



MINISTERO DELL'AMBIENTE
E DELLA TUTELA DEL TERRITORIO E DEL MARE



United Nations
Educational, Scientific and
Cultural Organization



Italian MAB
National
Committee



Italian
MAB UNESCO
Biosphere Reserves
A rising
network



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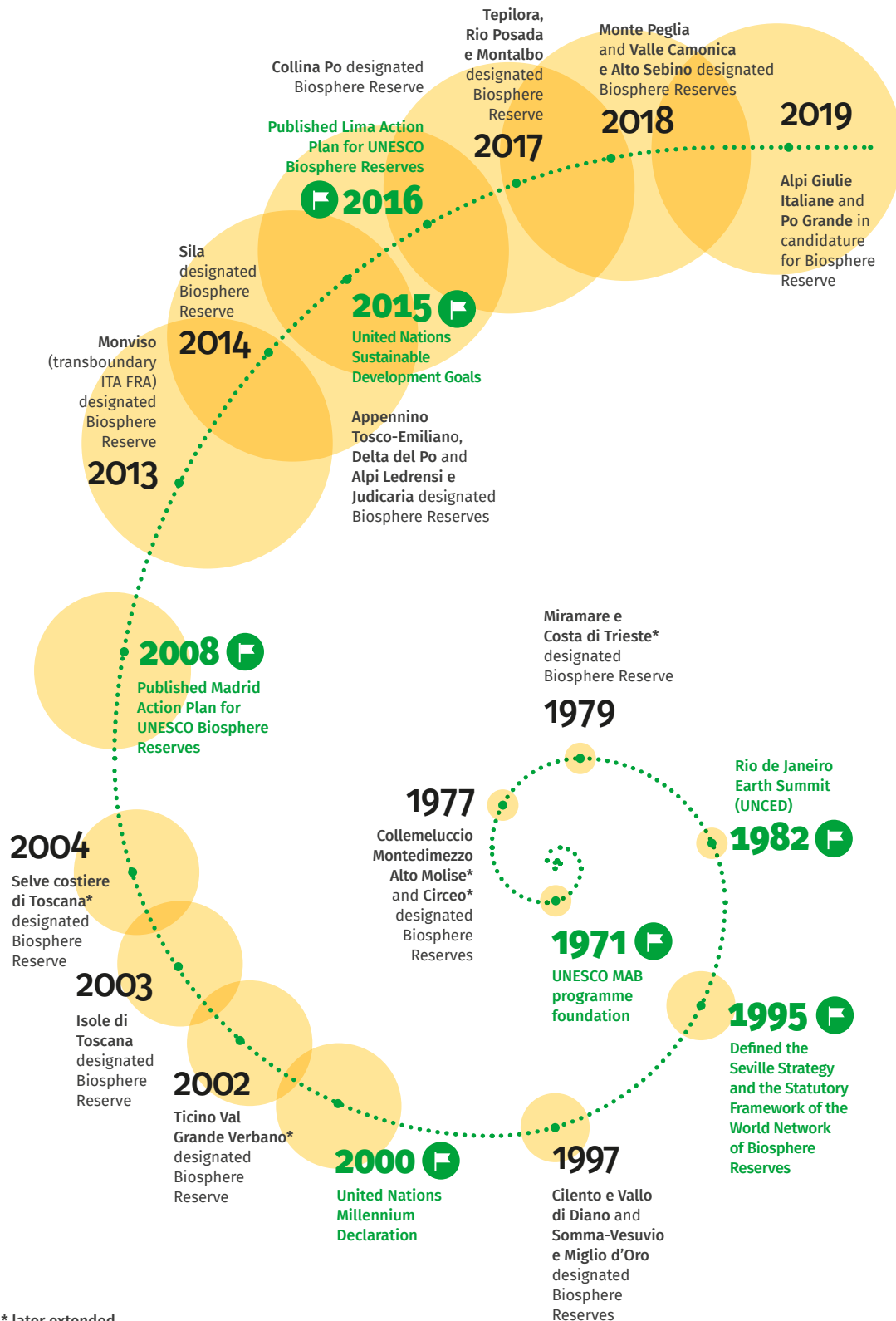
Italian MAB UNESCO Biosphere Reserves A rising network

June, 19th 2019

Italy in the MAB Programme

A long-lasting path for a positive future

Maria Carmela Giarratano
 General Director
 Nature and Sea Protection Directorate
 Ministry of Environment, Land and Sea
 Protection of Italy



Over the years, Italy has been pursuing a rewarding path to protect and enhance its natural capital through a coordinated system of management and protection of natural areas and their contiguous territories. This natural capital includes many diverse ecosystems and is rich in biodiversity.

The implementation of the MAB Programme, in recent years, has become a significant framework for activities, ethical and cultural values linked to environmental conservation and education, and to the sustainable use of resources and for good practices traditionally employed in Italy.

The Italian National Technical Committee, set up to meet the aims of the Seville Strategy and the Statutory Framework of the World Network of Biosphere Reserves, has been coordinating all of the activities in the Programme since 2011.

This has allowed for a sizable boost to the Italian Network of Biosphere Reserves, both in numbers and management capacity, as well as in the renewed interest of local communities

towards issues and objectives linked to sustainable development. It has been both a highly motivating force and of great support to the Italian Biosphere Reserves and their territories, and has consequently shaped and enhanced their active participation in national and international events, especially at the EuroMAB network. In this way, these activities have allowed for relations and exchanges that are particularly important considering the role that the MAB Programme can play - in synergy with other International Conventions - when it comes to meeting the UN's Sustainable Development Goals.

This presentation aims to be an accessible user-friendly tool that can serve to outline the key information, details and unique features of the Italian Network of Biosphere Reserves. A way to bring a wider audience to these areas which are an example of balance between man and nature.

