



NATURA 2000 ITALIA

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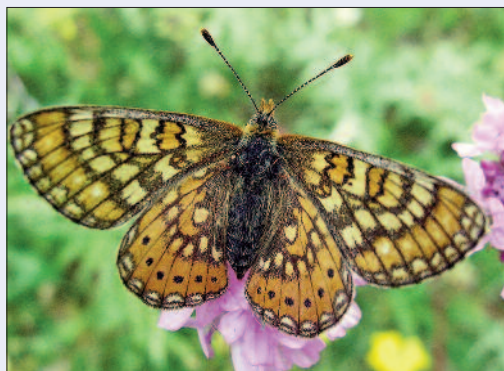
The "fitness check" exercise, a comprehensive assessment of Directives which started late in 2014 involving the Commission, the Member States and all European "stakeholders", ended in early December 2016 with the decision made by the College of Commissioners not to proceed with the revision/recast of the Habitats and Birds Directives, but rather to proceed with the definition of an Action Plan that will cover a set of concrete measures and

that the Member States in concert with "Stakeholders" are expected to develop, in pursuit of better Directive implementation. The fitness check's most relevant criticality lies in the incomplete implementation of the sectoral legislation and in the need for higher coherence with other socio-economic policies. Inadequate management, insufficient resources for the Natura 2000 network, and multiple local inefficiencies were identified as some of the causes responsible for the present situation, and for this reason, among other things, the Committee of the Regions will be directly involved in the follow up.

As we know, Italy is still committed to designating process of the Special Areas of Conservation (SACs), for which the Commission has launched a formal infringement procedure 2015/2163 in October 2015. The meeting with the Commission held in June 2016 helped to draft an early picture of the state of play of the ongoing process, that was updated on a regular basis in the following months – see table on page 8 – and more specifically to focus on the central goals-setting task, being a prerequisite for the definition of the conservation

measures. The present issue of our Newsletter describes where the Commission stands on this subject and also provides an overview of the ongoing activities resulting from the implementation of the Natura 2000 Network.

Monitoring is another key priority in terms of conservation objectives and measures. To pursue fine-tuning in the coordinated data collection, management and exchange process, started in preparation for the 3rd National Report under Art. 17 of the Habitats Directive, and later submitted to the Commission in December 2013, the Ministry instructed ISPRA in cooperation with all regional biodiversity network entities to report on the monitoring requi-



Euphydryas aurinia, a Lepidopteran of Community interest.
Photo by S. Sarrocco

rements. The present issue of our Newsletter describes where the Commission stands on this subject and also provides an overview of the ongoing activities resulting from the implementation of the Natura 2000 Network.

red for all flora and fauna species and for all land and freshwater habitats relevant for the EU Community as shown in the Habitats Directive's annexes. The present Newsletter issue covers the content of the three Monitoring HandBooks in greater detail.

The three Monitoring HandBooks briefly describe the monitoring techniques and protocols applicable to the 215 animal species (62 invertebrates, 30 freshwater fish, 71 amphibians and reptiles and 52 mammals), 118 flora species (107 vascular plants, 10 bryophytes, 1 lichen) and 124 habitats (21 coastal dune habitats, 15 freshwater habitats, 16

shrubs and scrub, 15 grasslands, 8 peat bogs and marshes, 10 rocky habitats, 39 forest habitats) reported in Italy that are relevant for the EU Community.

In terms of monitoring, the present issue of the Newsletter features an interesting contribution provided by the Lazio Region in particular the article pointing to the need for further improvement in monitoring and offers suggestions on specific issues.



The completion of Natura 2000 Network activities with the identification of new marine sites, is a top priority on the agenda of Regions and the Ministry of Environment (MoE). Photo by E. Calvario

A second “grass-root” voice to be heard is the one coming from the Marine Protected Area of Ustica, which fits into the picture of Natura 2000 marine sites to be completed, and more importantly illustrates the interaction between Habitats Directive forecasts and regulatory and management instruments for national protected areas. The article explains how a truly cultural revolution was brought about leading moni-

toring authorities to become aware of the need to monitor and safeguard both communities and systems hitherto treated in isolation, shifting the focus of protection away from the single “flagship” species or away from the boundaries of the single protected area, towards a more modern, fair and environmentally-correct protection of the ecosystem that is finally looked at from a “habitat” and “species” perspective. ■



A number of Natura 2000 Network sites host forestry typologies that represent habitats and species habitats of Community interest, whose management requires forestry harmonization and evaluation also in relation to phytoceonosis and local species' ecological needs. Photo by S. Sarocco

Monitoring guidelines

On 19 and 20 October 2016, the Central Aquarium of Rome was the backdrop to the presentation to the public of the Monitoring Guidelines Manuals for habitats, animal and plant species existing in Italy.

The Habitats Directive (Art. 17) provides that the Member States comply with a set of obligations related to the analysis of the conservation status of all animal and plant species and habitats listed in the European legislation, to the evaluation of population trends and to the monitoring of threat factors that might affect future developments. Such an analysis aims not only at providing a picture of biodiversity state of health and forecasting future trends but, more importantly, at evaluating the effectiveness of conservation and protection measures enforced by a number of European countries. Consequently the above analysis serves the purpose of monitoring the appropriate use of resources allocated to the Natura 2000 network.

The legislation provides that monitoring should be carried out both inside and outside of the Natura 2000 network sites and as such this task proves to be particularly onerous for Italy both on the grounds that habitats and species are extremely abundant, mainly due to Italy's bio-geographic location and climate, and that economic resources are limited in this area.

Italy boasts some 58 000 animal species (see Fauna Europea database, www.fauna-eu.org) out of which approximately 55 000 invertebrates, 1 812 Protozoa and 1258 vertebrates (almost 2% of the total amount), accounting for the largest wildlife habitat in Europe

and this, together with the high number of plant species and habitats, represents a major asset for the community which sees the enhancement of eco-system service benefits which we all depend upon, both as they provide the basic elements for our lives, like clean air, clean water, shade and coolness, and because natural ecosystems in good health are the basis upon which essential human activities, such as farming, fishing and forestry, depend.

Given the overall scenario we are faced with in Italy since the publication of the 3rd Report on EU habitats and species conservation status (also under art.17 of the Habitats Directive), a number of constraints have emerged in the national data collection exercise, as reported by local Administrations responsible for monitoring (i.e. Regions and autonomous Provinces), reportedly one of the most relevant constraints lies in the lack of standardization in the sampling techniques applied in the different national contexts, which jeopardizes data comparability both on a geographical and temporal scale.

To fix this problem and to ensure greater standardization in terms of data collection methods in preparation for the 4th Habitats Directive Report to be submitted to the EU in 2018, the Ministry of Environment and ISPRA undertook to publish three monitoring manuals gathering some 489 monitoring reports concerning the total habitats, animal and plant species to be protected under the Directive (the three manuals

are downloadable in www.isprambiente.gov.it/it/servizi-perlambiente/direttiva_habitat/).

