



# Natura 2000 Seminars

## Natura 2000 Biogeographical Process

**Second Boreal Natura 2000 Seminar  
Vilnius - Lithuania, 5 – 7 October 2016**

### **DRAFT Seminar Report**

An initiative  
of the





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Event: For more information on this seminar, see the Natura 2000 Communication Platform:  
[http://ec.europa.eu/environment/nature/natura2000/platform/knowledge\\_base/14\\_2\\_boreal\\_region\\_en.htm#NBP](http://ec.europa.eu/environment/nature/natura2000/platform/knowledge_base/14_2_boreal_region_en.htm#NBP)

All presentations giving during the event can be found here:  
[http://ec.europa.eu/environment/nature/natura2000/platform/events/260\\_second\\_boreal\\_natura\\_2000\\_seminar\\_en.htm](http://ec.europa.eu/environment/nature/natura2000/platform/events/260_second_boreal_natura_2000_seminar_en.htm)

## Executive summary

The second Boreal Natura 2000 Seminar took place in Vilnius, Lithuania from 5-7 October 2016. It brought together 86 Natura 2000 practitioners and expert stakeholders from the Boreal region. Issues of common interest were discussed in the field and during working group discussions, and a number of presentations on a variety of topics were given by participants. The presentations covered, for example, innovative approaches used and being developed in different countries to implement Natura 2000 areas and target resources for restoration priorities and projects. Other presentations covered the Low Hanging Fruit approach, stakeholder engagement, and the LIFE financing programme.

Group discussions were a core element of the Seminar; participants could choose to join one of four thematic working groups and one of four habitat working groups. Several issues discussed in the different groups cross-related – for example, the challenges of Natura 2000 management with regard to appropriate scale came to the fore in almost all group discussions: this included whether management interventions should focus on small or larger areas, what timescales should be considered, as well as finding a balance between biogeographical level and national, regional or local conservation objectives. The need for clear inventories and knowledge sharing about best practices (but also failures) were emphasised in several discussion groups. All habitat groups agreed that it is especially necessary to share knowledge about the effects of climate change. Another point frequently mentioned was the opportunity through the Natura 2000 Biogeographical Process to assist with the identification of common inventory methods as a means to help improve consistency across all countries and to facilitate comparison. Finally, a topic that was repeatedly identified across the groups was the benefits that would arise from enhancing common understanding of conservation objectives and better harmonisation of definitions in relation to Natura 2000.

Further remarkable elements of the programme were the two field visits, respectively on forest and grassland habitats and on freshwater and wetlands habitats and the 'Knowledge Market' where participants could discuss in the field or around information stands concrete examples of habitat management and a large number of relevant cases studies. Finally, in the margins of the knowledge market an informal round table discussion took place on the feasibility of developing regional approaches to large carnivores management.

The discussions at the Seminar led to a range of ideas for concrete cooperation and the future development initiatives to improve the management of Natura 2000 including a number of specific follow-up events. Participants' feedback was very positive and there was general consensus that the second Boreal Natura 2000 Seminar was highly successful.

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## **List of abbreviations**

- CAP: Common Agricultural Policy  
EC: European Commission  
FCS: Favourable conservation status  
FRV: Favourable reference value  
IMA: Integrated management approach  
LHF: Low hanging fruit  
WFD: Water Framework Directive

## 1 Introduction

This document presents the main outcomes from the second Boreal Natura 2000 Seminar held in Vilnius, Lithuania, from 5 to 7 October 2016. This Seminar brought together a wide range of Natura 2000 practitioners and expert stakeholders from the Boreal region. As part of the Natura 2000 Biogeographical Process, the Seminar served the purpose of discussing issues of common concern and interest in relation to the conservation and management of Natura 2000 habitats selected for priority consideration and habitats identified as “low hanging fruit”. More information on the low hanging fruit methodology can be found in Annex II of this report.

The Seminar was organised by ECNC in close cooperation with the European Commission and the generous hosts, the Ministry of Environment of Lithuania. It took place at the National Visitors’ Centre of Protected Areas in Lithuania and was attended by 86 delegates. All EU Member States in the Boreal region participated.

### 1.1 Context of the second Boreal Natura 2000 Seminar

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

As the responsibility for the implementation of Natura 2000 and ensuring progress towards the EU’s Biodiversity Strategy targets lies with Member States, they are key actors in the Natura 2000 Biogeographical Process. The Process also provides an opportunity to mobilise expert networks and inputs from other key stakeholders, including NGOs. This is important in order to be in direct contact with experience of Natura 2000 practitioners, expert stakeholders and Member States’ representatives with specific responsibilities for implementation of Natura 2000. This underlines the strategic and operational importance of the Process, the integrated inputs required from diverse actors and the opportunities available to develop concrete collaborative actions for future implementation.

### 1.2 The Boreal Seminar Input Document

The [Boreal Seminar Input Document](#) was produced to support discussions during the second Boreal Natura 2000 Seminar in Lithuania. As a primary source of background information, produced with support from the European Topic Centre on Biological Diversity (ETC-BD) and based on the latest Article 17 reports, the document:

- Identifies key factors in relation to establishing favourable conservation status (FCS) for the four habitat groups and the habitat types and species within them;
- Outlines the issues, pressures and threats per habitat group;
- Identifies necessary management and conservation actions.

## 2 Results of the second Boreal Natura 2000 Seminar

The second Boreal Natura 2000 Seminar was opened by Mr Vidmantas Bezaras, Director of the Protected Areas and Landscape Department of the Lithuanian Ministry of Environment. Mr Bezaras' presentation was followed by an address from Mr Humberto Delgado Rosa, Director Natural Capital, DG Environment at the European Commission. He expressed his sincere gratitude to the Ministry of Environment of Lithuania and the Lithuanian State Protected Areas Service for hosting this seminar. Mr François Kremer, Policy Coordinator Natura 2000, DG Environment at the European Commission, gave an outline of the background of this seminar, including the Boreal Roadmap as an outcome of the Boreal Kick-Off Seminar. He encouraged keeping this Boreal Roadmap active. Finally, Mr Neil McIntosh from ECNC presented an overview of the programme and target outcomes from the Seminar. Ms Rūta Baškytė, Deputy Director of the Lithuanian State Protected Areas Service, introduced the site visits.



Picture 1. Plenary presentation at the 2<sup>nd</sup> Boreal Seminar

Together, the introductory speeches provided a summary overview of the wider context of the Natura 2000 Biogeographical Process, and its implementation challenges at national and site levels.

### 2.1 Site visits

After the introductory presentations, the seminar participants departed for one of two field visits. The field visit options were:

#### **Field visit 1: Aukštadvaris Regional Park – Forest & Grassland habitats**

Aukštadvaris Regional Park is a diverse, picturesque landscape with deep hollows, high hills, lakes, fountainheads of rivers and rich biodiversity. Here one can find both Southern European steppe meadows and Western taiga habitats, as well as the unique, mysterious thermokarstic sinkhole Velnio duobė (Devil's hollow). Watercress grows in the waters of this park. The area has a rich cultural history as well.

#### **Field visit 2: Labanoras Regional Park – Freshwater & Wetlands habitats**

Labanoras Regional Park is the largest regional park in Lithuania. It protects the core part of the country's second largest forest – Labanoras forest. The total area of Labanoras Regional Park is 55,309 ha. It is part of the Natura 2000 network to a large extent; nearly 96% is designated as Natura 2000. In the Labanoras forest, there is a dense network of lakes. Small streams meander through the forests. The wetland complexes of Girutiškis and Beržalotas are recognised as Wetlands of International Importance. The osprey is the symbol of the Regional Park. Dwarf birches – relict plants – grow in the upland moors, reminiscent of northern tundra. Water lobelias that are rare in Lithuania adorn the banks of the lakes here.

The field visit stopped at two lakes, a wetland, transitional mire and an alkaline fan area. In both site visits, past restoration measures were explained and possible future restoration or management measures were discussed.

## 2.2 Knowledge Market and discussion about large carnivore management

In the evening of the first day of the Seminar, there was an opportunity for participants to share cases studies, projects and ideas at the Knowledge Market. An overview of the knowledge market presentations is given in Annex V of this report.

In the margin of the knowledge market, an informal round-table meeting was organised to discuss the feasibility of regional approaches to large carnivore management. This meeting was chaired by Humberto Delgado Rosa and attended by representatives of all five Boreal MS and stakeholder representatives, including FACE and ELO. There was quite much support among the participants for more bilateral and multilateral cooperation on a voluntary basis, for example on population and conservation status assessments/reporting and on practical ways for managing relevant large carnivores' populations in the region. Such cooperation should involve the competent authorities of the Boreal Member States as well as their expert networks and stakeholder organisation and complement the activities of the Large Carnivores Platform.

The second day of the Seminar started with presentations in plenary, followed by the thematic working groups and then the Habitat Working Groups (see table 1 for the chairs and facilitators for these groups). Kęstutis Navickas presented regional approaches to integrated habitat and species management for grassland and mire habitats in Lithuania. Santtu Kareksela showed the Finnish approach for restoration prioritisation for Finnish Natura 2000 areas, using Zonation analysis. Marie-Alice Budniok presented the HERCULES programme, bringing together 13 partners dedicated to landscape science and practice. The presentations can be found on the Natura 2000 Platform:

[http://ec.europa.eu/environment/nature/natura2000/platform/events/260\\_second\\_boreal\\_natura\\_2000\\_seminar\\_en.htm](http://ec.europa.eu/environment/nature/natura2000/platform/events/260_second_boreal_natura_2000_seminar_en.htm).

