

# **PORTUGAL National Report**

UNESCO Man & the Biosphere Programme 2021

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# 1. Portugal and the UNESCO MaB Programme

The national authority for nature conservation and biodiversity (Institute for Nature Conservation and Forests – ICNF) of the Ministry of Environment and Climate Action, is in charge of the coordination and promotion of the Man & the Biosphere Programme (MAB) in Portugal.

Portugal is associated with the MaB Programme since late 1981, when our first Biosphere Reserve - Paul do Boquilobo - was classified. Currently, from the 731 sites belonging to the World Network of Biosphere Reserves, 12 biosphere reserves (BR) are designated in Portugal. Three of these biosphere reserves are transboundary: Gerês/Xurês, Meseta Ibérica and Tejo/Tajo Internacional. A total of 22 Transboundary Biosphere Reserves (TBR) are currently designated including 131 countries.

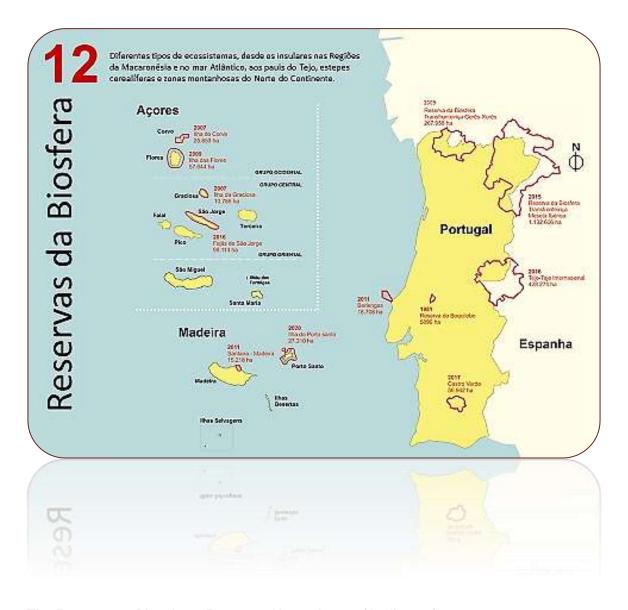
After the designation of the Paul do Boquilobo Biosphere Reserve, there were not developed new applications from Portuguese territories to the MaB Programme for 25 years. The MaB Programme was boosted again in 2007 and since then, eleven other territories were classified by UNESCO, which are now part of the World Network of Biosphere Reserves. There are six biosphere reserves designated in Portugal mainland and six in the Autonomous Regions: four in Azores and two in Madeira. Biosphere reserves are designated in about 14.5% of the Portuguese territory, corresponding to an area of 1.339.875 ha and about 350.000 people.

The significant area occupied by biosphere reserves in Portugal is a good indicator of the recognized opportunities given by the UNESCO MaB Programme label that fosters the harmonious integration of people and nature for sustainable development through participatory dialogue; knowledge sharing; human well-being improvements; respect for cultural values and society's ability to cope with change.

It is one of the main international tools to co-operation through sharing knowledge, exchanging experiences, building capacity, promoting best practices and developing and implementing sustainable development approaches in a diversity of contexts.

The Portuguese Biosphere Reserves cover different types of ecosystems, from mainland (Atlantic and Mediterranean ecosystems) to the archipelagos of Azores and Madeira (Macaronesia ecosystems). These are territories where humans and nature have been historically coupled, which is reflected in the traditions and in the models of sustainable developed pursued.

On figure 1 and table 1 it is possible to see how the 12 Portuguese Biosphere Reserves are geographically distributed, their total size and the respective zoning in core areas, buffer zones and transition areas.



The Portuguese Biosphere Reserves Network map (April 2022)

Biosphere Reserves	Year of Nomination	Total area (ha)	Land area (ha)	Marine area (ha)	Population (total)	Portugal (ha)	Spain (ha)	Zoning areas (%)
Paul do Boquilobo	1981	5896			8400			Core - 13,8% Buffer- 17,50% Transition-68,7 %
Corvo Island	2007	25.853	1.713	24.141	430			Core - 11,7% Buffer- 88% Transition-0,3%
Flores Island	2009	57.644	14.112	43.532	3793			Core- 3% Buffer- 12% Transitian-85%
Graciosa Island	2007	10.786	6.076	4.710	4391			Core - 5% Buffer- 18% Transition-77%
Geres-Xurês	2009	267.958			76.301 total 66.177 PT 10.124 SP	196.838 (76%)	62.819 (24%)	Total Core - 16% Buffer- 32% Transition-52%
Santana - Madeira	2011	15.218			7.795			
Berlengas	2011	18.708	701	18.007	70+27.752			Core - 0,1% Buffer - 4,6% Transition - 95,3%
Meseta ibérica	2015	1.132.6 06			169.745 total 133.940 PT 35.805 SP	657.365 (58%)	475.24 1 (42%)	Total Core - 9,29% Buffer- 56,36% Transition- 34,35%
Fajãs de S. Jorge	2016	98.114, 17	24.382, 77	73.731, 40	9.171 total Core - 188 Buffer-767 Transition 8217			Core-8.52% Buffer- 11.28% Transition - 80,2%
Tejo/Tajo Internacional	2016	428.274				169.201 (39,5%)	259.07 3 (60,5% )	Total Core -13,1% Buffer- 30,7% Transition- 56,2%
Castro Verde	2017	56.942			7.276 total Core - 5 Buffer - 784 Transition - 6487			Core-10.5% Buffer- 46.7% Transition- 42,8%
Porto Santo Island	2020	27.310	5060	22251	5173 total			Core -9,4% Buffer - 42,2% Transition - 48,4%

**Table 1.** Biosphere Reserves in figures (declaration year, area, population, zoning areas). TBR – Transboundary Biosphere Reserve. Total area in Portugal: 1.339.875 ha (14,5%)

### 2. MaB National Committee

The year of 2021 was strongly marked by a pandemic setting, which limited the development of activities in the territories. However, there were developed activities of awareness-raising, environmental education and support to governance in virtual interactions.

The MaB National Committee integrates in its composition the Institute for Nature Conservation and Forests, I.P. (ICNF, IP), representants of each of the 12 Portuguese Biosphere Reserves, including both technicians and politicians, Turismo de Portugal IP, the National Council for the Environment and Sustainable Development (CNADS) and the Portuguese National Commission for UNESCO (CNU) / Ministry of Foreign Affairs. There are also present some observers such as UNESCO Chairs, non-governmental organizations, university students and those interested or responsible for MaB actions under development. The MAB National Committee is chaired by the national authority for nature conservation and biodiversity (ICNF), which also carries out the functions of the secretariat and coordination of the Portuguese Biosphere Reserves. It also works as a clearinghouse of information and external dissemination and generates an impulse of visibility and management support in the biosphere reserves. The presence of Turismo de Portugal IP in the MAB Committee aims to help fostering tourism and visitation in the biosphere reserves. The CNADS contributes to the integration of the social, economic and environmental components of biosphere reserves. The CNU is a partner in the dissemination of information from UNESCO and a facilitator for the development of joint actions.

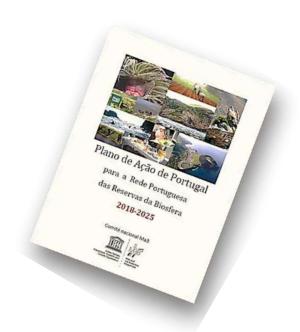
This year, due to the contingency of the COVID-19 pandemic, the two annual ordinary meetings of the National MaB Committee (that took place on 12<sup>th</sup> of May and the 25<sup>th</sup> of November) were held online. Despite this situation, the meetings had high participation, with several moments of reflection and exchange of views and experiences on the management of Biosphere Reserves.

The National Committee, through the president, also takes part in the governing bodies and advisory councils of some Biosphere Reserves (e.g. TBR Gerês/Xurês and TBR Tejo/Tajo International) and participates in public events and technical work meetings with stakeholders whenever is considered relevant.

# 3. Portugal Action Plan 2018-2025

Portugal is committed to the UNESCO MaB Programme with the adaptation of the Lima Action Plan (PAL) to the Portuguese context and with the approval of the Portuguese Action Plan 2018-2025. This Action Plan (Figure 3) defines in more detail the actions that will be carried out in our country, respecting the original scheme of the PAL and its main objectives and lines of action.

The document was prepared through a participatory process, including the contributions of the managers of Biosphere Reserves and of all the elements of the National Committee. There will be an interim evaluation of the implementation of the action plan in 2021. The results will be indicative of the needs to reorient actions, in order to meet the objectives set for 2025. A special template was built to facilitate ongoing reporting.



The Portuguese Action Plan for Biosphere Reserves 2018-2025

# 4. Cooperation with Biosphere Reserves, Regional Networks, MaB Committees and MaB Programme Secretariat

During this year Portugal proceed its international involvement in the MaB Programme and their formal and informal networks, increasing cooperation through sharing knowledge, exchanging experiences, building capacity and promoting best practices on the Biosphere Reserves as laboratories of sustainable development.

We present below some of the main activities developed

- Updating the digital catalogue "Información Básica. Reservas de la Biosfera Iberoamericanas" - IberoMaB network, including data from our new Biosphere reserve – Ilha do Porto Santo – Madeira

# http://rerb.oapn.es/images/PDF\_publicaciones/Cat%C3%A1logo\_ReservasBiosfera\_Red\_lberoMaB\_2019\_2020.pdf

- Participacion with a communication on the webinar "Management and governance in the Network of Biosphere Reserves of Ibero-America and the Caribbean (Red IberoMaB)", helded from May 25 to 27, 2021, and organized by the Spanish Agency for International Cooperation for Development (AECID), through the Spanish Cooperation Training Center in La Antigua Guatemala, in collaboration with the Autonomous Organism for National Parks of the Ministry for the Ecological Transition and the Demographic Challenge of Spain,

The objective of this webinar was to prepare a diagnosis of the state of the situation of each of the MaB National Committees and Focal Points, promoting the recommendation to the governments of the countries for the formation and strengthening of the MaB National Committees. Likewise, these webinars are intended to promote the creation of MaB National Committees in all countries that have not yet been constituted, as well as management committees, participation committees and action plans, thus guaranteeing the governance of Biosphere Reserves of the IberoMaB Network.



- Participation on the Survey prepared by the Menorca Biosphere Reserve for the World Network of Island and Coastal Biosphere Reserves to obtain feedback on how the COVID-19 pandemic is affecting islands and coastal areas classified as RB and how management priorities or foci are changing (or not).
- Presence on the UNESCO Forum on Biodiversity: our Planet, our Future: 50 years of MaB "On the way to Kunming" 24 of march.



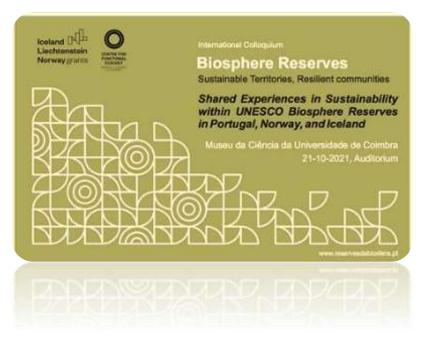
- Presence on the Seminar "Working on gender equality in the Network of committees, focal points and Biosphere Reserves of Ibero-America and the Caribbean (Red IberoMaB)".

The seminar was organized by the Spanish Cooperation Training Center in La Antigua (CFCE Antigua) in collaboration with the Autonomous Organism for National Parks (OAPN) of the Ministry for the Ecological Transition and the Demographic Challenge of Spain and the IberoMaB Network and was developed from October 26 to 28, 2021.

The objective of this training activity is to try to advance in determining the general gender equality guidelines that could serve as a reference in the Network Reserves for the mainstreaming of this concept and, in particular, to guide its inclusion in its planning documents. In addition to this, it is intended to share experiences of good practices to promote gender equality and female empowerment in the IberoMaB Network.

- Participation on the MAB 50 Mobilisation Event – 17 february – MaB Secretariat iniative

- Contacts with Norway Innovation and Norway MaB Committee for a week tour to three Portuguese BR Boquilobo, Berlengas and Gerês-Xurês transboundary BR.
- International Colloquium in Coimbra Portugal, Iceland and Norway Promoting scientific research, boosting the socio-economic development of territories and sharing the experiences of Biosphere Reserves classified by UNESCO, which are some of the objectives that define the Project "Biosphere Reserves: Sustainable Territories, Resilient Communities" and which were debated at an International Colloquium, in Coimbra. According to a note shared with the press, the challenges of sustainability, the appreciation of ecosystems and the quality of life of populations were discussed.



- On Earth Day, Portugal and Spain on the Transboundary Biosphere Reserve Tejo/Tajo Internacional developed an awareness project, with young people, in the field of climate change - A planet with life, which will only continue to do so if we all make efforts to change behaviors and attitudes compatible with its defense and safeguard. Results, in the sense of involving the youngest, were published on RBTTTI's facebook,

## 5. Cooperation with Portuguese-speaking African countries (PALOPS)

The MaB National Committee participated with the CPLP Secretariat in order to support the creation of a UNESCO Lusophone Network of Biosphere Reserves. We made a support declaration as we consider this network will constitute a privileged and permanent space for dialogue and cooperation. Through this network, there will be a permanent process of exchange of experiences and development of joint cooperation initiatives around nature conservation and biodiversity, research and logistical support and economic and social development, within the framework of the UNESCO MaB Programme, in line with the 2030 Agenda and the Sustainable Development Goals. Currently, 6 CPLP countries are represented in the MaB Programme by 24 BR: 7 in Brazil, 2 in Cabo Verde, 1 in Guiné-Bissau, 1 in Mozambique, 12 in Portugal and 1 in S.Tomé and Principe.

The CPLP Ministers of the Environment decided and declared to promote the establishment of a "Network of BR from CPLP countries" aiming at: i) enhancing cooperation, technical and management capacity of existing CPLP BR, ii) supporting the establishment of new BR and iii) developing joint initiatives and networking within the UNESCO MaB Programme and formal presented this informal network to UNESCO.

