

Nomination Form
THE ISLAND
OF **PORTO**
SANTO
Biosphere Reserve

Nomination Form
The Island of
Porto Santo
Biosphere Reserve

September 2019





TECHNICAL SPECIFICATIONS

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Porto Santo Folklore Group Association
Regional Energy and Environmental Agency of the Autonomous Region of Madeira
Regional Directorate for Public Administration of Porto Santo
Forest and Nature Conservation Institute, IP-RAM
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Regional Directorate for Fisheries
Regional Directorate for Heritage and Informatics
Regional Directorate for Land-use and the Environment
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Thank you!



PORTO SANTO

Maximiano de Sousa, Libertino Lopes and
Teodoro Silva

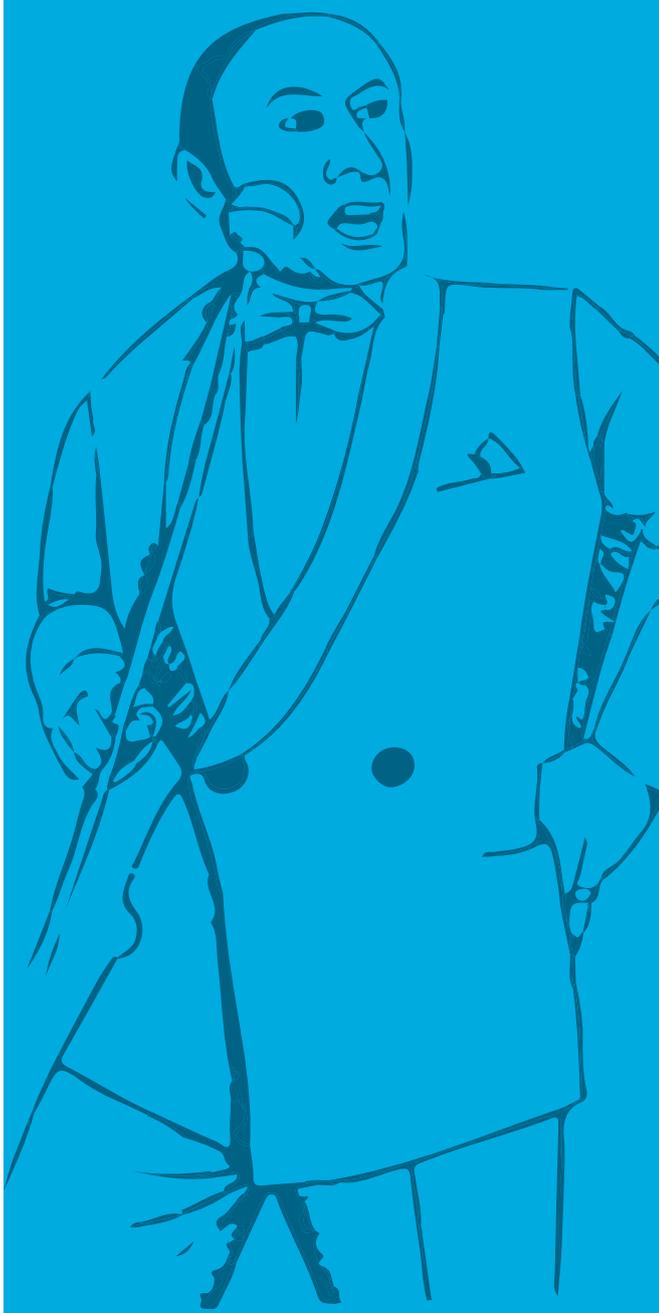
"Oh island of Porto Santo
With such delicious grapes
Your sea is a charm
Your beaches, the most beautiful
And even Zarco upon discovering you
And by stepping on your friendly soil
It was almost like asking you
It was almost like asking you
For protection and shelter

Friendly land
Like you there is no other
You are the oldest jewel
Of the jewels of Portugal
Porto Santo
How your name suits you
That is why I love you so much
In the way I love my mother

Oh, beautiful golden island
Of pure and vigorous water
With such a silvery moon
And peace and joy
Your old mills continue grinding the Lord's bread
And the doves on the eaves
And the doves on the eaves
Chirp songs of love

Friendly land
Like you there is no other
You are the oldest jewel
Of the jewels of Portugal
Porto Santo
How your name suits you
That is why I love you so much
In the way I love my mother

Porto Santo
How your name suits you
That is why I love you so much
In the way I love my mother."



PROMOTERS



PORTO SANTO MUNICIPAL COUNCIL

The Municipal Council of Porto Santo, abbreviated as CMPS, is a local authority with powers defined in the Legal Regime of Local Authorities, under Law No 75/2013 of 12th September and in accordance with Article 235 of the Constitution of the Portuguese Republic, with representative bodies (City Council and Municipal Assembly), whose objectives are the pursuit of public interests and the interests of the population. It is a collective entity, responsible for the municipality's strategy and which promotes the careful management of its own resources. In addition to administrative and financial authority in various areas of its competence, it defines, within the scope of its mission, policies which promote sustainable development and implements concrete measures aimed at improving the quality of life of its population.



PORTO SANTO FOLKLORE GROUP ASSOCIATION

The Porto Santo Folklore Group Association, abbreviated as AGFPS, aims to contribute to the recognition, defence and dissemination of the values, culture and traditional heritage of Porto Santo, to interpret and preserve the folklore of Porto Santo, namely through dances, music and songs. In addition to this, AGFPS also participates in other fun and recreational activities.



REGIONAL ENERGY AND ENVIRONMENTAL AGENCY OF THE AUTONOMOUS REGION OF MADEIRA

The Regional Energy and Environment Agency of the Autonomous Region of Madeira, abbreviated as AREAM, is a private non-profit association with public interest recognition, whose mission is to promote innovation and cooperation in the fields of energy and the environment. AREAM was created in 1993, through the initiative of the Regional Government, with 51 founding members, made up of governmental institutions, business associations and companies with significant dynamics in the Region's development. AREAM's objective is to contribute to the improvement of knowledge in the areas of energy and the environment, to disseminate information and to promote a conscious participation of citizens and organisations in the process of sustainable development. AREAM works with the Regional Government of Madeira, Municipalities and other stakeholders in the planning and defining of regional policies in the area of energy, environment and climate change, among others, including the study of solutions, interregional cooperation and communication with national and community institutions.

PROMOTERS



REGIONAL DIRECTORATE FOR PUBLIC ADMINISTRATION OF PORTO SANTO

The Regional Directorate for Public Administration of Porto Santo, abbreviated as DRAPS, is a peripheral service of the Presidency of the Regional Government of Madeira, integrated in the direct administration of the Autonomous Region of Madeira, with administrative autonomy. Its mission is to supervise and coordinate the services of the Regional Government on the Island of Porto Santo, coordinating its activity with the other services of the regional executive.



Secretaria Regional
do Ambiente e Recursos Naturais

REGIONAL SECRETARIAT OF THE ENVIRONMENT AND NATURAL RESOURCES

The Regional Secretariat of the Environment and Natural Resources, abbreviated as SRA, is the department of the Regional Government of Madeira which defines and executes, from a global perspective and that of sustainable development, regional policy in the following areas: Water; Environment; Nature conservation; Forests; Geographical, cartographic and land information; Coast; Sea; Land use planning; Natural Park; Basic sanitation; Urbanism. In the pursuit of its mission, the main tasks of the SRA are to: Design, develop, coordinate and implement regional policy in the aforementioned areas; Manage and conserve resources related to water, flora, fauna and geology, as well as protected and classified areas of the Region; Reconcile economic and social progress with a quality environmental policy, based on the preservation of biogeodiversity, landscape, ecosystems, water and air quality, respecting and conserving the environmental heritage in its various aspects; Coordinate management tools, environmental monitoring, information and public participation, as contributions to improving the quality of life of citizens; Take the necessary measures to conserve biodiversity, including rare, threatened or vulnerable species.



FOREST AND NATURE CONSERVATION INSTITUTE, IP-RAM

Forests and Nature Conservation Institute, IP-RAM, designated IFCN, IP-RAM, is a public legal entity, with administrative, financial and asset autonomy, integrated in the indirect administration of the Autonomous Region of Madeira; exercising its powers under the guidance and superintendence of the Regional Secretariat of the Environment and Natural Resources. Its mission is: "To promote nature conservation, planning and sustainable management of biogeodiversity of the landscape and forest, as well as associated resources and management of protected areas."

ACRONYMS

ACES	Espírito Santo Cultural and Recreational Association
AGFPS	Porto Santo Folklore Group Association
APIPS	Association of Producers of the Island of Porto Santo
ARDITI	Regional Agency for the Development of Research, Technology and Innovation.
AREAM	Regional Energy and Environment Agency of the Autonomous Region of Madeira
ARM	Águas e Resíduos da Madeira, S.A. (Waste and Water Services of Madeira)
CIIMAR	Interdisciplinary Centre for Marine and Environmental Research
CMPS	Porto Santo Municipal Council
CWR	Crop Wild Relatives
DRA	Regional Directorate for Agriculture
DRAPS	Regional Directorate for Public Administration of Porto Santo
DRP	Regional Directorate of Fisheries
EMAM	Mission Structure for Marine Affairs
ESS	Energy Storage System
ETAR	Wastewater Treatment Plant
FEADER	European Agricultural Fund for Rural Development
GEE	Greenhouse Gases
GT-PSRB	Porto Santo Biosphere Reserve Work Group
IBA	Important Bird and Biodiversity Areas
IFCN, IP-RAM	Forest and Nature Conservation Institute
ISOPlexis	Germplasm Bank of the University of Madeira
JORAM	Official Gazette of the Autonomous Region of Madeira
LED	Light Emitter Diode
OOM	Ocean Observatory of Madeira
OSPAR	Convention for the Protection of the Marine Environment of the North Atlantic
PEA	Environmental Education Programme for 1 st Cycle Basic Education Schools of Porto Santo
PDES	Economic and Social Development Plan for the Autonomous Region of Madeira
PIETRAM	Strategic and Integrated Transport Plan for the Autonomous Region of Madeira
PDM	Municipal Master Plan
PGRI	Flood Risk Management Plan for the Autonomous Region of Madeira
PGRH	Porto Santo Coastal Area Programme
POCPS	Management Plan for the RH10 Hydrographic Region
POGRAMPPS	Plan for the Management of the Network of Protected Marine Areas of Porto Santo
POT	Tourism Planning Programme for the Autonomous Region of Madeira
POTRAM	Land-use Plan for the Autonomous Region of Madeira
PRAM	Regional Water Plan of Madeira
PRODERAM	Rural Development Programme for the Autonomous Region of Madeira
PROF-RAM	Regional Plan for Forest Management in the Autonomous Region of Madeira
PRPA	Regional Environmental Policy Plan
PSOEM	Situation Plan for Maritime Spatial Planning
PU	Urbanisation Plan
PUPC	Urbanisation Plan for the Waterfront of Baixo/Calheta
PUGRPS	Urbanisation Plan for the Porto Santo Golf Resort
RAM	Autonomous Region of Madeira
RAMPPS	Network of Protected Marine Areas of Porto Santo
SAU	Usable Agricultural Area
SIC	Site of Community Interest
SPEA	Portuguese Society for the Study of Birds
SRA	Regional Secretariat of the Environment and Natural Resources
SRE	Regional Secretariat of the Education
SRTC	Regional Secretariat of the Tourism and Culture
IUCN	International Union for Nature Conservation
UMa	University of Madeira
UNESCO	United Nations Educational, Scientific and Cultural Organization
USPS	Senior Citizen University of Porto Santo
ZEC	Special Area of Conservation
ZPE	Special Protection Area

°C	degrees Celsius
cm	centimetre
d	day
e.g.	<i>exempli gratia</i> , for example
etc.	From the Latin for " <i>et cetera</i> " meaning "and the rest", "and other things"
<i>ex libris</i>	currently used to describe something emblematic
<i>ex situ</i>	off-site or away from the natural location
h	hour
ha	hectare
<i>in situ</i>	on-site or in the natural location
<i>in vitro</i>	biological processes which occur outside living systems
km	kilometre
l	litre
m	metro
Ma	millions of years ago
mg	milligram
mm	millimetre
mn	nautical miles
No.	number
<i>per capita</i>	per person
séc.	century
sp.	unspecified species
spp.	several species of the same genus
subsp.	subspecies
<i>sui generis</i>	something unique, special
S.V.	Sebastião de Vasconcelos
var.	variety

ABBREVIATIONS AND LATIN EXPRESSIONS



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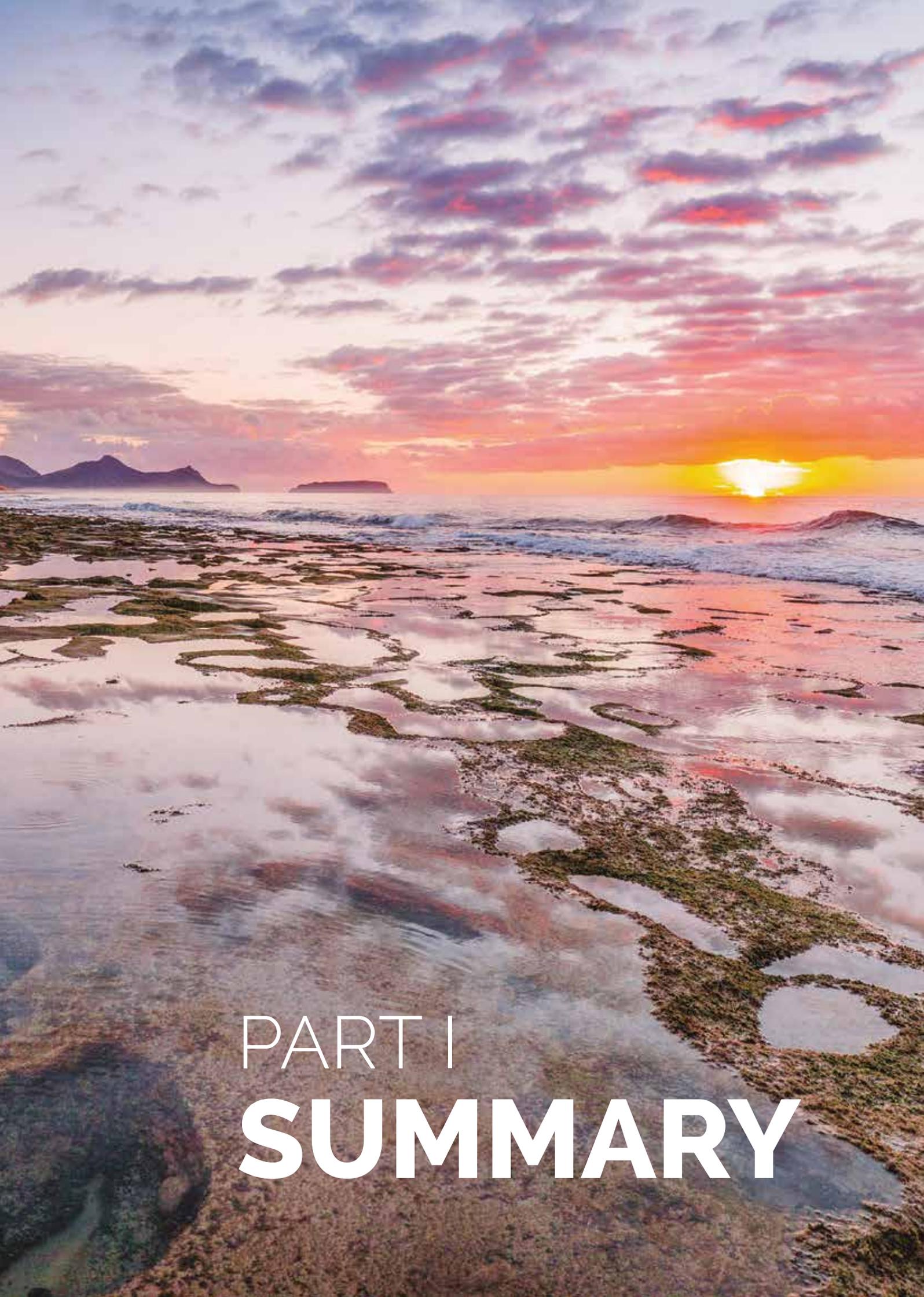
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PART I
SUMMARY



1 PROPOSED NAME OF THE BIOSPHERE RESERVE

Biosphere Reserve of the Island of Porto Santo.

2 NAME OF THE COUNTRY

Portugal, Autonomous Region of Madeira.

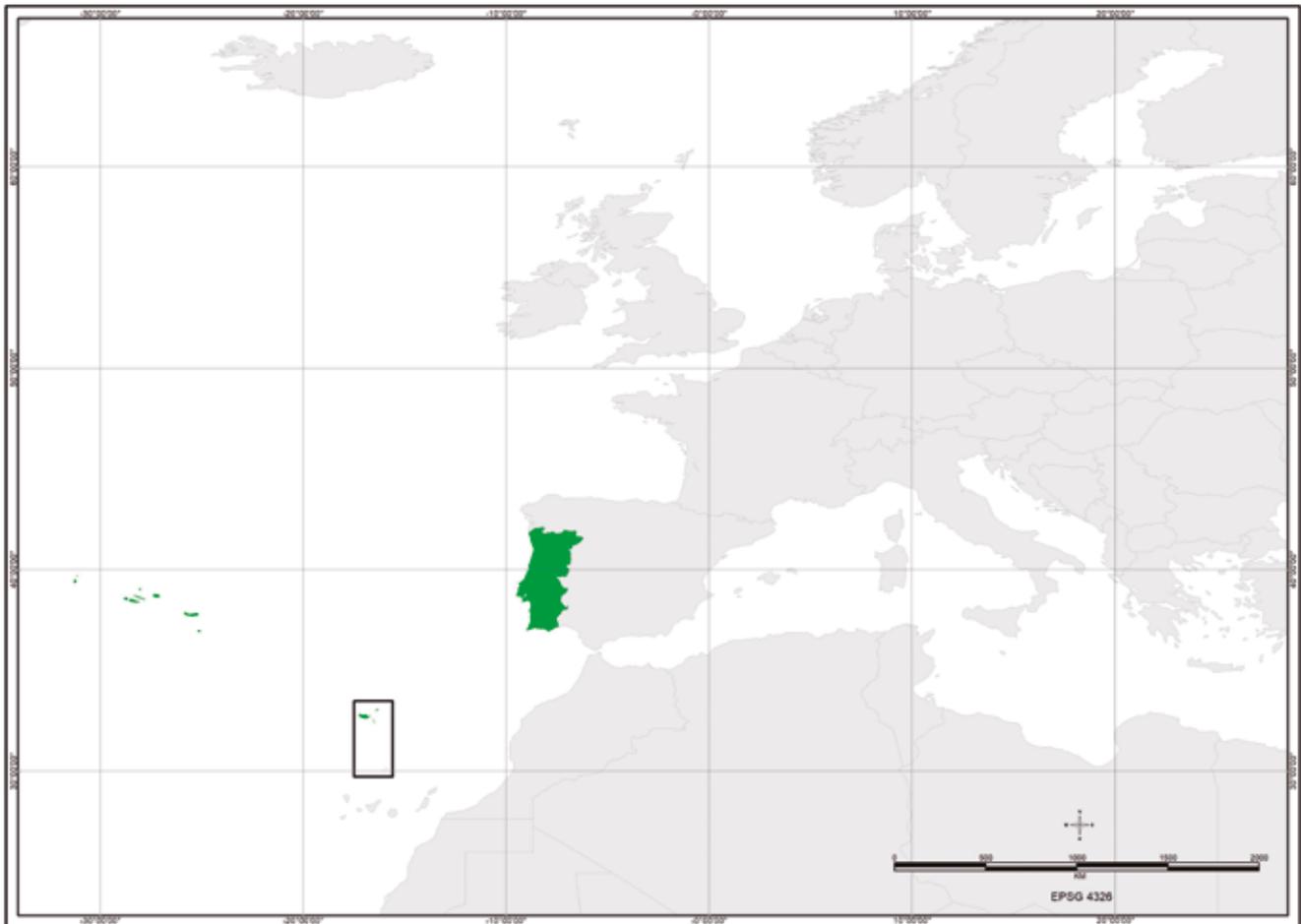


Figure 1 Location of Portugal and the Autonomous Region of Madeira, where Porto Santo Island, the proposed Biosphere Reserve, is located.



3 FULFILLMENT OF THE THREE FUNCTIONS OF BIOSPHERE RESERVES

3.1

CONSERVATION

CONTRIBUTE TO THE CONSERVATION OF LANDSCAPES, ECOSYSTEMS, SPECIES AND GENETIC VARIATION

And everything started with its geological formation. Porto Santo grew as an underwater shield-volcano between the Early Miocene and the Middle Miocene (18Ma - 13.5Ma), with flows of basalts, hyaloclastites and palagonites, intercalated with conglomerates and tuffite lenticules, as well as fossiliferous calcareous formations of the Miocene epoch. The last eruptions took place 10.2Ma ago. Subsequent volcanic activity is only represented by basic phyllonian rocks, from approximately 8.3Ma, and correlative extrusions have not been preserved. The most recent formations correspond to sedimentary deposits from the Quaternary period, such as silty clay paleosols, limestone crusts, calcarenite aeolianites, beach and river deposits and the like. Of these, the aeolianites in the central-west region of the island, which cover about 1/3 of the surface, are worth highlighting.

Long, long ago, the first migration arrived on the island from the nearest continents, as well as from neighbouring islands and islets, swept by sea winds and currents, generally transported by birds and insects. In a first phase, the island was colonised by pioneer species of lichens and bryophytes. The development of pioneer communities created conditions for the land to host more complex plant communities, vascular plants, some spore producers, others seeds and flowers, as well as invertebrate and vertebrate animals. And since then and for millions of years, evolution has continued.

The Reserve is home to 136 taxa under the Berne Convention - the Convention on Wildlife and Natural Habitats in Europe (87 birds, 23 mammals, nine vascular plants, seven gastropods, three reptiles, three arthropods, two echinoderms, one fish and one cnidarian), 25 taxa under the Convention of Bonn - Convention on the Conservation of Migratory Species of Wild Fauna (20 birds, four mammals and one reptile), 31 taxa under CITES - Washington Convention - International Trade in Endangered Species of Wild Fauna and Flora (22 mammals, five birds, two vascular plants, one reptile and one cnidarian), 42 taxa registered in the Birds Directive and 44 taxa in the Habitats Directive (22 mammals, 13 vascular plants, seven gastropods, one reptile and one algae).

Terrestrial biodiversity includes more than 1600 (1660) taxa and a high number of endemisms, about 396 (24%) belonging to various taxonomic groups such as fungi, lichens, plants (nonvascular and vascular) and animals (invertebrates and vertebrates), some species having international, national or regional conservation status.

In terms of fauna, invertebrates are clearly the most abundant, with 892 taxa being identified, especially arthropods and gastropods. Arthropods dominate and present the greatest diversity, with around 769 taxa and also the highest number of endemisms, 201, of which 64 are exclusive to Porto Santo, 88 to Madeira and 49 to Macaronesia. Relative to insects, there are 675 taxa (52 endemic to Porto Santo), the most abundant being beetles (274 taxa), followed by butterflies and moths (137 taxa).

The gastropods, which include snails, semi-slugs and slugs, are the second most diverse group with about 123 taxa and the one with the highest percentage of endemisms (82%), of which 91 are endemic to Porto Santo, 10 to Madeira and two to Macaronesia. Some of the endemics are listed in Annex II of the Habitats Directive, such as: *Caseolus calculus*, *Caseolus subcalliferus*, *Leiostylia corneocostata* and *Idiomela subplicata*.

Relative to vertebrate fauna, including migratory and nesting birds, 69 taxa have been identified, grouped into three classes: reptiles, birds and mammals. Two taxa are identified in the reptile class, one endemic to Porto Santo, the Madeiran wall lizard (*Teira dugesii jogeri*). In mammals, the Madeira pipistrelle bat (*Pipistrellus maderensis*) is referenced, endemic to Macaronesia, with the status "Endangered" on the IUCN Red List. Regarding nesting birds, 13 endemisms are identified, four endemic to Madeira and nine to Macaronesia. In total, in the vertebrates, there are 15 endemisms, one from Porto Santo, four from Madeira and ten from Macaronesia.

The flora includes a large number of endemic vascular plants: 15 exclusive to Porto Santo, of which the most recently described, *Echium portosanctense*, *Pericallis menezesii* and *Sonchus parathalassius* are noteworthy; 28 endemic to Madeira and 26 endemic to Macaronesia, from among the approximately 536 identified taxa. Several endemisms are listed in Annex II of the Habitats Directive as *Phagnalon lowei* (*P. benettii*, *P. hansenii*), *Autonoe madeirensis* (*Scilla maderensis*), *Monizia edulis* (*Monizia*, genus endemic to Madeira), *Cheirolophus massonianus*, *Maytenus umbellata*, *Sibthorpia peregrina*, *Semele androgyna* (*S. maderensis*) and the priority species, *Chamaemeles coriacea* (*Chamaemeles*, genus endemic to Madeira). In addition, several species of flora are wild relatives of agricultural species (CWR), such as *Beta vulgaris*, *Patellifolia procumbens* and *Patellifolia patellaris*. Four Species of flora are listed on the IUCN Red List as "Critically Endangered" and three "Endangered", as can be

found in Annex III (Species of the IUCN Red List).

As regards nonvascular plants, 133 taxa of bryophytes have been identified, including seven endemisms: two species endemic to Madeira, the thallose liverwort (*Riccia atlantica*) and the leafy liverwort (*Frullania sergiae*); to which five species endemic to Macaronesia are associated, comprised of three acrocarpous mosses (*Fissidens coacervatus*, *Leucodon treleasei* and *Tortella limbata*) and two leafy liverworts (*Frullania polysticta* and *Radula wichurae*). The hepatic *Riccia atlantica* has the status "Vulnerable" on the IUCN Red List.

In the lichen group, 16 taxa are mentioned, with one species endemic to Porto Santo, *Anzia centrifuga*, "Vulnerable" on the IUCN Red List. In relation to the fungi, where mushrooms are integrated, 14 species have been identified.

Compared to the available information on terrestrial biodiversity, the existing information on the marine environment is scarce and dispersed. Approximately 453 taxa have been identified, with eight Macaronesian endemisms, six of which are of the fish class and two of the bird.

The flora is represented by 146 taxa (collected from the intertidal area to 160m deep). Of the algae, the most prominent is coralline red algae (*Lithothamnium coralloides*), rhodoliths or maêrl, which is listed in Annex V of the Habitats Directive. This species forms large communities, such as the one observed in the "Campo das Laranjas" (Orange Fields) located in the Islet of Cima. Maêrl communities are of high ecological importance because they serve as microhabitats for many species (e.g. other algae, bryozoans, sponges, polychaetes, bivalves and echinoderms), fostering biodiversity and primary benthic production.

The fauna comprises several groups. Relative to fish, the approximately 55 species which have been registered under the Monitoring Programme of the "General Pereira D'Eça Corvette", carried out between 2016 and 2017 are worth highlighting. Several species present ecological added value because they are endemisms of Macaronesia, such as the Canary damsel (*Abudefduf luridus*), the barred hogfish (*Bodianus scrofa*), the emerald wrasse (*Centrolabrus trutta*, synonymous with *Symphodus trutta*), the moray eel (*Muraena augusti*) and the island grouper (*Mycteroperca fusca*); to which other threatened species, which should be preserved, are added, such as the grey triggerfish (*Balistes capriscus*) and the dogfish,

both with the status "Vulnerable", and the dusky grouper (*Epinephelus marginatus*), which is "Endangered" and protected by regional legislation.

The sea around Porto Santo is a place where several species of marine reptiles and mammals can be found, the most noteworthy being the rarest seal in the world, the Mediterranean monk seal (*Monachus monachus*) and the loggerhead sea turtle (*Caretta caretta*), both priority species in Annex II of the Habitats Directive and considered respectively to be "Endangered" and "Vulnerable" on the IUCN Red List. In addition to this fauna, several other species of cetaceans are present, such as the bottle-nose dolphin (*Tursiops truncatus*), also listed in Annex II of that directive and others listed in Annex IV such as the short-beaked common dolphin (*Delphinus delphis*), the Atlantic spotted dolphin (*Stenella frontalis*) and the sperm whale (*Physeter macrocephalus*), this last one "Vulnerable" on the IUCN Red List.

Porto Santo contains several types of habitats, specifically: 1110 Sandbanks which are slightly covered by seawater all the time, 1140 Mudflats and sandflats not covered by seawater at low tide, 1160 Large shallow inlets and bays, 1250 Vegetated sea cliffs with endemic flora of the Macaronesian coasts, 2130 *Fixed dunes with herbaceous vegetation ("grey dunes"), 4050 *Endemic Macaronesian heaths, 5330 Thermo-Mediterranean pre-desert scrub, 8220 Siliceous rocky slopes with chasmophytic vegetation, 8230 Siliceous rock with pioneer vegetation of *Sedo-Scleranthion* or *Sedo albi-Veronicion dillenii*, 8330 Submerged or partially submerged caves, 9320 *Olea* and *Ceratonia forests*, 9360 *Macaronesian laurel forests and 9560 *Endemic forests with *Juniperus* spp., four of which are priority areas (2130, 4050, 9360 and 9560) listed in Annex I of the Habitats Directive (92/43/EEC).

The Reserve has habitats suitable for nesting species of seabirds listed in Annex I of the Birds Directive on the Conservation of Wild Birds (Council Directive 79/409/EEC of 2nd April), specifically of the order of Procellariiformes, such as the Cory's shearwater [*Calonectris borealis* (*Calonectris diomedea*)], the band-rumped storm petrel (*Hydrobates castro*), the Bulwer's petrel (*Bulweria bulwerii*) and the Audubon's shearwater [*Puffinus lherminieri* (*Puffinus assimilis*)], "Almost Threatened" on the IUCN Red List, and from the order of the Charadriiformes, the common tern (*Sterna hirundo*) and the roseate tern (*Sterna dougallii*). In this last order, the Kentish plover (*Charadrius alexandrinus*), in the Madeira archipelago, it can only be found in Porto Santo.

The proposed Biosphere Reserve comprises distinct protected and classified areas, as shown in Figures 2 and 3. This includes the Network of Protected Marine Areas of Porto Santo (RAMPPS), approved by Regional Legislative Decree No 32/2008/M of 13th August; two Special Areas of Conservation (ZEC): the Pico Branco (PTPOR0002) approved by Resolution No. 751/2009 of 2nd July, and the Islets of Porto Santo (PTPOR0001) approved by Governing Council Resolution No. 1341/2009 of 3rd November; one Site of Community Interest (SIC Cetaceans) approved by Resolution No. 699/2016 of 17th October, included in the Natura 2000 Network - PTMMD0001 Cetaceans of Madeira, under the EU Commission's Implementing Decision 2019/20 of 14th December 2018, which adopts

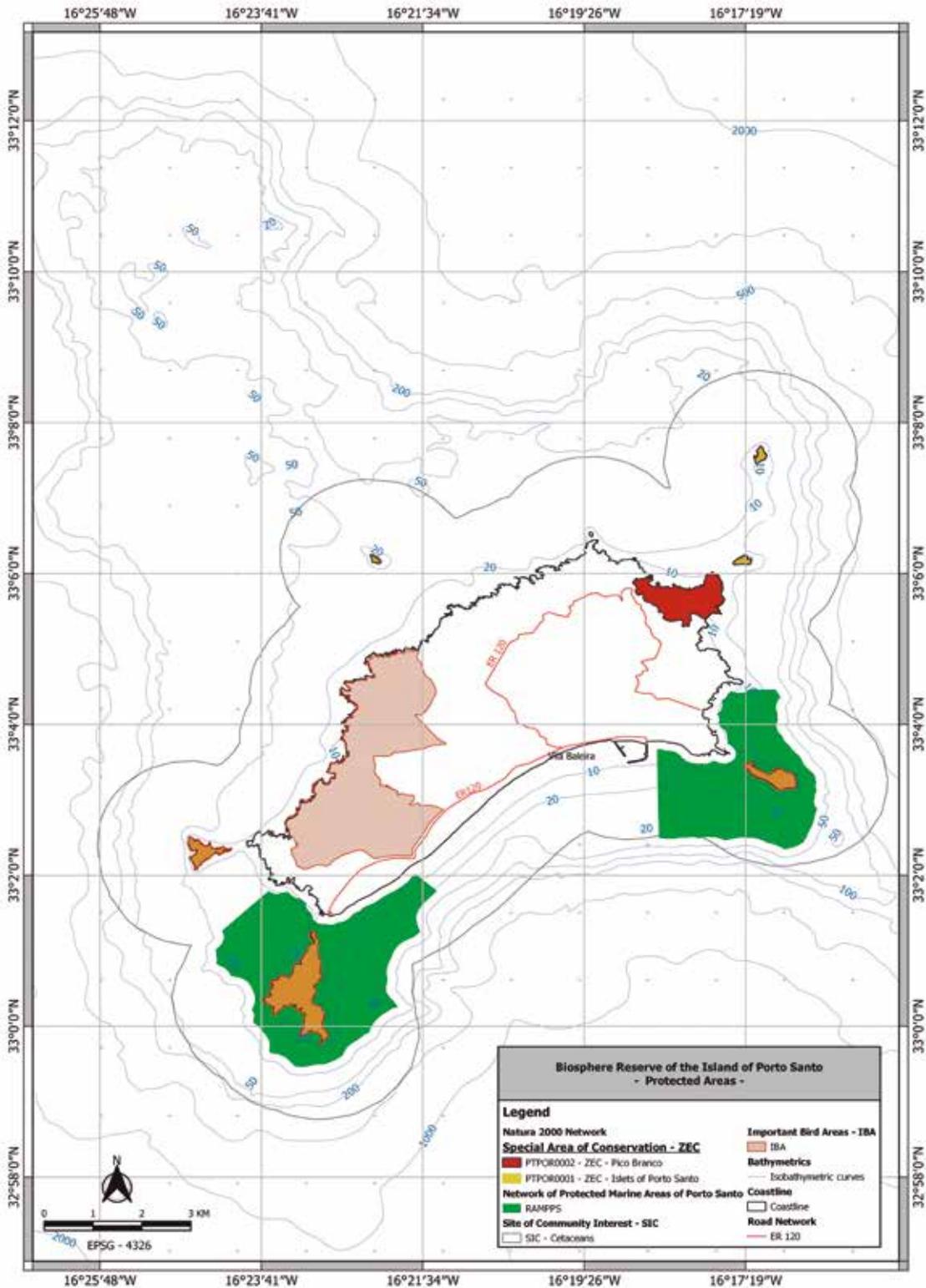


Figure 2 Protected and classified areas of Porto Santo.

the seventh update of the list of Sites of Community Importance in the Macaronesian biogeographical region; as well as two Important Birds and Biodiversity Areas (IBAs). In addition, as a consequence of the geological specificity and diversity, ten geosites have been classified in the territory (Praia, Zimbralinho, Morenos, Pico de Ana Ferreira, Serra de Dentro, Pico da Cabrita, Fonte da Areia, Islet of Cima - Pedra do Sol, Islet of Cima - Cabeço das Laranjas and Islet of Cal) and seven sites of geodiversity (Pico Espigão, Serra de Fora, Pico Branco, Porto das Salemas, Pico da Juliana, Pico do Facho and Pico do

Castelo). In addition, the Quarry of Pico de Ana Ferreira is "Property of Public Interest and Municipal Value (Regional Value) and Scientific Heritage (Geological)", according to the PDM (Municipal Master Plan), ratified by the Resolution of the Government's Presidency No. 856/99. It is also classified as Natural Cultural Heritage, of Regional Value, by Resolution No. 592/99. The Mountain Range of Ana Ferreira, the Central Mountain Range of Porto Santo, the Beach and the Dunes are part of the CORINE Biotopes Network, in accordance with the former CORINE Programme 85/338/CEE.

Porto Santo is a legacy of biological and geological diversity. Its landscapes demonstrate high scenic value, diversity of ecosystems and species, many of which are unique on a global scale, thereby, harbouring a valuable natural heritage from a scientific, educational, cultural and touristic point of view.

For the Biosphere Reserve 2113 taxa have been identified, of which 1660 are terrestrial and 453 are marine.

The percentage of endemism on land is 10.4%, exclusive to Porto Santo (endemic to Porto Santo) and 7.9% common to Madeira (endemic to Madeira).

The safeguarding of this sui generis natural heritage and, in particular, its genetic wealth is one of the first lines of action of the proposed UNESCO Biosphere Reserve.

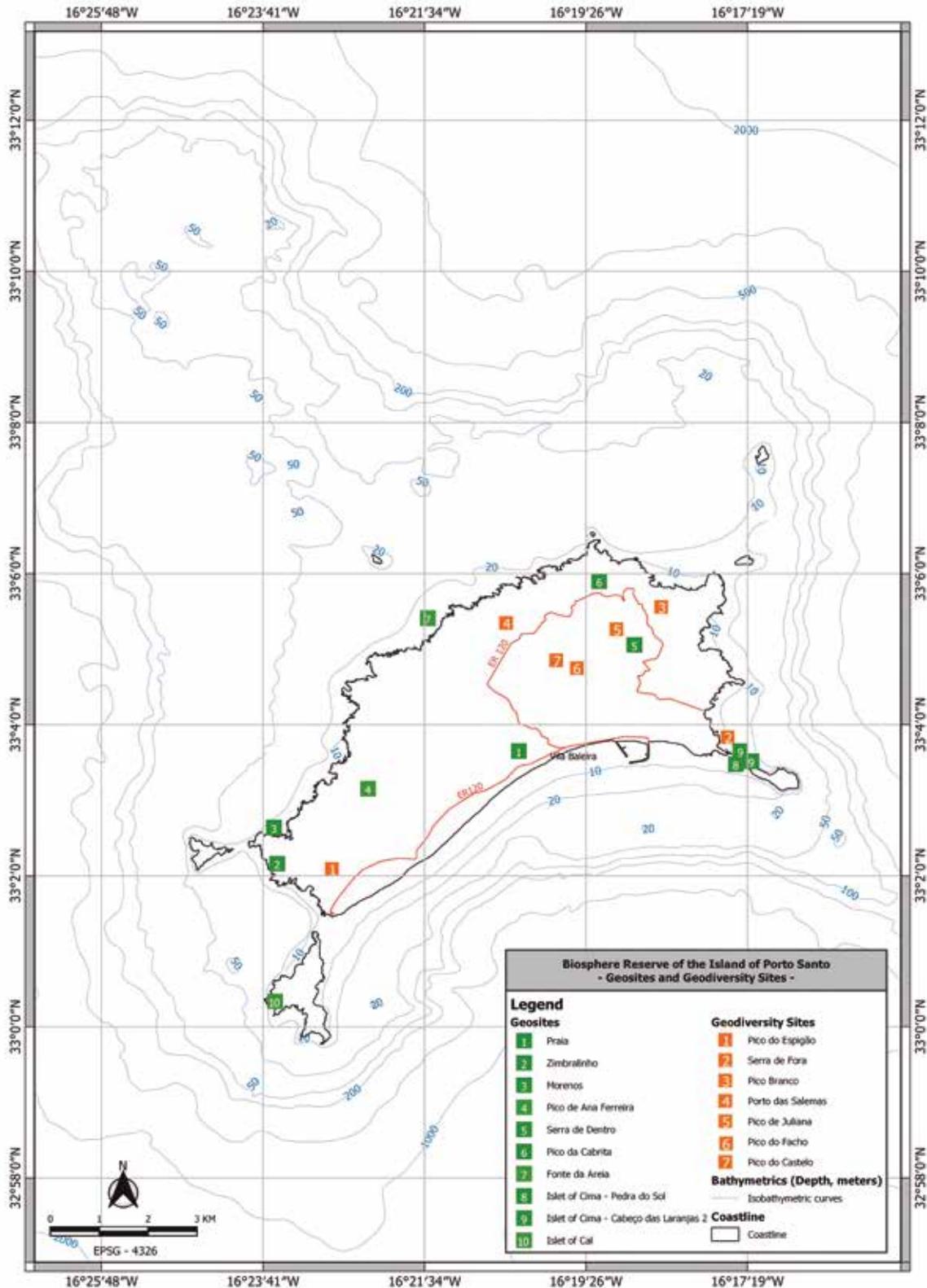


Figure 3 Geosites and Sites of Geodiversity of Porto Santo.

3.2

DEVELOPMENT

FOSTER ECONOMIC AND HUMAN DEVELOPMENT WHICH IS SOCIO-CULTURALLY AND ECOLOGICALLY SUSTAINABLE

After its discovery about 600 years ago, corresponding to the start of Portugal's expansion, settlers of diverse origins and nationalities colonised the island. Captive Moors from Morocco arrived, who, by living amongst the Portuguese Discoverers, mixed their customs, beliefs and superstitions with theirs, thus, beginning the social history of the land. Its cultural richness is associated with maritime discoveries, trade routes in the Atlantic and the use of natural resources.

The proposed Biosphere Reserve corresponds to the totality of the land of Porto Santo, plus a surrounding marine area up to the 100m bathymetric line. The most important economic activities are tourism, agriculture, livestock farming and fishing, all with a strong connection to natural resources, biodiversity, landscape and historical and cultural heritage.

Porto Santo is one of the eleven municipalities of the Autonomous Region of Madeira (RAM), with a city and a civil parish with the same name as the island. It corresponds to 5.4% of the territory and 2% of the RAM population. Double insularity persists in Porto Santo, although there is an airport and port with regular connections to the Island of Madeira and some European destinations. With the creation of the Reserve, there are plans to implement itineraries of tourist and educational interest, feasible throughout the entire year, during which the biogeodiversity knowledge will be promoted in an accessible way and enriched with ethnographic experiences, as well as the flavours of the local cuisine.

The focus currently given to the rural world of Porto Santo goes beyond the essence of production, with ecosystem services, circular economy and the bioeconomy deserving recognition. The functions performed by the rural environment and the agroforestry activity are not only of an economic nature but also environmental, social and cultural. With the creation of the Biosphere Reserve, a more multifunctional agroforestry activity is fostered, enhancing the production of a set of additional products, contributing to the economic, social and cultural dynamics of the territory. These functions are essential for the development of its rurality, by preserving heritage and traditions, by promoting the establishment of people and giving precedence to landscape diversity and the planning and management of rural areas, thereby, safeguarding the ecological and natural resources of the island.

In fact, notwithstanding the defined forest management models which leverage a differentiated management approach, which is better suited to biodiversity conservation, soil protection and landscape enhancement objectives, the whole process must be based on economic diversification, which is consistent with the sustainability of its forest areas. In addition to the services associated with carbon storage and regularisation of the water cycle and soil protection, forestry activity promotes the production of wood material for the production of small pieces or crafts, firewood or forest biomass, resulting in local employability and economic dynamics.

Organic farming is a very important aspect, not only due to the inherent principles of the activity, but also for its transversality in other emerging areas, such as medicinal agriculture. In fact, edible vegetables and fruits, which are grown in soils developed in carbonate and biogenic sands, have been known for several decades and have become famous for their difference in taste and aroma, when compared with those from the island of Madeira or other regions of Portugal and Europe. Restaurants, specifically seek out the "goatling of Porto Santo", known for its tender and succulent meat. This is due to the myriad of available fodder enriched by nutrient-rich winds and salt water, enabling the feeding of animals naturally, without the use of synthetic foods. As marine resources, fish and limpets are also very coveted because of their freshness.

In this Atlantic island, commercial fishing is small-scale and carried out by a small number of exclusively artisanal vessels. Based on the most recent period of 2015-2017, on average, only about six vessels bring their catches into the Porto Santo auction, around 12 tons of fish per year. Commercial species with the most significant catches include small pelagics: the blue jack mackerel (*Trachurus picturatus*), the Atlantic chub mackerel (*Scomber colias*) and the bogue (*Boops boops*). Tuna fishing is also important, particularly the species of bigeye tuna (*Thunnus obesus*), skipjack tuna (*Katsuwonus pelamis*) and albacore (*Thunnus alalunga*), some of which are caught on the island's shelf. The live bait used by the tuna fishing vessels, which use the pole-and-line method, is caught there as well. Limpets are also harvested on the coast of the island. Some of the species harvested are white Azorean limpet (*Patella aspera*) and black limpet (*Patella candei*). Harvesting is regulated by Regional Legislative Decree No. 11/2006/M of 18th April and is currently subject to, among other limitations, a closed period which runs annually between 1st December and 31st March (Ordinance No 80/2006 of 4th July, amended by Ordinance No 5/2009 of 22nd January and Ordinance No 40/2016 of 17th February, which regulates the harvesting of the limpets). There is also significant activity relative to recreational fishing, in its various aspects: from land, from boat, underwater hunting, etc. This activity is established by Regional Legislative Decree No. 19/2016/M of 20th April, which regulates fishing for plant and animal species, for recreational purposes, in the marine waters of the RAM and by Ordinance No. 484/2016 of 14th November, which defines permitted gear, conditions and terms for the licencing of recreational fishing.

The search for sustainability in a limited geographic space such as Porto Santo requires reconciliation between the benefits of the globalised world and the search for sustainability in the services and products it provides. It entails the provision of more sustainable services and products which result in increasing the social welfare of residents and visitors, strengthening the cultural identity of the island and its inhabitants, fostering their traditions and improving the economic climate and ecological performance. With the advent of climate changes, which spur innovation in the fields of energy production and use and mobility, the implementation of the Smart Fossil Free Island concept in Porto Santo intends to go beyond the established international energy and climate goals. It will ensure the transformation of the energy matrix in this area into one which is free of fossil fuels in the medium to long term, through a transition to electric energy and to renewable energy sources. The creation of this Reserve will serve as an example to be followed across borders.

In this land, much significance is given to the preservation of customs and the multicultural traits which define them. Traditional festivities such as the Feasts of St. John, the Pilgrimages and the Columbus Festival are testimonies of this authenticity and diversity of cultural events. With the creation of the Biosphere Reserve, these festivities, which already attract a large number of residents, have the potential to involve the participation of visitors and promote more traditional folklore, a symbol of the traditional culture of Porto Santo with the charm of its songs and dances, as well as the local cuisine with its unique delicacies which deserve to be tasted and shared far and wide. Over the years, this territory has been proving itself to be a safe tourist destination, with landscapes of unique beauty and the tradition of making visitors feel at home. It has a mild climate and plenty of sun, which is associated with its offer of experiences to visitors in diverse areas such as hiking, horse-riding, diving, bird and whale watching, ethnography and gastronomy. The sustainability of tourism will be based on products and services consistent with the protection of



Porto Santo Folklore

the environment, the promotion of social responsibility of tour operators and agents and the conciliation between tourism activity and local social dynamics, with special emphasis on mitigating the differences in work availability resulting from the current seasonality. The main products such as the beach, health and wellness, active sport and nature have the potential to reinforce their own identity, in order to gain greater dynamics and diversification. The Biosphere Reserve can contribute to the promotion and development of tourism in a sustainable way, a tourist destination all year round, differentiated by the authenticity of the offer, based on the genuine quality of the service.

The Reserve's management will be designed in an inclusive and integrated manner, implementing concepts as relevant as those of green economy, blue economy, low carbon economy and circular economy, in order to significantly increase value generation and environmental sustainability, with significant gains for residents and for generations to come.

The proposed Biosphere Reserve, through a shared management structure and the implementation of an Action Plan, will make a decisive contribution to the definition and promotion of common management criteria adapted to its different zones. It will also contribute to the development of a platform for environmental, social and economic coordination, which will promote a more sustainable way of life for Porto Santo, which in the last 600 years has been able to resist and overcome adversity, accepting innovation as a form of affirmation.



Islet of Baixo

3.3

LOGISTIC SUPPORT

SUPPORT FOR DEMONSTRATION PROJECTS, ENVIRONMENTAL EDUCATION AND TRAINING, RESEARCH AND MONITORING RELATED TO LOCAL, REGIONAL, NATIONAL AND GLOBAL ISSUES OF CONSERVATION AND SUSTAINABLE DEVELOPMENT

If in the past and present this territory has been able to rouse and continues to rouse great interest, with the implementation of projects, some of which pilot, in areas such as biology, geology, palaeontology, archaeology, forestry, nature conservation, climate change, renewable energy, health and well-being, among others, then with the creation of the Biosphere Reserve, this type of project and others will certainly be consolidated and increased, contributing to the fostering of research, training and education, locally and beyond borders.

Over time, various public and private infrastructures have been created. Some have supported research, training and education activities such as the Porto Santo Cultural and Conference Centre, the Salões Forest Service Post and the Chapas Forest Service Post and their respective recreational areas, the Terra Chã shelter house, the Islet of Cima lighthouse, the Municipal Library, the Municipal Auditorium, Casa Colombo (Columbus House) - Porto Santo Museum, Jorge Brum do Canto Centre, Cardina Museum and Casa da Serra ("Mountain House"). In addition to these, there is the local "Ecoteca" (place with information on the environment, raising awareness about nature protection). The municipality is developing a requalification project for this space, in order to provide it with the conditions to function as an environmental and cultural interpretation centre of the proposed Biosphere Reserve.

Relative to local partnerships, with different public and private entities, the following are of particular relevance: the Madeira Electricity Company (EEM), AREAM, the University of Madeira (UMa), the UMa ISOPlexis Germplasm Bank, the Regional Directorate for Agriculture (DRA), the IFCN, IP-RAM and its Botanical Garden of Madeira - Eng. Rui Vieira, the Faculty of Sciences of the University of Lisbon (FCUL), the FCUL Centre for Ecology, Evolution and Environmental Changes (Ce3C), the University of Aveiro, the Portuguese Society for the Study of Birds (SPEA), the Ocean Observatory of Madeira (OOM)/ARDITI, the Marine Biology Laboratory, the Madeira Interdisciplinary Centre for Marine and Environmental Research (CIIMAR-Madeira), Water and Waste Services of Madeira (ARM) and the Madeira Promotion Association (APM). These partnerships have ensured the acquisition and transfer of knowledge, as well as the fostering of innovation in areas such as biogeodiversity, agrobiodiversity, genetic resources, renewable energies, circular economy, and health and wellness tourism.

Based on the Europe 2020 strategy, the "Sustainable Porto Santo" project is currently in an implementation phase, led by the Regional Government of Madeira, with AREAM and the EEM (Madeira Electricity Company) as partners. The project aims to reduce GHG (Greenhouse Gases) emissions, increase renewable energy and improve energy efficiency by promoting the low carbon economy. The objective is to replace fossil fuels with renewable energy and increase the current contribution of renewable energies from 15% to 30%, with more solar power and wind power in electricity production. This will involve local and regional authorities, as well as other technologies such as: ESS (Energy Storage System), electric vehicles (Vehicle for the Grid-V2G), LED lighting, energy efficient construction and smart grids.

In partnership with EEM, and at the facilities of the Industrial Production Unit of Porto Santo, the company, Buggypower, produces several species of microalgae, with a special focus on *Chlorella*. As microalgae producers, their mission is to capture and fix CO₂ through the use of these microalgae, obtaining, through this process, a high quality raw material which ensures the production of high added-value products. At present, they are developing a wide range of products for the cosmetics, food and animal feed markets, with leading companies in each sector, thereby, being good examples of the fostering of the bioeconomy.

The UMa ISOPlexis Germplasm Bank has been exploring and cataloguing genetic resources in Porto Santo for more than two decades, in terms of agricultural species and agrobiodiversity. It is currently characterising and monitoring local agrosystems and genetic resources, within the framework of the project "Consortium for the monitoring of the impact of climate change on Agrobiodiversity and Sustainability of the BIOeconomy in the RAM (CASBio)", financed by the Operational Programme, PO Madeira 14-20. This project's objective is to validate and optimise the scenarios of the CLIMA strategy for agriculture in Porto Santo. In addition, ISOPlexis, in close partnership with the DRA and DRAPS, has been fostering the exploration and conservation of fruit and vegetables typical of Porto Santo, as well as developing another line of research aimed at recovering soils in eroded areas or with accelerated loss of productivity. In the agro-livestock sector, the Association of Producers of the Island of Porto Santo (APIPS) has been providing training and improvement initiatives for the professions related to agriculture, livestock, forestry and agroindustry, as well as promoting measures towards the qualification of local products.

Relative to biodiversity and management of protected areas, the IFCN, IP-RAM continues with the post-LIFE actions entitled "Halting the loss of European Biodiversity through the recovery of habitats and species of the Islets of Porto Santo and the surrounding marine area." In this sense, it has been monitoring biodiversity, fostering the implementation of management measures and action plans for species and habitats, as well as disseminating information to the general public.

Regarding the marine environment, the monitoring programme for natural and artificial subtidal habitats on the Island of Porto Santo (CORDECA) is underway. It is being led by the Interdisciplinary Centre for Marine and Environmental Research of Madeira (CIIMAR-Madeira), comprised of researchers from the University of Madeira, the Department of Natural Sciences and Resources of the Municipality of Funchal and the Ocean Observatory of Madeira (OOM)/ARDITI, whose main objective is to assess the impacts of the sinking of the General Pereira D'Eça Corvette, not only at the site of the sinking, but also on the surrounding natural reefs.

Of the growing aspects of the tourism sector, health and wellness deserve to be highlighted. This growth is largely due to research by the University of Aveiro, which has been able to highlight the therapeutic properties of biogenic and carbonate beach sand, as well as the specificity of other natural resources in promoting health and treating some diseases.

In terms of education and training, since 1998, the Municipality has developed the Environmental Education Programme in the 1st Cycle Schools of Porto Santo (PEA). This initiative involves 3rd and 4th form students of the basic education schools of the county and aims to teach students about the natural heritage of Porto Santo, as well as identify possible environmental problems. Another objective is to promote good environmental practices by presenting some solutions to be adopted in everyday life which will make Porto Santo more environmentally sustainable.



AN

Hiking

Since 2006, the Municipality of Porto Santo has been a partner of the Eco-Schools programme, which started in the local Prof. Dr. Francisco Freitas Branco Basic and Secondary School but is currently being implemented in all public and private schools. There are various initiatives and awards worth mentioning in this programme, including the GEA - Terra Mãe (Mother Earth) School Competition from its first edition, in the 2015/2016 school year. This competition, sponsored at the national level by the UNESCO National Commission, by the Portuguese Committee for UNESCO's International Geoscience Programme and in partnership at the regional level by the Regional Secretariat for the Environment and Natural Resources in partnership with the Regional Secretariat of the Education (SRE), explores the students' competences in the area of geosciences, enhancing knowledge of geology and local/regional geography, to then generally understand the themes, additionally integrating credited training for teachers.

The Municipality is also developing a programme to raise awareness and provide information to citizens throughout the year, which includes the commemoration of calendar events (International Day of Forests, World Earth Day and Geological Heritage, World Environment Day, World Nature Conservation Day, Ecological Day, European Day Without Cars and Indigenous Forest Day), implementing activities directed at the community in general and school-age youth, in order to involve everyone in the common cause. In addition, it has promoted training in the environmental area aimed at the school community and other target audiences as tour guides. It has also continued to promote the annual Environmental Symposium, which in 2018 held its 13th edition, where it addressed the importance of the application of Porto Santo to the UNESCO Biosphere Reserve. Also worth mentioning are some cultural initiatives carried out throughout the year, such as the Municipal Festivals, which take place at the end of June, in tribute to St. John. These involve the entire local community in reviving traditions in a festive atmosphere. Also noteworthy are the festivities of Saint Amaro, Carnival, Women's Day, Christmas, Easter, Harvest Festival, Day of Older Persons, among others. There is always wonderful participation by the local community in these festivities. They provide citizens with activities and moments of social interaction, crucial for the exchange of values and experiences, bringing together generations and fostering the memories of older generations as the identity of a people - identity heritage - expressing intergenerational experiences in relationships of sharing and collective growth.

In fact, memories and the collective identity constitute the bridges for the construction of a more inclusive region. The promotion of sessions for the sharing of "traditional cultural wisdom" in cultural and musical events, the publication of journals or cultural magazines/notebooks with popular songs, life stories, short stories, idioms, among other records from the memories of older generations are a significant milestone in the proposed Reserve.

Since 2013, the Senior Citizen University of Porto Santo (USPS), under the purview of the DRAPS (Regional Directorate for Public Administration of Porto Santo) and the Porto Santo Civil Parish Council, has been developing a series of activities aimed at revitalising the local senior population, those over 55 years of age. Taking into consideration the life experience of its students, the university developed some activities to revitalise local traditions during the 2017/2018 school year. Of these, folklore and the senior choir stand out. In addition, the collection and recovery of old songs, of which many people are unaware, is also in the process of being completed. Art involving palm hearts is also being disseminated, with the USPS opening its doors to the local community, to all interested in learning handicrafts, providing conviviality and the transmission of knowledge. Intergenerational activities have also been encouraged, and our seniors have visited schools to share history and tell stories from Porto Santo's past. The USPS has taken on a significant role in enhancing and revitalising local traditions, focusing on information and training from the earliest years of schooling, fundamental in strengthening the cultural identity of young people, contributing to the appreciation of their roots and traditions because "we only protect what we know."

In the 2018/2019 school year, the DRAPS and USPS proposed to the SRE the implementation of the "This is my, your, our Porto Santo" project, which is being implemented at the EB1/Pré (pre-school and primary school) of Porto Santo with students from the 1st cycle of the Basic Education. The Project is divided into two themes to be developed throughout two semesters: "Flavours of My Land" and "Sounds of My Land". The first consists in the elaboration of traditional recipes such as the *escarpada* (typical bread), *salada de serralha* (sow whistle salad) and *rosquilhas* (ring-shaped pastry), with the help of students from the Senior University. The second theme involves the learning of songs and nursery rhymes from the past, which have been collected by the students of the University. The objective is to give continuity to this project and to involve other schools and cover the most varied topics related to local natural and heritage values.

The local senior population can also enjoy the project, "Being Elderly - Paths of an active life" developed by the Espírito Santo Cultural and Recreation Association (ACES), with the objective of promoting self-esteem in the elderly, strengthening neighbourhood ties, providing cognitive stimulation and combating isolation and social exclusion.

Still at the level of cultural revitalisation, the ACES amateur theatre group has presented several plays, contributing to the local and regional cultural offer throughout the year. In addition to the stable nucleus of amateur actors, this group challenges the community to participate, promoting a taste for the theatre. It collaborates with other community groups, such as the USPS, to play a role in supporting other local initiatives.



Activity "Being Elderly - Paths of an active life"

In addition, this integration of local actors, namely decision makers, entrepreneurs, teachers, the senior university, the youth group and the population in general, is markedly expressed in diverse projects. An example of its significance and particular importance is the event, "Porto Santo - UNESCO Biosphere Reserve: Opportunities and Challenges", which took place in the city of Porto Santo, from 28th to 30th November 2018.

To summarise, there are several events promoted locally by the CMPS, DRAPS, the Civil Parish and other public entities with the purpose of valuing social, patrimonial, cultural and environmental components. Regarding environmental education and training, the awarding of the Eco-Schools award to six Porto Santo institutions (2017-2018 school year), the issuance of the Blue Flag to three beaches, Praia da Fontinha being the RAM's bathing area which has been most frequently recognised for its excellence (28 times until 2019) and the delivery of the Green Key to seven hotel units (in 2018), plus the annual organisation of the Environmental Symposium, the GEA - Terra Mãe (Mother Earth) School Competition and the USPS projects are examples of actions which have progressively contributed to the education and training of the local community and which can still be enriched. The reopening of the "Ecoteca" of Porto Santo as an Environmental and Cultural Interpretation Centre of the Biosphere Reserve will promote knowledge about the island's material and intangible heritage for the local and visiting community, through the development of educational programmes, training and awareness-raising activities, and the revitalisation of thematic routes, among others.

In this context, the proposed Biosphere Reserve will act as an important tool for transferring knowledge between research and local agents, including schools, businesspeople, farmers and fishermen, integrating technical and scientific information into training activities which can be directed at administration and visitors. The Reserve is an opportunity to show the world the grandeur of Porto Santo, not only for its values, but also because it is a sustainable territory where circular economy, green economy, blue economy and low carbon economy all have a strong representation in local development.



4 CRITERIA FOR DESIGNATION AS A BIOSPHERE RESERVE

4.1

ENCOMPASS A MOSAIC OF ECOLOGICAL SYSTEMS REPRESENTATIVE OF MAJOR BIOGEOGRAPHIC REGION(S), INCLUDING A GRADATION OF HUMAN INTERVENTIONS

Generally speaking, the landscape of Porto Santo differs from others in RAM (Autonomous Region of Madeira), mostly due to three geological inheritances. As a volcanic island, active for over 10Ma, it has been left a magmatic inheritance of different types of rocks and volcanic structures, left exposed due to millions of years of subsequent erosive activity. During its transition phase from undersea mountain to island, within the context of tropical sea reef structures, Porto Santo received a legacy of a wide range of carbonate, biogenic rocks, with notable fossils of corals, bivalve molluscs and gastropods, echinoderms, fish, among others, about 15-14Ma ago. At a later phase of its geologic evolution, within a time frame of 100 to 10 thousand years, it received its last inheritance, this time from the last Ice Age, made up of large accumulations of biogenic carbonate sand, hardened in eolianites, with markings of ancient vegetal cover, terrestrial gastropod and seabird fossils, interspersed with levels of periglacial palaeosol and regolith.

Over this geological richness, expansion, competition and evolution led to the genetic diversity and endemic species that, when associated with other native species, are characteristic of the terrestrial and marine ecosystems of Porto Santo.

With the arrival of Man and after 600 years of the humanisation of the insular space, Porto Santo underwent alterations on a landscape, composition and population dynamics level. The devastation of the primitive vegetal cover and inadequate agricultural practice, often in lands which were inappropriate for farming with a significant tendency for single-crop cultivation, negligently exhausted the soil for half a millennium and led to the loss of the fertility of that same soil, leaving deep marks in the landscape. All through the island there are grooves and gullies, showing the serious problems of erosion to which it has been subjected. Human intervention led to the depletion of the original vegetation, with a direct impact on the other ecosystems and the onset of a process of desertification that has been tackled in the last decades through reforestation.

It is important not to forget the privations of the island and the most pressing needs of wood to satisfy basic survival needs: food. In an adverse post-war scenario in the XX century, it became more important to establish priorities for the installation of a cover that was more adaptable to the environment and that provided forest biomass to meet the many needs of the population rather than working towards the recovery of the vegetal cover. It was necessary to interfere with the physical space. It became crucial to shape the land into small terraces with supporting walls, in order to give it a greater ability to soak up the water and to thus defend it from erosion. These terraces can be seen in the Picos of Castelo, Facho and Gandaia, Juliana and in the craggy slopes of Pico Branco and Terra Chã. Thus, the terrain became afforested by a variety of species. In the beginning of the last century due care was taken to cover the lands so as to guarantee the improvement of the conditions of rainwater infiltration, thus reducing surface run-off. This notable and sublime effort which started in 1955 with the Forest Services of the time, left its evidence in the lush, green peaks that rise from the island and can be seen from the sea, proud and remarkable in the landscape. In effect, the intricate evidence of human presence in the peaks – like architectonic works born of human manual efforts and the geometry of the shapes that characterize them, with particular relevance in Pico do Castelo – is breathtaking for whomever is bold enough to hike up the slope to the top, in a connivance of values between nature and Man, who gave it dignity by impeding the erosive processes and conquering soil which is the support of life on land. The retaining walls that support the terraces or small basins of soil material for the trees show a glorious and very important accomplishment, justifying the success attained with the plantations developed in the different peaks, and should be followed in the pursuit of further afforestation. Another constraint to the expansion of the natural flora and wildlife in general, leading to the erosion of the lands, was the free-grazing livestock in the mountains. In the 90s of the XX century, measures were implemented to stop the free-grazing, and this allowed for the development of work for the recovery of species and restoration of habitats. Furthermore, the island has benefitted from this effort and nuclei of indigenous vegetation can be seen spontaneously dotting the once hostile areas that were depleted of vegetation, in green.



PM
Islet of Baixo



"Crocheted walls"

Porto Santo presents a mosaic of ecological systems (natural and semi-natural), rich in species and habitats which are exclusive to the biogeographical region of Macaronesia, alternated with some conurbations, an airport, a harbour, a golf course and a communications network made up of roads and country lanes, among other signs of humanisation of the territory, as shown in the land use map represented in Figure 4.

About 5173 people live on the island. The population distribution of the territory is not homogeneous, it is concentrated in the south of the island, stretching to the interior in the central area. There are significant population density differences between the central/historical zone of the urban centre of the city which extends to Camacha, and a second area of urban concentration in Campo de Baixo/Campo de Cima. With the exception of two other areas south of the island – Ponta da Calheta and Serra de Fora – the rest of the county shows null or residual population densities, and the islets are uninhabited.

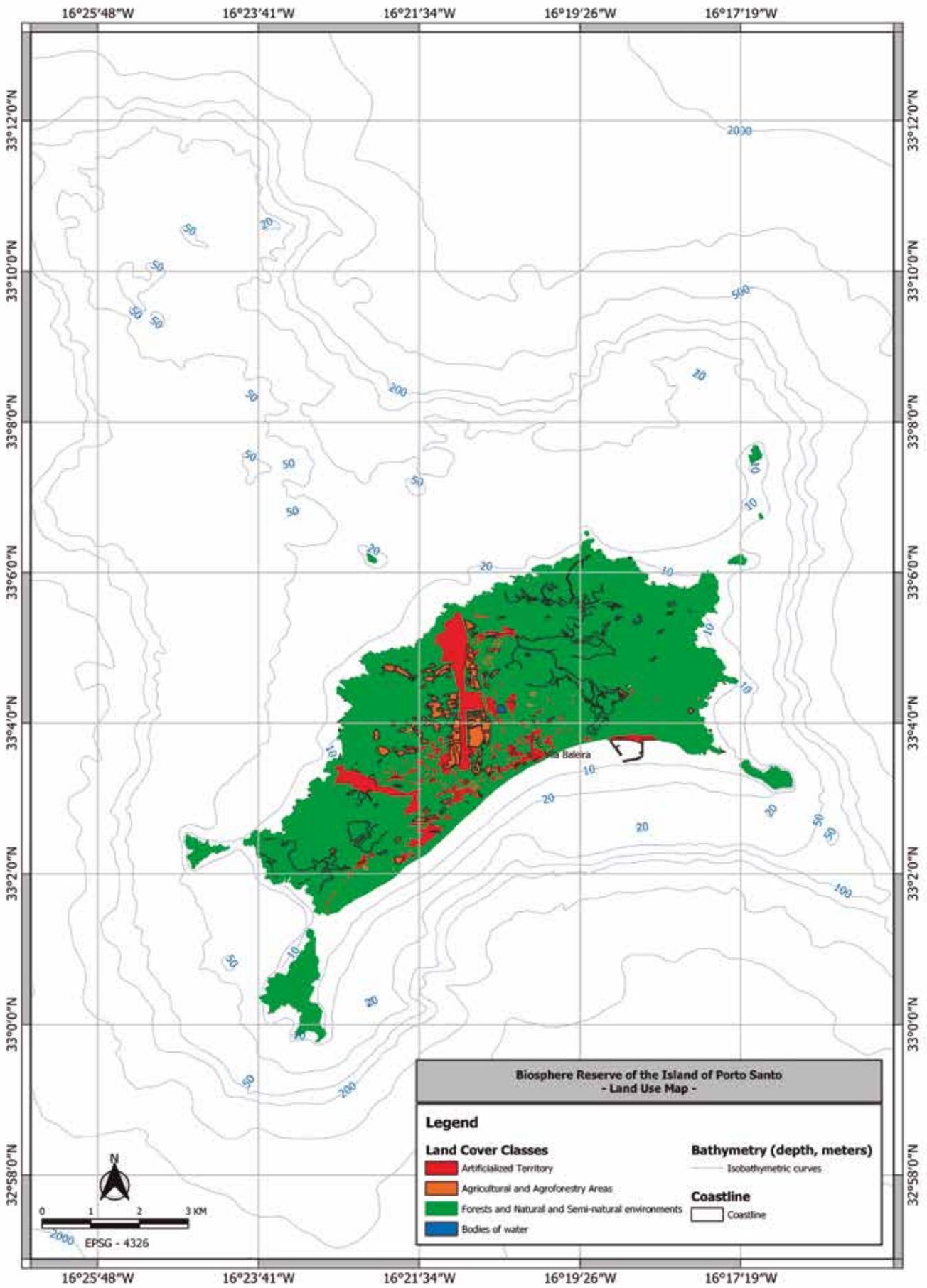


Figure 4 Land Use map of Porto Santo.

Since ancient times, Porto Santo has been known as “Ilha Dourada” (the Golden Island), because its landscape displays shades of yellow, as a consequence of the dune like sandy substrates, fossil dunes and sandstone raised plates. The extensive beach of golden sand in the south of the island stands out in this landscape. In comparison to the Island of Madeira, its surface is much less (42km² taking into account the islets), the population density is reduced (120 people per km²), the terrain is not very pronounced, the highest peak has an altitude of about 517m (Pico do Facho), and its vegetation is predominantly herbaceous and shrubby, the forest only occupies 8% of the territory.

From a phytosociological point of view, the current vegetal cover corresponds to a climax forest and pre-forest vegetation before stages of substitution and vegetation associated to human presence.

At the land-sea interface there are dynamic, complex, coastal dune systems which are mobile due to the location they occupy. These make up the natural protection of the submerged lands from the erosive action of the waves and present interesting halophyte and psammophilus vegetation.

At the dune system, the embryonic dune supports endemic plants such as, *Lotus loweanus* and *Lotus glaucus* subsp. *floridus*; in turn, the primary dune corresponds to the *Polygono maritimi-Euphorbietum paraliae* group; while the secondary dune corresponds to the *Euphorbio paraliae-Loletum glauci* group and shows fragments of native and endemic vegetation, sometimes combined with introduced species, some with commercial value, a reflection of agricultural occupation and expansion. The grapevines planted next to the beach, not only have a productive function, they also serve as sand dune fixations. Due to constant wind action and to protect the vines, the inhabitants have resorted to using tamarisk hedges (*Tamarix gallica*) and giant reed (*Arundo donax*) and have built walls of stacked stones called “crocheted walls”, which keep alive the knowledge and memories of olden days, when the vineyards had a different importance for the survival of the people. Notwithstanding, it is worthy to note the importance of the renewal of fields of this nature, rebuilding the vineyards through inherited knowledge, highlighting the crocheted walls and reaffirming the rurality of the Island of Porto Santo.

In contrast to the extensive stretch of sand to the south, in the north, the cliffs and small indented bays, dominate the landscape. These escarpments show accumulations of blocks of rolled stone, hosting endemic flora, characteristic of Macaronesian coasts, showing very little or no humanisation due to their inaccessibility, not having been subjected to human activity in the past. On some escarpments in the northeast, the wild junipers (*Juniperus turbinata* subsp. *canariensis*) still survive.

The forest and other wooded areas can mainly be found near Pico de Ana Ferreira, Pico do Castelo and in other reliefs in the northeast part of the island. The peaks, some rugged, are rock outcrops of greater resistance to erosion and include a forest cover mostly made up of exotic perennial species. At the foothill, there is secondary vegetation dominated by the endemic shrub, fish-stunning spurge (*Euphorbia piscatoria*), where once the small endemic tree called wild olive tree (*Olea maderensis*) and the dragon tree (*Dracaena*

draco subsp. *draco*), which correspond to traces of *Olea* and *Ceratonia Forests*, would have been predominant. In higher elevation patches, traces of ironwood and laurel forests can be found, where respectively, trees such as ironwood (*Sideroxylon mirmulans*), canary laurel (*Apollonias barbujana*) and beefwood (*Heberdenia excelsa*) would have been dominant; adjacently, heathers mainly comprised of small green flowered heath (*Erica platycodon* subsp. *maderincola*) were found, as well as a characteristic, pioneer vegetation of siliceous rock.

In this territory where fresh water is a scarce resource, some freshwater ecological systems have been registered; most are associated with the need to guarantee water reserves for different purposes. The streams and ravines spread throughout the island are typical, intermittent, Mediterranean water courses. The vegetation along the banks is mostly composed of tamarisk hedges (*Tamarix gallica*) and bramble (*Rubus* spp.); or other types of shrub and tree vegetation, resulting from the vegetal cover of the banks of the water courses which show stronger torrentiality, hand in hand with the torrential correction work, developed over several decades by the Forest Services. Generally speaking, the water lines show different torrent correction measures that were implemented and whose objective is the consolidation, rectification and elevation of the banks of the streams and the river-training of watercourses with stronger torrentiality, contemplating the construction of masonry dams, of underpinned flagstones and dry rock, and the construction of retaining walls. The existing reservoirs and the golf course ponds are interesting stopovers for migratory birds as well as other types of wild life.

In relation to the marine environment, it offers a landscape of elevated beauty, and is known for the presence of Macaronesian habitats, namely sandbanks that are permanently covered by shallow seawater, mudflats and sandflats not covered by seawater at low tide and coves, and shallow bays. The marine ecosystem holds great natural and ecological value of elevated importance and takes into account well preserved populations of species of scientific or commercial interest. Associated to the natural ecosystems are artificial reefs, like the ship “Madeirense” which was sunk in 2012 and the corvette “Pereira D’Eça”, in 2016. Besides the existing subaquatic archaeological remains, these ships are composed of aggregating elements of marine fauna and flora, having become subaquatic museums and diving areas of tourist attractions.

The terrestrial and marine ecological systems of the proposed Reserve include high levels of biological, geological and landscape diversity, contributing greatly to the conservation of the biodiversity of Macaronesia.

4.2

BE OF SIGNIFICANCE FOR BIOLOGICAL DIVERSITY CONSERVATION

Porto Santo, located in the Atlantic Ocean at the intersection of the tropics, North America and Europe, harbours an interesting and rich biological diversity within its territory, with 1660 taxa, of which 396 are endemic (172 from Porto-Santo, 132 from Madeira and 92 from Macaronesia), with 453 taxa including eight species endemic to Macaronesia, referenced for the marine environment. In the terrestrial part, the percentage of species endemic to Porto Santo is 10.4% and 7.9% to Madeira.

In total, the candidate Reserve has 2113 taxa, with 298 species mentioned in the IUCN Red List, 66 of which are under greater threat, namely 12 "Critically Endangered", 14 "Endangered", 14 "Near Threatened" and 27 "Vulnerable", as stated in Annex III.

In addition to the above, for the Biosphere Reserve of the Island of Porto Santo, 136 taxa have been identified under the Berne Convention – The Convention on Wild Life and the Natural Habitats in Europe (87 birds, 23 mammals, 9 vascular plants, seven gastropods, three reptiles, three arthropods, two echinoderms, one fish and one cnidarian), 25 taxa under the Bonn Convention - Convention on the Conservation of Migratory Species of Wild Animals (20 birds, four mammals and one reptile), 31 taxa under the CITES – Washington Convention - the Convention on International Trade in Endangered Species of Wild Fauna and Flora (22 mammals, five birds, two vascular plants, one reptile and one cnidaria), 42 taxa listed in the Birds Directive and 44 taxa in the Habitats Directive (22 mammals, 13 vascular plants, seven gastropods, one reptile and one algae), also showing an elevated number of habitats included in Annex I of the Habitats Directive.



Tarantula (*Hogna schmitzi*)

Terrestrial biodiversity is distributed over several ecosystems, from sea level to the zones of higher altitude, on the island and the islets, from the most natural environments to the humanised zones including agroforestry systems with typical crocheted walls, and paired stone walls, terraces or fields, irrigation canals as well as torrential correction work and reservoirs. In this biological diversity, 396 endemic taxa (310 species, 84 subspecies and two varieties) can be identified, the equivalent of 24% of the total, representing a high level of endemic species. In endemisms, it is important to note the existence of 21 endemic genus, of which nine are exclusive to Porto Santo, namely *Rhinothripiella* in the arthropods and *Callina*, *Hystriella*, *Idiomela*, *Lampadia*, *Lemniscia*, *Pseudocampylaea*, *Serratorotula* and *Wollastonaria* in the gastropods, the remaining twelve endemism are common to Madeira and include *Esuridea*, *Ellipsodes* and *Hadrus* in the arthropods; seven genus in the gastropods (*Boettgeria*, *Amphorella*, *Actinella*, *Caseolus*, *Discula*, *Spirorbula*, *Staurodon*); *Monizia* and *Chamaemeles* in the vascular plants, some with infraspecific taxonomical categories exclusive to the proposed Reserve, like for example, *Monizia edulis* subsp. *santosii*.

In terrestrial biodiversity, animals dominate with 961 taxa, representing 58% of the total diversity and 319 endemisms. In the invertebrates (892 taxa), the arthropods are those with the greatest number of taxa (796) and endemisms (201), following the gastropods with 123 taxa and 103 endemisms. In contrast, the vertebrates show less specific diversity, including 69 taxa with 15 endemisms distributed into three classes: mammals (eight), reptiles (two) and birds (59).

The proposed Reserve displays one of the most diverse terrestrial mollusc fauna on oceanic islands, including relic European fauna species from the Tertiary period and an elevated specificity, which can be confirmed with the 82% rate of endemisms, distributed over a vast number of habitats which include the neighbouring islets, all of them with endemic species. This fauna includes elements that are representative of the three evolutionary echelons of terrestrial gastropods, including slugs (three species, all non-native), semi-slug (four endemic species) and the commonly designated snails (116 species, 97 endemic). The low dispersion capacity of the endemic species, together with the limited area of distribution, makes it vulnerable to environmental changes, the disturbance and habitat loss and consequently, susceptible to extinction. As a result of this, 29 species are listed as threatened according to the IUCN Red List. Eight species are included in annexes II and IV of the Habitats Directive as priority for conservation, representing 28% of all gastropods listed in this structural document.

This insular malacofauna shows significant geographical differentiation as a consequence of distinct geological and climatic past events that were responsible for topographical variations which occurred over time and which resulted in the alteration and substitution of habitats, culminating in the isolation of the fauna. The zones of greater altitude, made up of seven peaks arranged on the east and west of the island are rich in endemisms while the coastal areas are essentially made up of non-native species. The mountains to the west are havens for elements which are characteristic of wet forests like the endemic *Leiostyla ferraria*, exclusive of Pico de Ana Ferreira, which indicates a presence of wet forest habitats until recent times, as suggested by the presence of other similar forests, like *Craspedopoma mucronatum*, *Paralaoma servilis* and *Plagyrona placida*, in the various fossil deposits on the island. To the east the open space gastropods like the higromiidae of the genus *Discula* (*D. cheiranthicola*), *Callina* (*C. rotula* e *C. bulwerii*), *Hystricella* (*H. bicarinata* e *H. echinulata*), and the exclusive *Lampadia webbiana*, *Lemniscia michaudi*, *Leptaxis wollastoni* e *Wollastonaria oxytropis*, dominate. There are other species distributed throughout the island appearing not to possess ecological restrictions, like the endemic clausiliidae *Boettgeria lowei* and the higromiidae *Caseolus commixtus*, *Heterostoma pauperculum* and *Leptaxis nivosa*. The coastal zones, with sandy soil and covered by introduced sparse vegetation, are dominated by non-native species, where *Theba pisana*, *Cochlicella acuta* and *Rumina decollata* are the most abundant. Having undergone cycles of instability of natural and anthropic origin, these areas must have always offered a very poor habitat for endemic species. Once connected to the main island, the islets have reduced fauna and include faunistic elements common to Porto Santo as well as exclusive species, resulting from the isolation and local speciation, with emphasis on *Idiomela subplicata*, the only representative of its genus and one of the largest gastropods of the endemic fauna and *Wollastonaria turricula*, which possesses an unusual turbinat shell.

In relation to arthropods, the percentage of endemisms is around 26%, however, it is as yet an understudied fauna; the increase of research could lead to the identification of new species for science. In this group 64 endemic taxa of Porto Santo can be identified, 88 of Madeira and 49 of Macaronesia.

There is only one confirmed species of wild mammal that has been confirmed for native vertebrates, the bat (*Pipistrellus maderensis*), known as the Madeira pipistrelle, corresponding to an endemic species of Macaronesia, "Endangered" on the IUCN Red List. Most mammals, which can be seen nowadays, were introduced after human settlement, for example bovine, caprine and porcine, and so were not a part of this analysis.

In relation to birdlife, taking into consideration the nesting and migratory birds, Porto Santo encompasses 59 taxa, of which 13 are endemic, four exclusive to Madeira, namely: the Madeira buzzard (*Buteo buteo harterti*), the common linnet (*Carduelis cannabina guentheri*), the grey wagtail (*Motacilla cinerea schmitzi*) and the Madeira firecrest (*Regulus madeirensis*); in addition, nine are exclusive to Macaronesia. In relation to birds of prey, besides the Madeira buzzard, the presence and nesting of the Canarian kestrel (*Falco tinnunculus canariensis*), endemic to Macaronesia and the barn owl (*Tyto alba schmitzi*) are worthy to note. Another subspecies that is also worthy



Lotus glaucus floridus

of note is the quail (*Coturnix coturnix confisa*) endemic to Macaronesia, occurring in Portugal only in Madeira and listed as "Least Concerned". Although the quail is part of the list of game birds, it does not present any relevant importance in this activity. Notwithstanding, in every hunting season, the daily bag limit is legislated as well as the hunting season, thus ensuring the conservation and maintenance of an effective population.

With regards to flora, the territory is home to 69 taxa of endemic vascular plants: 15 are exclusive to Porto Santo (*Crepis noronhaea*, *Echium portosanctense*, *Fumaria muralis* subsp. *muralis* var. *laeta*, *Helichrysum melaleucum* subsp. *roseum*, *Lotus glaucus* subsp. *floridus*, *Lotus loweanus*, *Monizia edulis* subsp. *santosii*, *Sonchus parathalassius*, *Limonium lowei*, *Pericallis menezesii*, *Saxifraga portosanctana*, *Erysimum arbuscula*, *Vicia costae*, *Vicia ferreirensis* and *Sideritis candicans* var. *multiflora*), 28 are endemic to Madeira and 26 endemic to Macaronesia, among the approximately 536 identified taxa. Part of this flora is of ancient origin (paleoendemic flora), showing traces of Tertiary vegetation that predominated in the basin of the Archaic ocean *Tethys*, where the Mediterranean sea is now located, while another part presents a more recent evolutionary tendency (non-endemic flora), where the arborescent caulirosetate or candelabra like or woody monocarpic plant aspect are evidence of an insular evolutionary tendency called Island woodiness. Several endemisms are listed in Annex II of the Habitats Directives such as: *Chamaemeles coriacea*, *Cheirolophus massonianus*, *Maytenus umbellata*, *Monizia edulis*, *Phagnalon lowei* (*P. benettii*), *Semele androgyna* (*S. maderensis*), *Autonoe madeirensis* (*Scilla maderensis*) and *Sibthorpia peregrina*.

Associated to the vascular flora is an interesting diversity of nonvascular plants, the bryophytes, with 133 identified taxa, of which seven are endemic, two being endemic to Madeira (*Riccia atlantica* and *Frullania sergiae*) and five to Macaronesia (*Fissidens coacervatus*, *Leucodon treleasei*, *Tortella limbata*, *Frullania polysticta* and *Radula wichurae*). In relation to lichens, although their presence is abundant and stands out in the landscape due to the yellowish, orange and off-white shades they confer onto the rocky outcrops, only 16 species have been cited, with *Anzia centrifuga* endemic to Porto Santo.

Local agrodiversity is also a differentiating factor of the proposed Reserve, represented by wildlife species, wild relatives of some of the main agricultural crops, agricultural species, represented by local varieties and agrosystems with unique structures and techniques. The wild relatives of the agricultural crops encompass about 200 taxa, 114 of which are native and 47 endemic. The most representative groups of this agrodiversity are the legumes, the grasses and the brassica. The agricultural species represent the second most important and representative component, where 95 taxa are listed. The most representative cultivations are the cereals, followed by the legumes and the fruit. Of the local varieties, tomato (*Lycopersicon esculentum*), wheat (*Triticum aestivum*), barley (*Hordeum vulgare*), Indian pea (*Lathyrus sativus*), beans (*Phaseolus lanatus*), onions (*Allium cepa*), sweet potatoes (*Ipomoea batatas*), lentils (*Lens culinaris*), watermelons (*Citrullus lanatus*) and table grapes (*Vitis vinifera*), are noteworthy.

In relation to the biological diversity of the marine environment, there are 453 taxa, with eight taxa endemic to Macaronesia, six species of fish, namely the canary damsel (*Abudefduf luridus*), the barred hogfish (*Bodianus scrofa*), the emerald wrasse (*Centrolabrus trutta*), the dotted moray (*Muraena augusti*), the scorpionfish (*Scorpaena canariensis*) and the island grouper (*Mycteroperca fusca*) and two bird taxa, the yellow-legged gull (*Larus michahellis atlantis*) and the shearwater [*Puffinus lherminieri* (*P. assimilis*)]. In the sea, worthy of mention are, the loggerhead sea turtle (*Caretta caretta*) and the Mediterranean monk seal (*Monachus monachus*) two species of the priority species of Annex II of the Habitats Directive, as well as the bottlenose dolphin (*Tursiops truncatus*), listed in Annex II of that directive and other cetacean species listed in Annex IV, like the short-beaked common dolphin (*Delphinus delphis*), the Atlantic spotted dolphin (*Stenella frontalis*) and the sperm whale (*Physeter macrocephalus*) among others.

In terms of intertidal and subtidal rocky and sandy biocenosis, it is important to note the coral species (*Antipathes wollastoni*, *Gerardia savaglia* and *Dendrophyllia ramea*), the spiny lobster (*Palinurus elephas*), the Mediterranean slipper lobster (*Scyllarides latus*), the crabs (*Xantho incisus*, *Grapsus grapsus*, *Plagusia depressa*),



Starfish



Bulwer's petrel (*Bulweria bulwerii*)

the European spider crab (*Maja squinado*), the sea-snail (*Charonia lampas*), the white limpet (*Patella aspera*), the limpet (*Patella candei*), the commercial harvesting of which is regulated by Regional Legislation, and the sea snail (*Phorcus sauciatius*), the spiny fan-mussel (*Pinna rudis*), the spotted rockling (*Gaidropsarus guttatus*), the blacktail comber (*Serranus atricauda*), the ballan wrasse (*Labrus bergylta*), the sand smelt (*Atherina presbyter*), the Madeira rockfish and the scorpionfish (e.g. *Scorpaena maderensis* and *Scorpaena canariensis*), the grey triggerfish (*Balistes capriscus*), the dusky grouper (*Epinephelus marginatus*) under regional protection and the red algae (*Lithothamnium coralloides*) included in Annex V of the Habitats Directive.

In the group of oceanic or pelagic birds, the following deserve mentioning, the Cory's shearwater [*Calonectris borealis* (*C. diomedea*)], the Bulwer's petrel (*Bulweria bulwerii*), the band-rumped storm petrel (*Hydrobates castro*) and the shearwater [*Puffinus lherminieri* (*P. assimilis*)], as well as the Kentish plover (*Charadrius alexandrinus*) for being one of the only species of nesting Charadriiformes in RAM and of ecological importance and "Critically Endangered", according to the Red Book of Vertebrates in Portugal.

The proposed Reserve includes classified areas of international importance for being nesting areas of important species of birds, many of them listed in Annex I of the Birds Directive and for protecting habitats and rare species of flora and fauna included in Annexes II and IV of the Habitats Directive.

Porto Santo has two ZEC, one SIC and 13 habitats included in Annex I of the Habitats Directive, four of which are considered priority, to which is added the Network of Protected Marine Areas of Porto Santo (RAMPPS). The applicable legal frameworks of these protected spaces follow the public policies of conservation of nature and management of resources and planning and land management of the territory, conforming to the regulation of economic activity in the sense of preserving the environmental values, in a clear commitment of compatibility between sustainability and development.

The creation of the Biosphere Reserve of the Island of Porto Santo will further stimulate all the effort being made at RAM and, in particular, in Porto Santo in the sense of guaranteeing and promoting the conservation of the present natural values, ensuring the respective compatibility with the socioeconomic development.

4.3

PROVIDE AN OPPORTUNITY TO EXPLORE AND DEMONSTRATE APPROACHES TO SUSTAINABLE DEVELOPMENT ON A REGIONAL SCALE

Over the last decades, Porto Santo has been a pioneer in the use of renewable energy and in the promotion of a sustainable environment. It is important to state that it was the first place in the country to have a wind farm for the production of electricity; and the first place in Portugal where passive solar houses were studied and built; being self-sufficient in heating and cooling, and where a pilot project was housed for the desalinisation of seawater through solar energy, due to the scarcity of drinkable water sources in the territory. In addition to the desalinisation plant of Porto Santo, by reverse osmosis, it was the fifth in the world and the first where a unit that functioned under pressure coming from other units (energy recovery system) was installed. From that experience, the manufacturers of desalinisation units by reverse osmosis started selling their machines with energy recovery turbines. This invention, created in Porto Santo, allowed for energy savings of about 15%.

Porto Santo continues to offer excellent conditions as a world reference, for example in what pertains to intelligent management of an insular power grid and for sustainable energy generation, to satisfy the local energy needs from sources, not fossils (e.g. wind and sun). The objective is that the proposed Reserve be a community with a better quality of life for the citizens, a tourist destination of high international accreditation in the areas of nature, health and well-being, and an exemplary territory in the field of low carbon economy because it will tendentially become a territory without fossil fuels and near zero CO₂ emissions.

With respect to sustainable energy, it is important to note the project "Sustainable Porto Santo" still in the implementation phase, which aims to reduce GEE emissions, increase renewable energy and improve energy efficiency, in addition to the existing partnership between EEM and Buggypower which produces microalgae, allowing for the capture and fixation of CO₂.

In addition to the abovementioned, Buggypower is recognised as one of the largest centres of biotechnology production in Europe, producing marine microalgae for food, the pharmaceutical and cosmetics industries. In 2017, BLUEVERT was created; it is a Spanish brand produced in Porto Santo and was classified as one of the products of the year by the Spanish magazine ELLE. Recently, this company was awarded the "2018 Innovation in Management and Business Award" by the European Association of Economy and Competitiveness.

The unique Golden Island – considered one of the 7 Wonders of Portugal, in the category of "Dune Beaches", in 2012 – of carbonate sand made up of the fossilised remains of marine animals and algae, has particular thermal properties and is rich in magnesium and strontium, this last one being a natural anti-inflammatory. These characteristics led to their recognition in the treatment of bone disorders and rheumatism. Some local hotels explore the therapeutic and well-being industry, offering thalassotherapy treatments using seawater and therapeutics with heated sand. Here, the user is buried in beach sand during the hours of greatest heat, causing sweating, which facilitates the penetration of the mineral elements in the skin, guaranteeing the necessary hydration, the treatment is supplemented with a diet rich in liquids and with local products. The seawater is also used in thalassotherapy treatments due to the elevated quantities of strontium, chromium and iodine, elements that are beneficial to health. These treatments are used to prevent and relieve stress and ailments related to rheumatism, arthritis, bone and muscle disorders. At these hotels in particular, oligotherapy has a significant importance, and users are provided controlled diets that include fruit and vegetables produced in soils developed over biogenic carbonate sands, rich in calcium, magnesium and strontium.



Biogenic carbonate sands

The proposed Reserve, aside from being a reference for beach fan tourists, is also one for the amateur divers, golf, whale watchers, birdwatchers, and in general for lovers of outdoor activities, in contact with nature, whether in the mountains or in the sea, through the enjoyment of walking trails and sea trips. During the year, the visitor can enjoy the different scenarios in a warm climate, safely and tranquilly. Its potential as a differentiating element for tourism is very high, lacking the valorisation and promotion of activities that supplement those that already exist.

For example, the interest in amateur diving has been growing, especially after the sinking of the ship "Madeirense" in 2012 and later the Corvette "Pereira D'Eça" in 2016. These elements, besides their existing underwater archaeological assets, are areas of tourist attraction. In turn, the Porto Santo Golf course, designed by the champion, Severiano Ballesteros, and considered one of the best in Europe, offers the perfect combination of natural beauty and a challenging game, attracting more and more fans, mostly from Northern Europe who visit the island outside the summer months.

In relation to nature tourism and scientific tourism, the Biosphere Reserve will promote the structuring and the emergence of new quality products around the development of responsible tourism for environmental, cultural and local values of the site. Concurrently, it is estimated that there will be an increase in the consumption of local products derived from the livestock and fishing activities, contributing to the promotion and development of these sectors.



Typical fruits

In livestock activities, the soil and climate conditions of the proposed Reserve are favourable to the development of certain traditional crops such as, tomato, onion, sweet potato, carrot, watermelon, melon, fig, table grapes, Indian peas, lentils, prickly pears, pomegranate, pitanga and even passion fruit which blooms in corridors in stretches of green throughout the settlements. These products are expected to be conferred with the designation of origin. Furthermore, organically grown produce has become more and more an opportunity for the development of local agriculture. On the one hand, it leads to differentiated products, with added value which has grown in demand on the part of the consumer; on the other hand, this production mode makes use of methods and practices that respect the environment, allowing for a more sustainable management of the environment and the landscape. The development of the brand "Porto Santo goatling" and "Porto Santo veal", may represent a secondary economic activity for the residents, contributing to the increase of employability.

The Golden Island has the potential for the stimulation of several recreational activities of a distinct nature, taking advantage of the equipment and infrastructures and the diverse natural resources it has to offer, aside from the beaches, in periods of less demand. The creation of more events of a cultural nature and their revitalisation associated to local gastronomy, traditions and passage routes, has created opportunities that may help combat the seasonality of this destination. The quietness of the destination, outside the summer months, represents a promotional nucleus that needs to focus on the integrated valorisation of the diverse and discreet accoutrements that characterise this island dressed in gold and bathed by crystalline, aquamarine water that caress the body and free the mind, in a rampant achievement of senses and emotions, timeless and distanceless.

The Porto Santo Biosphere Reserve of UNESCO will guarantee the progress of good environmental practices and the valorisation of its natural and cultural heritage. It is in this sense that a quality brand of environmental, social and economic sustainability is sought after for Porto Santo.



NS

Shoal

4.4

HAVE AN APPROPRIATE SIZE TO SERVE THE THREE FUNCTIONS OF BIOSPHERE RESERVE

The proposed Biosphere Reserve corresponds to a total area of 27310.54ha, according to projection system WGS84 (EPSG:4326), represented in Figure 5. This Reserve includes all the terrestrial surface of the Island of Porto Santo and its neighbouring islets corresponding to extensions of the island, to which is added the surrounding marina to the 100m bathymetric line, including the underwater plate and in this way coinciding with the natural limits of the island.

The proposed area has the adequate dimension because it takes into account the archipelago state, the unique geomorphologic characteristics of the territory and the elevated number of endemisms of Porto Santo, Madeira and Macaronesia, as well as other terrestrial and marine biodiversity that it is home to. This area contemplates the natural values of exceptional character or of critical importance as well as the realisation of practices compatible with nature and the encouragement of biodiversity associated to human activity, which is predominantly touristic.

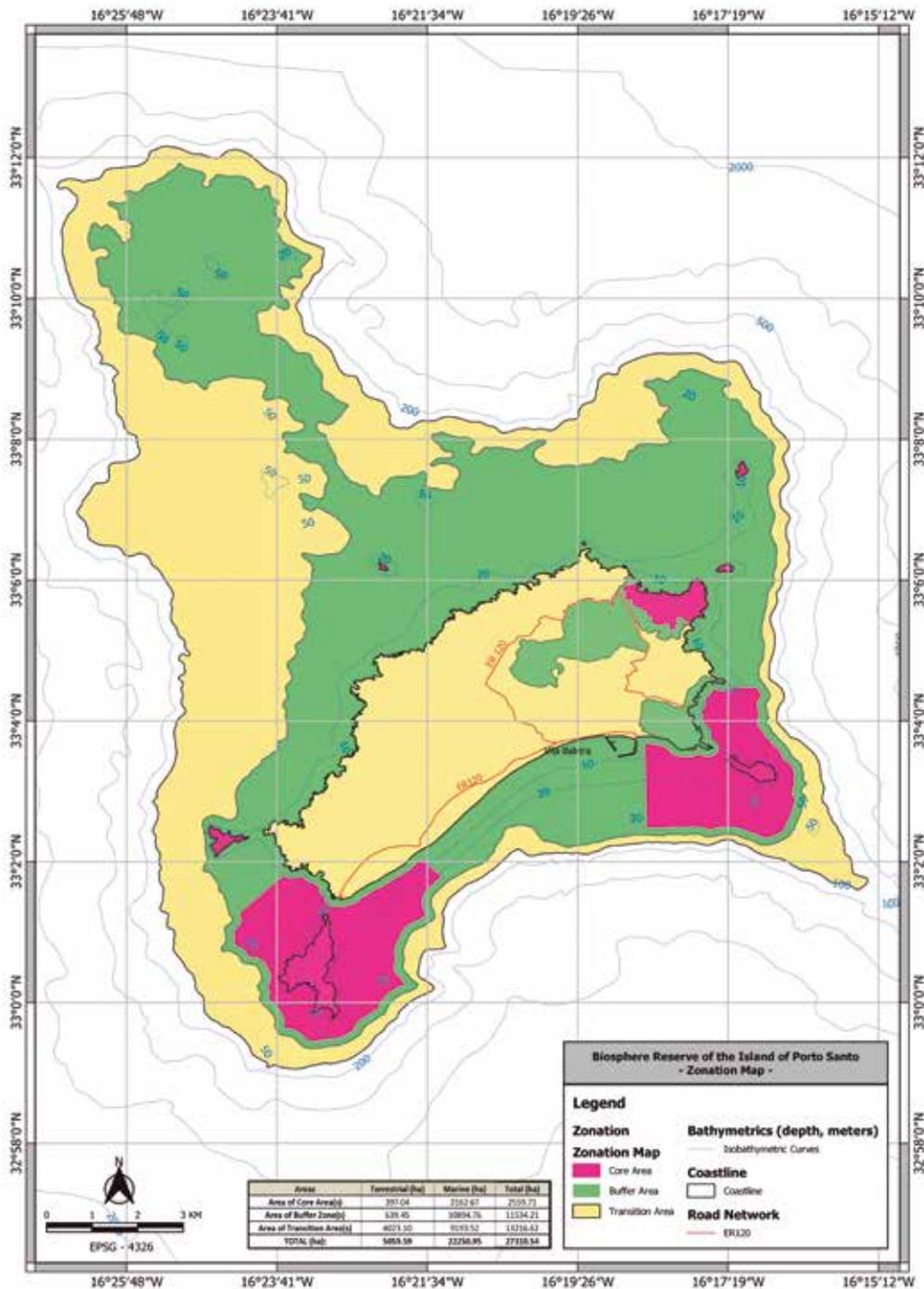


Figure 5 Biosphere Reserve of the Island of Porto Santo according to projection system WGS84 (EPSG:4326).

Areas	Terrestrial (ha)	Marine (ha)	Total (ha)	% Area
Core Area	397.04	2 162.67	2 559.71	9.4
Buffer Zone	639.45	10 894.76	11 534.21	42.2
Transition Area	4 023.10	9 193.52	13 216.62	48.4
TOTAL (ha)	5 059.59	22 250.95	27 310.54	100

Table 1 The areas of the Biosphere Reserve of the Island of Porto Santo, according to projection system WGS84 (EPSG:4326).

The proposed Biosphere Reserve encompasses seven Core Areas (2559.71ha), both terrestrial and marine. The Core Areas represent 9.4% of the whole of the proposed Biosphere Reserve. The terrestrial part, with 397.04ha includes the Pico Branco and its surrounding area, in accordance with ZEC PTOR0002, where there are unique species of flora and fauna, typical Macaronesian habitats and landscapes of exceptional scenic value; as well as the six islets included in RAMPPS, territories where genetic drift and isolation have contributed to the existence of a specific biodiversity in addition to the one common to the island, but more protected from human activity and currently without the presence of invasive herbivorous species. The marine area, with 2162.67ha is included in RAMPPS and encompasses the sea surrounding the islets of Cima and Baixo, including species and habitats characteristic of Macaronesia and presenting underwater landscapes of great beauty and a diversity of living beings. These Core Areas benefit from long term protection regime, issued under specific legislation, allowing for the conservation of biodiversity, the monitoring of the ecosystems and the realisation of research projects and activities of an educational or formative nature, as well as ecotourism for the appreciation of the natural areas as spaces of elevated natural, cultural and landscape value, which offer ecological, educational, recreational, scientific, economic and cultural value for local, national and international visitors as well as neighbouring communities and the society in general.

There is also a well-defined Buffer Zone that surrounds the Core Areas on land and in the sea in a *spatial continuum*, that stretches essentially through the marine space to the 50m bathymetric line. The Buffer Zone, with 11534.21ha corresponds to 42.2% of the total of the Biosphere Reserve, with 639.45ha on land and 10894.76ha in the sea. This zone functions as protection around the areas of greater sensitivity, designed for cooperation activities in harmony with good ecological or environmental practices, including environmental and educational awareness, research, recreation and leisure and nature tourism, as well as a diversity of activities such as walking trails, orienteering, cycling or horse-riding, nautical activities or diving, among others.

Finally, the Transition Areas, a total of 13216.62ha, the equivalent of 48.4% of the total of the proposed Reserve, is geared primarily for the development function, complementarily offering a logistic function, seeing as how they cover equipment and infrastructures like schools, museums, hotels, restaurants, commerce, services, etc., as well as the function of conservation because it includes relevant natural values. The Transition Area in the sea corresponds to the other areas extending to the 100m bathymetric line, presenting a total of 9193.52ha; while on land it occupies an area of 4023.10ha on the island. In general, these areas integrate several practices or activities, from fishing, agricultural, conurbations and other uses where the local population, the organs of administration and management, researchers, cultural organisations, tourist groups and the economic sector in general as well as other interested parties, work together for the management and sustainable development of Porto Santo.

The Biosphere Reserve of the Island Porto Santo is considered to have the appropriate dimension and zonation which allows for the development of the three functions in a long term, intergenerational perspective, functioning as a place of learning and sustainable development, integrating different sectors of the society on behalf of social well-being and environmental safeguarding because it will guarantee areas on land and in the sea with the function of conservation, and appropriate areas for the local community to demonstrate sustainable use of endogenous resources, through the functions of development and logistic support.

4.5

THROUGH APPROPRIATE ZONATION

a) CORE AREAS

A LEGALLY CONSTITUTED CORE AREA OR AREAS DEVOTED TO LONG TERM PROTECTION, ACCORDING TO THE CONSERVATION OBJECTIVES OF THE BIOSPHERE RESERVE, AND OF SUFFICIENT SIZE TO MEET THESE OBJECTIVES

The Core Area corresponds to 9.4% of the proposed Reserve, primarily guaranteeing the functions of conservation in the terrestrial and marine environment, as well as the promotion and the dissemination of scientific knowledge.

The objective of these areas in the long run, is to protect the landscape, holder of a rich, unique biodiversity to which is added an equally particular geodiversity, as well as monitoring and safeguarding the respective natural resources. According to existing information, they are considered large enough to meet the objectives of conservation of the proposed Reserve.

The marine part, with 2162.67ha corresponds to the part of the sea of RAMPPS (approved by Regional Legislative Decree No. 32/2008/M of 13th August) that surrounds the islets of Baixo and Cima. Its management is in agreement with what was established in RAMPPS and POGRAMPPS (approved by Resolution No. 1295/2009, of 2nd October – JORAM, I Series-100). The whole area is home to an elevated diversity of species and habitats characteristic of Macaronesia, to which the landscapes of great scenic value, can be added.

The terrestrial part, with 397.04ha, corresponds to the territory of RAMPPS that encompasses ZEC Islets of Porto Santo PTPOR0001 (approved by Government Council Resolution No. 1341/2009, of 3rd November), including the territory of the six islets, managed in accordance with RAMPPS and POGRAMPPS, to which was added ZEC Pico Branco PTPOR002 (approved by Resolution No. 751/2009, 2nd July), located in the extreme northeast of the island and whose management is in accordance with the Management and Conservation Measures Programme of the Site of Natura 2000 Network of Pico Branco – Porto Santo (PTPPR0002) (approved by Order No. 73/2009 of SRA, of 24th June – JORAM, II Series – 119) and PROF-RAM (approved by Resolution No. 600/2015, of 11th August – JORAM, I Series – 119).

The islets of Porto Santo are the property of RAM. With the creation of RAMPPS, they have had the legal status of protected area since 2008, being managed by IFCN, IP-RAM. They have an elevated ecological and biophysical value, calling for the long term safeguarding of their natural heritage which ranges from the geological aspects to the species of xerophytic, indigenous and endemic vegetation, presenting habitats that are representative and important for the conservation *in situ* of the biodiversity, as is the case of the "Sea cliffs with endemic flora of the Macaronesian coasts" listed under "Habitats of communitarian interest" of the Habitats Directive. These islets make up relevant areas for the safeguarding



Wall lizard (*Teira dugesii jogeri*)

of the biodiversity, without the presence of herbivorous animals, allowing for the harmonious growth of the vegetation which is predominantly made up of small plants as well as perennial and annual herbaceous plants. The terrestrial fauna is home to vertebrate species (birds and lizards) and a great variety of invertebrates, many of which are endemic. Most of the islets include exclusive species of molluscs, such as the case of *Wollastonaria turricula*, which can only be found on the islet of Cima, *Leptaxis wollastoni forensis* (Islet of Fora), *Leptaxis nivosa craticulata* (Islet of Ferro), *Serratorotula acarinata* (Islet of Baixo) and *Discula calcigena barbozae* (Islet of Fonte da Areia). On a vertebrate level, the islets are preferential places for the nesting of seabirds, making the islets of Cima, Baixo and Ferro an IBA.

On the island, Pico Branco is one of the few places in RAM where havens of two priority forest habitats can be found, under the Habitats Directive, designated as Macaronesian Laurel Forests and endemic Forests of *Juniperus* spp, to which others typical of Macaronesia can be added as well as flora and fauna species under Annexes II and IV of that same communitarian directive and the Birds Directive. In relation to flora, it hosts about 250 taxa of vascular plants, seven of which are exclusive to Porto Santo (e.g. *Echium portosanctense*, *Erysimum arbuscula*, *Pericallis menezesii*, *Saxifraga portosanctana* and *Vicia costae*), deserving equal emphasis, *Cheirolophus massonianus*, for its rarity, and other species of communitarian interest. In relation to indigenous fauna the avifauna dominates and it is important to note the high percentage of mollusc endemisms, of which *Caseolus subcalliferus*, exclusive to Pico Branco, stands out.

b) BUFFER ZONES

A BUFFER ZONE OR ZONES CLEARLY IDENTIFIED AND SURROUNDING OR CONTIGUOUS TO THE CORE AREA OR AREAS, WHERE ONLY ACTIVITIES COMPATIBLE WITH THE CONSERVATION OBJECTIVES CAN TAKE PLACE

The Buffer Zones surround the Core Areas on land and in the sea, corresponding to 42.2% of the proposed Reserve. These Zones contribute to the safeguarding of the existing natural values in the Core Areas, lessening any threats that may surge by protecting the areas of greater sensitivity. In the marine part of the Buffer Zones some tourist activity can be developed, compatible with the conservation objectives, such as cetaceans and bird watching, amateur diving and recreational fishing. On the terrestrial part there is visitation of emblematic peaks like Pico do Castelo, Pico do Facho and Pico da Juliana, as well as some agroforestry activity, whose objective is to reduce soil erosion, promote ecosystem restoration and avoid the phenomena of desertification. They present significant natural values to maintain special coherence of the proposed Reserve and the connectivity of the existing biodiversity. These zones also contribute to the function of conservation and logistics of the Reserve.

The Buffer Zone in the sea corresponds to 10894.76ha. It surrounds the marine Core Areas and extends from the coastline of the island to the 50m bathymetric line.

The Buffer Zone on land is on the island and has 639.45ha. With respect to the extreme southeast it corresponds to a contiguous zone of the marine part of RAMPPS that surrounds the Islet of Cima; while the other zone is located in the northeast, neighbouring Pico Branco – Porto Santo (PTPOR0002). The whole terrestrial area is regulated according to the PDM of Porto Santo and forest surface in conformity with the underlying principles of the Law on Forestry Policy – Law No. 33/96, of 17th August – the forest, due to the diversity and nature of the goods and services it provides, is a renewable natural resource, essential to the maintenance of all types of life. Its conservation and protection is the responsibility of all the citizens and its resources and associated natural systems should be managed in a sustainable way, within the framework of integrated forest development. The carrying out of good forestry practices and the management of those spaces is the responsibility of its keepers or managers according to the regulatory standards of the enjoyment of forest resources. Furthermore, and without prejudice of the legal regime of property, the conservation, exploitation, reconversion and expansion of the forest is of public interest. The management of the forest or agroforestry spaces is undertaken according to the forestry standards defined in PROF-RAM.



Barred hogfish (*Bodianus scrofa*)

c) TRANSITION AREAS

AN OUTER TRANSITION AREAS WHERE SUSTAINABLE RESOURCE MANAGEMENT PRACTICES ARE PROMOTED AND DEVELOPED

The Transition Areas correspond to 48.4% of the proposed Reserve area and encompass 4023.10ha on the surface of the island and 9193.52ha in the marine environment between the 50m and 100m bathymetric lines. It is on this Golden Island that there are human settlements, the airport and harbour facilities, and other equipment and infrastructures related to health, safety, education, commerce, industry and services, such as the Health Centre, Municipal Fire Department, Public Security Police Station, Forestry Police Station, National Republican Guard Station, Port Captaincy of Porto Santo, municipal library, teaching establishments, museums, cemetery, hotels, golf course, restaurants and commercial establishments, among others. This is where the main economic activities take place; the most relevant ones related to tourism, farming and fishing, they all have a strong connection to the natural resources, biodiversity, landscape and historic-cultural heritage.

The Transition Areas on land and in the sea are aimed at the development function, although they also have a logistic and conservation function, because they include natural values, characteristic of Macaronesia.

d) PLEASE PROVIDE SOME ADDITIONAL INFORMATION ABOUT THE INTERACTION BETWEEN THE THREE AREAS

The three types of Areas (Core, Buffer and Transition) that make up the proposed Biosphere Reserve will work jointly and in articulation, requiring harmonious and functional interaction between them, seeing as how the proposed area covers the totality of the terrestrial territory and consequently the whole of the Island of Porto Santo, as well as an important marine area around this island and its islets, defined according to the bathymetric and precisely in accordance with the coastline.

In the Core Areas the legal protection in force regulates the development of some activities like fishing, hunting and visitations, because the conservation of nature and the safeguarding of the biodiversity and geodiversity are the priority objectives. The Buffer Zones also function as protection of the Core Areas, in a controlled development for the Transition Areas, where economic activities take on a predominant role.

4.6

ORGANIZATIONAL ARRANGEMENTS SHOULD BE PROVIDED FOR THE INVOLVEMENT AND PARTICIPATION OF A SUITABLE RANGE OF INTER ALIA PUBLIC AUTHORITIES, LOCAL COMMUNITIES AND PRIVATE INTERESTS IN THE DESIGN AND THE CARRYING OUT OF THE FUNCTIONS OF THE BIOSPHERE RESERVE

4.6.1

DESCRIBE ARRANGEMENTS IN PLACE OR FORESEEN

The involvement and the participation of authorities and public entities, local communities and private entities in the planning and implementation of the functions of the Biosphere Reserve, began with the initiation of the process for the preparation of the submission of Porto Santo as a Biosphere Reserve, in the last trimester of 2017. To this end, a Work Group was formed (GT – PSRB), which includes members of the Porto Santo City Council (CMPS), the Porto Santo Folklore Group Association (AGFPS), the Regional Energy and Environment Agency of the Autonomous Region of Madeira (AREAM), and the Regional Government of Madeira, represented by the Regional Secretariat of the Environment and Natural Resources (SRA), Regional Directorate for Public Administration of Porto Santo (DRAPS) and the Forest and Nature Conservation Institute (IFCN, IP-RAM), with the responsibility of carrying out the necessary measures and tasks inherent to the submission process and its projection within the local community.

The work done relating to the proposal was based on the principles of involvement and participation of the community and interested parties, with the implementation of information sessions for clarification, participatory sessions to listen to input and work meetings, mainly in Porto Santo, to encourage the development process.

The first general information session for the community took place on 9th January, 2018, in the Multipurpose room of the Cultural and Congress Centre of Porto Santo, intended for entities and institutions (public and private), with the participation of about 70 people. The President of the National Committee for the MAB Programme, Anabela Trindade, the President of CMPS and the Director of DRAPS, among other notable figures, were present.

Until the end of February, 2018 and in order to listen to different speakers, in the continuance of the work that had been started in the first general session, several work meetings took place as well as participatory sessions, aimed at certain groups of local actors, namely tourist guides, professors, farmers, fishermen, hunters and businessmen of civil construction, agents connected to transport and tourism, professionals and lovers of culture, brotherhoods, as well as the population in general.



Yellow-legged gull (*Larus michahellis atlantis*)

In that same year, in the months of March and April, there were more meetings with speakers in the fields of agriculture, culture, biological diversity, geodiversity, nature conservation and ethnography, among other sectors and fields of expertise.

From the first meetings of GT-PSRB, special mention should be made to those that took place in the City of Porto Santo, on the 14th and 28th March, and 2nd and 12th April, 2018, where the underlying theme was always the Programme “Man and the Biosphere” in order to listen to and evaluate the interest of this submission and to compile information, pertinent to its development.

Next, there was a period of public participation, between the 12th April and 2nd May, 2018 during which a preliminary document before the completion of the application form of Porto Santo as a Biosphere Reserve, was available on the internet site of the Municipality of Porto Santo, DRAPS and SRA and in paper format, at two relevant places in the City of Porto Santo: The City Council Building of Porto Santo, Town Hall and Citizen Service Station, and at the headquarters of SRA in the city of Funchal, Island of Madeira. Having received 11 contributions of several local actors and external experts, the proposal was further improved by GT-PSRB.

In the last trimester of 2018, from the 28th to the 30th November, Porto Santo hosted the event “Porto Santo – Biosphere Reserve of UNESCO: Opportunities and Challenges”, aimed at the public in general, with the participation of about 90 people. This event, which took place in the auditorium of the local City Council, was attended by the Regional Secretariat of the Environment and Natural Resources, the President of CMPS, the official representative of DRAPS and other local entities and notable figures; as well as several guest speakers, notably, Anabela Trindade (President of the National Committee MaB), António Domingos Abreu (International Specialist for UNESCO, in the Ecological and Earth Sciences Division), António San Blas (Director of the Biosphere Reserve of La Palma, Canary Islands), Fernando Ferreira (Director of the Biosphere Reserve of Corvo, Azores) and Rui Moisés (Promoter of the application of Santana, Madeira, to Biosphere Reserve). This conference was aimed at promoting this UNESCO classification and clarifying how it can contribute to the promotion and safeguard of the natural values and heritage of Porto Santo in the pursuit of the development of the local economy based on sustainable tourism. On the 28th, there were two more

round table discussions: the first with the objective of promoting the sharing of experiences with other Biosphere Reserves, namely Macaronesia and the second was dedicated to the unique values of Porto Santo and how the Biosphere Reserve could contribute to the valorisation and sustainability of Porto Santo, followed by lectures. On the 29th the activities centred on the importance of education and the Eco-Schools programme in the involvement of the local community within the scope of the Biosphere Reserves. On the 30th a tour of the Golden Island with stops at different places of cultural, historical and natural interest was carried out, with the objective of raising awareness of the invaluable local heritage.

In order to strengthen the promotion of the ongoing proposal, display booths were placed in the main establishments of Porto Santo at the beginning of January 2019, with summarised data on the proposal of Porto Santo as a Biosphere Reserve, to offer the community information and to incite their interest and involvement.

With the same objective, DRAPS has been promoting the dissemination of this proposal in its monthly newsletter, namely in the January and April 2018 editions, having published a special edition at the beginning of 2019. Thousand copies were printed and distributed on the island in different establishments like schools, commerce and restaurants, hotels and public administrative services.

Within the scope of the Programme for Environmental Education of the council, aimed at basic education of the first cycle, which reaches about 100 students monthly, activities have been integrated with the objective of the diffusion of the proposal, as well as the promotion of the awareness of local cultural heritage.

Between the 20th March and 22nd April, 2019, there was another period of public hearing of the proposal document of Porto Santo to Biosphere Reserve, including a proposal Action Plan for the nominated Reserve and the logo. During that period and similarly to what had happened in 2018, the referred documentation was made available on internet site of the Municipality of Porto Santo, DRAPS and SRA and in paper format at two relevant places in the City of Porto Santo: The City Council Building of Porto Santo, Town Hall and Citizen Service Station -, and at the headquarters of the Regional Secretariat of the Environment and Natural Resources in the city of Funchal. On the 12th April at 6p.m. in the auditorium of CMPS there was a public session of clarification of the available documents. Thirty people participated in this session, representing distinct sectors of activity like the Port Captaincy of Porto Santo, the National Republican Guard, The Parish Council of Porto Santo, The Municipal Assembly of Porto Santo, the State Forestry Corps and people acting in a private capacity who showed an interest in this proposal, as well as the top-level directors of CMPS, DRAPS and members of GT – PSRB. In view of eight contributions of different local actors and external specialists, the proposal was further improved by GT-PSRB.

Not to devalue the other Porto Santo people who were keenly involved in the whole process, two photograph lovers, Pedro Menezes and Neide Paixão, deserve special mention, for having ceded the copyright to most of the photos that are part of the application, besides of Pedro Menezes have created a logo of the Biosphere Reserve of the Island of Porto Santo that was in the genesis of the final version.

Throughout this process of the preparation of the application portfolio, 81 declarations or letters of support and partnerships of different public and private entities were received, namely schools, commercial establishments, hotels, associations, regional secretariats and offices, research centres, among others, who demonstrated their commitment to the pursuance of the objectives of the nomination, to which is added nine declarations of the Biosphere Reserve of Macaronesia manifesting their support for the classification of Porto Santo as a Biosphere Reserve, included in Annex III.

In turn, the Municipal Assembly of Porto Santo, in the regular meeting of the 26th April, 2018 approved, with 16 votes, unanimously, the congratulations vote for the ongoing proposal, which can be consulted in Annex III. The following year, the CMPS, in the 15th July 2019, approved the Action Plan for the Biosphere Reserve of the Island of Porto Santo. On July 25, 2019, the Regional Government of Madeira approved the application proposal containing the Action Plan of the Porto Santo Island Biosphere Reserve (Annex III).

On the whole, these initiatives encouraged the direct participation of the people of Porto Santo and Madeira in general, on an individual or institutional level, allowing the local community to be informed and to participate in a proactive and participatory process, for the implementation and effective functioning of the Biosphere Reserve, acknowledging the interest and relevance of this proposal for Porto Santo.

The administration, management and coordination of the Biosphere Reserve of the Island of Porto Santo will actively involve the people of Porto Santo by the Advisory Board and by the Scientific Board of the non-profit Private Law Association. Additionally, the Action Plan for the proposed Biosphere Reserve includes several action measures that show the strong involvement of the local community.

This nomination is based on the shared interests, knowledge, and experience, focusing on the peculiarities of Porto Santo and open to the world on behalf of the people of Porto Santo and of the objectives of the Biosphere Reserve of UNESCO.

4.6.2.

HAVE ANY CULTURAL AND SOCIAL IMPACT ASSESSMENTS BEEN CONDUCTED, OR SIMILAR TOOLS AND GUIDELINES BEEN USED?

No cultural and social impact evaluation was done, seeing as how Porto Santo does not have any indigenous inhabitants. The territory has been populated by the Portuguese since from the first quarter of the XV century.

4.7

MECHANISMS FOR IMPLEMENTATION

DOES THE PROPOSED BIOSPHERE HAVE

a) MECHANISMS TO MANAGE HUMAN USE AND ACTIVITIES IN THE BUFFER ZONE OR ZONES?

In the Buffer Zones of the Biosphere Reserve there are mechanisms that regulate and ensure the management of the uses of the soil and the occupation of the territory, namely the legislative instruments in existence, such as the Land-use Plan for the Autonomous Region of Madeira (POTRAM) and the Municipal Master Plan (PDM) of Porto Santo, which guarantee the use of the space in a way that is compatible with the functions of the Buffer Zones.

The PDM was approved by Government Presidency Resolution No. 856/99, of 16th June, and altered in 2010 and 2012, through the adaptation of two Urbanisation Plans (PU): the PU for the Porto Santo Golf Resort of (PUGRPS), rectified by Resolution No. 1438/2009, published in JORAM, I Series, No. 122, of 4th December; and PU of Frente de Mar Campo de Baixo/Calheta (PUP), ratified by Resolution No. 228/2012, published in JORAM, I Series, No. 43 of 5th April. The PDM of Porto Santo defines the zoning plan of the whole municipal territory, except in the areas that fall within the Urbanisation Plan.

In accordance with the underlying principles of the Law on Forestry Policy – Law No. 33/96, of 17th August, the observance of good forestry practices and the sustainable management of forest spaces is of the responsibility of the holders or managers of the lands. The conservation, exploration, reconversion and expansion of the forest according to the regulatory standards of the enjoyment of the forest resources defined in the zoning plans and forest management, namely considered in the PROF-RAM, are of public interest.

Law-decree No. 140/99 of 24th April, as currently worded, led to the revision of the transposition for the national law of Directives No. 79/409/CEE, of the Council, of 2nd April (Birds Directive, pertaining to the Conservation of Wild Birds) and No. 92/43/CEE, of the Council of 21st May (Habitats Directive, pertaining to the Preservation of the Natural Habitats and of Fauna and Wild Flora); establishing Natura Network 2000, namely the instruments of the planning of the territory, the acts and activities conditioned in the designated SIC, whether ZEC or ZPE.



Club tipped anemone (*Telmatactis cricoides*)

The elaboration of the Porto Santo Coastal Area Programme (POCPS), still awaiting approval, is under way. The objective of this programme is the promotion of a sustainable and harmonious use of the coastal area of the island, aligning the different uses with the protection of the beach and promoting the planning of the occupations and the safeguarding of people and goods, considering the phenomena of risk associated to the coastal dynamics and the rising sea level. Within the scope of the elaboration of POCPS, a commitment made with the Government Programme and integrated in the Marine Strategy of RAM, Beach Plans will also be drawn up. These plans establish, in regulation, the typologies of the beaches and their maximum capacity, the criteria and characteristics for the typologies to be installed, the particularities of implementation and construction of the support and beach equipment, the maximum areas, the bathing areas and accessibilities, including the characteristics of the accesses. POCPS is a territorial management system of the coastal area which will create strategic options for the biophysical protection of that area, always valuing the natural resources and the conservation of the environmental and landscape values. Taking into account the specific characteristics of the coastline of the Island of Porto Santo – the only dune beach of Madeira, vulnerable to the effects of the rising sea level, no efficient planning instruments on most of the beach, the need to regulate the uses and occupations of the beach and adjacent territory - requires the existence of an instrument of this nature.

In relation to the Situation Plan for Maritime Spatial Planning (PSOEM), which includes the marine Buffer Zone of the proposed Biosphere Reserve, the approval date is quite close. Madeira PSOEM is concluded and aims to respond to the new challenges placed for the sustainable development of the ocean, through the spatial and temporal identification and representation of the existing uses and activities. As a planning and managing instrument, it is characterized by its intersectoral approach, allowing for the coordination of the actions of public authorities and private initiative, establishing itself as an important and indispensable tool for marine prosperity, contributing to sustainable blue growth. This plan is awaiting approval at a national level.

b) A MANAGEMENT POLICY OR PLAN FOR THE AREA AS A BIOSPHERE RESERVE?

The Action Plan for the Biosphere Reserve of the Island of Porto Santo includes several actions to be developed, focussed on the compliance of the objectives defined for the Reserve, aligned with each other and structured according to five strategic priorities of intervention: Priority 1 Image and Identity; Priority 2 Social, economic and cultural activities; Priority 3 Nature conservation; Priority 4 Social participation; Priority 5 Climatic change. This Action Plan includes the contributions resulting from the different public hearing sessions with the community and meetings with various entities, and contemplates several actions to develop, for a five year time line, focussed on the fulfilment of the defined objectives for the area in question. Its implementation requires the realisation of varied nature actions and the mobilisation of the local community, who are expected to act as the protagonists in a local development project which is compatible with the protection of the environment.

Included are different strategic instruments applicable to the whole Autonomous Region of Madeira (RAM) and which are applied to the proposed Reserve, of which the following are noteworthy, Strategic and Integrated Transport Plan for the Autonomous Region of Madeira (PIETRAM), Economic and Social Development Plan for the Autonomous Region of Madeira (PDES), Tourism Planning Programme for RAM (POT), Rural Development Programme for the Autonomous Region of Madeira (PRODERAM), Management Plan for the RH10 Hydrographic Region (PGRH Madeira), Regional Environmental Policy Plan (PRPA), Regional Water Plan of Madeira (PRAM), Flood Risk Management Plan for the Autonomous Region of Madeira (PGRI) and Regional Plan for Forest Management in the Autonomous Region of Madeira (PROF-RAM).



Table grapes

c) A DESIGNATED AUTHORITY OR MECHANISM TO IMPLEMENT THIS POLICY OR PLAN?

The governance, management and coordination of the Porto Santo Island Biosphere Reserve will be ensured by the non-profit private law Association, composed of private founding members and public founding members, with competence to manage, streamline, monitor and disseminate the Porto Santo Island Biosphere Reserve Action Plan.

The Association, through cooperation agreements to be signed with private and public associates, will allocate resources - human, logistical, administrative and financial - indispensable for the proper functioning of the management of the Reserve and the execution of the Action Plan.

The proposed management has been articulated with the plans referred to in the preceding paragraphs, in harmony with the existing legal instruments, involving regional and local public administration.

d) PROGRAMMES FOR RESEARCH, MONITORING, EDUCATION AND TRAINING?

RESEARCH

Within the scope of the different research and higher education programmes, encouraged by the academies, particularly with the University of Madeira (UMa), the Faculty of Science of the University of Lisbon and the University of Aveiro, research has been developed, bringing together several themes which are relevant to the revitalisation of the knowledge of the endogenous values of Porto Santo and its sustainability, as a candidate to the Biosphere Reserve.

The Germplasm Bank ISOPlexis of UMa has developed research within the field of surveying and stocktaking of the endogenous genetic resources of Porto Santo, involving agricultural species and their wild relatives, including their documentation, georeferencing and conservation *ex situ e in situ*, and the evaluation of those genetic resources. Alongside this study is the coordination of the project "Consortium for the Monitoring of the Impact of Climate Change on Agrobiodiversity and Sustainability of BIOeconomics in RAM (CASBio)", which includes the characterisation and monitoring of a target agrosystem in Porto Santo and the development of pilot trials whose objective is to study the techniques for adaption to climate change.

The Botanical Group of UMa has a doctoral project underway, entitled "Flora and vegetation of Porto Santo (Madeira, Portugal)".



Ship "Madeirense" – artificial reef

In relation to the sea, there are few studies about the marine environment and most that exist are very specific, such as the campaign for the Mission Structure for the Extension of the Continental Shelf, done in July, 2011, and the programme for monitoring natural habitats and artificial subtidal environments on the Island of Porto Santo, led by the Interdisciplinary Centre for Marine and Environmental Research of Madeira (CIIMAR – Madeira) which began in 2016.

In the last decades there was continued research activity within the scope of studying, monitoring and exploring the littoral fishery, coastal and ocean resources. In the intertidal and subtidal zones, campaigns were carried out in the 90s and in the beginning of the following decade, by the Research Services of the Regional Direction of Fishery, aimed at the biological study and evaluation of the state of exploitation of the littoral resources (limpets), and encompassing in Porto Santo. The evaluation of the resources was the origin, in 2006, of the first initiatives of regional legislation of commercial and recreational activity of the harvesting of gastropods, by establishing an off-season and other technical measures that were implemented.

Annual campaigns were carried out at the insular shelf and slope of Porto Santo (1995, 1996, 1997, 2004 and 2005), for prospecting and obtaining abundance indices of demersal fish. These campaigns, carried out within the scope of several Macaronesian research projects with the participation of DRP using the research Ship "Arquipélago" of the Department of Oceanography and Fisheries of the Azores, carried out experimental fishing with bottom longlines, allowing for the identification, on this island, of more than eighty marine, coastal and ocean species, mainly demersal fish, but also pelagic fish and crustaceans.

The experimental fishing of shrimp in Porto Santo, carried out by DRP/Service of Research, began in the eighties using the Study Ship "São Roque" of DRP, targeted at

shallower water species of the insular shelf (narwal shrimp, *Plesionika narval*). In 2004 and 2008, two intensive campaigns of prospecting aimed at the identification of new resources with the potential for commercial exploitation, were carried out. These campaigns, aimed mostly at Decapod crustaceans using netted fishing pots suspended from commercial fishing boats, contributed to establishing the potential of several species of crustaceans, namely the maximum sustainable catch of soldier striped shrimp (*Plesionika edwardsii*) in the archipelago.

Regarding sustainability, the project 'Sustainable Porto Santo' is worthy of note, it aims to reduce the GEE emissions, increase renewable energy and improve energy efficiency. This project, which includes an important research component, aims to substitute fossil fuels with renewable energy. Due to the importance of Porto Santo in a natural context of RAM and the Atlantic, it is foreseeable that with the implementation of the proposed Biosphere Reserve, research will increase significantly due to its relevance in global space, and the island will act as a laboratory to enable studies in view of applying integrated and supported management models emphasising the sustainable energy aspect.

The objective is to continue with the work already implemented and develop new opportunities of studies directed towards the evaluation of ecosystem services and related functions associated with the natural heritage of the Biosphere Reserve.

MONITORING

The management and coordination structure of the Biosphere Reserve will promote the necessary means to proceed with the evaluation of the state of conservation of the species and the ecosystems, and the results of the management measures to be implemented, using specific programmes and actions of monitoring in conformity with the Action Plan.