Table 1. Chairs and facilitators for the thematic and habitat working groups

Group	Chair	Seminar support by the contractor
<b>Lead Seminar Coordinator: Neil McIntosh (ECNC)</b>		
<b>Integrated management approaches to Natura 2000</b>	Hans van Gossum (Arcadis)	Emmanuelle Mikosz (ELO)
<b>Approaches to setting restoration priorities</b>	Santtu Kareksela (Metsähallitus, Parks & Wildlife Finland)	Monika Kotulak (CEEweb for Biodiversity)
<b>Communication and stakeholder engagement</b>	Alice Budniok (ELO)	Michael Hosek (EUROPARC)
<b>Setting conservation objectives</b>	Mora Aronsson (SLU/ETC-BD)	Frank Gorissen (ECNC)
<b>Freshwater habitats</b>	Andris Urtans (Nature Conservation Agency)	Michael Hosek (EUROPARC)
<b>Wetland habitats</b>	Agu Leivits (Environmental Board)	Monika Kotulak (CEEweb for Biodiversity)
<b>Forest habitats</b>	Kimmo Syrjänen (Finnish Environment Institute)	Frank Gorissen (ECNC)
<b>Grassland habitats</b>	Petras Kurlavičius (Lithuanian Univ. of Educational Sciences)	Emmanuelle Mikosz (ELO)



## 2.3 Results of the thematic working groups



Pictures 2 & 3. Group discussions at the 2<sup>nd</sup> Boreal seminar

### 2.3.1 Integrated management approaches to Natura 2000

*Chair: Hans van Gossum*

The Chair introduced some ideas on how Integrated Management could be approached and discussed in the session. He suggested using ecosystem services considerations for this. The rationale for this was that integrated management planning is linked to multiple benefit agendas.



Figure 2 Ecosystem services

The aim of the session was to discuss where cross-border collaboration could provide benefits. In particular sustainable forestry, agri-environmental schemes, and rural planning could be considered, but other themes such as water management could also be discussed.

It was mentioned that integrated management should not be discussed on a vague, large spatial scale, as it is often the case when referring to ecosystem services but rather with a clear focus on how favourable conservation status can be reached for habitat types or species present on a site.

The question was also raised whether Natura 2000 goals can be achieved by integrating agricultural practices and whether certain habitats can be maintained without traditional farming. The participants discussed whether ecosystem services can provide leverage and how the applicability of the precautionary principle can be taken into account. The lack of flexibility of certain management plans was mentioned as a possible problem. It was agreed that in order to share and learn from each other, it would be very helpful to establish an inventory of best and worst practices and examples.

The discussion then turned to defining integrated management: what should be the spatial focus of its applicability? Should it be limited to Natura 2000 sites only or can it include the larger landscape? The participants agreed on the need to have links with other policy departments. A better understanding of integrated management and the opportunities it can provide should be the subject of further discussions.

The final discussion point concerned the financial instruments available. It was emphasised that a lot of information is already available through websites, etc. Nevertheless, the participants underlined the continued need for up-to-date information about financial sources – not only how to find them, but also how to mobilise them for concrete actions and how to create synergies and have the means to address major threats. Many specific measures that have been identified cannot be implemented because of lacking financial resources.

The following actions were proposed as a possible follow-up:

- A workshop on integrated management approaches supported by a background document;
- Possibly a thematic event including relevant stakeholders, e.g. foresters;
- Further discussion to promote the understanding of integrated management and its opportunities.

Elements for further elaboration are:

1. To reach an understanding of what is under discussion:
  - What is integrated management?
  - What is the spatial focus for discussion: the Natura 2000 sites or the larger landscape?
  - Can ecosystem services provide leverage?
2. To establish an inventory of best practices and good examples, learn from what went less well.
3. To define effective means to ensure stakeholder involvement with specific focus on issues such as: information needs and proper communication and consultation approaches; best practices being applied to establish and build trust; proactive mobilisation of stakeholders' inputs; awarding and rewarding schemes.
4. Continuous and up-to-date information on financial sources and how to access these.

## 2.3.2 Approaches to setting restoration priorities

*Chair: Santtu Kareksela*

The discussion revolved around the main elements for general and systematic priority setting: the goals and targets of restoration, the methods used, the costs of the methods (and financing restoration in general) and the effects of restoration.

The participants addressed the need for regional inventories of habitats and sites to be restored. The need to well define restoration targets was identified as a crucial element: what do we want to achieve, what should be the scale for restoration, should we focus on large areas over smaller ones, and should we target only Natura 2000 sites or areas outside the network as well.

Answering these questions would allow more systematic priority setting, and the identification of where to take quick actions, for example in the case of ecologically relevant Low Hanging Fruits. In addition, the importance of setting the scale and estimation of costs and benefits of restoration were raised. The need to value the ecosystem service potential of restoration was underlined. Systematic evaluation of the restoration related ecosystem service potential would help, for example, to assess trade-offs between biodiversity and ecosystem services, between different habitats, and between methods such as restoration and protection. It is important to consider the socio-economic benefits of restoration for the provision of ecosystem services along with the positive effects on species and habitats (e.g. contributing to their FCS).

Another major theme of the discussion was related to Member State-level expertise on restoration. The need to calibrate different inventory methods was underlined, as well as taking different approaches towards various habitats and species. The use of passive restoration, letting nature recover on its own, and other measures that specifically target an habitat site, rather than the same approach for multiple habitats, were mentioned. When planning a restoration process it is necessary to take a wide view – for example, to take into account what is happening upstream and downstream or on the whole watershed as well as the impact outside the region. The group also discussed restoration as an offsetting tool, i.e. as a compensation for negative effects of development projects elsewhere (Habitats Directive, Article 6 on appropriate assessment).

The third umbrella topic of the discussion focused on the costs and financing of restoration – this included, for example, the possibilities of private companies financing restoration as compensation. A lack of private financing opportunities for restoration was indicated as a problem that could perhaps be solved through, for example, publicity. The importance of using the financing possibilities dedicated to the Natura 2000 network as efficiently as possible was stressed.

Lastly, the effectiveness of restoration (i.e. to what extent improvement takes place) was discussed, starting from scale and perspective: i.e. the European Union compared with biogeographical regions compared with local levels; it is all about finding the trade-offs and synergies. Working constructively with landowners and gathering the agreements necessary for restoration work can be quite complex. In the policy sphere, it is important to acknowledge, take into account and integrate diverse policies which influence restoration, for example nature conservation, water quality and adaptation to climate change.

The dilemma of choosing between conservation and restoration was discussed. It was concluded that the priority should be to conserve, especially in the Boreal region where biodiversity is still rich and where there are still remote areas without human intervention. However, this depends on habitat types, EU policies and the other Member States. Moreover, most financing is directed towards protection rather than restoration. The problem of financing restoration was again discussed in this context, participants also flagging up that funds could be better targeted or specified to facilitate appropriate choices of sites to restore. In addition, differences between national and biogeographical or EU level priorities were mentioned. This problem could be solved by a prioritising exercise using spatial prioritisation tools such as Zonation. It is important to assess different priorities for different habitats and species. The group agreed that prioritising is essential to maximise the effect of the restoration and efficiency of money spent. Whilst the focus of the Natura 2000 Biogeographical Process so far has been on habitats, the group also discussed the topic of species restoration and the need to focus on distribution and threatened species.

The following actions were identified and proposed as possible follow-up:

1. To update the Boreal Roadmap with regard to restoration, including the attribution of responsibilities and the definition of ways of collaboration.
2. Decide on species and habitats which would help maximise long-term goals, balance between trade-offs and benefits.
3. Find trade-offs and benefits between EU-level goals and Member States' goals.
4. Use and activate volunteers.
5. Collect data at Member State level which would be made available on a single online platform (use EU funding, e.g. Interreg).

### **2.3.3 Communication and stakeholder engagement**

*Chair: Marie-Alice Budniok*

The EUROPARC Federation's presented its experience and recommendations with respect to stakeholder communication, emphasising that, in order to better communicate, it is necessary to clarify who is responsible for communication, who the stakeholders are, what needs to be communicated, and to well reflect on what is the best way achieve agreement. Generally, human behaviour is poorly understood and this is why communication is underestimated. It is also important to bear in mind that communication planning is a process and is not fixed.

It was concluded that the best practice does not mean working in isolation. Rather, effective communication and outreach can be the means to find partners to work with. It is also important to support stakeholders, by helping them with what they already want and/ or plan to do. Conservationists often want to change motives; this actually means breaking habits or customs or established ways of working, which is hard for stakeholders to accept and often may result in a high risk of failure.

Many projects tend to fail because there is no clear "baby step" to start from. A realistic first step will greatly increase chances of success. It is also important to share and celebrate successes, as success leads to increased hope and removes fear of new developments. Success leads to more success; change is powered by success and halted by failure.

In general, participants agreed that communication (as an action) tends to be underestimated. Environmental studies do not necessarily take people into account sufficiently and the challenge is to improve on that and find the right ways of working together. The importance of research on improving communication was stressed as more knowledge development on the issue is needed.

Latvian experts have good experience with a scheme based on “competition” amongst farmers, based on, for example, the number of orchid individuals. However, a lack of professional communicators within nature conservation was identified as a challenge. Stakeholders are often locals, and therefore good ambassadors are needed for communication (e.g. a hunter for hunters). It also helps to have a clear vision and design of what you want, so that a goal is identified that should be fine-tuned with stakeholders. Lithuanian experts stated that positive communication between Ministries for Environment and Ministries for Agriculture is necessary. Failure to involve the younger generation might cause problems in the future.

The idea of the Low Hanging Fruit approach in relation to communication and stakeholder engagement is to make landowners proud of Natura 2000 on their land by showing them that additional value is created by biodiversity and its protection. Farmers do a lot for biodiversity protection and may not always be aware of the positive impact of their work on nature. Often, finding appropriate ways to work together and involve practices that already exist can be the keys to success, so long as such approaches are demonstrated and properly communicated. If successfully presented, stakeholders’ willingness to give more to nature could increase.

The final word (confirmation and approval of an agreement) should not belong to the experts but to the stakeholders. If the expert or manager of a protected area is not also the owner or tenant, he should act as a mediator rather than a decision-maker.

The participants concluded on the following priorities for improving communication with stakeholders:

1. Start by identifying the relevant stakeholders.
2. Understand and recognise their values and needs.
3. Stakeholder groups should have ambassadors (champions, land users) as well as professional communicators.
4. Start by asking what stakeholders are prepared to do and help them to achieve it.
5. Engage stakeholders by co-designing the process (common ownership of the process).
6. Communication should not be based only on research results, but also on stakeholder values and needs.

### **2.3.4 Setting conservation objectives**

*Chair: Mora Aronsson*

The discussion within this group focused on setting conservation objectives at different scales, dealing with potentially conflicting conservation priorities, experience with setting of Favourable Reference Values, and the new Low Hanging Fruit methodology.

