

IMPLEMENTARE IL NETWORK DELLE BUONE PRATICHE PER LA CONSERVAZIONE DELLA BIODIVERSITÀ FORESTALE

LIFE GoProFor

REPORT

European Final Conference

16th-18th February 2022



Final European Conference February 16-17-18, 2022

ONLINE

Zoom simultaneous translation available in English, Italian, French & Spanish





IMPLEMENTARE IL NETWORK DELLE BUONE PRATICHE PER LA

Introduction

The inexorable loss of biodiversity, climate change, global warming, the energy crisis, and not least the Covid-19 pandemic, are placing us in front of the need to act urgently, concretely, and across the board, to counter the effects of these pressures that are constantly increasing.

Forests, which alone cover almost half of the EU's land surface, are at the center of renewed attention for the fundamental role they play in protecting biodiversity, absorbing and storing CO2, providing many ecosystem services, contributing to the development of circular bioeconomy and provide employment for around 2.6 million people, particularly in rural areas.

The recent European policies and strategies, such as the New Green Deal, the new EU Forest Strategy and the EU Biodiversity Strategy for 2030, emphasise the central role of forests, as well as the need to protect and manage them in order to achieve multiple objectives.

On the occasion of its last year of activity, and in the light of today's European scenary, LIFE GoProFor (LIFE17 GIE/IT/000561) organized an European final conference, focused on the theme of integration between forest management and biodiversity conservation.

The project LIFE GoProFor, through the organization of this conference, wants to give its contribution on this important issue, also underlining the importance of the LIFE Program.

In more detail, the event has set itself the following **objectives**:

- 1. share and enhance the contribution of the LIFE Program to the new European Strategies for Forests and Biodiversity for 2030;
- 2. foster the network between forest-related LIFE projects and the exchange of experiences;
- 3. share and promote at European level the experience gained by LIFE GoProFor, the tools tested, the results obtained and the most successful strategies for forest management in harmony with the conservation of biodiversity within N2000 Network;
- 4. collect experiences and opinions on the best tools, indicators and training for more effective forest management in line with biodiversity conservation.

The event, held online from 16 to 18 February 2022, was dedicated to:

- on the first day, presenting the contents of the two European Strategies for Forests and Biodiversity for 2030, highlighting synergies, critical issues and opportunities;
- on the second day, sharing the experiences gained thanks to the LIFE Program, through the participation of a selection of forest-related LIFE projects from all over Europe;
- on the third day, through 2 parallel sessions, discussing and collecting useful information and considerations to promote training and the application of indicators and useful tools for forest management integrated with biodiversity conservation.

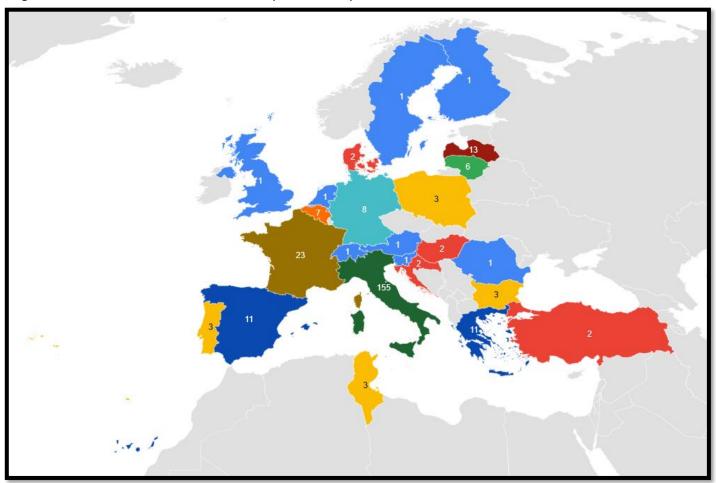
The event made use of a simultaneous translation service for English, Italian, French and Spanish.



IMPLEMENTARE IL NETWORK DELLE BUONE PRATICHE PER LA CONSERVAZIONE DELLA BIODIVERSITÀ FORESTALE

The audience

Subscribers come from 27 countries, including 21 Member States of the European Union, for a total of 267 registered. Most of subscribers are from Italy, followed by France and Latvia.



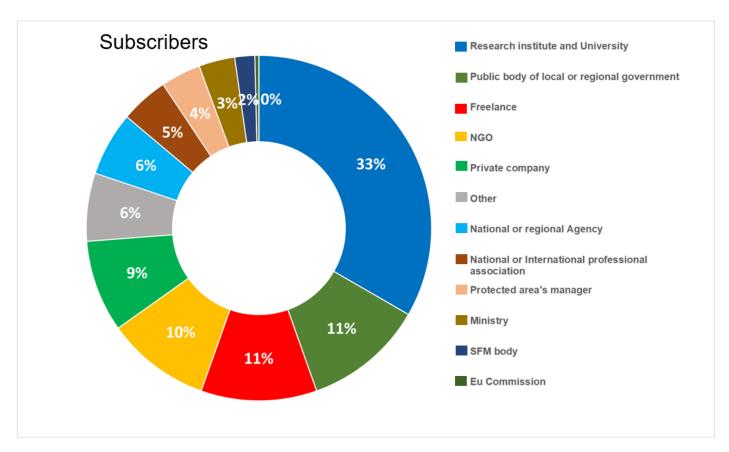
Country	N°	Country	N°	Country	N°	Country	N°
Italy	155	Lithuania	6	Denmark	2	Netherlands	1
France	23	Bulgaria	3	Hungary	2	Romania	1
Latvia	13	Poland	3	Turkey	2	Slovenia	1
Greece	11	Portugal	3	Other	2	Sweden	1
Spain	11	Tunisia	3	Austria	1	Switzerland	1
Germany	8	Andorra	2	Cyrpus	1	United Kingdom	1
Belgium	7	Croatia	2	Finland	1		





IMPLEMENTARE IL NETWORK DELLE BUONE PRATICHE PER LA CONSERVAZIONE DELLA BIODIVERSITÀ FORESTALE

Representatives of the European Commission, Ministries, national and regional agencies, local authorities, managers of protected areas, research institutes and universities, NGOs, national and international trade associations, forest and agricultural sector associations, professionals and freelancers, private companies and citizens joined the event.



Overall, a total of 178 participants from 19 countries and Member States of the European Union participated.





IMPLEMENTARE IL NETWORK DELLE BUONE PRATICHE PER LA CONSERVAZIONE DELLA BIODIVERSITÀ FORESTALE

Day 1 – 16th February 2022: the European Strategies for Forests and for Biodiversity to 2030

The first day focused on recent European Strategies, the New EU Forest Strategy and the EU Biodiversity Strategy for 2030, presenting their contents and highlighting synergies, critical issues and opportunities in the context of forest management integrated with biodiversity conservation.

The conference was opened by **Andrea Cutini** senior researcher at Research Centre for Forestry and Wood of Italian Council for agricultural Research and Economics (CREA), who welcomed the guests and participants on behalf of LIFE GoProFor. Andrea Cutini chaired the whole day, presenting the organization of the three days and their objectives, and introducing the speakers invited.