ENVIRONMENTAL EDUCATION AND TRAINING

The current programme of the Regional Government of Madeira will support the development of initiatives at an international, national and regional level that contribute to the integration of 'Education for a Sustainable Development' at the different levels of society and in particular, in all types of teaching; as well as continuing the environmental programmes already underway, namely, Eco-Schools, Young Reporters for the Environment, Blue Flag, Green Key and Eco XXI.

Another initiative focused on sensitisation and environmental education corresponds to the Environmental Education Programme for 1st Cycle Basic Education Schools of Porto Santo (PEA), sponsored by the local City Council since 1998. This initiative, involving students of the 1st cycle of Basic Education, aims to let students know about their natural heritage, as well as promoting good environmental practices through the presentation of solutions to be adapted on a daily basis to make Porto Santo more sustainable from an environmental point of view.

The Municipality of Porto Santo has been a partner of the Eco-Schools programme since 2006. Today it is implemented in all the local schools. In turn, the School Competition GEA – Terra Mãe (Mother Earth) in Porto Santo promotes competences in the students in the areas of geosciences, enhancing the knowledge of local/regional geology and geography; additionally, there is qualified/credited training for teachers.

This Municipality has also developed awareness and information programmes for the residents, throughout the year, including the commemoration of events in the area of the environment, with activities directed towards the community in general and towards young school children, in order to involve the whole population. Its role in the training and environmental component has shown to be fundamental through the realisation of periodical training activities aimed at the school community and other target-public like tourist guides

The intention of the Biosphere Reserve of the Island of Porto Santo is to affirm itself and its own entity, with defined strategies and objectives that promote the defining values of Porto Santo and its people.



PEA - The 1th Cycle school of Porto Santo



5 ENDORSEMENTS

5.1

SIGNED BY THE AUTHORITY IN CHARGE OF THE MANAGEMENT OF THE CORE AREAS

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5.4

SIGNATURE OF LOCAL EXECUTIVE AUTHORITY

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5.5

SIGNED ON BEHALF OF THE MAB NATIONAL COMMITTEE

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PART II

DESCRIPTION



6 LOCATION (COORDINATES AND MAP(S))

The proposed Biosphere Reserve is located in Portugal, in Autonomous Region of Madeira, in the archipelago of Madeira and corresponds to the subarchipelago of Porto Santo, represented in Figure 6.

The proposed Reserve includes all the land surface of the Island of Porto Santo and the six surrounding islets, the highest point being located in Pico do Facho (517m) to which is added the surrounding maritime area to the 100m bathymetric line, corresponding to the insular shelf. The total area is 27310,54ha, according to projection system WGS84 (EPSG:4326).

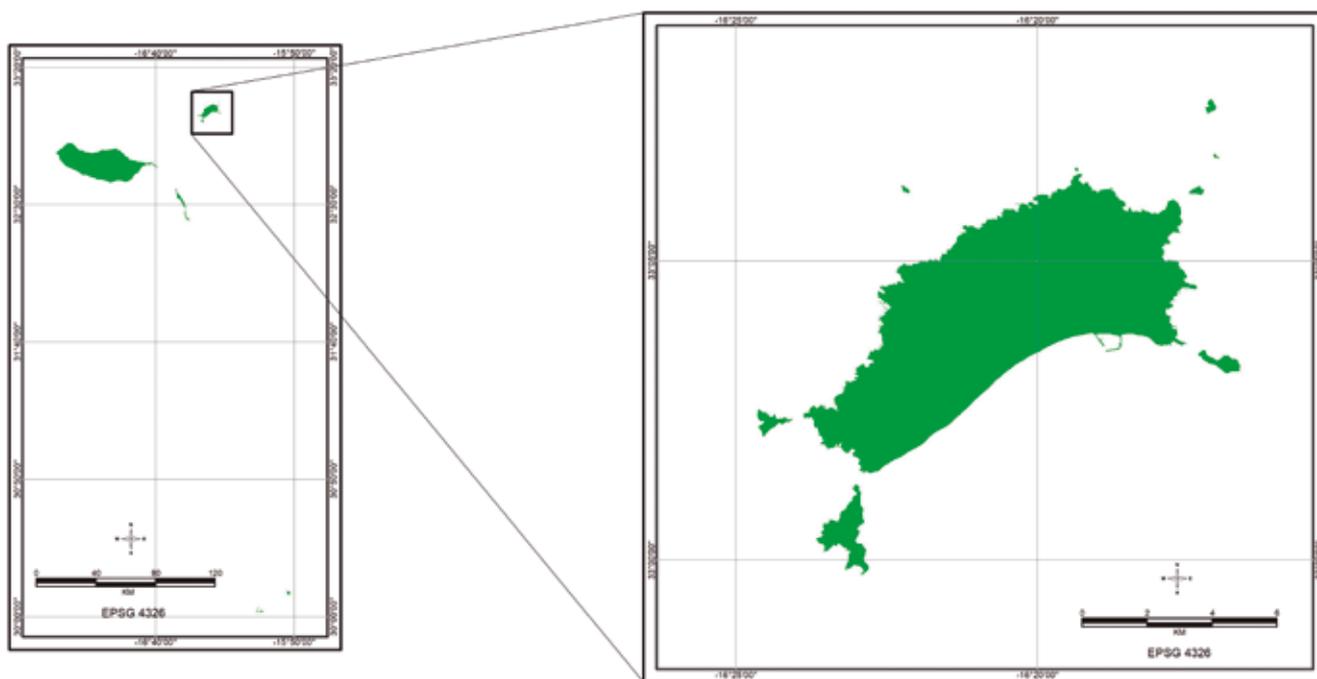


Figure 6 Subarchipelago of Porto Santo located in the archipelago of Madeira.

6.1

PROVIDE THE BIOSPHERE RESERVE'S STANDARD GEOGRAPHICAL COORDINATES (ALL PROJECTED UNDER WGS 84)

Cardinal Points	Latitude	Longitude
• Most central point:	33.0912364	-16.361948
• Northernmost point:	33.2027434	-16.420712
• Southernmost point:	32.9842509	-16.390790
• Westernmost point:	33.1932673	-16.446314
• Easternmost point:	33.0286496	-16.255850

Table 2 Geographical coordinates of the Biosphere Reserve of the Island of Porto Santo.



6.2

PROVIDE A MAP(S) ON A TOPOGRAPHIC LAYER OF THE PRECISE LOCATION AND DELIMITATION OF THE THREE ZONES OF THE BIOSPHERE RESERVE

The zoning of the proposed Reserve, according to projection system WGS84 that defines the boundaries of the three zones of the Biosphere Reserve, reflecting the three distinct recommended functions of the Biosphere Reserves of the MAB UNESCO Programme, is represented in Figure 7 (<https://portosantobiosfera.madeira.gov.pt>).

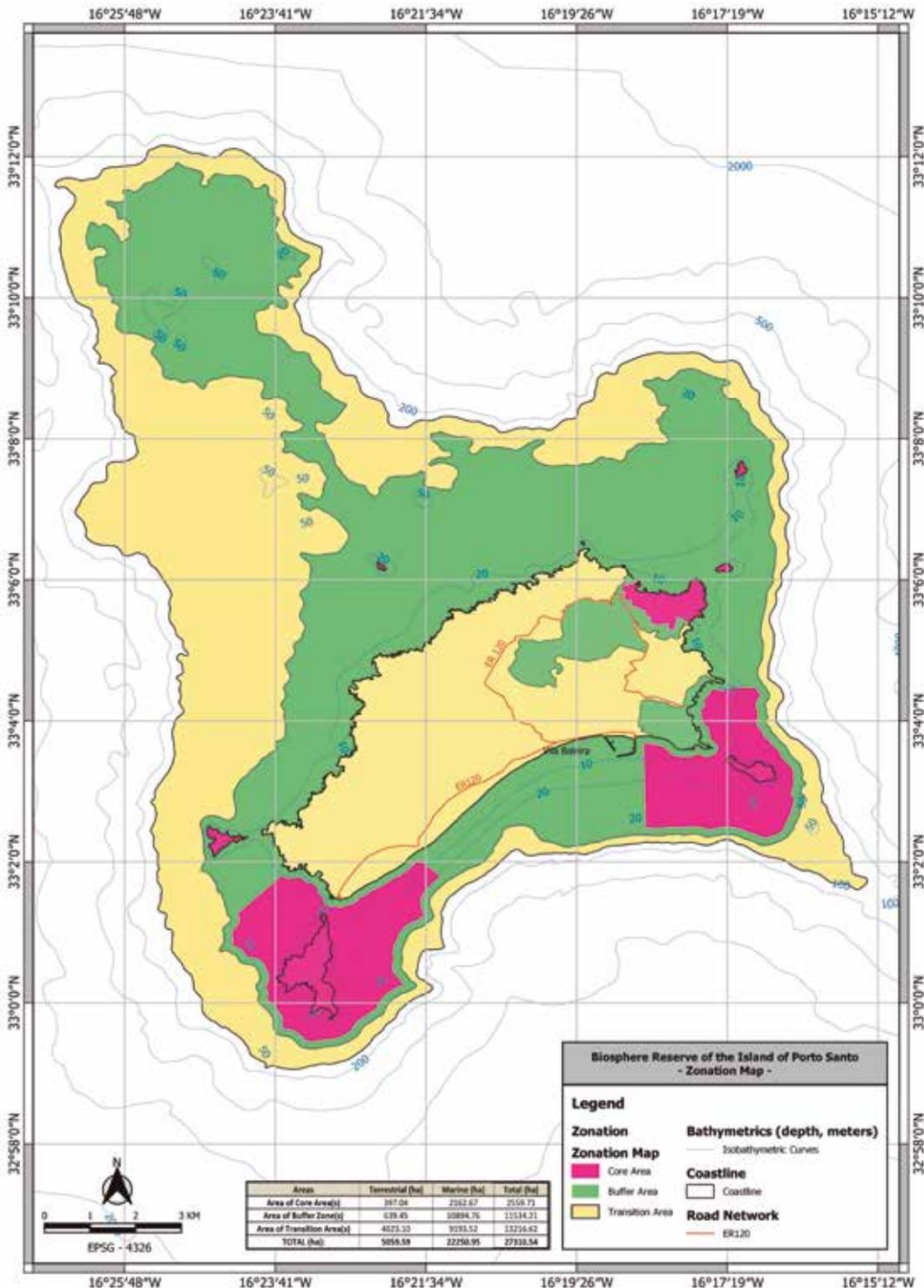


Figure 7 Zonation of the Biosphere Reserve of the Island of Porto Santo, according to projection system WGS84 (EPSG:4326).



7 AREA

The Biosphere Reserve of the Island of Porto Santo has a total area of 27310.54ha, 5059.59ha of which correspond to terrestrial area and 22250.95ha correspond to the marine area to the 100m bathymetric line.

Areas	Terrestrial (ha)	Marine (ha)	Total (ha)	% Area
▶ 7.1 CORE AREA	397.04	2 162.67	2 559.71	9.4
▶ 7.2 BUFFER ZONE	639.45	10 894.76	11 534.21	42.2
▶ 7.3 TRANSITION AREA	4 023.10	9 193.52	13 216.62	48.4
Total (ha):	5 059.59	22 250.95	27 310.54	100

Table 3 Areas of the Biosphere Reserve of the Island of Porto Santo according to projection system WGS84.

7.4

BRIEF RATIONALE OF THIS ZONATION IN TERMS OF THE RESPECTIVE FUNCTIONS OF THE BIOSPHERE RESERVE. IF A DIFFERENT TYPE OF ZONATION ALSO EXISTS INDICATE HOW IT CAN COEXIST WITH THE REQUIREMENTS OF THE BIOSPHERE RESERVE ZONATION

Two types of Core Areas were considered in the proposed Biosphere Reserve: Core Terrestrial Area and Core Marine Area, in accordance with Figure 8.

The Core Terrestrial Areas of the proposed Reserve coincide with ZEC PTPOR0002 and ZEC PTPOR0001. The Core Marine Area includes the surrounding area of the Islet of Cal and Islet of Cima which corresponds to the marine area of the Network of Protected Marine Areas of Porto Santo (RAMPPS), in accordance with Figure 2.

In relation to ZEC PTPOR0002, the Programme for Management and Conservation Measures of the Natura 2000 Network Site of Pico Branco – Porto Santo (PTPOR0002), includes the implementation of policies for the management of forest resources and natural areas of Pico Branco, in a territorial land area of 135.5ha (which includes the Core Forest Terra Chã which is 17.5ha), centred on the demand for the defence and enrichment of the natural heritage, based on the sustainable management of the protected natural space, in a micro-reserve approach, by monitoring and restoring the populations of the existing endemic taxa. Pico Branco is one of the only places in RAM where a priority forest habitat under the Habitats Directive, designated as endemic Forests with *Juniperus* spp. can be found and to which other typical Macaronesian habitats and species of flora and fauna, included in Annexes II or IV of the Community directive and the Birds Directive, can be added. It hosts flora and fauna taxa exclusive

to Porto Santo or even to Pico Branco, of considerable conservational interest. Management and conservation measures of Pico Branco include the adoption of strategic and specific objectives, and the development of actions or measures conducive to the environmental protection of the Site. Its main strategic pillars are the conservation of nature and environmental protection and it encourages participation of the population and visitors in the enjoyment, promotion and preservation of the natural space. The main objective of these actions is the recuperation and maintenance of the natural plant cover, promoting their development in areas which are more susceptible to erosion by appraising the components of the soil and the reduction of the impact of erosive phenomena on the landscape; the protection of the biodiversity and the landscape; the conservation of fundamental assets like the soil and the water; the monitoring and enrichment of knowledge of the biodiversity; the improvement or maintenance of the conditions of access to the natural spaces, managing the activities of the use of the space and implementing actions that lead to the diffusion and promotion of the natural, cultural and landscape heritage of the area.

In terms of terrestrial area, RAMPPS is made up of the six islets – Cal or Baixo; Cenouras; Cima, Dragoeiros or Farol; Ferro; Fonte da Areia; and Fora or Rocha do Nordeste – and the marine area surrounding the islets of Cal and Cima. RAMPPS includes areas of great natural value, which implies different levels of protection and, as a consequence, permission for different activities, namely educational, scientific or even economical, such as non-commercial or recreational sea fishing, the picking of limpets and snails from the pebbles, scuba diving, spearfishing, maritime tourism and nautical activities, in accordance with the restrictions of the use of the soil or the territory established on POGRAMPPS.

The Core Area corresponding to RAMPPS – ZEC PTPOR0001 'Islets of Porto Santo' – includes areas that have been classified according to the levels of 'Area of Total Protection' and 'Area of Partial Protection, Type I'.

The 'Area of Total Protection' – which covers the Islets of Ferro, Fonte da Areia, Fora and Cenouras – corresponds to an area of high ecological and biophysical value, it is very sensitive to human activity or has a poor regenerating

capacity, making all its natural values subject to full protection and recommending the safeguard and conservation of the values of flora and fauna and their respective habitats. This level of protection that covers the indicated islets stems from the interest in safeguarding a natural heritage that ranges from the geological aspects to the species of xerophytic, indigenous and endemic vegetation, and faunal species, namely sea birds.

The 'Area of Partial Protection' corresponds to the areas of ecological value, where human activity is compatible with the heritage, natural and cultural values.

In the 'Area of Partial Protection, Type I', the use is conditioned, favouring activities that fall within the scope of conservation and appreciation; actions which

promote and raise environmental awareness, scientific studies and papers and recreational and leisure activities, guaranteeing the safeguard of environmental balance. They are areas of ecological value where human activities are compatible with the heritage, natural and cultural values. In the 'Area of Partial Protection, Type I' – which includes the Islet of Cima and the Islet of Baixo or Cal – some of the natural elements are included in the protection, so human activity is conditioned, safeguarding the protection of the existing natural values. In the 'Area of Partial Protection, Type II' – non-commercial or recreational fishing, picking limpets and snails from the pebbles, scuba diving, spearfishing and some maritime tourism and nautical activities are allowed in the marine area surrounding the Islets of Baixo and Cima.

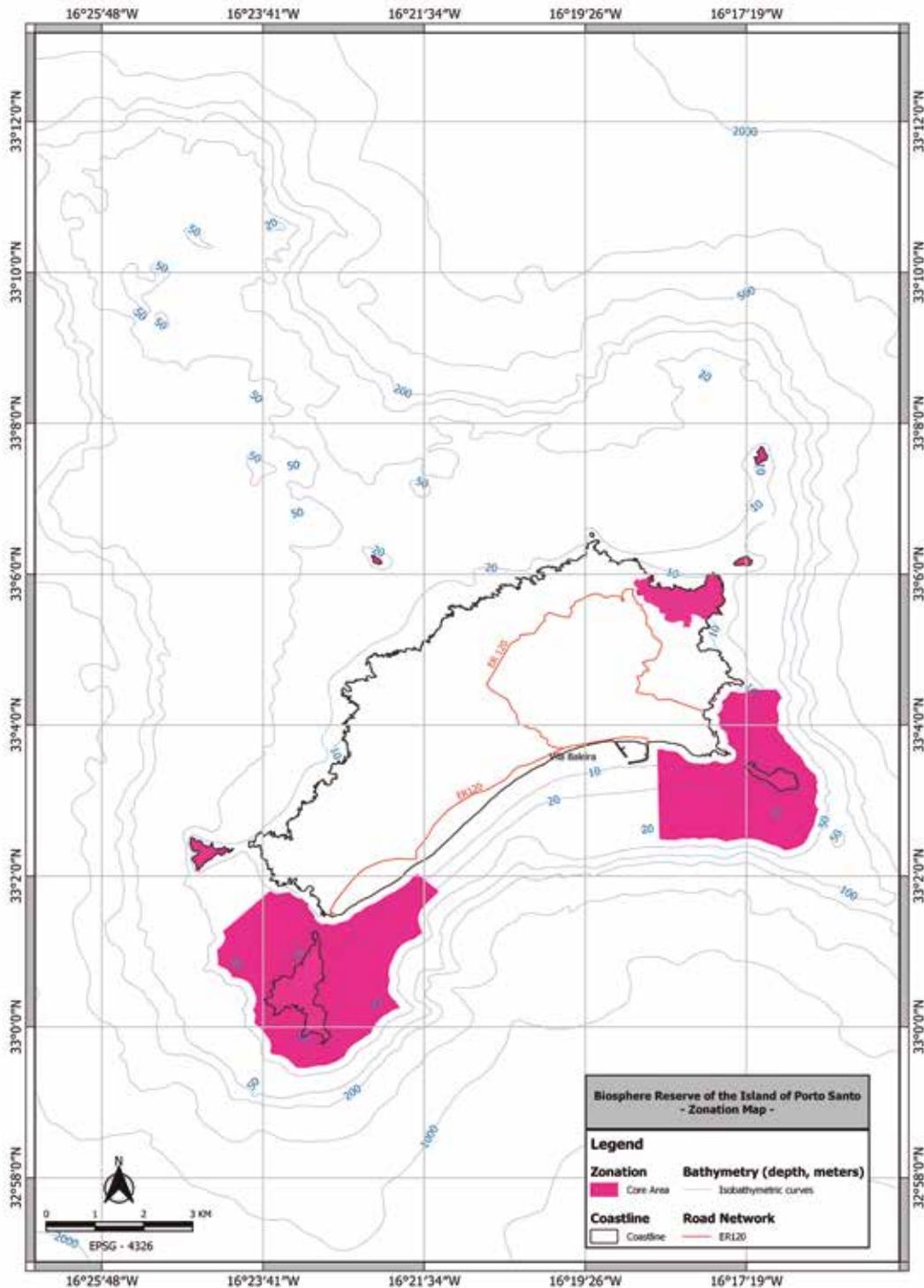


Figure 8 Core Areas of the Biosphere Reserve of the Island of Porto Santo, according to projection system WGS84 (EPSG:4326).

The Buffer Zones (Figure 9) make up an area with the dimensions and legal status, in terms of nature conservation and biodiversity, necessary for the protection functions of the Core Area. The definition took into consideration the legal status which has already been established and the topographical and functional aspects which guarantee functional continuity between the Core Areas and the Transition Areas. The marine area borders the land area of the Island of Porto Santo and the surrounding areas to the Core Areas established for the different islets, from the 50m bathymetric line. Some activities such as nautical and maritime tourist activities, extensive commercial and recreational fishing, picking

limpets and snails, diving and spearfishing are allowed here.

The terrestrial area includes the adjoining zone of the marine area of RAMPPS belonging to the Islet of Cima and the strip that borders Pico Branco - Porto Santo (PTPOR0002) and extends along the mountain range in the direction of northeast to southeast, regulated in accordance with PDM of Porto Santo and in conformity with the underlying principles of the Law on Forestry Policy - Law No. 33/96), of 17th August and the norms of silviculture defined in PROF-RAM, approved by Government Council Motion No. 600/2015, of 11th August.

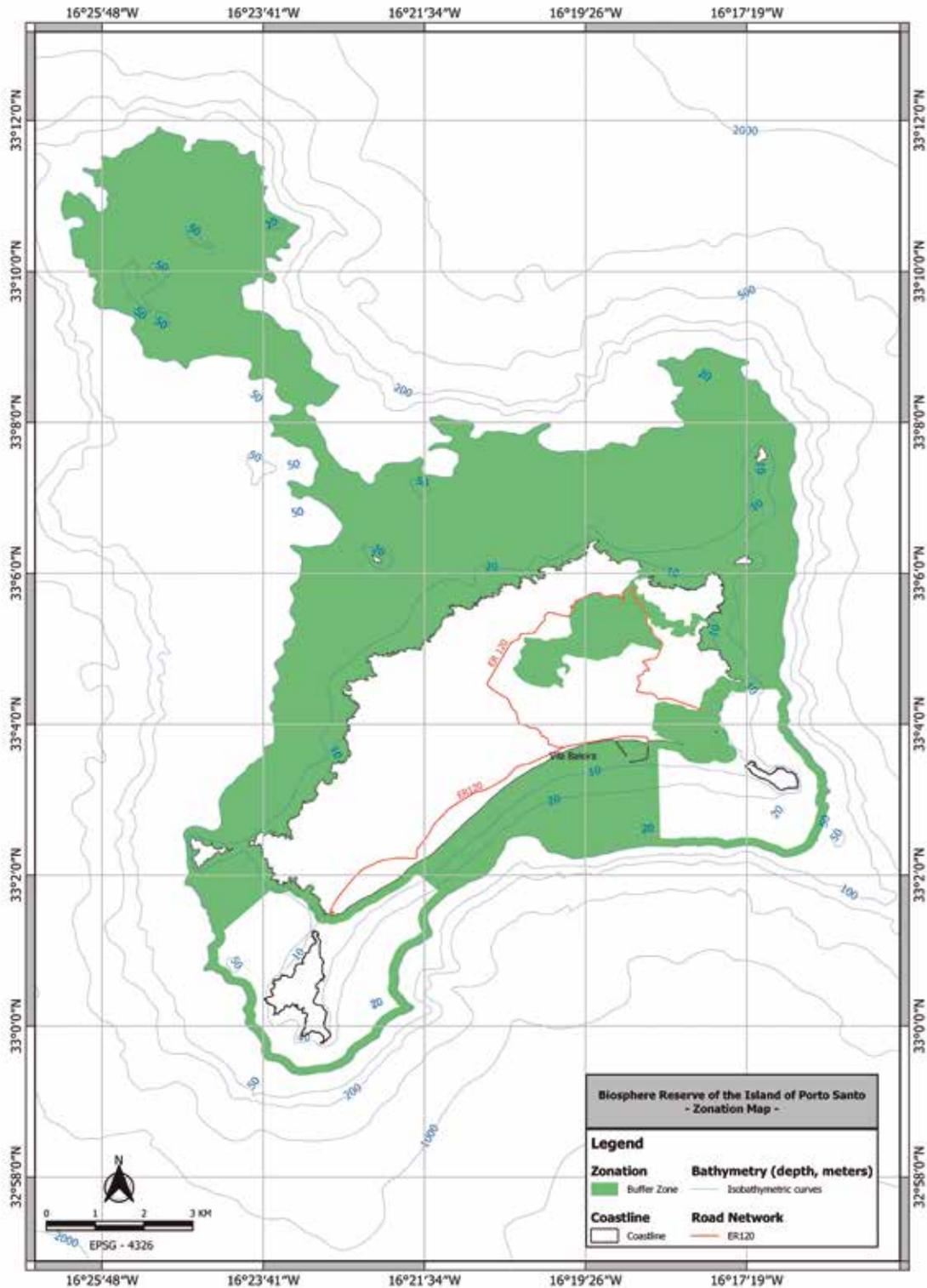


Figure 9 Buffer Zones of the Biosphere Reserve of the Island of Porto Santo, according to projection system WGS84 (EPSG:4326).

In the proposed Biosphere Reserve, two types of Transition Areas were included: Terrestrial Transition Area and Marine Transition Area, in accordance with figure 10. The Transition Areas correspond to areas where the different initiatives or business opportunities are essential for the sustainable development of Porto Santo. Given the

environmental and sociocultural characteristics that are encompassed in Porto Santo, these zones will decisively contribute to the much desired implementation of the economic and human development objectives, for the Biosphere Reserve, based on the social, cultural and ecological principles of sustainability.

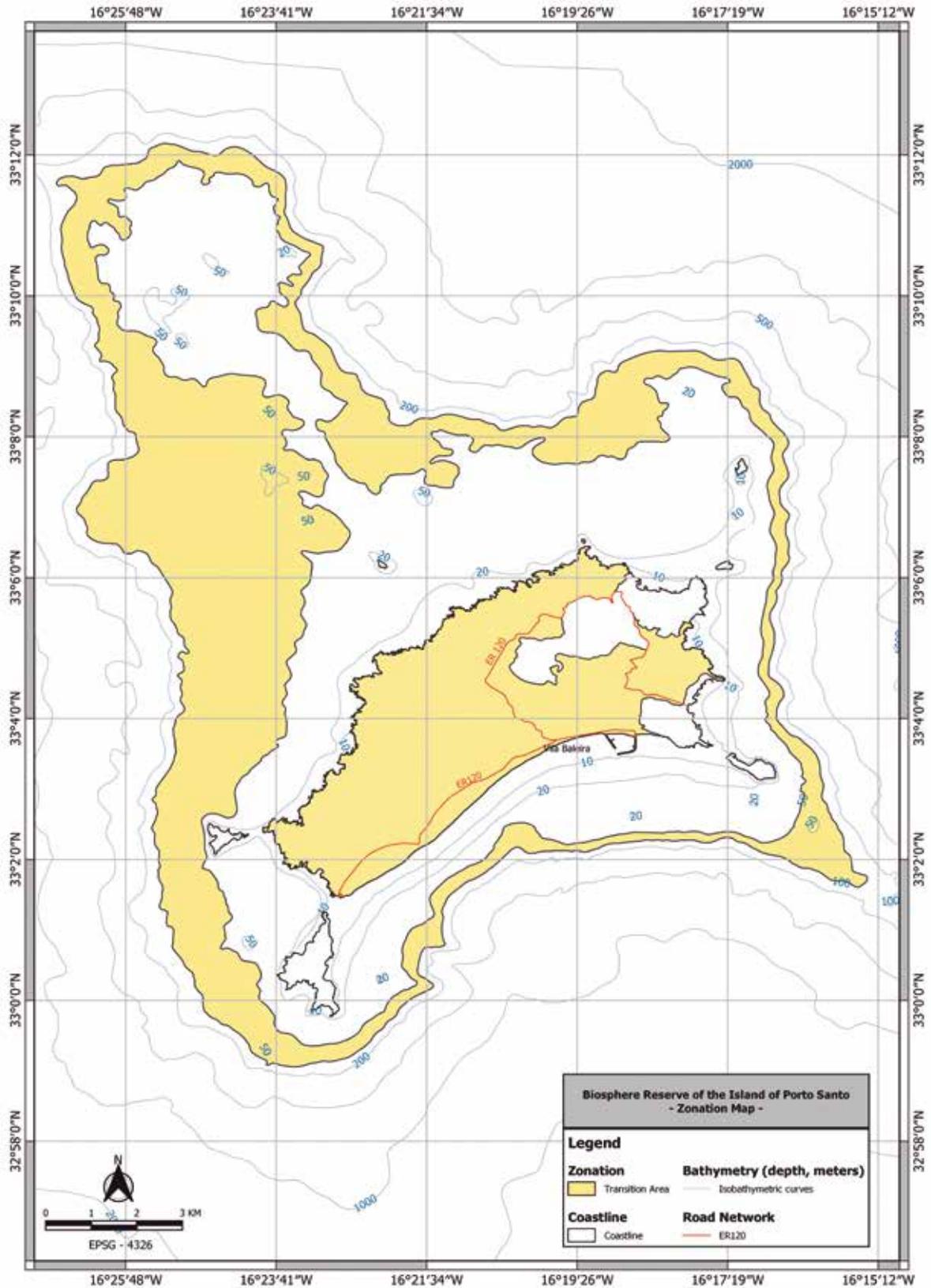


Figure 10 Transition Areas of the Biosphere Reserve of the Island of Porto Santo, according to projection system WGS84 (EPSG:4326).

They include areas aimed at development functions, even though they also have a crucial role in the logistic function (because they encompass different equipment and infrastructures like schools, museums, hotels, restaurants, commerce, services, etc.) and conservation because they include interesting natural values, both biological and geological. Altogether, they make up the remaining areas of Porto Santo extending to the 100m bathymetric line, including settlements and different activities like fishing or agricultural, the groups of tourists and the economic sector in general and the other interested parts, which operate together for the sustainable management and development of Porto Santo.

In summary, in the zonation defined for the Biosphere Reserve of Porto Santo Island, the natural, social, economic and cultural characteristics were taken into consideration, using as primary reference the susceptibility of the natural environments (marine, coastal, land), in function of human activities and their implications for the territory. Different legal instruments and mechanisms were analysed and tackled, namely those that combine with the existing protected areas and the

respective statutes of conservation and the regulations in terms of compatibility of the use and occupation of the territory. The established zonation is compatible with the limits of the existing protected areas as well as the planning and management instruments of the territory and the regulation of economic activities.

The delimitation of the three zoning levels (Core Area, Buffer Zone and Transition Area) also considered the three functions defined for Biosphere Reserves and the participatory process of construction of this Reserve.

The integration of all of Porto Santo in the Biosphere Reserve results from the respect for the unique geomorphology of the island which extends to the 100m bathymetric line, so as to include the continental shelf and coincides with the natural limits of the island, and the commitments taken on with respect to socioeconomic development proposed by the people of Porto Santo, based on fundamental principles of the conservation and sustainable use of natural resources, in particular the biodiversity, geodiversity and the landscape associated with the use of renewable energies.



Wind generator - wind energy



BIOGEOGRAPHICAL REGION

On a world scale and according to the biogeographical division of the biosphere, defined by Udvardy in 1975, Porto Santo is in Macaronesia, a relevant region for the conservation of biodiversity on a global scale.

The proposed Biosphere Reserve is part of the biogeographical region of Macaronesia, like all the islands in Europe that make up the Autonomous Regions of Madeira, the Azores and the Canary Islands.

Macaronesia has been identified as a very important region for the conservation of biodiversity, with an elevated number of habitats listed in Annex I of the Habitats Directive and different endemic species included in Annex II and IV of that same directive, to which is added the elevated number of birds that are included in the Birds Directive.

The word Macaronesia means "Fortunate Islands" and was initially used by ancient geographers to name the islands west of the Strait of Gibraltar. Later, in the middle of the XIX century, the botanist Philip Barker Webb recovered the word Macaronesia, to address aspects of the flora of the Azores, Madeira, Canary Islands as well as Cape Verde.

The volcanic origin from the Tertiary is common to the Macaronesian archipelagos as well as the fact that they were subject to climate fluctuations characteristic of the Quaternary. The severity of the glaciations was gentler in these archipelagos than in the neighbouring continental

regions, which explains the current occurrence of phytogeographic elements that could be considered relics from the past, such as species of the laurel (*Lauraceae*) and olive tree (*Oleaceae*) families.

The geographical isolation and the geological history have contributed to making Macaronesia a region of particular interest from a biodiversity point of view, housing an elevated number of endemic taxa and habitats which are considered a priority. In this biogeographical region, the plants show the highest level of endemism in Europe, comparable on a global scale to what happens in the Galapagos Islands.

Notwithstanding the similarity and identity that is found in Macaronesia, this region exhibits a varied climatic range from Cape Verde, more to the south, to the Azores, more to the north. Besides the latitudinal climatic influence, the biological components of the different types of habitats and their distribution are also strongly influenced by the altitude.

Within the context of Macaronesia, the flora of Porto Santo, similarly to what happens on the other islands of the archipelago of Madeira, shows a strong Mediterranean influence, whereas the flora of the Canary Islands shows a Mediterranean-Saharan influence, Cape Verde shows Saharan-Sudanian and the Azores Eurosiberian-Asian influence.



Common tern (*Sterna hirundo*)



9.1

HISTORICAL

Porto Santo was officially discovered by the Portuguese explorers, Gonçalves Zarco and Tristão Vaz Teixeira, in the fifteenth century, around 1418, during the age of discoveries and Portuguese exploration of the West African coast. Nevertheless, there are records which show that Italian and Iberian navigators and cartographers had already been aware of its existence since the mid-fourteenth century because it appeared in the Mediceo Atlas of 1351, in the map attributed to the Pizzigani brothers of 1367 and in Pinelli's map of 1390, among others.

The origin of the name Porto Santo is not agreed upon, and there are two versions of its origins. One version involves Gonçalves Zarco's arrival on the island, when he took refuge there during a terrible storm. There is another version, occurring in the Early Middle Ages, according to which a ship found safe harbour on this island after a violent storm on 1st November, All Saints' Day.

According to local history studies, it was also on this island, between 1480 and 1482, that the famous navigator, Christopher Columbus, planned the voyage in which he sought to discover the maritime route to the Spice Islands, but which instead resulted in the discovery of the New World and the beginning of European colonisation, opening the way for the period of expansion, exploitation, conquest and colonisation of the Portuguese around the world.

Although the historical and cultural richness of Porto Santo is closely associated with maritime discoveries and trade routes in the Atlantic, the Porto Santo population experienced severe difficulties, mainly related to the isolation and aridity of the territory. The isolation of the island made it a target of pirates and privateers, whilst the aridity of the land, due to cyclical droughts and consequent shortages in the production of cereals, caused great barrenness, hunger and poverty. In 1713, such difficulties called into question inhabitants' ability to continue living on the island, which was contradicted by the authorities, who, as on other occasions, considered Porto Santo a strategic point necessary to ensure Portuguese sovereignty.

Even today, there is still evidence of military defences, such as the 16th century fortress, Pico do Castelo Fort, symbol of defence of the populations against the continuous pirate attacks and the St Joseph Fort, located in the city centre, erected during the Pombaline consulate (second half of the 18th century), to defend the anchorage of the then town, inside of which the Governor's House is located.

REFORESTATION

The critical situation the Island of Porto Santo has reached in terms of soil erosion and degradation is reported in Campos Andrada's work entitled "Reforestation in the Madeira Archipelago (1952-1975)", where he expresses "being struck by the ruinous state to which the lands of this island had arrived, generally-speaking, to the extent that it no longer produces enough for the sustenance of its inhabitants and it is necessary to ship supplies from Madeira. Wherever a person turns, what is most noticeable are the deeply gullied slopes and skeletal soils, and in fact such a marked aridity that, at first glance, one is astonished at how people still dedicate themselves to agriculture. (...) Nevertheless, we are convinced that this small and poor island has such attractions and qualities that its inhabitants are encouraged to fight to the end for their survival, in the hope that better times will come." The afforestation of bare and barren terrain, prevailing over the precarious soil and climatic conditions of the island, is seen today as a benefit to the population, recognising the influences of reforestation in the local climate conditions and soil protection and its role in creating services for the benefit of the population and local development.

In the past, the devastation of primitive vegetation and unsuitable agricultural practices, often on land unsuitable for cultivation, with a predominant inclination for single-crop cultivation of grains unwisely depleted the soil over the course of half a millennium. These scenarios of such aridity led to the loss of soil fertility and left profound marks in the landscape, with the presence of furrows and ravines being evident throughout the island, demonstrating the serious erosion problems to which it has been subjected. Human intervention led to the almost complete destruction of the original vegetation, with repercussions on the other ecosystem components, and the unleashing of a process of desertification which, in recent decades, has been combated through reforestation, with emphasis on the use of exotic nature.



Pico do Castelo belvedere



Afforested of Pico do Castelo

The great works of afforestation and preparation of the soils for the containment of the lands began and were guided by the Forestry Regent, Shiappa de Azevedo, during the period of 1918-1921. With methodical work and much persistence and dedication, the afforestation work began in the island's highest points: Pico do Castelo, Pico da Juliana and Pico Branco. The remarkable and majestic effort, which continued after 1955 with the Forest Service of that time, left its testimony in the green peaks which rise on the island and can be seen from the sea, regal and striking in the landscape.

Indeed, the intricate human mark on the summits of the peaks - whose architectural work resulted from human manual effort and the geometry of forms which characterises them, with particular relevance in the Pico do Castelo - makes those who dare to enjoy the hillside walk up to the top of the peak, hold their breath, in a complicity of values with nature and with Man, who dignified it by impeding the erosive processes and conquering the soil, the support of life on Earth. The soil-supporting walls, resulting in terraces or small basins to accommodate land equipment for the trees, represent a glorious and very important feat which justifies the success achieved in the plantations throughout the various peaks and which must be followed in the continuation of the afforestation.

In this review of forest activity in Porto Santo, it is important to remember the privations of the island and the pressing needs of wood for basic survival: food. In an adverse post-war context, more important than directing the guidelines for the recovery of the natural vegetation cover would certainly be to establish priorities for the installation of a cover that is more adaptive to the environment and to provide forest biomass to meet the needs of the population. It was necessary to intervene in the physical space, usually using animals to carry the heaviest loads. It became indispensable to shape the terrain using small terraces, with support walls, to give the soil greater power to soak the waters and thus defend it from erosion. We can observe this in the Picos do Castelo, Facho and Gandaia and Pico da Juliana and in the steep slopes of the Pico Branco and Terra Chã. The soil, thus prepared, was subject to afforestation, using a variety of species. At the beginning of the last century, there was already a concern to cover the soil in a manner which improves rainfall infiltration conditions, thus reducing runoff. Writings from the time reveal the use of diversified pioneer species, some of which did not adapt to the precarious local soil and climatic conditions.

The torrential correction of the brooks, where ravine erosion was significant, and where erosive phenomena manifested themselves with serious gravity, was one of the great priorities of the then Forestry Division of Funchal. In fact, projects involving such measures began to take shape in 1952, with due planning to ensure the construction of dams in harmony with the afforestation of the catchment areas of the streams or their banks, in order to revert the intense and widespread soil depletion.

The woods were planted in very precarious and inhospitable conditions, and it would be of interest to establish, in these adverse circumstances, a type of plant cover which, by its nature, would create certain conditions at the microclimatic level (temperature regulation, humidity maintenance, mitigation of wind effects); generate better structural characteristics, through root networks, bark and foliage, improving water infiltration conditions; and guarantee the interception phenomenon, reducing the impact of rainfall on the terrain and hindering erosion.

After a significant period of afforestation, the concern was then to maintain and care for the existing plantations, having continued the afforestation work in Picos do Facho and Gandaia and begun the plantations in Pico de Ana Ferreira and Morenos, intervening in lands made available to the Regional Government for this purpose. During these new afforestation activities, the preparation of the land implemented an expressive application of trench and summit techniques leading to greater entrapment of rainwater, whilst at the time defending against soil erosion processes. The recovery work was later extended, predominantly, to the expropriated land in the Serra de Dentro.

Several species were tried in the afforestation of Porto Santo, but many plantations succumbed. The use of more resistant species, essentially resinous, was successful. Despite the dominance of exotic species, there was a concern to utilise ancient species prevalent in each area, when their propagation and production were possible. The needs of the population relative to wood and their basic needs were also taken into consideration. In turn, the geographical names of the areas, such as Dragoal and Islet of Dragoeiros or Cima, led to the planting of dragon trees, as a way of valuing the primitive vegetation.

The Salões Forest Park and the nursery were created to ensure the afforestation of an area of deeply gullied terrain, overlooking the village, and establish a forest nursery to produce trees for the afforestation works of the whole island. Residents nearby could watch and witness the transformation which took place in these ravines of the Salões, which they called the "miracle of Porto Santo". This tenacity of the Forest Service encourages initiatives to face challenges in terms of terrain modelling and defence against soil erosion. Great deeds have been witnessed throughout generations, resulting in benefits for man and nature.



Agricultural fields

AGRICULTURAL PORTO SANTO

Property ownership was based on the colonial system, despite the existence of property owners who cultivated their own land. The Porto Santo people organised their daily lives according to the requirements of grain production. The people's dedication to grain production played a social role in that they had to produce more to avoid famine crises.

Thus, during the decisive periods of field work, the prevailing environment was defined by the extensive character of the production, resulting in the presence of men working in groups and using seasonal workers, creating a greater distancing from the worker relative to the equipment which he used. The plough, of a radial nature, did not need adaptations, since traditional agriculture enabled the peasant to choose the best lands to cultivate grains, according to the preferred order: barley, rye and wheat. In short, the grains culture was a production activity organised on the basis of plough-like tools, synonymous with the extensive appropriation of the space dedicated to agricultural production.

Although royal regulations foresaw the expansion of the vineyards on the island, their culture did not compete for the space occupied by another culture fundamental to the basic needs of the peasantry. The vineyards, which from the end of the eighteenth century began to expand, were destined to occupy predominantly sandy areas, unfit to become bread lands. From a planning point of view, the function of the vines was to halt the advance of the dunes and to ensure the good condition of the land planted with grains. Here, the hoe appears as an instrument of work associated with these lands and the productive process.

At the end of the eighteenth century, the vineyard was represented across the whole island, predominantly in the southern part, with plantations extending from Calheta to Penedo. Vineyards arranged in small plots formed a mesh with the boundary components delimited by loose stone walls or small tamarind shrubs interwoven with giant reed, constituting natural windscreens which, although rudimentary, had a preponderant role in the defence against dune erosion. In addition, these ecological enclosures continue to play a crucial role in the agricultural fields.

The harvest, the last stage of the grain production cycle, coincided with the warmer and drier season of the year. The prospect of a good harvest was of extreme importance to the peasants because with their fair share, they would try to pay off the debts incurred throughout the year. All information indicates that the fields were harvested, in other words, the grain was harvested using a scythe, in an organised system of work, using workers specifically for the task, in a simultaneous process for all the fields. Here the crops in these fields ripened earlier than those of the Island of Madeira. Harvesting and barley threshing were often done by the end of May, which may explain the population's preference for this grain, because it could have a harvested crop sooner, guaranteeing food security. Between the middle and late June, it was the wheat phase, each grain being threshed separately.

The fields were harvested, and the land was then subject to a more or less long fallow, so, after the threshing, the fields would be used for pasture for cattle or sheep. Here, unlike the Island of Madeira, the straw was not intended for the roofs of the houses, which were covered in "salão" clay. In the threshing, they used the rail, then the machine and the blower to separate the wheat from the chaff. Before the blower, the wheat was cleaned with "aventejar" method, lifting the cereal with the rake, then with the shovel, and finally with the sieve, for complete elimination of the shaft or other foreign plants. Turning the grain into flour was done using hand mills, an indispensable utensil to any family. The finest flour was sifted for "bolo do caco" (traditional flat bread) and the most course was cooked into a porridge called "frangolho". The flour was also used in the production of couscous, cooked using "bafo" (steam) in the clay "cuscuzeiro" (couscous pot). The use of the windmill or millstones, which abounded on the island in the past, was typical. The lack of fresh water and the existence of wind explain the appearance of the windmills for the milling of the grain. The wind was used for many years as a natural source of energy, making the mills used for the milling of cereals of extreme importance in the food supply of the Porto Santo people. It is said that

"Salão" or "massapez" is the name used by the local population to describe all the clay material with a greenish yellowy-grey colour which was often used in the roofing of the old dwellings – "Salão" Houses. It corresponds to smectite clay, which is the product of underwater or above water alterations of certain types of volcanic rock (hyalo tuffaceous matrix, represented by glass and ash) of acidic nature and trachytic-rhyolitic composition which were formed in the early Miocene period (about 14Ma). The type of clay referred to, by its origin and composition is called bentonite and, in Portugal, only occurs in Porto Santo. There are several outcrops of bentonite on the island, all small in size. The most important deposits, due to the size and volume of material, are located in Serra de Dentro.

In addition, the inhabitants have empirically used "salão" in geophagy (ingestion of clay powder mixed with natural mineral water) and in dermocosmetic applications, to reduce oedema and produce facial masks.



Windmill

the senate of 1603 ordered the first windmill to be built in Matas. In a few decades, they spread to such an extent that they became one of the emblematic images of the island. If in 1827, only two were visible from the sea, about a century later, in 1927, there were 29 in operation. Later, in the 1950s, 23 had their sails unfurled. Until 1960, there were approximately 30. However, there is currently no active windmill.

The wealthy owners, in the social context of the island, used ox carts to transport the harvest from the fields to the threshing floor. The car was called a cart of oxen and not of cows, as in Madeira Island. Both the terrain - with a predominance of flat terrain, except for the hillside area - and the need to carry small loads associated with the main work of agriculture, justified the existence of this type of vehicle on the island.

The rural peculiarities of Porto Santo and its agricultural activity are reflected in the organisation of daily rural life. For example, there had to be enough space in the layout of the vines to provide access to these vehicles and the nature of the products to be transported in domestic production. The carts served mainly for the work of threshing, but also for the grape harvest, albeit on a smaller scale.

The island had numerous threshing floors, where the grain was accumulated after harvesting. Each threshing

floor was usually used by several peasants who organised themselves for this to occur. The threshing floors respected principles of functional order: aerated location and flat configuration of the soil, if possible, taking advantage of clay soils, and corresponded to circular structures, outlined by stone. These constructions, associated with the traditional local architectural dwellings, were indispensable in grain production and the survival of the population. The threshing was done with the use of instruments drawn by animals or by the treading of their hooves.

Storage of the grain harvest could be done in underground barns, pits or "matamoras" (stone-lined pit), in the surrounding straw within the haystack or pens, or by arranging the grains inside a large ark, making this a part of the home furnishings. The Crown also had an underground barn in the centre of the village, where the tithe was collected.

The hand mill, or millstone, and windmills completed the productive process with the grinding of the grain into coarse flour, as a basic food resource for the population, or fine flour for baking. Here, the miller came into play. He had to take advantage of all the good winds to grind the grain, often at night with some family member or even alone. And on the moonlit nights, with a light breeze, he would play his machete ("rajão" or "cavaquinho" – string instruments) and sing, in time with the sound of the sails and the turning of the millstone, always attentive to the grinding process. In the end, the miller carried the sacks of flour on top of donkeys, distributing them to their owners.



The "matamorra" is a sixteenth-century structure of a more or less cylindrical or pear-shaped shape, excavated in the soil for storage and preservation of grains. They were once common on the Island of Porto Santo, which provided a hiding place for the pirates and privateers who frequently assaulted the island. In the centre of the city, there are two examples of "matamoras", one inside the Casa Colombo (Columbus House) - Porto Santo Museum and one in the Largo do Pelourinho. After the hole was made, usually inside the dwellings, the walls were lined with stone, straw and "salão" mud and its opening was covered with boards and earth.



Peasant

RAISING LIVESTOCK

Raising livestock in the sixteenth century was an activity in which the Porto Santo people invested remarkable effort. There is mention of three springs near the village, where a drinking fountain had been built to where the herds were led. Thereby, the raising of livestock complemented dry agriculture with cereal production. If it did not rain for successive winters, the peasants had no other solution but to sell the animals at any price to the island of Madeira, given the lack of pastures. It is thought that until the mid-nineteenth century, this type of solution was only available to wealthy people and a very remote alternative for the rest of the peasant population. In the face of food shortage, the cattle languished in the fields, a premonition of hunger and deprivation. In these conditions, there were several official requests for aid sent to Funchal, painting a figurative picture, in one sent to the governor dated March 1768, of how the population faced the state of affairs, as an announcement of the end of the world. Nevertheless, successive years of shortage and affliction were followed by periods of rain and good harvests, and in these good scenarios the number of sheep herds surpassed the number of inhabitants of the island. As a result of the abundance of grasses in the spring and of straw in the fall, the herds, a pillar of insular agriculture, also increased, signalling a period of peace and hope for the population.

The island's hillsides had walls to support the terraces which, in addition to making sowing possible, were fundamental to the attenuation of the erosive action and to the retention of rainwater in the soil, crucial to the development of pastures for the herds and the raising of livestock in an extensive manner. This overly determined the daily life of peasants, who relegated soil maintenance to the background, while the livestock lacked for nothing.

Between the mid-eighteenth century and the 1930's, activity in the fields would have been heavily based on the raising of livestock, to the detriment of the soil. Agriculture facilitated the system of appropriation of available resources, simply by imposing rules on the pastures and the management of the cattle throughout the lands of the island. The system of agricultural production and land exploitation, inherited from the 18th century, remained practically the same, with extensive cattle ranching until the twentieth century.

FRESHWATER

Porto Santo people have always struggled with the shortage of drinking water, living only, until the introduction of the desalination plant in 1979, with the guarantee of a few natural springs. Fonte da Areia's fountain, built in 1843, was one of the most sought after by the population and visitors to stock up on supplies. This and other fountains are part of a heritage which testifies to the importance of fresh water in this corner of the Atlantic marked by insularity.

In addition to the fountains, the inhabitants had to resort to other methods of extracting water to survive. One of the resources was the digging of wells, along the coast and near sea level. These wells, made by hand, reached a depth of 6 to 8m and a diameter of 1.5m, with a capacity of about 15l. The water extracted was used to water the livestock and for domestic use. The process of extracting water, though rudimentary, was effective and involved a bucket of copper and zinc foil. For many years there were eight wells, sought after by the population, which through very simple and rudimentary processes, efficiently extracted the precious liquid. Nowadays, there are remains of bucket water-wheels, which, due to their symbolism, deserve to be restored.

In the past, the island's mineral water, distinguished for containing bicarbonate, chloride and sodium sulphate, was a valuable natural resource, giving rise to the bottled water production plant, Casa das Águas in 1922. This is a unique building on the island, which deserves to be restored and appreciated for its architectural value and symbolism as an expression of people's life.

RURAL HOMES

The rural houses covered with "salão" completed the country landscape, constituting with the other figurative elements of the landscape, the true expression of their rurality. The contemplation of the landscapes in Porto Santo, the agricultural brands time has not erased, the "crocheted" walls, the windmills, among other things, between coffee conversations with the natives of the island, allows us to travel in time, dive into its history and recognise that there is much to tell the world about this small territory endowed with natural and cultural benefits and which was the first-born of Portugal.



Rural house



"Casa das Águas", built in 1922



[Tribute to "Barqueiro"](#)

MARITIME PORTO SANTO

Porto Santo has its heroes, its Men of the Sea, the "Barqueiros", Porto Santo men who ensured that the boats - in the past, the only means of communication with the outside - took the supplies to the residents and everything else which was indispensable for their survival and permanence on the island. The crew tried to lessen the suffering due to isolation to which the island was subject. In their honour, a statue was erected in the square with the same name, located near the city pier, which crosses the beach in direction to the sea.

The Porto Santo Canning Factory operated from 1946 to 1979, with great impact on the local economy, at one point employing 96 workers, mostly from Porto Santo, including women who contributed in this way to the small family budget. The factory packed sardines and mackerels in the first phase and later tuna and skipjack, which they sent to Funchal, in the "carreireiro" boats, which later shipped to the capital where it was sold.

THE LIME INDUSTRY

Located at the southern end of the island, separated by a canal or "boqueirão" (Boqueirão de Baixo), there is Islet of Baixo, known as Islet of Cal, where limestone exploration occurred for the manufacture of lime. The extraction of lime in Porto Santo began in 1533, including other locations besides the islet referred to, namely from Chavinhas and Lombos, to the Espírito Santo site in Campo de Cima. The extraction of this precious mineral was marked by several accidents, of which the most tragic occurred in 1800 killing 16 men, who were buried inside a mine as a result of a collapse of rocks. These mines have been inactive since 1967, with the extraction of lime having left marks in the local geological panorama: the underground caves.



[Lime kilns](#)

With 600 years of history, the Island of Porto Santo has crossed several periods which left marks on the landscape, some which last until today. The settlement of the island was not an easy process due to the aridity of the soils, scarcity of water and successive pirate attacks. The settlement of the island quickly led to a drastic change in the landscape, due to the need to use, to exhaustion, material for combustion and construction, necessary for the people's survival. In addition to the hand mills, in stone, they used windmills to grind the grains, structures which profoundly marked the landscape of Porto Santo and, although they are in disuse, are still associated with this island. Until the end of the last century all the land was used for agriculture. The land was protected by stone walls which mark the landscape of the island associated with traditional "salão" houses, made exclusively of natural materials accompanied by the "eira" (threshing floor) and stable for the animals, who witnessed the experiences of Porto Santo from that time. The lime industry, beginning around the year 1600 and of great importance to the island's economy, marked more than a century of history on Porto Santo and opened a maritime route to the island of Madeira. This route, in addition to shipping the raw material, allowed the first trips between the islands and the first tourist activities. Later, the beauty and charm of Porto Santo beach marked the future of this island, making it a beach destination desired by Portuguese and foreign tourists.

In recent years the landscape of the island has undergone profound changes with the construction of a port, airport, sanitation networks, accessibility and health infrastructures, among others, drastically increasing the quality of life of the inhabitants and orienting this territory for tourism.

9.2.

WHO ARE THE MAIN USERS OF THE BIOSPHERE RESERVE?

The area outlined for the proposed Biosphere Reserve corresponds to the territorial and administrative division of the county of Porto Santo and the surrounding marine area up to the bathymetric line of 100m, for which reason its enjoyment extends to the entire local population and the visitors.

The majority of the active population belongs to the tertiary sector, corresponding to trade and services, such as public administration, education, health, banking, insurance sales, transport, hotels and restaurants.

In the tertiary sector, tourism activity is the most relevant. In 2016, Porto Santo recorded 467559 overnight stays, in 2017, 512309, decreasing in 2018 to 503995, with the largest occupation occurring in August, quadrupling the population. The net rate of bed occupancy has remained stable over the last few years, reaching a value of 52% in 2018. The Biosphere Reserve of the Island of Porto Santo will expand all aspects of the territory, making its essence visible and not restricted to summer and beach activities, covering different niches of varied and transversal expression which could constitute priorities of integrated

development, contributing to a better quality of life of Porto Santo and its people.

The secondary sector, product transformation, was more representative in the past compared to its current expression. The water factory, the canning factory, the lime and cement industry are all part of the local history. Currently, the production of wind and solar energy stands out. Inert extraction and civil construction were represented on the island, and their growth reached its peak in 2011, followed by a significant decrease in these activities.

The primary sector, in turn, comprises activities carried out by a smaller number of individuals, related to agriculture, livestock, hunting and, in reduced numbers, fishing.

With regard to agricultural activity, to which extensive livestock farming is associated, small family farms predominate, with 134 farms, constituting a Usable Agricultural Area (SAU) of 309ha. The family farm is represented in 14 holdings, permanent pastures in 31 holdings and permanent agricultural species are grown on 111 holdings. Agriculture and cattle breeding occur in the Transition Area of the Reserve.

As for fishing, there are four vessels dedicated to professional fishing, which deliver their fish to the local market, mostly mackerel, bogues, horse mackerel and tuna or to the Island of Madeira, when it is a good catch, to facilitate its flow. On the other hand, recreational fishing is an activity which receives great interest from Porto Santo residents and even visitors, with the issuance of 733 licences in 2018. Recreational fishing mainly occurs in the Reserve's Buffer Zone. In turn, professional fishing occurs essentially outside the candidate Reserve, but also in the Transition Area.

Relative to hunting, it takes on a role as a "catalysing element" in the economy and tourism, interesting from the point of view of the changing seasons, in a way, ensuring the destination being sought out in October and November. Hunting in the Biosphere Reserve is regulated by the General Framework of Hunting Law (Law No 173/99 of 21st September), which establishes the basis for the sustainable management of hunting resources, in which their conservation and development is included, as well as the principles regulating hunting activity and hunting management. The General Framework of Hunting Law was regulated by Law-Decree No 202/2004 of 18th August, which establishes the legal regime for the conservation, promotion and exploitation of hunting resources, for their sustainable management, as well as stipulate the regulating principles of hunting, with the changes conferred by Law-Decree No. 201/2005 of 24th November and No 2/2011 of 6th January. This activity occurs predominantly in the Transition Area of the candidate Reserve

9.3

WHAT ARE THE RULES (INCLUDING CUSTOMARY OR TRADITIONAL) OF LAND USE IN AND ACCESS TO EACH ZONE OF THE BIOSPHERE RESERVE?

According to POTRAM (Land-use Plan for the Autonomous Region of Madeira), the soil of Porto Santo is qualified in four distinct space categories: urban soil production spaces, agroforestry areas, natural spaces and environmental protection and space-channels.

The spaces classified as consolidated urban are located in the terrestrial Transition Area of the Reserve and the part of the city's waterfront integrates the urban zone of expansion. The classification as a consolidated area confers a predominantly housing status, without other specific standards associated with these spaces. Urban expansion zones, however, have the associated requirement of infrastructure, green spaces and equipment complementary to the dominant function. As for the urban spaces of a tourism nature, there are several tourist areas of expansion located in the south end of the island, on the waterfront, around the existing coastal road.

Industrial parks are also located in this area of the Reserve, which correspond to two areas: one next to the port and another adjacent to the urban space, both constituting areas of expansion. The regime for these areas includes environmental and landscape quality requirements.

Also located in the Transition Area are the basic infrastructures and equipment, such as the airport, the marina, industrial and artisanal fishing and tourist transportation, the commercial port, and the infrastructures and equipment corresponding to tourism, golf, military installations and a wastewater treatment plant.

The agroforestry spaces have a significant importance in the territory and cover mainly the central area of the island and dispersed areas, corresponding predominantly to the Transition Area. The respective regime involves the prohibition of uses which diminish or destroy the potential of the soils integrated in them. In addition, the natural vegetation should be preserved, requiring that the installation of greenhouses be preceded by studies of landscape framing. On the other hand, the promotion of population fixation, coupled with incentives for agriculture and forestry, is based on assumptions of soil protection and recovery.

There are three subcategories of natural spaces: areas with extremely conditioned use, which correspond to the rocky coast (north and east); the areas of conditioned use, which correspond to small areas located at the southern end of the island around urban/tourist spaces; and the areas of conditioned use to regenerate, which are more common and constitute the main category of the island, these spaces being located mainly in the Eastern sector of the island, each with specific standards.

Relative to land use there is also the PDM (Municipal Master Plan) of Porto Santo approved by the Resolution of the Presidency of the Government No. 856/99, of 16th June, which defines the planning model of the entire municipal territory, except in the areas included in the Urbanisation Plan.

In Porto Santo, as in the RAM (Autonomous Region of Madeira) and in the rest of Portugal, the right of private ownership of land is considered a fundamental right and, as such, guaranteed under the Constitution of the Portuguese Republic. According to the General Foundations of Land Public Policy, Land-use Planning and Urban Planning, private property rights and other rights relating to land are weighted and conformed within the framework of legal relations of land-use planning and urban planning, with principles and constitutional values, in particular in the areas of national defence, the environment, culture and cultural heritage, landscape, public health, education, housing, quality of life and



PM

Harbour

economic and social development. Regional Legislative Decree No. 18/2017/M develops the foundations of the land public policy, land-use planning and urban planning in the RAM and defines the respective regional system of territorial management. In compliance with the Basic Law, the institution in the RAM, through the present law-decree, firstly emphasises a new classification system of the land, based on the differentiation between the classes of rural land and urban land, which requires the demonstration of the economic and financial sustainability of the transformation of the rural land into urban and reflects the concern of containing the expansion of urban perimeters and avoiding real estate speculation. Secondly, it emphasises the distinction between programmes and plans in the territorial management instruments, the first focusing on the strategic interventions of the regional administration, and the second on the interventions of the local administration, which is a binding device on individuals. Thirdly, it emphasises the need to reconcile these instruments with the instruments for managing the national maritime space. Lastly, it emphasises the provision of new means of public intervention in the land, namely, the land reserve.

There are other programmes and plans in effect in the RAM, which refer to Porto Santo and the Reserve, of which the following stand out:

- Plan for the Management of the Network of Protected Marine Areas of Porto Santo (POGRAMPPS);
- Regional Plan of Forest Management in the Autonomous Region of Madeira (PROF-RAM);
- Strategic and Integrated Transport Plan for the Autonomous Region of Madeira (PIETRAM);
- Economic and Social Development Plan of the Autonomous Region of Madeira (PDES);



Penicillus capitatus



Anchovy (Pomatomus saltatrix)

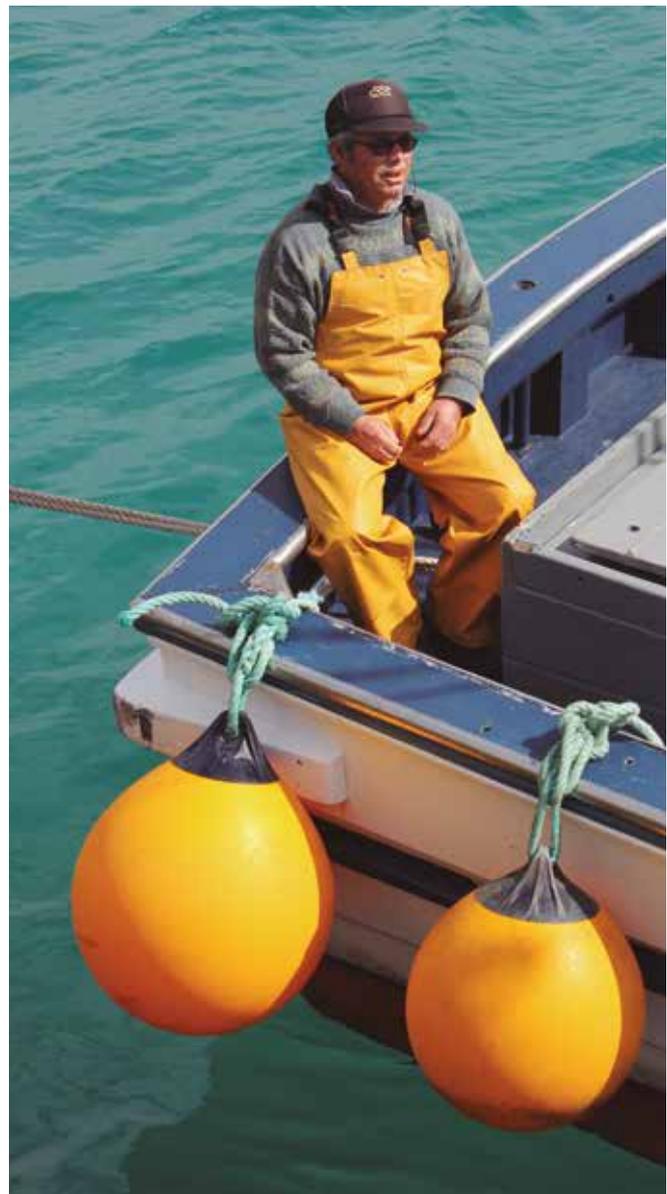
- Management Plan for the RH10 Hydrographic Region (PGRH Madeira);
- Regional Environmental Policy Plan (PRPA);
- Madeira Regional Water Plan (PRAM);
- Flood Risk Management Plan of the Autonomous Region of Madeira (PGRI);
- Tourism Planning Programme of the RAM (POT).

PROF-RAM, as a sectoral plan with territorial impact, is linked to plans which directly or indirectly affect forest areas. POGRAMPPS aims to ensure the preservation of the natural balance, from the perspective of a correct conservation and management strategy, guarantees the defence and valorisation of the natural and cultural heritage and establishes the management regime compatible with the protection and valorisation of natural resources and development of human activities.

POGRAMPPS considers different areas with distinct protection: 'Total Protection Area' and 'Partial Protection Area, Type I and Type II'. In regulatory terms, the plan defines a set of provisions applicable to the area of intervention, defining actions and activities which may be carried out, prohibited or conditioned, as well as the precepts associated with the preservation of natural areas. Considering that the land and marine Core Areas of this Biosphere Reserve coincide with ZEC PTPOR0002 Pico Branco (Special Area of Conservation) and RAMPPS (Network of Protected Marine Areas of Porto Santo), the Biosphere Reserve will benefit from the management systems already established for these protected areas.

In relation to the hunting activity, there are six hunting areas on the Island of Porto Santo - Pico do Castelo, Pico da Juliana, Pico do Facho, Pico Branco, Pico Concelho and Pico de Ana Ferreira - where hunting is prohibited. This measure and others, such as the limitation in the number of days of hunting, the duration of the trip, the daily limit of slaughter and the limitation of hunting dogs, ensure the sustainability of this activity. The IFCN, IP-RAM (Forest and Nature Conservation Institute), annually establishes, by public notice, places, processes and other hunting season conditions deemed necessary. Thus, for each hunting season, the game species allowed for hunting are identified, and the respective daily limits of slaughter and hunting periods are established. Furthermore, the IFCN, IP-RAM may, in addition to hunting conditions, adjust stocking density when justified, to prevent or minimise the occurrence of damages, mainly in native vegetation, in forested areas and in agricultural plantations.

The practice of commercial fishing is duly regulated. As is the harvesting of limpets (Regional Legislative Decree No. 11/2006/M of 18th April), which is currently subject, among other limitations, to a closed season in effect annually between 1st December and 31st March (Ordinance No. 80/2006 of 4th July, amended by Ordinance No. 5/2009 of 22nd January and No 40/2016 of 17th February, which regulate limpet harvesting). As far as recreational fishing is concerned, in its various forms: line, with boat, underwater fishing, etc., it is regulated by Regional Legislative Decree No. 19/2016/M of 20th April, which regulates the fishing of plant and animal species for recreational purposes in the marine waters of the RAM and by Ordinance No. 484/2016 of 14th November, which defines the permitted gear, the constraints and the terms of recreational fishing licensing.



Fisherman

9.4

DESCRIBE WOMEN'S AND MEN'S DIFFERENT LEVELS OF ACCESS TO AND CONTROL OVER RESOURCES

There are no gender differences in access and control of resources in the Reserve. Article 13 of the Constitution of the Portuguese Republic enshrines the principle of equality, giving all citizens the same dignity before the law and states that no one can be privileged, benefited, prejudiced, deprived of any right or exempt from any duty due to ancestry, sex, race, language, territory of origin, religion, political or ideological beliefs, education, economic status, social status or sexual orientation.



10 HUMAN POPULATION OF PROPOSED BIOSPHERE RESERVE

Areas	Permanently	Seasonally
10.1 CORE AREA	0	0
10.2 BUFFER ZONE	0	0
10.3 TRANSITION AREA	5 173	22 415
TOTAL	5 173	22 415

Table 4

The number of inhabitants per zone of the candidate Biosphere Reserve, permanently or seasonally (DREM, 2017).

All 5173 inhabitants of the Island of Porto Santo live in the Transition Area of the proposed Biosphere Reserve. Throughout the year, a flow of tourists of different nationalities, contribute to a significant increase in the population in that same area, increasing the number of inhabitants to over 22000, especially in summer.

10.4 BRIEF DESCRIPTION OF LOCAL COMMUNITIES LIVING WITHIN OR NEAR THE PROPOSED BIOSPHERE RESERVE

The estimated population of 5173 inhabitants has risen steadily, with a population density of 120 individuals per km², showing no significant difference between the number of women (2637) and men (2536). With a gross birth rate of 7.2‰ in 2017, the number of births does not make up for the number of annual deaths, with the ageing index at around 96.6%. In order to tackle this tendency, efforts have been made to boost childbirth and support families at a local and regional level.



Figure 11 Gross birth rate and natural growth rate in the county of Porto Santo (%) (INE /DREM, 2017).

County	Year	Total	0 to 14 years old	15 to 64 years old	65 years old and over
Porto Santo	2001	4 474	795	3 214	465
	2011	5 453	812	3 894	747
	2016	5 162	723	3 795	644

Table 5 Resident population according to the major age groups IINE - PORDATA (2001, DREM (2011 and 2016)).

In accordance with data gathered by INE PORDATA (2001) and DREM (2011 and 2016), there was an increase in the number of children and young people up to the age of 14 from 2001 to 2011 and in just five years, a reduction of 89 individuals.

Porto Santo is one of the counties in Madeira with the greatest gross birth rate (7.2‰), slightly exceeding the rate of RAM (7.1‰) and approaching the number registered in Mainland Portugal (8.4‰ registered).

In relation to education indicators, the 2011 census points to a literate population, where only 8% of the individuals showed no level of schooling. The male gender is more representative in the different indicators, but the number of women stands out in secondary and higher education.

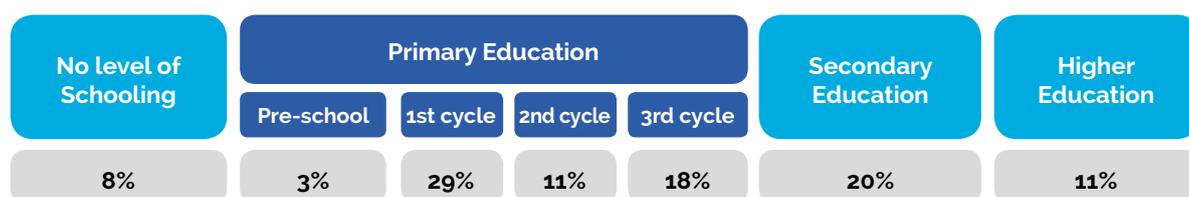


Table 6 Resident population according to the level of schooling (2011 Census).

The declining birth rate is reflected in the number of students enrolled in the different schools of the county, with a difference of 114 students between the school years of 2011/2012 and 2016/2017. In 2016, Porto Santo showed a gross rate of pre-school attendance of 82.5%. In the school year of 2016/2017 there was improvement in school success, with the retention and dropout rate in primary education of about 6.5%, and in the school year of 2017/2018 a transition/completion rate of 84.9% in secondary education.

Most students who complete their secondary education choose to continue their studies. Some return to Porto Santo and others, for different reasons, stay in Madeira, in Mainland Portugal, or emigrate.

Efforts have been made to provide training opportunities by investing in lifelong learning. In the school year of 2015/2016 the number of students enrolled in public education for education/training guided towards adults was: 21 students for the first cycle and five students for the third cycle.

The highest population density can be found in the south coast, namely in the cities of Porto Santo, where there is greater employability, namely in the places of: Pedras Pretas, Lombas, Campo de Cima, Lapeira, Campo de Baixo, Tanque, Matas, Dragoal, Farrobo, Camacha, Pé do Pico, Salões, Casinhas, Terças and Ponta; with significantly lower density in the places of Pedregal, Serra de Dentro, Serra de Fora, Portela, Cabeço and Calheta. The predominant dwellings are single family houses grouped in small settlements, with a growing tendency for dispersion, known by the names of the places.

On the other hand, the hotel units/resorts which have the largest concentration of tourists can be found along the southern bank, near the beach. In the urban centres further from the city centre, the rurality of the people is easily noticed; they shop in traditional grocer's shops, they raise chickens and other domestic animals. They have small vegetable gardens, and live peacefully and tranquilly. In these communities, traditions are very deeply rooted, especially gastronomical and religious ones.

The population lives essentially off the tertiary sector, which employs 84.3% of the active population, and tourist activity plays a major role in local socioeconomic development.

In the past, the secondary sector played a relevant role, and the lime, water, cement and canning industries are part of the history of the local economic activity. Today this sector is represented through energy production, some mining and in the construction industry, corresponding to about 14.4%.

In turn, the primary sector has a low representation, 1.3% of employed individuals, leading to an external dependence at an agricultural and livestock level.

The 2011 census points to an unemployment rate of 18.9%, 13.6% of whom are people looking for their first job and the other 64.4% are people looking for a new job. When the bathing season is over, there is a decrease in the influx of tourists and consequently of tourist activity in Porto Santo, leading to an increase in unemployment and to the precariousness of the families.

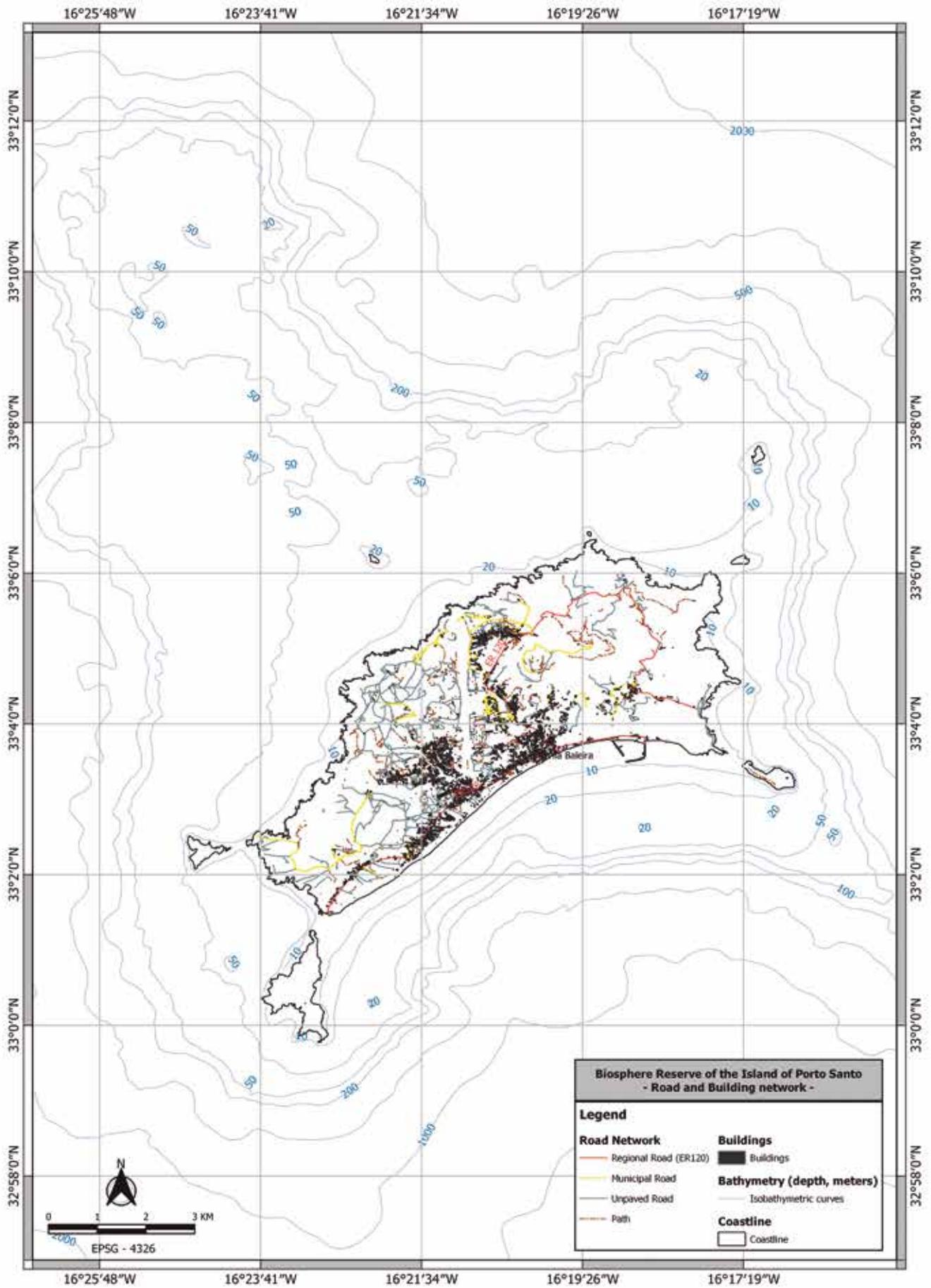


Figure 12 Map of the road and buildings network of Porto Santo.

10.5

NAME(S) OF THE MAJOR SETTLEMENT(S) WITHIN AND NEAR THE PROPOSED BIOSPHERE RESERVE WITH REFERENCE TO THE MAP (SECTION 6.2)

There is only one county, one parish and one city within the proposed Biosphere Reserve and they all share the same name: Porto Santo.

The population distribution in the territory is not homogeneous; it is concentrated in the southern part of the Island of Porto Santo and stretches into the interior in the central area.

There are significant differences in population density between the central/historical area of the urban centre of the city, which extends to Camacha and a second conurbation in Campo de Baixo/Campo de Cima. With the exception of two other areas in the south of the island – Ponta da Calheta and Serra de Fora – the rest of the county shows null or residual densities of population; and the islets are uninhabited.

The urban system basically corresponds to the city and to two small isolated centres (Serra de Fora and Camacha). The city stretches from the oldest part of the centre, its surrounding area and to the coastal front. With the exception of the oldest part of the centre, urban density is low and there is some variation in typologies, especially in the area with the largest concentration of hotel establishments, as well as in the civic centre.

The distribution of buildings shows some dispersion, with many unoccupied plots in the middle of the spaces classified as urban. The main collective equipment and different qualified public spaces are concentrated in the centre of the city. Although single-family dwellings

prevail, the city presents a density of collective typologies much above the regional average, due to the existing hotel establishments. On the other hand, the urban area extends to the west, to the areas of Campo de Baixo and Ponta, where there is a greater pressure from tourism on undeveloped lands on a 500m strip from the shore.

Generally speaking, two complementary forms of urban occupation can be identified along the south coast: the nuclear one, with a regular grid, of greater density; and the linear one along the Regional Road and which is essentially an extension of the city.

In terms of building typology, isolated construction adjacent to the road predominates, varying between houses, the equipment and collective blocks. In the oldest parts of the urban conglomerate, the dominant morphology is the traditional neighbourhood, made up of continuous fronts and low dimensions, rarely interrupted by collective buildings. On the other hand, in the area around the old part of the city there are mostly isolated, terraced houses. The west part of the city, Ponta and Campo de Baixo, show numerous empty plots and a predominance of tourist facilities. Here the housing typology alternates between single-family dwellings and big blocks of flats and some dense spaces, which correspond to the condominiums or resorts.

A fore dune of considerable dimension guarantees a real and visual distancing between the urbanized areas and the beach, especially in the west sector of the city. Part of this sector is filled with groups of buildings of touristic use.



PM

Bathing area

10.6

CULTURAL SIGNIFICANCE

Porto Santo, claimed 600 years ago by Portuguese navigators, has undergone various cultural influences, resulting from the origin of its people, who had to adapt to a territory that challenged their courage and resilience. The existing material and intangible heritage shows a whole history that is important to value and revitalize, in some cases, in order to guarantee its perpetuation through time. Here is a culture that marks the identity of people who still follow traditions but because of globalization, tend to gravitate towards new practices, and so it is fundamental to recover that history and those traditions. The diffusion of local values not only constitutes an important contribution for the reinforcement of the local identity, but it is also important for Porto Santo to assert itself as a unique, quality destination as a Biosphere Reserve.

10.6.1

BUILDING HERITAGE

The geographic isolation and the scarcity of resources has shaped the people of Porto Santo and their environment, which is reflected in the buildings that have been erected all over the county, making the land and its geological diversity the foundation of an architectural heritage, which is expressed in the variety of buildings and outdoor sites which are points of great tourist interest.

This heritage is made up of an important cultural legacy which should be preserved and promoted, as an inheritance and as the basis for the teaching and promotion of knowledge for contemporary interventions which sustain the identifying character of Porto Santo and its people, and are the differentiating elements of other Biosphere Reserves. In this way, the following buildings, places of gathering, meeting and faith, which have united people intimidated by the harsh territory, are most noteworthy.



Cobblestone of the entrance of the Church of Our Lady of Piety



The Church of Our Lady of Piety

THE CHURCH OF OUR LADY OF PIETY – MAIN CHURCH OF PORTO SANTO

Of mannerist features, although it also has baroque and rocaille lines, this church has been classified as Landed Property of Municipal Interest and possesses an interesting collection of paintings, sculptures and jewellery. The primitive church of the XV century, was built by Infante D Henrique, but was reconstructed in 1667 due to a fire. The main altar has a wooden retable, of mannerist features, of the XVII century, of regional work. On this altar there is a painting of "Our Lady of Piety", by the Portuguese proto-baroque painter, Martim Conrado, partner of the Royal Painter Avelar Rebelo (c. 1600-1657). There are two more paintings on the altar, representing "Joseph of Arimathea" and "Nicodemus", signed by Max Römer (1878 – 1960). The collateral retables date back to the XVII century, and have, on the Gospel side, on the altar of the Heart of Jesus, two small paintings of the XVI century – "Eternal Father" and "Beheading of São Brás (?)". There is also, an image of "Our Lady" of the XVI century, traditionally called Our Lady of Expectation on painted, gilded and polychrome wood of Flemish work. In one of the chapels of the church there is an oil on canvas painting, "Noli me tangere", signed in 1653 by Martim Conrado, indicative of the proto-baroque language through games of light and tenebrist language. In this church there are also tiles from the XVII century, of polychromatic patterns in the spires of the tower, which were recovered during an artwork campaign and placed there in 1899. Under the guardianship of the church factory there is a broken up carved retable, possibly of the XVI century or the beginning of the XVII century. The sculptural set of the "Last Supper" made in polychrome, gilded wood of the XVII century and of regional work, is also very interesting. Also worthy of note is the collection of silver objects from the XVII, XVIII and XIX centuries (incense boat, monstrance, safe) and the tile panel – "Our Lady of Piety" (XX century), a gift from D. Laura Gilbert and her husband, benefactors of the Main Church of Porto Santo, and owners of the Factory of Sacavém. In this church some regional materials such as the white masonry of Porto Santo can be identified, among others. This church has been subject to several pirate and corsair raids, in 1566 (French, commanded by Montluc), 1617 and 1667 (Algerians) and in 1708 (the English, commandeered by Captain Amias Preston).



THE CHAPEL OF THE HOLY SPIRIT

The Chapel of the Holy Spirit, situated in Campo de Baixo, is in the middle of a residential area. Originating from a XVI century chapel, it underwent remodelling or rebuilding in the XVII and XVIII centuries. The most significant intervention happened in 1793 at the behest of the then administrator Captain Sebastião António Drummond, the construction work went on until 1819, at which time permission for the blessing of the chapel was requested. This campaign of work resulted in the holy water font built in Porto Santo stone, resembling a shell, segmented inside and out, mounted onto the wall. There is a XVII century retable, built between 1650 and 1670 attributed to the Madeiran sculptor Manuel Pereira, active from 1624 to 1679, or to a follower of his models, like his nephew, the carver Manuel Pereira de Almeida, active from 1677 – 1720/1730. But it is the painting of "Sacred Family" and the polychrome retable of gilded wood that bear witness to the existence of a primitive chapel of the XVI century and a campaign of work in the XVII century, they are two crucial pieces of the devotional and artistic heritage of this chapel and the Island of Porto Santo, an oil on wood painting of the XVI century, circa 1530, of Flemish work (Antwerp) close to the circles of Joos van Clève (1485-1541) or Quentin Metsys (1466-1530).

THE CHAPEL OF SAINT PETER

Small, located on the slope of Pico de Ana Ferreira, the Chapel of Saint Peter, also classified as a Landed Property of Municipal Interest, is a XVII century construction with significant work done in the XVIII century; the altarpiece is from the late seven hundreds. That is why its typology is integrated in a mannerist and baroque manner, on a longitudinal plan, with a single nave and a lower chancel. The façade forms a gable roof with a cross and a full arch portico, in grey stonework, with a straight and protruding cornice with impost, over which there is a window framed in grey stonework. In the interior we notice the ceiling of the chancel, painted and bearing the emblems of Saint Peter, angels and vegetal elements. The pulpit, a cubic box, common in the XVIII and XIX centuries, shows rocaille paintwork, of regional work. What stands out most is the baroque, gilded polychrome altar-piece. In the alcoves there are three images from the XVIII century, painted on polychrome, gilded wood, highlighting two great works: "Saint Peter", glistening with silver, of large dimensions, doing justice to the chapel organ, and "Saint Peter Xavier", the apostle from the Orient, and a "Saint Anthony" of a more popular work. Next to the sacristy, there is a holy water font in carved stonework, with shells from the island. Outside, the churchyard is paved with pebbles, with a design of the figure of a caravel, as a reference to the guardian saint of navigators.

THE CHAPEL OF OUR LADY OF GRACE

A place of pilgrimages since ancient times, this rural hermitage is situated in Casinhas. The precise date of construction is unknown due to the theft of Porto Santo books and archives by pirates. However, inside there is an image of "Our Lady of Grace", a Flemish, sixteenth century work in painted, polychrome, gilded wood, detailed by Gaspar Frutuoso in 1583, estimating 1813 to be the last date of reconstruction.

THE CHAPEL OF MERCY

There is information on the Chapel of Mercy from 1605, but its construction dates to the XVI century in the wake of the foundations of the Misericórdias (a charity foundation) and their importance with the communities. There is an inventory dated to 1732 that attests to the heritage wealth of the Misericórdia (charity) of Porto Santo, with a list of crucifixes, chalices, candlesticks, crosses, retables, and fronts. In 1793, the properties of the Misericórdia were inventoried, because it received other assets besides the pious legacies. The chapel of Mercy is of mannerist lines, on a longitudinal plan and a single nave, with a lower and narrower chancel. In the interior there is a rococo style retable with marbled surfaces and columns, using a technique in plaster. A retable finished in a rocaille palette, structured in two pairs of columns and a cropped attic. In the centre there is a painting, "Visitation" and some devotional images. It is illuminated by slatted windows. The triumphal arch shows a keystone carved with the instruments of Passion. The portal is a round arch with protruding cornice, straight, over which there is a rectangular window, framed in grey stonework and topped by the national arms carved in stone. It is finished by a gable roof with a cross. Attached to the chapel is the building where the Misericórdia was run.

THE CHAPEL OF SAINT CATHERINE

The chapel of Saint Catherine is situated within a cemetery and is a reconstruction of the XIX century, with construction work documented in 1838, followed by other work done later. However, in the portal, typically gothic pillars and chapters can be observed, built in red stonework that must be from the primitive construction, as a base for the diamond point pillars, chapters decorated with protruding spheres. The portal is a full arch, built in grey stonework topped by an impost, and overshadowed by a circular spyglass. Inside, there is a simple, wooden altar with small gilded features and marbled effects, following the plasterwork technique. Access to the chapel is through a forested avenue, with pebbled flooring in geometric designs. It is important to note the use of Porto Santo stonework, as well as other materials.

THE FORT OF SAINT JOSEPH AND THE PICO DO CASTELO

The attacks of pirates and corsairs in this territory made defensive construction urgent. From the Pico do Castelo the remains of fifteenth century military buildings, which illustrate the concerns that the first captains had in the defence of the island, can be seen. A name of reference is Bartolomeu Perestrelo, knight of the house of the Infantes D. João and D. Henrique, named first captain of Porto Santo in 1446. This administration then became hereditary. The Fort of Saint Joseph is part of the defensive constructions of the island, and was later transformed into a dwelling. On the portal we can see the Royal Portuguese Arms, built in regional stonework, oval shaped, with a closed crown topped with the cross of Christ and on the border, seven towers instead of seven castles, pointing to the date of 1820. The portal is arched, resting on painted pilasters and opens onto a patio with five cannons in cast iron of English origin.

COLUMBUS HOUSE – PORTO SANTO MUSEUM

According to oral tradition, Christopher Columbus lived on the Island of Porto Santo, in what is now known as Columbus House – Porto Santo Museum, after having married a daughter of Bartolomeu Perestrelo, first captain of Porto Santo. This is where he programmed and prepared his great voyage and conquest of the Indies from the west, between the years of 1580 and 1582, which turned out to be the discovery of American soil. This Landed Property of Municipal interest comprises an urban building, isolated within a walled patio, next to the church of Our Lady of Piety – Main church of Porto Santo. There is also a structure of the XV century, with regional stone divisions, and a framed door. Other evidence of its antiquity are the two windows in pointed arches, with clay brick slips attesting to its gothic style and wooden lintel.

It is important to note the vernacular attachment with the introduction of elements which identify the regional architecture, such as the double eaves, the windows framed in stonework, sunscreen battens, oval spyglasses and an exterior bread oven. The other building is from the XVII century, inside of which two dungeons and primitive silos, excavated underground to store cereals, survived. Inaugurated as a museum in 1989, it underwent extensive work in 2003, having, as part of its collection some relevant works of art and artefacts: ethnographic objects and local costumes made in partnership with the Museu do Traje (Costume Museum), paintings of Christopher Columbus, one from the XVII century; engravings; maps/cartography; and an archaeological core, on temporary loan from the Quinta das Cruzes Museum, originally from the Dutch ship "Slot ter Hooge", from the East India Company and shipwrecked north of Porto Santo on 19th November, 1724 off the coast of the Baía do Guilherme (silver bars with Dutch contrasts, Dutch, Spanish and Mexican brass coins, a tobacco box lid and ceramic fragments).

BRUM DO CANTO NUCLEUS

This nucleus is a way of honouring Jorge Júdice Limpo Brum do Canto (Lisbon, 10th February, 1910 – Lisbon, 7th February, 1994), whose roots are from Madeira and the Azores. His paternal grandmother, Maria Amélia Vaz Teixeira Perestrello Drummond da Câmara Escórcio Henriques Brum do Canto, owned vast property on this island. Jorge Brum do Canto studied in Lisbon where he got a degree in Law from the University of Lisbon. He stood out as a film director, writing plots, adaptations, editing, making soundtracks, special effects and casting, placing cinema in Portugal at the forefront. He was a film critic for the newspaper "O Século" and the magazine "Cinéfilo". The Brum do Canto Nucleus houses a collection of documents and personal items of the filmmaker,



Columbus House – Porto Santo Museum

relating to his vast filmography, like "A Canção da Terra" (Song of the Land) from 1938 which shows the life and the people on the Island of Porto Santo, where some of the extras are real people of Porto Santo. It also shows personal objects such as pictures (plaster, oleography, photography), medals, insignias, certificates, trophies, different cinematographic material (reels, films, a clapperboard) and still, an interesting set of drawings about different species of fish, of his own authorship.

SALT MINES

In 1943 the Captaincy of the harbour of Funchal, in the midst of WWII, started construction on a network of lookouts on the islands of Madeira, Porto Santo and Desertas, to make it possible to control air and maritime traffic along the coast. At the same time, whale hunting began and the whalers took advantage of these structures to watch the whales. Currently there are still some archaeological remains of these structures made of brickwork and lime, in Pedregal.

SALINAS

For some time, Porto Santo tried to develop the industry of the extraction of salt from the seawater. The oldest structure known is in Fontinha beach, which is currently in ruins.

FOUNTAINS

Water was a scarce resource, especially in Porto Santo so water dictated the profession of the people in the territory. Currently, evidence of this tireless search for the resource, which was essential for the survival of the people can still be seen, in the numerous water holes found all over the island. At the end of the XIX century, the Municipal Council of Porto Santo had the first fountains and public washer-houses built, by taking advantage of existing springs. The fountains of Porto Santo are the living testimony of the Porto Santo culture and they were meeting places where the inhabitants would share stories, songs and island experiences. The main fountains were built on plastered brickwork with Roman arcs ending in a cornice, with a stonework basin and the initials of the Municipal Council of Porto Santo (CMPS) on them, as well as the year of construction.



Noria



"Crocheted walls"

WELLS AND NORIAS

Circular structures, known locally as "wells", tank like, built in fitted stone where the water was raised from underground by using animal or wind traction, with the norias. Located along the main water lines or alongside the south coast, there are about 45 of these archaeological remains left, some in a reasonable state of preservation and showing great constructive care and architectural uniqueness. Fresh water was such a scarce resource that a license in 1854 provided the funding for the construction of wells by the proprietors of lands, which may explain the large amount of wells, considering the reduced dimensions of the island.

CROCHETED WALLS

Associated to the vineyard cultures, they were built by fitting stones of different sizes and functions. At the base, they were larger and served as support to other, smaller stones which were piled up leaving some spaces, in order to provide good ventilation and ideal temperature conditions.

'SALÃO' HOUSES

A local clay called 'salão' was used to cover the rural houses and that is why they are called "casas de salão" (salão houses). The 'salão' protected the houses from strong winds, giving them a cool environment in the summer and making them waterproof in the periods of rain. They were one storey houses with pavilion or gabled roofs and included three rooms: the living room, the bedroom and the kitchen. The kitchen was generally the point of entry into the house where the food was cooked on a cooker with a stone chimney. The mono-pitched roof houses were not used as dwellings. The rooms were made of giant reed and the spaces were filled with straw, bracken, waste wood or small stones, and then lined with lime and cement. The floor was of packed-mud.

ARCHAEOLOGICAL MARINE SITES

There are some archaeological marine sites worthy of note, such as the case of the Dutch Galleon "Slot Ter Hooge" which was shipwrecked in Porto Santo in 1724, on the north coast of the island. It was a ship that belonged to the Dutch India Company and was destined for India, to establish trade relations.

10.6.2

INTANGIBLE HERITAGE

CRAFTSMANSHIP

Local craftsmanship is in a lag phase, the number of active artisans has been decreasing due to their advanced age. As a result of the times, there hasn't been an interest by younger people in taking on this type of activity, which requires art, patience and above all, a passion for the work. Following are some examples of local craftsmanship.

The palm hearts are tender leaves of Canary Island Date Palms (*Phoenix canariensis*). After dried and subject to several treatments, they are transformed into strips, braided and later sewn and moulded by the artisan, leading to beautiful hats and purses. In turn, the fresh palm hearts, made from the tenderest of leaves, after being embroidered, are sought after for the Palm Sunday procession, at Easter.

The giant reed wickerwork (*Arundo donax*) is an art that demands patience and a strong, skilled hand. The stalks of the plants have numerous applications and can be used as rattles, fishing poles, supports for climbing plants, capping for vineyards and orchards, rods for the frames of tent mats used for protection from the sun, stakes for the grapevines as traditionally done in Porto Santo, small lattices for the tomato plants, traps for lizards, snuff boxes, wind-breakers, under-covers and partitions for the old "casas de salão" (Salão houses) and "tabiques"(bulkheads), fishing creels, cane carts, the making of whistles and "pifos"(typical pipe instrument of Porto Santo), pipes, the musical instruments of the scissor sharpeners, frames for sieves, the construction of cane mills with sales, decorations for the nights of Saint John, among other uses. Currently they are still used as protective hedges in the vineyards and beach dunes, as well as animal fodder.

By all accounts, Porto Santo had the greatest variety of clay such as argil, pozzolan, chalk, marl and this is where thick, resilient bricks applied in the construction of the fortress of Pico do Castelo were made, as well as in the shelters. The raw clay (salão) was used to cover poor old dwellings and would crack and split open in the summer, but would close up with the first rain and no water would pass through. Also in Porto Santo, roof shingles were manufactured and sold with the mark of S.V., the initials of Sebastião de Vasconcelos. Furthermore, some artisans, taking advantage of the existing natural resources, dedicated themselves to working clay, leading to the tradition of the making of shepherd figurines, among others. Whereas in the past they were shaped by hand and dried in the sun, today they are mostly turned with the help of a potter's wheel and then fired in a kiln. Some pieces are on display at the Ethnographic Museum of Madeira and at the Frederico de Freitas House Museum.



Palm heart hat

In the old days, girls and women would dedicate their time to Madeira embroidery in Porto Santo, as a livelihood activity. It is said that when the person in charge of the embroidery reached the island, the women would run to the beach to receive the orders. Because there was a large number of embroiderers, the best and quickest would be chosen, making this job the sustenance of many families in the past.

Originating in the XVI century, Madeira's cobblestone, preceding Portuguese cobblestone, used black and white stones of basalt and reef limestone respectively, gathered from the beaches and pebbles of the archipelago. This floor coating technique is still present today in different places on the Island of Porto Santo, forming a historical and heritage reference of the island and reflecting the lithological geodiversity of the place. In the square of the Pillory, in the courtyard of all the churches and in the different buildings, the artistic displays of the pavours through what is known as "black and white stone embroidery", can be seen.

It is worth noting that there are other pieces of typical craftwork, such as the miniature windmills and work done with seashells taken from the sand. Notwithstanding the tradition that is still upheld, different creative craftwork showing new ways of expressing art, culture and local identity, have started to appear. Part of the crafts can be found in the city centre, in the Prophet's Shop, where they are displayed and commercialized.

FESTIVALS, FESTIVITIES AND PILGRIMAGES

Most island festivities have remained the same throughout the years, each one with its idiosyncrasies and role in motivating the population and cultivating the sociocultural identity of Porto Santo, which is in need of new approaches in the face of the challenges and stimuli of the new times.

On the Twelfth Night, the fifth of January, the population gathers in the city centre, where the municipality brings together different groups to sing Christmas Carols. Throughout the night, these and other groups of people go through the streets of the island, door to door, singing Christmas Carols, enjoying the nativity and tasting Christmas delicacies.

On the night of fourteenth of January, the voices and the instruments once again take to the streets and visit friends and family for the traditional "sweeping of the wardrobes", finishing off the Christmas sweets in the houses visited. On the day of Saint Amaro, 15th January, the students in pre-school and in the 1st cycle at school as well as groups of senior citizens (Day Centre of the Foundation of Our Lady of Piety, USPS and ACES) take their brooms and sing songs allusive to the festivities, in the city.

Two weeks before Easter the word "Balamento!" can be heard, breaking the silence. They are exclamations of children and adults in an ancient game that has been passed down from parents to children. The participants agree on whether it will be the sound of the church bell or the moment when the public lighting goes on, or whatever other phenomenon with a fixed timetable, that will make the participants shout out "Balamento!". The first participant to say the magic word receives a point and at Easter the player with the most points is the winner and receives the "Balamento!", which has initially been agreed upon, and can be sweets, chocolates, eggs or the traditional almonds allusive to the ceremony.

During the Easter celebration, the interweaved fresh palm hearts are used in the Palm Sunday Procession. After the blessing, the palm hearts are carried in the procession and are then kept at home and used daily as symbols to receive "divine protection", because after they are "blessed" they can be used to keep away evil and calm adversities. Displayed on the walls or in household oratories, next to the chosen saints of family devotion, the branches dry up and lose their original colour, but even so are kept until the following year for spiritual protection.

After the traditional ceremonies have taken place, the Easter Sunday visit is replaced by the visit of the Holy Spirit to the different places on the island on the following Sundays, taking the "joy of the Resurrected Christ" to every family. The girls that accompany the group are called "saloias" (country girls), and in each house they sing a typical song and carry a small basket to collect sweets, eggs or other objects according to the tradition. After all the places have been visited, they go the beach and this ends the cycle of Easter festivities.



Festival in honour of Our Lady of Piety



"Espetada"



Festival of Saint Peter

"Come down to Earth, Blessed Light"

come uplift your people

visit our souls

guide our steps

Upon entering this church

we fervently ask

the Divine Holy Spirit

to fill us with your love

Our Lady who is inside

dressed in blue and white

waiting for the visit

of the Divine Holy Spirit

Divine Holy Spirit

eternal in your pain

bless our souls

and keep them in your love"

Included in the Festivals of the County, the festivals of Saint John, patron saint of the island are the most anticipated. For five months, each march is thought out in detail, from the lyrics and music of the march, the attire, choreography and floats. When night arrives, the streets fill with a different shine and joy, and the marches end around the great fire, quayside, followed by nocturnal entertainment and food and drinks until sunrise. The Municipal day, 24th June is celebrated with pomp and circumstance, culminating in the festivities that bring many visitors to the island, who specifically search out this period in order to participate in this festive scenario which is characteristic of Porto Santo.

The devotion to Saint Peter, patron saint of farmers and fishermen, is also longstanding. Farmers would ask for rain and the fishermen for an abundance of fish. Every year, on the 28th June there is a procession organised by the brotherhood of Saint Peter, from the Ribeiro Salgado beach to the Chapel of Saint Peter, where the mass is held. At the end, there is the traditional fish auction, offered by the fishermen and one of the highlights of the festival.

It is worthy to note that in the past, the single girls played "Sortes" (Luck), at around the time of the festivals of the saints, to see who they would marry. The "sorte" of the snail consisted in getting a dark cloth and placing a snail on it and then a medium sized box over the snail and the cloth. The girl would then ask the match-maker saint to reveal the name of the boy she was going to marry. The following morning, the path outlined by the snail would reveal the initial of her future husband.

In July, the city is filled with music, and the big little talents hit the streets. Organised by the Parish Council of Porto Santo, the Children's Festival of Voices of Porto Santo presents the selected students of the different 1st cycle schools and their music, accompanied by the Children's choir of the Parish Council.

The Gastronomy Festival, organised since July 2015 presents a series of delicacies, some traditional and others more modern, local or regional, giving the people a special reason to take to the streets.

With the creation of the parishes of Our Lady of Piety and the Holy Spirit, two brotherhoods of the Holy Sacrament were established, and the festivals in their honour are celebrated on the second last weekend in July in the chapel of the Holy Spirit and in the first weekend of September in the church of Our Lady of Piety.

In the last weekend of July, the festival of the Holy Spirit celebrates the blessing of the bread, with the flag of the Holy Spirit, which is then distributed to the people, in the respective chapel.

Between the 14th and 16th of August the festival of Our Lady of Grace, gathers hundreds of followers and visitors. It is known that the chapel of Our Lady of Grace was in ruins between the years of 1813 and 1949. In 1949, the population decided to rebuild it by getting the necessary materials in the Serra de Fora, as well as the festivals and pilgrimages to help in the reconstruction. Nowadays, the number of parishioners who are part of the brotherhood of Our Lady of Grace is still significant. Many of the songs still sung today during the pilgrimages, began during this phase of the history of the chapel of Our Lady of Grace.

In the last days of August, the festival of the Grape Harvest takes place. Here one can get acquainted with the variety of vineyards, grown on the island, contributing to the opportunity for the harvest in the Experimental Agricultural Park of Farrobo and the stomping of grapes in a public winepress set up in the centre of the city, providing moments of fun and musical entertainment.

Another important event in August is the Folklore Gathering, counting sixteen editions so far. The local folklore group hosts the event which entertains the island and promotes the local culture of the country.



Festival in honour of Our Lady of Piety

In 1952, foreseeing a year of drought, the people, in pilgrimage and in faith, pleaded with Our Lady of Grace in song, for the fields to stop being dry. This prayer was subsequently answered with the arrival of the much desired rain.

“Our Lady of Grace,
is our mediator
So here we carry her,
present on this salver.

Do not show disdain of the little church
that you see lost from up above,
Because that church is
my faith, my life.”

The festival in honour of Our Lady of Piety, patron saint of the Island of Porto Santo, since primitive times, is celebrated on the last weekend in August and relies on the commitment of the respective brotherhood. The Centre of the city is decorated with colourful flags which are placed on wooden poles decorated with vegetation. After the religious festivities there is food and drink and a lot of entertainment.

During the second half of September, the island goes back in time to the arrival of Christopher Columbus in Porto Santo. Besides the music and street entertainment allusive to the time period, the disembarking of the navigator and his crew can be witnessed, followed by a historical parade and the growing participation of the people. The Columbus Festival has increasingly been gathering touristic importance.

The official discovery day of Porto Santo is celebrated every year on the 1st November, leading to the traditional ceremonies, recalling the arrival of Gonçalves Zarco and Tristão Vaz Teixeira to the island in 1418.

CHRISTMAS SEASON

Christmas season arrives soon. The masses of the Birth that precede the great feast are a tradition of the Archipelago of Madeira, and are lived intensely on the Island of Porto Santo. The nine days before Christmas, correspond to the nine months of pregnancy of the Virgin Mary, a mass is celebrated at six o'clock in the morning, and different groups of the community are in charge of the entertainment. Following the mass of the Birth, there are moments of social interaction, preceding the professional obligations which include taste tests of chicken soup, chicken sandwiches, biscuits and liquors as well as entertainment.

On Christmas Eve there is a traditional Christmas Market, where traditional Christmas delicacies are presented as well as local crafts, in a festive environment. The rich Christmas dinner characteristic of Mainland Portugal is substituted by chicken soup and chicken sandwiches, making up a simple meal that precedes the participation in Midnight Mass, celebrated at midnight from the 24th to the 25th December. This mass includes the presentation of a short Christmas play involving the community, and the traditional pilgrimages of the “shepherds”. The following day, the table presents the traditional “carne de vinho d'alhos” (pork meat in wine and garlic), fried pork meat and homemade bread, fried in the remaining fat. The traditional sweets are “rosquilhas” (ring-shaped pastry), the biscuits and the honey corn cakes, accompanied by liquors in a variety of flavours for all tastes.



The nativity, locally called “lapinha” is a sense of pride for each household. For such, furniture is normally stacked and lined with butcher paper, which has previously been retouched with Tung oil, giving it a dark brown colouring. Moss colours the nativity green, with its clay figures and paper houses and flowers which are handed down from generation to generation and spread throughout the scene; real works of art that are on display until the day of Saint Amaro.



Nativity

LEGENDS AND STORIES

THE LEGEND OF THE IMAGE OF SAINT PETER

Legend has it that a long time ago, a shepherd was tending to his flock near the Ribeiro da Quebrada stream, above the Chapel of Saint Peter. He went to drink water from a spring that was there and found the image of Saint Peter. He immediately went to tell authorities and the image was taken in procession to the main Church. However, as if by a miracle the image reappeared in the same stream. It was then decided to build a Chapel at that place in his honour. It is important to note that the image would sometimes appear with its back to the door and on other occasions with its back to the altar.

THE LEGEND OF THE PICO DE ANA FERREIRA (ANA FERREIRA PEAK)

It is said that Ana Ferreira was the bastard daughter of D. João II and was sent to Porto Santo, and given the Pico (peak) where the animals grazed. When she was told of the gift, she exclaimed "So I will receive the peak to graze animals?" and someone answered "My lady, you will not only receive the peak and the pastures, you will receive the lands for farming that are irrigated with rain water", because it was from that peak that the people harvested the cereals and the grapes.

THE LEGEND OF OUR LADY OF GRACE

One day, someone found an image of Our Lady, stuck in a rock, near Casinhas. They tried several times to take it to the Main Church but the next day, the image would reappear in the original place. And so began the construction of a chapel at the site where the image would appear.

THE LEGEND OF THE KING D. SEBASTIÃO

People used to say that the king D. Sebastião would appear on a Thursday on the day of Saint John. On that day the city of Funchal would be destroyed and the stairs of the Monte would serve as a pier. It was prophesized that he would appear on a beautiful beach (Porto Santo) and that on that day the people would have to run away without looking back, lest they be turned into marble stone.

THE LEGEND OF THE BULLS

Passed down from generation to generation, legend says that when the population spotted pirate ships off the coast of the island, they brought their cattle down to the beach and at nightfall tied torches to their horns, creating the illusion of a great number of inhabitants. Faced with this, the pirates didn't dare invade the island and sailed away.

THE PROPHETS

In 1533, a man named Fernando or Fernão Nunes who lived in Porto Santo was posing as a prophet inspired by the Holy Spirit, whom he claimed guided his steps and dictated his words. He was accompanied by his niece called Filipa Nunes who was 17 years old.

One night they came down from the hills to the village, with a bell in hand. Many people gathered to find out what was happening, Fernão Nunes would point out the sins they had committed and he was believed not only by the ignorant people but also by judges, councilmen and the more important men on the island. The people, influenced by the false prophet dedicated themselves exclusively to religion, praying fervently for the remission of their sins, abandoning their animals and losing their means of sustenance. When news of these strange facts reached the island of Madeira, the Magistrate, João de Fonseca went to the island, accompanied by two scribes. He arrested the two prophets and sent them to jail in Machico. They were later sent to Évora, where they were judged and their sentence was to stand on the steps of the Cathedral of Évora, during the celebration of the mass with a sign that said: "Prophet of Porto Santo". Since then the title has not fallen in disuse and the people of Porto Santo are still called "The Prophets".



ETHNOBOTANY

The first inhabitants needed to adapt to the sometimes adverse local conditions and in virtue of the isolation, they had to use the existing natural resources. The plants, used for the most diverse of purposes, are present

in religious traditions, home remedies and at the table and are inseparable from the local culture and identity. Next, some uses and customs associated to plants from Porto Santo will be referred to.

The dragon tree was once abundant and the target of exploitation by the first settlers, due to the great demand for dragon-blood in the XV century. The name comes from the Greek word "drakaiano" which means dragon, because it was said that its red sap was dragon-blood. In the early days of the settlement, dragon-blood was exported to Europe because it was much appreciated for its medicinal properties, as a fabric dye and in the manufacture of polish for violins. For many years the origin of the dragon-blood was kept secret leading people to believe it really was blood, feeding beliefs and hopes in its benefits and cures. The stalks of the primitive Dragon Tree, of large proportions, were used in the reparation and construction of small canoes or commonly use utensils.

Besides the dragon tree, some types of lichen commonly called orchil (*Roccella* sp.) were much sought after for dyeing. These lichens are common in the rocks overlooking the coast. The active component – the orcinol – with its dyeing value, is used in the dyeing process of clothes, the perfection of the colour purple or blue violet, giving significant importance and commercial value to the orchils. Their value in the economy of the Atlantic area happened very early, with the European occupation of Atlantic spaces in the XV century. The orchil was one of the first products to be commercialized and its exploitation was active until the XIX century, but it was in the XVIII century that it had the greatest economic importance and power, being exported to Flanders and England.

Plants used for other ends are the "barrilha" plants (*Mesembryanthemum crystallinum* and *M. nodiflorum*), namely for the production of soap powder, after being reduced to ashes. These plants, which are rich in soda, are still used today for washing hands if necessary, having elevated water content in their tissues.

Others local plants were and are still used nowadays, such as the "selvageira" tea (*Sideritis candicans* var. *multiflora*) with digestive properties; "losna" tea (*Artemisia argentea*) used to cure uterine ailments, as an emmenagogue and for stomach ailments; "hissopo" tea (*Micromeria varia* subsp. *thymoides*) used as a soother; garlic macerated with olive oil to heal spider fish bites (*Trachinus draco*) and the Opuntia Tuna Cactus (*Opuntia tuna*) used to fight coughs.

GASTRONOMY

If in the past wild plants were used in food due to a need for survival, today some are considered delicacies. Of the local specialities used in gastronomy, the following plants deserve special mention.

- The "ranchões" (*Rapistrum rugosum*), a ground shrub of large leaves that appears with the first rains of October. The leaves are cut similarly to how kale is cut and cooked in water and salt. After cooking, the water is drained. Water is again added together with olive oil, garlic and pepper and it is reheated. The Turnipweed is served as a side dish to "escarpiada" (typical bread).

- The "serralhas" (*Sonchus oleraceus*) is used in salads. After washing it with water the leaves are cut like lettuce and scrubbed to become softer. Then they are seasoned with vinegar, olive oil, garlic and salt; they are served with "bolo do caco" (flat, circular bread) and "escarpiada" (typical bread).

- The "saramagos" (*Sinapis arvensis*) are cooked in water and seasoned with salt, garlic and olive oil.

- Sea fennel, "perrejil" (*Crithmum maritimum*) picked from the rocks off the coast, quickly boiled in an abundance of water with a. After draining the water they are placed in jars, pickled, in other words in vinegar, pepper garlic and salt. Currently it is used to accompany fish dishes on Good Friday.

Associated with the use of wild plants is the consumption of fish, like tuna and skipjack, the latter being much appreciated consumed grilled or pickled after being subjected to a salting and drying process used by the elders.

"Escarpiada", similar to Asian bread, thin, made with corn flour. The taste for this bread was introduced by the Arabs. The corn flour, ground in the past essentially with a hand grinder was placed in a bowl and kneaded with cold water and a pinch of salt. After greasing the stone (caco) with olive oil or pork lard it is heated and when it is hot, a piece of dough is placed on it and flattened to become thin, then flipped from one side to the other to become golden without burning. "Escarpiada" is used all year round and is eaten with skipjack, roasted jack mackerel, sow thistle salad and raw limpets.

The "bolo do caco" (flat, circular bread) from Porto Santo sets itself apart from the "bolo do caco" in Madeira Island because it is thicker, bigger and is not made with sweet potato. The name comes from the fact that it was originally baked on a "caco", a stone.

The "capelas" are sweet bread that in Porto Santo look like a chapel, thus being called chapels. They are much appreciated around the time of the feast days of Saint John and Saint Peter.

Equally appreciated are the hard cakes which taste salty, "rosquilhas" the ring-shaped pastry and the honey corn bread, usually eaten at around Christmastime.



"Capela"

FOLKLORE

Local folklore has been performed by the Folklore Association Group of Porto Santo since 1963, recreating songs and traditions from the past, of note, the "Baile da Meia-Volta" (The Midnight Ball), the "Baile do Ladrão" (The Thief's Ball), and the "Baile Sério" (The Earnest Ball). The costumes go back to the XIX century, where sombre colours, represented on the linen of Madeira, predominated. Burlap, wool, cambric and "siriguilha" (a thick wool and linen cloth) represented the farmer in his work clothes and Sunday best and the clothes of the average bourgeoisies. It is important to note the performance of "Moinhos de Vento" (Windmills); here the group talks about the agriculture and the importance of the windmills to grind the wheat to make the bread. Some of the members turn small sails on their backs imitating the sails of a mill of Porto Santo. The Folklore Group currently has 30 members. The First Cycle school of Porto Santo also has a project that aims to preserve and raise awareness of the Porto Santo culture through dance and song, a Children's Folklore Group, with about 25 members.

10.7

SPECIFY THE NUMBER OF SPOKEN AND WRITTEN LANGUAGES IN THE PROPOSED BIOSPHERE RESERVE

On the Island of Porto Santo, an integral part of RAM and Portugal, the only official language is Portuguese.



11 BIOPHYSICAL CHARACTERISTICS

11.1

GENERAL DESCRIPTION OF SITE CHARACTERISTICS AND TOPOGRAPHY OF AREA

The Island of Porto Santo is 12km long in the direction of NE-SW and 6km wide maximum, in the direction of N-S, presenting a rather flattened and gentle morphology, reaching a maximum height of 517m in Pico do Facho.

It is surrounded by six islets which correspond to the extension of its largest protrusions, to which are associated two low protrusions in an area of 2.1km²; the Islet of Baixo or Cal (179m), the Islet of Cima or of Farol or the Dragoeiros (121m), Islet of Ferro (115m), Islet of Fonte da Areia (79m), Islet of Cenouras (109m), Islet of Fora (100m), Baixa do Meio and Baixa dos Barbeiros.

On the island, there are two zones of rugged terrain; one more imposing to the NE, the other is less significant to the SW, separated by a depressed, flat, sloped shelf, to the SE. In the NE sector, there is the Pico do Castelo (437m), Pico da Juliana (447m), Pico da Gandaia (499m), and Pico do Facho (517m), four types of terrain, separated very clearly from 150m of altitude; and between the aforementioned mountains and the coast facing E, three more types of terrain dominate, Pico do Maçarico (285m), Pico do Concelho (324m) and Pico Branco (450m).

The SW sector is taken up by three main elevations, above 100m: Cabeço do Zimbralinho (183m), Pico do Espigão (270m) and Pico de Ana Ferreira (283m). Among these three sectors, the terrain is suave, not going over 150m and sloping downwards from the north coast to the south coast, between Ponta da Calheta and Sítio do Penedo, forming a fine sand beach which extends for about 9km and defines the basin of Porto Santo. To the WNW there is another sector made up of Cabeço das Canelinhas (176m) and Cabeço de Bárbara Gomes (227m). The average altitude of the island is 112.5m, lower in the islets, 77.8m.

Over 85% of the island is below the 200m altitude and about 40% of the island is at an altitude inferior to 50m. Most of the area (54%) is between 50m and 200m in altitude, which corresponds to about 23km².

The coastline is quite uneven. It is deeply indented and with many escarpments to the east, north and west, with cliffs cut into volcanic or consolidated sedimentary rock, showing rolled stone beaches. In these cliffs to the N, erosion is more pronounced, followed by areas that encompass the continuation of these cliffs and next to the summits, as well as in the cliffs between the port and the west zone of the island and Serra de Dentro.



Dragon tree (*Dracaena draco draco*)

The coastline facing southeast is low and sandy, forming an ample bay made up of beach and fields of sand dunes of about 7km in extension with excellent quality bathing water. Around the island there is a significant shelf of shallow water marked by the presence of two of the main existing islets: Islet of Baixo, located to the south of Ponta da Calheta and Islet de Cima to the east of Ponta da Galé, to which can be associated Islet of Fonte da Areia, Islet of Cenouras, Islet of Fora and Baixa do Meio and Baixa dos Barbeiros.

The underwater shelf around the island develops predominantly in the direction of NNW. This shelf is surrounded by the slopes of the underwater peak of Porto Santo, where the first 50m take up about double the area of the island (85.72km²) which leads to the supposition that the immersed insular area was much larger to what it is today and that it was connected to the islets. Its disappearance was probably due to tectonic phenomena, with intense fracturing and the abatement of structures, accompanied by strong erosive activity, especially marine abrasion.

On the Island of Porto Santo, freshwater is mainly of underwater origin and notwithstanding the scarcity make up a supply source of irrigation water, in spite of the needs not being uniform in time and space. There are also some water courses, like torrential streams that guarantee the occasional drainage, after periods of intense precipitation. These water courses are associated to trenches for the harvesting of surface runoff, built on the hillsides, leading the runoff to the storage reservoirs of irrigation waters.

The area with the best aquifer is in the central part of the island and corresponds to an area with geological sedimentary formations, by the coastline and the ground level is below sea level, providing marine intrusion phenomena. This area has the most productive water harvesting of the island, currently used in the irrigation of the whole agricultural perimeter of the Agricultural Park, as is the case with the norias of Leacok (173m³/d), Língua de Vaca (7.2m³/d), Heréus and Araújos (132m³/d) and the water hole of the Hotel of Porto Santo (250m³/d), situated in the Ribeira do Tanque basin and the Ribeiro Cochino basin, respectively.

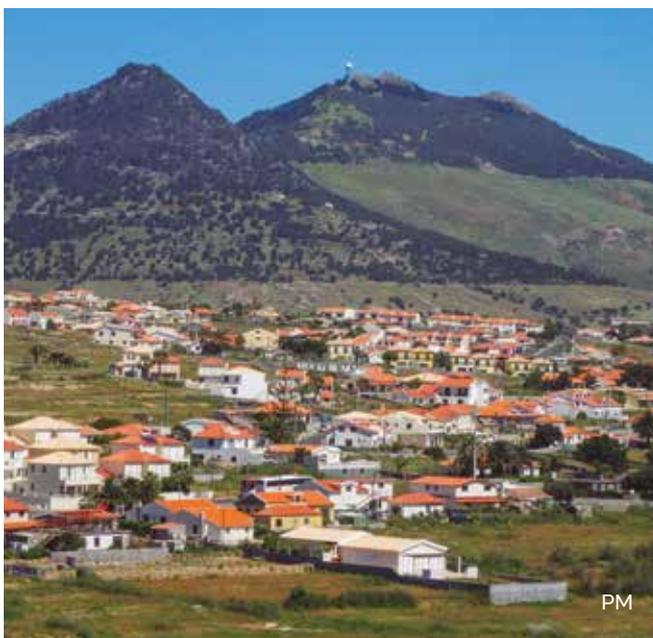
The remaining water harvests, located in the northeast and southeast areas, present very low flow rates and their dispersion impairs their usefulness for agricultural supplies, worthy of note are the water harvests of Ribeiro Cochino, Ribeiro Salgado, Zimbralinho, Perrigil, Fonte Velha and Fonte da Areia.

The analysis carried out on the natural freshwater, between 2015 and 2019 in infrastructures granted to ARM, S.A., namely on the springs of Leacok, Língua de Vaca, Fonte Velha, Fonte da Areia, Ribeiro Cochino, Ribeiro Salgado, Zimbralinho, Heréus and Araujo and the Hotel water hole, show that underwater freshwater is generally alkaline (pH 7.0 and 9.0) and mineralised, as a consequence of the elevated mineral salt content dissolved in the water, like chlorides, carbonate anions, magnesium, sodium, potassium, among other metals resulting in part from the soil leaching process. The analysis also revealed that all the water presented chloride and boron ions, with values of between 400 – 800 mg/l and 0.5 to 4.0 mg/l, resulting from the marine intrusion of detritus and porous geological formations that are easily permeable and of rock and soil leaching processes containing boron and borosilicate, respectively.

11.2

ALTITUDINAL RANGE

In the proposed Biosphere Reserve, the highest elevation is 517m at Pico do Facho, the lowest elevation is at sea level (0m) and the maximum depth is 100m around the Island of Porto Santo, covering an underwater shelf.



Picos of Castelo, Facho and Gandaia

11.3

CLIMATE

Porto Santo is part of the subtropical region, characterized by mild weather throughout the year. The average annual temperature is 18.6°C. Nevertheless, the weather trend of the air temperature has registered an increase, especially since 1975, with increases of +0.54°C/decade for the maximum temperature and about +0.35°C/decade for the minimum temperature. The low thermic range that exists essentially results from the moderating effect of the sea, under the insular environment. Precipitation is lower than that which occurs on the Island of Madeira, and the rainiest months are, December (69.9mm), November (50.0mm) and January (48.7mm); and the least rainy days are, June, July and August, with a total of 14.1mm. It presents 61.4 days of significant precipitation (RR> 1mm) and about 9.3 days of intense precipitation (RR>10mm).

The wind frequently blows from NW to NE, and the highest intensity values of the wind are registered during autumn and winter. The average insolation is 5.9 hrs, showing maximum figures for the months of May (7.2hrs) and August (7.8hrs). The lowest insolation figures are registered in the month of December (4.3hrs).

According to the Köppen-Geiger Climate Classification system, Porto Santo presents a dry, mild climate with an annual precipitation level of under 400mm and annual potential evapotranspiration superior to annual precipitation, of about 1500mm.



Sand

11.3.1

AVERAGE TEMPERATURE OF THE WARMEST MONTH

The highest average monthly temperature is 22.5°C, occurring in August, with the absolute maximum temperature being 35.5°C, registered in August, 1990.

11.3.2

AVERAGE TEMPERATURE OF THE COLDEST MONTH

The lowest average monthly temperature is 15.5°C in the month of February, with the absolute minimum temperature being 6.4°C, registered in February, 1981.

11.3.3

MEAN ANNUAL PRECIPITATION

The mean annual precipitation is 361mm.

11.3.4

IS THERE A METEOROLOGICAL STATION IN OR NEAR THE PROPOSED RESERVE? IF SO, WHAT IS ITS NAME AND LOCATION AND HOW LONG HAS IT BEEN OPERATING?

The Meteorological Station of Porto Santo, located at the airport of the island began operating on 1st January, 1996. This station, with an altitude of 82m, measures several parameters such as atmospheric pressure, temperature and the relative humidity of the air, wind speed and direction, precipitation, air temperature at 5cm, ground temperature and global solar radiation.

In 2019, the Weather Radar of the Autonomous Region of Madeira, in Pico do Espigão was inaugurated, which allows for the weather surveillance of this region, as well as the improvement and optimisation of the current models. The technology used by the radar is based on the double polarisation principle that determines the type and intensity of precipitation, as well as its occurrence, with greater accuracy. This greatly improves the precision of the estimates of the quantity and types of precipitation and makes it possible to gather meteorological information at distances of 400km, allowing for the prompt issue of formal communiques, when justifiable.

11.4

GEOLOGY, GEOMORPHOLOGY, SOILS

The geology is quite diversified, essentially made up of basic volcanic rocks (e.g. basalt) and acidic-intermediate (trachyte and rhyolite), and also sedimentary rocks. This island presents a complex volcanic structure, mostly underwater, heavily dissected by erosion. The island grew as an underwater shield volcano between the Early Miocene and the Middle Miocene (18Ma – 13.5Ma), with runoff of basalt, hyaloclastite e palagonite interspersed with lenticules of tuffite conglomerates. These conglomerates occur at the top of the underwater volcanic complex, together with calcareous coral reefs and sandstones and represent the transition from a low-depth underwater volcano to one that is subaerial. The subaerial volcanic activity has essentially produced runoff of basalt, including mugearite, hawaiite and trachyte. The last eruptions occurred 10.2Ma ago. The subsequent volcanic activity is only represented by subvolcanic basic rock from about 8.3Ma ago, no correlative extrusions were found. The most recent formations correspond to sedimentary deposits from the quaternary era, such as silty clay paleosols, calcareous crusts, calcarenitic eolianites, river and sloped beach deposits. Of these, it is important to highlight the eolianites that occur essentially in the centre-west region of the island and cover about one third of its surface. These sands fossilise an ancient erosion surface, with greater emphasis to the north of the island itself. The thickness of this deposit is variable, reaching a maximum of 40 to 50m near the Fonte de Areia. This sand is medium to fine, well calibrated, essentially calcareous and its composition includes a predominantly organogenic fraction (made up of fragments of limestone algae and the remnants of bivalves, foraminifera, radiolaria, bryozoan, etc.) and volcaniclasts (5% on average). This composition

shows that it was originally made up of marine sediments, generated in low-depth insular shelf environments, at the end of the Pleistocene, about 30 thousand years ago, in the context of a sea level substantially lower than the current one. Between this epoch and the beginning of the Holocene, the sea level reached minimum values, exposing the deposits and organogenic structures of this extensive shelf, allowing for its erosion and the transportation of the resulting sediments, especially by wind, resulting in Aeolian accumulations that covered vast parts of the island and that later consolidated, resulting in the eolianites. In the Holocene, the rising sea level, that re-submerged the insular shelf, hindered the continuity of the Eolic processes, and the eolianite deposits underwent erosive processes associated to external geodynamic agents, namely the action of rainwater, seawater, wind and temperature variation.

The island and respective islets present many geological heritage values, inherited throughout the different phases of development. Its magmatic inheritance, as a volcanic island, active for more than 10Ma, has given it a variety of rocks (basalt, hawaiite-mugearite, and trachyte-rhyolite, tuffite, hyaloclastites, peperite, etc.), and volcanic structures (runoff, ashes, chimneys, veins, lava tubes, bombs, prismatic disjunctions, volcanic fissure, etc.) exposed due to millions of years of subsequent erosive activity. In the course of the transition phase from underwater mountain to island, within the context of tropical reef seas, Porto Santo received an inheritance of different biogenic, carbonate rocks with notable coral fossils, Rhodophyta ("oranges"), bivalve and gastropod molluscs, echinoderms, fish, among others, about 15-14Ma ago. In a late phase of its geologic evolution, within the time-frame of 100 to 10 thousand years, it received a last inheritance, from the last Ice Age, made up of extensive accumulations of carbonate biogenic sand, hardened with eolianites (consolidated dunes), with signs of ancient vegetal cover (rhizoconcretion), terrestrial fossil gastropods and seabirds, interspersed with levels of paleosols and periglacial regolith. The confluence of the aspects associated to these three geological inheritances gives Porto Santo an elevated geodiversity and geological heritage.

Based on the soil charter of the Island of Porto Santo of 1994, there is a more significant class, the calcisol, which takes up 40% of the territory. The underdeveloped soils, namely, the rocky and craggy terrain, ravines and gullies, occupies 30% of the island. Most of the soils of this island present a light-sand consistency, indicating a great susceptibility to erosion. They are quite permeable, resulting in nutrient leaching problems, and consequently, to its impoverishment in relation to the nutritional needs of the vegetation.



Pico de Ana Ferreira

Typical of calcareous soils, its chemical character is alkaline, even though its limestone composition is heterogeneous, which is related to the formation of the island. The organic matter content is low, which could be due to the little current vegetal cover. Leaching and the reduced nutrient content of the soil are also caused by the low phosphorous and potassium content, while other nutrients are within the normal values.

11.5

BIOCLIMATIC ZONE

Porto Santo has a low temperature range due to the moderating effect of the ocean on the archipelagic system. The lowest temperatures occur in winter, in the month of February, while the highest in summer are registered in August.

According to the Köppen-Geiger Climate Classification system, Porto Santo presents a dry, mild climate with annual rainfall inferior to 400mm and potential annual evapotranspiration much above the annual rainfall of about 1500mm.

The mean annual rainfall is 361mm. 61.4 days present significant rainfall (RR>1mm) and about 9.3 days of intense rainfall (RR>10mm).

The proposed Reserve encompasses one of the most vulnerable territories of RAM, to desertification and drought, and fragility, which has drawn attention to the importance of developing projects to combat soil erosion and the phenomena of desertification, as well as experimenting with new ways of increasing the soil support capacity, as foreseen in the Action Plan of the Biosphere Reserve of the Island of Porto Santo.



Morenos

Areas	Annual Average Rainfall (mm)	Aridity Index		Core Areas	Buffer Zones	Transition Areas
		Penman	(UNEP Index)			
Hyper-arid	P<100	<0.05	<0.05			
Arid	100-400	0.05-0.28	0.05-0.20	x	x	x
Semi-arid	400-600	0.28-0.43	0.21-0.50			
Dry Sub-humid	600-800	0.43-0.60	0.51-0.65			
Moist Sub-humid	800-1200	0.60-0.90	>0.65			
Per-humid	P>1200	>0.90				

Table 7 Aridity index resulting from the use of P/ETP. Mean annual precipitation (P)/Mean annual potential evapotranspiration (ETP).