The key added value of this important initiative lies in the fact that the contents of the three manuals have been published thanks to the contribution of seven major national scientific societies (Società Italiana Scienza della Vegetazione, Società Botanica Italiana, Unione Zoologica Italiana, Comitato Scientifico per la Fauna d'Italia, Associazione Teriologica Italiana, Societas Herpetologica Italica, Associazione Italiana Ittiologi delle Acque Dolci) whose experts from the various taxonomic and habitats groups valuably contributed to the publication.

In addition, each report describing key data collection techniques and protocols was supervised by the Regions and the Autonomous Provinces, responsible for monitoring activities, who in turn provided feedback and peer-to-peer reviews aimed at ensuring applicability of reporting techniques.

Ensuring communication efficiency is key to providing the technical and scientific knowhow and knowledge required to adequately assist habitats and species monitoring and to carry out protection activities. The progress made in recent years is promising since it shows that by enhancing collaboration and communication between stakeholders it is possible to achieve information optimization and improve conservation efficacy.

Nonetheless, the time has come for Italy to make a quantum leap and produce a national monitoring scheme to ensure proper integration of the various data collection initiatives undertaken under the Habitats Directive



with those falling under other Community instruments, such as the Marine Strategy, the Water Framework Directive and, in particular, the Birds Directive.

As to the latter, coordination is already in place ensuring interval standardization and reporting formats and is currently being enhanced with the identification of a single methodological approach to be adopted in drafting the Report. Similarly to data collection aimed at supporting Habitats Directive reporting (under art. 17), birds data collection as well (under art 12 of the Birds Directive) is entrusted to ornithological reporting services run by either public (e.g. Regional Administrations, Autonomous Provinces, park authorities, Natura 2000 network managing authority, research bodies and universities) or private entities, as well as non-governmental organizations NGOs (i.e. conservation, scientific and voluntary associations).

What is also to be stressed is that to fully comply with periodic technical reporting requirements provided for under the Habitats and the Birds Directives, the route ahead still needs to be improved. In this regard, the most urgent criticality is the lack of a clear guidance for “Favorable Reference Values” (FRVs) parameter which constitutes an essential element for assessing the conservation status of species and habitats. Such values are currently at the subject of a complex technical debate.

In this regard, out of the four parameters assumed to reveal species’ status of conservation (i.e. range, population, species habitat and future outlook), the first two are particularly instrumental in being expressed quantitatively, and their monitoring should also be designed to trigger a correlation between recorded data and reference values, the latter being the values whereby the species fall in line with the “Favorable Conservation Status” (FCS).

In particular, “range” and “population” Favorable Conservation Values (FCVs) shall represent the quantitatively expressed objectives to be achieved for each species. In terms of definition, it should be noted that unlike Red Lists, the Directive’ s objectives are not confined to rule out the risk of extinction, but are designed to strike a favorable balance that shall be defined, achieved and maintained.

Favorable Reference Values (FRVs) are therefore key parameters upon which the FCS assessment shall rely, but they are far from being explicitly defined in the Directive itself and in the latest reporting stage, Member States interpretation was highly controversial. To clarify the FRV concept and to agree on methodologies and guidelines, the European Commission (EC) appointed an ad hoc working group composed of representatives from the DG Environment and

from the European Environment Agency (EEA), a number of experts from a scientific consortium responsible for testing new methods applied to FRVs, and representatives from single Member Countries. To assist the Italian team, members from the scientific societies involved in the reporting sit on the ad hoc working group.

It is therefore essential at this stage to make the next step, moving from data gathering and optimization to resource allocation based on data collection, thus providing for a balanced time frame for the planning of sampling activities, that is higher than two reporting cycles. ISPRA is prepared to play a central role and to commit its resources to ensure an ongoing dialogue between research institutes, Ministry of Environment and the Regions and the Autonomous Provinces, thus strengthening the collaboration achieved over the years with research institutes and conservation bodies.

The Manuals at a glance

Animal Species

The Animal Manual features 151 reporting sheets that briefly outline monitoring techniques and protocols for all 215 species relevant for the EC which are reported in Italy (62 invertebrates, 30 freshwater fish, 71 amphibians and reptiles and 52 mammals). All reporting sheets are mo-



Coenagrion mercuriale, dragonfly of Annex II which lives in relatively stable running waters, such as streams, springs and karst springs, swamps, peat bogs up to 700 m of altitude.

Photo by S. Sarrocco



Typical Alpine mountain characterized by rupicolous environments, gravel beds and high mountain grasslands that represent the habitat of choice for numerous flora and fauna species of Community interest. Photo by E. Calvario

nitored and scrutinized for revision by experts from the Regions and from the Autonomous Provinces, who pursuant to the Habitats Directive are responsible for monitoring, whereas ISPRA is given the mandate to facilitate coordination with the Ministry of Environment. Data reported are as follows:

Chorotype. The chorotype is the value that is the most consistent with the CKmap database. Further details can be used for endemic species.

Taxonomy and distribution. Species taxonomy and geographic distribution issues are reported with specific reference to the Italian landscape.

Ecology. Ecological preferences and primarily used habitats are reported with particular reference to useful phonologic indications for monitoring purposes.

Criticalities and impacts. Brief description of major present and future risk factors for each species.

Monitoring techniques. Brief introduction to preferred and tested (with few exceptions) monitoring techniques applied to Italian species. Techniques have a tentative nature as the different environments found in the Italian landscape can call for adjustments in the methodology applied at regional level.

Estimation of the demographic parameter. Methodological indications for reporting population consistency through semi-quantitative estimations and values.

Estimation of the species habitat quality. Indication of the principal parameters to take into account in the evaluation of the species habitat quality.

Operational recommendations. A brief description of the resources to be allocated to the monitoring activities: monitoring frequency and deadlines during the year; number of working days in a year and approximate number of people required for each publication; number of monitoring activities to be carried out over the six years intervening between the two reporting activities (pursuant to art. 17 of the Habitats Directive).

http://www.isprambiente.gov.it/public_files/direttiva-habitat/Manuale-141-2016.pdf

Plant Species

The Plant Manual features 118 species and describes monitoring techniques and protocols covering the whole range of Italian plant species (107 vascular plants, 10 bryophytes and 1 lichen).

The conservation of plant diversity is a guarantee for future ecosystem safety and for the present survival of bacteria, fungi, animals and humans. Indeed, plants are the driving engine of ecosystems and, in the framework of constant climate and geomorphologic change, and also extensive land use by humans, current species variety and variability conservation is today the only viable solution to respond to future challenges. This Plant Manual constitutes a further step forward. It presents unpublished data and provides new definitions, innovative national classifications, species conservation monitoring protocols, in compliance with the Habitats Directive's requirements. Data reported are as follows:

Chorotype. The chorotype for endemic

species is taken from Peruzzi et al. (2014, 2015). The chorotype for foreign species is derived from Pignatti (1982) or from other sources specified.