### *Low Hanging Fruit methodology*

The Low Hanging Fruit methodology received a lot of attention in this thematic group. The Chair's active involvement in the development of the methodology contributed to the discussion.

An important part of the discussion focused on the relation between the Low Hanging Fruit methodology and the original Boreal priority habitats. A shared question was how the LHF habitats would influence the priority habitats. The most frequently voiced concern by the participants was that the LHF habitats would become an obligatory task for the Member States, and that this would limit their financial and resource capacity for working on priority habitats. It was explained that the LHF habitats will not replace the priority habitats and that they will not be an obligatory task for the Member States.

This led to a question on the necessity of Low Hanging Fruit habitats. The development of the LHF approach was in part triggered by a political incentive to generate positive outcomes in the Article 17 reporting. Nature restoration is a long-term activity which means that direct positive developments will not show up quickly in the Article 17 reporting. The risk of this is that the Natura 2000 work might lose political support due to a lack of visible short-term results. The LHF is meant to add quick wins, but without compromising the long-term work on the original priority habitats. There is a political and a biological reality, which is something that needs to be handled by using the multiple tools available. The objective of nature conservation experts is to improve biodiversity, but to do so they need to deal with politics. Nature conservation specialists need training to be able to better deal with the political aspects of their work. An additional point raised was that results within Natura 2000 should be compared with what happens outside the Natura 2000 network. This will provide data that show that there are positive developments within the Natura 2000 regions.

The participants also wondered about the selection method of the LHF habitats, because some Member States do not have any LHF habitats, and some are considered more challenging than the name "Low Hanging Fruits" would imply. This is because several of the identified habitats are influenced by factors that are not under the direct control of managers. Climate change, which can have a large impact on the future development of habitats, was a frequently mentioned factor. It is also important to look at how big the percentage of the LHF habitats is within Natura 2000 areas, because managers cannot act outside those borders. In relation to the actual difficulty of improving an habitat, it was mentioned that all grassland habitats should then be LHF, based on the reasoning that a lack of financial funds are the only obstruction to improvement of their quality.

The Chair explained that the current selection of LHF habitats is not a definitive list and will be re-evaluated, based on expert input. Calculations are based on biogeographical region assessments. The results for the Boreal region are based on the status and total surface area of an habitat across all the Boreal Member States. One Member State with a small patch of an habitat with a negative status will not alter the Boreal average if the habitat has a positive status in other, larger areas. In reaction to this, a participant mentioned that it can be dangerous to generalise these things too much. Rare species are not always equally spread across an habitat, and neither do they only live within one habitat type. In addition, some LHF habitats are influenced by what happens around them, meaning that actions in the habitat will not be successful if surrounding problems are not solved. A possible weakness of the Birds and Habitats Directives may also be that the species protection regime applies

horizontally to the whole country, whereas the conservation measures for habitat types have to be established only in the special areas of conservation of Natura 2000.

#### *Definitions of habitats, FCS and FRV*

The selection of LHF habitats developed into a discussion on the actual interpretation of habitat definitions. Most experts agree that although there are common habitat definitions, these are not always interpreted in the same manner in different Member States and this may lead to confusion when reporting for the entire Boreal region. There are differences in how specialists define and evaluate habitats. Data cannot always be compared, because the Member States have their own definitions of the habitat types. According to a Finnish expert, Estonia, for instance, would have much more Western Taiga if they adopted the Finnish approach. The participants concluded that it might be useful to organise a workshop about the differences in definitions and FRV between Member States and how to remove them.

The differences in habitat definition/interpretation were seen as the greatest weakness of the LHF approach. They should be linked up better, or it should at least be possible to translate them to ensure a better biogeographical overview. Habitat definitions need to be harmonised within a framework of factors such as quality, size, geography, etc. Then experts can understand each other better and make better comparisons.

#### *Additional comments*

Participants agreed that currently the CAP payments work only for intensive farming and there are not enough opportunities for smaller scale/eco-friendly farmers. It is these small-scale farmers that contribute to the maintenance of several habitats. Some habitats disappear as a consequence of the agricultural funding, because farmers alter their production system and remove grassland habitats to produce crops for which they will receive funding. Work within the European Commission on the CAP is ongoing and essential in order to tackle current tensions between Agricultural policy and improved implementation of the Habitats and Birds Directives. It was concluded that managers should show the conflicts between CAP and biodiversity, especially where there is evidence of “capital destruction” and EC funds are being spent in a conflicting manner.

Another problem within the Baltic States is that there are many private owners within the Natura 2000 areas. This makes it difficult for governments to reach their Natura 2000 and conservation targets. Member States can make a model and vision, but often cannot adequately influence the condition of privately owned land.

It is not always feasible to restore the historical coverage of habitats. If this is a goal, we will keep reporting negative statuses for a long time. Besides restoration, sites also require to be maintained: this is very important to keep in mind when setting reference values.

#### *Main conclusions*

The main current challenge with the LHF approach is that there are differences in habitat definition/interpretation between Member States. There is potential, through the Natura 2000 Biogeographical Process, to improve links, increase understanding and identify current knowledge by ensuring a better biogeographical overview. Improved harmonisation would also, for example, help

to address factors such as quality, size, and geographical location of Natura 2000 management strategies. Following discussion, given the current differences, participants agreed that it might be a good idea to organise a workshop on the differences in FRV between Member States and how to remove them.

One important point made by the group in concluding was that working with, in and for Natura 2000 involves dealing with political and ecological realities. The objective of nature conservation experts is to improve biodiversity, but to do so they have to deal with politics. For this they need training. However, in demonstrating the added value gains that have been achieved for habitats and species of Community importance, comparison of the condition of nature within and outside Natura 2000 sites shows that Natura 2000 is delivering and ensuring progress towards EU targets. In particular the group identified that there is an urgent need when reporting about Natura 2000 species and habitats to ‘accentuate the positive’ – this will involve improving ways to also report on gains and positive trends being achieved, rather than just report current conservation status in isolation.

## 2.4 Results of the habitat working groups

### 2.4.1 Boreal freshwater habitat group

*Chair: Andris Urtans*

The working group was attended by participants from all countries in the Boreal biogeographical region.

The session began with a presentation on the Integrated LIFE Project FRESHABIT presented by the Project Manager Pauliina Louhi (Finland). The aim of the project is to improve the ecological and conservation status of freshwater Natura 2000 sites and habitats in Finland; to enhance the sustainable use of freshwater resources by integrating the conservation approach into new coordination structures, models and networks; and to raise awareness of the natural, cultural and economic values of freshwater habitats (capacity building).

Regionally significant problems and challenges were discussed. This resulted in a table showing the main challenges and opportunities and which countries were interested in cooperating to find solutions or take other action (e.g. arrange specific workshops).

Roadmap of activities for collaboration (cooperation priorities)

	Finland	Sweden	Lithuania	Latvia	Estonia
WFD + Floods Directive + Habitats Directive + N2000 conflict/synergy	X	X	X	X	X
Migration barriers	X	X	X	X	X
Workshop organised by Sweden on hydropower and its impact on conservation status	X	X		X	X
Changes in CAP (Common Agricultural Policy) affecting freshwater habitats	X	X	X	X	X



Channelized rivers (nature friendly management guidelines)	X	X	X	X	X
Sedimentation	X	X		X	X
Large woody debris	X – a lack of debris	X – a lack of debris		X – excess of debris	
REMIBAR project (Sweden)	X (similar project in Finland)	X		X	
Beaver				X	X

It was confirmed that new approaches and sometimes even new coordination structures and networks are needed to promote and develop existing synergies of the WFD, Floods Directive and Habitat Directives. All participants noted that improvements in the CAP are needed to balance different policy segments, to maintain and improve water quality and biodiversity.

Proposed activities include improving the integration of freshwater quality and biodiversity in the CAP, and the elaboration and introduction of nature friendly management principles for channelized river maintenance.

It was generally acknowledged that since the last Boreal Seminar there has been obvious improvement in common understanding on the need to replace migration barriers, with many ongoing and completed practical actions.

The Swedish experts described their experience with hydropower and its impact on the conservation status of watercourses. It was agreed that this issue is relevant for all Boreal Process countries. The need for a joint workshop on the topic was expressed. Sedimentation processes from agriculture and forestry and their impact on habitat integrity and aquatic biodiversity were discussed as previously not fully recognized phenomenon impacting the state of watercourses.

It became clear that in some cases a particular challenge in one country may represent an opportunity or have the opposite effect in another country (e.g. woody debris). Therefore, all issues should be dealt with on a case-by-case basis.

Several important issues, such as integrated lake management for biodiversity and water resource quality as well the impacts of climate change on aquatic biodiversity, were only briefly mentioned but not discussed in detail due to time limits.

The participants identified the following management measures that could usefully be applied within Low Hanging Fruit habitats:

- Removal of migration barriers – improvement of species migration and river functionality. Already 1800 barriers have been removed in Sweden and 90 fish passes improved in Estonia.

- Elaboration and introduction of nature friendly management principles for channelized river maintenance (all Member States).
- Artificial wetlands for nutrient removal (Finland), integrated buffer zone management (Sweden), Guidelines for channelized river maintenance in progress in Latvia;
- Ecosystem functionality based coastal zone management in lakes (all Member States).
- Promotion of synergies with Water Framework Directive and Floods Directive (all Member States).

## 2.4.2 Boreal wetland habitats

*Chair: Agu Leivits*

### *Main problems*

The main problem identified by the working group was peat mining outside the Natura 2000 sites which influences the sites. Forest and agriculture activities outside the network also affect Natura 2000 habitats. These disturbances can act directly and indirectly. Drainage that influences mire hydrology was identified as the greatest threat. Forestry measures on bog woodlands outside Natura 2000 areas may also represent a threat as site managers cannot directly influence them. Other problems listed were nitrogen deposition, the impact of climate change, insufficient buffer zones, and the abandonment of the traditional use of mires, especially rich fens.

### *Challenges*

The challenges faced by Natura 2000 site managers are at both management and policy level. The group first discussed non-compliance with certain forestry measures outside Natura 2000 sites that do not take ecosystem services and biodiversity into account. Conservation measures to suppress habitat deterioration are not widely agreed or synchronised. Moreover, they are not known for some habitats, such as rich fens. Habitat 7140 'Transition mires and quaking bogs' is often misinterpreted, which leads wrong interpretations of the quality of this habitat.

