



Natura 2000 Seminars

Natura 2000 Biogeographical Process

Second Mediterranean Natura 2000 Seminar Limassol - Cyprus, 14 – 16 November 2017

Seminar Report

An initiative
of the





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Funding: European Commission, as part of contract number 07.0307/2012/60517/SER/B.3.

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Event: For more information on this seminar, see the Natura 2000 Communication Platform:
http://ec.europa.eu/environment/nature/natura2000/platform/events/second_mediterranean_natura_2000_seminar_2017_en.htm

Relevant documents can be found here:
http://ec.europa.eu/environment/nature/natura2000/platform/knowledge_base/135_mediterranean_region_en.htm

Executive summary

The Second Mediterranean Natura 2000 Seminar took place in Limassol, Cyprus, from 14-16 November 2017. It brought together 92 Natura 2000 practitioners and expert stakeholders from all 9 EU Mediterranean countries and leading EU level institutions (EC, ETC-BD, EASME, EEA). This was the first time that a NGO (Terra Cypria) hosted an EU biogeographical seminar since its beginning in 2011.

After the first day welcomes, participants could distended keep in touch through a field visit to two Natura 2000 sites, where they knew several conservation and restoration projects. The second day was time to overview & case study presentations and thematic working groups.

After an overview about the main pressures and threats related to Natura 2000 management in the Mediterranean region, five brief presentations were showed around several issues such long-term monitoring programmes (breeding marine turtles in Cyprus), approaches on evaluating conservation status for habitats types in Spain, new technologies for site condition monitoring developed in Scotland, private land conservation in the Mediterranean and evaluation of anthropogenic impacts and the efficiency of conservation measures on Mediterranean wetlands and their biodiversity (The Tour du Valat experience).

The four thematic working groups brought participants the opportunity to share common experiences, to discuss about common challenges and to build a Mediterranean roadmap for the next years. The main conclusions of these groups are:

1. Assessment and sustainable development of ecosystems

Three main topics were addressed during the session: interpretation of habitat types, assessing conservation status and Favourable Reference Values (FRV) and restoration priorities & the evaluation of the Low Hanging Fruits (LHF) approach.

All the discussions had three underlying arguments that somehow, make it difficult to implement the Directive. These arguments are: 1) habitats are usually considered as static entities while ecosystems are inherently dynamics, both due to natural and anthropogenic factors; 2) the Mediterranean Basin is one of the world hot spot of biodiversity, what in practice imply a huge biogeographical variability in the species composition of habitats along the region; 3) to ensure long-term habitats conservation, and according to the new conservation paradigm focused on ecosystem services, conservation status evaluations should be connected to the capacity of habitats to provide ecosystem services.

As a result of the discussions, several opportunities and requirements were identified. Particularly, all the delegates agreed with: 1) the need for training in the habitat interpretations and in the use of methods to assess conservation status, 2) an increasing communication among stakeholders and with the society, 3) the use of the already existing scientific knowledge to improve habitats evaluations, 4) promoting networking across the region, and 4) new funding to deal with proposed actions.

2. Conservation objectives, monitoring and evaluation

The main topics addressed during the session were: definition and interpretation of habitats, Favourable Reference Values (FRV), the Low Hanging Fruits approach, setting conservation objectives and monitoring.

Participants highlighted the importance of having proper and common definitions of all habitats of community interest prior to prioritization exercise. It is proposed the centralization of all manuals and documents of HCI definition and interpretation available. On the other hand, an adequate determination of Favourable Reference Values (FRV) is necessary prior to defining biogeographical level targets.

Some participants warn of an excessive political approach of the Low Hanging Fruits methodology, open to different interpretations. In general, participants expressed criticisms about this approach and proposed an improvement of prioritization tools based on better scientific knowledge and taking into account HCI conservation status in all the biogeographical regions where they are present.

Delegates claimed to check the different conservation objectives set in each Member State at different scales looking for further developments at biogeographical level. A good starting point of collaborative work could be the development of action plans for HCI and species at biogeographical level, after sharing all the data and criteria about interpretation of HCI and FVR.

Several monitoring systems developed by Member States were mentioned. Reporting projects about monitoring systems at biogeographical scale were strongly expected.

3. Effective governance model for integrated approaches to implementation of Natura 2000

After building a common definition of governance, the threats and pressures related to effective governance models for integrated approaches to implementation of Natura 2000 were discussed thoroughly. The different threats and pressures identified during the discussion were related to: communication, coordination, communication & coordination or resources.

The IIRR approach (Inform, Involve, (share) Responsibilities and Reward) was proposed to overcome several problems, such lack of local awareness and/or a common language/ground, knowledge gaps about the benefits of the Natura 2000 network, lack of collaboration with all involved stakeholders and lack of a (long-term) mediator or bridging entity between the local communities and conservation issues.

Integration of different management plans them into an overarching integrated plan with elements of all plans was proposed, as well better coherence within the competent authority at different levels. In relation to collaboration with all involved stakeholders, sharing of responsibilities is particularly important, not only for the EU and Member States but for all involved stakeholders; mechanisms or guidelines for efficient and effective collaboration should be in place; twinning can contribute to effective practice exchange and hands-on interventions.

In relation to resources and funding, CAP and LIFE integrated projects can be a good source. However, it is also important to think beyond CAP and LIFE integrated projects. In general, for nature projects it will probably be beneficial to have a new fund replacing the CAP or a reformation of the CAP. It is however important to keep in mind that it is also a matter of sharing responsibilities of how the CAP is implemented, not only the EC, but Member States have their responsibility as well.

4. Addressing threats and pressures on Mediterranean habitats & species

Regarding the pressures and threats, a long list was collated during the introductory round. This list was afterwards, through discussion, shortened and prioritised. Next to the general pressures and threats, the group has discussed about which habitat groups in the Mediterranean region are the most under pressure and should, therefore, be prioritized for conservation actions.

The main pressures and threats discussed here were the Invasive Alien Species, land abandonment, and issues in general related to assessing the pressures and threats in relation to the Article 6.3 of the Habitats Directive and the appropriate assessments. It was agreed that some kind of early warning system would be very much appreciated to be able to react timely to pressures. Some solutions were proposed related to.

In terms of land abandonment, it was agreed that there is no universal solution to this in all cases. While in some cases investing in High Nature Value Farmland and subsidies are appropriate, in other cases rewilding might be an option.

As the CAP reform is happening at this moment, it is the right timing for the Mediterranean nature organisations to coordinate and send a joint statement to the EC on the region-specific solutions that could be integrated into the next CAP.

The Knowledge Market at the end of day 2 was another opportunity to share more than 22 experiences of projects and initiatives linked to Natura 2000 management and conservation inside and outside the Mediterranean region (see Annex IV).

Finally, the latest developments under the LIFE programme were presented during the third day some, in addition to the outcomes of the four thematic working groups on day 2, opened to shortly discussions.

The discussions at the Seminar led to a range of ideas for concrete cooperation and the development of initiatives to improve the management of Natura 2000, including a number of specific follow-up events that can be checked in chapter 3.

Contents

Executive summary	2
List of abbreviations	6
1 Introduction.....	7
1.1 Context of the second Mediterranean Natura 2000 Seminar.....	7
1.2 The Mediterranean Seminar Input Document	8
2 Results of the second Mediterranean Natura 2000 Seminar.....	9
2.1 Day 1. The opening session	9
2.2 Day 1. The site visits	9
2.3 Day 2. Plenary sessions: overview and case studies	10
2.4 Day 2. The thematic working groups.....	13
2.4.1 Assessment and sustainable development of ecosystems	13
2.4.2 Conservation objectives & monitoring and evaluation.....	18
2.4.3 Effective governance model for integrated approaches to implementation of Natura 2000 21	
2.4.4 Addressing threats and pressures on Mediterranean habitats & species	23
2.5 Day 2. The knowledge market.....	25
2.6 Day3. Closing plenary session	25
3 Mediterranean Roadmap	27
Annex I. Habitats selected in the Mediterranean Biogeographical Process	29
Annex II. List of participants per thematic working group	32
Annex III. List of participants of the second Mediterranean Natura 2000 Seminar	36
Annex IV. Projects presented at the Knowledge Market	39

List of abbreviations

CAP:	Common Agricultural Policy
EC:	European Commission
EEA :	European Environment Agency
HCI :	Habitat of community interest
IAS :	Invasive alien species
FCS:	Favourable conservation status
FRV:	Favourable reverence value
LHF:	Low hanging fruit
MS:	Member State
WFD:	Water Framework Directive

1 Introduction

This document presents the main outcomes from the second Mediterranean Natura 2000 Seminar held in Limassol, Cyprus, from 14 to 16 November 2017. The Seminar brought together a wide range of Natura 2000 practitioners and expert stakeholders from the Mediterranean region. As part of the Natura 2000 Biogeographical Process, the Seminar served the purpose of discussing issues of common concern and interest in relation to the conservation and management of Natura 2000 habitats selected for priority consideration and habitats identified as “Low Hanging Fruits”. The Seminar was organised by ECNC in close cooperation with the European Commission and the generous hosts, the NGO Terra Cypria in Cyprus.

The seminar was attended by 92 delegates from 13 different countries (table 1). All Member States within Mediterranean Biogeographical Region¹ were represented, as well as other leading EU level institutions (EC –DG Environment & LIFE Unit- , ETC-BD, EEA).

Table 1. Number of participants by country.

<i>Mediterranean countries</i>	Participants	<i>Other countries</i>	Participants
Croatia	4	Belgium	6
Cyprus	47	Sweden	1
France	6	Denmark	1
Greece	6	The Netherlands	3
Italy	2		
Malta	1		
Portugal	1		
Spain	13		
United Kingdom	1		
Total	81	Total	11

1.1 Context of the second Mediterranean Natura 2000 Seminar

The Natura 2000 Biogeographical Process was launched by the European Commission in 2011 to assist Member States in managing Natura 2000 as a coherent ecological network. The Process provides practical means to exchange the information, experience and knowledge that are required to identify and define common solutions and develop cooperative actions, which can be delivered to ensure progress towards the EU 2020 Biodiversity Strategy targets, in particular to Targets 1 & 2.

As the responsibility for the implementation of Natura 2000 and ensuring progress towards the EU’s Biodiversity Strategy targets lies with Member States, they are key actors in the Natura 2000 Biogeographical Process. The Process also provides an opportunity to mobilise expert networks and inputs from other key stakeholders, including NGOs. This is important in order to be in direct contact

¹ Croatia, Cyprus, France, Greece, Italy, Malta, Portugal, Spain, United Kingdom.

with experience of Natura 2000 practitioners, expert stakeholders and Member States' representatives with specific responsibilities for implementation of Natura 2000. This underlines the strategic and operational importance of the Process, the integrated inputs required from diverse actors and the opportunities available to develop concrete collaborative actions for future implementation.

1.2 The Mediterranean Seminar Input Document

The [Mediterranean Seminar Input document](#) is intended to trigger discussions during the seminar activities and to share experiences with a view to identify collaborative work. It has been built through all contributions from expert consultation and includes feedback on the four thematic clusters and four habitat groups, describing among others:

- Most pressing common issues and specific challenges
- Opportunities for cooperation and suggestions for improvement
- Examples of good practices and resources
- Working together on Favourable Reference Values (FRV)

A brief presentation about the main conclusions and points to discuss into the thematic working groups was showed during day 2 of the seminar.

2 Results of the second Mediterranean Natura 2000 Seminar

2.1 Day 1. The opening session

The Seminar was officially opened by Lefkios Sergides, Director of Terra Cypria, the Cyprus conservation foundation. After a warm welcome, Lefkios highlighted the close collaboration between NGOs and DG Environment, being this the first biogeographical seminar which is hosted by an ONG.

