



Improved communication, co-operation and capacity building
for preserving biodiversity in Natura 2000 forests in Hungary

LIFE13 INF/HU/001163

Life in Forests

There were three main goals of the project. Life in Forests aimed to improve the conservation status of Natura 2000 forest sites in Hungary; primarily by fostering co-operation among forest owners and managers, forest authorities, governmental and non-governmental organisations, and local citizens. Furthermore, it would strengthen active communication among these stakeholders. Lastly, the project would initiate knowledge exchange through efficient stakeholder co-operation in order to more efficiently achieve Natura 2000 objectives.

The Life in Forests Project contributed to halting the loss of biodiversity at Hungary's Natura 2000 sites, and to strengthening their conservation status and multifunctionality, as well as to promoting and employing sustainable forest management that better considers natural processes.

Project implementation was co-ordinated by WWF Hungary, and in partnership with the Bükk National Park Directorate, Duna-Ipoly National Park Directorate, Europa Media Non-Profit Ltd., Kiskunság National Park Directorate, Association of Hungarian Private Forest Owners and Forest Managers, Hungarian Forestry Association, and Pilisi Parkerdő Zrt.

A fourth, joint objective was defined by these implementing organisations; to strengthen both the scientific and practical backgrounds of natural forest management, and to provide opportunities for stakeholders (forest owners, forest managers and relevant authorities) involved in the management of Natura 2000 forests to share their knowledge and experiences, and to bring their views closer together.

Project data

Title	Improved Communication, Co-operation and Capacity Building for Preserving Biodiversity in Natura 2000 Forests
Reference	LIFE13 INF/HU/001163
Duration	10. 07. 2014 - 31. 03. 2018
Total budget	1,190,753 EUR
EU contribution	588,378 EUR
Co-financier	Hungarian Ministry of Agriculture