11.6

BIOLOGICAL CHARACTERISTICS

LIST MAIN HABITAT TYPES (E.G. TROPICAL EVERGREEN FOREST, SAVANNA WOODLAND, ALPINE TUNDRA, CORAL REEF, KELP BEDS) AND LAND COVER TYPES (E.G. RESIDENTIAL AREAS, AGRICULTURAL LAND, PASTORAL LAND, CULTIVATED AREAS, RANGELAND)

Characteristic land, coastal and marine ecosystems of the Macaronesian Biogeographic Region can be found on the Island of Porto Santo. The flora and fauna of the forests which were predominant in Europe during the Tertiary Period are noteworthy. In the coastal and marine environment, the presence of fossils which are witnesses to a reef period, which was also a precursor of dune formation, should be highlighted as well.

The proposed Reserve includes a wide diversity of ecosystems and is home to several types or representatives of terrestrial habitats, coastal and marine, some of which are listed in Annex I of the Habitats Directive, namely:

- 1110 Sandbanks which are slightly covered by seawater all the time;
- 1140 Mudflats and sandflats not covered by seawater at low tide;
- 1160 Large shallow inlets and bays;
- 1250 Vegetated sea cliffs with endemic flora of the Macaronesian coasts;
- 2130 Fixed coastal dunes with herbaceous vegetation ("grey dunes") (priority habitat);
- 4050 Endemic Macaronesian heaths (priority habitat);
- 5330 Thermo-Mediterranean and pre-desert scrub;
- 8220 Siliceous rocky slopes with chasmophytic vegetation;
- 8230 Siliceous rock with pioneer vegetation of *Sedo-Scleranthion* or *Sedo albi-Veronicion dillenii*;
- 8330 Submerged or partially submerged caves;
- 9320 *Olea* and *Ceratonia* Forests;
- 9360 Macaronesian laurel forests (priority habitat);
- 9560 Endemic Forests with *Juniperus* spp (priority habitat).

According to the last forestry inventory of RAM (IFRAM2), dated from 2015, the 'Forest Spaces' take up the greatest percentage representation in Porto Santo (68%), and the predominant use of the soil is attributed to 'Herbaceous plants and Scrub' (60%), while the 'Forests and other wooded areas' only take up 8% of these spaces. The 'Unproductive' areas encompass 14%, 'Agricultural' 6% and 'Urban' use 12%, and 'Inland waters' is very insignificant (less than 1%). The vegetation is the main terrestrial component of the use of the soil, underlying the interest in guiding these characteristics essentially in that sense.

TERRESTRIAL AREA

The existing natural vegetation in the beginning of the XV century would have included a set of forestry communities of which some isolated plants still remain, such as: *Chamaemeles coriacea* and Madeira shrubby bittersweet (*Maytenus umbellata*), ironwood (*Sideroxylon mirmulans*), beefwood (*Heberdenia excelsa*), wild olive tree (*Olea maderensis*), wild juniper (*Juniperus turbinata* subsp. *canariensis*) and climbing butcher's broom (*Semele androgyna*). Currently, the most notable traces of indigenous woody vegetation are the heathers (*Erica platycodon* subsp. *maderincola*).

The terrestrial part of the proposed Reserve is home to 1660 taxa, with a rate of endemisms of about 24% (396 taxa), referenced by the aforementioned terrestrial habitats. In relation to this biodiversity, 75 taxa are under the Berne Convention – Convention on the Conservation of European Wildlife and Natural Habitats (59 birds, one mammal, nine vascular plants, four gastropods, two reptiles), eight taxa under CITES – Washington Convention – Commerce and Detention of Threatened Wild Fauna and Flora Species (one mammal, five birds, two vascular plants), 23 taxa listed in the Birds Directive and 20 taxa in the Habitats Directive (13 vascular plants, seven gastropods), in accordance with the list of terrestrial species included in Annex III.

THE ISLAND OF PORTO SANTO

The presence of the aforementioned plant species in the peaks of the Island of Porto Santo are indicative of the probable occurrence of three types of forestry communities in the past, namely a mesoforest or a forest with thermophiles, characteristics corresponding to the plant community *Semele androgynae-Apollonietum barbujanae*, dominated by Canary laurel (*Apollonias barbujana*), laurel (*Laurus novocanariensis*) and climbing butcher's broom (*Semele androgyna*); a meso xerophytic arborescent microforest corresponding to the plant community *Helichryso melaleuci-Sideroxyletum marmulanae*, dominated by ironwood (*Sideroxylon mirmulans*), Madeira shrubby bittersweet (*Maytenus umbellata*) and globe flower (*Globularia salicina*); and a microforest or infra-forest shrubland, corresponding to the plant community *Mayteno umbellatae-Oleetum maderensis*, dominated by sclerophyllous, xerophytic and thermophilous shrubs, such as the wild olive tree (*Olea maderensis*), *Chamaemeles coriacea* and dragon tree (*Dracaena draco* subsp. *draco*). To which can be added the presence of wild junipers (*Juniperus turbinata* subsp. *canariensis*), which is an evidence of endemic Forests of *Juniperus* spp., on the island.

From this evidence and historical reports, it can be assumed that the forest vegetation of this island was dominated, at inferior altitudes by wild olive woods, overrun by *Olea maderensis* to which the dragon tree can be associated, currently substituted by secondary vegetation dominated by the fish-stunning spurge (*Euphorbia piscatoria*). In the zones of greater altitude and in the darker slopes with northern exposure, another type of forest vegetation took over, corresponding to the laurel forest, where canary laurel species dominates.

The peculiarities of the vegetation result from the occurrence of sandy dune substrates and “fossil” dunes, as well as the communities of plants that exist under elevated sandstone plates. The primary dunes correspond to the *Polygono maritimi-Euphorbietum paraliae* and the secondary ones to *Euphorbio paraliae-Loletum glauci*, being dominated by chamaephytes *Lotus glaucus* and *Euphorbia paralias*.

PICO BRANCO

On the Island of Porto Santo, Pico Branco is one of the few ancient forestry ecosystem havens, where there are taxa exclusive to this territory and the archipelago of Madeira. It is an exceptionally humid enclave in an island context, and its potential vegetation corresponds, at its highest point, to the laurel forest (Laurisilva), represented by isolated plants of the same community, to which canary laurels and oleasters can be added. There is also an interesting community of heathers and wild junipers in the cliffs to the northeast, which is evidence of the habitat “Endemic forests of *Juniperus* spp”. In this area, 247 taxa have been accounted for, eight of which are exclusive to Porto Santo (*Crepis noronhaea*, *Echium portosanctense*, *Erysimum arbuscula*, *Pericallis menezesii*, *Fumaria muralis* subsp. *muralis* var. *laeta*, *Lotus loweanus*, *Saxifraga portosanctana* and *Vicia costae*), 36 are exclusive to Madeira and 55 to Macaronesia. Other species classified as of communitarian interest like *Cheirolophus massonianus*, *Phagnalon lowei*, *Autonoë madeirensis* and *Chamaemeles coriacea*, can be added. New species for science like *Echium portosanctense*, in 2010 and later *Pericallis menezesii*, were described from examples found in Pico Branco.



Pico Branco



Islet of Cima

ISLETS OF PORTO SANTO

The coastal area of Porto Santo includes several rocky islets, of great importance with regards to their biodiversity and legally protected by belonging to RAMPPS. The six islets: Cenouras, Baixo, Cima, Fora, Fonte da Areia and Ferro, combine a variety of factors, namely in relation to their local geography, isolation and difficult colonisation conditions, presenting habitats that are representative and very important for the conservation in situ of the biodiversity, as is the case of the “Vegetated sea cliffs with endemic flora of the Macaronesian coasts” a habitat listed in the “Habitats of communitarian interest” of the Habitats Directive.

The vegetation is made up of communities of small shrub and perennial and annual herbaceous plants. It is only possible to find small trees on the cliffs of Islet of Baixo and Islet of Cima, a sign that there used to be arboreal vegetation here in the past (e.g. wild olive trees).

The plant cover encompasses about 173 taxa, of which 138 are in Islet of Cima, 97 on Islet of Baixo, 94 on the Islet of Ferro, eight on Islet of Fonte da Areia, 29 on the Islet of Cenouras, and 15 on the Islet of Fora.

The terrestrial fauna is made up of a relatively small number of vertebrate species – birds and lizards – and a great variety of invertebrates, many of which are endemic. Just like on the Island of Porto Santo, the diversity of terrestrial gastropod species and subspecies is quite high, counting 47 taxa, 85% of which are endemic to Porto Santo. Most islets include exclusive species as is the case with *Wollastonaria turricula*, which only occurs on Islet of Cima or *Leptaxis wollastoni forensis* (Islet of Fora) and *Leptaxis nivosa craticulata* (Islet of Ferro). On the Islet of Baixo exclusive *Serratorotula acarinata*, *Leptaxis nivosa calensis* and *Idiomela subplicata*, were found, while *Discula calcigena barbozae* can only be found on Islet of Fonte da Areia.

These islets are places of preference for the nesting of marine seabirds. Three of the Islets – Islet of Cima, Islet of Baixo and Islet of Ferro – form an IBA, known as the nesting place of at least four Procellariiformes: the cory's shearwater (*Calonectris borealis*), the bulwer's petrel (*Bulweria bulwerii*), the band-rumped storm-petrel (*Hydrobates castro*) and the audubon's shearwater (*Puffinus lherminieri*). Other nesting marine birds are the common tern (*Sterna hirundo*), the yellow-legged gull (*Larus michahellis atlantis*) and the roseate tern (*Sterna dougallii*). In relation to nesting land birds, the following are important to note, berthelot's pipit (*Anthus berthelotii madeirensis*), plain swift (*Apus unicolor*) and the Atlantic canary (*Serinus canaria canaria*).

MARINE AREA

The marine environment of the proposed Reserve is characterised by clear water with a sandy bottom and an abundant and diversified fauna. The coast is essentially made up of sandy beaches and rocky coastlines that include some pebble beaches. The bottoms are, mostly sandy, but also consist of bedrock. In this environment, typical habitats of the biographical region of Macaronesia, can be found, highlighting the "Sandbanks which are slightly covered by seawater all the time", "Mudflats and sandflats not covered by seawater at low tide", "Coves and shallow bays", and "Submerged or partially submerged caves" whose dimension and characterisation are yet to be carried out. This is a project to be launched.

The marine part of the proposed Reserve is home to 453 taxa, with a percentage of endemisms of about 1.77% (eight taxa). In relation to biodiversity, 61 taxa are listed in the Berne Convention – The Convention on Wild Life and the Natural Habitats in Europe (28 birds, 22 mammals, three gastropods, one reptile, three arthropods, two echinoderms, one fish and one cnidaria), 25 taxa listed under the Bonn Convention - Convention on the Conservation of Migratory Species of Wild Animals (20 birds, four mammals and one reptile), 23 taxa listed in CITES - Washington Convention - the Convention on International Trade in Endangered Species of Wild Fauna and Flora (21 mammals, one reptile and one cnidaria), 19 taxa listed under the Birds Directive and 24 taxa under the Habitats Directive (22 mammals, one reptile and one algae), as listed in the marine species in Annex III.

In shallow water, the mobile substrates are generally sandy with low organic material content. Due to marine agitation and water oligotrophy, these bottoms, besides being unstable, show a certain lack of species normally associated with seabed living. However, they are home to species such as crabs (*Percnon gibbesi* and *Pachygrapsus* sp.), sea-urchin (*Paracentrotus lividus* and *Arbacia lixula*), starfish (*Marthasterias glacialis*, *Coscinasterias tenuispina* and *Ophiaster ophidianus*), smooth brittle star (*Ophioderma longicaudum*) and the Mediterranean snakelocks sea anemone (*Anemonia viridi*).

In marine flora, the algae that are most noteworthy are the green algae, *Enteromorpha* and *Dasycladus vermicularis* species. Among the brown algae, there are *Padina pavonica* and *Cystoseira* sp.

In relation to fish, the ornate wrasse (*Thalassoma pavo*), the canary damsel (*Abudefduf luridus*), chromis limbata (*Chromis limbata*), the Mediterranean parrot fish (*Sparisoma cretense*), emerald wrasse (*Centrolabrus trutta*), redlip blenny (*Ophioblennius atlanticus*), island grouper (*Mycteroperca fusca*), blacktail comber (*Serranus atricauda*) and the emblematic dusky grouper (*Epinephelus marginatus*), are worthy of mention.

It is normal to observe, in the sea, migratory species of cetaceans like the sperm whale (*Physeter macrocephalus*), as well as reptiles, namely the loggerhead sea turtle (*Caretta caretta*).



Coastal ecosystem

Less common is the presence of the rarest seal in the world, the Mediterranean monk seal (*Monachus monachus*), which sporadically appears in Porto Santo. However, in April, 2019 a young, six-month old female, born on the Desertas Islands 20km away, rested on the beach of Porto Santo for almost two weeks. A very uncommon situation resulting from the exploratory behaviour the young Mediterranean monk seals tend to adopt after their nursing period. This event, which required conservation measures to guarantee the necessary conditions for this animal to recover and follow its natural course, placed Porto Santo on regional and national news. This occurrence enforces the need to list and characterise the habitat with the designation of "Submerged and semi-submerged marine caves" which is part of the natural habitat of this species.

Starting at 14m depths, in open areas, there are colonies of brown garden eels (*Heteroconger longissimus*), and also common of this type of habitat is the common stingray (*Dasyatis pastinaca*), the round fantail stingray (*Taeniurops grabata*) and the gastropod (*Tonna galea*).

The sand bottoms are, generally speaking, poorer than rocky bottoms, due to instability. For such, the existence of a fixed substrate on a sandy bottom provides the possibility of fixation of the organisms that need a stable substrate, which happens with the ship "Madeirense", sunk at a depth of 25 to 35m, and the "Corveta Pereira D'Éça" sunk at a depth of 29m.



12 ECOSYSTEM SERVICES

12.1

IF POSSIBLE, IDENTIFY THE ECOSYSTEM SERVICES PROVIDED BY EACH ECOSYSTEM OF THE BIOSPHERE RESERVE AND THE BENEFICIARIES OF THESE SERVICES

AT PRESENT THERE ARE NO DETAILED STUDIES ON THE ECOSYSTEM SERVICES PROVIDED BY THE NATURAL SYSTEMS OF PORTO SANTO. HOWEVER, ENVIRONMENTAL SERVICES PROVIDED BY THE DIFFERENT ECOSYSTEMS IN THE PROPOSED RESERVE, CAN BE IDENTIFIED:

- **Natural marine and terrestrial ecosystems:** food, regulation, climatic, recycling of nutrients, research, recreation and tourism.
- **Agroforestry ecosystems:** food, cultural heritage, humanised landscape, recycling of nutrients and water.
- **Urban and humanised ecosystems:** air and water quality control, recreation and tourism, cultural and religious inheritances.

The variety of ecosystems, species and genes that exist at the proposed Reserve is important on its own and for providing the society with multiple ecosystemic services that people depend on such as food, pollination, protection against flooding and loss of soil and soil erosion, freshwater, among others.

The terrestrial part of the proposed Reserve hosts natural and semi-natural ecosystems which are relevant from a scientific point of view and important for the safeguarding of the biodiversity, in addition to the humanised ecosystems (e.g. agrosystems). This territory presents agricultural, agroforestry, forestry areas (essentially resinous, mixed or pure stands) and natural vegetation with different ecological niches of flora and fauna species exclusive of Porto Santo, Madeira and Macaronesia, among other unique natural aspects. The coastal and marine ecosystems also include relevant ecological niches and artificial reefs (e.g. sunken ships) that hold large quantities of emblematic diving fish, like the dusky grouper (*Epinephelus marginatus*) and the island grouper (*Mycteroperca fusca*), spaces of great attraction for leisure and tourism.

Besides the intrinsic scientific value of the endemic flora and fauna, the territory provides diverse ecosystem services that should be adequately identified and evaluated. The landscape of elevated beauty is full of opportunities for recreation on land and in the sea, for moments of meditation and relaxation on the beach and in the mountains, of increased scientific research and the implementation of environment education policies. The good maintenance of the landscape, the management

of soil resource and the maintenance of the hydrological cycle are ecosystem services that can be identified and evaluated, in the short-term during the course of the research work set out, within the scope of the management of the Biosphere Reserve.

The production of cultivars, which present different value at the level of taste and nutritional quality, like the tomato, onion, sweet potato, watermelon, fig, grape, blackberry and some associated livestock are important for the familial and local agricultural economy, providing services for the production of food, besides providing places of feeding, shelter and reproduction of wild fauna. Associated to sustainable farming, is the production of biomass and the replenishment of organic material in the soil, avoiding the impoverishment of a skeletal arable layer, sensitive to erosion, and having a positive and significant impact on the cycle of nutrients.

In relation to the beneficiaries of the aforementioned services, in first place are the residents of the proposed Reserve, because they benefit locally and immediately, next is the scientific community and the visitors, in other words, society in general, due to the global benefits in the air, water, sand and soil cycles.

In terms of the users of the local products, or the resulting endogenous resources used in the gastronomy of Porto Santo, like the common "serralhas" salad, "ranchões", "pencas", the wine, the honey, the "bolo de caco" (typical bread), the "escarpada" (typical bread), the typical pastry, the aromatic and medicinal herbs, the goatling meat, the fish and the limpets, as well as the crafts, once again, the main beneficiaries are the residents of the proposed Reserve as well as the visitors.

12.2

SPECIFY WHETHER INDICATORS OF ECOSYSTEM SERVICES ARE USED TO EVALUATE THE THREE FUNCTIONS (CONSERVATION, DEVELOPMENT AND LOGISTIC) OF THE BIOSPHERE RESERVE

As yet, there are still no specific indicators of the ecosystem services that can evaluate the three functions of the proposed Biosphere Reserve. Nevertheless, within the scope of the Action Plan for the implementation of the reserve, the objective is to identify a set of indicators of ecosystem services that will allow for the evaluation of the fulfilment of the functions of the Reserve. The objective is for the indicators to be simple and easy to interpret, acting as tools for the continuous evaluation of the success and support of the Reserve.

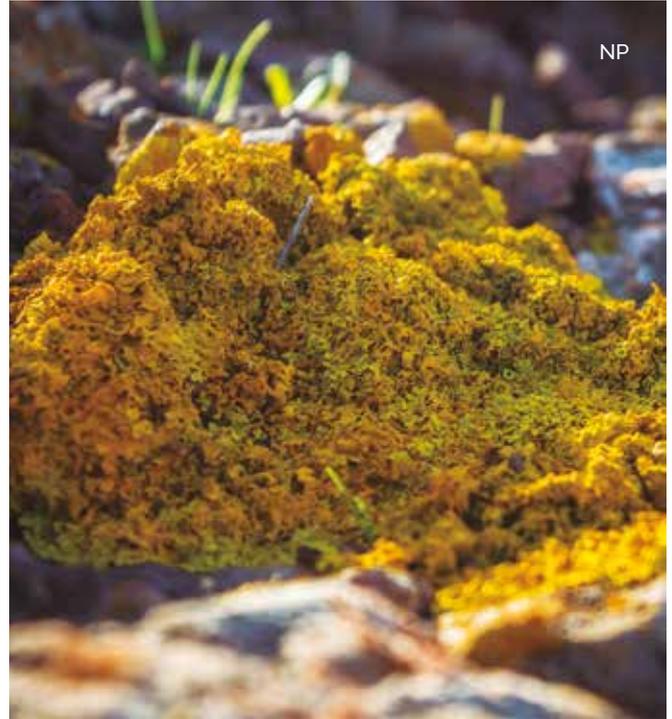
12.3

DESCRIBE BIODIVERSITY INVOLVED IN THE PROVISION OF ECOSYSTEMS SERVICES IN THE BIOSPHERE RESERVE

Porto Santo, as an ocean archipelago system, has never been connected to a continent. To get to this territory, living beings had to overcome a barrier, the sea. The survivors, after a period of establishment, found rather different conditions than those that they had left in their territory of origin, beginning a new stage. Survival led to adaptation which, in conjunction with isolation and the genetic drift led to speciation, in other words, the emergence of a new species. Another phenomenon that competed for the enrichment and diversity of the species was adaptive radiation. Here, among other relevant aspects, birds interfered in the ecosystems in a complex way, regulating the population of the species which they fed off, and helping in the dispersion of seeds and the promotion of germination.

In the ecosystems, the decomposing agents of organic material, namely leaves, fruit and the remains of living beings, play a key role, which controls the energy and nutrient cycle above and under the ground. The primary decomposers like microbes and fungi, are the main responsible agents for carbon mineralisation and nutrient cycles, while the micro-fauna (e.g. protozoa), mesofauna (e.g. acarids, springtails) and macro-fauna (e.g. isopods, worms and molluscs) influence the rate of the processes. The diversification and the balance of these beings promotes the betterment of the structure and the fertility of the soil, the ventilation and decomposition of dead vegetation, contributing to the enrichment of the soil and reduction of the processes of erosion.

At the proposed Reserve, the terrestrial molluscs, mainly macro detritivores, show an elevated representability. These play an important role in the decomposition processes, because they feed off decomposing animal and vegetal extracts, influencing the rates of decomposition in different ways, such as material of fragmented extracts, a mixture of organic and mineral particles, organically and chemically modifying the matter during the metabolic processes and facilitating microbial activity through the addition of nutrient rich faeces or mucous. These invertebrates are equally good indicators of environmental disturbances.



Lichen

In turn, pollinizing insects are of extreme importance in the agrosystems, significantly promoting the production and quality of the food, as well as contributing to the equilibrium of the same and the other ecosystems. Even though some insects are very resistant, there are others which are quite sensitive to the biotic and abiotic changes in the environment. Changes in temperature, chemical composition and water turbidity may indicate problems in the communities of some aquatic insects much before the pollutants can manifest themselves in plant and vertebrate populations, thus being one of the best bioindicators of the known water quality.

In this territory, the presence of lichen is abundant, covering large surfaces of rocks, giving them the typical yellow, orangey and whitish shades. Less frequent, but equally important are the nonvascular plants (bryophytes), which mainly inhabit crevices and the bases of rocks, slopes and the trunks of shrub and trees in the forestry areas. The lichens and the nonvascular plants are pioneer terrestrial communities, considered good indicators of the quality of the ecosystems and the ecological functionality. These beings, in addition to promoting conditions for the accumulation of humus, the stabilisation of soils and seed germination, serve as food and protection for animals, mostly invertebrates. For such, they have a considerable role in the accumulation of biomass, the recycling of nutrients and the water cycle, being key organisms for the monitoring of ecosystems.

In summary, the biodiversity and the ecosystems services of the Biosphere Reserve of the Island of Porto Santo are fundamental for the well-being of the population and local socioeconomic development, making a better knowledge and valorisation of these systems urgent and of utmost public and collective interest.

12.4

SPECIFY WHETHER ANY ECOSYSTEM SERVICES ASSESSMENT HAS BEEN DONE FOR THE PROPOSED BIOSPHERE RESERVE

There is no detailed evaluation of the ecosystem services of the proposed Reserve; this work is expected to be carried out within the scope of the execution of the Action Plan.

Notwithstanding the presented work, it is important to refer to data obtained in the completion of the 2nd Forest Inventory of RAM (IFRAM2), which is linked with: (i) the quantification of the existing resources in the forestry spaces of Porto Santo and the evaluation of the stock of carbon stored in the forest biomass; (ii) the evaluation of the presence of lichen and moss in the tree trunks; and (iii) the analysis of the state of the forest soils regarding erosion.

In the evaluation of the role of forest spaces for climate change mitigation, a quantification of carbon storing in the biomass was carried out at IFRAM2, on a tree scale as well as at the level of undercover undergrowth. The basis for the methodology used rested on the approach used in the National Plan for Climate Change. The carbon stored estimates in the forest trees, in under cover undergrowth and in the dead vegetation, were obtained through the biomass and medium content of carbon on vegetal matter. The equivalent CO₂ (CO₂e) is a measure used to compare emissions of different greenhouse effect gases based on their heating potential, serving in terms of forest inventory to calculate the carbon dioxide taken from the air and stored in the forest biomass. In the face of the quantification of carbon storing in the biomass, both at a tree level and on the level of undercover undergrowth, dead vegetation or woody material on the soil, it is important to note, from the point of view of climate change mitigation, the importance of the role of forest spaces in Porto Santo and their covering, such



Kidney-leaved fern (*Adiantum reniforme*)

as sinkholes that sustain forest carbon, especially in its woody constituents.

Still according to IFRAM2, the moss and lichen are ecological indicators, whose presence and vigour reveal the quality of the environment. They are binders of particles and organic matter with an important role in the recovery of the degraded habitats. Their presence, associated to feelings of serenity and environmental quality, are added value in the forest spaces of refuge and leisure, making the protection and valorisation of this microworld a crucial component of forest ecosystems. At universities, they are the object of study in many different areas, such as health science, making for an interesting theme for Porto Santo, to which greater research effort should be devoted.

In relation to the state of forest soils, IFRAM2 highlights the role of the forest in the formation of the soil of the island and its conservation, being of manifest interest to benefit the diversified and stratified forest formations.

The diverse functions of the associated ecosystems under vegetal cover of Porto Santo, in terms of production, regulation, cultural and support services take on a particular interest in the conservation of the biodiversity and the protection of the soil (terrestrial life support) and water resources, of landscape qualification and their use in the components of recreation, leisure and other activities of the multiple use of the forest. It is relevant to note the importance of the vegetation in the storage of carbon and in the control of the process of desertification.



Thick-leaved groundsel (*Senecio incrassatus*)



13 MAIN OBJECTIVES FOR THE BIOSPHERE RESERVE'S DESIGNATION

13.1

DESCRIBE THE MAIN OBJECTIVES OF THE PROPOSED BIOSPHERE RESERVE, INTEGRATING THE THREE FUNCTIONS

(CONSERVATION, DEVELOPMENT AND LOGISTIC)

The defining of objectives for the Biosphere Reserve of the Island of Porto Santo was based on a reflection on the local reality and sounding of the community, as well as the different sectors of activity. By identifying the strengths, weaknesses, threats and opportunities, a huge potential for natural and cultural heritage has been identified, both material and intangible, which can sustain the local economy through a differentiated tourism offer. It should be noted that tourism is now almost exclusively seaside and seasonal, with saturation of the island's capacity, especially during August, and it is necessary to ensure access to goods and services throughout the year in a sustainable way. The dual insularity of the island conditions access to it, implicating significant costs in terms of air and sea transport, for residents and also for those who visit it, which has limited the economic development of the island since tourism is the main sector of activity. On the other hand, this may be an opportunity to safeguard future measures which enable local socio-economic growth based on circular economy, low carbon economy, green economy and blue economy. It should be noted that the Island of Porto Santo constitutes a land which is highly vulnerable to climate change, affecting natural systems, agriculture and tourism activities, whose effects can be minimised through the actions foreseen in the scope of this application.

At the administrative level, there are no types of conflicts which may jeopardise the achievement of the objectives foreseen in this application.

Thus, for the Biosphere Reserve of the Island of Porto Santo, the guiding principles are the compatibility of the preservation of natural values and historical and cultural heritage with local economic activities, enhancing the sustainable management of the territory and the valorisation of existing resources whilst, at the same time, improving the well-being of the population. These principles are set out in a number of international treaties aimed at ensuring environmental quality, nature conservation and sustainable use of biodiversity, such as the MaB Strategy, the Lima Plan of Action, the United Nations Framework Convention on Climate Change and the Convention on Biological Diversity.

In this context, the following general objectives were defined for the Biosphere Reserve of the Island of Porto Santo:

- Consolidate the image of the Biosphere Reserve of the Island of Porto Santo, facilitating its perception inside and outside its geographical scope;
- Make the preservation of natural and historical-cultural values with economic activities compatible, promoting the improvement of the population's well-being and the sustainable development of the Reserve;
- Preserve biogeodiversity through increased knowledge, management and monitoring of natural resources and values;
- Promote information and participation, integrating the community in the strategic objectives and developing a sense of belonging relative to the Reserve;
- Promote awareness and training of the agents involved in the Reserve, through training programmes, equipping them with knowledge and tools to achieve the objectives of the Reserve;
- Promote actions for mitigation and adaptation to climate change with a significant impact on the Reserve's territory;
- Encourage technical and cultural events and exchanges, establishing a network for sharing experiences with other Biosphere Reserves;
- Contribute to the development of the local economy through the creation and promotion of differentiated tourism products and services supplied throughout the year.

The strategy adopted brings together the main objectives through a set of strategic intervention priorities which ensure the effective integration of the three functions foreseen for the Biosphere Reserve (conservation, development and logistic support), in a transversal and complementary approach. In this sense, five priorities have been defined:

Priority 1: Image and identity

The Biosphere Reserve of the Island of Porto Santo intends to assert itself as an entity in its own right, with defined objectives and actions, focused on the purpose of involving the local community in revitalising and promoting Porto Santo's identity values. The definition of the means and strategies for the dissemination of the Reserve and the establishment of partnerships and work groups with different local development agents and entities outside the Biosphere Reserve, are seen as other purposes.

Priority 2: Social, economic and cultural activities

The implementation of strategies to overcome constraints, such as the seasonality of tourism, plays a crucial role within the Biosphere Reserve. The valorisation and dissemination of local products, the preservation and divulgation of natural and cultural heritage, and the promotion of sustainable farming practices and green and circular economy initiatives throughout the year are guidelines for the creation of entrepreneurship opportunities, with the use and profitability of local resources, promoting the local economy and the creation of lasting employment.

Priority 3: Nature conservation

As a Biosphere Reserve, it is essential to promote a range of measures, including habitat protection and restoration of land, coastal and marine ecosystems, prevention of desertification and containment of invasive species, in this way, promoting the sustainability of Porto Santo, in a tribute to the safeguarding of the Biosphere's values. The preservation of natural values, the development of behaviours centred on preservation and environmental awareness, together with new opportunities for studies and research, and the dissemination of their identity and rurality, as well as the creation of local employment and valorisation of professions related to land and sea and ecological values, are aspects of significant and important influence in the development of the Porto Santo community.

Priority 4: Social participation

The involvement and capacity of the community of the Biosphere Reserve of the Island of Porto Santo is fundamental for the fulfilment of the objectives defined in the scope of its management, as well as for the development of a sense of belonging to the Biosphere Reserve. It is recommended that the local community assume the leading role in defining strategies for the implementation and sustainability of the Biosphere Reserve.



Berthelot's pipit (*Anthus berthelotii madeirensis*)

Priority 5: Climate changes

As an island territory with sensitive natural systems and a fragile economy, Porto Santo is highly vulnerable to climate change, constituting a fundamental theme for the sustainable development of the Reserve. Implementing measures to mitigate climate change by reducing the emissions of greenhouse gases of anthropogenic origin, in particular by reducing the use of fossil energy sources in the transportation sector, in the production of electricity, in buildings and public infrastructures, as well as adaptation, to mitigate the effects of climate change on the population, infrastructure, natural and built heritage and economic activities are crucial guidelines for the management of the Biosphere Reserve of the Island of Porto Santo.

The goals, indicators and the different actions undertaken within the scope of the strategy defined for the management of the Biosphere Reserve of the Island of Porto Santo have their own development in the Action Plan for the Biosphere Reserve of the Island of Porto Santo, which is also part of the application dossier.

The achievement of the aforementioned objectives and recommended actions will foster the production and exchange of scientific, technological and traditional knowledge, involving the scientific community, policy makers and citizens' groups; as well as giving visibility to Porto Santo, as a living laboratory and demonstrative model of an exemplary balance between nature conservation and human activities, through networking and sharing among various agents, favouring local development.

13.2

DESCRIBE THE SUSTAINABLE DEVELOPMENT OBJECTIVES OF THE BIOSPHERE RESERVE

The strategy for sustainable development of Porto Santo is based on the following major strategic objectives:

- Safeguarding, valuing and optimising existing natural and cultural resources;
- Improving the quality of life of Porto Santo people, other residents and future generations;
- Creating more and better opportunities for local businesses;
- Promote sustainable tourism;
- Foster employment of the resident population;
- Increase revenues from the revitalisation of the local economy;
- Reduce dependence on the outside and the seasonality of economic, social and cultural activities.

The Biosphere Reserve of the Island of Porto Santo also meets several 2016-2030 Sustainable Development Goals (SDGs), namely:

- **SDG 7** - Ensure access to reliable, sustainable and modern energy sources for all;
- **SDG 8** - Promote inclusive and sustainable economic growth, full and productive employment and decent work for all;
- **SDG 11** - Make cities and communities inclusive, secure, resilient and sustainable;
- **SDG 12** - Ensure sustainable consumption and production standards;
- **SDG 13** - Take urgent action to combat climate change and its impacts;
- **SDG 14** - Conserve and sustainably use oceans, seas and marine resources for sustainable development;
- **SDG 15** - Protect, restore and promote the sustainable use of land ecosystems, sustainably manage forests, combat desertification, halt and reverse land degradation and halt biodiversity loss;
- **SDG 17** - Strengthen the means of implementation and revitalise the global partnership for sustainable development.

The sustainable development goals of Porto Santo, as a Biosphere Reserve, are included and aggregated in the strategic priorities of intervention already described, which also serve for the evaluation of the effectiveness of the priority actions in the Action Plan, in function of the intended sustainability.

Thus, it is important to retain for each strategic priority the following specific objectives focused on the sustainability of the Biosphere Reserve of the Island of Porto Santo:

Priority 1: Image and identity

- Consolidate the identity values of the Biosphere Reserve with the community and tourists;
- Create a local and external support network for the Biosphere Reserve.

Priority 2: Social, economic and cultural activities

- Promote a better use of local resources to boost the economic structure of the Biosphere Reserve;
- Promote sustainable tourism, focusing on knowledge and conservation of the natural, historical and cultural heritage of Porto Santo;
- Involve entities from the economic sector in the activities of the Biosphere Reserve;
- Promote organic agriculture and livestock farming;
- Promote accessibility for people with reduced mobility.

Priority 3: Nature conservation

- Increase knowledge of the species and habitats of the Reserve as well as their conservation status by identifying potential threats;
- Conserve and manage the biodiversity of species and habitats;
- Recover degraded areas.

Priority 4: Social participation

- Increase the knowledge and involvement of local people and visitors in the safeguarding of the Biosphere Reserve and its natural and ecological values.

Priority 5: Climate change

- Reduce greenhouse gas emissions;
- Foster plant cover in areas subject to erosion;
- Ensure the operation of rainwater reservoirs.

In terms of sustainable development, this Biosphere Reserve is built on the land with the goals defined in the United Nations resolution "Transforming our world: 2030 Sustainable Development Agenda".

13.3

INDICATE THE MAIN STAKEHOLDERS INVOLVED IN THE MANAGEMENT OF THE BIOSPHERE RESERVE

The management of the Biosphere Reserve of the Island of Porto Santo is provisionally ensured by the Porto Santo Biosphere Reserve Work Group (GT-PSRB), comprised of the Porto Santo Municipal Council, the Regional Energy and Environment Agency of the Autonomous Region of Madeira, the Porto Santo Folklore Group Association, Regional Directorate for Public Administration of Porto Santo, Forest and Nature Conservation Institute, IP - RAM, and the Regional Secretariat of the Environment and Natural Resources.

During the transitional period, the definitive Management and Coordination Structure of the Biosphere Reserve of the Island of Porto Santo, composed by an Association of private law will be defined. The association will have private founding associates and the public founding associates will be the RAM (e.g. SRA, DRAPS) and Porto Santo Municipal Council.

The association's governing bodies will be the general assembly, the board of directors and the supervisory board. The general assembly will establish the advisory and scientific boards.

In the management and coordination of the Reserve, as well as in the implementation of actions foreseen in the Action Plan, entities that, due to their territorial representation, are closer to the population, or have guardianship over the territory in the areas under their jurisdiction will also be involved. Other entities, public or private, of different sectors, linked to tourism, education and culture, as well as associative bodies or other socio-economic entities relevant to the sustainable development of the Biosphere Reserve of the Island of Porto Santo will collaborate as well.



Porto Santo traditional costume

13.4

WHAT CONSULTATION PROCEDURE WAS USED FOR DESIGNING THE BIOSPHERE RESERVE?

At the beginning of the process of preparing the application of Porto Santo to the Biosphere Reserve, in the last quarter of 2017, a work group (GT-PSRB – Porto Santo Biosphere Reserve Work Group) was formed, comprising members of the CMPS (Porto Santo Municipal Council), AGFPS (Porto Santo Folklore Group Association), AREAM (Regional Energy and Environment Agency of the Autonomous Region of Madeira and the Regional Government of Madeira, represented by SRA (Regional Secretariat of the Environment and Natural Resources), DRAPS (Regional Directorate for Public Administration of Porto Santo) and IFCN, IP-RAM (Forest and Nature Conservation Institute), with the responsibility of carrying out all the necessary steps and tasks inherent to this process and its design within the local community.

The work inherent to the application was based on the principles of community and stakeholder involvement and participation, with information sessions for clarification, participatory sessions to listen to contributions and work meetings, primarily in Porto Santo, in order to foment the evolution of the whole process and incite the spirit of belonging to the Biosphere Reserve of the Island of Porto Santo.

In this sense, there were several general information sessions for the local community in 2018. The first, held on 9th January in the Multi-purpose room of the Porto Santo Cultural and Conference Centre, was addressed to entities and institutions (public and private). This session was attended by the President of the National Committee of the MAB Programme, the Mayor of Porto Santo and the Regional Director for Public Administration of Porto Santo, among other individuals of local interest, with the participation of about 60 people.

With the objective of listening to different speakers, and continuing the work begun in the first general session, several work meetings and participatory sessions were held between January and February 2018 aimed at certain groups of local agents, namely tourist guides, teachers, farmers, fishermen, hunters, construction businesspeople, agents involved in transport and tourism, professionals and lovers of culture and confraternities, as well as the general population. During this period, and until the middle of March, various meetings were held with speakers on agriculture, culture, biological diversity, geodiversity, nature conservation, ethnography, and other sectors and areas of knowledge.

The most important meetings of the Work Group were held in the city of Porto Santo, namely those on 14th and 28th March and on 2nd and 12th April 2018. The objective of these sessions and meetings was to define procedures and readjust work methodologies in the preparation of the application of the Porto Santo to Biosphere Reserve, based on the "Man and the Biosphere" Programme; and, at the same time, listen and evaluate the interest of this application and compile information pertinent to its evolution.

On 12th April, the work continued with a public presentation of the application dossier in the Multi-purpose room of the Porto Santo Cultural and Conference Centre, with the participation of 34 people. This was followed by a period of public participation - from 12th April to 2nd May 2018 - during which the previous application document was available on the websites of the Porto Santo Municipality, the Regional Directorate for Public Administration of Porto Santo and the Regional Secretariat of the Environment and Natural Resources; and, in paper format, in two relevant places of the city of Porto Santo - Porto Santo City Hall in the County Building and Citizen Service Desk - and at the headquarters of the Regional Secretariat of the Environment and Natural Resources, Funchal. Some members of the local community contributed to the public consultation phase, namely at the level of forest intervention and also contributed the logo which was used during the application. The students of the Technical Professional Course of Environmental and Rural Tourism also contributed with a proposal of divulgation/promotion of the application, which occurred through facebook.

The work document has, however, been improved by the contributions of local agents and the various stakeholders involved in the process of preparing the application, in a dynamic and evolving process.

In the scope of this application, the event "Porto Santo - UNESCO Biosphere Reserve: Opportunities and Challenges" was held from 28th to 30th November 2018, in the city of Porto Santo, which was open to the general public. The objective was to raise awareness of this UNESCO award and elucidate and provide information on how this award can contribute to the promotion of its natural and heritage values in the search for the development of the local economy based on sustainable tourism.

On the morning of the 28th, the "MaB Programme and UNESCO Biosphere Reserves" lecture was given by the Chairman of the MaB National Committee, which was followed by the "UNESCO Biosphere Reserves" roundtable moderated by the Chairman, with the aim of promoting the sharing of experiences with other Biosphere Reserves, namely Macaronesia, with the participation of a Specialist from the UNESCO Programme - Division of Ecological and Earth Sciences, the Director of the Biosphere Reserve of La Palma, the Canary Islands, the Director of the Biosphere Reserve of Corvo, Azores, and the Promoter of the Candidacy of Santana to Biosphere Reserve.

On the afternoon of the same day, the lecture "Porto Santo as a destination of excellence" was presented by the Coordinator of the application of Porto Santo to the Biosphere Reserve. Next, there was a roundtable moderated by the Coordinator entitled, "The Biosphere Reserve - What are the attractions of the Porto Santo destination?", dedicated to the unique values of Porto Santo and to the way in which the Biosphere Reserve can contribute to its enhancement and sustainability, with the participation of a Hotel Owner and representative of the Tourism Board/ACIF - Madeira Chamber of Commerce and Industry, the President of AREAM, a representative of the Regional Directorate for Agriculture and a representative of the Regional Secretariat of the Tourism and Culture (SRTC). The historical, cultural, natural and agricultural components of the Island were discussed, as well as its specific characteristics and potential as a tourist destination of choice in a UNESCO Biosphere Reserve scenario.



Meeting of Work Group (GT-PSRB) in Porto Santo Municipal Council

On the 29th, the activities centred on the creation of a Pedagogical Workshop focused on the theme "Porto Santo - Biosphere Reserve: What are the contributions from the Eco-Schools Programme?" It focused on the importance of education and the aforementioned programme in the involvement of the local community in the Biosphere Reserve. The use of the Wikiloc digital application was made available during a field trip and subsequent construction of the track log, thus promoting contact with nature and the sharing of information with the local community and tourists. On the 30th, with the theme "Rediscovering Porto Santo", an interpretative tour was carried out through the history, biogeodiversity, culture and gastronomy of Porto Santo, with stops in various places of cultural, historical and natural interest, with the objective of raising awareness of invaluable local heritage, in an appeal to knowledge and experiences in Porto Santo and its people. This initiative, which was part of the Porto Santo Biosphere Reserve application process, was promoted by CMPS, DRAPS, AGFPS, AREAM, IFCN, IP-RAM and SRA. The topics and lectures, as well as the other activities developed within the scope of this event, have proved to be of significant importance within the local community, instilling in the participants the spirit of belonging to a land with the potential to become a UNESCO Biosphere Reserve.

In the course of this event, it was also possible to share experiences with speakers with vast experience in the management of Biosphere Reserves or with direct involvement in the Programme, who shared their knowledge and their teachings, proving to be of the utmost importance in the preparation of this application and raising the awareness of decision-makers and other stakeholders in the local community.

In addition, various dissemination actions have been developed to foment greater involvement of the local community and economic agents in the promotion of Porto Santo, its singularity and its importance in the context of a Biosphere Reserve.

Between 20th March and 22nd April 2019, another period of public presentation took place on the dossier of Porto Santo's candidacy to Biosphere Reserve, including a proposal for an Action Plan for the Reserve and its logotype. During this period, and similar to what happened in 2018, this documentation was made available on the website of the Municipality of Porto Santo, DRAPS and SRA; and, in paper form in the Building of the City Council of Porto Santo and the Citizen Service Desk, and on the island of Madeira at the headquarters of the Regional Secretariat of the Environment and Natural Resources. On 12th April, at 6:00 pm, a session was held in the auditorium of the CMPS to clarify any doubts regarding the documents made available. This session was attended by thirty people, representing different sectors of activity, such as the Port Authority of Porto Santo, the Republican National Guard, the Porto Santo Civil Parish Council, the Porto Santo Municipal Assembly, the Forest Police Corps and people who on a private level have demonstrated their interest in this application, in addition to the top managers of the CMPS, DRAPS and elements of the GT-PSRB (Work Group – Porto Santo Biosphere Reserve). In response to eight contributions from various local stakeholders and external experts, the application continued to be improved by the GT-PSRB.

Not to devalue the other Porto Santo people who were keenly involved in the whole process, two photograph lovers, Pedro Menezes and Neide Paixão, deserve special mention, for having ceded the copyright to most of the photos that are part of the application, besides of Pedro Menezes have created a logo of the Biosphere Reserve of the Island of Porto Santo that was in the genesis of the final version.

In conclusion, all these initiatives enable the direct participation of the people of Porto Santo and Madeira in general, either individually or institutionally, and provide the local community with information, mobilising them in a proactive and participatory process for the implementation and proper functioning of the Biosphere



City of Porto Santo

Reserve, deserving recognition and interest in the attributes for the territory of this application. It is a process of projection of the Biosphere Reserve, which is dynamic and evolutionary, based on the sharing of interests, knowledge, experiences and expertise, focused on the uniqueness of Porto Santo and open to the World on behalf of the People of Porto Santo and the UNESCO Biosphere Reserve.

13.5 HOW WILL STAKEHOLDERS INVOLVEMENT IN IMPLEMENTING AND MANAGING THE BIOSPHERE RESERVE BE FOSTERED?

The present application was enhanced by the CMPS, AGFPS, AREAM and various departments of the Regional Government of Madeira, namely DRAPS, IFCN, IP-RAM and SRA, working together to safeguard the natural and cultural heritage of Porto Santo and its sustainable development. In the process of preparing and streamlining this application, other entities, both public and private, at local, regional and national levels, were involved and called upon to participate.

In addition to the entities promoting the application, those which, by their territorial representation, are closer to the populations, which exercise jurisdiction in the territory and other entities, namely local associations, linked to different sectoral areas relevant to the sustainability of the Biosphere Reserve will be involved in the management of the Biosphere Reserve.

The implementation of the Action Plan requires the realisation of varied actions and the mobilisation of the local community. The aim is that the local community take a leading role in a sustainable local development project, through their representation in the Advisory Board, the Scientific Board and participation in expected activities. Based on local development, the opportunity to establish common and shared partnerships and goals within the community and with external entities, and to promote entrepreneurship initiatives, with the identification of new differentiated products based on identity and heritage values, as a strategy to promote sustainable tourism, is of the utmost importance. The participation and cooperation of public and private stakeholders outside the community

will also be fundamental from the perspective of exchanging knowledge and experiences and of the socio-economic and cultural development of “*Ilha Dourada*” - Golden Island.

13.6 WHAT ARE THE EXPECTED MAIN SOURCES OF RESOURCES (FINANCIAL, MATERIAL AND HUMAN) TO IMPLEMENT THE OBJECTIVES OF THE BIOSPHERE RESERVE AND PROJECTS WITHIN IT?

The main sources of funding for the activities of the future Biosphere Reserve come from several departments of the Regional Government of Madeira, the Municipality of Porto Santo, as well as from the private sector.

In terms of human resources, various entities with a position in the defined governance structure or other individuals, including researchers, fellows, volunteers, and other stakeholders will be involved, who through their work, experience and advice, give greater integrity to the implementation and management process of the Biosphere Reserve.

With the implementation of the Biosphere Reserve of the Island of Porto Santo, material and human resources (existing or new resources) and financial resources will be redirected to its management, already taking into consideration the funding programme for 2020.

Part of the investment may be Community co-financed, within the framework of specific existing programmes, or any others which may start in 2020, embodied in the different strategic priorities established for the management of the Biosphere Reserve of the Island of Porto Santo.

Management of the Biosphere Reserve of the Island of Porto Santo will occur in a headquarters, which is currently operating as an “*Ecoteca*” (place with information on the environment, raising awareness about nature protection) and which in the future will be the local Cultural and Environmental Interpretation Centre.



14 CONSERVATION FUNCTION

14.1

AT THE LEVEL OF LANDSCAPES AND ECOSYSTEMS (INCLUDING SOILS, WATER AND CLIMATE)

The candidate Reserve includes a remarkable diversity of landscapes, natural and semi-natural ecosystems of great complexity and a biodiversity of elevated conservational and scientific interest, due to the geomorphological and edaphoclimatic characteristics of the territory, modelled by Man since it was first discovered by the Portuguese.

14.1.1

DESCRIBE AND GIVE THE LOCATION OF ECOSYSTEMS AND/OR LAND COVER TYPES OF THE BIOSPHERE RESERVE

According to data from the last forest inventory of the RAM (IFRAM2, based on orthophoto maps of 2008), the predominant soil use in Porto Santo corresponds to the area covered by scrub and herbaceous plants. Herbaceous plants are the main component of forest areas, accounting for about 60% of the area, while forest and other wooded areas account for about 8%. Concerning the spatial distribution of forest areas, areas with forest and other wooded areas appear mainly in the extreme SW, covering areas of the Pico de Ana Ferreira and Morenos and in the zones of the mountainous system of the NE sector, including the Picos do Castelo, Facho, Gandaia, Juliana and the Pico Branco on the coast facing east.

At the land-sea interface there are coastal dune systems which are dynamic, complex and mobile due to their location. They create a natural protection of the lands which are subjected to the erosive action of the waves and present an interesting halophytic and psammophytic vegetation.

In contrast to the extensive stretch of beach to the south, the northern slope is dominated by cliffs with small bays. These cliffs have accumulations of blocks of boulders and contain an endemic flora characteristic of the Macaronesian coasts, little or nothing unchanged by humans due to their inaccessibility. For that reason they were not the target of human activity in the past. On the northeast slopes, the last wild junipers (*Juniperus turbinata* subsp. *canariensis*) still survive today.



Hystricella bicarinata

The forest and other wooded areas appear mainly near the Pico de Ana Ferreira, Pico do Castelo and other hills in the northeast sector of the island. The peaks, some of them wild, correspond to rocky outcrops which are more resistant to erosion and include a forest cover comprised mostly of exotic perennial species. In the foothills, there is secondary vegetation dominated by the endemic fish-stunning spurge (*Euphorbia piscatoria*), which corresponds to remnants of *Olea* and *Ceratonia* forests. At higher altitudes, from the peaks of Facho and Gandaia and Pico Branco, there still survive remnants of laurel forests and a pioneer vegetation characteristic of siliceous rocks.

The Pico Branco and its surrounding area, which corresponds to ZEC PTPOR0002 (Special Area of Conservation), houses globally unique flora and fauna, typical Macaronesian habitats and landscapes of exceptional scenic value. Biodiversity highlights include plant and animal species under the Habitats and Birds Directives as well as priority habitats such as endemic Macaronesian heaths, Macaronesian Laurel forests and endemic forests of *Juniperus* spp. Its area of 135.5ha is extremely important within the scope of the safeguarding and valorisation of the natural heritage of the candidate Reserve.

In the streams and ravines scattered throughout the island are typical Mediterranean waterways with an intermittent character. Although the vegetation on these banks includes mainly introduced species, such as the tamarisk (*Tamarix gallica*) and brambles (*Rubus* spp.), it also includes important native flora. Of the indigenous plants present, the *Ruppia* maritime vegetation, restricted to Ribeira da Serra de Dentro and Ribeira do Tanque should be mentioned. This aquatic plant is characteristic of the plant class *Ruppietea maritima*, and in Madeira it has only been identified in the candidate Reserve. Additionally, the dune ecosystem, fixed dunes with herbaceous plants, considered priority habitat in the Habitats Directive, harbours an endemic flora which should be preserved.

Agroforestry areas are particularly significant in the territory, covering about 74% of the land, mainly the central area of the Island of Porto Santo and some dispersed areas. The agricultural component covers about 6% of the island's territory in a landscape with human intervention, integrating small-scale production properties, cut by "crocheted" walls, which protect vineyards or vegetable gardens, the main daily productions of Porto Santo.

It should also be mentioned that the various ecosystems provide a highly relevant fauna of invertebrates and vertebrates from a scientific and ecosystemic perspective.

The islets of Porto Santo also harbour natural heritage of high scientific value with specific endemisms. They include habitats and species present in Annex I, II and IV of the Habitats Directive and Birds Directive, and some species covered by international conventions (in accordance with the list of terrestrial species in Annex III). They constitute natural ecosystems of high conservational interest, whose status and management measures give them protection against human pressure.

Marine habitats also possess relevant natural and ecological values, harbouring elevated biodiversity and well-preserved populations of various species of scientific or commercial interest. Reference is made to those covered by international conventions and directives such as the Bern Convention - Convention on Wildlife and Natural Habitats in Europe, Bonn Convention - Convention on the Conservation of Migratory Species of Wild Fauna, CITES - Washington Convention - International Trade in Endangered Species of Wild Fauna and Flora, Birds Directive and Habitats Directive (Annex III, list of marine species). At the habitat level, sandbanks permanently covered by shallow seawater, mudflats and sand flats at low tide, shallow coves and bays, and submerged or semi-submerged marine caves under the Habitats Directive are also relevant.



Cory's shearwater (*Calonectris borealis*)



Echium portosanctense

14.1.2

DESCRIBE THE STATE AND TRENDS OF THE ECOSYSTEMS AND/OR LAND COVER TYPES DESCRIBED ABOVE AND THE NATURAL AND HUMAN DRIVERS OF THE TRENDS

The Pico Branco management and conservation measures, implemented or underway, contemplate actions leading to the environmental protection of this ZEC. The conservation of nature, environmental protection and the promotion of the participation of the population and visitors in the enjoyment, dissemination and preservation of the space are the main strategic pillars. These actions have fostered knowledge about biodiversity and the recovery of natural ecosystems, with an improvement in the state of conservation of its plant cover, with emphasis on the increase of the distribution area of the Porto Santo endemism, *Echium portosanctense*, a shrub which 20 years ago was extremely rare. The ongoing management measures provide a trend towards improving the conservation status of their habitats and ecosystems.

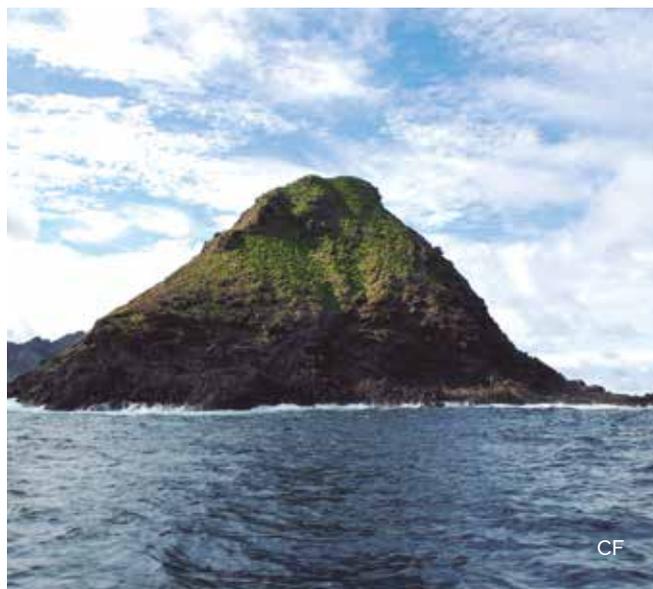
Furthermore, together with the afforestation work on the Island of Porto Santo, the measures taken by the Regional Government in the 1990s to control the herds of wild livestock, under the policy of sheep and goat reduction on land appropriate for forestry, have enabled intervention in some habitats, given the significant improvements in soil and climate which have been promoting the development of natural vegetation, which also sprouts spontaneously in very characteristic niches. Particularly important are the areas such as Pico Branco and Terra Chã, which are priority sites which include the presence of endemic species, some of which are present only in these sites. There has been definite recovery of the natural vegetation cover in the area surrounding this ZEC, extending along the side which integrates the Pico Branco path, in a restoration situation which lives up to the seminal potential in these places and to the soil and microclimatic values, in a synergy of ecological interactions which reward these spaces with glimpses of success.

Relative to the Islets of Porto Santo, which are part of the RAMPPS (Network of Protected Marine Areas of Porto Santo) and are also a ZEC, the vegetation of the Islets of Cenouras, Fora and Fonte da Areia is in good state of conservation and the marine habitats belonging to Annex I of the Habitats Directive are classified as having a "Very Good Conservation Status". The control and monitoring of this protected area suggests that there is a tendency to maintain the conservation status of its habitats and ecosystems.

As for the remaining habitats and ecosystems in the candidate Biosphere Reserve, there is insufficient information to define in detail their status and trends. In the framework of their management, improving the degree of knowledge and adjusting protection and conservation mechanisms to the trends identified and the designs outlined for the Island of Porto Santo Biosphere Reserve is recommended.

Considering the low average annual rainfall which characterises Porto Santo and which conditions the activities of both reforestation and agriculture, it is pertinent to promote a greater use of rainwater through the increase of water storage structures in agroforestry areas, coordinated with the work of torrential correction of the most eroded water lines. Promoting soil protection and control of the hydrological regime and enhancing the landscapes of Porto Santo, making them richer and more diversified, together with the conservation and recovery of species and habitats and the establishment of ecological corridors, essentially along the water lines, are goals present in the management objectives of the Biosphere Reserve of the Island of Porto Santo.

In general terms, space management should be oriented towards increasing the natural values at the origin of the classification of protected habitats, as well as favouring their genetic wealth and endemism. Thus, forest conservation and management objectives - manifested in forest planning and management instruments or in conservation and management programmes and measures for protected areas - are in keeping with the fostering and maintenance of habitats of clear ecological value, both for fauna and flora. This occurs specifically through the conservation of genetic diversity, especially in the Core Areas of the Reserve, and, due to the presence of invasive species, with control of invasion patches, in order to condition their dispersion. These control actions take on greater importance in areas dedicated to the conservation of flora and fauna diversity, or where rare species have already been registered, favouring or fostering their expansion.



Islet of Cenouras

14.1.3

WHAT KIND OF PROTECTION REGIMES (INCLUDING CUSTOMARY AND TRADITIONAL) EXIST FOR THE CORE AREA(S) AND THE BUFFER ZONE(S)?

The territory of Porto Santo complies with standards or regulations which include strategies and management instruments appropriate to the preservation of its natural and environmental values such as the Land-use Plan for the Autonomous Region of Madeira (POTRAM), the Municipal Master Plan for Porto Santo (PDM), the Regional Plan for Forest Management in the Autonomous Region of Madeira (PROF-RAM) and the Rural Development Programme for the Autonomous Region of Madeira (PRODERAM). They include protected and classified areas, thus fulfilling the classification adopted by the International Union for Nature Conservation (IUCN).

The proposed Biosphere Reserve includes the Network of Protected Marine Areas of Porto Santo (RAMPPS), approved by Regional Legislative Decree No 32/2008/M of 13th August; two Special Areas of Conservation (ZEC): the Pico Branco (PTPOR0002) approved by Resolution No. 751/2009 of 2nd July and the Islets of Porto Santo (PTPOR0001) approved by Resolution of the Governing Council No. 1341/2009 of 3rd November; SIC (SIC Cetaceans – Site of Community Interest) approved by Resolution No. 699/2016 of 17th October and included in the Natura 2000 Network - PTMMD0001 Cetaceans of Madeira, under the EU Commission's Implementing Decision (EU) 2019/20 of 14th December 2018 and two Important Birds and Biodiversity Areas (IBAs), one corresponding to the western part of the Island of Porto Santo and another comprised of the Islets of Cal, Cima and Ferro. In addition, it integrates sites of Geological Interest, with ten 'Geosites' and seven 'geodiversity sites'; a Property of Regional Value and Scientific Heritage (geological), Pico de Ana Ferreira, according to the PDM; also integrating the CORINE Biotopes Network (Central Mountain Range of Porto Santo, the Mountain Range of Ana Ferreira and the Beach Dunes), in accordance with CORINE Programme 85/338/CEE.

In this territory, the RAM is monitoring conventions, national and international standards and regulations related to nature conservation and biodiversity, namely: CITES – Washington Convention - Convention on International Trade in Endangered Species of Wild Fauna and Flora Threatened by Extinction; Convention on Biological Diversity (CBD); Bern Convention (Convention on the Conservation of European Wildlife and Natural Habitats); Bonn Convention (Convention on the Conservation of Migratory Species of Wild Animals); EUROBATS (Agreement on the Conservation of Bats in Europe); Nagoya Protocol (Access to Genetic Resources and the Fair and Equitable Sharing of benefits Arising from their Utilisation); The European Landscape Convention, among others. Also important to highlight is the United Nations Convention to Combat Desertification, which in the case of Porto Santo is of particular relevance, given its susceptibility to such processes.

The continuing work of cataloguing and monitoring the habitats and species of the fauna and flora at risk in Porto Santo, as well as places of geological interest, ensures the sustainable management of natural resources, supported by management plans or specifically developed programmes of management and conservation measures, taking into consideration the distinct localities, ecosystem dynamics and human enjoyment and harmonisation with the nature of the resource.

The strategic and specific objectives, as well as the actions and measures recommended, are defined within the scope of the Pico Branco Management and Conservation Measures Programme and POGRAMPPS. They are conducive to the environmental protection of these classified areas, integrated in the Core Area of the candidate Reserve and will increase as a UNESCO Biosphere Reserve.



Common tern (*Sterna hirundo*)



Downy stonecrop (*Aichryson villosum*)

14.1.4

WHICH INDICATORS OR DATA ARE USED TO ASSESS THE EFFICIENCY OF THE ACTIONS/ STRATEGY USED?

Management reports on areas with a protection status and the results of specific programmes on species and habitat conservation are used as tools to assess the efficiency of actions in the field of nature conservation and biodiversity. The cataloguing of natural values and the elaboration of lists of species and habitats with their conservation statutes complement the set of instruments used as indicators in monitoring.

The Plan for the Management of the Network of Protected Marine Areas of Porto Santo (POGRAMPPS) foresees that the various monitoring measures for ecosystems and species should be supervised in order to quantify their impact on the Protected Area (RAMPPS). This issue is also addressed by the strategic objective of "Managing the Protected Area adequately and effectively in accordance with the proposed guidelines" and "Monitoring and assessment of the development of this Plan by the managing entity's Advisory Committee". However, no concrete indicators have been defined to measure the efficiency of the work developed.

In addition, the measures outlined in the scope of the Management Plan of the Biosphere Reserve of the Island of Porto Santo will also be subjected to a measuring and evaluation of their efficiency, enabling, if appropriate, the readjustment of existing strategies or protection mechanisms.

14.2

AT THE LEVEL OF SPECIES AND ECOSYSTEM DIVERSITY

14.2.1

IDENTIFY THE MAIN GROUPS OF SPECIES OR SPECIES OF PARTICULAR INTEREST FOR THE CONSERVATION OBJECTIVES, ESPECIALLY THOSE THAT ARE ENDEMIC TO THIS BIOSPHERE RESERVE, AND PROVIDE A BRIEF DESCRIPTION OF THE COMMUNITIES IN WHICH THEY OCCUR

The proposed Reserve is a biodiversity hotspot and hosts a high number of endemic species which are of particular conservational interest, as can be seen in Annex III.

Terrestrial biodiversity includes approximately 396 endemic taxa (310 species, 84 subspecies and two varieties), equivalent to 24% of the total, representing a high rate of endemisms, belonging to various groups of organisms such as lichens, nonvascular and vascular plants and invertebrates and vertebrates.

There are 21 endemic genera, of which nine are exclusive to Porto Santo, specifically, *Rhinothripiella* of the arthropods, and *Callina*, *Hystricella*, *Idiomela*, *Lampadia*, *Lemniscia*, *Pseudocampylaea*, *Serratorotula* and *Wollastonaria* of the gastropods. In addition, there are 12 endemisms common to Madeira, namely: *Esuridea*, *Ellipsodes* and *Hadrus* of the arthropods, seven gastropods (*Boettgeria*, *Amphorella*, *Actinella*, *Caseolus*, *Discula*, *Spirorbula*, *Staurodon*) and two vascular plants, *Monizia* and *Chamaemeles*.

A total of 172 taxa are endemic to Porto Santo (one lichen, 15 vascular plants, 155 invertebrates and one vertebrate), 132 are endemic to Madeira (two bryophytes, 28 vascular plants, 98 invertebrates and four vertebrates) and 92 are endemic to Macaronesia (five bryophytes, 26 vascular plants, 51 invertebrates and ten vertebrates).

The plant cover includes 15 taxa of phanerogamic plants endemic to Porto Santo (*Crepis noronhaea*, *Echium portosanctense*, *Fumaria muralis* subsp. *muralis* var. *laeta*, *Helichrysum melaleucum* subsp. *roseum*, *Lotus*



Autonoë madeirensis

glaucus subsp. *floridus*, *Limonium lowei*, *Lotus loweanus*, *Monizia edulis* subsp. *santosii*, *Sonchus parathalassius*, *Pericallis menezesii*, *Saxifraga portosanctana*, *Erysimum arbuscula*, *Vicia costae*, *Vicia ferreirensis*, *Sideritis candicans* var. *multiflora*), 28 endemic to Madeira and 26 endemic to Macaronesia, from among the 536 taxa identified. Several endemisms are listed in Annex II of the Habitats Directive, such as *Chamaemeles coriacea*, *Cheirolophus massonianus*, *Maytenus umbellata*, *Monizia edulis*, *Phagnalon lowei* (*P. benettii*), *Semele androgyna* (*S. maderensis*), *Autonoë madeirensis* (*Scilla maderensis*) and *Sibthorpia peregrina*. This flora comprises two genera endemic to Madeira: *Chamaemeles* and *Monizia*.

Relative to nonvascular plants, 133 taxa of bryophytes have been identified, including seven endemic species, two endemic to Madeira (*Riccia atlantica* and *Frullania sergiae*); and five species endemic to Macaronesia (*Fissidens coacervatus*, *Leucodon treleasei*, *Tortella limbata*, *Frullania polysticta* and *Radula wichurae*). These are associated with 16 species of lichens, with one endemism from Porto Santo, *Anzia centrifuga*.

In the fauna, invertebrates are clearly dominant, with arthropods and land molluscs being prominent, both in diversity and in the percentage of endemic species. In the arthropods, about 201 endemic taxa have been counted, 64 being endemic to Porto Santo, 88 endemic to Madeira and 49 endemic to Macaronesia. In this group, the insects deserve special attention, with 677 taxa being cited for the territory of Porto Santo, the most abundant being beetles (274 taxa), followed by butterflies and moths (137 taxa).

Relative to gastropods, 123 taxa are known, of which 82% are endemic to Madeira, corresponding to 91 endemic to Porto Santo and ten endemic to Madeira, plus two common to Macaronesia. The following are species listed in Annex II of the Habitats Directive: *Caseolus commixtus*, *Caseolus calculus*, *Caseolus subcalliferus*, *Idiomela subplicata*, *Leiostylia corneocostata* and *Wollastonaria leacockiana*.

Sixty nine taxa have been identified of vertebrate animals. Reptiles include the lizard endemic to Porto Santo (*Teira dugesii jogeri*); in mammals, the bat (*Pipistrellus maderensis*) endemic to Macaronesia. Relative to nesting birds, four endemisms of Madeira stand out, for example, Berthelot's pipit (*Anthus berthelotii madeirensis*) and nine endemisms of Macaronesia, in the total of about 59 taxa identified.



Geomitra turricula



Downy stonecrop (*Anthus berthelotii madeirensis*)

With regard to marine biodiversity, this region shares the biodiversity with the other islands of the Madeira archipelago, with emphasis on the coralline red algae (*Lithothamnium coralloides*) included in Annex V of the Habitats Directive, the dusky grouper (*Epinephelus marginatus*), with regional protection, and the barred hogfish (*Bodianus scrofa*), a Macaronesian endemism, considered "Vulnerable" on the IUCN Red List. The presence of the loggerhead sea turtle (*Caretta caretta*) and the Mediterranean monk seal (*Monachus monachus*), both priority species in Annex II of the aforementioned Directive, deserves special mention. There are also a number of species of cetaceans such as the bottle-nose dolphin (*Tursiops truncatus*), listed in Annex II of the Habitats Directive, and others listed in Annex IV of this Directive, such as the short-beaked common dolphin (*Delphinus delphis*), the Atlantic spotted dolphin (*Stenella frontalis*) and the sperm whale (*Physeter macrocephalus*). In addition, the species of birds listed in Annex I of the Birds Directive are: Cory's shearwater [*Calonectris borealis* (*C. diomedea*)], the common tern (*Sterna hirundo*), the band-rumped storm petrel (*Hydrobates castro*), the Bulwer's petrel (*Bulweria bulwerii*), the Audubon's shearwater [*Puffinus lherminieri* (*P. assimilis*)] and the roseate tern (*Sterna dougallii*).

Many species in the Reserve are covered by international conventions and regulations: 136 under the Bern Convention, 25 under the Bonn Convention, 31 under CITES, 42 under the Birds Directive and 44 under the Habitats Directive. In addition, 12 species are listed as "Critically Endangered", 14 "Endangered", 14 "Near Threatened" and 27 "Vulnerable" on the IUCN Red List. This demonstrates the importance of this archipelagic territory in safeguarding the biodiversity of the Biosphere.

14.2.2

WHAT ARE THE PRESSURES ON KEY SPECIES? IN OTHER WORDS: WHAT ARE THE THREATS, THEIR IMMEDIATE CAUSES, THEIR UNDERLYING CAUSES, AND THE MAIN DRIVING FORCES AND THE AREA(S) CONCERNED?

The proposed Reserve suffers from pressures which can result in potential threats to the preservation and conservation of some habitats and species.

Excessive human burden in certain parts of the territory, if unregulated, may increase off-trail trampling and contribute to the degradation of natural and semi-natural ecosystems, and in extreme situations may lead to the extinction of local endemisms (e.g. land molluscs and small plants). This would adversely affect nesting areas of land and marine birds, increase soil nitrification and littering, and enhance the proliferation of invasive and weed species.

Therefore, more intense visitation to sensitive sites requires greater supervision, leading to compliance with management measures and control of human burden, and mitigating potential impacts on species and habitats.

An exotic vascular plant which has a very significant distribution is the ice plant (*Carpobrotus edulis*), occupying large areas in several zones of the island, preventing the development of native species and in particular the endemic ones. Its use as a slope cover, a little throughout the entire Island of Porto Santo, has contributed to the increase of its expansion area, even in forest spaces, negatively affecting natural ecosystems. Likewise, shrub tobacco (*Nicotiana glauca*) and the century plant (*Agave americana*) also have a negative impact on natural ecosystems. As for the giant reed (*Arundo donax*), although it is an exotic species with a dispersed distribution area, it fixes dunes in place, thereby, protecting the agricultural fields. Therefore, its management should be directed towards the valuation of the traditional uses given to the plant, such as basketry or, after drying, as supports for plants or other applications in the constitution of sidings, borders and various arrangements, thus hindering its possible progression in ecosystems.



Cetaceans

It is also known that the herbivorous nature of the wild rabbit can compromise the recovery efforts of the vegetation cover and consequently mitigation of the erosion processes as well. Therefore, it is essential to study the population dynamics of the species and establish measures to control population density, along with the existence of regulated hunting activity.

Certain marine species may be adversely affected by illegal capture, such as Cory's shearwater, which although protected, was once widely sought after as part of gastronomic customs, as well as the dusky grouper, a protected fish, much appreciated for its quality. Also, the harvesting of limpets and other fish, if carried out illegally, may jeopardise stocks of fishery resources.

Extraction of sands and other geological resources may be a major threat to habitats and species, especially in a small area as that of the Island of Porto Santo.

Porto Santo, due to its extremely arid climate (low annual average precipitation), has a very great limitation on its production potential. Associated with this characteristic are centuries of inadequate land use which have given the territory a high susceptibility to situations of desertification. The high aridity and degradation of soils makes it difficult to develop vegetation cover, a fundamental component in guaranteeing protection against water and wind erosion, as well as to promote soil formation. The presence of herbivores, especially wild rabbits, also makes it very difficult to naturally regenerate vegetation, exposing the soil to the erosive action of rain and wind. Nevertheless, in the fight against desertification, afforestation efforts have occurred using species adapted to the aridity and mechanisms to protect plants against herbivores. These actions have had some success, but must be reinforced and extended to all the forest areas of the Reserve.

Therefore, taking urgent measures to control soil erosion, so as not to reduce its fertility and increase the rate of infiltration of rainwater, necessarily involves an expansion of forested areas, as well as their correct use, which are aspects being considered in the PROF-RAM. It is important to ensure that the various activities associated with forest areas do not conflict with one another and that a balance is established between ecosystem conservation, soil and water protection and multiple-use activities such as recreation and leisure, sport, hunting and honey production.

On a more global scale, climate change is another threat to consider. It may contribute to changes in habitats and ecosystems of key species, loss of biodiversity, and increasing extreme events (droughts, fires, soil loss, others), fomenting desertification and soil barrenness. Mitigation of the climate change phenomenon and the strengthening of adaptation and mitigation measures, in human and property values, are the goals of the Action Plan, which is recommended in the context of the management of the Reserve and included in the strategic priority of intervention relative to 'Climate change'.



Idiomela subplicata

14.2.3

WHAT KIND OF MEASURES AND INDICATORS ARE CURRENTLY USED, OR PLANNED TO BE USED TO ASSESS BOTH SPECIES GROUPS AND THE PRESSURES ON THEM? WHO UNDERTAKES THIS WORK, OR WILL DO SO IN THE FUTURE?

The proposed Biosphere Reserve will continue to benefit from the minimising and preventive measures which are in effect in the various regulatory instruments, in order to control the threats and pressures felt.

The monitoring and inspection actions of forest areas and all protected areas are part of an already established device, which is provided in the field by teams of the Forest Police Corps and the Guards of Nature Corps, and may extend to other entities with competences within their areas of jurisdiction.

Education and environmental awareness are part of another set of measures to be used regularly as an instrument of joint responsibility of the community for the common good: Preservation of the values of Porto Santo, candidate to Biosphere Reserve. For example, raising awareness of the problem of the ice plant (*Carpobrotus edulis*) and its negative impact on the priority habitat of fixed Dunes with herbaceous vegetation and defining recovery actions, with the planting of species characteristic of this habitat in the surrounding areas, are goals of the management of the Biosphere Reserve of the Island of Porto Santo, involving public entities, the cooperation of associations and social participation.

Under POGRAMPPS, approved in 2009, measures were taken to promote the environmental protection of these spaces and the following strategic objectives were defined:

- Conserve, improve and protect all ecosystems;
- Promote, coordinate and support research which improves knowledge of species and habitats;
- Improve the dissemination, knowledge and appreciation of the Protected Area;
- Manage the flow of visitors in the recreational-tourist area so that it does not interfere with the conservation value of the Protected Area, an influx with an average of 590 visitors per year in the Islets (according to information made available for the 2014-2017 period);
- Maintain the legal conditions for the management of the Protected Area to be carried out more effectively;
- Manage the Protected Area appropriately and effectively in accordance with the proposed guidelines.

The Pico Branco Management and Conservation Measures Programme integrates major strategic pillars such as nature conservation and environmental protection and fomentation of the population and visitors' participation in the enjoyment, dissemination and preservation of the natural space. The actions harmonise in the purpose of the recovery and maintenance of the natural vegetation cover, promoting its fomentation in the zones which are more susceptible to erosion, with the valorisation of the soil component and the reduction of the impact of erosive phenomena in the landscape; protection of biodiversity and landscape; conservation of fundamental values such as soil and water; monitoring and enriching knowledge of biodiversity; improving or maintaining the access conditions to nature spaces, managing the activities of fruition and implementing actions to promote and disseminate the natural, cultural and landscape heritage of the place.

The on-going implementation of both the POGRAMPPS and the Pico Branco Management and Conservation Measures Programme are the responsibility of the IFCN, IP-RAM, without undervaluing the other competences of the Regional Directorate for Land Planning and Environment (DROTA), in the field of land planning and the maritime public domain. In alignment with these measures, and associated with this application, the Action Plan for 2020-2025 will also be implemented.



SF

Soil erosion

14.2.4

WHAT ACTIONS ARE CURRENTLY UNDERTAKEN TO REDUCE THESE PRESSURES?

With the creation of the Network of Protected Marine Areas of Porto Santo in 2008, a protection and surveillance programme for the protected area was established at the time, led by the former Madeira Natural Park Service and currently under the responsibility of the IFCN, IP-RAM. The creation of the ZEC Pico Branco - Porto Santo PTPOR0002 (Special Area of Conservation) was also accompanied by a programme of management measures for this protected area, with the aforementioned institute being responsible for the development of the contemplated actions.

Between September 2010 and December 2015, the LIFE ILHÉUS DO PORTO SANTO (LIFE Islets of Porto Santo) project was established, whose great objective was to halt the loss of European biodiversity through the recovery of habitats and species of the Islets of Porto Santo and the surrounding marine area, in order to achieve a stable, favourable and self-sustaining state of conservation. It enabled the creation of conditions for the recovery of habitats and species of the Site through the elimination or control of non-native species with an invasive nature and of regulated human use, in its leisure and economic aspect.

The project advocated diverse actions, such as the eradication and control of introduced herbivorous rodent populations, the control and stabilisation of seagull populations on the islets, the reduction of invasive plant populations and improved access conditions and organisation of visits to the islets, as well as the implementation of 14 conservation programmes for the species with the highest conservation value. These were mainly transversal actions, which had significant impacts on the ecosystems and species in the Islets of Porto Santo. It also promoted awareness and information provision on indigenous and endemic species with high conservation value (seabirds, land molluscs and flora).

The IFCN, IP-RAM essentially pursues the actions recommended within the scope of post-LIFE, technical and scientific monitoring and implementation of management measures and action plans for species and habitats. In addition, it promotes the dissemination of information in interpretation and reception centres (installation of equipment and information materials). Several actions are under way, namely:

- Maintenance and protection of soils in protected areas;
- Conservation and protection of habitats and sensitive species such as seabirds, some land molluscs and vascular plants, with control actions for invasive species, such as rabbit, mouse and plants introduced to the islets, such as *Nicotiana glauca* and *Agave americana*;
- Monitoring of protected areas, focusing on seabird habitats, invasive plants and marine habitats with artificial reefs, as well as environmental supervision in the areas of their attributions and competences;
- Promotion of sustainable uses and activities within protected areas, such as nature tourism activities;
- Raising awareness for the sustainable development of Porto Santo, supporting several projects promoted by the Porto Santo Municipal Council, such as waste cleaning actions;
- Application and supervision of the various legal instruments in effect for fishing and visitation of the islets.



Pericallis menezesii

14.2.5

WHAT ACTIONS DO YOU INTEND TO TAKE TO REDUCE THESE PRESSURES?

The coordination of actions and efforts, in cooperation with the IFCN, IP-RAM, DRAPS and the Municipality of Porto Santo, is the basis of the strategy for the implementation of a programme aimed at the prevention of identified threats or the mitigation of possible impacts on the ecological systems of the proposed Biosphere Reserve area.

Associated to this application, the Biosphere Reserve Action Plan was outlined, which defines the measures and actions to be developed from the perspective of the Reserve's management, including different areas of priority intervention and monitoring for environmental protection, in compliance with the precepts within the framework of the MaB Programme, the Lima Action Plan and other plans defined for the Biosphere Reserves. It is to be carried out in harmony with or complementarily to the environmental objectives enshrined in international conventions, namely the Convention on Climate Change and the Convention on Biodiversity, and the Sustainable Development Goals (SDG) projected under the Agenda 2030 for Sustainable Development. In this context, the Action Plan aims to: promote sustainable tourism, giving priority to knowledge and conservation of the natural heritage; promote organic agriculture and livestock farming; make tourism agents aware of the importance of disseminating local values and developing a sustainable tourism culture; raise awareness and provide training for organic agriculture and livestock; conserve and manage the biodiversity of species and habitats; create monitoring protocols for species and habitats of high conservational interest; supervise and monitor the protected and classified areas of the Biosphere Reserve; create mechanisms to maintain marine and land sustainability; develop nature conservation activities directed at different local publics and visitors, in close cooperation with the protection of natural and ecological values; develop projects for the recovery of the agroforestry cover and torrential correction as a safeguard for plan and soil values; to establish ecological corridors in order to mitigate the effects of territorial fragmentation and implement a control plan for invasive exotic plants; and habitat restoration.



Atlantic canary (Serinus canaria canaria)

14.3

AT THE LEVEL OF GENETIC DIVERSITY

14.3.1

INDICATE SPECIES OR VARIETIES THAT ARE OF IMPORTANCE (E.G. FOR CONSERVATION, MEDICINE, FOOD PRODUCTION, AGROBIODIVERSITY, CULTURAL PRACTICES, ETC.)

Porto Santo is a biodiversity hotspot, its territory being the home to an interesting and rich biological diversity of flora and fauna, with approximately 2113 taxa. Approximately 1660 taxa are found on land, of which 396 are endemisms, corresponding to 10.4% from Porto Santo and 7.9% from Madeira. The marine environment is home to 453 taxa, with eight being endemic to Macaronesia. This attests to the importance of this territory for the conservation of biological diversity at the level of the Biosphere.

The genetic and natural heritage of Porto Santo has unique values in terms of biogeodiversity, and its use must be valued and promoted in a sustainable manner. The protection and maintenance of biological diversity, ensuring the continuity of the genetic potential of native species, especially endemic species, is confirmed by the creation and active conservation of classified areas. This is reinforced with the attribution of the Biosphere Reserve Award, which privileges the sustainable use of natural resources in protected areas and aims to promote knowledge, practices and human values in the formation of the relationship between populations and the environment, that is, in the Man-Biosphere relationship.



"Barrilha" (*Mesembryanthemum cristallinum*)



Ancistrocerus madaera

Agriculture using local farmers, including vegetables and fruit trees, associated with small-scale production with high nutritional quality is another interesting opportunity.

The territory of Porto Santo presents a germplasm bank of high biological value. Since human settlement, the ancestral practice of saving the seeds of grains and other crops from previous harvests, to then plant again, has currently enabled the existence of an important seed bank in the regional, national and even international context. This process ensures the existence of globally unique indigenous varieties, which are well-adapted to the region's soil and climate characteristics, which otherwise would have disappeared. Among the wild relatives of agricultural crops, there are about 200 taxa, of which 114 are native species and 47 are endemic. Agricultural species represent the second most important and representative component of agrobiodiversity, with 95 taxa being mentioned. The most representative crops are grains (wheat and barley), legumes (beans and peas) and fruit (tomatoes, grapes and watermelon).

Regarding ethnobotany, several indigenous species and some endemic species have traditional uses and customs associated with the people of Porto Santo. The people of Porto Santo, by necessity and due to their isolation, have always been very attached to the earth and plants. The local plants, for six centuries, were, and many of them still are, used for the most varied purposes, in religious traditions, home remedies and at the table, being inseparable from their culture and identity. Some examples of very popular plants used in traditional medicine are the endemic species: "selvageira", "hissopo" and "losna".

The designation of the Biosphere Reserve of the Island of Porto Santo reinforces the importance of conserving genetic resources, preserving and safeguarding an important heritage, especially with local agricultural interest, and ensuring the preservation and maintenance of agrobiodiversity, enabling the sustainability of characteristic ecosystems.

14.3.2

WHAT ECOLOGICAL, ECONOMIC OR SOCIAL PRESSURES OR CHANGES MAY THREATEN THESE SPECIES OR VARIETIES?

Potential risks in terms of threats to the natural heritage (bio and geodiversity) occur essentially at the level of activities which do not comply with the regulations in effect, both in land and marine natural spaces and in other areas of the candidate Reserve.

The phenomena associated with climate change and desertification are aspects to be taken into consideration in the management of the Biosphere Reserve, since in the calculation of susceptibility to desertification, Porto Santo is considered to be susceptible. In fact, desertification corresponds to the reduction or loss of productivity and biological diversity of ecosystems, resulting from the degradation of soil, vegetation or other biota, whereby the conservation of life depends on the maintenance of habitats, and the preservation of agroforestry systems, soil and water conservation, education and environmental awareness and reduction of greenhouse gas emissions. Climate change worsens this panorama of soil loss due to changes in rainfall and the occurrence of extreme situations, such as floods and droughts.

Negative impacts of tourism, such as the disruption of ecosystems leading to the loss of vegetation cover by trampling and behavioural changes in animals, may justify taking measures to limit the maximum number of people visiting the most sensitive places.

The ageing population, leading to the abandonment of land and agriculture, could increase the distribution area of weeds and invasive species, undermining the balance of ecosystems and even the survival of wild species, as well as potentially affect the soil dynamics, whose protection must be ensured, as a finite resource that is the basis for sustaining terrestrial biodiversity.

The Action Plan of the Biosphere Reserve of the Island of Porto Santo takes these aspects into consideration, reflected in the set of actions recommended essentially within the strategic priorities related to 'Nature conservation', 'Social participation' and 'Climate changes'.

14.3.3

WHAT INDICATORS, AT THE LEVEL OF THE SPECIES, ARE USED, OR WILL BE USED, TO ASSESS THE EVOLUTION OF POPULATION STATUS AND ASSOCIATED USE?

Duly updated control lists of endemic and indigenous fauna and flora and monitoring lists of exotic and invasive species enable the monitoring of tendencies in the conservation status of species and their updating (e.g. red lists), ensuring appropriate management.

Since 2006, SPEA (Portuguese Society for the Study of Birds) has annually carried out the Census of Buzzards in the archipelago, including Porto Santo, in order to monitor and track the evolution of the species. Unlike others, this species has not been the subject of in-depth biological studies, so this initiative is of great importance, especially given its essential role in our ecosystems, for example as a pest-controlling agent of mice, for example. In this census all citizens interested in contributing so that more scientific data can be obtained are welcomed to do so in a Citizen Science initiative.

With the main objective of understanding their abundance and the way the birds are distributed in the territory of the Madeira Archipelago, an Atlas of Nesting Birds in the Madeira Archipelago was elaborated, using information from the field work obtained between 2009 and 2013, throughout the whole year, including censuses for the nocturnal birds of prey, conducted in 2013.



Coral (*Scleractinia*)



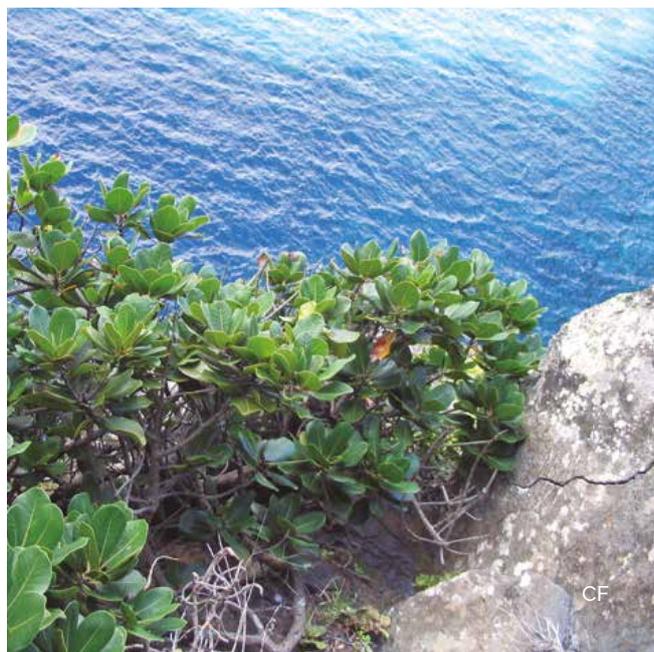
14.3.4

WHAT MEASURES WILL BE USED TO CONSERVE GENETIC DIVERSITY AND PRACTICES ASSOCIATED WITH THEIR CONSERVATION?

Within the scope of the application "Conservation of Forest Genetic Resources in Madeira", under Sub-measure 15.2 "Support for the Conservation of Forest Genetic Resources" of Measure 15 "Forest-environmental and Climatic Services and Forest Conservation" of PRODERAM 2020, to be developed by the IFCN, IP-RAM in partnership with the National Institute of Agricultural and Veterinary Research (INIAV) and the Laboratory of Agricultural Quality of Madeira (LQA), it is recommended that work be developed which leads to the conservation and sustainable use of genetic resources, with particular attention to the conservation of plant biogenetic heritage. This application was recently approved by the Management Authority of PRODERAM 2020.

It is a project with an assistance rate of 100% (85% EAFRD and 15% Regional Budget), which includes: cataloguing and elaboration of an updated and detailed cartography of species of the vascular flora of Madeira listed in the Habitats Directive, Bern Convention, classified in a threatened category, as well as of the most threatened native taxa which are relevant in terms of the preservation of their habitats; production of plants and establishment of "mother fields" of forest species with the object of reintroducing or reinforcing populations and the recovery of species and habitats, in particular those registered in the Habitats Directive, thus ensuring the conservation of forest genetic resources, for Porto Santo, this includes *Chamaemeles coriacea*, *Juniperus turbinata* subsp. *canariensis*, *Maytenus umbellata*, *Olea maderensis*, and *Sideroxylon mirmulans*, to be produced on this island; development of studies and technical-scientific exchanges related to the conservation of forest genetic resources in the Region, thus enhancing the Reserve area.

Within the framework of sub-measure 10.2 'Support for the conservation and sustainable use and development of genetic resources in agriculture', of Measure 10 'Agro-environment and climate', of PRODERAM 2020, the project entitled, 'Characterisation and Conservation of Main Traditional and Strategic Genetic Resources of RAM', was approved in the second quarter of 2018. It consists of the development of a strategy for the conservation of endogenous genetic resources, various fruit trees and other fruit and vegetable plants, through the implementation of a conservation plan, which includes resource exploration, improvement and management of germplasm collections and a documentation system of the genetic resources, benefitting the University of Madeira (UMa) in partnership with the Regional Directorate for Agriculture (DRA), the Association of Young Farmers of Madeira and Porto Santo (AJAMPS) and the Cider Producers' Association of RAM (APSRAM). The project, with an assistance rate of 100% (85% EAFRD and 15% Regional Budget), includes human resources, laboratorial, computer and agricultural equipment, general expenses, procurement of services, production of publicity material, travel and participation in training. It advocates the development of work focused on the islands of Madeira and Porto Santo and is thus an added value in the scope of research and improvement of knowledge in the agricultural component of the proposed Reserve area.



Ironwood (*Sideroxylon mirmulans*)

In addition, the IFCN, IP-RAM, through the Seed Bank of the Botanical Gardens of Madeira, contributes to the *ex situ* conservation of the floristic diversity of the candidate Reserve. Its seed bank is a safe method of conserving genetic resources using internationally recognised techniques and procedures, whereby seeds are stored under controlled conditions of humidity and temperature, which enables them to remain viable over a long period of time. This type of conservation, compared to other *ex situ* conservation methods, offers advantages, with emphasis on safeguarding a wide range of species in an easy and universal manner; the storage, in a small space, of great genetic variability, in the short, medium and long term; the availability, for immediate use, of genetic material from various locations; and the process of collecting material in nature without harming the survival of wild populations.

With the promotion of agriculture and livestock farming through organic production methods, by entities such as ISOPlexis, DRA and DRAPS, as set out in the 2020-2025 Action Plan, the aim is to increase the number of farms using this environment-friendly production mode. This will certainly contribute to the preservation of the genetic diversity of the candidate Reserve, together with the sustained use of production factors and the preservation and valorisation of natural resources, as a testimony of values and a path towards sustainability.



15 DEVELOPMENT FUNCTION

15.1

POTENTIAL FOR FOSTERING ECONOMIC AND HUMAN DEVELOPMENT WHICH IS SOCIO-CULTURALLY AND ECOLOGICALLY SUSTAINABLE

15.1.1

DESCRIBE HOW AND WHY THE AREA HAS POTENTIAL TO SERVE AS A SITE OF EXCELLENCE/ MODEL REGION FOR PROMOTION SUSTAINABLE DEVELOPMENT

The human occupation of the Island of Porto Santo represents six centuries of history, tradition and culture, highlighted by the customs and expressive traits of a people and the rurality of the landscape that glorify the scenery of the Biosphere Reserve of the Island of Porto Santo. The long period of continuous occupation, the isolation of the island and archipelago and the particularities of the territory, often in a struggle for survival in the face of scarce resources, imposed the composition of a rich and remarkable historical and cultural identity, which will be demonstrated and valued as a UNESCO Biosphere Reserve.

The candidate Reserve offers exceptional criteria in terms of natural, cultural and heritage resources for the promotion of sustainable development. Porto Santo comprises elements of high identity value of indisputable authenticity. The promotion of this identity serves not only the purpose of preserving the intrinsic historical and cultural values, heavily contributory to the social sustainability of the resident population, but also affirms itself as a preponderant factor in the growth of the local economy with high potential for the generation of wealth.

Despite the patrimonial, material and immaterial value of the candidate Reserve, the model of economic development has been mainly based on seasonal tourism, mostly beaches, which has contributed to a fragile economy and unstable employment, especially for the young inhabitants.

This application will help Porto Santo establish itself as a territory with potential for sustainable development, based on the following assumptions:

a) In the promotion of values, traditions and customs, techniques and local knowledge, allied to the functional perspective of the economic valuation of such resources, contributing significantly to the enhancement of quality of life of the population.

The Reserve will thus contribute to the proliferation of areas of tourist interest, with an offer of and demand for outstanding services and products, and for an upgrading in the tourist experience in Porto Santo as a whole.

b) In the Smart Fossil Free Island concept implemented in the candidate Reserve which intends to go beyond established international energy and climate targets, ensuring a transformation of the energy matrix making the territory fossil fuel free in the medium to long term through a transfer to electric power and renewable energy sources, thus promoting low-carbon economics.

The Reserve Action Plan assumes this concept as the engine of the sustainable Porto Santo initiative and is a driving force for the leverage of other areas of priority intervention that give the necessary coherence, coverage and rigour to the assumed sustainability objective.

c) In the dissemination of the wealth of natural and cultural heritage, which will attract attention and encourage research projects with repercussions in its asset management, fostering international cooperation.

The Biosphere Reserve of the Island of Porto Santo will enhance the legitimacy of the promoted actions that value its natural and cultural heritage. Incentives which reward local knowledge and the link between human activities, biological and geological diversity and the adoption of sustainable energies will be valued.

d) In the guidance leading to social participation and the promotion of training and awareness for sustainability.

The involvement and sharing of experiences of the proposed Reserve with other national and international Biosphere Reserves will contribute to the enhancement of the outstanding role of these sites at regional and global levels as reference points for the promotion of sustainable development, testifying to and leading to the adoption of similar practices, in similar scenarios, in participatory management and of cooperation of values, knowledge and knowledge diffusion.

15.1.2

HOW DO YOU ASSESS CHANGES AND SUCCESSES (WHICH OBJECTIVES AND BY WHICH INDICATOR)?

The evaluation of changes and successes of the candidate Biosphere Reserve will be carried out through economic, tourism and environmental indicators, observing the three functions of the Biosphere Reserve zoning and coordinating with the Portuguese Action Plan for Biosphere Reserves, specifically defined in the management of the Reserve. It is also worth mentioning the monitoring of the implementation of the Action Plan and evaluation of the impact or degree of incidence of the actions contemplated therein.

15.2

IF TOURISM IS A MAJOR ACTIVITY

15.2.1

DESCRIBE THE TYPE(S) OF TOURISM AND THE TOURISTIC FACILITIES AVAILABLE. SUMMARIZE THE MAIN TOURISTIC ATTRACTIONS IN THE PROPOSED BIOSPHERE RESERVE AND THEIR LOCATION(S)

Tourism is the central economic activity of Porto Santo wherefore its performance is fundamental to the sustainability of the territory.

External access to the island is obtained by airport and seaport, namely by the "Lobo Marinho" ship, which carries people, vehicles and goods between Madeira and Porto Santo islands.

Porto Santo airport currently has a capacity adequate for present and future needs, taking into account the needs of the resident population and the prospects of growth in tourism in the medium and long term. The development and sustainability strategy that supports the Biosphere Reserve application is set on a sustainable growth of tourism, based on the quality of services, the appreciation of local heritage, the mitigation of seasonality, the added value of the place and lasting employment, and not in the overcrowding associated with the summer months. Consequently, neither a need to expand the airport in the coming decades or a significant increase in peak season usage is anticipated.

The main touristic products are grouped into segments, with emphasis on the following: sun and sea (beach); health and well-being (taking advantage of the therapeutic characteristics of the sands, thalassotherapy, holistic activities, traditional spas); sports (diving, sailing, boating, surfing, windsurfing, kite surfing, canoeing, coastering, sport fishing); stand up paddle; nature (walking, cycling, equestrian and boat trips, bird watching); golf and residential tourism.

The recommended footpaths, namely the Vereda do Pico Branco and Terra Chã (PR1), the Vereda do Pico do Castelo (PR2) and the Levada do Pico do Castelo (PR3) provide tourists with a unique view of the unique landscape that makes up Porto Santo and the surrounding countryside.

According to official data of the Regional Directorate of Tourism, there are 12 tourist enterprises that offer 3,126 beds; and for the future (medium and long term) about 2,000 new beds are planned. In terms of local accommodation (LA), 152 establishments are registered in the RNAL (National Registry of Local Accommodation), with capacity for 852 users.

There are ten tourist entertainment companies on the island, three of which are tourist-maritime operators and four are travel and tourism agencies. The company that makes the Funchal-Porto Santo sea connection offers a "1-Day Cruise" that provides a visit to the island and to experience several local touristic products.

In the restaurant area there are 30 bars and snack bars and 12 restaurants, offering the local gastronomic

specialities. There is also a nightclub, which only operates in summer, and some bars, mostly in the town centre, which offer night-life throughout the year.

Located in the centre of town, the Cultural and Congress Centre of Porto Santo is a modern complex that allows the holding of congresses, musical shows and film projections. Equipped with state-of-the-art projection, sound, video and simultaneous translation systems, it meets all the requirements for multimedia presentations. Besides the main auditorium which holds up to 260 people, there is also an exhibition area, rooms for meetings and workshops and multipurpose rooms prepared for cocktail and dining services. It also has a shopping area and a car park with 106 places.

The Porto Santo Golf complex, designed by the champion Severiano Ballesteros, crosses the island from the quaternary dunes to the mugarite cliffs, offering a perfect combination - natural beauty and a challenging game. The course blends in with the landscape, and presents a diverse vegetal cover combined with ponds and streams frequently visited by migratory birds.

The best tennis complex in the Madeira region and one of the best in the country can also be found on the island. Located on the Campo de Baixo site, in an area adjacent to the golf course, this development is equipped with the main facilities for high-level tournaments. It consists of a main court, with benches for 1000 people, five secondary courts and two other paddle tennis courts. This sports arena is served by a modern Club House with a shop, a bar-restaurant, several rooms, sickbay and changing rooms.

The Porto Santo campsite, located in Fontinha, right next to the beach, is an enclosed, wooded and landscaped area, with 300 pitches for up to 800 people, with changing rooms, TV room, internet, bar and electricity. Here visitors can enjoy a space with a calm and relaxing environment adjoining the beach of Fontinha awarded the Blue Flag, 28 times in a row and since 2010 has been rated "Accessible Beach - beach for all".

Billboards also annually attract a large number of visitors to events such as the Festivities of the Municipality – Saint John, Columbus Festival, The Feast of the Chapel of Grace and the Vine Harvest Festival, based on the traditions, culture and history of Porto Santo.

The tourist model for the candidate Biosphere Reserve is based on the affirmation of Porto Santo, due to the uniqueness of its social, territorial dimension and its natural, scenic, historical and cultural characteristics. In fact, the small size of the territory, coupled with the diversity of environments and its favourable global quality (good urban spaces, public areas, facilities, hotels, extensive sandy beaches and clear waters, footpaths, belvederes, and impressive landscape), together enhance its value as a destination for quiet and strolls, where the exceptional golden sandy beaches and the rural scenarios that characterize it, as spaces of nature, bathing and enjoyment, associated with traditions and cultural aspects, are key values in promoting and sustaining quality tourism throughout the year.

The Tourism Planning Programme (POT) of the RAM as well as the Madeira Tourism Strategy, Autonomous Region of Madeira 2017-2021, document published in 2017, define the regional tourism development strategy, as one of the pillars of sustainable growth of tourism in Porto Santo. The vision advocated is "to promote the affirmation of Porto Santo in the Madeira destination by the uniqueness of its socio-territorial dimension and its environmental, landscape, historical and cultural characteristics". In this context, the mission for the destination is to: consolidate the Region as an exceptional tourism destination, for the authenticity of the offer, based on a genuine quality service, aiming at economic, social and environmental sustainability, in line with the strategic objectives of the Reserve candidate.

15.2.2

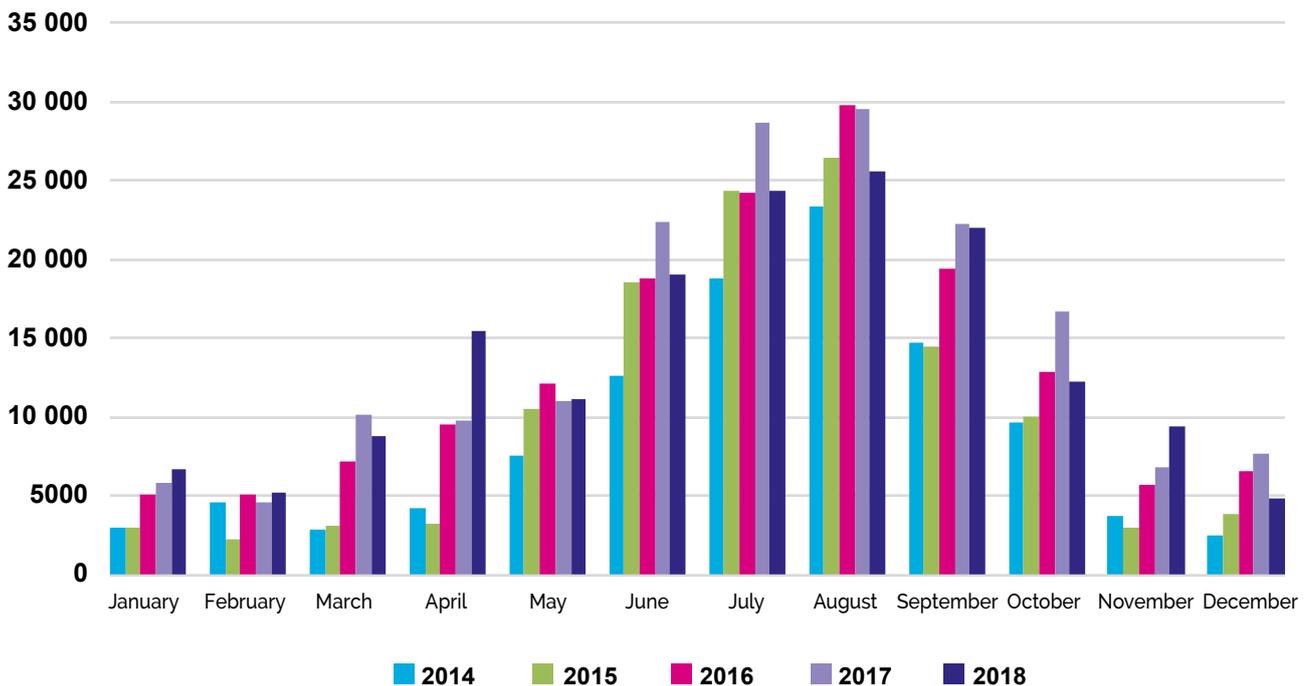
HOW MANY VISITORS COME TO THE PROPOSED BIOSPHERE RESERVE EACH YEAR? (DISTINGUISH BETWEEN SINGLE-DAY VISITORS AND OVERNIGHT GUESTS, VISITORS ONLY VISITING THE PROPOSED BIOSPHERE RESERVE OR ONLY PASSING ON THE WAY TO ANOTHER PLACE). IS THERE AN UPWARD OR DOWNWARD TREND, OR A PARTICULAR TARGET?

In terms of tourist supply, Porto Santo has been the scene of significant dynamics over the last few decades, with the construction of structuring equipment such as the airport, the port, tourist developments and all that is involved.

Air transport is of great importance to the candidate Reserve, with the construction of the airport in the 1960s, increasing the mobility of the population, tourists and merchandise, constituting a remarkable development milestone for Porto Santo at various levels, since until then it had only ensured maritime mobility.

Domestic air traffic between the Island of Porto Santo and Madeira Island is predominant. As far as international air traffic is concerned, traffic to and from European Union airports and subscribers to the Schengen Agreement and Convention stands out. In 2016 there were 3227 departures and arrivals of aeroplanes at the airport of Porto Santo and, in 2017, 3388 departures and arrivals, expressing an increase of 5%. In 2018, this figure decreased to 2827. The months of July and August are those of greater affluence, quadrupling the number of people on the island; with December and February being the least affluent, having a sharp fall in the number of passengers, which accentuates the effects of seasonality that ravage the territory every year, affecting the community economically and socially.

Figure 13 Passenger movement (No) at Porto Santo airport between 2014 and 2018 (DREM).



In addition to the great impact on the local economy, Porto Santo Airport, inaugurated in 1960, played an important role for Portuguese aviation during the war overseas, especially in terms of air traffic control. This was the first airport in the Autonomous Region of Madeira, receiving all the passengers, even those who were travelling to the island of Madeira, who then continued their journey by sea. This situation gave great visibility to a practically unknown island, creating direct and indirect employment, and promoting tourism. Even after the airport on the Island of Madeira was built in 1964, the role of the Porto Santo airport was always of great relevance given the limitations of the airport on the neighbouring island due to the small size of its runway and its susceptibility to adverse weather conditions. Porto Santo airport currently employs around 200 people and is fundamental to the development of the Island of Porto Santo due to the importance of tourism to the local economy.

Landed passengers on Porto Santo Island come mainly from Portugal, the United Kingdom and Denmark, with 164,603 air passengers registered in 2018. As of 2016, there has been an increase in the number of Italian and Danish tourists, the latter group focused primarily on golf tourism, with the qualities of the countryside and the climate being the main attractions.

The port of Porto Santo is the island's main port, situated at the eastern end of the south coast. Built between 1978 and 1984, its main function being the regular connection to Madeira Island, both passenger and cargo. This port has two docks: dock 1, for cruise liners, the ship "Lobo Marinho" and cargo ships as well as the cement terminal; and dock 2, for the anchoring of recreational craft.

This port has a crane for transporting vessels, a structure for forklift truck operations and a launch ramp for the fishing fleet; there are four 290m long floating pontoons, with a capacity for the mooring of 175 boats, and a ramp for recreational sailing. As there are larger recreational vessels anchored outside the intended perimeter, expansion is being evaluated. The port also has offices, repair yards and a boat park. The entity that oversees the



Port of Porto Santo

area of jurisdiction of this port is the Port Administration of the Autonomous Region of Madeira, SA, which also has two tugboats, located in the port of Funchal that, when necessary, provide towing service in the port of Porto Santo.

Regular passage between the islands of Porto Santo and Madeira is by the ship "Lobo Marinho", of the company Porto Santo Line, which carries out voyages throughout the year, except part of January, during which time the ship is in dry dock for maintenance. During this period, air transport is the only alternative for the movement of passengers and tourists. In 2016, 314189 passengers were registered in the port of Porto Santo, 338277 in 2017, and 33329 in 2018, not including passengers on cruise ships.

In 2016, 2275 passengers were counted in transit on cruise ships in the port of Porto Santo in 2017, 1390 passengers and in 2018, 3616 passengers, corresponding to a much lower amount than cruise ship traffic in the port of Funchal, on the Island of Madeira.

The Biosphere Reserve of the Island of Porto Santo allows us to highlight the uniqueness of Porto Santo and its natural and cultural values, affirming it as a territory of excellence and with international projection.

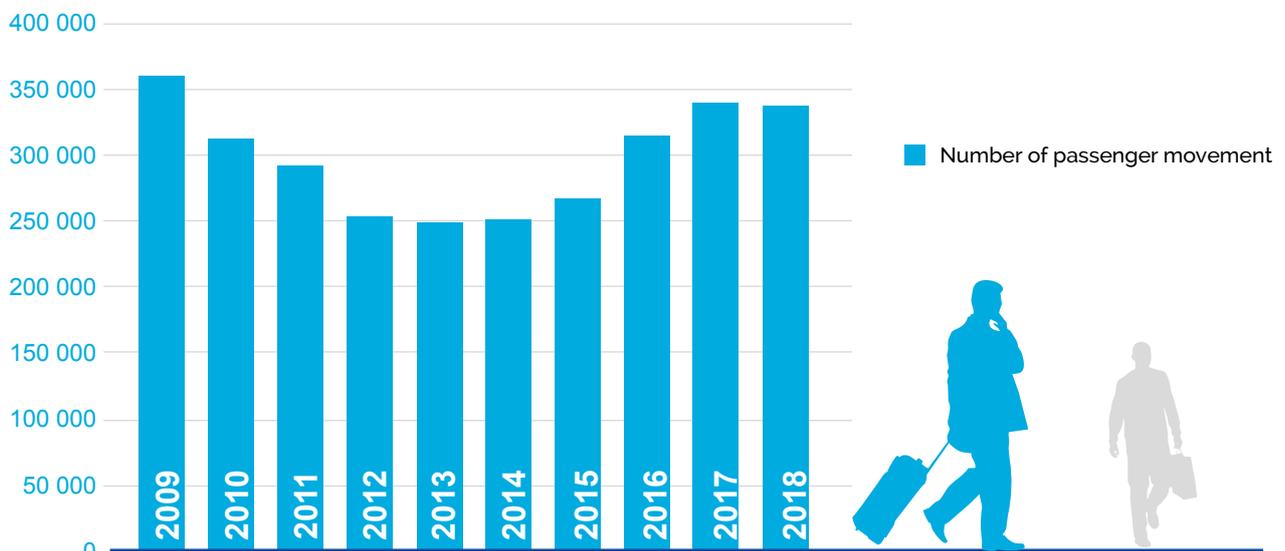


Figure 14 Passenger movement in the port of Porto Santo between 2009 and 2018 (DREM).

The impetus of the cultural and tourist offer, based on the divulgence of its natural values and heritage, will provide more enriching experiences for the visitors, leading to their return and boost the local economy.

Although the seasonality of Porto Santo continues to be very acute, for some years now this has become more blurred, as hitherto tourism in Porto Santo occurred only in the three months of summer, in recent years this destination has managed to attract tourists for about six to seven months.

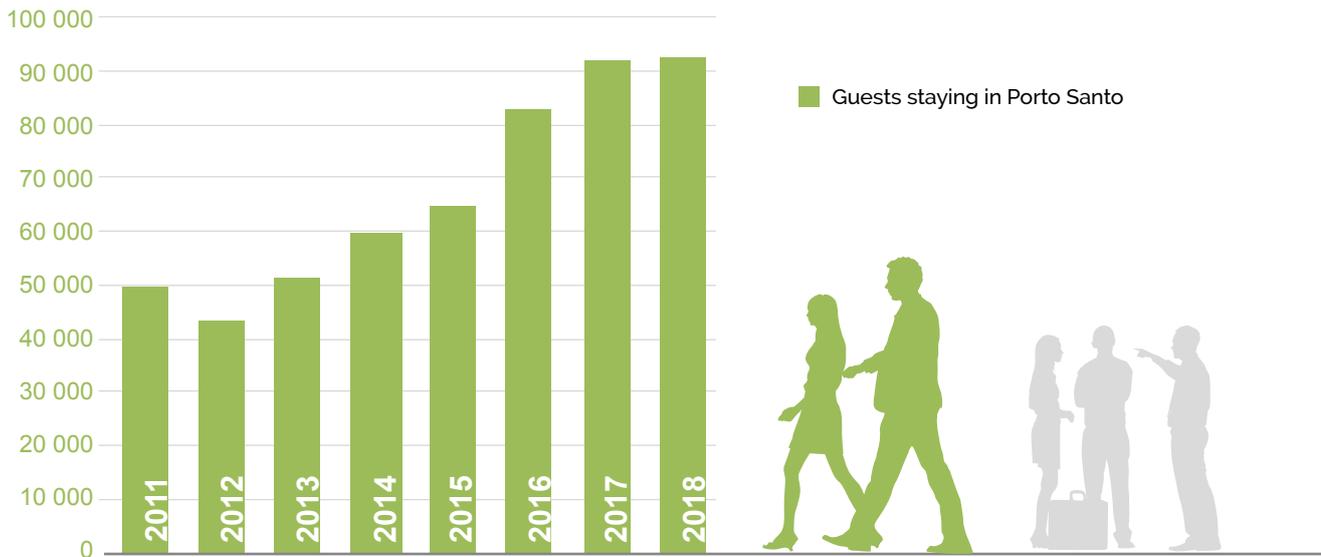


Figure 15 Guests staying in Porto Santo between 2011 and 2018 (DREM).

After a fall in 2012, there has been a great recovery, the number of guests in Porto Santo having doubled in 2017, which in 2018 was 92377. The average length of stay in hotels between 2011 and 2017 is 4.9 nights, with no significant differences over the years, most likely as a result of the package tours offered. In 2018 this figure dropped to 4.75 nights. Total revenues have doubled since 2011, reaching 27240 euros in 2018, making investment possible in improving the quality of infrastructure and services, reflected in the increase in the number of staff employed by hotels. The net rate of bed occupancy has remained stable over the last few years, reaching 52% in 2018.

In 2017, 512309 overnight stays were registered, mainly Portuguese guests (with a cumulative value of 203391), English (120708), German (64474), Danish (49727) and Italian (39964). In 2018, the number of overnight stays decreased to 503995, of which 204607 were resident in Portugal and 299388 from abroad.

	2011	2012	2013	2014	2015	2016	2017	2018
Length of stay in hotels (No. of nights)	4.8	4.9	4.9	5.0	5.0	4.9	4.7	4.75
Net rate of occupation-room in hotels, (%)	42.3	43.2	45.0	46.3	52.3	55.1	55.2	52.0
Total income from hotels (euros)	13854	13023	14385	17084	20530	25555	27607	27240

Table 8 - Data related to Tourism in Porto Santo between 2011-2018 (DREM).

15.2.3

HOW ARE TOURISM ACTIVITIES CURRENTLY MANAGED?

A large part of the tourists who come to the island are welcomed by the respective travel agencies that present a variety of activities, trying to meet the needs of visitors to Porto Santo. For the others there is information available at the Tourist Office, located in the centre of town, whose function is to help and inform through the provision of leaflets and maps. In the centre of town, there are placards that offer information about the architectural historical heritage, maps and the monthly cultural agenda.



City pier

15.2.4

INDICATE POSSIBLE POSITIVE AND/OR NEGATIVE IMPACTS OF TOURISM AT PRESENT OR FORESEEN AND HOW THEY WILL BE ASSESSED (LINKED TO SECTION 14)?

External access to the island is by the airport and the port, namely by the "Lobo Marinho" ship, which carries people, vehicles and goods between Madeira and Porto Santo islands. Porto Santo airport currently has a capacity adequate for present and future needs, taking into account the needs of the resident population and the possibility of growth in tourism in the medium and long term.

The development and sustainability strategy that underpins the Biosphere Reserve application is based on a sustainable growth of tourism, the quality of services, the appreciation of local heritage, the mitigation of seasonality and the creation of local added value and lasting employment, and not in the overcrowding associated with the summer months. Consequently, there is no need to expand the airport in the coming decades as no significant increase in peak season usage is anticipated.

The Biosphere Reserve of the Island of Porto Santo will promote local natural and cultural values that will encourage the creation of distinctive and quality products and services, attracting new visitors throughout the year, boosting trade and job creation, and the expectation of a positive impact on the local economy. The appreciation of local features, not only historical and cultural but also bio geodiversity, besides the creation of thematic itineraries which will allow new discoveries of the territory, attracting more visitors to Porto Santo.

Since the beach is an ex-libris of the territory, in the summer, mainly in August, there is some negative impact of tourism due to the large number of people on the shore, nonetheless the excellent quality of the bathing water and the sand are maintained.

From the foregoing, in order to evaluate the positive and negative impacts and their growth, the Biosphere Reserve intends to implement plans to monitor the effects of tourism on natural and historical-cultural

heritage, in addition to counting the number and flow of day-trippers and tourists throughout the year and the reason for choosing the destination. At the same time, due attention will be given to air transport and its potential to support local development, with the Biosphere Reserve of the Island of Porto Santo focused on minimising the environmental and social impacts generated.

15.2.5

HOW WILL THESE IMPACTS BE MANAGED, AND BY WHOM?

In order to mitigate the tourist overload that occurs in the summer, especially in August, as opposed to the low demand during the winter, the focus passes from the greater perception of its unique natural, social and cultural heritage, to the strong promotion of sustainable tourism in a territory whose climate is favourable for the practice of various activities on land and at sea throughout the year. Awareness and training of the population, local travel agents and visitors are crucial for changing paradigms about natural and cultural values and promoting more responsible tourism. With this in mind, awareness-raising actions aimed at different target audiences are planned, especially travel agents, to promote sustainable tourism.

Managing the positive and negative impacts of tourism on the Reserve requires close collaboration with the various development promoters, local authorities, travel agents and local groups or associations. To be achieved, representatives will be involved in the Management Structure and Coordination of the Biosphere Reserve of the Island of Porto Santo, seeking to tackle and correct negative impacts and optimise the positive for the sustainable development of the territory. The Plan of Action of the Biosphere Reserve of the Island of Porto Santo outlined for a period of five years (2020-2025), contemplates several measures that can be adjusted and even improved, if necessary, in the following years.

The protected and classified areas of Porto Santo already contain codes or regulations of good practices. For the UNESCO Biosphere Reserve, codes of good practice will be presented for adoption in the different areas that make up its zoning.



Harvest

15.3

AGRICULTURAL (INCLUDING GRAZING) AND OTHER ACTIVITIES (INCLUDING TRADITIONAL AND CUSTOMARY)

15.3.1

DESCRIBE THE TYPE OF AGRICULTURAL (INCLUDING GRAZING) AND OTHER ACTIVITIES, AREA CONCERNED AND PEOPLE INVOLVED (INCLUDING MEN AND WOMEN)

The agricultural Porto Santo has characteristics that are specific to its identity and that remain today. The agroforestry areas mainly cover the central area of the island and scattered areas, where sand-to-loam soils occur, with more sporadic occurrences of typically clayey spots. Chemically, and because most of the sand and sandstones of the island are of biological origin, they are richer in calcium and potassium, which gives them a more favourable pH for most agricultural crops, and unique organoleptic characteristics, which consumers, especially those from other territories, greatly value. Indeed, the focus given today to the rural world goes beyond the nature of production, with a view that the functions performed by the rural environment and agro forestry are not only economic but also environmental, social and cultural functions. The agroforestry activity enhances the production of a set of additional goods from the products, contributing to the economic, social and cultural dynamics of the territory, functions that are essential to the development of Porto Santo rurality by preserving cultural assets and traditions, the settlement of people, favouring the landscape diversity and the planning and management of rural areas besides safeguarding the ecological-natural resources of the candidate Reserve.

Over time cereal crops prevailed, mainly on the slopes of the mountains, which created a humanised landscape, maintaining the harmonious balance between nature and the human presence. Currently, small family farming generally exists in which management and labour is provided by the household or only by the men of the family.

According to the 2009 Census of Agriculture (RA 09), the National Institute of Statistics, Porto Santo has 134 farms, which make up a Usable Agricultural Area (UAA) of 309ha. In this ambit, there are 43 farms with clean arable land, with an area of 39ha, 32 (26ha) with temporary crops (mainly melon, watermelon, tomato, pumpkin and potato) and 19 (13ha) fallow. Home gardens grows on 14 farms (0.51ha), permanent pastures on 31 farms (210ha) and permanent agricultural crops are in place on 111 farms in a UAA of 60ha, most of the permanent crops being vineyards, which occupy 58 of the 60ha (97%). Each farm has an average of 2.31ha, and the average size factor of the property favouring agricultural production in specific and fundamental production sectors in Porto Santo: Organic agriculture, essentially, and extensive cattle farming, to a lesser extent.

Watermelon, melon, tomato, carrot, sweet potato, prickly pear, figs, pomegranates and grapes continue to be produced in Porto Santo. The cultivation of agricultural products in calcisoils (soils developed in biogenic carbonate sands) has led them to be known and renowned for several decades for their difference in taste and aroma, when compared to other sites producing the same type of crops and fruits from Madeira Island and other regions of Portugal, with high levels of calcium, magnesium and strontium in vegetables and fruits, and particularly magnesium.

From the vineyards, in addition to table grapes and wine production in Porto Santo, some private companies use also grape seed for grinding and flour production for culinary consumption. The leguminous pea "chicharo" was formerly cultivated in the fields as part of the local diet. Although this crop requires low production costs and adapts very well to the characteristics of the soils of Porto Santo, its production has decreased along with the abandonment of agriculture. Due to the few demands of the pea in terms of cultivation and maintenance, and with this leguminous soil enrichment in nitrogen, there has been a focus on its dissemination and multiplicity of applications in the local gastronomy. There are recommendations for the consolidation of sustainable livestock activity that abides by Regional Legislative Decree No. 35/2008/M (safeguarding of natural resources), Regional Legislative Decree No. 7/2015/M (livestock activity) and Legislative Decree No. 64/2000 (animal welfare), besides the associated ordinances. Currently animal production has the purpose of producing meat, totalling 31 cattle, 122 sheep, 19 pigs and 234 goats.

15.3.2

INDICATE THE POSSIBLE POSITIVE AND/OR NEGATIVE IMPACTS OF THESE ACTIVITIES ON BIOSPHERE RESERVE OBJECTIVES (SECTION 14)

The actions envisaged in the Plan of Action of the Biosphere Reserve of the Island of Porto Santo advocate the fostering and development of more environmentally friendly agriculture and livestock, which will contribute to the promotion of the local green economy, and will have a very significant positive impact on the Reserve candidate. These activities, both biologically and organically, are fundamental to the sustainability of the territory and its people, not only at the ecological level, but also at the level of local economic development, contributing to the creation and promotion of local products and distinctive tourist services where the traditional gastronomy and the historical-cultural values stand out. The focus on the dissemination of the nutritional quality of agricultural products, derived from the unique characteristics scientifically proven, can take place in the local, regional and national market as products of certified quality.

Systematic training and technical support with local producers will play a key role in obtaining quality crops and promoting respect for and safeguarding our natural resources in the community at large.

15.3.3

WHICH INDICATORS ARE, OR WILL BE USED TO ASSESS THE STATE AND ITS TRENDS?

The evaluation of progress of actions envisaged in the implementation of the Action Plan, regarding agriculture, livestock and other associated traditions and customs, will be done by verifying compliance with the goals outlined. Despite the complementarities that exists between indicators for verification of the goals, we highlight the following: population with a sense of pride and sense of belonging in relation to the identity elements of Porto Santo that support the application for Biosphere Reserve; events fostering entrepreneurship based on local resources; events promoting sustainable tourism and traditional cultural practices; awareness-raising and training activities related to agriculture and organic livestock; holdings in organic production; awards and distinctions in the area of sustainability; cultural and recreational events carried out in line with the objectives of the Biosphere Reserve; and maintenance and cleaning operations, in order to ensure the operation of rainwater dams.

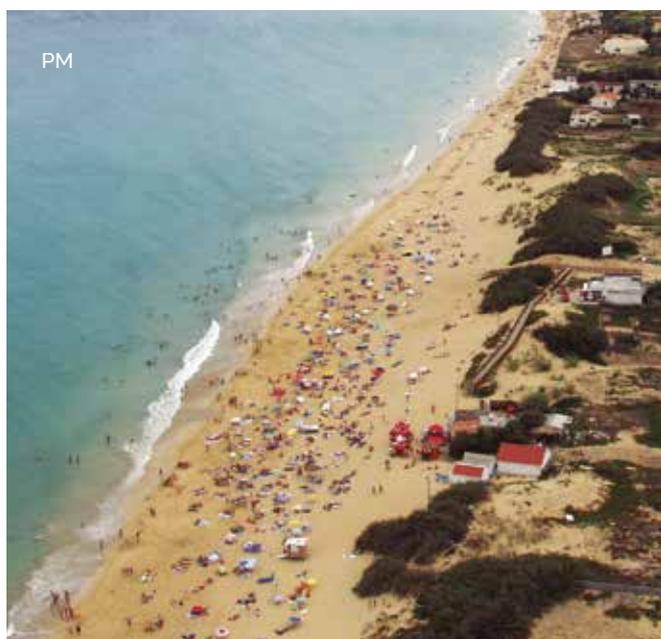
15.3.4

WHAT ACTIONS ARE CURRENTLY UNDERTAKEN, AND WHICH MEASURES WILL BE APPLIED TO STRENGTHEN POSITIVE IMPACTS OR REDUCE NEGATIVE IMPACTS ON THE BIOSPHERE RESERVE OBJECTIVES?

The maintenance of a part of the active population in the primary sector, through a more environmentally friendly production method and a link to land and resources, with a focus on training and support for organic production methods, is the guarantor of transmission to generations to come of 600 years of culture, tradition and love for Porto Santo, is of great importance in fulfilling the objectives proposed for the Reserve.

DRAPS and DRA have been providing information and training local producers, with various initiatives throughout the year, in order to promote their training and the local produce itself.

Within the scope of this application and proposed in the Plan of Action for the next five years, the following actions should be highlighted: organisation of initiatives that contribute to the revitalisation and enhancement of local products, traditions and heritage throughout the year; survey of local traditions (songs, dances, harvests, seeding, gastronomy, ethnobotany, folklore); development of projects for the recovery of the agroforestry cover and torrent correction as a safeguard of vegetal and edaphic values; development of a campaign to promote the identity values of Porto Santo, through sponsorship by different hotels, restaurants, commercial establishments; sensitisation to efficient water use and promotion of efficient irrigation techniques associated with less water-intensive agricultural practices; restoration of agricultural areas with permanent cover adapted to the soil and climatic conditions and recovery of the productive potential of the soil; monitoring of agro-systems to assess the success of measures to adapt to climate change and the desorption of rainwater dams.



Bathing area

15.4

OTHER TYPES OF ACTIVITIES POSITIVELY OR NEGATIVELY CONTRIBUTING TO LOCAL SUSTAINABLE DEVELOPMENT, INCLUDING IMPACT/INFLUENCE OF THE PROPOSED BIOSPHERE RESERVE OUTSIDE ITS BOUNDARIES

15.4.1

DESCRIBE THE TYPE OF ACTIVITIES, AREA CONCERNED AND PEOPLE INVOLVED (INCLUDING MEN AND WOMEN)

Fishing in Porto Santo has developed since the early days of the settlement on the island. *Cadamosto* refers in Navigation Prima to the abundance of groupers, sea bream and other fish that could be captured there. The geomorphologic structure of the seabed around Porto Santo shows relatively smooth inclinations with several islets to approximately 100m bathymetric, after which the steeper slopes break out, entering a slope zone, which extends beyond 1000m deep.

Particularly interesting is the extensive shelf NNW of the island that extends up to about 8mn away from the coast. This configuration provides environmental conditions for the development of a diverse and relatively abundant marine fauna, with several species of fish around Porto Santo, namely demersal species and tunas. Its ichthyologic fauna (demersal fish) is similar to the other islands of the archipelago, both in species variety and in biological diversity. Amongst species of fishery interest up to 100m deep, the following are abundant: snapper (*Pagrus pagrus*), grouper (*Serranus atricauda*), stingray (*Phycis phycis*), offshore rockfish (*Pontinus kuhlii*), bream (*Diplodus sargus*), two-banded sea bream (*Diplodus vulgaris*), grey triggerfish (*Balistes capriscus*), rockhopper (*Sparisoma cretense*), dogfish (*Bodianus scrofa*), scorpionfish (*Scorpaena scrofa*), sea bass (*Pagellus bogaraveo*), turbot (*Polyprion americanus*), white trevally (*Pseudocaranx dentex*), the amberjacks (*Seriola* spp.) and the Azores chromis (*Chromis limbata*). Relatively abundant are Mediterranean moray (*Muraena helena*), conger (*Conger conger*), brown moray (*Gymnothorax* spp.), rays (*Raja* spp.) and stingray (*Dasyatis* spp.). Several campaigns carried out by the Regional Fisheries Directorate of the Regional Government of Madeira have also shown that, around 100m bathymetric, the insular platform has a considerable potential for catching crustaceans, namely Madeira shrimp (*Plesionika narval*). This activity is established by Regional Legislative Decree No. 19/2016/M of April 20th, which regulates directed fishing for plant and animal species, for recreational purposes, in the marine waters of the RAM and by Ordinance No. 484/2016, of November 14th, that defines the permitted gear, the constraints and the terms of licensing for the practice of recreational fishing.

Like fishing, hunting also attracts men from the area, so when autumn comes, hunting becomes the subject of daily conversation within the local community. Hunting in the proposed Biosphere Reserve has a framework under the General Bases of Hunting Law (Law No. 173/99, of 21th September). The application of legal diplomas in the RAM is the guarantor of the hunting regulations, expressed in the assumption of a set of measures and actions in the fields of conservation, promotion and rational exploitation of hunting resources towards an optimum and sustained production, compatible with the potential of the environment, in harmony with the limits imposed by ecological, economic, social and cultural constraints and in compliance with international conventions and the Community directives transposed into Portuguese legislation. The management of this resource, along with the revitalisation of other traditional or cultural activities, is part of the island's economy, marking the culture and the experience of the local population.

The importance of hunting, in general terms, has been linked to human nature since time immemorial, evolving from an activity indispensable to its survival, or for complementary food, to a recreational and leisure activity associated with the taste for contact with nature and management of animal species, in a symbolism of power and ostentation. Being an activity of significant economic importance and socially popular in Porto Santo that once constituted a food resource of the local population, extending later, as a recreational component, to other external groups.

The hunting season on the island involves approximately 300 hunters, local residents, Madeira people, continental Portuguese and even foreigners, thus representing tourism value for a specific market niche. The wild rabbit is the hunting species of choice of the local population. In fact, during the hunting season there is a great influx of hunters in order to search for, to chase and to capture the game hunting species on the island, turning the activity into an important resource for the local economy, at a time when the destination 'beach' is not decisive. Besides the wild rabbit, there is a great demand for the red partridge, due to the very wild characteristics and difficulty of kill, according to the testimony of many hunters from Madeira and the continent. This aspect deserves some reflection, not least because the great hunters are not defined so much by the number of animals killed or by the time dedicated to hunting, but mainly by their attitude towards hunting, by the way in which they integrate hunting with other knowledge and other knowledge with hunting.

In turn, although the local crafts have great potential, with the aging of the few craftsmen their fostering and revitalisation have become important. In order to encourage the handicraft population, during the academic year 2017/2018, Porto Santo University opened its doors to those interested in learning the art of heart of palm braids, used in the elaboration of hats and bags of heart of palm and, in 2018/2019, the Senior Citizen University of Porto Santo and DRAPS proposed the transfer of this art to the Basic and Secondary School Prof. Dr. Francisco de Freitas Branco, Porto Santo, with the project taking place in the classes of the 8th year of schooling in the subject of Technological Education.