After the opening, Frank Vassen, from DG ENV of the European Commission, introduced the new EU Biodiversity Strategy for 2030 "Bringing back nature into our lives". The Strategy entails the development and strengthening of a coherent network of protected areas within the EU, which includes legal protection of a minimum of 30% of its land area, to form a Trans-European Nature network. This first target also includes an objective for 10% of land and sea under strict protection, including all remaining old-growth forests. A second target of the Strategy is the Nature Restoration Plan: no deterioration in conservation trends and status of all protected habitats and species by 2030, and a favourable conservation status for at least 30% of species and habitats (or a positive trend) by 2030. Concerning the first target, on January 2022 the Commission has provided a Guidance Note, explaining criteria and guidance for identifying and designating additional areas, including a definition of strict protection, as well as for





IMPLEMENTARE IL NETWORK DELLE BUONE PRATICHE PER LA CONSERVAZIONE DELLA BIODIVERSITÀ FORESTALE

appropriate management planning. By mid 2022 the Commission and the European Environment Agency will provide an electronic "reporting formats" for pledges, the CDDA (Common Database of Designated Areas). Concerning the **second target**, the Commission has already provided, on June 2021, a Guidance note with clarification on the target and proposes criteria for prioritization of habitats and species. By the end of 2022, initial pledges should be submitted by Member States to the Commission, for both targets, through the reporting formats that will be provided. In early 2023 Biogeographical seminars will be carry out to allow Commission, EEA, national authorities & stakeholders to review the pledges, in order to evaluate if the goals expressed by the Strategy could be achieved by 2030.

Davide Pettenella, full Professor of the Department of Land, Environment, Agriculture and Forestry of the University of Padua, is an expert in the field of economics and forest policies. His presentation compares the main policies inherent in the use of the European territory that affect the protection of forest biodiversity. It concerns policies for the circular bioeconomy, policies for biodiversity, climate change and the use of renewable energy sources, and human health policies. In-depth reflection is needed to understand what synergies and compromises are necessary to meet the objectives of these three lines of action at the same time. In fact, there are several possible synergies, but there is also a relevant point of conflict, which concerns the use of biomass for energy use, linked to the crucial issue of decarbonisation. The forest sector, the use of its resources and the protection of its biodiversity are closely related to this issue. In fact, in recent years, at a European level, important strategic documents have been drawn up concerning forest management, which together introduce new ideas, innovative criteria and targets, as well as set objectives that are sometimes difficult to reconcile. The use of biomass is in fact essential to achieve the goal of zero emissions, which is also closely linked to the quality of our natural environment. It is also important in reducing our carbon and biodiversity footprint derived from imports, by increasing the capacity for self-supply. At the same time, it impacts both forest biodiversity, human health and the economy. Despite this complex picture, prof. Pettenella emphasizes that there is a possible space for action.

Giorgio Vacchiano, researcher in forest management and planning at the State University of Milan, as well as communicator, analyzed the scenery of possible forest management methods and activities aimed at satisfying the multiple objectives of our forests. Starting from the polarized concepts of landsparing (segregation) and landsharing (integration), he analyzed in which contexts, for which types of forests, and for the achievement of which objectives it is more effective to apply these different management approaches. The concept of rewilding, pertaining to the first approach, for example is well applied to old-growth forests. Vacchiano also recalls how the European Strategies oblige the strict protection of 10% of the European surface, including precisely the primary and old-growth forests. However, segregated areas cannot be applied the rest of the territory. In fact, forest management is not always incompatible with the need to protect biodiversity. Professor Vacchiano lists the main approaches, already tested, that go in this direction, and which generally follow the principles of retention forestry, which focuses on the elements to be released in the forest, rather than on what is removed. Key elements are for example tree microhabitats, habitat trees, sporadic species, dead wood and processing residues. Another technique that reconciles production needs with protection goals is tree-oriented silviculture. In general, silviculture can aim at achieving greater structural heterogeneity. In conclusion, the choice between segregation and integration is not





IMPLEMENTARE IL NETWORK DELLE BUONE PRATICHE PER LA CONSERVAZIONE DELLA BIODIVERSITÀ FORESTALE

binary, there are many intermediate degrees of application, and there is a way to apply both: the secret lays in the careful planning of the territory and forest areas at the broadest landscape scale.

After these first wide-ranging interventions, the second part of the day brought three LIFE projects as concrete cases of contribution of the LIFE Program to the European Strategies. The projects are **LIFE GoProFor** (LIFE17 GIE/IT/000561), organizer of the event, **LIFE Biorgest** (LIFE17 NAT/ES/000568) and preparatory project **LIFE Land is Forever** (LIFE17 PRE/BE/000001).

Marcello Miozzo, Technical Director and Head of European Projects group of D.R.E.Am. Italia, presented LIFE GoProFor project, of which he is Project Manager. The project encourages and promotes the exchange of knowledge and tools, the good practices deriving from the LIFE Program experience, among all the subjects operating in the forests within Natura 2000 Network, in order to favor a better integration of forest management with the protection of biodiversity. This European Conference itself concretely embodies the spirit of networking and exchange that underlies GoProFor. The heart of the project is precisely the collection and provision, in a single <u>Database</u>, of good practices of forest-related LIFE projects, to capitalize on them. At the moment, more than 230 GPs, extracted from the analysis of about 300 projects, are available. The GPs are also the basis of the contents of the training activities that the project has carried out at national level. Training activities, which are illustrated in more detail in the parallel session on the final day of the conference, involved a wide range of people with very different professional backgrounds, with the aim of improving their knowledge and skills, but also of promoting dialogue between the various actors of forest management and conservation. The cooperation between these subjects is also strengthened thanks to the establishment of a National Network: thanks to a participatory process, the NN will provide a guideline document with indications, solutions and best practices for a better management of our forests. Finally, the project is closely collaborating with some Italian regions to provide them with concrete support in order to improve forest management. The project provides them with specific tools to be included in the planning phases and with definition of silvicultural interventions (an example is the diagnosis of the Potential Biodiversity Index, developed in France by the CNPF and adapted to the Italian context within this project. For more details see the session "Indicators and tools for forest management", on the third day of the conference). The project also provided training for officials of regional departments responsible for both Environment Forests. Finally GoProFor is providing training tools so that the Regions can independently train their own technicians and operators.



Roser Mundet, of the Consorci Forestal de Catalunya, presented <u>LIFE Biorgest</u> of which she is the project manager. The project aims at improving the biodiversity of the Catalan Mediterranean forest through the integration of specific measures and innovative practices into forest planning and management instruments, and through new financing and compensation mechanisms. Through an extensive network of demonstration areas located between Catalonia (ES) and Occitania (FR), and representative of 4 forest habitats of community interest, the project tested measures to improve biodiversity conservation, to be implemented in existing silvicultural management models. The project also adapted the Potential Biodiversity Index (IBP) to the Catalan context, also establishing an International





IMPLEMENTARE IL NETWORK DELLE BUONE PRATICHE PER LA CONSERVAZIONE DELLA BIODIVERSITÀ FORESTALE

Committee of Experts for its harmonization in the Mediterranean area. The IBP is used in the initial diagnosis phase of a forest area and, based on the results obtained, makes possible to choose the most appropriate management model, based on the type of forest habitat, on the context and on the objective set. The project favors the choice of management models that go towards greater structural diversification, following the principles of the CNF, through tree-oriented silviculture. Some of the measures to be applied are of a general nature, while others are related to the results obtained with the IBP. Finally, the project analyzed a wide range of potential innovative funding mechanisms to be applied for biodiversity conservation in sustainable forest management, providing some guidelines and recommendations to implement these funding mechanisms more effectively in the Spanish context.



