



Natura 2000 Seminars

Natura 2000 Biogeographical Process

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

**Draft
Seminar Report**

An initiative
of the





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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 an NGO (Terra Cypria, the Cyprus conservation foundation) hosted an EU biogeographical seminar since they began in 2011.

After the welcome and introduction on the first day, the participants visited two Natura 2000 sites, where there are several conservation and restoration projects. The second day was devoted to an overview of typical issues surrounding the management of Natura 2000 habitats and species, case study presentations, and thematic working groups.

After an overview of the main pressures and threats related to Natura 2000 management in the Mediterranean region, five brief presentations were given on: long-term monitoring programmes (breeding marine turtles in Cyprus); approaches to evaluating conservation status for habitat and species 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 gave participants the opportunity to share common experiences, to discuss common challenges and to build a Mediterranean roadmap for the coming 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.

The discussions identified three underlying reasons why the implementation of these aspects is sometimes difficult: 1) habitats are usually considered as static entities while ecosystems are inherently dynamic, due to both natural and anthropogenic factors; 2) the Mediterranean Basin is one of the world's biodiversity hotspots, implying in practice a huge biogeographical variability in the species composition of habitats in 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.

Several opportunities and requirements were identified as a result of the discussions. The delegates all agreed on the need for: 1) training in the habitat interpretations and in the use of methods to assess conservation status; 2) increased communication among stakeholders and with society; 3) the use of already existing scientific knowledge to improve habitat evaluations; 4) promoting networking across the region; and 5) new funding to deal with proposed actions.

2. Conservation objectives, monitoring and evaluation

The main topics addressed by this group were setting conservation objectives and monitoring. The group also addressed some of the issues discussed in the first group (definition and interpretation of habitats, FRV and LHF).

The participants highlighted the importance of having proper and common definitions of all habitats of Community interest prior to the prioritisation exercise. They proposed centralising all manuals and documents related to the definition and interpretation of habitat types of Community interest (HCI). They agreed that an adequate determination of Favourable Reference Values is necessary prior to defining biogeographical-level targets.

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

Delegates compared different conservation objectives set in each Member State at different scales and considered their further development at biogeographical level. A good starting point for 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 FRV.

Several site-level monitoring systems developed by Member States were mentioned.

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

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

An approach based on extensive Information and Involvement of, sharing Responsibilities with and Rewarding conservation merits of all stakeholders ('IIRR approach') was proposed to overcome several problems, such lack of local awareness and acceptance, lack of a common language/ground, knowledge gaps about the benefits of the Natura 2000 network, lack of collaboration with stakeholders and lack of a (long-term) mediator or bridging entity between the local communities and conservation issues.

Integration of different management plans into an overarching integrated management plan containing 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 would 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 for 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 then shortened and prioritised. In addition to the general pressures and threats, the group discussed which habitat groups in the Mediterranean region are the most under pressure and should, therefore, be prioritised for conservation actions.

The main pressures and threats discussed here were Invasive Alien Species, land abandonment, and issues in general related to assessing the pressures and threats in relation to Article 6.3 of the Habitats Directive and the appropriate assessments. It was agreed that some kind of early warning system would be most useful to enable timely reaction to pressures.

It was agreed that there is no universal solution to land abandonment. While in some cases investing in High Nature Value Farmland and subsidies is appropriate, in other cases rewilding might be an option.

As the CAP reform is currently taking place, now is the right time 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).

The latest developments under the LIFE programme were presented during day 3, in addition to the outcomes of the four thematic working groups held on day 2, open to short 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 (see Chapter 3).

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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 reference 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, the Cyprus conservation foundation.

The Seminar was attended by 92 delegates from 13 different countries (Table 1). All Member States within the 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 in the thematic working groups was given on 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, this being the first biogeographical seminar to be hosted by an NGO.

