From the project to the Medforval network: collaborating for high ecological value Mediterranean forests

by Marine LOVERO, Pedro REGATO, Valentine PLESSIS & Alain CHAUDRON

Context

In the Mediterranean region, the issue of high ecological value in forests often arises in more complex way than in other types of forests, boreal, temperate or tropical. In forests scarcely marked by strong anthropogenic actions, sylvigenesis can be expressed quite naturally, and lead ecosystems towards states of high ecological value, governed mainly by natural disturbances. Instead, forests and other wooded areas of the Mediterranean basin have been subjected, at least since Neolithic times, to extremely strong anthropogenic disturbances.

Despite the various pressures experienced over the last millennia, Mediterranean forests retain outstanding diversity at different levels: landscape, habitat, species, gene. The ancient semi-domestication of Mediterranean forest landscapes, produced by human intervention and related silvo-pastoral practices, has even contributed to increasing their ecological diversity.

Thanks to their unique resilience, these wooded areas can experience quite remarkable biological recoveries, either when anthropogenic pressures relaxes, or in response to major climate changes.

The high ecological value of some Mediterranean forested and wooded areas is thus the result of the interaction, following very complex dynamics, of numerous natural and human factors, leading to high value eco-cultural landscapes characterized by a rich mosaic of agro-silvo-pastoral systems.

Current global changes further add to this complexity; against these changes, maintening and enhancing the biological diversity of forest ecosystems at all levels is essential.

The Medforval 2015-2018 project

The MEDFORVAL project, "Network of forested areas of high ecological value", aims to bring together practitioners and decision-makers from different sectors in the Mediterranean on concrete action for protecting, managing or restoring the ecological values of their respective sites.

The project stems from the analysis that, despite the great number of organizations and institutions working on the protection, management or restoration of Mediterranean forests, there was no permanent platform bringing together stakeholders or addressing key cross-cutting issues such as climate and biodiversity.

It was funded over three years by MAVA Foundation for Nature, from March 2015 to February 2018, and is part of the activities carried out by AIFM (International Association for Mediterranean Forests), in the framework of the Collaborative Partnership on Mediterranean Forests and of the Strategic Framework for Mediterranean Forests (SFMF – axes 1, 3, 5 and 6).

When the project was launched on March 1st, 2015, three results were targeted:

- 1.- Identification, networking and collaboration of 15 to 20 forested areas
- 2.— Utilisation of this network to exchange best practices, knowledge and expertise, implement pilot projects and develop project proposals
- 3.— Dissemination of information on environmental values and threats to Mediterranean forests, particularly in international gatherings of policy makers from different sectors.

Over the longer term, the project aimed to create a MEDFORVAL network, providing its members with added value in terms of research and development (knowledge management and sharing, joint actions), capacity building, in particular through exchange visits and training sessions, popularization and international awareness.

High ecological value forests according to Medforval

From its very first day, the MEDFORVAL project developed a definition of the High Ecological Value (HEV) concept, based in particular on the results of an expert workshop held in September 2014.

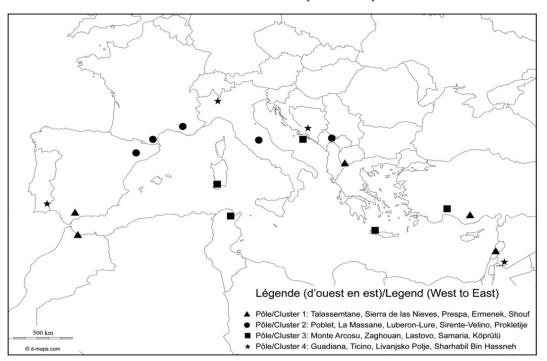


Fig. 1: The Medforval network.

HEV forests were thus defined at the beginning of the project as sites with the following three attributes:

- high diversity in terms of habitat types, flora, fauna and fungi;
- well-maintained natural ecological process – including natural disturbances – in forest blocks large enough to meet the needs of viable populations of species;
- a well-preserved forest structure, covering all age classes: natural regeneration, young stands, mature stands, old-growth and dead wood.

Each of these attributes was then outlined to select the first sites of the network, and more precise selection criteria are being developed and will be finalized before the end of the project.