In these context the 3 years project "Unesco Biosphere Reserves Network in the CPLP" (presented and discussed at the CPLP Cooperation Focal Points meeting on April 5/6, 2021) was approved. The project is the result of a process of dialogue and general interest on the part of the Biosphere Reserves (RB) and the MaB National Committees of the CPLP countries. The project integrates the actions that successively and repeatedly have been reported as basic and essential to create dynamics and give life to the Network. It presents an executing entity with experience and foresees the constitution of a Monitoring Committee of the Network that will be responsible for the strategic planning and monitoring of the activity plan.

A meeting was held at the Serralves Foundation - Porto - in the context of the Lusophone Network (June 28-29) with the presence of Clayton Faho who spoke about the Brazilian BR and Jose Cassandra who presented the African BR from São Tome and Principe, Mozambique, Cape Verde and Guinea Bissau.

A temporary exhibition was opened, dedicated to the 24 Lusophone Biosphere Reserves. This exhibition is located in the Foundation's garden, which is visited by thousands of people (national and international). More information on point 10 of this report.

We had the honour of the presence of Miguel Clüsener-Godt (Division of Ecological and Earth Sciences Director - UNESCO) in both moments.

## 6. ICC - International Coordinating Council

### An important milestone!

Portugal submitted its candidacy to be a member of the International Coordinating Council of UNESCO's "Man and the Biosphere – MAB programme", bearing in mind the Program's relevance and the potential for creating synergies with Portugal's initiatives and actions in this domain, namely with the CPLP countries and enforcing the compromise with the Program. The proposal was approved by the UNESCO General Assembly, held last November, and Portugal is now a full member of this body for four years (2022 to 2025).

On 2021, Portugal participated (online) on the 33<sup>rd</sup> session of the MaB-ICC – 13-17 September, in Abuja, Nigeria, as an observer country.

# 7. Periodic Review process: Berlengas and Santana Biosphere Reserves – Madeira

10th Anniversary of the Berlengas and Santana Biosphere Reserves – Madeira

In 2011, the Berlengas and Santana Biosphere Reserves – Madeira were created and integrated into the UNESCO World Network of Biosphere Reserves, by decision of the International Coordination Council of the "Man and the Biosphere" Program (MaB).

After 10 years of existence and in accordance with the requirements of the MaB Program, the respective Periodic Review Report was prepared for each of these Biosphere Reserves. For these, information was compiled and the main activities and projects developed in this decade were evaluated, through a participatory process, involving the population and various relevant entities in these territories, culminating in a public consultation.

As this is a very important moment of balance and discussion of proposals for action and programming for the next decade, for both territories, it was evident that human activities, with their aspect of socio-economic development, interact and they are intertwined with

the conservation and enhancement of the natural and cultural heritage, but also with innovation, research and environmental awareness.

The MaB National Committee expressed its positive opinion on the Periodic Review Reports of these 2 Biosphere Reserves, which were thus sent, this week, to UNESCO headquarters in Paris, for the respective evaluation.

In the last 10 years of the Berlengas Biosphere Reserve, economic activity has changed substantially, with an increase and rejuvenation of the various actors involved, namely in the Nature Tourism activity, in restaurant and accommodation services, in artisanal fishing and in shellfish harvesting.

In the Biosphere Reserve of Santana – Madeira, there is a growing interest in environmental issues, in particular for the conservation of nature and biodiversity, resulting from greater dissemination, intensification of environmental education activities by schools and greater availability of knowledge scientific. There is a greater proximity and interest on the part of the socio-economic sector in relation to environmental issues, namely in tourism and agriculture.

# 8. Best Practise – The "Biosphere Reserve" in the schools of Castro Verde BR

In the Castro Verde Biosphere Reserve, designated on June 14, 2017, the school is implementing since the 2017/18 school year the discipline "Biosphere" with 3 hours per week for students in the Primary School (1st to 4th year of schooling).

With this discipline of local curriculum it is intended to:

- 1. Deepen the knowledge about the UNESCO Biosphere Reserves (what they are and where they exist);
- 2. Promote knowledge about the heritage and distinguishing values of Castro Verde that sustained its classification by UNESCO;
- 3. Encourage student involvement as one of the active elements of the Castro Verde Biosphere Reserve.

This discipline has a strong practical component, motivating students to discover and deepen knowledge about local heritage, with effective and meaningful learnings that will

a positive and significant "mark" on their growth as citizens of a more sustainable society. With this discipline, students will be emotionally engaged with the values of their "land", fostering a sense of belonging, identity and responsibility in their preservation.

In addition to this discipline, the complementary Curricular Enrichment Activities (AEC) also includes 1 hour per week dedicated to the "Biosphere".

Topics covered both by the "Biosphere" discipline and AEC include biodiversity and its relationship with agriculture, soil and water protection, rocks and ores, traditional culture such as Alentejo traditional singing, sustainable consumption and climate change.

The learnings carried out involve the school community, including families, and various local entities, such as the Campo Branco Farmers Association (AACB), the League for the Protection of Nature (LPN) and the Municipality of Castro Verde (MCV), among others, which collaborate in the realization of various activities.

As a complement, the school produced with the support of a local company the Passport with the "Biosphere Roadmap", where all the reference sites of the Castro Verde Biosphere Reserve are referenced and that will be explored by the students during the school visits they will make.

Thus, with all these learnings, students understand the relationship between man and nature that exists in the daily life of the Castro Verde Biosphere Reserve, with a rational and sustainable use of resources and that justifies the classification of this territory by UNESCO.



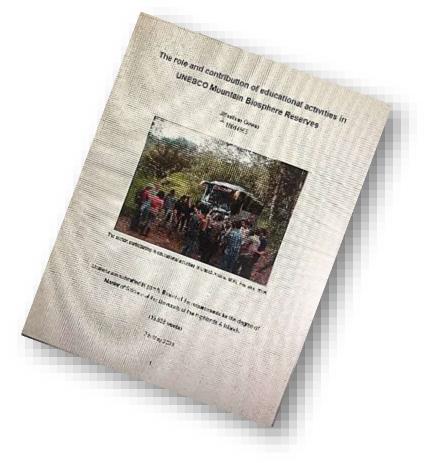


Some activities – olive picking and contact with the herds

## 9. Research activities

The National Committee supports, whenever requested, Master's and PhD students developing theses related with Biosphere Reserves and sustainable development. Other support has been available through the Biosphere Reserves, many of them collaborating with researchers and students from Universities and Technical Schools at regional and national levels.

The Dissertation, under the theme "The role and contribution of educational activities in UNESCO Mountain Biosphere Reserves", by Jonathan Gower, for the Master of Science degree at the University of the Highlands & Islands, was developed with the support of the RBT Meseta Ibérica and integrates information about the activities and their modus operandi on this topic.





The Webinar "UNESCO Chairs and knowledge sharing in times of a pandemic: reducing inequalities in the field of Science" took place on November 10, between 18:00 and 20:00, on the occasion of the celebrations of the World Science Day in service of peace and development, proclaimed by UNESCO. The national MaB Committee was invited to follow the event.

This event, co-organized between the National Commission of UNESCO and the Lisbon Academy of Sciences, with the support of several UNESCO Chairs – Portugal, aims to highlight the important role of science in society and the need to involve the general public in debates on scientific issues emerging. Through the testimony of the different UNESCO Chairs invited, the activities developed will be made known, demonstrating the relevance of science in our daily lives, as well as the role that scientists play in expanding our understanding of the dynamics of planet Earth. The topics addressed will highlight the contribution made to building more sustainable and resilient societies in times of a pandemic. Only by sharing knowledge will it be possible to reduce inequalities "within countries and between countries", as referred to in Sustainable Development Goal (SDG) 10 of the 2030 Agenda.

# 10. UNESCO Chair in Biodiversity and Conservation for Sustainable Development

Among the 12 UNESCO chairs in Portugal, the Biodiversity and Conservation for Sustainable Development chair at the University of Coimbra, established in 2013, is the one with a closest relationship with the National MaB Committee.

The UNESCO Chair is an active member of the National MaB Committee, participating in meetings and working groups.

The UNESCO Chair on Biodiversity and Conservation for Sustainable Development at the University of Coimbra maintains a strong and fruitful partnership with the National MaB Committee participating in the Committee's meetings (as observer) or working groups and generally promoting the values and mission of the MaB program through research, education, and science communication actions.

We emphasize the central role of the UNESCO Chair and Chair's holder in proposing the successfully funded EEA project "Biosphere Reserves: sustainable territories, resilient communities" (involving all 12 national Biosphere Reserves) and highlight the organization, throughout 2021, of important initiatives within the scope of this project objectives as well as integrating the celebrations of the 50<sup>th</sup> anniversary of the global MaB program. Major initiatives included:

- 28<sup>th</sup>-29<sup>th</sup> June: The "International Conference on Biosphere Reserves: Sustainable Territories, Resilient Communities – Lusophone Dialogues"\* at Serralves Foundation in Porto where the Network of Biosphere Reserves in Portuguese-Speaking Countries was publicly introduced and where representatives of these Reserves were able to meet in person for in-depth discussions, knowledge sharing and development of partnerships (28-29<sup>th</sup> June).
- Since June: Exhibition on the 12 national Biosphere Reserves at Serralves Park (since June 2021).
- 20<sup>th</sup> of October: Workshop in participatory methodologies directed at coordinators/managers of the national Biosphere Reserves: "Serviços dos ecossistemas-chave nas Reservas da Biosfera Portuguesas" (Key ecosystem services in the Portuguese Biosphere Reserves) at the University of Coimbra, Portugal.
- 21<sup>st</sup> October: The International Colloquium "Shared experiences in sustainability within UNESCO Biosphere Reserves in Portugal, Norway and Iceland"\* at the University of Coimbra fostering dialogue and synergies among the three countries' institutions (UNESCO Chairs at the University of Coimbra and University of Bergen in Norway, Norway's Nordhordland Utviklingsselskap IKS Biosphere Reserve, Iceland's Snæfellsnes Regional Parkand and Icelandic National Commission for UNESCO).

(\* these events were part of the official celebrations of the 50<sup>th</sup> anniversary of the global MaB program).





Besides the key initiatives above, the UNESCO Chair on Biodiversity and Conservation for Sustainable Development's holder and several members were also actively engaged in additional research and dissemination activities within the Biosphere Reserves project which included field trips to a subset of BRs, inventory of ecosystem services, local and remote meetings and interactions with all 12 national BRs, organization of workshops, elaboration and completion of surveys, among others.

The events and activities above facilitated or strengthened key partnerships such as the recently established Portuguese-Speaking Biosphere Reserves Network, the on-going collaboration between the UNESCO Chair on Biodiversity and Conservation for Sustainable Development and the UNESCO Chair on Sustainable Heritage and Environmental Management at the University of Bergen in Norway (Chair holder: Inger Maren) and a new cooperation between the University of Coimbra's UNESCO Chair and the Icelandic National Commission for UNESCO (Secretary-General Áslaug Dóra Eyjólfsdóttir).







Finally, the UNESCO Chair on Biodiversity and Conservation for Sustainable Development is promoting the establishment of a UNESTWIN network of UNESCO Chairs working with Biosphere Reserves and it continues to actively support the mission of the global MaB program as well as the work of the Portuguese National MaB committee.

# 11. Report on project "Biosphere reserves - sustainable territories, resilient communities" (EEA GRANT – EFTA Fund)

The project "Reservas da Biosfera – Territórios sutentáveis, comunidades resilientes/ Biosphere reserves - sustainable territories, resilient communities" is a project to be developed in 30 months and it is financed by the EEA Grants. It was launched in November 2020 and it will run until May 2023.

After a year of activity, the EEA Grants Project: "Biosphere Reserves, sustainable territories, resilient communities" reached a stage of achievement of some of its key objectives, particularly with regard to the creation of dynamics of projection and proximity both to the Biosphere Reserves and to the general public, promoting these territories and their relevant stakeholders. The difficulties imposed by the COVID19 pandemic were addressed through the strengthening of direct communication with the managers of the Biosphere Reserves (BRs), thus compensating for the impossibility of presenting and promoting the Project in face-to-face sessions in each BR as initially planned. However, this presentation was gradually carried out as the limitations were reduced with the improvement in the general situation of COVID19. The project team was physically present in practically all the Portuguese BRs

This presence of the project team in the BRs corresponded to the development of different initiatives, associated with public presentations bringing together the main local stakeholders in each territory, highlighting the widespread participation and general interest in matters associated with the RB. Within the scope of the specific activities of the Project, this physical presence was predominantly associated with the work of collecting basic information regarding the analysis of socio-economic trends, memories and identity, cultural heritage, identification and mapping of ecosystems and identification of relevant assets for activities such as sustainable tourism routes and also the analysis of training and capacitation needs.

In terms of communication, the Project assumed its visual identity, integrating it in the different communication channels established and in full operation in the meantime, such as the website and social networks, deserving from the outset a significant and very positive general acceptance, to which must be added a great interest on the part of the media, both national and local.

Complementing the specific dynamics of the different project partners, there is a growing integration among the members of the different teams underlining the multidisciplinarity

suggested by the initial proposal, including also an excellent articulation and presence in the daily life of the Project by the international partners from Iceland and Norway.

As a result of this cooperative positioning, opportunities have been created to extend the reach of the Project, namely in the field of scientific cooperation with international partners, in the interest of the UNESCO MaB Programme Secretariat, which has followed and publicised some of the Project's actions, officially integrated in the commemorations of the 50th anniversary of the MaB Programme, and in the promotion of initiatives such as the exhibition on the Community of Portuguese Speaking Counties (CPLP) BRs and the conference bringing together CPLP BRs promoted in collaboration with the Serralves Foundation.

The project provides for a total of 81 activities, 60 of which have already started, with some having been completed in the meantime, particularly those related to the collection and organisation of basic information or the framework of more specific components. Even though not assuming a high general visibility, some of the activities completed in the meantime are already crucial to the project's objectives, as is the case of the Marketing and Communication Strategy for Portuguese BRs or the definition of the concept and structure of future Sustainable Development Plans. Also noteworthy are the proposals for participative methodologies to be used in different Project activities. The identification, inventorying and mapping of key ecosystems in all the RBs and the extensive collection work within the scope of the inventorying of memories and cultural heritage, as well as socio-economic dynamics are central activities that support the determinant axes of the Project, associated with the pillars of knowledge and communication.