Also worth mentioning are some activities with influence on the local economy, such as energy production, through the Porto Santo thermoelectric power plant and the production of microalgae, both affecting the sustainability of the territory, the first is the responsibility of the Madeira Electricity Company, SA (EEM), currently developing the project "Sustainable Porto Santo" and Buggypower, also an EEM partner, with an innovative biotechnology methodology, both having a meaningful impact on the local socioeconomic by the significant number of jobs that they create.

15.4.2

INDICATE THE POSSIBLE POSITIVE AND/OR NEGATIVE IMPACTS OF THESE ACTIVITIES ON BIOSPHERE RESERVE OBJECTIVES (SECTION 14). HAVE SOME RESULTS ALREADY BEEN ACHIEVED?

Fishing and hunting activities are duly regulated so that no negative impacts are anticipated as a result in meeting the objectives of the proposed Biosphere Reserve. Still in relation to hunting, there are areas of refuge, created by Order No. 51/2018 of August 23rd, which are intended to ensure the conservation or development of game species, and may be totally or partially protected from hunting for reasons of conservation.

As far as crafts and traditions are concerned, it is important to involve local travel agents in their promotion, with an increase in young entrepreneurship in this sector. This will contribute to its revitalisation, appreciation and consequent increase in local socio-economic development and supply.

15.4.3

WHAT INDICATORS ARE, OR WILL BE USED TO ASSESS THE STATE AND ITS TRENDS?

Parameters such as number of licenses for the exercise of fishing, number of people involved in hunting (residents and visitors), number of cartridges collected by hunters, and number of artisans will be analysed. This will allow not only the monitoring of the situation and its trends, but also to define strategic lines in order to optimise the sustainable development potential of the territory.

15.4.4

WHAT ACTIONS ARE CURRENTLY UNDERTAKEN, AND WHICH MEASURES WILL BE APPLIED TO STRENGTHEN POSITIVE IMPACTS OR REDUCING NEGATIVE ONES ON THE BIOSPHERE RESERVE OBJECTIVES?

The annual "Cartridge-Hunting" competition is organised by Porto Santo Municipal Council with the intention of raising awareness of the importance of collecting cartridges in defence of an environment of quality and conservation of ecosystems.

DRAPS and the Senior Citizen University of Porto Santo have been developing efforts in sensitising and revitalising traditional handicrafts, as well as collecting songs from the past and disseminating them to young people and the community in general.

With regard to travel agents, the Porto Santo Municipal Council has been providing training in various areas, including environmental, historical and cultural, providing participants with more information and knowledge about local values.



USPS activity

15.5

BENEFITS OF ECONOMIC ACTIVITIES TO LOCAL PEOPLE

15.5.1

FOR THE ACTIVITIES DESCRIBED ABOVE, WHAT INCOME OR BENEFITS TO LOCAL COMMUNITIES (INCLUDING MEN AND WOMEN) DERIVE DIRECTLY FROM THE SITE PROPOSED AS A BIOSPHERE RESERVE AND HOW?

Since the Biosphere Reserve of the Island of Porto Santo corresponds to the entire territory up to the bathymetric of 100m, the economic activities developed there will have to comply with the criteria defined for local sustainability. In turn, services related, for example, to nature and cultural tourism, agriculture, fishing and products derived from endogenous resources such as jams, jellies, preserves, pastry, bakery, liqueurs, wine and vinegar, as well as handicrafts may bear the Porto Santo UNESCO Biosphere Reserve brand, which will ensure its quality and contribute to the distinctiveness and affirmation across borders.

The benefits to the Porto Santo community are clearly associated to the conservation and enhancement of the natural, historical and cultural heritage and economic activities mentioned above, which will increase the incomes of the local community when the proposed Biosphere Reserve integrates with the world network of biosphere reserves.

To this end, a local marketing plan will be defined to promote local values, increasing its visibility beyond the Autonomous Region of Madeira, aiming for international projection, and consequent emergence of new businesses, with a boost to entrepreneurship and innovation.

15.5.2

WHAT INDICATORS ARE USED TO MEASURE SUCH INCOME OR OTHER BENEFITS?

In order to assess the benefits of economic activities for the local population, a number of indicators will be used, such as: gross domestic product (GDP), employment rate, job creation, part-time / full-time employment, the development of the levels of professional qualification and of literary or academic qualifications, the level of public or social participation, and the rates of implementation of local and regional development programmes, as well as the results of other sectoral interventions under the responsibility of the Regional Government of Madeira, the Municipality and local private initiative.

Other criteria for analysis may be taken into account in assessing the social status of the Reserve area, using various indicators that may depict social development, such as population characteristics, demographic dynamics and population flows, labour and income per capita of families and the average level of income of the population, health, justice and public safety, education and living conditions of families.

15.6

SPIRITUAL AND CULTURAL VALUES AND CUSTOMARY PRACTICES

The maintenance of traditions and customs and their valorisation are some of the objectives of the candidate Biosphere Reserve, besides its dissemination and shared expression with other UNESCO Biosphere Reserves being essential.

15.6.1

DESCRIBE ANY CULTURAL AND SPIRITUAL VALUES AND CUSTOMARY PRACTICES INCLUDING LANGUAGES, RITUALS, AND TRADITIONAL LIVELIHOODS

Religious festivals and pilgrimages, such as the Feast of Our Lady of Grace, Saint John, the Harvest Festival, traditions such as the "Missas do Parto", Santo Amaro, and Visits of the Holy Spirit, are rooted in the local population and in those who choose to stay on the island. There is a natural cultural identity that has unquestionable value.

At Christmas, the famous meticulously built nativity scenes, many of which reach the ceiling and have pieces produced with local clay by the older generations, are the pride of each household and the cause of harmony among family and friends. On Twelfth Night, musical groups, accompanied by violas, accordions, songs and merriment, perform to the population in Pelourinho Square, and later from house to house.

The Feast of Saint John, organized by the City Council of Porto Santo, reveals the pride of the population, especially in the rhythm of the marches that run down the avenue on the night of June 23rd.

The Harvest Festival, under the auspices of DRAPS, promotes a local product - the grape, recognized by many as a product of excellence, along with the famous wine of Porto Santo.

The focus on the local festivities also counts on the contribution of schools as promoters of some traditions like the Christmas parade, the Feast of Santo Amaro and Carnival.

Thus, confirming the involvement of different members of the community in the continuity of traditions. This contributes to a sense of belonging; each and every individual assumes their identity and demonstrates their pride in Porto Santo, reflected in the numbers of participants involved in the different activities that take place throughout the year. It is a coming together of people, connecting memories, spaces and villages, linking cultures and establishing generational links, in a solid testimony of social value and belonging.



Feast of Saint John, 2019



Choral

In addition to the traditional festivals, the folklore associated with the Island of Porto Santo, the songs of old that require special attention for their perpetuation, the stories and experiences of a people that sought, deep in the soul, the forces necessary to survive a territory that has rarely given respite, demanding from its population a supernatural resilience, should also be mentioned. Proof of this is its typical gastronomy, a population, faced with desertification of the soil and scarcity of food that develops strategies to feed themselves, taking advantage of the little that the land gave.

The proposed Biosphere Reserve will therefore contribute to the consolidation of values and customs, and revitalisation of traditions, through the establishment of new and improved common objectives and definition of further partnerships and strategies.

15.6.2

INDICATE ACTIVITIES AIMED AT IDENTIFYING, SAFEGUARDING, PROMOTING AND/OR REVITALISING SUCH VALUES AND PRACTICES

The focus on origins allows its people to define their cultural identity, which is only possible by understanding the essence of the past and accepting and understanding the present, in a future projection. Only with solid knowledge of the natural and cultural heritage of Porto Santo can we define measures and goals for its protection, guaranteeing the sustainable development that we aim to achieve in the proposed Biosphere Reserve.

The workshops and lectures are examples of strategies to promote the traditions and customs of the Reserve, with the participation of the elders in the transfer of deep-rooted knowledge of the craft and pride in Porto Santo, being a key factor in the participatory approach combining intergenerational activities with the youth in local schools.

In the academic year 2018/2019, the Senior Citizen University of Porto Santo developed the project "This is My, Your, Our Porto Santo" at EB1 / PE of Porto Santo, encouraging the youth in the making of gastronomic products of the past, and the learning of old songs.

It should also be noted that, since 2018, Vila Baleira Hotel has been promoting the event "Tuna Route", an initiative that has contributed not only to promoting a local and regional product, but also its use at culinary level, besides developing activities in the field of fishing and for a sustainable way of life, popular every year with the community and visitors.

15.6.3

HOW SHOULD CULTURAL VALUES BE INTEGRATED IN THE DEVELOPMENT PROCESS: ELEMENTS OF IDENTITY, TRADITIONAL KNOWLEDGE, SOCIAL ORGANIZATIONS, ETC.?

Despite the effects of globalisation, there is still a perpetuation of the cultural values that are assimilated by the younger generations, contributing to their preservation in the present day. The work of different local entities / associations / groups leads to a continued involvement of the community and a growing recognition of the uniqueness of certain values and the potential of their valuation and promotion for local sustainable development. Since 2017, DRAPS has been fostering the promotion and appreciation of local crafts and traditions, organising activities not only in the community, but also in schools, raising awareness and involving young people in the local culture. The Senior Citizen University of Porto Santo, in turn, has been playing a role in revitalising traditions, as is the case of songs of yesteryear, avoiding their loss through intergenerational activities at schools.

15.6.4

SPECIFY WHETHER ANY INDICATORS ARE USED TO EVALUATE THESE ACTIVITIES. IF YES, WHICH ONES AND GIVE DETAILS.

The assessment of the progress of the actions planned in the implementation of the Action Plan, which refer to spiritual and cultural values and customs, will be done by verifying compliance with the goals outlined. In spite of the complementarities that exists between indicators identified to verify the goals, we highlight the following: population with a sense of pride and sense of belonging in relation to their identity with Porto Santo that support the candidacy for Biosphere Reserve; promotional entrepreneurship events based on local resources; natural, historical and cultural itineraries that privilege experiences related to heritage and local identity; material and non-material assets; restaurants and hotels that promote the natural, historical and cultural heritage of Porto Santo; events promoting sustainable tourism and traditional cultural practices; students covered by the educational programmes of the Biosphere Reserve; establishments / entities adhering to the campaign to promote the identity values of Porto Santo; awards and distinctions in the area of sustainability; cultural and recreational events carried out in line with the objectives of the Porto Santo Island Biosphere Reserve.



16.1

RESEARCH AND MONITORING

16.1.1

DESCRIBE EXISTING AND PLANNED RESEARCH PROGRAMMES AND PROJECTS AS WELL AS MONITORING ACTIVITIES AND THE AREA(S) IN WHICH THEY ARE (WILL BE) UNDERTAKEN IN ORDER TO ADDRESS SPECIFIC QUESTIONS RELATED TO BIOSPHERE RESERVE MANAGEMENT AND FOR THE IMPLEMENTATION OF THE MANAGEMENT PLAN

Porto Santo has been used as a laboratory for the practice and test of new renewable energy technologies. In addition to the historical use of wind energy by the first vessels to arrive in Porto Santo and by windmills, in 1986 the first wind farm in Portugal was installed in Porto Santo for the production of electrical energy, with nine 30kW turbines. Porto Santo was also a laboratory for the installation and development of desalination technologies and passive solar architecture.

Currently in course in Porto Santo, in the context of mitigation of carbon emissions and climate change, is the implementation phase of a strategy to reduce the use of fossil fuels, called "Smart Fossil Free Island", catalysed by the Regional Government of Madeira, the Electricity Company of Madeira and AREAM, which aim to replace fossil energy sources with renewable energy. This strategy includes the gradual conversion of electricity production to renewable sources, providing the electrical system with smart grids and energy storage capacity to adjust the availability of intermittent resources to demand, as well as the transition to electric mobility and energy efficiency in buildings, street lighting and other uses. Electric mobility with intelligent charge, preferably at night, also has the advantage of being able to contribute to the increase in capacity of the grid to receive energy from intermittent renewable sources in periods of lower demand.

In turn, the UMa ISOPlexis Germplasm Bank is leading the project "Consortium for Monitoring the Impact of Climate Change on Agrobiodiversity and Sustainability of BIOeconomics in the RAM (CASBio)", financed by the Operational Programme PO Madeira 14-20. This project aims to validate the impact of the CLIMA strategies on agriculture in the candidate Biosphere Reserve, developing a line of research aimed at recovering soils in eroded areas or with an accelerated loss of productivity. In addition, ISOPlexis, in close partnership with DRAPS and DRA, has developed a PRODERAM action to inventory and conserve the genetic resources of strategic fruit and vegetables of the RAM, whose objective is to promote the conservation of genetic diversity, to typify regional varieties and foster the certification of genetic material

in order to further its use in favour of local fruit growing and horticulture and the promotion of sustainable development.

The IFCN, IP-RAM prepared the application "Conservation of Forest Genetic Resources in Madeira", within the framework of Measure 15 "Silvicultural and Climatic Services and Conservation of Forests", more specifically in Sub-measure 15.2 "Support for the Conservation of Forest Genetic Resources", of the Madeira Regional Development Programme (PRODERAM 2020), and the objectives set out therein are in line with the National Strategy for the Conservation of Nature and Biodiversity (with application in the RAM), which, amongst other guidelines, encourages conservation and sustainable use of genetic resources. In turn, the National Forest Strategy (NFE), with regard to the component of ADR, has in its guiding principles, amongst others, the conservation of plant biogenetic heritage. In view of the nature of the work recommended and the thematic scope of the actions contemplated, it is a project involving three entities: the IFCN, IP-RAM, as the entity managing the project, and the partners National Institute of Agrarian and Veterinary Research (INIAV) Laboratory of Agricultural Quality of Madeira (LQA), assuming the various entities distinct specific functions, which are interconnected in the accomplishment of the purposes assumed in the project. This project intends to:

- Catalogue and produce updated and detailed mapping of species of the vascular flora of the RAM listed in the Habitats Directive, Berne Convention, which are classified under a threat category according to IUCN as well as of the most threatened native taxa which are relevant in terms of preservation of their habitats;
- To produce plants and establish "mother plant fields" of forest species for the reintroduction or reinforcement of populations and for the recovery of species and habitats, in particular those registered under the Habitats Directive, thereby ensuring the conservation of forest genetic resources, considering Biosphere Reserve candidate species *Chamaemelum coriacea*, *Juniperus turbinata* subsp. *canariensis*, *Maytenus umbellata*, *Olea maderensis* and *Sideroxylon mirmulans*, to be produced locally.
- Promote studies and technical-scientific exchanges related to the conservation of forest genetic resources in the Autonomous Region of Madeira.

Meanwhile, this project merited the approval of the amount of the proposed investment by the Management Authority of PRODERAM 2020 in June 2019.

Regarding biodiversity monitoring and management of protected areas, the IFCN, IP-RAM, continues with the post-LIFE actions entitled "Halting the loss of European biodiversity through the recovery of habitats and species of the Island of Porto Santo and surrounding marine area". To these ends, it has been monitoring biodiversity, promoting the implementation of management measures and plans of action directed at species and habitats, as well as disseminating information to the general public.

Regarding the marine environment, a monitoring programme for sub tidal natural and artificial habitats on the Island of Porto Santo (CORDECA) is underway, led by the Interdisciplinary Marine and Environmental Research Centre of Madeira (CIIMAR-Madeira) and composed of researchers from the University of Madeira, the Department of Science and Natural Resources of the Municipality of Funchal and the Madeira Ocean Observatory (OOM)/ARDITI. This work, currently underway in the candidate Biosphere Reserve, has as its main objective the evaluation of the impact of the shipwreck General Pereira D'Eça Corvette, not only at the wreck site, but also in the surrounding natural reefs.

Note also that the multidisciplinary research promoted by the University of Aveiro on the properties and applications of the natural resources of Porto Santo has highlighted the therapeutic properties of the biogenic and carbonate sands of the beach of the candidate Reserve, as well as the specificity of other natural resources in the fostering of health and treatment of some diseases.



PM

Beach



Ship "Madeirense"

16.1.2

SUMMARIZE PAST RESEARCH AND MONITORING ACTIVITIES RELATED TO BIOSPHERE RESERVE MANAGEMENT

STRATEGIES FOR THE APPRECIATION OF THE VEGETAL COVER OF THE ISLAND OF PORTO SANTO

In the recent past, a researcher, native of Porto Santo, within the scope of her doctoral programme led by the Biology Department of the University of Aveiro, developed a research project aimed at enhancing the vegetal cover of the Island of Porto Santo. The project presents two complementary research methodologies, with emphasis on the preservation and reintroduction of an endemic species of great conservation interest of the archipelago of Madeira, the wild olive tree (*Olea maderensis*); and the analysis of perception of the local and visiting community about the desertification process and the valorisation of the vegetal cover as well as its acceptance regarding the application of biotechnology in the micro propagation of olive plants for the purpose of minimizing this process. The study integrated the genetic characterisation of genotypes of *O. maderensis* through the analysis of ploidy and the content in DNA by flow cytometry and through the detection of polymorphisms by microsatellite analysis. Other genotypes of *Olea* were also used. The research developed contributed to the better characterization of this species and allowed the detection of a level of new ploidy in the genus *Olea* (tetraploidy). The conditions for optimisation of the in vitro culture were studied, defining the best means for propagation of the endemic species, with description of micro propagation protocols and acclimatization of the same. The work also describes the protocol of acclimatisation of the species in the field. These studies are of added value from an ecological point of view and in the face of success shown by the reintroductions established under the developed research programme. In fact, *Olea maderensis* has shown good adaptive behaviour to the present edaphoclimatic conditions. It is of particular interest to foster its expansion in the Buffer Zone of the proposed Reserve, thus promoting forest diversity and enriching landscape units with native vegetation and in particular with endemic species.

RECOVERY OF THE PICO BRANCO PLANT COVER, ON THE LIFE PROJECT 99 NAT / P / 006431

This project contemplated the recovery of natural habitats of Pico Branco (ZEC PTPOR0002), which corresponds to a terrestrial Core Area of the candidate Biosphere Reserve, as well as the conservation of endangered plant species, especially those occurring in Porto Santo, namely *Chamaemeles coriacea* and *Cheirolophus massonianus*. The evaluation of the threat factors, exhaustive inventory of the populations and digital cartography of the geographic distribution of the species contributed as fundamental information for the evaluation and update of the conservation status of the mentioned species and definition of conservation strategies. The degree of knowledge was improved by carrying out technical-scientific studies in the areas of reproductive biology, genetic variability, ecology, taxonomy, vegetative and seminal propagation, germination physiology, germplasm bank conservation, population reinforcement and reintroduction of species. The recovery of habitats of great interest for the conservation of some target species of the project is a very important component of the proposed Reserve. In fact, the need to conserve and recover the vegetal cover and natural species of the Island of Porto Santo was manifested in the Pico Branco area, due to its floristic interest with a significant presence of endemic taxa of Macaronesia, Madeira and Porto Santo and because it corresponds to a stronghold of the best preserved indigenous flora of the island.

PROJECT LIFE ISLAND OF PORTO SANTO (LIFE09 NAT / PT / 000041) "TACKLING THE LOSS OF EUROPEAN BIODIVERSITY THROUGH THE RECOVERY OF HABITATS AND SPECIES OF THE ISLANDS OF PORTO SANTO AND SURROUNDING MARINE AREA"

This project took place in the period 2010-2015, being developed by the then Service of the Natural Park of Madeira in association with the Portuguese Society for the Study of Birds (SPEA). The project confirms the Island of Porto Santo and the surrounding marine area (RAMPPS), as Core Areas of the proposed Biosphere Reserve. It allowed the creation of conditions for the recovery of habitats and species through the elimination or control of non-native species with an invasive nature and of regulated human use, in leisure and economic aspects. The project advocated several actions that had significant impact on existing ecosystems and species. It also consecrated actions directed directly to groups of indigenous and endemic species with high conservation value (seabirds, terrestrial molluscs and flora). The recovery of habitats and species of high importance for conservation is a very important component of the proposed Reserve. The IFCN, IP-RAM pursues the project essentially with the actions recommended in the framework of post-LIFE, of technical and scientific follow-up and implementation of management measures and plans of action directed towards species and habitats and valorisation of protected areas, promoting the dissemination of information in reading and reception centres (installation of information equipment and materials).

REDUCTION OF LIGHT POLLUTION IN THE CONSERVATION OF THE SEABIRDS OF PORTO SANTO

A plan for minimizing the negative effects of urban illumination on seabirds was drawn up between 2010 and 2015, evaluating the diagnosis and analysis of the actual situation on the ground, and identifying the most harmful illuminated points in the for seabirds; a second guiding document was produced for the lighting most appropriate for each area, contemplating the presentation of solutions for the adaptation of existing lighting. From the first half of 2011, a seabird collection programme was implemented, involving several Porto Santo entities with operational capacity for collection and release procedures at sea. This programme remains operational under the coordination of the IFCN, IP-RAM, through the Guards of Nature Corps, and is monitored in cooperation with SPEA. The programme has made it possible to increase awareness of seabird behaviour, and it has been found that, in general, incidents related to artificial lighting tend to be concentrated around illuminated urban areas, particularly along the Porto Santo coast.

ARTIFICIAL REEF IN THE SEA OFF THE ISLAND OF PORTO SANTO WITH THE SHIPWRECK PEREIRA DE EÇA CORVETTE - FEAMP - COMMON STRATEGIC FRAMEWORK (QEC)

This project advocates the recovery of fish habitats and resources through the creation of an artificial reef, from the controlled sinking of the Corvette of the Portuguese Navy, General Pereira D'Eça. The ship was prepared in accordance with national and international environmental safeguards standards, and the optimum conditions for sinking, including structural stability, cleaning and decontamination, were ensured in order to preserve the aquatic environment and its biotic components; with the vessel being adapted to its functionality as an artificial reef, providing it with passageways within the structures, ensuring diversified niches for the purpose of serving as nurseries and sanctuaries of fish populations.

**LIFE 04 / PT / 000213 - IBAS-MARINHAS.
"IMPORTANT AREAS FOR MARINE BIRDS IN
PORTUGAL"**

This project, promoted by SPEA with the support of the Madeira Natural Park Service, took place between 2004 and 2008, with its main objective being the contribution to the implementation of the Birds Directive in the marine environment in Portugal by identifying the inventory of the most suitable areas for seabirds included in Annex I to the Directive, migratory bird species and regular wintering species. The main results achieved with this project include the identification of 17 IBAs in Continental Portugal, in the Archipelago of the Azores and Madeira Archipelago.

**CAMPAIGN EMAM / PEPC_M @ RBIS / 2011
DEVELOPED IN THE DESERTAS, PORTO SANTO AND
MADEIRA ISLANDS, FROM 16 TO 25 JULY 2011**

Organized by the Mission Structure for Marine Affairs (EMAM), it makes up part of the Continental Shelf Extension Project and the M@rBis Project. It was carried out by a wide range of researchers and students from different universities, associated laboratories and research centres of the country. The objectives included the inventory of marine species. The work involved the sampling and inventory in the zone between tides and in the sub tidal zone (up to 30m depth) where up to 6 dives per day were performed. Data were also collected to characterize habitats. All data were introduced in a coherent and organized way in the marine biodiversity information system (M@rBis). The aim of these campaigns was also to encourage greater cooperation between the scientific community, fostering a better liaison in the techniques of scientific inventory and sampling, which, without harming the scientific objectives of each researcher, allow a more coherent collection of data to facilitate its insertion in the information system. It was also possible to register 10000 new entries for the M@rBis system, to observe nine species belonging to the Natura Network, ten species belonging to the OSPAR Convention and seven protected species in the RAM.



Common tern (*Sterna hirundo*)

**DESIGN OPTIMISATION AND IMPLEMENTATION
OF DEMERSAL SURVEY CRUISES IN THE
MACARONESIAN ARCHIPELAGOS. DG XIV, STUDY
CONTRACT 94/034. DESIGN OPTIMISATION AND
IMPLEMENTATION OF DEMERSAL SURVEY CRUISES
IN THE MACARONESIAN ARCHIPELAGOS II. DG XIV,
STUDY CONTRACT 95/095**

Two projects of Macaronesian scope realised between 1994 and 1997, with participation of investigation entities of the Azores (Department of Oceanography and Fisheries), Canary Islands (Institute of Marine Sciences) and Madeira (DRP / Investigation Service). These projects developed methods of optimisation and implementation of scientific cruises to obtain indices of the abundance of demersal fish. Standard fishing methods were used, adapted to the conditions of the shelves and island slopes, and cruises were carried out in the various archipelagos. In Porto Santo, the projects carried out in 1995, 1996 and 1997 annual cruises with the Archipelago Research Ship of the Azores. Dozens of species of demersal, pelagic and crustacean fish were identified between a depth of 20 and 1200m.

**NETWORK OBSERVATORY FOR FISHERIES AND
MARINE ENVIRONMENT OF MACARONESIA,
ORPAM, INTERREG IIIB, MAC/4.2/A1 AND
OBSERVATORY ON FISHERIES AND MARINE
ENVIRONMENT IN MACARONESIA - PHASE II,
ORPAM II, INTERREG IIIB, 03 / MAC /4.2 /A2**

These two projects, carried out with the participation of the University of the Azores (DOP / UAç) and Madeira (DRP / Research Service), continued the implementation of the standardised methodology for demersal bottom longline fish survey campaigns. In Porto Santo, the projects carried out, in the 2004 and 2005 annual cruises with the Archipelago Research Ship of the Azores. These campaigns, in addition to obtaining estimates of abundance, collecting information unrelated to commercial fishing, and prospecting new areas and / or depths to identify possible alternative species for commercial fishing, have also provided elements for the study of biology and ecology of coastal demersal communities and the continental slope of the Madeira archipelago. The dominance curves showed that in the stratum between 20m and 100m depth the dominant species in number and weight are red snapper (*Pagrus pagrus*), blacktail comber (*Serranus atricauda*), tope (*Galeorhinus galeus*), common smooth-hound (*Mustelus mustelus*) and the grey triggerfish (*Balistes capricus*).

FISHERY RESOURCES OF DEEP WATERS OF CENTRAL-EASTERN ATLANTIC, PESCPROF-1, INTERREG IIIB, MAC / 4.2 / M12 AND DEEP WATER RESOURCES OF THE CENTRAL-EASTERN ATLANTIC: EVALUATION OF ITS POTENTIAL AND DISSEMINATION OF RESULTS, PESCPROF-3, INTERREG IIIB, 05 / MAC / 4.2 / M11

In these two projects, coordinated by the DRP / Investigation Service, with the participation in Madeira City Hall of Funchal / Marine Biology Station of Funchal and in the Canaries of the Canaries Institute of Marine Sciences, University of Las Palmas and University of La Laguna, in 2004 and 2008, in Porto Santo, campaigns were carried out regarding exploration and depletion of resources (crustaceans: shrimps and deep sea crabs), on the shelf and island slope, between a depth of about 100m and 1000m. These projects showed that Porto Santo has a shelf and beginning of the slope with a relatively high abundance of Narwal shrimp (*Plesionika narval*) and striped soldier shrimp (*Plesionika edwardsii*), as well as a great diversity of other species of crustaceans decapods. Taken together, it has been estimated that the Madeira Archipelago has an exploitation potential (maximum sustainable yield) of shrimps in the order of 10 to 20 tonnes per year.

In addition to the above, in the last two decades, and as a consequence of developed research projects, scientific articles have been published that deal with aspects of the natural heritage of Porto Santo. Several articles are included in the bibliography presented in Annex III, covering areas such as geology, palaeontology, flora and fauna. In the area of geology, including palaeontology, the identification of rocky outcrops and fossils of the Island of Porto Santo and adjacent islets should be highlighted, as well as the study of biogenic sands and their benefits for health and cosmetic use. In the area of marine biodiversity, the monitoring of species in natural and artificial habitats, the description of new taxa for science and the identification of migratory species should be highlighted. With regard to terrestrial biodiversity, mention should be made of new species of flora and malacofauna for science, inventories of nonvascular and vascular plants, invertebrate and vertebrate animals, both on the island and islets, as well as monitoring key species.



Hyles tithymali



Dragonfly

16.1.3

INDICATE WHAT RESEARCH INFRASTRUCTURE IS AVAILABLE IN THE PROPOSED BIOSPHERE RESERVE, AND WHAT ROLE THE BIOSPHERE RESERVE WILL PLAY IN SUPPORTING SUCH INFRASTRUCTURE

Infrastructure in Porto Santo has been used as support for research activities such as the Salões Forest Park and its leisure areas, the support house of Terra Chã, the Farrobo Experimental Field and the Islet of Cima lighthouse. Added to this is the local "Ecoteca", where the municipality is developing a project to requalify the area, in order to provide it with the conditions to function as a centre for environmental and cultural understanding of the proposed Biosphere Reserve and research support site. What's more, the University of Madeira has ongoing investigations in partnership with DRAPS and DRA.

16.2

EDUCATION FOR SUSTAINABLE DEVELOPMENT AND PUBLIC AWARENESS

16.2.1

DESCRIBE EXISTING AND PLANNED ACTIVITIES, INDICATING THE TARGET GROUP(S) AND NUMBERS OF PEOPLE INVOLVED (AS "TEACHERS" AND "STUDENTS") AND THE AREA CONCERNED

In terms of education and training, since 1998 the Municipality has been developing the Environmental Education Programme in the 1st Cycle of Porto Santo (PEA), which involves students in the 3rd and 4th year of primary school in the municipality and aims to teach the local natural heritage, and identify possible environmental problems. Another objective is to promote the circular economy and good environmental practices, by presenting some solutions to be adopted in everyday life that will make Porto Santo more environmentally sustainable. Currently the PEA involves about 100 students and 10 teachers monthly during the school year.

As of 2006, the Municipality of Porto Santo became a partner in the Eco-Schools programme, being implemented in all public and private schools. This programme involves the entire educational community of the island, including 6 establishments, which in the current academic year has 891 students, 143 teachers and 71 non-teaching staff, and has been supported by the municipality for its importance and positive impact on the sustainability of the county. Among the initiatives, some of the prizes awarded under this programme, including the GEA – Terra Mãe (Mother Earth) School Competition, from its first edition, in the academic year 2015/2016 stands out. This competition, sponsored at national level by the National Commission of UNESCO, the Portuguese Committee for the International Programme of Geosciences of UNESCO and in partnership with them, at regional level, by SRA and with SRE, explores students' skills in the area of geosciences, enhancing knowledge of geology and local / regional geography, to then understand the themes in general, additionally integrating accredited training for teachers.

The Municipality also develops a programme of awareness and information for the citizens, throughout the year, which includes the commemoration of ephemeris (International Day of Forests, World Earth Day and Geological Heritage, World Environment Day, World Conservation Day Ecological Day, European Day Without Cars and Day of the Native Forest), implementing activities aimed at the community in general and school-age youth, in order to involve everyone in the common cause. In addition, it has fostered training in the environment aimed at the school community and other target audiences as tour guides and continues to advance the annual Environmental Symposium, which in 2018 had its 13th edition addressing the importance of the application of Porto Santo to the UNESCO Biosphere Reserve. Also worthy of mention are some cultural initiatives carried out throughout the year, such as the Municipal Festivals,

which take place at the end of June, in tribute to Saint John that involve the whole local community in reviving traditions in a festive atmosphere. Also noteworthy are the festivities of Santo Amaro, Carnival, Women's Day, Christmas, Easter, Harvest Festival and Elder's Day, always with great participation of the local community, providing the residents with activities and moments of social interaction that are crucial for the exchange of values and experiences, bringing together generations and promoting the memories of the elders as an identity of a people - identity heritage - expressing intergenerational experiences in relationships of sharing and collective growth.

Since March 2018, the CMPS has published a monthly cultural agenda for the dissemination of cultural, environmental and sporting activities carried out by various local entities, in addition to its official Facebook page. It should be pointed out that, since 2018 was the 600th anniversary of the discovery of Porto Santo, a specific itinerary was dedicated to this celebration, which will run until the end of 2019 and which has the support of the Regional Government of Madeira, through SRTC. Among the initiatives, we highlight the creation of itineraries, the establishment of thematic workshops on painting of tiles, exhibitions, concerts, tributes to local personalities, and the construction or restoration of a "casa de salão", a typical house, with threshing floor to show the wealth of traditional local architecture. All the activities carried out or to be carried out were projected to diversify and increase the cultural offer of the Island of Porto Santo and reach the various age groups, including children and adolescents.

In fact, memories and collective identity establish the bridges for the construction of a more inclusive region. The impetus of sessions for the sharing of "popular cultural wisdom", cultural and musical events, the publication of magazines / cultural notebooks with popular songs, life stories, short stories, poems, chants, idioms, among other records in the memoirs of the elderly are a significant milestone in the proposed Reserve.

In turn, the Senior Citizen University of Porto Santo (USPS), under the purview of DRAPS and Porto Santo Parish Council, has been developing a series of activities aimed at stimulating the local population, aged over 55 years, since 2013. Taking into account the life experience of its students, this university developed, in the academic year 2017/2018, some activities to revitalise local traditions. Of these, folklore and the senior choir are worthy of note, and the recovery of old songs that many are unaware of. The art of the palm heart was also imparted, with the USPS opening its doors to the local community, to all interested in learning handicrafts, providing the conviviality and the transmission of knowledge with the collaboration of a local artisan. Intergenerational activities have also been encouraged, and our seniors have visited schools to tell stories from Porto Santo's past.

The USPS has thus assumed a significant role in enhancing and revitalizing local traditions, with a focus on training and informing from the earliest years of schooling, fundamental for strengthening the cultural identity of young people, contributing to the appreciation of their roots and traditions because, as someone said, "we only protect what we know."

For the 2018/2019 school year, DRAPS and the USPS proposed to SRE the implementation of the "This is My, Your, Our Porto Santo" Project in the EB1 / PE of Porto Santo with the students of the 1st cycle of Basic Education. The Project is divided into two themes to be developed in two semesters: "Flavours of My Land" and "Songs of Olden Times". The first consists of the elaboration of traditional recipes such as the "escarpada" (typical bread), "salada de serralha" (sow whistle salad), and "rosquilhas" (ring-shaped pastry), with the support of students from the Senior Citizen University of Porto Santo, while the second theme involves the learning of songs of a bygone age compiled by the same students.

The local senior population will also benefit from the project "Being Elderly - Paths of an Active Life" developed by the Cultural and Recreational Association of Espírito Santo (ACES), with the aim of fostering elderly self-esteem, strengthening neighbourhood bonds, and cognitive stimulation, consequently combating loneliness and social exclusion, and the Day Centre of the Our Lady of Compassion Foundation, where the senior population can enjoy a variety of recreational activities, with the aim of tackling isolation, providing conviviality between users and the practice of various motor activities.

The Museums of Porto Santo - Columbus House and Brum do Canto Centre, within the framework of Porto Santo's candidacy for the Biosphere Reserve, commemorating the 600th anniversary of the official discovery of Porto Santo and the proclamation of 2018 as the European Year of Cultural Heritage, developed in the 2017/2018 school year a series of activities open to the community as a whole and others specific to the school population, which dealt with topics from the discovery by Portuguese navigators, João Gonçalves Zarco and Tristão Vaz Teixeira, traditions such as songs, to capacity for resilience with the construction of materials from endogenous resources, amongst others. Seeking to promote and contribute to the revitalisation of local crafts, they invited artisans and challenged the community to listen to their stories and produce materials through the workshops. In order to make these stories more credible to the youth, the students of the Senior Citizen University of Porto Santo were invited to go to different schools to talk about "their" past, their stories of a Porto Santo different from the one young people know today.

In addition to these cultural initiatives are also the environmental ones; mention should also be made of the fact that the implementation of selective waste collection in 2001 has brought new concepts and challenges to the community, which has one of the highest rates of recycling of RAM. The role of ARM - Waste and Water Services of Madeira, S.A., the entity that manages municipal solid waste, in public awareness, has been decisive in this success.

In turn, the IFCN, IP-RAM had a programme of activities for the academic year 2017-2018 composed of workshops, lectures, exhibitions and visits to Islet of Cima, with the purpose of informing, sensitizing and disseminating to the general population the natural and cultural heritage of Porto Santo. The programme included a visit to Islet of Cima with the participation of 12 people and a lecture on the Network of Protected Marine Areas of Porto Santo (RAMPPS) with 30 participants. Planting and habitat restoration actions were also carried out, with four sowing, re-planting and planting activities involving 79 students from the 1st cycle of the B1 School of the Campo de Baixo and five sowing, re-planting and planting activities with a participation of 79 students of the 1st cycle and further education. The activities of the CMPS with the support of the IFCN were also highlighted, namely a forest clean-up in Pico do Facho with 30 participants and three planting actions with the participation of 65 people.

The Biosphere Reserve of the Island of Porto Santo advocates a series of activities aimed at education for sustainable development, which include, amongst others, the organisation of initiatives that contribute to the revitalisation and valorisation of local products, traditions and heritage throughout the year; survey of local traditions (songs, dances, harvests, seeding, gastronomy, ethnobotany, legends, amongst others); development of nature conservation activities aimed at different local audiences and visitors, in strict cooperation to safeguard natural and ecological values; organisation of thematic sessions and working groups to discuss issues relevant to the Biosphere Reserve; creation of educational projects, targeting different age groups, promoting the Biosphere Reserve and holding an annual event to publicise and advance the Biosphere Reserve. These endeavours will be developed alongside the community, in collaboration with different entities, with the purpose of awakening in the participants, awareness of the wealth of natural and cultural heritage, as well as good practices of local sustainable development.



AN

Hiking



16.2.2

WHAT FACILITIES AND FINANCIAL RESOURCES ARE (OR WILL BE) AVAILABLE FOR THESE ACTIVITIES?

The Municipality of Porto Santo will continue the PEA, a programme already ingrained in the educational community of Porto Santo, with very positive results, and will continue to support the Eco-Schools programme, complementary programmes that guarantee the involvement of this community in the accomplishment of common objectives of sustainable development in the territory. It also intends to continue and enhance the dynamics of the Office of the Environment and Culture, also through the opening of the Centre for Cultural and Environmental Interpretation of Porto Santo, guaranteeing an information and awareness programme for the community, allocating funds and other necessary resources. The IFCN, IP-RAM has a support station for the works developed by this service in the marina of Porto Santo where it welcomes visitors with a small exhibition appurtenant to the Network of Marine Protected Areas of Porto Santo. The trip to Islet of Cima is made by semi-rig accompanied by Guards of Nature.

In financial terms, there are mechanisms of support for the interventions advocated in rural development, as well as for actions related to the conservation of species and habitats advocated for Porto Santo. Such instruments may be used in pilot or demonstration projects of disparate actions in the area of conservation, soil protection, forestation and risk prevention, enhancement of landscapes and promotion of rural development, involving the Porto Santo community in the preservation and enhancement of its endogenous resources and making jointly responsible as a mentor or auxiliary in the process of education and awareness for sustainable development in the proposed Reserve.

The Rural Development Programme for the Autonomous Region of Madeira - PRODERAM 2020 (with FEADER funding) contemplates in its architecture measures that meet what is recommended in the Action Plan of the candidate Reserve, such as: Measure 08 "Investments in development of forest areas and improving the viability of forests", as part of the "sustainability" objective; Measure 15 "Forest environmental and climatic services and forest conservation", included in the same objective, for the achievement of environmental objectives and mitigation and adaptation to climate change. This programme also includes other measures of interest in rural development, with particular interest in the 'organic farming' component, restoration of walls and investments in agricultural holdings, expressed in the improvement of accessibility and availability of water and more efficient use of resources in rural buildings with significant interest to the Island of Porto Santo.

The Operational Programme for the Autonomous Region of Madeira 2014-2020 - "Madeira 14-20" is a Support Programme of the European Regional Development Fund (ERDF) and the European Social Fund (ESF) for Growth and Development and employment for the Autonomous Region of Madeira. Structured in eleven Priority Axes, its architecture and objectives are framed in the thematic areas of Competitiveness and Internationalisation, Sustainability and Efficiency in the Use of Resources, Human Capital and Social Inclusion; and may be an important source of public or private investment

needed for the different areas of priority intervention contemplated in the "Sustainable Porto Santo" project.

The LIFE + 2014-2020 (LIFE +) programme seeks to focus on sustainable development and the achievement of the objectives and targets of the EU 2020 Strategy, the 7th Environment Action Programme and other relevant EU strategies and plans on environment and climate. The environmental sub programme shall include as priority areas: Environment and resource efficiency, Nature and Biodiversity and Governance and information on the environment; the Climate Action sub programme covering the three priority areas: Mitigation of climate change, Adaptation to climate change and Governance and information on climate.

Under the Regional Development and Investment Plan and Development Programme of the Regional Administration (PIDDAR), several programmes and measures are contemplated that integrate the different projects to be developed by the regional administration bodies. The activities to be developed and their estimated budgets are defined annually.

Educational activities for sustainable development will take place either in schools or in closed public spaces, such as the auditorium of the Town Hall, or outside, according to the objectives to be achieved and the methodology to be adopted.

The activities promoted by the CMPS are duly financially funded in the annual city budget, where a heading has also been created for expenses related to costs related to the application of Porto Santo to the Biosphere Reserve. In relation to the actions foreseen in the scope of this application, promoted by the municipality, and given its strategic importance in achieving the defined objectives, the budget will be strengthened in 2020 in order to meet the expected expenses.

Farrobo's Experimental Field, under the auspices of DRAPS, besides providing assistance and support to farmers, has played an important role in research, serving as a testing ground for various crops and providing training to farmers, with the support of the Regional Directorate of Agriculture and the University of Madeira, in order to improve sustainable production processes and productivity. There is also a Museum of Agricultural Artefacts and several fruit trees, grape varieties, legumes and various crops, which were once part of the agricultural culture and the Porto Santo diet, as is the case of peas and lentils, which are intended to revitalize the local gastronomy. This space intends to continue to support the level of research and to bring the wider community in contact with farming practices and the rural world, giving special support to all farmers, but with a focus on encouraging the younger generations in farming.

16.3

CONTRIBUTION TO THE WORLD NETWORK OF BIOSPHERE RESERVES

16.3.1

HOW WILL THE PROPOSED BIOSPHERE RESERVE CONTRIBUTE TO THE WORLD NETWORK OF BIOSPHERE RESERVES, ITS REGIONAL AND THEMATIC NETWORKS?

The candidate Biosphere Reserve takes local, regional, national and international cooperation as a priority, and thus intends to be an active partner in relevant thematic networks such as the National Network of Biosphere Reserves, REDBIOs and the World Network of Reserves in Islands and Coastal Zones, amongst others, contributing to the bolstering of the environmental and cultural diversity of the Global Network.

Porto Santo intends to distinguish itself by its status and enhanced name of "Sustainable Porto Santo", as a reference model of integrated, participatory and sustainable management of natural resources, with emphasis on energy sustainability and circular economy.

The road to sustainability in the energy sector is mainly focused on implementation of the Smart Fossil Free Island project, which is based on energy efficiency and the transition from fossil fuels to renewable energy sources, supported by new technologies and a robust and intelligent electrical system, with energy storage infrastructure, decentralised production of electricity from renewable sources, information and communication systems, sensitisation, automation, electric vehicle charging management and consumption management.

Thus, based on its small size, suitable for the implementation and monitoring of results of new technologies and concept projects, within the circular economy, the candidate Biosphere Reserve will serve as a model of sustainability to be developed in other territories. The involvement of the community in the objectives of the Reserve and the need for a new vision of the valuation and conservation of natural and cultural heritage, will allow the testing of development mechanisms for the fostering of entrepreneurship, fundamental for small territories whose development mainly depends on local resources.

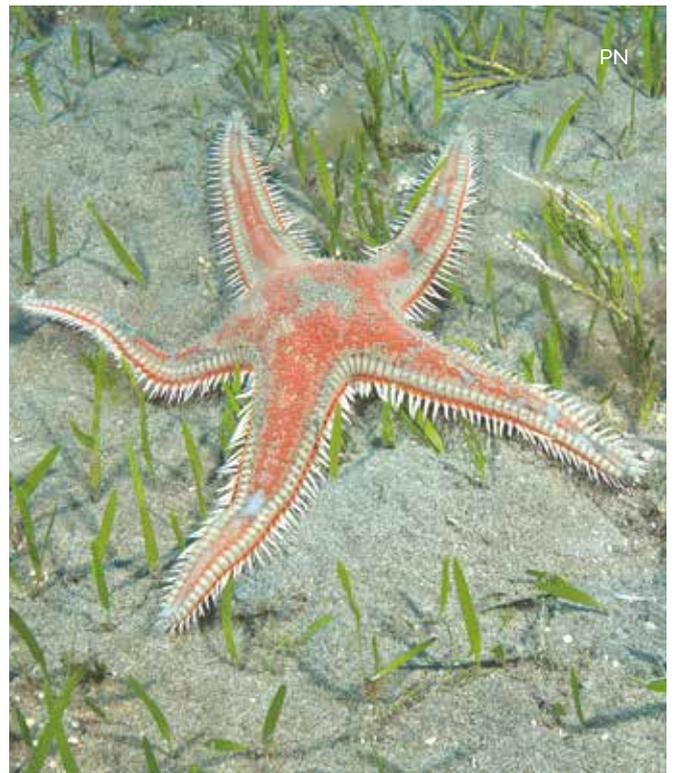
16.3.2

WHAT ARE THE EXPECTED BENEFITS OF INTERNATIONAL COOPERATION FOR THE BIOSPHERE RESERVE?

Despite its status of insularity and as an outermost region subject to geographical constraints and various shortcomings, Porto Santo aims to ennoble its natural values and resources, making them compatible with human needs and ensuring their management in perpetuity.

The international cooperation of the proposed Reserve with other Biosphere Reserves will allow sharing experiences and the exchange of knowledge, consolidating it as a laboratory of experiences in the areas of nature conservation, safeguarding natural and cultural heritage, as well as economic and social development. In addition, it will make known and promote, within the framework of the networks of Biosphere Reserves, the knowledge and products and services provided by the Biosphere Reserve of the Island of Porto Santo.

The status of Biosphere Reserve will serve to project Porto Santo nationally and internationally, valuing its endogenous resources, bio geodiversity, historical and cultural heritage, traditions and its rurality.



Starfish (*Astropecten aranciacus*)

16.4

INTERNAL AND EXTERNAL COMMUNICATION CHANNELS AND MEDIA USED BY THE BIOSPHERE RESERVE

16.4.1

IS (WILL) THERE (BE) A BIOSPHERE RESERVE WEBSITE? IF YES, WHAT IS ITS URL?

Until the establishment of the proposed Reserve, information is available on the website <https://portosantobiosfera.madeira.gov.pt>, as well as on the website of the Porto Santo Municipal Council (<https://cm-portosanto.pt>) and the Regional Directorate for Public Administration of Porto Santo (<https://www.madeira.gov.pt/draps>).

16.4.2

IS (WILL) THERE (BE) AN ELECTRONIC NEWSLETTER? IF YES, HOW OFTEN WILL IT BE PUBLISHED?

A monthly electronic leaflet on the Reserve is being created in a joint production between CMPS and DRAPS.

16.4.3

DOES (WILL) THE BIOSPHERE RESERVE BELONG TO A SOCIAL NETWORK (FACEBOOK, TWITTER, ETC.)?

The candidate Reserve advocates its continued and progressive dissemination in social networks. Thus, a Facebook page is being created and other communication tools such as Twitter and Instagram as part of its promotion and communication strategy.



Hoopoe (*Upupa epops*)



17 GOVERNANCE, BIOSPHERE RESERVE MANAGEMENT AND COORDINATION

17.1

MANAGEMENT AND COORDINATION STRUCTURE

17.1.1

WHAT IS THE LEGAL STATUS OF THE BIOSPHERE RESERVE?

The zonation defined for the proposed Biosphere Reserve, considering the specific geomorphological characteristics of the territory, its insularity and the high number of endemisms from Macaronesia, Madeira and Porto Santo, was based on the existence of conservation statutes (supranational scope), the presence of biological values (habitats and species) of exceptional or critical importance, as well as the verification of good practices compatible with the conservation and promotion of biodiversity associated with tourism, forestry, agriculture and fishing activities. In this sense, the different zones and legal mechanisms in effect were taken into consideration, namely the established or classified protected areas and the respective conservation statutes and regulations, in terms of the compatibility of uses and occupation forms of the territory. The legal regime established for the distinct protected or classified areas is important to highlight, namely:

1. The Network of Protected Marine Areas of Porto Santo (RAMPPS)

- Regional Legislative Decree No. 32/2008/M of 13th August - Network of Protected Marine Areas of Porto Santo, which establishes its legal regime;
- Resolution No. 1295/2009, published in JORAM (Official Gazette of the Autonomous Region of Madeira), Series I, Supplement, No. 100 of 2nd October - Proof of the Management Plan of the Network of Protected Marine Areas of Porto Santo (POGRAMPPS);
- Ordinance No. 75/2010, published in JORAM, Series I, No 93 of 1st October, regulates the conditions of use of the Network of Protected Marine Areas of Porto Santo.

2. Special Areas of Conservation (ZEC)

(i) Pico Branco (PTPOR0002)

- Resolution No. 751/2009, published in JORAM, Series I, 2nd Supplement, No 66 of 2nd July - Transfer from Site of Community Interest (SIC) to Special Area of Conservation (ZEC) "Pico Branco - Porto Santo (PTPOR0002)";
- Order No. 73/2009, published in JORAM, Series II, Supplement, No. 119 of 24th June - Approves the measures proposed in the Programme of Management and Conservation Measures of the site of community interest "Pico Branco - Porto Santo (PTPOR0002)";

(ii) Islets of Porto Santo (PTPOR0001)

- Resolution No. 1341/2009, published in JORAM, Series I, No. 112 of 3rd November, which classifies the Site of Community Interest (SIC) for the Special Area of Conservation (ZEC) of SIC "Islets of Porto Santo (PTPOR0001)".

3. SIC (SIC cetaceans)

- Resolution No. 699/2016, published in JORAM, Series I, Supplement, No. 181 of 17th October, approving the inclusion of the Madeira Cetaceans Site in the List of Sites of the Autonomous Region of Madeira;
- Included in the Natura 2000 network - PTMMD0001 Cetaceans of Madeira, under EU Commission's Implementing Decision (EU) 2019/20 of 14th December 2018, which adopts the seventh update of the list of sites of Community importance in the Macaronesian biogeographical region [number C (2018) 8532].

4. Forest Planning and Management

- Resolution No. 600/2015, published in JORAM, Series I, No. 119 of 11th August, which approves the Regional Plan for Forestry Management Plan in the Region (PROF RAM).

The Regional Plan for Forestry in the Autonomous Region of Madeira (PROF-RAM) is an instrument of sectoral policy which focuses on forest areas and aims to establish the appropriate technical and institutional framework to ensure an effective and efficient use of the forest areas of the Autonomous Region of Madeira, both by the public sector and the private sector, based on a long-term perspective of economic, environmental and social sustainability.

5. Others

Moreover, the Land-use Plan for the Autonomous Region of Madeira (POTRAM) and the Municipal Master Plan (PDM) of Porto Santo apply to the entire administrative area of the county of Porto Santo, being local and regional instruments common to the three types of Zones of the proposed Biosphere Reserve and guarantee the use of space in a way which is compatible with their functions.

17.1.2

WHAT IS THE LEGAL STATUS OF THE CORE AREA(S) AND THE BUFFER ZONE(S)?

The zonation established for the Core Areas and Buffer Zones is absolutely compatible with the limits of the existing protected areas, as well as of the areas covered by special land planning and management instruments. Together, the Core Areas and the Buffer Zones correspond to or integrate protected areas which are either classified as ZECs within the Natura 2000 Network, having a dimension to guarantee, in the long term, the ecological integrity and the preservation of the favourable state of conservation of habitats and species present.

The proposed Reserve's Core Areas, with 2559,71 ha, include ZEC PTPOR0002, on the Island of Porto Santo, the land section of the Network of Protected Marine Areas of Porto Santo (ZEC PTPOR0001) and the surrounding marine areas of the Islet of Baixo and the Islet of Cima (ZEC PTPOR0001), in accordance with the zonation stipulated in point 7.4.

Pursuant to the provisions of the legal instruments in effect, its management occurs in accordance with the Plan for the Management of the Network of Protected Marine Areas of Porto Santo (POGRAMPPS) approved in 2009, with the Programme of Management and Conservation Measures for the Site of the Pico Branco Natura 2000 Network - Porto Santo (PTPOR0002) approved in 2009 and with the Regional Plan for Forest Management in the Autonomous Region of Madeira (PROF-RAM) approved in 2015.

The Buffer Zones, with 11534,21 ha, include land areas on the Island of Porto Santo and the sea up to the 50m bathymetric line. The marine section includes the area bordering the land area of the Island of Porto Santo and the area surrounding the Core Areas established for the islets of Baixo and Cima. The land section includes the area adjacent to the marine component of the RAMPPS allocated to the Islet of Cima and the strip bordering Pico Branco - Porto Santo (PTPOR0002), extending along the mountain range in a northeast-southwest direction, governed according to the PDM of Porto Santo and in accordance with the principles underlying the General Law of Forestry Policy - Law No. 33/96 of 17th August and the forestry standards defined in the PROF-RAM.

17.1.3

WHICH ADMINISTRATIVE AUTHORITIES HAVE COMPETENCE FOR EACH ZONE OF THE BIOSPHERE RESERVE (CORE AREA(S), BUFFER ZONE(S), TRANSITION AREA(S))?

The administrative authority with jurisdiction in the Core Areas is the Regional Secretariat of the Environment and Natural Resources (entity of the Madeira Regional Government), through the Forest and Nature Conservation institute (IFCN, IP-RAM) and the Regional Directorate for Land Planning and Environment (DROTA). The human activities management programmes in these areas are subject to their binding opinion.

The administrative authority with jurisdiction in Buffer Zones is the Regional Secretariat of the Environment and Natural Resources (SRA), through IFCN, IP-RAM and DROTA, within the scope of spatial planning and maritime

public domain; the Porto Santo Municipal Council, under the terms of its jurisdiction; and the Regional Secretariat of the Agriculture and Fisheries, through the Regional Directorate for Fisheries (DRP), in accordance with their duties and responsibilities.

The Transition Area includes the other areas of Porto Santo, extending to the bathymetric curve of 100m, being governed by the instruments of land management in effect, without prejudice to the current sectoral plans.

17.1.4

CLARIFY THE RESPECTIVE COMPETENCE OF EACH OF THESE AUTHORITIES. MAKE A DISTINCTION BETWEEN EACH ZONE IF NECESSARY AND MENTION ANY DECENTRALIZED AUTHORITY

The Regional Government of Madeira and the Porto Santo Municipal Council have several competences in the area of the proposed Biosphere Reserve. The Regional Government manages the Core Areas and a significant part of the Buffer Zones. In the Transition Zones, in addition to the Regional Government's attributions in the environmental, cultural, rural, tourism, energy and transport areas, the local Municipal Council has a territorial administrative function at the level of the Municipality.

The Porto Santo Municipal Council is also responsible for issuing licences for various entities of the Regional Government of Madeira, namely the Regional Secretariat of the Environment and Natural Resources (IFCN, IP-RAM and DROTA) and the Regional Secretariat of the Agriculture and Fisheries (DRP and the Regional Directorate of Agriculture (DRA)).

The IFCN, IP-RAM, in accordance with Regional Legislative Decree No. 21/2016/M of 13th May, which establishes this Institute, is responsible for promoting the nature conservation, planning and sustainable management of biogeodiversity, the landscape and forest resources, as well as the associated resources and management of protected areas. DROTA, as defined in Regional Regulatory Decree No. 13/2016/M of 22nd April, which approves its organisational structure, is responsible, among other things, for executing and coordinating the regional policy on the management of the quality of the environment, water, sea, coast, spatial planning and urban development, contributing to a sustainable and coordinated development between the various sectoral policies.

17.1.5

INDICATE THE MAIN LAND TENURE (OWNERSHIP) FOR EACH ZONE

The land areas integrated in the Core Areas are mostly public property, approximately 85%. The Transition Area and part of the Buffer Zone are mostly private property.

17.1.6

IS THERE A SINGLE MANAGER/COORDINATOR OF THE BIOSPHERE RESERVE OR ARE SEVERAL PEOPLE IN CHARGE OF MANAGING IT? IF ONE MANAGER/COORDINATOR, WHO DESIGNATES AND EMPLOYS HIM/HER (NATIONAL AUTHORITIES, ENVIRONMENTAL ADMINISTRATIVE AGENCY, LOCAL AUTHORITIES)?

The Manager is the president of the non-profit private law Association. The role of the manager is to advance the Biosphere Reserve and to ensure the execution of the daily management functions delegated. Till the Association creation, the management of the Reserve will be assured by the GT-PSRB.

17.1.7

ARE THERE CONSULTATIVE ADVISORY OR DECISION-MAKING BODIES (E.G., SCIENTIFIC COUNCIL, GENERAL ASSEMBLY OF INHABITANTS OF THE RESERVE) FOR EACH ZONE OR FOR THE WHOLE BIOSPHERE RESERVE?

The Advisory Board will be comprised of representatives from the Espírito Santo Cultural and Recreational Association (ACES), the Association of Producers of the Island of Porto Santo (APIPS), the Senior Citizen University of Porto Santo (USPS), the Association of Promotion of the Autonomous Region of Madeira, the Águas e Resíduos da Madeira, S.A. (ARM – Water and Waste Services), the Commercial and Industrial Association of Funchal (ACIF), the Regional Directorate for Agriculture (DRA), the Regional Directorate for Spatial Planning and Environment (DROTA), Empresa de Eletricidade da Madeira, SA (EEM – Electric Company), the Regional Directorate for Tourism (DRT), the Regional Directorate for Culture (DRC), the Regional Directorate for Fisheries (DRP), and other interested entities who wish to participate.

The Scientific Board will be made up of representatives of the University of Madeira, other universities and research centres, ARDITI, the Insular Association of Geography, among others, as well as researchers.

The Advisory Board shall be responsible for ensuring the participation of the association in the execution and follow-up of actions and projects, as well as validating and disseminating the achieved results. It will meet quarterly, or whenever deemed necessary, to evaluate the implementation of the actions and the results achieved in relation to the objectives and targets. In turn, the Scientific Board will have the task of deliberating on matters of a technical or scientific nature, with the objective of stimulating and monitoring the management of the Biosphere Reserve, meeting once a year, or more, whenever deemed necessary.

17.1.8

HAS A COORDINATION STRUCTURE BEEN ESTABLISHED SPECIFICALLY FOR THE BIOSPHERE RESERVE?

The Management and Coordination Structure of the Biosphere Reserve of the Island of Porto Santo will be comprised of a non-profit Private Law Association, which will pursue its objective once all legal formalities have been finalised, including the approval of its statutes and the celebration of a public deed of incorporation.

The association, with powers to revitalise, monitor, review and disseminate the Action Plan, will have private founding associates and public founding associates [RAM (e.g. SRA, DRAPS) and CMPS] and will be governed in accordance with the provisions of its statutes.

The association's members shall include the general assembly, the board of directors and the supervisory board, whose constitution, composition, powers and functioning will be provided for in the articles of association. In turn, the General Assembly will establish the advisory board and the scientific board.

The Biosphere Reserve is coordinated by the non-profit private law Association with powers to advance, monitor, revise and disseminate the Action Plan, comprised of private founding members and public founding members. The non-profit private law Association will have the power to decide on the defining and implementation of management strategies and activities, which will be governed by an internal regulation to be approved by its members. It is the responsibility of these members to coordinate and monitor management, to promote and authorise the use of the brand and associated logotypes in products and services, and propose actions and projects to advance and promote the objectives of the Biosphere Reserve of the Island of Porto Santo. When established, the Association will define the frequency of meetings in internal regulations.

Temporarily, until the association starts its activity, the governance, management and coordination of the Biosphere Reserve is ensured by the GT-PSRB.

17.1.9

HOW IS THE MANAGEMENT/COORDINATION ADAPTED TO THE LOCAL SITUATION?

The Action Plan of the Biosphere Reserve of the Island of Porto Santo, as an operational tool in the management of the Reserve, was based on the results of an analysis of the reference situation, as well as a shared reflection on the reality of Porto Santo and consultation of the Porto Santo community in general, gathering objectives and measures to be implemented or to be continued, reflecting their aspirations in sectoral areas relevant to the sustainable development of Porto Santo.

The participation of the community through its representation in the non-profit private law Association takes on an active and influential role in the implementation and management of the Reserve, in the implementation of the Action Plan and in the development of projects to advance and promote its objectives. This participation and its contributions were

and will be the guarantee of the continuous identification of the community with the Reserve and its objectives and actions.

The integration in the management of representatives from entities present in the territory daily and with a strong relationship of proximity to the community, as well as governmental entities and others, all with a relevant role for the sustainable development of the Island of Porto Santo, are fundamental in ensuring the effective management of a reserve whose implementation of development policies is heavily dependent on the cohesion of its territory.

17.1.10

IS THERE A PROCEDURE FOR EVALUATING AND MONITORING THE EFFECTIVENESS OF THE MANAGEMENT?

The non-profit private law Association ensures the monitoring of the Action Plan of the Biosphere Reserve of the Island of Porto Santo, in liaison with the Advisory Board and Scientific Board, in order to evaluate the implementation progress of the actions, achieved through projects and initiatives, and verifies the fulfilment of the goals outlined, with the collection of evidence and defined indicators to assess results with statements from annual reports, business plans and, thereby, evaluate and monitor the effectiveness of the management of the Reserve.

17.2

CONFLICTS WITHIN THE BIOSPHERE RESERVE

17.2.1

DESCRIBE ANY IMPORTANT CONFLICTS REGARDING THE ACCESS OR THE USE OF NATURAL RESOURCES IN THE AREA CONSIDERED (AND PRECISE PERIOD IF ACCURATE). IF THE BIOSPHERE RESERVE HAS CONTRIBUTED TO PREVENTING OR RESOLVING SOME OF THESE CONFLICTS, EXPLAIN WHAT HAS BEEN RESOLVED OR PREVENTED, AND HOW THIS WAS ACHIEVED FOR EACH ZONE.

There are no, nor are there expected to be, conflicts in the candidate Reserve. However, any and all possible situations which may arise will be analysed using the planning and management instruments in effect, at the level of the applicable legislation, namely, the authorisation and licensing regimes and the environmental impact assessment.

17.2.2

IF THERE ARE ANY CONFLICTS IN COMPETENCE AMONG THE DIFFERENT ADMINISTRATIVE AUTHORITIES IN THE MANAGEMENT OF THE BIOSPHERE RESERVE, DESCRIBE THESE

There are no conflicts at this level. Administrative management in the Core Areas and Buffer Zones is clearly defined in terms of competence within the scope of the legislation for the classified or protected areas, or by subjecting forest areas to total or partial forest regimes, or by constraints imposed by POTRAM or by the PDM of Porto Santo, which limit certain areas to very conditioned use, the management in the Transition Area also being defined, in terms of regulatory instruments connected to land-use planning. It is also important to highlight the prolific work carried out over the years between these entities on behalf of the Island of Porto Santo.

17.2.3

EXPLAIN THE MEANS USED TO RESOLVE THESE CONFLICTS, AND THEIR EFFECTIVENESS

There are no, nor are there expected to be, conflicts at this level. Nevertheless, if any conflict situation is foreseen, clarifications deemed necessary and mediation by the Management and Coordination Structure should be ensured, in close collaboration with local authorities and other administrative authorities involved in the management of the Reserve.

17.3

REPRESENTATION, PARTICIPATION, AND CONSULTATION OF LOCAL COMMUNITIES

17.3.1

AT WHAT STAGES IN THE EXISTENCE OF A BIOSPHERE RESERVE HAVE LOCAL PEOPLE BEEN INVOLVED: DESIGN OF THE BIOSPHERE RESERVE, DRAWING UP OF THE MANAGEMENT/ COOPERATION PLAN, IMPLEMENTATION OF THE PLAN, DAY TO DAY MANAGEMENT OF THE BIOSPHERE RESERVE? GIVE SOME SPECIFIC EXAMPLES

The participation and involvement of the local community in the preparation process of the application of the Biosphere Reserve of the Island of Porto Santo occurred since the intention was announced, with a public session held in early January 2018 in the city of Porto Santo. A number of contacts were made with representatives of local public and private institutions to disseminate the objectives of the MAB Programme and its importance for the sustainable development of Porto Santo and to welcome participatory proposals for the establishment of the Biosphere Reserve of the Island of Porto Santo.

The GT-PSRB established for the preparation of Porto Santo's application for Biosphere Reserve, with representatives from the CMPS, DRAPS, AGFPS, SRA, IFCN IP-RAM and AREAM, met several times throughout the process and contributed, in a decisive way, towards the preparation of this application. From January to February 2018, various participatory sessions were held with representatives from various sectors of the island, namely tourism, education, transport, culture, religion and traditions, in which 50 people actively participated. They learned about the concept of a Biosphere Reserve and contributed with suggestions which enabled the work group to evaluate the reference situation and define the starting point for this application. Meetings were held for presentation and analysis of the zonation as well as other relevant aspects regarding the management of the Reserve, between January and April 2018, prior to the first presentation and public consultation of the application form, between 12th April and 2nd May 2018.

Since the announcement of the application, several initiatives have contributed to the enlightenment and involvement of the community. The inclusion of activities in the Environmental Education Programme for the Basic Schools of the 1st Cycle focusing only on the application, involving about 100 students monthly, and the representation of the Municipality of Porto Santo in the Eco-Schools councils of all the educational establishments of the island, has enabled the establishment of common goals and objectives within the school communities and, simultaneously, their involvement in this application. There has also been an effort to disseminate information about the Reserve to the community, through newsletters and information media, available in the main public places of the island. The "Porto Santo - UNESCO Biosphere Reserve: Opportunities and Challenges" event, organised by the GT-PSRB, from 28th to 30th November 2018, aimed at the general public, was important due to its objective of publicising this UNESCO award and raising awareness on how this award can contribute to the promotion of the area's natural and heritage values and to the development of the local economy based on sustainable tourism. This initiative has proved to be of significant importance within the local community, giving the stakeholders a spirit of belonging to a land with the potential to become a UNESCO Biosphere Reserve. This initiative was validated by the Regional Secretariat of the Education as a training action for teachers and included the pedagogical workshop "Porto Santo - Biosphere Reserve: What are the Contributions from the Eco-Schools Programme?" It focused on the importance of education and the Eco-Schools in the involvement of the local community in the Biosphere Reserves. The event garnered the interest of about 80 people.

The CMPS has played a fundamental role in training in the environmental field by conducting periodic training actions directed at the school community and other target audiences such as tour guides, whose performance is predominant in terms of external projection of the Biosphere Reserve's values. In this context, the Training Action for Tourism Agents with the theme "Porto Santo: Identity with a Future", which took place from 2nd to 5th April 2019, involving a group of 25 trainees, presented to this group of local revitalisation, a whole projection, a sense of belonging and accountability, conducive to the success of this island, the candidate for Biosphere Reserve. In fact, with theoretical sessions and field

trips, with topics such as: 'Geodiversity of the Island of Porto Santo: Culture, Tourism and Environment', 'Life Paths', 'Landmark Heritage of the Island of Porto Santo', 'Biodiversity. Biophysical Recovery of Porto Santo', 'Porto Santo. Population and depopulation – 15th-18th century', 'History in Nature' has roused remarkable interest and involvement, reflected in the results of the practical activity with the theme, 'Porto Santo in winter: 10 reasons to visit'. The work developed and presented by the various groups, constituted for this purpose, have revealed projections of diversified activities, in scenarios which are perfectly in keeping with what is recommended for the functionality of the Biosphere Reserve of the island of Porto Santo.

From 20th March to 22nd April 2019, the improved version of the application dossier, including the proposed Action Plan, was subject to public consultation, enabling both consultation and contributions by the population. 24th June commemorates the Day of the County and the celebrations involve the whole local community in a week of cultural entertainment, culminating in the presentation of the traditional parade through the main streets of the city. Taking the current application into consideration and the importance of Porto Santo's involvement in it, the CMPS decided that the annual theme for 2019 would be: BIOSPHERE RESERVE OF PORTO SANTO, whilst also paying tribute to local personalities and entities, which deserve special mention for their service to the community and the Island of Porto Santo and its identity. In collaboration with the local radio station and with the aim of publicising the application to the community, spots, two per week, are being broadcast from July to September 2019, highlighting aspects of the cultural identity of Porto Santo and its natural heritage, reinforcing the importance of this application and promoting community involvement in it.

Within the scope of this application and in order to promote knowledge of aspects related to the culture of Porto Santo, as well as encourage the involvement of the local community, the Museums of Porto Santo – Columbus House and Brum do Canto Centre, with the support of DRAPS, developed a series of activities open to the entire community and others specific to the school population, which addressed topics which range from the Island's discovery by the Portuguese navigators, João Gonçalves Zarco and Tristão Vaz Teixeira, to traditions such as songs, resilience of construction using materials from endogenous resources, among others. Seeking to promote and contribute to the revitalisation of local crafts, artisans were invited and the community was challenged to listen to their stories and produce pieces in workshops. In order to make these stories more credible for the younger students, the students of the Senior Citizen University of Porto Santo were invited to visit the various schools to talk about "their" past, their stories of a Porto Santo different from what the youth know today. In all these initiatives, the importance of the current application and its objectives was highlighted to the participants.

Also within the scope of this application, DRAPS and the Senior Citizen University of Porto Santo implemented the Project "This is my, your, our Porto Santo", in the EB1/Pré (pre-school and primary school) of Porto Santo with students from the 1st cycle of Basic Education. The project included two themes "Flavours of my land" and "Songs of yesteryear". The first consisted in the elaboration of traditional recipes such as the "escarpiação" (typical bread),

“salada de serralha” (sow whistle salad) and “rosquilhas” (ring-shaped pastry), with the help of students from the Senior Citizen University of Porto Santo. The second theme involves the learning of songs and nursery rhymes from the past, which have been collected by the students of the University. The development of these and other projects, together with the school community, enabled, in coordination with the Regional Secretariat of the Education, that in the next school year the subject of Artistic Expression of the 1st cycle of basic education will include songs and nursery rhymes of Porto Santo in its curricular programme. In addition, it has also resulted in local handicraft techniques, namely through the use of palm hearts, being included in the visual art and technological education subjects of the 2nd and 3rd cycles.

All these initiatives resulted in the population being informed and mobilised in a proactive and participatory process, giving legitimacy and credibility to the application process, as well as enabling the collection of contributions for the constitution and proper functioning of the Biosphere Reserve of the Island of Porto Santo.

17.3.2

DESCRIBE HOW THE LOCAL PEOPLE (INCLUDING WOMEN AND INDIGENOUS COMMUNITIES) HAVE BEEN, AND/OR ARE REPRESENTED IN THE PLANNING AND MANAGEMENT OF THE BIOSPHERE RESERVE (E.G., ASSEMBLY OF REPRESENTATIVES, CONSULTATIVE GROUPS)

The population of Porto Santo has freely assumed a progressive involvement in this process of developing the application of Porto Santo to Biosphere Reserve, individually or through organisations or associations. The GT-PSRB has also been able to count on the participation of representatives from different fields and areas of civil society, public entities and research centres, in conjunction with public consultation periods and events with the involvement of the local community.

It is expected that a greater focus on awareness will result in a greater effectiveness in assuming a determining role for the local population in participating in the decisive moments of the implementation and management of the Biosphere Reserve. The Action Plan, due to its interdisciplinary nature and the necessary involvement of local development stakeholders, will contribute to each inhabitant of the island being able to identify with the Biosphere Reserve of the Island of Porto Santo, instituting principles of responsibility and social participation.

The non-profit private law Association, in coordination with the Advisory Board and the Scientific Board, which includes representatives of social, economic and environmental actors of local development, will ensure the participation of society. The community will be heard and taken into consideration in the planning, execution and follow-up of actions and projects, as well as in the validation of the results achieved and their dissemination.

17.3.3

DESCRIBE THE SPECIFIC SITUATION OF YOUNG PEOPLE IN THE PROPOSED BIOSPHERE RESERVE (E.G., POTENTIAL IMPACTS OF THE BIOSPHERE RESERVE ON YOUTH, CONSIDERATION OF THEIR INTERESTS AND NEEDS, INCENTIVES TO ENCOURAGE THEM TO PARTICIPATE ACTIVELY IN THE GOVERNANCE SYSTEM OF THE BIOSPHERE RESERVE)

The fact that all of the island's educational establishments have received the Eco-Schools award has facilitated the involvement of school communities in the application of Porto Santo to Biosphere Reserve, as we have verified the interest and involvement of students and teachers in the definition and achievement of common goals and objectives. The secondary school of the island has been particularly involved through the students of the Professional Course of Environmental and Rural Tourism, who have been ambassadors of the candidacy. The students were and are involved in the application through curricular transversality (formal education) and also through informal education through the learning acquired with the senior population on culture, traditions and also through field trips to consolidate knowledge about the environment.

In the future, the candidate Biosphere Reserve will constitute a space of excellence for youth involvement in training and skills-building activities, as well as the promotion of youth entrepreneurship programmes aimed at the creation of employment opportunities, in close partnership with public entities responsible for youth and other associations, such as young farmers, non-governmental environmental organisations and others. It should be noted that the Regional Government of Madeira has young entrepreneurship and employment programmes available, for the creation of youth employment opportunities.

17.3.4

WHAT FORM DOES THIS REPRESENTATION TAKE (E.G., COMPANIES, ASSOCIATIONS, ENVIRONMENTAL ASSOCIATIONS, TRADE UNIONS)?

Local communities are represented by a number of public or private entities, such as schools, universities, scientific institutions, producer associations, farmers and hunters, cultural and recreational associations, local businesses and local authorities. In accordance with the governance, management and coordination model of the Reserve, these agents are members of the Advisory Board and the Scientific Board of the non-profit private law Association, which meets at least once a year, and whenever necessary for specific or sectoral issues, thus ensuring the broad participation of society.

17.3.5

ARE THERE PROCEDURES FOR INTEGRATING THE REPRESENTATIVE BODY OF LOCAL COMMUNITIES (E.G., FINANCIAL, ELECTION OF REPRESENTATIVES, TRADITIONAL AUTHORITIES)?

The representative bodies of local communities are members of the non-profit, private law Association, the Advisory Board and the Scientific Board, whose members are defined by delegation of powers by the entities which they represent or by invitation to institutions or individuals who stand out in different sectors of activity which is important for the Reserve.

17.3.6

HOW LONG-LIVED ARE CONSULTATION MECHANISMS (PERMANENT ASSEMBLY, CONSULTATION ON SPECIFIC PROJECTS)?

The periodic meetings of the non-profit, private law Association, the Advisory Board and the Scientific Board ensure community involvement and transparency in the management and coordination of the Reserve. Whenever it becomes necessary, due to the relevance of the subject, public consultation mechanisms will be put in place in order to guarantee the participation and involvement of the community.

17.3.7

WHAT CONSULTATION MECHANISMS HAVE BEEN USED, AND WHO HAS BEEN INVOLVED? ARE THEY FOR SPECIFIC PURPOSES OR LONG-TERM? WHAT IMPACTS HAVE THEY HAD ON DECISION-MAKING PROCESSES (DECISIONAL, CONSULTATIVE OR MERELY TO INFORM THE POPULATION)?

The preparation of Porto Santo's application for Biosphere Reserve was based on a series of actions and outreach and public consultation sessions, involving a set of stakeholders in order to assess the interest and motivation of the community, as well as to gather contributions for the formalisation and design of the Action Plan for the Biosphere Reserve of the Island of Porto Santo. These initiatives, within the local community, encouraged the debate and clarification of the candidacy project, as well as helped understand or clarify the hopes and expectations of the Porto Santo people, in a progressive and dynamic involvement.

During the application process of Porto Santo to the Biosphere Reserve, five sectoral participatory sessions were held with local development agents and three sessions were held to inform the population, two of them in the scope of the public consultation carried out. Two training actions were also carried out, one for teachers and the other for local tourism agents. The process of preparing the application for the Biosphere Reserve of the Island of Porto Santo has also involved direct consultations with the scientific community, non-governmental organisations and various services of the regional and local administration.

Suggestions and opinions have been considered in the preparation of the final proposal. The GT-PSRB brings together technicians and representatives of different public institutions and non-governmental organisations, and projects its action in a dynamic which is open to knowledge and knowledge sharing.

These consultation mechanisms have already been described in item 13.4 'Consultation process used to design the Biosphere Reserve', point 13 of this application form, so its content is referenced for the purposes of informational complementarity.

The entities promoting the application were involved in the various consultation mechanisms. The role of the local entities - CMPS, DRAPS and AGFPS - should be highlighted in this process due to their proximity to the community of Porto Santo and economic agents, promoting greater dissemination and contributing to the development of the sense of belonging to a territory which values the priority of heritage and cultural values and which considers itself a UNESCO Biosphere Reserve.

17.3.8

DO WOMEN PARTICIPATE IN COMMUNITY ORGANIZATIONS AND DECISION-MAKING PROCESSES? ARE THEIR INTERESTS AND NEEDS GIVEN EQUAL CONSIDERATION? WHAT INCENTIVES OR PROGRAMMES ARE IN PLACE TO ENCOURAGE THEIR REPRESENTATION AND PARTICIPATION (E.G.: WAS(WERE) A "GENDER IMPACT ASSESSMENT(S)" CARRIED OUT)?

Article 13 of the Constitution of the Portuguese Republic enshrines the principle of equality, giving all citizens the same dignity before the law and states that no one can be privileged, benefited, prejudiced, deprived of any right or exempt from any duty due to ancestry, sex, race, language, territory of origin, religion, political or ideological beliefs, education, economic status, social status or sexual orientation. The legal system in effect thus ensures full rights and gender equality, which will be ensured, as well as improved if necessary.

17.4

MANAGEMENT/COOPERATION PLAN/POLICY

17.4.1

IS THERE A MANAGEMENT/COOPERATION PLAN/POLICY FOR THE BIOSPHERE RESERVE AS A WHOLE?

The Biosphere Reserve of the Island of Porto Santo will be managed in accordance with the strategies defined in the respective Action Plan prepared by the work group for this application, based on the SWOT analysis of the territory and the consultation and discussion sessions which took place between January 2018 and April 2019.

The Action Plan, referred to in Annex III, covers the entire Biosphere Reserve and is articulated with the regulations of the Network of Protected Marine Areas and classified areas, as well as with other applicable legal and planning instruments.

17.4.2

WHICH ACTORS ARE INVOLVED IN PREPARING THE MANAGEMENT/COOPERATION PLAN? HOW ARE THEY INVOLVED?

For the preparation of the Action Plan, the entities which are part of the GT-PSRB, such as CMPS, DRAPS, AGFPS, SRA, IFCN IP-RAM, AREAM were directly involved.

These institutions are responsible for implementing and streamlining the activities contained in the Action Plan, being committed to involving and mobilising other individual and collective actors to achieve the objectives of the Biosphere Reserve of the Island of Porto Santo.

17.4.3

DO LOCAL AUTHORITIES FORMALLY ADOPT THE MANAGEMENT/COOPERATION PLAN? ARE LOCAL AUTHORITIES MAKING REFERENCE TO IT IN OTHER POLICIES AND/OR PLANS? IF SO, PLEASE PROVIDE DETAILS.

After the period of the last public consultation (between 20th March and 22nd April 2019), the Action Plan was approved by the Porto Santo Municipal Council, as well as by the Regional Government of Madeira, and the related entities are required to register their actions in their prospective documents (Activity Plan and Budget).

17.4.4

WHAT IS THE DURATION OF THE MANAGEMENT/COOPERATION PLAN? HOW OFTEN IS IT REVISED OR RENEGOTIATED?

The Action Plan of the Biosphere Reserve of the Island of Porto Santo will have a time frame of five years, providing for an annual or even multiannual financial programming, and the Management and Coordination Framework will be responsible for monitoring its execution. Revisions to the Plan will coincide with the timetable established for the defined goals, based on the Progress Reports, and it may be necessary to reformulate actions or adjust objectives and targets, under the responsibility of the Management and Coordination Framework, in strict cooperation with the various entities or local contacts.

17.4.5

DESCRIBE THE CONTENTS OF THE MANAGEMENT/COOPERATION PLAN. DOES IT CONSIST OF DETAILED MEASURES OR DETAILED GUIDELINES? GIVE SOME EXAMPLES OF MEASURES OR GUIDELINES ADVOCATED BY THE PLAN?

The Action Plan, to be consulted in Annex III, was developed in accordance with the strategies defined for the sustainable development of the Biosphere Reserve

of the Island of Porto Santo. Its guiding principles are the compatibility of the preservation/conservation of the natural values and the historical-cultural heritage with local economic activities, boosting the circular economy, the green economy, the blue economy and the low carbon economy, and consequently, the sustainable management of the territory and the enhancement of existing resources, whilst improving the well-being of populations.

Based on these assumptions, several intervention priorities were defined: Priority 1: Image and identity; Priority 2: Social, economic and cultural activities; Priority 3: Nature conservation; Priority 4: Social participation and Priority 5: Climate changes, in accordance with the Action Plan of the Biosphere Reserve of the Island of Porto Santo (Annex III).

For each priority, several specific objectives have been defined to be achieved with the implementation of the Biosphere Reserve of the Island of Porto Santo, with the respective indicators being marked to assess their achievement. In turn, the various actions to be carried out by different entities, who take on the role of promoters, committing themselves to their physical realisation and financial availability, within the scope of their annual investment programmes, have been registered.

17.4.6

INDICATE HOW THIS MANAGEMENT/COOPERATION ADDRESSES THE OBJECTIVES OF THE PROPOSED BIOSPHERE RESERVE

The Action Plan of the Biosphere Reserve of the Island of Porto Santo (Annex III) is guided towards the essential objectives of conservation of biodiversity, natural resources and landscape, of local development based on the promotion of renewable energies, green economy and guaranteeing environmental training and education, research and knowledge transfer among the various actors, whilst being subjected to constant monitoring of the respective indicators of sustainable development.

Its structuring in crucial strategic priorities - Image and identity; Social, economic and cultural activities; Nature conservation; Social participation; and Climate changes, is in line with the objectives of the Biosphere Reserve, the MaB Programme, the Lima Action Plan and the 2018-2025 Portuguese Biosphere Reserve Action Plan, adjusted to the broad guidelines for the sustainable development of Porto Santo and respecting the major objectives of the 2030 Agenda for Sustainable Development.

17.4.7

IS THE PLAN BINDING? IS IT BASED ON A CONSENSUS?

The Action Plan was defined based on the results of the public consultation actions in the local community, focusing on different areas relevant to the application of Porto Santo to the Biosphere Reserve, namely: Nature Conservation, Tourism, Education, Transportation, Agriculture, Forestry and Fisheries, Civil Construction, Culture and Heritage, Commerce, Restaurants and Hotels and Leisure and Religious Activities. In addition to discussing the challenges, proposals were presented for

actions to be developed by different local agents and the availability of community intervention was considered. The Action Plan was subjected to public consultation between 20th March and 22nd April 2019, and was explained on 12th April 2019, during a clarification session which took place in the auditorium of the Porto Santo Municipal Council, without any objections having been made.

The Action Plan of the Biosphere Reserve of the Island of Porto Santo assumes a legal nature by its approval in the local Municipal Council. Thus, proving the consensus and participation of the parties involved in the application process, as well as the other entities that promote the actions or activities projected for the Biosphere Reserve. In addition, this Plan of Action was approved by the Regional Government of Madeira (Annex III).

17.4.8

WHICH AUTHORITIES ARE IN CHARGE OF THE IMPLEMENTATION OF THE PLAN, ESPECIALLY IN THE BUFFER ZONE(S) AND THE TRANSITION AREA(S)? PLEASE PROVIDE EVIDENCE OF THE ROLE OF THESE AUTHORITIES

It will be the responsibility of the Management and Coordination Structure of the Biosphere Reserve of the Island of Porto Santo to implement the Action Plan in partnership with the other public and private entities involved.

17.4.9

WHICH FACTORS IMPEDE OR HELP ITS IMPLEMENTATION (E.G.: RELUCTANCE OF LOCAL PEOPLE, CONFLICTS BETWEEN DIFFERENT LEVELS OF DECISION-MAKING)

The involvement of local development actors and the establishment of sound strategic partnerships are facilitating factors in achieving the objectives of the Reserve. In addition to the small size of the Island of Porto Santo, the proximity between the entities, between the entities and the local community and the history of joint work, which dates back to the start of the territory's settlement, are also facilitating factors.

17.4.10

IS THE BIOSPHERE RESERVE INTEGRATED IN REGIONAL/NATIONAL STRATEGIES? VICE VERSA, HOW ARE THE LOCAL/MUNICIPAL PLANS INTEGRATED IN THE PLANNING OF THE BIOSPHERE RESERVE?

The application of the Biosphere Reserve of the Island of Porto Santo is part of the sustainable development and cohesion strategies of the Autonomous Region of Madeira (RAM), in conjunction with the National MaB Committee, the National Commission of UNESCO and the 2018-2025 Action Plan of the Biosphere Reserves of Portugal.

The Regional Government of Madeira has a wide range of incentives, programmes, policies and strategic documents

which aim to develop, support and stimulate the economic, social, cultural and environmental dimensions of the RAM, which includes the Island of Porto Santo and its specificities, not only in terms of its socio-economic reality, but also of its natural heritage, biogeodiversity, cultural values, typical products, handicrafts, mild climate, hospitable and welcoming nature and unique landscape.

Among the numerous documents, mention should be made of: Programme of the XII Regional Government of Madeira (2015-2019); Regional Economic and Social Development Plan for the 2014-2020 period, referred to as the 'Madeira Commitment@2020'; Regional Strategic Guidance Document "Madeira Commitment@2020" (2013); Rural Development Programme of the RAM for 2014-2020 (PRODERAM 2020); RUP 2020 Action Plan for the RAM (2013); Regional Strategy for Forests of the RAM (2014); Regional Plan for Forest Management of the RAM (2015); Regional Strategy for Climate Change; as well as others which will be implemented in the period after 2020.

Within the scope of the current Government Programme, it is pertinent to highlight the importance attributed to Porto Santo, specifically expressed in the following strategic objectives: - Creation of incentives for economic innovation, with special emphasis on the agro-food area and the provision of services peripheral to tourism; - Promotion of measures to aid in employment and increase the training and technical specialisation of the unemployed; - Strengthening and safeguarding the defence of the authenticity of the Island of Porto Santo, promoting sustained policies to defend the natural, cultural and environmental heritage; - Promotion of the destination and the Porto Santo brand, based on the authenticity of the territory and its population, fostering tourism promotion based on the uniqueness of the natural and cultural elements which characterise the island. Economy, employment, renewable energies, transport and tourism, education and sport, agriculture, environment and natural resources, social support and health are highlighted.

17.4.11

INDICATE THE MAIN SOURCE OF THE FUNDING AND THE ESTIMATED YEARLY BUDGET

The main sources of public funding of the Biosphere Reserve of the Island of Porto Santo are through the budgets of the entities which comprise the Regional Government of Madeira and the Porto Santo Municipal Council. Private investment will also be considered. Part of the investment may be co-financed under regional incentive systems, such as PRODERAM 2020, POISE - Operational Programme for Social Inclusion and Employment, Madeira 14-20 Programme (ERDF and ESF), MAC 2014-2020 (ERDF), LIFE 2014-2020 Programme (LIFE +), Support Programme for the Restaurant and Hotel Industry for the Acquisition of Regional Products, handicraft support programmes, incentive system for the recovery and maintenance of traditional landscapes, among other sources of financing.

The estimated budget for the 2020-2025 period is approximately 4500000.00 Euros.





17.5

CONCLUSIONS

17.5.1

IN YOUR OPINION, WHAT WILL ENSURE THAT BOTH THE FUNCTIONING OF THE BIOSPHERE RESERVE AND THE STRUCTURES IN PLACE WILL BE SATISFACTORY? EXPLAIN WHY AND HOW, ESPECIALLY REGARDING THE FULFILLMENT OF THE THREE FUNCTIONS OF BIOSPHERE RESERVES (CONSERVATION, DEVELOPMENT, LOGISTIC) AND THE PARTICIPATION OF LOCAL COMMUNITIES

The Management and Coordination Structure will play a key role in achieving the objectives of the proposed Biosphere Reserve. The work developed by the GT-PSRB, in which the entities integrated in the non-profit, private law Association are integrated, guarantees that they have already been made aware and are committed to the project and they are also aware and prepared for future challenges and opportunities. This is an added value, fundamental in ensuring the proper functioning of the Biosphere Reserve of the Island of Porto Santo.

The Biosphere Reserve of the Island of Porto Santo, from the start, intends to contribute to the improvement of the quality of life and economic development of the community, based on the conservation of biodiversity, the landscape and the cultural and traditional identity of Porto Santo. The designation of the Biosphere Reserve will reinforce the commitment of official entities, economic agents and the population with regard to the conservation of species and ecosystems, geodiversity and the promotion of a development model which preserves these natural values and uses them to create new investment and job creation opportunities, helping to maintain the population, particularly the young and skilled residents.

The proposed Biosphere Reserve is thus a platform for development and public participation, promoting training and environmental information for economic agents and the community in general, supported by the knowledge generated in research activities, as well as national and international cooperation with other Biosphere Reserves, with which it will work to explore new models of sustainable development and solutions to common problems.



18 SPECIAL DESIGNATIONS

NAME: Biosphere Reserve of the Island of Porto Santo

UNESCO WORLD HERITAGE SITE

RAMSAR WETLAND CONVENTION SITE

OTHER CONVENTIONS / INTERNACIONAL CONSERVATION DIRECTIVES (SPECIFY):

- Natura 2000 Network - ZEC Islets of Porto Santo (PTPOR0001)
- Natura 2000 Network - ZEC Pico Branco - Porto Santo (PTPOR0002)

OTHER CONVENTIONS / REGIONAL CONSERVATION DIRECTIVES (SPECIFY):

- Network of Protected Marine Areas of Porto Santo (RAMPPS)

LONG TERM MONITORING SITE (SPECIFY)

LONG TERM ECOLOGICAL RESEARCH (LTER SITE)

OTHER (SPECIFY):

- Important Bird and Biodiversity Areas (IBA), two IBA, one in the west part of the Porto Santo Island and other composed by Islet of Cal, of Cima and of Ferro, which integrate RAMPPS
- CORINE Biotope (Central Mountain Range of Porto Santo, Mountainous Massif of Ana Ferreira and Beach and Dune Zone), under the CORINE 85/338/CEE program



19 SUPPORTING DOCUMENTS

(TO BE SUBMITTED WITH NOMINATION FORM, ANNEX III)

- 1** Location and zonation map with coordinates
- 2** Land cover map
- 3** List of legal documents
- 4** List of land use and management/cooperation plans
- 5** Species list
- 6** List of main bibliographic references
- 7** Original Endorsement letters according to paragraph 5
- 8** Further supporting documents



20.1

CONTACT ADDRESS OF THE PROPOSED BIOSPHERE RESERVE

PORTO SANTO MUNICIPAL COUNCIL

Contact:

Rua Dr. Nuno Silvestre Teixeira,
9400-162 Porto Santo – Madeira, Portugal

Telephone: (+351) 291 980 640

Fax: (+351) 291 982 860

Email: geral@cm-portosanto.pt

Website: <https://cm-portosanto.pt>

20.2

ADMINISTERING ENTITY OF THE CORE AREA(S)

FOREST AND NATURE CONSERVATION INSTITUTE, IP-RAM

Contact:

Quinta Vila Passos, Rua Alferes Veiga Pestana, n.º 15
9054-505 Funchal – Madeira, Portugal

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Email: ifcn@madeira.gov.pt

Website: <https://ifcn.madeira.gov.pt>



20.3

ADMINISTERING ENTITY OF THE BUFFER ZONE(S)

FOREST AND NATURE CONSERVATION INSTITUTE, IP-RAM

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REGIONAL DIRECTORATE FOR PUBLIC ADMINISTRATION OF PORTO SANTO

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20.4

ADMINISTERING ENTITY OF THE TRANSITION AREA(S)

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ANNEXES

ANNEX I

MABNET

Directory of Biosphere Reserves (Biosphere Reserve Description)

Administrative details

Description

Main objectives of the biosphere reserve

Research

Monitoring

MABnet Directory of Biosphere Reserves

Biosphere Reserve Description

Administrative details

Country:

Portugal

Name of BR:

Biosphere Reserve of the Island of Porto Santo

Year designated: *(to be completed by MAB Secretariat)*

Administrative authorities (17.1.3)

Porto Santo Municipal Council

Regional Secretariat of the Agriculture and Fisheries

Regional Secretariat of the Environment and Natural Resources

Name contact: (20.1)

Porto Santo Municipal Council

Contact address: (including phone number, postal and email addresses) (20.1)

Rua Dr. Nuno Silvestre Teixeira, 9400-162 Porto Santo – Madeira, Portugal

Tel: (+351) 291 980 640

Email: geral@cm-portosanto.pt

Related links: (web sites, social networks) (16.4.3)

Website: <https://portosantobiosfera.madeira.gov.pt>

Description

General description: (site characteristics in 11.1; human population in 10)

The Biosphere Reserve of the Island of Porto Santo, extending 12km in the NE-SW direction, with a maximum width of 6km in the N-S direction, presents a very flattened and smooth morphology, reaching a maximum elevation of 517m in the Pico do Facho. Surrounded by a sea of turquoise waters, the landscape almost seems to have been painted with watercolours, emerging with such beauty in this small territory in this corner of the immense Atlantic. It is surrounded by six islets, which correspond to the prolongation of its major projections, extending into the ocean and corresponding to two shallows: Islet of Baixo or Cal (179m), Islet of Cima or Farol or Dragoeiros (121m), Islet of Ferro (115m), Islet of Fonte da Areia (79m), Islet of Cenouras (109m), Islet of Fora (100m), the Baixo do Meio and the Baixo dos Barbeiros.

The south-facing coastline is low and sandy, forming a wide bay comprised of a beach and associated dune field, extending approximately 7km, where the water is of excellent quality. The vast beach, marked by its golden sand, extends an invitation for reflection and poetry, an appeal to experiences, memories, and the magnitude of the being who prevails within each one of us. It contributes to the senses and emotions which ennoble the soul and characterise this island paradise as a UNESCO Biosphere Reserve location.

On the island, two areas of rugged terrain stand out, the pinnacles rising from these heights. The peaks, which can be seen from the sea, are always a part of both land and sea routes, whose presence is even more imposing due

to the flatness of the land. They are an invitation to adventure and the discovery of the hidden nooks and particularities they have to reveal, in a sharing of learning and discovery of knowledge to be enjoyed, in a scenery marked by the rurality of its landscapes, by human presence and the passage of time.

The 5173 inhabitants of the Island of Porto Santo live only in the Transition Area of the Biosphere Reserve, with greater population density on the southern coast, namely in the city of Porto Santo, where employability is the highest. In the urban centres furthest from the city centre, the rurality of its people, who shop at the more traditional grocery stores, who raise chickens or other domestic animals, who have small gardens and live in a quiet and peaceful way is more prominent. Traditions, particularly gastronomic and religious, are more deeply rooted in these communities.

Major ecosystem type: (14.1)

Characteristic land, coastal and marine ecosystems of the Macaronesian Biogeographic Region can be found on the Island of Porto Santo. The flora and fauna of the forests which were predominant in Europe during the Tertiary Period are noteworthy. In the coastal and marine environment, the presence of fossils which are witnesses to a reef period, which was also a precursor of dune formation, should be highlighted as well.

Major habitats & land cover types: (11.6)

The candidate Reserve has a high diversity of ecosystems and houses various types or representations of land, coastal and marine habitats, some of which are listed in Annex I of the Habitats Directive and which should be mentioned because of their representation capability: 1110 Sandbanks which are slightly covered by seawater all the time, 1140 Mudflats and sandflats not covered by seawater at low tide, 1160 Large shallow inlets and bays, 1250 Vegetated sea cliffs with endemic flora of the Macaronesian coasts, 2130 Fixed coastal dunes with herbaceous vegetation (“grey dunes”) and 8220 Siliceous rocky slopes with chasmophytic vegetation.

Bioclimatic zone: (11.5)

Aridity index resulting from the use of P/ETP. Mean annual precipitation (P)/ Mean annual potential evapotranspiration (ETP).

Areas	Annual Average Rainfall (mm)	Aridity Index		Core Areas	Buffer Zones	Transition Areas
		Penman	(UNEP Index)			
Hyper-arid	P<100	<0.05	<0.05			
Arid	100-400	0.05-0.28	0.05-0.20	x	x	x
Semi-arid	400-600	0.28-0.43	0.21-0.50			
Dry Sub-humid	600-800	0.43-0.60	0.51-0.65			
Moist Sub-humid	800-1200	0.60-0.90	>0.65			
Per-humid	P>1200	>0.90				

Location: (latitude & longitude) (6.1)

Geographical coordinates of the Biosphere Reserve of the Island of Porto Santo.

Cardinal Points	Latitude	Longitude
Most central point:	33.0912364	-16.361948
Northernmost point:	33.2027434	-16.420712
Southernmost point:	32.9842509	-16.390790
Westernmost point:	33.1932673	-16.446314
Easternmost point:	33.0286496	-16.255850

Total area: (ha) (7)

27310.54 ha

Core area(s): (7)

2559.71 ha

Buffer zone(s): (7)

11534.21 ha

Transition area(s): (7)

13216.62 ha

Different existing zonation: (7.4)

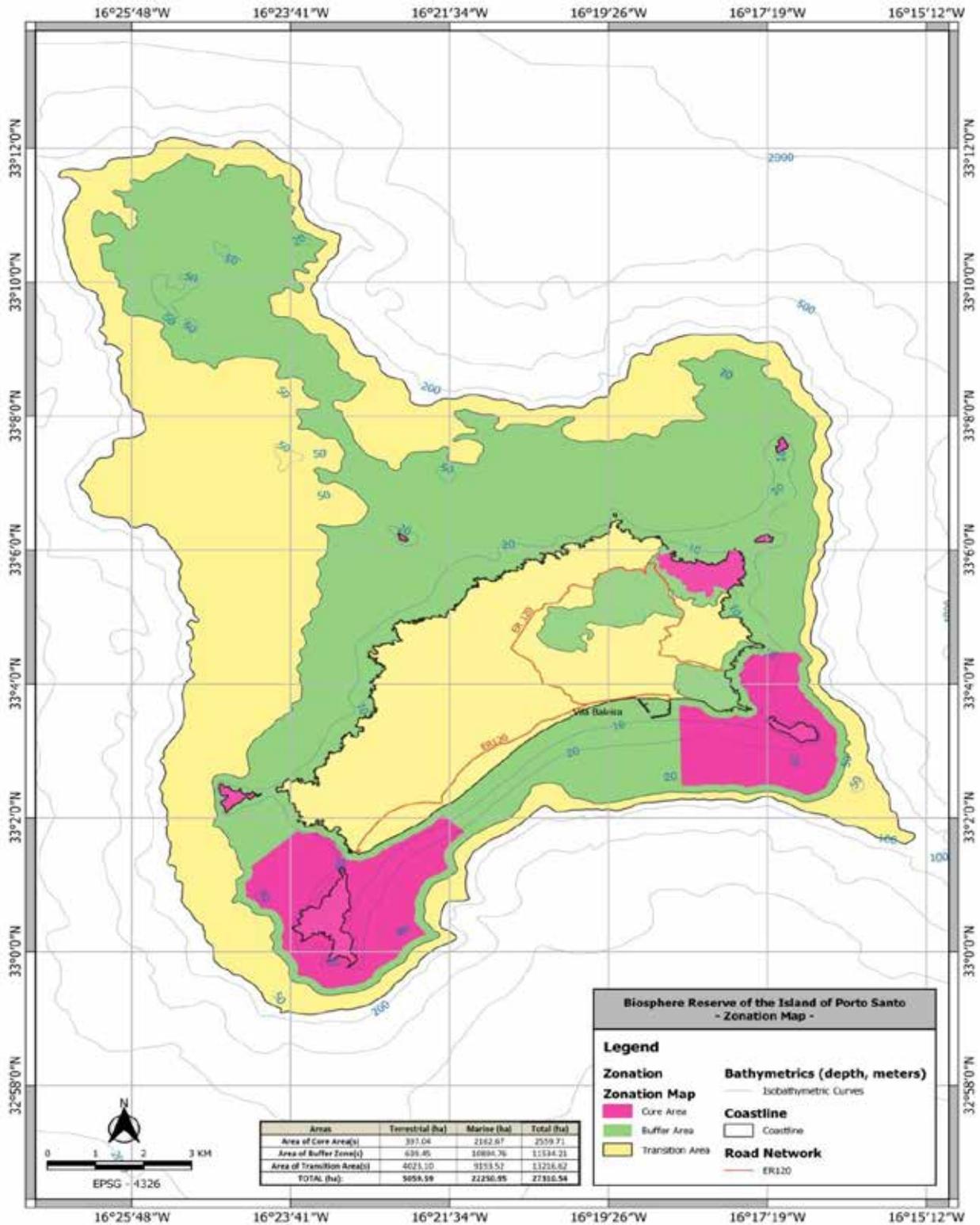
The natural, social, economic and cultural characteristics were taken into consideration in the zonation defined for the Biosphere Reserve of the Island of Porto Santo, having as a primary reference the susceptibility of the natural environments (marine, coastal and land), in function of human activities and their implications in the territory. The various legal instruments and mechanisms in effect were analysed and complied with, namely those connected to the existing protected areas and their respective conservation statutes and regulations in terms of compatibility of use and occupation of the territory. The established zonation is compatible with the boundaries of existing protected areas, as well as with spatial planning and management instruments and the regulation of economic activities.

The inclusion of all of Porto Santo in the Biosphere Reserve results from the respect for the island's unique geomorphology, which extends to the bathymetric line of 100m, in order to include the underwater platform and coincide with the natural boundaries of the island.

The delimitation of the three zoning levels (Core Area, Buffer Zone and Transition Area) also took into consideration the three functions defined for the Biosphere Reserves and the participatory process of construction of this Reserve.

Altitudinal range (metres above sea level): (11.2)
 517m (Pico do Facho).

Zonation map(s): (6.2)



Main objectives of the Biosphere Reserve

Brief description (13.1)

The objective of the Biosphere Reserve is to achieve a differentiated and pioneering finality in the field of sustainability, with a coordinated strategy of harmonisation between local development and respect for the conservation of nature and valorisation of its heritage and its people, with community involvement, and in accordance with the doctrines established under the MaB Programme, the Lima Action Plan and other plans defined for the UNESCO Biosphere Reserves.

Research

Brief description (16.1.1)

The Island of Porto Santo, by the nature of its heritage values and indigenous resources, has inspired scientists in various areas of knowledge: biology, geology, ecology, culture, among others, in the development of research projects, whose pursuit within the Biosphere Reserve, through networking with knowledge-holding partners, will boost its scientific status in a tribute to the consolidation of knowledge and the diffusion of science and shared accountability.

Monitoring

Brief description (16.1.1)

Continuing the work which is to be maintained over time, the Biosphere Reserve of the Island of Porto Santo will not only strengthen the focal point for the transfer of scientific and empirical knowledge, but also the implementation of a variety of new and efficient actions, contributing to the proper monitoring of the territory in the various heritage areas.

SPECIFIC VARIABLES
(THE RELEVANT PARAMETERS ARE FULL IN THE TABLE BELOW)

ABIOTIC		BIODIVERSITY	
Abiotic factors		Afforestation/Reforestation	X
Acidic deposition/Atmospheric factors		Algae	X
Air quality		Alien and/or invasive species	X
Air temperature		Amphibians	
Climate, climatology		Arid and semi-arid systems	
Contaminants		Autoecology	
Drought	X	Beach/soft bottom systems	X
Erosion	X	Benthos	
Geology	X	Biodiversity aspects	X
Geomorphology	X	Biogeography	
Geophysics		Biology	
Glaciology		Biotechnology	X
Global change	X	Birds	X
Groundwater		Boreal forest systems	
Habitat issues	X	Breeding	
Heavy metals		Coastal/marine systems	X
Hydrology		Community studies	
Indicators		Conservation	X
Meteorology		Coral reefs	
Modeling		Degraded areas	X
Monitoring/methodologies	X	Desertification	X
Nutrients		Dune systems	X
Physical oceanography		Ecology	
Pollution, pollutants		Ecosystem assessment	
Siltation/sedimentation		Ecosystem functioning/structure	
Soil	X	Ecosystem services	X
Speleology		Ecotones	
Topography		Endemic species	X
Toxicology		Ethology	
UV radiation		Evapotranspiration	
		Evolutionary studies/Palaeoecology	
		Fauna	X
		Fires/fire ecology	
		Fishes	X
		Flora	X
		Forest systems	X
		Freshwater systems	X
		Fungi	X
		Genetic resources	X
		Genetically modified organisms	

	Home gardens	
	Indicators	
	Invertebrates	X
	Island systems/studies	
	Lagoon systems	
	Lichens	X
	Mammals	X
	Mangrove systems	
	Mediterranean type systems	
	Microorganisms	
	Migrating populations	X
	Modeling	
	Monitoring/methodologies	X
	Mountain and highland systems	
	Natural and other resources	X
	Natural medicinal products	X
	Perturbations and resilience	X
	Pests/Diseases	
	Phenology	
	Phytosociology/Succession	
	Plankton	
	Plants	X
	Polar systems	
	Pollination	
	Population genetics/dynamics	
	Productivity	
	Rare/Endangered species	X
	Reptiles	
	Restoration/Rehabilitation	X
	Species (re) introduction	X
	Species inventorying	X
	Sub-tropical and temperate rainforest	X
	Taxonomy	
	Temperate forest systems	
	Temperate grassland systems	
	Tropical dry forest systems	
	Tropical grassland and savannah systems	
	Tropical humid forest systems	
	Tundra systems	
	Vegetation studies	X
	Volcanic/Geothermal systems	
	Wetland systems	
	Wildlife	X
SOCIO-ECONOMIC		INTEGRATED MONITORING

Agriculture/Other production systems	X	Biogeochemical studies	X
Agroforestry	X	Carrying capacity	X
Anthropological studies		Climate change	X
Aquaculture		Conflict analysis/resolution	
Archaeology	X	Ecosystem approach	X
Bioprospecting		Education and public awareness	X
Capacity building	X	Environmental changes	X
Cottage (home-based) industry		Geographic Information System (GIS)	X
Cultural aspects	X	Impact and risk studies	
Demography	X	Indicators	
Economic studies		Indicators of environmental quality	X
Economically important species	X	Infrastructure development	
Energy production systems	X	Institutional and legal aspects	
Ethnology/traditional practices/knowledge	X	Integrated studies	X
Firewood cutting	X	Interdisciplinary studies	X
Fishery	X	Land tenure	
Forestry	X	Land use/Land cover	X
Human health	X	Landscape inventorying/monitoring	X
Human migration		Management issues	
Hunting	X	Mapping	X
Indicators		Modelling	
Indicators of sustainability	X	Monitoring/methodologies	X
Indigenous people's issues		Planning and zoning measures	X
Industry		Policy issues	
Livelihood measures		Remote sensing	
Livestock and related impacts		Rural systems	X
Local participation	X	Sustainable development/use	X
Micro-credits		Transboundary issues/measures	
Mining		Urban systems	
Modelling		Watershed studies/monitoring	
Monitoring/methodologies	X		
Natural hazards			
Non-timber forest products	X		
Pastoralism			
People-Nature relations	X		
Poverty			
Quality economies/marketing			
Recreation	X		
Resource use	X		
Role of women			
Sacred sites			
Small business initiatives			
Social/Socio-economic aspects	X		

Stakeholders' interests	X		
Tourism	X		
Transports	X		

ANNEX II

PROMOTION AND COMMUNICATION MATERIALS FOR THE PROPOSED BIOSPHERE RESERVE

Press dossier

PROMOTIONAL SPOTS (RADIO) OF BIOSPHERE RESERVE OF THE ISLAND OF PORTO SANTO APPLICATION
(<https://portosantobiosfera.madeira.gov.pt>)

- Promotional *spot* Casa de Salão (mp3)
- Promotional *spot* Gastronomia (mp3)
- Promotional *spot* Ilheu da Cal (mp3)
- Promotional *spot* Matamorra (mp3)
- Promotional *spot* Moinhos de Vento (mp3)
- Promotional *spot* Praia (mp3)

PRESS DOSSIER

MADEIRA PAÍS MUNDO DESPORTO 5 SENTIDOS CASOS DO DIA BOA VIDA

Porto Santo a caminho da 'Reserva da Biosfera'

05 JAN 2018 - 07:12 PM



A candidatura da ilha do Porto Santo a galardão da UNESCO é liderada por Susana Fontinha e visa transformar a ilha num "laboratório vivo" de desenvolvimento sustentável e promotor de economia verde. Esta é a notícia que foi manuseada na edição impressa de hoje do DIÁRIO e onde damos a conhecer alguns dos detalhes que precedem esta decisão.

Também nesta edição, sabe que Paulo Cabrita, presidente da Câmara Municipal do Funchal foi condecorado arguido no âmbito do processo de queda de avaras na freguesia do Monte Idalina Perceirão e um financiamento da CMF também couberam nos agrados deste processo. A oposição diz que o tempo é da justiça e não de políticos, se o assunto afirmar estar de "reserva transição".

Nesta edição, destaque ainda para o Grupo Simão que se enquadra na lista dos melhores negócios do Mundo.

Nesta entrevista ao DIÁRIO, Philippe Miravalles, director hoteleiro em São Tomé e Príncipe afirma que o turismo sustentável deve ser meta prioritária.

Sabe ainda que em 2019 haverá mais reembolsos e maços DTS.

Por fim, o último destaque da primeira página vai para o desporto e põe o dedo nos apoios ao desporto regional para chegar mais cedo.

Tópicos

MADEIRA PAÍS MUNDO DESPORTO 5 SENTIDOS CASOS DO DIA BOA VIDA

Diário Notícias, 05/01/2018

<https://www.dnoticias.pt/madeira/porto-santo-a-caminho-da-reserva-da-biosfera-GA2570594>

MADEIRA PAÍS MUNDO DESPORTO 5 SENTIDOS CASOS DO DIA BOA VIDA

Porto Santo é candidato a Reserva da Biosfera

Susana Fontinha lidera equipa de trabalho que prepara dossier a apresentar em Maio

RICARDO MIGUEL OLIVEIRA / PORTO SANTO - 05 JAN 2018 - 09:40 PM



A Reserva Mundial de Biosfera é uma entidade atribuída pela UNESCO a certas áreas protegidas.

A candidatura da ilha do Porto Santo a Reserva da Biosfera ganha forma e está ser preparada de modo a ser formalizada em Maio deste ano.

Trata-se de um projecto que transforma o Porto Santo num "laboratório vivo" de desenvolvimento sustentável e pólo dinamizador de uma economia verde, que resultará na melhoria do bem-estar da população, aumento da eficiência no uso dos recursos naturais...

Tópicos

MADEIRA PAÍS MUNDO DESPORTO 5 SENTIDOS CASOS DO DIA BOA VIDA

Diário Notícias, 05-01-2018

<https://www.dnoticias.pt/impressa/hemeroteca/diario-de-noticias/porto-santo-e-candidato-a-reserva-da-biosfera-LI2569872>

RTP, 09-01-2018

https://www.rtp.pt/madeira/sociedade/porto-santo-candidato-a-reserva-da-biosfera_14618



SOCIEDADE

Porto Santo candidato a Reserva da Biosfera

Publicado 09 Jan, 2018, 15:43 / atualizado em 09 Jan, 2018, 15:44



A ilha do Porto Santo prepara-se para avançar com uma candidatura a Reserva da Biosfera, estatuto atribuído pela UNESCO. Um projeto que visa transformar a ilha dourada num verdadeiro "laboratório vivo" de desenvolvimento sustentável e pólo dinamizador de uma economia verde.

Susana Parada, Secretária Regional do Ambiente e Recursos Naturais, salienta que o "acréscimo de notoriedade terá impactos no turismo, no progresso socio-económico e na melhoria da qualidade de vida da população" e sublinha que é com "muito empenho e entusiasmo que o Governo Regional coordena esta candidatura a mais um galardão da UNESCO".

MADEIRA PAÍS MUNDO DESPORTO 5 SENTIDOS CASOS DO DIA BOA

dnoticiasopt



MADEIRA PAÍS MUNDO DESPORTO 5 SENTIDOS CASOS DO DIA BOA

Candidatura apresentada no Porto Santo

SENCALHA / PORTO SANTO - 10 JAN 2018 - 02:00



Candidatura à Reserva da Biosfera apresentada no Porto Santo. Foto: GMA



Conforme o DIÁRIO noticiou, o Porto Santo está a candidatar-se a Reserva da Biosfera da Unesco. Esta candidatura foi apresentada, ontem à tarde, no auditório do Centro Cultural e de Congressos do Porto Santo, às participações locais.

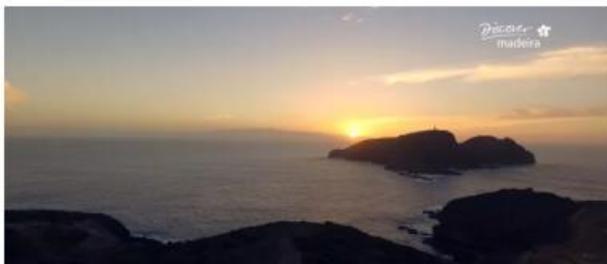
Anabela Trindade, que preside a nível nacional ao Man and the Biosphere Programme, falou ao sobre a importância desta candidatura: "A primeira...

Diário Notícias, 10-01-2018

<https://www.dnoticias.pt/impressa/hemeroteca/diario-de-noticias/candidatura-apresentada-no-porto-santo-AC2589323>

HENRIQUE CORREIA

Porto Santo candidato a Reserva da Biosfera já tem disponível documento preliminar



Porto Santo Reserva da Biosfera já tem candidatura em documento preliminar.

A Câmara Municipal do Porto Santo dá conta que "está disponível para consulta pública a versão preliminar do documento de candidatura do Porto Santo a Reserva da Biosfera", um texto que diz ser "de carácter evolutivo" e que, por isso, "será, após este período de consulta pública, finalizado e entregue em maio à consideração do Comité MAB (Man and the Biosphere) em Portugal".

Funchal Noticias, 12- 04-2018

<https://funchalnoticias.net/2018/04/12/porto-santo-candidato-a-reserva-da-biosfera-ja-tem-disponivel-documento->

NOTÍCIAS IMPRESSO TV RÁDIO

dnoticias.pt

MADERA PAÍS MUNDO DESPORTO 5 SENTIDOS CASOS DO DIA NOVA

Reserva da Biosfera entra hoje em discussão pública

Candidatura do Porto Santo a galardão da Unesco é apresentada hoje

RICARDO MEIRA BURELA / PORTO SANTO - 12 ABR 2018 - 00:00:35



Severina Notícias sobre o processo de candidatura.



O documento candidato à candidatura do Porto Santo a Reserva da Biosfera é hoje apresentado publicamente esta tarde no "Salão dos Cidadãos", momento que também marca o início do período de consulta pública que decorre até 2 de Maio.

A equipa multidisciplinar de trabalho liderada pela Secretaria Regional do Ambiente e Recursos Naturais, tem desenvolvido, desde Dezembro de 2017,

Diário Notícias, 12-04-2018

<https://www.dnoticias.pt/imprensa/hemeroteca/diario-de-noticias/reserva-da-biosfera-entra-hoje-em-discussao-publica-JC3004579>

NOTÍCIAS DESPORTO TELEVISÃO RÁDIO RTPPLAY ZÉL

RTP MADEIRA

MADEIRA 600 PROGRAMAS

RSS Facebook Twitter

SOCIEDADE

Candidatura do Porto Santo a Reserva da Biosfera está em consulta pública

Os contributos para a candidatura do Porto Santo a Reserva da Biosfera devem ser enviados até ao dia 2 de maio deste ano.

VNobrega | Publicado 17 Abr, 2018, 16:56 / atualizado em 17 Abr, 2018, 17:06



A câmara do Porto Santo já disponibilizou, para consulta pública, a versão preliminar do documento de candidatura do Porto Santo a Reserva da Biosfera.

O documento pode ser consultado on-line nos sites oficiais da Câmara Municipal do Porto Santo e na Direção Regional para a Administração Pública do Porto Santo e ainda em papel em cada uma das instituições.

A autarquia revela que a candidatura "de carácter evolutivo será, após este período de consulta pública, finalizado e entregue no início de maio à consideração do Comité MAB (Man and the Biosphere) em Portugal".

A Reserva da Biosfera é um estatuto atribuído pelo Programa Homem e Biosfera da UNESCO a certas áreas que reúnem características especiais e são definidas como laboratórios vivos onde se desenvolvem a conservação de paisagens, ecossistemas e espécies e o desenvolvimento sustentável a nível social, económico, cultural e ecológico.

RTP, 17-04-2018

https://www.rtp.pt/madeira/sociedade/candidatura-do-porto-santo-a-reserva-da-biosfera-esta-em-consulta-publica_17774

Ganhar candidatura a reserva da biosfera é “fundamental” para o Porto Santo

ERIDA FRANDO - GONÇALO MAIA / PORTO SANTO / 04 AGO 2018 / 16:05 H.



O XIII Simpósio Ambiental realizou-se nos dias 3 e 4 de Agosto, no Porto Santo.



Tópicos

AMBIENTE - CÂMARA MUNICIPAL DO PORTO SANTO -
CANDIDATURA - DIÁRIO - GALARDÃO - JOÃO BAPTISTA -
PATRIMÓNIO - QUALIDADE DE VIDA - RECONHECIMENTO -
RESERVA DA BIOSFERA - SUSANA FONTINHA

Chegou ao fim, este sábado, o XIII Simpósio Ambiental - “Da Colonização ao Povoamento”. Este evento decorreu no primeiro dia no auditório da Câmara Municipal do Porto Santo, onde foram convidados vários oradores de diversas áreas, tais como: Susana Fontinha, Mário Cachão e João Baptista.

Depois de terem sido debatidos vários temas relacionados com o ambiente, como seja a candidatura do Porto Santo a reserva da Biosfera, Susana Fontinha salientou ao DIÁRIO que “é um reconhecimento e valorização de todo o património natural, quer geológico da ilha, bem como a valorização e potenciar os aspectos culturais que o Porto Santo reúne”.

A palestrante sublinhou ainda que caso o galardão da reserva da biosfera seja atribuído ao Porto Santo, “irá contribuir da melhoria da qualidade de vida dos porto-santenses”. Esta candidatura é “fundamental para os porto-santenses”, reiterou.

Já Rubina Brito, a responsável pela área ambiental da autarquia local, disse ao DIÁRIO que “é muito importante” que, não só os porto-santenses mas também “todos aqueles que nos visitam, tenham a noção que o Porto Santo tem aspectos únicos e específicos que nós precisamos de urgentemente conhecer para podermos valorizar”.

“Temos aspectos da flora que são exclusivos da ilha, temos aspectos da geologia que são exclusivos do Porto Santo e também aspectos culturais. Uma coisa certa, temos muita potencialidade”, frisou Rubina Brito, acrescentando que este simpósio “tem tido esse objectivo de dar a conhecer esse património, principalmente aos porto-santenses”.

Já no segundo dia actividades integradas no XIII Simpósio Ambiental, os participantes realizaram vários passeios e visitas de estudo por diversos ‘geosítios’ da ilha do Porto Santo.

Diário Notícias, 04-08-2018

<https://www.dnoticias.pt/madeira/ganhar-candidatura-a-reserva-da-biosfera-e-fundamental-para-o-porto-santo-DC3510630>



REGIÃO



CANDIDATURA A RESERVA DA BIOSFERA É ESPERANÇA PARA O PORTO SANTO

Artigo | 01/11/2018 12:52

VOTAR

Idalino Vasconcelos aproveitou o seu discurso no âmbito das comemorações dos 600 anos do Descobrimento da Madeira e do Porto Santo para transmitir ao Presidente da República as "agruras da dupla insularidade".

O presidente da Câmara do Porto Santo ressaltou que "existem ainda dificuldades e arestas a limar, que tenham em persistir, por via de uma realidade que se faz sentir de dupla insularidade ou mesmo por via de uma forte sazonalidade". Todavia, prosseguiu, "os porto-santenses conhecem bem as agruras da dupla insularidade". "Uma condição que nos traz, frequentemente, dificuldades em vários aspetos, principalmente, na questão da mobilidade, quer aérea, quer marítima", prosseguiu, apontando questões como os transportes marítimos regionais e as suas ligações inter-ilhas, que privam a população de transporte marítimo regular, todos os anos, durante o mês de janeiro.

As taxas aeroportuárias também preocupam Idalino Vasconcelos, bem como as questões ligadas ao desemprego e à formação profissional e ainda o envelhecimento da população e a "falta de massa crítica" naquela ilha.

Faço a estas dificuldades, e edei salientou que "quem tem acesso imediato a questões fundamentais como mobilidade, cultura, saúde ou mesmo educação não sabe o que é viver numa ilha como a nossa. Não sabe o que é sentir na pele o peso da dupla insularidade". "Não sabe, porque não sente. Não sabe porque não o vive, não sabe porque não é um 'lhéu'".

Mas esperanças não faltam e, para o presidente da Câmara, a candidatura do Porto Santo a Reserva da Biosfera é uma "luz ao fundo do túnel".

"Será, sem dúvida, a forma de conseguirmos dar um impulso, na promoção e no desenvolvimento do Porto Santo, salvaguardando os nossos valores patrimoniais e o nosso legado de 600 anos de história", considera, acrescentando que tal distinção por parte da UNESCO, a par do inovador projeto "Porto Santo Sustentável" do Governo Regional, é fundamental para dinamizar uma estratégia que vise o desenvolvimento sustentável do nosso destino turístico".

Idalino aproveitou o momento para lembrar a nossa diáspora, que vive momentos difíceis, enviando um abraço fraterno e solidário, "porque também fazem parte desta comemoração".

Compartilhar em: Facebook Twitter

0 comentários

Ordenar por:

Jornal da Madeira, 01-11-2018

https://www.jm-madeira.pt/regiao/ver/45706/Candidatura_a_Reserva_da_Biosfera_e_esperanca_para_o_Porto_Santo



REGIÃO



MIGUEL FERNANDES

PORTO SANTO ACOLHE EVENTO SOBRE CANDIDATURA A RESERVA DA BIOSFERA

Artigo | 12/11/2018 09:15:04

VOTAR

No âmbito da candidatura da Porto Santo a Reserva da Biosfera, realizar-se-á nos próximos dias 28, 29 e 30 de novembro o evento "Porto Santo - Reserva da Biosfera da UNESCO: Oportunidades e Desafios". Esta iniciativa dirige-se ao público em geral e tem como objetivo dar a conhecer este galardão da UNESCO e elucidar sobre a forma deste poder contribuir para a promoção dos seus valores naturais e patrimoniais na procura do desenvolvimento da economia local baseada no turismo sustentável.

No dia 28, teremos duas mesas redondas: a primeira pretende promover a partilha de experiências com outras Reservas da Biosfera, designadamente da Macaronésia e a segunda será dedicada ao turismo sustentável e à forma como a Reserva da Biosfera pode contribuir para a concretização deste objetivo. No dia seguinte, as atividades incidirão mais sobre a importância da educação e do programa Eco Escolas no envolvimento da comunidade local no âmbito das Reservas da Biosfera.

No dia 30 realizar-se-á um passeio pela ilha com paragens em diversos locais de interesse cultural, histórico e natural, com o objetivo de dar a conhecer o valiosíssimo património da Porto Santo, subjacente a esta candidatura.

0 comentários

Ordenar por:

Jornal da Madeira, 12-11-2018

[https://www.jm-madeira.pt/regiao/ver/46617/Porto Santo a colhe evento sobre candidatura a Reserva da Biosfera](https://www.jm-madeira.pt/regiao/ver/46617/Porto_Santo_a_colhe_evento_sobre_candidatura_a_Reserva_da_Biosfera)



Mês:

Inscreva-se

Porto Santo reserva da Biosfera em debate de 28 a 30 de novembro

PORTO SANTO
Reserva da Biosfera da UNESCO
OPORTUNIDADES E DESAFIOS
28 novembro 29 novembro

28 novembro

- 14:00h - Mesa Redonda "Oportunidades e Desafios da Reserva da Biosfera da UNESCO"
- 15:00h - Mesa Redonda "Turismo Sustentável e a Reserva da Biosfera da UNESCO"
- 16:00h - Mesa Redonda "Oportunidades e Desafios da Reserva da Biosfera da UNESCO"
- 17:00h - Mesa Redonda "Oportunidades e Desafios da Reserva da Biosfera da UNESCO"
- 18:00h - Mesa Redonda "Oportunidades e Desafios da Reserva da Biosfera da UNESCO"

29 novembro

- 10:00h - Mesa Redonda "Oportunidades e Desafios da Reserva da Biosfera da UNESCO"
- 11:00h - Mesa Redonda "Oportunidades e Desafios da Reserva da Biosfera da UNESCO"
- 12:00h - Mesa Redonda "Oportunidades e Desafios da Reserva da Biosfera da UNESCO"
- 13:00h - Mesa Redonda "Oportunidades e Desafios da Reserva da Biosfera da UNESCO"
- 14:00h - Mesa Redonda "Oportunidades e Desafios da Reserva da Biosfera da UNESCO"

30 novembro

- 10:00h - Mesa Redonda "Oportunidades e Desafios da Reserva da Biosfera da UNESCO"
- 11:00h - Mesa Redonda "Oportunidades e Desafios da Reserva da Biosfera da UNESCO"
- 12:00h - Mesa Redonda "Oportunidades e Desafios da Reserva da Biosfera da UNESCO"
- 13:00h - Mesa Redonda "Oportunidades e Desafios da Reserva da Biosfera da UNESCO"
- 14:00h - Mesa Redonda "Oportunidades e Desafios da Reserva da Biosfera da UNESCO"

Funchal Noticias, 20 / 11 / 2018

<https://funchalnoticias.net/2018/11/20/porto-santo-reserva-da-biosfera-em-debate-de-28-a-30-de-novembro/>

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Porto Santo discute importância da reserva da biosfera da UNESCO
25 Novembro 2018, 10:08

O evento serve para dar a conhecer a distinção da UNESCO, no âmbito da candidatura do Porto Santo a reserva natural da biosfera, e dar o seu contributo para a promoção dos valores naturais e patrimoniais.



O Porto Santo vai promover uma conferência entre 28 e 30 de novembro, sobre a biosfera, no âmbito da candidatura apresentada a reserva da biosfera da UNESCO.

O evento tem por tema 'Porto Santo - Reserva da Biosfera da UNESCO: Oportunidades e Desafios' e tem por objectivo dar a conhecer o galardão da UNESCO, e como esta distinção pode contribuir para a promoção dos valores naturais e patrimoniais com vista ao desenvolvimento da economia local.

A conferência vai ter duas mesas redondas a 28 de novembro, em que se vai partilhar as experiências de outras reservas da biosfera, entre as quais a da Macaronésia e outra dedicada ao turismo sustentável.

A 29 de novembro realiza-se mais debates mas deste vez dedicados à importância da educação e do programa Eco-Escolas.

O evento encerra a 30 de novembro com um passeio pelo Porto Santo em que se pretende visitar locais de interesse cultural, histórico e natural.

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Apoie o jornalismo independente, assinie o Jornal Económico.

Jornal Económico, 25-11-2018

<https://jornaleconomico.sapo.pt/noticias/porto-santo-discute-importancia-da-reserva-da-biosfera-da-unesco-381079>

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Reserva da Biosfera irá esbater a sazonalidade do Porto Santo, é esta a convicção de Susana Prada



https://funchalnoticias.net/2018/11/28/reserva-da-biosfera-ira-esbater-a-sazonalidade-do-porto-santo-e-esta-a-convicao-de-susana-prada/

funchal noticias, 28 / 11 / 2018

<https://funchalnoticias.net/2018/11/28/reserva-da-biosfera-ira-esbater-a-sazonalidade-do-porto-santo-e-esta-a-convicao-de-susana-prada/>



REGIÃO



ILHA DO PORTO SANTO DEVERÁ SER EM BREVE RESERVA DA BIOSFERA DA UNESCO

Atualizado em 20/11/2018 09:02

VOTAR

A Ilha do Porto Santo deverá ser considerada, em breve, Reserva da Biosfera da UNESCO, anunciou hoje a secretária regional do Ambiente da Madeira, Susana Prada, no âmbito do processo de candidatura em anexo na fase final.

A região submeteu o documento de candidatura, que já foi sujeito a uma primeira análise por parte da UNESCO (Organização das Nações Unidas para a Educação, a Ciência e a Cultura), o que dá boas indicações à região relativamente a este processo, sublinhou a governante.

"É nossa expectativa que a Reserva da Biosfera do Porto Santo promova um desenvolvimento integral e sustentável e seja o motor de uma economia verde que resulte numa real melhoria do bem-estar e da qualidade de vida dos portosantenses. É aqui, ao mesmo tempo, redutir significativamente os riscos ambientais e a interferência decorrente no meio ambiente", afirmou.

Susana Prada é do opinião de que o galardão é também a reconhecimento da qualidade e diversidade do território, além de estar alinhado com os objetivos.

"O Porto Santo não será apenas, ao potenciar a qualidade e diversidade do destino, uma plataforma para mais sustentabilidade e, mais vertida, mais inclusão, contribuindo para reduzir a desigualdade territorial na ilha", afirmou.

A governante citou que o galardão poderá "revitalizar e conservação do património natural e cultural com o apoio de desenvolvimento sustentável da população residente, em particular, para concretizar a Agenda 2030 e os objetivos de desenvolvimento sustentável estabelecidos pela ONU".