Elena Stylianopoulou, of the Cyprus Ministry of Agriculture, Rural Development and Environment, briefly described the Ministry's involvement in Natura 2000 management and the main government actions related to it.

François Kremer from the European Commission presented the context of the Seminar, zooming in on the refocusing 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 attending. It is important to continue with cooperation and networking after the Seminar and this also with experts who could not be present at the seminar. Action 6 of 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 European Committee of the Regions is also a key partner in implementing the Action Plan. In conclusion, François Kremer 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 Seminar programme 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. The participants had the opportunity to learn about two Natura 2000 sites (Madari-Papoutsas and Ethniko Dasiko Parko Troodous) located on the highest mountains of Cyprus. During the journey, the 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*.

The Madari-Papoutsas site (CY2000005) is both a SAC (581 ha) and SPA (12,833 ha). Along a short part of the Doxa Soi O Theos natural trail, participants enjoyed an interesting example of habitats 9390 and 9560 (both priority) and their most characteristic flora, such the endemic Golden Oak (*Quercus alnifolia*) and the Grecian Juniper (*Juniperus excelsa*), among some planted trees of Cyprus Cedar (*Cedrus brevifolia*) and other scrub and herbaceous species. Improvement of Grecian Juniper conservation was the objective of LIFE JUNIPERCY (LIFE 10NAT/CY/000717), and the participants saw some restoration measures during the visit and shared information about common pressures and threats to its conservation.

Ethniko Dasiko Parko Troodous is also both SAC and SPA (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). During the visit to A.G. Leventis Troodos Botanical Garden, the participants saw the main natural

values of this site and their conservation status. In addition, a visit was made to the EEA Grants project 'Biodiversity conservation in restoration and management of the Amiantos asbestos mine in Troodos National Forest Park'. The overall objective of the project is to contribute to halting the loss of biodiversity by improving restoration and management practices in the Amiantos asbestos mine, in terms of efficiency and conformity with European Directives, and broadening their scope to sufficiently address biodiversity conservation and landscape improvement considerations.



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

2.3 Day 2. Plenary sessions: overview and case studies

The 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 (LHF) approach. The LHF habitats are an addition to the priority habitats, where the habitats in the worst condition are prioritised. There is, however, also a need to demonstrate that targets can and are being reached, notably with a view to continue mobilising funds. Therefore, the LHF methodology was developed to identify habitats that can more easily improve on their conservation status.

Diego García Ventura (EUROPARC-Spain) presented an overview of the Seminar Input Document and its purpose, and 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, based on contributions to the expert consultation, were proposed.

Andreas Demetropoulos (Cyprus Wildlife Society) gave an overview of more than 40 years' of studying and conserving breeding marine turtles in Cyprus (*Caretta caretta* and *Chelonia mydas*). The Cyprus Wildlife Society has accumulated wide experience applying conservation measures, monitoring programmes and training, participation & education activities to marine turtle protection, in close cooperation with the Cyprus Government, UNEP and other international institutions. As a result of these efforts, 20 years of breeding data show a rising population in Cyprus; the population has also benefited by the declaration of two coastal Natura 2000 sites (Polis/Yialia and Akamas Peninsula). This demonstrates that, in most cases, achieving successful results in nature conservation can take many years from the implementation of measures. Climate change seems to be one of the most pressing issues in future marine turtle conservation scenarios.