The currently applied forms of management are generally based on traditional knowledge, which is not in accordance with the latest scientific knowledge. New, more effective methods should be explored. Acceptance of conservation measures by local stakeholders is still low. There should be more consultation and discussion with landowners on conservation measures. There is not enough of the large-scale catchment approach, which would look beyond the site. Prioritisation for restoration funding of sites, species, habitats and conservation actions is lacking in the entire Boreal region. Finally, there are no links between the Natura 2000 directives and other policies, e.g. climate change and water.

### *Knowledge gaps*

The group recognised several knowledge gaps. First, the impact of climate change was especially important for wetland habitats specialists. Furthermore, there are insufficient data on habitat locations outside protected areas. Expertise in managing and restoring some habitats was also identified, namely: peatlands, alkaline fens, mesotrophic mires, and rich fens. With respect to alkaline fens, the problem of measuring water level and water and soil chemistry was mentioned. An issue that has recently arisen is the management of newly created wetlands (novel habitats). More

specifically, there is a lack of knowledge on how they develop, how they should be managed, and their effect on biodiversity. Finally, priorities for restoration have not always been established.

#### *Low Hanging Fruit (LHF) approach*

The group proposed to include habitat 7120 'Degraded raised bogs still capable of natural regeneration' as it shows a positive trend and it would be easy to achieve favourable conservation status. Some of the habitats already identified as LHF were questioned, such as 91D0 'Bog woodland', 7140 'Transition mires and quaking bogs', 7160 'Fennoscandian mineral-rich springs and springfens'. The reason for this is that it is difficult to achieve FCS or at least some improvement because of external factors, such as forestry drainage which occur outside Natura 2000 sites. The differences between the various countries' definition/interpretation of habitat and favourable conservation status are the greatest weakness of the LHF approach on the biogeographical region scale. National lists of LHF would be better than regional lists; LHF does not replace national priorities and there is a need to find the balance between opportunities indicated by LHF and other national priorities. Different habitat types require different timescales for effective restoration. Effects might not be seen until 2020 as conservation actions need time to fully realise their effects. Mire restoration does not produce a quick-win result. Restoration prioritisation on biogeographical region scale is absent. Priority habitats are decided only on the national scale and this varies greatly between countries.

The group identified possible solutions and possibilities for cooperation; these are included in the Boreal roadmap, chapter 3.

### **2.4.3 Boreal forest habitats**

*Chair: Kimmo Syrjänen*

#### *Low Hanging Fruits (LHF)*

The group discussed the LHF approach in relation to forest habitats in the Boreal region, based on the Seminar Input Document. The participants expressed their views on the selected habitats and the LHF methodology. There was general agreement on the potential added value of trying to define LHF habitats for the Boreal region while it remains important to determine how to improve the conservation status of all forest habitats in a simple and cost-effective way, both inside and outside the Natura 2000 network.

Mora Aronsson (involved in the development of the LHF methodology) explained that the LHF will not replace the originally selected priority habitats, and that they are not a list of obligatory tasks for the Member States. The current selection of habitats is also not a definitive list and will be re-evaluated based on expert input. The development of the LHF approach was in part triggered by a political incentive to generate positive outcomes in the Article 17 reporting. Nature development is a long-term activity, which means that direct positive developments will not show up quickly in the Article 17 reporting. The risk of this is that the Natura 2000 work might lose political support due to a lack of visible short-term results. The LHF is meant to add quick wins, but without compromising the long-term work on the original priority habitats.

The participants did not completely agree with all habitats listed as LHF so far (by boreal experts and the ETC-BD). The group discussed different proposed LHF habitats (especially 91T0, 9060 and 9040) and some potential habitats (9020\*, 9180\* and 9180\*) as well as some non-LHF (\*9010, 91D0\*, 91E0\*) and also how to improve the conservation status of the latter group with simple measures. They mentioned that for various reasons some of these selected habitats do not really seem the best choices for LHF. It is often difficult to generalise simple actions/measures that are needed to easily improve the status of a particular habitat. Conservation measures needed for a certain habitat may vary among Natura 2000 areas within a country and also between countries. Threats and pressures as well as the possibilities to carry out certain conservation actions can be site and country specific (moreover, assumptions of pressures and needed conservation measures can vary according to country). Some valuable habitats may be mainly inside the Natura 2000 network and already managed/restored, but measurable positive trends take a long time. Another problem mentioned was that several habitats marked as LHF are threatened by factors related to climate change, making it difficult for Member States to be able to address them. In addition, one expert raised the question whether some habitat types/locations should always be maintained, or whether succession should be allowed in some cases.

A general discussion followed on the role of natural dynamics and succession in the development of forest habitat types inside the Natura 2000 network. In certain forest habitats (such as 9010\* and 91D0\*) natural succession and disturbance dynamics will enhance the structure and function of the habitat. It was supposed that the structure and function of 9010\* and 91D0\* have already improved a lot inside Natura 2000 since the establishment of the network. Certain structural characteristics that are important for this habitat type and threatened species, such as decaying coarse wood, have increased. These developments are considered important enough to also be addressed in the next Article 17 reporting round.

Experts also wondered whether habitat type 91T0 (Central European lichen Scots pine forests) can really be considered as being a Low Hanging Fruit in Latvia, because it is a very dry and easily burned habitat. Burning is socially unacceptable in most Baltic countries, which makes it difficult to manage this habitat. So it may actually be a rather high hanging fruit. Threats to this habitat type include eutrophication due to air-borne nitrogen deposition that is mainly outside national control.

An additional point of concern raised by the forestry sector was the increasing problems with fast growing grasses (*Calamagrostis epigeios*) that quickly take over land where forest has been cut down. There are no effective management tools available to get rid of this grass effectively.

The habitat type 9060 (Coniferous forests on, or connected to, glaciofluvial eskers) is a complex habitat that sometimes overlaps with e.g. 9010\* and 9050. Over 98% of the habitat area lies in Finland. It is easy to take biodiversity hotspots of 9060 (Open sandy slopes) with important fauna and flora into consideration in forestry practices (their surface area is small). Forests fires belong to the natural dynamics of the habitat type 9060, but prescribed burning possibilities are not good, because in Finland many of these sites are groundwater formation areas where controlled burning is not legally allowed, and in Baltic Member States controlled burning of forests is not much used in conservation management. Structure and function may also be enhanced by developing forestry practices, but not necessarily quickly.

The habitat type 9040 (Nordic subalpine/subarctic forests with *Betula pubescens ssp czerepanovii*) is mainly concentrated in northern Finland in the Boreal zone. Structure and function are affected by overgrazing, although the situation inside the Natura 2000 network is fairly stable. Climate change is another important threat to the structure and function of this habitat type and this cannot be easily influenced.

For the habitat type \*9180 (*Tilio-Acerion* forests of slopes, screes and ravines – a potential LHF in Estonia and Finland) the most valuable sites are already protected in Estonia and Finland. Management is done in several locations and not much can be easily done to improve the situation of this habitat type.

There was a lot of discussion on how to improve the conservation status of the habitat \*9010 (Western Taiga). In both Sweden and Finland there has been some burning of mainly pine-dominated stands in various LIFE projects in recent decades (in Finland, mainly restoring of former commercial forests); in Sweden there has also been controlled burning of more natural stands. In an ongoing LIFE project in Sweden controlled burning of Western Taiga continues in conservation areas. The weather conditions hamper the amount that can actually be burned annually. Only a very small proportion of Western taiga can be burned in projects, but burning is an essential part of natural dynamics in dry and drier site types of Western taiga forests. There will be a workshop on controlled forest burning in Finland (April 2017). The structures and functions of the habitat type 9010 on spruce dominated sites are also developing towards FCS without management.

Natural succession and disturbance dynamics were also discussed. In many forest habitats natural succession helps management actions and sometimes actions are not needed at all. When are disturbances good for FCS and when are they not? For example: a high population of elks in Sweden and Finland can hinder regeneration of aspen in some Natura 2000 areas within habitat type 9010 and decrease their quality. Effects of beavers gave rise to many opinions; some considered them important ecosystem engineers, others destroyers of valuable habitats. There are a lot of negative experiences in Latvia, where the beaver population is very high.

#### *Definitions of habitats, FCS and FRV*

Most experts agree that although there are common habitat definitions, these are not always interpreted in the same manner in different Member States and this may lead to confusion when reporting for the entire Boreal region. Within countries, and even within parks, there are differences in how specialists define and evaluate habitats. Several participants proposed ways to improve understanding, for instance through the development of an EU guidance document giving the best example of each habitat type that can be used as a reference when defining these habitat interpretations. This can also lead to common reference values for FCS. A discussion followed on these definitions and the involvement of different actors. It showed that there was no broad agreement between experts from different Member States on habitat definitions. The European Commission explained that common definitions have been established, but that interpretation varies per location.

It is sometimes difficult to evaluate the conservation status of habitat types because sizeable portions of them often lie outside Natura 2000 and there is a lack of data on their structures and

functions. It is worthwhile to show the success that has been achieved in the quality and connectivity of habitats within and outside the Natura 2000 network. In many cases development inside the network is positive or stable, but the situation outside is negative. This affects the overall assessment of habitat types, which may be considered unfavourable despite successful conservation measures exist inside the Natura 2000 network.

There are significant variations in habitat management between countries. In Finland for example selective cuttings of spruces can be done in some Natura 2000 areas with the habitat type 9050 (Fennoscandian herb-rich forests with *Picea abies*) in order to enhance the status of broadleaved trees. One expert suggested that nature values may increase naturally in the habitat type 9050 without special management. In Lithuania it is possible to do cuttings of Black alder (*Alnus glutinosa*) growing in wet forests (91E0 and/or 9080) which in most other Member States are outside forestry practices.

Differences between natural and commercial forests were also discussed. Conservation and nature management of Natura 2000 habitats also outside the network may provide possibilities to improve the conservation status of certain habitats. The forestry sector is paying increasing attention to natural values and there are certainly possibilities for increased cooperation between managers, foresters and landowners. The representative of the Lithuanian Forest Owners Association said that it is important for owners to have access to all data on Natura 2000 habitats and species so that it is easier for them to anticipate legislative provisions and adopt suitable management plans. The group concluded that all involved actors (policymakers, managers and landowners) should work together even though they might have different objectives. Cooperation will eventually lead to faster results. The European Commission representative highlighted the importance of sharing responsibilities but also that Member States should consider providing rewards for landowners who actively participate in Natura 2000 conservation management.