* later extended

Living biodiversity

Italy a land of different habitats



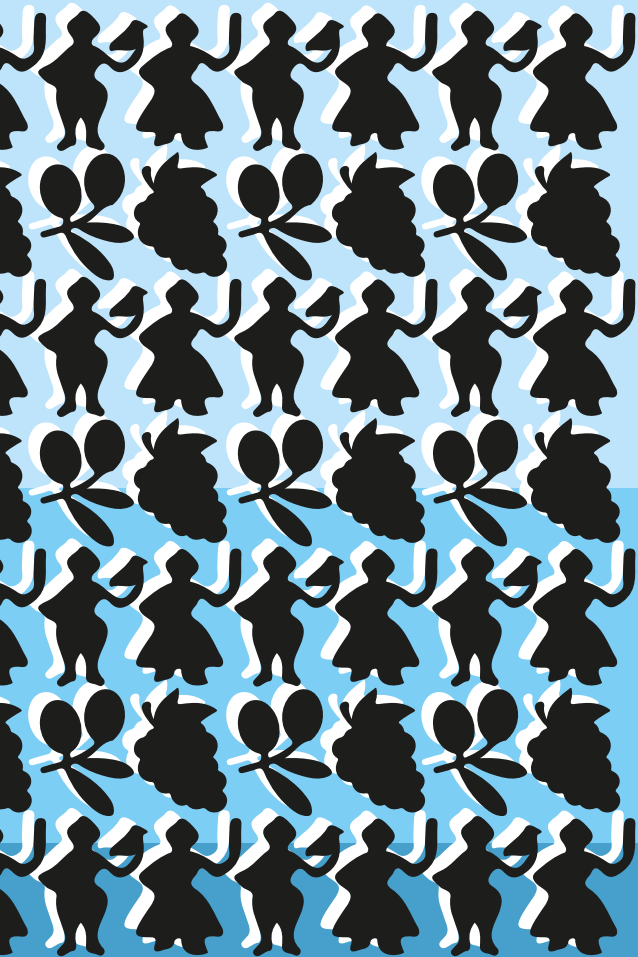
Finding harmony in Nature from the icy peaks of its Alps, from eagles to mountain goats, as man and beast make their way across alpine paths seeking shelter; all flourishing as streams run down to crystalline lakes, meandering through intricate rivers towards the rugged coasts and sandy shores until, they finally reach the sea; the rolling Apennine hills dotted with villages rich in the traditions of the past, and goods that come from living of the land and islands dotted like twinkling stars in the sea.

Italy is a land of tiny dimensions, rich in variety whose tiny proportions offer great biodiversity making protection of these fragile eco-systems key since they are as vulnerable as they are precious.



Man, nature, sustainable sustenance

Helping people and
nature to thrive together



Italy is filled with protected natural habitats, urban areas surrounded by richly rural areas, all co-existing, flourishing, interacting from one community to the next, to ensure that each different eco-system protects its own highly bio-diverse reality.

With Biosphere Reserves unlike any others found in Europe, keeping such communities alive has never been simple, and each has had to find and implement both agricultural and cultural strategies in order to guarantee a thriving living and sustainable future for both man and Nature.



Wasting no time in saving precious resources



In Italy food waste is a new phenomenon, the result of modern well-being, of losing touch with rural traditions where nothing went to waste and everything was put to use. In days of old food was scavenged for, too precious to waste, used and re-used so nothing was left over.

Bread, at the heart of Mediterranean diet was not freshly baked each day but had to last, so that as the stale bread hardened the only solution was to use it up, so that some of Italy's greatest traditional recipes celebrate the use of bread long past its best.





**Italy, a land of
islands, coasts,
plains, rivers, hills
and mountain
ranges...**

**A focus on the
17 Biosphere Reserves
of the Italian Network**

Mapping Biosphere Reserves in Italy



The Biosphere Reserves are terrestrial, marine and coastal ecosystems each created to afford solutions fostering the conservation of biodiversity with its sustainable use for the communities hosting them.

These internationally recognized Biosphere Reserves take an interdisciplinary approach, aiming to understand and manage both change and interaction between social and ecological systems, including conflict prevention and managing biodiversity.

Biosphere Reserve Collemeluccio Montedimezzo Alto Molise



YEAR OF DESIGNATION
1977 extended in 2014

AREA
25.268 ha terrestrial

COORDINATOR
Reparto Carabinieri per la
Biodiversità di Isernia

The *Collemeluccio - Montedimezzo Alto Molise* Biosphere Reserve stands at heights ranging from 800 to 1730 MASL and was first designated a Biosphere Reserve in 1977, initially covering only the two state-owned forests of the Alto Molise, the Montedimezzo and the Collemeluccio forests with 638 ha. Since 2014 the boundaries of the Biosphere Reserve have been extended to include the nearby Municipalities of Carovilli, Chiauci, Pescolanciano, Pietrabbondante, Roccasicura, San Pietro Avellana and Vastogirardi making a total of 25268 ha for the whole territory.

BIODIVERSITY

Extensive broad-leaved forests distinguish the areal and are key to this Biosphere Reserve. The landscape is interspersed with pastures and meadows including a strong nucleus of Silver fir trees (*Abies alba Miller*). The Biosphere Reserve includes 12 habitats, of which 3 recognised as priorities, the reserve hosts populations of 48 mammal species, 112 bird species, 10 amphibian species, 8 reptile species, 5 fish species

and 9 invertebrate species named in the EU Habitat Directive. The floral heritage of the area includes over 900 species and subspecies belonging to 90 families.