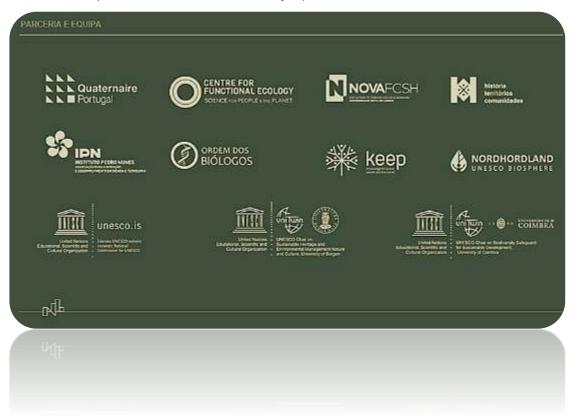
The organization and public launch of the National Olympics of Biosphere Reserves is another relevant activity in this phase of the project, given the national scope and the target audience it is aimed at. About a thousand students representing dozens of schools from all over the country participated in the first qualifying round in this relevant activity that combines knowledge, appreciation and promotion of national Biosphere Reserves.

The project has maintained very close communication with the UNESCO National Commission and the MaB National Committee, which has enabled assiduous participation in meetings, enriching the debate and sharing of visions and proposals relevant to the project's development.

I must congratulate the entire project team for the commitment and skills demonstrated and the enormous availability that ensured the general compliance with the work program, promoting an excellent climate of internal and external cooperation that greatly contributed to overcome the natural difficulties of a project of this nature and those imposed by the circumstances associated with COVID 19. Our thanks also to the General Secretariat of the Ministry of Environment and Climate Action, the team of the EEA Grants Programme and the MaB National Committee for the availability and support they have provided.

Finally, a special word to the Biosphere Reserves, their managers and other associated entities and communities with whom and for whom we work in order to better promote their territories, living laboratories of sustainability and innovation and commitment to sustainable development and the programmatic framework of the UNESCO MaB programme.

António Abreu (General Coordinator of the Project)



Partnership and team

# 12. Other Funding sources

The **Berlengas** Biosphere Reserves received a funding of € 130.000 through the European Union Regional Fund for the Fishing sector (GAL Pesca OESTE-MAR2020). The funded project is related with the creation of an information and interpretation gate centre in Peniche called "Portas da Biosfera Berlengas".

All the **4 Biosphere Reserves of the Azorean** archipelago will also benefit from an EU LIFE funded project called LIFE-IP AZORES NATURA - Active protection and integrated management of Natura 2000 Network in Azores (Figure 8). This project is led by the Direção Regional de Ambiente of the Azores Autonomous Government, in collaboration with the Fundación Canaria, Reserva Mundial de la Biosfera La Palma,



### The project LIFE-IP Azores Natura

Sociedade Portuguesa para o Estudo das Aves (SPEA), Direção Regional dos Assuntos do Mar (DRAM) and Sociedade de Gestão e Conservação da Natureza – AZORINA. It has a total budget of € 19,087,522.00 and it will be developed from January 2019 until December 2027.

The National MaB Committee continues to analyse other funding sources that may support Biosphere Reserves territories, such as the EU Regional Funds under the framework Portugal 2020 overall mechanism, as well as the Interreg European Union regional funding. The Committee fosters the continuous dissemination of information to the managers and coordinators of Biosphere Reserves, and the analysis of funding opportunities, in order to deepen the support for existing and proposed sustainable development activities inside the UNESCO territories.

# 13. Communication and information dissemination on Biosphere Reserves

- -The contents of the website of the Portuguese Network of Biosphere Reserves and the MaB Programme were updated. These websites are important public sources of information about the MaB Programme, the Portuguese MaB Committee and the BR. http://www2.icnf.pt/portal/pn/biodiversidade/ei/MaB
- On November 3, between 2:00 pm and 6:00 pm, was held the hybrid webinar "Biosphere Reserves as Sustainability Laboratories: Working for a better world". This event was co-organized between the National Commission of UNESCO and the Escola Superior de Turismo e Tecnologia do Mar Politécnico de Leiria. This initiative was part of the celebrations of the 50th anniversary of UNESCO's scientific program "Man & Biosphere" (Man & Biosphere) MAB in Portugal. The event, open to the public in general, had the participation and support of the National Committee for the MAB Program and the 12 Portuguese biosphere reserves and aimed to show the work done in the territories and the future strategy of this oldest intergovernmental scientific program of UNESCO.



- Itinerant exhibition of the "Portuguese Biosphere Reserves Network", present in library of Silves municipality. This is an initiative of the Portuguese National Commission for UNESCO.



The exhibition "Portuguese Biosphere Reserves Network" at the Silves municipality

- Some News on the ICNF website, Facebook and Instagram about various activities of the National MaB Committee and the Biosphere Reserves.

## https://natural.pt/news/parabens-mab?locale=en

- Interview for the Public newsletter on the project "Biosphere Reserves sustainable territories, resilient communities" (Figure 12).
- Some examples of information dissemination in media:





# In 2021, some television programs about the Biosphere Reserve were recorded:





- TV5 Monde aired the television program "Embarquement - Les Açores: Un paradis pour les amoureux de la nature", where the Natural Monument of Caldeira da Graciosa (Core Zone of the Graciosa Island Biosphere Reserve) and the Graciosa Donkey were highlighted.

# 14. Relevant Initiatives of the 12 Portuguese Biosphere Reserves. 2021 reports

### MAINLAND

PAUL DO BOQUILOBO
GERÊS-XURÉS (TRANSBOUNDARY BIOSPHERE RESERVE)
BERLENGAS
MESETA IBERICA (TRANSBOUNDARY BIOSPHERE RESERVE)
TEJO/TAJO INTERNACIONAL (TRANSBOUNDARY BIOSPHERE RESERVE)
CASTRO VERDE
AZORES ARCHIPELAGO

CORVO ISLAND GRACIOSA ISLAND FLORES ISLAND FAJÄS OF SÃO JORGE MADEIRA ARCHIPELAGO

SANTANA PORTO SANTO ISLAND

Each of the Biosphere Reserves develops their own planning and annual programming. Herewith is a short review of the more relevant activities during **2021**<sup>1</sup>:

<sup>1</sup> The following report texts are of the responsability of each Biosphere Reserve

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### 2021. PAUL DO BOQUILOBO BIOSPHERE RESERVE



### INTRODUCTION

In 2021, we continued to reinforce the implementation and development of a set of activities and strategies that were considered important, which we highlight here those that most contributed to the objectives indicated by the MaB Program.

Despite the contingencies of the COVID19 pandemic, we were able to carry out many of the actions foreseen in the activity plan.

### 1. GOVERNANCE ACTIONS

During the year of 2021, through videoconference, a series of periodic meetings by the management body were held to discuss and develop the strategy for the Paul do Boquilobo Biosphere Reserve (PBBR).

Possible sources of financial participation were identified and promoted with various partners in view of the economic sustainability of the Paul do Boquilobo Biosphere Reserve.

The objectives and development strategy for PBBR were disclosed to various entities.

A PBBR own budget was implemented, with donations from the Municipalities, to cover some of the current expenses.

The Management Body's participation in meetings and working groups was effective. We highlight:

- Participation in Working Groups / Collaboration Networks, such as the Portuguese and Mediterranean Biosphere Reserve Networks and the MaB Committee:
- Participation in technical meetings with the National MaB Committee and with other National Biosphere Reserves;
- Participation in the Torres Novas Municipal Tourism Council and other regional forums;
- Adherence, as an effective member, to the ADIRN



### Financing Sources

In 2021 a number of applications for community funds were identified and promoted for investments, necessary for the development of the strategy of Paul do Boquilobo Biosphere Reserve.

It was also decided by the municipalities of Golegã and Torres Novas the transfer of funds to cover current communication and promotion expenses.

### <u>Investments</u>

A set of investments were developed and executed by the Management Board's partners with a view to revitalizing and restoration of spaces for conservation, observation and leisure, namely:

- By the ICNF, conservation works on trails and signs of the Paul do Boquilobo Nature Reserve;
- By the Management Body's partners, several dissemination and promotion materials were developed;
- By the Torres Novas municipality, the execution of some of the investments foreseen in the Almonda Route, namely the upgrading of the interpretation center
- By the ONGATEJO, the development and acquisition of a set of promotional and communication material on the Paul do Boquilobo Biosphere Reserve.



### 2. CONSERVATION FUNCTION

A set of RBPB nature conservation activities were carried out in 2021, which we highlight the following:

- By ICNF, the maintenance of the constant effort ringing station under the terms of EURING:
- Continuation of conservation actions on the Narcissus fernandesii;
- The recovery of water lily áreas;
- Certification maintenance of ash (Fraxinus angustifólia) populations;
- Conducting regular bird censuses with an emphasis on water birds and colonial species;
- Implementing a monitoring program of existing species of fish in the reserve
- Mapping areas of occurrence of weed and important flora species;
- Continued implementation of a nature conservation and surveillance program;
- Monitoring of climate and water levels in the RBPB;
- Installation of visits and visitors counters.
- Support of the celebration of 40 years of the Paul do Boquilobo Biosfere Reserve.







## 3. DEVELOPMENT FUNCTION

2021 was a year in which a set of development and sustainability actions were carried out that deserve to be mentioned:

- Participation in the Optimus Prime project,
- Promotion of local food products from the Paul do Boquilobo Biosphere Reserve:
- Accompaniment of guided visits, with environmental education actions;
- Carrying out several awareness and solidarity actions, under the stubble program.



## 4. LOGISTIC FUNCTION

During 2021, several actions were developed in the areas of scientific research, monitoring, education and environmental awareness with the community and the different local agents, of which the following are highlighted:

- Raising awareness among farmers about a set of measures that they must carry out in the sense of environmental sustainability, namely in terms of the use of plant protection products and the use of water resources;
- Awareness raising for the maintenance of ecological interest areas in agriculture;
- Awareness raising for the prevention of rural fires;
- Promotion and information of the Paul do Boquilobo fauna through the dissemination of the chronicles published on mediotejo.pt;
- Actions to raise awareness / denounce water quality in the Almonda River;

### 5. COMMUNICATION AND DISSEMINATION ACTIONS

In the activities developed in the scope of communication and dissemination of RBPB to third parties, we highlight:

- Update of online publications on the website www.pauldoboguilobo.pt;
- Disclosure of news and all activities developed at PBBR on the Facebook;
- Promotion of the Paul do Boquilobo Biosphere Reserve on the RB Mediterranean Network;
- PBBR news integration in the editorial line of 2021 AGROTEJO magazine;

### OTHER ACTIVITIES / OTHER PROJECTS / PARTNERS

During 2021, the RBPB participated or promoted a set of other projects in the scope of nature conservation, agriculture, tourism:

■ RESTOLHO- <u>www.restolho.org</u>

- ENTOVALOR project <a href="http://www.iniav.pt/menu-lateral-geral/projetos-de-investigacao/entovalor">http://www.iniav.pt/menu-lateral-geral/projetos-de-investigacao/entovalor</a>
- MaisSolo project <a href="https://maissolo.webnode.pt/">https://maissolo.webnode.pt/</a>

In 2021, investments were also developed by other partners to better receive those who visit us.

 World Wetlands Day was celebrated on February 2, with the presentation of Carlos Lima's short film



The municipalities continued the installation of information signs on the RBPB

### 2021. Gerês-Xurês Transboundary Biosphere Reserve



### INTRODUCTION

In spite of constrains imposed by the pandemic crises, the Gerês-Xurês Transboundary Biosphere Reserve developed and maintained, during the last year, a varied set of activities. Volunteer initiatives, conservation projects and visitors activities happened. The activity plan was adapted as well as the meeting strategies and events. Opportunities and constrains, triggered by the pandemic crises, were experienced.

Among others, the project "Reservas da Biosfera – Territórios Sustentáveis, Comunidades Resilientes" continued and the research project "CLICTOUR – Turismo Resiliente às Alterações Climáticas em Áreas Protegidas do Norte de Portugal" started during 2021.

Peneda Gerês National Park celebrated (May, 11<sup>th</sup>) the 50° anniversary of the inauguration and the official foundation diploma.

### 1. GOVERNANCE ACTIONS

Participation of the Gerês-Xurês Transboundary Biosphere Reserve in the regular annual meetings of MaB's National Committee. These two meetings were held online.

The discussion and edition of the Management Plan 2021-2025 continued with several bilateral contacts and meetings involving members of the Direction Board.

The project "Reservas da Biosfera – Territórios Sustentáveis, Comunidades Resilientes" (supported by EEAGrants) developed abundant activity and tasks along the year (https://www.reservasdabiosfera.pt/) and it was revealed and explained to stakeholders (e.g. land owners, NGOs, corporations), in Gerês during two days of November.

# 2. CONSERVATION FUNCTION

Conservation projects continued, during 2021, in the Biosphere Reserve. Among others, the most relevant projects were:

- i) Conservation of *Taxus baccata* forests: native forests of Yew continues in the area of the Biosphere Reserve – Improved cooperation occurred around the LIFE project "Life Baccata".
- ii) Endangered habitats restoration of areas destroyed by forest fires or invaded by alien species: seeding and plantation of native species was carried out not only through public contracts and staff but also with the help of volunteers.
- iii) Conservation of autochthonous forests of Scots Pine (*Pinus sylvestris*); *in situ* and *ex situ* conservation efforts resulted in a significant increase of the occurrence extension of the native populations.
- iv) Invasive species (*Acacia dealbata*) control in the core area of the Biosphere Reserve.
- v) Monitoring and conservation programs of priority species (e.g. Wolf, Iberian Ibex) were carried out as in previous years.
- vi) Seeds of rare tree species were collected to produce plants for restoration projects in the Biosphere Reserve.
- vii) Mammals monitoring program.
- viii) Recovery of Golden eagle (*Aquila chrysaetos*) population in the Biosphere Reserve with close international collaboration









Taxus bacatta and Pinus sylvestris

Foto Alberto Gil (GREFA)



In situ conservation projects



### 3. DEVELOPMENT FUNCTION

Plurennial projects were continued and measures were implemented ensuring economic

development and welfare for those who live in the Biosphere Reserve, namely:

The book "Vidas e Lugares com História" was published in 2021. The book reveals

the history and experiences of life of 50 inhabitants of the Biosphere Reserve and it was also publish in Xurês (Spanish part of

the Biosphere Reserve). This project was

financed by POCTEP, Gerês-Xurés Dinâmico.



