



Annual Report – 2012/2013

MAB National Committee

PORTUGAL

**Programme “Man and Biosphere” -
UNESCO**



INTRODUCTORY NOTE

Portugal is associated with the MAB Programme since 1981, when the Natural Reserve of Boquilobo Marsh was designated as the first "Biosphere Reserve" in the country. Since then, the promotion of the main goals of this Programme and the creation of new Biosphere Reserves were the issues where most of the work was developed.

Currently, Portugal has seven Biosphere Reserves - (BR), which is not an insignificant number for a country with such geographic dimension, based on the presence of natural values of particular relevance for their rarity, scientific, ecological, social or scenic values. These BR's comprise different types of ecosystems, from islands in the Macaronesia region and the Atlantic Ocean, the marshes of the Tagus and the mountainous areas of the northern continental Portugal.

After "Boquilobo Marsh", whose designation was approved in 1981 based on the criteria prior to the Seville Strategy, followed the "Corvo Island" (approved in 2007), the "Graciosa Island" (approved in 2007) , the "Flores Island" (approved in 2009), "Transboundary Biosphere Reserve Gerês-Xurés" (approved in 2009), introducing a new component of transboundary cooperation in this context, and the latest, "Berlengas - Peniche" and "Santana - Madeira", approved in 2011. Some of these Biosphere Reserves are part of Thematic and / or Geographic Global Networks.

A. Boquilobo Marsh - 1981
B. Corvo Island - 2007
C. Graciosa Island - 2007
D. Flores Island - 2009
E. Transboundary Biosphere Reserve Gerês-Xurés (Portugal/Spain TBR) - 2009
F. Berlengas - 2011
G. Santana Madeira - 2011

Table 1 - Biosphere Reserves of Portugal and year of approval

Several actions have been promoted and carried out in these territories both in the field of nature conservation and in the area of logistics function. Also partnerships were built linking the management structure of the BR's to the various sectoral partners and other entities who are responsible for the management of these territories, namely local authorities.

On another hand, the promotion of environmental education and awareness has been an essential element to interconnect with the populations of these territories, schools and non-governmental organizations. They are privileged places where dialogue and partnerships with stakeholders can be reinforced and where management and spatial planning are done in a fair and equitable way.

The good practices of balanced and sustainable development, have enhanced disclosure, visitation and conservation of natural, historical, cultural heritage, for the promotion of nature tourism, to promote and encourage the manufacture of handcrafted items, for the stimulation of the trade of quality products/flavors, stimulating entrepreneurship and economic activity while ensuring the establishment of local citizens and a consequent improvement in the quality of life of populations.

1. MaB National Committee

In recent years Portugal has seen several proposals for BR being approved, which proves the increased national interest in this Programme of UNESCO, particularly in terms of sustainable development and biodiversity conservation. In this context, the MaB National Committee is being reactivated, with a new model in terms of composition, functions and rules of operation. The proposed model is awaiting approval from the Ministry of Agriculture, Sea, Environment and Spatial Planning and will enable greater involvement of managing bodies of the BR in the exchange of experiences, in creating synergies and in presenting information on the activities developed.

Therefore, Portugal reinforces its commitment to continue and deepen all the work in progress namely the assessment of our first BR, the "Boquilobo Marsh" based in the new criteria reviewed by UNESCO in 1995 (Seville Strategy and the subsequent Madrid Action Plan) with the imperative auscultation and involvement of local agents and actors, the analysis of new applications, the monitoring of actions in development in the designated BR or the promotion of the principles and goals of the MAB Programme.

During 2013, with the reactivation of the MAB National Committee, it has been possible to work very closely with the Portuguese National Commission for UNESCO about all issues related with the MAB Programme and together it has been possible to analyze a new application proposal for a transboundary BR, presented to both entities.

Herewith are the following activities carried out in 2012 and 2013.

2. Biosphere Reserves

A. 'Boquilobo Marsh Biosphere Reserve' - part of the World Network of Biosphere Reserves since 1981 and managed by the Institute for Nature Conservation and Forestry (ICNF, IP).



The management of this Reserve is intended to be a development model focused on the conservation of environmental and cultural heritage, where management objectives are developed around three complementary strategic axis/functions:

- Conservation - contributing to the conservation of landscapes, ecosystems, species and genetic variability;
- Development - contributing to an economic and human development which is socio-cultural and environmentally sustainable;

- Logistics - laying the bases for research, monitoring, education and information exchange related to issues of conservation and local, national and global development.

The actions carried out in 2012/2013, within each of these areas are presented hereafter.

CONSERVATION

The main activities carried out in 2012 and worth mentioning in this area are monitoring actions targeting species of flora, fauna and natural habitats. As regards the flora populations two species of *Narcissus spp* were followed.



Narcissus fernandesii which is an Iberian endemism considered very threatened and endangered species and *Narcissus bulbocodium*. Regarding the first, given its threat status, a small nucleus of plants of this species was implanted on public lands acquired by the State, from specimens obtained from seeds planted in favorable soils. In parallel, we worked in raising awareness next to the owner, and the respective tenant of the land where the existing nucleus is implanted in order to keep the current management practices and thereby ensuring the viability and maintenance of the population.