Distribution in Italy. The Regions where species are reported and current and/or historical stations are indicated as part of species distribution in Italy.

Biology. Biological form, summary description and useful information to recognize and identify the species.

Ecology. Substrate, humidity, atmospheric and edaphic humidity conditions, altitude etc.

Reference Community. Short description of the reference plant community/ies for the species and syntaxonomy thereof (sources specified).

Criticalities and impacts. Short description of the major risk factors for the species.

Monitoring techniques. Introduction to the species monitoring, general framework, special features and practical instructions: features and criticality of in-field measurements, key priorities, preliminary surveys, optimum period, station accessibility, etc. As a general rule, it is recommended to achieve for each species and during each monitoring, an exhaustive collection of iconographic materials related to both the species and its habitat, but also an illustration of the specific monitoring operations carried out in the field.

Estimation of the population parameter. Methodological indications for reporting population consistency by means of estimations and/or evaluations.

Estimation of the habitat quality for



Photo by E. Calvario

the species. Indications of the key parameters to be taken into account when assessing the habitat quality and detection methodologies.

Operational guidelines. This section, focused on monitoring planning, features a summary of the allocation of resources required annually and over the six year period intervening between the two reporting cycles, in terms of working days and people employed. Note that the estimates given hereafter are based on monitoring activities carried out in an optimal environment by highly qualified staff provided with exhaustive knowledge of the places and the species involved.

Frequency and period. Number of monitoring efforts to be carried out annually and over the six year period and optimal season when such monitoring should take place. Estimation of the working days refers only to in-field activities, therefore they do not include data entry and subsequent analysis.

Minimum number of people to be employed. The indication refers

to the performance of each monitoring day. Note that for each monitoring cycle, which can be extended over several - even non continuing - days, the monitoring of priority activities, i.e. the count of people at work etc., should always be carried out by the same operator:

http://www.isprambiente.gov.it/public_files/direttiva-habitat/Ma_nuove-140-2016.pdf

Habitat

The Habitat Manual features 124 habitats and provides a short description of the monitoring techniques and protocols applicable to all typologies of natural habitats existing in Italy (21 Habitats and coastal dunes, 15 fresh water habitats, 16 bushes and scrubland, 15 grasslands, 8

peat moss and wetlands, 10 rocky habitats, 39 forest habitats). The added value of this work lies in the communication and collaboration network established between the entities concerned, key to establishing a virtuous relationship between technical and scientific knowhow on the one hand and species and habitats monitoring and conservation activities on the other. Data reported are as follows:

Description. The paragraph provides a short description of the habitat, with reference to other papers such as the European Handbook "Inter-

pretation Manual of European Union Habitats EUR-28" (European Commission 2013) and the Italian Manual for the Interpretation of the Habitats Directive 92/43/ECC

(<http://vnr.unipg.it/habitat/index.jsp>).

Criticalities and impact: This section describes known conservation criticalities and issues related to the Italian habitat. The effects of such pressure are reflected in the structure and function of the single ecosystem. The monitoring of natural habitats, therefore, is needed not only to provide information on the current conservation status and on future trends, but also to provide appropriate guidance to implement adequate operations.

Area covered by the habitat. To allow



Photo by F. Patacchiola

Conservation measures of sites related to agro-systems must also be driven by actions aimed at promoting conservation of natural elements such as hedges, rows, isolated trees, dry stone walls and sustainable use, both qualitatively and quantitatively, of pesticides.

any natural habitat to enjoy a favorable conservation status, the entire habitat area must be stable or “increasing”. It is therefore necessary to rely on an adequate cartographic scale in order to characterize habitats and to assess any change over time. Although the Habitats Directive does not mention what an ideal cartographic representation scale should be at habitats bio-geographic level, it was agreed that 1:10 000 is the reference cartographic scale which provides sufficient details. Therefore the paragraph mentions whether at that specific cartographic scale habitats can be recognized as an element of range, that is, as a minimum surface set at least at 400 m². When the habitat area does not cover that minimum surface, the cartographic map will refer to habitats as a point or linear elements.

Habitat Structure and functions. This section outlines the variables required to measure the “structure and functions” parameter, taking account of the European recommended guidelines. The parameter consists of a mandatory variable, i.e. the plant analysis variable, which can be monitored in combination with other variables in order to add on site-specific information. Each variable can be identified as a sub-paragraph.

Typical species. The definition of typical species is not mentioned in the Directive, however it is clear that given their role, typical species should be considered as reference indicators of the habitat quality. According to the Habitats Directive (art. 2), typical species should be monitored following the same methodologies applied to Annex 2 species. However, given the

considerable amount of work required by such monitoring exercise, the European guidelines only require a species shortlist upon which the habitat structure and function evaluation is based.

Monitoring techniques. This section describes data gathering techniques required in the previous sections for Area and Structure and Function parameters. The breaking down into similar sub-sections allows to identify at a glance the recommended monitoring techniques for each variable

Notes. This field allows to include relevant information that could not be entered in any previous sections; for example, reference to ongoing habitat monitoring projects.

http://www.isprambiente.gov.it/public_files/direttiva-habitat/Manuale-142-2016.pdf ■

National Rural Network project on “Natura 2000: Biodiversity and Natural Protected Areas”

On 16 July 2016 the Italian Ministry of Agriculture, Food and Forestry and CREA – Research Centre on Political and Bio-economy - in cooperation with the Ministry of Environment, Land and Sea Protection, within the framework of Natura 2000 and Biodiversity, and more specifically under the 2014-2020 National Rural Network (hereafter briefly described), convened a workshop in Rome on “2014-2020 Rural Development Programs, the Natura 2000 Network and biodiversity. Integration and synergies between the implementation of Rural Development Programs measures and Natura 2000 sites conservation measures”.

The workshop aimed at sharing opinions, analyzing and discussing the implementation of 2014-2020 Rural Development Programs that contribute to protecting, restoring and enhancing biodiversity, with particular reference to the Natura 2000 areas and the protected areas, but more importantly, the workshop provided the opportunity of engaging in a profitable exchange of best practices on integration and synergies between 2014-2020 RDPs implementation measures and Natura 2000 conservation measures.

The workshop was designed to engage 2014-2020 RDP Managing Authorities and officials, as well as Natura 2000 Managing Authorities and Regional officials in a public debate together with business and social stakeholders from the National Rural Network.

The items on the agenda proved particularly relevant given the start-up phase of the Rural Development Program and the need to complete the designation process of the Special Areas of Conservation (SACs) with the approval of the conservation measures for Natura 2000, also in compliance with the Regional Prioritized Action Framework (PAF).