<u>Environmental education Initiatives</u> among students from urban cities (mainly from Northern Portugal), stimulating dissemination of good practices in nature conservation and biodiversity.





Education and informative programs where developed around social development, local economy, and environment. A total of 359 participants (local population and stakeholders) attended in 20 different modules.



Educational programs on tourism (*walk friendly, cooperation and safety*) were also developed with 16 companies and nearly 30 participants.





The plurennial project "Valorizar para visitar" (2020-2022), that includes the reinforcement of the communication strategies and resources for environmental education, developed several activities. With the same scope, initiatives around the Long distance path – "Grande Rota Peneda-Gerês" (GR50) occurred.





Development of a communication and marketing plan for promotion the trail: Long distance path "Grande Rota Peneda-Gerês" (GR50).



Promotion and recording the advances and results of the conservation projects described in section 3.

Participation in the National Park management plan assemblies.



# 4. LOGISTIC FUNCTION

Regardless constrains imposed by the global pandemic crises the existing partnerships with research institutions continued as well as citizen science and community involvement.

### 5. COMMUNICATION AND DISSEMINATION ACTIONS

The main activities of the Biosphere Reserve were disclosed by social media and websites (Facebook, Instagram) and also through the website of the project "Reservas da Biosfera – Territórios Sustentáveis, Comunidades Resilientes" and exhibitions (*e.g.* <a href="https://www.serralves.pt/ciclo-serralves/2107-reservas-da-biosfera/">https://www.serralves.pt/ciclo-serralves/2107-reservas-da-biosfera/</a>).

# Visitors and visits

Seven activities were carried out to spread information on the natural and cultural values of the RBTGX territory, involving around 2500. In the Portuguese information centres around 42 000 visitors were recorded (90% were foreigners).



Release of a recovered bird

The promotion of the Biosphere Reserve and the National Park was accomplished by the presence in one of the most seen TV shows in Portugal "Aqui Portugal".

Touristic private enterprises conducted around 440 regulated activities (mostly trails) with 7600 participants.

# Volunteer programs

Three volunteering activities were developed, involving 81 persons: planting of native trees, controlling invasive plants species in the core area. These actions always have a relevant impact concerning the environmental awareness and education – in two of them participants were students and children.



Plantation of native trees

## **OTHER**

### **PNPG 50th Anniversary**

Peneda Gerês National Park celebrated (May, 11<sup>th</sup>) the 50° anniversary of the inauguration and the official foundation diploma. Celebration event took place in Melgaço. Lamas de Mouro. One open access workshop around History, Patrimony and Knowledge was organized and the National Park 50<sup>th</sup> anniversary book was presented.





The Counselling Board of the National Park decided to invest a new Management Commission. The new management commission met 5 times during 2021.

1<sup>st</sup> Workshop – CLICTOUR: Resilient tourism to climate change in Protected Areas in Northern Portugal: The first workshop of the project happened in the Biosphere Reserve. It is a research project developed by Minho University (https://www.cecs.uminho.pt/clictour-novo-projeto-de-investigacao-cecs/).



# 2021. Berlengas Biosphere Reserve



### INTRODUCTION

The year of 2021 was challenging in many ways, but the general outcome is very positive.

The Berlengas Biosphere Reserve is now running under a new management structure, which is proving to be efficient and providing solutions for some of the existing problems.

The year of 2021 represented the 10th anniversary of Berlengas as a Biosphere Reserve. As such, the team compiled the 10 years Periodic Review Report for Biosphere Reserve.

One of the objectives for several years was completed with the creation of a Comanagement committee for a sustainable harvest of the stalked barnacle. The land area on Berlenga island is now limited to the human capacity of 550 people.

Efforts to keep protecting native species and eradicate invasive and exotic ones are proving to be been successful as are the efforts to work with local fishers in raising awareness of the importance of implementing friendly environmental practices and promote sustainable fisheries.

# 1. GOVERNANCE ACTIONS

The year of 2021 was the first under the new management structure, which replaced the previous one, in order to address the main challenges listed on Lima Action Plan, Sustainable Development Goals (SDGs) of UNESCO as well as on the MAB program. This new management body includes the Municipality of Peniche, Institute for Nature Conservation and Forests (ICNF), School of Tourism and Maritime Technology (Polytechnic Institute of Leiria), Sociedade Portuguesa para o Estudo das Aves (SPEA) and Smart Ocean - Marine Science and Technology Park of Peniche. This management structure now counts with the assistance of a full-time collaborator to give body to the needs of the governance project implementation.

In 2021, the management structure had six (6) official meetings and many other work and informal (both online and in person) meetings in order to discuss various pending issues and challenges, often with the participation of people and entities external to the core management structure, depending on the subject of each meeting.

The year of 2021 represented the 10<sup>th</sup> anniversary of Berlengas as a Biosphere Reserve. As such, the team compiled the 10 years Periodic Review Report for Biosphere Reserve. This was a very comprehensive task and it allowed us to look back and see with great detail what has been in the last decade, but most importantly, what needs to be done in the future. We analyzed what went right and wrong and defined a 10 year plan for the BBR. This was shared with the local population, authorities, stakeholders, and academia and all these sectors of the community provided their feedback, which was taken into account in the report and in the plans for the future.

Berlengas Biosphere Reserve Periodic Review Report



One of the main priorities defined for 2021 was the eradication of the invasive hottentot fig (invasive plant). It was not entirely removed for safety reasons (a few patches are providing structural security in certain areas) but its complete removal is planned and will be implemented soon.



Hottentot fig removal action

The Anzol + project is still running and providing good results. This project aims to promote the implementation of measures and good practices in the capture and manipulation of marine resources, always with a view to a balance between the preservation of resources and their economic exploitation. The goal is to create an appropriate management system, which will result in the valorisation of the fish.

### 3. DEVELOPMENT FUNCTION

In the year of 2021 the production of freshwater in Berlenga Island is already a reality. After several months of planning and implementation, a desalination unit in already fully running in Berlenga Island, providing freshwater locally. This will reduce (and in the future hopefully eliminate) the need to transport freshwater from land, reducing costs and the carbon footprint.

In 2021, several steps were taken in Anzol + project (mentioned above).

The methodologies used throughout 2021 to collect information included observations on board 14 partner fishing vessels, electronic tracking systems installed on the same vessels, questionnaires to a large proportion of fishers who operate from the Peniche port, landings data, interviews with key actors (including national and local authorities, academia, fisheries managers, fishing associations, entities responsible for surveillance and auctioneers) and bibliographic review.

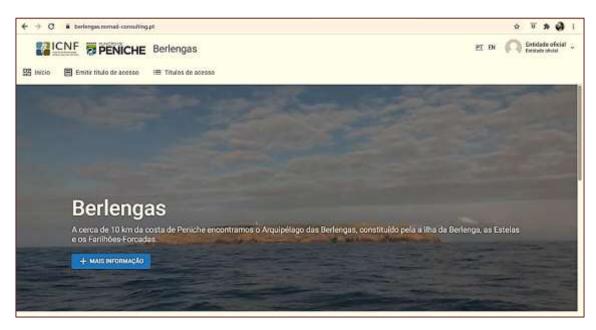


Anzol + project interview

Also in 2021, we had the official nomination of a Co-management committee for the sustainable harvest of the stalked barnacle (one of the most important local resources). This is a very important achievement, as it will allow a better management of this resource, which plays an extremely important economic and social role in the region. This follows several years of efforts by the COPESCA 2 project, which aimed precisely to obtain the implementation and full operationalization of the co-management committee. As such, the COPESCA 2 project is now concluded with success.

### 4. LOGISTIC FUNCTION

Human load control in Berlenga Island: The human load capacity in the land area of the Berlenga Island has been debated for many years now. After studies pointing to the necessity to control human load, recently published legislation limits the number of people on the Island to 550 in simultaneous. Access conditions to the land area of the Berlenga Island, respective management model and control and supervision mechanisms, respectively, motivated the need to create a platform to control access to the Berlenga Island. This platform is ready and will start running this year.

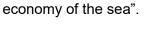


Human load control platform

### 5. COMMUNICATION AND DISSEMINATION ACTIONS

In order to prepare the Ten year periodic Review Report for Berlengas Biosphere Reserve the management team organized open public sessions with the general population, including local entities and stakeholders. The objective was to understand their perception about the BBR and potential for collaborations. These sessions resulted in valuable contributions to both the evaluation and the future programming of the Biosphere Reserve.

Resuming a current practice in previous years, it was organized the "Month of the Sea" in Peniche. Through lectures, workshops, conferences, cleaning actions, exhibitions, among other activities throughout the month, the initiative aimed to "promote the dissemination of knowledge, increase blue awareness in society and leverage the





Month of the Sea program



# 2021. Meseta Ibérica Transboundary Biosphere Reserve

### INTRODUCTION

The work developed by the Meseta Ibérica Transboundary Biosphere Reserve is currently focused on socio-economic development, based on the territory's ecosystem services. In particular, with the promotion of the MESETA IBÉRICA cross-border territorial identity brand, which brings together cultural, heritage and natural multiplicity, through the logistics platform <a href="www.produtos-mesetaiberica.com">www.produtos-mesetaiberica.com</a>; the implementation and promotion of the tourist platform <a href="www.mesetaiberica.com">www.mesetaiberica.com</a>; the implementation and promotion of the Responsible Traveller.



Manifesto and the implementation and promotion of the Meseta Ibérica km 0 Menu (Slow Food).

Meseta Ibérica has supported scientific research, doctoral dissertations and welcomes undergraduate trainees in areas such as sport, tourism and environmental education.

### 1. GOVERNANCE ACTIONS

The European Grouping of Territorial Cooperation ZASNET EGTC has established cooperation networks between several entities, namely with local and regional entities for the management of the RBT Meseta Ibérica, among them the cooperation with the Secretary of State for the Enhancement of the Interior, the CIM TTM (Terras de Trás-os-Montes Intermunicipal Community), the IPB (Polytechnic Institute of Bragança) and the Mountain Research Centre (CIMO), EDP, the GAL (Local Action Groups), associations of local products and services and NGOs. Working meetings were established with all

these bodies, and the activities in which the ZASNET EGTC participates and/or are represented were promoted, in order to achieve the best governance posture, as well as involve the community in this governance and promote and value the territory. It should also be noted that the deliberative body met several times throughout the year and that the executive body works as a team.

### 2. CONSERVATION FUNCTION

We understand that we are promoting the conservation of nature, through the awareness of entrepreneurs in the region, visitors and the population in general of the importance of the environment as a basis for social development.

# 3. DEVELOPMENT FUNCTION

Meseta Ibérica is developing work in the area of quality and responsible tourism, with the creation of an innovative tourist quality brand for the RBT Meseta Ibérica territory, with which it is intended to increase the number of visitors with the appreciation and economic improvement of services. associated with the natural and cultural heritage in a logic of participatory sustainable development. Joint and dynamic thematic tourist itineraries were created, as well as the valorisation of agricultural products, with the creation of a gastronomic itinerary of products and the implementation of the Meseta Ibérica Km 0 Menu, from the perspective of Slow Food.

For this reason, the tourist platform <a href="www.mesetaiberica.com">www.mesetaiberica.com</a> and the logistics platform <a href="www.produtos-mesetaiberica.com">www.produtos-mesetaiberica.com</a> were designed to support the promotion of the territory, its activities, products and services, with dynamics and the involvement of local, public and private.



### 4. LOGISTIC FUNCTION

RBT Meseta Ibérica supported the FirESmart Project - nature-based solutions for preventive fire risk management and sustainable provision of ecosystem services, through a partnership with the Mountain Research Centre of the Polytechnic Institute of Bragança (CIMO/IPB), which developed this project together with the Research Centre in Biodiversity and Genetic Resources of the Network in Biodiversity and Evolutionary Biology (CIBIO/InBIO), the Centre for Research and Agro-environmental and Biological Technologies of the University of Trás-os-Montes and Alto Douro (CITAB/UTAD), the Centre for Forest Science and Technology of Catalonia (CTFC), the University of University Santiago de Compostela (USC) and the of York. https://firesmartprojectpt.wordpress.com/.

Training actions were promoted, namely Training in Organic Agriculture and Training in Short Marketing Paths. with the main objective of stimulating and promoting food products from the territory of RBT Meseta Ibérica, through training and capacity building of producers, in order to economically value their farms and use resources in a sustainable way and Training Menu Meseta Ibérica. This training comes with the main objective of boosting and promoting the territory's food products, through training and capacity building of establishments in the restaurant sector and producers. It is inspired by the KM 0 concept, which stems from the Slow Food philosophy, which celebrates quality food and the pleasure of eating. The region seeks to develop quality, healthy and tasty cuisine, using the gastronomic heritage of the territory and valuing its products and traditions.



# 5. COMMUNICATION AND DISSEMINATION ACTIONS

Communication actions have been in practice for several years, namely the promotion of activities developed individually or with partners, whether publications in specialist magazines, in local newspapers, social networks (Facebook, Instagram and Twitter). At the same time, RBT Meseta Ibérica participates and promotes Seminars, in order to communicate the territory and its heritage.



https://www.instagram.com/rbtmesetaiberica/

https://www.facebook.com/reservabiosferatransfronteiricamesetaiberica

www.mesetaiberica.com

www.produtos-mesetaiberica.com





# 2021. RESERVA DA BIOSFERA TRANSFRONTEIRIÇA TEJO-TAJO INTERNACIONAL

# INTRODUCTION

The Tejo – Tajo Internacional Transfrontier Biosphere Reserve (RBTTTI) was approved during the 28th Session of the International Coordinating Council of the UNESCO "Man and the Biosphere" Program (MAB – Man and the Biosphere), held in Lima, Perú, on March 18 and 19, 2016.

In 2021, RBTTTI's activity continued to be conditioned by the context of the COVID-19 disease pandemic.

The year in question marks the beginning of the implementation at RBTTTI of the actions developed under the project "09#CALL3 – Biosphere Reserves, sustainable territories, resilient communities", with funding from the EEA Grants Portugal.