Elena Stylianopoulou, on behalf of Cyprus Ministry of Environment, acknowledged to all participants their presence and showed a brief description of the Ministry organization chart involved in Natura 2000 management and the main government actions related to.

François Kremer from the European Commission presented the context of the seminar, zooming into the refocus of the Natura 2000 Biogeographical Process, the EU Biodiversity Strategy for 2020 and the EU Action Plan for nature, people and the economy (2017-2019). He also thanked everyone for being present. It is important to continue with cooperation and networking, also after the seminar and with people that are not present. Action 6 from the Action Plan is to “Bring together public authorities and stakeholders from different Member States at the biogeographical region level to address common challenges, including on cross-border issues”. The Committee of the Regions of the EU is also a key partner in implementing the action plan. François Kremer finally stressed the importance of developing and adopting roadmaps for cooperative action under the Natura 2000 Biogeographical Process, trying to identify best practices in conservation management, seizing funding opportunities, communication and stakeholder involvement and improving governance of Natura 2000.

Finally, Neil McIntosh presented the schedule of the seminar and stated that the Process is meant to build a network of people working together on the management of the Natura 2000 network.

2.2 Day 1. The site visits

Lefkios Sergides provided an introduction to the site visits. Participants had the opportunity to know two Natura 2000 sites (Madari-Papoutsas and Ethniko Dasiko Parko Troodous) located on the highest mountains of Cyprus. During the travel, participants could see the vegetation transition from low to high lands, with some interesting forests and strands of *Quercus infectoria*, *Platanus orientalis*, *Pinus brutia* and *Pinus nigra*.

Madari-Papoutsas site (CY2000005) is both SAC (581 ha.) and SPA (12.833 ha.). Along a short part of Doxa Soi O Theos natural trail, participants enjoyed seeing an interesting representation of habitats 9390 and 9560 (both priority) and their most characteristic flora, such the endemic Golden Oak (*Quercus alnifolia*) or the Grecian Juniper (*Juniperus excelsa*), among some planted trees of Cyprus Cedrus (*Cedrus brevifolia*) and other scrub and herbaceous species. Improvement of Grecian Juniper conservation was the objective of LIFE JUNIPERCY (LIFE 10NAT/CY/000717), and participants could see some restoration measures during the visit and share information about common pressures and threats to its conservation.

Ethniko Dasiko Parko Troodous is both SAC and SPA too (9.015 ha.) and is situated at the centre of Troodos massif, including the Troodos National Forest Park and the highest peak of the island (1.951 m.). Through the visit to A.G. Leventis Troodos Botanical Garden, participants knew the main natural

values of this site and their conservation status. In addition, the EEA Grants project *Biodiversity conservation in restoration and management of the Amiantos Asbestos mine in Troodos National Forest Park* was presented and visited. The overall objective of the project is to contribute to halting loss of biodiversity through improvement of restoration and management practices in the Amiantos Asbestos mine, improving restoration practices, in terms of efficiency and conformity to European Directives and to broaden their scope to sufficiently address biodiversity conservation and landscape improvement considerations.



Mr. Takis Tsintides kindly explaining habitat 9560* restoration in Madari mountains (left) and Amiantos asbestos mine restoration in Troodos (right).

2.3 Day 2. Plenary sessions: overview and case studies

The first part of second day started with an overview of Mediterranean Natura 2000 management and some case study presentations focusing on thematic issues.

Mora Aronsson (European Topic Centre on Biological Diversity, Sweden) presented the Low Hanging Fruit approach (LHF). The LHF habitats are an addition to the priority habitats, where the habitats in the worst condition are prioritized. There is however also a need to demonstrate that targets can and are being reached, this notably with a view to keep mobilizing funds. Therefore the LHF methodology was developed to identify habitats that can more easily improve on their conservation status.

Diego García Ventura (Europarc-Spain) shared an overview of the Seminar input document and its purpose, as well as showed the main pressures and threats related to Natura 2000 management in the Mediterranean region, and some opportunities and challenges to work together in collaborative solutions. Some questions and topics aimed to trigger discussions during the four thematic groups, according to all contributions reported by the expert consultation, were proposed.

Andreas Demetropoulos (Cyprus Wildlife Society) shared an overview of more than 40 years studying and conserving breeding marine turtles in Cyprus (*Caretta caretta* and *Chelonia mydas*). The Cyprus Wildlife Society accumulates wide experience applying conservation measures, monitoring programmes and training, participation & education actions around marine turtle protection, in close cooperation with Cyprus Government, UNEP and other international institutions. As a result of these efforts, 20-years breeding data shows a rising population in Cyprus, also benefited by the declaration of two coastal Natura 2000 sites (Polis/Yialia and Akamas Peninsula). It demonstrated that, in most of cases, success results in nature conservation could take many years from measures implementation. Climate change seems one of the most pressing issue in future marine turtle conservation scenarios.

Prof. Antonio Camacho (University of Valencia), in collaboration with Rafael Hidalgo (Spanish Ministry of Agriculture & Fisheries, Food and Environment), highlighted the importance of evaluation conservation status to inform and improve Natura 2000 management for habitats types. The principal ideas shared during the presentation, and taken from Spanish experience, were:

- Since the conservation targets for habitats and species must be set for the biogeographical region, an harmonization on the different issues related to these targets, from the interpretation of HCI, establishment of FRV, procedures for the assessment of the conservation status, and priorities for conservation/restoration, is of paramount importance among the different Member States of the Mediterranean region. Scales, both spatial and temporal, are relevant in viewing any of these points to harmonise.
- Habitat interpretation requires not only knowing which are the characteristic species of each habitat, but also the variables defining the structure and function of the habitat, which could be harmonized for the different member states in a joint work. Further, the values and characteristic species for each habitat can be established by each MS under the umbrella of this common approach.
- Synergies can be established with other frameworks (e.g. the Water Framework Directive for aquatic habitats) allowing profiting collaboration of managers of the habitats having different duties (e.g. water and nature managers, respectively) for instance a compatible assessment procedure, and coordinated actions. This requires gateways allowing making equivalences within the different habitats/ecosystems classifications.
- Methods for the establishment of FRV, especially for the range and area of distribution of the HCI are lacking, and this precludes establishing conservation targets referring to the amount (area) and distribution of each particular habitat needed both at the level of MS and biogeographical region to ensure the conservation of the habitat. Here there is also room for collaboration among Mediterranean MS.
- There is a need for methods on how to upgrade the results of the evaluation of structure and function from the local to the biogeographical region level. Again, this can be achieved by the collaboration of MS.
- The result of the evaluation of the conservation status and the pressures and threats, with a scientific basis and using well harmonized procedures among MS; can give a holistic overview allowing the selection of the best conservation measures and policy actions driving to the maintenance or restoration of the favourable conservation status of European Habitats.

Zoe Russell (Scottish Natural Heritage) presented a technological tool for efficient site condition monitoring in Scotland. The SWIFT app supports field survey work for monitoring the condition of habitats and species in Scotland, carried out by Scottish Natural Heritage staff & specialists and following common standards throughout United Kingdom. Through the use of mobile devices, it is possible to see background information, capture field data and upload the data collected to Scottish Natural Heritage database. Finally, Zoe encouraged all participants to share this tool on mobile devices available during the knowledge market session.

Kristijan Civic (Eurosite) showed the European Private Land Conservation Network launched through a LIFE Preparatory project, which includes some actions in Mediterranean region. After a brief presentation of Eurosite mission and targets, a definition of private land conservation was provided.

This includes the protection of nature and biodiversity on a property which is already in private ownership as well as the private acquisition of a property or of use rights for conservation purposes. Among other pilot actions, the project includes:

- An action of crowdsourcing in Portugal, by creating contractual agreements on land management between conservation organisation and private landowners (i.e. forest companies, individuals) to cover a wide coherent territory under nature management/landscape approach.
- Tax incentives for stewardship agreements in Spain, joining efforts with Catalan Government to study, approve and implement a suite of tax incentives for land stewardship, as well as investigating the feasibility of qualifying as eligible for tax deductions of private land-owners who commit to land stewardship contracts for implementing conservation actions.
- Historic heritage and land conservation experiences in Italy, examining the work of existing private non-naturalistic foundations that own and manage land for its conservation values and working with that.
- Public recognition to foster land conservation in the EU, focusing on 3 questions: how to motivate members and non members of IMA (Industrial Mineral Association) to enter the IMA Europe Biodiversity Award competition; does the award increase the level of conservation activity of the winners; does the award attract organisations to include conservation (if not before).

Thomas Galewski (Tour du Valat) showed a practical approach on assessing the impact of anthropogenic pressures and conservation measures on Mediterranean wetlands at site level. Since its foundation in 1954, this research institute accumulates a wide experience using the Rhone Delta (Camargue) as a laboratory for research activities and test management practices, including species and habitats of community interest (such Mediterranean salt meadows or Mediterranean temporary ponds), through a low-interventionism approach. In 2008 decided to launch the Mediterranean Wetlands Observatory in collaboration with MedWet in order to start making a Mediterranean picture at biogeographical level. The main tools applied for monitoring and evaluation are:

- Remote sensing data to monitor wetlands surface area and inundation, to identify the drivers of wetland loss and to evaluate if protection prevents wetland loss.
- Species abundance data to evaluate trends in wetland biodiversity, to compare biodiversity trends among ecosystems and to evaluate the efficiency of European Directives.

Other projects focus on Mediterranean Red Lists address assessments on threats and identify areas of higher risk at the biogeographical level. The ecosystem services approach is applied to assess the cultural value of wetlands and to evaluate the trends in services in a context of wetland loss.

All the presentations can be found on the [Natura 2000 Platform](#).

2.4 Day 2. The thematic working groups

A large part of the second day of the seminar included the thematic working groups. In the following table, the group with their chairs and facilitators are presented:

Group	Chair	Seminar support by the contractor
Lead Seminar Coordinator: Neil McIntosh (ECNC)		
1. Assessment and sustainable development of ecosystems	Javier Cabello (UAL)	Teresa Pastor (EUROPARC)
2. Conservation objectives & monitoring and evaluation	Mora Aronsson (SLU/ETC-BD)	Diego García Ventura (EUROPARC-Spain)
3. Effective governance model for integrated approaches to implementation of Natura 2000	Lydia Alvanou (Axios Loudias Aliakmonas Management Authority)	Jinthe Roelofs (ECNC)
4. Addressing threats and pressures on Mediterranean habitats & species	Takis Tsintides (Cyprus Ministry of Agriculture, Rural Development and Environment)	Kristijan Civic (Eurositi)

All thematic working groups started with an introduction of the group participants, chair and facilitator. In this way the group participants could outline their expertise and express their expectations and interest in the group they joined. The participants list for each thematic group is available in Annex II.

2.4.1 Assessment and sustainable development of ecosystems

The session involved 20 stakeholders including scientist, managers, policy-makers and NGO members around Natura 2000 Network and Habitat Directive in the Mediterranean Region, from 5 European countries of the Mediterranean Basin (Cyprus, Croatia, France, Malta and Spain). Discussion was made separately by each topic in small (4-5 people) groups, followed by a common discussion for each topic, as summarized in the present document.

Three main topics and 12 issues were addressed during the session. Regarding to the first topic, *Interpretation of Habitat Types*, the issues addressed were the confusing definitions of habitats in the Interpretation Manual, the challenge to deal with the biogeographical variability of habitats in the Mediterranean region, and the need for more complete definitions of the habitats, that consider the ecological dynamics and transitions. The second topic, *Assessing Conservation Status and Favourable Reference Values (FRV)*, involved discussions about the lack of FRV guidelines for Habitats, a very fragmented & scattered information about habitats, the need to adopt a biogeographical perspective in conservation status evaluations, the needed steps to relate FCS of habitats with their role as Ecosystem Services providing units, and lastly the way to assess future prospects to characterize conservation status. Finally, in relation to the third topic, *Restoration priorities and the evaluation of the Low Hanging Fruits (LHF) approach*, the questions emerged were: How to prioritize habitats to restore? How to prioritise and ensure acceptance and long-term viability of habitats? and How to proceed with restoration?