MISSION

This Biosphere Reserve aims to pursue sustainable development with projects that target both the conservation and optimisation of its diverse environmental and cultural heritage also sustaining the small communities belonging of its *Borghi Autentici* project. The Biosphere Reserve is committed to projects which support soft mobility such as that of bringing back to life former sheep trails (*tratturi*) and trainlines which cross its pastures. One the main aims in terms of conservation is caring for the key tertiary relict tree species: the Silver fir (*Abies alba Miller*).



www.riservamabaltomolise.it
info@riservamabaltomolise.it



AGRI-FOOD CHAIN

Some examples

San Pietro Avellana
White truffle
Alto Molise
Black truffle

Biosphere Reserve Circeo



YEAR OF DESIGNATION
1977 extended in 2014

AREA
8.760 ha terrestrial

COORDINATOR
Parco Nazionale
del Circeo

The area of the *Circeo* Biosphere Reserve, recognized by UNESCO in 1977, initially covered an area of state-owned forest only later expanded in 2014 by incorporating other areas beyond the borders of the National Park. Adding this extra terrain was necessary in order to guarantee the aims of the MAB Programme. This change in the Biosphere's boundaries increased the importance of its chosen aims: enhancing the relationship between man and nature by means of skills-building research programmes teamed with the sustainable management of the area.

BIODIVERSITY

The Circeo Biosphere Reserves now includes four coastal lakes, a lowland forest stretching out for almost 3000 ha, the calcareous massif of Mount Circeo (541 MASL) and a range of sandy coastline and dunes that extends for 25 km. Within its confines the Biosphere Reserve offers significant biodiversity: for example, 40 species of mammals including 19 species

of Chiroptera, 280 species of birds, 16 species of reptiles and 7 species of amphibians as well as a rich but unspecified number of Invertebrates, and around 1200 species of vascular flora.

MISSION

The Circeo has greatly strengthened the relationship between Man and nature, however its huge popularity with tourists puts pressure on the ecosystem, especially its coastal dunes. Another challenge is that of the eutrophication of the water as well as the pollution of coastal lakes caused by urban sewage and agricultural activities. As a result, the National Park aims to provide educational activities on the environment and an eco-museum offering key information to visitors.



www.parcocirceo.it
segreteria@parcocirceo.it



AGRI-FOOD CHAIN

Some examples

Colline Pontine Extra
Virgin Olive Oil PDO
Campana Bufalo ricotta
PDO (cheese)
Favette di Terracina
(strawberry)



Biosphere Reserve Miramare e Costa di Trieste



YEAR OF DESIGNATION
1979 extended in 2014

AREA
1.476 ha terrestrial
1.584 ha marine

COORDINATOR
Area Marina Protetta
di Miramare

The *Miramare e Costa di Trieste* Biosphere Reserve covers the coastal area facing the Gulf of Trieste. It is famous for its karst promontory, which overlooks the bay running steeply down towards the sea. There are settlements, farmed terraces and large areas of natural woods and meadows at the edges of the Biosphere. The Biosphere's core zone is the Miramare Castle park which faces the sea and also includes the Biosphere's buffer zone.

BIODIVERSITY

The Biosphere has great biodiversity with many diverse species and habitats - from its sea beds to its karst plateau, it is unique, with both Mediterranean features on its most northerly borders, Illyrian and continental elements in the karst areas, and Atlantic elements in the sea. In its coastline, woods, karst scrublands and dry meadows are countless endemic species, while its highly varied marine environments are home to a rich biodiversity including numerous species of animals and plants of key community importance.

MISSION

The main aim of the Reserve is to promote sustainable development, whilst carrying out innovative best practices and creating experiences which can be transferred outside the Biosphere Reserve. In particular, slow tourism, research, monitoring and environmental conservation are all important. Naturally, it is also key to encourage education and awareness-raising regarding biodiversity conservation both at sea and on land as well as fostering a balanced relationship between Man and Nature.



www.riservamarinamiramare.it
info@riservamarinamiramare.it



AGRI-FOOD CHAIN

Some examples

Prosecco PDO (wine)
Tergeste extra Virgin Olive PDO
Carso honey
Traditional product
Sardoni in savor
Traditional product (fish)

Biosphere Reserve Cilento e Vallo di Diano



YEAR OF DESIGNATION
1997

AREA
319.839 ha terrestrial
75.664 ha marine

COORDINATOR
Parco Nazionale Cilento
e Vallo di Diano



Cilento and Vallo di Diano National Park with the Archeological Sites of Paestum and Velia, and the Certosa di Padula



UNESCO
Global Geoparks
Cilento e Vallo di Diano



Intangible
Cultural Heritage
Mediterranean diet

The *Cilento e Vallo di Diano* Biosphere Reserve in southern Italy, close to the Tyrrhenian Sea, bears witness to centuries of Man, Nature and Culture's thriving co-existence, which has been transformed by the Biosphere which represents a complex biogeographic home blending ancient Greek cities, abbeys, castles and farmhouses across a rich varied landscape. The terrain varies from its gentle hills to its rugged mountain top landscapes and from roughly hewn gorges and valleys to Palaeolithic karst caves and petrified springs.

BIODIVERSITY

The high natural value of the variety of its ecosystems reflects the biodiversity of the area, with 28 SCI and 8 SPA which are unique to this area. The flora counts for 1800 diverse autochthonous species such as the *Primula palinuri*, an extremely localized paleoendemic species. Equally, part of the local fauna includes creatures like bald eagle, the Coturnix, the Apennine hare, the wolf and a vast population of otters.

MISSION

The Cilento e Vallo di Diano Biosphere Reserve is currently promoting a plastic-free awareness raising campaign and is also working to foster and improve the traditional rural working practices offering its endorsement via the use of a Park and Biosphere Reserve quality label. The aim here is to encourage best practices and behaviour in order to positively improve the quality of life for local inhabitants, also enhancing job opportunities and contributing to the development of the area via sustainable environmental strategies.



www.cilentoediano.it
direttore@cilentoediano.it



AGRI-FOOD CHAIN

Some examples

Caciocavallo podolico PDO (cheese)
Cilento Extra Virgin Olive Oil PDO
Campana Bufalo Mozzarella PDO (cheese)
Cilento white fig PDO
Paestum artichoke PGI



Biosphere Reserve Somma-Vesuvio e Miglio d'Oro



Archaeological Areas
of Pompei, Herculaneum
and Torre Annunziata



Intangible
Cultural Heritage
Art of Neapolitan 'Pizzaiuolo'

In 2018 the *Somma Vesuvio e Miglio d'Oro* Biosphere Reserve was the setting for the First Meeting of Italian Biosphere Reserves. The Biosphere Reserve is located in the Gulf of Naples, and within its confines the area includes the National Park of the Vesuvius together with its surrounding coastal area, as well as the city of Pompei and the XVIth and XVIIth Century Vesuvian villas which are part of the golden mile known to Italians as the Miglio d'Oro. The Biosphere Reserve gained heritage status in 1997 for its cultural landscape, which is further enhanced by both its outstanding natural features and its famous religious, artistic and historical cities, relics, and monuments.