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

- Since the conservation targets for habitats and species must be set for the biogeographical region, harmonisation of 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. Both spatial and temporal scales are relevant when considering these points for harmonisation.
- Habitat interpretation requires knowing not only the characteristic species of each habitat, but also the variables defining the structure and function of the habitat. The different Member States could work together to harmonise these. Further, the values and characteristic species for each habitat could be established by each Member State under the umbrella of this common approach.
- Synergies can be established with other frameworks (e.g. the Water Framework Directive for aquatic habitats) allowing managers of the habitats who have different duties (e.g. water and nature managers) to collaborate, for instance through a compatible assessment procedure and coordinated actions. This requires gateways enabling comparisons within the different habitat/ecosystem classifications.
- Methods for establishing FRV, especially for the range and area of distribution of the HCI, are lacking. This precludes the establishment of conservation targets referring to the amount (area) and distribution of each particular habitat needed at both the Member State and biogeographical region level to ensure habitat conservation. Here there is also room for collaboration among Mediterranean Member States.
- 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 Member States.
- The evaluation of conservation status and pressures and threats, scientifically based and using harmonised procedures between the Member States, can provide a holistic overview allowing the selection of the best conservation measures and policy actions for the maintenance or restoration of favourable conservation status of European habitats.

Zoë 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 and specialists and following common standards throughout the United Kingdom. Through the use of mobile devices, it is possible to see background information, capture field data and upload the data collected to the Scottish Natural Heritage database. Ms Russell encouraged all participants to share this tool on mobile devices available during the Knowledge Market session.

Kristijan Čivić (Eurosites) talked about the European Private Land Conservation Network launched through a LIFE Preparatory project, which includes some actions in the Mediterranean region. After a

brief presentation of Eurosite's mission and targets, he gave a definition of private land conservation. 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:

- A crowdsourcing activity in Portugal, by creating contractual agreements on land management between a 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 the Catalan Government to study, approve and implement a suite of tax incentives for land stewardship, as well as investigating the feasibility of tax deductions for private landowners 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 the IMA (Industrial Minerals 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 they did not already).

Thomas Galewski (Tour du Valat) showed a practical approach to assessing the impact of anthropogenic pressures and conservation measures on Mediterranean wetlands at site level. Since its foundation in 1954, this research institute has accumulated wide experience using the Rhone Delta (Camargue) as a laboratory for research activities and testing management practices, using a low-intervention approach. It monitors species and habitats of Community interest (such as Mediterranean salt meadows and Mediterranean temporary ponds). In 2008 it launched 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 of 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 of 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 was taken up by the thematic working groups. The following table shows the groups with their chairs and facilitators.

Table 2. Thematic working groups.

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 models 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 Čivić (Eurosite)

All of the 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 list of participants for each thematic group is presented in Annex II.

2.4.1 Assessment and sustainable development of ecosystems

The session involved 20 stakeholders, including scientists, managers, policymakers and NGO members related to the Natura 2000 Network and Habitats Directive in the Mediterranean region, from 5 European countries of the Mediterranean Basin (Cyprus, Croatia, France, Malta and Spain). Each topic was discussed separately in small groups of 4-5 people, followed by a joint discussion of each topic, as summarised in the present document.

Three main topics and 12 issues were addressed during the session. The issues addressed in the first topic, *Interpretation of Habitat Types*, were the sometimes insufficiently clear definitions of habitats in the Interpretation Manual, the challenge of dealing with the biogeographical variability of habitats in the Mediterranean region, and the need for more complete definitions of the habitats that take into account 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, the very fragmented and scattered information about habitats, the need to adopt a biogeographical perspective in conservation status evaluations, the steps needed to relate FCS of habitats with their role as providers of ecosystem services, and lastly the way to assess future prospects to characterise conservation status. Finally, in relation to the third topic, *Restoration priorities and the evaluation of the Low Hanging Fruits (LHF) approach*, the following questions

emerged: How to prioritise habitats to be restored? How to prioritise and ensure acceptance and long-term viability of habitats? and How to proceed with restoration?

The discussions identified three underlying reasons why it is sometimes difficult to implement these aspects: 1) habitats are usually considered as static entities while ecosystems are inherently dynamic, due to both natural and anthropogenic factors; 2) the Mediterranean Basin is one of the world’s biodiversity hotspots, implying in practice a huge biogeographical variability in the species composition of habitats in 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.