The workshop was held within the framework of “Natura 2000 and Biodiversity”, under the auspices of CREA in cooperation with AGEA-SIN (Rural Funding Agency – National IT system for Rural Development), the Ministry of Environment, Land and Sea and World Wildlife Fund (WWF), and aimed at reinforcing multi-level “governance” and capacity building with central and regional administrations for the implementation of the Natura 2000 Network in support of 2014-2020 RDPs. The project involved a number of Work Programs (WP) as indicated below.

WP1- Support, coordination and animation

WP1 activities shall consist in providing support and coordination at central and regional levels to promote “governance” and to support the implementation of 2014-2020 RDP biodiversity measures, and of the Natura 2000 network, and to strengthen the management of natural protected areas. Of particular importance was the support needed to facilitate coordination of regional entities involved in the implementation of the Natura 2000 Network (Departments of Agriculture and of Environment) and to promote integration between existing programming and planning tools (2014/2020 RDPs, management plans for the Natura 2000 Network sites and natural protected areas, conservation measures, national action plans for sustainable use of plant protection products). The activities envisaged include specific animation and networking initiatives to promote participation from stakeholders and local players in the implementation of the Natura 2000 Network (economic, social and environmental partnership, managing authorities of the natural protected areas and 2000 Natura protected areas, etc.).

WP2- Analysis of the implementation of RDP biodiversity measures and of Natura 2000

WP2 intends to set up a working group which starting with the analysis of the implementation of funding measures favorable to biodiversity and of Natura 2000 2007/2013 RDP provisions, may provide Management Authorities with the support needed to improve implementation of biodiversity and Natura 2000 2014/2020 RDP measures.

WP3 – Identification and dissemination of best practices. Sharing knowledge and expertise

The proposed activity aims at selecting, disseminating and sharing best practices developed in the framework of the implementation of 2014/2020 RDPs in the areas of biodiversity protection, restoration and enhancement in the 2000 Natura Network sites and in the natural protected areas.

WP4 –Information and communication

WP4 covers information, communication and dissemination activities designed to promote more knowledge around project outcomes and to make the public more aware of the opportunities provided by 2014/2020 RDPs in relation to biodiversity and the Natura 2000 Network sites.

Conservation objectives for Natura 2000 sites: the viewpoint of EU Commission

The designation of the Special Areas of Conservation (SACs) is key to the full implementation of the Natura 2000 network because it guarantees full enforcement of site-specific conservation measures, provides higher network management security and seeks to reduce biodiversity loss in Europe by 2020.

The designation shall be in accordance with Article 4 of the Habitats Directive and Article 3 paragraph 2 of the Presidential Decree 357/97 and subsequent amendments and Article 2 of Ministerial Decree 17 October 2007.

As of today 1 101 SACs have been designated from 13 regions and 2 autonomous provinces. The table below gives an update of the designated SACs.

In the complex journey that will ultimately bring our country to complete the designation of SACs through ad hoc conservation measures, the Ministry of Environment, in concert with a number of Regions and Autonomous Provinces, has always given priority to the Habitats Directive's goals and the correlated conservation measures.

In 2016 the European Commission has called upon all the Member States, including Italy, in the framework of the procedure leading to the selection of Sites of Community Importance (SCIs) and to the designation of Special Areas of Conservation (SACs), to pay particular attention to a well balanced definition of the conservation objectives.

Conservation objectives are subdivided into two macro-areas: restoration and maintenance. Restoration and maintenance objectives are the bedrock of a well-balanced

Region/Autonomous Province	Designation date	n. sites	Land surface		Sea surface	
			Sup./ha	%	Sup./ha	%
Basilicata	16/09/2013	20	30.824	3,06	0	0
PA Bolzano	22/11/2016	35	114.236	15,44	/	/
Calabria	12/04/2016	25	9.027	0,59	0	0
Friuli Venezia Giulia	21/10/2013	56	129.173	16,43	3003	3,6
Lazio	06/12/2016	142	105.958	6,15	6576	0,58
Liguria	24/06/2014	14	50.100	9,25	9,074	1,66
	13/01/2016	38				
Lombardia	30/04/2014	46	204.363	8,56	/	/
	02/12/2015	1				
	15/07/2016	138				
Marche	06/05/2015	1	25.695	2,73	62	0,02
	12/04/2016	29				
	12/04/2016	2				
Piemonte	27/07/2016	27	29.315	1,15	/	/
Puglia	10/07/2015	21	34.298	1,76	6848	0,45
PA Trento	28/03/2014	123	139.597	22,49	/	/
	24/05/2016	3				
	15/07/2016	3				
	21/11/2016	3				
Toscana	24/05/2016	89	193.410	8,41	476	0,03
Umbria	07/08/2014	95	103.401	12,22	/	/
	18/05/2016	1				
Valle d'Aosta	07/02/2013	27	34.607	10,61	/	/
Sicilia	21/12/2015	118	224.397	8,69	414	0,01
Total		1.101	1.507.399 ha	4,99%	27.387 ha	0,18%

Special Areas of Conservation (SAC) designated on 31 December 2016. Link updates: <http://www.minambiente.it/pagina/zsc-designate>. Data source: Ministry of the Environment, Land and Sea.



Conservation measures of sites related to aquatic ecosystems must also be driven by actions aimed at favoring conservation of adequate riparian zones consisting both of aquatic helophytes and arboreal elements, which make an irreplaceable trophic and reproductive habitat for many animal species.

Photo by E. Calvario

definition of habitats and species conservation measures and mark out the path towards a satisfactory conservation status as envisaged by Europe 2020 objectives.

To achieve utmost efficacy, objectives shall be defined on the basis of scientific knowledge and local species habitats ecological requirements reported in each Natura 2000 site. Drawing on scientific knowledge, each Site of Community Importance (SCI) shall set an objective conducive to a favorable conservation status for each habitat and species. As a result, depending on their initial state of health, recovery objectives will be pursued for species and habitats affected by natural or man-made pressures which have jeopardized their satisfactory conservation status, namely maintenance of a satisfactory conservation status.

Habitat and species specific conservation objectives will help to identify the most effective conservation measures, regulations, policy and contract in response to the habitat and species threats and ecological requirements. They also represent a common reference to all environmental assessment procedures in which Natura 2000 network sites are involved. As long as they are described in an efficient and reasonable manner, conservation objectives shall be easily accepted by the people living in the site (SCI) who will eventually appreciate fully their value.

In this regards, the definition of timely and effective habitat and species specific conservation objectives will lead to a profitable management, either from the site manage-

ment authority and from the relevant environmental authorities, let alone the Member States that will be responsible for managing habitats and species that are worth of the utmost protection.

Given the above complexity and the significance of the designation of the sites of Community importance (SCI) into special areas of conservation (SAC), the EC has transmitted to all the Member States a document which explains what a balanced definition of conservation objectives and measures should look like. Below some excerpts taken from some of the most significant paragraphs of the above document.

The preamble to the Directive includes several references to the working “conservation objectives” explicitly mentioned in Article 6, paragraph 3 and in several other points.