Four main ecological clusters were defined, with a view to ensuring the greatest ecological representativeness, and initially planned as a regrouping of sites with identical or similar problems. These clusters constitute a simplified version of the schematic altitudinal arrangement of species and vegetation types corresponding essentially to thermal criteria, following the works of GAUSSEN (1926), QUEÉZEL (1974) and OZENDA (1975), among others.

Cluster 1 - High Mountain Conifer Forests: corresponds to the Mountain-Mediterranean and Oro-Mediterranean altitudinal levels, grouping essentially highland conifer forests, most of which are comprised of endemic species and subspecies. These forests are very vulnerable to climate change trends, showing abundant symptoms of dieback problems throughout the Mediterranean. Among the main forestry formations of this cluster: fir, cedar and mountain pine forests.

Cluster 2 - Mountain Mixed Deciduous Forests: corresponds to the Supra-Mediterranean level, domain of deciduous forests, although under xeric conditions pine forests may predominate. Among the main forestry formations in this cluster: thermophile beech forests, mixed deciduous oak forests and other deciduous forests, such as spontaneous forests of chestnut, hornbeam, endemic species or dense shrub-like formations.

Cluster 3 - Lowland Dry Evergreen Forests: corresponds to the Thermo-Mediterranean and Meso-Mediterranean levels, consisting of sclerophyllous maquis, woodlands and forests,

including: evergreen oak, dry conifer, wild olive-carob and small pistachio forests as well as maquis formations.

Cluster 4 - Freshwater Forests: this cluster includes forest types that are not related to altitudinal zoning, but to the permanent presence of soil humidity, close to permanent or seasonal systems of rivers, lakes, peatbogs, coastal lagoons, etc.

The Medforval network in June 2017

At the end of the first two years of the project, the network now counts 19 sites spread over the entire Mediterranean basin (See Fig. 1).

A mid-term evaluation, conducted in December 2016, highlighted the positive dynamics created by the network, with several examples of concrete collaboration between network members and support to site activities, describing members and partners as "a community of like-minded people".

In concrete terms, the actions carried out in the project were of two types:

- actions directed towards the member sites of the network,
 - transversal actions.

The actions dedicated to the sites are:

- a program for small projects, allowing for rapid responses to urgent needs or new opportunities: two calls, open at the end of 2015 and at the end of 2016, enabled the

Picture 1: View of Prespa in Greece. © *M. Lovero/AIFM.*



The conservation plan for a rapid response to the return of the Caracal of Arabia to the Shouf Biosphere Reserve (SBR, Lebanon)

Summarizing the presentation of Nizar HANI, environmental specialist, responsible of the SBR.

Following the capture of an Arabian Caracal by a reserve farmer, a small project was launched with the objectives to confirm the presence of the Caracal in the reserve, clarify its behavior and habitat, and reinforce the capacities of local actors on this species.

The tools used were questionnaires, interviews and camera traps and training workshops.

The Caracal could not be found on the SBR, but thanks to the questionnaires, the population was able to receive information on the species. Camera traps photographed 9 wildlife species (foxes, jackals, wolves, porcupines, etc.) in the SBR during the 2,880 days of the campaign.

Projects for the future are: intensive monitoring, which will also extend off-



which will also extend offreserve, and a program to raise awareness among local populations.

In addition, if caracal individuals are found, they will be captured and released after getting fitted with a radio collar.

Picture 2:Marine Lovero in Shouf
Biosphere Reserve (Lebanon).

allocation of 6 grants, funding the implementation of concrete actions in the field (see focus boxes);

- support for the development of joint project proposals: two proposals common to several members of the network are being drafted with these supports;
- exchange visits between the sites: the network facilitated the organization of bilateral or multi-lateral visits between the network members.

The transversal actions encompass the organization of annual meetings, including training sessions, in Martigues (France, July 2015) and Prespa (Greece, July 2016) and communication activities. Among these are: the creation of a website and pages on social networks, the preparation and printing of materials and tools and international dissemination during various events, including a dedicated booth and side-event during the 5th Mediterranean Forest Week.