Several opportunities and requirements were identified as a result of the discussions. The delegates all agreed on the need for: 1) training in the habitat interpretations and in the use of methods to assess conservation status; 2) increased communication among stakeholders and with society; 3) the use of already existing scientific knowledge to improve habitat evaluations; 4) promoting networking across the region; and 5) new funding to deal with proposed actions. Spain proposed two workshops that could promote collaborative projects: one dedicated to habitat definitions following an ecosystem approach and incorporating complementary variables (abiotic, structure & function, other taxonomic groups, etc.), and the second on how to establish FRV at national/biogeographical level, and calibration for the assessment of structure and function at site level.

The main issues identified, recommendations proposed, 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
Sometimes insufficiently clear definition of habitat types in the Interpretation Manual	<p>The habitats interpretations are sometimes ambiguous and difficult to harmonise between countries. This poses difficulties in reaching the conservation target at the biogeographical region level, but also in 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). Standardised guidelines are needed to deal with uncertainties.</p>
Biogeographical variability	<p>The Mediterranean biogeographical 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 their 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 plant communities or plant species composition, which may be incomplete. For some habitats, variables related to structure function, but other taxonomic groups could also 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 these have been fixed, each MS can determine the characteristic ranges and species that describe the ecological variability of the</p>

	habitat type within the Mediterranean biogeographical region within its territory.
Ecological dynamics and transitions	<p>Ecosystems are dynamic entities at both a spatial and temporal level: (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>

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

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, although an 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 the 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. Information needs to be integrated. There are many platforms and databases that can be used to produce or get information at national, continental and global level, such as the Satellite-based Wetland Observation Service (SWOS), Copernicus, LTER-Europe, Life-Watch, or GBIF.</p>
Biogeographical perspective to be fulfilled	<p>Even if FRV vary across Member States (MS), the targets must be faced at the 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. The establishment of 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's engagement in relation to habitats conservation.</p> <p>According to the Ecosystem Services cascade model, services are derived from ecosystem functions. This emphasises the development of protocols and guidelines to monitor functions as one of the components 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 relies primarily on Expert consultation; however, an evaluation list/matrix is being elaborated by the Commission that would be helpful in standardising 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 prioritise habitats to restore	<p>Restoration priorities based on: 1) imminent risk of loss; these should go first, despite the cost; 2) local endemic, umbrella and flagship species in the habitat composition; 3) habitats that can be considered umbrella and flagship, i.e. those big habitats comprising different smaller ones; for example, habitat 1130 Estuaries (in this way, we will also be 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 (e.g. small territories such as 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	Plan for a national book on habitat types	They looked for information from other countries but it was very difficult to find.
France	A national working group to perform the habitats interpretation	Some habitat types' interpretations may differ from the EU Manual Interpretation. It was particularly difficult to distinguish between guidelines from NGOs and official ones.
France	Cahiers d'habitats: 7 volumes (Habitats forestiers,	https://inpn.mnhn.fr/telechargement/documentation/natura20

	Habitats côtiers, Habitats humides, Habitats agropastoraux, Habitats rocheux, Espèces végétales, Espèces animales)	00/cahiers-habitats
France	Current project for mapping vegetation at country level	http://prodinra.inra.fr/?locale=es#!ConsultNotice:406443
Croatia	National project to map all habitats	http://www.dzzp.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 in 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 RedBosques (EUROPARC-Spain) to provide reference models for assessing the conservation status of Mediterranean forests	http://www.redbosques.eu/
France	Limited funding hampers 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	
	No FRV have been established yet	The sooner a start is made, the sooner the baseline can be established. The budget to monitor marine habitats is an important issue.