Jurgen Tack, Scientific Director of the European Landowners' Organization (ELO), presented the preparatory LIFE project LIFE Land is Forever, of which he is Project Manager. The project aims at expanding the use of private land conservation methods and approaches in the EU, through dialogue with landowners and their representatives. The involvement of private owners is a fundamental step in achieving the conservation objectives set by the European Biodiversity Strategy for 2030, since much of the biodiversity is found on private land, which constitutes 60% of the European surface. The project presents an accurate picture of private forest properties in Europe, of their use and management methods and of the degree of sensitivity of private owners to the issue of conservation. Through a bottom-up approach, the project gives voice to the istances of private owners, their requests and needs to foster their involvement in sustainable and multifunctional forest management. The project identifies several tools, actions and financial mechanisms that would substantially facilitate the commitment of landowners to the conservation of biodiversity and launches a set of indications and recommendations useful for generating the necessary changes in European policies to effectively involve this important group of stakeholders. Land is Forever has therefore played an important role of mediator and link between private property and conservation policies.



Marco Onida, Team Leader of the Forest Unit of DGENV, concluded the day making a point on the main contents of the new EU Forest Strategy for 2030 and in particular a) the strategic objectives and the main pillars of the Strategy; b) the road map for its implementation; c) the state of the art of guidelines being drafted by the EU Commission; d) the financial instruments envisaged. Onida emphasizes the importance of a key concept, the paradigm shift that is underway, recognized and necessary, with respect to the way in which we look at forests and we manage them. For this reason the FS, and not the Biodiversity Strategy, is a deliverable of the Green Deal. He also stressed the importance of preserving the multi-functional role of forests, and the central role of foresters. Given the context of





IMPLEMENTARE IL NETWORK DELLE BUONE PRATICHE PER LA CONSERVAZIONE DELLA BIODIVERSITÀ FORESTALE

the conference, Onida focused in particular on 4 pillars relating to the aspects protection of forest ecosystems, and for each of them reported the state of the art: regarding the first pillar, the protection of primary and old-growth forests, the EC is developing guidelines for conservation, through а process that involves Member States, experts, **NGOs** and other stakeholders. The starting point is a clear and common definition of "primary and old growth forests", and the definition of indicators that



allow their real mapping, and consequent strict protection.

Regarding the second pillar, **restoration and sustainable forest management**, Onida announced that the Nature Restoration Law will be enacted towards the end of March 2022. This law is a legally binding instrument for ecosystems restoration, and it will also take into account the protection of forest habitats not included in Annex I of the Habitats Directive.

Regarding the third pillar, **reforestation and afforestation**, specific guidelines are being drawn up to plant 3 billion trees in a biodiversity-friendly way. The Commission also supports the development of a community made up of a broad spectrum of stakeholders, and plays a key role in communication, political support, securing funds and creating a sense of identity. The EC is also working on the drafting of guidelines for the definition of *Close to Nature Forestry* and its practices. The guidelines, which see a broad participation of all Member States, headed by some lead countries, will see the light towards the second quarter of 2022.

With regard to the fourth pillar on **incentives for forest owners and managers**, Europe will favor the use of rural development funds, as well as the development and promotion of payment schemes for ecosystem services.

Finally, Onida concluded with the following remarks: by 2023 the Commission will issue a new legislative proposal for forest monitoring, reporting and data collection, in order to create a harmonized system, which will be part of Forest Information System for Europe (FISE). Also a new definition of SFM will replace the actual one, which is too general. The Commission will also define clear thresholds for the related SFM indicators, differentiated by biogeographical Regions.





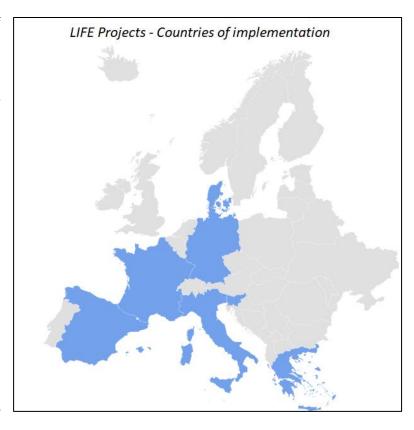
IMPLEMENTARE IL NETWORK DELLE BUONE PRATICHE PER LA CONSERVAZIONE DELLA BIODIVERSITÀ FORESTALE

Day 2 – 17th February 2022: LIFE Projects experiences and good practices

The second day focused on the contribution of the LIFE program to the implementation of the recent European Strategies, the New EU Forest Strategy and the EU Biodiversity Strategy for 2030, through the sharing and exchange of experiences and good practices of several forest-related LIFE projects from all over Europe.

The projects presented dealt with various issues, closely related to sustainable forest management, *Close to Nature Forestry*, forest species and habitats conservation, invasive alien species, adaptation and mitigation to climate change, strengthening capacity building and cooperation in the forest sector.

Also the second day of the conference was opened by **Andrea Cutini**, who welcomed the guests and participants, and summarized the work of the previous day, then passing the floor to the representatives of the invited LIFE projects.



Highlights of the presentations

Peter Hahn, from the Danish Nature Agency (Naturstyrelsen) presented LIFE Forest Fit For Future (LIFE19 ENV/DK/000013). The project has recently started, on 2020, and it deals with the substantial implementation of Close to Nature Forestry (CNF) at a larger scale in Denmark, in a wide range of private and state owned forests. The project, by helping to reduce barriers for implementation of CNF practices, is perfectly in line with the New EU Forest Strategy 2030, which advocates the application of CNF silvicultural models. The focal point of the project is the conversion of more than 4,000 hectares of traditional even-aged monocoltures of conifer stands into more varied and climate-robust forests. The project will also collect data and support the development of management tools for CNF forestry, such as growth models and economic models, cost-effective CO2 and biodiversity indicators as well as manuals, training materials and courses directed at all levels in the professional forestry sector.







IMPLEMENTARE IL NETWORK DELLE BUONE PRATICHE PER LA CONSERVAZIONE DELLA BIODIVERSITÀ FORESTALE

Bruno De Cinti, from the National Research Council of Italy (CNR) presented <u>LIFE Span</u> (LIFE19 NAT/IT/000104). The project has recently started, on 2020, and it deals with innovative and economically sustainable forest planning and management approach to conserve biodiversity and increase structural heterogeneity in productive forests of the Natura 2000 network. In particular, it focuses on the conservation of saproxylic species, by the establishment of a network of Saproxylic Habitat Sites (SHS). Within SHS the presence of habitat trees and dead wood is guaranteed, thanks to the implementation of specific interventions that speed up the process.