BIODIVERSITY

The Somma - Vesuvio has two diverse morphological features: the caldera of Mount Somma and the Gran Cono (large cone) of Vesuvius. These locations are also highly diverse from a natural point of view: the Somma's more humid hillside hosts mixed forests, while the drier



YEAR OF DESIGNATION

1997

AREA

13.550 ha terrestrial

COORDINATOR

Ente Parco Nazionale
del Vesuvio

Vesuvian hillside has been partially re-forested and is partly composed of xeric maquis scrublands. Despite its man-made background, the Biosphere Reserve fosters diverse wildlife communities including both bats and various species of birds.

MISSION

The mission of the Biosphere Reserve is a radical inversion of the dynamics of the area, where the cultural and natural values of the volcano complex and of the Miglio d'Oro will become the focus of long-term development of the area. In this way activities aiming to conserve its natural resources will allow for the refurbishment of its existing green areas. Likewise, long-term development policies favouring lawful best practices will foster an improvement of the social and cultural context of the area surrounding Vesuvius.



www.parcnazionalelvesuvio.it
protocollo@epnv.it



AGRI-FOOD CHAIN

Some examples

Vesuvian Piennolo
Tomato PDO
Vesuvian apricot
PGI
Lacriam Christi
PDO (wine)
San Sebastiano bread
Traditional Product
Cento Giorni pea
Slow Food Presidia

Biosphere Reserve Ticino Val Grande Verbano



Sacri Monti of Piedmont
and Lombardy



Prehistoric Pile Dwellings
around the Alps



UNESCO
Global Geoparks
Sesia-Val Grande



YEAR OF DESIGNATION

2002 extended in 2018

AREA

151.597 ha terrestrial

COORDINATOR

Parco Lombardo
della Valle del Ticino

The *Ticino Val Grande Verbano* Biosphere Reserve, was designated in 2018 when the original *Valle del Ticino* (2002) reserve was enlarged, it now includes the Ticino Parks of Lombardy and Piedmont, as well as Lake Maggiore, the National Park of the Val Grande, and the Regional Park Campo dei Fiori. The Biosphere Reserve has great urban and rural biodiversity with areas of key significance thanks to their unique history and culture including its stunning water meadows. In addition, these areas have great tourist appeal.

BIODIVERSITY

The area houses 19 parks and reserves and 48 Natura 2000 sites also hosts a vast mix of environments. There are both peri-fluvial zones in the lowlands and the mountain and alpine environments which foster significant water-courses and river basins. The Biosphere offers great diversity in its nature and landscapes with a wide number of habitats and species of significant importance to the

Community all demonstrating the fundamental and the irreplaceable role of the Biosphere Reserve in fostering the ecological connections between the Alps and the Apennines.

MISSION

The Biosphere Reserve's main aim is to forge strong connections between the Parks, integrating actions, generating ecological links to conserve biodiversity, ecosystems, landscapes, and implementing sustainable development in ways which can also be exported beyond its confines. Other aims include supporting cultural, educational and research projects especially those offering large-scale interconnection between the Alpine, Continental and Mediterranean bio-regions. Ideally one day the reserve will become an Italo-Swiss transboundary Biosphere Reserve.



www.parcoticino.it
direzione@parcoticino.it



AGRI-FOOD CHAIN

Some examples

Gorgonzola PDO
(cheese)
Grana Padano PDO
(cheese)
Piemonte Hazelnuts
PDO
Taleggio PDO (cheese)
Oltrepò Pavese POD
(wine)
Cureggio e Fontaneto
blond onion
Slow Food Presidia



Biosphere Reserve Isole di Toscana



YEAR OF DESIGNATION
2003

AREA
28.500 ha terrestrial
66.090 ha marine

COORDINATOR
Parco Nazionale
Arcipelago Toscano

The *Isole di Toscana* Biosphere Reserve is made of the territory of the National Park of the Tuscan Archipelago, the seven main islands and sea surrounding them: Gorgona, Capraia, Elba, Pianosa, Montecristo, Giglio and Giannutri. Each island preserves its own local production, historical monuments and precious biodiverse treasures. These natural environments contain countless examples of biological, geological and geomorphological diversity, with unique environmental features of the Mediterranean offering exceptional geodiversity.

BIODIVERSITY

The natural environments of the Biosphere Reserve are highly diverse: the vegetation is mainly Mediterranean and the flora includes a wealth of endemic species, with principle habitat types including evergreen forests and Sclerophyllous vegetation, pines and Maquis shrublands, chestnut forests and broad-leaved trees. Key fauna, especially

in terms of conservation, include the Audouin gull (*Larus audouinii*), the Scopoli shearwater (*Calonectris diomedea*) and the Yelkouan shearwater (*Puffinus yelkouan*). The marine environment has an intact biocoenosis, posidonia prairies and numerous species listed in the Bern Convention Appendix III.