CHALLENGE #3 - RESTORATION PRIORITIES AND LOW HANGING FRUITS

Country	Actions/Experience/Examples	Comments
Spain	LIFE Adaptamed, Conhabit	http://bit.ly/2zCMeOt http://bit.ly/2n6Yj7s

Cyprus	LIFE Rizoelia, JUNIPERCY	http://www.life-rizoelia.eu/
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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 habitat types	<p>Working group led by Spain to work on common, standardised Mediterranean biogeographical 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 habitat definitions following an ecosystem approach and incorporating complementary variables (abiotic, structure & function, other taxonomic groups, etc.) promoted by Spain. Explore the opportunities to apply for a collaborative project to work on the standardised common approach, identifying variables to define habitats (abiotic variables).</p>	<p>Learn from Corine Land Cover way of working; they have training sessions. Something similar could be applied for habitats interpretation.</p> <p>Organise training in remote sensing tools, since it is becoming essential for habitat mapping and monitoring.</p> <p>Carry out sampling in the whole biogeographical region.</p> <p>Promote bilateral cooperation between countries that share habitats. If they agree on semantics, this would ease the way at EU level.</p>
#2 - Assessing conservation status & Favourable Reference Values (FRV)	<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 (perhaps linked to the following 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 intercalibration workshop led 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 intercalibration 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

The session started with the 23 participants introducing themselves, their relation to Natura 2000 management and their expectations for the workshop. Administration bodies, research institutions and NGOs from Spain, France, Italy, Croatia, Greece and Cyprus were represented in the discussion, as well as the European Environment Agency (EEA) and LIFE Unit.

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

2.4.2.1. Definition and interpretation of habitats

Although this was also discussed in group 1, the participants highlighted the importance of having proper and common definitions of all habitats of Community interest prior to the prioritisation 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 the Mediterranean Member States have interpretation manuals² with different levels of HCI knowledge, but there is no common platform through which to share and compare them. To address this issue, it is proposed that all manuals and documents on HCI definition and interpretation (if possible translated into English) be made available on the Natura 2000 Platform. This measure implies a reinforcement of the Platform and its contents: an administrator who should manage the contents and energise the discussion would be necessary. After a period of consultation supported by the Platform, a workshop on common interpretation of HCI between Member States is proposed. It would be very useful to have a comparative analysis of the national interpretation manuals in order to detect differences and particular issues to be discussed by the countries.

2.4.2.2. Favourable Reference Values

An adequate determination of Favourable Reference Values (FRV) is necessary prior to defining biogeographical-level targets. As with the previous issue, efforts on setting FRV vary between Member States and also produce different results, due to the difficulties in finding reference HCI in the Mediterranean because of secular human intervention. FRV could be determined through expert consultation, comparison of available historical data (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). Reporting ranges was discussed as a proper method, rather than fixed references, due to the variability of HCI and species at the local/regional scale.

As proposed for previous issue, a practical online framework to share all the Mediterranean experiences on setting FRV (previously translated) is necessary (such as the Natura 2000 Platform), as well as a “feature-by-feature” (groups of HCI and species) workshop series 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 in conservation status for a number of habitat types with relatively little effort, and aimed at showing positive results on target 1 of the EU Biodiversity Strategy 2020. The EEA remarked that it is an optional tool to prioritise at biogeographical level, despite other criteria or legal frameworks launched in the EU/Member States.

Several participants pointed to a possible lack of scientific basis in the methodology. An argument is the low consistency of data used in the Article 17 report to determine the trend in conservation

² For example, 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.

status. On the other hand, the LHF selection for the Mediterranean biogeographical region includes typical HCI widespread in other biogeographical regions, but also documented in the Mediterranean (e.g. habitat 2150 – Atlantic decalcified fixed dunes). Participants considered that the conservation of all of these habitats should be analysed and prioritised on the basis of the 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 the approach and proposed an improvement of prioritisation 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 looked at different conservation objectives set in the Member States at different scales and considered possibilities for further developments at biogeographical level. In the case of species (especially migratory), prior to defining conservation objectives inside the EU, it would be interesting to know their conservation status outside of the EU and the implications.