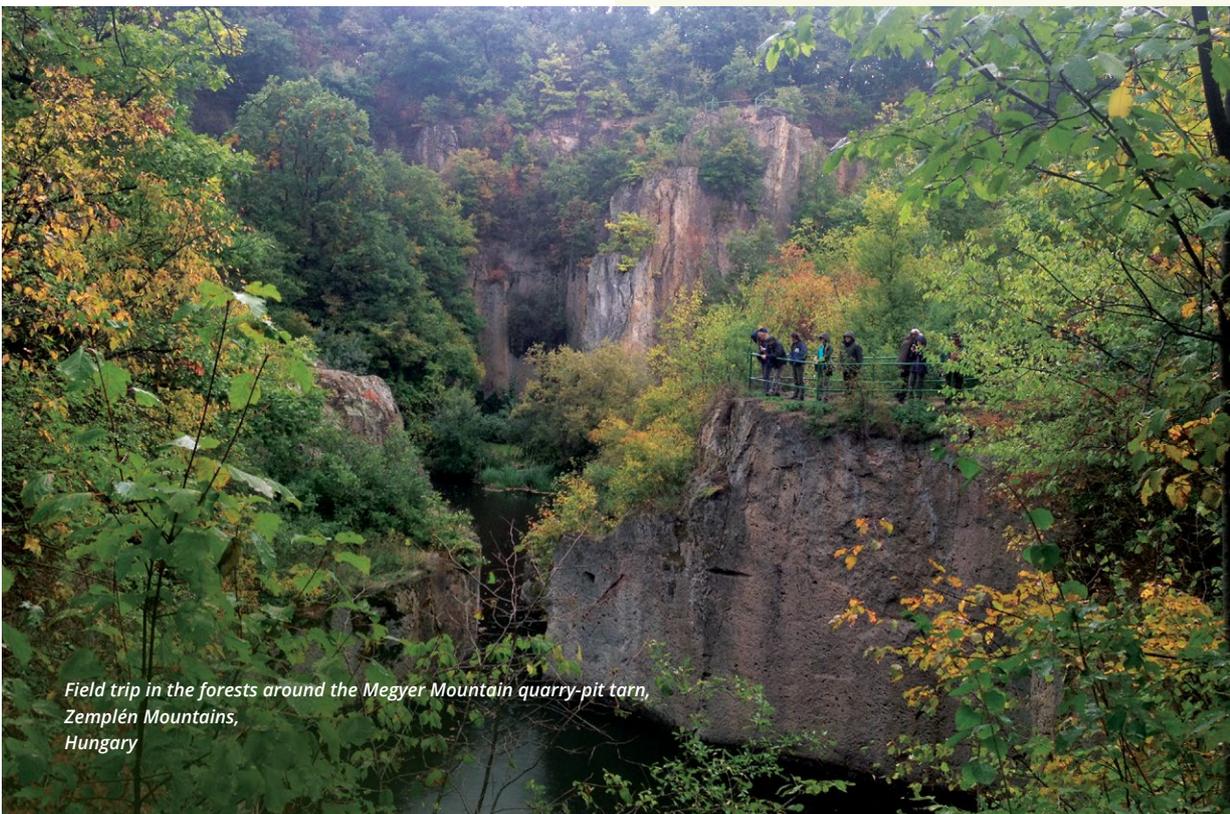


Natura 2000 forests in Hungary

Managing Natura 2000 forests in Hungary is a complex task filled with several challenges. In order to maintain the conservation status of Natura 2000 species and habitats of Special Areas of Conservation, the implementation of forest management requires joint efforts from several stakeholders who often have conflicting interests. Forest management practices have to be determined with respect to the multifunctional use of forests. Activities must be carried out in co-operation with forest managers (representing the economic function of the forest and the interests of the forest owner), conservation managers (whose goal is to conserve natural values), and the forest authority (who is responsible for the preparation of forest management plans). During this process, the opinions of the environmental protection authority and different civil groups must also be taken into account. The practical realisation of the multifunctionality (economic, conservation and welfare functions, etc.) of the forests often results in major conflicts. Past frictions may prevent co-operation even between those who share similar views. In addition, many foresters see the Natura 2000 management requirements and restrictions as a professionally unjustifiable additional burden.

The role of the Life in Forest project in improving the current situation

The project partners provided numerous opportunities for the affected stakeholders to meet. The objectives of these meetings included thinking together to find solutions to challenges, sharing experiences, and learning about best practices from Hungary and abroad. Furthermore, a knowledge repository, different publications, and a Forest Planning Toolkit were prepared. These outputs contribute to the dissemination of information about natural forest management practices.



*Field trip in the forests around the Megyer Mountain quarry-pit tarn,
Zemplén Mountains,
Hungary*

Some project results

Development of conservation knowledge hub

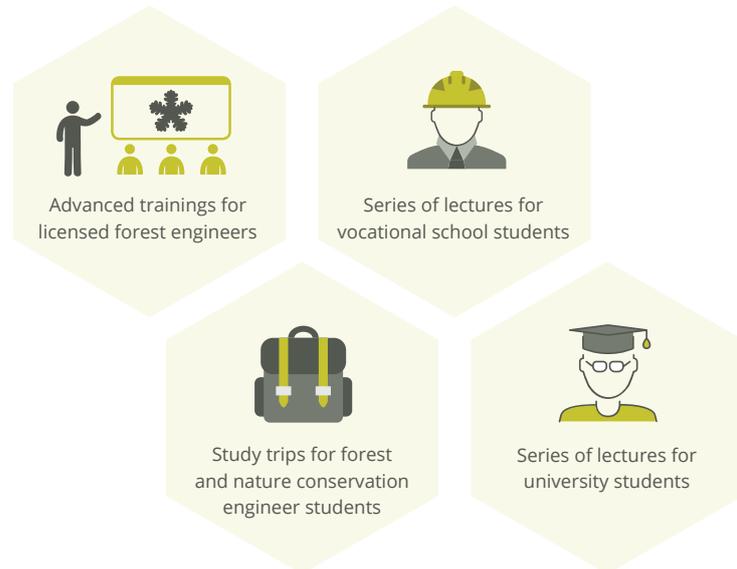
Forest management guidelines were developed for forest managers and conservation professionals. These guidelines introduce Natura 2000 species and habitats of Special Areas of Conservation in Hungary.