O presidente da Câmara do Porto Santo, António Rodrigues, pediu, ainda assim, um olhar particular ao que o projeto poderá representar para a ilha.

"Para sermos uma Reserva da Biosfera temos de conseguir envolver os agentes da nossa sociedade. Queremos um Porto Santo mais e mais sustentável seja territorial e ambiental. Queremos um turismo sustentável, mas que proporcione emprego", disse.

1 comentário

Ilha do Porto Santo deverá ser em breve Reserva da Biosfera da UNESCO - Madeira - Sapo

Home Notícias Economia Turismo Saúde Meio Ambiente Cultura Artes e Esportes Saúde&C

Hoje e dia foi sexta - Europa 2018 - É assim que vão comemorar - Entretenha Sapo24

Ilha do Porto Santo deverá ser em breve Reserva da Biosfera da UNESCO

28 nov 2018 05:40

Matéria/Notícia / Lusa

Este artigo é sobre Madeira. Veja mais na seção Local

A ilha do Porto Santo deverá ser considerada, em breve, Reserva da Biosfera da UNESCO, anunciou esta quarta-feira a secretária regional do Ambiente da Madeira, Susana Prada, indicando que o processo de candidatura se encontra na fase final.



A região submeteu o documento de candidatura, que já foi sujeito a uma primeira análise por parte da UNESCO (Organização das Nações Unidas para a Educação, a Ciência e a Cultura), o que dá boas indicações à região relativamente a este processo, sublinhou a governante.

"É nossa expectativa que a Reserva da Biosfera do Porto Santo promova um desenvolvimento integral e sustentável e seja o motor de uma economia verde que resulte numa real melhoria do bem-estar e da qualidade de vida dos portosantenses. É aqui, ao mesmo tempo, redutir significativamente os riscos ambientais e a interferência decorrente no meio ambiente", afirmou.

Jornal da Madeira, 28-11-2018

[https://www.im-madeira.pt/regiao/ver/47959/Ilha do Porto Santo devera ser em breve Reserva da Biosfera da UNESCO](https://www.im-madeira.pt/regiao/ver/47959/Ilha_do_Porto_Santo_devera_ser_em_breve_Reserva_da_Biosfera_da_UNESCO)

Sapo, 28-11-2018

<https://24.sapo.pt/atualidade/artigos/ilha-do-porto-santo-devera-ser-em-breve-reserva-da-biosfera-da-unesco>

POLÍTICA

Ilha do Porto Santo deverá ser em breve Reserva da Biosfera da UNESCO

A ilha do Porto Santo deverá ser considerada, em breve, Reserva da Biosfera da UNESCO, anunciou hoje a secretária regional do Ambiente da Madeira, Susana Prada, indicando que o processo de candidatura se encontra na fase final (Áudio)

Videogage | Publicado 28 Nov, 2018, 12:53 | atualizado em 28 Nov, 2018, 14:09



© m. m. m. m.

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"É nossa expectativa que a Reserva da Biosfera do Porto Santo promova um desenvolvimento integral e sustentável e seja o motor de uma economia verde que resulte numa real melhoria do bem-estar e na qualidade de vida dos portosantenses e que, ao mesmo tempo, reduza

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RTP, 28-11-2018

https://www.rtp.pt/madeira/politica/ilha-do-porto-santo-devera-ser-em-breve-reserva-da-biosfera-da-unesco_23922



Ó QUE FAZER COMER BEBER FICAR

BOZOTOS CRÓNICAS

Porto Santo perto de ser Reserva da Biosfera da UNESCO



Pessoas a fotografar para conhecer o roteiro que é (Fotografias de Diane Guimarães)

TODOS VIRAM

Nota: Todos os direitos reservados à RTP. Não é permitida a reprodução ou a utilização de imagens sem a autorização da RTP. 2018

Evasoes, 28-11-2018

<https://www.evasoes.pt/noticias/porto-santo-pode-vir-a-ser-reserva-da-biosfera-da-unesco/>

Reserva no Porto Santo vai criar mais emprego

Entrevista com Susana Fontinha, coordenadora da candidatura a Reserva da Biosfera da UNESCO

NOVA FRANKFURT | PORTO SANTO | 30 DEZ 2018 | 01:00 H



"O maior projecto sempre está mais adiante em Porto Santo através a candidatura de Reserva da Biosfera". FOTOS: HÉLGA SANTOS



De onde surgiu a ideia de candidatar o Porto Santo a Reserva da Biosfera da UNESCO? O desejo foi-se lançando em Novembro de 2017 pela secretaria do Ambiente e Recursos Naturais. No âmbito transaccional de que para trabalhar uma candidatura deste tipo seria fundamental envolver as entidades locais e toda a comunidade portosantense. Em Dezembro foi constituído um grupo de trabalho que...

Diário Notícias, 30-12-2018

<https://www.dnoticias.pt/imprensa/hemeroteca/diario-de-noticias/reserva-no-porto-santo-vai-criar-mais-emprego-JY4166029>

MULTIMÉDIA OPINIÃO LETOR LIVRELOS

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MADEIRA PAÍS MUNDO DESPORTO 5 SENTIDOS CASOS DO DIA BOA

Um Porto Santo que importa preservar

JOAQUIM LEÇA | 30 DEZ 2018 | 03:00 H



Oportunidades e desafios da Reserva da Biosfera do Porto Santo

De 28 a 30 de Novembro teve lugar no auditório da Câmara Municipal do Porto Santo (CMPS), o Seminário 'Porto Santo - Reserva da Biosfera da UNESCO: Oportunidades e Desafios', organizado pela CMPS, Secretaria Regional do Ambiente e Recursos Naturais, Direcção Regional para a Administração Pública do Porto Santo, Associação...

Diário Notícias, 30-12-2018

<https://www.dnoticias.pt/imprensa/hemeroteca/diario-de-noticias/um-porto-santo-que-importa-preservar-YA4165177>

Candidatura a reserva da Biosfera cativa Porto Santo

GONÇALO HERRA / PORTO SANTO / 05 FEV 2019 / 02:00 H



Desde que foi anunciado que o Porto Santo se estava a candidatar a reserva da Biosfera que os porto-santenses se interessaram logo pelo assunto. Já algumas palestras foram feitas na ilha e todas elas tiveram aceitação por parte da população, como foi caso da realizada no passado sábado nos paços do concelho.

O DIÁRIO falou com uma das responsáveis locais pela divulgação deste projecto...

Susana Prada debateu alterações climáticas no Porto Santo

O auditório da autarquia foi pequeno para tantos alunos e professores, interessados em ouvir a secretaria regional do Ambiente falar da importância das regiões insulares contribuírem para as alterações climáticas

GONÇALO HERRA / PORTO SANTO / 15 MAR 2019 / 13:10 H



Tópicos

ALTERAÇÕES CLIMÁTICAS - ALUNOS - AMBIENTE - CANDIDATURA - CARLOS SILVA - CARTA - CATÁSTROFE - CLIMA - DEBATE - ENERGIAS RENOVÁVEIS - ESCOLA - ESPAÇOS - FRANCISCO FREITAS - GOVERNO REGIONAL - ILUMINAÇÃO - MAIS - MEIO - PLANO DE GESTÃO FLORESTAL - PORTO SANTO - PROFESSORES - REFORESTAÇÃO - RESERVA DA BIOSFERA - RISCO - SUSANA PRADA - TEMPERATURA - TERROÇO - TRABALHO - UMA

A Escola Professor Francisco Freitas Branco, organizou hoje um debate intitulado "O Impacto das Alterações Climáticas nos territórios insulares" que levou Susana Prada à ilha dorada.

A secretaria regional do Ambiente referiu que não existem dúvidas de que o clima está a mudar, com a temperatura média a aumentar e a precipitação a diminuir, sendo os episódios extremos cada vez mais frequentes, pelo que é preciso adaptarmo-nos a esta realidade.

"O governo regional consciente que das alterações climáticas, aprovou, em 2015, uma estratégia de adaptação às alterações climáticas na Madeira" disse a governante, tendo frisado que essas medidas já estão no terreno e passam pela reforestação, com plantas adequadas, para minimizar o risco de incêndio, ou risco de uma aluvião, ou pela diminuição nas perdas de água.

Para melhorar as soluções hídricas, Susana Prada disse ao DIÁRIO que é preciso fazer uma "utilização sustentável dos nossos recursos" que, neste momento, são suficientes para todos os usos. A solução passa igualmente pela utilização, cada vez mais, de energias renováveis.

No entanto, relembra que as mudanças não parem só do Governo, sendo importante cada um fazer a sua parte.

"Todos nós temos de dar o nosso contributo para a adaptação às alterações climáticas", realçou Susana Prada.

O debate foi realizado pelos alunos e professores da área do ambiente da escola secundária Professor Francisco Freitas Branco.

Jose Carlos Silva, docente da escola, salientou que o objetivo da iniciativa foi sensibilizar a comunidade para a importância das alterações climáticas.

No início do debate os alunos do "Liceu" do Porto Santo, entregaram à governante uma carta intitulada "GESTO GLOBAL PELO FUTURO", onde dão a conhecer as medidas e os projetos do Governo Regional para um melhor ambiente na ilha, como o Integração da área do Pico Branco e Terra Chã na rede Natura 2000, o Projeto Life nos Ilhéus do Porto Santo, o Porto Santo Sustentável, a Rede das áreas marinhas protegidas do Porto Santo, o Sistema de Iluminação pública, o Plano de Gestão Florestal dos Espços Florestais e a Candidatura do Porto Santo a Reserva da Biosfera.

Apesar de reconhecerem o trabalho governamental, os alunos questionaram as medidas tomadas para a protecção da praia e também dos duanos e de que forma será possível acudir os oceanos em situação de catástrofe. Foi ainda proposta a utilização de copos recicláveis, por parte da autarquia, nas grandes festas da ilha dorada.

Diário Notícias, 05-03-2019

<https://www.dnoticias.pt/impressa/hemeroteca/diario-de-noticias/candidatura-a-reserva-da-biosfera-cativa-porto-santo-EX2707868>

Diário Notícias, 05-03-2019

<https://www.dnoticias.pt/madeira/susana-prada-debateu-alteracoes-climaticas-no-porto-santo-ID4500390>



REGIÃO



AUSCULTAÇÃO PÚBLICA DA CANDIDATURA DO PORTO SANTO A RESERVA DA BIOSFERA DA UNESCO ENTRE 20 DE MARÇO E 22 DE ABRIL

Artigo | 20/03/2019 18:10

VOTAR

Segundo comunicado da Secretaria Regional da Agricultura e Recursos Naturais, o "novo período de auscultação pública do dossiê de candidatura do Porto Santo a Reserva da Biosfera, incluindo a proposta de Plano de Ação da Reserva candidata, bem como a proposta de logotipo do Porto Santo Reserva da Biosfera decorrerá de 20 de março a 22 de abril de 2019".

Ao longo deste período, será disponibilizada a referida documentação no sítio da internet do Município do Porto Santo, da DRAPS e da SRA; e, em formato papel, em dois locais relevantes da cidade do Porto Santo – o edifício da Câmara Municipal do Porto Santo nos Paços do Concelho e o posto de atendimento ao cidadão –, e na sede da Secretaria Regional do Ambiente e Recursos Naturais, na cidade do Funchal, acrescenta a mesma nota. Informa ainda que antes da data de 22 de abril decorrerá uma sessão de esclarecimento dos documentos disponíveis.

A referida Secretaria recorda que "o arranque do processo de elaboração da candidatura do Porto Santo a Reserva da Biosfera, no último trimestre de 2017, foi constituído um grupo de trabalho (GT-PSRB), que integra elementos da Câmara Municipal do Porto Santo (CMPS), da Associação Grupo de Folclore do Porto Santo (AGFPS), da Agência Regional da Energia e Ambiente da Região Autónoma da Madeira (ARCAEM), e do Governo Regional da Madeira, representado pela Secretaria Regional do Ambiente e Recursos Naturais (SRA), Direção Regional para a Administração Pública do Porto Santo (DRAPS) e Instituto das Florestas e Conservação da Natureza (IFCN, IP-RAM), com a responsabilidade de executar as diligências e tarefas necessárias inerentes ao processo de candidatura e sua projeção na comunidade local".

Acrescenta que o "trabalho em torno da candidatura teve por base princípios de envolvimento e participação da comunidade e das partes interessadas, com a realização de sessões de informação para esclarecimentos, sessões participativas para auscultação de contributos e reuniões de trabalho, primordialmente no Porto Santo, de modo a fomentar a evolução do processo".

Lê-se ainda que a 12 de abril de 2018 "foi apresentado o documento de base do dossiê de candidatura no Porto Santo, seguindo-se um período de participação pública – de 12 de abril a 2 de maio de 2018 –, durante o qual o documento prévio de candidatura esteve disponível no sítio da internet do Município do Porto Santo (CMPS), da (DRAPS) e da Secretaria Regional do Ambiente e Recursos Naturais (SRA); e, em formato papel, em dois locais relevantes da cidade do Porto Santo – Edifício da Câmara Municipal do Porto Santo nos Paços do Concelho e Posto de atendimento ao cidadão –, e na sede da Secretaria Regional do Ambiente e Recursos Naturais, na cidade do Funchal".

Sublinha que o "documento de trabalho foi, entretanto, melhorada com os contributos dos atores locais e das várias intervenientes no processo de preparação da candidatura, num processo dinâmico e evolutivo".

"Prendemos neste processo evolutivo e participativo direta dos Porto-santenses, e Maderenses de uma forma geral, a título

Jornal da Madeira, 20-03-2019

https://www.jm-madeira.pt/regiao/ver/57342/Auscultacao_publica_da_candidatura_do_Porto_Santo_a_Reserva_da_Biosfera_da_Unesco_entre_20_de_marco_e_22_de_abril

09/05/2019

Candidatura do Porto Santo a Reserva da Biosfera já entrou em período de auscultação pública

Antes da data de 22 de abril está prevista uma sessão de esclarecimento dos documentos disponíveis.



O novo período de auscultação pública da candidatura do Porto Santo a Reserva da Biosfera está a decorrer de 20 de março a 22 de abril. Além desta candidatura está a ser auscultado também o projeto de Plano de Ação da Reserva da Biosfera, bem como o projeto de logótipo do Porto Santo Reserva da Biosfera.

Durante este período está disponível a referida documentação no site do Internet do Município do Porto Santo, da Direção Regional para a Administração Pública do Porto Santo e da Secretaria Regional do Ambiente. Também está acessível no edifício da Câmara Municipal do Porto Santo, no Anexo de Intervenção ao Cidadão do Porto Santo e no Anexo da Secretaria Regional do Ambiente e Recursos Naturais (SRA), na cidade de Funchal.

Antes da data de 22 de abril está prevista uma sessão de esclarecimento dos documentos disponíveis.

O Governo Regional pretende a participação direta dos Porto-santenses, e Madeirenses de uma forma geral, e toda a comunidade local, bem como informar e mobilizar a comunidade local num processo pro-ativo e participativo, para a implementação e bom funcionamento da futura Reserva da Biosfera.

O início do processo de elaboração da candidatura do Porto Santo a Reserva da Biosfera, no último trimestre de 2017 foi constituído por um grupo de trabalho que integra elementos da Câmara do Porto Santo, da Associação Grupo de Fátima do Porto Santo, da Agência Regional da Energia e Ambiente da Região Autónoma da Madeira e do Governo Regional, representado pela SRA, Direção Regional para a Administração Pública do Porto Santo e Instituto das Florestas e Conservação da Natureza. A responsabilidade desta tarefa era executar as diligências e tarefas necessárias inerentes ao processo de candidatura e a sua projeção na comunidade local.

Jornal Economico, 21-03-2019

<https://jornaleconomico.sapo.pt/noticias/candidatura-do-porto-santo-a-reserva-da-biosfera-ja-entrou-em-periodo-de-auscultacao-publica-424391>

09/05/2019

Candidatura de Porto Santo la Reserva de la Biosfera ya entró en periodo de auscultación pública - Noticias RTV

Noticias RTV

INICIO ACTUALIDAD MUNDO NOTICIAS GENERALES NEGOCIOS TECNOLOGÍA CURIOSIDADES

Buscar

Candidatura de Porto Santo la Reserva de la Biosfera ya entró en periodo de auscultación pública

21 marzo 2019

El nuevo periodo de auscultación pública de la candidatura de Porto Santo a la Reserva de la Biosfera está en marcha del 20 de marzo al 22 de abril. Además de esta candidatura está siendo auscultada también la propuesta de Plan de Acción de la Reserva de esta isla, así como la propuesta de logotipo de Porto Santo Reserva de la Biosfera.

Durante este periodo está disponible la referida documentación en el sitio de Internet del Municipio de Porto Santo, de la Dirección Regional para la Administración Pública de Porto Santo y de la Secretaría Regional de Medio Ambiente. También es accesible en el Edificio del Ayuntamiento de Porto Santo, en el Puesto de Atención al Ciudadano de Porto Santo y en la sede de la Secretaría Regional del Ambiente y Recursos Naturales (SRA), en la ciudad de Funchal.

Antes de la fecha del 22 de abril está prevista una sesión de aclaración de los documentos disponibles.

El Gobierno Regional pretende la participación directa de los Porto-santenses, y Madeirenses de una forma general, a título individual o institucional, así como informar y movilizar a la comunidad local en un proceso proactivo y participativo, para la implementación y buen funcionamiento de la futura Reserva de la Biosfera.

El inicio del proceso de elaboración de la candidatura de Porto Santo a la Reserva de Biosfera en el último trimestre de 2017 fue constituido por un grupo de trabajo que integra elementos de la Cámara de Porto Santo de la Asociación Grupo de Fátima de Porto Santo de la Agencia Regional de la República Energía y Ambiente de la Región Autónoma de Madeira y del Gobierno Regional, representado por la SRA, Dirección Regional para la Administración Pública de Porto Santo e Instituto de los Bosques y Conservación de la Naturaleza. La responsabilidad de estos órganos era ejecutar las diligencias y tareas necesarias inherentes al proceso de candidatura y su proyección en la comunidad local.

El trabajo en torno a la candidatura se basó en principios de participación y participación de la comunidad y de las partes interesadas, con la realización de sesiones de información para aclaraciones, sesiones participativas para auscultación de contribuciones y reuniones de trabajo, primordialmente en Porto Santo, de modo que fomentar la evolución del proceso.

El 12 de abril de 2018 se presentó el documento de base del expediente de candidatura en Porto Santo, seguido de un periodo de participación pública, del 12 de abril al 2 de mayo de 2018.

El documento de trabajo se ha mejorado con las contribuciones de los actores locales y de los distintos actores en el proceso de preparación de la candidatura.

← Netflix rechazó la propuesta de Apple para integrar su servicio de streaming

<https://noticiasrtv.com/candidatura-de-porto-santo-la-reserva-de-la-biosfera-ya-entrou-em-periodo-de-auscultacao-publica/>

1/4

noticias RTV, 21-03-2019

<https://noticiasrtv.com/candidatura-de-porto-santo-la-reserva-de-la-biosfera-ya-entrou-em-periodo-de-auscultacao-publica/>



REGIÃO

Porto Santo: Identidade com Futuro

2, 3, 4 e 5 abril Formação para Agentes de Turismo



Património Imóvel *Fátima Menezes*



FORMAÇÃO PARA AGENTES DE TURISMO LOCAL DE 2 A 5 DE ABRIL NO PORTO SANTO

Artigo | 22/03/2019 10:51

VOTAR

O município do Porto Santo está a organizar uma ação de formação dirigida aos agentes de turismo local, que decorrerá de 2 a 5 de abril, e que abordará temas como a biodiversidade e geodiversidade, história, património imóvel, cultura e tradições.

Esta ação de formação, dirigida a guias turísticos e outros agentes de turismo do Porto Santo, tem como objetivo principal a promoção do conhecimento dos valores identitários porto-santenses, sejam naturais, históricos, arquitetónicos ou culturais, de valor indiscutível na afirmação do destino Porto Santo, que importa reforçar junto deste público, para que surjam produtos diferenciados baseados naquilo que é único e que pode ser atrativo para os turistas durante todo o ano.

A participação neste evento formativo é gratuita, mas obriga a uma inscrição prévia. Os interessados deverão preencher a ficha de inscrição disponível no sítio de internet da Câmara Municipal do Porto Santo enviando-a para ambiente@cm-portosanto.pt. A formação tem um limite de 25 participantes, dando-se prioridade aos guias turísticos.

O programa conta com a colaboração de várias personalidades e especialistas nas matérias a abordar tais como João Batista, investigador de várias universidades nacionais e representante da Progeo Portugal; que falará sobre a Geodiversidade da ilha do Porto Santo; Nelson Veríssimo, professor da Universidade da Madeira, investigador e autor de diversas obras sobre a História da Região Autónoma da Madeira; Gorete Freitas e Francisco Fernandes, engenheira florestal e biólogo respetivamente, com um enorme conhecimento sobre a biodiversidade da ilha do Porto Santo, ambas do Instituto das Florestas e Conservação da Natureza, IP-RAM; Fátima Menezes, arquiteta e amante do conhecimento sobre o património imóvel da ilha do Porto Santo, e ainda Lucília Sousa, escritora, amante da cultura porto-santense e que juntamente com os preciosos testemunhos dos alunos da Universidade Sénior abordará o tema da cultura, incontornável num evento desta natureza.

Nesta formação, e numa perspetiva de se desenvolverem produtos turísticos inovadores para o Porto Santo, especialmente fora da época balnear, os formandos serão desafiados a criarem dez novos produtos turísticos sob o lema – Porto Santo no inverno: 10 razões para nos visitar.

A iniciativa pretende ir ao encontro do modelo de desenvolvimento sustentável preconizado para a ilha do Porto Santo e subjacente à sua candidatura a Reserva da Biosfera que visa alcançar um destino diferenciado, com uma estratégia concertada de harmonização entre o desenvolvimento local e o respeito pela conservação da natureza e valorização do seu património e das suas gentes.

Compartilhar

1 comentário

Ordenar por Principais

Jornal da Madeira, 22-03-2019

https://www.im-madeira.pt/regiao/ver/57579/Formacao_para_agentes_de_turismo_local_de_2_a_5_de_abril_no_Porto_Santo

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22-28 JULHO
SEMANA DO MAR
 ONDE TU VAIS QUERER ESTAR?

REGIÃO

PORTO SANTO

Candidatura Reserva da Biosfera

CANDIDATURA DO PORTO SANTO A RESERVA DA BIOSFERA EM DISCUSSÃO A 12 DE ABRIL

[Aqui!](#)
[VOTAR](#)

Os documentos da candidatura do Porto Santo a Reserva da Biosfera disponíveis para consulta pública estão em discussão no dia 12 de abril.
 Desde o passado dia 20 de março que os documentos da candidatura do Porto Santo a Reserva da Biosfera se encontram disponíveis para consulta pública, tornando o prazo ao dia 22 de abril.
 Devido à grande quantidade de trabalho para a presente candidatura que o Conselho de Administração e Assembleia de Administração de um projeto que visa a candidatura local e o impacto global, sendo que nos últimos anos foram realizados os 12 de abril, a 1992, se realizou na Câmara Municipal do Porto Santo uma reunião de esclarecimento e de discussão dos documentos elaborados, aberta a toda a comunidade.
 Recordar-se que a Reserva da Biosfera é um estatuto atribuído pelo Programa Homem e Biosfera da UNESCO a territórios que possuem características únicas, sendo definidos como laboratórios vivos onde se desenvolve a conservação do património, económico e ambiental e a diversidade como sustentabilidade social, económica, cultural e ecológica.

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6 comentários
 Destacar um
 (Deixa uma resposta)

Jornal da Madeira, 09-04-2019

https://www.jm-madeira.pt/regiao/ver/59018/Candidatura_d_o_Porto_Santo_a_Reserva_da_Biosfera_em_discussao_a_12_de_abril

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MADEIRA PAÍS MUNDO DESPORTO SENTIDOS CASOS DO DIA BOA

Documentos da Candidatura do Porto Santo a Reserva da Biosfera disponíveis para consulta pública

20 MAR 3 10:42:02 - 09 ABR 2019 - 12:42:08

PORTO SANTO

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Desde o passado dia 20 de março que os documentos da candidatura do Porto Santo a Reserva da Biosfera se encontram disponíveis para consulta pública, tornando o prazo ao dia 22 de abril.
 Devido ao seu caráter, terá lugar no próximo dia 12 de Abril, às 18 horas, no auditório da Câmara Municipal do Porto Santo uma sessão de esclarecimento e de discussão dos documentos elaborados.
 Mais uma vez apela-se à participação de toda a comunidade porto-santense, de forma a enriquecer este documento.
 Recordar-se que a Reserva da Biosfera é um estatuto atribuído pelo Programa Homem e Biosfera da UNESCO a territórios que possuem características únicas, sendo definidos como laboratórios vivos onde se desenvolvem a conservação do património, económico e ambiental e a diversidade como sustentabilidade social, económica, cultural e ecológica.

Diário Notícias, 09-04-2019

<https://www.dnoticias.pt/madeira/documentos-da-candidatura-do-porto-santo-a-reserva-da-biosfera-disponiveis-para-consulta-publica-GC4613484>

Porto Santo pode vir a ter uma reserva da Biosfera

Lusa
14 Mai, 2019, 16:18 | Ciências

Portugal pode vir a ter, brevemente, mais uma reserva da Biosfera, em Porto Santo, no arquipélago da Madeira, disse hoje o vice-presidente do Instituto da Conservação da Natureza e das Florestas (ICNF).

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TÓPICOS:

Biosfera, Florestas ICNF,

"As 11 reservas, brevemente, poderão passar a 12, com uma candidatura de Porto Santo, na Madeira", afirmou em Castelo Branco, Paulo Salsa.

Este responsável, falava no final da assinatura do protocolo, no âmbito do programa Ambiente, que envolve as 11 reservas da Biosfera portuguesas, a Secretaria Geral do Ambiente e da transição Energética e o Instituto da Conservação da Natureza e das Florestas (ICNF).

Paulo Salsa realçou a importância do protocolo na promoção de iniciativas inovadoras, conhecimento e boas práticas ao nível da estratégia nacional da conservação da natureza.

O ICNF é, desde 1961, responsável pelas reservas da biosfera nacionais, que atualmente são 11, seis localizadas no continente e cinco nas ilhas dos Açores e da Madeira e que estão incluídas no total de 686 reservas mundiais espalhadas por 122 países.

RTP, 14-05-2019

https://www.rtp.pt/noticias/ciencias/porto-santo-pode-vir-a-ter-uma-reserva-da-biosfera_n1147434



REGIÃO



Joana Soares

PORTO SANTO PODE VIR A TER UMA RESERVA DA BIOSFERA

Lusa

Artigo | 14/05/2019 15:05

VOTAR

Portugal pode vir a ter, brevemente, mais uma reserva da Biosfera, em Porto Santo, no arquipélago da Madeira, disse hoje o vice-presidente do Instituto da Conservação da Natureza e das Florestas (ICNF).

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Jornal da Madeira, 14-05-2019

https://www.im-madeira.pt/regiao/ver/61925/Porto_Santo_pode_vir_a_ter_uma_reserva_da_Biosfera

Porto Santo homenageia 12 pessoas e instituições

Memento será integrado nas celebrações do 184.º aniversário do concelho

ALÍSSIO PINHEIRO | BIODIVERSIDADE / PORTO SANTO - 20 JUN 2019 - 11:01:25



Concelho de Porto Santo celebra 184.º aniversário no próximo dia 24 de Junho, segunda-feira.



No 184.º aniversário do concelho de Porto Santo, está prevista no próximo dia 24 de Junho (segunda-feira), a Câmara Municipal vai prestar homenagem a 12 personalidades e instituições.

De acordo com o que o DLARND conseguiu apurar, as escolhas para o conteúdo são realizadas sobre pessoas e instituições que têm contribuído para a candidatura do Porto Santo a Reserva da Biosfera da...

Diário Notícias, 20-06-2019

<https://www.dnoticias.pt/imprensa/hemeroteca/diario-de-noticias/porto-santo-homenageia-12-pessoas-e-instituicoes-LL4904269>



SOCIEDADE

Porto Santo vai ser candidato a reserva da biosfera

A candidatura do Porto Santo a reserva da biosfera deve estar concluída até ao fim do mês.

| Publicado 20 Jul, 2019, 12:07



Se o processo decorrer dentro da normalidade, o reconhecimento da UNESCO pode ser uma realidade até ao início do próximo ano.

RTP, 20-07-2019

<https://www.rtp.pt/madeira/sociedade/porto-santo-vai-ser-candidato-a-reserva-da-biosfera-30318>



GOVERNO APROVA PROPOSTA DE CANDIDATURA DO PORTO SANTO A RESERVA DA BIOSFERA DA UNESCO

Artigo | 25/07/2019 | 17:42

VOTAR

Terminaram as deliberações carreadas hoje em Conselho de Governo. A maior parte dos membros do Governo a favor e ficaram assim de alguns temas, se destacaram recentemente.

Destaca-se ainda para a aprovação da proposta de candidatura do Porto Santo a Reserva da Biosfera da UNESCO bem como o Plano de Ação para o período 2020-2025, que define a sua estratégia de gestão, e ainda formalizou a criação do Grupo de Trabalho Porto Santo a Reserva da Biosfera incumbido de acompanhar a respetiva candidatura.

A candidatura do Porto Santo a Reserva da Biosfera fundamenta-se nas características muito peculiares da ilha, possuidora de ecossistemas bem preservados e detentores de espécies de excepcional interesse para a conservação da natureza e da biodiversidade, sendo reconhecida pela diversidade e beleza das suas paisagens naturais e humanizadas, destacando-se a inimitabilidade da sua praia, a sua raridade e o seu encanto.

De acordo com o Governo, esta candidatura visa afirmar esta ilha atlântica como um território diferenciado e pioneiro no âmbito da sustentabilidade, com uma estratégia concertada de harmonização entre o desenvolvimento local, e o respeito pela conservação da natureza e pela criação de um equilíbrio entre os aspetos, económicos, sociais e ambientais, promovendo o desenvolvimento social.

Jornal da Madeira, 25-07-2019

<https://www.jm-madeira.pt/regiao/ver/67785/Governo aprova proposta de candidatura do Porto Santo a Reserva da Biosfera da UNESCO>

Governo aprova candidatura do Porto Santo a Reserva da Biosfera e cria grupo de trabalho para acompanhar o processo



O Conselho do Governo Regional decidiu hoje aprovar a proposta de candidatura do Porto Santo a Reserva da Biosfera da UNESCO bem como o Plano de Ação para o período 2020-2025, que define a sua estratégia de gestão, e ainda formalizou a criação do Grupo de Trabalho Porto Santo a Reserva da Biosfera incumbido de acompanhar a respetiva candidatura.

O porta-voz do conselho do Executivo, o secretário regional dos Equipamentos e Infraestruturas, Amílcar Gonçalves, disse que "a candidatura do Porto Santo a Reserva da Biosfera fundamenta-se nas características muito peculiares da ilha, possuidora de ecossistemas bem preservados e detentores de espécies de excepcional interesse para a conservação da natureza e da biodiversidade, sendo reconhecida pela diversidade e beleza das suas paisagens naturais e humanizadas, destacando-se a inimitabilidade da sua praia, a sua raridade e o seu encanto".

Funchal Notícias, 25-07-2019

<https://funchalnoticias.net/2019/07/25/governo-aprova-candidatura-do-porto-santo-a-reserva-da-biosfera-e-cria-grupo-de-trabalho-para-acompanhar-o-processo/>

Governo da Madeira aprova candidatura do Porto Santo a Reserva da Biosfera da UNESCO

O Governo liderado pelo social-democrata Miguel Albuquerque aprovou ainda o Plano de Ação para o período 2020-2025, que define a sua estratégia de gestão, e formalizou a criação do grupo de trabalho Porto Santo a Reserva da Biosfera incumbido de acompanhar a respetiva candidatura. (Vídeo)

Publicado em 25 Jul, 2019, 17:36 / atualizado em 26 Jul, 2019, 11:05



RTP Madeira, 25-07-2019

https://www.rtp.pt/madeira/politica/governo-da-madeira-aprova-candidatura-do-porto-santo-a-reserva-da-biosfera-da-unesco_30444

ANNEX III

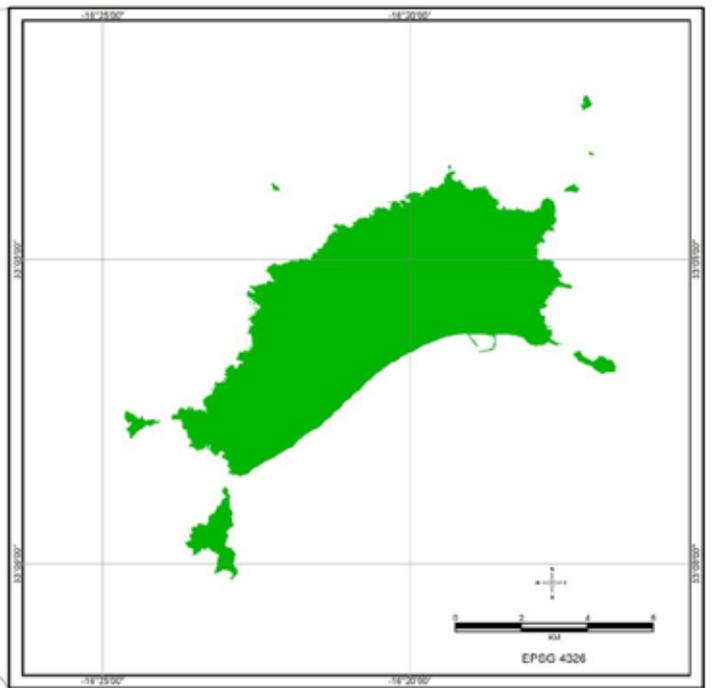
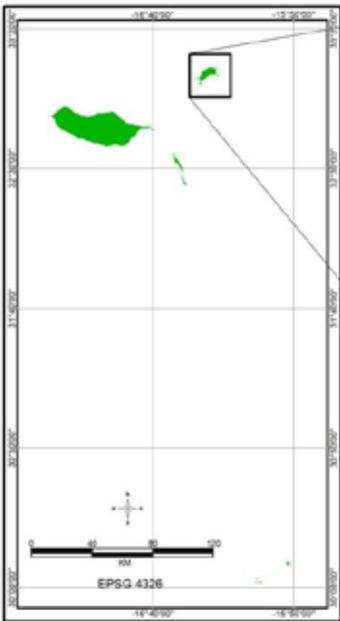
Supporting Documents

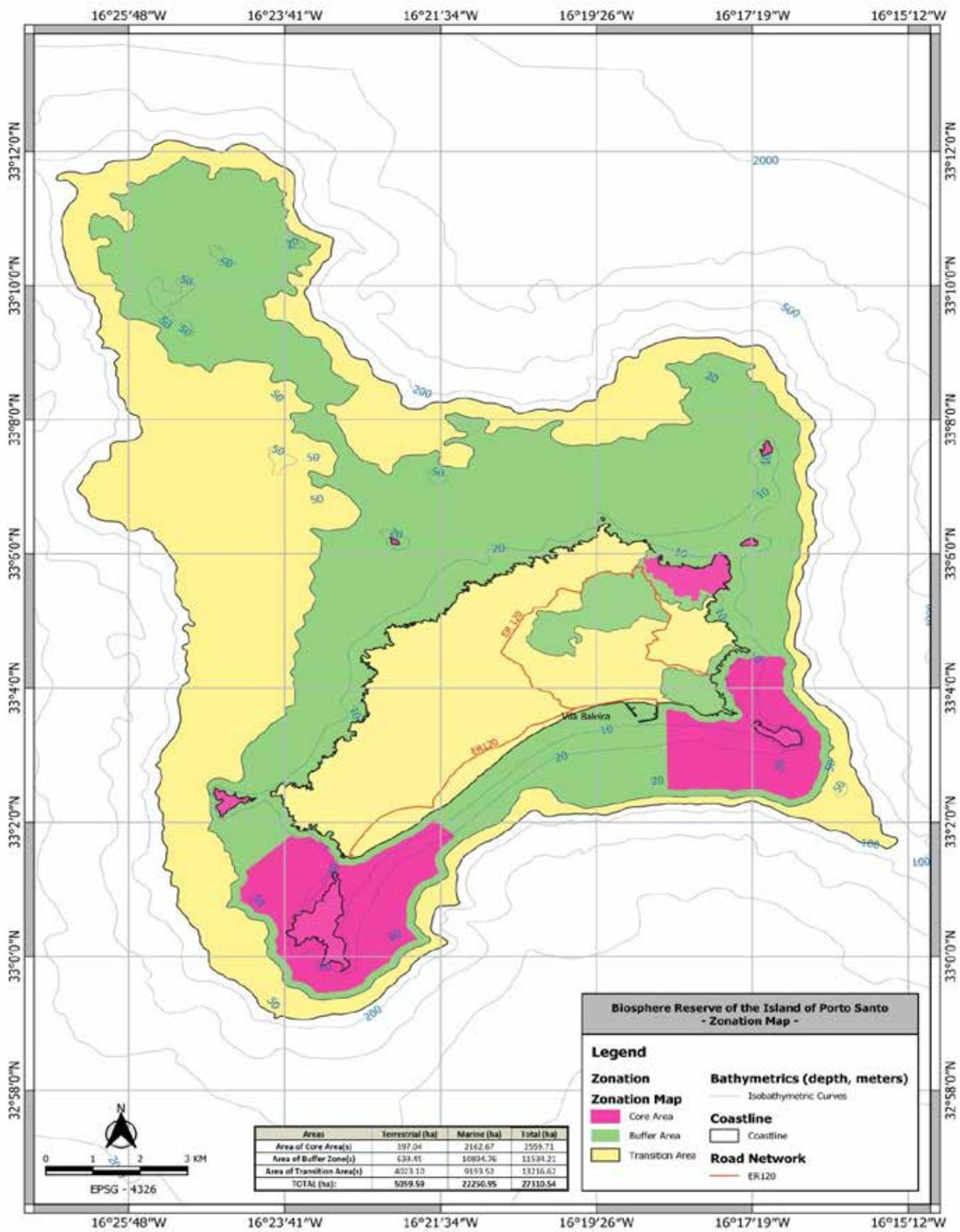
Point 19 of the Nomination Form

- 1** Location and zonation map with coordinates
- 2** Land cover map
- 3** List of legal documents
- 4** List of land use and management/cooperation plans
- 5** Species list
- 6** List of main bibliographic references
- 7** Original Endorsement letters according to paragraph 5
- 8** Further supporting documents

1

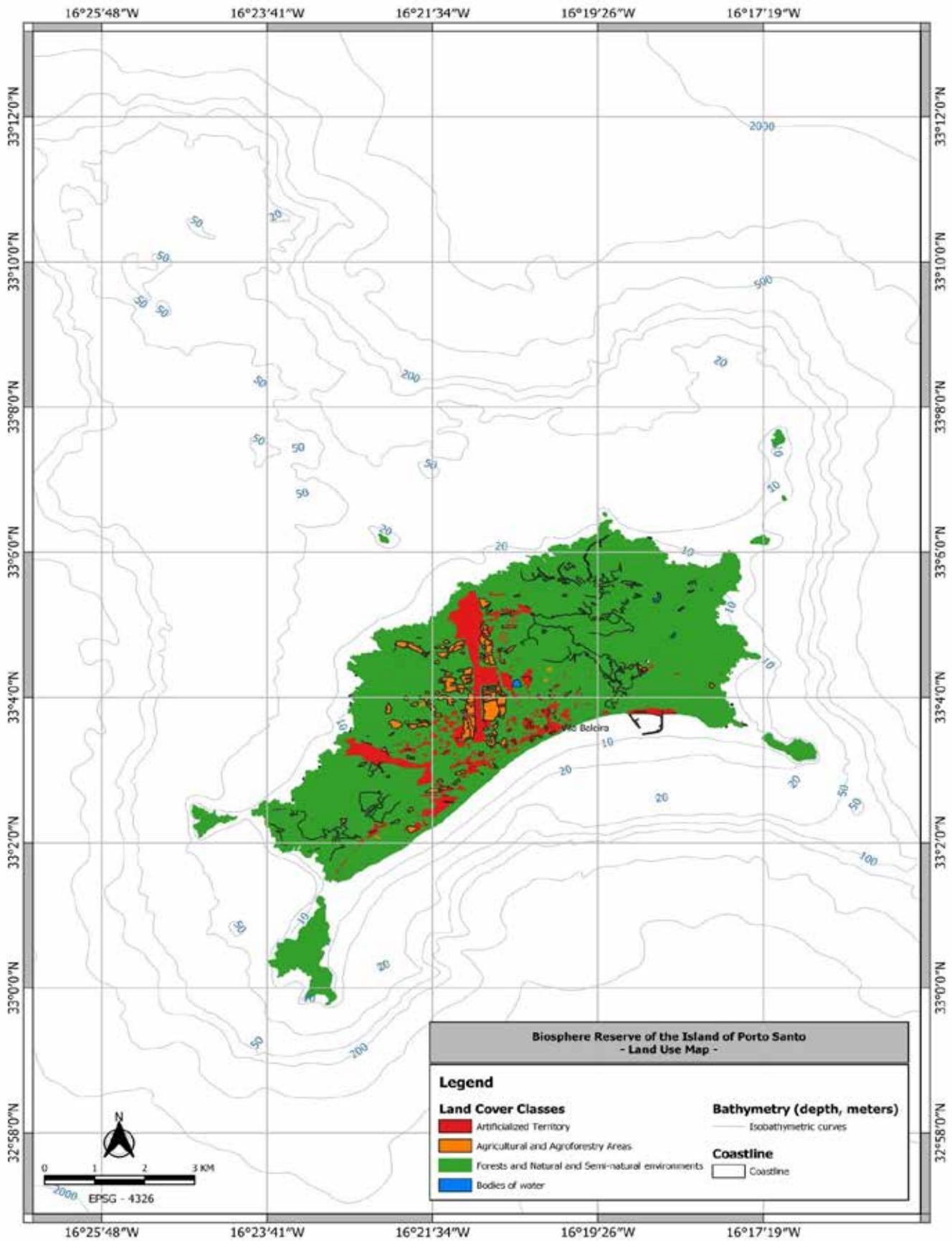
Location and zonation map with coordinates





2

Land cover map



3

List of legal documents

REGIONAL LEGISLATION

Decree-Law No. 44718, published in Diário do Governo I Series, No. 269/1962 of 22nd November – It submits, for public utility, to the compulsory partial forest regime the municipal wasteland located within the boundaries of the parish of Porto Santo, municipality of Porto Santo, of the Funchal district; and to the total forestry regime the lands that are the property of the State located in Pico Castelo, within the referred limits.

Regional Legislative Decree No. 12/95/M, published in Diário da República, Serie I-A, No. 144, of 24th June, changed by Regional Legislative Decree No. 9/97/M, of 18 July – Approves the Land-use Plan for the Autonomous Region of Madeira (POTRAM).

Resolution No. 592/99, published in No. 46 of Series I of JORAM (Official Gazette of the Autonomous Region of Madeira), of 3rd May – Declares the Mountain Range of Ana Ferreira as a natural heritage.

Resolution No. 856/99 published in No. 64 of Series I, Supplement, of JORAM (Official Gazette of the Autonomous Region of Madeira) of 16th June – Ratifies, according to the PDM, Pico de Ana Ferreira as “Property of Public Interest and Municipal Value (Regional Value) and Scientific (geological) Heritage”.

Resolution No. 856/99, published in No. 64 of Series I, Supplement, of JORAM (Official Gazette of the Autonomous Region of Madeira) of 16th June and changed in 2010 and 2012, by adaptation to the two Urbanization Plans (PU) – Ratifies the Municipal Master Plan of Porto Santo.

Decree-Law No. 64/2000, published in Diário da República, Serie I-A, No. 95, of 22nd April – It transposes into Council Law the Council Directive No. 98/58/EC, of 20th July, laying down minimum standards for the protection of animals kept for farming purposes.

Resolução No. 809/2000, published in No. 51 of Series I of JORAM (Official Gazette of the Autonomous Region of Madeira), of 8th June – Approves the Regional Environmental Policy Plan (PRPA).

Regional Legislative Decree No. 24/2004/M, published in Diário da República, Serie I-A, No. 196, of 20th August – Defines the objectives for the conservation and preservation of the geological heritage of the Autonomous Region of Madeira.

Regional Legislative Decree No. 11/2006/M, published in Diário da República, Serie I-A, No. 76, of 18th April – Establishes the legal regime for the harvesting of limpets in the Autonomous Region of Madeira – Second amendment to the Legislative ordinance No. 80/2006, of 4th July, amended by the Legislative Ordinance No. 5/2009, of 22nd January and 40/2016, of 17 February.

Regional Legislative Decree No. 32/2008/M, published in Diário da República, Serie I, No. 156, of 13rd August – Creates the Network of Protected Marine Areas of Porto Santo and established the corresponding legal regime.

Regional Legislative Decree No 35/2008/M, published in Diário da República, Serie I, No. 157, of 14th August – It lays down the system for the protection of natural and forest resources and repeals the Regional Legislative Decrees No. 7/88/M, of 6th June, and 21/88/M, of 1st September, which establish the silvopastoral system and regulate the protection of forest resources, respectively.

Regional Legislative Decree No. 38/2008/M – published in Diário da República, Serie I, No. 160, of 20th august – Approves the Regional Water Plan of Madeira.

Order No. 73/2009, published in No. 119 of Series II, Supplement, of JORAM (Official Gazette of the Autonomous Region of Madeira), of 24th june – Approves the measures proposed in the Program of Management and Conservation Measures of the site of Community importance “Pico Branco - Porto Santo (PTPOR0002)”.

Resolution No. 751/2009, published in No. 66 of Series I, 2nd Supplement of JORAM (Official Gazette of the Autonomous Region of Madeira), of 2nd july – It proceeds to move from the Site of Community Interest (SIC) to the Special Area of Conservation (ZEC) of the SIC “Pico Branco - Porto Santo (PTPOR0002)”.

Resolution No. 1295/2009, published in No. 100 of Series I, Supplement, of JORAM (Official Gazette of the Autonomous Region of Madeira), of 2nd october – Approves Plan for the Management of the Network of Protected Marine Areas of Porto Santo (POGRAMPPS).

Resolution No. 1341/2009, published in No. 112 of Series I of JORAM (Official Gazette of the Autonomous Region of Madeira) of 3rd november – Proceeds to classify the Site of Community Importance (SIC) for Special Area of Conservation (ZEC) do SIC “Ilhéus do Porto Santo (PTPOR 0001)”.

Resolution No. 1438/2009, published in No. 122 of Series I of JORAM (Official Gazette of the Autonomous Region of Madeira), of 4th december – Ratifies the Porto Santo Resort Urbanization Plan, whose regulations, plant management and conditioning plant, form integral part of this motion, with the respective originals filed in the General Secretariat of the Presidency of the Government.

Ordinance No. 75/2010, published in No. 93 of Series I of JORAM (Official Gazette of the Autonomous Region of Madeira), of 1st october – Regulates the conditions of use of the Network of Protected Marine Areas of Porto Santo.

Resolution No. 228/2012, published in No. 43 of Series I of JORAM (Official Gazette of the Autonomous Region of Madeira), of 5th april – Ratifies the Plan of Urbanization of the Sea Front of Campo de Baixo/Calheta (PUPC).

Regional Legislative Decree No. 7/2015/M, published in Diário da República, Serie I, No. 162, of 20th august – Adapts to the Autonomous Region of Madeira the Decree-Law No. 81/2013, of 14 june, rectified by the Declaration of Rectification No.31/2013, of 24th july, and modified by Decree-Law No. 165/2014, of 5th november and No. 85/2015, of 21st may, which approves the New System for the Exercise of Livestock Activity (NREAP).

Resolution No. 600/2015, published in No. 119 of Series I of JORAM (Official Gazette of the Autonomous Region of Madeira), of 11th august – Approves the Regional Plan for Forest Management in the Autonomous Region of Madeira (PROF-RAM).

Order No. 11494/2015, published in Diário da República, Series II, No. 201, of 14th october - The Regional Directorate for Spatial Planning and the Environment, of the Regional Secretariat for Environment and Natural Resources of the Regional Government of Madeira, is responsible for drawing up the situation plan in the area of the national maritime space adjacent to the Madeira archipelago between the baselines and the continental shelf up to 200 nautical miles.

Regional Regulatory Decree No. 13/2016/M, published in Diário da República, Serie I, No. 79, of 22nd april – Approves the organic of the Regional Directorate for Land Planning and Environment (DROTA).

Regional Legislative Decree No. 19/2016/M, published in Diário da República, Serie I, No. 77, of 20th april – Regulates Directed Fishery for Vegetable e Animal Species, for recreational purposes, in the Marine Waters of the Autonomous Region of Madeira.

Regional Legislative Decree No. 21/2016/M, published in Diário da República, Serie I, No. 93, of 13rd may – Creates the Forest and Nature Conservation Institute, IP-RAM and extinguishes the Regional Direction of Forests and Nature Conservation and the Madeira Natural Park Service.

Resolution No. 154/2016, published in No. 59, Series I of JORAM (Official Gazette of the Autonomous Region of Madeira), of 4th april – Approves the Strategic and Integrated Transport Plan for the Autonomous Region of Madeira (PIETRAM), for the period 2014-2020.

Ordinance No. 484/2016, published in No. 199, Series I, Supplement, of JORAM (Official Gazette of the Autonomous Region of Madeira), of 14th november – Defines the permitted gear, constraints and terms of the licensing of recreational fishing in the marine waters of the Autonomous Region of Madeira.

Resolution No. 699/2016, published in No. 181, Series I, Supplement, of JORAM (Official Gazette of the Autonomous Region of Madeira), of 17th october – Approves the inclusion of the Cetaceous Site of Madeira in the List of Sites of the Autonomous Region of Madeira.

Resolution No. 945/2016, published in No. 221, Series I, Supplement, of JORAM (Official Gazette of the Autonomous Region of Madeira), of 16th december – Approves the Management Plan for the RH10 Hydrographic Region: 2016-2021, which integrates the Hydrographic Region 10 (RH10), abbreviated as PGRH of the Madeira Archipelago.

Regional Legislative Decree No. 18/2017/M, published in Diário da República, Serie I, No. 122, of 27th june – It develops the bases of the public policy of soils, of spatial planning and urban planning in the Autonomous Region of Madeira, contained in Law No. 31/2014, of 30th may, and defines the respective regional system of territorial management.

Resolution No. 805/2017, published in No. 187, Series I, of JORAM (Official Gazette of the Autonomous Region of Madeira), of 27 de october – Approves the Flood Risk Management Plan for the Autonomous Region of Madeira 2016-2021 (PGRI-RAM 2016-2021).

Regional Legislative Decree No. 18/2018/M, published in Diário da República, Serie I, No. 161, of 22 august – Proceed the amendment of the Regional Economic and Social Development Plan for the period 2014-2020, entitled “Madeira Commitment 2020”, approved by Regional Legislative Decree No. 2/2014/M, of 10th april.

Order No. 51/2018 of SRA, of 23rd august – Creates areas for hunting grounds designated by “Pico do Castelo”, “Pico de Juliana”, “Pico do Facho”, “Pico Branco”, “Pico do Concelho” e “Pico de Ana Ferreira”, county of Porto Santo, RAM.

Important Bird and Biodiversity Areas (IBAs) – Islets of Porto Santo; Código: PT089 (old ZZ007) e Porto Santo West; Código: PT090.

NACIONAL LEGISLATION

Constitution of the Portuguese Republic, Article 13, which enshrines the principle of equality.

Law No. 33/96, of 17th august – Basic Law of Forest Policy.

Law No. 173/99, of 21st september - Basic Law of Hunting – Establishes the basis for the sustained management of hunting, which include their conservation and promotion, as well as the hunting regulatory principles and hunt administration.

Law-Decree No. 201/2005, published in Diário da República, Serie I-A, No. 226, of 24th november – Changes the Decree-law No. 202/2004, of 18 august, which regulates the Law No. 173/99, of 21st September, Basic Law of Hunting

Ordinance No. 829/2007, published in Diário da República, Serie I, No. 226, of 1st august – Discloses the list of site of community interest (SIC) located in national territory belonging to the Atlantic, Mediterranean and Macaronesian biogeographical regions.

Law No. 75/2013, published in Diário da República, Serie I, No. 176, of 12nd September – It establishes the legal regime of local authorities, approves the statute of intermunicipal entities, establishes the legal regime of the transfer of State competences to local and intermunicipal entities and approves the legal regime of municipal associations.

Constitution of the Portuguese Republic, Article 235, which enshrines the General Principles relating to Local Authorities.

INTERNACIONAL LEGISLATION

Directive No. 79/409/CEE, do Conselho, of 2nd april – Birds directive, concerning the Conservation of Wild Birds.

Directive No. 92/43/CEE, of the Council, of 21st may – Habitats Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora.

Decree-Law No. 140/99, published in Diário da República, Serie I-A, of 24th april – Review the transposition into national law of the Directives No. 79/409/CEE, of the Council, of 2nd april (on the conservation of wild birds) and Council Directive 92/43/EEC of 21st may (on the conservation of natural habitats and of wild fauna and flora).

Decree No. 103/80, published in Diário da República, Serie I, No. 236, of 11st october – Approves for ratification the Convention on the Conservation of Migratory Species of Wild Animals (Bonn Convention).

CORINE 85/338/CEE Program – CORINE Biotopes Sites (Massif Central Mountain of Porto Santo, Massif Mountain of Ana Ferreira and Beach and Zone Dunar).

Decree-Law No. 316/89, of 22nd september – Regulates the application of the Convention on the Conservation of European Wildlife and Natural Habitat (Bern Convention).

Decree-Law No. 114/90, published in Diário da República, Serie I, No. 80, of 5th april – Promotes the application of the Convention on International trade in Endangered Species of Wild Fauna and Flora (CITES).

Decree No. 21/93, published in Diário da República, Serie I-A, No. 143, of 21st june – Portugal approves and ratifies the Convention on Biological Diversity (CDB).

Decree-Law No. 59/97, published in Diário da República, Serie I-A, No. 253, of 31st october – Portugal approves and ratifies the OSPAR Convention (The Convention for the Protection of the Marine Environment of the North-East Atlantic).

Council of Ministers Motion No. 69/99, published in Diário da República, Serie I-B, No. 158, of 9th july – Approves the National Action Program to Combat Desertification (PANCD) and establishes procedures for its implementation under the United Nations Convention to Combat Desertification.

Council Decision No. 98/216/EC, of 9th march. Approval of the United Nations Convention to Combat Desertification by the European Union.

Decree No. 4/2005, published in Diário da República, Serie I-A, of 14th february – Approval in Portugal of The European Landscape Convention.

Directive 2008/56/CE, of 17th june, of the European Parliament and of the Council – Establishes a framework for Community action in the field of marine environment policy (Marine Strategy Framework Directive).

Decree No. 5/2014, published in Diário da República, Serie I, No. 20, of 29th january – Approves the Amendment to the Agreement on the Conservation of Bats in Europe, signed in London, on 4 december 1991, adopted in Bristol, from 24 to 26 july of 2000.

Decree No. 7/2017, published in Diário da República, Serie I, No. 51, of 13th march – Approves the Nagoya Protocol on access to genetic resources and the fair and equitable sharing of benefits arising from their use, adopted at Nagoya on 29th october 2010.

Commission Implementing Decision (EU) 2019/20, of 14th December 2018 - Adopts the seventh update of the list of sites of community importance in the Macaronesian biogeographic region [No. C (2018) 8532] and includes in Natura 2000 the Madeira Cetaceans Site - 'PTMMD0001 Cetaceans of Madeira'.

4

List of land use and management/
cooperation plans

Economic and Social Development Plan for the Autonomous Region of Madeira

Regional Legislative Decree No. 18/2018/M, published in Diário da República, I Series — No. 161 — of 22 august — Proceed with the amendment of the Regional Economic and Social Development Plan for the period 2014-2020, entitled “Madeira Commitment 2020”, approved by Regional Legislative Decree No. 2/2014/M of 10th april.

Flood Risk Management Plan for the Autonomous Region of Madeira

Resolution No. 805/2017, published in No. 187 of Series I of JORAM (Official Gazette of the Autonomous Region of Madeira) of 27th october — Approves the Flood Risk Management Plano for the Autonomous Region of Madeira 2016-2021.

Land-use Plan for the Autonomous Region of Madeira

Regional Legislative Decree No. 12/95/M, published in Diário da República, I Series-A, No. 144, of 24th june, changed by Regional Legislative Decree No. 9/97/M, of 18 july — Approves the Land-use Plan for the Autonomous Region of Madeira (POTRAM).

Plan for the Management of the Network of Protected Marine Areas of Porto Santo

Resolution No. 1295/2009, published in No. 100 of Series I of JORAM (Official Gazette of the Autonomous Region of Madeira) of 2nd october — Approves the Plan for the Management of the Network of Protected Marine Areas of Porto Santo (POGRAMPPS).

Management Plan for the RH10 Hydrographic Region

Resolution No. 945/2016 published in No. 221 of Series I of JORAM (Official Gazette of the Autonomous Region of Madeira) of 16th december — Approves the Management Plan for the Hydrographic Region of the Madeira Archipelago: 2016-2021, which integrates Hydrographic Region 10 (RH10), abbreviated as PGRH of the Madeira Archipelago.

Municipal Master Plan for Porto Santo

Resolution No. 856/99, published in No. 64 of Series I of JORAM (Official Gazette of the Autonomous Region of Madeira) of 16th june and changed in 2010 and 2012, by adaptation to the two Urbanization Plans (PU) — Ratifies the Municipal Master Plan of Porto Santo.

Regional Environmental Policy Plan

Resolution No. 809/2000, published in No. 51 of Series I of JORAM (Official Gazette of the Autonomous Region of Madeira), of 8th june — Approves the Regional Environmental Policy Plan (PRPA)..

Regional Plan for Forest Management in the Autonomous Region of Madeira

Resolution No. 600/2015, published in No. 119 of Series I of JORAM (Official Gazette of the Autonomous Region of Madeira), of 11st august — Approves the Regional Plan for Forest Management (PROF-RAM).

Regional Water Plan of Madeira

Regional Legislative Decree No. 38/2008/M published in Diário da República, I Series, No. 160, of 20th august, — Approves the Regional Water Plan for the Autonomous Region of Madeira.

Situation Plan for Maritime Spatial Planning

Dispath No. 11494/2015, published in Diário da República, II Series, No. 201, of 14th october – Commits to the Directorate General of Natural Resources, Safety and Maritime Services (DGRM) national maritime area adjacent to the archipelagos of Madeira and the Azores and to the Regional Directorate for Spatial Planning and Environment of the Regional Secretariat for the Environment and Natural Resources of the Regional Government of Madeira, of the situation plan in the area of the national maritime space adjacent to the Madeira archipelago between the baselines and the continental shelf up to 200 nautical miles.

Strategic and Integrated Transport Plan for the Autonomous Region of Madeira

Resolution No. 154/2016, published in No. 59 of Series I of JORAM (Official Gazette of the Autonomous Region of Madeira) of 4th april – Approves the Strategic and Integrated Transport Plan for the Autonomous Region of Madeira (PIETRAM), for the period 2014-2020.

Urbanisation Plan for the Porto Santo Golf Resort

Resolution No. 1438/2009, published in No. 122 of Series I of JORAM (Official Gazette of the Autonomous Region of Madeira), of 4th december – Ratifies the Porto Santo Resort Urbanization Plan, whose regulations, plant management and conditioning plant, form integral part of this motion, with the respective originals filed in the General Secretariat of the Presidency of the Government.

Urbanisation Plan for the Waterfront of Baixo/Calheta

Resolution No. 228/2012, published in No. 43 of Series I of JORAM (Official Gazette of the Autonomous Region of Madeira), of 5th april – Ratifies the Urbanisation Plan for the Waterfront of Campo de Baixo/Calheta.

5

Species list

Legend

PS – endemic Porto Santo; MAD – endemic Madeira; MAC – endemic Macaronesia; n – native; np – likely native; ip – likely introduced; i – introduced; m – migratory; ? – unknown; † – taxon found only in the fossil state; (†) – taxon extant and also represented in fossil deposits; †† – extinct taxon in the wild; * – endemic genus Madeira; # – endemic genus Porto Santo; • – priority species; A – Birds Directive; B – Bern Convention; BO – Bonn Convention; C – CITES; H – Habitats Directive; I – Annex I; II – Annex II; III – Annex III; IV – Annex IV; V – Annex V

TERRESTRIAL BIODIVERSITY

FUNGI

Family	Taxa	Naturalness
Amphisphaeriaceae	<i>Pestalotiopsis menezesiana</i> (Bres. & Torrend) Bissett	
Botryosphaeriaceae	<i>Macrophoma flaccida</i> (Viala & Ravaz) Cavara	
Capnodiaceae	<i>Capnodium nerii</i> Rabenh.	
Coleosporiaceae	<i>Coleosporium tussilaginis</i> (Pers.) Lév.	
Mycosphaerellaceae	<i>Cladosporium herbarum</i> (Pers.) Link	
Peronosporaceae	<i>Peronospora alta</i> Fuckel	
Phakopsoraceae	<i>Cerotelium fici</i> (Castagne) Arthur	
Polyporaceae	<i>Phaeolus schweinitzii</i> (Fr.) Pat.	
Pucciniaceae	<i>Puccinia frankeniae</i> Link <i>Puccinia malvacearum</i> Mont. <i>Uromyces beticola</i> (Belynyck) Boerema, Loer. & Hamers <i>Uromyces guerkeanus</i> Henn.	
Schizophyllaceae	<i>Schizophyllum commune</i> (L.) Fr.	
Venturiaceae	<i>Antennaria elaeophila</i> Mont.	

LICHENS

Family	Taxa	Naturalness
Lobariaceae	<i>Lobaria pulmonaria</i> (L.) Hoffm.	
Parmeliaceae	<i>Anzia centrifuga</i> Haugan <i>Parmotrema chinense</i> (Osbeck) Hale & Ahti <i>Rimelia cetrata</i> (Ach.) Hale & A. Fletcher <i>Xanthoparmelia conspersa</i> (Ehrh. ex Ach.) Hale	PS
Physciaceae	<i>Heterodermia leucomelos</i> (L.) Poelt	
Ramalinaceae	<i>Ramalina confertula</i> Krog & Østh. <i>Ramalina erosa</i> Krog <i>Ramalina jamesii</i> Krog <i>Ramalina nematodes</i> (Nyl.) Krog Østh. <i>Ramalina polymorpha</i> (Lilj.) Ach. <i>Ramalina portosantana</i> Krog <i>Ramalina timdaliana</i> Krog	
Roccellaceae	<i>Roccella vicentina</i> (Vain.) Vain.	
Teloschistaceae	<i>Xanthoria elegans</i> (Link) Th. Fr. <i>Xanthoria resendei</i> Poelt & Tav.	

NON-VASCULAR PLANTS

(BRYOPHYTES)

Family	Taxa	Naturalness
Aneuraceae	<i>Riccardia multifida</i> (L.) Gray	
Anthocerotaceae	<i>Anthoceros agrestis</i> Paton <i>Anthoceros punctatus</i> L. <i>Phaeoceros laevis</i> (L.) Prosk. <i>Phymatoceros bulbiculosus</i> (Brot.) Stotler, W.T.Doyle & Crand.-Stotl.	
Arnellaceae	<i>Gongylanthus ericetorum</i> (Raddi) Nees <i>Calypogeia arguta</i> Nees & Mont. <i>Calypogeia fissa</i> (L.) Raddi	
Aytoniaceae	<i>Asterella africana</i> (Mont.) A.Evans. <i>Mannia androgyna</i> (L.) A.Evans	
Brachytheciaceae	<i>Brachythecium rutabulum</i> var. <i>atlanticum</i> Hedenäs <i>Homalothecium sericeum</i> (Hedw.) Schimp. <i>Kindbergia praelonga</i> (Hedw.) Ochyra <i>Rhynchostegiella litorea</i> (De Not.) Limpr. <i>Rhynchostegiella tenella</i> (Dicks.) Limpr. <i>Rhynchostegium confertum</i> (Dicks.) Schimp. <i>Scleropodium touretii</i> (Brid.) L.F.Koch <i>Scorpiurium circinatum</i> (Bruch) M.Fleisch. & Loeske	
Bryaceae	<i>Bryum argenteum</i> Hedw. <i>Bryum caespiticium</i> Hedw. <i>Bryum canariense</i> Brid. <i>Bryum capillare</i> Hedw. <i>Bryum dichotomum</i> Hedw. <i>Bryum radiculosum</i> Brid.	
Cephaloziaceae	<i>Cephalozia bicuspidata</i> (L.) Dumort. <i>Cephaloziella divaricata</i> (Sm.) Schiffn.	
Conocephalaceae	<i>Conocephalum conicum</i> (L.) Dumort.	
Corsiniaceae	<i>Corsinia coriandrina</i> (Spreng.) Lindb.	
Ditrichaceae	<i>Ceratodon purpureus</i> (Hedw.) Lindb <i>Pleuridium subulatum</i> (Hedw.) Rabenh	
Exormothecaceae	<i>Exormotheca pustulosa</i> Mitt.	
Fabroniaceae	<i>Fabronia pusilla</i> Raddi	
Fissidentaceae	<i>Fissidens bryoides</i> Hedw. <i>Fissidens coacervatus</i> Brugg.-Nann. <i>Fissidens curvatus</i> Hornsch. <i>Fissidens viridulus</i> (Sw. ex anon.) Wahlenb.	MAC
Fossombroniaceae	<i>Fossombronia angulosa</i> (Dicks.) Raddi <i>Fossombronia caespitififormis</i> De Not. ex Rabenh. <i>Fossombronia echinata</i> Macvicar <i>Fossombronia husnotii</i> Corb.	
Funariaceae	<i>Entosthodon obtusus</i> (Hedw.) Lindb.	
Geocalycaceae	<i>Heteroscyphus denticulatus</i> (Mitt.) Schiffn. <i>Lophocolea bidentata</i> (L.) Dumort. <i>Lophocolea heterophylla</i> (Schrad.) Dumort. <i>Lophocolea minor</i> Nees <i>Saccogyna viticulosa</i> (L.) Dumort.	
Gigaspermaceae	<i>Oedipodiella australis</i> (Wager & Dixon) Dixon	
Grimmiaceae	<i>Grimmia trichophylla</i> Grev.	

Hypnaceae	<i>Hypnum cupressiforme</i> Hedw.	
Jubulaceae	<i>Frullania azorica</i> Sim-Sim et al.	
	<i>Frullania dilatata</i> (L.) Dumort.	
	<i>Frullania ericoides</i> (Nees) Mont.	
	<i>Frullania microphylla</i> (Gottsche) Pearson	
	<i>Frullania polysticta</i> Lindenb.	MAC
	<i>Frullania sergiae</i> Sim-Sim et al.	MAD
	<i>Frullania tamarisci</i> (L.) Dumort.	
	<i>Frullania teneriffae</i> (F.Weber) Nees	
Jungermanniaceae	<i>Jungermannia calithrix</i> Lindenb. & Gottsche	
	<i>Jungermannia hyalina</i> Lyell	
	<i>Nardia geoscyphus</i> (De Not.) Lindb.	
	<i>Nardia scalaris</i> (De Not.) Lindb.	
Lejeuneaceae	<i>Cololejeunea minutissima</i> (Sm.) Schiffn.	
	<i>Drepanolejeunea hamatifolia</i> (Hook.) Schiffn.	
	<i>Harpalejeunea molleri</i> (Steph.) Grolle	
	<i>Lejeunea eckloniana</i> Lindenb.	
	<i>Lejeunea flava</i> (Sw.) Nees subsp. <i>moorei</i> (Lindb.) R.M.Schust.	
	<i>Lejeunea lamacerina</i> (Steph.) Schiffn.	
	<i>Lejeunea mandonii</i> (Steph.) Müll.Frib.	
	<i>Marchesinia mackaii</i> (Hook.) Gray	
	<i>Microlejeunea ulicina</i> (Taylor) A.Evans	
Leptodontaceae	<i>Leptodon smithii</i> (Hedw.) F.Weber & D.Mohr	
Leucobryaceae	<i>Campylopus brevipilus</i> Bruch & Schimp	
	<i>Campylopus flexuosus</i> (Hedw.) Brid.	
	<i>Campylopus fragilis</i> (Brid.) Bruch & Schimp.	
	<i>Campylopus pilifer</i> Brid	
Leucodontaceae	<i>Leucodon treleasei</i> (Cardot) Paris	MAC
Lunulariaceae	<i>Lunularia cruciata</i> (L.) Lindb.	
Marchantiaceae	<i>Dumortiera hirsuta</i> (Sw.) Nees	
	<i>Marchantia polymorpha</i> L.	
Mielichhoferiaceae	<i>Epipterygium tozeri</i> (Grev.) Lindb.	
Metzgeriaceae	<i>Metzgeria furcata</i> (L.) Dumort.	
	<i>Metzgeria leptoneura</i> Spruce	
Neckeraceae	<i>Homalia webbiana</i> (Mont.) Schimp.	
	<i>Neckera intermedia</i> Brid.	
Orthotrichaceae	<i>Orthotrichum diaphanum</i> Schrad. ex Brid.	
	<i>Zygodon rupestris</i> Schimp. ex Lorentz	
	<i>Zygodon viridissimus</i> (Dicks.) Brid.	
Plagiochilaceae	<i>Plagiochila bifaria</i> (Sw.) Lindenb.	
	<i>Plagiochila punctata</i> (Taylor) Taylor	
	<i>Plagiochila spinulosa</i> (Dicks.) Dumort.	
Porellaceae	<i>Porella canariensis</i> (F.Weber) Underw.	
Pottiaceae	<i>Aloina aloides</i> (Koch ex Schultz) Kindb.	
	<i>Aloina ambigua</i> (Bruch & Schimp.) Limpr.	
	<i>Crossidium crassinerve</i> (De Not.) Jur.	
	<i>Didymodon luridus</i> Hornsch.	
	<i>Didymodon rigidulus</i> Hedw.	
	<i>Didymodon tophaceus</i> (Brid.) Lisa	
	<i>Gymnostomum aeruginosum</i> Sm.	
	<i>Hymenostylium recurvirostrum</i> (Hedw.) Dixon	
	<i>Leptophascum leptophyllum</i> (Müll.Hal.) J.Guerra & M.J.Cano	
	<i>Microbryum davallianum</i> (Sm.) R.H.Zander	

	<i>Microbryum starckeanum</i> (Hedw.) R.H.Zander	
	<i>Pseudocrossidium revolutum</i> (Brid.) R.H.Zander	
	<i>Tortella flavovirens</i> (Bruch) Broth.	
	<i>Tortella limbata</i> (Schiffn.) Geh & Herzog	MAC
	<i>Tortella nitida</i> (Lindb.) Broth.	
	<i>Tortula atrovirens</i> (Sm.) Lindb.	
	<i>Tortula lanceolata</i> R.H.Zander	
	<i>Tortula muralis</i> Hedw.	
	<i>Trichostomum brachydontium</i> Bruch	
	<i>Trichostomum crispulum</i> Bruch	
	<i>Weissia controversa</i> Hedw.	
Pterigynandraceae	<i>Heterocladium heteropterum</i> (Brid.) Schimp.	
Radulaceae	<i>Radula carringtonii</i> J.B. Jack	
	<i>Radula lindenbergiana</i> Gottsche ex C. Hartm.	
	<i>Radula wichurae</i> Steph.	MAC
Ricciaceae	<i>Riccia atlantica</i> Sérgio & Perold	MAD
	<i>Riccia bifurca</i> Hoffm.	
	<i>Riccia ciliata</i> Hoffm.	
	<i>Riccia ciliifera</i> Link ex Lindenb.	
	<i>Riccia crozalsii</i> Levier	
	<i>Riccia macrocarpa</i> Levier	
	<i>Riccia nigrella</i> DC.	
	<i>Riccia sorocarpa</i> Bisch.	
	<i>Riccia subbifurca</i> Warnst. ex Crozals	
Scapaniaceae	<i>Scapania compacta</i> (A.Roth) Dumort.	
	<i>Scapania curta</i> (Mart.) Dumort.	
	<i>Scapania gracilis</i> Lindb.	
	<i>Scapania nemorea</i> (L.) Grolle	
	<i>Scapania undulata</i> (L.) Dumort.	
Sematophyllaceae	<i>Sematophyllum substrumulosum</i> (Hampe) E.Britton	
Targioniaceae	<i>Targionia hypophylla</i> L.	
	<i>Targionia lorbeeriana</i> Müll.Frid.	

VASCULAR PLANTS

(PTERIDOPHYTA E SPERMATOPHYTES)

Family	Taxa	Naturalness	Protection status
Adiantaceae	<i>Adiantum capillus-veneris</i> L.	n	
	<i>Adiantum reniforme</i> L. subsp. <i>reniforme</i>	n	
Agavaceae	<i>Agave americana</i> L.	i	
	<i>Dracaena draco</i> (L.) L. subsp. <i>draco</i> ++	MAC, i	B; H - IV
Aizoaceae	<i>Aizoon canariense</i> L.	n	
	<i>Aizoon hispanicum</i> L.	np	
	<i>Aptenia cordifolia</i> (L.f.) Schwantes	i	
	<i>Carpobrotus edulis</i> (L.) N.E. Br.	i	
	<i>Lampranthus multiradiatus</i> (Jacq.) N. E. Br	i	
	<i>Malephora crocea</i> (Jacq.) Schwantes var. <i>crocea</i>	i	
	<i>Mesembryanthemum crystallinum</i> L.	ip	
	<i>Mesembryanthemum nodiflorum</i> L.	n	
	<i>Tetragonia tetragonoides</i> (Pall.) Kuntze	i	
Amaranthaceae	<i>Achyranthes sicula</i> (L.) All.	i	
	<i>Alternanthera caracasana</i> Kunth	i	

	<i>Amaranthus deflexus</i> L.	i	
	<i>Amaranthus graecizans</i> L.	n	
	<i>Amaranthus hybridus</i> L.	i	
Amaryllidaceae	<i>Amaryllis belladonna</i> L.	i	
	<i>Allium cepa</i> L.	i	
Apiaceae	<i>Ammi majus</i> L.	n	
	<i>Ammi visnaga</i> (L.) Lam.	n	
	<i>Apium graveolens</i> L.	n	
	<i>Bupleurum lancifolium</i> Hornem.	np	
	<i>Bupleurum salicifolium</i> R. Br. ex Buch subsp. <i>salicifolium</i>	MAC	
	<i>Coriandrum sativum</i> L.	i	
	<i>Crithmum maritimum</i> L.	n	
	<i>Cyclospermum leptophyllum</i> (Pers.) Sprague	i	
	<i>Daucus carota</i> L. subsp. <i>carota</i>	n	
	<i>Daucus carota</i> L. subsp. <i>hispidus</i> (Arcang.) Heywood	n	
	<i>Foeniculum vulgare</i> Mill.	n	
	<i>Kruberia peregrina</i> (L.) Hoffm.	n	
	<i>Monizia edulis</i> Lowe subsp. <i>santosii</i> *	PS	B; H - II, IV
	<i>Petroselinum crispum</i> (Mill.) Fuss	i	
	<i>Scandix pecten-veneris</i> L. subsp. <i>pecten-veneris</i>	n	
	<i>Torilis nodosa</i> (L.) Gaertn.	n	
Apocynaceae	<i>Nerium oleander</i> L.	i	
Areaceae	<i>Phoenix canariensis</i> Chabaud	i	
	<i>Phoenix dactylifera</i> L.	i	
Asclepiadaceae	<i>Asclepias curassavica</i> L.	i	
	<i>Gomphocarpus fruticosus</i> (L.) W.T. Aiton	i	
Aspleniaceae	<i>Asplenium billotii</i> F.W. Schultz	n	
	<i>Asplenium hemionitis</i> L.	n	B; H - IV
	<i>Asplenium marinum</i> L.	n	
Asteraceae	<i>Ageratina adenophora</i> (Spreng.) R.M. King & H. Rob.	i	
	<i>Andryala glandulosa</i> Lam. subsp. <i>glandulosa</i>	n	
	<i>Anthemis cotula</i> L.	i	
	<i>Artemisia argentea</i> L'Hér.	MAD	
	<i>Aster squamatus</i> (Spreng.) Hieron.	i	
	<i>Bidens pilosa</i> L.	i	
	<i>Calendula arvensis</i> L.	n	
	<i>Calendula officinalis</i> L.	i	
	<i>Carduncellus caeruleus</i> (L.) C. Presl	np	
	<i>Carduus squarrosus</i> (DC.) Lowe	MAD	
	<i>Carduus tenuiflorus</i> Curt.	np	
	<i>Carlina salicifolia</i> (L.f.) Cav.	MAC	
	<i>Carthamus lanatus</i> L.	np	
	<i>Carthamus tinctorius</i> L.	i	
	<i>Centaurea melitensis</i> L.	np	
	<i>Chamaemelum mixtum</i> (L.) All.	i	
	<i>Cheirolophus massonianus</i> (Lowe) A. Hansen & Sunding	MAD	H - II, IV
	<i>Chrysanthemum coronarium</i> L.	i	
	<i>Chrysanthemum segetum</i> L.	i	
	<i>Cichorium endivia</i> L. subsp. <i>divaricatum</i> (Schousb.) P.D. Sell	np	
	<i>Cirsium vulgare</i> (Savi) Ten.	i	
	<i>Conyza bonariensis</i> (L.) Cronquist	i	
	<i>Conyza sumatrensis</i> (Retz.) E. Walker	i	
	<i>Cotula australis</i> (Sieber ex Spreng.) Hook.f.	i	

<i>Crepis divaricata</i> (Lowe) F.W. Schultz	MAD	
<i>Crepis noronhaea</i> Babc.	PS	
<i>Cynara cardunculus</i> L. var <i>ferocissimo</i>	n	
<i>Dittrichia viscosa</i> (L.) Greuter	ip	
<i>Filago pyramidata</i> L.	n	
<i>Gaillardia pulchella</i> Foug.	i	
<i>Galactites tomentosa</i> Moench	n	
<i>Galinsoga parviflora</i> Cav.	i	
<i>Galinsoga quadriradiata</i> Ruiz & Pav.	i	
<i>Glebionis coronaria</i> (L.) Tzvelev	i	
<i>Hedypnois cretica</i> (L.) Dum.-Cours.	n	
<i>Helichrysum melaleucum</i> Rchb. subsp. <i>roseum</i> (Lowe) R.Jardim & M.Seq.	PS	
<i>Helminthotheca echioides</i> (L.) Holub	np	
<i>Hypochoeris glabra</i> L.	n	
<i>Lactuca serriola</i> L.	ip	
<i>Lactuca virosa</i> L.	n	
<i>Leontodon taraxacoides</i> (Vill.) Merat subsp. <i>longirostris</i> Finch & P.D. Sell	n	
<i>Logfia gallica</i> (L.) Coss. & Germ.	n	
<i>Mantiscalca salmantica</i> (L.) Briq. & Cavill.	np	
<i>Nauplius aquaticus</i> (L.) Cass.	n	
<i>Pericallis menezesii</i> R. Jardim, K. E. Jones, M. Carine & M. Sequeira	PS	
<i>Phagnalon lowei</i> DC (<i>P. benettii</i>)	MAD	B; H - II, IV
<i>Phagnalon saxatile</i> (L.) Cass.	n	
<i>Pseudognaphalium luteo-album</i> (L.) Hilliard & B.L. Burt	n	
<i>Scolymus maculatus</i> L.	np	
<i>Senecio angulatus</i> L.f.	i	
<i>Senecio incrassatus</i> Lowe	MAC	
<i>Senecio sylvaticus</i> L.	n	
<i>Senecio vulgaris</i> L.	np	
<i>Silybum marianum</i> (L.) Gaertn.	np	
<i>Soliva stolonifera</i> (Brot.) R. Br. ex G. Don	i	
<i>Sonchus oleraceus</i> L.	np	
<i>Sonchus parathalassius</i> J.G. Costa ex R. Jardim & M. Seq.	PS	
<i>Sonchus tenerrimus</i> L.	i	
<i>Sonchus ustulatus</i> Lowe subsp. <i>maderensis</i> Aldridge	MAD	
<i>Taraxacum officinale</i> Weber agg.	ip	
<i>Tolpis barbata</i> (L.) Gaertn. subsp. <i>barbata</i>	n	
<i>Tolpis succulenta</i> (Dryand. in Aiton) Lowe	MAC	
<i>Tragopogon hybridus</i> L.	np	
<i>Urospermum picroides</i> (L.) Scop. ex F.W. Schmidt	np	
<i>Boussingaultia cordifolia</i> Ten.	i	
Basellaceae Boraginaceae <i>Anchusa azurea</i> Mill.	np	
<i>Borago officinalis</i> L.	i	
<i>Cynoglossum creticum</i> Mill.	n	
<i>Echium nervosum</i> Dryand.	MAD	
<i>Echium plantagineum</i> L.	n	
<i>Echium portosanctense</i> J. A. Carvalho, Pontes, Batista- Marques & R. Jardim	PS	
<i>Heliotropium europaeum</i> L.	n	
<i>Heliotropium ramosissimum</i> (Lehm.) DC.	n	
<i>Myosotis discolor</i> Pers.	n	

Brassicaceae	<i>Brassica nigra</i> (L.) W.D.J. Koch	n	
	<i>Cakile maritima</i> Scop. subsp. <i>maritima</i>	n	
	<i>Capsella bursa-pastoris</i> (L.) Medik.	n	
	<i>Cardamine hirsuta</i> L.	n	
	<i>Coronopus didymus</i> (L.) Sm.	i	
	<i>Coronopus squamatus</i> (Forssk.) Asch.	n	
	<i>Crambe fruticosa</i> L.f.	MAD	
	<i>Diplotaxis tenuifolia</i> (L.) DC.	i	
	<i>Eruca vesicaria</i> (L.) Cav. subsp. <i>sativa</i> (Mill.) Thell.	n	
	<i>Erysimum arbuscula</i> (Lowe) Snogerup	PS	
	<i>Lepidium virginicum</i> L.	i	
	<i>Lobularia libyca</i> (Viv.) Meisn.	n	
	<i>Matthiola maderensis</i> Lowe	MAD	
	<i>Matthiola parviflora</i> (Schousb.) R. Br.	np	
	<i>Raphanus raphanistrum</i> L. subsp. <i>raphanistrum</i>	n	
	<i>Rapistrum rugosum</i> (L.) All. subsp. <i>linnaeanum</i> (Coss.)	n	
	Rouy & Foucaud		
	<i>Rapistrum rugosum</i> (L.) All. subsp. <i>rugosum</i>	n	
	<i>Rorippa nasturtium-aquaticum</i> (L.) Hayek	n	
	<i>Sinapis arvensis</i> L.	n	
	<i>Sisymbrium erysimoides</i> Desf.	n	
	<i>Sisymbrium irio</i> L.	i	
	<i>Sisymbrium officinale</i> (L.) Scop.	n	
	<i>Teesdalia coronopifolia</i> (J.P. Bergeret) Thell.	n	
	<i>Thlaspi arvense</i> L.	np	
	Cactaceae	<i>Opuntia ficus-barbarica</i> A. Berger	i
<i>Opuntia subulata</i> (Muehlenpf.) Engelm		i	
<i>Opuntia tuna</i> (L.) Mill.		i	
Callitrichaceae	<i>Callitriche stagnalis</i> Scop. S	n	
Campanulaceae	<i>Campanula erinus</i> L.	n	
	<i>Wahlenbergia lobelioides</i> (L.f.) Link subsp. <i>lobelioides</i>	MAC	
Caryophyllaceae	<i>Arenaria leptoclados</i> (Rchb.) Guss.	n	
	<i>Cerastium fontanum</i> Baumg. subsp. <i>vulgare</i> (Hartm.)	n	
	Greuter & Burdet		
	<i>Cerastium glomeratum</i> Thuill.	n	
	<i>Herniaria cinerea</i> DC.	n	
	<i>Petrorhagia nanteuillii</i> (Burnat) P.W. Ball & Heywood	n	
	<i>Polycarpon tetraphyllum</i> (L.) L. subsp. <i>tetraphyllum</i>	n	
	<i>Sagina apetala</i> Ard.	n	
	<i>Sagina procumbens</i> L.	n	
	<i>Scleranthus annuus</i> L.	n	
	<i>Silene behen</i> L.	n	
	<i>Silene gallica</i> L.	n	
	<i>Silene inaperta</i> L. subsp. <i>inaperta</i>	n	
	<i>Silene nocturna</i> L.	n	
	<i>Silene uniflora</i> Roth	n	
	<i>Silene vulgaris</i> (Moench) Garcke	n	
	<i>Spergula fallax</i> (Lowe) E.H.L. Krause	n	
	<i>Spergularia bocconeii</i> (Scheele) Graebn.	n	
	<i>Spergularia marina</i> (L.) Besser	n	
	<i>Stellaria media</i> (L.) Vill.	n	
Celastraceae	<i>Maytenus umbellata</i> (R. Br.) Mabb.	MAD	H - II, IV
Chenopodiaceae	<i>Atriplex glauca</i> L.	n	
	<i>Atriplex halimus</i> L.	i	

	<i>Atriplex rosea</i> L.	i
	<i>Atriplex semibaccata</i> R.Br.	i
	<i>Bassia tomentosa</i> (Lowe) Maire & Weiller	n
	<i>Beta maritima</i> L.	n
	<i>Beta vulgaris</i> L.	i
	<i>Chenopodium album</i> L.	n
	<i>Chenopodium ambrosioides</i> L.	n
	<i>Chenopodium murale</i> L.	n
	<i>Chenopodium opulifolium</i> Schrad. ex W.D.J. Koch & Ziz	n
	<i>Chenopodium vulvaria</i> L.	i
	<i>Patellifolia patellaris</i> (Moq.) A.J. Scott, Ford-Lloyd & J.T. Williams	n
	<i>Patellifolia procumbens</i> (C. Sm.) A.J. Scott, Ford-Lloyd & J.T. Williams	MAC
	<i>Salsola kali</i> L.	n
	<i>Suaeda vera</i> Forssk. ex J.F. Gmel	n
Cistaceae	<i>Cistus ladanifer</i> L.	i
	<i>Cistus psilosepalus</i> Sweet	i
Convolvulaceae	<i>Calystegia soldanella</i> (L.) R. Br.	n
	<i>Convolvulus althaeoides</i> L.	n
	<i>Convolvulus arvensis</i> L.	n
	<i>Convolvulus siculus</i> L. subsp. <i>siculus</i>	n
	<i>Cuscuta epithymum</i> (L.) L.	n
	<i>Cuscuta planiflora</i> Ten.	n
	<i>Ipomoea batatas</i> (L.) Lam.	i
	<i>Ipomoea imperati</i> (Vahl) Griseb.	ip
	<i>Ipomoea pes-caprae</i> (L.) R.Br.	i
	<i>Ipomoea purpurea</i> (L.) Roth	i
Crassulaceae	<i>Aeonium arboreum</i> (L.) Webb & Berthel.	i
	<i>Aeonium glandulosum</i> (Aiton) Webb & Berthel.	MAD
	<i>Aeonium glutinosum</i> (Aiton) Webb & Berthel.	MAD
	<i>Aichryson villosum</i> (Aiton) Webb & Berthel.	MAC
	<i>Cotyledon orbiculata</i> L.	i
	<i>Crassula tillaea</i> Lest.-Garl.	n
	<i>Kalanchoe daigremontiana</i> Raym.-Hamet & H. Perrier	i
	<i>Sedum nudum</i> Aiton	MAD
	<i>Umbilicus gaditanus</i> Boiss	n
	<i>Umbilicus rupestris</i> (Salisb.) Dandy	n
Cucurbitaceae	<i>Citrullus lanatus</i> (Thunb.) Matsum. & Nakai	
Cupressaceae	<i>Cupressus macrocarpa</i> Hartw.	i
	<i>Juniperus turbinata</i> Guss. subsp. <i>canariensis</i> (Guyot) Rivas Mart., Wildpret & P. Perez	MAC
Cyperaceae	<i>Bolboschoenus maritimus</i> (L.) Palla	n
	<i>Carex divulsa</i> Stokes subsp. <i>divulsa</i>	n
	<i>Carex muricata</i> L. subsp. <i>lamprocarpa</i> C~elak	n
	<i>Cyperus eragrostis</i> Lam.	i
	<i>Cyperus involucratus</i> Rottb.	i
	<i>Cyperus longus</i> L.	n
	<i>Cyperus rotundus</i> L.	ip
	<i>Isolepis cernua</i> (Vahl) Roem. & Schult.	n
	<i>Juncellus laevigatus</i> (L.) C.B. Clarke subsp. <i>laevigatus</i>	n
	<i>Schoenoplectus triqueter</i> (L.) Palla	n
Davalliaceae	<i>Davallia canariensis</i> (L.) Sm.	n
Dioscoreaceae	<i>Tamus edulis</i> Lowe	MAC

Dipsacaceae	<i>Dipsacus ferox</i> Loisel.	n	
	<i>Scabiosa atropurpurea</i> L.	i	
Elaeagnaceae	<i>Elaeagnus angustifolia</i> L.	i	
Ephedraceae	<i>Ephedra fragilis</i> Desf.	n	
Equisetaceae	<i>Equisetum telmateia</i> Ehrh.	n	
Ericaceae	<i>Arbutus unedo</i> L.	i	
	<i>Erica platycodon</i> (Webb & Berthel.) Rivas Mart et al. <i>maderincola</i>	MAD	
Euphorbiaceae	<i>Chamaesyce peplis</i> (L.) Prokh.	n	
	<i>Chamaesyce prostrata</i> (Aiton) Small	i	
	<i>Chamaesyce serpens</i> (Kunth) Small	i	
	<i>Euphorbia helioscopia</i> L.	n	
	<i>Euphorbia ingens</i> E. Mey.	i	
	<i>Euphorbia paralias</i> L.	n	
	<i>Euphorbia peplus</i> L.	n	
	<i>Euphorbia piscatoria</i> Aiton	MAD	C - II
	<i>Euphorbia terracina</i> L.	n	
	<i>Mercurialis ambigua</i> L.f.	n	
	<i>Ricinus communis</i> L.	i	
Fabaceae	<i>Acacia farnesiana</i> (L.) Willd.	i	
	<i>Acacia longifolia</i> (Andrews) Willd.	i	
	<i>Acacia melanoxylon</i> R. Br.	i	
	<i>Albizia lophantha</i> (Willd.) Benth.	i	
	<i>Astragalus boeticus</i> L.	np	
	<i>Astragalus pelecinus</i> (L.) Barneby	n	
	<i>Astragalus solandri</i> Lowe	n	
	<i>Bituminaria bituminosa</i> (L.) C.H. Stirt.	n	
	<i>Ceratonia siliqua</i> L.	i	
	<i>Cytisus scoparius</i> (L.) Link subsp. <i>scoparius</i>	i	
	<i>Cytisus striatus</i> (Hill) Rothm.	i	
	<i>Hippocrepis multisiliquosa</i> L.	n	
	<i>Lathyrus aphaca</i> L.	n	
	<i>Lathyrus cicera</i> L.	i	
	<i>Lathyrus clymenum</i> L.	n	
	<i>Lathyrus ochrus</i> (L.) DC.	i	
	<i>Lathyrus sativus</i> L.		
	<i>Lens culinaris</i> Medik.	i	
	<i>Lotus argyroides</i> R.P. Murray	MAD	
	<i>Lotus glaucus</i> Aiton subsp. <i>floridus</i> (Lowe) R. Jardim & M. Seq.	PS	
	<i>Lotus hispidus</i> Desf. ex DC.	n	
	<i>Lotus loweanus</i> Webb & Berthel.	PS	
	<i>Lotus macranthus</i> Lowe	MAD	
	<i>Medicago italica</i> (Mill.) Fiori	n	
	<i>Medicago littoralis</i> Rhode ex Loisel.	n	
	<i>Medicago lupulina</i> L.	ip	
	<i>Medicago minima</i> (L.) L.	n	
<i>Medicago polymorpha</i> L.	n		
<i>Medicago sativa</i> L.	i		
<i>Medicago truncatula</i> Gaertn.	n		
<i>Melilotus indicus</i> (L.) All.	n		
<i>Melilotus sulcatus</i> Desf.	n		
<i>Ononis dentata</i> Sol. ex Lowe	n		
<i>Ononis diffusa</i> Ten.	n		

	<i>Ononis mitissima</i> L.	n
	<i>Ononis serrata</i> Forssk.	n
	<i>Ornithopus compressus</i> L.	n
	<i>Ornithopus perpusillus</i> L.	n
	<i>Ornithopus pinnatus</i> (Mill.) Druce	n
	<i>Phaseolus lanatus</i> L.	
	<i>Scorpiurus sulcatus</i> L.	n
	<i>Trifolium angustifolium</i> L.	n
	<i>Trifolium arvense</i> L.	n
	<i>Trifolium campestre</i> Schreb.	n
	<i>Trifolium cernuum</i> Brot.	n
	<i>Trifolium dubium</i> Sibth.	n
	<i>Trifolium glomeratum</i> L.	n
	<i>Trifolium lappaceum</i> L.	n
	<i>Trifolium resupinatum</i> L.	n
	<i>Trifolium scabrum</i> L.	n
	<i>Trifolium squamosum</i> L.	n
	<i>Trifolium squarrosum</i> L.	n
	<i>Trifolium striatum</i> L. subsp. <i>striatum</i>	n
	<i>Trifolium suffocatum</i> L.	n
	<i>Trifolium tomentosum</i> L.	n
	<i>Ulex minor</i> Roth	i
	<i>Vicia angustifolia</i> L.	n
	<i>Vicia cordata</i> Hoppe	np
	<i>Vicia costae</i> A. Hansen	PS
	<i>Vicia ferreirensis</i> Goyder	PS
	<i>Vicia hirsuta</i> (L.) Gray	n
	<i>Vicia lutea</i> L. subsp. <i>lutea</i>	n
	<i>Vicia lutea</i> L. subsp. <i>vestita</i> (Boiss.) Rouy	n
	<i>Vicia parviflora</i> Cav.	n
Fagaceae	<i>Quercus ilex</i> L.	i
Frankeniaceae	<i>Frankenia laevis</i> L.	n
	<i>Frankenia pulverulenta</i> L.	n
Geraniaceae	<i>Erodium botrys</i> (Cav.) Bertol.	n
	<i>Erodium chium</i> (L.) Willd. subsp. <i>chium</i>	n
	<i>Erodium cicutarium</i> (L.) L'Her. subsp. <i>bipinnatum</i> (Cav.) Four.	n
	<i>Erodium cicutarium</i> (L.) L'Her. subsp. <i>cutarium</i>	n
	<i>Erodium malacoides</i> (L.) L'Her.	n
	<i>Erodium moschatum</i> (L.) L'Her.	n
	<i>Geranium dissectum</i> L.	n
	<i>Geranium molle</i> L.	n
	<i>Geranium purpureum</i> Vill.	n
	<i>Geranium rotundifolium</i> L.	n
	<i>Pelargonium glutinosum</i> (Jacq.) L'Her.	i
	<i>Pelargonium inquinans</i> (L.) L'Her. ex Aiton	i
	<i>Pelargonium x hortorum</i> L.H. Bailey	i
Globulariaceae	<i>Globularia salicina</i> Lam.	MAC
Hemionitidaceae	<i>Anogramma leptophylla</i> (L.) Link	n
Hydrangeaceae	<i>Hydrangea macrophylla</i> (Thunb.) Ser	i
Hypericaceae	<i>Hypericum glandulosum</i> Aiton	MAC
Hypolepidaceae	<i>Pteridium aquilinum</i> (L.) Kuhn subsp. <i>aquilinum</i>	n
Iridaceae	<i>Chasmanthe aethiopica</i> (L.) N.E. Br.	i
	<i>Gladiolus italicus</i> Mill.	i

	<i>Romulea columnae</i> Sebast. & Mauri subsp. <i>grandiscapa</i> (Webb) G. Kunkel	MAC	
Juncaceae	<i>Juncus acutus</i> L. subsp. <i>acutus</i>	n	
	<i>Juncus bufonius</i> L.	n	
	<i>Juncus foliosus</i> Desf.	np	
	<i>Juncus inflexus</i> L.	n	
	<i>Luzula campestris</i> (L.) DC.	n	
Lamiaceae	<i>Ajuga iva</i> (L.) Schreb. subsp. <i>pseudoiva</i> (DC.) Briq.	n	
	<i>Ballota nigra</i> L.	n	
	<i>Calamintha nepeta</i> (L.) Savi subsp. <i>sylvatica</i> (Bromf.) R. Morales	n	
	<i>Lamium amplexicaule</i> L.	n	
	<i>Lavandula pedunculata</i> (Mill.) Cav. subsp. <i>maderensis</i> (Benth.) Menezes	MAD	
	<i>Marrubium vulgare</i> L.	n	
	<i>Mentha pulegium</i> L.	n	
	<i>Micromeria varia</i> subsp. <i>thymoides</i> (Sol. ex Lowe) P. Pérez	MAD	
	<i>Origanum vulgare</i> L. subsp. <i>virens</i> (Hoffmanns. & Link) Bonnier & Layens	n	
	<i>Prasium majus</i> L.	n	
	<i>Salvia verbenaca</i> L.	n	
	<i>Sideritis candicans</i> Aiton var. <i>multiflora</i>	PS	
	<i>Stachys arvensis</i> (L.) L.	n	
	<i>Stachys ocymastrum</i> (L.) Briq.	n	
Lauraceae	<i>Apollonias barbuiana</i> (Cav.) Bornm. ††	MAC, i	
	<i>Laurus novocanariensis</i> Rivas Mart., Lousa, Fern. Prieto, E. Dias, J. C. Costa & C. Aguiar ††	MAC, i	
Liliaceae	<i>Agapanthus praecox</i> Willd. subsp. <i>orientalis</i> (F.M. Leight) F.M. Leight	i	
	<i>Aloe arborescens</i> Mill.	i	
	<i>Asparagus aethiopicus</i> L.	i	
	<i>Asparagus scoparius</i> Lowe	MAC	
	<i>Asphodelus fistulosus</i> L.	n	
	<i>Autonoe madeirensis</i> (<i>Scilla maderensis</i>) (Menezes) Speta	MAD	H - II
	<i>Semele androgyna</i> (L.) Kunth (<i>S. maderensis</i>)	MAC	B; H - II
	<i>Linum bienne</i> Mill.	n	
	<i>Linum strictum</i> L.	n	
	<i>Linum trigynum</i> L.	n	
Lythraceae	<i>Lythrum hyssopifolia</i> L.	n	
	<i>Lythrum junceum</i> Banks & Sol.	n	
Malvaceae	<i>Hibiscus rosa-sinensis</i> L.	i	
	<i>Lavatera arborea</i> L.	i	
	<i>Lavatera cretica</i> L.	n	
	<i>Malva parviflora</i> L.	n	
Moraceae	<i>Ficus carica</i> L.	i	
	<i>Morus nigra</i> L.	i	
Myoporaceae	<i>Myoporum laetum</i> G. Forst.	i	
Myricaceae	<i>Myrica faya</i> Aiton	i	
Myrsinaceae	<i>Heberdenia excelsa</i> (Aiton) Banks ex DC.	MAC	
Myrtaceae	<i>Eucalyptus robusta</i> Sm.	i	
	<i>Metrosideros excelsa</i> Sol. ex Gaertn.	i	

Oleaceae	<i>Olea europaea</i> L.	i	
	<i>Olea maderensis</i> (Lowe) Rivas Mart. & del Arco	MAD	
Ophioglossaceae	<i>Ophioglossum lusitanicum</i> L.	n	
Orchidaceae	<i>Gennaria diphylla</i> (Link) Parl.	n	C - II
Orobanchaceae	<i>Orobanche calendulae</i> Pomel	n	
	<i>Orobanche minor</i> Sm.	n	
	<i>Orobanche ramosa</i> L. ssp. <i>nana</i> (Reut.) Cout.	n	
Oxalidaceae	<i>Oxalis corniculata</i> L.	i	
	<i>Oxalis debilis</i> Kunth	i	
	<i>Oxalis pes-caprae</i> L.	i	
Papaveraceae	<i>Fumaria bastardii</i> Boreau	n	
	<i>Fumaria muralis</i> (Sonder) ssp. <i>muralis</i> var. <i>laeta</i> Lowe.	PS	
	<i>Fumaria parviflora</i> Lam.	n	
	<i>Glaucium corniculatum</i> (L.) Rudolph	n	
	<i>Papaver dubium</i> L.	n	
	<i>Papaver hybridum</i> L.	n	
	<i>Papaver rhoeas</i> L.	n	
	<i>Papaver somniferum</i> L. subsp. <i>setigerum</i> (DC.) Arcang.	n	
	<i>Papaver somniferum</i> L. subsp. <i>somniferum</i>	i	
Pinaceae	<i>Pinus halepensis</i> Mill.	i	
	<i>Pinus pinaster</i> Aiton	i	
Plantaginaceae	<i>Plantago coronopus</i> L.	n	
	<i>Plantago lagopus</i> L.	n	
	<i>Plantago lanceolata</i> L.	n	
	<i>Plantago leiopetala</i> Lowe	MAD	
	<i>Plantago loeflingii</i> L.	i	
	<i>Plantago maderensis</i> Decne.	MAD	
	<i>Plantago major</i> L.	n	
	<i>Plantago ovata</i> Forssk.	n	
Plumbaginaceae	<i>Limonium lowei</i> R. Jardim, M. Seq., Capelo, J. C. Costa & Rivas Mart.	PS	
	<i>Limonium sinuatum</i> (L.) Mill.	i	
Poaceae	<i>Aira caryophyllea</i> L.	n	
	<i>Arundo donax</i> L.	i	
	<i>Avena barbata</i> Pott ex Link	np	
	<i>Avena fatua</i> L.	np	
	<i>Brachypodium distachyum</i> (L.) P. Beauv.	n	
	<i>Brachypodium sylvaticum</i> (Huds.) P. Beauv.	n	
	<i>Briza maxima</i> L.	n	
	<i>Briza minor</i> L.	n	
	<i>Bromus catharticus</i> Vahl	i	
	<i>Bromus diandrus</i> Roth	n	
	<i>Bromus hordeaceus</i> L. subsp. <i>hordeaceus</i>	n	
	<i>Bromus lanceolatus</i> Roth	n	
	<i>Bromus madritensis</i> L.	n	
	<i>Catapodium rigidum</i> (L.) C.E. Hubb.	n	
	<i>Cenchrus ciliaris</i> L.	ip	
	<i>Chloris gayana</i> Kunth	i	
	<i>Cynodon dactylon</i> (L.) Pers.	n	
	<i>Cynosurus echinatus</i> L.	n	
	<i>Dactylis glomerata</i> L. subsp. <i>glomerata</i>	ip	
	<i>Dactylis smithii</i> Link subsp. <i>marina</i> (Borrill) Parker	n	
	<i>Digitaria ciliaris</i> (Retz.) Koeler	i	

<i>Digitaria sanguinalis</i> (L.) Scop.	i	
<i>Eleusine indica</i> (L.) Gaertn.	i	
<i>Eragrostis barrelieri</i> Daveau	i	
<i>Festuca jubata</i> Lowe	MAC	
<i>Gastridium phleoides</i> (Nees & Meyen) C.E. Hubb.	i	
<i>Hainardia cylindrica</i> (Willd.) Greuter	n	
<i>Holcus lanatus</i> L. subsp. <i>lanatus</i>	np	
<i>Hordeum marinum</i> Huds. subsp. <i>gussoneanum</i> (Parl.) Thell.	n	
<i>Hordeum marinum</i> Huds. subsp. <i>marinum</i>	n	
<i>Hordeum murinum</i> L. subsp. <i>leporinum</i> (Link) Asch. & Graebn.	n	
<i>Hordeum vulgare</i> L.		
<i>Hyparrhenia sinaica</i> (Delile) Llauro ex G. Lopez	n	
<i>Lagurus ovatus</i> L.	n	
<i>Lamarckia aurea</i> (L.) Moench	n	
<i>Lolium canariense</i> Steud.	MAC	
<i>Lolium lowei</i> Menezes	MAC	
<i>Lolium multiflorum</i> Lam.	i	
<i>Lolium perenne</i> L.	i	
<i>Lolium rigidum</i> Gaudin subsp. <i>lepturoides</i> (Boiss.) Sennen & Mauricio	i	
<i>Lolium rigidum</i> Gaudin subsp. <i>rigidum</i>	i	
<i>Lolium temulentum</i> L.	i	
<i>Oryzopsis miliacea</i> (L.) Asch. & Schweinf.	n	
<i>Panicum maximum</i> Jacq.	i	
<i>Parapholis filiformis</i> (Roth) C.E. Hubb.	n	
<i>Parapholis incurva</i> (L.) C.E. Hubb.	n	
<i>Paspalum dilatatum</i> Poir.	i	
<i>Pennisetum purpureum</i> Schum.	i	
<i>Phalaris aquatica</i> L.	np	
<i>Phalaris brachystachys</i> Link	np	
<i>Phalaris coerulescens</i> Desf.	np	
<i>Phalaris maderensis</i> (Menezes) Menezes	MAC	B; H - II, IV
<i>Phalaris minor</i> Retz	np	
<i>Phalaris paradoxa</i> L.	np	
<i>Phragmites australis</i> (Cav.) Trin. ex Steud.	n	
<i>Poa annua</i> L.	np	
<i>Poa trivialis</i> L.	ip	
<i>Polypogon maritimus</i> Willd.	n	
<i>Polypogon monspeliensis</i> (L.) Desf.	n	
<i>Polypogon viridis</i> (Gouan) Breistr.	np	
<i>Rostraria cristata</i> (L.) Tzvelev	n	
<i>Rostraria pumila</i> (Desf.) Tzvelev	n	
<i>Schismus barbatus</i> (L.) Thell.	n	
<i>Setaria parviflora</i> (Poir.) Kerguelen	i	
<i>Setaria verticillata</i> (L.) P. Beauv.	ip	
<i>Sporobolus africanus</i> (Poir.) Robyns & Tournay	i	
<i>Stenotaphrum secundatum</i> (Walter) Kuntze	i	
<i>Stipa capensis</i> Thunb.	n	
<i>Triplachne nitens</i> (Guss.) Link	n	
<i>Triticum aestivum</i> L.		
<i>Vulpia bromoides</i> (L.) S.F. Gray	n	
<i>Vulpia geniculata</i> (L.) Link	i	

	<i>Vulpia muralis</i> (Kunth) Nees	n	
	<i>Vulpia myuros</i> (L.) C.C. Gmel.	n	
Polygonaceae	<i>Emex spinosa</i> (L.) Campd.	n	
	<i>Polygonum aviculare</i> L.	n	
	<i>Polygonum maritimum</i> L.	n	
	<i>Polygonum patulum</i> M. Bieb.	i	
	<i>Polygonum persicaria</i> L.	n	
	<i>Rumex bucephalophorus</i> L. subsp. <i>canariensis</i> (Steinh.) Rech.f.	MAC	
	<i>Rumex crispus</i> L.	ip	
	<i>Rumex pulcher</i> L. subsp. <i>woodsii</i> (De Not.) Arcang.	n	
Polypodiaceae	<i>Polypodium macaronesticum</i> A.E. Bobrov	n	
Portulacaceae	<i>Portulaca oleracea</i> L. subsp. <i>oleracea</i>	n	
Primulaceae	<i>Anagallis arvensis</i> L.	n	
Ranunculaceae	<i>Adonis microcarpa</i> DC.	i	
	<i>Consolida ajacis</i> (L.) Schur	i	
	<i>Ranunculus muricatus</i> L.	n	
Resedaceae	<i>Reseda luteola</i> L.	np	
Rosaceae	<i>Chamaemeles coriacea</i> Lindl. *	MAD	B; H - II•
	<i>Rubus ulmifolius</i> Schott	n	
Rubiaceae	<i>Galium aparine</i> L.	n	
	<i>Galium geminiflorum</i> Lowe	MAC	
	<i>Galium murale</i> (L.) All.	n	
	<i>Galium parisiense</i> L.	n	
	<i>Galium verrucosum</i> Huds.	n	
	<i>Phyllis nobla</i> L.	MAC	
	<i>Rubia fruticosa</i> Aiton subsp. <i>fruticosa</i>	MAC	
	<i>Sherardia arvensis</i> L.	n	
Ruppiaceae	<i>Ruppia maritima</i> L.	n	
Rutaceae	<i>Ruta chalepensis</i> L.	n	
Salicaceae	<i>Populus alba</i> L.	i	
Sapindaceae	<i>Dodonaea viscosa</i> (L.) Jacq.	i	
Sapotaceae	<i>Sideroxylon mirmulans</i> R. Br. (<i>S. marmulano</i>)	MAD	B; H - IV
Saxifragaceae	<i>Saxifraga portosanctana</i> Boiss.	PS	B; H - IV
Scrophulariaceae	<i>Bartsia trixago</i> L.	n	
	<i>Misopates orontium</i> (L.) Raf. subsp. <i>orontium</i>	n	
	<i>Scrophularia lowei</i> Dalgaard	MAD	
	<i>Sibthorpia peregrina</i> L.	MAD	H - II
	<i>Verbascum virgatum</i> Stokes	n	
	<i>Veronica agrestis</i> L.	np	
	<i>Veronica arvensis</i> L.	n	
	<i>Veronica polita</i> Fr.	i	
Selaginellaceae	<i>Selaginella denticulata</i> (L.) Spring	n	
Solanaceae	<i>Datura stramonium</i> L.	i	
	<i>Hyoscyamus albus</i> L.	n	
	<i>Lycium europaeum</i> L.	np	
	<i>Lycopersicum esculentum</i> Mill.	i	
	<i>Nicandra physalodes</i> (L.) Gaertn.	i	
	<i>Nicotiana glauca</i> Graham S	i	
	<i>Nicotiana tabacum</i> L.	i	
	<i>Physalis peruviana</i> L.	i	
	<i>Solanum mauritianum</i> Scop.	i	
	<i>Solanum nigrum</i> L. subsp. <i>nigrum</i>	np	
Tamaricaceae	<i>Tamarix gallica</i> L.	i	

Tropaeolaceae	<i>Tropaeolum majus</i> L.	i
Urticaceae	<i>Parietaria debilis</i> G. Forst.	n
	<i>Parietaria judaica</i> L.	n
	<i>Urtica membranacea</i> Poir.	n
	<i>Urtica portosanctana</i> Press	MAD
	<i>Urtica urens</i> L.	n
Verbenaceae	<i>Lantana camara</i> L.	i
	<i>Verbena officinalis</i> L.	n
Vitaceae	<i>Vitis vinifera</i> L.	i

ARTHROPODS

Family	Taxa	Naturalness
Acrididae	<i>Aiolopus strepens strepens</i> Latreille, 1804	n
	<i>Aiolopus thalassinus thalassinus</i> Fabricius, 1781	n
	<i>Sphingonotus rubescens rubescens</i> Walker, 1870	n
Aeolothripidae	<i>Aeolothrips collaris</i> Priesner, 1919	n
Aeshnidae	<i>Anax ephippiger</i> Burmeister, 1839	n
	<i>Anax imperator</i> Leach, 1815	n
	<i>Anax parthenope</i> Selys, 1839	n
Agelenidae	<i>Tegenaria parietina</i> Fourcroy, 1785	?
Aleyrodidae	<i>Bemisia afer</i> Priesner & Hosny, 1934	i
	<i>Bemisia tabaci</i> Gennadius, 1889	i
	<i>Siphoninus phillyreae</i> Haliday, 1835	i
Anisolabidae	<i>Anisolabis maritima</i> Gené, 1832	n
	<i>Euborelia annulipes</i> Lucas, 1847	n
Anobiidae	<i>Sphaericus albopictus plantaginis</i> Erber, 2000	PS
	<i>Sphaericus ater</i> Leiler, 1984	PS
	<i>Sphaericus fragilis</i> Wollaston, 1854	MAD
	<i>Sphaericus leileri</i> Erber, 2000	PS
	<i>Sphaericus nodulus</i> Wollaston, 1854	PS
Anthicidae	<i>Cordicollis instabilis instabilis</i> Schmidt, 1842	
	<i>Hirticollis hispidus</i> Rossi, 1792	
Anthocoridae	<i>Brachysteles wollastoni</i> White, 1880	MAC
	<i>Lyctocoris campestris</i> Fabricius, 1794	n
	<i>Orius laevigatus maderensis</i> Reuter, 1884	MAC
	<i>Orius limbatus</i> Wagner, 1952	MAC
Aphididae	<i>Acyrtosiphon lactucae</i> Passerini, 1860	n
	<i>Acyrtosiphon pisum pisum</i> Harris, 1776	n
	<i>Aphis fabae</i> Scopoli, 1763	i
	<i>Aphis gossypii</i> Glover, 1877	n
	<i>Aphis nerii</i> Fonscolombe, 1841	i
	<i>Aphis pomi</i> De Geer, 1773	i
	<i>Aphis punicae</i> Passerini, 1863	i
	<i>Aphis solanella</i> Theobald, 1914	i
	<i>Aphis spiraeicola</i> Patch, 1914	i
	<i>Aulacorthum solani</i> Kaltenbach, 1843	n
	<i>Brachycaudus cardui</i> Linnaeus, 1758	i
	<i>Brachycaudus helichrysi</i> Kaltenbach, 1843	i
	<i>Brachycaudus schwartzi</i> Börner, 1931	i
	<i>Brevicoryne brassicae</i> Linnaeus, 1758	n
	<i>Cavariella aegopodii</i> Scopoli, 1763	n
	<i>Diuraphis noxia</i> Kurdjumov, 1913	i
	<i>Dysaphis apiifolia</i> Theobald, 1923	n

	<i>Dysaphis emicis</i> Mimeur, 1935	n
	<i>Hyadaphis foeniculi</i> Passerini, 1860	i
	<i>Hyperomyzus lactucae</i> Linnaeus, 1758	i
	<i>Macrosiphoniella tapuskae</i> Hottes & Frison, 1931	i
	<i>Macrosiphum euphorbiae</i> Thomas, 1878	i
	<i>Melanaphis donacis</i> Passerini, 1862	i
	<i>Myzus ornatus</i> Laing, 1932	n
	<i>Myzus persicae</i> Sulzer, 1776	i
	<i>Nasonovia ribisnigri</i> Mosley, 1841	i
	<i>Pentatrichopus fragaefolii</i> Cockerell, 1901	i
	<i>Rhodobium porosum</i> Sanderson, 1900	i
	<i>Schizaphis graminum</i> Rondani, 1852	n
	<i>Toxoptera aurantii</i> Fonscolombe, 1841	i
	<i>Toxoptera citricidus</i> Kirkaldy, 1907	i
	<i>Uroleucon jaceae jaceae</i> Linnaeus, 1758	n
	<i>Uroleucon mieraе</i> Tizado & Nieto-Nafria, 1994	n
	<i>Uroleucon sonchi</i> Linnaeus, 1767	n
Aphodiidae	<i>Aphodius ghardimaouensis</i> Balthasar, 1929	
	<i>Aphodius granarius</i> Linnaeus, 1767	
	<i>Aphodius hydrochaeris</i> Fabricius, 1798	
	<i>Aphodius pedrosi</i> Wollaston, 1854	
	<i>Aphodius pseudolividus</i> Balthasar, 1941	
	<i>Aphodius sturmi</i> Harold, 1870	
	<i>Brindalus maderae</i> Pittino, 1983	MAD
	<i>Brindalus schatzmayri</i> Pittino, 1980	
	<i>Platytomus tibialis</i> Fabricius, 1798	
	<i>Pleurophorus caesus</i> Creutzer, 1796	
Apidae	<i>Amegilla maderae</i> Sichel, 1868	MAD
	<i>Andrena maderensis maderensis</i> Cockerell, 1922	MAD
	<i>Andrena wollastoni wollastoni</i> Cockerell, 1922	MAD
	<i>Apis mellifera</i> Linnaeus, 1758	i
	<i>Lasioglossum villosulum</i> Kirby, 1802	n
	<i>Lasioglossum wollastoni</i> Cockerell, 1922	MAD
	<i>Osmia madeirensis</i> Van der Zanden, 1991	MAD
Apionidae	<i>Apion frumentarium</i> Linnaeus, 1758	n
	<i>Aspidapion radiolus chalybeipenne</i> Wollaston, 1854	MAC
	<i>Holotrichapion wollastoni</i> Chevrolat, 1852	MAC
	<i>Kalcapion semivittatum sagittiferum</i> Wollaston, 1854	MAD
Araneidae	<i>Agalenatea redii</i> Scopoli, 1763	?
	<i>Araniella maderiana</i> Kulczynski, 1905	MAC
	<i>Argiope bruennichi</i> Scopoli, 1772	?
	<i>Argiope trifasciata</i> Forskål, 1775	?
	<i>Neoscona crucifera</i> Lucas, 1839	?
	<i>Zygiella x-notata</i> Clerck, 1757	?
Arctiidae	<i>Utetheisa pulchella</i> Linnaeus, 1758	m
Asilidae	<i>Machimus portosanctanus</i> Cockerell, 1921	PS
Asterolecaniidae	<i>Planchonia arabidis</i> Signoret, 1877	i
	<i>Planchonia zanthenes</i> Russell, 1941	i
Autostichidae	<i>Apatema fasciata</i> Stainton, 1859	MAC
Bedelliidae	<i>Bedellia somnulentella</i> Zeller, 1847	n
Berytidae	<i>Berytinus hirticornis pilipes</i> Puton, 1875	n
	<i>Berytinus montivagus</i> Meyer-Dür, 1841	N
Blaniulidae	<i>Acipes decolor</i> Enghoff, 1983	PS
	<i>Acipes lateralis</i> Enghoff, 1983	PS

	<i>Acipes portosantoensis</i> Enghoff, 1983	PS
Blastobasidae	<i>Blastobasis bassii</i> Karsholt & Sinev, 2004	MAD
	<i>Blastobasis decolorella</i> Wollaston, 1858	MAD
	<i>Blastobasis desertarum</i> Wollaston, 1858	MAC
	<i>Blastobasis lavernella</i> Walsingham, 1894	MAD
	<i>Blastobasis luteella</i> Karsholt & Sinev, 2004	MAD
	<i>Blastobasis marmorosella</i> Wollaston, 1858	n
	<i>Blastobasis maroccanella</i> Amsel, 1952	n
	<i>Blastobasis nigromaculata</i> Wollaston, 1858	MAD
	<i>Blastobasis subdivisus</i> Karsholt & Sinev, 2004	MAD
Blattellidae	<i>Loboptera decipiens decipiens</i> Germar, 1817	i
Blattidae	<i>Periplaneta americana</i> Linnaeus, 1758	i
Bostrichidae	<i>Scobicia barbata</i> Wollaston, 1860	i
Bourletiellida	<i>Fasciosminthurus quinquefasciatus</i> Krausbauer, 1898	
Braconidae	<i>Aleiodes apicalis</i> Brullé, 1832	
	<i>Macrocentrus collaris</i> Spinola, 1808	
	<i>Pseudopezomachus bituberculatus</i> Marshall, 1905	
Byrrhidae	<i>Curimopsis brancomontis</i> Pütz, 2002	PS
	<i>Curimopsis horrida</i> Wollaston, 1854	MAD
Caeciliusidae	<i>Stenocaecilius caboverdensis</i> Meinander, 1966	n
Cantharidae	<i>Malthinus scriptus</i> Kiesenwetter, 1852	
	<i>Malthodes kiesenwetteri</i> Wollaston, 1854	MAD
Carabidae	<i>Amara aenea</i> De Geer, 1774	i
	<i>Apotomus chaudoirii</i> Wollaston, 1860	n
	<i>Bembidion atlanticum atlanticum</i> Wollaston, 1854	MAD
	<i>Bembidion schmidti schmidti</i> Wollaston, 1854	MAD
	<i>Bembidion tethys</i> Netolitzky, 1926	n
	<i>Bradycellus assingi</i> Wrase & Jaeger, 1996	MAD
	<i>Bradycellus excultus</i> Wollaston, 1854	MAD
	<i>Calathus fimbriatus</i> Wollaston, 1858	PS
	<i>Calosoma maderae maderae</i> Fabricius, 1775	n
	<i>Cymindis suturalis pseudosuturalis</i> Bedel, 1906	n
	<i>Eurygnathus latreillei latreillei</i> Laporte, 1834	PS
	<i>Harpalus attenuatus</i> Stephens, 1828	n
	<i>Harpalus distinguendus distinguendus</i> Duftschmid, 1812	n
	<i>Harpalus tenebrosus</i> Dejean, 1829	n
	<i>Laemostenus complanatus</i> Dejean, 1828	i
	<i>Masoreus orientalis nobilis</i> Wollaston, 1864	MAC
	<i>Microlestes corticalis</i> Dufour, 1820	n
	<i>Microlestes luctuosus chobauti</i> Jeannel, 1942	n
	<i>Microlestes negrita</i> Wollaston, 1854	n
	<i>Nesarpalus cimensis cimensis</i> Cockerell, 1922	MAD
	<i>Nesarpalus gregarius</i> Fauvel, 1897	MAD
	<i>Olisthopus elongatus</i> Wollaston, 1854	n
	<i>Paradromius insularis insularis</i> Wollaston, 1854	MAD
	<i>Paradromius linearis</i> Olivier, 1795	i
	<i>Philorhizus conicipennis</i> Fauvel, 1905	MAD
	<i>Philorhizus wollastoni nitidus</i> Mateu, 1957	PS
	<i>Poecilus wollastoni</i> Wollaston, 1854	n
	<i>Pterostichus aterrimus aterrimus</i> Herbst, 1784	n
	<i>Scarites abbreviatus cimensis</i> Cockerell, 1922	PS
	<i>Syntomus fuscomaculatus</i> Motschulsky, 1844	n

	<i>Syntomus lundbladi</i> Jeannel, 1938	MAD
	<i>Tachyura curvimana</i> Wollaston, 1854	
	<i>Thalassophilus whitei whitei</i> Wollaston, 1854	n
	<i>Trechus cautus</i> Wollaston, 1854	PS
	<i>Trechus flavocinctus</i> Jeannel, 1922	
Cerambycidae	<i>Arhopalus ferus</i> Mulsant, 1839	i
	<i>Arhopalus syriacus</i> Reitter, 1895	i
	<i>Cordylomera spinicornis nitidiformis</i> Serville, 1834	i
	<i>Hylotrupes bajulus</i> Linnaeus, 1758	i
Ceratophyllidae	<i>Leptopsylla segnis</i> Schonherr, 1811	i
	<i>Nosopsyllus fasciatus</i> Bosc d'Antic, 1800	i
	<i>Stenoponia tripectinata tripectinata</i> Tiraboschi, 1902	i
Ceratopogonidae	<i>Culicoides newsteadi</i> Austen, 1921	n
	<i>Culicoides obsoletus</i> Meigen, 1818	n
	<i>Culicoides puncticollis</i> Becker, 1903	n
	<i>Culicoides scoticus</i> Downes & Kettle, 1952	n
Cercopidae	<i>Neophilaenus angustipennis</i> Horváth, 1909	MAC, i
Chironomidae	<i>Cricotopus ornatus</i> Meigen, 1818	n
	<i>Microchironomus deribae</i> Freeman, 1957	n
	<i>Polypedilum nubifer</i> Skuse, 1889	n
	<i>Thalassomya frauenfeldi</i> Schiner, 1856	n
Chrysomelidae	<i>Bruchidius lichenicola</i> Wollaston, 1854	
	<i>Bruchidius lividimanus</i> Gyllenhal, 1833	
	<i>Bruchidius wollastoni</i> Decelle, 1975	
	<i>Chrysolina bankii</i> Fabricius, 1775	
	<i>Cryptocephalus crenatus</i> Wollaston, 1854	MAD
	<i>Longitarsus cerinthes</i> Schrank, 1798	
	<i>Longitarsus codinai</i> Madar & Madar, 1965	
	<i>Longitarsus echii</i> Koch, 1803	
	<i>Longitarsus nervosus</i> Wollaston, 1854	
	<i>Longitarsus ochroleucus lindbergi</i> Madar & Madar, 1963	MAD
	<i>Ochrosis ventralis</i> Illiger, 1807	
	<i>Oulema melanopus</i> Linnaeus, 1761	
	<i>Phyllotreta procera</i> Redtenbacher, 1849	
	<i>Psylliodes hospes</i> Wollaston, 1854	
	<i>Psylliodes pyritosus</i> Kutschera, 1864	
	<i>Psylliodes vehemens vehemens</i> Wollaston, 1854	MAD
	<i>Sphaeroderma rubidum</i> Graëlls, 1858	
Chrysopidae	<i>Chrysoperla lucasina</i> Lacroix, 1912	n
Chthoniidae	<i>Chthonius tetrachelatus</i> Preyßler, 1790	i
Cicadellidae	<i>Aconurella prolixa</i> Lethierry, 1885	n
	<i>Anoscopus assimilis</i> Signoret, 1879	n
	<i>Asianidia atlantica</i> China, 1938	MAD
	<i>Asianidia chrysanthemii</i> Lindberg, 1954	MAC
	<i>Circulifer haematoceps</i> Mulsant & Rey, 1855	n
	<i>Eupteryx capreola</i> Lindberg, 1954	MAC
	<i>Euscelis ormaderensis</i> Remane, 1968	MAD
	<i>Exitianus fasciolatus</i> Melichar, 1911	n
	<i>Macrosteles ossiannilssoni</i> Lindberg, 1954	n
	<i>Macrosteles ramosus</i> Ribaut, 1952	n
	<i>Psammotettix alienus</i> Dahlbom, 1850	n
Ciidae	<i>Octotemnus opacus</i> Mellié, 1848	MAC

Cleridae	<i>Necrobia rufipes</i> De Geer, 1775	i
Clubionidae	<i>Clubiona decora</i> Blackwall, 1859	n
Coccidae	<i>Ceroplastes rusci</i> Linnaeus, 1758	i
	<i>Ceroplastes sinensis</i> Del Guercio, 1900	i
	<i>Coccus hesperidum</i> Linnaeus, 1758	i
	<i>Pulvinaria floccifera</i> Westwood, 1870	i
	<i>Pulvinariella mesembryanthemi</i> Vallot, 1829	n
	<i>Saissetia coffeae</i> Walker, 1852	i
	<i>Saissetia oleae</i> Olivier, 1791	i
Coccinellidae	<i>Adalia decempunctata</i> Linnaeus, 1758	
	<i>Coccinella algerica</i> Kovár, 1977	n
	<i>Hippodamia variegata</i> Goeze, 1777	
	<i>Lindorus lophanthae</i> Blaisdell, 1892	
	<i>Myrrha octodecimguttata formosa</i> Costa, 1849	
	<i>Nephus flavopictus</i> Wollaston, 1854	MAC
	<i>Pharoscymnus decemplagiatus</i> Wollaston, 1857	MAC
	<i>Rhyzobius litura</i> Fabricius, 1787	
	<i>Rodolia cardinalis</i> Mulsant, 1850	i
	<i>Scymnus epistemoides</i> Wollaston, 1864	MAD
	<i>Scymnus interruptus</i> Goeze, 1777	
	<i>Scymnus limnichoides</i> Wollaston, 1854	MAD
	<i>Scymnus nubilus</i> Mulsant, 1850	
	<i>Scymnus subvillosus</i> Goeze, 1777	
	<i>Scymnus suturalis</i> Thunberg, 1795	
Coenagrionidae	<i>Ischnura pumilio</i> Charpentier, 1825	n
Coleophoridae	<i>Coleophora orotavensis</i> Rebel, 1896	MAC
Coreidae	<i>Arenocoris waltlii</i> Herrich-Schaeffer, 1835	n
	<i>Haploprocta sulcicornis</i> Fabricius, 1794	n
	<i>Syromastus rhombeus</i> Linnaeus, 1767	n
Corixidae	<i>Sigara lateralis</i> Leach, 1817	n
Corylophidae	<i>Arthrolips picea</i> Comolli, 1837	
	<i>Clypastrea maderae</i> Kraatz, 1869	MAD
	<i>Orthoperus aequalis</i> Sharp, 1885	i
	<i>Sericoderus lateralis</i> Gyllenhal, 1827	
Cosmopterigidae	<i>Cosmopterix attenuatella</i> Walker, 1864	
Crambidae	<i>Agriphila trabeatellus</i> Herrich-Shaffer, 1848	n
	<i>Aporodes floralis</i> Hübner, 1809	
	<i>Duponchelia fovealis</i> Zeller, 1847	i
	<i>Euchromius cambridgei</i> Zeller, 1867	m
	<i>Eudonia angustea</i> Curtis, 1827	n
	<i>Evergestis isatidalis</i> Duponchel, 1833	m
	<i>Hellula undalis</i> Fabricius, 1781	i
	<i>Mecyna asinalis</i> Hübner, 1819	n
	<i>Nomophila noctuella</i> Denis & Schiffermüller, 1775	m
	<i>Palpita vitrealis</i> Rossi, 1794	n
	<i>Spoladea recurvalis</i> Fabricius, 1775	i
	<i>Udea ferrugalis</i> Hübner, 1796	n
	<i>Udea maderensis</i> Bethune-Baker, 1894 ????	MAD
Cryptophagidae	<i>Atomaria scutellaris</i> Motschulsky, 1849	