The need to set conservation objectives at biogeographical level was pointed out. These 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 for 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 FRV. The LIFE programme was considered an ideal framework for gathering previous best practices (usually at site level), then funding action plans. Spain offered the possibility to arrange a workshop on the preparation of habitat action plans.

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

2.4.2.5. Monitoring

The discussion started with a reflection on the different approaches to and perspectives on field monitoring (usually carried out by researchers) and Article 17 reporting (done by managers). The LIFE programme was mentioned again as a source of lots of monitoring experiences linked to project actions, although there is no specific compilation of them. LIFE has also funded some citizen science monitoring projects in Italy and many other interesting projects, such as the MARMONI³ project in the Baltic Sea. The LIFE Unit encouraged reporting projects about monitoring systems at the biogeographical scale.

Several monitoring systems developed by Member States were mentioned (Table 3). The importance of monitoring inside and outside Natura 2000 sites was also confirmed.

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

Table 3. 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 models 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. Mediators between local communities and ministries were present, as well as someone with a lot of involvement in the MedWet project.

After a round of introductions, the group started by 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 shaped and through management it is actualised. Fostering good environmental governance ensures accountability, transparency and cultivation of attitudes. Failproof 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, straightforward discussion, the distinction was also made between management plan implementation and the associated management planning – an adaptive, iterative process with systematic contact with stakeholders. 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 interrelationship with human activities.

After the definition setting, the threats and pressures related to effective governance models for integrated approaches to the implementation of Natura 2000 were discussed thoroughly. The threats

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.

and pressures identified during the discussion were related to: communication, coordination, communication & coordination, and resources.

2.4.3.1. Communication-related threats and pressures

1. Lack of local awareness and/or a common language/ground. An approach based on extensive Information and Involvement of, sharing Responsibilities with and Rewarding conservation merits ('IIRR') of all stakeholders was proposed. This approach would help overcoming several problems, such as lack of local awareness and acceptance, lack of common language/ground, knowledge gaps about the benefits of the Natura 2000 network, insufficient collaboration with stakeholders and lack of a (long-term) mediator or bridging entity between the local communities and conservation issues. 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. 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 also, the above-mentioned 'IIRR' approach can contribute to better information and stronger involvement of stakeholders in the Natura 2000 network. It is also important to find out why stakeholders are sometimes 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 one dedicated person/body that compares all plans and combines them into a single overarching integrated plan containing elements of all plans. Inter-service consultation is needed.

2. Lack of coordination between different site designation processes and protected area regimes (for example, RAMSAR designation). Better cooperation between the respective competent authorities at different levels is needed. In general, a coordination entity should be present. For example, in Greece there is a National Nature Committee. 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. Insufficient information of and lack of collaboration with relevant stakeholders, including from other policy sectors. The 'IIRR' approach will favour effective governance: sharing of responsibilities is particularly important, not only for the EU and Member States but for all relevant 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 at 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 whom 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 help achieving 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 for 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 (Cyprus, Spain, Greece, Croatia, and Portugal). The group kicked off their discussions by a round of introductions, during which they 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 (BirdLife Cyprus)

- Appropriate assessment procedures
- Sea Turtles LIFE project (6 countries, Cyprus)
- LIFE invasive species (RELIONMED, 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 longlist was collated during the introductory round. During the discussions, this list was 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?

Besides the general pressures and threats, the group discussed which habitat groups in the Mediterranean region are the most under pressure and should, therefore, be prioritised 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), all coastal and bordering marine habitats/ecosystems and reefs (1170). The selection was made on the basis that these habitats suffer from almost all of the pressures and threats listed as priority in the discussion above.

After this setting-the-scene exercise, the group 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 Invasive Alien Species, land abandonment, and issues in general related to assessing the pressures and threats in relation to Article 6.3 of the Habitats Directive and the appropriate assessments. With respect to the latter, 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 in order to be able to react to pressures in a timely manner. 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 in the evaluation matrix of the conservation status. Spain would be willing to lead on preparing a technical workshop to develop this further.