Strengthening co-operation between sectors

The objectives of meetings, round table discussions and information days were to foster exchange of good practices and experiences, and to provide opportunities for resolving potential conflicts between sectors. Based on mutual agreements, appointed experts elaborated the Natura 2000 forest management principles and guidelines.

Raising awareness of Natura 2000 and natural forest management

Programmes, trainings and publications helped forest managers and conservation specialists working in Natura 2000 sites, as well as forestry students to increase their knowledge about natural forest management and forest conservation.



Promoting the aspects of biodiversity

Through the Natura 2000 Forest Planning Toolkit prepared for forestry authorities, the project partners made an important step towards promoting natural forest management among specialists. Natural forest management contributes to improving the conservation function of Natura 2000 forests, promoting forest management practices favourable for conservation, and to more effectively applying conservation principles during forest planning.

Fostering the application of European best practices

Professionals participating in study trips could see Natura 2000 forest and conservation management good practices successfully applied in other EU member states.



What is Natura 2000?

Natura 2000 is a European Union ecological network that embraces natural habitats and species of Special Areas of Conservation. The concept of the network is suggested by its name: it consists of more-or-less interlinked areas of valuable natural habitats that sustain native wildlife in Europe.

When joining the EU, Hungary (similarly to other member states) had to designate these invaluable areas. Consequently, almost 21% of the country has become part of the Natura 2000 network. Most of the already protected areas, and ca. 1.2 million additional hectares have received EU protection from the designation. Therefore, it is no wonder that a rather large percentage of these areas are agricultural lands, grasslands, ponds, rivers and forests that have been managed for centuries.

Since the European landscape has been cultivated for such a long time, remaining wild areas are very scarce. Therefore, it is of utmost importance to conserve natural values that still exist. In addition, the complex interlinkages between humans and nature (various domesticated animals and crops, and different land use practices) are also crucial elements in conserving biodiversity.

The role of land managers and traditional sustainable management practices are extremely important for the protection of Natura 2000 areas. In general, instead of creating intact reserves, the Natura 2000 network aims to reconcile social, cultural, economic and conservation interests.



Prolonged regeneration of oak forests, Plášťovce, Slovakia

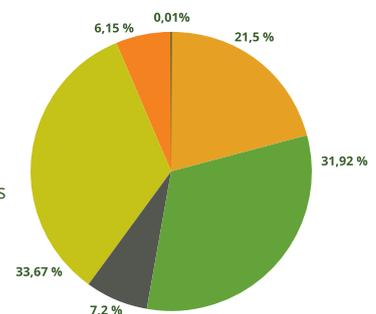
Natura 2000 forests in Hungary

* Data source: Forest Assets and Forest Management in Hungary, 2016. Budapest: National Food Chain Safety Office (NFCO), 2017.

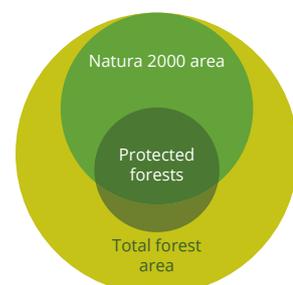
Protected by national law	In the Natura 2000 network	Area	
		1000 ha	%
✗	✓	418	20
✗	✗	1183	57
✓	✓	416	20
✓	✗	42	3

Naturalness of Hungarian forests

- Natural forest
- Semi-natural forest
- Second growth forest
- Transitional forest
- Cultivated and park forests
- Wood plantation



Distribution of Natura 2000 and protected areas



Promotion of Natura 2000 in Hungary

Animated film series about forest management

Another major task of the project was to raise awareness about the principles of natural forest management. The project partners all agree that successful forest management is possible even when implementing conservation practices. To demonstrate this, the Bükk National Park Directorate prepared a 6-episode animated film series which explains basic concepts such as continuous forest cover, forest habitats, the role of deadwood in the forest, and why Natura 2000 is important, etc.