For both species, population sizes were counted, areas of distribution were calculated, and populations and its georeferencing were mapped.

Regarding habitats, work on mapping and georeferencing began.

In 2013, these actions will continue and new ones will be developed, including the establishment of an oaks nursery (*Quercus suber*), the establishment of a bird ringing central (integrated in the European bird ringing network) and the

preparation of a project for the certification of populations of Cork Oak and Ash (*Quercus suber* and *Fraxinus angustifolia*).

DEVELOPMENT



In the axis of environmentally sustainable economic and human development we would stress the work developed with a local company of Rural Tourism (Quinta dos Álamos) in terms of guided tours for tourists; volunteer activities involving different types of partners (local company - Mendes Gonçalves, Association of scouts of Golegã and Tomar Polytechnic Institute); the partnership with Quercus (environmental non-governmental organization) on the improvement of the discovery of nature trail signaling; the participation in fairs and local events (Feast of S. Martin, National Horse Fair, International Fair of Lusitano Horse in Golegã and Cattle Blessing Party in the village of Riachos) with expository material and partnerships with municipalities (Golegã and Torres Novas) and parish councils (Riachos, Azinhaga and Brogueira) of the region.

We emphasize the good relationship and joint work with municipalities which enabled the concession of space (in Golegã) to support the administrative services of the Reserve and the availability of various materials and machinery to perform active management tasks in the area. In municipal holiday - *Dia da Espiga* - a general invitation to the public to visit the Reserve was made.

In 2013, the partnership work with Quinta dos Alamos, with municipalities, with Quercus will continue along with the participation in fairs and local events. Planned volunteer activities will include control of exotic species

actions, maintenance of the nature discovery trail and the installation of an information panel in the area of the Reserve.

LOGISTICS



In terms of monitoring, the activities were directed to avifauna and focused with particular emphasis on waterbirds (participation in the European census) and on several species of herons present in the existing colony in the Reserve (counting of population sizes).



The work with 4 local schools (Escola Profissional de Ciências Geográficas, Escola Maria Lamas, Escola Chora Barroso and Escola Gustavo Eiffel of Entroncamento) focused on biodiversity seminars, sessions of stars observation, guided tours and on receiving trainees.



Partnerships were also developed with higher educational institutions like the Polytechnic Institute of Tomar and the University of Aveiro for monitoring undergraduate traineeship and Master theses of students of Conservation Biology and Ecology and Environmental Management. In this context, a final degree work on "Ecological Mapping and Environmental Monitoring" and a master's thesis on "Study on the colony of Ardeidae in the Boquilobo Reserve " were developed and concluded.

Work on monitoring the avifauna will continue in 2013. Work with schools in the region will be extended to António Gedeão school of Entroncamento and will involve holiday camps with students and the installation of exhibitions on

the Reserve. A protocol will be established with the Polytechnic Institute of Tomar for the regular collection of water from the Almonda River, analysis of physical chemical parameters and monitoring of environmental parameters which are essential for understanding and managing this ecosystem.

B. '**Berlengas Biosphere Reserve**' - Part of the World Network of Biosphere Reserves since 2011 and managed by the municipality of Peniche and by the Institute for Nature Conservation and Forestry.



This Biosphere Reserve includes the totality of the Berlengas archipelago, as well as the adjacent marine area to a maximum depth of 520m.

The importance of Berlengas as an island ecosystem, the biological value of the surrounding marine area, the botanical interest, its role as a place of passage and habitat of migratory waterbirds and the presence of interesting underwater archaeological heritage give the Berlengas an obvious ecological and cultural interest.

CONSERVATION

In the context of conservation, three major projects underway are emphasized:

1. **FAME Project- *Future of the Atlantic Marine Environment*** - which is cofinanced by Atlantic Area Programme and involves 5 european countries and 10 partners: *Royal Society for the Protection of Birds (RSPB)*, *BirdWatch Ireland (BWI)*, *Ligue pour la Protection dês Oiseaux (LPO)*,

Sociedade Portuguesa para o Estudo das Aves (SPEA), *Sociedad Española de Ornitología* (SEO/BirdLife), Universidade do Minho (UMinho) e *Wave Energy Centre* (WavEC), Sociedade Portuguesa de Vida Selvagem (SPVS), *Agence des Aires Marines Protégées e Martifer*.



For the realization of the project, the following actions have been carried out in the Berlengas archipelago:

- Population census of reproductive Cruet *Phalacrocorax aristotelis*;
- Tracking of Shearwater *Calonectris diomedea* in Berlenga;



- Monitoring artificial nests of Shearwater in Berlenga Island;
- Assessment of the existence of predation on Shearwater in Berlenga;
- Evaluation of the population of Band - rumped storm petrel *Oceanodroma castro* in Farilhão Grande.



2. **LIFE+ MarPro** Project- Conservation of marine protected species in Mainland Portugal (LIFE09 NAT/PT/00038; Duration: 2011-2015; aims: reduce the conflicts between fisheries and cetacean and seabird species by implementing solutions concerning by-catch and fish depredation; understanding the complex relations between the exploitation of pelagic fishes and the conservation of protected species; ensure the long-term socio-economic viability of the management, surveillance and monitoring activities of the target species and their habitats, together with the promotion of a sustainable exploitation of marine fishery resources of Mainland Portugal). Partnership: University of Aveiro (coordinating partner), IPIMAR (Portuguese fisheries institute), University of Minho, SPEA and ICNF, I.P..