MISSION

The Reserve preserves and enhances the historical, artistic and cultural heritage of the islands, and promotes the spread of environmental awareness and care for the natural world, especially when teaching young people. Together with local inhabitants the Biosphere Reserve supports tourism and the sustainable economic development of the Archipelago, while raising the profile and promoting typical products and local gastronomic traditions of the islands.



www.islepark.it
parco@islepark.it



AGRI-FOOD CHAIN

Some examples

Aleatico dell'Elba PDO (wine)
Ansonaco del Giglio PDO (wine)
Toscana Extra Virgin Olive PGI
Palamita Slow Food Presidia (fish)
Schiaccia briaca dell'Elba (cake)

Biosphere Reserve Selve costiere di Toscana



YEAR OF DESIGNATION
2004 extended in 2014

AREA
43.132 ha terrestrial
947 ha marine

COORDINATOR
Parco Regionale
di Migliarino San Rossore
Massaciuccoli

The *Selve Costiere di Toscana* Biosphere Reserve has an unusual landscape running along the coast and flanking agricultural, woodland and lowland wetlands moving uphill to mountain environments. These natural environments have been permanently altered over the centuries with reclaimed lowlands, hedges and channels, olive groves combined with dry stonewall terraces. The Biosphere area is also home to many historical monuments: aqueducts, Roman parishes and churches. It also houses the Pisa Charterhouse in Calci which contains the university's Natural History Museum.

BIODIVERSITY

The area holds Tertiary and Ice age relict species including the *Osmunda regalis*, *Drosera rotundifolia*, *Sphagnum* spp. The area's uncontaminated dunes and extensive open wetlands, along with forests (meso hydrophyte forests, but also man-made chestnut and pine forests) are vital for the extremely rare birds which come here both to nest and in migration.

As a result, these lands offer vital ecosystem services for agriculture, forestry and tourism. There is also a great deal of scientific research in the area since the Biosphere is home to three universities.

MISSION

The aims of the Selve Costiere di Toscana Biosphere Reserve include the revitalization of natural forestry and local supply chains as well as that of reinforcing the ecological corridors between its three core areas (Mount Pisano, Livorno hills and the Park of Migliarino San Rossore Massaciuccoli). The Biosphere will also pursue the development of itineraries on foot, on horseback, and by bicycle, liaising with local tourist institutions in order attract visitors and further develop sustainable quality tourism.



www.parcosanrossore.org
direttore@sanrossore.toscana.it



AGRI-FOOD CHAIN

Some examples

Monti Pisani Extra vergine olive oli PGI
Pisan Piattella (bean)
Pine seed
Beach honey



Biosphere Reserve Monviso

transboundary Ita-Fra



Residences of the
Royal House of Savoy

In 2014, at the heart of the Cottian Alps between the Haute-Alps, and the Alps of Haute Provence and Piedmont, the Park of Monviso and the Park of Queyras endorsed a Transboundary Biosphere Reserve between Italy and France. The territory covers 400.000 ha, with 300.000 inhabitants living between 88 Italian and 21 French Municipalities. It includes 4 UNESCO WHS sites: the Castles of Racconigi and Pollenzo, the city of Briançon and the Fort of Mount-Dauphin. In 2018, The Biosphere organized the UNESCO MAB Monviso Youth Camp for teenagers from both France and Italy.

BIODIVERSITY

The environments in the Biosphere Reserve range from the high mountain settings to the valleys around the Monviso area and down to the plains. The area hosts a multitude of different natural areas, from forests to grasslands to permanent meadows, rocky formations and aquatic environments. Nearly one thousand plant species



YEAR OF DESIGNATION
2013

AREA
199.581 ha terrestrial

COORDINATOR
Parco del Monviso

and more than a hundred animal species populate the area between the Monviso and the Po River, with some endemic species such as the Lanza alpine salamander (*Salamandra lanzai*).

MISSION

The Monviso Biosphere Reserve favours the conservation of biodiversity and ecosystems, promoting cross-border governance, which allows for greater involvement of economic and social actors in the management and promotion of the Biosphere Reserve. The Monviso Biosphere Reserve raises awareness with local inhabitants showcasing the aims of the MAB programme and UN SDG's with a view to encouraging local involvement in projects aiming to meet these objectives.



www.monviso.eu
info@parcodelpocni.it



AGRI-FOOD CHAIN

Some examples

Piemontese cow Slow Food Presidia (meat)
Saluzzo white chicken Slow Food Presidia (meat)
Bra PDO (cheese), Piemontese Toma PDO (cheese)
Ancient apple of Piemonte Slow Food Presidia
High Mountain honey Slow Food Presidia
Langhe PDO (wine)
Barolo PDO (wine)

Biosphere Reserve Sila



YEAR OF DESIGNATION
2014

AREA
357.294 ha terrestrial

COORDINATOR
Fondazione Riserva Area MAB Sila

The Sila Biosphere Reserve in Calabria includes the Sila National Park within its boundaries. Over 386 thousand inhabitants live in the 66 Municipalities of the Biosphere Reserve. This national treasure hosts many stunning ecosystems where the geological and geomorphological features of the area add to create a series of outstanding landscapes. The area offers a broad range of diverse natural environments, each with different microclimates, so as to offer great biodiversity which is significant for the whole biogeographic Mediterranean region.

BIODIVERSITY

One of the strongest features of the Sila Biosphere Reserve is its relative abundance of water thanks to the extraordinary presence of its ancient forests, all of which offer great biodiversity in terms of their flora for example with pines like the *Pinus nigra laricio*. These forests are the source of the area's forest-based supply chain, which is rich in tradition, so that these same forests are also interspersed with land which has

been used for livestock and animal husbandry over the course of thousands of years. Animal biodiversity accounts for 175 autochthonous vertebrates including various species of mammals, birds, amphibians, reptiles and fish.