Viewers become acquainted with the ecological, social and economic benefits of natural forest management, and learn how profitable forest management is possible in protected areas while also preserving nature. The series is available at <http://lifeinfoforests.eu/>.

Living Forest Award

The overall aim of the Life in Forests Project was to help realise the Natura 2000 objectives by contributing to the promotion of natural forest management, highlighting best practices in Hungary, and by presenting Natura 2000 funding opportunities. To this end, WWF Hungary announced the Living Forest Award for private forest managers working in Natura 2000 areas. The achievements of the five winners prove that it is possible to preserve natural values while maintaining professional forest management standards.

Sustainable forest management contributes to preserving biodiversity in the forests, and helps support their multifunctionality. The exemplary work of the winners is presented in detail in the film *Our Living Forest*. The film is available on WWF Hungary's YouTube channel.

The animated film episodes cover the following topics:

- *Forest management;*
- *Natura 2000;*
- *Continuous forest cover;*
- *Forest habitats;*
- *Is forest management possible in Natura 2000 areas?;*
- *How should the forests be managed in Natura 2000 areas?*



Life in Forests Award ceremony

What is the Forest Planning Toolkit? What is there to know about natural forest management?

Forest Planning Toolkit

The aim of the online toolkit is to provide help for professionals in planning silviculture operations and implementation of forest management activities. Based on data from the National Forestry Database, public forest maps, and the user's knowledge, Natura 2000 forest habitats of Special Areas of Conservation can be identified with just a few clicks.

In the knowledge hub, the user can find a set of recommendations that are in line with the Natura 2000 principles, and concern forest planning and management in the identified habitats. The main objective of these recommendations is to create, preserve and improve the diversity of forest habitats of Special Areas of Conservation.

In the Toolkit, one can find descriptions, maps, pictures and recommended literature which can contribute to improving knowledge on habitats of Special Areas of Conservation, and of the Natura 2000 network in general. The Forest Planning Toolkit is available at <http://natura.2000.hu/hu>

Natural forest management

The main objective of forest management has been to provide timber. During the past centuries, humans have accumulated an increasing amount of knowledge about how forests work, and they have developed ever more efficient procedures to produce as much timber as possible. As a result, timber production gradually dominated the other complex and important functions of the forests.

Realizing this imbalance the need emerged to consider forest, apart from being the space for timber production, as an ecological system in order to give importance also to natural processes as well. Thanks to the increasing knowledge pool this can be realized without affecting productivity.

This imbalance makes it imperative that we change our viewpoint and look at forests as ecological systems. Moreover, we should let natural processes reassert themselves. Thanks to our increasing knowledge, this can be realised without negatively affecting productivity.

One of the practices of natural forestry is natural regeneration: relying on natural dynamics to provide saplings for forest renewal. Forest management with continuous forest cover employs selection cutting, or perhaps shelterwood cutting in conjunction with a rotation period. Since good management assistance lets the forest do the work, these practices help reduce the costs of forest management.

Winners of the Living Forest Award

Miklós Binger
András Bence Cseke
Gábor Fejes
Gábor Flamich
Péter Laczkó



Nature values in our forests

Hungary is situated in the Pannonian Biogeographical Region, where the European Union aims to conserve 118 animal and 46 plant species, as well as 70 habitat types of Special Areas of Conservation. The natural values connected to forests include the following:

Species/species groups of Special Areas of Conservation connected to forests

-  Herbaceous species
-  Beetles in living and deadwood
Stag Beetle, Great Capricorn Beetle, Hermit Beetle, Flat Bark Beetle, Rosalia Longicorn
-  Butterflies related to forests
Silver-Washed Fritillary, Clouded Apollo, Scarce Fritillary
-  Woodpeckers and secondary hole nesting species
Middle Spotted Woodpecker, White-backed Woodpecker, Black Woodpecker, Grey-headed Woodpecker, Red-breasted Flycatcher, Collared Flycatcher
-  Birds of prey, owls and black stork
Honey Buzzard, Short-toed Snake Eagle, Black Kite, Red Kite, Golden Eagle, Imperial Eagle, Lesser Spotted Eagle, White-tailed Eagle, Saker Falcon, Ural Owl
-  Forest dwelling bats
Western Barbastelle, Bechstein's Bat, Pond Bat
-  Large predators
Wolf, Lynx, Bear
-  Forest dwelling rodent
Beaver