With regard to invasive alien (and pest) species, there were ideas to look at existing apps and tools (e.g. from the Joint Research Centre, JRC) for citizen science and to explore how these could be used for an early warning system. This could be done via a workshop with a possible role for JRC and/or the EEA. The participants thought it would be interesting to 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. eradication, control, or it is already too late).

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 to 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 currently taking place, now is the right time 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 a document, to be agreed at the regional level. Eurosite will try to support this action.

2.5 Day 2. The Knowledge Market

After the thematic working groups, the Knowledge Market shared over 22 experiences of projects and initiatives linked to Natura 2000 management and conservation inside and outside the Mediterranean region. An abstract of each contribution is available in Annex IV.

2.6 Day 3. 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 Mediterranean region aiming at improving nature and biodiversity, and, in particular, Natura 2000 network habitat restoration and site management.

The LIFE Multiannual Work Programme (2018-2020) and the Mid-term evaluation of the current LIFE regulation are close to being approved. The multiannual programme includes novelties such as simplification of the application and reporting processes (a short report for evaluation prior to the complete report). It is wise not only to think about nature and biodiversity when submitting an

application, because the competition in this area is huge; governance and climate can sometimes also be a possibility. It is also really important to read the LIFE regulation, the Multiannual work programme, the 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 briefly discussed.



Final acknowledgements on day 3 of the Seminar, by Lefkios Sergides.

François Kremer (European Commission) thanked Terra Cypria for hosting the seminar and the Cypriot Nature authorities for their active support. He stressed that the Process is designed to bring all those people working on Natura 2000 into contact with each other and to encourage them to work together. He invited the participants to share the final report also with colleagues and other actors involved in Natura 2000 management. He underlined that the seminar should not be considered as the end of a process, but rather as a milestone event in a continuous process of cooperation and networking on the management of Natura 2000. The results of the seminar 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 will continue playing a coordinating and supporting role in the follow-up actions, but the initiative clearly resides with actors at the site, local, regional and Member State level. 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 were discussed during the Seminar.

Lefkios Sergides (Terra Cypria) closed the Seminar, acknowledging the delegates' presence and underlining the importance of long-term monitoring: as shown during the Seminar, in most cases, current conservation measures will give results after 20-50 years. This is an important idea for politicians to take into account. It is also important to involve stakeholders in order to see people going out to take part in conservation.

3 Mediterranean Roadmap

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

What?	Where?/ Who?
Working group on common standardised Mediterranean biogeographical guidelines, following an ecosystem approach and incorporating complementary variables for certain habitats.	Spain
Centralisation of all Member State manuals and documents of HCI definition and interpretation available (if possible, translated into 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 setting 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 Member State.	
Intercalibration 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 intercalibration 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.	
Prioritisation tools based on better scientific knowledge and taking 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 for gathering previous best practices, then funding action plans.	Spain
Projects about monitoring systems at the biogeographical scale.	
Best practices exchange on local awareness and common language/ground in communication.	Natura 2000 Platform
Encourage plan integration in Natura 2000 sites.	
Guidelines for efficient and effective stakeholder collaboration. Twinning programmes.	
Thematic networking event on stakeholder involvement and land stewardship, with competent authorities and steering groups at various levels.	EU & Member States
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 the evaluation matrix of the conservation status.	Spain
Workshop on citizen science & early warning systems.	Joint Research Centre (JRC)/EEA
Workshop on developing tools to identify high-risk areas (map of pathways) to inform a response system, based on several data inputs.	