Wide reflection of the network and the capitalization of the project activities was also carried out, with in particular the opening of the network to new sites, some of which have already shown interest in joining it, for example in Lebanon (Bentaël), Italy (Gran Sasso), France (Ventoux, Alpilles), Morocco (Ifrane) and Croatia (Hyar).

JunEx: improve, restore and promote juniper woods in Prespa (Greece)

Summarizing the presentation of Annita LOGOTHETI, MSc environmental scientist, Society for the Protection of Prespa

As part of the JunEx LIFE project for the conservation and protection of junipers, the Society for the Protection of Prespa is carrying out various actions, such as the implementation of silvicultural treatments on an area of 1,800 ha, the reintroduction of grazing with the construction of pastoral equipment, the clearing of refuse and dead organic material, and seedlings production, planting and maintenance (6000 seeds, 1200 seedlings, 300 cuttings).

In time, the project will have to be sustained through the contribution to the forest management plan of the western shore of Prespa Park.

In addition, the Society is involved in international actions, such as the efforts to launch a pan-Mediterranean program for the genetic diversity of high alpine juniper species, linked to some sites of the MEDFORVAL network.

Finally, Prespa is involved in the development of an agro-sylvo-pastoral project proposal common to the sites of Guadiana (Portugal), Sirente Velino (Italy) and Livansjko Polje (Bosnia and Herzegovina), which will include concerted research on grazing activities in relation to the maintenance of floristic diversity.

What future for the MEDFORVAL network?

In the medium term, the Medforval network is intended to be a regional forum to catalyse and facilitate, through a partnership approach, the development, sustainability and animation of a network of forest sites of high ecological value in the Mediterranean, territories that are ecologically representative, connected and managed effectively – and to place the Mediterranean forests at the forefront of the global biodiversity conservation agenda.

The objective of this network is to better protect, manage and restore HEV forest areas, especially in a context of global change.

In the long term, the network aims to be recognized by partners of AIFM and MAVA, forest protected area managers and other key players in the region (including FAO and

EU) as a leading network supporting regional contributions to the commitments made by the three Rio Conventions, the Sustainable Development Goals and other regional commitments (SFMF, Agadir Commitment, etc.).

In practice, these ambitions are reflected in different actions, including:

- Capacity-building actions, in particular through the sharing and exchange of knowledge and experience among its members;
- Demonstrations at the network sites and actions to promote best practices that can be replicated at regional level;
- Actions supporting regional collaboration among members and strengthening the efforts of each site through joint projects and strong permanent links;
- Communication actions, between network actors and towards a wider audience;
- Actions to improve scientific and technical knowledge on the high ecological values of Mediterranean forests, such as the establishment of harmonized monitoring systems, the development of innovative conservation and management tools and the organization of meetings at the Mediterranean basin level;
- Lobbying at the regional and international levels, towards policy makers and technical public services, to put Mediterranean forests to the fore of gatherings of biodiversity conservation, increase international buy-in to support actions to mitigate threats to HEV forests and recognise their role in climate change mitigation and adaptation.

In order to be recognized by partners, the network must first have been formalized, to exist beyond the current project. Thus, AIFM created a subsidiary body, as defined in the French law of 1901 relating to the contract of association, called "MEDFORVAL network". The functioning of this tool will be defined collegially at the next annual meeting of the project. It could then be opened for membership of interested sites and partners by the end of 2017.

In terms of size, the network will have to strike a balance between openness to the greatest number around the Mediterranean basin in a policy of transparency and equity, which will allow for a "critical mass", and a manageable number of sites and actions with a gradual increase in power. After the pilot

The Jordan River Rehabilitation Efforts by the NGO EcoPeace Middle East (Jordan)

Summarizing the presentation of Abdel SULTAN, Assistant Regional Director, Ecopeace Middle East

The Sharhabil Bin Hassneh EcoPark (SHE) site in Jordan is managed by the NGO Ecopeace Middle East and is part of their overall program of rehabilitation of the Jordan River Valley in the three neighboring countries.

Among the actions in progress are:

- the creation of documentation on existing tree species, then provided to local populations to limit overgrazing and other inappropriate land uses,
- the identification of three interesting ecological zones and mapping of their vegetation cover,
- advocacy and awareness raising actions towards local populations and regional stakeholders.