All the discussions had three underlying arguments that somehow, make it difficult to implement the Directive. These arguments are: 1) habitats are usually considered as static entities while ecosystems are inherently dynamics, both due to natural and anthropogenic factors; 2) the Mediterranean Basin is one of the world hot spot of biodiversity, what in practice imply a huge biogeographical variability in the species composition of habitats along the region; 3) to ensure long-term habitats conservation, and according to the new conservation paradigm focused on ecosystem services, conservation status evaluations should be connected to the capacity of habitats to provide ecosystem services.

As a result of the discussions, several opportunities and requirements were identified. Particularly, all the delegates agreed with: 1) the need for training in the habitat interpretations and in the use of methods to assess conservation status, 2) an increasing communication among stakeholders and with the society, 3) the use of the already existing scientific knowledge to improve habitats evaluations, 4) promoting networking across the region, and 4) new funding to deal with proposed actions. Spain was leading all discussions and proposals, and two workshops, that could drive to apply to collaborative projects were proposed by the Spanish team: one dedicated to habitats definitions following an ecosystem approach and incorporating complementary variables (abiotic, structure & function, other taxonomic groups, ...), and other on how to establish FRV at national/biogeographical level, and calibration for the assessment of structure and function at the level site.

The main identified issues and proposed recommendations and cooperative opportunities for solutions are detailed below.

2.4.1.1. Recommendations & collaborative opportunities

CHALLENGE #1 - INTERPRETATION OF HABITAT TYPES

Issue	Recommendations & collaborative opportunities
Confusing Habitats Interpretation Manual	<p>The habitats interpretations are somewhat ambiguous and difficult to harmonize between countries. This poses difficulties to reach the target of the conservation at the level of biogeographical region, but also to its evaluation, as the defining features of the habitat are not well fixed and the current status cannot be compared with the natural ranges / reference conditions.</p> <p>Common approach to define habitats, even with different values for featuring variables and characteristic species at each MS (Member State), Standardized guidelines are needed to deal with uncertainties.</p>
Biogeographical variability	<p>The Mediterranean biogeographic region is a biodiversity hotspot; thus, there is high variability across countries for the same habitat.</p> <p>This high range of variability should be reflected in the definitions. This is especially important to identify habitats and its variability, as well as for evaluating the range as a component of the evaluation matrix that deals with covering all ecological variability of the habitat type within the biogeographical region.</p>
Definition of habitats	<p>Usually based solely on plants communities or plant species composition, what may be incomplete. For some habitats variables related to structure, function but also other taxonomic groups could be key indicators for identification of the habitat. Other features (structure, functions, and other taxonomic species) should be included in the Interpretation Manual to complement definitions. Identification of common variables (not their ranges) that define the structure and function of the habitat type within the Mediterranean Biogeographical region is needed. This “Environmental variables + Species approach” should be common for all Mediterranean MS sharing the habitat type. Once fixed these, then each MS can fix which are the characteristic ranges and species that describe the ecological variability of the habitat type within the Mediterranean Biogeographical region within its territory</p>

Ecological dynamics and transitions	<p>Ecosystems are dynamics entities both at spatial and temporal basis: (i) ecosystems are prone to natural succession; (ii) many habitats depend on traditional uses that are now disappearing, and (iii) climate change is already affecting many Mediterranean habitats. Moreover, Mediterranean habitats are often characterised by mosaics.</p> <p>Definition of habitats should follow an ecosystem approach. The main dynamic features of the habitat and the scales at which its structure and processes occur should be included in a proper habitat definition. Mapping should upscale to landscape mapping.</p>
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CHALLENGE #2 - ASSESSING CONSERVATION STATUS AND FAVOURABLE REFERENCE VALUES (FVR)

Issue	Recommendations & collaborative opportunities
Lack of FRV guidelines for Habitats	<p>While for species FRV have been well addressed in the new guidelines for the reporting of article 17 of the Habitats Directive, this has not been achieved at the same level for habitats.</p> <p>FRV for the different variables used to evaluate structure and function would not be the same across countries, though environmental variables – species approach would identify the same variables (but different reference conditions) to be evaluated. Country specific FRV are thus needed for structure and function, but methods must be intercalibrated/compared in the sense that ranges of variables differ among MS, but the method should offer the same result regarding the achievement of the conservation target of structure and function (favourable/unfavourable) when the different MS national methods are applied to a same locality where the habitat type is present</p> <p>The essential variables to monitor habitats need to be identified.</p>
Fragmented & scattered information	<p>Very often, information exists but it is very difficult to access it. It is needed to integrate information. There are many platforms and databases that can be used to produce or getting information at national, continental and global level that can be used, such as Satellite-based Wetland Observation Service (SWOS), Copernicus, LTER-Europe, Life-Watch, or GBIF.</p>
Biogeographical perspective to be fulfilled	<p>Even if FRV may vary across Member States (MS), the targets must be faced at biogeographical level. The Favourable Reference Range (FRR) should include all habitat subtypes (ecological variability) within the Mediterranean Biogeographical region (or MS if MS scale is applied). Concerning the Favourable Reference Area (FRA), how much area will be needed to reach the targets? There are different methods and models that could be applied. A way of doing it could be a saturation number in the curve area / species. Establish an ecological network of sites with FCS, as reference, could be useful.</p>
How to relate FCS with Ecosystem Services provision?	<p>Ecosystem Services should be monitored for adding values to ensure people engagement in relation to habitats conservation.</p> <p>According to the Ecosystem Services cascade model, services are derived from ecosystem functions. This emphasizes the development of protocols and guidelines to monitor functions as one of the component of the habitats conservation status assessment, and these relevant functions must consequently be parametrised in the habitat type definition.</p>
Future prospects	<p>As it is established now, it is a vague question. So far it lies primarily on Expert consultation, however an evaluation list/matrix is being elaborated by the Commission that would be helpful to standardise the evaluation procedure. On the other hand, there is scientific knowledge to implement climate change and land use change scenarios for forecasting the future of habitats.</p> <p>Evaluations of pressures and threats should also include indicators for structure and function. Work on socio-economic values of habitats is needed to ensure long-term habitats conservation.</p>

CHALLENGE #3. RESTORATION PRIORITIES AND LOW HANGING FRUITS (LHF)

Issue	Recommendations & collaborative opportunities
How to prioritize habitats to restore	<p>Restoration priorities based on: 1) imminent risk of loss should go first, despite the cost; 2) local endemic, umbrella and flagship species in the habitat composition; 3) habitats that can be considered</p>

	<p>umbrella and flagship, i.e. those big habitats comprising different smaller ones for example habitat 1130 – estuaries (In this way, we will be also addressing mosaics); 4) Connectivity; 5) Priority habitats.</p> <p>Consider the cost of no restoration in terms of loss of ecosystem services. What should be paid to compensate for the ecosystem services lost</p> <p>Size concerns: the criteria would be different regarding the type of pressures and size (ex. Small territories like Malta).</p>
How to prioritise and ensure acceptance and long-term viability?	<p>Political and social will to back up restoration.</p> <p>Medium to long term perspective in establishing the targets of restoration.</p> <p>Opportunities / Restoration Feasibility: the use of government or private land; carry actions that have no high costs but have high visibility/effectivity</p>
How to proceed with restoration?	<p>Follow a Landscape approach, exchanges among habitats/ecosystems.</p> <p>Focus on Ecosystem functions (not only species)</p>

2.4.1.2. Projects and experiences from countries

CHALLENGE #1 - INTERPRETATION OF HABITAT TYPES

Country	Actions/Experience	Comments
Spain	Bases ecológicas preliminares para la conservación de los tipos de hábitat de interés comunitario en España. 2009. (Preliminary Ecological Bases for the conservation of habitat types of Community interest in Spain)	http://www.mapama.gob.es/es/biodiversidad/temas/espacios-protegidos/red-natura-2000/rn_tip_hab_esp_bases_eco_preliminares.aspx
Spain	Interpretation of HCI group 31 and Equivalences	Correspondence of HCI with other habitat classifications + Inventorying (IEZH – Data Base UVEG + EUNIS). http://www.mapama.gob.es/es/biodiversidad/temas/espacios-protegidos/31_tcm7-24056.pdf
Spain	National and Regional habitats maps	https://www.juntadeandalucia.es/medioambiente/site/rediam/menuitem.04dc44281e5d53cf8ca78ca731525ea0/?vgnnextoid=738d2cf382ef4410VgnVCM2000000624e50aRCRD http://mediambient.gencat.cat/es/05_ambits_dactuacio/patrimoni_natural/sistemes_dinformacio/habitats/habitats_terrestres/cartografia_dels_habitats_ver_1/
France	Projected a National book on Habitats Types	They looked for information from other countries but it was very difficult to find it.
France	A national working group to perform the habitats interpretation	Some Habitats Types interpretations can enter in contradiction with EU Manual Interpretation. It was particularly difficult to distinguish between guidelines from NGOs and official ones.
France	Cahiers d'habitats: 7 volumes (Habitats forestiers, Habitats côtiers, Habitats humides, Habitats agropastoraux, Habitats agropastoraux, Habitats rocheux, Espèces végétales, Espèces animales)	https://inpn.mnhn.fr/telechargement/documentation/natura2000/cahiers-habitats
France	Current project for mapping vegetation at country	http://prodinra.inra.fr/?locale=es#!ConsultNotice:406443

	level	
Croatia	National project to map all habitats	http://www.dzpz.hr/eng/habitats/habitat-map/habitat-map-147.html https://www.europeandataportal.eu/data/en/dataset/e785ba33-d282-411d-96ee-7c8c2aeb9774
Cyprus	There is not a good map of terrestrial habitats for the whole country	Difficulties on marine habitats definition because of the variability in the spatial scale at which they can be identified.

CHALLENGE #2 - ASSESSING CONSERVATION STATUS AND FAVOURABLE REFERENCE VALUES (FRV)

Country	Actions/Experience	Comments
Spain	Bases ecológicas preliminares para la conservación de los tipos de hábitat de interés comunitario en España. 2009. (Preliminary ecological bases for the conservation of habitat types of Community interest in Spain)	http://www.mapama.gob.es/es/biodiversidad/temas/espacios-protegidos/red-natura-2000/rn_tip_hab_esp_bases_eco_preliminares.aspx
Spain	Experience on quantifying range and area for FRV HCl group 31 based on Species-Area Curve model.	EU ad-hoc group of FRV
Spain	Spanish system for the assessment of lakes and wetlands under the WFD	http://www.mapama.gob.es/es/agua/temas/estado-y-calidad-de-las-aguas/aguas-superficiales/
Spain	Expert consultation to set FRV	Ad-hoc group of FRV
Spain	LIFE Red Bosques (EUROPARC-Spain) to provide reference models for assessing the conservation status of Mediterranean forests.	http://www.redbosques.eu/
France	Limited funding is hampered a good evaluation of FRV.	
France	A national working group to perform the habitats interpretation	
Cyprus	A permanent sampling plot scheme (every 6 yrs) to monitor terrestrial habitats in terms of climate change impact, and temporal variability in area, structure, and function.	
	There are no FRV established yet.	The sooner starting, the sooner we will have the baseline. The budget to monitor marine habitats is a great issue.