### 1.GOVERNANCE ACTIONS

O Órgão de Gestão da RBTTTI, onde têm assento, para além do ICNF, I.P., os Municípios de Castelo Branco, de Idanha-a-Nova e de Vila Velha de Ródão, a Junta de Freguesia de Castelo Branco e a Meltagus - Associação de Apicultores do Parque Natural do Tejo Internacional, reuniu em 5 de julho de 2021, tendo sido alterada a representação do ICNF, I.P. na coordenação do órgão, por decisão da Diretora Regional da Conservação da Natureza e Florestas do Centro.

Foram realizadas diversas reuniões de trabalho com o consórcio responsável pelo projeto "09#CALL3 — Reservas da Biosfera, territórios sustentáveis, comunidades resilientes", com os propósitos de adequar o conceito do "Plano de Desenvolvimento Sustentável" à realidade da RBTTTI, identificar o elenco de *stakeholders* da reserva (mais de 220 entidades e pessoas), e apoiar a divulgação do questionário sobre dinâmicas socioeconómicas nos territórios das Reservas da Biosfera portuguesas, junto dos *stakeholders* da RBTTTI.

The RBTTTI Management Body, where, in addition to ICNF, IP, comprehends the Municipalities of Castelo Branco, Idanha-a-Nova and Vila Velha de Ródão, the Castelo Branco Parish Council and Meltagus - Beekeepers Association of the Parque Natural do Tejo Internacional, met on July 5, 2021, having changed the representation of ICNF, IP in the coordination of the body, by decision of the Regional Director of Nature Conservation and Forests of the Centre.

Several working meetings were held with the consortium responsible for the project "09#CALL3 – Biosphere Reserves, sustainable territories, resilient communities", with the purpose of adapting the concept of the "Sustainable Development Plan" to the reality of RBTTTI, identifying the of stakeholders of the reserve (more than 220 entities and people), and to support the dissemination of the questionnaire on socio-economic dynamics in the territories of the Portuguese Biosphere Reserves, among the stakeholders of the RBTTTI.





On October 25, 2021, in Idanha-a-Nova, in the auditorium of the Escola Superior de Gestão, the project "09#CALL3 – Biosphere Reserves, sustainable territories, resilient communities" was presented.

### 2. CONSERVATION FUNCTION

The following initiatives in the area of biodiversity, ecosystems, habitats and landscape conservation stand out:

Execution of projects "Compatibility of hunting management with nature conservation in the PNTI", "Investigation and monitoring of avifauna in the PNTI" and "Plan to raise environmental awareness for the local population in the PNTI" within the scope of a partnership between Quercus – Associação Nacional of Nature Conservation and ICNF, IP, financed by the Environmental Fund (97,500 €);

Completion of the PNTI Structural Restoration and Prevention Project was established by the Resolution of the Council of Ministers No. in a global amount of €1,300,000, which allowed:

- The establishment of 60 ha of fuel management areas to increase the territory's resilience to rural fires;
- Conversion of 500 ha of eucalyptus stands with holm oak and cork oak plantations;







- -The creation of a new feeding ground for scavenger birds interventions by the PNTI Structural Prevention and Restoration Project
- Installation of artificial platforms for nesting and study of the juvenile population of Black Vulture in the PNTI, with tagging of flying juveniles placement of GPS/GSM emitters and CEMPA metal rings and the collection of biological samples of blood and feathers, for identification of sex and screening for the presence of heavy metals and veterinary products; ICNF partnership, I.P. with the Hawk Mountain Sanctuary Association (USA), the Facultad de Veterinaria of the Universidad de Murcia, the Junta de Andalusia (Spain), and Quercus ONG.







Aegypius monachus in RBTTTI

### 3. DEVELOPMENT FUNCTION

In RBTTTI's territory, in 2021, the following initiatives are highlighted in terms of economic and human development:

Execution of the project "Training and involving key actors – Communication, creation and promotion of the PNTI identity" within the scope of a partnership between the Beira Baixa Business Association and ICNF, I.P., financed by the Environmental Fund (€14,200);

Execution of the project "Creation of the Strategic Roadmap for Tourism Development in the PNTI" within the scope of a partnership between the Polytechnic Institute of Castelo Branco and ICNF, I.P., financed by the Environmental Fund (61,500 €);

Execution of the project "Touristic-cultural and heritage signage in the PNTI" within the scope of a partnership between the Polytechnic Institute of Castelo Branco, the Municipalities of Castelo Branco, Idanha-a-Nova and Vila Velha de Ródão and ICNF, IP , financed by the Environmental Fund (65,000 €).

# 4. LOGISTICS FUNCTION

Preparation of the study/report "Characterization and Dynamics of the Landscape of the International Tagus Tajo Transfrontier Biosphere Reserve in Mainland Portugal" by Dr. Paula Gonçalves (ICNF, I.P.).

### 5. COMMUNICATION AND DISSEMINATION ACTIONS

Questionnaire referring to the RBTTTI in the scope of the information collection for the new database system of the World Network of Biosphere Reserves of UNESCO (Sep/21). Participation in the workshop "Key ecosystem services in Portuguese Biosphere Reserves" and in the International Colloquium "Shared Experiences in Sustainability within UNESCO Biosphere Reserves in Portugal, Norway, and Iceland", organized by the Center for Functional Ecology - Science for People & the Planet (CFE) from the Department of Life Sciences of the University of Coimbra (20 and 21/10/2021).

Fieldwork of the project "09#CALL3 – Biosphere Reserves, sustainable territories, resilient communities" at RBTTTI, in the action "Memories and identities - systematized

record of memories", with interviews carried out between 27 and 29 October 2021, in 6 parishes in the territory.





Webinar "Biosphere Reserves as Sustainability Laboratories: Working for a better world", co-organized between the UNESCO National Commission and the Escola Superior de Turismo e Tecnologia do Mar do Politécnico de Leiria, included in the celebrations of the 50th anniversary of the scientific program "Man and the Biosphere" by UNESCO, with the communication "The importance of tourism and partnerships for the development of RBTTTI" (03/11/21).

Dissemination of the questionnaire on socio-economic dynamics in the territories of Portuguese Biosphere Reserves, among RBTTTI stakeholders, within the scope of the "09#CALL3" project.

Participation in the 13th National Committee meeting of the UNESCO "Man & the Biosphere" (MaB) Program, in telematic mode, on 25 November 2021.

# 2021. Castro Verde Biosphere Reserve



### INTRODUCTION

The Castro Verde Biosphere Reserve (CVRB) is located in Mainland Portugal, in the Baixo Alentejo region, with an area of 569km<sup>2</sup>, being coincident with the boundaries of the Municipality of Castro Verde. In these extensive and long plains, the high diversity of natural and cultural values results from the millenary man-nature relationship that characterize this humanized ecosystem of high natural value.

The year 2021 was strongly affected by the covid 19 pandemic, conditioning economic, social and cultural activities in a very complex way. On the other hand, 2021 represented another worrying period of reduced rainfall during most of the hydrological year in this territory, which worsened in the autumn and led to a severe drought situation at the end of the year, with repercussions in several dimensions.

On 24/05/2021 it was held the Presentation Session of the Project "BIOSPHERE RESERVES: SUSTAINABLE TERRITORIES, RESILIENT COMMUNITIES".

On 14/06/2021, as part of the celebrations of the 4th Anniversary of the Biosphere Reserve, took place the public tribute to Mr. José da Luz Pereira, President of AACB. On 08/05/2021, took place the tribute to Professor Eugénio Sequeira by the Portuguese Confederation of Environmental Protection Associations (CPADA).

### 1. GOVERNANCE ACTIONS

Regarding the management of the Castro Verde Biosphere Reserve (RBCV) meetings of the Technical Working Group of the Management Council were held, with the participation of the three entities in charge of the management of this Biosphere Reserve (MCV - Municipality of Castro Verde, AACB - Association of Farmers of the Branco Field and LPN - League for the Protection of Nature).

Also, the Management Council, constituted by the same three organizations responsible for the CVRB management (MCV - Castro Verde Municipality, AACB - Campo Branco Farmers Association and LPN – League for the Protection of Nature) had several coordination meetings during 2021.

The funding sources used for the implementation of the CVRB activities were from the the three entities budgets that constitute the Management Council, as well as budgets from partners that participate in the Advisory Board and implemented actions (Castro Verde Schools Grouping, ICNF, Football Club Castrense, Cortiçol Association, among others). The activities concerning powerlines (both monitoring and powerline corrections) had private financing (E-REDES).

The process of revising the Castro Verde Municipal Land Management Plan (PDM), a central element of the territorial planning of the Castro Verde Biosphere Reserve, continued during 2021. At the level of the promotion of civic participation, it is worth mentioning the implementation of the Participatory Budget (OP) 2020, with the investment in the project "Pedal without Age" and the realization of the 3<sup>rd</sup> edition of the OP 2021, which allowed to elect two more projects for implementation in 2022: "Sensorial Garden" and "Improvement of the Sete Social Park".

### 2. CONSERVATION FUNCTION

The entities that constitute the Local Support Structure (ELA) of the Baixo Alentejo (AACB, LPN, DRAPAL - Regional Directorate of Agriculture and Fisheries of Alentejo, ICNF, AABA – Association of Farmers of the Baixo Alentejo, Agricultural Cooperative of the Guadiana), carried out the monitoring of agri-environmental measures, namely the Zonal Support of Castro Verde of the PDR2020, which supports farmers to implement farming activities that promotes the conservation of the endangered steppe bird populations and their habitats in good environmental conditions, as well as the traditional landscape. It should be noted that in 2020 it was announced the possibility for new applications for the Castro Verde Zonal Plan for 2021 and 2022, which increased the number of farmers adhering to agricultural practices compatible with the conservation of steppe birds. Seeking to ensure the continuity of this important agri-environmental measure, ELA Baixo Alentejo actively participated in the public consultation of the Strategic Plan of the Common Agricultural Policy (2023-27).

AACB and LPN participated in the Birds@Farmland, contracted by the European Commission and implemented in Portugal by CIBIO. This project worked on the definition

of agri-environmental measures for low density Mediterranean arable land, focusing on steppe birds.

LPN is implementing a project with measures for the conservation of steppe birds, funded by the Association "VIRIDIA – *Conservation in Action*" that includes the structural and functional requalification of aquatic habitats (cleaning of catch and dams, densification of riverside vegetation, definition of protection strips around streams and dams to avoid watering and grazing directly by livestock), availability of new nesting sites for European Roller (*Coracias garrulus*), installation of small woodland patches for feeding and shelter of steppe birds and protection of nesting areas. In September, the LIFE Iberian Agrosteppes Project, coordinated by the Sociedad Ornitologia de España, which has the partnership of LPN, started, aiming to protect the nests of Montagu's Harrier (*Circus pygargus*) in the cornfields of Campo Branco.

LPN in partnership with E-Redes is implementing the Avifauna Protocol 8, which has signaled 5km of power lines with anti-collision devices to reduce the impact of these infrastructures on steppe birds, namely collision by Great Bustard (*Otis tarda*) and Little Bustard (*Tetrax tetrax*).

# 3. DEVELOPMENT FUNCTION

Due to the pandemic by COVID19, several events were cancelled whose realization was not possible for public health reasons (Entrudanças, Festival Sabores do Borrego, Festas de Castro, Feira de Castro, among others). To promote local products the Gastronomic Week of "Borrego do Campo Branco" (lamb cooking) took place between April and May, involving AACB, the Livestock Producers Association of Campo Branco and 12 restaurants.

The construction works of the Area of Economic Activities of Castro Verde began on 25/03/2021, a total investment of the Municipality of Castro Verde of 1.9 M€. In August, the requalification works of the High School of Castro Verde (budgeted at 3.15 M€) were started, which will be essential to give better education conditions in the Biosphere Reserve.

On 25/04/2021 was inaugurated the Center of Arts and Viola Campaniça, which promotes, since June in a regularly basis, music lessons and construction classes of Viola Campaniça and Cante Alentejano.

In August began the conservation and restoration of the wooden painted ceiling of the Royal Basilica of Castro Verde, which constitutes the 3<sup>rd</sup> phase of the interventions to requalify this important monument.

In the context of tourism promotion, the mobile application "Biosphere of Castro Verde" was launched (14/06/2021) and continued the implementation of the project to create the Cycling Center of Castro Verde of the MCV and with co-financing of the PDR2020.

On 30/09/2021, took place the public presentation of the project "Regenerative Pastures", an initiative of ESDIME, with the partnership of several entities, including the MCV and the AACB, which intends to support the adaptation of climate, regeneration and sustainability of extensive livestock systems in territories of high risk of environmental desertification. It is supported by the La Caixa Foundation and the Soil Alliance and is co-financed by the municipalities in the area of intervention.

Under the Project "Protection against Fire Risks - Low Alentejo" promoted by CIMBAL (Intermunicipal Community of Baixo Alentejo), a kit of 1st intervention for firefighting was acquired and made available to farmers through the AACB. The MCV, AACB and the Volunteer Firefighters of Castro Verde promote on 15/06/2021 an Information Session in the facilities of the AACB to demonstrate the operation of the equipment to farmers. Under this project, a water tank (176m³) was also installed for rapid supply of land and air firefighting means, thus improving the capacity of the Biosphere Reserve to reduce the risk of large agricultural fires (such as the one that occurred in 2020).

### 4. LOGISTIC FUNCTION

As part of the agricultural activity, AACB maintained the Trial and Experimentation Fields of Winter Cereals, Hay, Legumes and Improved Pastures in operation, in partnership with IPBeja, whose objective is to combine experimentation with research and demonstrate results of crops adapted to the region and the needs of farmers. In May, a visit was made to the Trial Field installed in the Herdade da Lagoa da Mó.

In education, several environmental awareness activities were carried out with the students of the Castro Verde School Group (AECV), which integrated the theme of the Biosphere Reserve as an element of its Annual Activity Plan. In the context of curricular flexibility, the School implemented the local curriculum discipline entitled "Biosphere", with a 3-hour weekly school workload, which covered all classes from 1st to 4th grade and also has content articulation with the other disciplines. Also noteworthy is the Project

of "Cante Alentejano na Escola" (tradiocional singing in Alentejo) that continues to promote among the newest Preschool and primary students the learning of this Unesco Intangible Heritage.

In 2021, the Curricular Enrichment Activities (AEC) in the primary schools of the Biosphere Reserve of Castro Verde continued and pomoted activities to raise awareness of the natural and agricultural values of the Biosphere Reserve, as well as activities that stimulate the ability to build, repair and program using materials and technology from an innovation perspective.