In the preamble, Article 4, paragraph 4 and Article 6 paragraphs 1,2,3, it is stated that:

- “in each designated area, it is necessary to implement the required measures in relation to the **conservation objectives** sought after;”
- “any plan or policy likely to significantly impact upon the **conservation objectives of a site that was already designated or is likely to be designated, shall be subject to adequate scrutiny;**”
- “when a site of Community importance has been selected pursuant to the procedure provided for under paragraph 2, the

Member State concerned designates such site as SAC as soon as possible and within a maximum period of six years, **setting priorities** on the basis of the relevance of the site subject to maintenance or recovery, at a favourable conservation status, of one or more types of natural habitats and species of Community interest, and in relation to Natura 2000 coherence and in the light of possible degradation and deterioration risks the sites are exposed to”.

- “for special areas of conservation, Member States shall establish the required **conservation measures** dealing with, if necessary, appropriate management plans specifically designated or integrated into other development plans and appropriate statutory administrative or contractual measures which respond to the ecological requirements of natural habitat types in Annex I and specie in Annex II existing on the sites”
- “Member States **shall take appropriate steps** to avoid, in special conservation areas, the deterioration of natural habitats and of species habitats as well as any pressure put upon the species for which the areas have been designated, in so far as such disturbance could be significant with regards to the Directive objectives”
- “Any plan or project not directly connected with or necessary to the management of the site but likely to put some pressure thereon, either individually or jointly with other plans or projects, shall be subject to appropriate assessment in terms of

its implications across the site, bearing in mind the **site conservation objectives**”

The above provisions describe the requirement to set conservation objectives at site level, against which the corresponding conservation measures shall be analyzed and the relative impact of possible project and schemes evaluated thereto.

The measures enforced under the Directive are designed to ensure that the designated species and habitats shall pursue “a favorable state of conservation” and that long term survival shall be ensured throughout their natural range in the European Union.

In its broadest sense, a conservation objective translates specifically an overall objective, tying it up with the species and/or the habitats for which the site is designated, in order to contribute to the maintenance or enhancement of the conservation status benefitting the habitat and the species concerned at a national, European and bio-geographic levels.

However, the overarching objective of achieving a favorable conservation status for all habitat types and species set in Annex I and II of the Habitats Directive **must be translated into site-specific conserva-**

tion objectives, providing for the conservation status that the species and the habitats shall pursue at the site level, in order to maximize their contribution to achieving a favorable conservation status at a national, bio-geographical and European levels.

In cases where the present conservation status deviates from pre-established national targets, it is appropriate to set a number of goals to be achieved through clear conservation measures. This requires a site-specific assessment of the conservation rate or, where appropriate, recovery of a specified conservation status which is needed for the species or the habitat concerned, in order to help the site to achieve the conservation objectives that may be prescribed at a higher level (Regional, National, bio-geographical or European).

In adopting the conservation objectives in a Natura 2000 site, the Member States must set priorities based on the importance of achieving favorable maintenance or recovery conservation of habitat types and species of Community interest therein, as well as ensuring compliance with Natura 2000 goals, taking into account the risk of deterioration or destruction the site is exposed to. The terms “conservation objectives”, “conservation measures” and “conservation

priorities” are often used together and therefore can be often time confused or interpreted as if they convey the same meaning.

It is important to make a distinction between site specific conservation objectives and general conservation objectives consisting in achieving a favorable conservation status.

Site-specific conservation objectives consist in a number of specific goals to be achieved at site level, so that they can contribute to achieving as much as possible the level of favorable conservation at the most appropriate level.

To comply with the requirements provided for in Article 2 and Article 4, paragraph 1, 2 and 4 of the Directive, it is necessary to establish site specific objectives, both for SACs, provided for in the Habitats Directive, and for SAPs, referred to in the Birds Directive.

Conservation measures correspond to actions and mechanisms to be deployed in a Natura 2000 site in order to achieve conservation objectives therein. The obligation lies in establishing the necessary measures, regardless of whether they are applied in individual sites or even, in some cases, be-

beyond the site boundaries or in multiple sites. It is possible that a Member State complies with Article 6, paragraph 1, to a large extent thanks to the adoption of site non specific measures: this can occur, in particular, with marine sites which are likely to be affected by a more extensive fishing regulation and thereby prove compliant with Article 6, paragraph 1.

Conservation measures are generally established at local/site level, but can also be



The wolf, one of the most charismatic species that must be protected under the Habitats Directive calls for proper management measures for which it is necessary to define appropriate conservation actions. Photo by R. Ragno - Panda Foto



The Common Dolphin is one of species described in the Habitats Directive – Annex 4 –mostly present in the southern Tyrrhenian and eastern Ionian regions, must be protected also through Marine Protected Area regulatory tools and through the designation of new marine sites. Photo by G. Scocianti

vation status, of one or more natural habitat types as set out in Annex I or of one or more species as listed in Annex II and for compliance with Natura 2000, and in the light of the risks of degradation and destruction to which those sites may be exposed”.

It is also essential for Natura 2000 site conservation objectives to be as clear and explicit as possible, and to facilitate, at a practical level, the implementation of conservation

measures. Objectives should therefore be specified in concrete terms and, where possible, be quantified in numerical and/or scale terms. The formulation of the conservation objectives shall be driven by the following rules:

defined at regional or national level, or even agreed upon at transnational, bio-geographic or EU level and may also affect areas that are not part of the Natura 2000 network (e.g. horizontal measures, measures for national ecological networks, connectivity measures, etc.).

The conservation priority defines the priority species/habitats for which actions and/or measures are more urgent. Conservation priorities too can be established at different levels (local, regional, national, bio-geographic or European). Article 4, paragraph 4 refers to the need to “prioritize” when an SCI is designated as SAC, but it is in any case important to ensure that all Natura 2000 sites be managed in such a way as to maximize the contribution of each site to the achievement of a favorable conservation status.

Conservation objectives at site level should take the following into due account:

- the ecological requirements of the species and habitats featuring in the Natura 2000 standard shortlist;
- species and habitats local, regional and national conservation status;
- Natura 2000 network overall compliance;
- higher level (national/bio-geographical) conservation objectives and the site contribution to achieving higher level conservation objectives.

It is important to make a clear distinction between objectives and measures, for example, it is common sense to assume

that conservation objectives are relatively stable over time. Conversely, it is likely that conservation measures required to pursue such objectives, may change in response to the evolution of the risks to which sites are exposed and, of course, to the effects, hopefully positive, of the conservation measures already undertaken at national, bio-geographical and European levels.