CHALLENGE #3 RESTORATION PRIORITIES AND LOW HANGING FRUITS

Country	Actions/Experience/Examples	Comments
Spain	LIFEs Adaptamed, Conhabit.	http://bit.ly/2zCMeOt http://bit.ly/2n6Yj7s
Cyprus	LIFEs Rizoelia, JUNIPERCY	http://www.life-rizoelia.eu/

2.4.1.3. Cooperative opportunities for solutions identified, collaboration actions/Follow up ideas

Challenge	Possible collaboration actions	Other actions that could be explored
#1 - Interpretation of habitats types	<p>Working group lead by Spain to work on common, standardized Mediterranean biogeographic guidelines, following an ecosystem approach and incorporating complementary variables (abiotic, structure & function, other taxonomic groups) for certain habitats. Input from different disciplines other than botany may be needed. Among others, this working group could perform online surveys to gather data on variables by Habitat type and organise a workshop to work on the common guidelines.</p> <p>Workshop on habitats definitions following an ecosystem approach and incorporating complementary variables (abiotic, structure & function, other taxonomic groups...) promoted by Spain. See there the chances to apply for a collaborative project to work on the standardized common approach, identifying variables to define habitats (abiotic variables).</p>	<p>Learn from Corine Land Cover way for working. They have training sessions. Something similar could be applied for Habitats Interpretation.</p> <p>Organise training in remote sensing tools, since is becoming essential for habitat mapping and monitoring.</p> <p>Carry out sampling in the whole biogeographical region</p> <p>Bilateral cooperation between countries that share habitats should be promoted. If they agree on semantics, these would ease the way at EU level</p>
#2 - Assessing conservation status & Favourable Reference Values (FVR)	<p><i>(Lack of FRV guidelines for Habitats):</i> Working group to set approaches to set FRV at the biogeographical region level, INTERREG or Life project to work on that (maybe linked to the below mentioned for assessment methods).</p> <p><i>(Fragmented & scattered information):</i> Promote National seminars to promote integration of data within each state.</p> <p><i>(Biogeographical perspective to be fulfilled):</i> Hands on Inter-calibration workshop lead by Spain with in situ testing to assay MS national methods and calibrate them on given sites, Life Project involving all Member States to work on Inter-calibration methods and to establish the ecological network of sites with FCS, as reference.</p> <p><i>(How to relate FCS with Ecosystem Services provision?):</i> Training in <i>Ecosystem Services</i> assessment.</p> <p><i>(Future prospects):</i> EU pressures and threats list: application to the Mediterranean Biogeographical region. Expert consulting at biogeographical or even EU level, Training</p>	
#3 - Restoration priorities & Low Hanging Fruits	<p><i>(How to prioritise and ensure acceptance and long-term viability?):</i> Communication and Dissemination at local and national level</p> <p><i>(How to proceed with restoration?):</i> Organise a Workshop on criteria for establishing the restoration priorities and guidelines on habitat restoration</p>	

2.4.2 Conservation objectives & monitoring and evaluation

Session started with a brief self-introduction of all the 23 participants in the thematic group, their relation to Natura 2000 management and their expectations over the workshop. Administration bodies, research institutions and/or NGO's from Spain, France, Italy, Croatia, Greece and Cyprus were represented in the discussion, as well as European Environment Agency (EEA) and LIFE Unit.

This information was clustered and used to build the following main issues to address during the session.

2.4.2.1. Definition and interpretation of habitats

Despite being discussed also on group 1, participants highlighted the importance of having proper and common definitions of all habitats of community interest prior to prioritization exercise. This gap continues to be a problem in Natura 2000 management and monitoring (e.g. some countries reported actions and measures on different HCI that are probably the same).

Most of Mediterranean Member States have manuals of interpretation² with different level of HCI knowledge, but there is not a common platform to share and compare them. To solve that, it is proposed the centralization of all manuals and documents of HCI definition and interpretation available (if possible translated to English) on Natura 2000 Platform. This measure implies a reinforcement of the platform and its contents: an administrator who should manage the contents and energize the discussion is expected. After a consultation time supported by the platform, it is proposed a workshop on common interpretation of HCI between Member States. A comparative analysis of the national interpretation manuals to detect differences and particular issues to discuss among the countries would be very useful.

2.4.2.2. Favourable Reference Values

An adequate determination of Favourable Reference Values (FRV) is necessary prior to defining biogeographical level targets. As previous issue, efforts on setting FRV are variable on each Member State and also with different results, keeping in mind the difficulties on finding reference HCI in the Mediterranean due to their secular human intervention. Expert consultation, comparison along historical data available (census, aerial photographs, etc.), establishment of reference monitoring stations and comparison of HCI conservation state inside and outside Natura 2000 at different levels (regional/national) are the common ways to try that. Reporting ranges was discussed as a proper method rather than fixed references, due to variability of HCI and species at local / regional scale.

As proposed on previous issue, a practical online framework to share all the Mediterranean experiences on setting FRV (previously translated) is expected (such as the Natura 2000 platform), as well as workshop series “feature by feature” (groups of HCI and species) related to this subject.

2.4.2.3 The “Low Hanging Fruits” approach

The Low Hanging Fruits methodology was presented during day 1 as an approach to achieve quick improvements on conservation status for a number of habitat types with relatively less efforts, aimed to show positive results on target 1 of the EU Biodiversity Strategy 2020. EEA remarked that it is an optional tool to prioritize at biogeographical level, despite other criteria or legal framework launched in EU/Member States.

Several participants pointed a lack of scientific basis in the methodology. An argument is the low consistency of data used in Article 17 report to determine the trend in conservation status. On the other hand, the LHF selection for Mediterranean biogeographic region includes typical HCI widespread on other biogeographical regions, but with a testimonial presence in the Mediterranean (e.g. habitat 2150 – Atlantic decalcified fixed dunes -). Participants considered that the whole

² E.g. Cahiers d’habitats in France (<https://inpn.mnhn.fr/telechargement/documentation/natura2000/cahiers-habitats>) and Bases Ecológicas in Spain (http://www.mapama.gob.es/es/biodiversidad/temas/espacios-prottegidos/red-natura-2000/rn_tip_hab_esp_bases_eco_preliminares.aspx) were mentioned by the participants.

conservation of these habitats should be analysed and prioritized on their proper biogeographical region where they are typical or characteristic.

Some participants warn of an excessive political approach of the methodology, open to different interpretations. In general, participants expressed criticisms about this approach and proposed an improvement of prioritization tools based on better scientific knowledge and taking into account HCI conservation status in all the biogeographical regions where they are present.

2.4.2.4 Conservation objectives

In several countries, conservation objectives are set by different approaches (selection of “best sites” or “best populations” for each HCI/species; definition of reference thresholds) at different scales (site, regional, national). Participants claimed to check the different conservation objectives set in each Member State at different scales looking for further developments at biogeographical level. In case of species (especially migratory), it could be interesting to know their conservation status outside of EU and their implications prior to define conservation objectives inside.

The need to set conservation objectives at biogeographical level was pointed out, which should take into account the conservation status of the habitat types and species and consider the role and relative value of Natura 2000 sites for the conservation of the habitat types and species concerned.

A good starting point of collaborative work could be the development of action plans for HCI and species at biogeographical level, after sharing all the data and criteria about interpretation of HCI and FVR. LIFE Programme was pointed as an ideal framework either for gathering previous best practices (usually at site level) than funding action plans. Spain offered the possibility to arrange a workshop related to the preparation of habitat action plans.

Projects of training between Natura 2000 site managers and sharing best practices from LIFE, INTERREG and other initiatives were proposed during this session. In general terms, a better communication between researchers, practitioners, site managers and stakeholders should be encouraged.

2.4.2.5. Monitoring

The last point of discussion started with a reflexion about the different approaches and perspectives between field monitoring (usually assumed by researchers) and Article 17 reporting (done by managers). LIFE Programme was mentioned again as a source of lots of monitoring experiences linked to project actions, in spite of there is not a specific compilation of them. LIFE also has funded some citizen science monitoring projects in Italy and many other interesting projects, such MARMONI³ project on Baltic Sea. LIFE unit encouraged reporting projects about monitoring systems at biogeographical scale.

Several monitoring systems developed by Member States were mentioned (table 1). The importance of monitoring inside and outside Natura 2000 sites was confirmed as ending issue of the thematic group.

³http://ec.europa.eu/environment/life/project/Projects/index.cfm?fuseaction=search.dspPage&n_proj_id=3822#AD

Table 1. Several monitoring systems developed and mentioned by participants.

COUNTRY	HABITATS	SPECIES
Cyprus	-	Birds/Mammals (mouflon)
Greece	Monitoring stations inside Natura 2000 sites	Reptiles/Plants
Croatia	Several habitats inside and outside Natura 2000 sites	Several species inside and outside Natura 2000 sites
Italy	Regions monitor habitats inside Natura 2000 sites. No systematic monitoring outside	Regions monitor species inside Natura 2000 sites. Some regions monitor birds outside sites; no systematic monitoring for other species
France	Data from Forest Service	Birds/Bats
Spain	Nationwide system for monitoring the conservation status of habitat types ⁴	-
Portugal	Linked to Agro-environmental scheme National Forestry Inventory Rivers and wetlands (WFD)	Land-steppe birds/ (coastal areas) Plants

2.4.3 Effective governance model for integrated approaches to implementation of Natura 2000

The group consisted of 15 experts from Cyprus, France, Greece, Italy and Spain. The participants had a variety of expertise, governmental representatives and NGO representatives were both present. Specifically, mediators between local communities and ministries were present, and someone with a lot of involvement in the MedWet project.

After a round of introductions, the group started with defining ‘governance’, as the term usually comes with some misinterpretations: Governance is the interaction of structures, processes, information and norms guiding behaviour towards stated objectives that impact collections of people. Through governance, a shared vision is being shaped and through management it is being actualized. Fostering good environmental governance ensures accountability, transparency and cultivation of attitudes. A fail-proof governance entails bridging organisations/entities/actors, enabling legislation and government policies and incorporating local knowledge/experience and scientific insight in the context of a robust but adaptive management plan.

In order to lead a clear and straightforward discussion, the distinction between a management plan implementation and the associated management planning -an adaptive, iterative process with systematic contact with stakeholders- was made. Also, it was pointed out by the participants that Natura 2000 sites are not nature reserves as such, they are often man-made or semi-natural and have a strong inter-relation with human activities.

⁴ The system was presented at the Knowledge market (on a poster). It uses available tools, such as the Orthophotography national Plan, the National Forest Inventory and monitoring under the WFD.

After the definition setting, the threats and pressures related to effective governance models for integrated approaches to implementation of Natura 2000 were discussed thoroughly. The different threats and pressures identified during the discussion were related to: communication, coordination, communication & coordination or resources.

2.4.3.1. Communication related threats and pressures:

1. A lack of local awareness and/or a common language/ground. The IIRR (Inform, involve, (share) responsibilities and reward) approach can help in overcoming this problem: all stakeholders should be Informed, Involved, they should have (shared) Responsibilities and be Rewarded. Communication experts, social scientists and good practices should be used. There should be a structured dialogue and the language should be adapted to the audience. Member States should also exchange best practices, possibly through a specified section on the Natura 2000 Platform.

2. A knowledge gap about the benefits of the Natura 2000 network. A change of mind-set about Natura 2000 and sustainable development is instrumental. To that end, the IIRR approach can contribute to the information and involvement of stakeholders in the Natura 2000 network and the sustainability thinking. It is also important to find out why stakeholders are negative about Natura 2000. It may well be that their outlook on conservation issues and the ecosystem service approach is false (e.g. farmers may think that Natura 2000 has a negative impact on their welfare, so a way should be found in which Natura 2000 can generate income for them). Other examples of Natura 2000 benefits are ecotourism and environmental education activities in the field. However, it is essential to inform all stakeholders about the “red lines” applied within the Protected Area (regulations on land uses, activities and the Code of Conduct for visitors etc.) In general, the rewards and benefits of the network should be showcased more and in a cross- sectoral way.