#### *Risk analyses of actions should include climate change, adaptation and mitigation*

The experts agreed that climate change might be an important factor, but it is not completely understood how it actually influences the state of the Boreal habitats. A study on the effects of climate change on the Boreal habitats would provide a useful tool for potential adjustments in the management of Natura 2000 areas (some habitats might not be sustainable in the long run if climate change undermines their minimum habitat conditions). It is important to understand how climate change is influencing habitats and species, as conservation measures may need to be adapted where certain species or habitats are strongly influenced by climate change. Flexibility within Natura 2000 management is crucial to be able to react to external developments and accommodate change in ecological conditions.

#### *Integration to other habitat types and regional planning processes*

One participant mentioned that to make Natura 2000 functional, we must think about green infrastructure and connectivity (corridors and stepping stones and management/restoration of habitats both inside and outside Nature 2000). More dynamic planning is needed. Changes based on external developments are always possible; however the current Natura 2000 sites have been selected as the most suitable sites for the conservation of particular species and habitat types.

### *Additional comments*

The European Commission representative stressed that cooperation between all involved actors is important and that the LIFE programme is open to all, not just to NGOs and environmental services. It is restricted to pilot projects that contribute to the objectives of EU's environmental and climate policy.

### *Main conclusions*

All participants agreed that the potential impact of climate change on the Boreal forest habitat types, and in relation to this the management and designation of Natura 2000 sites, should be better understood. Ideas for shared research and exchange of experience/knowledge between experts were raised, but no concrete proposals were made.

The relation between different actors (governments, managers, forest managers and landowners) should move towards shared responsibilities, shared knowledge, and clarity about objectives and abilities. The LIFE programme offers opportunities for different actors to develop innovative pilot projects. A holistic approach to the implementation of Natura 2000 is needed to achieve good results together. The relation between nature inside and outside Natura 2000 areas should not be forgotten in this.

Differences in habitat and FCS (and FRV) definitions/interpretations between the Member States are an important issue. These should be better harmonised, or it should at least be possible to 'translate' them to ensure a better biogeographical overview. This harmonisation should address factors such as general quality, structures and functions, distribution and range.

Flexibility within Natura 2000 management to be able to react to external developments is considered an important aspect. Management approaches should be linked better to the way 'nature works' and be flexible to accommodate change.

## **2.4.4 Boreal grassland habitats**

*Chair: Petras Kurlavičius*

Land abandonment and its influence on landscape and protected habitat types is a critical issue across the Boreal (and other) Biogeographical regions. Abandonment is critical to the viability of Natura 2000 grassland sites in Estonia: in order to be profitable, a farmer must own a minimum of 300 ha of pasture. Depending on the type of meadow, different legal measures are involved covering ploughing rites, possible support measures for land that is not very fertile, or other measures which relate to area size in relation to, for example, cattle grazing. There are similar problems in Latvia associated with abandonment with regard to forestry (wooded meadows).

One of the solutions to address land abandonment in Estonia depopulation is a practical re-investment scheme - "installation investment support". Through this scheme, cattle are "lent" to small farmers for a few years and, after a period of time, farmers have to return the same number and kind of cattle that they "borrowed", which are then used by the next farmer. This practical measure creates a multiplier effect, which allows farmers to develop their business interest economically and sustainably. The result is that people are being attracted back to the countryside.

Although this can be a useful solution in some countries, if it is not managed properly, it can create new problems instead of solving the existing one – an example of this is overgrazing by Konik horses which occurs in some Swedish sites. Also, there are other issues to tackle with respect to human-animal interaction; e.g. for sheep: diseases, parasites, ticks.

All participants welcomed rules and subsidies to stimulate proper use of grassland, but it was acknowledged that each Member State has to apply available schemes of the Rural Development Programme according to their nationally determined priorities and circumstances - for example, Lithuania is currently not using the "non-profit investments" sub-scheme of the Rural Development Programme for grassland and Finland has not used it much so far as almost all the grassland is outside Natura 2000 and in private ownership. Also, as implementation has to be performed by farmers and landowners, decisions should not be taken without checking whether private landowners are actually able to do the work: attention should also be given to what additional investments may apply and how they can be accessed. It is important to remember that farmers and private landowners generally are interested in keeping land in good condition; they take care of the countryside so that it can be passed down to future generations.

The group considered CAP to be an effective tool in some cases, but this often requires consideration of how regulations may be applied on a national scale or lower level. For example, Sweden highlighted that, when the CAP focuses on specific areas, there is often an issue which remains about what to do with surroundings areas (e.g. fens and grazing). In Estonia, it was observed that it is possible and useful to apply measures available under CAP adaptively and flexibly, according to specific situations. In general it was agreed that cooperation between agricultural and environmental ministries has to be improved, especially in order to build common understanding about common goals that can be achieved from the good use of diverse financial resources.

Looking to the longer term in relation to CAP and post-2020 EU Biodiversity targets, participants felt that there could be increased benefits for Natura 2000 if the general public was better informed about how the funds under the CAP may be utilized as well as about the possibilities offered by the LIFE programme. They also felt that the potential contributions of the CAP to the management of Natura 2000 are yet to be more fully exploited.

With reference to the Low Hanging Fruit approach, participants concluded that this approach should be discussed further in all countries. There is much to consider, for example, in determining how to apply the approach in larger countries such as Sweden. Further development work is needed to harvest ideas about the approach, especially where there would be opportunities to streamline priorities and define possible cooperation actions and next steps. The LHF approach was considered as being an interesting tool in Estonia, especially where it could contribute to better cost-efficiency and integration. In Latvia, many habitats are classified as LHF and there is potential interest to work with them. The need for efficient guidance for farmers in relation to working with LHF habitats was underlined. Furthermore, it was commented that the restoration action plan which has been developed in Estonia in 2014 could be useful to further elaborate the LHF methodology and its application, as it translated national targets down to specific areas. This could be helpful in engaging other stakeholders, in particular farmers working with grasslands. In relation to the CAP, it was commented that agricultural subsidies are applied in different ways in different countries: the same



may arise in relation to the LHF method. It was concluded that it is essential to engage and involve all stakeholders directly in consideration of all tools, including the LHF method, to foster the necessary dialogue and to relate policies and management strategies to people 'on the ground'.

### 3 Boreal Roadmap

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

***Subjects for follow-up proposed in more than one working group, or not linked to a specific working group:***

What?	When?	Where?
A seminar on Low Hanging Fruits	Spring 2017	Finland
Training for experts to deal with the political and financial aspects of their work		
Sharing guidance via the Platform about projects, financial resources and everything that can be useful for other Member States		
The Zonation Software from Santtu Kareksela could be explained to other MS in a workshop, possibly leading to LIFE projects		
Ways to improve coordination and feedback from Boreal MS representatives in formal EC meeting groups - the Boreal Natura 2000 Biogeographical Process Steering Committee could have a role here		
Future Boreal coordination plans to discuss ways to share responsibilities	Early 2017	
Exchange of experience/knowledge between experts about the effects of Climate Change, including research outcomes on this topic		
Ensuring an equal understanding of habitats and their status		
Update the members of the Boreal Working Groups and make sure that they spread information to all relevant actors in their MS and update the Boreal Roadmap and put this on the Natura 2000 Platform		
Follow-up event on Large Carnivore Management		

***Subjects for follow-up proposed in the thematic group on 'Integrated management approaches to Natura 2000'***

What?	When?	Where?
An inventory of best and worst practices and examples		
A thematic event on integrated management, including relevant stakeholders		
Further discussion on integrated management, to promote its understanding		

**Subjects for follow-up proposed in the thematic group on 'Approaches to setting restoration priorities'**

What?	When?	Where?
Finland will organise a seminar on setting priorities?	Spring 2017?	
A region-wide nature inventory of habitats and sites to restore		
Calibration of different methods of inventory, different approaches towards various habitats and species is needed		
Decide on species and habitats which would help maximise long-term goals, balance between trade-offs and benefits		
Find trade-offs and benefits between EU-level goals and Member States' goals		
Performing a prioritising exercise using spatial prioritisation tools such as Zonation		
Use and activate volunteers		
Collect data at Member State level which would be made available on a single online platform (use EU funding, e.g. Interreg)		

**Subjects for follow-up proposed in the thematic group on 'Communication and stakeholder engagement'**

What?	When?	Where?
Ambassadors in stakeholder groups, as well as professional communicators within stakeholder groups are needed		
Engage stakeholders through co-design of the process (common ownership of the process), communication should not be based only on research results, but also on stakeholder values and needs.		
Development of more knowledge on the issue is needed		

**Subjects for follow-up proposed in the thematic group on 'Setting conservation objectives'**

What?	When?	Where?
Results from within Natura 2000 areas should be compared with what happens outside Natura 2000, this will provide data that shows the positive developments within Natura 2000 regions		
A workshop on differences in FRV's between Member States and how to remove them		
Habitat definitions need to be harmonised within a framework of factors such as quality, size, geography, etc. Then experts can understand each other better and make better comparisons		

Managers should show the conflicts between CAP and biodiversity, especially where there is evidence of “capital destruction”, EC funds being spent in a conflicting manner

#### **Subjects for follow-up proposed in the Habitat Group on Freshwater**

What?	When?	Where?
Removal of migration barriers – improvement of species migration and river functionality. MS are on the right track, but even more can be done		
Elaboration and introduction of nature friendly management principles for channelized river maintenance		
Artificial wetlands for nutrient removal (Finland), integrated buffer zone management (Sweden), Guidelines for channelized river maintenance in progress in Latvia		
Ecosystem functionality based lake coastal zone management should be applied		
New approaches and sometimes new coordination structures and networks are needed to promote and develop existing synergies of the WFD, Floods Directive and Habitat Directives. All participants noted that improvements in the Common Agriculture Policy (CAP) are needed to balance different policy segments, to maintain and improve water quality and biodiversity		
Workshop organised by Sweden on hydropower and its impact on conservation status		

#### **Subjects for follow-up proposed in the Habitat Group on Wetlands**

What?	When?	Where?
<b>Forest drainage</b> Mapping existing drainage systems in entire Boreal region <ul style="list-style-type: none"> <li>a. Finland has a LIFE project on peatland use, which will map the areas; they can share the outcomes</li> <li>b. Swedish ADDMIRE project has mapped the drainage systems</li> <li>c. Swedish Agriculture University project</li> </ul> Establishment of no-go zones for drainage (buffer zones)	2017-2020	
<b>Harmonisation of monitoring methods</b> Sweden will share methodology for measuring wetness of wetlands from SWOS Horizon 2020 project	2018	

Lithuanian and Belarusian knowledge exchange LIFE project's outcomes will be shared with the group. Possibility to organise seminar / conference to share project outcomes	2018 – 2020
Seminar on harmonising collection of data for Art. 17	2018?
<b>Knowledge exchange</b>	
Alkaline fen expert network continues	2017-2020
Need for more cooperation with freshwater experts	
Need for more cooperation between biogeographical regions, Continental region, CEE countries	
Study trip to see outcomes of restoration, in order to overcome reluctance in stakeholders	
<b>Prioritisation of restoration</b>	
Finland will share methodology on cost effectiveness of restoration of certain habitats	Spring 2017?
Finland to organise a seminar on setting priorities?	