Culicidae	<i>Anopheles cinereus</i> Theobald, 1901	n
	<i>Culex molestus</i> Forskal, 1775	n
	<i>Culex pipiens</i> Linnaeus, 1758	n
	<i>Culex theileri</i> Theobald, 1903	n
	<i>Culiseta longiareolata</i> Marquart, 1838	n
Curculionidae	<i>Acalles histrionicus</i> Wollaston, 1857	PS
	<i>Acalles portosantoensis</i> Stueben, 2002	PS
	<i>Anemophilus crassus</i> Wollaston, 1854	PS
	<i>Anemophilus subtessellatus</i> Wollaston, 1854	PS
	<i>Anemophilus trossulus</i> Wollaston, 1854	PS
	<i>Anillobius portosantoi</i> Franz, 1970	PS
	<i>Aphanarthrum bicolor</i> Wollaston, 1860	MAC
	<i>Aphanarthrum piscatorium</i> Wollaston, 1860	MAC
	<i>Barretonus desertae</i> Roudier, 1958	MAD
	<i>Barretonus minor</i> Folwaczny, 1972	PS
	<i>Calacalles wollastoni</i> Chevrolat, 1852	MAD
	<i>Cathormiocerus variegatus</i> Kuester, 1849	i
	<i>Caulotrumpis impius</i> Wollaston, 1858	MAD
	<i>Caulotrumpis lucifugus</i> Wollaston, 1854	MAD
	<i>Caulotrumpis terebrans</i> Wollaston, 1854	PS
	<i>Charagmus cachectus</i> Gyllenhal, 1834	n
	<i>Charagmus intermedius</i> Kuester, 1847	n
	<i>Coelositona puberulus</i> Reitter, 1903	n
	<i>Donus lunatus</i> Wollaston, 1854	n
	<i>Hypera melancholica</i> Fabricius, 1792	?
	<i>Hypera postica</i> Gyllenhal, 1813	n
	<i>Hypoborus ficus</i> Erichson, 1836	i
	<i>Laparocerus chaoensis chaoensis</i> Uyttenboogaart, 1940	PS
	<i>Laparocerus fritillus</i> Wollaston, 1854	PS
	<i>Laparocerus inconstans</i> Wollaston, 1854	PS
	<i>Laparocerus instabilis</i> Wollaston, 1854	PS
	<i>Laparocerus mendax</i> Wollaston, 1854	PS
	<i>Laparocerus navicularis</i> Wollaston, 1854	PS
	<i>Laparocerus schaumii</i> Wollaston, 1854	MAD
	<i>Leipommata calcarata</i> Wollaston, 1857	PS
	<i>Liparthrum inarmatum</i> Wollaston, 1860	n
	<i>Lixus juncii</i> Boheman, 1835	n
	<i>Lixus vectiformis</i> Wollaston, 1854	PS
	<i>Mogulones geographicus</i> Goeze, 1777	i
	<i>Pachytychius robustus</i> Wollaston, 1854	MAD
	<i>Parastyphloderes lindbergi</i> Roudier, 1963	PS
	<i>Rhopalomesites euphorbiae</i> Wollaston, 1854	MAC
<i>Rhopalomesites palmi</i> Folwaczny, 1979	PS	
<i>Rhytideres plicatus</i> Olivier, 1790	n	
<i>Sitona discoideus</i> Gyllenhal, 1834	?	
<i>Sitona humeralis</i> Stephens, 1831	?	
<i>Sitona lineatus</i> Linnaeus, 1758	i	
<i>Torneuma picocasteloense</i> Stueben, 2002	PS	

	<i>Trachyphloeus algesiranus</i> Escalera, 1923	n
	<i>Trachyphloeus laticollis</i> Boheman, 1843	n
	<i>Trachyphloeus reichei</i> Seidlitz, 1868	n
	<i>Tychius filirostris</i> Wollaston, 1854	PS
Cydnidae	<i>Byrsinus laticollis</i> Wagner, 1954	n
	<i>Cydnus aterrimus</i> Forster, 1771	n
Cyphoderidae	<i>Cyphoderus albinus</i> Nicolet, 1841	
Dasytidae	<i>Psilothrix illustris</i> Wollaston, 1854	n
Delphacidae	<i>Toya propinqua</i> Fieber, 1866	i?
Dermostidae	<i>Anthrenus verbasci</i> Linnaeus, 1767	
	<i>Thorictus grandicollis westwoodi</i> Wollaston, 1854	MAD
Diaspididae	<i>Aspidiotus nerii</i> Bouché, 1833	i
	<i>Carulaspis mínima</i> Signoret, 1869	n?
	<i>Chrysomphalus dictyospermi</i> Morgan, 1889	i
	<i>Diaspis echinocacti</i> Bouché, 1833	i
	<i>Hemiberlesia insularis</i> Balachowsky, 1937	MAD
	<i>Hemiberlesia lataniae</i> Signoret, 1869	n
	<i>Leucaspis lowi</i> Colvée, 1882	i
	<i>Leucaspis pusilla</i> Löw, 1883	i
Dictynidae	<i>Lathys affinis</i> Blackwall, 1862	MAD
	<i>Nigma puella</i> Simon, 1870	?
Dicyrtomida	<i>Dicyrtomina ornata</i> Nicolet, 1842	
Dryophthoridae	<i>Sitophilus zeamais</i> Motschulsky, 1855	i
Dysderidae	<i>Dysdera crocata</i> C.L. Koch, 1838	?
	<i>Dysdera portisancti</i> Wunderlich, 1995	PS
Dytiscidae	<i>Agabus maderensis</i> Wollaston, 1854	MAD
	<i>Eretes sticticus</i> Linnaeus, 1767	
	<i>Hygrotus confluens</i> Fabricius, 1787	
Elateridae	<i>Cardiophorus femoratus</i> Wollaston, 1854	PS
Entomobryidae	<i>Entomobrya atrocincta</i> Schött, 1896	
	<i>Entomobrya marginata</i> Tullberg, 1871	
	<i>Entomobrya multifasciata</i> Tullberg 1871	
	<i>Heteromurus major</i> Moniez, 1889	
	<i>Heteromurus nitidus</i> Templeton, 1835	
	<i>Lepidocyrtus montseniensis</i> Mateos-Frias, 1985	
	<i>Lepidocyrtus paradoxus</i> Uzel, 1890	
	<i>Pseudosinella octopunctata</i> Börner, 1901	
	<i>Seira domestica</i> Nicolet, 1841	
	<i>Sinella pulcherrima jugoslavica</i> Loksa & Bogojevic, 1970	
Ephydriidae	<i>Ephydra macellaria</i> Egger, 1862	n
	<i>Hyadina guttata</i> Fallén, 1813	n
	<i>Hydrellia griseola</i> Fallén, 1813	n
	<i>Parydra fossarum</i> Haliday, 1833	n
	<i>Psilopa aequalipes</i> Becker, 1907	n
	<i>Scatella paludum</i> Meigen, 1830	n
	<i>Scatella stagnalis</i> Fallén, 1813	n
Eriococcidae	<i>Eriococcus araucariae</i> Maskell, 1879	i
Ethmiidae	<i>Ethmia bipunctella</i> Fabricius, 1775	n

Flatidae	<i>Cyphopterus fauveli</i> Noualhier, 1897	MAD
Forficulidae	<i>Forficula auricularia</i> Linnaeus, 1758	i
Formicidae	<i>Cardiocondyla emeryi</i> Forel, 1891	i
	<i>Linepithema humile</i> Mayr, 1868	i
	<i>Monomorium carbonarium</i> F. Smith, 1858	MAC
	<i>Monomorium subopacum</i> F. Smith, 1858	n
	<i>Paratrechina longicornis</i> Latreille, 1802	i
	<i>Pheidole megacephala</i> Fabricius, 1793	i
	<i>Plagiolepis schmitzii</i> Forel, 1895	n
	<i>Tapinoma madeirense</i> Forel, 1895	n
	<i>Tetramorium caldarium</i> Roger, 1857	i
Garypidae	<i>Garypus levantinus</i> Navas, 1925	n
Gelechiidae	<i>Aproaerema anthyllidella elachistella</i> Stainton, 1859	MAC
	<i>Chrysoesthia drurella</i> Fabricius, 1775	i
	<i>Ephysteris promptella</i> Staudinger, 1859	MAD
	<i>Ergasiola ergasima</i> Meyrick, 1916	i
	<i>Hedma microcasis</i> Meyrick, 1929	
	<i>Ornativulva plutelliformis</i> Staudinger, 1859	i
	<i>Platyedra subcinerea</i> Haworth, 1828	
	<i>Scrobipalpa portosanctana</i> Stainton, 1859	n
	<i>Scrobipalpa vasconiella</i> Rössler, 1877	n
	<i>Sitotroga cerealella</i> Olivier, 1789	i
Geogarypidae	<i>Geogarypus canariensis</i> Tullgren, 1900	MAC
Geometridae	<i>Ascotis fortunata wollastoni</i> Bethune-Baker, 1891	MAD
	<i>Costaconvexa centrostrigaria</i> Wollaston, 1858	n
	<i>Gymnoscelis insulariata</i> Stainton, 1859	MAC
	<i>Gymnoscelis rufifasciata</i> Haworth, 1909	n
	<i>Rhodometra sacraria</i> Linnaeus, 1767	m
	<i>Scopula irrorata</i> Bethune-Baker, 1891	MAD
	<i>Xenochlorodes nubigena</i> Wollaston, 1858	MAD
Gnaphosidae	<i>Haplodrassus dalmatensis</i> L. Koch, 1866	?
	<i>Trachyzelotes lyonneti</i> Audouin, 1826	?
	<i>Zelotes longipes</i> L. Koch, 1866	?
Gracillariidae	<i>Phyllocnistis citrella</i> Stainton, 1856	i
	<i>Phyllonorycter messaniella</i> Zeller, 1846	
Gryllidae	<i>Gryllus bimaculatus</i> De Geer, 1773	i
	<i>Modicogryllus burdigalensis burdigalensis</i> Latreille, 1804	i
Hemerobiidae	<i>Hemerobius stigma</i> Stephens, 1836	n
	<i>Wesmaelius subnebulosus</i> Stephens, 1836	n
Henicopidae	<i>Lamyctes emarginatus</i> Newport, 1844	i
Histeridae	<i>Acritus nigricornis</i> Hoffmann, 1803	
	<i>Eutriptus putricola</i> Wollaston, 1862	
	<i>Hypocaccus brasiliensis</i> Paykull, 1811	
	<i>Pactolinus major</i> Linnaeus, 1767	
	<i>Saprinus caerulescens caerulescens</i> Hoffmann, 1803	
	<i>Saprinus chalcites</i> Illiger, 1807	
Hydraenidae	<i>Saprinus semistriatus</i> Scriba, 1790	
	<i>Ochthebius heeri</i> Wollaston, 1854	MAC

	<i>Ochthebius quadrifoveolatus</i> Wollaston, 1854	
	<i>Ochthebius rugulosus</i> Wollaston, 1857	
	<i>Ochthebius subpictus subpictus</i> Wollaston, 1857	
Hydrophilidae	<i>Cercyon inquinatus</i> Wollaston, 1854	
	<i>Cercyon nigriceps</i> Marsham, 1802	
	<i>Cercyon quisquilius</i> Linnaeus, 1760	
	<i>Cercyon terminatus</i> Marsham, 1802	
	<i>Dactylosternum abdominale</i> Fabricius, 1792	i
	<i>Enochrus politus</i> Küster, 1849	
	<i>Laccobius atricolor</i> d'Orchymont, 1938	MAD
	<i>Sphaeridium bipustulatum</i> Fabricius, 1801	
Hypogastruridae	<i>Ceratophysella gibbosa</i> Bagnall, 1940	
	<i>Hypogastrura manubrialis</i> Tullberg, 1869	
	<i>Xenylla maritima</i> Tullberg, 1869	
	<i>Xenylla xavieri</i> Gama, 1959	
Ichneumonidae	<i>Enicospilus faciator</i> Roman, 1938	MAD
	<i>Netelia thoracica</i> Woldstedt, 1880	n
	<i>Theroscopus fasciatulus</i> Horstmann, 1979	
Isotomidae	<i>Cryptopygus ponticus</i> Stach, 1947	
	<i>Cryptopygus thermophilus</i> Axelson, 1900	
	<i>Proctostephanus stuckeni</i> Börner, 1902	
Julidae	<i>Cylindroiulus transmarinus</i> Enghoff, 1982	PS
	<i>Dolicho-iulus madeiranus</i> Mauriès, 1970	PS
Katiannida	<i>Caprainea bremondi</i> Delamare & Bassot, 1957	
	<i>Sminthurinus aureus</i> Lubbock, 1862	
Labiduridae	<i>Labidura riparia</i> Pallas, 1773	n
Lachesillidae	<i>Lachesilla tectorum</i> Badonnel, 1931	i
Lachnidae	<i>Cinara pinimaritimae</i> Dufour, 1833	i
	<i>Eulachnus rileyi</i> Williams, 1911	i
Laemophloeidae	<i>Cryptolestes capensis</i> Waltl, 1834	i
Latriidiidae	<i>Corticaria maculosa maculosa</i> Wollaston, 1858	MAC
	<i>Corticarina curta</i> Wollaston, 1854	
Lepismatidae	<i>Ctenolepisma longicaudata</i> Escherich, 1905	i
	<i>Ctenolepisma vieirai</i> Mendes, 1981	MAC
	<i>Neoasterolepisma myrmecobia</i> Silvestri, 1908	MAC
Libellulidae	<i>Sympetrum fonscolombii</i> Selys, 1840	n
Limoniidae	<i>Geranomyia atlantica atlantica</i> Wollaston, 1858	MAC
	<i>Symplecta pilipes pilipes</i> Fabricius, 1787	i
Linyphiidae	<i>Microlinyphia johnsoni</i> Blackwall, 1859	MAC
	<i>Prinerigone vagans</i> Audouin, 1826	?
	<i>Tenuiphantes tenuis</i> Blackwall, 1852	?
Liposcelididae	<i>Belaphotroctes atlanticus</i> Lienhard, 1996	MAD
Lithobiidae	<i>Lithobius lusitanus</i> Verhoeff, 1925	i?
	<i>Lithobius pilicornis</i> Newport, 1844	i
	<i>Lithobius waldeni</i> Eason, 1985	PS
Lycaenidae	<i>Lampides boeticus</i> Linnaeus, 1767	n
	<i>Leptotes pirithous</i> Linnaeus, 1767	n
	<i>Lycaena phlaeas phlaeoides</i> Staudinger, 1901	MAD

Lycosidae	<i>Hogna biscoitoi</i> Wunderlich, 1992	PS
	<i>Hogna insularum</i> Kulczynski, 1899	MAD
	<i>Hogna maderiana</i> Walckenaer, 1837	MAD
	<i>Hogna schmitzi</i> Wunderlich, 1992	PS
	<i>Pardosa proxima</i> C.L. Koch, 1847	?
Lygaeidae	<i>Aphanus rolandri</i> Linnaeus, 1758	n
	<i>Camptocera glaberrima</i> Walker, 1872	n
	<i>Esuridea lathridioides</i> Puton, 1889 *	MAD
	<i>Geocoris lineola lineola</i> Rambur, 1839	n
	<i>Kleidocerys truncatulus</i> Walker, 1872	n
	<i>Nysius contiguus</i> Walker, 1872	MAD
	<i>Oxycarenus lavaterae</i> Fabricius, 1787	i
	<i>Peritrechus gracilicornis</i> Puton, 1877	n
	<i>Stygnocoris fuliginus</i> Geoffroy, 1785	n
	<i>Xanthochilus saturnius</i> Rossi, 1790	n
Malachiidae	<i>Attalus maderensis</i> Wollaston, 1854	MAD
	<i>Attalus rostratus</i> Wollaston, 1854	MAD
	<i>Attalus rugosus</i> Wollaston, 1854	MAD
Meinertellidae	<i>Machilinus portosantensis</i> Mendes, 1981	PS
Melanthripidae	<i>Melanthrips fuscus</i> Sulzer, 1776	n
Meloidae	<i>Euzonitis quadrimaculata</i> Pallas, 1782	
	<i>Meloe flavicomus</i> Wollaston, 1854	MAC
	<i>Meloe mediterraneus</i> Müller, 1925	
Melyridae	<i>Melyrosoma artemisiae</i> Wollaston, 1854	MAD
Mimetidae	<i>Ero aphana</i> Walckenaer, 1802	?
Miridae	<i>Atomoscelis onusta</i> Fieber, 1861	n
	<i>Closterotomus norwegicus</i> Gmelin, 1790	n
	<i>Eurystylus bellevoeyi</i> Reuter, 1879	n
	<i>Lygus maritimus</i> Wagner, 1949	n
	<i>Tuponia mixticolor</i> A. Costa, 1862	n
Miturgidae	<i>Cheiracanthium albidulum</i> Blackwall, 1859	MAD
	<i>Cheiracanthium pelasgicum</i> C.L. Koch, 1837	?
Monotomidae	<i>Europs impressicollis impressicollis</i> Wollaston, 1854	MAC
Mordellidae	<i>Anaspis imitator</i> Ermisch, 1963	MAD
	<i>Anaspis proteus</i> Wollaston, 1854	MAC
Mycetophagidae	<i>Berginus tamarisci</i> Wollaston, 1854	
	<i>Typhaea stercorea</i> Linnaeus, 1758	
Myrmeleontidae	<i>Synclisis baetica</i> Rambur, 1842	n
Neelida	<i>Neelus murinus</i> Folsom, 1896	
Nepticulidae	<i>Trifurcula ridiculosa</i> Walsingham, 1908	MAC
Nitidulidae	<i>Carpophilus dimidiatus</i> Fabricius, 1792	i
	<i>Meligethes nigrescens</i> Stephens, 1830	
	<i>Meligethes planiusculus</i> Heer, 1841	
	<i>Nitidula flavomaculata</i> Rossi, 1790	
	<i>Xenostrogylus histrio</i> Wollaston, 1854	MAD
Noctuidae	<i>Acontia lucida</i> Hufnagel, 1766	m
	<i>Agrotis atrux</i> Pinker, 1971	MAD
	<i>Agrotis ipsilon</i> Hufnagel, 1766	m

	<i>Agrotis segetum</i> Denis & Schiffermuller, 1775	n
	<i>Agrotis spinifera</i> Hübner, 1808	n
	<i>Agrotis trux</i> Hübner, 1824	n
	<i>Autographa gamma</i> Linnaeus, 1758	n
	<i>Autophila dilucida</i> Hübner, 1808	n
	<i>Caradrina clavipalpis pinkeri</i> Kobes, 1975	MAD
	<i>Chrysodeixis chalcites</i> Esper, 1789	n
	<i>Cornutiplusia circumflexa</i> Linnaeus, 1767	n
	<i>Cryphia maderensis</i> Bethune-Baker, 1891	MAD
	<i>Ctenoplusia limbirena</i> Gueneé, 1852	n
	<i>Cucullia calendulae</i> Treitschke, 1835	n
	<i>Hadena atlantica</i> Hampson, 1905	MAD
	<i>Hadula trifolii</i> Hufnagel, 1766	
	<i>Helicoverpa armigera</i> Hübner, 1808	n
	<i>Heliothis peltigera</i> Denis & Schiffermuller, 1775	n
	<i>Hypena obsitalis</i> Hübner, 1813	n
	<i>Leucania loreyi</i> Duponchel, 1827	n
	<i>Mythimna unipuncta</i> Haworth, 1809	m
	<i>Noctua pronuba</i> Linnaeus, 1758	m
	<i>Peridroma saucia</i> Hübner, 1808	n
	<i>Phlogophora wollastoni</i> Bethune-Baker, 1891	MAD
	<i>Spodoptera exigua</i> Hübner, 1808	n
	<i>Spodoptera littoralis</i> Boisduval, 1833	n
	<i>Tathorhynchus exsiccata</i> Lederer, 1853	m
	<i>Thysanoplusia orichalcea</i> Fabricius, 1775	n
	<i>Trichoplusia ni</i> Hübner, 1803	n
	<i>Xylena exsoleta</i> Linnaeus, 1758	
Notonectidae	<i>Anisops debilis canariensis</i> Noualhier, 1893	MAC?
Nymphalidae	<i>Danaus plexippus</i> Linnaeus, 1758	n
	<i>Pararge aegeria</i> Linnaeus, 1758	n
	<i>Vanessa atalanta</i> Linnaeus, 1758	n
	<i>Vanessa cardui</i> Linnaeus, 1758	n
	<i>Vanessa vulcania</i> Godart, 1819	MAC
Oecobiidae	<i>Oecobius similis</i> Kulczynski, 1909	n
Oecophoridae	<i>Hofmannophila pseudospretella</i> Stainton, 1849	i
Oligotomidae	<i>Haploembia solieri</i> Rambur, 1842	n
	<i>Oligotoma nigra</i> Hagen, 1866	i
Olpiidae	<i>Amblyolpium franzi</i> Beier, 1970	MAD
Ortheziidae	<i>Insignorthezia insignis</i> Browne, 1887	i
Paradoxosomatidae	<i>Oranmorpha guerinii</i> Gervais, 1836	i
Pentatomidae	<i>Acrosternum millierei</i> Mulsant & Rey, 1866	n
	<i>Dolycoris numidicus</i> Horváth, 1907	n
	<i>Eurydema herbacea</i> Herrich-Schaeffer, 1833	n
	<i>Eurydema lundbladi</i> Lindberg, 1960	MAC
	<i>Eurydema ornata</i> Linnaeus, 1758	n
	<i>Eysarcoris ventralis</i> Westwood, 1837	i
	<i>Nezara viridula</i> Linnaeus, 1758	i
	<i>Sciocoris helferi</i> Fieber, 1851	n

	<i>Sciocoris sideritidis</i> Wollaston, 1858	n
Philodromidae	<i>Thanatus vulgaris</i> Simon, 1870	?
Phloptoridae	<i>Halipeurus pelagicus</i> Denny, 1842	
	<i>Halipeurus spadix</i> Timmermann, 1961	
	<i>Naubates harrisoni</i> Bedford, 1930	
	<i>Philoceanus becki</i> Kellogg, 1903	
Phlaeothripidae	<i>Amphibolothrips grassii</i> Buffa, 1909	n
	<i>Apterygothrips wollastoni</i> zur Strassen, 1977	MAD
	<i>Bolothrips insularis</i> Bagnall, 1914	i
	<i>Cryptothrips nigripes</i> O.M. Reuter, 1880	i
	<i>Haplothrips gowdeyi</i> Franklin, 1908	i
	<i>Haplothrips lundbladi</i> Priesner, 1938	MAD
	<i>Nesothrips propinquus</i> Bagnall, 1916	i
Pholcidae	<i>Pholcus phalangioides</i> Fuesslin, 1775	?
Phylloxeridae	<i>Viteus vitifoliae</i> Fitch, 1855	i
Pieridae	<i>Colias croceus</i> Fourcroy, 1785	n
	<i>Pieris rapae</i> Linnaeus, 1758	i
Pisauridae	<i>Pisaura quadrilineata</i> Lucas, 1838	MAC
Plutellidae	<i>Plutella xylostella</i> Linnaeus, 1758	n
Polydesmidae	<i>Brachydesmus superus</i> Latzel, 1884	i
Porcellionidae	<i>Soteriscus brumdocantoi</i> Vandel, 1960	PS
	<i>Soteriscus madeirae</i> Arcangeli, 1958	PS
	<i>Soteriscus porcellioniformis</i> Vandel, 1960	PS
Pseudococcidae	<i>Phenacoccus latipes</i> Green, 1923	n
	<i>Phenacoccus madeirensis</i> Green, 1923	i
	<i>Planococcus citri</i> Risso, 1813	i
	<i>Pseudococcus cimensis</i> Green, 1924	PS
	<i>Pseudococcus longispinus</i> Targioni Tozzetti, 1867	i
Psychidae	<i>Apterona helicoidella</i> Vallot, 1827	
	<i>Luffia lapidella</i> Goeze, 1783	
Psyllidae	<i>Rhodochlanis salsolae</i> Lethierry, 1874	n
Pteromalidae	<i>Pteromalus alternipes</i> Walker, 1872	PS
	<i>Pteromalus integer</i> Walker, 1872	MAC
Pterophoridae	<i>Agdistis pseudocanariensis</i> Arenberger, 1973	n
	<i>Agdistis tamaricis</i> Zeller, 1847	i
	<i>Amblyptilia acanthadactyla</i> Hübner, 1813	n
	<i>Stenoptilia grisescens</i> Schawerda, 1933	n
Ptiliidae	<i>Ptenidium pusillum</i> Gyllenhal, 1808	
Pulicidae	<i>Ctenocephalides canis</i> Curtis, 1826	i
	<i>Ctenocephalides felis felis</i> Bouché, 1835	i
	<i>Echidnophaga murina</i> Tiraboschi, 1903	i
	<i>Pulex irritans</i> Linnaeus, 1758	i
	<i>Spilopsyllus cuniculi</i> Dale, 1878	i
	<i>Xenopsylla cheopis</i> Rothschild, 1903	i
Pyralidae	<i>Ancylosis roscidella</i> Eversmann, 1844	n
	<i>Cadra cautella</i> Walker, 1863	i
	<i>Cadra figulilella</i> Gregson, 1871	i
	<i>Cryptoblabes gnidiella</i> Millière, 1867	n

	<i>Neurotomia coenulentella</i> Zeller, 1846	n
	<i>Pararotruda nesiotica</i> Rebel, 1911	MAC
	<i>Pempeliella lundbladi</i> Rebel, 1940	MAD
	<i>Plodia interpunctella</i> Hübner, 1813	i
	<i>Pyralis farinalis</i> Linnaeus, 1758	i
	<i>Raphimetopus ablutella</i> Zeller, 1839	
Reduviidae	<i>Ectomocoris chiragra</i> Fabricius, 1803	n
	<i>Ploiaria chilensis</i> Philippi, 1862	i
	<i>Ploiaria domestica</i> Scopoli, 1786	n
Rhopalidae	<i>Liorhyssus hyalinus</i> Fabricius, 1794	i
Saldidae	<i>Saldula pallipes</i> Fabricius, 1794	n
Salticidae	<i>Macaroeris diligens</i> Blackwall, 1867	MAC
	<i>Menemerus semilimbatus</i> Hahn, 1829	?
	<i>Pseudeuophrys vafra</i> Blackwall, 1867	?
Sciaridae	<i>Bradysia diversispina</i> Mohrig & Blasco-Zumeta, 1995	n
Segestriidae	<i>Ariadna maderiana</i> Warburton, 1892	MAD
	<i>Segestria florentina</i> Rossi, 1790	?
Silvanidae	<i>Psammoecus personatus</i> Grouvelle, 1919	MAC
Simuliidae	<i>Simulium ruficorne</i> Macquart, 1838	n
Sminthuridida	<i>Sphaeridia pumilis</i> Krausbauer, 1898	
Sphecidae	<i>Podalonia tydei</i> Guillou, 1841	n
Sphingidae	<i>Acherontia atropos</i> Linnaeus, 1758	n
	<i>Agrius convolvuli</i> Linnaeus, 1758	n
	<i>Hippotion celerio</i> Linnaeus, 1758	n
	<i>Hyles livornica</i> Esper, 1779	m
	<i>Hyles tithymali</i> Boisduval, 1834	n
Staphylinidae	<i>Achenium hartungii</i> Wollaston, 1854	
	<i>Aleochara moesta</i> Gravenhorst, 1802	
	<i>Aleochara puberula</i> Klug, 1833	
	<i>Aloconota gregaria</i> Erichson, 1839	
	<i>Anotylus complanatus</i> Erichson, 1839	
	<i>Anotylus nitidulus</i> Gravenhorst, 1802	
	<i>Astenus lyonessius</i> Joy, 1908	
	<i>Atheta atramentaria</i> Gyllenhal, 1810	
	<i>Atheta coriaria</i> Kraatz, 1856	
	<i>Atheta haligena</i> Wollaston, 1857	MAD
	<i>Atheta trinotata</i> Kraatz, 1856	
	<i>Carpelimus bilineatus</i> Stephens, 1834	
	<i>Carpelimus corticinus</i> Gravenhorst, 1806	
	<i>Carpelimus nigrita</i> Wollaston, 1857	PS
	<i>Carpelimus simplicicollis simplicicollis</i> Wollaston, 1857	
	<i>Cordalia obscura</i> Gravenhorst, 1802	
	<i>Creophilus maxillosus</i> Linnaeus, 1758	
	<i>Euplectus sexstriatus</i> Besuchet, 1970	PS
	<i>Gabrius nigritulus</i> Gravenhorst, 1802	
	<i>Geostiba brancomontis</i> Assing & Wunderle, 1996	PS
	<i>Geostiba filiformis</i> Wollaston, 1854	MAD
	<i>Geostiba portosantoi</i> Franz, 1981	PS

	<i>Heterothops minutus</i> Wollaston, 1860	
	<i>Leptacinus pusillus</i> Stephens, 1833	
	<i>Lithocharis vilis</i> Kraatz, 1859	
	<i>Medon apicalis</i> Kraatz, 1857	
	<i>Medon indigena</i> Wollaston, 1857	MAD
	<i>Mycetoporus portosanctanus</i> Palm, 1980	PS
	<i>Nehemitropia lividipennis</i> Mannerheim, 1830	
	<i>Ocypus olens</i> Müller, 1764	
	<i>Oligota canariensis</i> Williams, 1973	
	<i>Oligota muensteri</i> Bernhauer, 1923	
	<i>Oligota parva</i> Kraatz, 1862	
	<i>Oxytelus piceus</i> Linnaeus, 1767	
	<i>Oxytelus sculptus</i> Gravenhorst, 1806	
	<i>Philonthus fenestratus</i> Fauvel, 1872	
	<i>Philonthus longicornis</i> Stephens, 1832	
	<i>Philonthus ventralis</i> Gravenhorst, 1802	
	<i>Phytosus balticus</i> Kraatz, 1859	
	<i>Platystethus degener</i> Mulsant & Rey, 1878	
	<i>Platystethus spinosus</i> Erichson, 1840	
	<i>Proteinus atomarius</i> Erichson, 1840	
	<i>Pseudomedon obscurellus</i> Erichson, 1840	
	<i>Quedius levicollis</i> Brullé, 1832	
	<i>Sepedophilus monticola</i> Wollaston, 1854	MAD
	<i>Sepedophilus testaceus</i> Fabricius, 1793	
	<i>Stenus guttula</i> Müller, 1821	
	<i>Stenus ossium</i> Stephens, 1833	
	<i>Sunius propinquus</i> Brisout, 1867	
	<i>Tachyporus caucasicus</i> Kolenati, 1846	
	<i>Tachyporus nitidulus</i> Fabricius, 1781	
	<i>Tinotus morion</i> Gravenhorst, 1802	
	<i>Trichiusa immigrata</i> Lohse, 1984	i
Stenocephalidae	<i>Dicranocephalus agilis</i> Scopoli, 1763	n
Syarinidae	<i>Micracreagrella caeca madeirensis</i> Beier, 1963	MAD
	<i>Micracreagrina madeirensis</i> Mahnert, 1993	MAD
Syrphidae	<i>Episyrphus balteatus</i> De Geer, 1776	n
	<i>Eristalinus aeneus</i> Scopoli, 1763	n
	<i>Eristalis tenax</i> Linnaeus, 1758	n
	<i>Eumerus hispidus</i> Smit, Aguiar & Wakeham-Dawson, 2004	MAD
	<i>Eupeodes corollae</i> Fabricius, 1794	n
	<i>Eupeodes luniger</i> Meigen, 1822	n
	<i>Ischiodon aegyptius</i> Wiedemann, 1830	n
	<i>Melanostoma mellinum</i> Linnaeus, 1758	n
	<i>Paragus coadunatus</i> Rondani, 1847	n
	<i>Scaeva albomaculata</i> Macquart, 1842	n
	<i>Scaeva pyrastrii</i> Linnaeus, 1758	n
	<i>Sphaerophoria rueppellii</i> Wiedemann, 1830	n
	<i>Sphaerophoria scripta</i> Linnaeus, 1758	n
	<i>Syritta pipiens</i> Linnaeus, 1758	n

Tachinidae	<i>Leucostoma engeddense</i> Kugler, 1966	n
	<i>Phasia pusilla</i> Meigen, 1824	n
Tenebrionidae	<i>Belopus elongatus</i> Herbst, 1797	i
	<i>Blaps gigas</i> Linnaeus, 1767	i
	<i>Blaps lethifera</i> Marsham, 1802	i
	<i>Boromorphus maderae</i> Wollaston, 1854	MAD
	<i>Ellipsodes glabrata oblongior</i> Wollaston, 1854 *	MAD
	<i>Gonocephalum affine</i> Billberg, 1815	n
	<i>Hadrus illotus</i> Wollaston, 1854 *	PS
	<i>Hegeter tristis</i> Fabricius, 1792	MAC
	<i>Nesotes futilis</i> Wollaston, 1854	MAD
	<i>Nesotes infernus infernus</i> Wollaston, 1854	PS
	<i>Nesotes infernus wollastoni</i> Ardoin, 1960	PS
	<i>Nesotes lucifugus lucifugus</i> Wollaston, 1854	PS
	<i>Nesotes lucifugus maritimus</i> Cockerell, 1923	PS
	<i>Nesotes portosanctanus</i> Wollaston, 1854	PS
	<i>Phaleria ciliata</i> Wollaston, 1854	PS
	<i>Tenebrio obscurus</i> Fabricius, 1792	i
	<i>Xanthomus pallidus</i> Curtis, 1830	n
Tephritidae	<i>Bactrocera oleae</i> Gmelin, 1790	i
	<i>Campiglossa producta</i> Loew, 1844	n
	<i>Campiglossa valida</i> Wollaston, 1858	MAC
	<i>Ensina decisa</i> Wollaston, 1858	MAC
	<i>Sphenella marginata</i> Fallén, 1814	n
	<i>Tephritis praecox</i> Loew, 1844	n
	<i>Trupanea insularum</i> Becker, 1908	MAC
Tetracampidae	<i>Platynocheilus cuprifrons</i> Nees, 1834	
Tetragnathidae	<i>Meta barreti</i> Kulczynski, 1899	MAD
	<i>Tetragnatha extensa</i> Linnaeus, 1758	?
	<i>Tetragnatha obtusa</i> C.L. Koch, 1837	?
Tettigoniidae	<i>Decticus albifrons</i> Fabricius, 1775	n
Theridiidae	<i>Enoplognatha diversa</i> Blackwall, 1859	?
	<i>Kochiura aulica</i> C.L. Koch, 1838	?
	<i>Latrodectus tredecimguttatus</i> Rossi, 1790	?
	<i>Nesticodes rufipes</i> Lucas, 1846	?
	<i>Steatoda grossa</i> C.L. Koch, 1838	?
	<i>Steatoda nobilis</i> Thorell, 1875	n
	<i>Theridion musivivum</i> Schmidt, 1956	MAC
Thomisidae	<i>Misumena spinifera</i> Blackwall, 1862	MAC
	<i>Xysticus nubilus</i> Simon, 1875	?
Thripidae	<i>Agrostothrips meridionalis</i> Bagnall, 1927	n
	<i>Aptinothrips rufus</i> Haliday, 1836	n
	<i>Frankliniella occidentalis</i> Pergande, 1895	i
	<i>Heliethrips haemorrhoidalis</i> Bouché, 1833	i
	<i>Limothrips cerealium</i> Haliday, 1836	n
	<i>Rhinotripsiella ctenifera</i> zur Strassen, 1977 #	PS
	<i>Scirtothrips inermis</i> Priesner, 1933	n
	<i>Thrips angusticeps</i> Uzel, 1895	n

	<i>Thrips pennatus</i> zur Strassen, 1965	MAC
	<i>Thrips tabaci</i> Lindeman, 1889	n
Tineidae	<i>Monopis crocicapitella</i> Clemens, 1859	i
	<i>Monopis nigricantella</i> Millière, 1872	i
	<i>Niditinea fuscella</i> Linnaeus, 1758	i
	<i>Oinophila v-flava</i> Haworth, 1828	
	<i>Opogona omoscopia</i> Meyrick, 1893	
	<i>Opogona sacchari</i> Bojer, 1856	i
	<i>Phereoeca allutella</i> Rebel, 1892	
	<i>Praeacedes atomosella</i> Walker, 1863	
	<i>Tenaga nigripunctella</i> Haworth, 1828	
	<i>Tinea murariella</i> Staudinger, 1859	
	<i>Trichophaga bipartitella</i> Ragonot, 1892	
	<i>Trichophaga robinsoni</i> Gaedike & Karsholt, 2001	n
	<i>Trichophaga tapetzella</i> Linnaeus, 1758	
Tingidae	<i>Tingis maderensis</i> Reuter, 1890	MAC
Tortricidae	<i>Acroclita guanchana</i> Walsingham, 1908	MAC
	<i>Acroclita subsequana</i> Herrich-Schäffer, 1851	n
	<i>Aethes francillana</i> Fabricius, 1794	n
	<i>Bactra lancealana</i> Hübner, 1799	n
	<i>Bactra minima</i> Meyrick, 1909	n
	<i>Cacoecimorpha pronubana</i> Hübner, 1799	i
	<i>Cochylimorpha decolorella</i> Zeller, 1839	
	<i>Crociosema plebejana</i> Zeller, 1847	n
	<i>Epinotia thapsiana</i> Zeller, 1847	
	<i>Eucosma cana</i> Haworth, 1811	n
	<i>Lobesia neptunia</i> Walsingham, 1908	MAC
	<i>Selania leplastriana</i> Curtis, 1831	n
Trichopsocidae	<i>Trichopsocus difficilis</i> Lienhard, 1996	PS
Triozidae	<i>Triozia erytrae</i> Del Guercio, 1918	i
Trogiidae	<i>Cerobasis albipes</i> Lienhard, 1996	MAD
	<i>Cerobasis nigra</i> Lienhard, 1996	PS
Uloboridae	<i>Zosis geniculata</i> Olivier, 1789	?
Veliidae	<i>Microvelia gracillima</i> Reuter, 1882	n
Vespidae	<i>Ancistrocerus gazella</i> Panzer, 1798	n
	<i>Ancistrocerus madaera</i> Saussure, 1852	MAD
Yponomeutidae	<i>Zelleria oleastrella</i> Millière, 1864	i
Zopheridae	<i>Langelandia porto-santoi</i> Franz, 1970	PS
	<i>Myrmecoxenus picinus</i> Aubé, 1850	
	<i>Tarphius excisus</i> Wollaston, 1857	PS
	<i>Tarphius lowei</i> Wollaston, 1854	MAD

GASTROPODS

Family	Taxa	Naturalness	Protection status
Assimineidae	<i>Paludinella globularis</i> Hanley in Thorpe, 1844	i	
Clausiliidae	<i>Balea heydeni</i> Von Maltzan, 1881 ???	i	
	<i>Balea perversa</i> Linnaeus, 1758	i	

	<i>Boettgeria lowei</i> Albers, 1852 (†) *	PS	
Cochlicellidae	<i>Cochlicella acuta</i> Muller, 1774	i	
	<i>Cochlicella barbara</i> Linnaeus, 1758	i	
Cyclophoridae	<i>Craspedopoma mucronatum</i> Menke, 1830 (†)	MAD	
Ellobiidae	<i>Carychium tridentatum</i> Risso, 1826	i	
	<i>Ovatella aequalis</i> Lowe, 1832	MAC	
Ferussaciidae	<i>Amphorella cimensis</i> Waldén, 1983 *	PS	
	<i>Amphorella gracilis</i> Lowe, 1831 *	MAD	
	<i>Amphorella intermedia</i> Wollaston, 1878 *	MAD	
	<i>Amphorella melampoides</i> Lowe, 1831 *	MAD	
	<i>Amphorella mitriformis</i> Lowe, 1852 *	MAD	
	<i>Amphorella oryza</i> Lowe, 1852 *	PS	
	<i>Amphorella triticea</i> Lowe, 1831 *	PS	
	<i>Amphorella tuberculata</i> Lowe, 1852 *	PS	
	<i>Cecilioides acicula</i> Muller, 1774	i	
	<i>Cecilioides eulima</i> Lowe, 1855 (†)	MAD	
	<i>Cylichnida ovuliformis</i> Lowe, 1831	PS	
Helicidae	<i>Cornu aspersum aspersum</i> Muller, 1774	i	
	<i>Idiomela subplicata</i> Sowerby, 1824 #	PS	H - II
	<i>Lampadia webbiana</i> Lowe, 1831 (†) #	PS	
	<i>Otala lactea lactea</i> Muller, 1774	i	
	<i>Theba pisana pisana</i> Muller, 1774	i	
Hygromiidae	<i>Actinella crassiuscula</i> Cockerell, 1922 † *	PS	
	<i>Actinella littorinella</i> Mabilie, 1883 (†) *	PS	
	<i>Actinella morenensis</i> Seddon, 1990 † *	PS	
	<i>Actinella papillosculpta</i> Waldén, 1983 † *	PS	
	<i>Callina bulwerii</i> Wood, 1828 (†) #	PS	
	<i>Callina rotula</i> Lowe, 1831 (†) #	PS	
	<i>Callina waldeni</i> Groh & De Mattia, 2018 † #	PS	
	<i>Caseolus abjectus abjectus</i> Lowe, 1831 (†) *	PS	
	<i>Caseolus baixoensis</i> Waldén, 1983 (†) *	PS	
	<i>Caseolus bowdichianus</i> Férussac, 1832 † *	MAD	
	<i>Caseolus calculus</i> Lowe, 1855 (†) *	PS	B - II; H - II
	<i>Caseolus commixtus</i> Lowe, 1855 *	PS	B - II; H - II
	<i>Caseolus compactus areiensis</i> Waldén, 1983 *	PS	
	<i>Caseolus compactus betamajor</i> Waldén, 1983 (†) *	PS	
	<i>Caseolus compactus portosanctanus</i> Lowe, 1855 (†) *	PS	
	<i>Caseolus compactus vigiae</i> Waldén, 1983 † *	PS	
	<i>Caseolus consors</i> Lowe, 1831 (†) *	PS	
	<i>Caseolus hartungi fictilis</i> Lowe, 1852 (†) *	PS	
	<i>Caseolus hartungi hartungi</i> Albers, 1852 *	PS	
	<i>Caseolus punctulatus punctulatus</i> Sowerby, 1824 (†) *	PS	
	<i>Caseolus punctulatus solidus</i> Lowe, 1831 (†) *	PS	
	<i>Caseolus subcalliferus majusculus</i> Paiva, 1867 † *	PS	H - II
	<i>Caseolus subcalliferus subcalliferus</i> Reeve, 1854 *	PS	H - II
	<i>Cernuella virgata</i> Da Costa, 1778	i	
	<i>Discula attrita</i> Lowe, 1831 (†) *	PS	
	<i>Discula calcigena barbozae</i> Paiva, 1866 *	PS	
	<i>Discula calcigena calcigena</i> Lowe, 1831 (†) *	PS	
	<i>Discula calcigena discina</i> Lowe, 1852 (†) *	PS	
	<i>Discula calcigena gomesiana</i> Paiva, 1866 *	PS	

<i>Discula calcigena maxima</i> Mandahl-Barth, 1950 *	PS	
<i>Discula cheiranthicola cheiranthicola</i> Lowe, 1831 *	PS	
<i>Discula cheiranthicola mustelina</i> Reeve, 1854 *	PS	
<i>Discula cockerellii</i> Noronha, 1923 † *	PS	
<i>Discula pulvinata</i> Lowe, 1831 (†) *	PS	
<i>Discula tectiformis ludovici</i> Albers, 1852 † *	PS	
<i>Discula tectiformis tectiformis</i> Sowerby, 1824 (†) *	PS	
<i>Discula testudinalis</i> Lowe, 1852 *	PS	B - II; H - IV
<i>Heterostoma duplex</i> Mandahl-Barth, 1950 (†)	PS	
<i>Heterostoma pauperulum</i> Lowe, 1831 (†)	MAC	
<i>Hystricella aucta</i> Wollaston, 1878 (†) #	PS	
<i>Hystricella bicarinata</i> Sowerby, 1824 #	PS	
<i>Hystricella echinoderma</i> Wollaston, 1878 (†) #	PS	
<i>Hystricella echinulata</i> Lowe, 1831 #	PS	
<i>Hystricella microcarinata</i> De Mattia & Groh, 2018 † #	PS	
<i>Lemniscia michaudi</i> Deshayes, 1831 #	PS	
<i>Leptaxis chrysomela</i> Pfeiffer, 1846 †	PS	
<i>Leptaxis fluctuosa</i> Lowe, 1852 †	PS	
<i>Leptaxis nivosa calensis</i> Bank, Groh & Ripken, 2002	PS	
<i>Leptaxis nivosa craticulata</i> Lowe, 1852 (†)	PS	
<i>Leptaxis nivosa nivosa</i> Sowerby, 1824 (†)	PS	
<i>Leptaxis psammophora</i> Lowe, 1852 †	PS	
<i>Leptaxis simia portosancti</i> Wollaston, 1878	PS	
<i>Leptaxis wollastoni forensis</i> Wollaston, 1878	PS	
<i>Leptaxis wollastoni wollastoni</i> Lowe, 1852 (†)	PS	
<i>Pseudocampylaea lowii</i> Férussac, 1835 (†) #	PS	
<i>Pseudocampylaea portosanctana</i> Sowerby, 1824 (†) #	PS	
<i>Serratorotula acarinata</i> Hemmen & Groh, 1985 † #	PS	
<i>Serratorotula coronata</i> Deshayes, 1850 (†) #	PS	
<i>Serratorotula gerberi</i> Groh & Hemmen, 1986 † #	PS	
<i>Spirorbula depauperata</i> Lowe, 1831 (†) *	PS	
<i>Spirorbula latina</i> Paiva, 1866 † *	PS	
<i>Spirorbula obtecta</i> Lowe, 1831 (†) *	PS	
<i>Wollastonaria beckmanni</i> De Mattia & Groh, 2018 † #	PS	
<i>Wollastonaria falknerorum</i> De Mattia, Neiber & Groh, 2018 † #	PS	
<i>Wollastonaria inexpectata</i> De Mattia & Groh, 2018 † #	PS	
<i>Wollastonaria jessicae jessicae</i> De Mattia, Neiber & Groh, 2018 #	PS	
<i>Wollastonaria jessicae monticola</i> De Mattia, Neiber & Groh, 2018 #	PS	
<i>Wollastonaria klausgrohi</i> De Mattia & Neiber, 2018 #	PS	
<i>Wollastonaria leacockiana</i> Wollaston, 1878 (†) #	PS	
<i>Wollastonaria oxytropis</i> Lowe, 1831 (†) #	PS	
<i>Wollastonaria ripkeni</i> De Mattia & Groh, 2018 † #	PS	
<i>Wollastonaria subcarinatula</i> Wollaston, 1878 † #	PS	
<i>Wollastonaria turricula</i> Lowe, 1831 #	PS	
<i>Wollastonaria vermetiformis</i> Lowe, 1855 † #	PS	
Lauriidae		
<i>Lauria cylindracea</i> Da Costa, 1778	np?	
<i>Leiostyla calathiscus</i> Lowe, 1831	PS	
<i>Leiostyla corneocostata</i> Wollaston, 1878	PS	B - II; H - II
<i>Leiostyla degenerata</i> Wollaston, 1878	PS	

	<i>Leiostyla espigaoensis</i> Seddon, 1990	PS
	<i>Leiostyla ferraria</i> Lowe, 1852	PS
	<i>Leiostyla monticola</i> Lowe, 1831	PS
	<i>Leiostyla relevata</i> Wollaston, 1878	PS
	<i>Leiostyla subcorneocostata</i> Seddon, 1990	PS
Limacidae	<i>Lehmannia valentiana</i> Férussac, 1822	i
Milacidae	<i>Milax gagates</i> Draparnaud, 1801	i
Physidae	<i>Physella acuta</i> Draparnaud, 1805	i
Punctidae	<i>Paralaoma servilis</i> Shuttleworth, 1852	i
Subulinidae	<i>Rumina decollata</i> Linnaeus, 1758	i
Testacellidae	<i>Testacella maugei</i> Férussac, 1819	i
Trissexodontidae	<i>Caracollina lenticula</i> Michaud, 1831	i
Valloniidae	<i>Plagyrona placida</i> Shuttleworth, 1852	i
Vertiginidae	<i>Staurodon seminulum</i> Lowe, 1852 (†) *	MAD
	<i>Truncatellina biscoitoi</i> Hutterer & Groh, 1993 †	PS
	<i>Truncatellina portosantana</i> Hutterer & Groh, 1993 †	PS
Vitrinidae	<i>Plutonia crassa</i> Groh & Hemmen, 1986 †	MAD
	<i>Plutonia marcida</i> Gould, 1847 (†)	MAD
	<i>Plutonia media</i> Lowe, 1855 (†)	PS
	<i>Plutonia portosantana</i> Groh & Hemmen, 1986 †	PS

VERTEBRATES

Family	Taxa Class Aves	Naturalness	Protection status
Accipitridae	<i>Buteo buteo harterti</i> Swan, 1919	MAD	B - II
	<i>Circus aeruginosus</i> Linnaeus, 1758	m	A - I; B - III; C - II
Acrocephalidae	<i>Acrocephalus scirpaceus</i> Hermann, 1804	m	B - III
Alaudidae	<i>Alauda arvensis</i> Linnaeus, 1758	i	A - II; B - III
Anatidae	<i>Aix galericulata</i> Linnaeus, 1758	i	B - III
	<i>Anas crecca</i> Linnaeus, 1758	m	A - II, III; B - III
	<i>Anas platyrhynchos</i> Linnaeus, 1758	m	A - II, III; B - III
	<i>Anas querquedula</i> Linnaeus, 1758	m	A - II; B - III
	<i>Anas strepera</i> Linnaeus, 1758	m	A - II; B - III
	<i>Anser brachyrhynchus</i> Baillon, 1834	m	A - II; B - III
	<i>Anser fabalis</i> Latham, 1787	m	A - II; B - III
	<i>Aythya ferina</i> Linnaeus, 1758	m	A - III; B - III
	<i>Aythya fuligula</i> Linnaeus, 1758	m	A - III; B - III
	<i>Mergus merganser</i> Linnaeus, 1758	m	A - II; B - III
	<i>Spatula clypeata</i> Linnaeus, 1758	m	B - III
Apodidae	<i>Apus pallidus brehmorum</i> Hartert, E. 1901	n	B - III
	<i>Apus unicolor</i> Jardine, 1830	MAC	B - II
Ardeidae	<i>Ardea cinerea</i> Linnaeus, 1758	m	B - III
	<i>Ardea purpurea</i> Linnaeus, 1766	m	A - I; B - III
	<i>Bubulcus ibis</i> Linnaeus, 1758	m	B - III
	<i>Egretta garzetta</i> Linnaeus, 1766	m	A - I; B - III
	<i>Nycticorax nycticorax</i> Linnaeus, 1758	m	A - I; B - III
Columbidae	<i>Columba livia atlantis</i> Bannerman, 1931	MAC	B - III
	<i>Streptopelia decaocto</i> Frivaldszky, 1838	i	A - II; B - III
	<i>Streptopelia turtur</i> Linnaeus, 1758	m	A - II; B - III
Estrildidae	<i>Estrilda astrild</i> Linnaeus 1758	i	B - III

Falconidae	<i>Falco peregrinus</i> Tunstall, 1771	m	A - I; B - II; C - II
	<i>Falco tinnunculus canariensis</i> Koenig, 1890	MAC	B - II; C - II
Fringillidae	<i>Carduelis cannabina guentheri</i> Wolters, 1953	MAD	B - II
	<i>Carduelis carduelis parva</i> Tschusi, 1901	n	B - II
	<i>Serinus canaria canaria</i> Linnaeus, 1758	MAC	B - III
Hirundinidae	<i>Delichon urbicum</i> Linnaeus, 1758	i	B - II
	<i>Hirundo daurica</i> Linnaeus, 1771	m	B - II
	<i>Hirundo rustica</i> Linnaeus, 1758	m	B - II
	<i>Riparia riparia</i> Linnaeus, 1758	m	B - II
Motacillidae	<i>Anthus berthelotii madeirensis</i> Erlanger, 1899	MAC	B - II
	<i>Motacilla alba alba</i> Linnaeus, 1758	m	B - II
	<i>Motacilla cinerea schmitzi</i> Tschusi, 1900	MAD	B - II
	<i>Motacilla flava</i> Linnaeus, 1758	m	B - II
Muscicapidae	<i>Erithacus rubecula rubecula</i> Linnaeus, 1758	n	B - II
	<i>Oenanthe oenanthe</i> Linnaeus, 1758	m	B - II
	<i>Phoenicurus ochruros</i> Gmelin, SG, 1774	i	B - II
Passeridae	<i>Passer hispaniolensis</i> Temminck, 1820	n?	B - III
	<i>Petronia petronia petronia</i> Linnaeus, 1766	n	B - II
Phasianidae	<i>Alectoris rufa hispanica</i> Linnaeus, 1758	i	B - III
	<i>Coturnix coturnix confisa</i> Hartert, 1917	MAC	B - III
Phylloscopidae	<i>Phylloscopus collybita</i> Vieillot, 1817	m	B - III
	<i>Phylloscopus sibilatrix</i> Bechstein, 1793	m	B - III
Rallidae	<i>Fulica atra</i> Linnaeus, 1758	m	A - II, III; B - III
	<i>Gallinula chloropus</i> Linnaeus, 1758	n	A - II; B - III
Regulidae	<i>Regulus madeirensis</i> Harcourt, 1851	MAD	B - II
Sturnidae	<i>Sturnus vulgaris</i> Linnaeus, 1758	m	A - II; B - III
Sylviidae	<i>Sylvia atricapilla heineken</i> Jardine, 1830	MAC	B - II
	<i>Sylvia conspicillata orbitalis</i> Wahlberg, 1854	MAC	B - II
Turdidae	<i>Turdus merula cabreriae</i> Hartet, 1901	MAC	A - II; B - III
	<i>Turdus philomelos</i> C.L. Brehm, 1831	m	A - II; B - III
Tytonidae	<i>Tyto alba schmitzi</i> Hartert, 1900	n	B - II; C - II
Upupidae	<i>Upupa epops</i> Linnaeus, 1758	n	B - II
Threskiornithidae	<i>Platalea leucorodia</i> Linnaeus, 1758	m	A - I; B - III; C - II
Family	Taxa Class Mammalia		
Felidae	<i>Felis silvestris</i> Linnaeus, 1758	i	C - II
Leporidae	<i>Oryctolagus cuniculus</i> Linnaeus, 1758	i	
Muridae	<i>Mus musculus</i> Linnaeus, 1758	i	
	<i>Rattus norvegicus</i> Berkenhout, 1769	i	
	<i>Rattus rattus</i> Linnaeus, 1758	i	
Mustelidae	<i>Mustela putorius</i> Linnaeus, 1758	i	B - III
Vespertilionidae	<i>Pipistrellus maderensis</i> Dobson, 1878	MAC	
	<i>Plecotus austriacus</i> Fischer, 1829 ?	n	
Family	Taxa Class Reptilia		
Gekkonidae	<i>Tarentola mauritanica</i> Linnaeus, 1758	i	B - III
Lacertidae	<i>Teira dugesii jogeri</i> Bischoff, Oseneegg & Mayer, 1990	PS	B - III

MARINE BIODIVERSITY

(ALGAE)

Family	Taxa Class Chlorophyta	Naturalness	Protection status
Boodleaceae	<i>Struvea ramosa</i> Dickie, 1874		
Caulerpaceae	<i>Caulerpa prolifera</i> (Forsskål) J.V.Lamouroux, 1809 <i>Caulerpa webbiana</i> Montagne, 1837		
Chaetophoraceae	<i>Entocladia viridis</i> Reinke, 1879 <i>Pringsheimiella scutata</i> (Reinke) Marchewianka, 1925		
Cladophoraceae	<i>Cladophora pellucida</i> (Huds.) Kützing, 1843 <i>Cladophora repens</i> (J. Ag.) Harvey, 1849		
Codiaceae	<i>Codium adhaerens</i> C. Agardh, 1822 <i>Codium elisabethiae</i> O.C.Schmidt, 1929 <i>Codium tomentosum</i> (Huds.) Stackhouse, 1797		
Dasycladaceae	<i>Dasycladus vermicularis</i> (Scopoli) Krasser, 1898		
Halimedaceae	<i>Halimeda incrassata</i> (J.Ellis) J.V.Lamouroux, 1816		
Polyphysaceae	<i>Polyphysa parvula</i> (Solms-Laubach) Schnetter & Bula Meyer, 1982		
Udoteaceae	<i>Penicillus capitatus</i> Lamarck, 1813		
Ulvaceae	<i>Enteromorpha compressa</i> (Linnaeus) Nees, 1820 <i>Enteromorpha ramulosa</i> (Smith) Carmichael, 1833 <i>Enteromorpha intestinalis</i> (L.) Link		
Valoniaceae	<i>Ernodesmis verticillata</i> (Kütz.) Börg., 1912		
Family	Taxa Class Ochrophyta		
Acinetosporaceae	<i>Feldmannia irregularis</i> (Kütz.) Hamel, 1939		
Arthrocladiaceae	<i>Arthrocladia villosa</i> (Huds.) Duby, 1830		
Asterolampraceae	<i>Asterolampra marylandica</i> Ehrenberg, 1844		
Biddulphiaceae	<i>Isthmia enervis</i> Ehrenberg, 1838		
Chordariaceae	<i>Ascocyclus orbicularis</i> (J.Agardh) Kjellman, 1890 <i>Giffordia mitchellae</i> (Harv.) Hamel., 1939 <i>Giraudia sphaclariodes</i> Derbès & Solier, 1851 <i>Myrionema coronnae</i> Sauv., 1897 <i>Nemacystus erythraeus</i> (J.Agardh) Sauvageau, 1897		
Choristocarpaceae	<i>Discosporangium mesarthrocarpum</i> (Meneghini) Hauck, 1885		
Cystoseiraceae	<i>Cystoseira abies-marina</i> (S.G.Gmelin) C.Agardh, 1820 <i>Cystoseira discors</i> (L.) C. Ag., 1828 <i>Cystoseira fimbriata</i> Bory de Saint-Vincent, 1832 <i>Cystoseira humilis</i> Schousboe ex Kützing, 1860 <i>Cystoseira tamariscifolia</i> (Huds.) Papenfuss, 1950		
Dictyotaceae	<i>Dictyopteris membranacea</i> (Stackh.) Batters, 1902 <i>Dictyota bartayresii</i> J.V.Lamouroux, 1809 <i>Dictyota cervicornis</i> Kützing, 1859 <i>Dictyota ciliolata</i> Sonder ex Kützing, 1859 <i>Dictyota dichotoma</i> (Huds.) Lamour., 1809 <i>Dictyota divaricata</i> J.V.Lamouroux, 1809 <i>Dictyota volubilis</i> Kützing, 1849		

	<i>Dilophus fasciola</i> (Roth) Howe., 1914
	<i>Dilophus spiralis</i> (Mont.) G.Hamel, 1939
	<i>Lobophora variegata</i> (J.V.Lamouroux) Womersley ex E.C.Oliveira, 1977
	<i>Padina pavonica</i> (Linnaeus) Thivy, 1960
	<i>Styopodium zonale</i> (Lamour) Papenf., 1940
	<i>Zonaria tournefortii</i> (Lamour.) Monti., 1846
Fragilariaceae	<i>Bleakeleya notata</i> (Grunow) Round, 1990
Hemiaulaceae	<i>Hemiaulus membranaceus</i> Cleve, 1873
Ralfsiaceae	<i>Ralfsia verrucosa</i> (Areschoug) Areschoug, 1845
Sargassaceae	<i>Sargassum desfontainesii</i> (Turn.) C. Ag., 1820
	<i>Sargassum natans</i> (Linnaeus) Gaillon, 1828
	<i>Sargassum vulgare</i> C. Ag., 1820
Scytosiphonaceae	<i>Colpomenia sinuosa</i> (Roth) Derb. & Sol., 1851
	<i>Hydroclathrus clathratus</i> (C.Agardh) M. Howe, 1920
Sphacelariaceae	<i>Sphacelaria tribuloides</i> Meneghini, 1840
	<i>Sphacelaria rigidula</i> Kützing, 1843
Sporochneaceae	<i>Sporochnus bolleanus</i> Mont., 1856
Stypocaulaceae	<i>Halopteris filicina</i> (Grat.) Kütz., 1843
	<i>Halopteris scoparia</i> (L.) Sauvag., 1904
Triceratiaceae	<i>Lampriscus orbiculatum</i> (Shadbolt) Peragallo & Peragallo, 1902

Family	Taxa Class Rhodophyta
Acrochaetiaceae	<i>Acrochaetium liagore</i> (Weber-van Bosse) G.Hamel, 1927
Atractophoraceae	<i>Atractophora hypnoides</i> P.L.Crouan & H.M.Crouan,
Bangiaceae	<i>Porphyra leucosticta</i> Thuret., 1863
Bonnemaisoniaceae	<i>Asparagopsis armata</i> Harv., 1855
	<i>Asparagopsis taxiformis</i> (Delile) Trevisan de Saint-Léon, 1845
Ceramiaceae	<i>Ceramium cilliatum</i> (Ellis) Ducl., 1806
	<i>Ceramium strictum</i> Harv., 1849
	<i>Compsothamnion gracillimum</i> De Toni, 1903
Champiaceae	<i>Chylocladia verticillata</i> (Lightfoot) Bliding, 1928
Corallinaceae	<i>Corallina elongata</i> J.Ellis & Solander, 1786
	<i>Dermatolithon hapalidioides</i> (Crouan) Foslie
	<i>Haliptilon virgatum</i> (Zanardini) Garbary & H.W.Johansen, 1982
	<i>Jania rubens</i> (L.) Lamour., 1816
	<i>Jania capillacea</i> (Harv.), 1853
	<i>Lithothamnion calcareum</i> (Pall.) Aresch., 1852
Cystocloniaceae	<i>Hypnea cervicornis</i> J. Ag., 1851
	<i>Hypnea musciformis</i> (Wulfen) Lamour., 1813
	<i>Rhodophyllis madeirensis</i> Levring, 1974
Dasyaceae	<i>Dasya corymbifera</i> J. Ag., 1841
	<i>Dasya pedicellata</i> C. Ag., 1824
	<i>Dasya rigidula</i> (Kütz.) Ardiss., 1878
	<i>Halydictyon mirabile</i> Zanardini, 1843
Delesseriaceae	<i>Acrosorium uncinatum</i> (Turner) Kylin, 1924

	<i>Apoglossum ruscifolium</i> (Turner) J. Ag., 1898	
	<i>Cryptopleura ramosa</i> (Huds.) Kylin	
	<i>Erythroglossum sandrianum</i> (Zanard.) Kylin	
	<i>Heraldia lenormandii</i> (Derbès & Solier) Feldmann, 1939	
	<i>Hypoglossum woodwardii</i> Kutz., 1843	
	<i>Myriogramme minuta</i> Kylin, 1924	
	<i>Nitophyllum punctatum</i> (Stackh.) Grev., 1830	
	<i>Taenioma perpusillum</i> (J.Agardh) J.Agardh, 1863	
Dumontiaceae	<i>Dudresnaya verticillata</i> (UIT) Le Jol., 1863	
Furcellariaceae	<i>Halarachnion ligulatum</i> (Woodw) Kutz.	
Goniotrichaceae	<i>Goniotrichum alsidii</i> (Zanard.) Howe, 1914	
Gracilariaceae	<i>Gracilaria armata</i> (C.Agardh) Greville, 1830	
	<i>Gracilaria verrucosa</i> (Huds.) Papenfuss, 1950	
Halymeniaceae	<i>Halymenia floresii</i> (Clemente) C.Agardh, 1817	
	<i>Halymenia hancokii</i> W.R.Taylor, 1942	
Hapalidiaceae	<i>Choreonema thuretii</i> (Bornet) Schmitz, 1889	
	<i>Epilithon membranaceum</i> (Esper) Heydr., 1897	
	<i>Melobesia lejolisi</i> Rosanoff, 1866	
	<i>Melobesia farinosa</i> Lamour., 1816	
Kallymeniaceae	<i>Kallymenia microphylla</i> J. Ag., 1851	
	<i>Kallymenia reniformes</i> (Turner) J. Ag., 1842	
Liagoraceae	<i>Helminthocladia calvadosii</i> (Lamour.) Setch., 1915	
	<i>Liagora distenta</i> (Mert.) C. Ag., 1816	
	<i>Liagora tetrasporifera</i> Børgeesen, 1927	
	<i>Liagora viscida</i> (Forsskål) C.Agardh, 1822	
Lithophyllaceae	<i>Crodelia orbiculata</i> (Foslie) Kylin, 1956	
	<i>Lithophyllum vickersiae</i> Lemoine, 1929	
Lithothamniaceae	<i>Lithothamnium coralloides</i> (P.L.Crouan & H.M.Crouan) P.L.Crouan & H.M.Crouan, 1867	H - V
	<i>Lithothamnion lenormandii</i> (Aresch.) Foslie, 1895	
	<i>Lithothamnion sonderi</i> Hauck., 1883	
Lomentariaceae	<i>Gelidiopsis intricata</i> (C.Agardh) Vickers, 1905	
Mesophyllaceae	<i>Mesophyllum canariense</i> (Foslie) Lemoine, 1928	
Nemastomataceae	<i>Nemastoma gelatinosum</i> Howe, 1918	
Peyssonneliaceae	<i>Peyssonnelia inamoena</i> Pilger, 1911	
	<i>Peyssonnelia rubra</i> (Grev.) J. Ag., 1851	
Plocamiaceae	<i>Plocamium coccineum</i> (Huds.) Lyngb., 1819	
Pterocladaceae	<i>Pterocladia capillacea</i> (Gmel.) Born. et Thur., 1876	
Rhodomelaceae	<i>Boergeseniella fruticulosa</i> (Wulfen) Kylin, 1956	
	<i>Chondria tenuissima</i> (Good. & Woodw) C. Ag.	
	<i>Ctenosiphonia hypnoides</i> (Welwitsch) Falkenberg, 1897	
	<i>Dipterosiphonia rigens</i> (C.Agardh) Falkenberg, 1901	
	<i>Erythrocytis montagnei</i> (Derbès & Solier) P.C.Silva, 1952	
	<i>Herposiphonia tenella</i> (C. Ag.) Näg.	
	<i>Janczewskia verrucaeformis</i> Solms-Laubach, 1877	

	<i>Laurencia obtusa</i> (Huds.) Lamour., 1813
	<i>Lophosiphonia reptabunda</i> (Suhr) Kylin, 1956
	<i>Laurencia paniculata</i> (C.Agardh) J.Agardh, 1852
	<i>Polysiphonia elongata</i> (Hudson) Sprengel, 1827
	<i>Polysiphonia flexella</i> (C.Agardh) J.Agardh, 1842
	<i>Polysiphonia tepida</i> Hollenberg, 1958
	<i>Polysiphonia tripinnata</i> J.Agardh, 1842
Rhodymeniaceae	<i>Botryocladia guieensis</i> D.M.John, 1972
	<i>Chrysymenia bullosa</i> Levring, 1974
	<i>Rhodymenia palmetta</i> (Esper.) Grez.
Sarcomeniaceae	<i>Cottoniella filamentosa</i> (Howe) Börg.
	<i>Cottoniella fusiformis</i> Børgesen, 1930
Scinaiceae	<i>Scinia complanata</i> (Collins) Cotton., 1907
Spyridiaceae	<i>Spyridia filamentosa</i> (Wulf.) Harv., 1833
Wrangeliaceae	<i>Corynospora furcellata</i> (J. Ag.) Levring, 1974
	<i>Griffithsia barbata</i> C.Agardh, 1828
	<i>Griffithsia schousboei</i> Mont., 1839
	<i>Griffithsia tenuis</i> C. Ag., 1828
	<i>Wrangelia penicillata</i> C. Ag., 1828

MARINE PROHIBITORS

Family	Taxa	Naturalness
Amphisoleniaceae	<i>Amphisolenia bidentata</i> Schröder, 1900	
Ceratiaceae	<i>Ceratium arietinum</i> Cleve, 1900	
	<i>Ceratium azoricum</i> Cleve, 1900	
	<i>Ceratium belone</i> Cleve, 1900	
	<i>Ceratium buceros</i> (Ehrenberg) Stein, 1883	
	<i>Ceratium candelabrum</i> (Ehrenberg) Stein, 1883	
	<i>Ceratium carriense</i> Gourret, 1883	
	<i>Ceratium concilians</i> Jørgensen, 1920	
	<i>Ceratium contortum</i> (Gourret) Cleve, 1900	
	<i>Ceratium contrarium</i> (Gourret) Pavillard, 1905	
	<i>Ceratium declinatum</i> (Karsten) Jørgensen, 1911	
	<i>Ceratium euarquatatum</i> Jørgensen, 1920	
	<i>Ceratium extensum</i> (Gourret) Cleve-Euler, 1900	
	<i>Ceratium furca</i> (Ehrenberg) Claparède & Lachmann, 1859	
	<i>Ceratium fusus</i> (Ehrenberg) Dujardin, 1841	
	<i>Ceratium geniculatum</i> (Lemmermann) Cleve, 1900	
	<i>Ceratium gibberum</i> Gourret, 1883	
	<i>Ceratium gravidum</i> Gourret, 1883	
	<i>Ceratium hexacanthum</i> Gourret, 1883	
	<i>Ceratium inflatum</i> (Kofoid) E.G.Jørgensen, 1911	
	<i>Ceratium karstenii</i> Pavillard, 1907	
	<i>Ceratium lunula</i> Schimper ex Karsten, 1906	
	<i>Ceratium macroceros</i> (Ehrenberg) Cleve, 1899	
	<i>Ceratium macroceros gallicum</i> (Kofoid) Peters, 1934	
	<i>Ceratium massiliense</i> (Gourret) Karsten, 1906	
	<i>Ceratium paradoxides</i> Cleve, 1900	

Ceratium pentagonum Gourret, 1883
Ceratium pulchellum Schröder, 1906
Ceratium ranipes Cleve, 1900
Ceratium strictum (Okamura & Nishikawa) Kofoid, 1906
Ceratium symmetricum Pavillard, 1905
Ceratium teres Kofoid, 1907
Ceratium trichoceros (Ehrenberg) Kofoid, 1881
Ceratium tripos (O.F.Müller) Nitzsch, 1817
Ceratium vultur Cleve, 1900
Ceratocoryaceae *Ceratocorys horrida* Stein, 1883
Cladopyxidaceae *Cladopyxis hemibrachiata* Balech, 1964
Dinophysaceae *Dinophysis caudata* Saville-Kent, 1881
Ornithocercus quadratus Schütt, 1900
Ornithocercus splendidus Schütt, 1895
Ornithocercus steinii Schütt, 1900
Ornithocercus thumii (Schmidt) Kofoid & Skogsberg, 1928
Ornithocercus magnificus Stein, 1883
Goniodomataceae *Goniodoma polyedricum* (Pouchet) Jørgensen, 1899
Oxyphysaceae *Phalacroma doryphorum* Stein, 1883
Phalacroma rapa Jørgensen, 1923
Podolampadaceae *Podolampas bipes* Stein, 1883
Podolampas spinifera Okamura, 1912
Pyrocystaceae *Pyrocystis fusiformis* C.W.Thomson, 1876
Pyrocystis pseudonoctiluca Wyville-Thompson, 1876
Pyrocystis hamulus Cleve, 1900
Pyrocystis lunula (Schütt) Schütt, 1896
Pyrophacus steinii (Schiller) Wall & Dale, 1971

MARINE VERTEBRATES

Family	Taxa Class Ascidiacea	Naturalness	Protection status
Cionidae	<i>Ciona intestinalis</i> Linnaeus, 1767		
Clavelinidae	<i>Clavelina dellavallei</i> Zirpolo, 1825 <i>Clavelina lepadiformis</i> Müller, 1776		
Holozoidae	<i>Distaplia corolla</i> Monniot F., 1974		
Family	Taxa Class Aves	Naturalness	Protection status
Charadriidae	<i>Charadrius alexandrinus</i> Linnaeus, 1758 <i>Charadrius dubius curonicus</i> Gmelin, 1789 <i>Charadrius hiaticula</i> Linnaeus, 1758 <i>Pluvialis squatarola</i> Linnaeus, 1758 <i>Vanellus vanellus</i> Linnaeus, 1758	n m m m m	A - I; B - II; BO - II B - II; BO - II B - II; BO - II A - II; B - III; BO - II A - II; B - III; BO - II
Hydrobatidae	<i>Hydrobates castro</i> Harcourt, 1851	n	A - I; B - II
Laridae	<i>Larus ridibundus (Chroicocephalus ridibundus)</i> Linnaeus, 1766 <i>Larus melanocephalus (Ichthyaetus melanocephalus)</i> Temminck, 1820 <i>Larus michahellis atlantis</i> Clements, 1991 <i>Sterna dougallii</i> Montagu, 1813 <i>Sterna hirundo</i> Linnaeus, 1758	m m MAC n n	A - II; B - III A - I; B - III B - III A - I; B - II; BO - II A - I; B - II

Procellariidae	<i>Bulweria bulwerii</i> Jardine & Selby, 1828	n	A - I; B - II
	<i>Calonectris borealis</i> (<i>Calonectris diomedea</i>) Scopoli, 1769	n	A - I; B - II
	<i>Puffinus Iherminieri</i> (<i>Puffinus assimilis</i>) Bonaparte, 1857	MAC	A - I; B - II
Scolopacidae	<i>Actitis hypoleucos</i> Linnaeus, 1758	m	B - III; BO - II
	<i>Arenaria interpres</i> Linnaeus, 1758	m	B - III; BO - II
	<i>Calidris alba</i> Pallas, 1764	m	B - II; BO - II
	<i>Calidris alpina</i> Linnaeus, 1758	m	B - II; BO - II
	<i>Calidris ferruginea</i> Pontoppidan, 1763	m	B - II; BO - II
	<i>Gallinago gallinago</i> Linnaeus, 1758	m	A - II, III; B - III; BO - II
	<i>Limosa lapponica</i> Linnaeus, 1758	m	A - I, II; B - III; BO - II
	<i>Numenius arquata</i> Linnaeus, 1758	m	A - II; B - III; BO - II
	<i>Numenius phaeopus</i> Linnaeus, 1758	m	A - II; B - III; BO - II
	<i>Phalaropus lobatus</i> Linnaeus, 1758	m	A - I; B - III; BO - II
	<i>Tringa erythropus</i> Pallas, 1764	m	A - II; B - III; BO - II
	<i>Tringa nebularia</i> Gunnerus, 1767	m	A - II; B - III; BO - II
	<i>Tringa ochropus</i> Linnaeus, 1758	m	B - II; BO - II
<i>Tringa totanus</i> Linnaeus, 1758	m	A - II; B - III; BO - II	

Family	Taxa Class Mammalia	Naturalness	Protection status
Balaenidae	<i>Eubalaena glacialis</i> Müller, 1776		B - II; BO - I; C - I; H - IV
Balaenopteridae	<i>Balaenoptera acutorostrata</i> Lacépède, 1804		B - II; C - I; H - IV
	<i>Balaenoptera borealis</i> Lesson, 1828		B - II; C - I; H - IV
	<i>Balaenoptera edeni</i> Anderson, 1879		B - III; H - IV
	<i>Balaenoptera musculus</i> Linnaeus, 1758		B - II; BO - I; C - I; H - IV
	<i>Balaenoptera physalus</i> Linnaeus, 1758		B - II; C - I; H - IV
	<i>Megaptera novaeangliae</i> Borowski, 1781		B - II; BO - I; C - I; H - IV
Delphinidae	<i>Delphinus delphis</i> Linnaeus, 1758		B - II; C - II; H - IV
	<i>Globicephala macrorhynchus</i> Gray, 1846		B - II; C - II; H - IV
	<i>Grampus griseus</i> G. Cuvier, 1812		B - II; C - II; H - IV
	<i>Orcinus orca</i> Linnaeus, 1758		B - III; C - II; H - IV
	<i>Pseudorca crassidens</i> Owen, 1846		B - III; C - II; H - IV
	<i>Stenella coeruleoalba</i> Meyen, 1833		B - II; C - II; H - IV
	<i>Stenella frontalis</i> Cuvier, 1829		B - II; C - II; H - IV
	<i>Steno bredanensis</i> G. Cuvier in Lesson, 1828		B - III; C - II; H - IV
	<i>Tursiops truncatus</i> Montagu, 1821		B - II; C - II; H - II
Phocidae	<i>Monachus monachus</i> Hermann, 1779		B - I; BO; C - I; H - II•
Physeteridae	<i>Kogia breviceps</i> de Blainville, 1838		B - III; C - II; H - IV
	<i>Physeter macrocephalus</i> Linnaeus, 1758		B - II; C - I; H - IV
Ziphiidae	<i>Mesoplodon bidens</i> Sowerby, 1804		B - II; C - II; H - IV
	<i>Mesoplodon densirostris</i> de Blainville, 1817		B - II; C - II; H - IV
	<i>Ziphius cavirostris</i> Cuvier, 1823		B - II; C - II; H - IV

Family	Taxa Class Fish
Antennariidae	<i>Antennarius nummifer</i> Cuvier, 1817
Apogonidae	<i>Apogon imberbis</i> Linnaeus, 1758

Atherinidae	<i>Atherina presbyter</i> Cuvier, 1829	
Balistidae	<i>Balistes capriscus</i> Gmelin, 1789	
Blenniidae	<i>Blennius parvicornis</i> Valenciennes, 1836 <i>Coryphoblennius galerita</i> Linnaeus, 1758 <i>Ophioblennius atlanticus</i> Valenciennes, 1836 <i>Parablennius incognitus</i> Bath, 1968	
Bothidae	<i>Bothus podas</i> Delaroche, 1809 <i>Bothus podas maderensis</i> Lowe, 1834	
Carangidae	<i>Caranx crysos</i> Mitchill, 1815 <i>Pseudocaranx dentex</i> Bloch & Schneider, 1801 <i>Seriola dumerili</i> Risso, 1810 <i>Seriola rivoliana</i> Valenciennes in Cuvier & Valenciennes, 1833 <i>Trachurus picturatus</i> S. Bowdich, 1825	
Congridae	<i>Conger conger</i> Linnaeus, 1758 <i>Heteroconger longissimus</i> Günther, 1870	
Dasyatidae	<i>Dasyatis pastinaca</i> Linnaeus, 1758 <i>Taeniurops grabata</i> Geoffroy Saint-Hilaire, 1817	
Gobiesocidae	<i>Lepadogaster zebrina</i> Lowe, 1839	
Gobiidae	<i>Gnatholepis thompsoni</i> Bleeker, 1874 <i>Mauligobius maderensis</i> Valenciennes, 1837	
Haemulidae	<i>Pomadasys incisus</i> Bowdich, 1825	
Labridae	<i>Bodianus scrofa</i> Valenciennes, 1839 <i>Centrolabrus trutta</i> (<i>Symphodus trutta</i>) Lowe, 1834 <i>Labrus bergylta</i> Ascanius, 1767 <i>Symphodus mediterraneus</i> Linnaeus, 1758 <i>Thalassoma pavo</i> Linnaeus, 1758 <i>Xyrichthys novacula</i> Linnaeus, 1758	MAC MAC
Lotidae	<i>Gaidropsarus guttatus</i> Collett, 1890	
Mobulidae	<i>Mobula mobular</i> Bonnaterre, 1788	
Monacanthidae	<i>Aluterus scriptus</i> Osbeck, 1765	
Mullidae	<i>Mullus surmuletus</i> Linnaeus, 1758	
Muraenidae	<i>Enchelycore anatina</i> Lowe, 1838 <i>Gymnothorax unicolor</i> Delaroche, 1809 <i>Muraena augusti</i> Kaup, 1856 <i>Muraena helena</i> Linnaeus, 1758	MAC
Myliobatidae	<i>Myliobatis aquila</i> Linnaeus, 1758 <i>Pteromylaeus bovinus</i> Geoffroy St. Hilaire, 1817	
Myliobatiformes	<i>Gymnura altavela</i> Linnaeus, 1758	
Phycidae	<i>Phycis phycis</i> Linnaeus, 1766	
Polyprionidae	<i>Polyprion americanus</i> Bloch & Schneider, 1801	
Pomacentridae	<i>Abudefduf luridus</i> Cuvier, 1830 <i>Chromis limbata</i> Cuvier in Cuvier and Valenciennes, 1830 <i>Similiparma lurida</i> Cuvier, 1830	MAC
Pomatomidae	<i>Pomatomus saltatrix</i> Linnaeus, 1776	
Priacanthidae	<i>Heteropriacanthus cruentatus</i> Lacepède, 1801	
Rajidae	<i>Raja miraletus</i> Linnaeus, 1758	
Scaridae	<i>Sparisoma cretense</i> Linnaeus, 1758	
Scombridae	<i>Katsuwonus pelamis</i> Linnaeus, 1758 <i>Scomber colias</i> Gmelin, 1789 <i>Thunnus alalunga</i> Bonnaterre, 1788	

Scorpaenidae	<i>Thunnus obesus</i> Lowe, 1839 <i>Pontinus kuhlii</i> Bowdich, 1825 <i>Scorpaena canariensis</i> Sauvage, 1878 <i>Scorpaena maderensis</i> Valenciennes, 1833 <i>Scorpaena scrofa</i> Linnaeus, 1758	MAC	
Serranidae	<i>Epinephelus marginatus</i> Lowe, 1834 <i>Mycteroperca fusca</i> Lowe, 1838 <i>Serranus atricauda</i> Günther 1874 <i>Serranus scriba</i> Linnaeus, 1758	MAC	B - III
Sparidae	<i>Boops boops</i> Linnaeus, 1758 <i>Dentex gibbosus</i> Rafinesque, 1810 <i>Diplodus cervinus</i> Lowe, 1838 <i>Diplodus sargus</i> Linnaeus, 1758 <i>Diplodus vulgaris</i> Geoffroy Saint-Hilaire, 1810 <i>Lithognathus mormyrus</i> Linnaeus, 1758 <i>Oblada melanura</i> Linnaeus, 1758 <i>Pagellus acarne</i> Risso, 1827 <i>Pagellus bogaraveo</i> Brünnich, 1768 <i>Pagellus erythrinus</i> Linnaeus, 1758 <i>Pagrus pagrus</i> Linnaeus, 1758 <i>Sarpa salpa</i> Linnaeus, 1758 <i>Spondylisoma cantharus</i> Linnaeus, 1758		
Sphyraenidae	<i>Sphyraena viridensis</i> Cuvier, 1829		
Sphyrnidae	<i>Sphyrna zygaena</i> Linnaeus, 1758		
Synodontidae	<i>Synodus saurus</i> Linnaeus, 1758 <i>Synodus synodus</i> Linnaeus, 1758		
Tetraodontidae	<i>Canthigaster capistrata</i> Lowe, 1839 <i>Canthigaster rostrata</i> Bloch, 1786 <i>Sphoeroides marmoratus</i> Lowe, 1838		
Torpedinidae	<i>Torpedo marmorata</i> Risso, 1810		
Trachinidae	<i>Trachinus draco</i> Linnaeus, 1758		
Triakidae	<i>Galeorhinus galeus</i> Linnaeus, 1758 <i>Mustelus mustelus</i> Linnaeus, 1758		
Tripterygiidae	<i>Tripterygion delaisi</i> Cadenat & Blache, 1970		
Family	Taxa Classe Reptilia		
Cheloniidae	<i>Caretta caretta</i> Linnaeus, 1758		B - II; BO; C - I; H - II•,IV

MARINE INVERTEBRATES

Family	Taxa Filo Annelida	Naturalness	Protection status
Amphinomidae	<i>Hermodice carunculata</i> Pallas, 1766		
Sabellariidae	<i>Lygdamis wirtzi</i> Nishi & Nunez, 1999		
Sabellidae	<i>Myxicola infundibulum</i> Montagu, 1808 <i>Sabella pavonina</i> Savigny, 1822		
Family	Taxa Filo Arthropoda		
Calappidae	<i>Calappa granulata</i> Linnaeus, 1758 <i>Cryptosoma cristatum</i> Brullé, 1837		

Chthamalidae	<i>Chthamalus stellatus</i> Poli, 1791	
Diogenidae	<i>Calcinus tubularis</i> Linnaeus, 1767 <i>Clibanarius aequabilis</i> Dana, 1851	
Eriphiidae	<i>Eriphia verrucosa</i> Forskål, 1775	
Grapsidae	<i>Grapsus grapsus</i> Linnaeus, 1758	
Inachoididae	<i>Stenorhynchus lanceolatus</i> Brullé, 1837	
Ligiidae	<i>Ligia oceanica</i> Linnaeus, 1767	
Lysmatidae	<i>Lysmata grabhami</i> Gordon, 1935	
Majidae	<i>Maja brachydactyla</i> Balss, 1922 <i>Maja squinado</i> Herbst, 1788	B - III
Paguridae	<i>Pagurus anachoretus</i> Risso, 1827 <i>Pagurus cuanensis</i> Bell, 1846	
Palaemonidae	<i>Palaemon elegans</i> Rathke, 1837	
Palinuridae	<i>Astacus elephas</i> Fabricius, 1787 <i>Palinurus elephas</i> Fabricius, 1787	B - III
Pandalidae	<i>Plesionika edwardsii</i> Brandt, 1851 <i>Plesionika narval</i> Fabricius, 1787	
Percnidae	<i>Percnon gibbesi</i> H. Milne Edwards, 1853 <i>Percnon planissimum</i> Herbst, 1804	
Plagusiidae	<i>Plagusia depressa</i> Fabricius, 1775	
Scyllaridae	<i>Scyllarides latus</i> Latreille, 1803	B - III
Thoridae	<i>Thor amboinensis</i> de Man, 1888	
Xanthidae	<i>Xantho incisus</i> Leach, 1814	

Family	Taxa Filo Bryozoa
Adeonidae	<i>Reptadeonella violacea</i> Johnston, 1847
Densiporidae	<i>Favosipora purpurea</i> Souto, Kaufmann & Canning-Clode, 2015
Phidoloporidae	<i>Rhynchozoon papuliferum</i> Souto, Kaufmann & Canning-Clode, 2015
Schizoporellidae	<i>Schizoporella dunkeri</i> Reuss, 1848

Family	Taxa Filo Cnidaria	
Actiniidae	<i>Actinia equina</i> Linnaeus, 1758 <i>Anemonia sulcata</i> Pennant, 1777 <i>Anemonia viridis</i> Forsskål, 1775	
Aglaopheniidae	<i>Aglaophenia pluma</i> Linnaeus, 1758 <i>Macrorhynchia philippina</i> Kirchenpauer, 1872	
Aiptasiidae	<i>Aiptasia mutabilis</i> Gravenhorst, 1831	
Aliciidae	<i>Alicia mirabilis</i> Johnson, 1861	
Andvakiidae	<i>Telmatactis cricoides</i> Duchassaing, 1850 <i>Telmatactis forskalii</i> Hemprich & Ehrenberg in Ehrenberg, 1834	
Antipathidae	<i>Antipathes wollastoni</i> Gray, 1857	
Caryophylliidae	<i>Caryophyllia inornata</i> Duncan, 1878 <i>Phyllangia mouchezii</i> Lacaze-Duthiers, 1897	C - II
Dendrophylliidae	<i>Dendrophyllia ramea</i> Linnaeus, 1758	
Parazoanthidae	<i>Antipathozoanthus macaronesicus</i> Ocana & Brito, 2003	

	<i>Gerardia savaglia</i> Bertoloni, 1819	B - II
Pennariidae	<i>Pennaria disticha</i> Goldfuss, 1820	
Physaliidae	<i>Physalia physali</i> Linnaeus, 1758	
Sphenopidae	<i>Palythoa canariensis</i> Haddon & Duerden, 1896	
Veretillidae	<i>Veretillum cynomorium</i> Pallas, 1766	

Family	Taxa Filo Echinodermata	
Antedonidae	<i>Antedon bifida</i> Pennant, 1777	
Arbaciidae	<i>Arbacia lixula</i> Linnaeus, 1758	
Asteriidae	<i>Asterias rubens</i> Linnaeus, 1758	
	<i>Coscinasterias tenuispina</i> Lamarck, 1816	
	<i>Marthasterias glacialis</i> Linnaeus, 1758	
Astropectinidae	<i>Astropecten aranciacus</i> Linnaeus, 1758	
Brissidae	<i>Brissus unicolor</i> Leske, 1778	
Diadematidae	<i>Diadema africanum</i> Rodríguez, Hernández, Clemente & Coppard, 2013	
	<i>Diadema antillarum</i> Philippi, 1845	
Echinasteridae	<i>Echinaster sepositus</i> Retzius, 1783	
Holothuriidae	<i>Holothuria sanctori</i> Delle Chiaje, 1823	
Ophidiasteridae	<i>Ophidiaster ophidianus</i> Lamarck, 1816	B - II
Ophi dermatidae	<i>Ophioderma longicaudum</i> Bruzelius, 1805	
Ophiopsilidae	<i>Ophiocomina nigra</i> Abildgaard in O.F. Müller, 1789	
	<i>Ophiopsila annulosa</i> M. Sars, 1859	
Parechinidae	<i>Paracentrotus lividus</i> Lamarck, 1816	B - III
Toxopneustidae	<i>Sphaerechinus granularis</i> Lamarck, 1816	

Family	Taxa Filo Mollusca	Naturalness	Protection status
Aplysiidae	<i>Aplysia dactylomela</i> Rang, 1828		
	<i>Aplysia depilans</i> Gmelin, 1791		
Cardiidae	<i>Eucardium (Rudicardium) tuberculatum</i> Linnaeus, 1758		
Cassidae	<i>Semicassis granulata</i> Born, 1778		
Charoniidae	<i>Charonia lampas</i> Linnaeus, 1758		B - II
Chromodorididae	<i>Felimare picta</i> Schultz in Philippi, 1836		
	<i>Hypselodoris villafranca</i> Risso, 1818		
Columbellidae	<i>Columbella adansoni</i> Menke, 1853		
Cymatiidae	<i>Monoplex parthenopeus</i> Salis Marschlins, 1793		
Cypraeidae	<i>Erosaria spurca</i> Linnaeus, 1758		B - II
Haliotidae	<i>Haliotis tuberculata</i> Linnaeus, 1758		
Limidae	<i>Lima lima</i> Linnaeus, 1758		
	<i>Mantellum hians</i> Gmelin, 1791		
Littorinidae	<i>Littorina striata</i> Danilo & Sandri, 1856		
Muricidae	<i>Hexaplex trunculus</i> Linnaeus, 1758		
	<i>Stramonita haemastoma</i> Linnaeus, 1767		
Octopodidae	<i>Octopus vulgaris</i> Cuvier, 1797		
Patellidae	<i>Patella aspera</i> Lamarck, 1819		
	<i>Patella candei crenata</i> d'Orbigny, 1840		
	<i>Patella piperata</i> Gould, 1846		
Pectinidae	<i>Flexopecten flexuosus</i> Poli, 1795		
Pinnidae	<i>Pinna rudis</i> Linnaeus, 1758		

Semelidae	<i>Ervilia castanea</i> Montagu, 1803
Sepiidae	<i>Sepia officinalis</i> Linnaeus, 1758
Spondylidae	<i>Spondylus gaederopus</i> Linnaeus, 1758 <i>Spondylus senegalensis</i> Schreibers, 1793
Tonnidae	<i>Tonna galea</i> Linnaeus, 1758
Trochidae	<i>Gibbula candei</i> d'Orbigny, 1840 <i>Gibbula magus</i> Linnaeus, 1758 <i>Jujubinus exasperatus</i> Pennant, 1777 <i>Osilinus atratus</i> Wood, 1828 <i>Phorcus sauciatus</i> Koch, 1845
Turritellidae	<i>Turritella turbona</i> Monterosato, 1877
Umbraculidae	<i>Umbraculum mediterraneum</i> Lamarck, 1819
Veneridae	<i>Callista chione</i> Linnaeus, 1758 <i>Venus verrucosa</i> Linnaeus, 1758

B - II

Family	Taxa Filo Porifera
Aplysinidae	<i>Aplysina aerophoba</i> Nardo, 1833 <i>Verongia aerophoba</i> Nardo, 1833
Callyspongiidae	<i>Callyspongia (Callyspongia) simplex</i> Burton, 1956
Chondropsidae	<i>Batzella inops</i> Topsent, 1891 <i>Chondrosia reniformis</i> Nardo, 1847
Hymedesmiidae	<i>Phorbas fictitius</i> Bowerbank, 1866
Suberitidae	<i>Aptos aptos</i> Schmidt, 1864

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- <http://www.visitmadeira.pt/pt-pt/o-que-fazer/.../miradouro-da-fonte-de-areia-porto-santo>
- <http://www.visitportosanto.pt/pt-pt/o-porto-santo/natureza/patrimonio-geologico-do-porto-santo>
- www.visitmadeira.pt

7

Original Endorsement letters according to
paragraph 5

BIOSPHERE RESERVE OF THE ISLAND OF PORTO SANTO

5.2 SIGNED BY THE AUTHORITIES IN CHARGE OF THE MANAGEMENT OF THE BUFFER AREAS

5.3 SIGNED BY THE AUTHORITIES IN CHARGE OF THE MANAGEMENT OF THE CORE AND THE BUFFER AREAS

5.4. SIGNATURE OF LOCAL EXECUTIVE AUTHORITY

PORTO SANTO MUNICIPAL COUNCIL

Name: José Idalino de Vasconcelos

Title: President

Contact: Rua Dr. Nuno Silvestre Teixeira, 9400-162 Porto Santo – Madeira, Portugal

Telephone: (+351) 291 980 640

Fax: (+351) 291 982 860

Email: idalino vasconcelos@cm-portosanto.pt / geral@cm-portosanto.pt

Website: <https://cm-portosanto.pt/>

Social Media: Município do Porto Santo

Date: 09.07.2019

Signature:

José Idalino de Vasconcelos



BIOSPHERE RESERVE OF THE ISLAND OF PORTO SANTO

5.2 SIGNED BY THE AUTHORITIES IN CHARGE OF THE MANAGEMENT OF THE BUFFER AREAS

REGIONAL DIRECTORATE FOR PUBLIC ADMINISTRATION OF PORTO SANTO

Name: Jocelino José de Velosa

Title: Regional Diretor

Contact: Avenida Vieira de Castro, n.º 1, 9400-179 Porto Santo – Madeira, Portugal

Telephone: (+351) 291 980 500

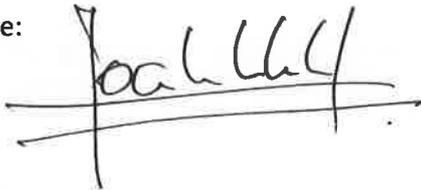
Fax: (+351) 291 983 562

Email: draps@madeira.gov.pt

Website: <https://www.madeira.gov.pt/draps>

Date: 09/07/2019

Signature:

A handwritten signature in black ink, appearing to read 'Jocelino José de Velosa', written over two horizontal lines.

BIOSPHERE RESERVE OF THE ISLAND OF PORTO SANTO

5.3 SIGNED BY THE AUTHORITIES IN CHARGE OF THE MANAGEMENT OF THE CORE AND THE BUFFER AREAS

REGIONAL SECRETARIAT OF AGRICULTURE AND FISHERIES

Name: José Humberto de Sousa Vasconcelos

Title: Regional Secretary

Contact: Avenida Arriaga, n.º 21 – Edifício Golden Gate, 5º andar, 9004-528 Funchal – Madeira, Portugal

Telephone: (+351) 291 201 841

Fax: (+351) 291 220 605

Email: gabinete.srap@madeira.gov.pt

Website: <https://www.madeira.gov.pt/srap>

Date:

9/7/19

Signature:

A handwritten signature in black ink, appearing to read "José Humberto de Sousa Vasconcelos". The signature is written in a cursive style and is positioned to the right of the "Signature:" label.

BIOSPHERE RESERVE OF THE ISLAND OF PORTO SANTO

5.1 SIGNED BY THE AUTHORITY IN CHARGE OF THE MANAGEMENT OF THE CORE AREAS

5.2 SIGNED BY THE AUTHORITIES IN CHARGE OF THE MANAGEMENT OF THE BUFFER AREAS

INSTITUTE OF FORESTS AND NATURE CONSERVATION, IP-RAM

Name: Manuel António Marques Madama de Sousa Filipe

Title: President

Contact: Quinta Vila Passos, Rua Alferes Veiga Pestana, n.º 15, 9054-505 Funchal – Madeira, Portugal

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Date: 09/07/2019

Signature:



BIOSPHERE RESERVE OF THE ISLAND OF PORTO SANTO

5.3 SIGNED BY THE AUTHORITIES IN CHARGE OF THE MANAGEMENT OF THE CORE AND THE BUFFER AREAS

REGIONAL SECRETARIAT OF THE ENVIRONMENT AND NATURAL RESOURCES

Name: Susana Luísa Rodrigues Nascimento Prada

Title: Regional Secretary

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Website: <https://www.madeira.gov.pt/sra>

Date: 9.7.2019

Signature: 



Further supporting documents

8.1

WORK MEETINGS, SESSIONS AND OTHER ACTIONS

REUNIÕES DE TRABALHO



1ª Reunião do GT-PSRB no Porto Santo – dezembro de 2017.



Reunião entre alguns elementos do GT-PSRB e os geólogos João Baptista e Raquel Ferreira para a caracterização de aspetos geológicos da Reserva.



Reunião do GT-PSRB no Porto Santo a 14 de março de 2018



Reunião do GT-PSRB no Porto Santo aquando do Seminário "Porto Santo - Reserva da Biosfera da UNESCO: Oportunidades e Desafios" com a presença dos diretores das Reservas da Biosfera de La Palma (arquipélago das Canarias) e do Corvo (arquipélago dos Açores), Dr.º Rui Moisés, impulsionador da Reserva da Biosfera de Santana (arquipélago da Madeira), Dr.ª Anabela Trindade, Dr.º António Domingos Abreu e Presidente da CMPS – novembro de 2018.

SESSÕES DE INFORMAÇÃO



Sessão geral de informação para a comunidade local que contou com a presença da Presidente do Comité Nacional do Programa MAB, Dr.ª. Anabela Trindade, do Presidente da CMPS e do Diretor da DRAPS, entre outras personalidades - 09 de janeiro 2018.

SESSÕES DE ESCLARECIMENTO



Sessão de esclarecimento – Documentação preliminar do dossier de candidatura da Ilha do Porto Santo a Reserva da Biosfera em auscultação pública -12 de abril de 2018.



Sessão de esclarecimento – Documentação do dossier de candidatura da Ilha do Porto Santo a Reserva da Biosfera em auscultação pública - 12 de abril de 2019.

Sessões participativas



Sessão participativa com os agentes de turismo local – 29 de janeiro de 2018.



Sessão participativa com agricultores, pescadores, caçadores e profissionais da construção civil- 29 de janeiro de 2018.



Sessão participativa com a educação e desporto - 30 de janeiro de 2018.



Sessão participativa com associações, artesãos e agentes culturais - 31 de janeiro de 2018.



Sessão participativa com a hotelaria e restauração - 30 de janeiro de 2018.



Sessão participativa com a comunidade em geral – 11 de fevereiro de 2018.

CANDIDATURA DO PORTO SANTO A RESERVA DA BIOSFERA

Sessões de Esclarecimento e Recolha de Contributos

29 janeiro 2ª feira 10h00 Guias turísticos, Táxis, Autocarros

FOLHA DE PRESENCAS

	Nome	Entidade
1	Ruben Gouveia	Angie Travel
2	David Joao F. Faria	TFX 919382264
3	Rita Helen Ferreira	LazerMar
4	Carolina Freitas	Dunes
5	Joana Sousa	Manuho Rent A Car
6		
7		contacto e-mail
8	Ruben - 966576841	Rubengouveia@hotmail.com
9	João	
10	Rita - 961960145	lazermar@sapo.pt
11	Gracina 966085927	joana.alves@dunestavel.com
12	Joana 962330328	moinha.servicos@hotmail.com
13	Jose Carlos Sousa 965090475	
14		
15		

Lista de presenças - Sessão participativa com os agentes de turismo local.

CANDIDATURA DO PORTO SANTO A RESERVA DA BIOSFERA

Sessões de Esclarecimento e Recolha de Contributos

29 janeiro 2ª feira 18h30 Agricultores, Pescadores, Caçadores, Empresários de Construção Civil

FOLHA DE PRESENCAS

	Nome	Contacto	Entidade
1	Vitor Manuel Ramos Dias	963038877	Caçadores
2	Manuel Oliveira Neves	966452205	Patronal
3	João João Dias	966567970	Patronal
4	João José Neves Dias	962583053	Comob Dias & Dias, Lda
5	Romão Alberto Mendes Dias	962488578	Associação Caçadores
6			
7			
8			

Lista de presenças - Sessão participativa com agricultores, pescadores, caçadores e profissionais da construção civil.

CANDIDATURA DO PORTO SANTO A RESERVA DA BIOSFERA

Sessões de Esclarecimento e Recolha de Contributos

30 janeiro
3ª feira
18h30
Desporto Educação

FOLHA DE PRESENÇAS

	Nome	Contacto	Entidade
1	Maria Amélia Gamâmelo Dias	963737534	Núcleo Infância (A)
2	Ivânia José Vasconcelos Lima	962955534	Núcleo Infância (B)
3	Francisco Aguiar Gomes Alvim	964203577	Linha Porto Santo
4	Filipa Leão	966437646	CMPS
5	Duarte Rosário	962413258	Esc. Básica D. F. B.
6	Paulo José da Silva Pereira	963306607	EB1 e/PE P. Santo
7	Márcia Patrícia Cordeiro Mendes	962550054	EB1 e/PE P. Santo
8	Maria Jureta R. O. Penacoba	968954040	EB1/C/PE P. Santo
9	HELENA CRISTINA DA SILVA FERREIRA ORNELAS	968295623	EB1/PE PORTO SANTO
10	M. Jorge M. G. Soares Ricardo	917696699	Centro Magalhães P. Santo
11	Fátima Fátima Almeida	966484064	Jaty p. D. P. Santo
12	Maria José Cunha Gonçalves Batista	919180816	EB1/PE do P. Santo
13	Sara Ferreira Almeida	963886310	EB1/PE do Porto Santo
14	Carla Irene da Horta Ferreira	919911974	EB1/PE do Porto Santo
15	Aldina Jacira Ferreira Gomes	938253309	EB1/PE do Porto Santo
16	Dina de Jesus Lourenço	9652549238	EB1/PE P. Santo
17	Maria Lúcia Feres	967273418	EB1/PE Porto Santo
18	Ana Lúcia Pereira Carvalho Gomes	965878441	EB1/PE Porto Santo
19	Paulo António Fernandes Gonçalves	938065527	EB15 P. D. P. Santo
20	Apresente Maria dos Santos Monteiro	291984572	EB5 " " "
21	Luís Miguel R. L. G. L. G.	961473995	" "

Lista de presenças - Sessão participativa com a educação e desporto.

CANDIDATURA DO PORTO SANTO A RESERVA DA BIOSFERA

Sessões de Esclarecimento e Recolha de Contributos

30 janeiro	3ª feira	15h30	Hotelaria Restauração Cafés
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FOLHA DE PRESENCAS

	Nome	Contacto	Entidade
1	NUNO SILVESTRE SILVA	962151256	TSou's Journey
2	Maria Susana Silva Telo	964464979	Academia Flor
3	Silvia Wandaes O. Dama	962325560	Mini Extra
4	Lusélia Melim	967628608	GRUP SOUSA
5			
6			
7			

Lista de presenças - Sessão participativa com a hotelaria e restauração

CANDIDATURA DO PORTO SANTO A RESERVA DA BIOSFERA

Sessões de Esclarecimento e Recolha de Contributos

31 janeiro	4ª feira	18h30	Artesãos/António Rodrigues/Fátima Menezes/Márcia Melim/ACES
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FOLHA DE PRESENCAS

	Nome	Contacto	Entidade
1	Bucélia Maria Gomes de Sousa	967029380	Biblioteca
2	Leonor Espírito	963582314	CMPS
3	Marcia Melim	965828645	CSC Contacta
4	gracia de euepi	991985145	artesanã
5	António José Rodrigues	967513722	Provetex-anta
6			
7	2 fevereiro (6ª feira) 20h00		
8	Margaret da Deus Escobar	963387164	Parceira N.º 100 Greg
9	Christa Albi Rita Ralga	964400493	CONF. SS. SAHND E S
10	Fra Feliciano de Luclim	926236411	Conf. N.º 100 Greg
11	Maria Douça Neves	966008121	Conf. S.S.S. Pied.
12	Ana Damasc	962917273	Conf. N.º 100 Greg
13	António José Rodrigues	966166130	Conf. N.º 100 Greg
14	Marcia Melim	965828649	SSSociedade
15			
16			
17			
18			
19			
20			

Lista de presenças - Sessão participativa com associações, artesãos e agentes culturais

CANDIDATURA DO PORTO SANTO A RESERVA DA BIOSFERA

Sessões de Esclarecimento e Recolha de Contributos

3 fevereiro sábado 16h00 População em Geral

FOLHA DE PRESENÇAS

	Nome	Contacto	Entidade
1	Alcides Lourença	965406304	—
2	João Carlos Silva	963139590	Escola BS Porto Santo
3	João Sá	968062510	—
4	Maria José de Sousa Vital	968306963	Escola BS P. Santo
5	Bernardo Caldeira	963834977	—
6	Pedro Freitas	966922079	CMPS
7	Mário Mira	964265524	—
8	Katrin Spitzer	+4915774312401	—
9	Magda vd Bruggen		
10	Henk vd Bruggen	0031616361800	
11	Filipa João	966437646	CMPS
12			
13			
14	⊕ HMVDBRUGGEN@hotmail.com		
15	ERANDAS		
16			
17			
18			
19			
20			

Lista de presenças - Sessão participativa com a comunidade em geral.



Conferência “Reservas da Biosfera da UNESCO” proferida pela Dr.ª Anabela Trindade – 28 de novembro de 2018.



Mesa redonda “O programa MaB e as reservas da Biosfera da UNESCO” – 28 de novembro de 2018.



Conferência “O Porto Santo enquanto destino de excelência” proferida pela Dr.ª Susana Fontinha – 28 de novembro de 2018.



Mesa redonda "Reserva da Biosfera, Que Atrativos do Destino Porto Santo? – 28 de novembro de 2018.

(Re)descobrir o Porto Santo – 30 de novembro de 2018



Casas de salão.



Museu Colombo.



Interpretação muros de croché.



Projeto de reflorestação



Igreja Matriz.



Degustação da escarpada.

Projeto “Este é o Meu, Teu, Nosso Porto Santo”

Workshops, oficinas e palestras de divulgação das tradições e costumes da Reserva.

A nossa história
A nossa arte
O nosso legado

12
maio

10.00h

arte dos cestos

JOÃO MELIM
artesão local, produz
cestos em cana
vieira.

Vem conhecer esta arte
e traz jornal ou cartão e
uma tesoura para
construïres o teu cesto.



Venha connosco
(re)descobrir as
nossas tradições!

NÚCLEO
BRUM
DO CANTO



PORTO SANTO

candidato a Reserva da Biosfera

Cartaz - Oficina Arte dos cestos canaveira – 12 de maio de 2018.



Oficina - Arte dos cestos canavieira (Artesãos constroem cestos).

Oficina

CHAPÉUS de palmito

Formadora: Otília Melim
Centro de Juventude
Porto Santo

abril a
junho
2018

4ª feira
16h-18h

... uma
ARTE
que vale
a pena
APRENDER!

Universidade Sénior do Porto Santo
PORTO SANTO candidato a Reserva da Biosfera

Para mais informações
contactar 962 816 619

Cartaz - Oficina chapéus de palmito – abril a junho de 2018



Oficina trança palmito – chapéus de palmito – Universidade sénior.

Trança de palmito na Escola Básica e Secundária Professor Dr. Francisco de Freitas Branco, Porto Santo.



Trança de palmito na escola.

A nossa história
A nossa arte
O nosso legado

21
abril

10h

NÚCLEO
BRUM
doCANTO

CONVERSAS
com
barro

Venha connosco
(re)descobrir as
nossas tradições!



PORTO SANTO

candidato a Reserva da Biosfera



Oficina conversas com Barro na escola - abril de 2018.

Sabores da minha Terra na EB1/PE do Porto Santo.



Sabores da minha Terra.

Músicas de outrora.



Música de outrora na escola.

Informação sobre a candidatura do Porto Santo a Reserva da Biosfera nos principais estabelecimentos do Porto Santo - janeiro de 2019

CANDIDATURA a **RESERVA**
da BIOSFERA da UNESCO
PORTO SANTO
MADEIRA  PORTUGAL

pela valorização
das **nossas** gentes...
da **nossa** praia...
da **diversidade** de seres vivos...
da **diversidade** de rochas...
das **nossas** paisagens...
da **nossa** história...
da **nossa** cultura e tradições...
da **nossa** gastronomia...
vamos dar o nosso
apoio e contributo!

Frente do cartaz.

O que é o Programa MaB e as Reservas da Biosfera?

O Programa Man & Biosphere (MaB) é um programa científico da UNESCO, que tem como objetivos a conservação da biodiversidade, a promoção do desenvolvimento económico sustentável e a melhoria da qualidade de vida das populações. Esses objetivos consubstanciam-se no terreno através da designação de Reservas da Biosfera (RB), que funcionam como laboratórios vivos, onde se ensaiam iniciativas de promoção e utilização sustentável dos recursos locais em cooperação com a população e os atores de desenvolvimento local. Para o período 2015-2025, o Programa MaB assume um mundo onde as pessoas são conscientes do futuro comum e da interação com o nosso planeta e atuam de forma colectiva e responsável para construir sociedades prósperas, em harmonia com a biosfera.

O que é necessário para a candidatura de Porto Santo a Reserva da Biosfera?

Em dezembro de 2017 foi criado um grupo de trabalho, sob a coordenação da Dra. Susana Fontinha, constituído por elementos da Câmara Municipal do Porto Santo, Direção Regional para a Administração Pública do Porto Santo, Associação Grupo de Folclore do Porto Santo, Agência Regional da Energia e Ambiente da Região Autónoma da Madeira, Instituto das Florestas e Conservação da Natureza, IP-RAM e Secretaria Regional do Ambiente e Recursos Naturais.

Desde então, tem vindo a ser recolhida e trabalhada informação, quer ao nível da biodiversidade terrestre e marinha de paisagens, espécies e genética, quer ao nível histórico e cultural, para o preenchimento de um formulário, para além da organização de sessões de sensibilização e auscultação da comunidade local, tornando o processo o mais participativo possível. Para além do formulário de candidatura também terá de ser entregue um plano de acção, que define as linhas estratégicas de atuação da Reserva da Biosfera do Porto Santo.

Que benefícios podem advir do reconhecimento do Porto Santo como Reserva da Biosfera da UNESCO?

Sendo assumidamente uma organização de relevo mundial, o reconhecimento da UNESCO irá dar visibilidade internacional à nossa ilha e, com o apoio do Programa MaB, irão desenvolver-se esforços e parcerias para melhorar a qualidade de vida da população e valorizar a nossa história, tradições e cultura e, simultaneamente, assegurar a sustentabilidade ambiental.

Que restrições impõe uma Reserva da Biosfera no território?

Uma Reserva da Biosfera da UNESCO não tem a competência de aumentar ou diminuir restrições legais para além das já existentes no território, tendo como principal foco o desenvolvimento sustentável, isto é, o desenvolvimento socioeconómico local, sem comprometer a qualidade ambiental e respectivos recursos endógenos.

Que implicações para a população e suas atividades?

A candidatura a Reserva da Biosfera da UNESCO é uma acção voluntária, mas que tem subjacente a vontade de revelar ao mundo o carácter único de um determinado território, que se compromete com o equilíbrio entre o desenvolvimento local e a conservação do meio ambiente.

O reconhecimento de Porto Santo como Reserva da Biosfera da UNESCO atrairá um turismo que confia na "marca" UNESCO, garante de qualidade e confiança, e servirá de pretexto para a união de esforços de forma a atingirem-se os objectivos preconizados no plano de acção.

De que depende o sucesso da Reserva da Biosfera?

O sucesso da Reserva da Biosfera depende do trabalho concertado dos diferentes atores locais: população em geral, autarquia, associações, comunidade escolar, empresários, agricultores, entre outros. Todos nós fazemos parte da Reserva da Biosfera e todos podemos e devemos contribuir profissional e pessoalmente para o desenvolvimento socioeconómico e cultural local e desenvolver acções de protecção do meio que nos rodeia. Para além dos atores locais, a Reserva da Biosfera poderá contar com o apoio do Governo Regional e Central, Universidades, entidades ligadas à conservação da natureza, empresas, entre outros.

No entanto, o mais importante, é que cada um de nós assuma a sua quota parte de responsabilidade de contribuir para um futuro melhor para as próximas gerações.

**Porto Santo - candidato a Reserva da Biosfera da UNESCO
uma realidade onde todos e cada um podem fazer a diferença!**

Verso do cartaz.

O boletim informativo mensal da DRAPS promove a candidatura da Ilha do Porto Santo a Reserva da Biosfera.

11. DESENVOLVIMENTO SUSTENTÁVEL Apresentação de candidaturas do Porto Santo a Reserva da Biosfera.	12. CULTURA/TRANSCRIÇÃO História e práticas agrícolas e tradições do "Terroir dos produtos em dia de São Amaro".	13. TURISMO/SPORTS História do desenvolvimento do turismo em São Amaro e Porto Santo.	14. OBRAS PÚBLICAS Um novo projeto para a Ilha do Porto Santo.	15. ESTADÍSTICA Número de 2017, evolução em termos de turismo.
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DRAPS

Boletim informativo / Newsletter

www.madeira.gov.pt/draps | Direção: Jacinta Veloso | Janeiro 2018 | Edição: 24



CANDIDATURA DO PORTO SANTO A RESERVA DA BIOSFERA EM CONSTRUÇÃO

A Reserva da Biosfera é um estatuto atribuído pelo Programa Homem e Biosfera (Programa HB) da UNESCO (Organização das Nações Unidas para a Educação, Ciência e Cultura) e consiste num determinado território, reconhecido-se como laboratório vivo, onde se desenvolvem como fatores principais a conservação de paisagens, ecossistemas e espécies, o desenvolvimento sustentável e o nível social, económico, cultural e ecológico. Estas Reservas são áreas planas formadas por investigação, monitorização, educação e sensibilização, visando sempre a partilha de informação e de experiências adquiridas. Embora a reserva "deve-se" ocupar por e manter para um espaço a preservar, não a máxima biodiversidade da biosfera, neste caso, a sua uti-

lização refere-se a um território que é especial pelas suas características naturais, pela riqueza e diversidade das suas gentes. No período da 9.ª da reunião teve lugar a apresentação pública da candidatura, que contou com a presença da Presidência do Conselho Nacional do Programa HB - Ilha, Assembleia da Madeira e da Coordenação Regional da candidatura Dra. Susana Freitas.

A nível local, a candidatura está desenvolvida por uma equipa de trabalho composta por elementos da Câmara Municipal do Porto Santo, Governo Regional da Madeira (DR, DRCS, DRAPS), ARS/RI e Associação Grupo de Turismo do Porto Santo, que culminou em conjunto em prol da revitalização do património natural e cultural do Porto Santo e do seu

desenvolvimento sustentável. O processo de construção e implementação desta candidatura teve por base um princípio de envolvimento e participação da comunidade, com a realização de sessões de informação para a comunidade e sessões participativas para a implementação de acordos.

Em termos de calendarização do decorrer que entre março e abril haverá um período de análise do documento elaborado, permitindo à população o seu conhecimento. É fundamental que seja transmitida e sustentada a a maior parte da candidatura do Porto Santo a Reserva da Biosfera da UNESCO e o sucesso de todo o processo de respeito plano de ação.

Candidatura do Porto Santo a Reserva da Biosfera em construção” – Boletim Informativo DRAPS de janeiro de 2018.

11. DESENVOLVIMENTO SUSTENTÁVEL Apresentação pública do plano de gestão preparatório da candidatura do Porto Santo a Reserva da Biosfera.	12. PORTO SANTO 900 ANOS - 150 anos de história no território.	13. IMPLANTAÇÃO/INFORMAÇÃO Plano de Gestão preparatório da candidatura do Porto Santo a Reserva da Biosfera.	14. AGRICULTURA DRAPS apoia o Conselho de Regadio do Porto Santo, promovendo a cultura do regadio.	15. OBRAS PÚBLICAS Novo espaço para a cidade.
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DRAPS

Boletim informativo / Newsletter

www.madeira.gov.pt/draps | Direção: Jacinta Veloso | Abril 2018 | Edição: 27



FASE FINAL DA CANDIDATURA A RESERVA DA BIOSFERA

A agenda do reconhecimento do Porto Santo como laboratório vivo pela UNESCO levou à formação de um grupo de trabalho para a elaboração do plano de gestão preparatório da candidatura do Porto Santo a Reserva da Biosfera, através da Assembleia da Câmara Municipal do Porto Santo, a Associação Grupo de Turismo do Porto Santo, a Agência Regional do Turismo e a Associação da Região Autónoma da Madeira (ARMA), o Instituto das Florestas e da Conservação da Madeira (IFCM), a Direção Regional para a Administração Pública do Porto Santo (DRAPS) e o Governo Regional da Madeira, através da Secretaria Regional do Ambiente e dos Recursos Naturais, sob a coordenação da Dra. Susana Freitas.

O grupo de trabalho reuniu várias vezes no Porto Santo para discutir os diferentes pontos do processo de candidatura. Diferentes reuniões de trabalho de carácter técnico e

envolvimento em geral foram realizadas, tendo-se realizado propostas de trabalho e melhorias no dia a dia de acordo com as necessidades, de forma a cumprir os requisitos da candidatura.

Preparado o formulário preparatório da candidatura, realizou-se no dia 12 de abril, na sala de reuniões do Centro Cultural e de Congressos, a apresentação pública do mesmo. Entre os dias 12 de abril e 2 de maio, o documento de candidatura à candidatura do Porto Santo a Reserva da Biosfera esteve disponível ao público na internet do Município do Porto Santo, da DRAPS e do IFCM. Como ainda disponível em formato de papel na Câmara Municipal do Porto Santo e Porto de Angra do Heroísmo em Colégio do Porto Santo, via DRAPS, no Pórtico.

Assim período possibilitou uma troca de experiências com a população, que teve a oportunidade de se manifestar sobre o conteúdo da

documentação em causa, tendo havido algumas reuniões que foram úteis em termos de elaboração do documento definitivo para a candidatura do Porto Santo a Reserva da Biosfera.

De referir que este é um processo que requer o envolvimento da população, não apenas na fase da candidatura, mas principalmente após o reconhecimento da UNESCO da Ilha do Porto Santo a Reserva da Biosfera. A elaboração de todo o plano de gestão preparatório da candidatura do Porto Santo a Reserva da Biosfera da UNESCO é um processo que requer o envolvimento da população, não apenas na fase da candidatura, mas principalmente após o reconhecimento da UNESCO da Ilha do Porto Santo a Reserva da Biosfera.

De referir que este é um processo que requer o envolvimento da população, não apenas na fase da candidatura, mas principalmente após o reconhecimento da UNESCO da Ilha do Porto Santo a Reserva da Biosfera.

Fase final da candidatura a Reserva da Biosfera” - Boletim Informativo DRAPS de abril de 2018



CANDIDATURA à RESERVA
 da BIOSFERA da UNESCO
PORTO SANTO
 MADEIRA PORTUGAL

pela valorização
 das nossas gentes...
 da nossa praia...
 da diversidade de seres vivos...
 da diversidade de rochas...
 das nossas paisagens...
 da nossa história...
 da nossa cultura e tradições...
 da nossa gastronomia...
**vamos dar o nosso
 apoio e contributo!**

“Candidatura do Porto Santo a Reserva da Biosfera da UNESCO” – Edição Especial do Boletim Informativo DRAPS de dezembro de 2018 (Capa e contracapa).

Siga-nos em: <http://www.facebook.com/draps/>

O que é o Programa MAB e as Reservas da Biosfera?

O Programa MAB (Man and Biosphere) é um programa científico da UNESCO, criado em 1971, tendo como objetivos a conservação da biodiversidade, a promoção do desenvolvimento sustentável e a melhoria da qualidade de vida das populações. Este programa, desenvolvido em conjunto com a Organização das Nações Unidas (ONU), que funciona como coordenadora geral, tem como principais objetivos a promoção e utilização sustentável dos recursos locais em consonância entre a conservação e os aspetos do desenvolvimento local.

O que é necessário para a candidatura de Porto Santo a Reserva da Biosfera?

Em dezembro de 2017 foi criado um grupo de trabalho, sob a coordenação da Direção Regional do Porto Santo, DRAPS, Associação Grupo de Folclore do Porto Santo, ARFAM, Instituto das Escolas e Conservação do Litoral, RZAMA e Direção Regional do Ambiente e Recursos Naturais.

Desde então, tem vindo a ser recolhida informação sobre as áreas candidatas, que se irão analisar e avaliar para o preenchimento de um formulário, para além da organização de sessões de sensibilização e divulgação da comunidade local, humana e processos a mais participativa possível.

A versão preliminar do formulário de candidatura foi apresentada em abril de 2018, e disponibilizada para consulta pública para análise da comunidade e recolha de sugestões. Para além do formulário de candidatura também deverá ser entregue um plano de ação, que define as linhas orientadoras de atuação da reserva do Porto Santo.

Quais as funções de uma Reserva da Biosfera?

As Reservas da Biosfera têm três funções que se complementam mutuamente: contribuir para a CONSERVAÇÃO dos ecossistemas, espécies e biodiversidade; impulsionar o DESENVOLVIMENTO ECONÓMICO de forma sustentável de acordo com os princípios do desenvolvimento sustentável; e promover a investigação, educação, formação e sensibilização permanente e interdisciplinar sobre a diversidade e a conservação da natureza local, regional e global.

Porque é que as Reservas da Biosfera estão criadas nestas zonas?

As Reservas da Biosfera são criadas por três tipos de zonas, de forma a cumprir as funções das Reservas da Biosfera: zonas núcleo – destinadas à conservação da natureza; zonas tampão – destinadas a promover a educação, sensibilização e investigação; e zonas de cooperação, visando a integração na Rede Mundial de Reservas da Biosfera. Estas zonas são definidas em função das características locais e da conservação da natureza, sendo a designação da natureza dada de acordo com o sistema de Áreas Protegidas da Rede Mundial de Reservas da Biosfera.

população, com promoção de práticas sustentáveis de gestão de recursos locais.

Que benefícios podem advir do reconhecimento do Porto Santo como Reserva da Biosfera da UNESCO?

A Organização das Nações Unidas para a Educação, a Ciência e a Cultura (UNESCO) foi criada em 14 de novembro de 1945, com o objetivo de promover e assegurar a cooperação intelectual entre as nações, desenvolver o desenvolvimento mundial e a educação de alto nível e promover a paz e a harmonia entre os povos. A UNESCO é a responsável internacional e a autoridade de referência mundial na busca de soluções para os problemas que afetam a nossa sociedade. Sendo assim, a UNESCO é uma organização de referência mundial e internacional para a UNESCO em matéria de sustentabilidade e desenvolvimento sustentável e a UNESCO é a responsável internacional e a autoridade de referência mundial na busca de soluções para os problemas que afetam a nossa sociedade. Sendo assim, a UNESCO é uma organização de referência mundial e internacional para a UNESCO em matéria de sustentabilidade e desenvolvimento sustentável.

Que restrições impõe uma Reserva da Biosfera?

Uma Reserva da Biosfera da UNESCO não tem a competência de alterar as áreas protegidas locais para além das já existentes no território, sendo como principal foco o desenvolvimento sustentável, a educação e a sensibilização da comunidade local, bem como a qualidade ambiental e respectivos recursos endógenos.

Que implicações para a população e suas atividades?

A candidatura a Reserva da Biosfera da UNESCO é uma ação voluntária, mas que tem impacto a nível da gestão do território e do desenvolvimento local e regional. A candidatura a Reserva da Biosfera da UNESCO é uma ação voluntária, mas que tem impacto a nível da gestão do território e do desenvolvimento local e regional.

O reconhecimento do Porto Santo como Reserva da Biosfera da UNESCO abre um futuro que confere ao “marco” UNESCO, garantia de qualidade e confiança, e contribui para o desenvolvimento local e regional de forma sustentável e integrada.

De que depende o sucesso da Reserva da Biosfera?

O sucesso da Reserva da Biosfera depende do trabalho conjunto das diferentes áreas locais: população em geral, autoridades locais, associações, comunidade escolar, empresas, agricultores, entre outros. Todas as Reservas da Biosfera da UNESCO são desenvolvidas e geridas conjuntamente pelo desenvolvimento sustentável e a conservação da natureza e a conservação da natureza.

Para além das áreas locais, a Reserva do Porto Santo poderá contar com o apoio da Direção Regional do Ambiente e Recursos Naturais, através da conservação da natureza e a conservação da natureza.

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PORTO SANTO
 RESERVA DA BIOSFERA DA UNESCO

oportunidades
 e desafios
 28 a 30 novembro



Direção Regional do Ambiente, Recursos Naturais e Energia

De forma a contribuir para a divulgação e operacionalização do candidatura a Reserva da Biosfera da UNESCO, o grupo de trabalho para a candidatura do Porto Santo a Reserva da Biosfera da UNESCO organizou um encontro de 28 a 30 de novembro, reunindo personalidades de renome regional, nacional e internacional de forma a proporcionar a reflexão e discussão sobre as questões e aspetos relevantes que a isto estão.

O encontro teve início com a apresentação de um vídeo da Universidade Nova do Porto Santo, no qual se abordam memórias sobre o “deix” do Porto Santo, vivências e tradições, tendo mais tarde apresentado as presentes com algumas fotografias históricas.

A Presidente da Câmara Municipal, Ana Paula Mendes, participou no vídeo das memórias do Porto Santo, tendo sido acompanhada pelas vereadoras da Reserva do Porto Santo, Ana Paula Mendes, de São Várzea (Candonga), Fernanda Ferreira, de Cova da Moura (Candonga) e Rui Mendes, presidente do Conselho da Reserva (Madeira), bem como António Domingos Almeida, que desempenha atualmente as funções de Representante de Reservas da Biosfera da UNESCO, da Direção Regional do Ambiente e Recursos Naturais.

No período da tarde, a coordenadora da candidatura do Porto Santo a Reserva da Biosfera, Susana Fidalgo Abreu, a leu o “deix” do Porto Santo enquanto estava no auditório, e abordou a situação do Porto Santo, tendo sido acompanhado por uma música cantada pelo grupo de trabalho do Porto Santo. A reunião teve início com a apresentação de um vídeo das memórias do Porto Santo, no qual se abordam memórias sobre o “deix” do Porto Santo, vivências e tradições, tendo mais tarde apresentado as presentes com algumas fotografias históricas.

O dia 29 de novembro, mais dedicado para os professores, teve também a participação de membros da comunidade – proponentes do desenvolvimento do desenvolvimento do desenvolvimento – e outros. Aberto durante uma hora de tempo, o encontro foi organizado por Susana Fidalgo (Direção Regional do Ambiente e Recursos Naturais) e José Manuel Silva (Direção Regional do Ambiente e Recursos Naturais).

No dia 30 de novembro, mais dedicado para os professores, teve também a participação de membros da comunidade – proponentes do desenvolvimento do desenvolvimento do desenvolvimento – e outros. Aberto durante uma hora de tempo, o encontro foi organizado por Susana Fidalgo (Direção Regional do Ambiente e Recursos Naturais) e José Manuel Silva (Direção Regional do Ambiente e Recursos Naturais).

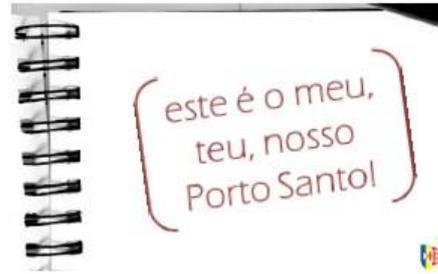
Um ano após a sua criação, a Reserva do Porto Santo não apenas promoveu a conservação da natureza e a conservação da natureza, mas também promoveu a educação, sensibilização e a sensibilização da comunidade local e regional.

“Candidatura do Porto Santo a Reserva da Biosfera da UNESCO” – Edição Especial do Boletim Informativo DRAPS de dezembro de 2018 (miolo).

T6. EDUCAÇÃO/CULTURA

No âmbito das comemorações dos 600 anos da descoberta oficial do Porto Santo, da proclamação de 2018 como o Ano Europeu do Património Cultural e a candidatura de Porto Santo a Reserva da Biosfera da UNESCO, a DRAPS e a Universidade Sénior do Porto Santo desenharam o projecto "Este é o meu, teu, nosso Porto Santo" a desenvolver nas escolas locais, como estratégia de valorização e revitalização das nossas tradições.

REVITALIZAÇÃO DAS TRADIÇÕES



"Revitalização das tradições" - Boletim Informativo DRAPS de janeiro de 2019.

"Poucas coisas são impossíveis à diligência e à habilidade...
As grandes tarefas não são executadas pela força, mas sim pela perseverança."
(Samuel Jackson, ator e produtor cinematográfico)



T6. CANDIDATURA A RESERVA DA BIOSFERA



PERÍODO DE AUSCULTAÇÃO ATÉ 22 ABRIL

Teve início a 20 de março o período de **auscultação** dos documentos da candidatura de Porto Santo a Reserva da Biosfera da UNESCO.

Desde a apresentação da primeira versão no mês de abril de 2018, que o formulário tem vindo a ser **melhorado** e foram elaboradas as propostas da carta de zonamento e o respectivo plano de acção para o período 2020-2025. Neste último documento estão enunciados os **principais eixos estratégicos** e definidas as actividades a desenvolver por diferentes entidades.