MISSION

The Sila Biosphere Reserve aims to encourage the active involvement of all those living and working within its territory, implementing its policy to foster the extraordinary opportunities afforded by the socio-economic development of its designated MAB status. The Biosphere plans to favour concrete development in the area, offering new guidelines in order to closely follow local needs, as well as applying any changes required by the dynamics of its local job market. What is more, it aims to create new and varied projects to encourage the flow of more visitors.



www.biosfere.eu
info@parcosila.it



AGRI-FOOD CHAIN

Some examples

Sila Potato, PGI
Calabria soppressata PDO (meat)
Caciocavallo, PDO (cheese)
Podolica Calabrese Cow Slow Food Presidia (meat)
Crotonese Pecorino PDO (cheese)
Clemantina of Calabria PGI



Biosphere Reserve Appennino Tosco-Emiliano



YEAR OF DESIGNATION
2015

AREA
223.229 ha terrestrial

COORDINATOR
Parco Nazionale
Appennino Tosco-Emiliano

The Biosphere Reserve includes the National Park of Appennino Tosco – Emiliano extending north and south along the regional border between Emilia and Tuscany and reaching up into the hills around of Parma, Reggio Emilia, Modena, Massa and Lucca, in an area that includes 34 municipalities. It crosses the climatic border between continental Europe and the Mediterranean and has a remarkable geological heritage thanks to its geographical location which has shaped its unusual ecology and culture.

BIODIVERSITY

The various different climatic zones result in great biodiversity creating ideal environments for high quality farming. The Reserve's diverse areas include a National Park, two Regional Parks and Regional and National Reserves with 22 Natura 2000 sites. Examples of Italian biodiversity are plentiful, including over 2000 rare and endemic species of which 122 are protected and living within its borders. The terrain varies greatly with woods, fields,

settlements, pastures, lakes, wetlands, torrents and rocky climbs and outcrops all of which fit into in a relatively small area, with altitudes reaching from 2120 MASL (Mount Cusna) to 60 MASL (Lunigiana).

MISSION

The Reserve aims to reinforce a sense of belonging for local people. So the young will be empowered with skills to encourage sustainable development, and also discouraged from moving away. Awareness-raising will teach local communities the importance of natural and cultural traditions showing the potential of this Reserve. Finally, promoting sustainable, quality agriculture, along with education on the environment and experiential tourism, sustainable economic growth will help people protect the ecosystems of the reserve.



www.mabappennino.it
info@parcoappennino.it



AGRI-FOOD CHAIN

Some examples

Parmigiano Reggiano PDO (cheese)
Parma ham, PDO (meat)
Garfagnana spelled, PDO
Lunigiana Honey, PDO
Tuscan pecorino, PDO
Tuscan extra Virgin olive Oil, PDO
Reggio Emilia Balsamic Vinegar, PDO
Chesnut flower, PDO
Lambrusco, PDO (wine)

Biosphere Reserve Alpi Ledrensi e Judicaria



YEAR OF DESIGNATION
2015

AREA
47.427 ha terrestrial

COORDINATOR
Consorzio dei Comuni BIM
Sarca Mincio Garda



The Dolomites



Prehistoric Pile Dwellings
around the Alps



UNESCO
Global Geoparks
Adamello Brenta

A variety of interesting elements co-exist in the terrain of this small-scale Biosphere Reserve, with features typical of both the Mediterranean and the Alps; the varied landscape ranges from the Ledro and Garda Lakes to the UNESCO WHS Dolomites and the Adamello Brenta Geopark. There are also plenty of castles, holy buildings and the prehistoric WHS stilt-house settlements which distinguish this territory. The local tradition-based communities are happy to explore innovative, sustainable solutions to enhance the social, economic and cultural development of this area.

BIODIVERSITY

There are 32 Natura 2000 habitats, several of high forest value, all characterizing the important natural wealth of the area. Flora censuses have revealed roughly 1600 plant species, of which 33 are endemic in one of the greatest concentrations in the Alps. This multiplicity of habitats –enforced by the significant presence of forests and low

urbanization– favours key species such as the bear, the wolf and the lynx. In Autumn this territory offers a key passage through the Alps for migrating birds since it stands between alpine and pre-alpine zones.

MISSION

For centuries communities inhabiting this territory have practiced a balanced, collective and responsible management of natural resources; today locals are willing to undertake economic activities that are sustainable both from the social point of view and in terms of the environment. The Biosphere Reserve focuses on fostering the development of sustainable tourism together with co-ordinated actions liaising between the many UNESCO sites encompassed in the territory of this Biosphere Reserve (2 World Heritage Sites and a Global Geopark) and enhancing network actions among Biosphere Reserves.



www.mabalpiledrensijudicaria.tn.it
mabunesco@bimsarca.tn.it



AGRI-FOOD CHAIN

Some examples

Garda Extra Virgin Olive Oil PDO
Spresa delle Giudicarie, PDO (cheese)
Bleggio walnuts Slow Food Presidia
Ciuga del Banale Slow Food Presidia (meat)
Carne salada Traditional product (meat)
Storo corn flour Traditional product

Biosphere Reserve Delta del Po



Ferrara, City of the Renaissance
and its Po Delta

The **Delta del Po Biosphere Reserve** was chosen as the setting for the first ever MAB Youth Forum in 2017. The Delta is the result of the river's action, which during centuries has sedimented at its mouth, leading to the progressive advancement of the coastline while alongside the work of the local community –which modified the water course– created a complex lagoon system. Such processes have led to strong genetic species and a richly diverse ecosystem. The Po Delta is a paradise for birds, fish and molluscs, as well as for the human activities which make the Po Delta famous for its strong traditions.

BIODIVERSITY

In terms of its biodiversity the rich variety of the Po Delta hosts over 370 bird species, of which 90 are listed in *Annex I. Dir. Birds*, 3 species of reptiles, 2 species of amphibians, 10 species of fish, 1 species of mammal and 1 species of plant as seen in *Annex II of the EU Habitats Directive*.



YEAR OF DESIGNATION
2015

AREA
139.398 ha terrestrial

COORDINATOR
Parco Regionale Veneto
del Delta del Po

In terms of genetic diversity, it is home to three endemic species including the Mesola Deer, which are recognised as a genetically distinct species from other red deer populations present in Europe.