2.4.3.2. Coordination related threats and pressures.

1. Lack of integration of different management plans. One area can have multiple plans, for multiple purposes (for example, different plans for tourism, recreation, forestry and Natura 2000). These plans are not always integrated. This problem can be resolved by installing a steering group or 1 dedicated person/body that compare all plans and combine them into 1 overarching integrated plan with elements of all plans. Inter-service consultation is needed.

2. Lack of coordination between different designation processes and protected area regimes (for example RAMSAR designation etc.). Better coherence within the competent authority at different levels is needed. In general, a coordination entity should be present. In Greece there is a National Nature Committee to coordinate it. The United Nations also has an InforMEA portal, an informative portal about Multilateral Environmental Agreements.

2.4.3.3. Communication and coordination related threats and pressures.

1. Lack of collaboration with all involved stakeholders. This includes a lack of collaboration with stakeholders from other policy sectors. The IIRR approach could be applied for effective governance: sharing of responsibilities is particularly important, not only for the EU and Member States but for all involved stakeholders; mechanisms or guidelines for efficient and effective collaboration should be in place; twinning can contribute to effective practice exchange and hands-on interventions. It is common knowledge though, that planning on paper is easier than in the real context; for instance

although Cyprus is a small country and more or less everyone knows each other, it is still not feasible for the communities to share a common vision. However, if the discussion is open, common ground can be found. It is also important to think out of your own framework and really identify what other stakeholders want and why. Sometimes, a lack of jurisdiction on the local level can be a constraint as well, as responses can be really slow (e.g. monthly board meetings)

A future thematic networking event could be organised, using the Action Plan as starting point. The audience for this thematic networking event should be integrated and inclusive. The European Commission and Member States should work together on who to invite. There should be a commitment to improve on and promote shared responsibilities. Land stewardship can also be used as a tool. There should be competent authorities and steering groups at various levels, to ensure collaboration with all involved stakeholders.

2. Lack of a (long-term) mediator or bridging entity between the local communities and conservation issues. Again, the IIRR approach can be applied for best results: trust should be built by having a long-term relationship with communities and by listening in an open-minded way. This can actually be a so called Low Hanging Fruit, as long-term relationships can really be positive for conservation, while at the same time local communities could be part of their own development. Steering committees and thematic groups about specific issues should be installed to work towards a good long-term relationship with local communities.

2.4.3.4. Resource related threats and pressures.

1. Lack or inefficient allocation of resources and funding. Bureaucracy is invariably the source of administrative challenges and delay leading to loss of funding and consequently, management implementation failure. Programmes (except for the LIFE programme) are not fit and/or structured for nature projects. For the CAP policy a collective approach, for example with a group of farmers could be beneficial. LIFE integrated projects can be a good source as well. However, it is also important to think beyond CAP and LIFE integrated projects. In general, for nature projects it will probably be beneficial to have a new fund replacing the CAP or a reformation of the CAP. It is however important to keep in mind that it is also a matter of sharing responsibilities of how the CAP is implemented, not only the EC, but Member States have their responsibility as well. For instance, in France an agricultural development fund for specific actions is applied and it is redefined every 5 years. The national government works jointly with the regional government towards a common goal in an effective way.

2.4.4 Addressing threats and pressures on Mediterranean habitats & species

The group comprised 19 experts from 5 Member States (CY, ES, GR, HR, PT). The group kicked off their discussions by a round of introductions where they have already stated the most important threats they are facing in their work, as well as examples of good practice they are using or know of. The list of examples of good practice is as follows:

- Rewilding as an approach (Rewilding Europe);
- Nature-based economy in local community integrated in management planning (Rewilding Europe);
- SPA management plan preparation (Bird Life Cyprus);
- Appropriate assessment procedures;

- Sea Turtles LIFE project (6 countries, Cyprus);
- LIFE invasive species (Lion fish, Cyprus);
- Standardised protocol to monitor and evaluate ecosystems in Spain;
- Concrete conservation actions for improvement of Juniper forests, (Cyprus);
- Recently launched standard by IUCN to prioritise invasive species based on environmental and ecological risk EICAT (<https://www.iucn.org/theme/species/our-work/invasive-species/eicat>)

Regarding the pressures and threats, in the first instance a long list was collated during the introductory round. This list was afterwards, through discussion, shortened and prioritised. The following pressures and threats were considered by the group as the most important in the Mediterranean region:

- IAS and pest species
- Agricultural intensification
- Tourism and coastal development
- Illegal killing and poaching
- Lack of clear conservation and management objectives (relates to problems with appropriate assessment)
- Land abandonment and a lack of opportunities for rural population
- Lack of methods to assess pressures and threats
- Wildfire
- Climate change
- Lack of technical knowledge
- Low awareness
- Quarries
- Lack of defined FRV for species at the Mediterranean level
- Conservation of reefs
- Mechanisms and approaches to Natura 2000 connectivity
- Slow bureaucracy – could local level act faster?

Next to the general pressures and threats the group has discussed about which habitat groups in the Mediterranean region are the most under pressure and should, therefore, be prioritized for conservation actions. In the end, it was agreed that the habitats we should focus the most on are: (temporary) freshwater habitats (3170, 3280, 3290) and all coastal and bordering marine habitats/ ecosystems. The selection was made on the basis that these habitats suffer from almost all pressures and threats listed as priority in the discussion above.

After this setting the scene exercise, the group has focused on the joint actions that could be set in motion within the biogeographical region to improve things. The main pressures and threats discussed here were the Invasive Alien Species, land abandonment, and issues in general related to assessing the pressures and threats in relation to the Article 6.3 of the Habitats Directive and the appropriate assessments – in relation to the last one, there is a lack of technical knowledge across the region. It was agreed that some kind of early warning system would be very much appreciated to be able to react timely to pressures. Equally, an early warning system for IAS is also necessary.

Spain has made some good progress on the development of the science based protocols to evaluate pressures and threats and how to include these into the evaluation matrix of the conservation status. Spain would be willing to lead on preparing a technical workshop to develop this further.

In terms of invasive alien (and pest) species there were ideas to look at existing apps and tools (e.g. from JRC) for citizen science and explore how these could be used for an early warning system. This could be done via a workshop with a possible role by JRC and or EEA. Spain was interested to perhaps organise a workshop towards developing a tool that can – based on various data inputs (on human activities) – identify high risk areas (map of pathways) to inform a response system.

Also, it would be worth exploring (i.e. through a project) in which cases what kind of response is reasonable (i.e. an eradication, control, or is it too late already).

In general the early warning system is very important for IAS so it would be useful to know the lists from the neighbouring countries to be alert for incoming threats. This will be brought up at the EU working group on IAS.

In terms of land abandonment, it was agreed that there is no universal solution to this in all cases. While in some cases investing in High Nature Value Farmland and subsidies are appropriate, in other cases rewilding might be an option. This could be explored by a project.

As the CAP reform is happening at this moment, it is the right timing for the Mediterranean nature organisations to coordinate and send a joint statement to the EC on the region-specific solutions that could be integrated into the next CAP. WWF Spain could prepare a first draft of such document to be agreed at the regional level. Eurosite will try to support this action.

2.5 Day 2. The knowledge market

After thematic working groups, the knowledge market was displayed to share more than 22 experiences of projects and initiatives linked to Natura 2000 management and conservation inside and outside the MED region. An abstract of each experience is available on Annex IV.

2.6 Day3. Closing plenary session

Blanca Saez-Lacave (EASME) and João Pedro Silva (NEEMO) presented the latest developments under the LIFE programme. The LIFE programme promotes collaboration between several stakeholders for managing Natura 2000 sites, habitats and species, and it is also a huge repository of practical habitat management and restoration actions. For the past 25 years, more than 250 projects have been developed in the MED region aiming at improving nature and biodiversity, and, in particular, Natura 2000 network habitat restoration and site management.

The LIFE Multi Annual Working Programme (2018-2020) was announced close to be approved, as well as the Mid-term evaluation of the current LIFE regulation. It includes novelties such a simplification of the application and reporting processes (a short report for evaluating prior to the complete report). It is wise not only to think about the nature and biodiversity area when submitting an application, because there competition for this area is huge; governance and climate can

sometimes is a possibility as well. It is also really important to read LIFE regulation, the Multi-annual work-programme, application packages and Frequently Asked Questions (FAQ), guides for evaluation of LIFE project proposals and LIFE project database.

In 2017, the EC initiated discussions leading to the next financial framework. Delegates were encouraged to participate and to give recommendations to LIFE discussions.

The outcomes of the four thematic working groups on day 2 were presented and shortly discussed as well.



Final acknowledgements at day 3 of the seminar, by Lefkios Sergides.

François Kremer (European Commission) thanked the host and stressed that the Process is also designed to bring people into contact with each other and encourage them to work together. Finally, François encouraged sharing the final report to all stakeholders involved in Natura 2000 management. The results of the working group discussions presented during the closing session provide the basis for developing new and promising follow-up actions. The European Commission and the contractor supporting the Natura 2000 Biogeographical Process play a coordinating and supporting role for these follow-up actions, but the initiative clearly resides with the site, local, regional and Member State level actors. The Commission has initiated and supported the Natura 2000 Biogeographical Process to help the Member States in their duty to implement the Nature Directives. In addition, there are various types of funds available to carry out projects and activities in relation to the implementation of the Nature Directives, in particular, under the LIFE Nature programme and the structural funds. The delegates are encouraged to remain in contact, to include their colleagues and to take forward the many interesting ideas that had been discussed during the Seminar.

Lefkios Sergides (Terra Cypria) closed the seminar acknowledging to all delegates their presence and underlining the importance of long-term monitoring: as showed during the seminar, in most cases, current conservation measures will give results 20-50 years later, and this is an important idea to take into account by politicians, as well as to involve stakeholders in order to see people going out to conserve.

3 Mediterranean Roadmap

A significant range of subjects for future development and concrete collaboration were identified during the course of the working groups' discussions:

What?	Where?/ Who?
Working group on common standardized Mediterranean biogeographical guidelines, following an ecosystem approach and incorporating complementary variables for certain habitats.	Spain
Centralization of all Member State manuals and documents of HCI definition and interpretation available (if possible, translated to English).	Natura 2000 Platform
Workshop on common habitat definitions and interpretation.	Spain
Online framework to share all the Mediterranean experiences on setting Favourable Reference Values (translated).	Natura 2000 Platform / other support
Working group on approaches to set Favourable Reference Values at the biogeographical region level (through an INTERREG or LIFE project) "feature by feature" (groups of habitats and species)	
National seminars to promote integration of data within each state.	
Inter-calibration workshop with in situ testing to assay Member State national methods and calibrate them on given sites.	Spain
LIFE project involving all Member States to work on inter-calibration methods and to establish the ecological network of sites with Favourable Conservation Status as reference.	
Workshop on criteria for establishing the restoration priorities and guidelines on habitat restoration.	
Prioritization tools based on better scientific knowledge and taken into account HCI conservation status in all biogeographical regions where they are present.	
Workshop on development of action plans for HCI and species at biogeographical level. LIFE project either for gathering previous best practices than funding action plans.	Spain
Projects about monitoring systems at biogeographical scale.	
Best practices exchange on local awareness and common language/ground in communication.	Natura 2000 Platform
To encourage plan integration into Natura 2000 sites.	
Guidelines for efficient and effective stakeholder's collaboration. Twinning programmes.	
Thematic networking event on stakeholder's involvement and land stewardship, with competent authorities and steering groups at various levels.	EU & Member States
To promote steering committees and thematic groups to work towards a good long-term relationship with local communities.	
Technical workshop on developing science based protocols to evaluate pressures and threats and how to include these in to the evaluation matrix of the conservation status.	Spain
Workshop on citizen science & early warning systems.	JRC/EEA
Workshop on developing tools to identify high risk areas (map of pathways) to inform a response system, based on several data inputs.	Spain
To bring up at the EU working group on Invasive Alien Species the need to know IAS lists from neighbouring countries to be alerts for incoming threats.	
To coordinate and send a joint statement to the EC from Mediterranean nature	WWF-Spain /

organisations on the region-specific solutions that could be integrated into the next CAP.	Eurosite
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Annex I. Habitats selected in the Mediterranean Biogeographical Process