Klaus Striepen, from Wald und Holz NRW (Germany) presented <u>LIFE+ Forests-waterworlds</u> (LIFE13 NAT/DE/000147). The project dealt with the conservation of oak-hornbeam forests and its biodiversity, within the Ville Forests, which include several N2000 sites. Oak-hornbeam forests are habitat of comunity interest, and changes in natural hydrology patterns remain a key threat for this forest type. Furthermore they host many rare animal and plant species, such as the middle spotted woodpecker, Bechstein's bat, and the European stag beetle. The project carried out numerous measures to support the biodiversity and to mitigate the effects of climate change. Among its main activities are the restoration of the natural water supply, the retention of habitat trees, the expansion of natural forest habitats, the construction and restoration of forest pond for amphibians.



Marteen De Groot, from the Slovenian Forestry institute (Gozdis) presented LIFE Artemis (LIFE15 GIE/SI/000770). The project dealt with the reduction of the harmful impacts of IAS on biodiversity by increasing public awarenes and by setting up an efficient early warning and rapid response (EWRR) system to manage their impacts on forests. The project strongly involved Citizen Scientists, focusing on capacity development and awareness raising on alien species, in particular for the professional foresters, private forest owners, as well as for adult citizens and youth. The project developed a web and mobile application "Invazivke", which enables quick and simple uploading of data where as many as possible functions are automatized. The EWRR system implemented has worked, as many alert species were reported, even if certain taxa are more popular than others, and not all the national territory was equally covered.

LIFE ARTEMIS







IMPLEMENTARE IL NETWORK DELLE BUONE PRATICHE PER LA CONSERVAZIONE DELLA BIODIVERSITÀ FORESTALE

Petros Kakouros, from the Greek Biotope/Wetland Centre (EKBY) presented LIFE ForestLife (LIFE14 GIE/GR/000304). The project, which heads towards its conclusion, focuses on the exchange of best practice and the development of skills of forest Natura 2000 managers in Greece. After an in-depth needs assessment among the target groups of the Greek Forest Community, the project implemented tools and actions aimed at properly responding to needs that emergeged. A Collaboration Platform for Forests (CPF) was developed to facilitate the dissemination of guidance, best practices and knowledge regarding the special management needs of forests included in Natura 2000 sites. Training seminars and webinars were carried out to improve the skills of forest related target groups. Finally the project developed a web-based app that allows visitors to obtain information on natural values and ecosystem functions of selection of Greek forests directly in the field.



Xavier Beaussart, director of the **Parc naturel régional du Haut-Languedoc** (France) presented <u>LIFE Foreccast</u> (LIFE15 CCA/FR/000021). The project deals with the impact of climate change on forests, by providing forest owners and managers tools for the adaptation of forests to climate change options and by raising awareness among the professionals, the local elected representatives and the general audience about this issue. The project developed a mobile app (*Foreccast by Bioclimsol*) as a decision-making tool for forest managers in a context of global change. The application provide diagnoses at forest stands scale, based on climate models, soil module, autecology of species and field observations. The project also implemented several test sites to provide professionals with potential solutions to their issues. These sites are demonstrators of tree species or forest management procedures adapted to climate change that stakeholders can draw inspiration from for their forest management activities.



Finally **Teresa Baiges Zapater**, from the Centre de Proprietat Forestal of Catalonia (CPF), presented <u>LIFE Climark</u> (LIFE16 CCM/ES/000065). The project, which heads towards its conclusion, focuses on the promotion of multifunctional forest management for climate change mitigation, through the design of a local market of 'climatic credits'. The project tested innovative and demonstrative forest management practices in 2 pilot areas in Catalonia and in Veneto, introducing the obligation to apply integrative forest management such as the diagnosis of Potential Biodiversity Index (IBP), tree marking in thinnings in private lands and *retention forestry* criteria. Thanks to the implementation of these pilot projects, it was possible to quantify the impact of this management approach, in comparison with a "no management" scenario, in terms of additional tCO₂ sequestered/avoided, m³ of blue water





IMPLEMENTARE IL NETWORK DELLE BUONE PRATICHE PER LA CONSERVAZIONE DELLA BIODIVERSITÀ FORESTALE

released and percentage of improvement in biodiversity hosting capacity. After adding also global project costs and social value, it is possible to quantify the number of 'climatic credits' that can be placed on the future local market, allowing to fund multifunctional management projects.



After this review of LIFE projects **Angelo Salsi**, Head of the Department "Natural resources, climate, sustainable blue economy and clean energy" in the new European Climate, Infrastructure and Environment Executive Agency (CINEA), concluded the day by emphasizing the importance of events like this. These moments allow the meeting, interaction and exchange of experiences and good practices, and also of failures, which contribute to improving the protection of the territory and biodiversity. N2000 site managers face daily challenges, especially at planning level, and it is important to create opportunities for collaboration, so that a common management approach would established, at European level, which goes beyond individual territorial specificities. In fact Salsi reiterates the importance of the concept of *network*, and how single sites are interconnected as part of it. Capitalizing on experiences and defining common approaches is particularly relevant also in the light of climate change, as a global phenomenon. He also stresses the importance of establishing a training network at European level for the training of N2000 site managers,

in order to strengthen a sense of common belonging and recognizing oneself as part of a network. Another point emphasized importance of the involvement of private owners, whose properties lie about 50% of the surface of the N2000 network. Many LIFE projects already are already working in this sense. Salsi concludes with the strong invitation to continue to believe that creating an environment in which we can learn together how to manage N2000 sites is a really important step in arriving at a kind of European federation. Projects like GoProFor are a good opportunity for network, connect and learn.





IMPLEMENTARE IL NETWORK DELLE BUONE PRATICHE PER LA CONSERVAZIONE DELLA BIODIVERSITÀ FORESTALE

Day 3 – 18th February 2022: indicators, tools and training

The third and final day involved the audience to collect experiences and opinions on the best tools, indicators and training methods for more effective forest management in line with biodiversity conservation. This was done in the form of parallel thematic sessions, relating to 1) "Training" and 2) "Indicators and tools for forest management".

The day was opened by **Marcello Miozzo**, project manager of LIFE GoProFor, who welcomed the guests and participants. He chaired the event, presenting the progress of the day, as well as the *fil rouge* that has accompanied the project from the first European Conference (Palermo, 2019) to today.

During the first workshop, representatives of key bodies and organizations of forest sector and of conservation coming from world, 11 European Countries (Italy, Spain, France, Greece, Slovenia, Romania, Hungary, Denmark, Latvia, Lithunia, Poland) and representatives from the Europarc Federation, LIFE Asap and Cost Action, were invited to collaborate in a participatory process with aim of laying the the foundations for the



development of a European training system for forest management within N2000 Network.

During the workshop, participants were asked to identify the main obstacles for forest management within N2000 Network, the knowledge gaps, the necessary soft skills and the best tools and training approaches.

The collection of their indications gave rise to a project proposal, which pursued the main aim of strengthen the effectiveness of Natura 2000 Network by improving Natura 2000 sites managers, pratictioners, technicians, forest workers and landowners technical and managerial knowledge and skills, for a more effective application of the Directives for what concerns forests.

The result of this process led to the publication of the announcement "Network of training activities for Natura 2000 sites managers" in the 2020 call for proposals for preparatory projects.

The resulting preparatory project, <u>LIFE ENABLE</u>, mainly targets Natura 2000 sites and Protected Area managers. In light of the path and experiences carried out by the project to date, and in particular in the light of the new Green Deal (2019), the EU Biodiversity Strategy (2020), and the New European Forest Strategy (2021), closely linked to each other, new and important aspects emerge, which broaden the field of action to the management of all forests, even

PROGETTO LIFE
GOPCOFOC
LIFE17 GIE/IT/000561

outside protected areas, and to stakeholders in the forestry field and forest sectors.