#### ***Subjects for follow-up proposed in the Habitat Group on Forests***

<b>What?</b>	<b>When?</b>	<b>Where?</b>
Workshop on controlled forest burning	Finland	April 2017
Creation of management tools to get rid of fast growing grasses need to be developed and/or communicated to the forestry sector		
Understanding and interpretation of habitats should be harmonised		
Show the success that has been achieved in the quality and connectivity of habitats within and outside the Natura 2000 network		
All involved actors (policymakers, managers and landowners) should work together even though they might have different objectives		
Data on Natura 2000 should be available and communicated towards private forest owners		
Flexibility within Natura 2000 management to be able to react to external developments is considered an important aspect		

#### ***Subjects for follow-up proposed in the Habitat Group on Grasslands***

<b>What?</b>	<b>When?</b>	<b>Where?</b>
14 <sup>th</sup> Eurasian Grassland Conference “semi-natural grasslands across borders” This is the annual conference of the EDGG, the working group of the International Association for	4-11 July 2017	Riga, at the University of Latvia

Vegetation Science ([www.edgg.org](http://www.edgg.org), past EDGG conferences: <http://www.edgg.org/events.htm>)

Rules and subsidies to stimulate proper use of grassland are welcome but Member States themselves have to be willing to apply all available schemes of the RD programme (i.e. Lithuania is not using "non profit investments" sub-scheme )

Cooperation and discussion on how to manage the valuable grasslands in hardly accessible places: which programme is supporting building the needed infrastructure

Information sharing and learning about measures applied within different Boreal MSs to address rural depopulation and use of agricultural development schemes - particularly of benefit to Boreal grasslands, for example, Estonia is supporting the economic viability of small holdings, using approaches which may be of benefit to Lithuania, which is encountering severe rural depopulation issues

The cooperation between agricultural and environment ministries has to be improved, especially the common understanding of goals enabling the good use of all financial resources

Negative cases in relation to reporting on grasslands should be shared

## 4 Closing plenary session

On the last day of the Seminar, Ms Sonja Jaari from NEEMO EEIG gave a presentation on the LIFE programme and the opportunities it provides to (financially) support the implementation of restoration and conservation activities. The presentation also included examples of current projects supported by LIFE. All LIFE projects can be found in a database: <http://ec.europa.eu/environment/life/project/Projects/>. General information about LIFE can be found here: <http://ec.europa.eu/environment/life/about/>.

Jussi Päivinen, Director of Development Projects at Metsähallitus, Parks & Wildlife Finland, gave a presentation on the establishment of the Boreal Working Group and the Boreal Roadmap. During the first Boreal Seminar in 2012, several networking events were planned which needed to be coordinated. For this purpose, a Boreal Working Group was established a few years later, which coordinates these upcoming events in a Boreal Roadmap. The role of the Boreal Working Group is to assist the Steering Committee when it comes to realization of the follow-up events proposed in the seminars. The Member States should make sure that back-ups for chairs and coordinators of the different Habitat Working Groups are identified and that the lists of the group members are updated. They should also make sure that information is spread to all relevant actors in the Member States. The Boreal Roadmap will have to be updated and published on the Natura 2000 Platform.

The outcomes of the four thematic working groups and the four habitat working groups were presented by the chairs of each group and briefly discussed by all seminar participants.

These presentations were followed by an expression of thanks by the Lithuanian host. François Kremer warmly thanked the Lithuanian hosts on behalf of the European Commission for their strong support to the organisation of the seminar and their great hospitality. He also reflected on the very successful implementation of the Natura 2000 Biogeographical Process in the Boreal region. Mr Neil McIntosh, lead coordinator of the seminar, made concluding remarks before the seminar was officially closed.

The organisers thanked all delegates for their active participation and valuable contributions during this second Boreal Natura 2000 Seminar. The results of the working group discussions presented during the closing session provide the basis to develop some very promising follow-up actions. The European Commission and the contractor supporting the Natura 2000 Biogeographical Process play a coordinating and supporting role for these follow-up actions, but the initiative clearly resides with the site, local, regional and Member State level actors. The Commission has initiated and supported the Natura 2000 Biogeographical Process to help the Member States in their duty to implement the Nature Directives. In addition, there are various types of funds available to carry out projects and activities in relation to the implementation of the Nature Directives, in particular, under the LIFE Nature programme and the structural funds. The delegates were encouraged to remain in contact, to include their colleagues and to take forward the many interesting ideas that had been discussed during the Seminar.

## Annex I: Habitats selected in the Boreal Biogeographical Process

<b>Freshwater habitat group</b>			
<b>Habitats Directive code</b>	<b>Habitat name</b>	<b>Low Hanging Fruit</b>	<b>Priority consideration habitat</b>
3260	Water courses of plain to montane levels with the Ranunculion fluitantis and Callitriche-Batrachion vegetation		Yes
3180	Turloughs	Yes	
3130	Oligotrophic to mesotrophic standing waters with vegetation of the Littorelletea uniflorae and/or Isoetes-Nanojuncetea	Yes	
3210	Fennoscandian natural rivers	Yes	
<b>Wetland habitat group</b>			
<b>Habitats Directive code</b>	<b>Habitat name</b>	<b>Low Hanging Fruit</b>	<b>Priority consideration habitat</b>
7110	Active raised bogs		Yes
7120	Degraded raised bogs still capable of natural regeneration		Yes
7160	Fennoscandian mineral-rich springs and spring fens	Yes	Yes
7230	Alkaline fens		Yes
91D0	Bog woodland	Yes	Yes
7140	Transition mires and quaking bogs	Yes	
<b>Forest habitat group</b>			
<b>Habitats Directive code</b>	<b>Habitat name</b>	<b>Low Hanging Fruit</b>	<b>Priority consideration habitat</b>
9010	9010 Western Taiga		Yes
9050	9050 Fennoscandian herb-rich forests with Picea abies		Yes



9060	9060 Coniferous forests on, or connected to, glaciofluvial eskers	Yes	Yes
9080	Fennoscandian deciduous swamp woods		Yes
91E0	Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i>		Yes
9040	Nordic subalpine/subarctic forests with <i>Betula pubescens</i> ssp <i>czerepanovii</i>	Yes	
91T0	Central European lichen Scots pine forests	Yes	
<b>Grasslands habitat group</b>			
<b>Habitats Directive code</b>	<b>Habitat name</b>	<b>Low Hanging Fruit</b>	<b>Priority consideration habitat</b>
6210	Semi-natural dry grasslands and scrubland facies on calcareous substrates ( <i>Festuco-Brometalia</i> ) (important orchid sites)		Yes
6530	Fennoscandian wooded meadows		Yes
6270	Fennoscandian lowland species rich dry to mesic grasslands		Yes
6450	Northern boreal alluvial meadows		Yes
6510	Lowland hay meadows ( <i>Alopecurus pratensis</i> , <i>Sanguisorba officinalis</i> )		Yes
9070	Fennoscandian wooded pastures		Yes
1630	Boreal Baltic coastal meadows		Yes
6110	Rupicolous calcareous or basophilic grasslands of the <i>Alyso-Sedion albi</i>	Yes	
<b>Other habitats</b>			
<b>Habitats Directive code</b>	<b>Habitat name</b>	<b>Low Hanging Fruit</b>	<b>Priority consideration habitat</b>
1210	Annual vegetation of drift lines	Yes	
1220	Perennial vegetation of stony banks	Yes	
1330	Atlantic salt meadows ( <i>Glaucopuccinellietalia maritima</i> )	Yes	

1640	Boreal Baltic sandy beaches with perennial vegetation	Yes	
4060	Alpine and Boreal heaths	Yes	
4030	European dry heaths	Yes	
8210	Calcareous rocky slopes with chasmophytic vegetation	Yes	
8230	Siliceous rock with pioneer vegetation of the SedoScleranthion or of the Sedo albi-Veronicion dillenii	Yes	

## **Annex II European Topic Centre on Biological Diversity: Low Hanging Fruits methodology**

This annex updates the 18 previously identified priority consideration Boreal habitat-types using 2013 Article 17 data and the results of applying the Low Hanging Fruit approach. The document is available via:

[http://ec.europa.eu/environment/nature/natura2000/platform/knowledge\\_base/142\\_boreal\\_region\\_en.htm#NBP](http://ec.europa.eu/environment/nature/natura2000/platform/knowledge_base/142_boreal_region_en.htm#NBP).

This version is similar to the Annex of the input document of this second Boreal Natura 2000 Seminar.