Forest habitat types of Special Areas of Conservation

-  Luzulo-Fagetum beech forests
-  Asperulo-Fagetum beech forests
-  Medio-European limestone beech forests
-  Tilio-Acerion forest on slopes, screes and ravines
-  Alluvial forests with *Alnus glutinosa* & *Fraxinus excelsior*
-  Riparian mixed forests of *Quercus robur*, *Ulmus laevis* and *minor*, *Fraxinus excelsior* or *angustifolia*, along the great rivers
-  Pannonian woods with *Quercus petraea* & *Carpinus betulus*
-  Pannonian woods with *Quercus pubescens*
-  Euro-Siberian steppic woods with *Quercus* spp.
-  Illyrian *Fagus sylvatica* forests
-  Illyrian oak-hornbeam forests
-  Pannonian-Balkanic turkey oak-sessile oak forests
-  Pannonian inland sand dune thicket

Together in the field and in the auditoriums

Events that enabled face-to-face discussions were very important. These events included sectoral and cross-sectoral round table discussions, information days, field trips and various courses. The experiences provided a good atmosphere for knowledge exchange and induced spontaneous co-operation. In the course of these activities we mainly focussed on professional target audiences, including licensed forest engineers, officials, experts from forestry and conservation organisations, as well as forest owners and managers.

Natura 2000 information days for private forest owners

The aim of the Natura 2000 information days, organised by the National Association of Private Forest Owners, was to provide information for Natura 2000 forest owners and licensed forest engineers about natural forest management and EU funding opportunities. We organised 15 events in different Hungarian cities and towns. The programme included presentations and discussions in the framework of a community event that provided an intimate, friendly atmosphere for accepting and absorbing new knowledge. They were also useful for establishing the basis for future co-operation. During these occasions, we provided as much information as possible about the management of Natura 2000 forests, and about the relationship between biodiversity and forestry practices.



Field visit during one of the international field trips, Steigerwald, Germany

Study trips in Hungary and abroad for representatives of the forestry sector

The main objective of the study trips in Hungary and abroad was to learn about good examples and gain practical experiences. These events also helped to improve the participants' professional networks, and gave opportunities for extensive knowledge exchange. The goal of choosing certain study sites abroad was to show examples that are not available in Hungary. For instance, participants were guided by local experts in several protected areas characterised by natural processes, or in natural forests.



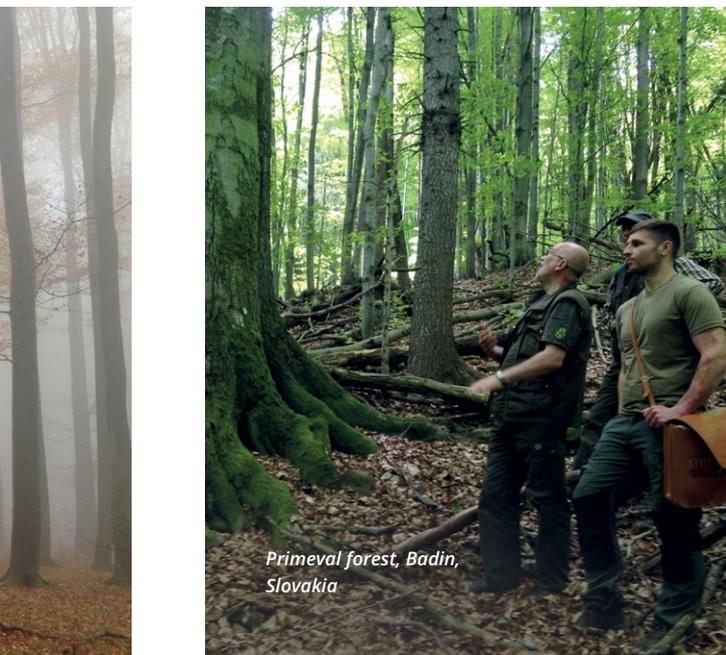
*Forests managed using selection cutting,
Mecsek Mountains, Hungary*