IMPLEMENTARE IL NETWORK DELLE BUONE PRATICHE PER LA CONSERVAZIONE DELLA BIODIVERSITÀ FORESTALE

In fact, both Strategies underline that "all forests must be kept in good health, hoping for the application of practices that respect biodiversity, such as "Close to Nature Forestry", and recognize "the fundamental role of foresters in guaranteeing sustainable forest management and in restoring and maintaining forest biodiversity".

LIFE GoProFor therefore wants to continue the participatory process, asking for the contribution of those present, representatives of the forest and conservation worlds at European level, with respect to two themes, a) indicators and tools for forest management and b) training.

Objectives of the sessions.

The two parallel sessions were oriented to define basic elements and a work plan applicable by a target often not specialized in the naturalistic field.

Through these sessions the project, with the support of the participants, wanted to **contribute to the following objectives**:

- make available existing indicators and good management practices, and more appropriate tools for their application (Session "Indicators and tools for forest management");
- encourage, through training, the adoption of indicators, tools, standardized and shared good management practices, on a large scale, by those who work in the forests (Session "Training").

Thematic sessions

These two themes are very broad and articulated, and they are to be considered very relevant because, in line with the direction promoted by the Strategies, they concern not only forest management within protected areas by the managers of these areas, but also affect all forest actors, such as forest professionals, technicians, forest owners.

It should be emphasized that the two topics, dealt with in 2 parallel sessions, are closely linked because, in a broader framework, the correct use and application of indicators and tools for better forest management cannot be separated from being conveyed by effective and concrete training activities.

Furthermore, it is very important that tools, indicators and training are concretely applicable and economically sustainable.

In the first part of each session, some concrete experiences were shared, which can be considered as "inspiring stories", to help participants get to the heart of the topic.

In the second part, all participants were asked to indicate, in the form of a survey, the degree of importance of some aspects relating to the topic dealt with. Furthermore, through the chat, the participants were able to add further contributions, or modify and integrate some aspects proposed by the project.

A brief introduction was illustrated for each survey, aimed at contextualizing and clarifying what was proposed.

Participants.

The two sessions were mainly attended by representatives of research institutes and universities (31%), national and regional agencies (13%), freelancers (13%), public bodies of local or regional government (10%) and others.





IMPLEMENTARE IL NETWORK DELLE BUONE PRATICHE PER LA CONSERVAZIONE DELLA BIODIVERSITÀ FORESTALE

Session 1 - TRAINING

This session was facilitated by **Sönke Hardersen**, ecologist and naturalist of "Bosco Fontana" National Biodiversity Center of Carabinieri, supported by **Serena Buscarini**, of D.R.E.AM Italia, for the technical management of the session.

The session began with the sharing of the experience of the European <u>Integrate Network</u>, presented by **Andreas Schuck** of the **European Forest Institute (EFI)**. Integrate is a demonstration project that aims to promote the integration of biodiversity conservation in forest management, thanks to the improvement of the transnational exchange of experiences, and the establishment of a European network of demonstration and learning sites, the so

called martelloscopes. 20 member countries join this voluntary network, with the European Commission being an observer. The project organizes events, produces several scientific and technical publications, as well as Policy Briefs to support the balance between forest management and biodiversity conservation. It also provides training and education in demonstration sites, to foster a better understanding of management choices. To date. 160 demonstration sites are available and distributed in 22 countries across Europe. representing a wide variety of site types and management regimes.

Utilising marteloscpes for training





- Training exercises using software running on mobile devices can be tailored to:
 - type of exercise
 - target groups (forest / conservation managers, students, school children, interested public; mixed groups)
- Discussing virtual intervention outcomes is at the heart of training exercises
- They promote knowledge exchange and build better understanding

Towards Forest Management in line with the Protection and Conservation of Biodiversity







These marteloscopes are implemented on voluntary basis, thanks to the contribution of many subjects, such as public and private forestry companies, universities, projects, etc. LIFE GoProFor is an example, as it contributed to implement 6 out of 7 marteloscopes in Italy. The marteloscope is usually 1 ha rectangular site, within which all trees are mapped, numbered and recorded. Furthermore each tree is described in term of species, dendrometric data, timber quality and presence of microhabitats. In this way it is possible to attribute to each tree an economic and ecological value. Thanks to the use of a software running on mobile devices, developed by the project, it is possible to perform a virtual intervention and see the effects of the choices made. Target groups for training can be forest/conservation managers, students, school children, interested public; mixed groups. Many different type of exercises can be proposed and tailored to target groups and to reflections that you want to bring out. Sites have shown a powerful tool for training, education and communication. They allow for exchange on site having available results of virtual interventions: discussing the outcomes together is at the heart of training exercises, and very effective to promote knowledge exchange and build better understanding. Marteloscopes have found application in silvicutural training curricula and their related dataset is showing valuable for research.

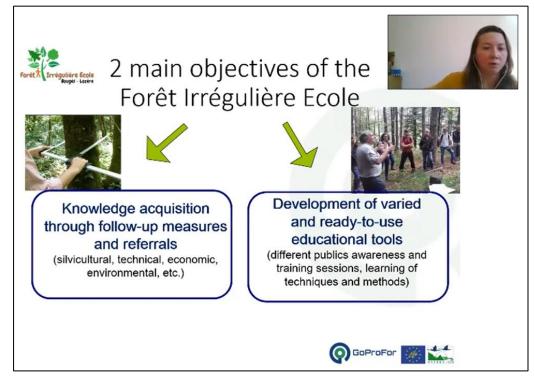




IMPLEMENTARE IL NETWORK DELLE BUONE PRATICHE PER LA CONSERVAZIONE DELLA BIODIVERSITÀ FORESTALE

The second case study focuses on the experience of <u>Forêt-Irrégulière-Ecole</u> (FIE) in France, presented by **Céline Emberger** of the Centre National de la Propriété Forestière (CNPF). The School is located in the Massif Central region, within the National Park of Cévennes, with the aim to learn and share the experience about irregular forestry, or Continuous Cover Forestry and close to nature. The 2 main objectives of FIE are 1) knowledge acquisition through follow-up measures and referrals, thus provifing an innovative research and development; 2) development of varied and ready-to-use educational tools, in order to raise awareness and trained different publics on Continuous Cover Forestry techniques and methods. One of the main cornerstone of the School is to make people understand the importance of the very strong link between ecology and economy in Continuous Cover Forestry.

Ιt considered important to involve as partners in the project, from its outset, all the main local forest actors, such as public and private managers, the National Park, forestry institutes, etc. Many local managers have made their properties available to the School to collect dendrometric implement measures, floristic surveys, surveys and descriptions and so on, and to test silvicultural techniques (160 ha). The School also



makes use of "satellite" areas, in order to collect complementary data on other themes and tree species. Long-term monitoring allows to understand the effects of the transition from traditional management to irregular forestry. Data, analyzed and synthesized, are also used to create reference materials for trainers. The School has also developed a series of informative and educational material in order to increase awareness on functional roles of biodiversity. Pedagogic material and approches are adapted to different public target. Practical training is carried out directly in forest, using marteloscopes (which are considered very effective tools) and applying the Potential Biodiversity Index, or IBP, better illustrated in the "Indicators and Tools" session. La Scuola mette inoltre a disposizione di chiunque ne faccia richiesta, il materiale formativo, and whenever requested it gives professional support to managers and professionals on real stands (planification, tree selection...).