Bring up at the EU working group on Invasive Alien Species the need to know IAS lists from neighbouring countries in order to be alert to incoming threats.	
Coordinate and send a joint statement to the EC from Mediterranean nature organisations on the region-specific solutions that could be integrated into the next CAP.	WWF-Spain / Eurosite

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
Kremer	François	European Commission, DG Environment, Nature Unit	Belgium
Orountiotis	Costas	Terra Cypria	Cyprus
Panayides	Panicos	Game and 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 pressures 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	Friends of Akamas	Cyprus
Ioulianou	Filio	BirdLife Cyprus	Cyprus
Zotos	Savvas	Terra Cypria	Cyprus
Hadjioannou	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	Portugal
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
Čačić	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	Artemis	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
Orountiotis	Costas	Terra Cypria	Cyprus
Ouzet	Sophie	European Commission, DG Environment, Nature Unit	Belgium
Panayides	Panicos	Game and Fauna Department	Cyprus
Pantazi	Christina	European Commission, DG Environment, Nature Unit	Belgium
Papadopoulos	Minas	Department of Forest	Cyprus
Papastyliauou	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	Friends of Akamas	Cyprus
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Tryfon	Eleni	European Environment Agency	EU
Tsiaoussi	Vasiliki	Greek Biotope / Wetland Centre	Greece
Tsintides	Takis	Ministry of Agriculture, Rural Development and	Cyprus

		Environment	
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 project and INTERREG EUROPE IMPACT project
2. The FACE Biodiversity Manifesto
3. Eurosite - the Network for Natura 2000 Site managers
4. Publications
5. Roadless 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 nationwide 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 project and INTERREG EUROPE IMPACT project

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

- LIFE project "LIFE REDBOSQUES" (LIFE15 GIE/ES/000809), in progress and of 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.

- INTERREG EUROPE IMPACT project, in progress, of 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 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. Roadless areas

PowerPoint presentation (presenting a paper in Science) and video for broad public for roadless 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 standardised 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:

- 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.
- DestiMed – a project that brings together 13 protected areas to collectively develop, manage and promote ecotourism in the Mediterranean basin.

Mr Petros Lyberakis

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 organisation 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 l.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' 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 organisers, 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 for 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 awareness about wetland values in the Mediterranean through a communication campaign mobilising 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 Site 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, AEW, 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 centres), Agence Française pour 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 Mailis Renaudin

MedWet - the Mediterranean Wetlands Initiative

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Mr Thomas Galewski

Tour du Valat

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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 fortnightly surveillance 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 organisation 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

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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 IT5320009 "Fiume Esino in località Ripa Bianca" Nature 2000 site (SAC/SPA).

Mr David Belfiori

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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.

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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 nationwide system for monitoring the conservation status of habitat types in Spain.

Methods for Evaluating Function and Structure in Forest.

Simón, Juan Carlos³ (Coord)

NFI: David Sánchez¹, Pescador, Jordi Vayreda^{1,2}, Julian Chacón¹, Adrián Escudero¹, Francisco Lloret¹;

LIDAR: Carles Batlles^{1,2}, Jordi Vayreda^{1,2}, Marta Lerner³, Beatriz Vila³; **Land Condition:** Gabriel del Barrio⁴, María E. Sanjuan⁴, Jaime Martínez⁴, Alberto Ruiz⁴

1. Asociación Española de Ecología (AEET). 2. Centro de Investigación Ecológica y Aplicaciones Forestales (CREAF). 3. Tecnología y Servicios Agrarios, S.A. (Tragsatec. Grupo Tragsa – SEPI). 4. Estación Experimental de Zonas Áridas (EEZA-CSIC)

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, Alicante-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 nationwide system for monitoring the conservation status of habitat types in Spain.

Hidalgo, Rafael¹ and Simón, J. C.²

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ABSTRACT

An optimal monitoring system for habitat types must rely on scientifically-robust, fit-for-purpose, standardised 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 nationwide, harmonised 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, multidisciplinary team of experts from different universities, public research centres 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, the Oppla Community offers an easy-to-use system for networking with other members from around the world and the Ask Oppla crowd-sourced enquiry service, where members of the Oppla community help to answer each other's questions.

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