A **documentação** está disponível até 22 de abril no sítio da internet do Município do Porto Santo <https://cm-portosanto.pt/>, da DRAPS <https://www.madeira.gov.pt/drap>s e da SRA <https://www.madeira.gov.pt/sra>; e, em formato papel, na Câmara Municipal do Porto Santo e no Posto de Atendimento ao Cidadão (DRAPS), bem como na sede da SRA, no Funchal.

De relembrar que a **Reserva da Biosfera** é um estatuto atribuído pelo Programa Homem e Biosfera da UNESCO a territórios que reúnem características especiais, sendo definidas como laboratórios vivos onde se desenvolvem a conservação de paisagens, ecossistemas e espécies e o desenvolvimento sustentável a nível social, económico, cultural e ecológico.

Participe... **pela valorização do que é nosso!**

"Período de auscultação até 22 de abril" - Boletim Informativo DRAPS de março de 2019.

Homenagem da Câmara Municipal do Porto Santo a personalidades e a entidades no âmbito da Candidatura da Iha do Porto Santo a Reserva da Biosfera.

2



MUNICÍPIO DO PORTO SANTO

CÂMARA MUNICIPAL

PROPOSTA

HOMENAGENS - DIA DO CONCELHO



Considerando, por um lado que,

A ilha do Porto Santo apresenta características muito peculiares com destaque para a imensidão da sua praia, a sua ruralidade e os seus ilhéus. Possui ecossistemas bem preservados e detentores de espécies de excepcional interesse para a conservação da natureza e da biodiversidade, sendo reconhecido pela diversidade e beleza das suas paisagens naturais e humanizadas.

Ao longo dos últimos 600 anos de história, o povoamento da ilha foi feito à custa de muito sacrifício e resiliência, o que acabou por contribuir para a criação de uma identidade cultural própria que se reflete nas tradições e valores das suas gentes. Tal unicidade merece ser valorizada e divulgada, contribuindo para um desenvolvimento ambiental, social e económico, no respeito pelo passado e pelas gerações futuras.

É precisamente com o propósito de compatibilizar a preservação dos valores naturais, agrícolas e histórico-culturais com as atividades económicas, potenciando a melhoria do bem-estar da população e o desenvolvimento sustentável do território que surge a candidatura do PORTO SANTO A RESERVA DA BIOSFERA DA UNESCO.

Tendo por base o princípio MaB da UNESCO – a relação Homem-Biosfera – pretende-se com a Reserva da Biosfera a mobilização da comunidade local que se deverá assumir como protagonista num projeto de desenvolvimento local sustentável.

A atribuição do galardão Reserva da Biosfera está dependente da adoção de uma estratégia para o turismo baseada na sustentabilidade do destino, assumindo as unidades hoteleiras um papel de destaque, pela implementação de medidas que visam um turismo responsável para com os valores ambientais, culturais e sociais locais.

Considerando por outro que,

A dupla insularidade da ilha do Porto Santo é uma condição que obriga a uma necessidade permanente de prestação de um serviço de evacuação de doentes em



MUNICÍPIO DO PORTO SANTO
CÂMARA MUNICIPAL



situação de emergência, o que garante o acesso a cuidados de saúde de vital importância para a manutenção da qualidade de vida dos porto-santenses.

Assim, proponho que a Câmara delibere,

1. No âmbito desta candidatura da Biosfera, e pelos serviços prestados aos Porto-Santenses, homenagear diversas personalidades e instituições, atendendo ao trabalho de destaque que desenvolvem ou desenvolveram, contribuindo, em diferentes áreas, para a perpetuação dos valores que marcam a identidade porto-santense e pelo apoio dado ao desenvolvimento da ilha, destacando-se:

No âmbito da Candidatura do Porto Santo a Reserva da Biosfera:

- Exmo. Senhor **João Gregório Melim**, pelo valiosíssimo contributo na recuperação biofísica do espaço que hoje representa o último reduto da vegetação nativa da ilha do Porto Santo, o Pico Branco, integrado na Rede Natura 2000, rede ecológica europeia criada com a finalidade de assegurar a conservação a longo prazo das espécies e dos habitats mais ameaçados da Europa.
- Exmo. Senhor **Lomelino Velosa**, apaixonado por tudo o que é identidade porto-santense, é um nato impulsionador e divulgador da cultura e tradições locais. Empreendedor, criou o projeto “Casa da Serra”, um espaço que nos transporta para a dura mas real vivência de outrora.
- Exmo. Senhor **João Melim (a título póstumo)** – Personalidade da cultura e artesanato tradicional local, dedicou mais de 70 anos a esta arte que se tem vindo a perder. Embora a procura tenha diminuído ao longo das últimas décadas, nunca abandonou o trabalho da canavieira, tendo inclusive participado em diversas atividades promocionais em parceria com as Entidades da ilha.



MUNICÍPIO DO PORTO SANTO
CÂMARA MUNICIPAL



- Exmo. Senhor **António José Rodrigues**, autor de diversas obras que apresentam e dignificam o Porto Santo, contando contos, poemas, histórias, tradições e costumes. Toda uma panóplia de informações reunida para que se conheça e entenda um Porto Santo de outros tempos, o Porto Santo das raízes.
- Exmas. Senhoras **Maria Otilia Melim** e **Maria Amélia Melim**, duas artesãs que aprenderam desde muito cedo a arte do palmito. Bolsas, porta-moedas, chapéus de aba larga, são alguns dos artigos feitos pelas mãos destas duas irmãs que são as únicas que ainda mantêm viva esta arte única.
- A **Associação Cultural e Recreativa do Espírito Santo**, por todo o trabalho desenvolvido desde a sua fundação, quer na área cultural, recreativa e desportiva, que em muito tem beneficiado não apenas os seus associados como também toda a sociedade porto-santense.
- A **Associação do Grupo de Folclore do Porto Santo**, por executar um trabalho sem paralelo na divulgação das tradições e costumes, fomentando a troca de experiências e conhecimentos a cada intercâmbio fora de portas. Criado a 1 de Novembro de 1963, já viajou por todo o Portugal, levando consigo a identidade e o orgulho de um povo.
- Exmo. Senhor **Comendador Fernando Pinho Teixeira**, Presidente do grupo FERPINTA, pelo investimento num projeto turístico abandonado até então. Atualmente é um dos Hotéis que mais contribui para o turismo sustentável da ilha e mais e melhor divulga o nome e imagem da mesma.

Pelos Serviços prestados à Ilha do Porto Santo:



MUNICÍPIO DO PORTO SANTO
CÂMARA MUNICIPAL



- A **Força Aérea Portuguesa**, por todo o compromisso e trabalho 24h por dia, 7 dias por semana, 365 dias por ano em prol da segurança de toda uma comunidade que necessita de resposta rápida e objetiva em caso de emergência.
2. Submeter à reunião ordinária de 11 de junho, as propostas de texto para as referidas homenagens.

Câmara Municipal do Porto Santo, em 16 de maio de 2019.

O PRESIDENTE DA CÂMARA

José Idalino de Vasconcelos
José Idalino de Vasconcelos

Submetida à votação, esta proposta foi aprovada, por unanimidade, em reunião da Câmara Municipal realizada em 16/05/2019, com os votos favoráveis do Presidente José Idalino Vasconcelos e dos vereadores Pedro Freitas, Filipe Penezes de Oliveira, Sofia Santos e José António Castro.

A presente proposta é aprovada em minuta, nos termos do disposto no artigo 57.º, n.º 3 da Lei n.º 75/2013, de 12 de setembro, a fim de produzir efeitos imediatos.

A CÂMARA MUNICIPAL,

Pedro V. Freitas
José Idalino Vasconcelos
Filipe Penezes de Oliveira
Sofia Santos
José António Castro

Programa de sensibilização e formação aos munícipes.

Dia da Ecologia

DIA DA ECOLOGIA



À descoberta dos MUSGOS
da Floresta do
PORTO SANTO

Saída de campo acompanhada por
SUSANA FONTINHA



13 setembro
10:00 horas



Percurso Pico Branco - Terra Chã
(saída de autocarro da descida do Cais às 10:00h)

Fotos © Rui Cunha



DRAP
Direção Regional do Ambiente

PORTO SANTO
Município



Secretaria Regional
de Ambiente e Recursos Naturais

SPEC
Sociedade Portuguesa de Ecologia

CE3C
Centro de Estudos e Formação em Ecologia



Cartaz do dia da ecologia.



Aspetos ecológicos no percurso para o Pico Branco.



Musgos do Pico Branco

Oficina pedagógica “Porto Santo – Reserva da Biosfera: Que Contributos do Programa Eco-Escolas?”



Instalação da Aplicação Móvel wikiloc para o registo do percurso efetuado pelos formandos. Além deste registo a App possibilita a adição de fotografias relevantes.



Trabalho colaborativo após a saída de campo.

Formação "Porto Santo: Identidade com Futuro".

Porto Santo: Identidade com Futuro

2, 3, 4 e 5 abril

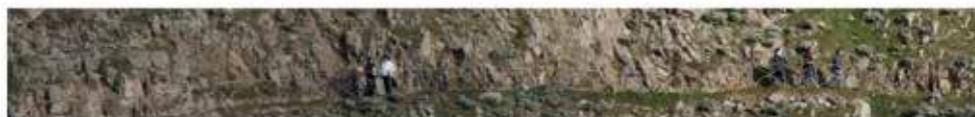
Formação para Agentes de Turismo



Património Imóvel *Fátima Monozes*



História *Nelson Veríssimo*



Geodiversidade *João Batista*



Biodiversidade *Gorito Freitas e Francisco Fernandes*

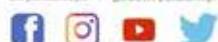


Cultura *Lucília Sousa e Universidade Sénior*



Faça o download da ficha de inscrição, preencha-a e envie para ambiente@cm-portosanto.pt

cm-portosanto.pt | geral@cm-portosanto.pt



PORTO SANTO

Cartaz - Formação "Porto Santo: Identidade com Futuro".



Património imóvel.



Geodiversidade e história.



Biodiversidade



Cultura em percursos de vida.



Festas do Concelho – tributo ao São João associam-se à Candidatura do Porto a Reserva da Biosfera

São João

Programa Cultural 2019

20 junho / Quinta-feira

- 18:00H - Abertura Oficial das Festas do Concelho - Largo do Pelourinho
- 21:00H - Grupo Ginástica Acrobática
- 21:15H - Fonte da Pipa
- 21:45H - Amigos da Música
- 23:30H - **Cristina Barbosa**

21 junho / Sexta-feira

- 20:30H - Grupo de Folclore Infantil
- 20:45H - Grupo de Folclore do Porto Santo
- 21:15H - Move & Dance - BRGYM
- 21:30H - Carina Teixeira
- 22:30H - Sónia Soares
- 23:30H - **Matay**
- 00:00H - **HMB**

22 junho / Sábado

- 21:00H - Fun & Dance
- 21:15H - Teatro "O Mar é o nosso lar" - Alunos do 4º A da EB1/PE do Caniço
- 21:30H - Eloisa Oliveira
- 22:30H - Aossesses
- 23:30H - Joana Câmara
- 00:30H - **Fernando Daniel**

23 junho / Domingo

- 21:00H - Desfile das Marchas Populares - Ruas da Cidade
- 23:00H - Apresentação das Marchas Populares em Palco
- 00:00H - Espetáculo Piromusical
- 00:15H - **Viramilho**

24 junho / Segunda-feira

- 09:00H - Hastear da Bandeira - Largo do Pelourinho
- 09:30H - Sessão Solene - Centro Cultural e de Congressos
- 11:30H - Missa Solene - Igreja da Piedade
- 21:00H - Espetáculo "A Resposta" - CAO Porto Santo
- 21:10H - Espetáculo das Prês 5 anos - Escolas do Porto Santo
- 21:30H - Espetáculo Multimédia - Semana Regional das Artes - Escolas do 1º Ciclo do Porto Santo "A Emigração"
- 21:45H - Coro Infante - Juvenil da Junta de Freguesia
- 22:15H - Ensemble de Acordeões
- 22:45H - Coro Universidade Sénior
- 23:00H - **Marcial**

Espectáculos musicais na Praça do Barqueiro
 Animação de Rua com os Fonte da Pipa

Logos: Município de Porto Santo, Reserva da Biosfera, and social media icons.

Cartaz programa das Festas do Concelho – 20 a 24 de junho de 2019.

Dia da criança associa-se à candidatura do Porto Santo a Reserva da Biosfera.

CONVITE



No dia 1 de junho, às 19h no Centro Cultural e de Congressos do Porto Santo, vem assistir à exibição deste fantástico filme de animação.

Entrada gratuita, devendo apresentar o cartão da escola ou respetiva caderneta.



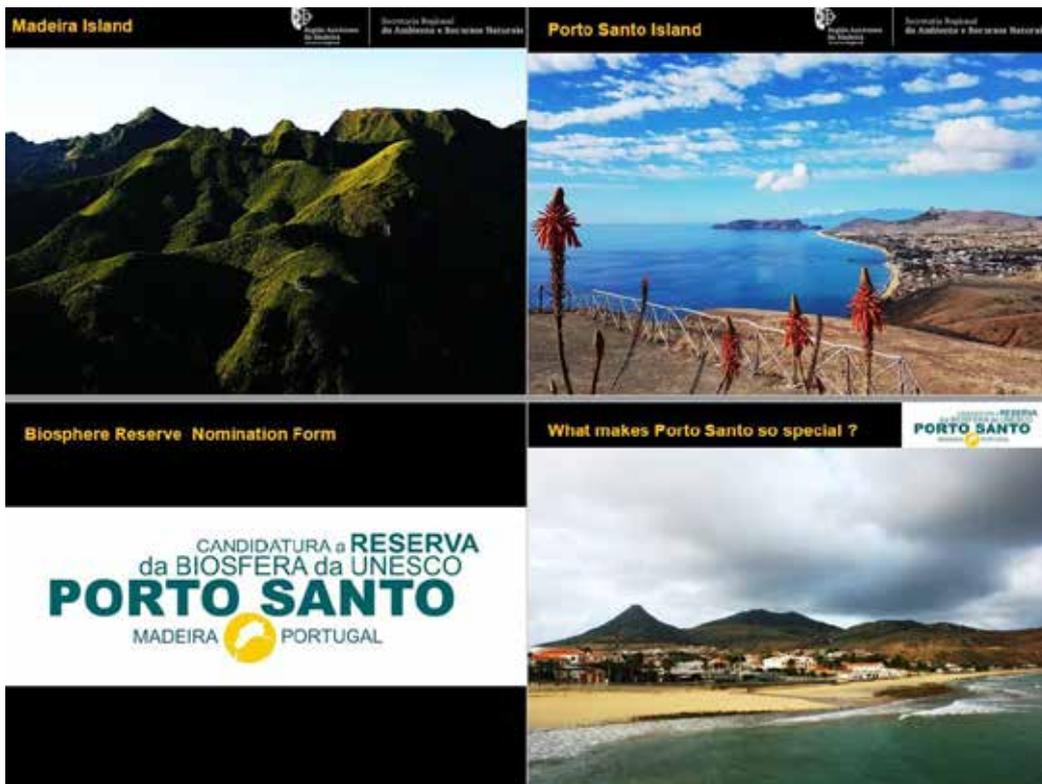
Convite para filme “O touro Ferdinando” da Blue Sky – 1 de junho de 2018.

Divulgação e promoção da candidatura da Ilha do Porto Santo a Reserva da Biosfera em Eventos Internacionais.

“Nature Talk” – Universidade da Madeira em julho de 2018



Comunicação “Porto Santo Biosphere Reserve application” apresentada por Susana Fontinha, elemento do GT - PSRB (1º ao 4º slide).



(5^o ao 8^o slide).



(9^o ao 12^o slide).



(13º ao 16º slide).



(17º ao 20º slide).



(21º ao 24º slide).



(25º ao 28º slide).

“Sustentabilidade do Porto Santo, região candidata a Reserva da Biosfera da UNESCO” em Cabo Verde.





“Sustentabilidade do Porto Santo, região candidata a Reserva da Biosfera da UNESCO”

Tema 1: Desertificação, incêndios florestais e riscos adicionais das alterações climáticas

ENTIDADE GESTORA: Engenheira Silvicultora, Instituto das Florestas e Conservação da Natureza, Madeira
* Em colaboração com RONTINHA, S. e SIMA, L. M., Secretária Regional do Ambiente e Recursos Naturais; PRIES, R., Instituto das Florestas e Conservação da Natureza; OLIVEIRA, F., Agência Regional da Energia e Ambiente da Região Autónoma da Madeira; BRITO, R., Câmara Municipal do Porto Santo; AREAL, R., Direção Regional para a Administração Pública do Porto Santo; MENDONÇA, D., Associação Grupo de Folklore do Porto Santo.

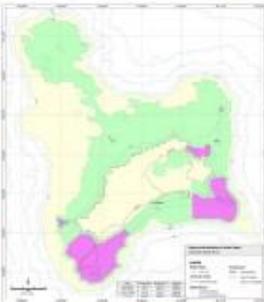
A Reserva da Biosfera do Porto Santo visa alcançar um destino diferenciado e pioneiro no âmbito da sustentabilidade, com uma estratégia concertada de harmonização entre o desenvolvimento local e o respeito pela conservação da natureza e valorização do seu património e das suas gentes.

Território detentor de características muito peculiares:

- os traços da sua ruralidade
- a presença de ecossistemas bem preservados com espécies de interesse para a conservação da natureza e da biodiversidade
- a diversidade e beleza das suas paisagens naturais ou humanizadas ...



A Reserva compreende a superfície terrestre da ilha do Porto Santo e dos ilhéus circundantes e a envolvente marinha até à batimétrica de 100 metros.




Face aos cenários que expressam a tendência atual das alterações climáticas, impera, como Região da Macaronésia e território ultra periférico, impulsionar um conjunto de medidas ou ações que sejam a expressão do recurso a energias renováveis, da proteção dos habitats e restauração dos ecossistemas, da prevenção dos fenómenos de desertificação e da contenção de espécies invasivas.



Estratégia de Gestão da Reserva da Biosfera do Porto Santo

Assenta em cinco eixos estratégicos de intervenção:

- Imagem e identidade
- Atividades sociais, económicas e culturais
- Conservação da natureza
- Participação social
- Alterações climáticas

e na definição de objetivos específicos conducentes à **MAIOR RESILIÊNCIA DOS ECOSISTEMAS E AO BEM-ESTAR HUMANO.**

SUSTENTABILIDADE DO PORTO SANTO

Medidas Florestais:

- Conservação da biodiversidade
- Recuperação de espécies e de habitats
- Proteção dos solos e melhoria das condições hídricas
- Recuperação biofísica e diversificação florestal
- Melhoria da produtividade dos solos
- Aumento da biomassa florestal e sequestro de carbono
- Controlo de invasoras e prevenção de riscos
- Melhoria dos serviços ecossistémicos
- Corresponsabilização social e ambiental



Com a Reserva da Biosfera, preconiza-se:

- a conservação dos valores naturais;
- o desenvolvimento de comportamentos centrados na preservação e na consciência ambiental;
- novas oportunidades de estudos e trabalhos de investigação ou de índole científico;
- a valorização e divulgação dos traços identitários e da cultura Porto-santense;
- a criação de emprego local e valorização das profissões; e
- o desenvolvimento sustentável do Porto Santo, obedecendo aos preceituados desígnios de adaptação às alterações climáticas.



Candidatura do Porto Santo a Reserva da Biosfera da UNESCO – Programa MaB ‘O Homem e a Biosfera’

... Um tributo à difusão do conhecimento e da responsabilização partilhada...

... Pela valorização do que é NOSSO!



Poster apresentado por Gorete Freitas, elemento do GT - PSRB nas IX Jornadas Florestais da Macaronésia, ilha de Santiago, na Cidade Velha – Património Mundial da Humanidade da UNESCO – Cabo Verde - 27, 28 e 29 de março de 2019.

“Candidatura da Ilha do Porto Santo a Reserva da Biosfera da UNESCO” em La Palma.

Candidatura da Ilha do Porto Santo a Reserva da Biosfera

Candidatura da Ilha do Porto Santo a Reserva da Biosfera da UNESCO

Ilha do Porto Santo, Região Autónoma da Madeira, Portugal

É tudo começou com a sua formação geológica. O Porto Santo terá crescido como um vulcão-escudo submarino entre o Miocénico inferior e o Miocénico médio (18Ma – 13,5Ma). As últimas erupções ocorreram há 10,2Ma. A paisagem distingue-se das demais da Madeira, em grande parte devido à confluência das suas heranças geológicas: magmática, rochas carbonatadas e biogénicas, e a última glaciação.

Após o seu adiantamento há cerca de 600 anos, que corresponde ao início da expansão marítima de Portugal, aportaram nesta ilha povoadores de origens e nacionalidades diversas, na maioria oriundos de Portugal continental. Chegaram Mouros cativos de Marrocos que com a convivência dos Portugueses, mesclaram costumes, crenças e superstições, dando-se início à história social da terra. A riqueza cultural do Porto Santo está associada aos descobrimentos marítimos, às rotas de comércio no Atlântico e à utilização dos recursos naturais.

Conferência apresentada por Susana Fontinha, elemento do GT - PSRB no encontro sobre Custodia del Territorio y Ecoturismo en las Reservas de la Biosfera y Territorios Insulares de la Macaronesia na Ilha de La Palma, em junho de 2019 (1º ao 4º slide).

A ilha foram chegando diásporas provenientes dos continentes mais próximos, Europeia e Africano, bem como de ilhas e ilhotas vizinhas, arrastadas pelos ventos e correntes marítimas, na generalidade transportadas por aves e insetos. A flora tem forte influência mediterrânica.

O Porto Santo apresenta elevado valor cénico, diversidade de ecossistemas e espécies, muitas delas únicas à escala mundial. Alberga um valioso património natural do ponto de vista científico, educativo, cultural e turístico.

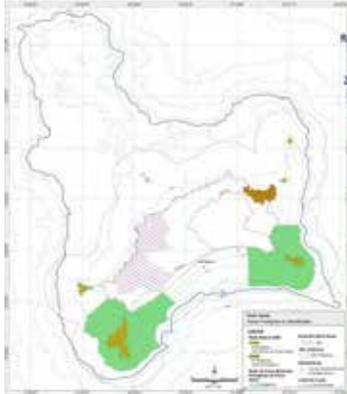
Biodiversidade do Porto Santo

- 2111 táxones
- 1000 são terrestres
- 451 marinhos

10,4% de exclusivos do Porto Santo
7,9% exclusivos da Madeira

136 táxones ao abrigo da Convenção de Berna (87 aves, 23 mamíferos, nove plantas vasculares, sete gastrópodes, três répteis, três artrópodes, dois equinodermes, um peixe e uma cnidária),
25 táxones ao abrigo da Convenção de Bonn (20 aves, quatro mamíferos e um réptil),
11 táxones ao abrigo da CITES (22 mamíferos, cinco aves, duas plantas vasculares, um réptil e uma cnidária),
42 táxones inscritos na Diretiva Aves,
44 táxones na Diretiva Habitats (22 mamíferos, 13 plantas vasculares, sete gastrópodes, um réptil e uma alga),
297 espécies estão mencionadas na Lista Vermelha da UICN (66 apresentam o maior estatuto de ameaça, nomeadamente 12 " criticamente em perigo", 14 "Em Perigo", 13 "Quase Ameaçada" e 27 "Vulnerável").

(5º ao 8º slide).



Rede de Áreas Marinhas Protegidas do Porto Santo (RAMPPS):

Zonas Especiais de Conservação (ZEC):
 Pico Branco (PTP060002)
 Ilhéus do Porto Santo (PTP060001)

SIIC (SIC Categorias):

Áreas Importantes para as Aves e Biodiversidade (IIBA):

Geodiversidade do Porto Santo

dez Geossítios:
 Praia, Zimbralinho, Morenos, Pico de Ana Ferreira, Serra de Dentro, Pico da Cabrita, Fonte da Areia, Ilhéu de Cima - Pedra do Sol, Ilhéu de Cima - Cabeço das Laranjeiras, Ilhéu da Cal.

sete sítios de geodiversidade:
 Pico Espigão, Serra de Fora, Pico Branco, Porto das Salemas, Pico de Juliana, Pico do Facho e Pico do Castelo.

um imóvel de Interesse Público e Valor Concelhio (Valor Regional) e Património Científico (geológico):
 Pedreira do Pico de Ana Ferreira.

rede de Biótopos CORINE (Programa CORINE 85/331/VCEE):
 Maciço Montanhoso do Pico de Ana Ferreira, o Maciço Montanhoso Central do Porto Santo, a Praia e a Zona Dunar.






O Porto Santo, que significa Porto Seguro, é um dos 11 municípios da RAM, com uma cidade e uma freguesia com o mesmo nome. Corresponde a 5,4% do território da RAM (42,5km²) e a 2% da população (3 173 habitantes). Nesta terra é dada grande importância à preservação dos costumes e dos traços multiculturais que a definem.

(9º ao 12º slide).



Ao longo dos tempos, este território vem se afirmando como destino seguro, detentor de paisagens de beleza ímpar e tradição de bem receber, com clima ameno e sol, a que se associa a oferta de experiências como o pedestrianismo, equitação, mergulho, observação de aves e cetáceos, etnografia e gastronomia.



As propriedades terapêuticas das areias biogénicas e carbonatadas da praia, bem como a especificidade doutros recursos naturais na promoção de saúde e tratamento de algumas doenças, têm contribuído para o destaque do Porto Santo.

Candidatura da ilha do Porto Santo a Reserva da Biosfera da UNESCO

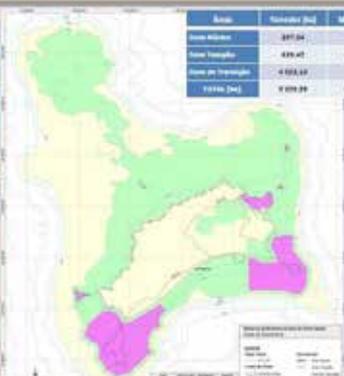
Área total de 27 310,54ha

Compreende toda a superfície terrestre da ilha do Porto Santo e seus ilhéus, que correspondem a prolongamentos da ilha, a que acresce a envolvente marinha até à batimétrica de 100m, por forma a incluir a plataforma submarina e coincide assim com os limites naturais da ilha.

A área proposta considera a condição arquipelágica, as características geomorfológicas peculiares do território e o elevado número de endemismos porto-santenses, madeirenses e macaronésicos, e demais biodiversidade terrestre e marinha que alberga.

A área contempla valores naturais de carácter excepcional ou de importância crítica, bem como a constatação de práticas compatíveis com a conservação da natureza e o fomento da biogeodiversidade associada à atividade humana, que é predominantemente turística.

Área	Terrestre (ha)	Marinha (ha)	Total (ha)	% Área
Área Marinha	387,38	3 283,87	3 671,25	9,4
Área Terrestre	439,45	10 004,76	10 444,21	42,3
Área de Transição	4 003,89	9 009,34	13 013,23	50,4
Total (ha)	4 821,72	12 297,97	17 119,69	100



Zonamento da Reserva

A candidatura resulta de um processo dinâmico e evolutivo assente na partilha de interesses, saberes, experiências e conhecimento, focado nas singularidades do Porto Santo e aberto ao mundo em nome do Povo do Porto Santo e dos desejos da Reserva da Biosfera da UNESCO.

(13º ao 16º slide).



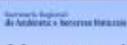
(17º ao 18º slide).



A comunicação na Reserva da Biosfera de La Palma.

“Sustentabilidade do Porto Santo, região candidata a Reserva da Biosfera da UNESCO” em La Palma.





Custodia del Territorio y Ecoturismo en las Reservas de la Biosfera y Territorios Insulares de la Macaronesia

“Sustentabilidade do Porto Santo, região candidata a Reserva da Biosfera da UNESCO”

FRUTAS, M.G.A.E.C., Engenheira Silvicultora, Instituto das Reservas e Conservação da Natureza, Madeira
 * Em colaboração com: FONTINHA, S. e SILVA, I.M., Secretaria Regional do Ambiente e Recursos Naturais; Pires, R., Instituto das Reservas e Conservação da Natureza; OLIVEIRA, F., Agência Regional de Energia e Ambiente da Região Autónoma da Madeira; BRITO, R., Câmara Municipal do Porto Santo; AREAL, R., Direção Regional para a Administração Pública do Porto Santo; MENDONÇA, D., Associação Grupo de Folclore do Porto Santo.

A Reserva da Biosfera do Porto Santo visa alcançar um destino diferenciado e pioneiro no âmbito da sustentabilidade, com uma estratégia concertada de harmonização entre o desenvolvimento local e o respeito pela conservação da natureza e valorização do seu património e das suas gentes.

Território detentor de características muito peculiares:

- os traços da sua ruralidade
- a presença de ecossistemas bem preservados com espécies de interesse para a conservação da natureza e da biodiversidade
- a diversidade e beleza das suas paisagens naturais ou humanizadas ...



A Reserva compreende a superfície terrestre da ilha do Porto Santo e dos ilhéus circundantes e a envolvente marinha até à batimétrica de 100 metros.




Com a Reserva da Biosfera, preconiza-se:

- a conservação dos valores naturais;
- o desenvolvimento de comportamentos centrados na preservação e na consciência ambiental;
- novas oportunidades de estudos e trabalhos de investigação ou de índole científico;
- a valorização e divulgação dos traços identitários e da cultura Porto-santense;
- a criação de emprego local e valorização das profissões; e
- o desenvolvimento sustentável do Porto Santo, obedecendo aos preceituados desígnios de adaptação às alterações climáticas.



Face aos cenários que expressam a tendência atual das alterações climáticas, impensável, como Região da Macaronesia e território ultra periférico, impulsionar um conjunto de medidas ou ações que sejam a expressão do recurso a energias renováveis, da proteção dos habitats e restauração dos ecossistemas, da prevenção dos fenómenos de desertificação e da contenção de espécies invasivas.



Desertificação

- Alterações climáticas → Aumento de fenómenos extremos: inundações, deslizamentos de terras, secas, incêndios, perda de solos ...
- Alterações climáticas → Redução das reservas de carbono e aumento das emissões de CO₂ ...
- Desertificação → Diminuição da diversidade de plantas e organismos do solo, perda de habitats ...
- Desertificação → Perda de nutrientes e défice hídrico nos solos ...
- Desertificação → Perda de biodiversidade

Estratégia de Gestão da Reserva da Biosfera do Porto Santo

Assenta em cinco eixos estratégicos de intervenção:

- Imagem e identidade
- Atividades sociais, económicas e culturais
- Conservação da natureza
- Participação social
- Alterações climáticas

e na definição de objetivos específicos conducentes a **MAIOR RESILIÊNCIA DOS ECOSISTEMAS E AO BEM-ESTAR HUMANO.**

SUSTENTABILIDADE DO PORTO SANTO

Medidas Florestais:

- Conservação da biodiversidade
- Recuperação de espécies e de habitats
- Proteção dos solos e melhoria das condições hídricas
- Recuperação biofísica e diversificação florestal
- Melhoria da produtividade dos solos
- Aumento da biomassa florestal e sequestro de carbono
- Controlo de invasoras e prevenção de riscos
- Melhoria dos serviços ecossistémicos
- Corresponsabilização social e ambiental



Candidatura do Porto Santo a Reserva da Biosfera da UNESCO – Programa MaB ‘O Homem e a Biosfera’

... Um tributo à difusão do conhecimento e da responsabilização partilhada...

... Pela valorização do que é NOSSO!



Poster apresentada por Susana Fontinha, elemento do GT - PSRB no encontro sobre Custodia del Territorio y Ecoturismo en las Reservas de la Biosfera y Territorios Insulares de la Macaronesia na Ilha de La Palma, em junho de 2019

“Apresentação dos trabalhos conducentes à candidatura do Porto Santo a Reserva da Biosfera da UNESCO e atual Ponto da situação” no Observatório Oceânico da Madeira (OOM).



Nascida no Funchal, a 28 de maio de 1965, Susana Maria Gouveia e Sá Ventura Fontinha é Licenciada em Biologia - Ramo Científico (1988) e Doutorada em Biologia - Ecologia e Sistemática (2005) pela Faculdade de Ciências da Universidade de Lisboa.

É técnica especialista da Secretaria Regional do Ambiente e dos Recursos Naturais, membro do Conselho Consultivo do IFCN IP-RAM, investigadora do Centro de Ecologia, Evolução e Alterações Ambientais (CE3A) da Universidade de Lisboa, investigadora do ISOPlexis Banco de Germoplasma da Universidade da Madeira e integra o grupo de peritos da IUCN relacionado com as plantas da Macaronésia.

Desde o último trimestre de 2017 coordena a candidatura da ilha do Porto Santo a Reserva da Biosfera, cujo grupo de trabalho inclui os demais elementos Filipe Oliveira da AREAM, Rubina Brito da CMPS, Rute Areal da DRAPS, Duarte Mendonça da AGFPS, Rosa Pires e Gorete Freitas do IFCN IP-RAM e José Manuel Silva da SRA.

Patrocinador:



Sextas do OOM

Apresentação dos trabalhos conducentes à candidatura do Porto Santo a Reserva da Biosfera da UNESCO e atual ponto de situação

Equipa: Susana Fontinha, Duarte Mendonça, Filipe Oliveira, Gorete Freitas, José Manuel Silva, Rosa Pires, Rubina Brito e Rute Areal

No amancebamento do processo, no último trimestre de 2017, foi constituído um grupo de trabalho composto por elementos da Câmara Municipal do Porto Santo, da Associação Grupo de Folclore do Porto Santo, da Agência Regional da Energia e Ambiente da Região Autónoma da Madeira, da Secretaria Regional do Ambiente e Recursos Naturais, da Direção Regional para a Administração Pública do Porto Santo e do Instituto das Florestas e Conservação da Natureza, IP-RAM), para executar as diligências e tarefas inerentes ao processo de candidatura.

Desde Janeiro de 2018 o processo tem tido a participação direta de Porto-santenses e Madeirenses de uma forma geral, a título individual ou institucional, num processo pró-ativo e evolutivo, com várias sessões de informação e participativas para auscultação de contributos e reuniões de trabalho. Neste período, decorreram duas fases de auscultação pública dos documentos: de 12/04 a 2/05 de 2018, e de 20/03 a 22/04 de 2019. No último período, esteve disponível a versão melhorada do dossiê de candidatura, incluindo a proposta de Plano de Ação.

Esta candidatura em fase de finalização está assente na partilha de interesses, saberes, experiências e conhecimentos, focada nas peculiaridades do Porto Santo e aberta ao Mundo em nome do Povo do Porto Santo e dos desígnios da Reserva da Biosfera da UNESCO.

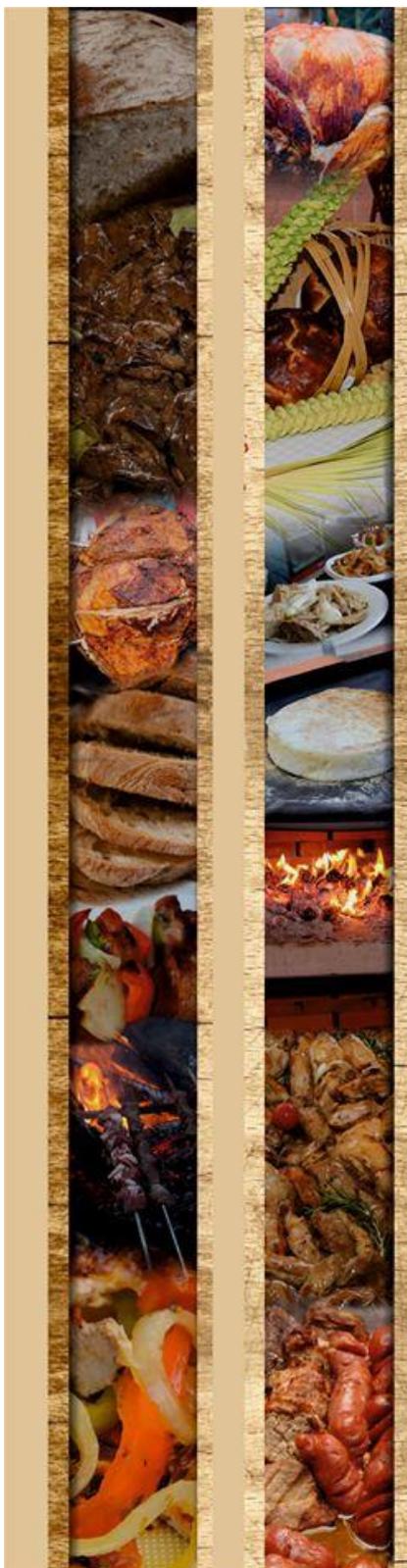
A candidatura é composta por duas partes e anexos, constando da mesma o Plano de Ação da Reserva da Biosfera da Ilha do Porto Santo.

19/7/2019 - 10h @ OOM
Madeira Tecnópolo

Inscrições em:
http://oom.ardill.pt/sextas_do_oom

Conferência apresentada por Susana Fontinha, elemento do GT – PSRB no Observatório Oceânico da Madeira (OOM).

Festival do Petisco do Porto Santo associa-se à Candidatura do Porto a Reserva da Biosfera.



Festival do Petisco

PORTO SANTO 2019

7 a 11 de agosto

Alameda Infante D. Henrique

Para mais informações consulte as
normas de participação disponíveis nas
nossas redes sociais

Cartaz - Festival do Petisco do Porto Santo a decorrer de 7 a 11 de agosto.

8.2

LIST OF SPECIES COMMON NAMES
SPECIES LIST OF IUCN RED LIST

LIST OF SPECIES COMMON NAMES

Common name	Taxa
albacore	<i>Thunnus alalunga</i> Bonnaterre, 1788
amberjacks	<i>Seriola</i> spp. Cuvier, 1816
atlantic canary	<i>Serinus canaria canaria</i> Linnaeus, 1758
atlantic chub mackerel	<i>Scomber colias</i> Gmelin, 1789
atlantic spotted dolphin	<i>Stenella frontalis</i> Cuvier, 1829
audubon's shearwater	<i>Puffinus lherminieri</i> (<i>Puffinus assimilis</i>) Bonaparte, 1857
Azores chromis	<i>Chromis limbata</i> Cuvier in Cuvier and Valenciennes, 1830
ballan wrasse	<i>Labrus bergylta</i> Ascanius, 1767
band-rumped storm petrel	<i>Hydrobates castro</i> Harcourt, 1851
barley	<i>Hordeum vulgare</i> L.
<i>barrilha</i>	<i>Mesembryanthemum crystallinum</i> L.
<i>barrilha</i>	<i>Mesembryanthemum nodiflorum</i> L.
barred hogfish	<i>Bodianus scrofa</i> Valenciennes, 1839
bat	<i>Pipistrellus maderensis</i> Dobson, 1878
beans	<i>Phaseolus lanatus</i> L.
beefwood	<i>Heberdenia excelsa</i> (Aiton) Banks ex DC.
berthelot's pipit	<i>Anthus berthelotii madeirensis</i> Erlanger, 1899
bigeye tuna	<i>Thunnus obesus</i> Lowe, 1839
black limpet	<i>Patella candei</i> d'Orbigny, 1840
blacktail comber	<i>Serranus atricauda</i> Günther 1874
blue jack mackerel	<i>Trachurus picturatus</i> S. Bowdich, 1825
bogue	<i>Boops boops</i> Linnaeus, 1758
bottle-nose dolphin	<i>Tursiops truncatus</i> Montagu, 1821
brambles	<i>Rubus</i> spp. L.
breem	<i>Diplodus sargus</i> Linnaeus, 1758
brown algae	<i>Cystoseira</i> sp. C.Agardh, 1820
brown algae	<i>Padina pavonica</i> (Linnaeus) Thivy, 1960
brown garden eels	<i>Heteroconger longissimus</i> Günther, 1870
brown moray	<i>Gymnothorax</i> spp. Bloch, 1795
bulwer's petrel	<i>Bulweria bulwerii</i> Jardine & Selby, 1828
Canarian kestrel	<i>Falco tinnunculus canariensis</i> Koenig, 1890
Canary damsel	<i>Abudedefduf luridus</i> Cuvier, 1830
Canary Island Date Palms	<i>Phoenix canariensis</i> Chabaud
Canary laurel	<i>Apollonias barbujana</i> (Cav.) Bornm. †
century plant	<i>Agave americana</i> L.
climbing butcher's broom	<i>Semele androgyna</i> (L.) Kunth (<i>S. maderensis</i>)
common linnnet	<i>Carduelis cannabina guentheri</i> Wolters, 1953
common smooth-hound	<i>Mustelus mustelus</i> Linnaeus, 1758
common tern	<i>Sterna hirundo</i> Linnaeus, 1758
conger	<i>Conger conger</i> Linnaeus, 1758
coral	<i>Antipathes wollastoni</i> Gray, 1857
coral	<i>Dendrophyllia ramea</i> Linnaeus, 1758
coral	<i>Gerardia savaglia</i> Bertoloni, 1819
coralline red algae	<i>Lithothamnium coralloides</i> , P.L.Crouan & H.M.Crouan, 1867
cory's shearwater	<i>Calonectris borealis</i> (<i>Calonectris diomedea</i>) Scopoli, 1769
crab	<i>Grapsus grapsus</i> Linnaeus, 1758
crab	<i>Percnon gibbesi</i> H. Milne Edwards, 1853

crab	<i>Plagusia depressa</i> Fabricius, 1775
crab	<i>Xantho incisus</i> Leach, 1814
dotted moray	<i>Muraena augusti</i> Kaup, 1856
dragon tree	<i>Dracaena draco</i> (L.) L. subsp. <i>draco</i> †
dusky grouper	<i>Epinephelus marginatus</i> Lowe, 1834
emerald wrasse	<i>Centrolabrus trutta</i> (<i>Symphodus trutta</i>) Lowe, 1834
european spider crab	<i>Maja squinado</i> Herbst, 1788
fish-stunning spurge	<i>Euphorbia piscatoria</i> Aiton
giant reed	<i>Arundo donax</i> L.
globe flower	<i>Globularia salicina</i> Lam.
green algae	<i>Dasycladus vermicularis</i> (Scopoli) Krasser, 1898
grey triggerfish	<i>Balistes capriscus</i> Gmelin, 1789
grey wagtail	<i>Motacilla cinerea schmitzi</i> Tschusi, 1900
heather	<i>Erica platycodon</i> (Webb & Berthel.) Rivas Mart et al. <i>maderincola</i>
<i>hissopo</i>	<i>Micromeria varia</i> subsp. <i>thymoides</i> (Sol. ex Lowe) P. Pérez
ice plant	<i>Carpobrotus edulis</i> (L.) N.E. Br.
Indian pea	<i>Lathyrus sativus</i> L.
island grouper	<i>Mycteroperca fusca</i> Lowe, 1838
kentish plover	<i>Charadrius alexandrinus</i> Linnaeus, 1758
laurel	<i>Laurus novocanariensis</i> Rivas Mart., Lousa, Fern. Prieto, E. Dias, J. C. Costa & C. Aguiar
lentils	<i>Lens culinaris</i> Medik.
lizard	<i>Teira dugesii jogeri</i> Bischoff, Osenegg & Mayer, 1990
loggerhead sea turtle	<i>Caretta caretta</i> Linnaeus, 1758
<i>losna</i>	<i>Artemisia argentea</i> L'Hér.
<i>Lotus glaucus</i>	<i>Lotus glaucus</i> Aiton
Madeira buzzard	<i>Buteo buteo harterti</i> Swan, 1919
Madeira firecrest	<i>Regulus madeirensis</i> Harcourt, 1851
Madeira shrimp	<i>Plesionika narval</i> Fabricius, 1787
Madeira shrubby bittersweet	<i>Chamaemeles coriacea</i> Lindl.
Madeira shrubby bittersweet	<i>Maytenus umbellata</i> (R. Br.) Mabb.
mediterranean monk seal	<i>Monachus monachus</i> Hermann, 1779
mediterranean moray	<i>Muraena helena</i> Linnaeus, 1758
mediterranean slipper lobster	<i>Scyllarides latus</i> Latreille, 1803
mediterranean snakelocks sea anemone	<i>Anemonia viridis</i> Forsskål, 1775
ironwood	<i>Sideroxylon mirmulans</i> R. Br. (<i>S. marmulano</i>)
offshore rockfish	<i>Pontinus kuhlii</i> Bowdich, 1825
onion	<i>Allium cepa</i> L.
opuntia tuna cactus	<i>Opuntia tuna</i> (L.) Mill.
orchil	<i>Roccella</i> sp. DC.
ornate wrasse	<i>Thalassoma pavo</i> Linnaeus, 1758
<i>perrejil</i>	<i>Crithmum maritimum</i> L.
plain swift	<i>Apus unicolor</i> Jardine, 1830
quail	<i>Coturnix coturnix confisa</i> Hartert, 1917
<i>ranchões</i>	<i>Rapistrum rugosum</i> (L.) All.
ray	<i>Raja</i> spp. Linnaeus, 1758
ray	<i>Taeniurops grabata</i> Geoffroy Saint-Hilaire, 1817
red partridge	<i>Alectoris rufa</i> Linnaeus, 1758
redlip blenny	<i>Ophioblennius atlanticus</i> Valenciennes, 1836
rockhopper	<i>Sparisoma cretense</i> Linnaeus, 1758
roseate tern	<i>Sterna dougallii</i> Montagu, 1813

sand smelt	<i>Atherina presbyter</i> Cuvier, 1829
<i>saramagos</i>	<i>Sinapis arvensis</i> L.
scorpionfish	<i>Scorpaena canariensis</i> Sauvage, 1878
scorpionfish	<i>Scorpaena maderensis</i> Valenciennes, 1833
scorpionfish	<i>Scorpaena scrofa</i> Linnaeus, 1758
sea bass	<i>Pagellus bogaraveo</i> Brünnich, 1768
sea-snail	<i>Phorcus sauciatu</i> s Koch, 1845
sea-snail	<i>Charonia lampas</i> Linnaeus, 1758
sea-urchin	<i>Arbacia lixula</i> Linnaeus, 1758
sea-urchin	<i>Paracentrotus lividus</i> Lamarck, 1816
<i>selvageira</i>	<i>Sideritis candicans</i> Aiton var. <i>multiflora</i>
<i>serralhas</i>	<i>Sonchus oleraceus</i> L.
short-beaked common dolphin	<i>Delphinus delphis</i> Linnaeus, 1758
skipjack tuna	<i>Katsuwonus pelamis</i> Linnaeus, 1758
smooth brittle star	<i>Ophioderma longicaudum</i> Bruzelius, 1805
snapper	<i>Pagrus pagrus</i> Linnaeus, 1758
sperm whale	<i>Physeter macrocephalus</i> Linnaeus, 1758
spider fish	<i>Trachinus draco</i> Linnaeus, 1758
spiny fan-mussel	<i>Pinna rudis</i> Linnaeus, 1758
spiny lobster	<i>Palinurus elephas</i> Fabricius, 1787
spotted rockling	<i>Gaidropsarus guttatus</i> Collett, 1890
starfish	<i>Coscinasterias tenuispina</i> Lamarck, 1816
starfish	<i>Marthasterias glacialis</i> Linnaeus, 1758
starfish	<i>Ophidiaster ophidianus</i> Lamarck, 1816
stingray	<i>Dasyatis pastinaca</i> Linnaeus, 1758
stingray	<i>Phycis phycis</i> Linnaeus, 1766
striped soldier shrimp	<i>Plesionika edwardsii</i> Brandt, 1851
sweet potatoes	<i>Ipomoea batatas</i> (L.) Lam.
table grapes	<i>Vitis vinifera</i> L.
tamarisk hedges	<i>Tamarix gallica</i> L.
tomato	<i>Lycopersicum esculentum</i> Mill.
tope	<i>Galeorhinus galeus</i> Linnaeus, 1758
tree tobacco	<i>Nicotiana glauca</i> Graham S
turbot	<i>Polyprion americanus</i> Bloch & Schneider, 1801
two-banded sea bream	<i>Diplodus vulgaris</i> Geoffroy Saint-Hilaire, 1810
watermelon	<i>Citrullus lanatus</i> (Thunb.) Matsum. & Nakai
wheat	<i>Triticum aestivum</i> L.
white Azorean limpet	<i>Patella aspera</i> Lamarck, 1819
white trevally	<i>Pseudocaranx dentex</i> Bloch & Schneider, 1801
wild juniper	<i>Juniperus turbinata</i> Guss. subsp. <i>canariensis</i> (Guyot) Rivas Mart., Wildpret & P. Perez
wild olive tree	<i>Olea maderensis</i> (Lowe) Rivas Mart. & del Arco
yellow-legged gull	<i>Larus michahellis atlantis</i> Clements, 1991

SPECIES LIST OF IUCN RED LIST

TAXA	CATEGORY
LICHENS	
<i>Anzia centrifuga</i> Haugan	Vulnerable
NON-VASCULAR PLANTS	
<i>Riccia atlantica</i> Sérgio & Perold	Vulnerable
VASCULAR PLANTS	
<i>Artemisia argentea</i> L'Hér.	Vulnerable
<i>Chamaemeles coriacea</i> Lindl. *	Endangered
<i>Cheirolophus massonianus</i> (Lowe) A. Hansen & Sunding	Endangered
<i>Echium portosanctense</i> J. A. Carvalho, Pontes, Batista-Marques & R. Jardim	Critically endangered
<i>Heberdenia excelsa</i> (Aiton) Banks ex DC.	Vulnerable
<i>Juniperus turbinata</i> Guss.	Near threatened
<i>Monizia edulis</i> Lowe *	Critically endangered
<i>Phalaris maderensis</i> (Menezes) Menezes	Vulnerable
<i>Saxifraga portosanctana</i> Boiss.	Vulnerable
<i>Sideroxylon mirmulans</i> R. Br.	Endangered
<i>Vicia costae</i> A. Hansen	Critically endangered
<i>Vicia ferreirensis</i> Goyder	Critically endangered
GASTROPODS	
<i>Actinella littorinella</i> Mabilie, 1883 (†) *	Vulnerable
<i>Amphorella cimensis</i> Waldén, 1983 *	Near threatened
<i>Amphorella tuberculata</i> Lowe, 1852 *	Endangered
<i>Caseolus baixoensis</i> Waldén, 1983 (†) *	Vulnerable
<i>Caseolus calculus</i> Lowe, 1855 (†) *	Vulnerable
<i>Cecilioides eulima</i> Lowe, 1855 (†)	Critically endangered
<i>Cylichnida ovuliformis</i> Lowe, 1831	Vulnerable
<i>Discula attrita</i> Lowe, 1831 (†) *	Near threatened
<i>Discula pulvinata</i> Lowe, 1831 (†) *	Endangered
<i>Discula testudinalis</i> Lowe, 1852 *	Critically endangered
<i>Hystricella bicarinata</i> Sowerby, 1824 #	Near threatened
<i>Hystricella echinulata</i> Lowe, 1831 #	Endangered
<i>Idiomela subplicata</i> Sowerby, 1824 #	Critically endangered
<i>Lampadia webbiana</i> Lowe, 1831 (†) #	Endangered
<i>Leiostyla calathiscus</i> Lowe, 1831	Near threatened
<i>Leiostyla corneocostata</i> Wollaston, 1878	Vulnerable
<i>Leiostyla degenerata</i> Wollaston, 1878	Near threatened
<i>Leiostyla ferraria</i> Lowe, 1852	Vulnerable
<i>Leiostyla relevata</i> Wollaston, 1878	Near threatened
<i>Lemniscia michaudi</i> Deshayes, 1831 #	Near threatened
<i>Leptaxis wollastoni</i> R.T. Lowe, 1852	Endangered
<i>Serratorotula acarinata</i> Hemmen & Groh, 1985 † #	Critically endangered
<i>Serratorotula coronata</i> Deshayes, 1850 (†) #	Endangered
<i>Wollastonaria jessicae</i> De Mattia, Neiber & Groh, 2018 #	Critically endangered

VERTEBRATES

<i>Aythya ferina</i> Linnaeus, 1758	Vulnerable
<i>Balaenoptera borealis</i> Lesson, 1828	Endangered
<i>Balaenoptera musculus</i> Linnaeus, 1758	Endangered
<i>Balaenoptera physalus</i> Linnaeus, 1758	Near threatened
<i>Balistes capriscus</i> Gmelin, 1789	Vulnerable
<i>Bodianus scrofa</i> Valenciennes, 1839	Vulnerable
<i>Calidris ferruginea</i> Pontoppidan, 1763	Vulnerable
<i>Caretta caretta</i> Linnaeus, 1758	Vulnerable
<i>Dasyatis pastinaca</i> Linnaeus, 1758	Vulnerable
<i>Epinephelus marginatus</i> Lowe, 1834	Vulnerable
<i>Eubalaena glacialis</i> Müller, 1776	Critically endangered
<i>Fulica atra</i> Linnaeus, 1758	Near threatened
<i>Galeorhinus galeus</i> Linnaeus, 1758	Vulnerable
<i>Gymnura altavela</i> Linnaeus, 1758	Critically endangered
<i>Mobula mobular</i> Bonnaterre, 1788	Endangered
<i>Monachus monachus</i> Hermann, 1779	Endangered
<i>Mustelus mustelus</i> Linnaeus, 1758	Vulnerable
<i>Mycteroperca fusca</i> Lowe, 1838	Vulnerable
<i>Myliobatis aquila</i> Linnaeus, 1758	Vulnerable
<i>Numenius arquata</i> Linnaeus, 1758	Vulnerable
<i>Pagellus bogaraveo</i> Brünnich, 1768	Near threatened
<i>Physeter macrocephalus</i> Linnaeus, 1758	Vulnerable
<i>Pipistrellus maderensis</i> Dobson, 1878	Endangered
<i>Pomatomus saltatrix</i> Linnaeus, 1776	Near threatened
<i>Polyprion americanus</i> Bloch & Schneider, 1801	Near threatened
<i>Puffinus lherminieri</i> Bonaparte, 1857	Near threatened
<i>Streptopelia turtur</i> Linnaeus, 1758	Vulnerable
<i>Vanellus vanellus</i> Linnaeus, 1758	Vulnerable

Subtitle

(†) – taxon extant and also represented in fossil deposits;

* – endemic genus Madeira;

– endemic genus Porto Santo

8.3

SUPPORTING STATEMENTS



MUNICÍPIO DO PORTO SANTO
CÂMARA MUNICIPAL



CARTA DE APOIO À CANDIDATURA DO PORTO SANTO A RESERVA DA BIOSFERA

PT// O Município de Porto Santo é uma autarquia local com competências definidas no Regime Jurídico das Autarquias Locais, previsto pela Lei n.º 75/2013 de 12 de setembro e segundo o art.º 235º da Constituição da República Portuguesa está dotado de órgãos representativos (Câmara Municipal e Assembleia Municipal) que visam a prossecução de interesses públicos e da sua população. É uma entidade coletiva, responsável pela estratégia do município e que promove a gestão criteriosa dos recursos que lhes próprios. Para além de autoridade administrativa e financeira em diversas áreas da sua competência, no âmbito da sua missão define as políticas que promovam o desenvolvimento sustentável e executa medidas concretas que visam a melhoria da qualidade de vida das suas populações.

Neste contexto, a **Câmara Municipal do Porto Santo** apoia a candidatura do Porto Santo a Reserva da Biosfera da UNESCO, no âmbito do programa "O Homem e a Biosfera". Para a prossecução dos objetivos definidos para a Reserva da Biosfera do Porto Santo, a Câmara Municipal assume o compromisso de apoio de iniciativas que promovam o desenvolvimento sócio-económico, a cultura, as tradições, bem como a consciência ambiental da população e de todos aqueles que nos visitam para, em conjunto contribuímos para o desenvolvimento sustentável da ilha do Porto Santo e para os objetivos da Biosfera.

ENG// The Municipality of Porto Santo is a local authority with powers defined by the Law no. 75/2013 of September 12 and according to article 235 of the Constitution of the Portuguese Republic, is endowed with representative local authority (City Hall and Municipal Assembly) aimed at the pursuit of public interests and their population. It is a collective entity, responsible for the municipality's strategy and that promotes the careful management of the resources that they own. In addition to administrative and financial authority in various areas of its competence, it defines policies that promote sustainable development and implement concrete measures aimed at improving the quality of life of its people.

In this context, the **Municipal Council of Porto Santo** supports the application of Porto Santo to the UNESCO Biosphere Reserve, within the scope of the "Man and the Biosphere" program. In order to achieve the objectives set for the Porto Santo Biosphere Reserve, the City Council undertakes to support initiatives that promote socio-economic development, culture, traditions, as well as environmental awareness of the population and all those who visit us to jointly contribute to the sustainable development of the island of Porto Santo and to the objectives of the Biosphere.

Porto Santo, 9 de julho de 2019 / July 09, 2019



José Luciano de Vasconcelos
José Luciano de Vasconcelos,

O Presidente da Câmara Municipal do Porto Santo / The Mayor of Porto Santo

CANDIDATURA DE PORTO SANTO A RESERVA DA BIOSFERA DA UNESCO



DECLARAÇÃO DE APOIO À CANDIDATURA DO PORTO SANTO A RESERVA DA BIOSFERA

A **Assembleia Municipal do Porto Santo** manifesta o seu acordo e apoio à candidatura de Porto Santo a Reserva da Biosfera da UNESCO, no âmbito do Programa *O Homem e a Biosfera*. Para a prossecução dos objetivos definidos para a Reserva da Biosfera do Porto Santo, a Assembleia Municipal do Porto Santo assume o compromisso de apoio de iniciativas que promovam o desenvolvimento sócio-económico local, a cultura e as tradições, bem como a consciência ambiental da população e de todos aqueles que nos visitam para, em conjunto, contribuirmos para o almejado desenvolvimento sustentável da nossa ilha.

The City Council of Porto Santo agrees and supports the candidacy of Porto Santo to UNESCO's Biosphere reserve, within the Man and the Biosphere Programme.

To attain the goals defined to Porto Santo's Biosphere Reserve, the City Council of Porto Santo is committed to supporting initiatives that promote local social and economic development, culture and traditions, as well as the environmental consciousness of inhabitants and tourists, so that together we can all contribute to the island's sustainable development.

A Presidente da Assembleia Municipal do Porto Santo

Fátima Ferreira Albino Silva

(Fátima Maria Camacho Ferreira Albino Silva)

CANDIDATURA DE PORTO SANTO A RESERVA DA BIOSFERA DA UNESCO



DECLARAÇÃO DE APOIO À CANDIDATURA DO PORTO SANTO A RESERVA DA BIOSFERA

A **Junta de Freguesia do Porto Santo** felicita a candidatura de Porto Santo a Reserva da Biosfera da UNESCO, no âmbito do Programa *O Homem e a Biosfera*, e compromete-se a apoiar na divulgação e promoção das tradições e costumes locais, bem como preservação do meio ambiente, contribuindo para o desenvolvimento sustentável da nossa ilha.

The Junta de Freguesia do Porto Santo congratulates Porto Santos's candidacy to UNESCO's Biosphere Reserve, within Man and Biosphere Programme, and commits to support and promote local traditions, as well as the preservation of nature, contributing to the island's sustainable development.

A Presidente da Junta de Freguesia do Porto Santo

(Maria Joselina Escórcio de Brito Melim)

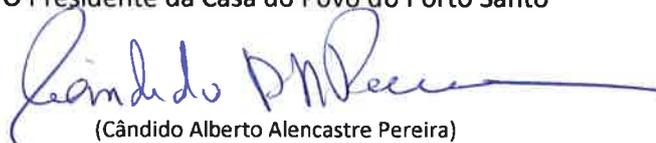
CANDIDATURA DE PORTO SANTO A RESERVA DA BIOSFERA DA UNESCO

DECLARAÇÃO DE APOIO À CANDIDATURA DO PORTO SANTO A RESERVA DA BIOSFERA

A Casa do Povo de N^o Sr^a da Piedade do Porto Santo tem sob a sua alçada a banda filarmónica e a realização de várias actividades como formação musical e concursos de pesca e caça.

A Casa do Povo do Porto Santo felicita a Candidatura de Porto Santo a Reserva da Biosfera da UNESCO, no âmbito do Programa *O Homem e a Biosfera*, e compromete-se a apoiar na divulgação e promoção das tradições e costumes locais, bem como da importância preservação do meio ambiente, contribuindo para o desenvolvimento sustentável da nossa ilha.

O Presidente da Casa do Povo do Porto Santo



(Cândido Alberto Alencastre Pereira)



DECLARAÇÃO DE APOIO À CANDIDATURA DO PORTO SANTO A RESERVA DA BIOSFERA

A Associação Grupo de Folclore do Porto Santo, fundada em 1963, tem como principal objectivo preservar e divulgar a cultura porto-santense através das suas danças e cantares. É uma associação que tem estatutos próprios e está associada à Federação do Folclore Português desde julho de 1977.

A Associação Grupo de Folclore do Porto Santo felicita a candidatura de Porto Santo a Reserva da Biosfera da UNESCO, no âmbito do Programa *O Homem e a Biosfera*, e compromete-se a apoiar na divulgação e promoção das tradições culturais da ilha.

The Associação Grupo de Folclore do Porto Santo, founded in 1963, has as main objective the preservation and promotion of Porto Santo's culture, through their dancing and singing. It has its own statutes and is associated with the Federação do Folclore Português since July 1977.

A Associação Grupo de Folclore do Porto Santo congratulates Porto Santos's candidacy to UNESCO's Biosphere Reserve, within Man and Biosphere Programme, and commits to support and promote the island's cultural traditions.

O Presidente da Associação Grupo de Folclore do Porto Santo


(Francisco Duarte Mendonça)


CANDIDATURA DE PORTO SANTO A RESERVA DA BIOSFERA DA UNESCO

DECLARAÇÃO DE APOIO À CANDIDATURA DO PORTO SANTO A RESERVA DA BIOSFERA

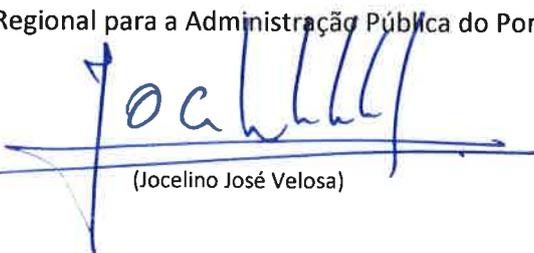
Consciente da importância da Candidatura de Porto Santo a Reserva da Biosfera da UNESCO, no âmbito do Programa *O Homem e a Biosfera*, a **Direção Regional para a Administração Pública do Porto Santo (DRAPS)** apoiou, desde o primeiro momento a iniciativa, assumindo-se como promotora da mesma.

Para a prossecução dos objectivos definidos para a Reserva da Biosfera do Porto Santo, a DRAPS assume o compromisso de apoio e de promoção de iniciativas que promovam o desenvolvimento sócio-económico local, a cultura e as tradições, bem como a consciência ambiental da população e de todos aqueles que nos visitam para, em conjunto, contribuirmos para o desenvolvimento sustentável da ilha.

*Aware of the importance of Porto Santo's appliance to UNESCO's Biosphere Reserve, the **Direção Regional para a Administração Pública do Porto Santo (DRAPS)** supported this initiative since the first moment, assuming its promotion.*

To achieve the defined goals of Porto Santo's Biosphere Reserve, DRAPS is committed to support and promote all the initiatives that promote the local social and economic development, its culture and tradition, as well as the environmental consciousness of local people and tourists, so that together we can contribute to the island's sustainable development.

O Diretor Regional para a Administração Pública do Porto Santo



(Joacino José Velosa)



REGIÃO AUTÓNOMA DA MADEIRA
GOVERNO REGIONAL
SECRETARIA REGIONAL DO AMBIENTE E RECURSOS NATURAIS

**DECLARAÇÃO DE APOIO À CANDIDATURA DA ILHA DO PORTO SANTO A
RESERVA DA BIOSFERA**

A Secretaria Regional do Ambiente e Recursos Naturais é o departamento do Governo Regional da Madeira que define e executa, sob uma perspetiva global e de desenvolvimento sustentável, a política regional nos domínios do ambiente, conservação da natureza e áreas protegidas, florestas, informação geográfica e cartográfica, cadastral, litoral, mar, ordenamento do território e urbanismo, água e saneamento básico.

Esta Secretaria Regional apoia a Candidatura da Ilha do Porto Santo a Reserva da Biosfera, no âmbito do Programa "O Homem e a Biosfera" da UNESCO, comprometendo-se, através de projetos e atividades integradas nos eixos estratégicos de intervenção definidos no Plano de Ação, a contribuir para o desenvolvimento sustentável deste território e para os objetivos da Reserva da Biosfera da Ilha do Porto Santo.

**SUPPORTING STATEMENT OF THE APPLICATION OF PORTO SANTO ISLAND TO
BECOME A BIOSPHERE RESERVE**

The Regional Secretariat of the Environment and Natural Resources is the department of the Regional Government of Madeira, that defines and implements, under a sustainable and global perspective, the regional policies in the areas of the environment, nature conservation and protected areas, forests, cartographic and geographic information, coastal, maritime and urban planning, water resources and wastewater management.

This Regional Secretariat supports the application of Porto Santo Island to become a Biosphere Reserve under the UNESCO's 'Man and the Biosphere' Programme, and commits itself to contribute to the sustainable development of that territory and to the objectives of the Biosphere Reserve of Porto Santo Island through projects and activities aligned with the strategic guidelines defined in its Action Plan.

Funchal, 05-07-2019

A SECRETÁRIA REGIONAL
DO AMBIENTE E RECURSOS NATURAIS,

Susana Luísa Rodrigues Nascimento Prada



REGIÃO AUTÓNOMA DA MADEIRA
GOVERNO REGIONAL
SECRETARIA REGIONAL DE AGRICULTURA E PESCAS

DECLARAÇÃO DE APOIO À CANDIDATURA DA ILHA DO PORTO SANTO A RESERVA DA BIOSFERA

A Secretaria Regional da Agricultura e Pescas, do Governo Regional da Madeira, apoia a candidatura da Ilha do Porto Santo a Reserva da Biosfera, no âmbito do Programa “O Homem e a Biosfera” da UNESCO, reiterando a colaboração na prossecução dos seus objetivos e implementação da mesma.

SUPPORTING STATEMENT OF THE APPLICATION OF PORTO SANTO ISLAND TO BECOME A BIOSPHERE RESERVE

The Regional Secretariat for Agriculture and Fisheries of the Regional Government of Madeira supports the application of Porto Santo Island to become a Biosphere Reserve under the UNESCO’s “Man and the Biosphere” Programme and reiterates its collaboration in the pursuit of its objectives and its implementation.

Funchal, 10-07-2019

O SECRETÁRIO REGIONAL
DE AGRICULTURA E PESCAS,

José Humberto de Sousa Vasconcelos



APOIO À CANDIDATURA DO PORTO SANTO A RESERVA DA BIOSFERA

O Instituto das Florestas e Conservação da Natureza, no âmbito da candidatura da Ilha do Porto Santo a Reserva da Biosfera, pretende afirmar-se como organização de excelência ao serviço da proteção e conservação da natureza e do ambiente, numa atitude partilhada de corresponsabilização com as instituições e a sociedade.

Com efeito, o coberto florestal e vegetal do Porto Santo, os serviços ecossistémicos associados e funções conexas e os seus contributos para uma economia verde, estão na base do desenvolvimento sustentável desta Ilha. Os bens e serviços que oferecem são fundamentais para a manutenção do bem-estar da população e para o desenvolvimento económico e social futuro, sendo pertinente o seu reconhecimento e valorização pelas sociedades, enquanto primazias de interesse público e coletivo.

Este Instituto apoia a Candidatura da Ilha do Porto Santo a Reserva da Biosfera da UNESCO, no âmbito do Programa 'O Homem e a Biosfera', comprometendo-se, através de projetos e outras atividades integradas nos eixos estratégicos de intervenção definidos no Plano de Ação, a contribuir para o desenvolvimento sustentável da Ilha do Porto Santo e para os objetivos da Reserva da Biosfera.

SUPPORT TO PORTO SANTO'S APPLICATION TO BIOSPHERE RESERVE

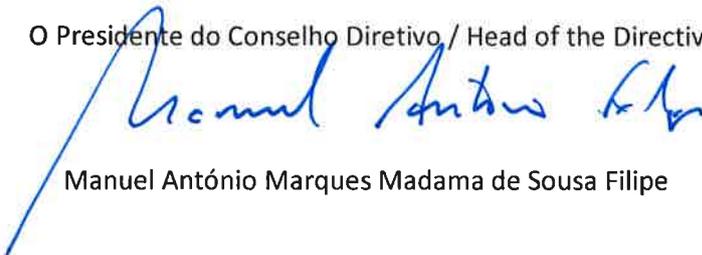
The Institute of Forests and Nature Conservation in the scope of the application of the Island of Porto Santo to the Biosphere Reserve, intends to affirm itself as an organization of excellence in the service of the protection and conservation of nature and the environment, in a shared attitude of with institutions and society.

In fact, the forestry and vegetation cover of Porto Santo, associated ecosystem services and related functions and their contributions to a green economy, are the basis for the sustainable development of this Island. The goods and services they provide are fundamental for the maintenance of the population's well-being and for future economic and social development, and their recognition and appreciation by societies as primacy of public and collective interest is pertinent.

This Institute supports the application of the Porto Santo Island to the UNESCO Biosphere Reserve, within the scope of the 'Man and the Biosphere' Program, committing itself through projects and other activities integrated in the strategic axes defined in the Plan of Action, contributing to the sustainable development of the Island of Porto Santo and to the objectives of the Biosphere Reserve.

Funchal, 04-07-2019

O Presidente do Conselho Diretivo / Head of the Directive Board



Manuel António Marques Madama de Sousa Filipe



Agência Regional da Energia e Ambiente da Região Autónoma da Madeira

APOIO À CANDIDATURA DO PORTO SANTO A RESERVA DA BIOSFERA

A AREAM – Agência Regional da Energia e Ambiente da Região Autónoma da Madeira tem por missão a promoção da eficiência energética, energias renováveis, mobilidade sustentável e adaptação às alterações climáticas, bem como o planeamento, a cooperação e a inovação associadas a estas áreas, nas ilhas da Madeira e do Porto Santo.

Neste contexto, a AREAM apoia a Candidatura do Porto Santo a Reserva da Biosfera da UNESCO, no âmbito do Programa *O Homem e a Biosfera*, comprometendo-se, através de projetos e outras atividades integradas na iniciativa *Smart Fossil Free Island*, a contribuir para o desenvolvimento sustentável da ilha do Porto Santo e para os objetivos da Reserva da Biosfera.

SUPPORT TO PORTO SANTO'S APPLICATION TO BIOSPHERE RESERVE

AREAM's aim is to promote energy efficiency, renewable energies, sustainable mobility and adaptation to climate change, as well as the planning, cooperation and innovation associated with these areas, in the islands of Madeira and Porto Santo.

In this context, AREAM supports the application of Porto Santo to the UNESCO Biosphere Reserve, within the scope of the Man and the Biosphere Program, committing itself through projects and other activities integrated in the Smart Fossil Free Island initiative to contribute to the sustainable development of Porto Santo island and to the objectives of the Biosphere Reserve.

Funchal, 3-07-2019

O Presidente do Conselho de Administração | Head of Administration Board


AREAM
Agência Regional da Energia e Ambiente
da Região Autónoma da Madeira
A Administração
Filipe Oliveira



REGIÃO AUTÓNOMA DA MADEIRA
GOVERNO REGIONAL
SECRETARIA REGIONAL DE AGRICULTURA E PESCAS
DIREÇÃO REGIONAL DE AGRICULTURA

Declaration of support for the application of Porto Santo to the UNESCO Biosphere Reserve

The Island of Porto Santo presents its own identity that is reflected in the agricultural activity that it develops. The Biosphere Reserve of the Island of Porto Santo advocates the revitalization of local agriculture and the development of techniques more environmentally friendly. These activities are fundamental in the perspective of the sustainability of the territory and its people, not only at the ecological level, but also at the level of green economy development, contributing to the creation and promotion of local products and differentiated services where traditional gastronomy stands out. Training and technical support for local producers will play a key role in achieving quality crops and promoting respect for and safeguarding natural resources.

From the above, the Regional Directorate of Agriculture supports and praises the application of Porto Santo to the UNESCO Biosphere Reserve.

Funchal, July 3, 2019

Regional Director for Agriculture

António Paulo S. Franco Santos





ARM - Águas e Resíduos
da Madeira, S.A.

Declaração de apoio à candidatura do Porto Santo a Reserva da Biosfera da UNESCO

A Reserva da Biosfera da Ilha do Porto Santo pretende criar um destino diferenciado e pioneiro no âmbito da sustentabilidade, promovendo o desenvolvimento local, o respeito pela conservação da natureza e a valorização do seu património e das suas gentes.

A ARM - Águas e Resíduos da Madeira, S.A., enquanto entidade responsável pela gestão da água para consumo humano, água residual e resíduos urbanos na ilha do Porto Santo, partilha e comunga destes objetivos, contribuindo para que o Porto Santo constitua uma comunidade desenvolvida que valoriza e salvaguarda o seu património natural e cultural e seja um território exemplar nas áreas da economia verde, da economia circular e da economia de baixo carbono.

Neste sentido, a ARM - Águas e Resíduos da Madeira, S.A., manifesta o seu total apoio a esta candidatura a Reserva da Biosfera da UNESCO, no âmbito do Programa "O Homem e a Biosfera", reiterando a sua inteira colaboração na prossecução dos objetivos e implementação da mesma e fazendo muitos votos do seu muito sucesso.

Declaration of support for the application of Porto Santo to the UNESCO Biosphere Reserve

The Biosphere Reserve of the Island of Porto Santo aims to create a distinguished and pioneer destination concerning sustainability, promoting simultaneously the local development, the protection of the environment and the value of its heritage and its people.

ARM - Águas e Resíduos da Madeira, S.A., as the company in charge of water supply, wastewater and waste management in the island of Porto Santo, shares and participates in these goals, aiming to create in Porto Santo a developed community that safeguards its natural and its cultural heritage and a place that is an exemplary territory in the areas of the green economy, the circular economy and the low carbon economy.

As such, ARM - Águas e Resíduos da Madeira, S.A., expresses its full support in the application for the UNESCO Biosphere Reserve under "The Man and the Biosphere Program" and reiterates its complete collaboration in the pursuit of its objectives and implementation, presenting its hopes for its long success.

Funchal, 17 de junho de 2019

O Presidente do Conselho de Administração, em exercício,

ARM
Águas e Resíduos da Madeira, S.A.


(Ricardo Nuno Rodrigues Fernandes Manica)



REGIÃO AUTÓNOMA DA MADEIRA
GOVERNO REGIONAL
SECRETARIA REGIONAL DE AGRICULTURA E PESCAS
DIREÇÃO REGIONAL DE PESCAS

Declaration of support for the application of Porto Santo to the UNESCO Biosphere Reserve

The Regional Directorate for Fisheries recognizes the importance of the Application of Porto Santo to the UNESCO Biosphere Reserve to the sustainable development of this island of the Autonomous Region of Madeira namely to pursue the protection and valorisation of its marine heritage and to promote de blue economy.

In this sense, it is with great satisfaction that we support the Application of Porto Santo to the UNESCO Biosphere Reserve, within the scope of "The Man and the Biosphere" program, committing itself to jointly contribute to the pursuit of its objectives.

Funchal, June 12, 2019

Regional Director for Fisheries

José Luís da Silva Ferreira



MUSEU
ETNOGRÁFICO
DA
MADEIRA



**Supporting candidature application for Porto Santo in the
UNESCO Biosphere Reserve**

Porto Santo represents a culture that marks the identity of people, who still is very much attached to traditions, but emerge new trends with the influence o globalization. The local culture heritage, material and immaterial, portrays a history that will value and revitalize so as to perpetuate in time and affirm Porto Santo as a quality distinct destination whilst being biosphere Reserve of UNESCO.

It's in the sense that the Ethnographic Museum of Madeira, plays an important role and it's main mission is to preserve, investigate, maintain, value, promote and witness within their competence. There for reaffirming the support of the application in reference, which is considered important for the consolidation of values and customs, through establishing new and improved goals, along with the definition of shared strategies that can be archived.

Ribeira Brava, 31-05-2019

A DIRETORA
GOVERNO REGIONAL DA MADEIRA

D.R.C.
MUSEU ETNOGRÁFICO DA MADEIRA



REGIÃO AUTÓNOMA DA MADEIRA
GOVERNO REGIONAL
SECRETARIA REGIONAL DO AMBIENTE E RECURSOS NATURAIS
DIREÇÃO REGIONAL DO ORDENAMENTO DO TERRITÓRIO E AMBIENTE

DECLARATION

SUPPORT FOR THE APPLICATION OF PORTO SANTO TO AN UNESCO BIOSPHERE RESERVE

The application of Porto Santo to an UNESCO Biosphere Reserve aims to affirm this Atlantic Island as a differentiated territory and pioneer in the field of sustainability, with a concerted strategy of harmonization between local development and respect for nature conservation, the valuation of its natural and cultural heritage and its people. This Biosphere Reserve will foster the production and exchange of scientific, technological and traditional knowledge, involving the scientific community, policy makers and citizen groups, and will give visibility to Porto Santo as a living laboratory and demonstrative model of balance between nature conservation and activities, through networking and sharing among different agents, favoring local development. For this reason, we strongly recommend the application of Porto Santo to an UNESCO Biosphere Reserve.

Regional Directorate for Land Planning and Environment, 28th May 2019

The Regional Director,





REGIÃO AUTÓNOMA DA MADEIRA
GOVERNO REGIONAL
SECRETARIA REGIONAL DO TURISMO E CULTURA
DIREÇÃO REGIONAL DA CULTURA

Declaration of support for the application of Porto Santo to the UNESCO Biosphere Reserve

The Regional Directorate of Culture is hereby transmitting its support to the application of Porto Santo to the UNESCO Biosphere Reserve. This application also represents the recognition of the treasure that it is the material and immaterial cultural heritage of Porto Santo and portrays the history of a people that has always had a dynamic relationship with the island, land and sea.

The classification of the Porto Santo UNESCO Biosphere Reserve will promote the assertive Man-Biosphere relationship fundamental to local sustainable development.

Funchal, 29 de maio de 2019

A DIRETORA REGIONAL

Maria Teresa Freitas Brazão





REGIÃO AUTÓNOMA DA MADEIRA
GOVERNO REGIONAL
SECRETARIA REGIONAL DO TURISMO E CULTURA
DIREÇÃO REGIONAL DO TURISMO

DECLARATION

The Regional Tourism Directorate hereby declares, for all due purposes, to recognize the importance of “Porto Santo to the UNESCO’s Biosphere Reserve” application, headed by the Regional Environment and Natural Resources Secretariat.

The project aims to value and preserve its natural and cultural heritage. This Biosphere Reserve will encourage the production and exchange of scientific, technological and traditional knowledge, involving the scientific community, political decision-makers and citizen groups, showing Porto Santo as a live laboratory and a demonstrative model of the balance between the nature conservation and human activities through a network, as well as sharing work between different agents, privileging the local development.

The general lines presented are worthy of interest either due to its scientific aspect of natural heritage preservation and disclosure of this Region’s biodiversity, not only through the economic and touristic aspect of one of the greatest assets of the regional activity as well as an attraction and valuation factor of the touristic offer.

This application derives from the Structuring Programme for Porto Santo, within the scope of the initiative “Sustainable Porto Santo – Smart Fossil Free Island”, pursuant to the resolution no. 263/2016 of the Regional Government Council of Madeira, of 19th May, aiming to promote a greater environmental, economic and social sustainability.

This submission is focused on a strategy integrated in the global environmental, social and economic improvement taking into consideration its limited territory and its relevant sociodemographic conditions, as demonstrated in the objectives framework 4th Structuring Programme – Porto Santo, present on the Tourism Management Plan (POT) in force, from which we highlight:

- The sustainable management of water with low carbon emissions;





REGIÃO AUTÓNOMA DA MADEIRA
GOVERNO REGIONAL
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DIREÇÃO REGIONAL DO TURISMO

- The sustainable management of solid waste and urban effluents;
- The reduction of the dependency on imported fossil fuels and increase of the energy efficiency;
- The promotion of conditions for a sustainable mobility;
- The promotion of the entrepreneurship, within the tourism area, regarding the natural and cultural resources and the organic agriculture;
- The study and promotion of a touristic offer which contributes for the reduction of the seasonal demand;
- The study and promotion of products and niche markets associated to the health, wellbeing and Nature;
- The certification of the Porto Santo's Touristic Destination and its main products and services.

Funchal, 6th of June 2019

THE REGIONAL DIRECTOR

Dorita Mendonça



Funchal, 25 June 2019

Subject: Support for Porto Santo application to UNESCO Reserve of Biosphere

ARDITI is the Regional Agency for the Development of Research, Technology and Innovation (in Madeira Island, Portugal). It is a private non-profit association, founded by the University of Madeira and by the Regional Government of Madeira.

The aim of ARDITI is to promote and support Research, Technological Development and Innovation (RTD&I) within the Autonomous Region of Madeira, in particular by: Making research and innovation a priority for Madeira, stimulating economic growth and creating highly qualified jobs; Carrying and funding RTD&I projects, scholarships (including PhD and Postdoctoral grants); Supporting the regional government in the definition and implementation of science and technology policies; Promoting and disseminating RTD&I results and knowledge transfer to business, service and industrial sectors; Promoting a greater involvement of all stakeholders, in the development, implementation and monitoring of the EU Smart Specialization Strategy in the Region.

ARDITI was in the genesis of the definition of the Research and Innovation Strategy for Smart Specialization (RIS3) for the Autonomous Region of Madeira, and is mandated by the government to implement and monitor the RTD&I strategic plan.

ARDITI supports the application of Porto Santo to the UNESCO Biosphere Reserve, under the 'Man and the Biosphere Program', with the commitment to help achieve the proposed objectives and implementation program.

Chairman of the Executive Committee



Clemente Aguiar



ARDITI
Agência Regional para o Desenvolvimento
da Investigação, Tecnologia e Inovação
Madeira Tecnopolo, Piso 2
Caminho da Penteadá
9020-105 Funchal



Letter of Support for the Application of Porto Santo to UNESCO Reserve Biosphere

In my personal name and as Coordinator of the Centre for Ecology, Evolution and Environmental Changes (cE3c), I hereby, confirm our interest and enthusiasm in supporting the application of Porto Santo to the UNESCO Reserve Biosphere. Accordingly also to our Research Centre aims, this application represents a remarkable diversity of landscapes, natural and semi-natural ecosystems with high conservation and scientific values.

Thus, it is my privilege and honour to support this initiative and hope that will be fully successful.

cE3c, June 05 2019



cE3c
centre for ecology, evolution
and environmental changes

Prof. Cristina Máguas
Scientific Coordinator of cE3c

DOCUMENTO

DECLARAÇÃO/ DECLARATION

ASSUNTO

APOIO À CANDIDATURA DO PORTO SANTO A RESERVA DA BIOSFERA DA UNESCO/
SUPPORT FOR PORTO SANTO CANDIDATURE TO UNESCO RESERVE OF
BIOSPHERE

O ISOPlexis, Centro de Agricultura Sustentável e Tecnologia Alimentar, é uma unidade da Universidade da Madeira que desenvolve atividade de investigação, desenvolvimento e inovação (I&D+I) no domínio da **agricultura, sustentabilidade e tecnologia alimentar**, com enfoque na agrobiodiversidade. O ISOPlexis, através do seu banco de Germoplasma e grupos de investigação contribui para o conhecimento, conservação, avaliação e valorização dos recursos genéticos para agricultura e alimentação. No âmbito da sua atividade, o ISOPlexis participa em diversos programas de investigação, na Rede regional de Bancos de Germoplasma da FAO e no sistema europeu AEGIS, contribuindo para a implementação dos Planos de Ação Nacional e Europeu para os Recursos Genéticos. Estes programas e projetos tem uma incidência direta ou indireta sobre o território da candidatura à Reserva da Biosfera. Pelo exposto o ISOPlexis tem uma enorme sensibilidade e afinidade para com iniciativas, que visem a promoção do desenvolvimento sustentável e integrado das comunidades, e em particular de uma comunidade, como o Porto Santo. Para esta comunidade, devido às suas condicionantes geográficas, a elevação a Reserva da Biosfera pode constituir um elemento diferenciador e aglutinador na promoção do seu desenvolvimento sustentável. O Porto Santo é a primeira comunidade europeia fundada fora do território geográfico da Europa, durante as descobertas geográficas, com 600 anos de existência esta comunidade, apresenta particularidades, territoriais, ambientais e culturais que enriquecem uma Reserva da Biosfera. Estes são alguns dos argumentos que nos levam a apoiar a candidatura do Porto Santo a Reserva da Biosfera da UNESCO, no âmbito do Programa O Homem e a Biosfera, comprometendo-se a unidade a contribuir para a prossecução dos objetivos e implementação da mesma.

The ISOPlexis, Centre for Sustainable Agriculture and Food Technology, is a unit of the University of Madeira that develops research, development and innovation (R & D & I) activities in the domain of agriculture, sustainability and food technology, with a focus on agrobiodiversity. ISOPlexis, through its germplasm bank and research groups contributes to the knowledge, conservation, evaluation and valorisation of genetic resources for food and agriculture. ISOPlexis take part in several research programs, in the FAO Regional Network

of Germplasm Banks and in the European AEGIS system, contributing to the implementation of the National and European Action Plans for Genetic Resources. These programs and projects have a direct or indirect effect on the territory of the application for the Biosphere Reserve.

Therefore, ISOPlexis has a great sensitivity and affinity with initiatives aimed at promoting the sustainable and integrated development of communities, and in particular of a community such as Porto Santo. For this community, due to its geographical constraints, the elevation to the Biosphere Reserve can be a differentiating and agglutinating motif in the promotion of its sustainable development. Porto Santo is the first European community founded outside the geographic territory of Europe, during the geographical discoveries, with 600 years of existence this community, presents territorial, environmental and cultural features that could enrich a Biosphere Reserve.

These arguments that lead us to support the application of Porto Santo to the UNESCO Biosphere Reserve, under the Man and the Biosphere Program, with the commitment to contribute to the achievement of the objectives and implementation of the Program.

O coordenador do ISOPlexis
Professor Doutor Miguel Ângelo Carvalho



CANDIDATURA DE PORTO SANTO A RESERVA DA BIOSFERA DA UNESCO



DECLARAÇÃO DE APOIO À CANDIDATURA DO PORTO SANTO A RESERVA DA BIOSFERA

Consciente da importância da Candidatura de Porto Santo a Reserva da Biosfera da UNESCO, no âmbito do Programa *O Homem e a Biosfera*, a **AIDGLOBAL – Acção e Integração para o Desenvolvimento Global (AIDGLOBAL)** apoiou, desde o primeiro momento a iniciativa, assumindo-se como promotora da mesma.

Para a prossecução dos objectivos definidos para a Reserva da Biosfera do Porto Santo, a AIDGLOBAL assume o compromisso de apoio e realização de iniciativas que promovam o desenvolvimento sustentável a nível social, cultural e ecológico.

*Aware of the importance of Porto Santo's appliance to UNESCO's Biosphere Reserve, the **AIDGLOBAL – Acção e Integração para o Desenvolvimento Global (AIDGLOBAL)** supported this initiative since the first moment, assuming its promotion.*

To achieve the defined goals of Porto Santo's Biosphere Reserve, AIDGLOBAL is committed to support and organize initiatives that promote the sustainable development at social, cultural and ecological level.

AIDGLOBAL

Acção e Integração para o Desenvolvimento Global
Organização Não-Governamental para o Desenvolvimento

Cont. N.º 507 501 063

A Direcção

A Presidente da Direcção da AIDGLOBAL


(Susana Damasceno)



Letter of Support

To whom it may concern, I hereby declare that the Research Unit GeoBioTec, hosted by University of Aveiro (UA) supports the application of Porto Santo to UNESCO Reserve of Biosphere.

For more than 30 years, we have carried Research and Innovation projects in Porto Santo focused both on basic geological knowledge and on applied research on local Georesources, with particular emphasis on Medical Geology, Geoheritage and Geotourism, always aiming the local and regional sustainable development in close partnership with local and regional public and private entities.

Therefore, GeoBioTec not only supports the application of Porto Santo to the UNESCO Biosphere Reserve, under the 'Man and the Biosphere Program', but also states its commitment to help achieve the proposed objectives and implementation program.

University of Aveiro, June 28th 2019

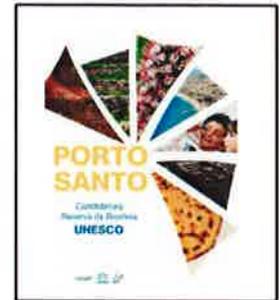
The GeoBioTec Director



(Professor Fernando Tavares Rocha)



ASSOCIAÇÃO INSULAR
DE GEOGRAFIA



SUPPORTING STATEMENT OF THE APPLICATION OF PORTO SANTO TO BECOME BIOSPHERE RESERVE

The Associação Insular de Geografia (Insular Association of Geography), a non-governmental and non-profit organization who promote research, development and innovation in Geography recognizes the importance of the Application of Porto Santo to the UNESCO Biosphere Reserve to the sustainable development of this island of the Autonomous Region of Madeira (Portugal) namely to pursue the valorization, protection and management of its natural heritage.

In this sense, it was with great satisfaction that we received the news of the Application of Porto Santo to the UNESCO Biosphere Reserve, within the scope of the Man and the Biosphere Program, committing itself to jointly contribute to the pursuit of its objectives.

Câmara de Lobos, 08 de maio de 2019

A Direção da Associação Insular de Geografia

ASSOCIAÇÃO INSULAR DE GEOGRAFIA
NIF: 511251947
A DIREÇÃO

(José Ilídio Jesus Sousa)



ASSOCIAÇÃO DE PROMOÇÃO DA
MADEIRA
PROMOTION BUREAU

Associação de Promoção da Madeira
Rua dos Azeitões nº 24/26
9000-044 Funchal, Portugal

Tel: +351 291 223 420
Fax: +351 291 222 167
E-mail: geral@ap-madeira.pt

DECLARAÇÃO DE APOIO À CANDIDATURA DO PORTO SANTO A RESERVA DA BIOSFERA DA UNESCO

A candidatura do Porto Santo a Reserva da Biosfera da UNESCO visa afirmar esta Ilha atlântica como um território diferenciado, com uma estratégia concertada de harmonização entre o desenvolvimento local e o respeito pela natureza, a valorização do seu património e a melhoria da qualidade de vida das suas gentes.

No Porto Santo, a interação dos valores naturais com os valores culturais está expressa no património quer material, quer imaterial. É a riqueza destes valores patrimoniais que dão conta da oferta única deste território.

A Associação de Promoção da Madeira, que tem por objecto promover e divulgar a Região Autónoma da Madeira como destino turístico, tendo em vista a criação de oportunidades para o destino, inclui no seu leque de actividades a promoção, divulgação e valorização do Porto Santo e de todas as suas valências turísticas, de que a constituição de uma Reserva da Biosfera constituiria uma mais-valia ímpar na diferenciação em relação a outros destinos.

Nesse sentido, a Associação de Promoção da Madeira reitera o seu apoio à candidatura do Porto Santo a reserva da Biosfera da UNESCO, na medida em que irá criar um novo e distinto factor de atracção turística, contribuindo, assim, para a valorização e fortalecimento do património turístico do destino Madeira.

The application of Porto Santo to the UNESCO Biosphere Reserve has the purpose of claiming this Atlantic island as a differentiated territory which provides a concerted strategy of harmonization between local development and respect for nature, enhancement of its heritage and improvement of its people's quality of life.

In Porto Santo, the interaction between natural and cultural values is manifested in its material and immaterial heritage. The richness of these patrimonial values account for the uniqueness of this territory's offer.

Madeira Promotion Bureau is responsible for promoting and marketing Madeira as a tourism destination with the aim of creating opportunities for the destination. Within the scope of its activities are included the promotion, marketing and enhancement of Porto Santo and all its touristic richness's. The creation of a Biosphere Reserve would bring added value to those richness's and would represent a differentiating factor in comparison to other destinations.



Associação de Promoção da Madeira
Rua dos Ananias nº 24/26
9000-1044 Funchal, Portugal

Telef: +351 291 222 400
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E-mail: geral@apmadeira.pt

Hence, Madeira Promotion Bureau reaffirms its support to the application of Porto Santo to the UNESCO Biosphere Reserve in so far it will create a new and distinct tourism attraction factor thus contributing to the strengthening of Madeira's touristic heritage.

Funchal, 24 de maio de 2019

António Gabriel de Castro Gonçalves
*Vogal da Direcção da
Associação de Promoção da Região
Autónoma da Madeira*

Roberto João Freitas Santa Clara Gomes
*Director Executivo da
Associação de Promoção da Região
Autónoma da Madeira*

CANDIDATURA DO PORTO SANTO A RESERVA DA BIOSFERA DA UNESCO

DECLARAÇÃO DE APOIO À CANDIDATURA DO PORTO SANTO A RESERVA DA BIOSFERA

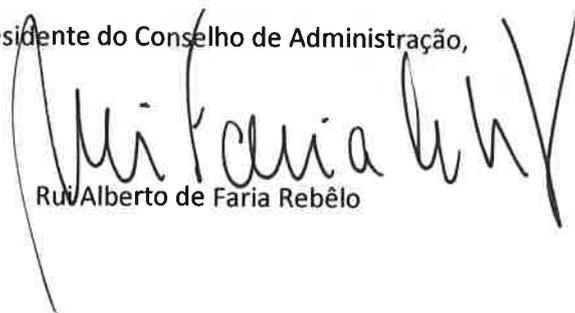
A EEM – Empresa de Electricidade da Madeira, S.A. é uma empresa pública que tem por missão a produção e o fornecimento de energia elétrica nas ilhas da Madeira e do Porto Santo, bem como a promoção da inovação e novas tecnologias associadas à energia.

No Porto Santo, a EEM está a desenvolver vários projetos que visam promover a sustentabilidade do território e a neutralidade carbónica, designadamente a instalação de contadores e implementação de redes elétricas inteligentes, a instalação de baterias para aumentar a integração de energias renováveis e melhorar a eficiência do sistema elétrico e a promoção da mobilidade elétrica, enquadrados na iniciativa *Smart Fossil Free Island*.

Neste contexto, é com grande satisfação que a EEM apoia a Candidatura do Porto Santo a Reserva da Biosfera da UNESCO, no âmbito do Programa *O Homem e a Biosfera*, comprometendo-se, através da implementação das ações integradas na iniciativa *Smart Fossil Free Island*, a contribuir para o desenvolvimento sustentável da ilha do Porto Santo e para os objetivos da Reserva da Biosfera.

Funchal, 17 de maio de 2019.

O Presidente do Conselho de Administração,



Rui Alberto de Faria Rebêlo

CANDIDATURA DE PORTO SANTO A RESERVA DA BIOSFERA DA UNESCO



DECLARAÇÃO DE APOIO À CANDIDATURA DO PORTO SANTO A RESERVA DA BIOSFERA

A **Universidade Sénior do Porto Santo**, criada em 2013, sob a alçada da Direção Regional para a Administração Pública do Porto Santo e Junta de Freguesia do Porto Santo, tem como objectivo principal dinamizar a população sénior local.

Tendo em conta os objectivos preconizados para a Reserva da Biosfera, a Universidade Sénior do Porto Santo vem por este meio manifestar o seu apoio e comprometer-se a contribuir para manter a população da terceira idade local ativa, com vista a aumentar a sua qualidade de vida. De entre as actividades propostas, de referir a revitalização de artes e ofícios, recuperação de antigas histórias e cantares e as actividades intergeracionais, garantindo a passagem de testemunhos do passado da história do Porto Santo.

Porto Santo's Senior University, created in 2013, under Direção Regional para a Administração Pública do Porto Santo (DRAPS) and Junta de Freguesia do Porto Santo, has as its main aim to boost the local senior population.

Considering the defined goals to the Biosphere Reserve, Porto Santo's Senior University hereby expresses its support and commitment to contribute to keep local senior population active, increasing its quality of life. Among the proposed activities, we must highlight the revival of arts and crafts, old stories and songs recovery and intergenerational activities, ensuring the transmission of Porto Santo's past history to the next generations.

O Diretor Regional para a

Administração Pública do Porto Santo

(Jocelino José Velosa)

A Presidente da Junta de Freguesia

do Porto Santo

(Maria José Escórcio de Brito Melim)



DECLARAÇÃO DE APOIO À CANDIDATURA DO PORTO SANTO A RESERVA DA BIOSFERA

A Quinta das Palmeiras é um mini zoo e jardim botânico que oferece aos visitantes a possibilidade de observar algumas espécies ornitológicas e uma variedade de plantas luxuriantes.

Sendo a Candidatura de Porto Santo a Reserva da Biosfera da UNESCO, no âmbito do Programa *O Homem e a Biosfera*, uma mais valia para o desenvolvimento sustentável local, a Quinta das Palmeiras compromete-se a apoiar na divulgação e promoção de boas práticas ambientais e preservação do meio natural e sua diversidade.

Quinta das Palmeiras is a mini-zoo and botanic garden that offers visitors the possibility to observe some ornithological species and a variety of lush plants.

Being the Porto Santo's appliance to UNESCO's Biosphere Reserve, within the Man and the Biosphere Programme, an asset for sustainable local development, the Quinta das Palmeiras is committed to support the promotion of good environmental practices and the preservation the natural environment and its diversity.

O responsável pela Quinta das Palmeiras



(Carlos Manuel Ferreira Afonso)

CANDIDATURA DE PORTO SANTO A RESERVA DA BIOSFERA DA UNESCO



DECLARAÇÃO DE APOIO À CANDIDATURA DO PORTO SANTO A RESERVA DA BIOSFERA

O **CNE (Corpo Nacional de Escutas)** é uma associação que valoriza, não só o desenvolvimento do indivíduo, mas também a preocupação para com o mundo que o rodeia.

Como tal, foi com grande satisfação que o Agrupamento 999 do Porto Santo recebeu a notícia da candidatura de Porto Santo a Reserva da Biosfera da UNESCO, no âmbito do Programa *O Homem e a Biosfera*.

De forma a atingir os objectivos da Reserva da Biosfera compromete-se o grupo de escuteiros a reforçar a aposta na promoção da consciência ambiental e das tradições locais, não só no seio do Agrupamento, mas também junto dos restantes agrupamentos que nos visitam todos os anos.

O Chefe do Agrupamento 999 do Porto Santo





Associação Cultural e Recreativa do Espírito Santo

Associação de Utilidade Pública

DECLARAÇÃO DE APOIO À CANDIDATURA DO PORTO SANTO A RESERVA DA BIOSFERA

A **Associação Cultural e Recreativa do Espírito Santo (ACES)**, criada em 2004, tem como objetivo a realização de atividades culturais, recreativas e desportivas para aproveitamento dos tempos livres dos seus associados e população em geral. O grupo de teatro amador da ACES foi formado em 2007, tendo representado várias peças ao longo do tempo.

Desta forma, apresenta um amplo espetro de ação, destacando-se as actividades de cariz social e cultural, dinamizando a oferta cultural e tradições.

Reconhecendo a importância do desenvolvimento social, económico e cultural da ilha, a ACES felicita e apoia a Candidatura de Porto Santo a Reserva da Biosfera da UNESCO, no âmbito do Programa *O Homem e a Biosfera*, comprometendo-se a contribuir na divulgação das tradições e apoio na realização de actividades culturais para toda a população.

O Presidente da Direção da Associação Cultural e Recreativa do Espírito Santo

A handwritten signature in blue ink, consisting of a large, stylized initial 'M' followed by several horizontal strokes.

Manuel Gregório Pestana

CANDIDATURA DE PORTO SANTO A RESERVA DA BIOSFERA DA UNESCO



DECLARAÇÃO DE APOIO À CANDIDATURA DO PORTO SANTO A RESERVA DA BIOSFERA

A gastronomia local é um dos fatores de atração turística, pelo que importa apostar nos sabores da nossa terra, desvendando a cultura do Porto Santo a todos aqueles que nos visitam.

O Restaurante Torres felicita a Candidatura de Porto Santo a Reserva da Biosfera, no âmbito do Programa *O Homem e a Biosfera* da UNESCO, e compromete-se a contribuir para o aumento do consumo dos produtos locais, estimulando a produção agrícola e promoção dos sabores e das tradições locais.

Being the local cuisine one factor of tourist attraction, we must bet in the flavors of our land, revealing Porto Santo's culture to all our visitors.

Restaurant Torres congratulates Porto Santos's candidacy to UNESCO's Biosphere Reserve, within Man and Biosphere Programme, and commits to contribute to the increase of local products consumption, stimulating agricultural production and promoting local traditions and flavors.

A gerência,

(Nelita Elizabete Freitas Melim)

CANDIDATURA DE PORTO SANTO A RESERVA DA BIOSFERA DA UNESCO



DECLARAÇÃO DE APOIO À CANDIDATURA DO PORTO SANTO A RESERVA DA BIOSFERA

Consciente da importância da Candidatura de Porto Santo a Reserva da Biosfera da UNESCO, no âmbito do Programa *O Homem e a Biosfera*, a **Direção Regional para a Administração Pública do Porto Santo (DRAPS)** apoiou, desde o primeiro momento a iniciativa, assumindo-se como promotora da mesma.

Para a prossecução dos objectivos definidos para a Reserva da Biosfera do Porto Santo, a DRAPS assume o compromisso de apoio e de promoção de iniciativas que promovam o desenvolvimento socioeconómico local, a cultura e as tradições a levar a cabo pelos Museus do Porto Santo – Casa Colombo e Núcleo Brum do Canto.

Aware of the importance of Porto Santo's appliance to UNESCO's Biosphere Reserve, the Direção Regional para a Administração Pública do Porto Santo (DRAPS) supported this initiative since the first moment, assuming its promotion.

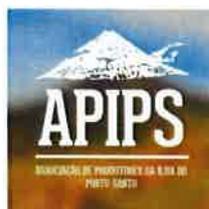
To achieve the defined goals of Porto Santo's Biosphere Reserve, DRAPS is committed to support and promote all the initiatives that promote the local social and economic development, its culture and traditions organized by Museus do Porto Santo – Casa Colombo e Núcleo Brum do Canto.

O Diretor Regional para a Administração Pública do Porto Santo

A handwritten signature in blue ink, appearing to read 'Jocelino José Velosa', is written over a horizontal line. Below the signature, the name '(Jocelino José Velosa)' is printed in black text.

CANDIDATURA DE PORTO SANTO A RESERVA DA BIOSFERA DA UNESCO

CANDIDATURA A RESERVA
da BIOSFERA da UNESCO
PORTO SANTO
MADERA PORTUGAL



DECLARAÇÃO DE APOIO À CANDIDATURA DO PORTO SANTO A RESERVA DA BIOSFERA

A **Associação de Produtores da Ilha do Porto Santo** tem como objectivos o aumento do consumo e defesa dos produtos locais, assente numa utilização racional dos nossos recursos naturais.

A Candidatura de Porto Santo a Reserva da Biosfera da UNESCO, no âmbito do Programa *O Homem e a Biosfera*, constitui uma mais valia para o desenvolvimento sustentável local, pelo que a APIPS se compromete a apoiar na divulgação e promoção de boas práticas ambientais e preservação do meio natural e sua diversidade.

The Associação de Produtores da Ilha do Porto Santo aims to increase the consumption and protection of local products, based on rational use of our natural resources.

The Porto Santo's appliance to UNESCO's Biosphere Reserve, within the Man and the Biosphere Programme, constitutes an asset for sustainable local development, so the APIPS is committed to support the promotion of good environmental practices and the preservation the natural environment and its diversity.

O Presidente da Associação de Produtores
da Ilha do Porto Santo

(Hugo Brandão)



DECLARAÇÃO DE APOIO À CANDIDATURA DO PORTO SANTO A RESERVA DA BIOSFERA

A **Casa da Serra** é um pólo divulgador da cultura e das tradições da ilha do Porto Santo, dando a conhecer o passado do seu povo, as suas tradições culturais e gastronómicas, permitindo ainda degustar e saborear algumas bebidas e doçarias locais.

Desta forma, foi com satisfação com que a **Casa da Serra** recebeu a Candidatura de Porto Santo a Reserva da Biosfera da UNESCO, no âmbito do Programa *O Homem e a Biosfera*, comprometendo-se a continuar a apoiar na divulgação da história, tradição e cultura do Porto Santo.

Casa da Serra is a promoter of culture and traditions of the island of Porto Santo, allowing to know the past of its people, cultural and gastronomic traditions, where you can taste and enjoy local drinks and cookies.

Casa da Serra was very pleased to know about Porto Santo's candidacy to Biosphere Reserve, within the Man and the Biosphere Programme, pledging to continue to support the promotion of the history, tradition and culture of Porto Santo.

O proprietário da Casa da Serra



(Lomelino Velosa)

CANDIDATURA DO PORTO SANTO A RESERVA DA BIOSFERA DA UNESCO

DECLARAÇÃO DE APOIO À CANDIDATURA DO PORTO SANTO A RESERVA DA BIOSFERA

SUPPORTING STATEMENT OF THE APPLICATION OF PORTO SANTO TO BECOME BIOSPHERE RESERVE

O Núcleo Infantil do Pé-do-Pico, Porto Santo, tem desenvolvido esforços no sentido de promover a biodiversidade e a geodiversidade local e alertar para a necessidade da sua protecção. Tal empenho é reforçado pelo programa *Eco-Escolas* que, através das actividades desenvolvidas, encoraja a comunidade educativa a adotar um comportamento de maior preocupação e cuidado para com o meio ambiente.

Neste sentido, foi com satisfação que o Núcleo Infantil do Pé-do-Pico, Porto Santo, recebeu a notícia da Candidatura do Porto Santo a Reserva da Biosfera da UNESCO, no âmbito do Programa *O Homem e a Biosfera*, comprometendo-se no apoio à prossecução dos seus objectivos, para em conjunto contribuírem para o desenvolvimento sustentável da nossa ilha.

The Nursery Childhood Nucleus of Pé-do-Pico, Porto Santo, has developed efforts to promote biodiversity and local geodiversity and the need for its protection. This commitment is reinforced by the Eco-Schools program which, through its activities, encourages the educational community to adopt a behavior of greater concern and care for the environment.

In this sense, it was with satisfaction that the Nursery Childhood Nucleus of Pé-do-Pico, Porto Santo, Porto Santo, received the news of the Application of Porto Santo to the UNESCO Biosphere Reserve, within the scope of the Man and the Biosphere Program, pledging to support the pursuit of its objectives, to jointly contribute to the sustainable development of our island.

Porto Santo, 4 de julho de 2018

A coordenadora do Núcleo Infantil do Pé-do-Pico,



Ivânia José Vasconcelos Faria



DECLARAÇÃO DE APOIO À CANDIDATURA DO PORTO SANTO A RESERVA DA BIOSFERA

A Loja do Profeta foi criada com o intuito de colmatar uma lacuna no comércio de souvenirs na ilha do Porto Santo, com a criação de uma imagem gráfica que valorizasse a identidade do nosso povo.

Os produtos vendidos incentivam à preservação de vários elementos, tais como o burro, o caracol, o barco carreiro, o moinho de vento e a lambeça.

A preservação do meio ambiente é uma das nossas preocupações, sendo os diversos materiais que dão à costa reaproveitados para transformar em peças de arte.

O apoio aos artesãos locais é também uma das preocupações, havendo um espaço reservado para a venda dos seus produtos, bem como um espaço de livraria onde os turistas podem encontrar livros editados por porto-santenses ou sobre o Porto Santo.

A Loja do Profeta felicita a candidatura do Porto Santo a Reserva da Biosfera da UNESCO, no âmbito do Programa O Homem e a Biosfera, e compromete-se a apoiar na divulgação da história, tradição e cultura do Porto Santo.

The Loja do Profeta was created in order to fill a gap in the souvenir trade in Porto Santo's island, with the creation of a graphic image that value our people's identity.

Our products incentivise preservation of several elements, such as the donkey, the snail, the carreiro boat, the wind mill and the local ice cream lambeça.

The environment's preservation is one of our concerns, transforming several materials that appear in the coast from the sea transformed into art pieces.

The support to local artisans is another concern, exhibiting their products, and there's a bookstore space where tourists can find books edited by locals or books about Porto Santo.

Loja do Profeta congratulates Porto Santo's candidacy to UNESCO's Biosphere Reserve, within Man and Biosphere Programme, and commits to support the promoting of Porto Santo's history, tradition and culture.

A proprietária



(Isabel Vera Brito Menezes)

Porto santo, 03 de Maio de 2018

CANDIDATURA DO PORTO SANTO A RESERVA DA BIOSFERA DA UNESCO

A Agência Dunas Viagens e Turismo, Lda, vem através desta carta manifestar o seu apoio à candidatura do Porto Santo a Reserva da Biosfera da Unesco.

Os agentes turísticos locais têm tido um papel fundamental na divulgação do Porto Santo como destino de excelência, promovendo o seu património natural e cultural e contribuindo para que esta ilha seja um destino de qualidade.

Neste sentido, foi com grande satisfação que a Agência Dunas Viagens e Turismo, Lda recebeu a notícia da Candidatura de Porto Santo a Reserva da Biosfera da UNESCO, no âmbito do Programa *O Homem e a Biosfera*, comprometendo-se no apoio à prossecução dos seus objectivos, para em conjunto contribuir para o desenvolvimento sustentável da nossa ilha.

Agency Dunas Viagens e Turismo, Lda, hereby this letter expresses the support for the candidature of Porto Santo to the UNESCO Biosphere Reserve.

Local tourism agents have played a key role in spreading Porto Santo as a destination of excellence, promoting its natural and cultural heritage and contributing to make this island a quality destination.

In this regard, it was with great satisfaction that the Agency Dunas Viagens e Turismo, Lda, received the news of the application of Porto Santo to the UNESCO Biosphere Reserve, within the scope of the Man and the Biosphere Program, pledging to support the pursuit of its objectives, to together contribute to the sustainable development of our island.

A Agência Dunas viagens e Turismo, Lda



José Jordão Belo Alves



CANDIDATURA DO PORTO SANTO A RESERVA DA BIOSFERA DA UNESCO

DECLARAÇÃO DE APOIO À CANDIDATURA DO PORTO SANTO A RESERVA DA BIOSFERA
SUPPORTING STATEMENT OF THE APPLICATION OF PORTO SANTO TO BECOME BIOSPHERE
RESERVE

As unidades hoteleiras têm tido um papel fundamental na divulgação do Porto Santo como destino de excelência, proporcionando a quem nos visita experiências e estadias únicas que ficam na memória e que contribuem para que esta ilha se afirme como um destino de qualidade.

Neste sentido, foi com grande satisfação que o **Hotel Torre Praia** recebeu a notícia da Candidatura do Porto Santo a Reserva da Biosfera da UNESCO, no âmbito do Programa *O Homem e a Biosfera*, comprometendo-se no apoio à prossecução dos seus objectivos, para em conjunto contribuir para o desenvolvimento sustentável da nossa ilha.

The hotel units have played a key role in promoting Porto Santo as a destination of excellence, providing those who visit us with unique experiences and stays that are in the memory and that contribute to this island as a destination of quality.

In this sense, it was with great satisfaction that the **Hotel Torre Praia** received the news of the Application of Porto Santo to the UNESCO Biosphere Reserve, within the scope of the Man and the Biosphere Program, committing itself in the support to the pursuit of its objectives, to jointly contribute to the sustainable development of our island.

A Direção

Lizuarte Rodrigues



CANDIDATURA DO PORTO SANTO A RESERVA DA BIOSFERA DA UNESCO

DECLARAÇÃO DE APOIO À CANDIDATURA DO PORTO SANTO A RESERVA DA BIOSFERA
SUPPORTING STATEMENT OF THE APPLICATION OF PORTO SANTO TO BECOME BIOSPHERE
RESERVE

As unidades hoteleiras têm tido um papel fundamental na divulgação do Porto Santo como destino de excelência, proporcionando a quem nos visita experiências e estadias únicas que ficam na memória e que contribuem para que esta ilha se afirme como um destino de qualidade.

Neste sentido, foi com grande satisfação que o **Hotel Praia Dourada** recebeu a notícia da Candidatura do Porto Santo a Reserva da Biosfera da UNESCO, no âmbito do Programa *O Homem e a Biosfera*, comprometendo-se no apoio à prossecução dos seus objectivos, para em conjunto contribuir para o desenvolvimento sustentável da nossa ilha.

The hotel units have played a key role in promoting Porto Santo as a destination of excellence, providing those who visit us with unique experiences and stays that are in the memory and that contribute to this island as a destination of quality.

In this sense, it was with great satisfaction that the **Hotel Praia Dourada** received the news of the Application of Porto Santo to the UNESCO Biosphere Reserve, within the scope of the Man and the Biosphere Program, committing itself in the support to the pursuit of its objectives, to jointly contribute to the sustainable development of our island.

A Direção

A Direção
Praia Dourada
PORTO SANTO

Lizuarte Rodrigues



CANDIDATURA DO PORTO SANTO A RESERVA DA BIOSFERA DA UNESCO

DECLARAÇÃO DE APOIO À CANDIDATURA DO PORTO SANTO A RESERVA DA BIOSFERA
SUPPORTING STATEMENT OF THE APPLICATION OF PORTO SANTO TO BECOME BIOSPHERE
RESERVE

As unidades hoteleiras têm tido um papel fundamental na divulgação do Porto Santo como destino de excelência, proporcionando a quem nos visita experiências e estadias únicas que ficam na memória e que contribuem para que esta ilha se afirme como um destino de qualidade.

Neste sentido, foi com grande satisfação que o **Aparthotel Luamar** recebeu a notícia da Candidatura do Porto Santo a Reserva da Biosfera da UNESCO, no âmbito do Programa *O Homem e a Biosfera*, comprometendo-se no apoio à prossecução dos seus objectivos, para em conjunto contribuir para o desenvolvimento sustentável da nossa ilha.

The hotel units have played a key role in promoting Porto Santo as a destination of excellence, providing those who visit us with unique experiences and stays that are in the memory and that contribute to this island as a destination of quality.

In this sense, it was with great satisfaction that the **Aparthotel Luamar** received the news of the Application of Porto Santo to the UNESCO Biosphere Reserve, within the scope of the Man and the Biosphere Program, committing itself in the support to the pursuit of its objectives, to jointly contribute to the sustainable development of our island.

A Direção

Lizuarte Rodrigues



PROVÍNCIA DO CORAÇÃO DE MARIA DA CONGREGAÇÃO DAS IRMÃS
FRANCISCANAS DE N. S. DAS VITÓRIAS



ESCOLA DE NOSSA SENHORA DA CONCEIÇÃO – EXTERNATO

**SUPPORTING STATEMENT OF THE APPLICATION OF PORTO SANTO TO BECOME
BIOSPHERE RESERVE**

The School Nossa Senhora da Conceição - Externato, Porto Santo, has developed efforts to promote biodiversity and local geodiversity and the need for its protection. This commitment is reinforced by the Eco-Schools program which, through its activities, encourages the educational community to adopt a behavior of greater concern and care for the environment.

In this sense, it was with satisfaction that the School Nossa Senhora da Conceição - Externato, Porto Santo, received the news of the Application of Porto Santo to the UNESCO Biosphere Reserve, within the scope of the Man and the Biosphere Program, pledging to support the pursuit of its objectives, to jointly contribute to the sustainable development of our island.

A Diretora

ESCOLA DE N.ª S.ª DA CONCEIÇÃO
EXTERNATO



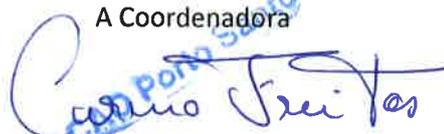
(Deolinda de Jesus Marques Mendonça)

CANDIDATURA DO PORTO SANTO A RESERVA DA BIOSFERA DA UNESCO

DECLARAÇÃO DE APOIO À CANDIDATURA DO PORTO SANTO A RESERVA DA BIOSFERA

O Centro de Atividades Ocupacionais (CAO) do Porto Santo, tem desenvolvido esforços no sentido de promover a biodiversidade e a geodiversidade local e alertar para a necessidade da sua protecção. Tal empenho é reforçado pelo programa *Eco-Escolas* que, através das actividades desenvolvidas, encoraja a comunidade educativa a adotar um comportamento de maior preocupação e cuidado para com o meio ambiente.

Neste sentido, foi com satisfação que o CAO do Porto Santo, recebeu a notícia da Candidatura do Porto Santo a Reserva da Biosfera da UNESCO, no âmbito do Programa *O Homem e a Biosfera*, comprometendo-se no apoio à prossecução dos seus objectivos, para em conjunto contribuírem para o desenvolvimento sustentável da nossa ilha.

A Coordenadora

(Carmo Freitas)



DECLARAÇÃO DE APOIO À CANDIDATURA DO PORTO SANTO A RESERVA DA BIOSFERA DA UNESCO

SUPPORTING STATEMENT TO THE APPLICATION OF PORTO SANTO TO BECOME A UNESCO BIOSPHERE RESERVE

A Fundação INATEL tem a sua missão e valores assentes numa história única e ímpar, na sociedade portuguesa, associada aos momentos determinantes e específicos da implementação das políticas sociais e dos sistemas de previdência e segurança sociais nas políticas públicas nacionais.

Surge profundamente ligada ao mundo do trabalho e à disponibilização de serviços de lazer, com particular destaque na área do turismo e hotelaria, na cultura, na formação e no desporto, para jovens, trabalhadores no ativo e pensionistas.

Liga-se também, incontornavelmente, ao associativismo e à cultura popular, nas cidades, no interior e nos meios rurais, nomeadamente através das sociedades musicais, da etnografia ou do desporto.

As unidades hoteleiras têm tido um papel fundamental na divulgação do Porto Santo como destino de excelência, proporcionando a quem visita a ilha experiências e estadias únicas que ficam na memória de quem a visita e que contribuem para que ela se afirme como um destino ímpar.

Neste espírito, foi com grande satisfação que a Fundação INATEL recebeu a notícia da Candidatura do Porto Santo a Reserva da Biosfera da UNESCO, no âmbito do Programa *O Homem e a Biosfera*, comprometendo-se no apoio destinado à prossecução dos seus objetivos, para em conjunto contribuir para o desenvolvimento sustentável da ilha do Porto Santo.

The INATEL Foundation's mission and values are based on the unique Portuguese history, associated decisive and specifically with the implementation of social policies and social security systems in national public policies.

It is profoundly linked to the world of labour, promoting leisure services, with particular emphasis on tourism and hospitality, culture, training and sports, for young people, active workers and pensioners.

It is also linked to associations and popular culture in cities, towns and rural areas, particularly through musical, ethnographic or sports associations.

Hotel units have been playing a key role in spreading Porto Santo as a destination of excellence, providing unique and memorable experiences to those who visit the island, as well as contributing for it to be established as an outstanding destination.

In this spirit, it was with great satisfaction that the INATEL Foundation received the news that Porto Santo has applied to become a UNESCO Biosphere Reserve, within the scope of *The Man and the Biosphere* Program, having thus undertaken to support Porto Santo island in the achievement of its objectives and to jointly contribute to its sustainable development.

The INATEL Foundation

Conselho de Administração | President of
the Board of Directors



(Francisco Caneira Madelino)

Vogal do Conselho de Administração |
Member of the Board of Directors



(José Manuel Alho)

Conselho de Administração | Vice
President of the Board of Directors

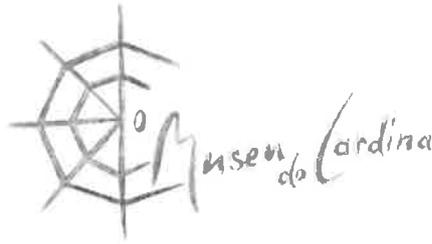


(Lucinda Maria Lopes)

Vogal do Conselho de Administração |
Member of the Board of Directors



(Álvaro de Sousa Carneiro)



DECLARAÇÃO DE APOIO À CANDIDATURA DO PORTO SANTO A RESERVA DA BIOSFERA

O **Museu Cardina** constitui um testemunho da história do Porto Santo, podendo contemplar-se peças e artefactos, concebidos ou recuperados pelo proprietário, que retratam os afazeres domésticos, a agricultura, a lavoura, a pesca, os fontanários e os ofícios locais. Construído em forma octogonal, destaca a importância dos moinhos para a ilha, apresentando ainda a réplica de um exemplar no seu interior, valorizando assim um passado que importa não esquecer.

O Museu Cardina felicita a Candidatura de Porto Santo a Reserva da Biosfera da UNESCO, no âmbito do Programa *O Homem e a Biosfera*, e compromete-se a apoiar na divulgação da história, tradição e cultura do Porto Santo.

Cardina's Museum is a testimony of Porto Santo's history, where you can contemplate objects and artifacts, designed or retrieved by the owner, that portray the housework, agriculture, farming, fishing, the fountains and local crafts. Built in an octagonal shape, highlights the mills' importance to the island, presenting a replica in the interior of the museum, valuing a past that we should not forget.

Cardina's Museum congratulates Porto Santo's candidacy to UNESCO's Biosphere Reserve, within the Man and Biosphere Programme, and is committed to support the promotion of Porto Santo's history, tradition and culture.

O proprietário do Museu Cardina

José Cardina Freitas Melim

(José Cardina Freitas Melim)

CANDIDATURA DE PORTO SANTO A RESERVA DA BIOSFERA DA UNESCO



DECLARAÇÃO DE APOIO À CANDIDATURA DO PORTO SANTO A RESERVA DA BIOSFERA

A gastronomia local é um dos fatores de atração turística, pelo que importa apostar nos sabores da nossa terra, desvendando a cultura do Porto Santo a todos aqueles que nos visitam.

O *Porto Santo Beach Club* felicita a Candidatura de Porto Santo a Reserva da Biosfera, no âmbito do Programa *O Homem e a Biosfera* da UNESCO, e compromete-se a contribuir para o aumento do consumo dos produtos locais, estimulando a produção agrícola e promoção dos sabores e das tradições locais.

Being the local cuisine one factor of tourist attraction, we must bet in the flavors of our land, revealing Porto Santo's culture to all our visitors.

The Porto Santo Beach Club congratulates Porto Santos's candidacy to UNESCO's Biosphere Reserve, within Man and Biosphere Programme, and commits to contribute to the increase of local products consumption, stimulating agricultural production and promoting local traditions and flavors.

A gerência,

(José Miguel Mendonça de Velosa)

CANDIDATURA DE PORTO SANTO A RESERVA DA BIOSFERA DA UNESCO



DECLARAÇÃO DE APOIO À CANDIDATURA DO PORTO SANTO A RESERVA DA BIOSFERA

A gastronomia local é um dos fatores de atração turística, pelo que importa apostar nos sabores da nossa terra, desvendando a cultura do Porto Santo a todos aqueles que nos visitam.

O Restaurante *Apolo 14* felicita a Candidatura de Porto Santo a Reserva da Biosfera, no âmbito do Programa *O Homem e a Biosfera* da UNESCO, e compromete-se a contribuir para o aumento do consumo dos produtos locais, estimulando a produção agrícola e promoção dos sabores e das tradições locais.

Being the local cuisine one factor of tourist attraction, we must bet in the flavors of our land, revealing Porto Santo's culture to all our visitors.

The Restaurant Apolo 14 congratulates Porto Santos's candidacy to UNESCO's Biosphere Reserve, within Man and Biosphere Programme, and commits to contribute to the increase of local products consumption, stimulating agricultural production and promoting local traditions and flavors.

A gerência,

(José Miguel Mendonça de Velosa)

DECLARAÇÃO DE APOIO À CANDIDATURA DO PORTO SANTO A RESERVA DA BIOSFERA

As confrarias desempenham um importante papel na comunidade do Porto Santo, contribuindo para a manutenção das tradições religiosas locais que fazem parte da nossa cultura e da nossa história.

A confraria de S. Pedro reconhece a importância da candidatura de Porto Santo a Reserva da Biosfera da UNESCO, no âmbito do Programa *O Homem e a Biosfera*, e compromete-se a apoiar este projecto, valorizando e promovendo as nossas tradições.

The religious fraternities play an important role in the Porto Santo's community, contributing to the maintenance of local religious traditions that make part of our culture and history.

The S. Pedro religious fraternity recognizes the importance of Porto Santo's candidacy to UNESCO's Biosphere Reserve, within Man and Biosphere Programme, and commits to support this project, valuing and promoting our traditions.

O Presidente da Confraria de S. Pedro

Ernesto dos Reis Melim

(Ernesto Reis Melim)



DECLARAÇÃO DE APOIO À CANDIDATURA DO PORTO SANTO A RESERVA DA BIOSFERA

As confrarias desempenham um importante papel na comunidade do Porto Santo, contribuindo para a manutenção das tradições religiosas locais que fazem parte da nossa cultura e da nossa história.

A confraria do Santíssimo Sacramento da Paróquia do Espírito Santo reconhece a importância da candidatura de Porto Santo a Reserva da Biosfera da UNESCO, no âmbito do Programa *O Homem e a Biosfera*, e compromete-se a apoiar este projecto, valorizando e promovendo as nossas tradições.

The religious fraternities play an important role in the Porto Santo's community, contributing to the maintenance of local religious traditions that make part of our culture and history.

The Santíssimo Sacramento da Paróquia do Espírito Santo religious fraternity recognizes the importance of Porto Santo's candidacy to UNESCO's Biosphere Reserve, within Man and Biosphere Programme, and commits to support this project, valuing and promoting our traditions.

O Presidente da Confraria do Santíssimo Sacramento da Paróquia do Espírito Santo


(Francisco Duarte Mendonça)



DECLARAÇÃO DE APOIO À CANDIDATURA DO PORTO SANTO A RESERVA DA BIOSFERA

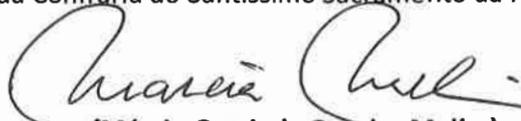
As confrarias desempenham um importante papel na comunidade do Porto Santo, contribuindo para a manutenção das tradições religiosas locais que fazem parte da nossa cultura e da nossa história.

A confraria do Santíssimo Sacramento da Paróquia da Piedade reconhece a importância da candidatura de Porto Santo a Reserva da Biosfera da UNESCO, no âmbito do Programa *O Homem e a Biosfera*, e compromete-se a apoiar este projecto, valorizando e promovendo as nossas tradições.

The religious fraternities play an important role in the Porto Santo's community, contributing to the maintenance of local religious traditions that make part of our culture and history.

The Santíssimo Sacramento da Paróquia da Piedade religious fraternity recognizes the importance of Porto Santo's candidacy to UNESCO's Biosphere Reserve, within Man and Biosphere Programme, and commits to support this project, valuing and promoting our traditions.

O Presidente da Confraria do Santíssimo Sacramento da Paróquia da Piedade


(Márcia Gracinda Ornelas Melim)



CANDIDATURA DE PORTO SANTO A RESERVA DA BIOSFERA DA UNESCO

DECLARAÇÃO DE APOIO À CANDIDATURA DO PORTO SANTO A RESERVA DA BIOSFERA

As confrarias desempenham um importante papel na comunidade do Porto Santo, contribuindo para a manutenção das tradições religiosas locais que fazem parte da nossa cultura e da nossa história.

A confraria de Nossa Senhora da Graça reconhece a importância da candidatura de Porto Santo a Reserva da Biosfera da UNESCO, no âmbito do Programa *O Homem e a Biosfera*, e compromete-se a apoiar este projecto, valorizando e promovendo as nossas tradições.

The religious fraternities play an important role in the Porto Santo's community, contributing to the maintenance of local religious traditions that make part of our culture and history.

The Nossa Senhora da Graça religious fraternity recognizes the importance of Porto Santo's candidacy to UNESCO's Biosphere Reserve, within Man and Biosphere Programme, and commits to support this project, valuing and promoting our traditions.

O Presidente da Confraria de Nossa Senhora da Graça


(Manuel de Deus Escórcio)



CANDIDATURA DE PORTO SANTO A RESERVA DA BIOSFERA DA UNESCO

DECLARAÇÃO DE APOIO À CANDIDATURA DO PORTO SANTO A RESERVA DA BIOSFERA

As confrarias desempenham um importante papel na comunidade do Porto Santo, contribuindo para a manutenção das tradições religiosas locais que fazem parte da nossa cultura e da nossa história.

A confraria de Nossa senhora da Piedade reconhece a importância da candidatura de Porto Santo a Reserva da Biosfera da UNESCO, no âmbito do Programa *O Homem e a Biosfera*, e compromete-se a apoiar este projecto, valorizando e promovendo as nossas tradições.

The religious fraternities play an important role in the Porto Santo's community, contributing to the maintenance of local religious traditions that make part of our culture and history.

The Nossa senhora da Piedade religious fraternity recognizes the importance of Porto Santo's candidacy to UNESCO's Biosphere Reserve, within Man and Biosphere Programme, and commits to support this project, valuing and promoting our traditions.

O Presidente da Confraria de Nossa senhora da Piedade


(Ana Maria Melim Drumond)





DECLARAÇÃO DE APOIO À CANDIDATURA DO PORTO SANTO A RESERVA DA BIOSFERA

A Fundação de N^ª Sr^ª da Piedade desenvolve a sua atividade social no concelho do Porto Santo e tem acompanhado o desenvolvimento local que concilia a atividade económica com a conservação da natureza e a salvaguarda dos valores culturais.

Neste sentido, a Fundação reconhece a importância do trabalho realizado e apoia a candidatura de Porto Santo à sua classificação como Reserva da Biosfera da UNESCO, no âmbito do Programa *O Homem e a Biosfera*.

The Foudation N^ª Sr^ª da Piedade develops its social ativity in Porto Santo and has been following the local development that conciliates the economic and the nature conservation and the safeguard of the cultural values.