IMPLEMENTARE IL NETWORK DELLE BUONE PRATICHE PER LA CONSERVAZIONE DELLA BIODIVERSITÀ FORESTALE

The last presentation focused on the training experience of LIFE GoProFor in Italy, presented by Serena Corezzola (D.R.E.AM. Italia). The training fulfilled multiple project's goals: it has contributed to increase knowledge and skills of participants, with respect to the theme of forest management integrated with the conservation of biodiversity, as well as being a vehicle for the dissemination of tools, experiences and forest management good practices deriving from the LIFE Program and from the European scenario in general. Finally, addressing a wide audience with diversified professionalism and personal backgrounds, it has created important moments of confrontation and exchange between the forest and conservation sector. The core of the training activities, which reflects the very nature of the project itself, is to use and capitalize in the best way what is already available and of proven success, both in terms of content and in terms of tools and training methods, reorganized in a way to effectively achieve the objectives set.



Training has in fact drawn heavily from the forest-related good practices tested within the LIFE Program, from tools and approaches developed by Integrate project (recognition and classification of tree microhabitats - DMH, implementation and use of marteloscopes for the simulation of virtual silvicultural interventions) and from the French experience of using the IBP. How did the project work? With the support of experts competent for several forest issues, 12 training modules have been developed. These experts also trained the trainers of the working group to ensure the best training quality. The 12 modules were organized into 2 training packages: a basic package (Level 1) and an in-depth package (Level 2). Level 1 collects the most important elements for biodiversity conservation and forest management, which have been considered an indispensable part of the knowledge and skills of all those who work in the forest. Level 1 is characterized by practical activities, carried out in 7 training areas specially





IMPLEMENTARE IL NETWORK DELLE BUONE PRATICHE PER LA CONSERVAZIONE DELLA BIODIVERSITÀ FORESTALE

implemented on the national territory, for the IBP application, the recognition of DMHs and the use of marteloscopes. For the second package (Level 2), of a more theoretical and in-depth nature, the project opted for an e-learning solution, through the development of a web platform and the use of material and video lessons made available by the teachers. More than 500 participants successfully completed the level 1 course, thanks to 5 online editions and 21 practical exercise sessions in the 7 training areas. More than 900 users are registered on the e-learning platform, with 211 courses displayed and 174 successfully completed to date. This training experience, the high participation and the positive feedback received highlighted: a) the importance of capitalizing on the existing, b) the importance of practical and experiential training, c) the importance of encouraging moments of dialogue and exchange between different sectors and d) the presence of gaps and training needs in the Italian national scenery, which the deputated institutions should provide by giving greater value to training.

Surveys

Close to Nature Forestry (CNF) silvicultural models and many factors related to biodiversity are often ignored due to

the lack of knowledge on the part of those who work in the forest. There are many limits to be overcome even if we have observed that forestry that is attentive to biodiversity does not always lead, for example, to significant economic sacrifices.

Through 4 surveys we wanted to assess:

- which are the obstacles for an extended application of the CNF,
- on which factors it should be acted to increase the number of actors in a

forest system capable of protecting biodiversity,

which tools should be adopt to foster knowledge and skills in this field.



Among factors indicated as most relevant in limiting the extended application of CNF are i) the lack of support from national policy-makers, and ii) the lack of specific training. The lack of a clear and common definition of CNF is not perceived as particularly relevant.

The participants believe that the most relevant actions to be implemented to increase the knowledge and skills of all the actors are those of i) increasing the importance of biodiversity issues during training, and ii) establishing biodiversity skill certificates for all professions operating in forests (technicians, operators, ...), formally recognized. The methods deemed most effective to foster knowledge and skills are considered i) the use of training areas and

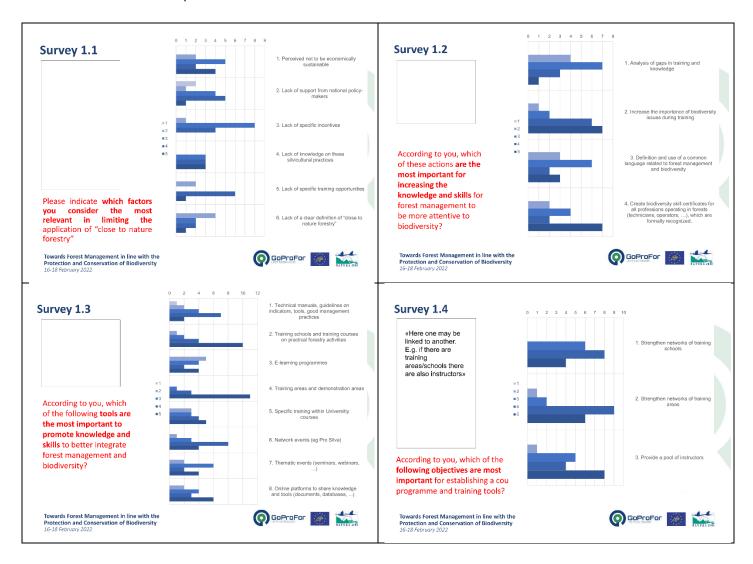




IMPLEMENTARE IL NETWORK DELLE BUONE PRATICHE PER LA CONSERVAZIONE DELLA BIODIVERSITÀ FORESTALE

demonstration areas, ii) training schools and training courses on practical forestry activities, iii) network events (like those organized by Pro Silva and finally iv) specific training within University courses.

Finally, the most important objectives for designing a training program and tools are i) provide a pool of instructors and ii) strengthen networks of training. One participant points out that, if training areas and schools are established, the need for trainers is implicit.





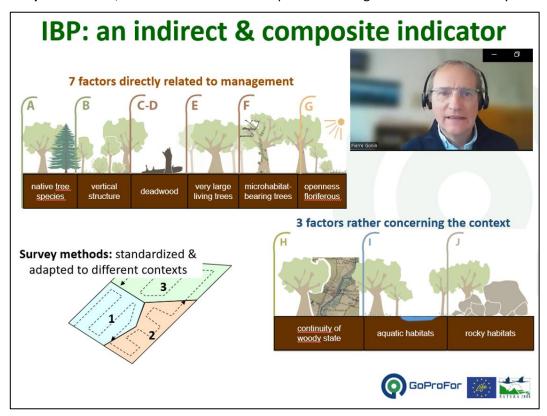
IMPLEMENTARE IL NETWORK DELLE BUONE PRATICHE PER LA CONSERVAZIONE DELLA BIODIVERSITÀ FORESTALE

Session 2 - INDICATORS AND TOOLS FOR FOREST MANAGEMENT

This session was facilitated by **Antonio Brunori**, General Secretary of PEFC Italia, supported by **Lara Redolfi de Zan**, of D.R.E.AM Italia, for the technical management of the session.