Coastal and marine habitat group			
Habitats Directive code	Habitat name	Low Hanging Fruit	Priority consideration habitat
1110	Sandbanks which are slightly covered by sea water all the time		Yes
1120	Posidonia beds (<i>Posidonia oceanicae</i>)		Yes
1150	Coastal lagoons		Yes
1170	Reefs		Yes
1310	<i>Salicornia</i> and other annuals colonising mud and sand		Yes
1410	Mediterranean salt meadows (<i>Juncetalia maritimi</i>)		Yes
1420	Mediterranean and thermo-Atlantic halophilous scrubs (<i>Sarcocornetea fruticosi</i>)		Yes
1520	Iberian gypsum vegetation (<i>Gypsophiletalia</i>)	Yes	
2110	Embryonic shifting dunes		Yes
2150	Atlantic decalcified fixed dunes (<i>Calluno-Ulicetea</i>)	Yes	
2230	<i>Malcomietalia</i> dune grassland		Yes
2250	Coastal dunes with <i>Juniperus spp.</i>		Yes
Freshwater habitat group			
Habitats Directive code	Habitat name	Low Hanging Fruit	Priority consideration habitat
3150	Natural eutrophic lakes with <i>Magnopotamion</i> and <i>Hydrocharition</i> -type vegetation	Yes	
3170	Mediterranean temporary ponds		Yes
3230	Alpine rivers and their ligneous vegetation with <i>Myricaria germanica</i>	Yes	
3240	Alpine rivers and their ligneous vegetation with <i>Salix elaeagnos</i>	Yes	
3250	Constantly flowing Mediterranean rivers with <i>Glaucium flavum</i>	Yes	
3280	Constantly flowing Mediterranean rivers	Yes	

	with <i>Paspalo-Agrostidion</i> species and hanging curtains of <i>Salix</i> and <i>Populus alba</i>		
3290	Intermittently flowing Mediterranean rivers of the <i>Paspalo-Agrostidion</i>		Yes
92D0	Southern riparian galleries and thickets (<i>Nerio-Tamaricetea</i> and <i>Securinegion tinctoriae</i>)		Yes
92A0	<i>Salix alba</i> and <i>Populus alba</i> galleries		Yes
Grassland, heath and scrub habitat group			
Habitats Directive code	Habitat name	Low Hanging Fruit	Priority consideration habitat
4010	Northern Atlantic wet heaths with <i>Erica tetralix</i>	Yes	
4030	European dry heaths	Yes	
5140	<i>Cistus palhinhae</i> formations on maritime wet heaths	Yes	
5220	Arborescent matorral with <i>Ziziphus</i>	Yes	
5320	Low formations of <i>Euphorbia</i> close to cliffs	Yes	
5330	Thermo-Mediterranean and pre-desert scrub		Yes
5430	Endemic phryganas of the <i>Euphorbio-Verbascion</i>	Yes	
6210	Semi-natural dry grasslands and scrubland facies on calcareous substrates (<i>Festuco-brometalia</i>) (*Important orchid sites)	Yes	Yes
6220	Pseudo-steppe with grasses and annuals of the <i>Thero-Brachypodietea</i>		Yes
6310	Dehesas with evergreen <i>Quercus spp.</i>	Yes	Yes
6520	Mountain hay meadows	Yes	
8240	Limestone pavements	Yes	
Forest habitat group			
Habitats Directive code	Habitat name	Low Hanging Fruit	Priority consideration habitat
9180	<i>Tilio-acerion</i> forest of slopes, screens and ravines	Yes	
9260	<i>Castanea sativa</i> woods		Yes

9320	<i>Olea</i> and <i>Ceratonia</i> forests		Yes
9330	<i>Quercus suber</i> forests		Yes
9340	<i>Quercus ilex</i> and <i>Quercus rotundifolia</i> forests		Yes
9430	Subalpine and montane <i>Pinus uncinata</i> forests (* If on gypsum or limestone)	Yes	
9510	Southern Apennine <i>Abies alba</i> forests	Yes	
9540	Mediterranean pine forests with Mesogean pines		Yes
9560	Endemic forests with <i>Juniperus spp.</i>	Yes	
91M0	Pannonian-Balkan turkey oak-sessile oak forests	Yes	
91L0	Illyrian oak-hornbeam forests	Yes	

Annex II. List of participants per thematic working group

Thematic working group 1: *Assessment and sustainable development of ecosystems*

Last name	First Name	Organisation	Country
Cabello	Javier (Chair)	University of Almería	Spain
Pastor Ramos	Teresa (Facilitator)	EUROPARC Federation	Spain
Argagnon	Olivier	CBNMED	France
Barrel	Maud	Ministry for the ecological and inclusive transition, Corsica	France
Camacho	Antonio	University of Valencia	Spain
Demetropoulos	Andreas	Cyprus Wildlife Society	Cyprus
Grima Connell	Matthew	Environment & Resources Authority	Malta
Hadjichristoforou	Myroulla	Federation of Env. Orp.d CY	Cyprus
Kakouris	Herodotos	Department of Forests	Cyprus
Koulla	Michael	Terra Cypria	Cyprus
Numa	Catherine	IUCN-Med	Spain
Ouzet	Sophie	European Commission DG ENV / D3	Belgium
Petrou	Antonis	Enalia Physis Env. Res. Centre	Cyprus
Sánchez de Dios	Rut	Universidad Complutense de Madrid (UCM)	Spain
Škunca	Marina	Geonatura Ltd,	Croatia
Vogiatzakis	Ioannis	Open University of Cyprus	Cyprus
Xenophontos	Marina	Department of Environment	Cyprus

Thematic working group 2: *Conservation objectives, monitoring and evaluation*

Last name	First Name	Organisation	Country
Aronsson	Mora (Chair)	SLU/ETC-BD	Sweden
García-Ventura	Diego (Facilitator)	EUROPARC-Spain	Spain
Andreou	Marios	Frederick University	Cyprus
Čačić	Tatjana	Croatian Agency for the Environment and Nature	Croatia
Coignon	Bastien	Ministère de la transition écologique et solidaire	France
Čuković	Tamara	Croatian agency for the Environment and Nature	Croatia
de Filippo	Gabriele	Istituto di Gestione della Fauna onlus	Italy
Erotokritou	Elena	Department of Environment	Cyprus
Galewski	Thomas	Tour du Valat	France
Ieronymidou	Christina	BirdLife Cyprus	Cyprus
Iezekiel	Savvas	Forestry Department	Cyprus
Kassinis	Nikos	Game and Fauna Service	Cyprus
Kati	Vassiliki	University of Ioannina	Greece
Kounnamas	Constantinos	Frederick University	Cyprus
Lymberakis	Petros	Natural History Museum of Crete - University of Crete	Greece
Olmeda	Concha	ATECMA	Spain
Pedro Silva	Joao	NEEMO	Belgium
Russell	Zoë	Scottish Natural Heritage	United Kingdom
Simón Zarzoso	Juan Carlos	Tragsatec	Spain
Tryfon	Eleni	European Environment Agency	EU
Tzirkalli	Elli	Cyprus Butterfly Study Group	Cyprus
Vasiliki	Anastasi	Terra Cypria	Cyprus
Zogaris	Stamatis	Hellenic Centre for Marine Resources	Greece
Zomeni	Maria	Department of Environment	Cyprus

Thematic working group 3: *Effective governance models for integrated approaches to implement Natura 2000*

Last name	First Name	Organisation	Country
Alvanou	Lydia (Chair)	Axios Loudias Aliakmonas Management Authority	Greece
Roelofs	Jinthe (Facilitator)	ECNC	The Netherlands
Belfiori	David	WWF Oasi S.U. a R.L.	Italy
Bourlon	Sophie	Parc naturel régional du Luberon	France
Carnicero Campmany	Pau	Xarxa de Custòdia del Territori	Spain
Hadjistylli	Margarita	Department of Environment	Cyprus
Hellicar	Martin A.	BirdLife Cyprus	Cyprus
Koutsofta	Panagiota	Terra Cypria	Cyprus
Orountiotis	Costas	Terra Cypria	Cyprus
Panayides	Panicos	Game ad Fauna Department	Cyprus
Papadopoulos	Minas	Department of Forest	Cyprus
Papastilianou	Klitos	Initiative for the Protection of the Natural Coastline	Cyprus
Renaudin	Maïlis	MedWet - the Mediterranean Wetlands Initiative	France
Stylianopoulou	Eleni	Department of Environment	Cyprus
Theodosiou	Antonia	Individual Expert	Cyprus
Tsiaoussi	Vasiliki	Greek Biotope / Wetland Centre	Greece
Zavrou	Despo	Department of Environment	Cyprus

Thematic working group 4: Addressing threats and pressure on Mediterranean habitats and species

Last name	First Name	Organisation	Country
Tsintides	Takis (Chair)	Cyprus Ministry of Agriculture, Rural Development and Environment	Cyprus
Čivić	Kristijan (Facilitator)	Eurosite	The Netherlands
Alves	Paulo	FLORADATA – ICNF	Portugal
Saavedra	Deli	Rewilding Europe	Spain
Theodorou	Christos	Frieds of Akamas	Cyprus
Ioulianou	Filio	BirdLife Cyprus	Cyprus
Zotos	Savvas	Terra Cypria	Cyprus
Hadjoannou	Louis	Enalia Physis Environmental Research Centre	Cyprus
Saez Lacave	Blanca	EASME	Belgium
Hidalgo	Rafael	Ministry of Agriculture and Food, Fisheries & Environment	Spain
Lugić	Edin	Oikon Ltd. - Institute of Applied Ecology	Croatia
Sánchez-González	Jorge R.	Tragsatec	Spain
Dimitriou	Kyriakos	Cyprus association for the protection of avifauna	Cyprus
Pantazi	Christina	European Commission	Belgium
Konstantinou	Loizos	Department of Forests	Cyprus
Christodoulou	Charalambos S.	Department of Forests	Cyprus
Rodriguez	Gemma	WWF Spain	Spain
Marcou	Melina	Department of Fisheries and Marine Research	Cyprus

Annex III. List of participants of the second Mediterranean Natura 2000 Seminar

Last name	First name	Organisation	Country
Alvanou	Lydia	Axios Loudias Aliakmonas Management Authority	Greece
Alves	Paulo	FLORADATA – ICNF	Portuga
Anane	Monia	FACE - European Federation for Hunting and Conservation	Belgium
Andreou	Marios	Frederick University	Cyprus
Antoniou	Andreas	Department of Environment	Cyprus
Argagnon	Olivier	CBNMED	France
Aronsson	Mora	ETC-BD/SLU	Sweden
Bakaloudis	Dimitrios	Aristotle University of Thessaloniki	Greece
Barrel	Maud	Ministry for the ecological and inclusive transition, Corsica	France
Belfiori	David	WWF Oasi S.U. a R.L.	Italy
Bourlon	Sophie	Parc naturel régional du Luberon	France
Cabello	Javier	University of Almería	Spain
Ćačić	Tatjana	Croatian Agency for the Environment and Nature	Croatia
Camacho	Antonio	University of Valencia	Spain
Carnicero Campmany	Pau	Xarxa de Custòdia del Territori	Spain
Christodoulou	Charalambos S.	Department of Forests	Cyprus
Čivić	Kristijan	Eurosite	The Netherlands
Coignon	Bastien	Ministère de la transition écologique et solidaire	France
Čuković	Tamara	Croatian agency for the Environment and Nature	Croatia
de Filippo	Gabriele	Istituto di Gestione della Fauna onlus	Italy
Demetropoulos	Andreas	Cyprus Wildlife Society	Cyprus
Dimitriou	Kyriakos	Cyprus association for the protection of avifauna	Cyprus
Eliades	Elias	ATLANTIS Consulting Cyprus Ltd	Cyprus
Erotokritou	Elena	Department of Environment	Cyprus
Galewski	Thomas	Tour du Valat	France
García-Ventura	Diego	EUROPARC-Spain / Fernando González Bernáldez Foundation	Spain
Giordamli	Artmeis	Director, Laona Foundation, Cyprus	Cyprus
Grima Connell	Matthew	Environment & Resources Authority	Malta
Hadjichristoforou	Myroulla	Federation of Env. Orp.d CY	Cyprus
Hadjioannou	Louis	Enalia Physis Environmental Research Centre	Cyprus
Hadjistylli	Margarita	Department of Environment	Cyprus
Hellicar	Martin A.	BirdLife Cyprus	Cyprus
Hidalgo	Rafael	Ministry of Agriculture and Food, Fisheries & Environment	Spain
Ieronymidou	Christina	BirdLife Cyprus	Cyprus
Iezekiel	Savvas	Forestry Department	Cyprus
Ioulianou	Filio	BirdLife Cyprus	Cyprus
Kakouris	Herodotos	Department of Forests	Cyprus
Karyos	Nektarios	Ministry of Agriculture, Rural Development and	Cyprus