## Annex III Programme of the second Boreal Natura 2000 Seminar

### DAY 0: Tuesday, 4 October 2016

- Arrival of participants

### DAY 1: Wednesday, 5 October 2016

<b>Time</b>	<b>Activity</b>	<b>Description &amp; objectives</b>
08.00 to 09.00		<i>Registration of participants</i>
09.00 to 10.00	<p><b>Welcome &amp; introductions</b></p> <ul style="list-style-type: none"> <li>• Mr Vidmantas Bezaras, Director, Protected Areas and Landscape department, Lithuanian Ministry of Environment</li> <li>• Mr Humberto Delgado Rosa, Director Natural Capital, DG Environment, European Commission</li> </ul>	<p><i>Welcomes from the hosts &amp; Ministry representatives and explaining the strategic context, importance and purpose of the Natura 2000 Seminar.</i></p> <p><i>Target outcome: Clear understanding amongst participants about expectations from the Seminar, in its context as a continuing process.</i></p>
	<p><b>The Natura 2000 Biogeographical Process in its strategic context</b></p> <ul style="list-style-type: none"> <li>• Mr François Kremer, Policy Coordinator Natura 2000, DG Environment, European Commission</li> </ul>	<p><i>To grow understanding about the EU 2020 Biodiversity Strategy targets to be reached and how the Natura 2000 Biogeographical Process can help.</i></p> <p>Present the seminar and its context, along with the approach and methods to be used</p>
	<p><b>Overview of the Seminar Programme</b></p> <ul style="list-style-type: none"> <li>• Neil McIntosh, ECNC</li> </ul>	
	<p><b>Introduction to the site visits</b></p> <ul style="list-style-type: none"> <li>• Ms Rūta Baškytė, Deputy Director, Lithuanian State Protected Areas Service</li> </ul>	<p>The site visits provide participants with an opportunity to see 'on the ground' the threats and issues, management practices and management planning approaches being applied in different Natura 2000 sites. Experts and guides will provide overviews of the current status and condition of visited habitats and related species, describe conservation objectives and measure and explain the features and management regimes. However, this is also an opportunity for participants to share experiences about related issues and management approaches in their countries.</p>
10.00 to 10.30	<b>Coffee break</b>	
10.30 to 18.30 (approx.)	<p><b>Site visits</b> (details &amp; timing TBC)</p> <p><i>Departure from the Seminar venue by coaches.</i></p>	<p><i>PLEASE BRING WATER, SUITABLE OUTDOOR CLOTHING, INCLUDING FOOTWEAR, CAMERAS AND BINOCULARS etc.</i></p> <p><i>During the site visits, lunches will be provided courtesy of the Regional Park Authorities.</i></p>
	<b>1. Forest &amp; Grassland Habitats</b>	<p><b>Aukstadvaris Regional Park</b> to see and discuss forest and grassland habitats conservation issues, including restoration options. (Onward journey time approx. 1 hour.)</p> <p><i>During this site visit Lithuanian representatives will give short overview of large carnivores management in the country, invite questions and possible discussion.</i></p>
	<b>2. Freshwater &amp; Wetlands Habitats</b>	<p><b>Labanoras Regional Park</b> to see and discuss freshwater habitats, related species conservation issues and wetland</p>

		<i>restoration examples.(Onward journey time approx 1 hour 20 mins.)</i>
19:00 to 22:00	<p><b>Knowledge Market</b></p> <p>The Knowledge Market will be officially opened by:</p> <ul style="list-style-type: none"> <li>• Mr Albertas Stanislovaitis, Director, Lithuanian State Protected Areas Service</li> <li>• Mr Humberto Delgado Rosa, Director Natural Capital, DG Environment, European Commission</li> </ul> <p>Following the official opening, a buffet and drinks reception will be served. This is generously offered by the Ministry of Environment of the Republic of Lithuania.</p> <p>Between 20:00 and 21:00 HRS, simultaneously with the knowledge market, there will be an informal Round Table discussion on opportunities for developing regional cooperation initiatives on large carnivore management.</p>	<p>This interactive networking session is designed to stimulate discussion between Seminar participants, share and gather information, and to provide useful inputs for further projects, collaborations and co-operations.</p> <p>Recognising the important contributions and new opportunities from the LIFE Programme, the Knowledge Market will include completed or ongoing LIFE Projects in the Boreal Region, as well as LIFE Programme information.</p> <p>Participants are invited in advance to provide information material about (planned, ongoing or concluded) relevant Natura 2000 projects or related work. This may (but need not) be a poster and information folder/flyer.</p> <p>This is an informal information gathering opportunity – there are no presentations in plenary. Anyone attending the Seminar and interested to have space at the Knowledge Market should indicate this on the registration form.</p>

## DAY 2: Thursday, 6 October 2016

<b>Time</b>	<b>Activity</b>	<b>Description/ Session objective</b>
09.00 to 09.30	<p><b>Setting management of Natura 2000 in a Boreal Biogeographic context</b></p> <ul style="list-style-type: none"> <li>• Mr Algirdas Klimavičius, Head of unit, Protected Areas Strategy Division , Lithuanian Ministry of Environment</li> <li>• Mr Mora Aronsson, SLU representing ETC-BD</li> </ul>	<p>An introduction to country-wide habitats in Lithuania, mapping recently completed projects: insights about national Natura 2000 implementation tactics.</p> <p>An overview of Boreal habitats groups and their conservation status (as per the latest Article 17) reports and an introduction to the Low Hanging Fruit approach.</p>
09.30 to 10.30	<p><b>Four presentations to focus on themes of current interest</b></p> <ul style="list-style-type: none"> <li>• <i>"Developing the Boreal Roadmap"</i> Mr Jussi Päivinen, Director of Development Projects, Metsähallitus Parks &amp; Wildlife Finland</li> <li>• <i>"Regional approaches to integrated habitat and species management"</i> Mr Kęstutis Navickas, leader of LIFE project "VivaGrass", NGO</li> </ul>	<p>Includes outcomes from the most recent events in the Boreal Region and specific themes – developing the Boreal 'Roadmap'; approaches to restoration; opportunities to link habitat management with species management; example of cross-border cooperation and how it works.</p>

	<p>Baltic Environmental Forum</p> <ul style="list-style-type: none"> <li>• "Restoration prioritisation for Finnish Natura 2000 areas using the Zonation analysis" Dr Santtu Kareksela, Metsähallitus Parks &amp; Wildlife Finland</li> <li>• "Stakeholder engagement &amp; outreach" Ms Alice Budniok</li> </ul>	
10.30 to 11.00		<b>Coffee break</b>
11.00 to 13.00	<b>Thematic working groups</b>	<i>Four Thematic Working Groups will work in parallel to identify common issues and potential practical solutions – topics for discussion include:</i>
	<b>1. Integrated management approaches to Natura 2000</b> <i>Chair: Mr. Hans van Gossum</i>	Theme includes integrated management planning linked to a multiple benefits agenda – for example, flood mitigation; coastal zone management; forestry management; locally-led and results-based agri-environmental schemes.
	<b>2. Approaches to setting restoration priorities</b> <i>Chair: Dr Santtu Kareksela</i>	Theme includes approaches to setting restoration priorities; considerations of scale and scope for cooperation.
	<b>3. Communication and stakeholder engagement</b> <i>Chair: Ms. Alice Budniok</i>	Theme includes landscape scale approaches to implementing Natura 2000 and innovative approaches to initiating and continuing communication about Natura 2000; effective solutions for dealing with conflict
	<b>4. Setting conservation objectives</b> <i>Chair: Mr. Mora Aronsson</i>	Theme includes identification of "low-hanging fruit"; setting conservation objectives at different scales; dealing with potentially conflicting conservation priorities; experience with Favourable Reference Values – at which levels can these usefully be set?
13.00 to 14.15		<b>Lunch</b>
14.15 to 15.45	<b>Habitat working groups- session 1</b>	<i>Four Habitat Working Groups will work in parallel to focus on issues of particular relevance to their group</i>
	<b>1. Freshwater</b> <i>Chair: Mr Andris Urtans, Latvia</i>	Aim is to identify future management issues and common priorities, particularly ones common to Boreal region.
	<b>2. Wetland</b> <i>Chair: Mr Agu Leivits, Estonia</i>	<i>NOTE: Case study examples will be welcome from identified experts to provide an overview of each habitat group at national levels. This can include and be based on specific Natura 2000 sites, but speakers will also be invited to comment on the status of the habitats according to their experience at national/ transnational levels.</i>
	<b>3. Forest</b> <i>Chair: Mr Kimmo Syrjänen, Finland</i>	
	<b>4. Grassland</b> <i>Chair: Prof. Petras Kurlavičius, Lithuania</i>	
15.45 to 16.15		
16.15	<b>Habitat working groups- session 2</b>	<i>Four Habitat Working Groups continue to work in parallel</i>

to 18.00	1. <b>Freshwater</b> <i>Chair: Mr Andris Urtans, Latvia</i>	Explore practical solutions for issues identified; focus on scope for collaboration and co-operation
	2. <b>Wetland</b> <i>Chair: Mr Agu Leivits, Estonia</i>	
	3. <b>Forest</b> <i>Chair: Mr Kimmo Syrjänen, Finland</i>	
	4. <b>Grassland</b> <i>Chair: Prof. Petras Kurlavičius, Lithuania</i>	
19.30	<b>Evening meal</b>	<p><b>The Old Green House</b></p> <p><b>L. Stuokos-Gucevičiaus gatvė 5, Old Town, Vilnius</b></p> <p>You can find a map via this link: <a href="#">The Old Green House</a></p> <p>And more information: <a href="http://www.vilnius-guide.com/restaurants/old-green-house/">http://www.vilnius-guide.com/restaurants/old-green-house/</a></p>

**DAY 3: Friday, 7 October 2016**

<b>Time</b>	<b>Activity</b>	<b>Description/ Session objective</b>
08.00 to 09.00	<b>Finalise presentations</b>	
09.00 to 09.10	<b>Recap on day 2 and introduction to day 3</b>	
9.10 to 9.30	<b>The LIFE Programme</b> • <b>Ms Sonja Jaari, NEEMO EEIG</b>	Opportunities available through the LIFE Programme to support implementation of activities identified by Boreal Seminar participants.
09.30 to 11.00	<p><b>Thematic Working Groups feedback &amp; discussion</b></p> <ol style="list-style-type: none"> <li><i>Integrated management approaches to Natura 2000</i></li> <li><i>Approaches to setting restoration priorities</i></li> <li><i>Communication &amp; stakeholder engagement</i></li> <li><i>Setting conservation objectives</i></li> </ol> <p><b>Habitat Working Groups feedback &amp; discussion</b></p> <ol style="list-style-type: none"> <li><i>Freshwater</i></li> <li><i>Wetland</i></li> <li><i>Forest</i></li> </ol>	<p>The main aim of this session is to report each Thematic &amp; Habitat Working Group's discussions and, where possible, confirm cooperation actions identified for implementation in future.</p> <p>The feedback will focus on the key points and the outcomes achieved and agreed by each groups' participants during Day 2.</p>

	<p>4. <i>Grassland</i></p> <p><b><i>Following the groups' feedback, there will be time for questions and plenary discussion.</i></b></p>	
11.00-11.30		<b>Coffee break</b>
11.30 to 12.30	<p><b>Boreal seminar closing session</b></p> <p><b>Following a plenary discussion, the floor will be given to</b></p> <ul style="list-style-type: none"> <li>• Lithuanian host's representative</li> <li>• Mr François Kremer, Policy Coordinator Natura 2000, DG Environment, European Commission</li> </ul> <p><b>Note of thanks</b></p>	<p>Reflecting on the feedback and earlier discussion, this final session aims to summarise outcomes, in particular noting specific cooperation actions identified on agreed common priorities.</p>



## Annex IV List of participants of the second Boreal Natura 2000 Seminar

Mora Aronsson (from Sweden, working for ETC-BD/SLU, mora.aronsson@slu.se) was involved in the development of the LHF methodology. Therefore he participated in all the habitat groups to share this knowledge and provide input to the discussions.