This session starts with the presentation of the <u>Potential Biodiversity Index (IBP)</u>, presented by <u>Pierre Gonin</u> of the Centre National de la Propriété Forestière (CNPF). The IBP was born in France in 2008, and to date, thanks to the establishment of an International Committee, it has been used in other countries of the Mediterranean area, such as Morocco, Lebanon and others and, within <u>LIFE GoProFor</u> and <u>LIFE Biorgest</u> it has also been adapted and harmonized for Italy and Catalonia. IBP is a **practical tool**, which was created to help forest managers to take biodiversity into

account in the ordinary management of the forest. Forest biodiversity is complex and difficult to measure. For this reason, the IBP is an indirect and composite indicator, easy to use, which serves to measure, at the stand level, the ability of the forest to potentially host biodiversity, through the analysis of 10 key factors. Seven of these factors are strictly influenced forest management, while the other 3 factors related are environmental context. A score from 0 to 5 is



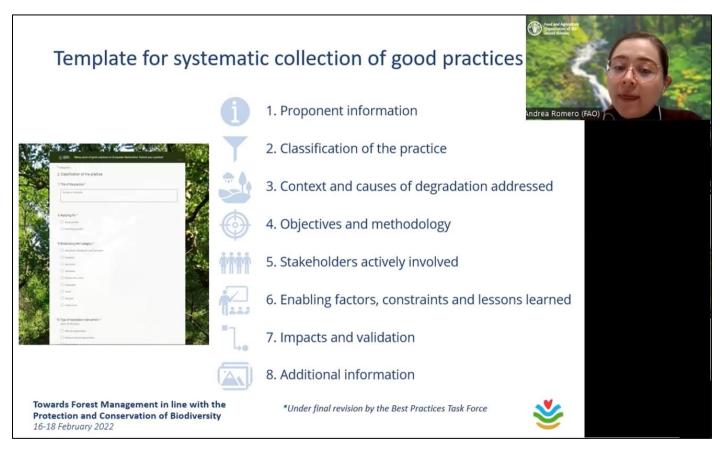
associated with each factor. Through different survey methods, it is possible to assign an overall score to the forest stand analyzed, which represents its potential to host biodiversity. Looking at the scores obtained by single factors, especially those associated with management, it is possible to define management recommendations that aim to improve the most deficient factors. The application of IBP, extended to a wider territorial scale, also helps planning, allowing the areas of intervention to be prioritized. It can also be used as a certification tool, as in the case of the "climate credit" market implemented in LIFE Biorgest. The IBP, in addition to supporting management decisions, is an extremely effective tool for raising awareness and training on the topic of biodiversity and forest management.





IMPLEMENTARE IL NETWORK DELLE BUONE PRATICHE PER LA CONSERVAZIONE DELLA BIODIVERSITÀ FORESTALE

The second case study concern the <u>UN Hub delle Nazioni Unite on good practices for ecosystem restoration</u>, presented by **Andrea Romero Montoya**, in behalf of FAO-led Task Force on Best Practices, established on the occasion of the UN Decade on Ecosystem Restoration 2021-2030. This Task Force is a coalition of 191 members from 87 organizations, whose focus is dissemination and capacity development to support ecosystems restoration. The Task Force's roadmap is based on 7 outputs, and in particular in this occasion the one concerning collection and capitalization of good practices is illustrated. The importance of this activity lays in the promotion of mutual learning and knowledge-sharing among restoration practitioners; in the replication and adaption of good practices to other situations with similar goals, avoiding repeating mistakes; in the enhancing of their capacities to implement and sustain successful restoration efforts across sectors, ecosystems and regions. The role of platforms, hubs and networks is to facilitate the achievement of these objectives. Good practice for ecosystem restoration are based on ten principles the Task Force is working on to extract evaluation criteria to assess effective good practices. A template for systematic collection of good practices has been developed and structured in 8 sections, tested in the Mediterranean area and under final revision.



This template is linked to <u>FERM</u> platform, "Framework for Ecosystem Restoration Monitoring", which will be operational in the collection of GPs from the second half of 2022.





IMPLEMENTARE IL NETWORK DELLE BUONE PRATICHE PER LA CONSERVAZIONE DELLA BIODIVERSITÀ FORESTALE

The last inspiring story concerns the Network of Reference Stands of old-growth (or near old-growth) forests, implemented in Spain within the LIFE RedBosques (LIFE15 GIE/ES/000809) project, and presented by José Antonio Atauri Mezquida from Europarc Espana. The project's main aim is to improve capacity building of Natura 2000 and forest managers on forest conservation in the Spanish Mediterranean region included in the Natura 2000 network, by a) providing benchmarks for evaluating conservation status of Mediterranean forest habitats; b) incorporating criteria for biodiversity conservation and adaptation to climate change in forest planning and management and c) ensuring the transfer of knowledge. The Network of Reference Stands of old-growth (or near old-growth) forests actually contributes to the first specific objective. In Spain, and in the Mediterranean area in general, the millennial human use of forests has led to the lack of real mature and old-growth forests. Identifying and protecting the remaining patches, or those that at least approach the characteristics of aging, is considered a priority, also in line with what is advocated by the European Biodiversity Strategy for 2030.

To characterize these stands, a system of quantitative indicators has been developed, grouped into three categories (maturity, human footprint and spatial integrity), which are aggregated into a Global Index. When the stand examined exceeds the Global Index treshold, it can be considered as a Reference stand. Reference stands represent the best naturalness example actually found (highest maturity and spatial integrity; lowest human footprint), for

each type of forest in a specific biogeographic region. Unfortunately some types of forest habitats of community interest don't have any reference The standardized stands. methodology implemented for their description follows a strict protocol, and the related field manuals and forms have been made available. Furthermore a online tool, a geoportal that collects all the stands of the Reference Networks, has been developed. By accessing this geoportal is possible to make



comparison with reference stands and "average" stands, for which the data of the National Inventory are available. This operation allows to understand how close it is to old-growth characteristics (or how far it is). The Reference Network therefore contributes a) to increase awareness on the value of mature forests, also in terms of multiple benefits for society, and to foster knowledge transfer; b) to provide protection to old-growth forests and their threatened associated species, c) to promote a more sustainable forest management, d) to increase resilience of forests, in the context of climate change. The possible extention of this Network at all forest types and at a EU scale could be useful for managers, researchers and professionals.





IMPLEMENTARE IL NETWORK DELLE BUONE PRATICHE PER LA CONSERVAZIONE DELLA BIODIVERSITÀ FORESTALE

Surveys

The experiences of projects illustrated in the first two days of this conference, together with the three inspiring stories presented at the beginning of this session, showed a wide use of criteria, factors, indicators and their thresholds, good practices and tools.

The tools needed to improve forest biodiversity management, to be adopted on a large scale, must be understood and applied by forest managers and not just by experts in the sector.

Through 5 surveys we want to assess:

- the possibility of developing easy-to-adopt biodiversity diagnosis systems
- the need, or not, to apply standardized methods to interpret factors related to biodiversity,
- how to capitalize on lessons learned and best practices

Starting from the assumption that integrating the aspects related to biodiversity requires complex analyzes, and that for a better economic sustainability of a biodiversity-conscious forestry, support tools and methodologies are necessary, the participants believe that the **forester must apply standardized methodologies for the analysis of biodiversity factors, capable of providing decision support**, also through the use of technological tools. One participant added that the application of standardized methodologies must be accompanied by adequate training,

and be of an easy use.