*Management of forests in Pécs – outdoor presentation
by Biokom Ltd., Hungary*

Destinations of the international study trips

- *Celje, Slovenia;*
- *Donau-Auen National Park, Austria;*
- *Ebrach, Bavaria, Germany;*
- *Bialowieza National Park, Poland;*
- *Banská Štiavnica, Štiavnické Mountains, Slovakia;*
- *Mureş-Floodplains Natural Park, Romania;*
- *and Pol'ana Biosphere Reserve, Slovakia.*



*Primeval forest, Badin,
Slovakia*



*Fight against invasive species in the Mureş floodplains,
Romania*



Life in Forests Conference, 21-22 March 2017, Sopron, Hungary

International professional conference

An important project event was the Life in Forests Conference held in Sopron, 21-22 March 2017, which attracted more than 200 practitioners. In the plenary session, international presenters shared their knowledge and experiences, followed by parallel sessions discussing various national issues. The presentations are available at <http://lifeinforessts.eu/>



Presentation about the multiple functions of forests at the Steigerwald Ebrach Visitor Centre, Germany

Series of presentations at Károly Kaán Eco-club, University of Sopron

“Presentation Series for Natural Forests” was the title of the programme series organised by WWF Hungary. With the assistance of prominent experts, the open course presented the theoretical and practical aspects of the Natura 2000 network. The presentations are available at <http://lifeinforessts.eu/> (in Hungarian).

<http://lifeinforessts.eu/downloads/77>

András Schmotzer
“Natura 2000 Species and Habitats of Special Areas of Conservation”

<http://lifeinforessts.eu/downloads/78>

Ferenc Szmorad
“Designating and Operating the Natura 2000 Network in Hungary”

<http://lifeinforessts.eu/downloads/80>

Gábor Tímár
“Considering Natura 2000 Regulations during Administrative Work”

<http://lifeinforessts.eu/downloads/87>

Tamás Frank
“Realising Natura 2000 Objectives in Forest Areas; Forest Management for Conservation”

<http://lifeinforessts.eu/downloads/24>

József Duska
“Why is Natura 2000 Important for Private Forest Managers?”

<http://lifeinforessts.eu/downloads/83>

Péter Laczkó
“Reaching Natura 2000 Conservation Objectives in Private Forests”



Zoltán Szentesi, a forest manager from Hegyalja, Hungary, presents different grape varieties before the study walk

Series of lectures for students in vocational forestry schools

As the project progressed, representatives of the next generation of professionals were also included among the target groups. WWF Hungary and the Association of Hungarian Private Forest Owners and Forest Managers visited the vocational forestry schools in Hungary with a knowledge package similar to those presented during the information days. Students received practical knowledge about the Natura 2000 network, natural forest management and EU funding opportunities.

- *Mátra Forestry Agriculture and Game Management Vocational School, Mátrafüred;*
- *Dráva Valley Secondary School, Barcs;*
- *Gyula Roth Forestry and Timber Industry Vocational School and College, Sopron; and*
- *Ferenc Kiss Forestry Technical School, Szeged.*

Study tour for university students

The University of Sopron, with the support of the Life in Forests Project, organised a 5-day study tour in the spring of 2018 for second-year conservation engineer students. The programme focused on familiarising the students with typical Hungarian habitats and their natural values. A strong emphasis was given to presenting the characteristics of currently applied forest management practices, conservation objectives and the prevailing conflicts.