MISSION

The Delta del Po Biosphere Reserve aims for sustainable development which is closely linked to nature, this includes the evaluation of ecosystem services and the production of renewable energy. The Delta del Po Biosphere Reserve, also hopes to promote environmental certification for products, territory and slow tourism as a way of life, as well as encouraging tourism. Another targeted aim is that of promoting specific activities, recognized to be of great importance to biodiversity, such as lagoon fish farming and rice cultivation.



www.biosferadeltapo.org
ufficiomab@parcodeltapo.org



AGRI-FOOD CHAIN

Some examples

Scardovari mussel
PDO
Polesano white garlic
PDO
Voghera garlic PDO
Delta Po rice PGI
Marinate eel
Slow Food Presidia

Biosphere Reserve Collina Po



Residences of the
Royal House of Savoy



YEAR OF DESIGNATION
2016

AREA
171.234 ha terrestrial

COORDINATOR
Aree Protette del Po e
della Collina Torinese

The **Collina Po Biosphere Reserve** which was set up in March 2016 is Italy's first urban Biosphere. Within its confines it also contains the city of Turin with over 1.5 million inhabitants. This area, once famed for its strong industrial links, has in recent years begun to lean more heavily towards cultural tourism and research. The River Po and the Collina Torinese hillside area are two of the key natural features of this Biosphere Reserve containing 14 core areas together with their respective landscapes.

BIODIVERSITY

The area holds 14 habitats of key importance to the Community 3 of which are priority and strongly linked to its river and hill environments. In the Biosphere Reserve there are 265 species named in the EU Habitat Directive including various types of invertebrates, amphibians, fish, reptiles, birds and mammals. Among these there are subspecies endemic to the Padan Plain which are of key

importance, such as the following species of toads, newts and eels, *Pelobates fuscus ssp Insubricus*, *Triturus carnifex*, *Anguilla Anguilla*, respectively, as well as the recent return to the hills of the grey wolves, *Canis lupus*.

MISSION

The idea envisioned by the MAB Programme is to tighten the relationship between the city and its surrounding rural/natural areas, as a result the aim of this Biosphere is to create of a sustainability laboratory able to fulfill the Biosphere Reserve's three main functions. The Plan of action for the Biosphere aims to cover the following 5 areas: sustainable development, territorial cooperation, economic sustainability, communication and governance.



www.areeprotettepotorinese.it
info@parcopocollina.to.it



AGRI-FOOD CHAIN

Some examples

Alpin chocolates,
Torinese traditional
pastry
Tomino (cheese)
Canavese Nebbiolo
PDO (wine)
Po valley
traditional rice.



Biosphere Reserve Tepilora, Rio Posada e Montalbo



Located in the North East Sardinia, *Tepilora Rio Posada e Montalbo* Biosphere Reserve covers a total surface area of over 140,000 ha, with mountain areas of different geological origins (from the Montalbo to Tepilora Mount, to the Alà mountains and to Nieddu Mount), a flat strip, rivers, delta and coastal areas. The Biosphere Reserve also contains 17 municipalities and has a resident population of 50 000 inhabitants, which multiplies fivefold during the summer season mainly in the coastal areas.

BIODIVERSITY

With its high level of endemic species, Sardinia is one of the main biodiversity hotspots of the Mediterranean. There are 183 endemic plants, exclusive to the island and 91 endemic plants in the Sardinian-Corsican-Tuscan Archipelago biogeographic province. What is more, 121 taxonomic species of the Sardinian flora are endangered, according to IUCN criteria or are included in lists needing special attention. The Biosphere Reserve is home to mouflons



YEAR OF DESIGNATION
2017

AREA
165.173 ha terrestrial

COORDINATOR
Parco Regionale
di Tepilora

(*Ovis musimom*), wildcats (*Felis silvestris lybica sarda*), Sardinian partridges (*Alectoris barbara*), Sardinian hares (*Lepus capensis mediterraneus*), pine martens (*Martes martes latinorum*), western or purple swamp hen (*Porphyrio porphyrio*) and wild boars (*Sus scrofa*).

MISSION

The Reserve's mission is to protect and enhance the culture of Sardinia –and more specifically the culture of the Barbagia and Baronie areas embraced by the Biosphere Reserve– a culture which stems from the profound ties between man and nature. In some ways, the territory of the Biosphere Reserve embodies the recent radical changes in the relationship between the coast and the interior of the island. There is a quest for balance between the hinterland and the coast both due to human presence and to all those spheres that have shaped the Sardinian culture and landscape.



www.parcotepilora.it
info@parcotepilora.it



AGRI-FOOD CHAIN

Some examples

Pecorino Sardo
PDO (cheese)
Fiore Sardo
PDO (cheese)
Sardinian extra virgin
olive oil, PDO
Pompia (citrus)
Slow Food Presidia
Casizolu sheep
Traditional Product
(meat)

Biosphere Reserve Monte Peglia



YEAR OF DESIGNATION
2018

AREA
42.342 ha terrestrial

COORDINATOR
Associazione
Monte Peglia

The *Monte Peglia* Biosphere Reserve (837 m) is located in Umbria, between two hydrographic corridors: the Chiani-Paglia and the Tiber. Core areas in this biosphere host both rare species and great meso-mediterranean biocenoses. The fauna and flora, paleontological, geological, prehistoric, archaeological and historical sites are all particularly interesting. In its buffer and transition zones, the local agricultural activities take advantage of broad range of natural resources. The Biosphere Reserve population is relatively low as a result of an aging population which has abandoned some of its rural areas.

BIODIVERSITY

The complexity of ecosystems and landscapes reflect the relatively high altitude and steep gradient of the land. A wealth of azonal elements and a dense hydrographic network characterize the area. The forest shows significant biocenoses and there are also many key predators including the wolf, the

wild cat, the eagle-owl, and the short-toed eagle as well as the brown trout in rivers which support and regulate its well-structured trophic networks.