The availability of examples of successful experiences can be extremely helpful. This is also true for forest management integrated with biodiversity conservation.

The participants believed that the most efficient way of transferring best practices take place mainly thanks to visits to application areas and direct comparison with the implementers of GPs. Secondly, the re-elaboration, in the form of guidelines, of similar GPs, aimed at achieving the same objectives, is extremely useful. Thirdly, the



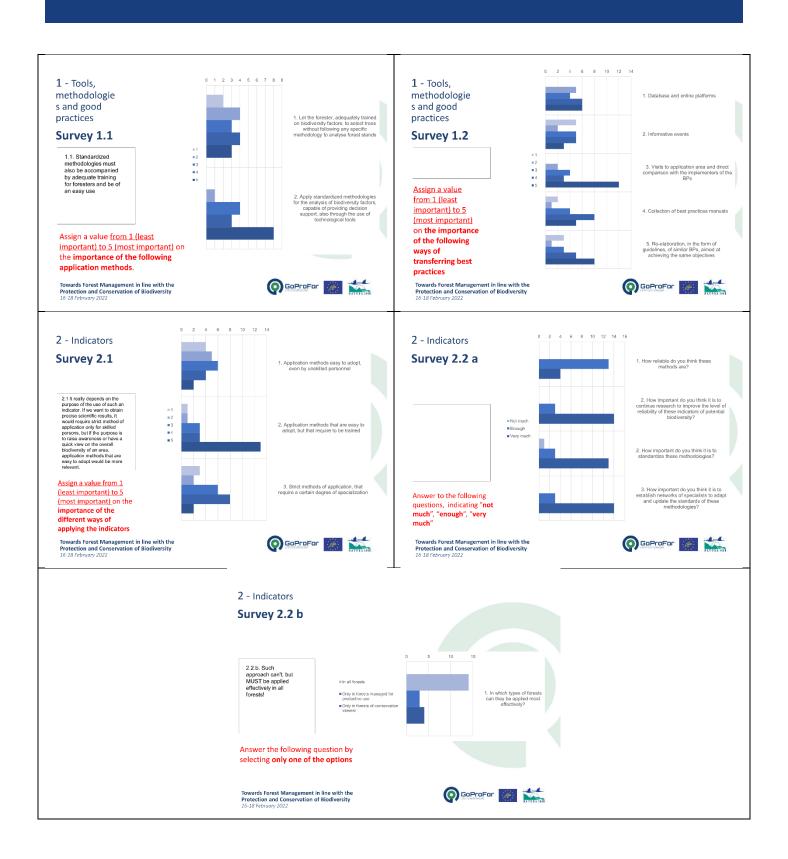
collection of good practice manuals. On the other hand, the opinion is much more conflicting concerning the effectiveness of databases and online platforms and information events.

With respect to the use of indicators to record trends and directions of change, the participants' opinion is asked on which **method of applying indicators** is preferable, with a clear preference for application methods that are easy to adopt, but which require training. On the other hand, opinion is very divergent on the possibility of adopting application methods that are easy to adopt even by unskilled personnel, and on strict application methods that require a certain degree of specialization. One participant specified that the most suitable method of application depends on the objective, or if it is necessary to obtain precise scientific results, or if you want to use it to raise awareness or to have a quick view of the overall biodiversity of a territory.





IMPLEMENTARE IL NETWORK DELLE BUONE PRATICHE PER LA CONSERVAZIONE DELLA BIODIVERSITÀ FORESTALE

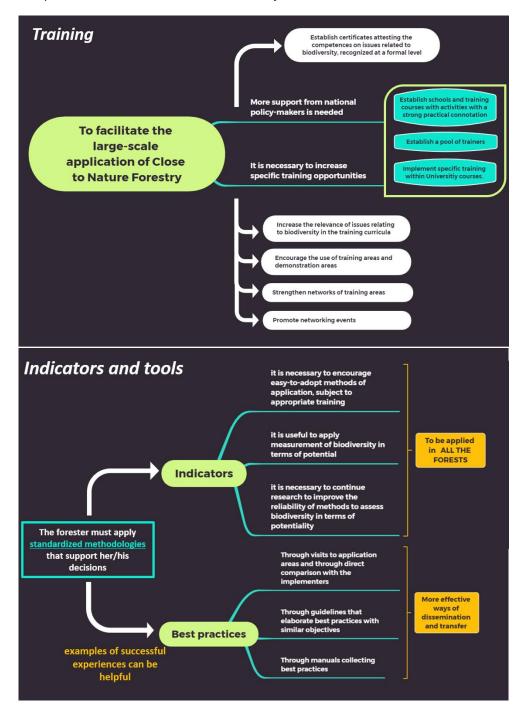




IMPLEMENTARE IL NETWORK DELLE BUONE PRATICHE PER LA

Concerning **methods to assess biodiversity in terms of potentiality**, usually easy to apply and with relatively low operating costs, participants believed that is really important to continue research to improve their level of reliability, and at the same time to establish networks of specialists to adapt and update the standards of these methodologies.

Finally, most of participants believe that **indicators should be applied in all type of forests**, beyond that they are mainly intended for productive uses or for conservation objectives.







IMPLEMENTARE IL NETWORK DELLE BUONE PRATICHE PER LA CONSERVAZIONE DELLA BIODIVERSITÀ FORESTALE

Sophie Ouzet, from DG ENV, concluded the conference underlying how the LIFE Programme is key for the implementation of nature policies, and a source of ideas for innovation, perspectives for implementation when it comes to developing a forest management that is in line with the protection and conservation of biodiversity. The LIFE Programme is already contributing to the development of a system to train and increase the knowledge of Natura 2000 site managers, thanks to LIFE projects that can be inspirational about ways to develop



knowledge and skills, such as LIFE e-natura.edu e LIFE ENABLE. The European Commission is also working to support such exchanges between practitioners, stakeholders and authorities, thanks to a networking programme developed under the Natura 2000 Biogeographical Process. The implementation of the very ambitious targets embedded in the EU BDS and the EU Forests Strategy, together with the upcoming EU Nature Restoration Law, which will also match these ambitions, requires a broader action, and again, training and monitoring are the keys to success, and raising this awareness it is a priority. Workforce and capacity must increase not only at the level of landowners, the actors in the forest sector and protected areas management bodies, but also at that of the competent authorities, in order that decision bodies take objectives relating to CNF on board their own strategies. Where LIFE Traditional nature projects have proved instrumental to develop and implement operational solutions, LIFE Integrated Projects and the upcoming Strategic Nature Projects will help scaling these up, fostering the use of other funding sources. Which means that LIFE can help achieve the objective to increase the share of EU funds dedicated to biodiversity action to 7,5% in 2024 and then 10% yearly. So LIFE has potential to help mainstreaming biodiversity into EU funds.

What was also highlighted in the sessions is that we need to **bridge the gap between the highly technical scientific levels and the more operational management levels**. The Horizon Europe can help make a difference in this sense.

LIFE GoProFor project is about to close, but the hope is that events like this will be the starting point for further exchanges and upcoming projects.

All presentations from the Conference are available on the LIFE GoProFor <u>website</u>.