Actions in development in the marine area of Berlengas and in the coast of Peniche:

- Census of cetaceans from vessels in the marine area of the Reserve - 2,800 Nautical Miles \approx 5 Km;
- Monthly Counts of seabirds from Cabo Carvoeiro;
- Behavioral observations of seabirds from Cabo Carvoeiro;
- Coastal Inspections from April to October for the detection of strandings of marine mammals and birds;
- “*Spatio-temporal dynamics of seabird-marine prey interactions in the Portuguese coast*”. Aims to understand the complex interactions between four trophic levels of the Portuguese pelagic ecosystem: primary production, secondary production, distribution of pelagic fish and seabirds along the Portuguese continental shelf.

3. **M@rBis Project**, which aimed to map and characterize marine habitats and species in the area surrounding the Berlengas islands, in order to increase the knowledge about the local marine area.

http://www.campanhasmarbis.org/index.php?option=com_content&task=blogcategory&id=62&Itemid=185

In addition to the development of these nature conservation projects, population management of Yellow-legged gull (*Larus michahellis*) through birth control, and control of non-native invasive plants (*Carpobrotus edulis* and *Oxalis pes-caprae*) is made annually on the Berlenga island.

DEVELOPMENT

As in previous years, in the summer of 2012, the School of Tourism and Maritime Technology (Polytechnic Institute of Leiria), the Research Group on Marine Resources (GIRM - IPL), the Natural Reserve of Berlengas (ICNF) and the Municipality of Peniche, fostered the volunteer program in the Biosphere Reserve of Berlengas, involving the provision of information to visitors, the disclosure of natural values of the Biosphere Reserve and conducting visitor surveys.

The approval of the operating rules of the Permanent Working Group (ICNF and Municipality of Peniche) of the Biosphere Reserve of Berlengas and the evaluation of the implementation of actions under the Action Plan for the Biosphere Reserve Berlengas is planned for 2013.

LOGISTICS (function)

In this context, the census of reproductive populations of sea and terrestrial nesting birds in the Berlengas Archipelago - Yellow-legged Gull *Larus michahellis*, Cruet *Phalacrocorax aristotelis* and Peregrine Falcon *Falco peregrinus* and 3 major initiatives as follow:

- i) Tanto Mar 2012 Week - cultural and adventure week on the valorization of the strategic role of the sea which involved 50 pre-university young

individuals. It was an initiative of the Forum Estudante (Student Forum), in partnership with the Municipality of Peniche and the School of Tourism and Maritime Technology (ESTM-IPL), sponsored by Caixa Geral de Depósitos (Bank) and with the support of the Ministry of Defense, EMAM, Naval School and ICNF. In view of the good results we expect to repeat the event in 2013. A report can be seen at the following address: <http://www.forum.pt/projectos-forum/semana-tanto-mar/6554-embaixada-do-mar-a-reportagem>;

ii) "Be@Berlenga" Initiative (8-10 June), organized by the nucleus of students of marine biology and biotechnology, the research group on marine resources and the risk group of the Polytechnic Institute of Leiria and with the support of Municipality of Peniche, the ICNF, the Port Authority of Peniche, HALIOTIS, AQUASUBOESTE, VIAMAR and Volunteer Firefighters of Peniche. During the three days the participants had the opportunity to attend lectures, participate in scientific workshops, contribute to the conservation of the biosphere Reserve and to get in contact with the underwater world.

For 2013, we have planned a guided tour to the Reserve for 50 students of ESTM-IPL along with routes cleanup and trail maintenance actions.

<http://www.cm-peniche.pt/News/newsdetail.aspx?news=62038dcd-afd5-44c0-9e51-82f5eafb665b>

<http://www.facebook.com/events/428147787213943/>

iii) The Project «Mar pedagógico», which will be repeated in 2013, resulted from an initiative of the Municipality of Peniche with the Pedro Arrupe College, in partnership with the ICNF, the ESTM-IPL, the Port Authority of Peniche, the Portuguese Institute of Maritime Transports, the Estaleiros Navais (shipyards) and HALIOTIS.

<http://marpedagogico.weebly.com/peniche---mar-pedagoacutegico.html>

<http://marpedagogico.weebly.com/icnb---reserva-natural-das-berlengas.html>

In addition to the repetition of the three abovementioned initiatives and of the census of reproductive populations of sea and terrestrial nesting birds, in 2013 we have planned dissemination actions on the Biosphere Reserve of Berlengas and the involvement of students from the 10th, 11th or 12th grade

of the secondary school of Peniche, in the observation of seabirds from Cape Carvoeiro. Also for the students of Integrated Primary School 1,2,3 of Peniche we expected holding information sessions on biological diversity, in particular on marine mammals. Training will be given on marine mammal strandings and recovery of injured animals.