In support of this general program, the small project awarded contributed to awareness-raising efforts, including a first regional stakeholder meeting in late October 2016 and a visit of the Royal Jordan Court with the signature of a Memorandum of Action in January 2017.

A national stakeholder meeting was also scheduled on April 10th, 2017 to call for the establishment of the national biodiversity master plan.

Finally, EcoPeace hopes to have SHE listed as a Special Conservation Area (SCA) in July 2017.

By year 1 (2018)

- The network comprises some 30 sites, ecologically representative, connected and effectively managed territories.
- The ecological values, current or potential, of the sites are known and the network contributes to regional scientific and technical knowledge.
- The network is presented at major international events.

By year 5 (2022)

- The network comprises some 50 sites, ecologically representative, connected and effectively managed territories.
- Network members regularly exchange and implement actions to protect, conserve or restore their territory.
- The network is recognized at the Mediterranean basin scale as the reference network for forests and biodiversity.

By year 10 (2027)

- The network comprises some 100 sites, ecologically representative, connected and effectively managed territories.
- The network contributes to the regional commitments made by the three Rio Conventions and to the Sustainable Development Goals.
- The network is a key player in the overall picture, and advocates at the regional and international levels.

The Educational project "Reinforcing knowledge on HEV forests" in Poblet (Spain)

Summarising the presentation of Xavier BUQUERAS, technician, Paratge Natural de Poblet

The small project of the Paratge Natural de Poblet in Spain aims to strengthen knowledge about HEV Mediterranean forests, with a Mediterranean version of the dead tree model developed by WWF France and called "Hector, l'arbre mort". This model tree, aimed at newcomers, presents the characteristics of a dead tree and its interest for biodiversity; it is accompanied by a educational file. This compilation, under preparation, will address three topics:

- context: demographic, climatic, landscape, historical, but especially the biodiversity aspect and services rendered by Nature,
- Mediterranean forests of high ecological value with 4 typological approaches,
- the Poblet site-specific approach (habitats, emblematic species, mature trees).



Picture 3: The Medforval booth during the 5th Mediterranean Forest Week in Agadir (Morocco). © L. Amandier.

phase, which has enabled the networking of some twenty sites, the short to medium-term objective is to extend the network by opening it to 50-100 sites, while ensuring its sustainability.

The challenges to achieve such outcomes are both human and financial, and significant fundraising is under way to ensure the future of the network after March 1st, 2018.

Bibliography & references

GAUSSEN H., 1926 – Végétation de la moitié orientale des Pyrénées. Sol, climat, végétation. – Documents pour la carte des productions végétales, série Pyrénées, I, 564 p.

OZENDA P., 1975 – Les limites de la végétation méditerranéenne en montagne en relation avec le projet de Flora Mediterranea. Collection interne du CNRS 235: 335-343

OZENDA P., 1975 – Sur les étages de végétation dans les montagnes du Bassin méditerranéen. Documents de cartographie écologique, XVI: 1-32

QUEZEL P., 1974 - Les forêts du pourtour méditerranéen. — UNESCO, Programme Homme et Biosphère, contribution du Comité national français, 53 p.

www.aifm.org

www.medforval.aifm.org

Strategic Framework on Mediterranean Forests www.fao.org/forestry/silva-mediterranea/89602/en/

Summary

From the project to the Meforval network: collaborating for high ecological value Mediterranean forests

Launched in 2015, the MEDFORVAL project led to the creation of the eponymous network, with the objective of creating a network of forest sites with high ecological value in the Mediterranean, as a place for exchange and advocacy around these territories.

This paper first presents the initial ground of the project, as well as the approach taken for the definition of high ecological value forests.

It then goes on to describe the actions carried out within the framework of the project, but also to pave the way for the future of the newly born network.

Finally, as part of the side event dedicated to the project during the 5th Mediterranean Forest Week, four interventions provided concrete insights into some of the activities carried out by the network's sites.

Marine LOVERO Pedro REGATO Valentine PLESSIS Alain CHAUDRON AIFM contact@aifm.org