In compliance with Article 4, paragraph 5 of the Habitats Directive, conservation objectives amount to legal and practical requirements when sites are designated as SCIs and are subject to Article 6, paragraph 3 and 4 of the Directive. It is essential for conservation objectives to be driven by the principle of utmost clarity as this bears on the subsequent definition of conservation measures for SACs. Article 6, paragraph 1 provides for the enforcement of “appropriate statutory, administrative or contractual measures that comply with the ecological requirements of the natural habitat types in Annex I and the species in Annex II present on the sites”, measures that need to be identified within 6 years (Article 4, paragraph 4) so that in principle they can be introduced and enforced at the time of the designation of the SAC.

Being provided with clear conservation objectives is also essential for the purpose of defining the priorities set out in Article 4 paragraph 4 of the Habitats Directive, which refers to the need to “set priorities according to site maintenance or restoration prime concern, at a favorable conser-

vation measures. Objectives should therefore be specified in concrete terms and, where possible, be quantified in numerical and/or scale terms. The formulation of the conservation objectives shall be driven by the following rules:

- **specificity** – make reference to a specific species or habitat feature and describe one or more conditions required to achieve the conservation objective;
- **measurability and communicability** – fulfillment of conservation objectives and compliance with Habitats Directive obligations (Article 17) should be subject to monitoring;
- **realism** – feasible timetable and reasonable use of resources;
- **approach consistency** – adopt a conservation objective system which as far as possible remains unchanged from one site to the other, and for those sites that share the same features and the same attributes, and objectives shall be used to describe the favorable conservation status;
- **completeness** – ensure that attributes and objectives follow the rule of the feature of prime concern that is required to differentiate between favorable or unfavorable status.

It is also important to set a deadline for the revision of the conservation measures adopted in order to ascertain adequacy, measurability and implementation as opposed to the achievement of the conservation objectives and the progress made to this end. ■

Assistance in implementing Monitoring Guidelines



LAZIO REGION



Building on the presentation of the Monitoring Guidelines and the ensuing debate held during the two-day National Biodiversity Monitoring Conference, the Lazio Region intends to provide assistance in the implementation of the Monitoring Guidelines through the following recommendations.

After examining the habitats and species described in the Manual, it is clear that the wealth of information highly useful for the definition of a monitoring plan originates from the concerted efforts made by a team of specialists handling habitat and species monitoring techniques.

Having said this, we believe that it would be appropriate to implement the guidelines available in synch with others still missing, which we consider essential for the implementation of a national plan itself.

As far as some taxa are concerned, monitoring methodologies are presented following a highly specialized approach and often time they fail to evaluate the overall research effort which in fact is highly relevant in terms of statistical significance.

This seems to suggest that the proposed monitoring activities are difficult to implement in the lack of the scientific support provided by numerous specialists and research institutions, and more importantly, in the absence of significant financial resources, prerequisites that appear difficult to pursue at present in the public central and local administrations.

We believe that in this regard, to make monitoring activities easier to implement and its goals more achievable, it is necessary to put more efforts into the planning of monitoring activities and protocols.

In this regard, we think it is necessary to build on the outcomes produced until now, adding on data which will incorporate all gathered data and survey activities into a nation-wide monitoring plan whose boundaries overlap with those of the bio-geographic regions for

which reporting is required.

Such national plan should also measure the minimum sampling effort for each species, habitat and bio-geographic region, with the goal of achieving data statistical significance and effort sustainability in the long term.

Given the amount of work at hand, it is recommended that the monitoring plan/s be designed in concert between bio-geographic regions, central authorities, ISPRA, scientific societies and associations, the Regions and the Autonomous Provinces.

We believe it is essential to prioritize monitoring plans for those species and those habitats that have a wider national distribution, as we believe that these elements will be featured by significant criticalities.



***Adonis distorta* is a mountain species which can be found in a limited number of stations located in Italy's central mountains and is characterized by an extremely small population threatened by the inbreeding.**

In the Lazio Region there are some iconic taxa which clearly illustrate the need to develop a coordinated monitoring plan, capable of generating protocols on a sample basis. Some plant habitats are largely distributed, such as grasslands falling under habitats 6210, semi-natural dry grassland and scrubland facies on calcareous substrates (*Festuco-Brometalia*) and pseudo-steppe with grasses and annuals (*Thero-Brachypodietea*), or bushy habitats such as scrubs 5330 thermo-Mediterranean and pre-desert or forest as the 91AA Eastern white oak woods or 9340 Quer-

cus Ilex forest.

The extent of each of these habitats exceeds 10,000 hectares, with a peak of over 70,000 hectares per habitat (91AA) with sample units (polygons that identify single forest units) being in the region of several thousands.

In these cases it seems impossible to carry out an exhaustive survey of all the areas concerned by the habitats, yet it seems essential to agree on a minimum number of hectares or sample units to be surveyed, in order to come up with interpretable data on the conserva-

tion of these “syntaxa”, at least for the purpose of defining the “structure and function” parameter.

This national experimental project, i.e. the monitoring plan, is all the more necessary if we consider that the boundaries between bio-geographic and administrative regions do not overlap and therefore it would be of little use, if any, if every administrative region were to engage in its own administrative regional sampling plan with no overall national framework at the background. The Region would engage in an oversized field effort and, notwithstanding the effort, come up with unrepresentative results for the national objectives. Planning at the national level seems the only solution to the problem. However, this does not rule out the possibility for each region to autonomously identify a number of sample units exceeding the amount required or, conversely, carry out exhaustive surveys in all the habitat sites, or alternatively carry out the survey in those sites where it sees fit to investigate.

Nonetheless, a minimum planning effort would strongly be desirable, because in the event the plan be implemented it would lead, at any rate, to an interpretable and significant outcome that speaks of the habitat under investigation.

The situation is similar for many animal species, hardly or largely scattered at regional level; from brook lampreys, fish, *Barbus Tyberinus* to Tiber roach, from amphibians to spectacled salamander and newt. Fortunately, for the latter two species, the job is made easier by the data reported in the monitoring manual as it is the work of herpetologists from Societas Herpetologica Italica.

As a matter of fact, for the above fauna group, researchers have factored in the controversial sampling approach and therefore proposed a minimum number of population units for each species (reproductive sites) to be investigated in each of the 10x10 km cells in which the territory is subdivided, suggesting also site proportionality to be investigated based on the presence of the species in the bio-geographic region.