In 2013 the Natural Reserve of Berlengas (NRB) will celebrate its 32nd anniversary and several activities are scheduled, including a colloquium for the presentation of the scientific work developed in the area, dissemination of information on the natural heritage of the Reserve and actions of environmental awareness and nature conservation. With the support of volunteers, concrete actions on weed control and reparation of pathways are planned.

C. **‘Gerês-Xurés Transboundary Biosphere Reserve’** - Part of the World Network of Biosphere Reserves since 2009 and jointly managed by the Institute for Nature Conservation and Forestry (ICNF)/National Park of Peneda-Gerês (PNPG) and the Natural Park of Baixa Limia - Serra do Xurés (PNBLSX). (Consellería de Médio Ambiente, Territorio e Infraestruturas - Xunta de Galicia).



On the border between Portugal and Spain, the Gerês-Xurés Transboundary Biosphere Reserve covers an area of 259,496 ha (62.916 ha in the region of Galicia y 205.580 ha in Portugal), which comprise six galician and five portuguese municipalities.

The transboundary project allowed to:

- Improve and consolidate knowledge about the area in a shared, uniform, joint way with the Spanish authorities;

- Improve the exchange of information and experiences between the two administrations and sharing in the management of the Gerês-Xurés Transboundary Park and of the Gerês-Xurés Transboundary Biosphere Reserve;
- Implement conservation actions for species and habitats in a concerted way in both sides of the border;
- Promote the conservation unit represented by the the Gerês-Xurés Transboundary Park, as a joint unit;
- Debate ideas and common solutions for common problems and jointly implement plans and essential tools for land management;
- Develop joint dissemination actions.

The Transboundary Reserve Action Plan envisages the development of activities in four different thematic areas: 1) increasing knowledge of the Reserves area in terms of natural resources, which resulted in the elaboration of two Atlas and a joint Geographic Information System, 2) development of actions of active management for the conservation and recovery of species and habitats and land, 3) valorization of endogenous resources and 4) communication.

Several meetings were held for promoting the joint management and coordination of actions to be implemented by Portugal and Spain. The development of activities was based on the principle of shared responsibility. As deemed necessary, meetings were also promoted with the various entities and actors involved in the implementation of actions on the ground.

Activities taken in each area are described briefly hereafter.

ACTIVITY 1: KNOWLEDGE OF THE ENVIRONMEWNT

Atlas of the flora and mapping of natural habitats

An atlas of the distribution of 56 plant species was produced, selected from criteria of rarity, ethnobotanical interest and seriousness of the



invasion, occurring in the Transboundary Reserve.

This action comprised the design of cartography at a scale of 2x2 km grid for the PNPG area, the elaboration of fact sheets by species and the production of an image database.

In parallel, mapping was produced for the habitats listed in Annexes of the Habitats Directive in the area of PNPG and in the remaining area of the Site of Community Importance (SCI) Peneda-Gerês and Special Protection Area (SPA) Serra do Gerês, in the scale 1/10.000.

This activity was carried out by the Institute of Agricultural and Agrifood Science and Technology (ICETA - University of Porto). The activity was conducted in harmony with the work developed by the partner PNBLSX.

Atlas of vertebrates

Existing data that were scattered by various entities and persons/researchers, on the distribution of the vertebrates of PNPG was compiled. The information collected was attached to information that PNBLSX possessed and a joint map was produced. This data was also integrated in the Geographic Information System (GIS).

Elaboration of a Transboundary Geographic Information System

A common Geographic Information System was built from existing information on both sides of the border which was compiled and harmonized.

ACTIVITY 2: MANAGEMENT, PLANNING AND TERRITORIAL PLANNING

Inventory of herds of feral goats in PNPG

Aiming to promote the conservation of Iberian Wild Goat populations, the inventory and survey of the distribution of herds of feral goats existing

	in the PNPG was made.
Peatland Restoration	All the preparatory works for the implementation of this action were concluded. There were working meetings with the project advisor EEA Grants, in order to identify the peatland to be recovered as well as with representatives of the communal lands commission and with the parish councils of the planned intervention area and the implementation project was elaborated.
Natura Xurés-Gerês wildlife sanitary monitoring	<p>A screening was conducted in the area of PNPG/PNBLSX from samples taken from animals found dead, hunted, captured for scientific studies or specifically for this study. A list of target species and pathogens potentially important for its conservation was defined. Then indicator species and important domestic hosts in the epidemiology of these diseases were defined.</p> <p>428 animals were studied, 809 biological samples analyzed and 1284 laboratory results have been obtained.</p> <p>A list of recommendations was prepared for continuing sanitary surveillance in protected species and domestic hosts.</p> <p>Six entities intervened in this action: the National Veterinary Research Laboratory, Faculty of Veterinary Medicine, the School of Health Sciences of the University of Minho, the Institute of Biomedical Sciences Abel Salazar of the University of Porto and the laboratories INNO and CEDIVET.</p>
Protection and conservation of native forest habitats through forest management actions in Mata de	With the objective of protection and conservation of native forest habitats several actions were developed for preventing the spread of forest fires, fostering the development of forest tree species and removing invasive