To celebrate the 4th anniversary of the Biosphere Reserve, the students of the primary and preschool education carried out a set of works that gave rise to the exhibition "Trees of the Biosphere" (outdoor exhibition on Rua Morais Sarmento).

The MCV organized between 8<sup>th</sup> and 11<sup>th</sup> of September, the 1<sup>st</sup> edition of the Biosphere Football Tournament, which was played by the teams of the Biosphere Reserve.

In terms of monitoring natural values, monitoring counts were made for some of the priority species: Great Bustard (LPN and ICNF), cranes (LPN and ICNF), Iberian imperial eagle (LPN and ICNF), black-bellied sandgrouse (ICNF), Lesser kestrel and roller (ISA/CEABN).

### 5. COMMUNICATION AND DISSEMINATION ACTIONS

The Castro Verde Biosphere Reserve uses Facebook as a social network:

(https://www.facebook.com/castroverdebiosfera/), having made 25 posts with information during 2021 and has 2385 followers. RBCV does not yet have its own website, but there is information available on the MCV and LPN website.

On June 14<sup>th</sup>, a public tribute ceremony to Mr. José da Luz Pereira was held in front of the Church of Remedies during the 4<sup>th</sup> Anniversary of the Castro Verde Biosphere Reserve, to recognize his outstanding work for the local community and farming activity. On May 8<sup>th</sup>, the tribute promoted by CPADA and a set of personalities was also awarded to Prof. Eugénio Sequeira for the protection of environment and desertification combat work.

Castro Verde emerged as an ornithological destination highlighted in the supplement Fugas no Jornal PÚBLICO (January 2021). Also in January were shown two TV

programs about the Castro Verde Biosphere Reserve on Record TV Europe under the Program "GIRO".

New signaling boards were placed for the dissemination and promotion of the Biosphere Reserve in municipal infrastructures: António dos Anjos Municipal Pavilion and Municipal Stadium 25 de Abril.

On 06/10/2021, the Workshop "Good agricultural practices for biodiversity in the context of climate change" was held in the AACB Pavilion, as part of the project coordinated by the Confederation of Farmers of Portugal (CAP) with the partnership of LPN, where examples to improve biodiversity on farms were presented.

The Castro Verde Biosphere Reserve was present at the Participatory Workshop "Ecosystem Services in the Portuguese Biosphere Reserves" (20/10/2021) and at the International Colloquium "Shared experiences in sustainability within UNESCO Biosphere Reserves" (21/10/2021) that took place at the University of Coimbra and participated in the Webinar "Biosphere Reserves as sustainability laboratories: working for a better world", organized by the UNESCO National Commission on 11/03/2021.

In all these initiatives took the opportunity to present the natural and cultural values that underplower the recognition of the territory as a Biosphere Reserve by UNESCO, as well as the challenges in terms of promoting sustainable development in these territories.



Presentation Session of the Project "BIOSPHERE RESERVES: SUSTAINABLE TERRITORIES, RESILIENT COMMUNITIES" (24/05/2021)



Signaling Board at the Municipal Stadium







"Trees of the Biosphere" exhibition made by the students of preschool and primary school of Castro to celebrate the 4th Anniversary of the Biosphere Reserve.





Mobile app



Tribute to Eugénio Sequeira < made by CPADA, recognizing his dedication and commitment to environmental causes and the fight against desertification

> Tribute to José da Luz Pereira (AACB president)



### 2021. Corvo Island Biosphere Reserve



### INTRODUCTION

Among the various actions developed in the last year, the following deserves particular mention:

In 2021, the first stone was laid for the new building for the Corvo's Environment and Climate Change Service (SAAC).

A vessel was acquired under the Life IP Azores Natura project for SAAC, allowing for more effective monitoring in the maritime domain.





Participation in the participatory workshop "Key ecosystem services in Portuguese Biosphere Reserves", on 20 October, and in the Colloquium "Shared Experiences in Sustainability within UNESCO Biosphere Reserves in Portugal, Norway, and Iceland", on 21 October, both at the University of Coimbra, promoted by Quartenaire Portugal.

The elaboration of the Management Plan for the Natural Park of Ilha do Corvo was carried out, with the public participation phase happening in the summer of 2021.

### 1. GOVERNANCE ACTIONS

Management board meetings were not held in 2021 due to various constraints of the COVID 19 pandemic and of lack of BR manager for a period in 2021.

Participation in the two ordinary annual meetings of the MaB National Committee which, due to the contingency of the COVID-19 pandemic, were held online, through the Teams platform.

In 2021, there was a period without the director of the Natural Park of Corvo and a RB manager for Corvo island, in which some work representing this RB was carried out by the Classified Areas division of the Regional Secretariat for the Environment and Climate Change, in the person of Dr. Carla Silva, who:

- met in person on the island of Graciosa with the three managers of the Biosphere

Reserves of the islands of Graciosa, Flores and São Jorge, on December 3rd;

- participated in the Webinar organized by the National Commission of UNESCO to commemorate the International Day of Biosphere Reserves, on November 3, by giving a presentation made on behalf of the 4 BRs of the Azores, with the communication entitled "Insular Reserves: Territories of Resilience and Marine Conservation";
- participated in the participatory workshop "Key ecosystem services in Portuguese Biosphere Reserves", on 20 October, and in the Colloquium "Shared Experiences in Sustainability within UNESCO Biosphere Reserves in Portugal, Norway, and Iceland", on 21 October, both at the University of Coimbra, promoted by Quartenaire Portugal.

# 2. CONSERVATION FUNCTION

Implementation of the Regional Plan for the Eradication and Control of Invasive Flora Species in Sensitive Areas – with particular focus on the protected areas of Corvo Island;

Throughout 2021, as part of the LIXAZ project, the monitoring of marine litter that arrives in the Azores was continued, to know the evolution of litter that appears along the coastline of the region, with the purpose of making a reference base for the future, in order to assess whether marine litter is increasing or decreasing and what is the real impact it has on the Azores;

Collection of seeds of endemic species for ex-situ conservation at the Azores Seed Bank, located in the Botanical Garden on Faial Island;

Conducting species monitoring work, of which the Census of Common Birds and the Census of Bats of the Azores stand out.





# 3. DEVELOPMENT FUNCTION

Support for the promotion of the "Biosfera Açores" brand, by the regulations of the brand "Biosfera Açores") and by the Regional Legislative Decree no. 15/2012/A of 2 April (legal regime for nature conservation and biodiversity in the Autonomous Region of the Azores).

Promotion and award on the island of Corvo of the "Miosotis Azores Award", which aims to promote sustainable tourism and reward good environmental practices in touristic companies in the Azores.

# 4. LOGISTIC FUNCTION

Promotion and monitoring of the campaign "ECO Parish, clean parish", organized by the Regional Secretariat for the Environment and Climate Change, that aims to distinguish the efforts of parishes and the collaboration of populations in cleaning, waste abandoned





in public spaces and giving them their correct destination for recycling. In the last 7 years, the municipality of Corvo has achieved the Excellence Award in this campaign;

• Maintenance of trails, viewpoints and signals inserted within classified areas in collaboration with various entities.

### 5. COMMUNICATION AND DISSEMINATION ACTIONS

To commemorate World Water Day, a short lecture was held at the Environmental Center, on the water resources of the Azores and the problem of eutrophication.

In an action promoted by the Corvo Vivo Association in partnership with SPEA, on World Tree Day, a plantation of endemic species was carried out with local population.

In the Junior Nature Ranger program, several actions were carried out: Monitoring protected areas or classified sites, planting endemic species, SOS Cory's Shearwater campaign (included ringing, handling of Cory's Shearwaters and subsequent release of the hatchlings).

In August, the Corvo Natural Park promoted a night tour for families, with bat observation and explanation of their ecology, to commemorate the International Night of Bats, held under the EUROBATS Agreement.

The School "Escola Básica e Secundária Mouzinho da Silveira" was awarded again the Eco Schools Award, the Green Flag, by its work in 2020/2021 in sustainable management of the school.





# 2021. GRACIOSA ISLAND BIOSPHERE RESERVE



### INTRODUCTION

During the year 2021, in Graciosa Island Biosphere Reserve, we can highlight the election of the Paínho de Monteiro (*Hydrobates monteiroi*) as nacional bird of the year. The voting took place from January 14 to February 4, this same year, by filling out an online form, in an initiative of the Portuguese Society for the Study of Birds (SPEA).



This species is endemic to the Azores, nesting only on some small islets near Graciosa and Flores islands, and possibly Corvo.

The first 100% electric Mini-Bus started circulating in the island.



#### 1. GOVERNANCE ACTIONS

- Participation of the Graciosa Island Biosphere Reserve in the two annual ordinary meetings of the National MaB Committee which, due to the contingency of the COVID-19 pandemic, were held online, through the Teams platform.
- In 2021 the two ordinary meetings of the Management Council of the Graciosa Island Biosphere Reserve were held, namely on July 14 (20th meeting) and December 3 (21st meeting). The first meeting was attended by nine councilors and the second by eighteen. The latter was attended by Dr. António Abreu and Dr. Madalena Coutinho, from Quaternaire Portugal, who presented the management board with the project "Biosphere Reserves: sustainable territories, resilient communities".
- Participation, on February 16, with the other managers of the Azores Biosphere Reserves, in a meeting via Teams, requested by the Technical Office of the Berlengas Biosphere Reserve, on the topic "Governance Model of the Azores Biosphere Reserves".

- Participation in a meeting via Teams, on February 17, promoted by the MAB International Coordinating Council (CIC), which was attended by MAB CIC members, MAB National Committees, representatives of regional and thematic networks, World Network biosphere reserves and program partners, on the theme "Mobilization of the MAB community and its biosphere reserves for the celebration of the 50th anniversary of the UNESCO Man and Biosphere Programme (MAB)".
- On December 3, the head of division of Classified Areas, Carla Silva, and the three managers of the Biosphere Reserves of the islands of Graciosa, Flores and São Jorge, met in person on the island of Graciosa.

### 2. CONSERVATION FUNCTION

- Continued implementation of PRECEFIAS Regional Plan for the Eradication and Control of Invasive Flora in Sensitive Areas Ponta Branca and the steep areas of Furna do Enxofre, and Ilhéu de Baixo.
- Regional and national bird censuses and monitoring of nesting birds in the Natural Reserve of the Ilhéu da Praia and the Ilhéu de Baixo (core areas of the Graciosa Island Biosphere Reserve).
- The PNIG team collected seeds of the following natural and endemic species: *Myosotis maritima*, *Festuca petraea*, *Erica azorica*, *Azorina vidalli*, *Crithmum maritimum* and *Ammi trifoliatum*, for the Azores Seed Bank, for ex-situ conservation, and the right sowing site, for in-situ conservation.
- The Graciosa Environment and Climate Change Service, the Santa Cruz da Graciosa Town Council, the Regional Secretariat for Public Works and Communications, Graciosa Forestry Service, Regional Directorate of Tourism, the Parish Councils of Guadalupe, Luz, São Mateus and Santa Cruz da Graciosa contributed with actions to remove species identified as invasive, where the highlights are *Tetragonia tetragonoides*, *Corpobrotus edulis*, *Arundo donax*, *Rubus ulmifolius*, *Hedychium gardnerianum* and *Tamarix africana*.



- Collaboration with SPEA under the LIFE4BEST Seabird Macaronesian Sound (SMS) project.
- Collaboration with the Biodiversity Group of the Azores in the "Long-term Ecological Study of Natural Forests of the Azores", under the NETBIOME ISLANDBIODIV Project.
- Action of planting endemic species, as part of the celebrations of World Earth Day, celebrated on April 22, on the island of Graciosa. This action was part of the 'Roadshow-Reserve' program, an event in a unique format, promoted by the Regional Directorate of Tourism and the Azores Tourism Association, with the close collaboration of the PNIG, with the purpose of promoting the tourist destination as safe and sustainable.
- During 2021, the work of monitoring coastal litter on the region's beaches, in accordance with the standardized criteria of the OSPAR Convention, and the study on microplastics in these same coastal areas, under the project "Establishing a Baseline on Marine Litter in the Azores AZORLIT", was continued.
- Field visit to the intervention areas of the IP Azores Natura Project, already using the new vessel to access the work done on the islets of Baixo and Praia, following the fourth monitoring visit.

# 3. DEVELOPMENT FUNCTION

- During the year 2021 ten new contracts were signed with local companies for the use of the "Biosfera Açores" brand and logo. Currently there are 21 local companies authorized to use the trademark and logo "Biosfera Açores". To highlight that one of the new adherents to the brand is the Graciosa Island Cheese, Milhafre from the Azores, which was awarded first prize in the category of Extended Matured Cow Cheese, Queijos de Portugal 2021 competition.

- Several exhibitions were held to promote and sell local products: Tourism Office, Mini Fair of Handicrafts and Local Products, Expo Azores - "Vila Natal", Azores BIO21.
- In 2021, regional support was maintained and increased for "incentives to maintain traditional landscapes of vine culture, in corrals and terraces, and orchards of traditional species", "integrated in island natural parks and biosphere reserves".



- Participation of Graciosa Natural Park in the IV Meeting of the Sustainability Monitoring Forum of the Azores Tourism Destination as a member of the Graciosa Green Team, provided for in Government Council Resolution No. 58/2018, of May 15 and Order No. 1039/2019 of July 16.

# 4. LOGISTIC FUNCTION

- Support to the SPEA team in the work carried out in the Nature Reserves of Ilhéu de Baixo and Praia, namely, installation of artificial nests and monitoring of breeding seabirds in Graciosa under the LIFE IP AZORES NATURA.



- Support to CIVISA in the maintenance of the monitoring, alert and alarm system for the safety of visitors to Furna do Enxofre.
- On June 9, the PNIG team accompanied the 11th A class of EBSG in a visit to the Natural Reserve of Ilhéu da Praia.
- Installation of a staircase breaker and safety line in the Ilhéu de Baixo Nature Reserve, in order to allow access to its



plateau. The intervention was carried out under the Life IP Azores Natura project.

- Online participation, on June 28 and 29, in the event "Biosphere Reserves: sustainable territories, resilient communities - Lusophone dialogues" at Serralves Foundation (Porto, Portugal), integrated in the celebrations of the global program UNESCO MAB 50th Anniversary.