		Environment	
Kassinis	Nikos	Game and Fauna Service	Cyprus
Kati	Vassiliki	University of Ioannina	Greece
Konstantinou	Loizos	Department of Forests	Cyprus
Koulla	Michael	Terra Cypria	Cyprus
Kounnamas	Constantinos	Frederick University	Cyprus
Koutsofta	Panagiota	Terra Cypria	Cyprus
Kouyialis	Nicos	Minister of Agriculture, Rural Development & Environment	Cyprus
Kremer	François	European Commission	Belgium
Lugić	Edin	Oikon Ltd. - Institute of Applied Ecology	Croatia
Lymberakis	Petros	Natural History Museum of Crete - University of Crete	Greece
Marcou	Melina	Department of Fisheries and Marine Research	Cyprus
McIntosh	Neil	ECNC	The Netherlands
Michaelides	Savvas		Cyprus
Numa	Catherine	IUCN-Med	Spain
Olmeda	Concha	ATECMA	Spain
Orontiotis	Costas	Terra Cypria	Cyprus
Ouzet	Sophie	European Commission DG ENV / D3	Belgium
Panayides	Panicos	Game and Fauna Department	Cyprus
Pantazi	Christina	European Commission	Belgium
Papadopoulos	Minas	Department of Forest	Cyprus
Papastylianou	Klitos	Initiative for the Protection of the Natural Coastline	Cyprus
Papatheodoulou	Athina	I.A.CO Water and Environmental Consultants	Cyprus
Pastor Ramos	Teresa	EUROPARC Federation	Spain
Pedro Silva	Joao	NEEMO	Belgium
Petrou	Antonis	Enalia Physis Env. Res. Centre	Cyprus
Renaudin	Maïlis	MedWet - the Mediterranean Wetlands Initiative	France
Rodriguez	Gemma	WWF Spain	Spain
Roelofs	Jinthe	ECNC	The Netherlands
Russell	Zoë	Scottish Natural Heritage	United Kingdom
Saavedra	Deli	Rewilding Europe	Spain
Saez Lacave	Blanca	EASME	Belgium
Sánchez de Dios	Rut	Universidad Complutense de Madrid (UCM)	Spain
Sánchez-González	Jorge R.	Tragsatec	Spain
Sarris	Dimitrios	Open University of Cyprus	Cyprus
Sergides	Lefkios	Terra Cypria The Cyprus Conservation Foundation	Cyprus
Simón Zarzoso	Juan Carlos	Tragsatec	Spain
Škunca	Marina	Geonatura Ltd,	Croatia
Stylianopoulou	Eleni	Department of Environment	Cyprus
Theodorou	Christos	Friended of Akamas	Cyprus
Theodosiou	Antonia	Individual Expert	Cyprus
Tryfon	Eleni	European Environment Agency	EU
Tsiaoussi	Vasiliki	Greek Biotope / Wetland Centre	Greece
Tsintides	Takis	Ministry of Agriculture, Rural Development and Environment	Cyprus
Tzirkalli	Elli	Cyprus Butterfly Study Group	Cyprus

Vasiliki	Anastasi	Terra Cypria	Cyprus
Vassiliki	Kati	University of Ioannina	Greece
Vogiatzakis	Ioannis	Open University of Cyprus	Cyprus
Xenophontos	Marina	Department of Environment	Cyprus
Zavrou	Despo	Department of Environment	Cyprus
Zogaris	Stamatis	Hellenic Centre for Marine Resources	Greece
Zomeni	Maria	Department of Environment	Cyprus
Zotos	Savvas	Terra Cypria	Cyprus

Annex IV. Projects presented at the Knowledge Market

List of Knowledge Market presentations:

1. Information about EUROPARC and a LIFE and INTERREG EUROPE IMPACT projects
2. The FACE Biodiversity Manifesto
3. Eurosite - the Network for Natura 2000 Site managers
4. Publications
5. Road less areas
6. FOREST LIFE project
7. Freshwater fishes and Lamprey of Greece
8. The LIFE programme
9. MEET and DestiMed projects
10. The Enalia Physis Environmental Research Centre and a project on marine protected areas
11. LIFE Cyclades "Integrated monk seal conservation in Northern Cyclades"
12. Natura area of Akamas
13. Parc naturel régional du Luberon feedback on Natura 2000 management and survey
14. LIFE.INF Project to upscale wetland communications outreach in the Mediterranean
15. Posters of habitats mapping results in protected areas
16. Two recently completed LIFE projects
17. Cyprus Butterfly Study Group
18. XCT - Land Stewardship Network of Catalonia
19. WWF Oasis protected area network
20. The SWIFT app – using technology for site condition monitoring
21. Methods for evaluating function and structure in forests; establishment of a national system for monitoring the conservation status of habitat types; Let's go monitoring! Basis for a nation-wide system for monitoring the conservation status of habitat types in Spain
22. OPPLA

Descriptions of Knowledge Market presentations:

1. Information about EUROPARC and a LIFE and INTERREG EUROPE IMPACT projects

EUROPARC – the largest European network of Protected Areas- will share general information and publications about their entity and specifically information about two projects:

1. LIFE project "LIFE REDBOSQUES" (LIFE15 GIE/ES/000809), nowadays in course and in which the **EUROPARC-Spain** Section is the coordinator beneficiary.

The RedBosques project aims to improve the management of Spanish Mediterranean forests included in Natura 2000, facilitating access of practitioners to state-of-the art knowledge. The ultimate goal is that forest managers effectively include biodiversity conservation and climate change adaptation objectives in their daily practice.

2. INTERREG EUROPE IMPACT project , in course, in which **EUROPARC Federation** is the communication coordinator.

The IMPACT project is an interregional cooperation project aimed at exchanging good practices on new managing models for Protected Areas to promote socio-economic activities without damaging biodiversity.

Ms Teresa Pastor Ramos

EUROPARC – the largest European network of Protected Areas

E t.pastor@europarc.org

2. The FACE Biodiversity Manifesto

Since 2013, FACE is gathering information on biodiversity conservation projects/initiatives involving hunters. Out of the 221 projects we've collected till now, 54 are occurring in Mediterranean countries AND related to Natura 2000 sites. See how hunters contribute to nature conservation on www.biodiversitymanifesto.com.

Ms Monia Anane

FACE - European Federation for Hunting and Conservation

E monia.anane@face.eu

3. Eurosite - the Network for Natura 2000 Site managers

Over the past almost 30 years Eurosite and its members have accumulated a vast amount of knowledge and experience about the management of Natura 2000 and, both the related issues and how to overcome them, but also the benefits that Natura 2000 Network brings. **Eurosite's Twinning Programme** is an ideal tool for the exchange of this knowledge. Eurosite can facilitate the finding of the right partners across Europe, help set up the cooperation and provide the international profiling. Eurosite Twinning is an ideal model for an international knowledge exchange within LIFE projects. More information is available at: <http://eurosite.org/site-management/twinning/>

Natura 2000 Branding website and the communication campaign, is collecting examples of benefits Natura 2000 can provide to local economies. It showcases products produced in Natura 2000 areas accompanied by inspiring background stories about the collaborations and socio-economic benefits related to those products. More information is available at: www.natura2000branding.eu

Mr Kristijan Čivić

Eurosite

E kcivic@eurosite.org

4. Publications

Ms Catherine Numa

IUCN-Med

E catherine.numa@iucn.org

5. Road less areas

Power point presentation (presenting a paper in Science) and video for broad public for road less areas of the world

Ms Vassiliki Kati

University of Ioannina

E vkati@uoi.gr

6. FOREST LIFE project

A poster on the Life project FORESTLIFE "Building cooperation, developing skills and sharing knowledge for N2K forests in Greece" which resulted from the kick-off meeting of the Mediterranean region back in 2014 will be presented.

Ms Vasiliki Tsiaoussi

Greek Biotope / Wetland Centre

E vasso@ekby.gr

7. Freshwater fishes and Lamprey of Greece

This book provides a complete list of fish species inhabiting freshwaters in Greece as of December 2014. The initiative aims to produce an official annotated list that will be regularly updated and reviewed by a committee of experts. An annotated species list is critically important for biodiversity conservation, especially since fish names and taxonomic validation have undergone remarkable changes during the last decade. This checklist contains standardized information on species' taxonomy, distribution, habitat, and conservation status, while it also helps interpret nomenclature and taxonomic problems. Furthermore, it may serve as a scientific basis for developing a wider public interest in Greece's freshwater fish fauna.

Mr Stamatis Zogaris

Institute of Marine Biological Resources and Inland Waters

E zogaris@hcmr.gr

8. The LIFE programme

Information about the LIFE programme.

Mr Joao Pedro Silva

NEEMO

E joao.silva@neemo.eu

9. MEET and DestiMed projects

Hard copies of the following brochures:

3. MEET – Mediterranean Experience of Ecotourism. The main objective of this Project is to develop an integrated strategy for the establishment, development and promotion of an Eco-Tourism model to Mediterranean Protected Areas (PAs) that will eventually promote a better seasonal distribution of tourism flow.
4. DestiMed- a project that brings together 13 protected areas to collectively develop, manage and promote ecotourism in the Mediterranean basin.

Mr Petros Lymberakis

Natural History Museum of Crete - University of Crete

E lyberis@nhmc.uoc.gr

10. The Enalia Physis Environmental Research Centre and a project on marine protected areas

The *Enalia Physis Environmental Research Centre* is a Cyprus-based non-profit organization established in 2009. Its purpose is to conduct and promote environmental research in marine and terrestrial ecosystems and to encourage and enhance education and ecological awareness of the general public. Cyprus, as the eastern Mediterranean in general, is in particular need of active NGOs who aim to become part of the decision making process of environmental policies in order to promote good environmental practices.

Also, information about a running project on marine protected areas will be given.

Mr Louis Hadjioannou

Enalia Physis Environmental Research Centre

E I.hadjioannou@enaliaphysis.org.cy

11. LIFE Cyclades "Integrated monk seal conservation in Northern Cyclades"

The Mediterranean monk seal (*Monachus monachus*) is a priority species for conservation, according to Annex II of the Habitats Directive. It is also designated as a "critically endangered" species under the IUCN Red List; and is included in Annex III of the Marine Strategy Framework Directive – as a key indicator of the status of the marine environment.