Albergaria - Elimination of invasive woody species	<p>alien species.</p> <p>With the purpose of protection against fires and fuel management, bush cleaning tracks were made and paths were cleaned in 35.8 ha. For favoring forest trees species bushes were cleaned in a total area of 2.0 ha and in order to combat woody weeds 14.0 ha were intervened.</p>
Restoration of inert extraction points	<p>The point of extraction of inerts to be intervened (gravel pit of Nossa Senhora de Numão in Castro Laboreiro) was selected and was made and the implementation project was elaborated.</p>
Exhibition “A Saga do Volfrâmio. As Minas dos Carris e das Sombras no Gerês-Xurés” (“The Saga of Wolfram. The Mines of Carris and Sombras in Gerês-Xurés”)	<p>This action involved the design and installation of an exhibition on the exploitation of the tungsten mines of Carris (Portugal) and Sombras (Spain).</p> <p>It was open to the public on the premises of the Centre for Environmental Education of Vidoeiro PNPG/ICNF in Gerês and was attended by 382 visitors.</p>

ACTIVITY 3: UTILIZATION AND VALORIZATION OF ENDOGENOUS RESOURCES

Implementation of a permit system for accessing sensitive areas and monitoring visitors	<p>In this action, a database was constructed for managing nature sports activities in PNPG and monitoring of visitors in sensitive areas. This database allows to record all information related to the entities licensed to operate in PNPG, the activities for which they are licensed, the individual applications to develop activities and the respective licenses.</p>
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ACTIVITY 4: COMUNICATION PLAN

Within the implementation of the Transboundary Reserve Action Plan various communication activities were developed, the main ones being:

- The 2nd Forum on Conservation of Transboundary Natural Areas Galicia-North of Portugal, which was attended by about 120 individuals, representatives of regional and local authorities, businesses, universities, associations, among others, of Portugal and Spain. The event took place at the Centre for Environmental Education of Vidoeiro PNPG/ICNF in Gerês.
- Organization of a Public Presentation of the results of the **XURÉS-GERÊS** Cooperation at the premises of the Centre for Environmental Education of Vidoeiro PNPG/ICNF in Gerês, attended by 51 people. The main subject of this session was the presentation of the preliminary results of the work activity carried out under Activity 1 - Knowledge of the Environment.
- Creation of the webpage “Transboundary Cooperation Projects: **Natura Xurés-Gerês** and **Natura Miño-Minho**”, in <http://portal.icnb.pt/ICNPortal/vPT2007/O+ICNB/Estudos+e+Projectos/Proj+Natura+Xures+Geres.htm>

and the production of contents specifically on the Biosphere Reserve for a page created in the ICNF website.

- Dissemination of activities carried out by sending information notices to the media.

D. ‘Graciosa Island Biosphere Reserve’ , ‘Corvo Island Biosphere Reserve’ and ‘Flores Island Biosphere Reserve’ - Part of the World Network of Biosphere Reserves since 2009 and managed by the Regional Direction of the Environment within the Regional Secretariat for the Environment and Sea of the - Autonomous Region of Azores.



Caldeirão – Corvo Island Biosphere Reserve



Ilhéu da Praia - Graciosa Island Biosphere Reserve



Cascatas Fajã Grande –Flores Island Biosphere Reserve

- In November 2011 the Biosphere Reserves of the Azores (Corvo, Graciosa and Flores), as well as the Santana Biosphere Reserve (Madeira), were invited to take part in a small exhibition of local products, on the occasion of the Biosphere Reserves Day and of the closure of UNESCO's Science Committee General Conference. This event was possible thanks to partnerships between representatives of these Reserves, the Portuguese National Commission for UNESCO, the Permanent Delegation of Portugal at UNESCO and the MAB Secretariat. According to the letter of appreciation from UNESCO, this initiative was a major success and the MAB Secretariat reaffirmed to the Portuguese National Commission for UNESCO that in the future, this type of activities could be repeated at the UNESCO headquarters;
- Under the aegis of the Portuguese National Commission for UNESCO, a new label was given to the schools belonging to the BR territories, starting in Azores and Madeira, entitled "Biosphere Reserve Schools", with the organization of School Contests (starting from 2008/2009 until now), in the framework of objectives of the *United Nations Decade of Education for Sustainable Development* (2005-2014), the *International Year of Biodiversity* (2010) and the United Nations Decade of

biodiversity (2011-2020), the *International Year of Water Cooperation* (2013) and *International Year of Mathematics of Planet Earth* (2013), involving all schools located in the BR territories. This new and innovative educational project, promoted and sponsored by the Portuguese National Commission for UNESCO and by the municipalities involved, reached more than one hundred schools. Students and teachers participated with the presentation of different works (in different formats, such as literary, documentary, fine arts, videos, spots and campaigns) about the BR concept and taking into account the objectives of the referred Decades and International Year's. A new school contest is being planned for 2013/2014.