This is a bleak picture especially for the monitoring entities involved that, however, is counterbalanced by the population situation, especially the local distribution of some specific taxa or endemic species

or species with relict, residual or marginal populations present in the region. This is the case of Adonis distorted (*Adonide curvata*) and of the sphagnum group among plants, or of *Cordulegaster trinacriae*, of *Salmo Cettii* (Mediterranean trout) and of *Ursinii Viper* (Ursini's viper) among animals. In the latter cases you can see fit to carry out an investigation on the total of the populations, wi-

thout the need to conduct a site a-priori selection on a sample basis. It is therefore considered appropriate to suggest that monitoring manuals be integrated with a set of data for each species or group of species (such as for homogeneous taxonomic groups or ecological “guilds”), as follows:

- 1) mention whether the investigation should be carried out on the total population (the entire “statistical” population – perhaps only possible for very rare or extremely localized species or habitats) or on a sample;
- 2) mention, in case of sample surveys, the minimum number of units (likely to be found in the 10x10km cell grid) to be surveyed, subdivided into bio-graphic regions;
- 3) mention, when possible, the minimum number of sample units (the species presence stations, the population units, the plant formation area units) to be surveyed, based on the known distribution (as already proposed for amphibians);
- 4) mention the minimum number of plots to be set up within the sample unit; for example in the case of plant habitats, an indication of the minimum number of surveys to be carried out for occupied habitat area is to be recommended (for ex. number of surveys per hectare, this figure is provided in the Manual for some specific habitats);
- 5) mention or reiterate the optimized “monitoring repetitions” (this indication is provided for most species and habitats, but perhaps further thought should be given to this matter; calibration could be tied up to the overall effort requirement) to be performed between each reporting exercise (6 years).

It is estimated that national monitoring plans, following the design phase, should undergo experimentation over a period that could cover the next monitoring cycle from 2019 to 2024.

Nevertheless, we believe that for future activities it is essential to opt for an adaptive model, so as to check out over time the significance of the results, optimization of activities and achievement of full operation, and possibly, when necessary, change the sample design or the survey methodology. ■



The *lamineti* besides representing habitats of Community Interest, constitute species habitats for numerous animal species and therefore must be adequately protected. In the picture a *Squacco Heron*. Foto di S. Sarrocco

Tailored **Habitat and Species** Management.



MARINE PROTECTED AREA of the Island of Ustica

The construction of the Natura 2000 network, through the various stages envisaged for P- SCIs and SCIs and ultimately the designation as SACs (in addition of SAPs “immediately” in force) has led to a revolution in the management methods applied to the Italian Natural Protected Areas, both on land and at seas. The center of gravity of protection activities has moved away from the single iconic species or “parameters”, to a more modern and fair protection of the ecosystems, seen through the habitat component as provided for in the EC Directive 1992/43.

In Sicily regional and national protected areas underwent an initial phase of integration of the Incidence Assessment Procedure into the authorization system (e.g. Presidential Decree 357/97 and its subsequent regional transpositions).

One should not be misled into thinking that it is a new legal institution that must be added on to long list of legal institutions and practices hitherto enforced.

Indeed, it is a truly cultural revolution that forced management authorities to come to terms with the need to monitor and protect communities and systems hitherto addressed separately; the assessment procedure provided with the gradual scanning of the health state of system components, the concept of proximity, the new institutions of mitigation and compensation, shifting the authorization proceedings balance more on quantity and less on quality.

The Authority must be able to assess how the impact on complex systems changes over time, from the design to the operation of interventions, projects or plans, and as such it must possess a thorough knowledge of the evolutionary dynamics and of the conservation status of the multiple habitats existing in the area. Protected areas have an extended “footprint” as they interact with the external environment abdicating the claim of a “fortress under siege”, and in so doing they act as biodiversity and ecosystem banks at the service of natural and anthropogenic communities.

The management of Natura 2000 network habitats there-

fore calls for a new scientific monitoring planning, which involves business objectives and environmental awareness; environmental management focused on the habitat, as opposed to marker-species, calling for large volumes of environmental data to be gathered, analyzed and processed, something that was simply unheard of in Protection System environments until now.

Heterogeneity of data, trends and scenarios required an interdisciplinary approach that is proving increasingly favorable for cultural and professional contamination and seems to pave the way for a quantum leap in the business processes: in the drafting of Geographic Information Systems, in decision making processes. As a result, it is now common for geographers, naturalists, economists, engineers to work in partnership in the drafting of Natura 2000 network management plans and in the design of Natural Protection Area management instruments.

Therefore, the Protected Marine Area of the Isle of Ustica, since the Municipal administration took over as its management authority in 2012, is been looking at the habitat as the real focus of a new management era. In addition, the new definition of the Sites of Community Importance (SIC) “The seabed of the isle of Ustica” – ITA020046” approximately amounting to 16 000 hectares, led to the overlapping of the two areas.

In terms of planning, the first activity of the new management – thanks to the recent construction of Sicily’s MPAs network – was the agreement entered into by six Sicilian MPAs, the Ministry of Environment and the Sicilian Regional Department of Environment, the

procedural harmonization between the MPA rules and regulations and the Minimum Protection Criteria applied to the SCIs concerned, to continue with a streamlined drafting of the SCI management plan following the recent resolutions adopted at Regional level whereby Sicilian MPAs have been designated as managing authorities of the SCIs within their jurisdiction.

The legislation regulating the activities allowed in the is-



Pinna nobilis and *Posidonia beds* are two of the most valuable natural assets that must be protected in the Ustica Marine Protected Area.

Photo by Andrea Ferri – Ustica MPA website

le of Ustica MPA refers to the management of correct and ordered productive activities, the need to avoid any disruption and to keep the impact at a minimum level. By way of illustration, the mooring buoys and anchoring bans have been relocated in the past few years as a result of the analysis carried out around the priority habitat of “Posidonia beds (1120*)” and of its nursery function, carrying out a rotation system which provides for a two-year protection against boating effects; or the rotation of underwater activities being carried out in the “underwater caves” habitat (8330), enriched with “citizen science” initiatives useful to gather species data.

Given the abundance of small boats in Ustica, the management of professional fishing is geared towards monitoring the catch in relation to the most neglected species from a commercial view point and most importantly, of the habitat trophic balance; sport fishing is regulated based on the analysis carried out for managing Posidonia beds and the number of annual permits is relative to species population projections.

According to regional legislation, Incidence Assessment Procedures fall under the responsibility of the Municipal Administration, in case of Ustica, the Environmental Impact/Incidence Assessment is the responsibility of the MPA managing authority, acting under the assumption that centralized management is increasingly beneficial to process management. As of today, there were 3 assessment procedures, and in all three cases, the overall dynamic perspective provided for by the procedure was received with enthusiasm and allowed to incorporate in MPA security clearance a number of new institutions, e.g. mitigation, which in the past could hardly be addressed. Therefore, the introduction of the Environmental Impact/Incidence Assessment has so reinforced and refined MPAs capacity to manage and safeguard wildlife sites with state-of-the-art tools, raising public awareness about the importance of flexible and reliable instruments capable of balancing protection with development requirements.

The introduction of new communication measures set out in the Natura 2000 network Site Management Plan helped citizens to become more informed, more sensible and increasingly aware of the im-



A school of yellowmouth barracuda (*Sphiraena viridensis*) one of the preferred climate change species which have been reported also in the Mediterranean sea over the last ten years. Photo by Andrea Ferri – Ustica MPA website.

portance of preserving the environment as a whole, not only “TV-genic” species!