- Participation in the Monteiroi 2021 Taskforce Working Meeting for the 1st evaluation of the Action Plan for the Monteiro's Flycatcher, promoted by SPEA
- During 2021 several contributions were sent by the Management Council of the Graciosa Island Biosphere Reserve and respective members, namely and among others
- Survey prepared by the IberoMaB Secretariat (OAPN, Spain) entitled "Gobernanza de las RB en la Red IberoMaB.
- Questionnaire prepared by the Instituto Pedro Nunes, Coimbra, as part of the project "Biosphere Reserves: sustainable territories, resilient communities".
- Survey on "Tourism in Portuguese Biosphere Reserves" within the project: Biosphere Reserves Sustainable Territories, Resilient Communities.
- Survey on "Ecosystem restoration activities in the World Network of Biosphere Reserves", prepared in the context of the 50th anniversary of the MAB Program and the launching of the United Nations Decade for Ecosystem Restoration.
- Survey on management in the world network of Biosphere Reserves, promoted by the UNESCO Chair at the University of Bergen in Norway, in collaboration with the Stockholm Resilience Centre in Sweden, and to which the UNESCO Chair in Biodiversity and Conservation for Sustainable Development at the University of Coimbra is associated.
- Survey prepared by the Menorca Biosphere Reserve for the World Network of Island and Coastal Biosphere Reserves to obtain feedback on how the COVID-19 pandemic is affecting islands and coastal areas classified as RB and how management priorities or foci are changing (or not).
- Questionnaire on socio-economic dynamics in the territories of Portuguese Biosphere Reserves, elaborated in the framework of the "Activity 17 Analysis of the dynamics of the socio-economic fabric" of the project "Biosphere Reserves: Sustainable Territories, Resilient Communities".

#### 5. COMMUNICATION AND DISSEMINATION ACTIONS

- The volunteer action in Homiziados Bay, located in the Protected Area for the

Management of Habitats or Species of Ponta da Restinga and the Special Area of Conservation of Ilhéu de Baixo and Ponta da Restinga. This action took place in the scope of the 14th anniversary of Graciosa's classification as a Biosphere Reserve and aimed at preserving the biodiversity of this location, through the removal of infesting species and a marine debris cleanup action.



- With the goal of reducing light pollution, as part of the SOS Cagarro campaign, the Graciosa Environment and Climate Change Service, in collaboration with the Municipality of Santa Cruz da Graciosa, Eletricidade dos Açores, Portos dos Açores, the Regional Secretariat of Public Works and Communications and Lotaçor, raised awareness about the subject and informed the population of the existence of a reduction in public lighting.
- Participation in the webinar "The Biosphere Reserves as Sustainability Laboratories: Working for a better world", co-organized by UNESCO's National Commission and the School of Tourism and Technology of the Sea Polytechnic of Leiria, on the occasion of the celebrations of the 50th anniversary of UNESCO's scientific program "Man & Biosphere" MAB.
- Within the scope of the 13th European Week for Waste Reduction, on November 25th two workshops were held, the first on "Organic Waste Production and its Recycling" and the second on "Construction and Demolition Waste Management in Graciosa Island", organized by the Santa Cruz da Graciosa Municipality in partnership with the Regional Secretariat for the Environment and Climate Change. During this week, the SAACG promoted visits to the Waste Processing Center of Graciosa.

# Other

In 2021 TV5 Monde aired the television program "Embarquement - Les Açores: Un paradis pour les amoureux de la nature", where the Natural Monument of Caldeira da Graciosa (Core Zone of the Graciosa Island Biosphere Reserve) and the Graciosa Donkey were highlighted.

On December 18, the final of the 2021 Trail Portugal Cup and the second edition of the Windmills Trail took place on Graciosa Island.



### 2021. FLORES ISLAND BIOSPHERE RESERVE



#### INTRODUCTION

In 2021, the Flores Biosphere Reserve promoted and participated in several actions,

among which the following stand out:

• Development of the Management Plan for the Land Areas of the Natural Park of Flores Island (PGPNIFLO), which establishes management measures aimed at



recovering the geological, paleontological or landscape values of the places, establishing conditions and ecological interdictions that can prevent damage or loss to those same values. The public discussion process happened between June 30<sup>th</sup> and August 10<sup>th</sup> 2021, with the aim of collecting the population's contributions to the Management Plan for the Land Areas of the Natural Park of Flores Island, in order to respond to the challenges related to the management of the respective protected areas, through the establishment of regimes to safeguard natural resources and values for the different categories of protected areas that make up the Natural Park, establishing the uses and management regime in accordance with the sustainable use of the territory, in conjunction with the territorial management instruments in force in the area of intervention.

#### 1. GOVERNANCE ACTIONS

- Participation of the Flores Island Biosphere Reserve in an ordinary annual meeting of the MaB National Committee which, due to the contingency of the COVID-19 pandemic, was held online, through the Teams platform.
- Participation, on February 16<sup>th</sup>, along with the other managers of the Azores Biosphere Reserves, in a meeting via Teams, requested by the Technical Office of the Berlengas Biosphere Reserve, on the theme "Governance Model of the Azores Biosphere Reserves".

- Participation in a meeting via Teams, on February 17<sup>th</sup>, promoted by the International Coordinating Council (CIC) of MaB, which included the participation of members of the CIC MAB, National Committees of MaB, representatives of regional and thematic networks, biosphere reserves of the World Network and program partners, on the theme "Mobilization of the MaB community and its biosphere reserves to commemorate the 50th anniversary of the UNESCO Man and Biosphere Program (MaB)".
- •On December 3<sup>rd</sup>, the head of division of Classified Areas, Carla Silva, and the three managers of the Biosphere Reserves of the islands of Graciosa, Flores and São Jorge, met in person on the island of Graciosa.

#### 2. CONSERVATION FUNCTION

• Constant fight against the dispersion of invasive flora within the scope of the LIFE BEETLES and LIFE IP Azores Natura projects, by the operational workforce within the Environment and Climate Change Service of Flores Island. More specifically, in March 2021, a volunteer action was carried out, promoted by the LIFE BEETLES project, which contributed to the control of invasive flora (*Acacia melanoxylon* and *Hedychium* 

gardnerianum) and to the planting of about 50 individuals of endemic flora (including Juniperus brevifolia, Viburnum treleasei, Picconia azorica, Frangula azorica, Erica azorica, among others), involving the participation of a local tourist entertainment company and a city council.

• Cleaning of waterways to improve riparian ecosystems and habitats, prevent flooding and civil protection. The concrete actions carried out in 2021 included the removal of fallen trees along the streams, cleaning of waste of various types (agricultural, urban, etc.), as well as the cleaning of invasive vegetation from the banks.



• During 2021, wood stacking techniques have been developed (resulting from the control of woody weeds), in order to encourage the development of fungi and increase the availability of decomposing organic matter, in order to obtain better habitat conditions

for a species of beetle endemic to Flores island (*Tarphius floresensis* – target of the LIFE BEETLES project) as well as for other arthropods native to the Azores.

#### 3. DEVELOPMENT FUNCTION

- The AzoresBio21 took place on Flores island, being the first Biological Farming Forum held in this island. This program aimed to train, differentiate and qualify the agricultural sector, promoting the values of balance, well-being, health, food self-supply and returning to the land with respect for all past, present and future generations. Thus, the first actions of this forum occurred in Flores, between the 21st and 25th of June, involving around 40 participants, with two workshops, one on organic horticulture and the other on green smoothies.
- "Humanity and the Biosphere: from corn to *bolo do tijolo* (brick cake)" was an activity developed by the Regional Secretariat for the Environment and Climate Change with the support of the Municipality of Santa Cruz das Flores, regarding the traditions and typical products of Flores island. Participants

had the opportunity to see the Ribeira do Pomar mill in operation and later were able to understand and taste the confection of this delicacy that is the "brick cake", which resembles a type of sweet bread. Throughout the process, there was an opening for discussion and sharing of knowledge about local traditions and customs, such as variants of the recipe presented and ways of eating the "brick cake" (with butter, in *sopas de leite* ("milk soups"), with jam and cheese).









• The handicraft exhibition "Expo Açores" took place in December 2021, in the parishes of Lomba and Santa Cruz das Flores. It was organized by the Regional Secretariat for Youth, Professional Qualification and Employment, through CADA (Centro de Artesanato e Design dos Açores). It aimed to enhance culture and tradition through the sale and promotion of traditional handicrafts, but also intended to stimulate contemporary artisans through workshops, events and digital dissemination of artisans and their arts.

#### 4. LOGISTIC FUNCTION

- Support in field work, placement and collection of samples from Pitfall and SLAM (Sea, Land and Air Malaise trap) traps at various points of the Natura 2000 Network, with the aim of capturing arthropods in a container that is later filtered for recovery of the same arthropods and is sent to the University of the Azores for identification of the species present in the place. As a rule, samples are collected quarterly in 7 installed traps. This action is also part of the LIFE Beetles project and the "Long Term Ecological Study of Natural Forests in the Azores" NETBIOME ISLANDBIODIV project.
- Support in the fieldwork of the Eel Trek project (a project that deepens scientific knowledge about oceanic migration and the breeding behavior of the European eel).
- Promotion and monitoring of the "ECO Parish, clean parish 2021" competition, organized by the Regional Secretariat for the Environment and Climate Change, aiming to distinguishing the efforts of parishes and the collaboration of populations in cleaning, removing and forwarding waste abandoned in public spaces, including water lines and shorelines.
- Carrying out of several censuses, namely, the Azores Bat Census, the Wood Pigeon Census (AZORPI Project) and the Garajaus Census.
- Drone monitoring to identify invaders, promoted by the LIFE BEETLES project, through the hiring of a local company.
- Participation, support and collaboration in the SOS Cagarro (shearwater) campaign. This campaign is the largest and oldest environmental education and conservation campaign in the Azores and happens

every year from October 1<sup>st</sup> to November 15<sup>th</sup>, coinciding with the departure of juvenile shearwaters from their nests for their first transoceanic flight.

- During 2021, the educational services of Flores (ecoteca/CIAB) carried out 44 environmental education activities:
- 30 activities aimed at the school community, with 280 participants;
- 14 activities aimed at the general public, with 118 participants (12 of these actions were specifically about the MaB program, with 107 participants).

# 5. COMMUNICATION AND DISSEMINATION ACTIONS

- The volunteer action promoted by the LIFE BEETLES project in the control of weeds and endemic flora plantations was reported by RTP Açores, having been broadcast on this regional television channel, drawing the population's attention to nature conservation and the importance of preserving the natural values.
- The Flores Island Biosphere Reserve was mentioned in several articles on tourism and nature websites and blogs in 2021, such as in National Geographic, Visit Portugal and Visit Madeira, and was also disclosed in an exhibition in Serralves (Porto, Portugal) which took place between July 9<sup>th</sup> and October 31<sup>st</sup>.
- In 2021, there was a period without the director of the Parque Natural of Flores and RB manager for Flores Island, in which some work representing this RB was carried out by the Classified Areas division of the Regional Secretariat for the Environment and Climate Change, in the person of Dr. Carla Silva, who:
- participated in the Webinar organized by the National Commission of UNESCO to commemorate the International Day of Biosphere Reserves, on November 3, by giving a presentation made on behalf of the 4 BRs of the Azores, with the communication entitled "Insular Reserves: Territories of Resilience and Marine Conservation";
- participated in the participatory workshop "Key ecosystem services in Portuguese Biosphere Reserves", on 20 October, and in the Colloquium "Shared Experiences in Sustainability within UNESCO Biosphere Reserves in Portugal, Norway, and Iceland", on 21 October, both at the University of Coimbra, promoted by Quartenaire Portugal.

# 2021, FAJÃS OF SÃO JORGE BIOSPHERE RESERVE



#### INTRODUCTION

There are continuous works in the Biosphere Reserve of Fajãs de São Jorge:

Maintenance of trails, viewpoints and signage inserted within the classified areas and cooperation with others organizations on maintenance of trails out of classified areas;

Collection of coastal waste in urban areas and Fajã da Caldeira de Santo Cristo;

Cleaning and recovery of retaining walls of water lines and continued monitorization;

Nature Conservation Actions;

Promotion of environmental education activities.

Throughout the year the Management Plans of the São Jorge Island Natural Park was support and the process of elaboration was followed.

#### 1. GOVERNANCE ACTIONS

Holding of two ordinary meetings of the Fajãs de São Jorge Biosphere Reserve Management Council, foreseen in article 54°, paragraph 4, of the DLR no. 15/2012/A of October 21<sup>th</sup>, with 7 participants and 3 quests.

The Regional Directorate for the Environment and Climate Change put into public consultation the proposal of São Jorge Natural Park Management Plan, occurred between June 30<sup>th</sup> and August 10<sup>th</sup>. Promotion of public session at July 28<sup>th</sup>.

Participation on two public session of process about Planning Plan for the Coast of São Jorge Island changes, occurred at Calheta and Velas cities at January 28<sup>th</sup> and 29<sup>th</sup>.

Participation, by the Director and Nature Watchers, in the Training Action "Law and Environmental Legislation III", which took place at the Youth and Arts Academy of Terceira Island, between 17 and 21 May 17<sup>th</sup> and May 21<sup>th</sup>, organized by the Regional Environmental Inspection.

Participation as Chairman of the Board of Directors of the Biosphere Reserve of Fajãs de São Jorge, at the 12<sup>th</sup> Annual Ordinary Meeting of the MaB National Committee, online by Teams platform, on May 12th.

Online meeting under the project: Biosphere Reserves - Sustainable Territories, Resilient Communities.

Participation in the IV Meeting of The Destination Sustainability Monitoring Forums, on May 19<sup>th</sup>, promoted by the Azores Destination Management Organization (Azores DMO).

Participation in the meeting with the coordinator of the national project "Biosphere Reserves - Sustainable Territories, Resilient Communities" that took place on Graciosa Island, on December 3<sup>rd</sup>.

On December 3, the head of division of Classified Areas, Carla Silva, and the three managers of the Biosphere Reserves of the islands of Graciosa, Flores and São Jorge, met in person on the island of Graciosa.