- The School Contest organized in 2012/2013 entitled "Water that unites us" involved not only BR from Portugal (Azores and Madeira) but also the cooperation with the BR of Príncipe, in S. Tomé and Príncipe in Africa, reinforcing the cooperation also between BR from different countries and giving especial attention to Africa.
- The process of certification of products, goods and services, was approved by the BR of Azores and to this end the brand "Biosphere Azores" as well as manual procedures and a model declaration, were created by decree published in the Official Journal. This measure was intended to regulate the brand "Biosfera Açores" (Azores Biosphere) to highlight the distinctive features of the region, such as biodiversity and geodiversity of excellence, calm and unexplored nature, sea life, the diversity of islands and landscapes, and local products. Thus, this "brand" will be at the service of increasing the attractiveness of the product "nature tourism" and the Azores destination, helping to implement a strategy that aims at the sustainable development of this tourist destination. 19 licenses have been granted to use this logo;



- The Portuguese National Commission for UNESCO, in 2011, created and coordinates the *Portuguese Biosphere Reserves Network*, and the BR of Santana, Madeira and also from Azores (Graciosa, Flores and Corvo) were the first BR's to join this Network. All efforts are being done to have all Portuguese BR represented in this Network, in order to give more visibility and promotion of the Portuguese BR at a national and international level. In this sense, a major event is being organized at the Portuguese Parliament to promote the Portuguese BR and this Network (July, 2013).
- In 2012, 15 actions were carried on Control and Eradication of Species of Flora and Monitoring of protected species and habitats in the Biosphere Reserves of Corvo, Flores and Graciosa islands, corresponding to an area of about 500 Hectares.



- On Waste Prevention and Management, and in the scope of the Strategic Plan for Waste Management in the Azores (Plano Estratégico para a Gestão de Resíduos dos Açores - PEGRA), the Waste Recovery Centres of the Biosphere Reserves of Graciosa, Flores and Corvo Islands are already operating. These waste recovery centers include waste storage units of different types of waste, including hazardous waste, a

transfer station for exporting waste to other islands or to mainland Portugal and a composting central, for the recovery of organic waste.



- Attribution of Miosótis Awards to 3 tourist facilities in the Biosphere Reserve Islands.

The "Miosótis" award is intended to recognize tourist accommodation units with "good environmental behavior" and to affirm the archipelago as destination devoted to the values of sustainable development;



- The valorization of sustainable tourism is also dependent on the quality and credibility of the content of materials on Biosphere Reserves, such as:
 - Bilingual Roadmaps on the tourist/cultural component of the three Biosphere Reserves of Azores;
 - Brochure entitled "Your island is a Biosphere Reserve" for the public residing in the 3 islands, with special emphasis on children and youth, in Portuguese;
 - Production of paper table trays and cup bases for restaurants, hotel door hangers and airports walkways, alluding to Biosphere Reserves;
 - Creation of an Infomail;
 - Welcome panels in airports;
 - Welcome messages in SATA airplanes;

- Installation of interactive kiosks in visitor centers with multimedia content on the Biosphere Reserves;
- 30 minute HD (High definition) documentary films on the 3 islands;
- Each DVD includes extras with photo galleries and other promotional material on each island
- Digital video mini clips for dissemination on the web, which are "trailers" or summaries of the final documentaries.



- Interpretation Centres were opened in all Biosphere Reserve Islands;
- On March 21st, 2013, the European Geoparks network /Global Geoparks Network (EGN/GGN) supported by UNESCO approved the integration of the Azores Geopark (all the nine islands) in the European Geoparks Network (EGN); 14 of the 57 geosites considered priority for the development of geoconservation strategies and the implementation of valorization actions, are located in the three Biosphere Reserves;
- Several volunteer and environmental awareness activities were executed in all Biosphere Reserves involving hundreds of adults and children, particularly in the campaigns, SOS Cagarro (SOS Shearwater), Entre-Mares, More-Endemic and in the celebration of International Day for Biosphere Reserves;



- Participation of the Biosphere Reserve of Flores Island, with an Itinerant eco pavillion in the county celebrations;
- The Municipal Council of Graciosa Island held a national competition for development of a new logo for the municipality, appreciating the natural and cultural values of the island, where the Biosphere Reserve reference stands out.



- On April 2, 2012, Regional Legislative Decree 15/2012/A was published establishing the Legal Regime of Biodiversity and Nature Conservation in the Azores containing a section V on the Biosphere Reserves thereby inserting them, in the regional legal system

E. 'Santana - Madeira Biosphere Reserve'- Part of the World Network of Biosphere Reserves since 2011. Managed by the Municipality of Santana (Madeira) with the support of the Regional Government of Madeira.



- Portugal was represented by the Biosphere Reserve of Santana in founding meeting of the Global Network of Island and Coastal Biosphere Reserves, held in Menorca, Spain, from 13 to 15 February 2012. In addition to the Santana Biosphere Reserve, the Biosphere Reserves of Jeju Island (Republic of Korea), Menorca (Spain), Shinan Dadohae (Republic of Korea), St. Kitts and Nevis (Caribbean), Yakushima (Japan) Komandorskiye Islands (Russia), Siberut Islands (Indonesia), Palawan (Philippines), Juan Fernandez Islands (Chile), Islands of the Gulf of California (Mexico), Lanzarote, Fuerteventura, Gran Canaria and La Palma Canary Islands, Spain) also participated;
- The Biosphere Reserve of Santana, Madeira, hosted from the 21st -26th of March 2012, the X Meeting of REDBIOS - Network of Biosphere Reserves of the East Atlantic and Macaronesia, whose central theme was "Sustainable Tourism in Islands - Island Reserves". This meeting was

co-organized by REDBIOS, Biosphere Reserve of Santana, Madeira, the municipality of Santana, the Government of the Autonomous Region of Madeira and Spain MAB Committee.