The Foundation recognizes the importance of the work done and supports Porto Santo's candidacy to UNESCO's Biosphere Reserve, within the Man and Biosphere Programme.

O Presidente da Fundação de Nossa Senhora da Piedade

Padre Fábio Rodrigues Ferreira



CANDIDATURA DE PORTO SANTO A RESERVA DA BIOSFERA DA UNESCO

DECLARAÇÃO DE APOIO À CANDIDATURA DO PORTO SANTO A RESERVA DA BIOSFERA

O Restaurante MAN E SOL Felicita e apoia a Candidatura de Porto Santo a Reserva da Biosfera, no âmbito do Programa *O Homem e a Biosfera* da UNESCO, e compromete-se a contribuir para a divulgação e promoção dos sabores locais.

A gerência,

María Miqueline P. PAIXÃO

CANDIDATURA DE PORTO SANTO A RESERVA DA BIOSFERA DA UNESCO

DECLARAÇÃO DE APOIO À CANDIDATURA DO PORTO SANTO A RESERVA DA BIOSFERA

O Restaurante *Bar Curassol*..... Felicita e apoia a Candidatura de Porto Santo a Reserva da Biosfera, no âmbito do Programa *O Homem e a Biosfera* da UNESCO, e compromete-se a contribuir para a divulgação e promoção dos sabores locais.

A gerência,

Manuel Guido Drummond

MANUEL GUIDO DRUMOND
NIF: 119 804 662
A GERÊNCIA

CANDIDATURA DE PORTO SANTO A RESERVA DA BIOSFERA DA UNESCO

DECLARAÇÃO DE APOIO À CANDIDATURA DO PORTO SANTO A RESERVA DA BIOSFERA

O Restaurante *Sazela* Felicitamos e apoiamos a Candidatura de Porto Santo a Reserva da Biosfera, no âmbito do Programa *O Homem e a Biosfera* da UNESCO, e comprometemo-nos a contribuir para a divulgação e promoção dos sabores locais.

Agerência,



BALEIA REAL Exploração de Restaurantes, Lda
Cont. 508 061 946
A gerência



CANDIDATURA DO PORTO SANTO A RESERVA DA BIOSFERA DA UNESCO

DECLARAÇÃO DE APOIO À CANDIDATURA DO PORTO SANTO A RESERVA DA BIOSFERA
SUPPORTING STATEMENT OF THE APPLICATION OF PORTO SANTO TO BECOME BIOSPHERE
RESERVE

Os agentes turísticos locais têm tido um papel fundamental na divulgação do Porto Santo como destino de excelência, promovendo o seu património natural e cultural e contribuindo para que esta ilha seja um destino de qualidade.

Neste sentido, foi com grande satisfação que a Representante Agência de turismo Olimar recebeu a notícia da Candidatura de Porto Santo a Reserva da Biosfera da UNESCO, no âmbito do Programa *O Homem e a Biosfera*, comprometendo-se no apoio à prossecução dos seus objectivos, para em conjunto contribuir para o desenvolvimento sustentável da nossa ilha.

Local tourism agents have played a key role in spreading Porto Santo as a destination of excellence, promoting its natural and cultural heritage and contributing to make this island a quality destination.

In this regard, it was with great satisfaction that the Representant from the tourism Agency Olimar received the news of the application of Porto Santo to the UNESCO Biosphere Reserve, within the scope of the Man and the Biosphere Program, pledging to support the pursuit of its objectives, to together contribute to the sustainable development of our island.

A Agência de Turismo.....

Trinastka Wiebe
Representante
OLIMAR

DECLARAÇÃO DE APOIO À CANDIDATURA DO PORTO SANTO A RESERVA DA BIOSFERA
SUPPORTING STATEMENT OF THE APPLICATION OF PORTO SANTO TO BECOME BIOSPHERE
RESERVE

As unidades de alojamento local têm tido um papel fundamental na divulgação do Porto Santo como destino de excelência, oferecendo um serviço informal e personalizado a quem nos visita, proporcionando experiências e estadias únicas que ficam na memória pela proximidade com o povo porto-santense e que contribuem para que esta ilha se afirme como um destino de qualidade.

Neste sentido, foi com grande satisfação que a CASA VISTA AZUL recebeu a notícia da Candidatura do Porto Santo a Reserva da Biosfera da UNESCO, no âmbito do Programa *O Homem e a Biosfera*, comprometendo-se no apoio à prossecução dos seus objetivos, para em conjunto contribuir para o desenvolvimento sustentável da nossa ilha.

Local accommodation units have played a key role in spreading Porto Santo as a destination of excellence, offering an informal and personalized service to those who visit us, providing unique experiences and stays that are remembered for their proximity to the people of Porto Santo and contribute to this island as a destination of quality.

In this sense, it was with great satisfaction that the CASA VISTA AZUL received the news of the Application of Porto Santo to the UNESCO Biosphere Reserve, within the scope of the Man and the Biosphere Program, committing itself in the support to the pursuit of its objectives , to jointly contribute to the sustainable development of our island.

Pela Casa Vista Azul



José de Freitas Caetano

CANDIDATURA DO PORTO SANTO A RESERVA DA BIOSFERA DA UNESCO

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SUPPORTING STATEMENT OF THE APPLICATION OF PORTO SANTO TO BECOME BIOSPHERE RESERVE

Os agentes turísticos locais têm tido um papel fundamental na divulgação do Porto Santo como destino de excelência, promovendo o seu património natural e cultural e contribuindo para que esta ilha seja um destino de qualidade.

Neste sentido, foi com grande satisfação que a Agência Angie Travel, viagens e turismo, lda, recebeu a notícia da Candidatura de Porto Santo a Reserva da Biosfera da UNESCO, no âmbito do Programa *O Homem e a Biosfera*, comprometendo-se no apoio à prossecução dos seus objectivos, para em conjunto contribuir para o desenvolvimento sustentável da nossa ilha.

Local tourism agents have played a key role in spreading Porto Santo as a destination of excellence, promoting its natural and cultural heritage and contributing to make this island a quality destination.

In this regard, it was with great satisfaction that the Agency Angie Travel viagens e Turismo, lda received the news of the application of Porto Santo to the UNESCO Biosphere Reserve, within the scope of the Man and the Biosphere Program, pledging to support the pursuit of its objectives, to together contribute to the sustainable development of our island.

A Agência Angie Travel, viagens e turismo, lda



DECLARAÇÃO DE APOIO À CANDIDATURA DO PORTO SANTO A RESERVA DA BIOSFERA
SUPPORTING STATEMENT OF THE APPLICATION OF PORTO SANTO TO BECOME BIOSPHERE
RESERVE

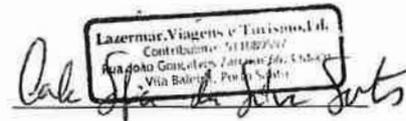
Os agentes turísticos locais têm tido um papel fundamental na divulgação do Porto Santo como destino de excelência, promovendo o seu património natural e cultural e contribuindo para que esta ilha seja um destino de qualidade.

Neste sentido, foi com grande satisfação que a Agência Lazermar, Viagens e Turismo, Lda. recebeu a notícia da Candidatura de Porto Santo a Reserva da Biosfera da UNESCO, no âmbito do Programa *O Homem e a Biosfera*, comprometendo-se no apoio à prossecução dos seus objectivos, para em conjunto contribuir para o desenvolvimento sustentável da nossa ilha.

Local tourism agents have played a key role in spreading Porto Santo as a destination of excellence, promoting its natural and cultural heritage and contributing to make this island a quality destination.

In this regard, it was with great satisfaction that the Agency, Lazermar Viagens e Turismo, Lda. received the news of the application of Porto Santo to the UNESCO Biosphere Reserve, within the scope of the Man and the Biosphere Program, pledging to support the pursuit of its objectives, to together contribute to the sustainable development of our island.

A Agência de Turismo Lazermar


Lazermar, Viagens e Turismo, Lda.
Contribuinte nº 51187707
Rua João Gonçalves, 140, 9100-105, Santo
Via Baleia, Porto Santo

Carla Sofia da Silva Santos



CANDIDATURA DO PORTO SANTO A RESERVA DA BIOSFERA DA UNESCO

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Os agentes turísticos locais têm tido um papel fundamental na divulgação do Porto Santo como destino de excelência, promovendo o seu património natural e cultural e contribuindo para que esta ilha seja um destino de qualidade.

Neste sentido, foi com grande satisfação que a Empresa Mr,Humb Unipessoal Lda, recebeu a notícia da Candidatura de Porto Santo a Reserva da Biosfera da UNESCO, no âmbito do Programa *O Homem e a Biosfera*, comprometendo-se no apoio à prossecução dos seus objectivos, para em conjunto contribuir para o desenvolvimento sustentável da nossa ilha.

Local tourism agents have played a key role in spreading Porto Santo as a destination of excellence, promoting its natural and cultural heritage and contributing to make this island a quality destination.

In this regard, it was with great satisfaction that the Company Mr,Humb Unipessoal Lda received the news of the application of Porto Santo to the UNESCO Biosphere Reserve, within the scope of the Man and the Biosphere Program, pledging to support the pursuit of its objectives, to together contribute to the sustainable development of our island.

A Agência de Turismo.....

Mr. Humb Unipessoal Lda

(Nome)



REGIÃO AUTÓNOMA DA MADEIRA
GOVERNO REGIONAL
SECRETARIA REGIONAL DE EDUCAÇÃO

DECLARAÇÃO DE APOIO À CANDIDATURA DO PORTO SANTO A RESERVA DA BIOSFERA
SUPPORTING STATEMENT OF THE APPLICATION OF PORTO SANTO TO BECOME BIOSPHERE
RESERVE

A Delegação Escolar do Porto Santo tem desenvolvido esforços no sentido de promover o envolvimento de todas as escolas nas questões ambientais, apoiando os programas educativos ambientais existentes no município. Tal empenho é reforçado pelo programa *Eco-Escolas*, presente em todos os estabelecimentos escolares da ilha e que, através das atividades desenvolvidas, encoraja a comunidade educativa a adotar um comportamento de maior preocupação e cuidado para com o meio ambiente.

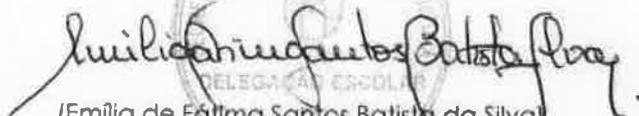
Neste sentido, foi com satisfação que a Delegação Escolar do Porto Santo recebeu a notícia da Candidatura do Porto Santo a Reserva da Biosfera da UNESCO, no âmbito do Programa *O Homem e a Biosfera*, comprometendo-se no apoio à prossecução dos seus objetivos, para em conjunto contribuírem para o desenvolvimento sustentável da nossa ilha.

The Porto Santo School Delegation has made efforts to promote the involvement of all schools in environmental issues, supporting the existing environmental education programs in the municipality. This commitment is reinforced by the *Eco-Schools* program, which is present in all schools on the island and, through its activities, encourages the educational community to adopt a behavior of greater concern and care for the environment.

In this regard, it was with satisfaction that the School Delegation of Porto Santo received the news of the Application of Porto Santo to the UNESCO Biosphere Reserve, within the scope of the *Man and the Biosphere* Program, committing itself in the support to the pursuit of its objectives, to jointly contribute to the sustainable development of our island.

Delegação Escolar do Porto Santo, 03 de maio de 2018

A DELEGADA ESCOLAR


(Emília de Fátima Santos Batista da Silva)

Of. N.º 73

Data 02 / 05 / 2018

Porto Santo

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ASSUNTO: DECLARAÇÃO DE APOIO À CANDIDATURA DO PORTO SANTO A RESERVA DA BIOSFERA

SUBJECT MATTER: SUPPORTING STATEMENT OF THE APPLICATION OF PORTO SANTO TO BECOME BIOSPHERE RESERVE

A Escola Básica do 1º Ciclo com Pré-Escolar e Creche do Campo de Baixo, Porto Santo, tem desenvolvido esforços no sentido de promover a biodiversidade e a geodiversidade local e alertar para a necessidade da sua proteção. Tal empenho é reforçado pelo programa *Eco-Escolas* que, através das atividades desenvolvidas, encoraja a comunidade educativa a adotar um comportamento de maior preocupação e cuidado para com o meio ambiente.

Neste sentido, foi com satisfação que a Escola Básica do 1º Ciclo com Pré-Escolar e Creche do Porto Santo, Porto Santo, recebeu a notícia da Candidatura do Porto Santo a Reserva da Biosfera da UNESCO, no âmbito do Programa *O Homem e a Biosfera*, comprometendo-se no apoio à prossecução dos seus objetivos, para em conjunto contribuírem para o desenvolvimento sustentável da nossa ilha.

The Basic School of the 1st Cycle with Preschool and Kindergarten of Down Field, Porto Santo, has developed efforts to promote biodiversity and local geodiversity and the need for its protection. This commitment is reinforced by the Eco-Schools program which, through its activities, encourages the educational community to adopt a behavior of greater concern and care for the environment.

In this sense, it was with satisfaction that the Basic School of the 1st Cycle with Preschool and Kindergarten of Down Field, Porto Santo, received the news of the Application of Porto Santo to the UNESCO Biosphere Reserve, within the scope of the Man and the Biosphere Program, pledging to support the pursuit of its objectives, to jointly contribute to the sustainable development of our island.

Apresento a Vª Exa. os meus melhores cumprimentos
I present the Vª Exa. Yours sincerely

Porto Santo, 02 de maio de 2018

Porto Santo, May 2, 2018

O Diretor da EB1/PE e Creche do Campo de Baixo
The Director of EB1/PE and Kindergarten of Down field

(Abel Agostinho da Silva)



CANDIDATURA DO PORTO SANTO A RESERVA DA BIOSFERA DA UNESCO

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A Escola Básica do 1º Ciclo com Pré-Escolar do Porto Santo, Porto Santo, tem desenvolvido esforços no sentido de promover a biodiversidade e a geodiversidade local e alertar para a necessidade da sua proteção. Tal empenho é reforçado pelo programa *Eco-Escolas* que, através das atividades desenvolvidas desde 2009/2010, encoraja a comunidade educativa a adotar um comportamento de maior preocupação e cuidado para com o meio ambiente.

Neste sentido, foi com satisfação que a Escola Básica do 1º Ciclo com Pré-Escolar do Porto Santo, Porto Santo, recebeu a notícia da Candidatura do Porto Santo a Reserva da Biosfera da UNESCO, no âmbito do Programa *O Homem e a Biosfera*, comprometendo-se no apoio à prossecução dos seus objectivos, para em conjunto contribuírem para o desenvolvimento sustentável da nossa ilha.

The School Básica do 1º Ciclo com Pré-Escolar do Porto Santo, Porto Santo, has developed efforts to promote biodiversity and local geodiversity and the need for its protection. This commitment is reinforced by the Eco-Schools program which, through its activities since 2009/2010, encourages the educational community to adopt a behavior of greater concern and care for the environment.

In this sense, it was with satisfaction that the School Básica do 1º Ciclo com Pré-Escolar do Porto Santo, Porto Santo, received the news of the Application of Porto Santo to the UNESCO Biosphere Reserve, within the scope of the Man and the Biosphere Program, pledging to support the pursuit of its objectives, to jointly contribute to the sustainable development of our island.

A Diretora / The Director




As Professoras / The Teachers

Maria Jureta Ribeiro Queiroz Lourenço

Dina de Jesus Lourenço

Sara Ferreira Almeida

Márcia Patrícia Araújo Melo Dias

Rosa Líria Pereira Carvalho Apuso

Fátima Ferreira Almeida Silva

Carla Ivone Pata Ferreira

Maria José Cunha Gonçalves Batista

Maria Lisete Feres

Maria de Nazare Bronco da Cunha

João Filipe Vieira Romão

Aldina Maria Ferreira Sousa

Margarida dos Santos Alves



CANDIDATURA DO PORTO SANTO A RESERVA DA BIOSFERA DA UNESCO

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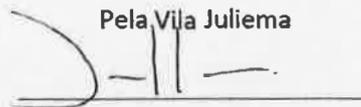
As unidades de alojamento local têm tido um papel fundamental na divulgação do Porto Santo como destino de excelência, oferecendo um serviço informal e personalizado a quem nos visita, proporcionando experiências e estadias únicas que ficam na memória pela proximidade com o povo porto-santense e que contribuem para que esta ilha se afirme como um destino de qualidade.

Neste sentido, foi com grande satisfação que a Vila Juliema recebeu a notícia da Candidatura do Porto Santo a Reserva da Biosfera da UNESCO, no âmbito do Programa *O Homem e a Biosfera*, comprometendo-se no apoio à prossecução dos seus objetivos, para em conjunto contribuir para o desenvolvimento sustentável da nossa ilha.

Local accommodation units have played a key role in spreading Porto Santo as a destination of excellence, offering an informal and personalized service to those who visit us, providing unique experiences and stays that are remembered for their proximity to the people of Porto Santo and contribute to this island as a destination of quality.

In this sense, it was with great satisfaction that the Vila Juliema received the news of the Application of Porto Santo to the UNESCO Biosphere Reserve, within the scope of the Man and the Biosphere Program, committing itself in the support to the pursuit of its objectives, to jointly contribute to the sustainable development of our island.

Pela Vila Juliema



Paulo Carvão

CANDIDATURA DO PORTO SANTO A RESERVA DA BIOSFERA DA UNESCO

“VILA DA PRAIA”

DECLARAÇÃO DE APOIO À CANDIDATURA DO PORTO SANTO A RESERVA DA BIOSFERA
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As unidades de alojamento local têm tido um papel fundamental na divulgação do Porto Santo como destino de excelência, oferecendo um serviço informal e personalizado a quem nos visita, proporcionando experiências e estadias únicas que ficam na memória pela proximidade com o povo porto-santense e que contribuem para que esta ilha se afirme como um destino de qualidade.

Neste sentido, foi com grande satisfação que a *Vila da Praia* recebeu a notícia da Candidatura do Porto Santo a Reserva da Biosfera da UNESCO, no âmbito do Programa *O Homem e a Biosfera*, comprometendo-se no apoio à prossecução dos seus objetivos, para em conjunto contribuir para o desenvolvimento sustentável da nossa ilha.

Local accommodation units have played a key role in spreading Porto Santo as a destination of excellence, offering an informal and personalized service to those who visit us, providing unique experiences and stays that are remembered for their proximity to the people of Porto Santo and contribute to this island as a destination of quality.

In this sense, it was with great satisfaction *Vila da Praia* received the news of the Application of Porto Santo to the UNESCO Biosphere Reserve, within the scope of the Man and the Biosphere Program, committing itself in the support to the pursuit of its objectives , to jointly contribute to the sustainable development of our island.

Pela Vila da Praia


(Mauricio Barros)

CANDIDATURA DO PORTO SANTO A RESERVA DA BIOSFERA DA UNESCO

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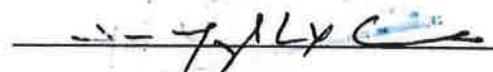
O Clube Naval do Porto Santo tem tido um papel fundamental na divulgação do Porto Santo como destino de excelência para a prática de desportos náuticos, bem como na formação dos mais jovens, proporcionando atividades lúdicas de carácter ocupacional, em contacto com o mar.

Neste sentido, foi com grande satisfação que o Clube Naval do Porto Santo recebeu a notícia da Candidatura do Porto Santo a Reserva da Biosfera da UNESCO, no âmbito do Programa *O Homem e a Biosfera*, comprometendo-se no apoio à prossecução dos seus objectivos, para em conjunto contribuir para o desenvolvimento sustentável da nossa ilha.

The Clube Naval do Porto Santo has played a fundamental role in the promotion of Porto Santo as a destination of excellence for water sports, as well as training of the youngest, providing recreational activities of an occupational nature, in contact with the sea.

In this sense, it was with great satisfaction that the Clube Naval do Porto Santo received the news of the Application of Porto Santo to the UNESCO Biosphere Reserve, within the scope of the Man and the Biosphere Program, committing itself in the support to the pursuit of its objectives, to jointly contribute to the sustainable development of our island.

O Presidente do Clube Naval do Porto Santo



Nuno Miguel Lourenço Xavier Camacho

CANDIDATURA DO PORTO SANTO A RESERVA DA BIOSFERA DA UNESCO

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As unidades hoteleiras têm tido um papel fundamental na divulgação do Porto Santo como destino de excelência, proporcionando a quem nos visita experiências e estadias únicas que ficam na memória e que contribuem para que esta ilha se afirme como um destino de qualidade.

Neste sentido, foi com grande satisfação que a o Hotel Porto Santo & Spa recebeu a notícia da Candidatura do Porto Santo a Reserva da Biosfera da UNESCO, no âmbito do Programa *O Homem e a Biosfera*, comprometendo-se no apoio à prossecução dos seus objectivos, para em conjunto contribuir para o desenvolvimento sustentável da nossa ilha.

The hotel units have played a key role in promoting Porto Santo as a destination of excellence, providing those who visit us with unique experiences and stays that are in the memory and that contribute to this island as a destination of quality.

In this sense, it was with great satisfaction that the Hotel Porto Santo & Spa received the news of the Application of Porto Santo to the UNESCO Biosphere Reserve, within the scope of the Man and the Biosphere Program, committing itself in the support to the pursuit of its objectives, to jointly contribute to the sustainable development of our island.

O Hotel Porto Santo



Ricardo Gonçalves

Diretor



DECLARAÇÃO DE APOIO À CANDIDATURA DO PORTO SANTO A RESERVA DA BIOSFERA
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As unidades hoteleiras têm tido um papel fundamental na divulgação do Porto Santo como destino de excelência, proporcionando a quem nos visita experiências e estadias únicas que ficam na memória e que contribuem para que esta ilha se afirme como um destino de qualidade.

Neste sentido, foi com grande satisfação que a o Hotel Vila Baleira recebeu a notícia da Candidatura do Porto Santo a Reserva da Biosfera da UNESCO, no âmbito do Programa *Homem e a Biosfera*, comprometendo-se no apoio à prossecução dos seus objectivos, para em conjunto contribuir para o desenvolvimento sustentável da nossa ilha.

The hotel units have played a key role in promoting Porto Santo as a destination of excellence, providing those who visit us with unique experiences and stays that are in the memory and that contribute to this island as a destination of quality.

In this sense, it was with great satisfaction that the Hotel Vila Baleira received the news of the Application of Porto Santo to the UNESCO Biosphere Reserve, within the scope of the Man and the Biosphere Program, committing itself in the support to the pursuit of its objectives, to jointly contribute to the sustainable development of our island.

Hotel Vila Baleira

Sociedade de Empreendimentos
Turísticos BALEIRA SOL, S.A.
Sítio da Porta - Apartado 243
(Bairro Miguel da Cruz André Martins)

DECLARAÇÃO DE APOIO À CANDIDATURA DO PORTO SANTO A RESERVA DA BIOSFERA
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Os agentes turísticos locais têm tido um papel fundamental na divulgação do Porto Santo como destino de excelência, promovendo o seu património natural e cultural e contribuindo para que esta ilha seja um destino de qualidade.

Neste sentido, foi com grande satisfação que a Mar Dourado Actividades Marítimo Turísticas, LDA recebeu a notícia da Candidatura de Porto Santo a Reserva da Biosfera da UNESCO, no âmbito do Programa *O Homem e a Biosfera*, comprometendo-se no apoio à prossecução dos seus objectivos, para em conjunto contribuir para o desenvolvimento sustentável da nossa ilha.

Local tourism agents have played a key role in spreading Porto Santo as a destination of excellence, promoting its natural and cultural heritage and contributing to make this island a quality destination.

In this regard, it was with great satisfaction that the Mar Dourado Actividades Marítimo Turísticas, LDA received the news of the application of Porto Santo to the UNESCO Biosphere Reserve, within the scope of the Man and the Biosphere Program, pledging to support the pursuit of its objectives, to together contribute to the sustainable development of our island.



A Agência de Turismo
MAR DOURADO
MAR DOURADO ACTIVIDADES MARÍTIMO-TURÍSTICAS, LDA
NIF 511 227 465
PORTO SANTO
(Nome)

CANDIDATURA DO PORTO SANTO A RESERVA DA BIOSFERA DA UNESCO

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A Escola Básica e Secundária Professor Dr. Francisco de Freitas Branco, Porto Santo, tem desenvolvido esforços no sentido de promover a biodiversidade e a geodiversidade local e alertar para a necessidade da sua protecção. Tal empenho é reforçado pelo programa *Eco-Escolas* que, através das actividades desenvolvidas, encoraja a comunidade educativa a adotar um comportamento de maior preocupação e cuidado para com o meio ambiente.

Neste sentido, foi com satisfação que a Escola Básica e Secundária Professor Dr. Francisco de Freitas Branco, Porto Santo, recebeu a notícia da Candidatura do Porto Santo a Reserva da Biosfera da UNESCO, no âmbito do Programa *O Homem e a Biosfera*, comprometendo-se no apoio à prossecução dos seus objectivos, para em conjunto contribuírem para o desenvolvimento sustentável da nossa ilha.

The School - Escola Básica e Secundária Professor Dr. Francisco de Freitas Branco, Porto Santo, has developed efforts to promote biodiversity and local geodiversity and the need for its protection. This commitment is reinforced by the Eco-Schools program which, through its activities, encourages the educational community to adopt a behavior of greater concern and care for the environment.

In this sense, it was with satisfaction that the Escola Básica e Secundária Professor Dr. Francisco de Freitas Branco - School, Porto Santo, received the news of the Application of Porto Santo to the UNESCO Biosphere Reserve, within the scope of the Man and the Biosphere Program, pledging to support the pursuit of its objectives, to jointly contribute to the sustainable development of our island.

O Presidente do Conselho Executivo





CANDIDATURA DO PORTO SANTO A RESERVA DA BIOSFERA DA UNESCO

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Os agentes turísticos locais têm tido um papel fundamental na divulgação do Porto Santo como destino de excelência, promovendo o seu património natural e cultural e contribuindo para que esta ilha seja um destino de qualidade.

Neste sentido, foi com grande satisfação que a Golden Sail – Yacht Charter Madeira, recebeu a notícia da Candidatura de Porto Santo a Reserva da Biosfera da UNESCO, no âmbito do Programa *O Homem e a Biosfera*, comprometendo-se no apoio à prossecução dos seus objectivos, para em conjunto contribuir para o desenvolvimento sustentável da nossa ilha.

Local tourism agents have played a key role in spreading Porto Santo as a destination of excellence, promoting its natural and cultural heritage and contributing to make this island a quality destination.

In this regard, it was with great satisfaction that the Golden Sail – Yacht Charter Madeira, received the news of the application of Porto Santo to the UNESCO Biosphere Reserve, within the scope of the Man and the Biosphere Program, pledging to support the pursuit of its objectives, to together contribute to the sustainable development of our island.

(Joana Ricardo)



CANDIDATURA DO PORTO SANTO A RESERVA DA BIOSFERA DA UNESCO

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RESERVE

Os agentes turísticos locais têm tido um papel fundamental na divulgação do Porto Santo como destino de excelência, promovendo o seu património natural e cultural e contribuindo para que esta ilha seja um destino de qualidade.

Neste sentido, foi com grande satisfação que a Porto Santo Sub – Dive Center, recebeu a notícia da Candidatura de Porto Santo a Reserva da Biosfera da UNESCO, no âmbito do Programa *O Homem e a Biosfera*, comprometendo-se no apoio à prossecução dos seus objectivos, para em conjunto contribuir para o desenvolvimento sustentável da nossa ilha.

Local tourism agents have played a key role in spreading Porto Santo as a destination of excellence, promoting its natural and cultural heritage and contributing to make this island a quality destination.

In this regard, it was with great satisfaction that the **Porto Santo Sub – Dive Center**, received the news of the application of Porto Santo to the UNESCO Biosphere Reserve, within the scope of the Man and the Biosphere Program, pledging to support the pursuit of its objectives, to together contribute to the sustainable development of our island.



(José Ricardo)

CANDIDATURA DE PORTO SANTO A RESERVA DA BIOSFERA DA UNESCO

DECLARAÇÃO DE APOIO À CANDIDATURA DO PORTO SANTO A RESERVA DA BIOSFERA

O Restaurante *Pedaços de Verão*..... Felicitamos e apoiamos a Candidatura de Porto Santo a Reserva da Biosfera, no âmbito do Programa *O Homem e a Biosfera* da UNESCO, e comprometemo-nos a contribuir para a divulgação e promoção dos sabores locais.

PEDAÇOS DE VERÃO
Restauração Unipessoal, Lda.
Nipc: 514 025 360
A Gerência

A gerência,





SUPPORTING STATEMENT OF THE APPLICATION OF PORTO SANTO TO BECOME BIOSPHERE RESERVE

The *Rocha Amiga* (Friendly Rock) program of the Faculty of Sciences of the University of Lisbon recognizes the importance of the Application of Porto Santo to the UNESCO Biosphere Reserve to the sustainable development of this island of the Autonomous Region of Madeira namely to pursue the protection and valorization of its natural heritage.

In this sense, it was with great satisfaction that we received the news of the Application of Porto Santo to the UNESCO Biosphere Reserve, within the scope of the Man and the Biosphere Program, committing itself to jointly contribute to the pursuit of its objectives.

Lisbon, May 6, 2019

Coordinator of the Rocha Amiga program

Mário Cachão
Digitally signed by Mário Cachão
DN: cn=Mário Cachão, o=ULisboa, ou=Ciencias,
email=mcachao@fc.ul.pt, c=PT
Date: 2019.05.06 14:49:50 +01'00'

Mário Cachão
Associate Professor
Faculty of Sciences, University of Lisbon, Portugal



Região Autónoma dos Açores
Secretaria Regional da Energia, Ambiente e Turismo
DIREÇÃO REGIONAL DO AMBIENTE



DECLARAÇÃO DE APOIO À CANDIDATURA DA ILHA DO PORTO SANTO A RESERVA DA BIOSFERA

SUPPORTING LETTER FOR THE APPLICATION OF PORTO SANTO ISLAND TO BIOSPHERE RESERVE

Hernâni Hélio Jorge, na qualidade de Diretor Regional do Ambiente do Governo Regional dos Açores, manifesta o seu acordo e apoio à Candidatura da Ilha do Porto Santo – Região Autónoma da Madeira a Reserva da Biosfera, no âmbito do programa MAB da UNESCO.

Hernâni Hélio Jorge, as Regional Director for the Environment of the Regional Government of the Azores, expresses its agreement and support the application of Porto Santo island–Autonomous Region of Madeira to Biosphere Reserve, under the MAB programme of UNESCO.

Horta, 22 de maio de 2019

O Diretor Regional do Ambiente





La propuesta de Reserva de la Biosfera de La Isla de Porto Santo perteneciente a la Región Autónoma de Madeira en Portugal, comprende un espacio geográfico tanto marino como terrestre que recoge en su interior una amplia diversidad de valores naturales, humanos, paisajísticos, ambientales y culturales de notable singularidad de interés no solo local y regional sino nacional e internacional.

Para la declaración de propuesta de Reserva Mundial de la Biosfera de Porto Santo se ha atendido a los criterios del Programa MaB de la UNESCO, especialmente de los emanados de la Conferencia de Sevilla, el Plan de Acción de Madrid de las Reservas de la Biosfera (2008-2013), así como del Plan de Acción de Lima para el Programa sobre el Hombre y la Biosfera (MAB) de la UNESCO y su Red Mundial de Reservas de Biosfera (2016-2025).

Entendemos que con la declaración de Porto Santo como Reserva de la Biosfera se refuerza la red de Reservas en islas y se apuesta por la conservación integral de un territorio ambientalmente frágil.

Por todo ello, la Reserva de la Biosfera del Macizo de Anaga, respalda la candidatura de la propuesta de Reserva de Porto Santo promovida por las administraciones de la Región Autónoma de Madeira.

En Santa Cruz de Tenerife, 10 de julio de 2019.

El Director

José Cristóbal Rodríguez Piñero

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EXCMO. CABILDO INSULAR DE LANZAROTE
Reserva de la Biosfera de Lanzarote

biofera
1993-2018

Ana Isabel Carrasco Martín (1 de 1)
Directora General del Consejo de la Reserva de la Biosfera
Fecha Firma: 05/07/2019
HASH: 58c1eba4b1694f6babcb86c1f5beb457

A/A Sra Susana Fontinha,
Secretaria General de Medioambiente y Recursos Naturales
Región Autónoma de Madeira

Estimada sra Fontinha,

Lanzarote ostenta la declaración de Reserva de la Biosfera desde el año 1993 y es la certificación del compromiso de sus habitantes para con el territorio. Conlleva una gran responsabilidad y respeto hacia un destino de especiales características y delicado ecosistema.

Madeira comparte con nuestra isla de Lanzarote muchas características entre las que se encuentra un territorio con un valor incalculable y una población muy concienciada en la conservación y la interacción respetuosa.

Hemos tenido conocimiento a través de su Secretaría General de que han solicitado que sea reconocida como Reserva de la Biosfera la Isla de Porto Santo. Este paso prueba una vez más la apuesta de su Región Autónoma por defender y proteger su territorio, un dechado de virtudes tangibles e intangibles así como joyas naturales y parajes únicos.

Desde esta Oficina de la Reserva de la Biosfera de Lanzarote, les brindamos nuestro más sincero apoyo a su candidatura para que siga creciendo el % de territorio protegido gracias a la certificación de Porto Santo por parte de la Unesco en su Región y que se sume a la Reserva de la Biosfera de Santana.

Reciba saludos cordiales,

ANA CARRASCO MARTÍN
OFICINA DE LA RB LANZAROTE

DOCUMENTO FIRMADO ELECTRÓNICAMENTE



Cód. Validación: 75WEN2LHAHY2MY9TSGY4AR4XX | Verificación: <http://cabildolanzarote.sedelectronica.es/>
Documento firmado electrónicamente desde la plataforma esPublico Gestión | Página 1 de 2



CONSEJERÍA DE MEDIO AMBIENTE Y
EMERGENCIAS

CARTA DE APOYO A LA CANDIDATURA DE LA ISLA DE PORTO SANTO (MADEIRA-PORTUGAL) COMO RESERVA DE LA BIOSFERA

Porto Santo reúne grandes valores geológicos, paisajísticos, culturales, naturales, etc. Además, su candidatura ha sido elaborada atendiendo a los criterios del Programa y Estrategia MaB, Marco Estatutario y Plan de Acción de Lima. Y en cuanto a gestión, es un reto asumible que sea compartida, entre entidades públicas y privadas, como así se refleja.

Por ello, la Reserva de la Biosfera de Gran Canaria, como representante Manuel Carmelo Amador Jiménez, Director General de Medio Ambiente y Emergencias del Cabildo de Gran Canaria, entidad que gestiona la Reserva de la Biosfera de Gran Canaria, manifiesta su acuerdo al apoyo de Candidatura de la Isla de Porto Santo (Archipiélago de Madeira) a Reserva de la Biosfera, bajo en marco del Programa MaB de la UNESCO.

En Las Palmas de Gran Canaria, a 4 de julio de 2019.

EL DIRECTOR GENERAL DE MEDIO AMBIENTE Y EMERGENCIAS
CABILDO DE GRAN CANARIA

D. Manuel Carmelo Amador Jiménez





CÂMARA MUNICIPAL DE SANTANA
GABINETE DO PRESIDENTE

**DECLARAÇÃO DE APOIO À CANDIDATURA DA ILHA DO PORTO
SANTO A RESERVA DA BIOSFERA DA UNESCO**

Teófilo Alírio Reis Cunha, responsável pela gestão da Reserva da Biosfera de Santana, Região Autónoma da Madeira, manifesta o seu apoio à candidatura do Porto Santo a Reserva da Biosfera, no âmbito do programa MaB da UNESCO.

**DECLARATION OF SUPPORT FOR THE APPLICATION OF PORTO
SANTO TO THE UNESCO BIOSPHERE RESERVE**

Teófilo Alírio Reis Cunha, Chairman of Santana Biosphere Reserve, Autonomous Region of Madeira, expresses its agreement and support the application of Porto Santo to Biosphere Reserve, under the MaB program of UNESCO.

Paços do Concelho de Santana, 04 de julho de 2019.

O Presidente da Câmara Municipal,

Teófilo Alírio Reis Cunha





Carta de Apoyo a la declaración por parte de la UNESCO de la isla de Porto Santo, Madeira-Portugal, como Reserva de la Biosfera

Porto Santo, nombre alusivo a una bahía protegida de las tempestades, es una pequeña isla con apenas 42 Km² de superficie, perteneciente a la Región Autónoma de Madeira y localizada, por tanto, en la región biogeográfica de la Macaronesia, que fue descubierta en **1418** por **João Gonçalves Zarco** y **Bartolomeu Perestrelo** aunque sus primeros colonos llegaron en la década de 1420.

En Porto Santo confluyen tres grandes herencias geológicas que, como isla volcánica, le confiere una riqueza de tipos rocosos y estructuras volcánicas expuestas durante millones de años a la actividad erosiva. Sobre esta riqueza geológica, se produjeron fenómenos de expansión, competencia y evolución que condujeron a la diversidad genética y a las especies endémicas, que asociadas a las demás nativas caracterizan, con un elevado número de hábitats y endemismos, los ecosistemas terrestres y marinos de Porto Santo.

Los elementos naturales - paisaje, bosque y vegetación, biogeodiversidad terrestre y marina, recursos hídricos y edáficos - desempeñan funciones sociales y ecológicas con relevancia identitaria de Porto Santo, constituyendo un abanico de potencialidades para la puesta en marcha del programa MaB (Man and Biosphere-Personas y Biosfera) en el espacio a declarar Reserva de la Biosfera, lo que permitirá promocionar y valorizar los sectores económicos de desarrollo estratégico en Porto Santo, teniendo tanto a la población local y a los visitantes como actores destacados y beneficiarios principales.

La candidatura de Porto Santo como Reserva de la Biosfera ha sido elaborada atendiendo a los criterios del Programa y la Estrategia MaB y, en particular, a los emanados de la Conferencia de Sevilla, el Marco Estatutario de la Red Mundial de Reservas de la Biosfera y el Plan de Acción de Lima, y, siendo esta propuesta un reto asumible, es una necesidad que es preciso abordar con modelos de gestión compartida con entidades y colectivos del ámbito privado y asociativo no gubernamental, a la vez que consorciada con instituciones y otras administraciones del sector público, como así se refleja en la propuesta de candidatura.

Por todo ello, la Reserva Mundial de la Biosfera La Palma respalda total y absolutamente la propuesta para la declaración por parte de la UNESCO de la Reserva de la Biosfera de Porto Santo (Región Autónoma de Madeira-Portugal) y su incorporación a la Red Mundial de Reservas de la Biosfera.





Região Autónoma dos Açores
Secretaria Regional da Energia, Ambiente e Turismo
DIREÇÃO REGIONAL DO AMBIENTE
RESERVA DA BIOSFERA DA ILHA DAS FLORES



DECLARAÇÃO DE APOIO À CANDIDATURA DA ILHA DO PORTO SANTO A RESERVA DA BIOSFERA

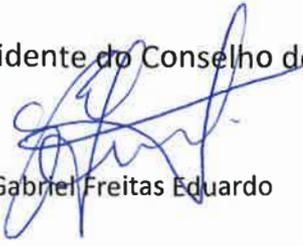
SUPPORTING LETTER FOR THE APPLICATION OF PORTO SANTO ISLAND TO BIOSPHERE RESERVE

José Gabriel Freitas Eduardo - Presidente do Conselho de Gestão da Reserva da Biosfera da ilha das Flores - Açores, manifesta o seu acordo e apoio à Candidatura da Ilha do Porto Santo – Região Autónoma da Madeira a Reserva da Biosfera, no âmbito do programa MAB da UNESCO.

José Gabriel Freitas Eduardo Chairman of the Management Board of Biosphere Reserve of Flores Island - Autonomous Region of the Azores, expresses its agreement and support the application of Porto Santo island– Autonomous Region of Madeira to Biosphere Reserve, under the MAB programmer of UNESCO.

Lajes das Flores, 24 de maio de 2019

O Presidente do Conselho de Gestão


José Gabriel Freitas Eduardo



Região Autónoma dos Açores
Secretaria Regional da Energia, Ambiente e Turismo
DIREÇÃO REGIONAL DO AMBIENTE
RESERVA DA BIOSFERA DA ILHA GRACIOSA



DECLARAÇÃO DE APOIO À CANDIDATURA DA ILHA DO PORTO SANTO A RESERVA DA BIOSFERA

SUPPORTING LETTER FOR THE APPLICATION OF PORTO SANTO ISLAND TO BIOSPHERE RESERVE

Pedro Manuel Lopes dos Santos Raposo, Presidente do Conselho de Gestão da Reserva da Biosfera da Ilha Graciosa Açores, manifesta o seu acordo e apoio à Candidatura da Ilha do Porto Santo – Região Autónoma da Madeira a Reserva da Biosfera, no âmbito do programa MAB da UNESCO.

Pedro Manuel Lopes dos Santos Raposo, Chairman of the Management Board of Graciosa Island Biosphere Reserve- Autonomous Region of the Azores, expresses its agreement and support the application of Porto Santo island – Autonomous Region of Madeira to Biosphere Reserve, under the MAB programme of UNESCO.

Santa Cruz da Graciosa, 22 de maio de 2019

O Presidente do Conselho de Gestão

Pedro Manuel Lopes dos Santos Raposo



Região Autónoma dos Açores
Secretaria Regional da Energia, Ambiente e Turismo
DIREÇÃO REGIONAL DO AMBIENTE
RESERVA DA BIOSFERA DA ILHA DO CORVO



DECLARAÇÃO DE APOIO À CANDIDATURA DA ILHA DO PORTO SANTO A RESERVA DA BIOSFERA

SUPPORTING LETTER FOR THE APPLICATION OF PORTO SANTO ISLAND TO BIOSPHERE RESERVE

Fernando Manuel Carvalho Ferreira - Presidente do Conselho de Gestão da Reserva da Biosfera da ilha do Corvo - Açores, manifesta o seu acordo e apoio à Candidatura da Ilha do Porto Santo – Região Autónoma da Madeira a Reserva da Biosfera, no âmbito do programa MAB da UNESCO.

Fernando Manuel Carvalho Ferreira Chairman of the Management Board of Biosphere Reserve of Corvo Island - Autonomous Region of the Azores, expresses its agreement and support the application of Porto Santo island– Autonomous Region of Madeira to Biosphere Reserve, under the MAB programmer of UNESCO.

Corvo, 23 de maio de 2019

O Presidente do Conselho de Gestão

Fernando Manuel Carvalho Ferreira



Região Autónoma dos Açores
Secretaria Regional da Energia, Ambiente e Turismo
DIREÇÃO REGIONAL DO AMBIENTE
RESERVA DA BIOSFERA DAS FAJÃS DE SÃO JORGE



DECLARAÇÃO DE APOIO À CANDIDATURA DA ILHA DO PORTO SANTO A RESERVA DA BIOSFERA

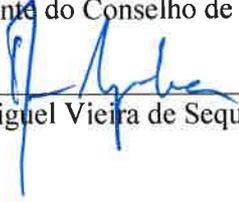
SUPPORTING LETTER FOR THE APPLICATION OF PORTO SANTO ISLAND TO BIOSPHERE RESERVE

Rui Miguel Vieira de Sequeira, Presidente do Conselho de Gestão da Reserva da Biosfera das Fajãs de São Jorge, Açores, manifesta o seu acordo e apoio à Candidatura da Ilha do Porto Santo – Região Autónoma da Madeira a Reserva da Biosfera, no âmbito do programa MAB da UNESCO.

Rui Miguel Vieira de Sequeira, Chairman of the Management Board of Biosphere Reserve of Fajãs de São Jorge - Autonomous Region of the Azores , expresses its agreement and support the application of Porto Santo island– Autonomous Region of Madeira to Biosphere Reserve, under the MAB programme of UNESCO.

Relvinha, 24 de Maio de 2019

O Presidente do Conselho de Gestão



Rui Miguel Vieira de Sequeira

Carta de apoio à Candidatura da ilha do Porto Santo a Reserva da Biosfera

A Sociedade Portuguesa para o Estudo das Aves (SPEA) é uma associação sem fins lucrativos de ambiente, que tem como missão trabalhar para o estudo e a conservação das aves e seus habitats, promovendo um desenvolvimento que garanta a viabilidade do património natural para usufruto das gerações futuras. Presente na região há mais de 20 anos tem trabalhado em conjunto com o Governo Regional na preservação e promoção dos recursos naturais do arquipélago.

Situada a cerca de 40 km a nordeste da Madeira, a ilha do Porto Santo e ilhéus em redor apresentam uma elevada bio e geodiversidade. Por este motivo, estão classificados dois sítios de Rede Natura 2000: os Ilhéus do Porto Santo e o Pico Branco – Terra Chã, assim como duas Áreas Importantes para as Aves e Biodiversidade: os Ilhéus do Porto Santo e Porto Santo Oeste.

Considerado um local de excelência para a observação de aves devido às características naturais, esta pequena ilha apresenta baixo relevo, vegetação rasteira dominante, pequenas lagoas e uma extensa praia de areia, além da presença de ilhéus e falésias costeiras. Nesta ilha, durante todo o ano, podem ser observadas espécies de aves residente, menos comuns e pouco frequentes na Madeira, como o cigarrinho, o pardal-espanhol, a poupa e o borrelho-de-coleira-interrompida. Durante o outono e inverno, esta ilha é um dos melhores locais para observação de aves migratórias em todo o arquipélago e, como tal, podem ser observadas algumas concentrações ou indivíduos isolados de passeriformes, limícolas ou garças que utilizam os habitats aquáticos para repousar e se alimentar. As aves marinhas, pelágicas e costeiras, como a cagarra, pintainho, gaivota-de-patas amarelas e garajau-comum, também podem ser observadas numa saída de mar em redor da ilha ou numa visita aos ilhéus.

Dada a importância do local, a SPEA tem desenvolvido um conjunto de iniciativas ao longo das últimas décadas, nomeadamente na área da educação ambiental, promoção do turismo ornitológico (projeto INTERREG MAC Macaroaves), conservação dos recursos naturais (projetos LIFE Ilhéus do Porto Santo e LIFE IBAS Marinhas), assim como ações de monitorização de aves nidificantes e migradoras (Atlas das Aves Nidificantes na Madeira, Atlas das Aves Nidificantes e Migradoras de Portugal, Censo de Mantas, Projeto Arenaria) e minimização dos impactes da poluição luminosa sobre as aves marinhas, numa parceria com as entidades locais.

Com base na sua experiência de trabalho e no conhecimento da biodiversidade da ilha do Porto Santo, a SPEA apoia a candidatura do Porto Santo a Reserva da Biosfera da UNESCO, estando inteiramente disponível para contribuir para a prossecução dos objetivos e implementação da mesma.

Lisboa, 24 de Junho de 2019.



Domingos Leitão

Diretor Executivo

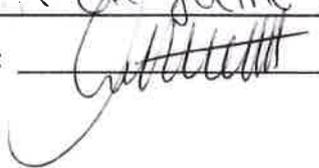
DECLARAÇÃO DE PARCERIA

O **Pestana Porto Santo Premium All Inclusive Beach & Spa Resort** declara para os devidos efeitos que reconhece a importância da candidatura *“Recuperação e Requalificação de Fontenários, Moinhos de Vento e Ecoteca do Porto Santo”*, da responsabilidade da Câmara Municipal do Porto Santo, apresentada a co-financiamento ao FUNDO EUROPEU DE DESENVOLVIMENTO REGIONAL - MADEIRA 14-20, enquadrado pela *“Prioridade 6.c – Conservação, proteção, promoção e desenvolvimento do património natural e cultural* (Eixo Prioritário 5 – Proteger o Ambiente e Promover a Eficiência de Recursos).

O **Pestana Porto Santo Premium All Inclusive Beach & Spa Resort** considera que esta candidatura irá contribuir de forma decisiva para a melhoria das condições de visita e fruição de equipamentos culturais, nomeadamente fontenários e moinhos de vento, salvaguardando a memória e identidade porto-santense. Permitirá ainda requalificar um espaço atualmente encerrado que funcionará como Centro de Interpretação Cultural e Ambiental do Porto Santo - Ecoteca, que valorizará o património natural desta ilha, promovendo a diversificação da oferta cultural e turística, baseada nos aspetos identitários da ilha.

Neste sentido, o **Pestana Porto Santo Premium All Inclusive Beach & Spa Resort**, irá cooperar com a Câmara Municipal do Porto Santo ao nível da **divulgação destas valências do património natural e cultural, no contexto das suas competências e atribuições ao nível da promoção cultural e turística.**

Data: 17 de Julho de 2019

Assinatura:  (Angela Quintal, Diretora de Hotel)



PESTANA

COLOMBOS

PREMIUM CLUB · ALL INCLUSIVE
BEACH & SPA RESORT
PORTO SANTO · PORTUGAL

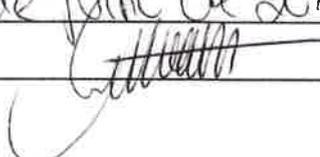
DECLARAÇÃO DE PARCERIA

O **Pestana Colombos Premium Club All Inclusive Beach & Spa Resort** declara para os devidos efeitos que reconhece a importância da candidatura *“Recuperação e Requalificação de Fontenários, Moinhos de Vento e Ecoteca do Porto Santo”*, da responsabilidade da Câmara Municipal do Porto Santo, apresentada a co-financiamento ao FUNDO EUROPEU DE DESENVOLVIMENTO REGIONAL - MADEIRA 14-20, enquadrado pela *“Prioridade 6.c – Conservação, proteção, promoção e desenvolvimento do património natural e cultural (Eixo Prioritário 5 – Proteger o Ambiente e Promover a Eficiência de Recursos)*.

O **Pestana Colombos Premium Club All Inclusive Beach & Spa Resort** considera que esta candidatura irá contribuir de forma decisiva para a melhoria das condições de visita e fruição de equipamentos culturais, nomeadamente fontenários e moinhos de vento, salvaguardando a memória e identidade porto-santense. Permitirá ainda requalificar um espaço atualmente encerrado que funcionará como Centro de Interpretação Cultural e Ambiental do Porto Santo - Ecoteca, que valorizará o património natural desta ilha, promovendo a diversificação da oferta cultural e turística, baseada nos aspetos identitários da ilha.

Neste sentido, o **Pestana Colombos Premium Club All Inclusive Beach & Spa Resort**, irá cooperar com a Câmara Municipal do Porto Santo ao nível da divulgação destas valências do património natural e cultural, no contexto das suas competências e atribuições ao nível da promoção cultural e turística.

Data: 18 de julho de 2019

Assinatura:  (Angela Quintal, Diretora de Hotel)

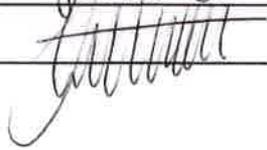
DECLARAÇÃO DE PARCERIA

O **Pestana Ilha Dourada Hotel & Villas** declara para os devidos efeitos que reconhece a importância da candidatura *“Recuperação e Requalificação de Fontenários, Moinhos de Vento e Ecoteca do Porto Santo”*, da responsabilidade da Câmara Municipal do Porto Santo, apresentada a co-financiamento ao FUNDO EUROPEU DE DESENVOLVIMENTO REGIONAL - MADEIRA 14-20, enquadrado pela *“Prioridade 6.c – Conservação, proteção, promoção e desenvolvimento do património natural e cultural* (Eixo Prioritário 5 – Proteger o Ambiente e Promover a Eficiência de Recursos).

O **Pestana Ilha Dourada Hotel & Villas** considera que esta candidatura irá contribuir de forma decisiva para a melhoria das condições de visita e fruição de equipamentos culturais, nomeadamente fontenários e moinhos de vento, salvaguardando a memória e identidade porto-santense. Permitirá ainda requalificar um espaço atualmente encerrado que funcionará como Centro de Interpretação Cultural e Ambiental do Porto Santo - Ecoteca, que valorizará o património natural desta ilha, promovendo a diversificação da oferta cultural e turística, baseada nos aspetos identitários da ilha.

Neste sentido, o **Pestana Ilha Dourada Hotel & Villas**, irá cooperar com a Câmara Municipal do Porto Santo ao nível da divulgação destas valências do património natural e cultural, no contexto das suas competências e atribuições ao nível da promoção cultural e turística.

Data: 18 de Junho de 2019

Assinatura:  (Angela Quintal, Diretora de Hotel)



Areia Dourada Actividades Hoteleiras, Lda

CANDIDATURA DO PORTO SANTO A RESERVA DA BIOSFERA DA UNESCO

DECLARAÇÃO DE APOIO À CANDIDATURA DO PORTO SANTO A RESERVA
DA BIOSFERA
SUPPORTING STATEMENT OF THE APPLICATION OF PORTO SANTO TO
BECOME BIOSPHERE RESERVE

As unidades hoteleiras têm tido um papel fundamental na divulgação do Porto Santo como destino de excelência, proporcionando a quem nos visita experiências e estadias únicas que ficam na memória e que contribuem para que esta ilha se afirme como um destino de qualidade.

Neste sentido, foi com grande satisfação que o Hotel Areia Dourada recebeu a notícia da Candidatura do Porto Santo a Reserva da Biosfera da UNESCO, no âmbito do Programa *O Homem e a Biosfera*, comprometendo-se no apoio à prossecução dos seus objectivos, para em conjunto contribuir para o desenvolvimento sustentável da nossa ilha.

The hotel units have played a key role in promoting Porto Santo as a destination of excellence, providing those who visit us with unique experiences and stays that are in the memory and that contribute to this island as a destination of quality.

In this sense, it was with great satisfaction that the Hotel Areia Dourada received the news of the Application of Porto Santo to the UNESCO Biosphere Reserve, within the scope of the Man and the Biosphere Program, committing itself in the support to the pursuit of its objectives, to jointly contribute to the sustainable development of our island.

O Hotel/Residencial

AREIA DOURADA ACTIV. HOTELEIRAS LDA
Lugar 511 258 780
Campo de Baixo 9400-015 PORTO SANTO

(Nome)

Morada:
Sítio do Espírito Santo
Campo de Baixo
9400 - 015 Porto Santo
Contribuinte: 511 258 780

Telefone: 291 980110
Telemóvel: 96 3817920
Fax: 291 980115
E-mail: areiadourada@grupopereira.net
Site: www.areiadourada.pt



CANDIDATURA DO PORTO SANTO A RESERVA DA BIOSFERA DA UNESCO

DECLARAÇÃO DE APOIO À CANDIDATURA DO PORTO SANTO A RESERVA
DA BIOSFERA
SUPPORTING STATEMENT OF THE APPLICATION OF PORTO SANTO TO
BECOME BIOSPHERE RESERVE

As unidades hoteleiras têm tido um papel fundamental na divulgação do Porto Santo como destino de excelência, proporcionando a quem nos visita experiências e estadias únicas que ficam na memória e que contribuem para que esta ilha se afirme como um destino de qualidade.

Neste sentido, foi com grande satisfação que os apartamentos Turísticos Paraíso Dourado recebeu a notícia da Candidatura do Porto Santo a Reserva da Biosfera da UNESCO, no âmbito do Programa *O Homem e a Biosfera*, comprometendo-se no apoio à prossecução dos seus objectivos, para em conjunto contribuir para o desenvolvimento sustentável da nossa ilha.

The hotel units have played a key role in promoting Porto Santo as a destination of excellence, providing those who visit us with unique experiences and stays that are in the memory and that contribute to this island as a destination of quality.

In this sense, it was with great satisfaction that the Tourist Apartments Paraíso Dourado received the news of the Application of Porto Santo to the UNESCO Biosphere Reserve, within the scope of the Man and the Biosphere Program, committing itself in the support to the pursuit of its objectives, to jointly contribute to the sustainable development of our island.

O Hotel/Residencial



Nascemos para O Servir!

Recepção:
Est. Francisco Rodrigues Jardim, Urb. Zarcoshopping,
Lapeira, 9400-065 Porto Santo E-mail:
paraisodourado@grupopereira.net
T.291983788 / 962516131 F.291985040

Administração:
Caminho das Preces 16-18,
Santo António, 9020-110 Funchal
E-mail: brunopereira@grupopereira.net
T.291700480 / 963817922 F.291700489

CANDIDATURA DO PORTO SANTO A RESERVA DA BIOSFERA DA UNESCO

DECLARAÇÃO DE APOIO À CANDIDATURA DO PORTO SANTO A RESERVA DA BIOSFERA
SUPPORTING STATEMENT OF THE APPLICATION OF PORTO SANTO TO BECOME BIOSPHERE
RESERVE

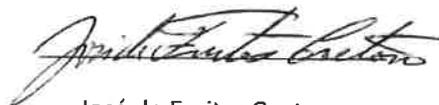
As unidades de alojamento local têm tido um papel fundamental na divulgação do Porto Santo como destino de excelência, oferecendo um serviço informal e personalizado a quem nos visita, proporcionando experiências e estadias únicas que ficam na memória pela proximidade com o povo porto-santense e que contribuem para que esta ilha se afirme como um destino de qualidade.

Neste sentido, foi com grande satisfação que a CASA DA VILA recebeu a notícia da Candidatura do Porto Santo a Reserva da Biosfera da UNESCO, no âmbito do Programa *O Homem e a Biosfera*, comprometendo-se no apoio à prossecução dos seus objetivos, para em conjunto contribuir para o desenvolvimento sustentável da nossa ilha.

Local accommodation units have played a key role in spreading Porto Santo as a destination of excellence, offering an informal and personalized service to those who visit us, providing unique experiences and stays that are remembered for their proximity to the people of Porto Santo and contribute to this island as a destination of quality.

In this sense, it was with great satisfaction that the CASA DA VILA received the news of the Application of Porto Santo to the UNESCO Biosphere Reserve, within the scope of the Man and the Biosphere Program, committing itself in the support to the pursuit of its objectives , to jointly contribute to the sustainable development of our island.

Pela Casa da Vila



José de Freitas Caetano

8.4

CONGRATULATION VOTE OF PORTO SANTO MUNICIPAL ASSEMBLY

À Sra. Secretária
09/03/2018

Udo Figueira



Sec. Reg. do Ambiente e
Recursos Naturais
Gabinete do Secretário

ENTRADA

N.º : 3 561 08/03/2018

Proc.: 98.0.1.0

Dar conhecimento à
Doutor Susana Furtado
12.3.2018
SLW

Previdência
Arquivo

Tomei conhecimento.
13/03/2018
mk



Ex.^{ma} Senhora

**Secretária Regional do Ambiente e
dos Recursos naturais**

Avenida Arriaga, Edifício Golden Gate 5.º

9000 Funchal

Sua referência	Sua comunicação de	Ofício n.º	Data
		82	02/03/2018

ASSUNTO: VOTO DE CONGRATULAÇÃO APRESENTADO PELO GRUPO MUNICIPAL DO PARTIDO SOCIAL DEMOCRATA PELA CANDIDATURA DA ILHA DO PORTO SANTO À RESERVA DA BIOSFERA DA UNESCO

Para os devidos efeitos, levo ao conhecimento de V.^a Ex.^a, que a Assembleia Municipal do Porto Santo, na sua Sessão Ordinária de 26 de Fevereiro, aprovou por unanimidade, com 16 votos a favor (6 do PSD, 6 do PS, 2 do Movimento Mais Porto Santo, 1 da Presidente da Junta de Freguesia e 1 da Presidente da Assembleia Municipal), um Voto de Congratulação, apresentado pelo Grupo Municipal do Partido Social Democrata, cujo teor, abaixo se transcreve na íntegra:

“O Grupo Municipal do Partido Social Democrata na Assembleia Municipal do Porto Santo vem pelo presente, apresentar uma proposta de Voto de Congratulação aos principais impulsionadores deste projeto, Governo Regional da Madeira através da Secretaria Regional do Ambiente e Recursos Naturais, Câmara Municipal do Porto Santo e Direção Regional para a Administração Pública do Porto Santo.

Desde a sua formação há 14 milhões de anos até à atualidade, este território, outrora inóspito, tornou-se num ex-libris, que atrai anualmente, milhares de pessoas.

As suas gentes, costumes e tradições, o seu património natural e imóvel, enaltecem esta candidatura que legitima o reconhecimento de uma ilha ímpar, capaz de

Largo do Pelourinho, 9400-001 PORTO SANTO

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olhar para o passado e conceber uma forte aposta futura apoiada num desenvolvimento sustentável, profícuo e atrativo.

O trabalho vindo a ser realizado por entidades públicas e privadas, agentes económicos e culturais, demonstram o querer e o poder que elevam a nossa Ilha a patamares de qualidade há muito ambicionado.

A competitividade existente nos destinos turísticos mundiais exigem uma capacidade de resposta cada vez mais célere e específica, sendo que a Reserva da Biosfera irá destacar o Ecoturismo, potenciando o maior sector de empregabilidade da ilha.

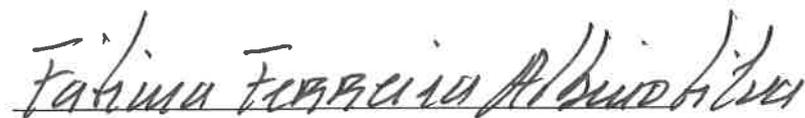
Este apoio é reflexo do empenho do Sr. Presidente do Governo Regional, Dr. Miguel Albuquerque, em colocar a ilha do Porto Santo em destaque, sendo o estatuto atribuído benéfico para os Porto-santenses, Madeirenses e todos quantos nos visitam.

Vem o Grupo Municipal do Partido Social Democrata na Assembleia Municipal do Porto Santo apresentar, ao abrigo do artigo 28º, alínea e) do Regimento da Assembleia Municipal do Porto Santo, para que seja aprovado por esta Assembleia, a seguinte proposta de:

Voto de Congratulação pela candidatura da Ilha do Porto Santo à Reserva da Biosfera da UNESCO.”

Com os melhores cumprimentos.

A PRESIDENTE DA ASSEMBLEIA MUNICIPAL,



(Fátima Maria Camacho Ferreira Albino Silva)

SF

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8.5

PORTO SANTO MUNICIPAL COUNCIL NOTICE



MUNICÍPIO DO PORTO SANTO

CÂMARA MUNICIPAL

EDITAL N.º 35/2019

MANDATO 2017/2021

DELIBERAÇÕES

REUNIÃO ORDINÁRIA DE 15 DE JULHO DE 2019

O Presidente da Câmara Municipal do Porto Santo, José Idalino de Vasconcelos, torna público, em cumprimento do disposto no artigo 56.º da Lei n.º 75/2013, de 12 de Setembro, que na Reunião Ordinária de dia 15 de julho de 2019, no Edifício de Serviços Públicos, pelas 14:30M, foram tomadas as seguintes deliberações:

1. Deliberar, ao abrigo do RJUE, aprovado pelo Decreto-Lei n.º 555/99, de 16 de dezembro, na sua atual redação, sobre os pedidos de licenciamento de edificação e urbanização, constantes da relação em anexo:
 - 1.1- **Matthias Folkers e Lorenz Oesterreich** (Proc. 180/2019) – Campo de Baixo – Deliberar deferir o projeto de arquitetura para alteração e ampliação de uma moradia unifamiliar e piscina, edificada no prédio urbano matriz n.º 4685 - **Aprovado por unanimidade**, com os votos favoráveis do Presidente, José Idalino de Vasconcelos, e dos Vereadores, Pedro Freitas, Filipe Menezes de Oliveira, Sofia Santos e José António Castro.
 - 1.2 - **Gonçalo Nuno de Freitas Vieira** (Proc. 264/2018) – Farrobo – Deliberar aprovar os projetos de especialidades e conceder a respetiva licença para reabilitação e adaptação de uma moradia existente (prédio urbano matriz n.º 2428) - **Aprovado por unanimidade**, com os votos favoráveis do Presidente, José Idalino de Vasconcelos, e dos Vereadores, Pedro Freitas, Filipe Menezes de Oliveira, Sofia Santos e José António Castro.
2. Deliberar sobre a Proposta da 6ª modificação ao orçamento – 5.ª alteração ao Plano Plurianual de Investimentos - ano financeiro de 2019 - **Aprovado por maioria**, com os votos favoráveis do Presidente, José Idalino de Vasconcelos, e dos Vereadores, Pedro Freitas, e José António Castro e abstenção dos Vereadores Filipe Menezes de Oliveira, Sofia Santos.
3. Deliberar Sobre o Plano de Ação da Reserva da Biosfera da Ilha do Porto Santo - **Aprovado por maioria**, com os votos favoráveis do Presidente, José Idalino de Vasconcelos, e dos Vereadores, Pedro Freitas, e José António Castro e os votos contra dos Vereadores Filipe Menezes de Oliveira, Sofia Santos.



MUNICÍPIO DO PORTO SANTO
CÂMARA MUNICIPAL

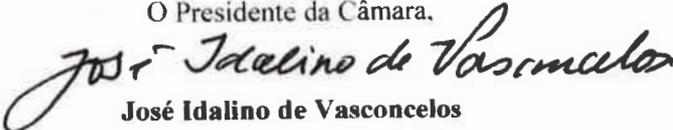
4. Deliberar sobre a Proposta de Normas de Concessão de “Barracas” e Atribuição de Licenças – Concessão de Espaços Provisórios – Festival do Petisco 2019, e Normas de Funcionamento da Zona de Estruturas de Comes-e-bebes - **Aprovado por unanimidade**, com os votos favoráveis do Presidente, José Idalino de Vasconcelos, e dos Vereadores, Pedro Freitas, Filipe Menezes de Oliveira, Sofia Santos e José António Castro.
5. Deliberar sobre o pedido apresentado por Ana Cláudia Oliveira (processo n.º 2252/2019 11.02), solicitando autorização para venda de crepes no palito, crepes franceses e cascata de fruta e chocolate, nos meses de julho e agosto – na sequência da resposta apresentada em sede de audiência prévia - **Reprovado por unanimidade**, com os votos contra do Presidente, José Idalino de Vasconcelos, e dos Vereadores, Pedro Freitas, Filipe Menezes de Oliveira, Sofia Santos e José António Castro.
6. Deliberar sobre o pedido apresentado por Sara Rubina Berenguer Caires (processo n.º 2234/2019 07.12) solicitando alargamento do horário de funcionamento e licença especial de ruído, para o estabelecimento “Só de Verão”, até às 04:00h, de todas as terças, até 30 de setembro - **Reprovado por unanimidade**, com os votos contra do Presidente, José Idalino de Vasconcelos, e dos Vereadores, Pedro Freitas, Filipe Menezes de Oliveira, Sofia Santos e José António Castro.
7. Deliberar sobre o pedido apresentado por João Marcelino dos Santos (processo n.º 2929/2019 13.04), solicitando licença para colocação de barraca, para o arraial do Santíssimo – Capela do Espírito Santo - **Aprovado por unanimidade**, com os votos favoráveis do Presidente, José Idalino de Vasconcelos, e dos Vereadores, Pedro Freitas, Filipe Menezes de Oliveira, Sofia Santos e José António Castro.
8. Deliberar sobre o pedido apresentado por Maria Fátima Melim (processo n.º 2945/2019 14.03), solicitando licença para colocação de barraca, para as festas e arraiais constantes do requerimento - **Aprovado por unanimidade**, com os votos favoráveis do Presidente, José Idalino de Vasconcelos, e dos Vereadores, Pedro Freitas, Filipe Menezes de Oliveira, Sofia Santos e José António Castro.
9. Deliberar sobre o pedido apresentado por Rúben Dinarte Silva Drumond (processo n.º 2959/2019 11.03), solicitando alargamento do horário de funcionamento até 15 de setembro, até às 03:00 h, com exceção das datas já autorizadas - **Aprovado por unanimidade**, com os votos favoráveis do Presidente, José Idalino de Vasconcelos, e dos Vereadores, Pedro Freitas, Filipe Menezes de Oliveira, Sofia Santos e José António Castro.



MUNICÍPIO DO PORTO SANTO
CÂMARA MUNICIPAL

10. Deliberar sobre o pedido apresentado pelo Hotel Torre Praia (processo n.º 2995/2019 13.05), solicitando licença especial de ruído para dia 7 de setembro, até às 03:00 do dia seguinte - **Aprovado por unanimidade**, com os votos favoráveis do Presidente, José Idalino de Vasconcelos, e dos Vereadores, Pedro Freitas, Filipe Menezes de Oliveira, Sofia Santos e José António Castro.
11. Deliberar sobre o pedido apresentado por Maria Miquelina Pestana da Paixão, (processo n.º 3062/2019 07.12) solicitando licença especial de ruído para o estabelecimento “Mar e Sol”, para o dia 10 de agosto - **Aprovado por unanimidade**, com os votos favoráveis do Presidente, José Idalino de Vasconcelos, e dos Vereadores, Pedro Freitas, Filipe Menezes de Oliveira, Sofia Santos e José António Castro.
12. Deliberar sobre o pedido apresentado por Rogério do Ó Drumond (processo 3065/2019 13.04), solicitando autorização para venda de produtos hortícolas de 1 a 31 de agosto, junto à praia do Henrique - **Aprovado por unanimidade**, com os votos favoráveis do Presidente, José Idalino de Vasconcelos, e dos Vereadores, Pedro Freitas, Filipe Menezes de Oliveira, Sofia Santos e José António Castro.
13. Ratificar o despacho do Presidente, José Idalino de Vasconcelos, que autorizou o pedido apresentado por Miguel João Caldeira de Sousa Ramos (processo n.º 2707/2019 11.02), solicitando autorização para venda de produtos de barro, junto à Estátua do Barqueiro, de 8 de julho a 21 de julho - **Aprovado por unanimidade**, com os votos favoráveis do Presidente, José Idalino de Vasconcelos, e dos Vereadores, Pedro Freitas, Filipe Menezes de Oliveira, Sofia Santos e José António Castro.
14. Informação à Câmara Municipal sobre a Minuta do Contrato Promessa de Compra e Venda do Edifício de Serviços Públicos, na sequência da deliberação da Assembleia Municipal do Porto Santo, do passado dia 23 de Abril de 2019 relativamente à Proposta de Contrato de Empréstimo de Médio/Longo Prazo para a Aquisição do Edifício de Serviços Públicos (Fracções A e B), sito à Rua Dr. Nuno Silvestre Teixeira, até ao montante de 1.500.000,00 euros – **A Câmara Municipal foi informada.**

O Presidente da Câmara,


José Idalino de Vasconcelos

8.6

RESOLUTION OF THE REGIONAL GOVERNMENT OF MADEIRA



JORNAL OFICIAL

Segunda-feira, 29 de julho de 2019

I

Série

Número 121

2.º Suplemento

Sumário

PRESIDÊNCIA DO GOVERNO REGIONAL

Resolução n.º 472/2019

Aprova o Relatório e a Conta da Região do ano de 2018.

Resolução n.º 473/2019

Autoriza a expropriação, pelo valor global de € 55.303,24, da planta parcelar da obra “Construção do Alargamento da Estrada do Garajau”.

Resolução n.º 474/2019

Autoriza a cessão de utilização e gestão a título precário e gratuito à entidade pública empresarial IHM - Investimentos Habitacionais da Madeira, EPERAM de: a) Parte do prédio misto e suas benfeitorias, localizado no sítio do Galeão, na freguesia de São Roque, município do Funchal e b) Prédio urbano, destinado a habitação, localizado no Caminho Novo de Galeão n.º 27, freguesia de São Roque, município do Funchal.

Resolução n.º 475/2019

Aprova o despacho conjunto que cria o grupo de trabalho cuja missão é o estudo e concretização de soluções habitacionais, para realojamento dos agregados familiares carenciados, expropriados na sequência da execução da obra de “Construção do Novo Hospital do Funchal”.

Resolução n.º 476/2019

Aprova a proposta de candidatura do Porto Santo a Reserva da Biosfera da UNESCO.

Resolução n.º 477/2019

Determina a alteração do ato final de rescisão do Contrato de Concessão de Exploração da Escola Profissional de Hotelaria e Turismo da Madeira, celebrado com a Celff - Centro de Estudos, Línguas e Formação do Funchal, S.A., no que concerne ao momento de produção de efeitos do mesmo, determinando que a aludida rescisão produza os respetivos efeitos à data de 31 de julho de 2020.

Resolução n.º 478/2019

Louva publicamente a associação cultural sem fins lucrativos Teatro Metaphora - Associação de Amigos das Artes e os seus membros.

Resolução n.º 479/2019

Aprova o Decreto Regulamentar Regional que fixa em € 745,00, o valor por metro quadrado de área útil padrão para valer no ano 2019, para a Indústria da Construção.

O Conselho do Governo reunido em plenário em 25 de julho de 2019, resolve:

1. Autorizar nos termos do n.º 1 do artigo 28.º conjugado com o artigo 26.º ambos do DLR n.º 7/2012/M, de 20 de abril, alterado e republicado pelo DLR n.º 24/2017/M, de 3 de agosto, a cessão de utilização e gestão a título precário e gratuito à entidade pública empresarial IHM – Investimentos Habitacionais da Madeira, EPERAM, pessoa coletiva de direito público de: A) Parte do prédio misto e suas benfeitorias, localizado no sítio do Galeão, na freguesia de São Roque, concelho do Funchal, inscrito a parte rústica na matriz cadastral sob o artigo n.º 121 da secção “H”, correspondente a uma área de 522m² e a parte urbana, inscrita na matriz predial respetiva sob os artigos n.ºs 1370 com área total de 28m², o artigo n.º 2000, com área total de 82m², e parte do logradouro do artigo 2321, com área de 38m², descrito na Conservatória do Registo Predial do Funchal sob o n.º 2245; B) Prédio urbano, destinado a habitação, localizado no Caminho Novo de Galeão n.º 27, freguesia de São Roque, concelho do Funchal, inscrito na matriz predial respetiva sob o artigo n.º 3752, com área total de 455 m², descrito na Conservatória do Registo Predial do Funchal sob o n.º 1725.
2. Aprovar a minuta do protocolo de utilização e gestão, a qual faz parte integrante desta resolução e fica arquivada na Secretaria Geral da Presidência.
3. Mandatar o Vice-Presidente do Governo Regional para em representação da Região Autónoma da Madeira, outorgar o protocolo de utilização e gestão.

Presidência do Governo Regional. - O PRESIDENTE DO GOVERNO REGIONAL, Miguel Filipe Machado de Albuquerque

Resolução n.º 475/2019

Considerando que a Região Autónoma da Madeira tem prevista a execução da obra de “Construção do Novo Hospital do Funchal”;

Considerando que, em virtude do procedimento expropriativo, será necessário assegurar uma solução para o realojamento dos agregados familiares expropriados, o que envolve uma estreita articulação entre a Vice-Presidência do Governo Regional, a Secretaria Regional dos Equipamentos e Infraestruturas e ainda a Secretaria Regional da Inclusão e Assuntos Sociais, o que recomenda a criação de um grupo de trabalho técnico para o efeito:

Assim, nos termos do artigo 28.º do Decreto Legislativo Regional n.º 17/2007/M, de 12 de novembro, o Conselho do Governo reunido em plenário em 25 de julho de 2019, resolve:

Ponto único - Aprovar o despacho conjunto, o qual cria o grupo de trabalho que tem por missão o estudo e concretização de soluções habitacionais, para realojamento dos agregados familiares carenciados, expropriados na sequência da execução da obra de “Construção do Novo Hospital do Funchal”.

Presidência do Governo Regional. - O PRESIDENTE DO GOVERNO REGIONAL, Miguel Filipe Machado de Albuquerque

Resolução n.º 476/2019

Considerando que o território proposto para a Reserva da Biosfera da Ilha do Porto Santo apresenta características

muito peculiares com destaque para a imensidão da sua praia, a sua ruralidade e os seus ilhéus;

Considerando que o mesmo possui ecossistemas bem preservados e detentores de espécies de excepcional interesse para a conservação da natureza e da biodiversidade, sendo reconhecido pela diversidade e beleza das suas paisagens naturais e humanizadas;

Considerando que ao longo dos últimos 600 anos de história, o povoamento da ilha foi feito à custa de muito sacrifício e resiliência, o que acabou por contribuir para a criação de uma identidade cultural própria que se reflete nas tradições e valores das suas gentes;

Considerando que tal unicidade merece ser valorizada e divulgada, contribuindo para um desenvolvimento ambiental, social e económico, no respeito pelo passado e pelas gerações futuras;

Considerando que, tendo por base o princípio MaB da UNESCO – a relação Homem-Biosfera –, se pretende com a Reserva da Biosfera garantir um equilíbrio sustentável entre as necessidades da população do Porto Santo, a conservação da biogeodiversidade, a promoção do desenvolvimento económico e a valorização da cultura e tradições;

Considerando que a Reserva da Biosfera da Ilha do Porto Santo visa afirmar esta ilha atlântica como um território diferenciado e pioneiro no âmbito da sustentabilidade, com uma estratégia concertada de harmonização entre o desenvolvimento local e o respeito pela conservação da natureza e valorização do seu património e das suas gentes;

Considerando que a Reserva da Biosfera da Ilha do Porto Santo tem por missão fomentar a produção e intercâmbio de conhecimento científico, tecnológico e tradicional, envolvendo a comunidade científica, decisores políticos e grupos de cidadãos, e dar visibilidade ao Porto Santo enquanto laboratório vivo e modelo demonstrativo de equilíbrio entre a conservação da natureza e as atividades humanas, por via de um trabalho em rede e de partilha, entre diferentes agentes, privilegiando o desenvolvimento local.

Considerando que o Plano de Ação 2020-2025, fruto das ações de auscultação junto da comunidade local, constitui um instrumento norteador e de grande valor que define a estratégia de gestão para a Reserva da Biosfera da Ilha do Porto Santo.

O Conselho do Governo reunido em plenário em 25 de julho de 2019, resolve:

1. Aprovar a proposta de candidatura do Porto Santo a Reserva da Biosfera da UNESCO.
2. Aprovar o Plano de Ação 2020-2025.
3. Criar o Grupo de Trabalho Porto Santo a Reserva da Biosfera (GT – PSRB), com as seguintes competências:
 - a) acompanhar a candidatura do Porto Santo a Reserva da Biosfera até ao início de funções da entidade gestora definitiva;
 - b) prestar esclarecimentos às entidades intervenientes no processo de aprovação da candidatura.
4. O GT – PSRB será composto por representantes das seguintes entidades:
 - a) 3 representantes da Região Autónoma da Madeira, sendo 1 do Gabinete da Secretaria Regional do Ambiente e Recursos Naturais, 1 do Instituto das Florestas e Conservação da Natureza, IP-RAM, e 1 da Direção Regional para a Administração Pública do Porto Santo;
 - b) 1 representante da Câmara Municipal do Porto Santo;

- c) 1 representante da AREAM - Agência Regional da Energia e Ambiente da Região Autónoma da Madeira;
- d) 1 representante da Associação Grupo de Folclore do Porto Santo.

Presidência do Governo Regional. - O PRESIDENTE DO GOVERNO REGIONAL, Miguel Filipe Machado de Albuquerque

Resolução n.º 477/2019

Considerando que, por Resolução do Conselho de Governo n.º 415/2019, aprovada em reunião de 27 de junho, publicada no Jornal Oficial da Região Autónoma da Madeira, I Série, número 108, de 5 de julho de 2019, o Conselho do Governo reunido em plenário em 25 de julho de 2019, resolveu, por unanimidade, face aos considerandos ali expostos, proceder à alteração do ato final de rescisão do Contrato de Concessão de Exploração da Escola Profissional de Hotelaria e Turismo da Madeira celebrado com a Celff – Centro de Estudos, Línguas e Formação do Funchal, S.A., no que concerne ao momento de produção de efeitos do mesmo, determinando que a aludida rescisão produza os respetivos efeitos à data de 31.07.2020;

Considerando que decorrido que se encontra o período concedido para a concessionária, a Celff – Centro de Estudos, Línguas e Formação do Funchal, S.A., querendo, exercer o direito de audiência prévia, esta nada disse.

O Conselho de Governo face aos considerandos vertidos na dita Resolução n.º 415/2019, que se dão por reproduzidos e, bem assim, nos aqui expostos, procede à alteração do ato final de rescisão do Contrato de Concessão de Exploração da Escola Profissional de Hotelaria e Turismo da Madeira, celebrado com a Celff – Centro de Estudos, Línguas e Formação do Funchal, S.A., no que concerne ao momento de produção de efeitos do mesmo, determinando que a aludida rescisão produza os respetivos efeitos à data de 31.07.2020.

Presidência do Governo Regional. - O PRESIDENTE DO GOVERNO REGIONAL, Miguel Filipe Machado de Albuquerque

Resolução n.º 478/2019

Considerando que o Teatro Metaphora – Associação de Amigos das Artes, sediado em Câmara de Lobos, associação cultural sem fins lucrativos, fundado a 3 de setembro de 2009, tem, ao longo dos últimos anos, desenvolvido projetos educacionais, culturais e sociais, entre eles, o Projeto Green Steps;

Considerando que o Projeto Green Steps tem contribuído para o desenvolvimento integrado e sustentado da comunidade onde se insere;

Considerando que o Projeto Green Steps, assente em métodos de educação não-formal, permite desenvolver competências sociais e pessoais de crianças, jovens e adultos, envolvendo a comunidade local no seu processo criativo;

Considerando que o Projeto Green Steps, com o desenvolvimento de diversas obras de arte através da reciclagem e reutilização de artigos, tem cooperado para a sensibilização e consciencialização do património natural, dos valores ecológicos e da temática da sustentabilidade;

Considerando que as suas instalações artísticas são objeto de reconhecido impacto a nível local, nacional e internacional, onde se incluem publicações em revistas, sites de arquitetura e de decoração assim como, a atribuição

do prestigiado Prémio Gulbenkian 2019, na área da sustentabilidade;

Considerando que o Projeto Green Steps constitui um projeto sociocultural, agregador e de clara expressão artística contemporânea, que tem inequivocamente colaborado para a afirmação criativa da região como demonstram as participações do Teatro Metaphora – Associação de Amigos das Artes em prestigiados festivais internacionais;

Considerando que o Teatro Metaphora – Associação de Amigos das Artes tem contribuído para o prestígio do nome da Região Autónoma da Madeira, sendo um excelente exemplo de agregação da comunidade e da sustentabilidade através da arte.

O Conselho de Governo reunido em plenário em 25 de julho de 2019, resolve louvar publicamente a associação cultural sem fins lucrativos Teatro Metaphora – Associação de Amigos das Artes e os seus membros.

Presidência do Governo Regional. - O PRESIDENTE DO GOVERNO REGIONAL, Miguel Filipe Machado de Albuquerque

Resolução n.º 479/2019

O Conselho do Governo, reunido em plenário em 25 de julho de 2019, tendo presente o Relatório da Comissão Técnica criada para o efeito nos termos do artigo 5.º do Decreto Legislativo Regional n.º 8/84/M, de 29 de junho, resolve aprovar o Decreto Regulamentar Regional que fixa em € 745,00, o valor por metro quadrado de área útil padrão para valer no ano 2019, para a Indústria da Construção.

Presidência do Governo Regional. - O PRESIDENTE DO GOVERNO REGIONAL, Miguel Filipe Machado de Albuquerque

Resolução n.º 480/2019

Considerando o excelente resultado obtido pelo atleta madeirense Nuno Pereira, do Sporting Clube de Portugal, ao sagrar-se Campeão da Europa de atletismo no escalão de Sub-20;

Considerando que com a obtenção deste resultado prestigiou o nome da Região Autónoma da Madeira, o Conselho de Governo reunido em plenário em 25 de julho de 2019, resolve louvar publicamente o Atleta, Técnico e Dirigentes da Federação Portuguesa de Atletismo.

Presidência do Governo Regional. - O PRESIDENTE DO GOVERNO REGIONAL, Miguel Filipe Machado de Albuquerque

Resolução n.º 481/2019

Considerando o excelente resultado obtido pelo atleta Marcos Freitas, do Fakel Gazprom (Rússia), ao vencer ao serviço da Seleção Nacional de Ténis de Mesa, a medalha de bronze, nos II Jogos Europeus de Minsk, no torneio de equipas;

Considerando que com a obtenção deste resultado prestigiou o nome da Região Autónoma da Madeira, o Conselho de Governo reunido em plenário em 25 de julho de 2019, resolve louvar publicamente o Atleta, a Seleção Nacional, os Técnicos e Dirigentes da Federação Portuguesa de Ténis de Mesa.

Presidência do Governo Regional. - O PRESIDENTE DO GOVERNO REGIONAL, Miguel Filipe Machado de Albuquerque

8.7

ACTION PLAN OF THE BIOSPHERE RESERVE OF THE ISLAND OF PORTO SANTO

Biosphere Reserve of the Island of Porto Santo

2020-2025 Action Plan

Acronyms

ACES	Espírito Santo Cultural and Recreational Association
AGFPS	Porto Santo Folklore Group Association
APIPS	Association of Producers of the Island of Porto Santo
APM	Association for the Promotion of the Autonomous Region of Madeira
AREAM	Regional Energy and Environment Agency of the Autonomous Region of Madeira
ARM	Águas e Resíduos da Madeira, S.A. (Waste and Water Services of Madeira)
CMPS	Porto Santo Municipal Council
DRA	Regional Directorate for Agriculture
DRAPS	Regional Directorate for Public Administration of Porto Santo
DROTA	Regional Directorate for Land Planning and Environment
EEM	Empresa de Eletricidade da Madeira, SA (EEM – Electric Company)
IFCN	Forest and Nature Conservation Institute
ISOPlexis	Germplasm Bank of the University of Madeira
SRA	Regional Secretariat of the Environment and Natural Resources
SRE	Regional Secretariat of the Education
SRTC	Regional Secretariat of the Tourism and Culture
USPS	Senior Citizen University of Porto Santo
VP-GRM	Vice-presidency of the Regional Government of Madeira

Preamble

The Action Plan summarises, in a systematic and functional way, the management strategy defined for the Biosphere Reserve of the Island of Porto Santo, as set forth by the doctrines established under the MaB Programme, the Lima Action Plan and other plans defined for the Biosphere Reserves, in harmony with or complementary to the environmental objectives enshrined in international conventions.

To that effect, implementing and strengthening the use of the Biosphere Reserve concept associated with the following is recommended:

- Valorisation and conservation of natural and cultural diversity;
- Territorial management based on a sustainable development model, focused on the specificities of Porto Santo and its people, and consequent recognition as a natural and cultural laboratory, which intends to affirm and create added value, not only at the local level, but also within the scope of the World Biosphere Reserves Network;
- Promotion of knowledge within the scope of the Man-Biosphere interaction, both through the increase of educational initiatives, public awareness and participatory involvement of the community, and in improving the qualification and use of the Biosphere for science and experimentation, research, monitoring and as a place for learning and technical, scientific and cultural exchange.

1. INTRODUCTION

The proposed territory for the Biosphere Reserve of the Island of Porto Santo presents very unique characteristics with emphasis on the immensity of its beach, its rurality, its islets and the surrounding sea. It has well-preserved ecosystems and is home to species of exceptional interest for the conservation of nature and biodiversity, being recognised for the high scenic value of its natural and humanised landscapes.

Over the last 600 years of history, the settlement of the island was done at the expense of much sacrifice and resilience, which contributed to the creation of a unique cultural identity, reflected in the traditions and values of its people. Such unity deserves to be valued and disseminated, contributing to environmental, social and economic development, with respect for the past and for future generations.

Based on the UNESCO MaB principle - the Man-Biosphere relationship - the objective of the Biosphere Reserve is to ensure a sustainable balance between the needs of the Porto Santo population, the conservation of biogeodiversity, the fostering of economic development and the valorisation of culture and traditions.

The Biosphere Reserve advocates the fulfilment of three complementary functions, in harmony with the intrinsic values of the specific territorial area and aspirations of its people:

- Function of conservation - Protection of genetic resources, species, ecosystems and landscapes;
- Function of development - Promotion of sustainable economic development from a social, cultural and ecological perspective;
- Function of scientific knowledge and logistic support - Support and fostering of research, education, training, monitoring and dissemination activities related to actions of local, regional and global interest, with the objective of conservation and sustainable development.

For its achievement, the zonation of the territory was established, integrating the following areas into the Biosphere Reserve of the Island of Porto Santo:

- Seven Core Areas which benefit from a long-term protection regime under the provisions of the specific legislation in effect in the Autonomous Region of Madeira, enabling the conservation of biodiversity, ecosystem monitoring and the carrying out of research projects and educational or training activities. It also enables the practice of nature tourism due to the recognition of these areas as places of elevated natural, cultural and landscape value, offering ecological, educational, recreational, scientific, economic and cultural benefits for local, national and international visitors;
- A well-defined Buffer Zone, which surrounds the Core Areas on land and sea, in a spatial continuum, extending essentially through the marine space to the 50 meter bathymetric line. It is designed for activities in harmony with good ecological or environmental practices, such as environmental awareness and education, research, forestry, nature tourism, and recreational and leisure activities, such as walking, tours, cycling or horse riding, nautical or diving activities, among others;
- A Transition Area, which corresponds to the other areas of Porto Santo, extending to the bathymetric curve of 100 meters, integrating population clusters and various practices or activities, such as fishing and agriculture, where the local population, administrative and management bodies, researchers, cultural associations, tourist groups and the economic

sector in general and other stakeholders, work together in the management and sustainable development of Porto Santo.

The present Action Plan of the Biosphere Reserve of the Island of Porto Santo is a guiding tool of great value, clearly translating the different strategic priorities to be developed and its objectives for the 2020-2025 period. Its elaboration was based on the Portuguese 2018-2025 Action Plan for the Portuguese Network of Biosphere Reserves, which transposes into the national reality the Lima Action Plan, the United Nations Framework Convention on Climate Change, the Convention on Biodiversity, as well as the Sustainable Development Goals (SDG) projected under the 2030 Agenda for Sustainable Development: To transform the World in the name of the People and the Planet. It complies with the criteria of the MaB Programme and Strategy, in particular the guidelines from the Seville Conference, the Statutory Framework of the World Network of Biosphere Reserves and the Lima Action Plan.

Its implementation requires the fulfilment of various actions and the mobilisation of the local community, who should take on a role of protagonists in the project of sustainable local development. This implicates the conservation and valorisation of the natural heritage, the development of behaviours focused on conservation and environmental awareness, associated with new opportunities for studies and scientific research. With local development being a fundamental assumption, it is also important to take note of the importance of the opportunity to establish common and shared goals and partnerships within the community and with external entities, and to promote entrepreneurship initiatives, with the identification of new differentiated products based on the local identity and heritage values, as a strategy to promote sustainable tourism. The focus on the differentiation factor of Porto Santo as a destination, will enable the identification of new business opportunities, as well as diversify supply, with the consequent revitalisation of local commerce, job creation and the combating of seasonality. The participation and cooperation of public and private actors outside the community will be fundamental in the exchange of knowledge and experiences and the socio-economic and cultural development of the "Ilha Dourada" (Golden Island).

The Action Plan was based on the results of public consultation sessions which were held in January 2018 with the local community, focusing on different areas relevant to the application of Porto Santo to the Biosphere Reserve, namely: Nature Conservation, Tourism, Education, Transportation, Agriculture, Forestry and Fisheries, Civil Construction, Culture and Heritage, Commerce, Restaurants and Hotels and Leisure and Religious Activities. These sessions promoted the concept of "Biosphere Reserve" to the community, and enabled a joint discussion of the opportunities and challenges at the local level. They were addressed to groups of local development actors, by themes, and a more generalist session was directed to the population in general.

The actions foreseen in the Action Plan also reflect the needs and priorities identified by the promoters of the candidacy, which will also be included in their respective activity plans, defined annually and integrated into multiannual investment programmes.

The degree of achievement of the Action Plan for the Biosphere Reserve will be monitored by the Association, which will ensure the management of the Reserve and the coordination between the different actors involved, to provide the necessary mechanisms for the implementation of the actions, as well as the revision of the Action Plan, when necessary.

2. VISION, MISSION AND OBJECTIVES

Vision

The Biosphere Reserve of the Island of Porto Santo intends to affirm this Atlantic sub-archipelago as a differentiated and pioneering territory in the field of sustainability and adaptation to climate change, with a coordinated strategy of harmonisation between local development and respect for nature conservation, as well as the valorisation of its heritage and its people.

Mission

The Biosphere Reserve of the Island of Porto Santo intends to foster the production and exchange of scientific, technological and traditional knowledge, involving the scientific community, policy makers and citizens' groups, promoting adaptation to climate change and giving visibility to Porto Santo as a living laboratory and demonstrative model of balance between nature conservation and human activities, through networking and sharing among different agents, favouring local development.

Objectives

The strategy for the sustainable development of Porto Santo in the context of the regional policies and the consultation carried out within the scope of this action plan is based on the following **major strategic objectives**:

- Safeguard, value and optimise existing natural and cultural resources;
- Improve the quality of life of Porto Santo people, other residents and future generations;
- Foster employment of the resident population;
- Promote sustainable tourism;
- Reduce the seasonality of economic, social and cultural activities;
- Create more and better opportunities for local businesses;
- Increase revenues from the revitalisation of the local economy;
- Reduce dependence on the outside for the acquisition of goods and services;
- Encourage the decarbonisation of the economy and adaptation to climate changes.

Within the specific scope of the Biosphere Reserve of the Island of Porto Santo, the guiding principles are the compatibility of the preservation of natural values and historical and cultural heritage with local economic activities, enhancing the sustainable management of the territory and the valorisation of existing resources whilst, at the same time, improving the well-being of the population. These principles are set out in a number of international treaties aimed at ensuring environmental quality, nature conservation and sustainable use of biodiversity, such as the MaB Strategy, the Lima Action Plan, the Portuguese Action Plan for Biosphere Reserves, the United Nations Framework Convention on Climate Change and the Convention on Biological Diversity. The Porto Santo Biosphere Reserve also intends to fulfil several of the 2016-2030 Sustainable Development Goals (SDGs), namely:

- SDG 7 - Ensure access to reliable, sustainable and modern energy sources for all;

- SDG 8 - Promote inclusive and sustainable economic growth, full and productive employment and decent work for all;
- SDG 11 - Make cities and communities inclusive, secure, resilient and sustainable;
- SDG 12 - Ensure sustainable consumption and production standards;
- SDG 13 - Take urgent action to combat climate change and its impacts;
- SDG 14 - Conserve and sustainably use oceans, seas and marine resources for sustainable development;
- SDG 15 - Protect, restore and promote the sustainable use of land ecosystems, sustainably manage forests, combat desertification, halt and reverse land degradation and halt biodiversity loss;
- SDG 17 – Strengthen the means of implementation and revitalise the global partnership for sustainable development.

In this context, the following **general objectives** were defined for the Porto Santo Island Biosphere Reserve:

- Consolidate the image of the Biosphere Reserve of the Island of Porto Santo, facilitating its perception inside and outside its geographical scope;
- Make the preservation of natural and historical-cultural values with economic activities compatible, promoting the improvement of the population's well-being and the sustainable development of the Reserve;
- Preserve biogeodiversity through increased knowledge, management and monitoring of natural resources and values;
- Promote information and participation, integrating the community in the strategic objectives and developing a sense of belonging relative to the Reserve;
- Promote awareness and training of the agents involved in the Reserve, through training programmes, equipping them with knowledge and tools to achieve the objectives of the Reserve;
- Promote actions for mitigation and adaptation to climate change with a significant impact on the Reserve's territory;
- Establish a network for sharing experiences with other Biosphere Reserves;
- Contribute to the development of the local economy through the creation and promotion of local products and differentiated tourism services supplied throughout the year.

3. ANALYSIS OF THE REFERENCE SITUATION

The Biosphere Reserve of the Island of Porto Santo is seen as a community project and propeller of the different natural and heritage values of this territory.

In order to define the best intervention strategies for its implementation and development, it was necessary to reflect on the local reality and consultation of the community in general, as well as the different sectors of activity, in order to obtain a reference analysis of the territory through a participatory and inclusive approach.

To this end, the SWOT analysis (Strengths, Weaknesses, Opportunities, Threats) was used as a simple and effective tool, not only at the level of analysis, but also at the strategic level, since it advocates the definition of strengths and weaknesses of the territory and points out opportunities and threats.

In general, the strengths are the elevated value of the natural and cultural heritage, material and intangible, of tourist, educational and scientific interest, with potential for the diversification of tourism, with a focus on differentiation. This will contribute to an increase in the demand by domestic and foreign tourists, which is intended to continue throughout the year, in order to mitigate the effects of seasonality, in several areas: transport, employment, development of the local economy, among others. The Biosphere Reserve of the Island of Porto Santo will thus require the joint efforts of the various sectors of local activity to achieve shared goals proposed by the community, taking on a prominent role in the revitalisation of the territory, through the implementation of an Action Plan, whose goal is the sustainable development of Porto Santo.

Table 1: SWOT Analysis

Strengths	Weaknesses
<ul style="list-style-type: none"> • Elevated value of the natural, material and intangible heritage of touristic, educational and scientific interest; Wealth of species and endemisms; Geodiversity; Historical-cultural heritage. • Existence of a beach of exceptional quality whose sands present therapeutic properties. • Supply of products and services associated with health and wellness tourism, and nature. • Existence of areas with a protected status or of conservational interest (Natura 2000 Network, Network of Protected Marine Areas of Porto Santo, IBAs, Geosites and Geodiversity Sites). • Inaccessibility of some sites of important biological value (Pico Branco and Pico Juliana cliffs, Islets of Porto Santo). • Existence of geodiversity roadmap with dissemination in several media channels. • High rate of coverage of infrastructures and basic public services (internal access, electricity, water and sanitation). • Atlantic island with the potential to be a differentiated and pioneering destination in terms of environmental sustainability. 	<ul style="list-style-type: none"> • Seasonality of tourism. • Air transport with limited supply. Maritime transport between the islands of Porto Santo and Madeira does not exist during the month of January. • Timetables of sea and air connections inadequate to the needs of the resident population. • Little diversity of tourism, practically limited to the beach and more recently to golf, to the detriment of other natural, material and intangible heritage values. • Lack of community awareness of local heritage values. • Saturation of cargo capacity in access to goods and services during the month of August. • Low level of community involvement and intervention in the initiatives to revitalise the territory. • Scarce information on local ecological, environmental and cultural values. • Lack of promotion of Porto Santo as a nature destination. • Tendency to abandon agriculture.

<ul style="list-style-type: none"> • Port and airport infrastructures. • Recognition of Porto Santo as a destination of tranquillity and security. • Implementation of the "Sustainable Porto Santo - Smart Fossil Free Island" Project. • Attractiveness relative to the completion of courses of short academic training related to aspects of the natural and cultural heritage. • Attractiveness as a destination for the preparation of international sports seasons. • Existence of local agents with initiative and intervention capacity in specific areas of activity and in the revitalisation of the territory. • Diversity and scenic beauty. • Existence of recommended footpaths. • Favourable natural conditions throughout the year for the practice of recreational and nature activities, on land and sea. • A mild climate with low thermal amplitude. • Soil and climatic conditions favourable to the development of organic agriculture and livestock farming. • Existence of sustainable farming techniques and crops. • Logistical and financial support for new farmers. • Municipal environmental education programme directed at the 1st cycle of basic education since 1998. • All schools integrated in the Eco-Schools Programme. • Hotel units with environmental certification (Green Key and Blue Flag). • Pride of the senior community in the island's identity values. • Intergenerational activities promoting local traditions. • Adequate scale for the development of innovative pilot projects. • The island's size makes it easier to apply management and conservation measures for natural resources. 	<ul style="list-style-type: none"> • Insufficient public transport network. • Reduced number of walking trails and their dissemination. • Weak recovery of historical-cultural identity elements and their dissemination. • Desertification of soils. • Presence of invasive exotic species. • Poor use of rainwater and its availability for agriculture. • Lack of a land-use plan for the coast. • Abandonment of traditional gastronomy by the younger population. • Reduced number of restaurants with traditional cuisine, based on the agro-food products of the region. • Community who is poorly aware and poorly informed of the impact of various forms of habitat disturbance. • Ageing population and the exodus of youth and qualified individuals off the island. • Scarcity of job offers. • Seasonal employment. • Lack of a common local development strategy for institutions, associations and the community. • Low level of entrepreneurship. • Low level of identification and pride in the local identity values by youth. • Difficulties of the senior population in transmitting the experiences of the past due to the adverse conditions of the past. • Lack of recognition and support for local artisans.
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Opportunities	Threats
<ul style="list-style-type: none"> • Recognition of Porto Santo as an island with a focus on sustainable development. • Greater dissemination of natural values. • Participation in funding programmes for local development projects. • Research and scientific studies on local heritage, increasing knowledge about the territory. • Diversification of tourist supply throughout the year and better employment conditions. • Establishment of measures to control biotic factors harmful to species and habitats. • Population propagation and reinforcement of indigenous specimens of conservational interest. • Consolidation of identity values by the local community. • Increase in the touristic value of the Porto Santo destination, based not only on the promotion of the beach, but also on other natural and cultural values. • Establishment of partnerships inside and outside the community with the objective of revitalising the territory and mobilising the community. • Greater use of local resources to boost local economic structure. • Encouragement of organic agriculture and livestock farming. • Collection and dissemination of local traditions. • Identification of products and services based on local identity values, which foster economic sustainability, fomenting entrepreneurship. • Promotion of sustainable tourism. • Promotion of health and wellness tourism. • Mobilisation of the school community in increasing knowledge of local values and developing a sense of belonging. • Regular organisation of training, awareness-raising and discussion forums within the local community. • Revitalising cultural activities throughout the year. 	<ul style="list-style-type: none"> • Climate change and its consequent effects on natural, agricultural and tourism systems. • Dry and arid climate. • Reduction of available water. • Human disturbance of natural habitats. • Proliferation of invasive species. • Perception by the population of the Biosphere Reserve being a limiting factor in the use of the territory and the accomplishment of certain activities. • Exodus of the young and qualified population. • Reduced capacity for initiative and entrepreneurship. • Lack of communication and common strategies among the various sectors of activity. • Progressive abandonment of traditional cuisine. • Tendency to abandon agriculture and fishing. • Disinterest in local crafts. • Low community participation in initiatives related to local traditions. • Destruction and loss of value of natural and cultural heritage.

4. STRATEGIC INTERVENTION PRIORITIES

The actions of this Action Plan are structured in five strategic priorities of intervention based on the results of the SWOT analysis which result in the priorities at the level of the local strategic action. Based on the vision, mission and general objectives of the Biosphere Reserve, the specific objectives, indicators, goals and actions proposed to leverage strengths and seize opportunities whilst at the same time minimise weaknesses and mitigate the threats identified in the territory have been defined for each priority:

- Priority 1: Image and identity.
- Priority 2: Social, economic and cultural activities.
- Priority 3: Nature conservation.
- Priority 4: Social participation.
- Priority 5: Climate changes.

4.1. Priority 1: Image and identity

Considering the Biosphere Reserve of the Island of Porto Santo as an entity in its own right, with defined objectives and an Action Plan, it is fundamental to involve the local community in revitalising and promoting the identity values of Porto Santo.

The communication plan will define different means and strategies for its dissemination, as well as contribute to the establishment of partnerships and work groups, not only with the different actors of local development, but also with other public and private entities outside the territory of the Biosphere Reserve.

Table 2: Specific objectives and goals – Image and identity

Specific objectives	Indicators	2025 Goals
Consolidate the identity values of the Porto Santo Biosphere Reserve with the community and tourists	Population with a sense of pride and sense of belonging relative to the identity elements of Porto Santo which support its candidacy to the Biosphere Reserve [%]	50
	Dissemination workshops and discussion forums [number]	20
	Participants in events on the Biosphere Reserve [number]	4000
	Communication and image plan [number]	1
	Visitors to the digital platform of the Biosphere Reserve [number]	5000
	Copies of dissemination materials [number]	5000
	News published in regional and national newspapers which refer to the Porto Santo Biosphere Reserve [number]	50
Create a local and external support network for the Biosphere Reserve	Organisation and participation in seminars/conferences to disseminate and share experiences with other entities and Biosphere Reserves [number]	10
	Partnerships with key entities and projects for the dissemination and implementation of the Biosphere Reserve [number]	15

Table 3: Actions – Image and identity

No	Actions	Promoters	Beneficiaries
1.1	Creation of the digital platform of the Biosphere Reserve, preparation of information material, publication of articles in the media and signage in the territory	<ul style="list-style-type: none"> • CMPS • DRAPS • SRA • SRTC • APM 	<ul style="list-style-type: none"> • Local community • Visitors • Public administration • Companies
1.2	Implementation of awareness campaigns on the Biosphere Reserve, including organising and participating in forums, seminars, conferences, fairs, workshops and other means to disseminate the objectives and share experiences	<ul style="list-style-type: none"> • CMPS • DRAPS • SRA • SRTC • APM 	<ul style="list-style-type: none"> • Local community • Visitors • Public administration • Companies
1.3	Travelling exhibition on the Biosphere Reserve	<ul style="list-style-type: none"> • CMPS • DRAPS • SRA • SRTC • APM 	<ul style="list-style-type: none"> • Local community • Visitors
1.4	Creation of information points on the Biosphere Reserve at the Airports and Ports of the Autonomous Region of Madeira	<ul style="list-style-type: none"> • CMPS • DRAPS • SRA • SRTC • APM 	<ul style="list-style-type: none"> • Visitors
1.5	Disclosure of the Reserve's natural values through landscape readers and information panels	<ul style="list-style-type: none"> • CMPS • DRAPS • IFCN 	<ul style="list-style-type: none"> • Local community • Visitors
1.6	Establishment of partnerships to support, disseminate and implement the Biosphere Reserve in the territory	<ul style="list-style-type: none"> • CMPS • DRAPS • SRA • SRTC • APM 	<ul style="list-style-type: none"> • Public administration • Companies

4.2. Priority 2: Social, economic and cultural activities

The seasonality of tourism is one of the constraints to local development, and it is therefore necessary to implement strategies to overcome that situation, such as the valorisation and dissemination of local products and natural and cultural heritage. This will help to create opportunities for entrepreneurship, using and making local resources more profitable, promoting local commerce and creating lasting employment. The dissemination and investment in green economy initiatives, as well as the promotion of sustainable farming practices, will also be fundamental for the preservation of natural resources and nature conservation. The foreseen actions aim to contribute to the achievement of the following Sustainable Development Goals: SDG 8 - "Promote inclusive and sustainable economic growth, full and productive employment and decent work for all"; SDG 11 - "Make cities and communities inclusive, secure, resilient and sustainable"; SDG 12 - "Ensure sustainable consumption and production standards "; and SDG 17 - "Partnerships for the Implementation of the Goals".

Table 4: Specific objectives and goals – Social, economic and cultural activities

Specific objectives	Indicators	2025 Goals
Promote a better use of local resources for the strengthening of the economic structure	Entrepreneurship promotion events based on local resources [number]	7
Promote sustainable tourism, prioritising knowledge and conservation of the natural, historical and cultural heritage of Porto Santo	Natural, historical and cultural tours which focus on experiences related to heritage and local identity [number]	5
	Surveys of material and intangible heritage [number]	15
	Restaurants and hotels which promote the natural, historical and cultural heritage of Porto Santo [%]	75
	Events promoting sustainable tourism and traditional cultural practices [number]	13
	Seasonality rate [%]	45
	Increase of passengers at the airport of Porto Santo [%]	10
Involve entities from the economic sector in the activities of the Biosphere Reserve	Partnerships established with entities of the economic sector in the activities of the Biosphere Reserve [number]	20
Promote organic agriculture and livestock farming	Awareness-raising and training actions related to organic agriculture and livestock farming [number]	20
	Organic farms [number]	5
Promote accessibility for people with reduced mobility	Commercial establishments accessible to people with reduced mobility [number]	8

Table 5: Actions – Social, economic and cultural activities

No	Actions	Promoters	Target
2.1	Organisation of initiatives which contribute to the revitalisation and valorisation of local products, traditions and heritage throughout the year	<ul style="list-style-type: none"> • CMPS • DRAPS • AGFPS • APIPS • SRTC • USPS • Hotel and restaurant businesses 	<ul style="list-style-type: none"> • Local community • Visitors • Cultural associations • Artisans • Farmers and livestock farmers • Schools • Entrepreneurs
2.2	Survey of local traditions (songs, dances, harvests, planting, gastronomy, ethnobotany, legends, among others)	<ul style="list-style-type: none"> • CMPS • DRAPS • AGFPS • SRTC • USPS • ACES 	<ul style="list-style-type: none"> • Local community • Cultural associations • Schools • Entrepreneurs
2.3	Raising awareness among tourism agents of the importance of disseminating local values and developing a sustainable tourism culture	<ul style="list-style-type: none"> • CMPS • DRAPS • SRA • SRTC • IFCN 	<ul style="list-style-type: none"> • Tourism companies
2.4	Publication of tour roadmaps and implementation of geodiversity routes of the Biosphere Reserve	<ul style="list-style-type: none"> • CMPS • DRAPS • SRA • IFCN 	<ul style="list-style-type: none"> • Local community • Visitors
2.5	Creation of a support and discussion network for the defining of strategies for the dissemination and promotion of local values	<ul style="list-style-type: none"> • CMPS • DRAPS • AGFPS 	<ul style="list-style-type: none"> • Local community • Cultural associations

		<ul style="list-style-type: none"> • SRA • IFCN • APM 	<ul style="list-style-type: none"> • Schools • Companies
2.6	Identification of products and services which promote local economic sustainability and its dissemination to the community	<ul style="list-style-type: none"> • CMPS • DRAPS • AGFPS • SRA • IFCN • ISOplexis 	<ul style="list-style-type: none"> • Local community • Cultural associations • Artisans • Farmers and livestock farmers • Schools • Companies
2.7	Establishment of partnerships between the different agents of local development for the creation, divulgation and promotion of the identity values of Porto Santo	<ul style="list-style-type: none"> • CMPS • DRAPS • AGFPS • SRA • IFCN • SRTC 	<ul style="list-style-type: none"> • Cultural associations • Schools • Companies
2.8	Awareness-raising and training actions related to organic agriculture and livestock farming	<ul style="list-style-type: none"> • CMPS • DRAPS • SRA • DRA • APIPS • ISOplexis 	<ul style="list-style-type: none"> • Local community • Farmers and livestock farmers • Hotel and restaurant businesses
2.9	Awareness-raising actions related to inclusive mobility	<ul style="list-style-type: none"> • CMPS • DRAPS • SRA 	<ul style="list-style-type: none"> • Local community • Hotel and restaurant businesses

4.3. Priority 3: Nature conservation

For the Biosphere Reserve of the Island of Porto Santo it is fundamental to promote a set of measures, namely habitat conservation and restoration of ecosystems, prevention of desertification phenomena and containment of invasive species. The sustainability of Porto Santo is promoted in a tribute to the safeguarding of Biosphere values, by achieving the Convention on Biological Diversity and the Sustainable Development Goals (SDG 14 and 15), with emphasis on SDG 14 "Conserve and sustainably use oceans, seas and marine resources for sustainable development", one of the priority objectives for Portugal within the scope of the implementation of the 2030 Agenda.

This Action Plan advocates the conservation of natural values, the development of behaviours focused on conservation and environmental awareness, associated with new opportunities for studies and research, and the dissemination of their identity and rurality. It also advocates the creation of local employment and the valorisation of professions related to land and sea, as well as ecological values, exerting a significant and important influence on the development of the Porto Santo community.

Table 6: Specific objectives and goals – Nature Conservation

Specific objectives	Indicators	2025 Goals
Increase knowledge about the species and habitats of the Reserve, as well as their conservation status, identifying potential threats	Documents produced [number]	10
Conserve and manage geological, species	Classified sites [number]	2

and habitat diversity	Management protocols [number]	2
Recovery of degraded areas	Recovered surface [ha]	20

Table 7: Actions – Nature conservation

No	Actions	Promoters	Beneficiaries
3.1	Creation of a work group of researchers to identify and prioritise the study and knowledge needs of the Reserve	<ul style="list-style-type: none"> • CMPS • DRAPS • IFCN 	<ul style="list-style-type: none"> • Local community • Universities and research centres • Environmental associations
3.2	Creation of monitoring protocols for species and habitats of high conservational interest	<ul style="list-style-type: none"> • CMPS • DRAPS • IFCN • Universities and research centres • ISOPlexis 	<ul style="list-style-type: none"> • Universities and research centres • Environmental associations
3.3	Promotion of studies and monitoring actions of land and marine species	<ul style="list-style-type: none"> • CMPS • DRAPS • IFCN • Universities and research centres • ISOPlexis 	<ul style="list-style-type: none"> • Universities and research centres • Environmental associations
3.4	Cataloguing and georeferencing of distribution areas of invasive species	<ul style="list-style-type: none"> • CMPS • DRAPS • IFCN • Universities and research centres 	<ul style="list-style-type: none"> • Public administration
3.5	Evaluation of ecosystem services	<ul style="list-style-type: none"> • CMPS • DRAPS • IFCN • Universities and research centres • ISOPlexis 	<ul style="list-style-type: none"> • Economic activities • Public administration • Local community
3.6	Development of technical exchanges and partnerships for the sharing of experiences and new knowledge relative to land and marine natural resources and environmental sustainability	<ul style="list-style-type: none"> • CMPS • DRAPS • IFCN 	<ul style="list-style-type: none"> • Universities and research centres • Environmental associations
3.7	Establishment of cooperation protocols between different entities (regional, national and international) with the objective of developing scientific work related to the biogeodiversity of the Biosphere Reserve	<ul style="list-style-type: none"> • CMPS • DRAPS • IFCN 	<ul style="list-style-type: none"> • Universities and research centres • Environmental associations • Companies
3.8	Creation of a digital platform for consolidation and updating of information on the biogeodiversity of the Biosphere Reserve	<ul style="list-style-type: none"> • CMPS • DRAPS 	<ul style="list-style-type: none"> • Local community • Visitors
3.9	Supervision and control in protected and classified areas of the Biosphere Reserve	<ul style="list-style-type: none"> • IFCN • CMPS • DRAPS 	<ul style="list-style-type: none"> • Local community • Public administration • Police authorities
3.10	Creation of management tools to ensure marine and land sustainability	<ul style="list-style-type: none"> • CMPS • DRAPS • IFCN • DROTA 	<ul style="list-style-type: none"> • Local community • Universities and research centres • Environmental associations
3.11	Development of nature conservation activities aimed at different local publics and visitors, in a relationship of close cooperation, for the safeguarding of natural and ecological values	<ul style="list-style-type: none"> • CMPS • DRAPS • IFCN • DROTA 	<ul style="list-style-type: none"> • Local community • Visitors
3.12	Classification of geosites	<ul style="list-style-type: none"> • IFCN 	<ul style="list-style-type: none"> • Public

		<ul style="list-style-type: none"> • CMPS • DRAPS 	<ul style="list-style-type: none"> • administration • Local community • Visitors
3.13	Development of projects for the recovery of the agroforestry cover and torrential correction as a safeguard of the vegetation and soil values	<ul style="list-style-type: none"> • CMPS • DRAPS • IFCN • ISOPlaxis 	<ul style="list-style-type: none"> • Public administration • Local community
3.14	Creation of structures which favour the propagation and population reinforcement of indigenous specimens of conservational interest, safeguarding their genetic pool	<ul style="list-style-type: none"> • CMPS • DRAPS • IFCN 	<ul style="list-style-type: none"> • Public administration • Local community
3.15	Establishment of ecological corridors in order to mitigate the effects of territorial fragmentation	<ul style="list-style-type: none"> • CMPS • DRAPS • IFCN 	<ul style="list-style-type: none"> • Public administration • Local community
3.16	Implementation of a control plan for invasive exotic plants and habitat restoration	<ul style="list-style-type: none"> • CMPS • DRAPS • IFCN 	<ul style="list-style-type: none"> • Public administration • Local community

4.4. Priority 4: Social participation

The involvement and empowerment of the community of the Biosphere Reserve of the Island of Porto Santo is fundamental for the fulfilment of the Action Plan and achievement of its objectives, as well as for the development of a sense of belonging to the Biosphere Reserve. This will enable the local community to take the lead role in discussing and defining strategies for the implementation and sustainability of the Biosphere Reserve. Community participation in the life of the Biosphere Reserve of the Island of Porto Santo enables the achievement of the following Sustainable Development Goals: SDG 8 - "Promote inclusive and sustainable economic growth, full and productive employment and decent work for all"; SDG 11 - "Make cities and communities inclusive, secure, resilient and sustainable"; SDG 13- "Take urgent action to combat climate change and its impacts by improving education and awareness on climate change"; and SDG 17 - "Partnerships for the Implementation of the Goals".

Table 8: Specific objectives and goals – Social participation

Specific objectives	Indicators	2025 Goals
Increase the knowledge and involvement of the local community and visitors in the safeguarding of the Biosphere Reserve and its natural and ecological values	Thematic sessions held to discuss strategies for the development of the Biosphere Reserve [number]	10
	Students covered by Biosphere Reserve educational programmes [%]	75
	Establishments/entities participating in the campaign to promote the identity values of Porto Santo [number]	30
	Awards and distinctions in the area of sustainability [number]	15
	Information panels [number]	10
	Nature conservation activities [number]	25
	Cultural and recreational events carried out in line with the objectives of the Biosphere Reserve [%]	75
	Holding of the annual event for the divulgation and promotion of the Biosphere Reserve [number]	5

Table 9: Actions – Social participation

No	Actions	Promoters	Beneficiaries
4.1	Organisation of thematic sessions and work groups to discuss issues relevant to the Biosphere Reserve	<ul style="list-style-type: none"> • CMPS • DRAPS • SRA • IFCN 	<ul style="list-style-type: none"> • Local community • Schools • Hotel, restaurant and commerce businesses
4.2	Creation of educational projects, focused on different age groups, promoting the Biosphere Reserve and good local sustainable development practices	<ul style="list-style-type: none"> • CMPS • SRA • IFCN • SRE 	<ul style="list-style-type: none"> • Local community • Schools
4.3	Development of a campaign to promote the identity values of Porto Santo, by sponsoring them through different hotel units, restaurants, commercial establishments, among others	<ul style="list-style-type: none"> • CMPS • DRAPS • SRA • IFCN 	<ul style="list-style-type: none"> • Local community • Visitors • Schools • Hotel, restaurant and commerce businesses
4.4	Promotion of nature conservation activities for different local publics and visitors, in close cooperation with the safeguarding of natural and ecological values	<ul style="list-style-type: none"> • CMPS • DRAPS • IFCN 	<ul style="list-style-type: none"> • Local community • Visitors • Schools
4.5	Reinforcement of cooperation between institutions, the business community and the local community in the conservation of natural and ecological values and in the increase of knowledge and its dissemination inside and outside the Biosphere Reserve	<ul style="list-style-type: none"> • CMPS • DRAPS • IFCN 	<ul style="list-style-type: none"> • Local community • Public administration • Schools • Hotel, restaurant and commerce businesses
4.6	Holding of an annual event for the divulgation and promotion of the Biosphere Reserve	<ul style="list-style-type: none"> • CMPS • DRAPS • SRA • IFCN • SRTC 	<ul style="list-style-type: none"> • Local community • Public administration • Companies

4.5. Priority 5: Climate changes

Porto Santo has an elevated vulnerability to climate change because it is an island territory with sensitive natural systems and a fragile economy, for which reason this theme is fundamental for its sustainable development.

On the one hand, it is important to contribute to the objectives of the United Nations Framework Convention on Climate Change through the mitigation of climate change by reducing emissions of greenhouse gases of human origin, such as those from fossil fuel energy sources, in the transport sector, electricity production, public buildings and infrastructure. This can be achieved by fulfilling the following Sustainable Development Goals, defined by Portugal as priorities in the scope of the implementation of the 2030 Agenda: SDG 7 - "Ensure access to reliable, sustainable and modern energy sources for all"; SDG 11 - "Make cities and communities inclusive, secure, resilient and sustainable"; SDG 12 - "Ensure sustainable consumption and production standards "; and SDG 13- "Take urgent action to combat climate change and its impacts ". On the other hand, it is necessary to act at the level of the adaptation of the territory to the climate changes, in order to attenuate their effects on the population, infrastructures, natural and constructed heritage and economic activities.

At the level of mitigation, the phase of implementation of a strategy to reduce the use of fossil fuels, called "Smart Fossil Free Island", is underway in Porto Santo, with the objective of substituting fossil energy sources with renewable energies. This strategy includes the gradual

conversion of electricity production to renewable sources, providing the power grid with smart grids and energy storage capacity to adjust the availability of intermittent resources to demand, as well as the transition to electric mobility and energy efficiency in buildings, street lighting and other uses. Electrical mobility with intelligent charging, preferably at night, also has the advantage of being able to contribute to increasing the grid's capacity to receive energy from intermittent renewable sources in periods of lower demand.

Porto Santo is particularly sensitive to the scarcity of water resources and erosion, which can be aggravated by climate change, with lower average precipitation and increased episodes of intense precipitation, increasing erosion and endangering populations and infrastructures near the water lines. Thus, relative to the adaptation of the territory to climate change, Porto Santo has been the target of afforestation programmes in the most vulnerable areas. It is also necessary to expand forested areas with species adapted to local conditions which contribute to containing erosion, increasing infiltration and reducing the torrential potential of water during periods of high precipitation. In addition, it is important to improve the efficiency of the various uses and increase the capacity of retention and storage of rainwater through agricultural dams.

Table 10: Specific objectives and goals – Climate changes

Specific objectives	Indicators	2025 Goals
Reduce greenhouse gas emissions	Reduction of CO ₂ emissions from fossil fuels [t CO ₂ /year]	800
	Renewable component in the production of electricity [%]	55
	Increase in the storage capacity of electric power [MW·h]	15
	Increase in the number of electric vehicles in use in Porto Santo [number]	250
Foster plant cover in areas subject to erosion	Expansion of forested area [ha]	10
Ensure the operation of rainwater dams	Maintenance and desanding operations [number]	4

Table 11: Actions – Climate changes

No	Actions	Promoters	Beneficiaries
5.1	Consolidation of the strategy for the reduction of fossil fuels in Porto Santo "Smart Fossil Free Island"	<ul style="list-style-type: none"> VP-GRM EEM AREAM 	<ul style="list-style-type: none"> Local community
5.2	Installation of batteries for energy storage in the power grid to increase the renewable component in the production of electricity	<ul style="list-style-type: none"> EEM 	<ul style="list-style-type: none"> Power grid Electric energy producers Electric energy users
5.3	Implementation of intelligent electrical networks equipped with sensors and monitoring and control systems	<ul style="list-style-type: none"> EEM 	<ul style="list-style-type: none"> Power grid Electric energy producers Electric energy users
5.4	Installation of efficient lighting and intelligent communication, monitoring and control systems in public lighting	<ul style="list-style-type: none"> CMPS EEM AREAM 	<ul style="list-style-type: none"> Local community
5.5	Replacement of conventional vehicles with electric vehicles	<ul style="list-style-type: none"> VP-GRM CMPS DRAPS Companies Individuals 	<ul style="list-style-type: none"> Local community Public administration Companies
5.6	Facilities to exploit renewable energy sources for electric	<ul style="list-style-type: none"> EEM 	<ul style="list-style-type: none"> Power grid

	energy production	<ul style="list-style-type: none"> • Companies • Individuals 	<ul style="list-style-type: none"> • Electric energy producers • Electric energy users
5.7	Afforestation of areas with degraded vegetation cover and subject to erosion	<ul style="list-style-type: none"> • IFCN 	<ul style="list-style-type: none"> • Local community
5.8	Raising awareness of water users relative to efficient water use and promoting efficient irrigation techniques associated with less water-intensive agricultural practices	<ul style="list-style-type: none"> • ARM • DRAPS • DRA 	<ul style="list-style-type: none"> • Local community
5.9	Recovery of agricultural areas with permanent cover adapted to the soil and climatic conditions and recovery of the productive potential of the soil	<ul style="list-style-type: none"> • DRAPS • DRA • ISOPlexis 	<ul style="list-style-type: none"> • Local community
5.10	Monitoring of agrosystems to assess the success of the adaptation measures to climate change	<ul style="list-style-type: none"> • DRAPS • ISOPlexis 	<ul style="list-style-type: none"> • Local community
5.11	Desanding of rainwater dams	<ul style="list-style-type: none"> • ARM 	<ul style="list-style-type: none"> • Local community

5. IMPLEMENTATION

For the implementation of the Action Plan, it is necessary to establish a management and coordination structure, as well as mechanisms for implementation, monitoring and dissemination, to ensure the involvement of stakeholders and the achievement of the objectives and goals set for 2025.

5.1. Management and coordination structure

The Management and Coordination Structure of the Biosphere Reserve of the Island of Porto Santo will be comprised of a non-profit private law Association, which will pursue its objective once all legal formalities have been finalised, including the approval of its statutes and the celebration of a public deed of incorporation.

The Association, with powers to revitalise, monitor, review and disseminate the Action Plan, will have private founding associates and public founding associates and will be governed in accordance with the provisions of its statutes.

The Association's members will include the General Assembly, the Board of Directors and the Supervisory Board, whose constitution, composition, powers and functioning will be provided for in the articles of association. In turn, the General Assembly will establish the Advisory Board and the Scientific Board.

The Advisory Board will be comprised of representatives from the Espírito Santo Cultural and Recreational Association (ACES), the Association of Producers of the Island of Porto Santo (APIPS), the Senior Citizen University of Porto Santo (USPS), the Association of Promotion of the Autonomous Region of Madeira, the Águas e Resíduos da Madeira, S.A. (ARM – Water and Waste Services), the Commercial and Industrial Association of Funchal (ACIF), the Regional Directorate for Agriculture (DRA), the Regional Directorate for Spatial Planning and Environment (DROTA), Empresa de Electricidade da Madeira, SA (EEM – Electric Company), the Regional Directorate for Tourism (DRT), the Regional Directorate for Culture (DRC), the Regional Directorate for Fisheries (DRP), and other interested entities who wish to participate.

The Scientific Board will be made up of representatives of the University of Madeira, other universities and research centres, ARDITI, the Insular Association of Geography, among others, as well as researchers.

The Advisory Board will be responsible for ensuring the participation of the association in the execution and follow-up of actions and projects, as well as validating and disseminating the achieved results. It will meet quarterly, or whenever deemed necessary, to evaluate the implementation of the actions and the results achieved in relation to the objectives and goals. In turn, the Scientific Board will have the task of deliberating on matters of a technical or scientific nature, with the objective of stimulating and monitoring the management of the Biosphere Reserve, meeting once a year, or more, whenever deemed necessary.

Temporarily, until the association starts its activity, the governance, management and coordination of the Biosphere Reserve is ensured by the Biosphere Reserve Application Commission.

5.2. Execution

Being that this Action Plan has a time frame of five years, the allocation of financial resources for the execution of projects will have an annual programme, within the scope of the plans of activities, investment plans and annual budgets of the promoters, and in some cases multiannual programming to accommodate projects which require it.

The Association, in function of the results of each fiscal year, relative to the established goals, coordinates with the various entities the preparation of projects and initiatives, as well as its annual and multiannual budgeting, in order to guarantee the fulfilment of the objectives and goals of the Action Plan.

In order to stimulate stakeholder participation in the implementation of the actions and goals of the Action Plan, the Association analyses needs and proposes financing incentives and solutions, including the dissemination and adaptation of regional, national, European and international financial programmes and instruments. It also establishes new forms of funding with private funds and crowdfunding. In addition, it identifies possible non-technical constraints and highlights measures to overcome them.

The participation of the community through its representation in the non-profit private law Association takes on an active and influential role in the implementation and management of the Reserve, in the implementation of the Action Plan and in the development of projects to enhance and promote its objectives. This participation and its contributions were and will be the guarantee of the continuous identification of the community with the Reserve and its objectives and actions.

5.3. Monitoring

The non-profit private law Association ensures the monitoring of the Action Plan of the Biosphere Reserve of the Island of Porto Santo in order to evaluate the implementation progress of the actions, achieved through projects and initiatives, and verifies the fulfilment of the goals outlined. This occurs through the collection of evidence and defined indicators to assess results with statements from annual reports, business plans and, thereby, evaluate and monitor the effectiveness of the management of the Reserve.

The Association, together with the promoters of the actions, elaborates the Annual Progress Reports, containing the survey of the state of the defined indicators, the identification of the projects in progress, the instrumental interventions, including incentive systems, sources of financing and legislative measures and the programming of activities to be carried out in the following year.

The Progress Reports are instruments of analysis and intervention for the Association and serve as a basis for presenting the progress of the Action Plan to the Advisory Board. Public disclosure will occur through a summarised report, highlighting the most relevant aspects to encourage the participation of all stakeholders.

In 2025, the Association, together with the promoters of the actions, elaborates the Execution Report of the Action Plan, which summarises the execution of the actions and the overall results achieved in the evaluation period and reported in the various Annual Progress Reports.

5.4. Revision

The Action Plan may be subject to review, in particular following an analysis of the Progress Reports and recommendations from the Advisory Board, if there is a need to reformulate the

actions or adjust the objectives and goals, given the status of the execution and changes in the socio-economic context and external factors which justify it.

5.5. Cooperation with other Biosphere Reserves

In addition to the communication and dissemination actions for the local community and the various stakeholders who are part of the implementation of the Action Plan, partnerships will be established with external entities, in particular with the Portuguese Biosphere Reserves Network, as well as with the Network of Macaronesian Biosphere Reserves, so that Porto Santo is part of a network of national and international cooperation, to ensure the exchange of experiences and mutual aid, for the diffusion of knowledge and shared responsibility.

It will also ensure the dissemination of the Biosphere Reserve of the Island of Porto Santo at a national and international level, namely through the development of cooperation projects and participation in forums and events promoted by the World Network of Biosphere Reserves.

ILHA DO
Porto

Santo

RESERVA DA BIOSFERA



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Man and
the Biosphere
programme