MISSION

Encouraging the return of more people to Monte Peglia area and enhancing socio-ecological biodiversity by developing small rural family enterprises are key missions for the Monte Peglia Biosphere. SMEs active in the area are motivated to the environmental protection and recognize ecosystem services. These SMEs combine well with eco-agritourism and can be involved in a monitoring network for socio-ecological resilience to global changes which can act as a bridge between national and international Biosphere Reserves.



www.montepegliaperunesco.it
montepegliaperunesco@yahoo.it



AGRI-FOOD CHAIN

Some examples

Colli Orvietani Extra
virgin olive oil, PDO
Secondo del Piano
bean, Slow Food
Presidia
Easter Crescia
Traditional Product
(cake)



Biosphere Reserve Valle Camonica Alto Sebino



Rock Drawings
in Valcamonica

The *Valle Camonica - Alto Sebino Biosphere Reserve* extends across 1360 km² with 45 Municipalities of Valcamonica and the upper region of the Iseo Lake. Within its confines the Biosphere also contains Italy's first UNESCO World Heritage site with the *Rock Drawings of Valcamonica* which gained heritage status in 1979. The exceptional mixture of diverse landscapes ranges from the Adamello glacier to the Mediterranean settings of the Sebino.

BIODIVERSITY

The Biosphere Reserve offers extraordinary biodiversity from its flora, which accounts for over 2200 species, to its fauna, which populates the area with numerous rare and endemic species including the wolf, the bear, the golden eagle and the Western Capercaillie wood grouse. A network of 34 protected areas, which overall comprise the 60% of the Biosphere Reserve, enjoys the riches of this outstanding biodiversity. These are 19 Special Areas of Conservation (SAC) and 6 Special



YEAR OF DESIGNATION

2018

AREA

136.565 ha terrestrial

COORDINATOR

Comunità Montana
Valle Camonica

Protection Areas (SPA), which have been awarded this title by the European Union as part of the Natura 2000 Network.

MISSION

The main aims of the Biosphere Reserve include strengthening the concept of the reserve beyond the confines of its local communities, also stimulating and enhancing internal management skills and aiming to launch concrete sustainable development of the area. Being named as a Biosphere Reserve has led to the recognition, protection and enhancement of diverse features of the biological diversity and of the local identities as a guarantee for long-term sustainable development able to favour communication between different places, and cultures and the protection of varied species.



www.cmvallecamonica.bs.it
presidente@cmvallecamonica.bs.it



AGRI-FOOD CHAIN

Some examples

Silter PDO (cheese)
Valcamonica wine PGI
Lombardi lake extra virgin olive oil PDO
Valsaviore Fatuli Presidio Slow Food (cheese)

Biosphere Reserve Alpi Giulie Italiane



AREA

71.451 ha terrestrial

COORDINATOR

Ente parco naturale
delle Prealpi Giulie

The *Alpi Giulie Italiane* are in the Northeast mountain area of the Friuli Venezia Giulia, on the border with Slovenia. This area has been now nominated to become a Biosphere Reserve. Its terrain starts from the lowlands of the Tagliamento River and rises up to the 2.700 MASL of the Montasio Jôf, crossing both pre-alpine and alpine areas. The communities of this area inhabit three cultural areas with Latin, Slavic and German culture, so that a key feature of this area are its linguistic minority groups who are still working to preserve their language and traditions.

BIODIVERSITY

Given its biogeographical position and elevated height the high levels of snow and rainfall result in a unique richness of species for both fauna and flora. Flora censuses in the area have revealed over 14000 species, including over 60 rare or endemic species; wildlife species here are no less important and there are bears and lynxes as well

as over 120 nesting bird species, including both the golden eagle and the griffon vulture.

MISSION

The principal purpose of the area now nominated to join the MAB Programme is to enhance the management model of the area, which today is based on deeply rooted local communities and their low impact environmental activities. Over the centuries such practices have aided the conservation of the great natural resources and landscape of the area. Engaging young people in its "Youth council for the Biosphere Reserve" will play a central role in meeting this aim.



www.parcoprealpigiulie.it
info@parcoprealpigiulie.it



AGRI-FOOD CHAIN

Some examples

Malga cheese
Goat cheese
Resia garlic
Resia corn
Fiorina Bean
Malga smoked (ricotta)



Biosphere Reserve Po Grande



AREA
286.600 ha terrestrial

COORDINATOR
Autorità di bacino
distrettuale del Fiume Po

The *Po Grande* area has recently been proposed as a Biosphere Reserve and stretches out over an area of 2866 km², in the central lowland on either side of Po River across 3 Italian Regions, 8 Provinces and including 85 Municipalities. The Po River has long been recognised as a common force for good, often playing a key role in the history and culture of the people living by the Po, uniting local communities, sometimes even in spite of their quite diverse identities. The landscape surrounding of the proposed area for Biosphere Reserve is typical of for riverside plains, stretching across a wetland area which serves mostly for agricultural purposes.

BIODIVERSITY

The area includes 25 Natura 2000 sites, with 13 significant habitats of Community importance, 2 of which are deemed high priority for conservation, these mainly have vegetation typical to lowland wetlands. The area also supports 232 bird species, 36 mammal species, 24 fish species, 10 amphibian species, 11

reptile species, 70 invertebrate species and 77 plant species all of which are included in the EU Habitat and Birds Directive on Habitat and Birds or are of great national importance.

MISSION

The proposed area hopes to heighten the conservation of species and habitats both for water-based and land-based ecosystems, and will also implement tools to promote circular economy, slow tourism and bike mobility. These chosen aims also include optimising sustainability, especially in the food industry and for poplar crops, as well as using quarrying methods aimed at environmental mitigation and betterment. It is also vital to discourage poaching and illegal fishing activities by developing centres dedicated to education on sustainable practices.



www.pogrande.it
segr-gen@adbpo.it



AGRI-FOOD CHAIN

Some examples

Modena baslamic
vinager PGI
Culatello di Zibello
PDO (meat)
Grana Padano
PDO (cheese)
Lambrusco Mantovano
PDO (wine)
Mortadella Bologna
PGI (meat)
Parmigiano-Reggiano
PDO (cheese)
Salame Piacentino
PDO (meat)
Zampone Modena
PGI (meat)

**Italian MAB UNESCO
Biosphere Reserves**
A rising network

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