- Attended the meeting representatives of different BR (La Palma, Canary Islands , Bijagós - Guinea Bissau, Azores, candidate BR of Principe Island, S. Tomé and Principe), representatives of MAB Committees (Spain and Cape Verde), representative of UNESCO and of the Portuguese National Commission for UNESCO (who participated in such meetings for the first time) and ministerial bodies and public and private agencies of the countries that comprise the REDBIOS;

This meeting projected the future of the REDBIOS Network, identifying ways and initiatives to meet the challenges of sustainable development, of the regions and countries to which they belong. Guidance for the valorization of assets that distinguish these places, such as the conservation of natural resources, and sustainable use respecting different cultures and traditions were some of the other topic discussed.

Upon completion of these activities, a monument to the BR of Santana was inaugurated, portraying what the sculptor Luís Paixão wanted to leave as another motto for the mentioned BR “to protect nature is to defend life”;

- The first School Contest promoted by the Portuguese Commission for UNESCO in the BR of Santana took place in 2012/2013. All schools located in the BR territory participated in very enthusiastic way and received the official label “Biosphere Reserves Schools”.
- In the next school year 2013/2014, under the framework of the *United Nations Decades of Education for Sustainable Development* (2005-2014) and *Biodiversity* (2011-2020) and the *International Year of Water Cooperation* (2013) a new school contest is being planned for the Portuguese BR, including the BR of Príncipe. Also a strong effort will be made to extend this initiative to schools from Berlengas Biosphere

Reserve territory and Gerês. In principle the theme will be in line with the International Year of Water Cooperation, which is celebrated in 2013;

- The creation of the Network “Biosphere Reserves Schools” has a main goal: promote and disseminate the BR that exists in the territory where the school and local community is play a very important role to achieve the objectives of the BR and MAB Programme;



- 2nd and 3rd edition of the magazine "*Olhar da Biosfera*" (Biosphere Look). Project whose mission is the interaction, involvement and dissemination of simple "looks" and perspectives. Observing, depicting and sharing, are the purposes to be achieved through collaboration, dynamics and wisdom of various actors and stakeholders. It is freely distributed to all children from public and private schools in the county, as well as 5 copies to each school library in the Madeira Autonomous Region;



- Enhancement of the landscape as a playful, educational and tourist resource by crating itineraries with hiking trails and traditional paths. This is the best way to recognize Mans ability to live, next door to nature in a sustainable equilibrium, providing the entire population and nature lovers the opportunity to visit and getting to know the Biosphere Reserve, roaming through a range of places and experiences that only Santana can offer;

A CAMINHAR NA BIOSFERA

Em poucos lugares do Mundo poderá dizer-se que o Homem e a Natureza convivem em equilíbrio. O Concelho de Santana recebeu da UNESCO, no passado mês de março o galardão de RESERVA DA BIOSFERA, fazendo parte de um restrito grupo de Ecossistemas terrestres e costeiros, lugares esses que conseguem alcançar o equilíbrio para o desenvolvimento sustentável.

Em Santana, a UNESCO reconheceu o território de todo o Concelho e o litoral até a profundidade de 200 metros, incluindo zonas protegidas, como a Floresta da Laurissilva ou a Reserva Natural Marítima da Rocha do Navio, bem como zonas habitadas e agrícolas.

As caminhadas pelas veredas, levadas e caminhos tradicionais, são a melhor forma de reconhecer a capacidade do Homem viver, paredes-meias com a natureza, numa situação de equilíbrio sustentável.

Assim, pretendemos proporcionar a toda população e amantes da natureza, a visita e dar a conhecer a Reserva da Biosfera, percorrendo um conjunto de lugares e experiências que só o Concelho de Santana proporciona, uma vez que confere uma identidade própria e única. Passando pelas montanhas (Pico da Pedras, vales (Vale da Iapa), meio rural e até mesmo pela orla costeira (Rocha do Navio).

NORMAS DE CONDUZTA:

- Mantenha-se dentro do trilho;
- Evite ruídos e atitudes que perturbem o meio ambiente;
- Não recolha nem danifique as plantas;
- Não perturbe os animais;
- Não abandone lixo;
- Se é fumador, não deite as beatas no chão, guarde-as;
- Não destrua ou modifique a sinalética;

DADE A SUA SEGURANÇA:

- Mantenha-se sempre junto ao Grupo;
- Recolha previamente informação sobre o percurso;
- Transporte alguma comida e água;
- Utilize roupa e calçado apropriados;
- Não corra riscos;

Reserva Mundial da Biosfera da UNESCO

ORGANIZAÇÃO:

AFILIADOS:

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A CAMINHAR NA BIOSFERA

- The Madeira Film Festival "On the Road", which took place from the 28th until the 30th September 2012, promoting nature movies, focusing on the dissemination of the Laurel forest and, in particular, the Biosphere Reserve of Santana, Madeira;
- The municipal business entity Terra Cidade, under the scope of a traineeship course of technological specialization in organic farming at the University of Madeira, and in partnership with the *Associação Santana Cidade Solidária* (Santana City Solidarity Association), is promoting the implementation of educational organic gardens in all 1st cycle schools in the municipality of Santana. This project's main objectives are: to inform children about the importance of contact with nature, to inform about the production of food in a healthy manner, respecting their natural cycles, of reusing of agricultural and domestic surplus (organic waste) in order to reduce the use of some natural resources while protecting the environment; raising the awareness of children to the importance of organic/sustainable farming;
- The first Biosphere Centre of the Biosphere Reserve of Santana, Madeira, opened in May, in Rocha do Navio, making this Center a point of information and dissemination of the Biosphere Reserve, the MAB Program, of promotion of educational and scientific activities and of support to sustainable tourism;



The Reserve also hosts the Centro Freira of Madeira, Dr. Rui Silva, which is managed by the Natural Park of Madeira and has associated with the network of Biosphere Centers, providing a space for dissemination of the contents of the Reserve. This center, among its

other valences, aims to publicize and promote the natural heritage of the surrounding area, of which the rarity and high protection status of the Zino's petrel should be highlighted.

- The biosphere reserve began conducting awareness raising workshops and training with the theme "The Santana Madeira World Biosphere Reserve of UNESCO in regional tourism" whose target audience were tourism agents, whether local, tour guides or travel agencies;
- In June, the Biosphere Reserve of Santana, Madeira began the process of certification of products, goods and services under the brand name "*Santana Madeira Biosfera*" (Santana Madeira Biosphere), based on good practices and promotion of sustainability, conservation of cultural and environmental values and authenticity.

Given the importance and notoriety of bread to the county, the certification of the baking industry had long been coveted as a way to promote, even further, a form of cultural identity of the Biosphere Reserve of Santana.

The certification of 3 baking units, namely the "*Doces Tradições*" (Sweet Traditions) of the People's House of Arco de São Jorge, the Olindinha Bakery and the Avelino Silva unit, passed through the evaluation of aspects with a focus on quality, sustainability, innovation and loyalty to the traditional manufacturing process and thus contributing to perpetuate the tradition underlying the production of Santana bread. In addition to this important industry, already adhering to this system of sustainable development are: 6 restaurants, 2 hotel units, 2 units of rural tourism; 1 craft store, in terms of public services the adherents are the Youth Hostel at Santana and the Thematic Park of Madeira;



- Through the BR of Santana, Madeira, Portugal supports and participates in the initiative "Smart Biosphere", dedicated to the development and testing of technologies and software tools in the service of digital management of BR. This initiative has been crafted together with BR in Spain and plans to expand to other reserves of the World Network. The Portuguese National Commission for UNESCO also supports officially this initiative;
- The Portuguese Ministry of Foreign Affairs, through its Department of Cooperation (Camões - Instituto de Cooperação e da Língua) has collaborated in the process of candidature of the BR of Principe, in the Democratic Republic of S. Tomé and Principe, based on technical cooperation in the development of the application file and training of human resources. The cooperation agreement between Santana, Madeira and the future Biosphere Reserve of Príncipe Island was developed during 2012. A member of the Principe BR was trained during one week in the month of July, as a form of involvement in the day to day of a Reserve and in the projects developed;
- In July, the Biosphere Reserve was visited by the Minister of Agriculture, Sea, Environment and Spatial Planning;



In January 2013, the BR of Santana presented its official website: www.santanamadeirabiosfera.com . Above all this is considered an action which objectively embodies awareness raising and dissemination of the award presented by UNESCO to the Autonomous Region of Madeira and more specifically to the municipality of Santana. The website contents include themes and subjects which may encourage scientific and cultural research and inventories. As such the website follows the outlined strategy for action, ie, local cultural dissemination as well as territorial promotion.

3. Portuguese National Commission for UNESCO

Among the various activities of the Portuguese National Commission for UNESCO already mentioned in this report, the following should be stressed for its visibility:

- Creation of the National Network of Biosphere Reserves (at first, in collaboration with the BR of Santana, Madeira and of the Azores - Graciosa, Flores and Corvo), and promotion of the referred Network at a national and international level;
- Partnership between the National Commission for UNESCO and RTP - Radio and Television of Portugal, with the support of the BR of Santana and Azores, as well as the MAB National Committee, in the planning of a TV documentary on the Portuguese Biosphere Reserves, focusing their activities as well as meetings and conclusions of REDBIOS, giving also especial attention to the BR of Principe, reinforcing the cooperation with the Portuguese-speaking African countries in this area;
- Promotion of the school contests involving more schools in the territories of the Portuguese BR reinforcing the *Biosphere Reserve Schools Network*.

This report was elaborated with the following contributions

Institute for Nature Conservation and Forestry (ICNF, IP)/ Natural Reserve of Boquilobo Marsh; Natural Reserve of Berlengas; National Park of Peneda-Gerês and Planning and International Affairs Department

Regional Direction of the Environment/Regional Secretariat for the Environment and Sea of the Autonomous Region of Azores

Municipality of Peniche

Municipality of Santana (Madeira)

Lisbon, May 2013