Examples from Slovakia of forest management based on natural dynamics



Conservation engineer students of the University of Sopron, Hungary

Impacts of the project

The events, meetings and series of publications during the Life in Forests Project have all contributed to two overall objectives: to improve the views on, and the acceptance of the Natura 2000 network in Hungary; and to raise awareness about, and promote natural forest management. The success of the project was measured through an impact assessment. We conducted interviews with representatives of the consortium partners, experts involved in the project, and with participants of the various project events - many of whom also belong to the immediate target groups. The major conclusions are the following:

1 The project partners strongly valued that the different representatives of the forestry and conservation sector managed to come together and take the first steps towards closer co-operation. They highly appreciated having an opportunity to discuss long-term conflicting views. During these discussions, a group of specialists with different professional backgrounds (private forest owners, state forest workers, forestry authorities and conservation specialists) emerged with whom it is possible to work together in the future.

2 External experts contributing to the project also consider the results of this long overdue co-operation as positive. They recommend introducing the project publications to universities and professional fora as a baseline for further discussions after the project. However, they pointed out that it would be important to also develop solutions for the identified problems (black locust, game damage, invasive species, etc.). Due to limited time and resources, this was not possible during the project.



Kasivarova Forest Reserve near Banská Štiavnica, Slovakia



Introduction to the floodplain forests of the Mures river near Arad, Romania

3 Private forest managers participating in the events said that they also considered the co-operation to be a success. Many of them stayed in touch with the colleagues they had gotten to know during the project. They especially valued that nearly all private forest managers were present at one of the events. Their feedback on the programmes was positive: they could acquire new knowledge e.g. about natural dynamics-based forest management or about conservation forest management. They were also able to strengthen their existing knowledge.

4 A national park expert stated that he believes a new approach was born during the project: one that takes conservation aspects more into account during the preparation of forest management plans (e.g. conservation authorities have the right to evaluate these plans). However, the legislative framework slows down and hampers the positive trends.



The different participants and the organisers highlighted the success of the intra-sectoral discussions. Most respondents stated that the initiation of these discussions (and their fortification) was the most important aspect of the project. The discussions between conservationists and forest specialists did not all end in consensus, but they took the first steps towards each other.

Lastly, the project successfully implemented a transfer of knowledge related to Natura 2000 forests and natural forest management.

Although the forester-conservationist conflict could still be perceived during the interviews, there were no big differences in the opinions of the study groups. Since almost all participants and organisers would like to continue this work in some form, the success of the project can also be measured by the willingness for future co-operation.



Opinions of the project partners

"For private forest owners, timely delivery of information is what matters the most. During the project, hundreds of forest owners received practical and up-to-date knowledge about managing natural and semi-natural forests, and about funding opportunities. We also organised a series of lectures for young professionals studying in secondary level forestry education. These were received with huge interest."



József Duska,
Deputy President,
Association of Hungarian Private Forest Owners

"It has always been important for WWF Hungary to enforce conservation interests based on consensus, and in a professionally sound way. We think that the intersectoral discussion and the professional base that was created during the Life in Forests Project are very important steps towards conserving natural values in the Natura 2000 forests."



Pál Bódis,
Forest Conservatory Project Leader,
WWF Hungary

"It is very important to introduce Natura 2000 forest habitats and related species to the wider public, as their long-term conservation can only be guaranteed if they are known and valued by society. Effects of Forest Management on the Biodiversity of Forests published by the Duna-Ipoly National Park, and the online "Forest Planning Toolkit" help professionals and the general public to better recognise and understand these forest communities."



Márton Árvay,
LIFE Project Manager,
Duna-Ipoly National Park Directorate

"Our association has been representing the forestry sector for 150 years, and has always paid special attention to key policy issues. Every forester has some experience with Natura 2000. It is our aim to represent their views, understand their opinions, and solve any emerging conflicts. Our role in the Life in Forests Project helped us to reach our goals."



Szentpéteri Sándor,
Managing Director,
National Forestry Association

"We value that we could produce basic information materials about conservation and forest management, both for the public and experts. This way we can reach even those people who do not have a specific interest in this topic, and we can help them understand the connection between conservation and forest management."