Participation of the head of Classified Areas Division, Dra. Carla Silva, in representation of the BR of São Jorge Fajãs in the workshop "Key ecosystem services in Portuguese Biosphere Reserves", on 20 October, and in the Colloquium "Shared Experiences in Sustainability within UNESCO Biosphere Reserves in Portugal, Norway, and Iceland", on 21 October, both at the University of Coimbra, promoted by Quartenaire Portugal.

### 2. CONSERVATION FUNCTION

Collection of seeds of endemic species for the Azores Seed Bank.

Continuation of implementation of several papers related to the approval of the Life Application – "LIFE VIDALIA – Valorization and Innovation Directed to Azorina and Lotus in the Azores Islands", a program of valorization and innovation that allows the conservation of endemic species *Azorina vidalii* and *Lotus Azoricus*.

Continuation of implementation of the Life Application "LIFE IP AZORES NATURA - Active Protection and Integrated Management in natura 2000 network" (LIFE17 IPE/PT/00010).

Seeds are collected annually to be sent to the Azores Seed Bank – Botanical Garden Faial – safe deposit, which guarantees the safeguarding of most plant species, through controlled laboratory conditions, where those are kept.

#### 3. DEVELOPMENT FUNCTION

In 2021, support was provided to 11 new applications elaborated under the Regional Regulatory Decree No. 24/2014/A of 15 December, which approves the "system to maintain the production of vineyard, in corrals and terraces, and of traditional species, in protected landscape areas and coastal fajãs, integrated in the Natural Parks of the Island and Biosphere Reserves."

In São Jorge, there have already been a total of 49 applications for the preservation of vines and orchards of traditional species (33,3 ha), with a global support attributed to about €47 498,11 year (F2).

Implementation of the regulation on the movement of motor vehicles in Fajã da Caldeira de Santo Cristo and the section of the PR1SJO trail, approved by Ordinance No. 59/2018 of4 june, with the aim of ensuring effective protection of naturally occurring habitats and species in the territory, as well as their landscapes, maintaining ongoing surveillance of their conservation status and adopting the policies and measures necessary to ensure their maintenance in a favourable conservation state of the section in question.

Support the promotion of the trademark "Azores Biosphere", as regulated in Administrative Rule n.º 27/2011 (Regulation of the "Azores Biosphere" brand) and Regional Legislative Decree n.º 15/2012/A, of April 2 (Legal regime for the conservation of nature and biodiversity in the Autonomous Region of the Azores).

Promotion and attribution in the Island of São Jorge of the "Miosotis Azores Award" which aims to promote sustainable tourism and reward environmental practices in Azores tourist developments.

#### 4. LOGISTIC FUNCTION

Conducting various Census (Bats Census, the Wood Pigeon (AZORPI Project), Terns, Common Birds (CAC) and Common Buzzard).

Promotion and follow-up of the "ECO Parish, Clean Parish" Competition, organized by the Regional Secretariat of Environment and Climate Changes from Azorean Government, aiming to distinguish the efforts of the parishes and the collaboration of the populations in the cleaning, removal and referral to the final destination of abandoned waste in spaces including water lines and coastlines.

Support for the Seabird Macaronesian Sound (SMS) project.

Participation in the exhibition and conference at the Serralves Foundation on Biosphere Reserves with sending photographs and written information about the Biosphere Reserve of Fajãs de São Jorge.

Support and monitoring in the field work for installation of the Geodesical and Hydrological Monitoring Network of Calheta, developed by the Division of Spatial Planning of Regional Secretariat of Environment and Climate Changes from Azorean Government and Azorean Civil Engineering Laboratory.

Collaboration with the Regional Director of Sea Affairs with the local operationalization of the Azores Cetacean Network (RACA), reporting the boldness and developing the necessary steps (F3).

Collaboration with the São Jorge Agrarian Development Service in the execution of the annual Environmental Conditionality controls.

Completing an online questionnaire as part of an application to the EEA Grants – "Biosphere Reserves: Sustainable Territories, Resilient Communities".

Survey conducted by the UNESCO Chair of the University of Bergen in Norway, in collaboration with the Stockholm Resilience Centre in Sweden, and which is associated with the UNESCO Chair on Biodiversity and Conservation for Sustainable Development of the University of Coimbra with the participation of the national Biosphere Reserves, framed in the project "Biosphere Reserves: Sustainable Territories, Resilient Communities."

Survey on ecosystem restoration activities applied to the World Biosphere Reserve Network.

Survey on "Socio-economic dynamics in the territories of the Portuguese Biosphere Reserves", as part of the Project Biosphere Reserves: Sustainable Territories, Resilient Communities.

# 5. COMMUNICATION AND DISSEMINATION ACTIONS

June 28<sup>th</sup> participation in the International Conference of the Park - Biosphere Reserves Sustainable territories, resilient communities - Lusophone Dialogue.

Participation in the webinar "Biosphere Reserves as sustainability laboratories: working for a better world" promoted by the UNESCO National Commission on November 3<sup>rd</sup>, with a brief communication on "Island Reserves: Territories of Resilience and Marine Conservation".

#### Photos:







#### 2021. SANTANA MADEIRA BIOSPHERE RESERVE



#### INTRODUCTION

In 2021, the Santana's Reserve had the great challenge and responsibility of preparing the Periodic Review Report. It was developed according to a participatory methodology, supported by an initial survey and organization of relevant information about the activities carried out in the Biosphere Reserve, in the last 10 years. In a second phase and based on the information collected, bilateral contacts were promoted with entities from key sectors. Public sessions were held in the form of workshops. A public consultation of the periodic review process was also promoted, with the document being made available online for the collection of contributions by citizens in general.

#### 1. GOVERNANCE ACTIONS

Meeting with Dr. António Domingos Abreu, general coordinator of the Biosphere Reserves Project: Sustainable Territories, Resilient Communities, with the participation of several elements of the project, for a broad presentation which was videoconferenced and took place on the 22nd of February.

12th meeting of the MaB National Committee, which was videoconferenced and held on May 12th.

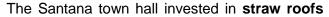
13th meeting of the MaB National Committee, which was videoconferenced and held on November 25th.

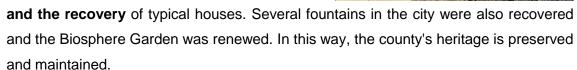
#### 2. CONSERVATION FUNCTION

In partnership with the schools of the county through the Eco-Schools Programme, an environmental education activity, 'O mar começa aqui' [The sea begins here], was

carried out. This activity consisted of painting gutters with figures alluding to the importance of the preservation of ecosystems and biodiversity.

A Clean-up Campaign was carried out at Faial's beach, with the collaboration of the Regional Secretariat for the Environment and Climate Change and with the local sport and recreational club, CDR Santanense, within the scope of the activities of the Blue Flag program, of the Blue Flag Association of Europe - ABAE.





# 3. DEVELOPMENT FUNCTION

There were 264 participants from 12 countries in the **9th edition of 'Biosphere Roller Skate'**.

"Sustainable North" project, developed by 10th grade students from the B+S Bispo D. Manuel Ferreira Cabral Basic and Secondary School, within the scope of Citizenship and Development. The work consisted of identifying 10 points of tourist, historical, natural or scenic interest in the county and promoting them through short videos. In this way, an appeal was made to environmental awareness and sustainable development. The school had the



support of the City Council for the editing and subtitling of the videos.

The Biosphere Reserve was represented at the XXVII Cultural Week of Ilha's parish "Ruralidades, De(construction) of a Cultural Vision", from November 28th to December 5th, with a **thematic exhibition – Santana, Biosphere Reserve**. There were several patent elements: photographs; panels identifying the various Portuguese Biosphere

Reserves and some promotional and publicizing material about the Reserve.

The book "Literatura de Cordel de Manuel Golçalves O Feiticeiro do Norte", by Danilo José Fernandes, published in December 2020, with the support of the Municipality of Santana, was



presented on November 26th, in the main hall of the City Council.

Santana Biosphere Reserve was present at the **Biosphere Reserves Exhibition** - **Portuguese Network and CPLP**, at the Serralves Cultural Museum, in Porto.

During the month of August, the **Gastronomic Month** took place, in a different format than the usual (Santana Gastronomic Show), due to COVID 19. Instead of the event being centralized in a single space, it was decentralized, with the event taking place in

all participating restaurants. The transmission of the event on Canal Na Minha Terra TV boosted the local economy as

well as the promotion of the county.





Santana hosted on October 8th and 9th, another edition of **Ultra Skyrunning Madeira**. An international event, which welcomes hundreds of athletes and makes known the natural and cultural heritage of this county. About 80% of this event takes place in the Laurissilva Forest area and the rest in the Central Mountain Massif.

#### 4. LOGISTIC FUNCTION

# Webinar - Biosphere Reserves as Sustainability Laboratories: working for a better

world. A hybrid event that took place at the Escola Superior de Turismo e Tecnologia do Mar – Politécnico de Leiria and by videoconference, on the 3rd of November. The Santana Reserve was present at the first session: Insular and Coastal Biosphere Reserves: Challenges and Opportunities, with the theme Ecosystems and Biodiversity: working with local communities.



On the 13th of November, students from the Higher Technical Course in Biological Agriculture at the University of Madeira visited, within the scope of the Environment and Rural Development subject, taught by Susana Fontinha. During this visit, the topic of Rural Development in the Santana Biosphere Reserve was addressed and a



short presentation was made on the work developed in the last 10 years.

### 5. COMMUNICATION AND DISSEMINATION ACTIONS

In October, the new website for the Santana Biosphere Reserve was launched. With a new look, more appealing and intuitive, the new website keeps up-to-date information and all the latest news on what happens in the Reserve's territory.





# 2021. ISLAND OF PORTO SANTO BIOSPHERE RESERVE

#### INTRODUCTION

2021 was marked by the celebrations of the 1st year of the Biosphere Reserve on the island of Porto Santo, throughout this year, the Municipality of Porto Santo and its candidacy partners developed actions to boost the Reserve by promoting and disseminating all the heritage underlying this classification, especially among the youngest, in an attempt to preserve the collective memory of our people. This commemoration was held at the Casa da Serra Museological Center, open to the entire population in a celebration of Porto-Santense culture and tradition.

Another of the outstanding moments of 2021 was undoubtedly the inauguration of the "Mural da Biosphere", a work developed by the students of Escola Básica e Secundária Prof. Dr. Francisco Freitas Branco, who emerged from a challenge launched by the City Council to this school community, with the aim of reinforcing the identity of the island of Porto Santo as a UNESCO Biosphere Reserve.

This initiative aimed to mark a generation of students in the feeling of belonging to this project and to the values underlying it. The Biosphere Mural was integrated in the commemorations of the 50th anniversary of the MaB - Man and Biosphere program.





#### 1. GOVERNANCE ACTIONS

During 2021, monthly meetings were held at the (GT-PSRB) and work was carried out with a view to implementing the management unit.

#### 2. CONSERVATION FUNCTION

In 2021, a cooperation protocol was signed between the IFCN, IP-RA M and ANA - AEROPORTOS DE PORTUGAL, SA, which aimed to contribute to environmental

sustainability on the island of Porto Santo, through the implementation of a reforestation project, ensuring a set of forestry operations, namely planting 1000 trees, clearing the bush, controlling spontaneous vegetation, watering and cutting.

As part of the **LIFE DUNAS** project, work began on controlling invasive species and introducing native species from the dunes of Porto Santo, with the involvement of the local community. These initiatives, aimed at various target audiences, involved around 200 volunteers in 20212, including schools, companies, the military and members of the community in general.





# 3. DEVELOPMENT FUNCTION

Parish Council of Porto Santo organized the **II Mostra do Pão** with the aim of making known the most diverse types of bread confections typical of the island, which included the Bolo do Caco, in an action to boost the culture and tradition of the island of Porto Holy. This initiative, open to the community in general, also included an exhibition on the history of bread on the island.



Students from the Senior University were able to learn a little more about local plants and, at the same time, contribute with their knowledge to the enrichment of all participants, in an **ethnobotany workshop** developed by the Municipality of Porto Santo. Experiences from the past were thus shared, with regard to the use of plants for the most varied purposes.



#### 4. LOGISTIC FUNCTION

# Improvement of the Salões Forest Nursery (Porto Santo) - PRODERAM20-8.6.0-FEADER-001583 Project

The IFCN, IP-RAM installed a forest nursery on the island of Porto Santo in order to obtain acclimatized plants to afforest bare, bare, unprotected and deep ravines. Considering that, at present, that production unit did not meet the appropriate technical conditions for the production and satisfaction of Porto Santo's needs, in 2021, the improvement of this nursery began.

## Corveta General Pereira D'Eça do Porto Santo artificial reef monitoring program

For the 5th consecutive year, in 2021, the monitoring program for the artificial reef CORDECA and surrounding areas on the island of Porto Santo was carried out. Two underwater sampling campaigns were carried out, in what is already the longest project to monitor subtidal habitats developed to date in the Region. CORDECA is today a diving spot of choice on the island of Porto Santo, sought after by many recreational divers who are surrendered to the abundance of fish.



The municipality of Porto Santo dedicated a week to commemorating the **National Sea Day**, involving the community in several coastal cleaning actions and also one of the main water lines on the island. The initiative was aimed at the community in general, involving elementary school students, military personnel and community members. In total, 145 people were



involved who collected more than 400 kg of garbage. This initiative aimed to raise awareness of the importance of cleaning streams and coastal areas in the prevention of one of the biggest scourges of our time, marine litter. These campaigns were part of the Porto Santo Sem Lixo Marinho project and the European Week for Waste Prevention.

The exhibition "AVES DA NOSSA PRAIA" was open to the public during the month of July, following an activity by the Porto Santo Occupational Activities Center that aimed to involve the community in the knowledge of the birds that we can see from our beach by the hands of one of its users and its illustrations. The initiative is part of the "Good Environment for All"



project, developed in partnership with the Porto Santo City Council.

# 5. COMMUNICATION AND DISSEMINATION ACTIONS

Within the scope of the conference "Porto Santo 600 years Engineering and Sustainability", organized by the Ordem dos Engenheiros, several lectures, thematic sessions and exhibitions were held, with the aim of debating the sustainability of the

island of Porto Santo. In this initiative, the highlight was the lecture by Dr. Susana Fontinha who divulged the Biosphere Reserve of the island of Porto Santo, and its importance in the definition of a sustainable development strategy for the island of Porto Santo.





Portuguese National Committee of the UNESCO MAB Programme