A growing public awareness of the need to protect the environment is one of the prerequisites for future environmental conservation, the coordinated action of several Natura 2000 network sites management authorities is of paramount importance as it will make citizens more aware of the importance of a global – not local - protection network that is part of a continental collective design aimed at protecting the planet’s natural assets as a whole.

The educational activities being carried out by the MPA since 2014 for the benefit of a public of approximately 1500 students a year, focused on the HABITAT, as set out in Natura 2000 network and all physical and digital educational instruments according to Natura 2000 network business objectives.

Marine Protected Area volunteer work camps, being inspired by “citizen science”, are animated by hundreds of volunteers who gather data on “marker species” for each habitat, increase the volume of monitoring data, disseminate habitat best practices and, in so doing, sensitize the public on innovative business management models.

The buzzword is innovative natural heritage management, a new challenge that Italy’s Natura 2000 network will have to face: the habitat will become the unit of measurement in environmental accounting and sustainable reporting. A challenge that will put the habitat at the center of enhancement policies whereby valuable and irreplaceable services will be offered to the environment, wildlife and human communities alike! ■

Marine Protected Areas (MPAs) and marine Natura 2000 sites integration through conservation

The Marine Natura 2000 Network accounts for approximately 4% of the whole Network, stretching over a total area of 581 000 hectares of protected habitats according to the ECC Habitats Directive 92/43. It overlaps, almost entirely, with the Marine Protected Area network established in compliance with law 394/91.

Within the framework of completing the Natura 2000 Network which culminates in the designation of the Sites of Community Interest (SCIs) as Special Areas of Conservation (SACs), all the marine protected areas (MPAs) have been involved in the definition of objectives and in the preparation of conservation and management measures, as well as in the approval and subsequent integration of conservation measures provided for by the regional administrations concerned as part of the regulatory framework.

MPAs in accordance with the Ministerial Decree of 17 October 2007 are referred to as management authorities of SCIs and SACs which fall under MPAs

jurisdiction. As a result they are called upon to integrate law 394/91 provisions with those resulting from the Habitats Directive EC 92/43 transposition. As a result, in addition to law 394/91, Protected Marine Area regulations will also integrate conservation measures provided for under the Habitats Directive to ensure protection and conservation for all selected habitats and species specified therein.

Far from increasing PMA governance complexity, the new protection level aims at ensuring more efficient management and protection for special habitats and species which require additional protection.

Given the complexity of the interests at stake - fishing interests are challenged by the risk of resource overexploitation and tourism by the impact on land occupation and on specific endangered species - PMA governance should painstakingly seek continuous alignment between protection and economic enhancement.

Marine bio-geographical workshop in Malta

The European Commission, in partnership with the European Thematic Centre on Biodiversity (ETC/BD) hold the Marine Bio-geographical Workshop on the 27-29 September 2016 in Malta.

The purpose of the workshop was to analyze and explore with the Member States the sustainability of the SCIs designed in the Atlantic, Mediterranean and Macaronesian marine biogeographical regions.

In addition to ETC, European Commission and Member States delegates, NGOs and independent experts attended the workshop.

In preparation for the workshop, the Ministry of Environment (MoE) had required ISPRA to investigate scientific data available, in relation to both habitats and marine species of Community interest, and highlight those with high conservation value for which the Italian Natura 2000 Network has reported some weaknesses.

Therefore the workshop produced an updated shortlist of natural reserve areas which highlights a weaknesses that matched with the results reported in the analysis carried out by ISPRA. In the light of the recent EU Pilot 8348/16/ENVI case filed in connection with failure to complete the designation of Natura 2000 Network Sites in Italy (both on land and at sea), the above weaknesses will have to be dealt with in the short term.

The most urgent weaknesses that need to be dealt with are associated with the designation of large Sites of Community Importance (SCIs) - the area for *Tursiops truncatus* in the Tyrrhenian sea, the extension of key *Caretta caretta* reproduction areas at sea - and of a new Site of Community Importance (SCI) for deepwater rock reefs - habitat 1170 - within the Italian Ecological Protection Zone (EPZ) designated under Article 1 of Law 61 on Feb 8 2006 and in compliance with UNCLOS, the United Nations Convention on the Law of the Sea signed in Montego Bay in 1982. The workshop also underlined the need for exploring the sustainability of new marine sites for *Tursiops truncatus* and *Caretta caretta* in the northern Adriatic sea and for habitat 1180 "submarine structures made by leaking gases" - recently found in the Italian seas.

The new Italian projects co-funded by LIFE

From its inception, 1992, LIFE has co-financed some 4,300 projects throughout Europe. For the 2014-2020 funding period, Life will contribute approximately 3.4 billion. On November 2016, the list of successful LIFE projects submitted in 2015 for LIFE funding was made public. 144 projects received the "green light". They are subdivided into two LIFE sub-groups as described below:

Environment

- 56 projects on environment and sustainable use of resources
- 39 projects on Nature and biodiversity
- 15 projects on Governance and environmental information

Climate action

- 16 projects on Climate Change Adaptation
- 12 projects on Climate Change Mitigation
- 6 LIFE projects on Governance and climate information

37 Italian projects were approved, amounting to 81,6 million (out of 222,7 million overall allocation from the European Union for this year), and together with Spain (39 approved projects), was recognized as Leader country for initiatives falling under the LIFE program on environment and climate action.

The Italian projects covered a wide range of themes, including the environment and sustainable use of resources, nature conservation, climate and awareness-raising. Meeting LIFE NATURE award criteria is increasingly challenging, in the case of Italy, 10 proposals were successful in 2013, 8 in 2015 and only 4 this year.

At EU level, the success rate grew from 9% in 2014 to 14 % this year, also as a result of the reduced number of projects being submitted.

On January 19, 2017 the UNESCO MAB AREA of Circeo National Park hosted

Rural Development, Man and Biosphere Workshop at Circeo Natural Park

a workshop entitled 2014-2020 Rural Development and UNESCO MAB (Man and Biosphere) Programs. On the agenda: best practices, success stories and future sustainable development opportunities for rural areas with high environmental value. The workshop was promoted by CREA, the center for Policies and Bio-economics within the framework of 2014-2020 National Rural Development Program (in particular Project

23.1: Biodiversity and Natura 2000) in partnership with DISR III (Agriculture, environment and farm tourism of the DG Environment) of DG Rural Development of the Ministry of Agriculture and Forestry and the DG Environment Protection of the Ministry of Environment, Land and Sea, responsible for coordinating the National Technical Committee of the UNESCO MAB Program.

The workshop was organized jointly by the Lazio Regional Department of Agriculture,

Circeo National Park and WWF Italy and offered a platform to explore new

sustainable development synergies within the framework of 2014-2020 Rural Development Program, UNESCO MAB, with particular reference to the Natura 2000 Network.

Speakers' PPT contributions are downloadable at:

<http://www.reterurale.it/flex/cm/pages/Serve-BLOB.php/L/IT/IDPagina/16476>

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