Specific objectives are:

- The conservation and protection of the local Mediterranean monk seal population;
- The protection and improvement of the conservation status of the species's habitat, and in particular of Posidonia beds, reefs and partially submerged marine caves;
- The overall protection and improvement of the conservation status of the Natura 2000 site;
- The active participation and involvement of local stakeholders in the conservation and co-management of the protected area, according to EBM principles; and
- A positive change in local stakeholders' conceptions, attitudes, and conduct towards the marine environment of their area.

Ms Panagiota Maragou

WWF Greece

E p.maragou@wwf.gr

12. Natura area of Akamas

Presentation for Natura area of Akamas

Mr Christos Theodorou

Friends of Akamas

E chr.theodorou@cytanet.com.cy

13. Parc naturel régional du Luberon feedback on Natura 2000 management and survey

With the following outcomes:

- GIS and database shared with municipalities, landowners, hikers, event organizers, forestry technicians (etc.) and other regional parks and partners.
- Grassland management and grazing supervision that includes contracts to clear and restore open areas, in cooperation with shepherds and specific agricultural contracts with the cattle owners ; and at a scientific level in cooperation with other alpine parks, study on climate change on the local plants of high interest and grazing adaptation.
- Old growth forests network through for example Natura 2000 contract established with the landowner to conserve in exchange with financial reward.

Ms Sophie Bourlon

Parc naturel régional du Luberon

E sophie.bourlon@parcduluberon.fr

14. LIFE.INF Project to upscale wetland communications outreach in the Mediterranean

Overall Goal of the project

A LIFE.INF would enable the MedWet Initiative to launch a Wetlands Campaign across a critical mass of Euro-Mediterranean countries to increase the awareness about wetland values in the Mediterranean through a communication campaign mobilizing national institutions to activate local action supported by relevant CSOs.

Objectives

Three main objectives have been identified to deliver this overall goal:

- a) Make wetland issues and wetland values more mainstream in national societies in order to ensure better and deeper understanding of the need to conserve them;
- b) Engage governments to broadly mobilise and actively relay the campaign; and
- c) Raise awareness on Wetlands (Natura 2000) sites and network about their values and services, while actively mobilising civil society locally.

Target groups could be:

- National Governments from Euro-Mediterranean countries
- Ramsar Sites / Natura 2000 Sites managers
- General Public / Citizens

Potential partners

Different categories of partners are being approached in the build-up of the overall LIFE INF proposal:

- a) international institutional partners: Ramsar Convention - and possible other Multilateral Environmental Agreements like CBD, CITES, CMS, AEWA, UNCCD, UNFCCC, World Heritage;
- b) national institutional partners: National Governments from Euro-Mediterranean countries
- c) international conservation NGOs: WWF, IUCN-Med, Wetlands International and BirdLife;
- d) technical partners: Association Ramsar France, “les pôles relais zones humides”, SNPN National Society for Protection of Nature, French National Museum of Natural History (MNHN), Wetlands Link International (WLI, network of Wetlands visitor centers), Agence Française de la Biodiversité, MedINA, Tour du Valat: Research Institute for the conservation of Mediterranean wetlands; Greek Biotope and Wetlands Centre (EKBY);
- e) scientific partners: Mediterranean Wetlands Observatory (Tour du Valat), MedWet Scientific and Technical Network (presently being established), Ramsar Scientific and Technical Review Panel;
- f) private sector and business sectors that are impacting the wetlands related to water and tourism.

Ms Maïlis Renaudin

MedWet - the Mediterranean Wetlands Initiative

E mailis@medwet.org

Mr Thomas Galewski

Tour du Valat

E galewski@tourduvalat.org

15. Posters of habitats mapping results in protected areas

Mapping the * habitat: Distribution of the priority habitat 6220

Contributors: Papatheodoulou A*, Fyttis G*, Delipetrou P.**, Fotiadis G*, Antoniou A***, Vayianou P*, Konstantinou K*, Pitta E*, Yiannapas M*, Xatzikiriakou G., Christodoulou Ch.****, Mouskountis M*, Nikolaou E*, Xenofontos M***, Stylianopoulou E***, Iacovides A*.

* [I.A.CO](#) Environmental and Water Consultants Ltd

** University of Athens - Department of Biology

*** Department of Environment- Nature and Biodiversity Protection Unit

**** Department of Forests

An island-wide mapping campaign of the priority habitat 6220* Pseudo-steppe with grasses and annuals (*Thero-Brachypodietea*) was conducted in 2016. The mapping included both field stratified random surveys and remote sensing methods. The project came as a response to a recognised knowledge gap relating to the overall distribution and conservation status of this habitat type. The project provided cornerstone data for the understanding of local conditions, pressures, and threats affecting the conservation status of this habitat. Opportunities are provided for long-term monitoring and assessment of habitat's trends and status. Furthermore, suitable management measures will be drawn, adapted to the habitat's local needs and conditions.

A Monitoring programme of selected Natura 2000 areas

Contributors: Papatheodoulou A*, Fyttis G*, Tziortzis I*, Vayianou P*, Antoniou A**, Papastavrou M**, Zavrou D**, Xenofontos M**, Erotokritou E**, Adamidou M**, Kyprianou Th**, Xatzistilli M**, Papacharitou P**, Stylianopoulou E**, Iacovides A*.

* [I.A.CO](#) Environmental and Water Consultants Ltd

** Department of Environment- Nature and Biodiversity Protection Unit

In the context of collecting information for pressures occurring in Natura 2000 areas, a monitoring scheme has been set since 2012 for selected Sites of Community Interest (SCI).

A dataset fed by information collected through regular fortnight surveillances has been developed. During the site inspections, pressures occurring and threats imposed are being recorded. This scheme provides timely, direct and accurate information -with a geographic component- to the Competent Authority, for the activities taking place within the selected SCIs. In some cases, corresponding actions were required and implemented accordingly from the Competent Authority. The results of the monitoring of the three Sites of Community Interest "*Fountoukodasi Pitsilias*", "*Madari-Papoutsas*" and "*Koilada Kargoti*" are presented.

This monitoring scheme is an insight provided to the Competent Authority, by trained inspectors.

Ms Athina Papatheodoulou

I.A.CO Water and Environmental Consultants

E athinap@iaco.com.cy

16. Two recently completed LIFE projects

Information material from previous LIFE projects involved.

Mr Ioannis Vogiatzakis

Open University of Cyprus

E ioannis.vogiatzakis@ouc.ac.cy

17. Cyprus Butterfly Study Group

Formation and aims of the CBSG and introduction to the Cyprus Butterfly Recording Scheme.

Ms Elli Tzirkalli

Cyprus Butterfly Study Group

E elli_tj@hotmail.com

18. XCT - Land Stewardship Network of Catalonia

The Xarxa de Custòdia del Territori is a non-profit organization working to foster land stewardship as a conservation strategy for the natural, cultural and landscape resources and values of Catalonia and its environment. We have collaborated in international projects to foster land stewardship as a tool to promote social involvement with the natural environment. Here we present the manual "Caring together for Nature", a manual on Land Stewardship result of the Land Life project.

Mr Pau Carnicero Campmany

Xarxa de Custòdia del Territori

E pcarnicero@xct.cat

19. WWF Oasis protected area network

The WWF Oasis s.u.a. r.l. manages 38 Natura 2000 sites with many different habitats and species. The information will cover the design of the network, some management experiences and in particular on IT5320009" Fiume Esino in località Ripa Bianca " Nature 2000 site (SAC/SPA).

Mr David Belfiori

WWF Oasi S.U. a R.L.

E d.belfiori@gmail.com

20. The SWIFT app – using technology for site condition monitoring

The SWIFT app supports field survey work for monitoring the condition of habitats and species in Scotland. Through the use of mobile devices we can see background information, capture field data

and upload the data collected to our database. Have a go at using the app - see how it saves time and makes us more efficient.

Ms Zoë Russell

Scottish Natural Heritage

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21. Methods for evaluating function and structure in forests; establishment of a national system for monitoring the conservation status of habitat types; Let's go monitoring! Basis for a nation-wide system for monitoring the conservation status of habitat types in Spain.

Methods for Evaluating Function and Structure in Forest.

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ABSTRACT

The aim of this communication is introducing 3 different methods to evaluate the habitat status within the context of a biogeographic region. The first one is based on the National Forest Inventory of Spain and it uses a plethora of variables from > 99.000. The second method produces high resolution cartography (20 m x 20 m) of biophysical variables (basal area, Weighted Mean Height, Normal Mean Diameter) by using airborne sensors like LIDAR. The last methodology is based on the use of land condition maps data which compares potential land productivity according to water availability with plant-biomass data.

Combining geomorphological and ecological criteria for the classification of the Spanish coastal habitat types.

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ABSTRACT

In the present work, geomorphological and ecological criteria have been applied to elaborate a dichotomous geo-ecological classification of the Spanish coastal environments and coastal habitats. In order to simplify, as far as possible, the extensive existing habitats classifications and to establish a new multidisciplinary and easily readable vision, of the huge Spanish coastal biodiversity, previous classifications have been taken into account and diverse criteria have been applied, from a geomorphological and dynamical to an ecological nature. Initially, three major bioregions have been differentiated: Atlantic, Mediterranean and Macaronesian. After the use of geomorphological and oceanographic criteria (like coastal orientation, waves regime, tidal range, sediment input, main characteristic forms, etc.), the bioregions have been divided into 8 geo-ecological provinces: Galician, Cantabrian, Cádiz Gulf, Gibraltar Strait, Costa Brava, Low Levantine coast, Alicantine-Balear (Balearic)

coast and Alborán coast. Once the regional distinction has been made, 9 major groups of coastal environments have been identified: cliffs, rocky platforms, beaches, dunes, saltmarshes, big shallow bays, coastal lagoons, tidal estuaries and Mediterranean deltas. The differentiation of every single environment has been made taking into account biotic and abiotic factors, like the morpho-sedimentary dynamics, the dominant plants or the relation with near coastal environments.

Let's go monitoring! Basis for a nation-wide system for monitoring the conservation status of habitat types in Spain.

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ABSTRACT

An optimal monitoring system for habitat types must rely on scientifically-robust, fit-for-purpose, standardized methods and protocols that provide the ecological information required to elucidate changes in the quantity and quality of each habitat type (or group of similar habitat types) and identify their pressures and threats. It must be tailored to the particular conditions of each habitat type.

The Spanish Ministry of Agriculture and Fisheries, Food & Environment (MAPAMA) is carrying out a project to develop a consistent methodology that will serve as the basis for the establishment of a nation-wide, harmonized system to monitor the conservation status (CS) of the habitat types in Spain –mainly, but not only, those of Community Interest. This methodology should be based on (1) an ecosystem approach, (2) a minimum approach, (3) its dependence on public data sources, and (4) rigorous and homogeneous methods for the entire Country.

The CS monitoring protocols have to (a) describe how to delimit and calculate the area covered by each habitat type, or group of similar habitat types, (b) identify and define the ecological variables that are essential to assess their composition, structure and functioning, (c) prescribe the measurement methods of these variables, (d) determine the periodicity of these measurements, and (e) establish the technical criteria to select the locations to be monitored. In addition, a methodology should be described to estimate pressures and threats whose effects could modify the conservation status of each habitat type, or group of similar habitat types.

This project, which runs from 2015 to 2018, is led and funded by the MAPAMA, coordinated by Tragsatec and carried out by a huge and multidisciplinary team of experts from different universities, public research centers and Tragsatec.

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22. OPPLA

Presenting information about Oppla: a platform that combines a knowledge marketplace, an enquiry service and community in the field of nature based solutions for science, policy and practice.

The Oppla knowledge marketplace brings together the latest thinking on ecosystem services, natural capital and nature-based solutions. One can find guidance, software, data and other useful resources.

Furthermore, Oppla Community offers an easy-to-use system for networking with other members from around the world and Ask Oppla crowd-sourced enquiry service, where members of the Oppla community help to answer each other's questions.

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