Krisztián Kovács,
Head of Forestry Department,
Bükk National Park Directorate

"Every day we experience the increasing importance of the protection and welfare functions of the forests during our work at the Pilisi Parkerdő Zrt. The Life in Forests Project's programmes and publications help us carry out our tasks to the best of our ability."



Sándor Szentpéteri,
Chief Forest Planning Officer,
Pilisi Parkerdő Zrt.

"The regional differences of the necessary conservation practices pose a huge challenge for the conservation sector, which makes our role very important in this project. The thematic workshops organised for conservation experts provided opportunities for overcoming everyday difficulties, and for starting to think together about how the conservation functions of Natura 2000 can be best realised."



Szőllősi Szabolcs,
Head of Project and Development Department,
Kiskunság National Park Directorate

"It was a pleasure for us to take part in shaping the opinions of foresters about conservation. We believe the project has exploited the possibilities of this topic to their maximum. Through the different activities and tools, the partner organisations could reach the widest possible audience. We hope that the project website, the knowledge repository and the innovative online courses will serve all those in the future who are interested in the topic."



Gabriella Lovász,
Managing Director,
Europa Media Nonprofit Ltd.

Project publications and electronic materials

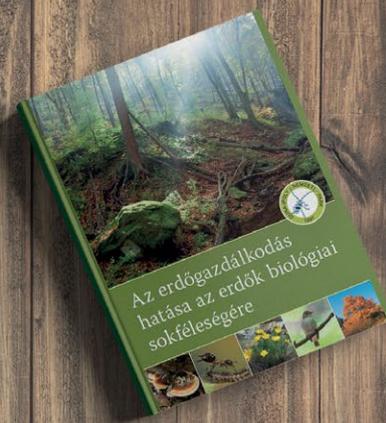
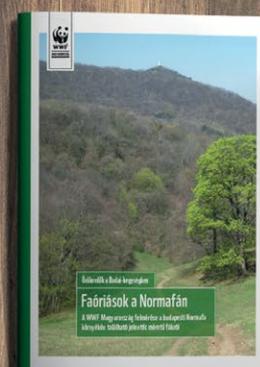
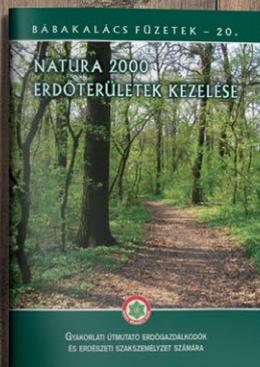
As a part of the Life in Forests Project, the following studies, information handbooks tailored to the needs of the professional audience, educational materials, and periodical publications were published (in Hungarian):

- Réka Aszalós Dr., and László Gálhidy Dr. (Eds.), 2015: Managing Natura 2000 Forest Areas – Practical Guidance for Forest Managers and Specialists
- Eszter Kovács, Gábor Harangozó, Zsuzsanna Marjainé Szerényi, and Péter Csépanyi (Eds.), 2015: Analysing the Economic Environment of Natura 2000 Forests
- László Gálhidy Dr., and Bálint Bombay (Eds.), 2016: Tree Giants in Normafa – A WWF Hungary Survey on Trees of Significant Size Around Normafa, Budapest
- Márton Korda (Ed.), 2016: The Effect of Forest Management on Forest Biodiversity
- Tamás Frank (Ed.), 2016: Conservation Aspects of Tree Marking in Natura 2000 Forests – Practical Guidance for Forest Managers and Specialists

- Nigel Dudley, 2017: Deadwood – Living Forests: The Importance of Veteran Trees and Deadwood to Biodiversity

E-learning courses
can be accessed at the
<https://lifeinforests.eu>
(in Hungarian only)

 Advanced Course for Licensed Forest Engineers and Specialists	 Natura 2000 Funding Opportunities for Forest Management
 Proposal development	 Project communication





 LIFE IN FORESTS



<https://hu.lifeinforests.eu/>



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