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*Approaches to setting restoration priorities thematic group*

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## Annex V Projects presented at the Knowledge Market

### List of Knowledge Market presentations

1. LIFE Taiga, Reintroduction of burning in Boreal western taiga woodlands, Sweden
2. LIFE Demonstrative restoration of the Tyruliai bog as a part of the initiative of the re-wetting of Lithuanian peatlands, Lithuania
3. Initiative "Place a Stone in the Stream", Latvia
4. LIFE programme and its connection to the biogeographical process
5. Various, Latvia
6. Publications by the Swedish Agency for Marine and Water Management
7. LIFE to alvars – Restoration of Estonian alvar grasslands, Estonia
8. LIFE+ URBANCOWS, Estonia
9. Experiences from various projects, Estonia
10. LIFE projects: Happyfish, Happyriver and Springday Saving the rivers and springs, Estonia
11. LIFE to ad(d)mire wetland restoration Project, Sweden
12. Information on ongoing and past LIFE projects, Lithuania
13. LIFE Light & Fire, Finland
14. Hercules project
15. Various publications
16. Arcadis biodiversity consultancy services
17. LIFE Towards integrated management of freshwater Natura 2000 sites and habitats
18. LIFE National Conservation and Management Programme for Natura 2000 sites in Latvia

### Descriptions of Knowledge Market presentations

#### 1. LIFE Taiga, Reintroduction of burning in Boreal western taiga woodlands, Sweden

Controlled burning can support the conservation of many sites of priority habitat type 9010 (\*Western Taiga) and, to some extent, habitat 9060 (Coniferous forests on, or connected to, glaciofluvial eskers). Up until 150 years ago, 1% of the wooded area burned annually. Today less than 0.016% burns annually. The reduction in the frequency of fires is one of the major ecological changes that have taken place in woodlands since the 1800s. Over time, fires have led to the development of pyrophilic organisms. We know today that some 40 insects and some 50 fungi species are dependent on burned wood and burned ground for their survival. Hundreds of other species, such as flies, bees and crabronids, also benefit from fires. Many of the organisms dependent on fire are rare and are on the Swedish Red List, and some of them are listed in the Habitats and the Birds Directives. If these fire-dependent habitats and species are to survive, then the number of controlled fires in the wooded landscape must increase.

Publications/roll up banner

**Mr Andreas Wedman**

County administrative board of Gävleborg, Sweden

E [andreas.wedman@lansstyrelsen.se](mailto:andreas.wedman@lansstyrelsen.se)

## 2. LIFE Demonstrative restoration of the Tyruliai bog as a part of the initiative of the re-wetting of Lithuanian peatlands, Lithuania

Peat-bog ecosystems are very important for European biodiversity. Even bogs that were once used for peat excavation can, after natural or human-initiated recovery, become valuable wetlands, containing a wide range of specific ecosystems. In Lithuania, the natural re-flooding of former peat extraction sites and the growth of patches of sedge-grass attract breeding spotted crane and migratory common crane. However, overgrowth with bushes and reeds disrupts the water regime and has a negative impact on the condition of the habitat.

Poster/publications/leaflets and film

### **Mr Gintaras Riauba**

*Lithuanian Ornithological Society*

E [gintaras.riuba@birdlife.lt](mailto:gintaras.riuba@birdlife.lt)

## 3. Initiative "Place a Stone in the Stream", Latvia

Involvement of local citizens in self-motivated stream maintenance activities, which simultaneously support biodiversity, adaptation to climate changes, water self-purification process and landscape functionality.

Roll up banner/laptop-based presentation

### **Mr Andris Urtans**

*Nature Conservation Agency*

E [andris.urtans@daba.gov.lv](mailto:andris.urtans@daba.gov.lv)

## 4. LIFE programme and its connection to the biogeographical process

Presenting the LIFE programme and its connection to the biogeographical process. It will contain a couple of posters and material (brochures and information material) provided by the Communication team from Brussels.

Poster/publications

### **Ms Sonja Jaari**

*Neemo*

E [sonja.jaari@neemo.eu](mailto:sonja.jaari@neemo.eu)

## 5. Various, Latvia

A poster on the structural quality of mapped EU importance forest habitats within lands managed by the "LVM" and a laptop-based presentation on a possible model of EU habitat conservation using a landscape ecological approach (inside and outside Natura2000 terrestrial network) in Latvia.

Poster and laptop-based presentation

**Ms Ieva Rove**

The Joint-Stock company "Latvijas valsts meži", Latvia

E [I.Rove@lvm.lv](mailto:I.Rove@lvm.lv)

**6. Publications by the Swedish Agency for Marine and Water Management**

Brochures/reports

**Ms Ursula Zinko**

Swedish Agency for Marine and Water Management, Sweden

E [ursula.zinko@havochvatten.se](mailto:ursula.zinko@havochvatten.se)

**7. LIFE to alvars – Restoration of Estonian alvar grasslands, Estonia**

Alvar grasslands are semi-natural grasslands with thin lime-rich soil on limestone bedrock. One third of all the alvar grasslands in Europe are found in Estonia. However, currently less than 30% of these are being managed annually (i.e. by animal grazing), which is necessary for the long-term survival of this habitat type. Unmanaged sites have become heavily overgrown with shrubs (mostly juniper, *Juniperus communis*) and trees (mostly Scots pine, *Pinus sylvestris*). In order to maintain the ecological connectivity and biodiversity of the country's alvar grasslands, a minimum of 7,500 hectares needs to be subject to annual grazing. This is a target of the Estonian Nature Conservation Development Plan that will run until 2020.

Publications/leaflets

**Ms Annely Esko**

Environmental Board, Estonia

E [annely.esko@keskkonnaamet.ee](mailto:annely.esko@keskkonnaamet.ee)

**8. LIFE+ URBANCOWS, Estonia**

Pärnu has a population of around 43,000 people. It is a popular tourist destination in the summer and is sometimes referred to as Estonia's summer capital. It receives around half a million visitors every year, mainly attracted by the beach. Coastal meadow management in an area with so many visitors is a major challenge and due to lack of funds has not been properly addressed to date.

Boreal coastal meadows are an habitat type listed in Annex 1 of the Habitats Directive. Given their relatively high occurrence in Estonia, the country has a special responsibility for securing the conservation of this habitat type. In Estonia, this habitat type can be found on the western coasts, where the meadows form semi-natural habitats together with other different coastal habitat types. Though these ecosystems are spread all over the western coastline, they occur in only a few coastal areas of no more than a couple of hundred hectares. The coast of Pärnu, which consists of boreal coastal meadows, coastal lagoons and dunes habitats, is located inside the Pärnu urban area and covers more than 250 ha. The area suffers from a lack of management and large areas still need restoration. The coastal meadows habitats in good conservation status have only been managed by reed cutting.

The experience gained from previous LIFE projects involving the restoration of boreal coastal meadows habitats projects shows that the most cost-effective action is grazing, combined with reed cutting. The coastal meadow of Pärnu town became overgrown with reed when grazing was discontinued in the 1970s-1980s. Reed cutting and mowing during the last ten years has not been successful, as reed is still dominant.

It is necessary, therefore, to reintroduce grazing, even though this will be challenging in such an urban environment. The coastal meadows are located very close to the public beach as well as the centre of the resort. Using cattle for managing coastal meadows in such an urban environment is not impossible, but needs investments that have so far not been available.

Leaflets/publications

**Mr Bert Holm**

Environmental Board, Estonia

E [bert.holm@keskkonnaamet.ee](mailto:bert.holm@keskkonnaamet.ee)

## 9. Experiences from various projects, Estonia

Various posters:

1. Re-establishment of native plant species in a drainage-influenced spring fen. Cutting-down of *Molinia* tussocks and rising water levels support the re-establishment of *Schoenus ferrugineus* and *Carex davalliana*.
2. Formation of moss carpet on abandoned peat-fields planted by Sphagnum moss transfer method. 6 year lasting succession of different Sphagnum species and their mixtures distributed is importantly dependent of bare peat micro-topography.
3. Restoration of moss carpet on a calcareous spring fen in Estonia.
4. Some results of the effect of N and P addition on the growth of *Scorpidium scorpioides* and *Campylium stellatum* on a 5-year-long experiment will be presented.

**Mr Mati Ilomets**

Tallinn University, Estonia

E [ilomets@tlu.ee](mailto:ilomets@tlu.ee)

## 10. LIFE projects: Happyfish, Happyriver and Springday Saving the rivers and springs, Estonia

The main factors threatening Estonia's protected rivers, alluvial meadows, springs and fish species are channelisation, dredging and damming. During the last decade many actions to enhance the protection status of Estonia's freshwater habitats and species have been implemented. For the restoration of riverine habitats longitudinal continuity, fish passes have constructed on more than 80 dams, and several dams have been removed. In order to improve the lateral continuity, the restoration of oxbow lakes and flooded meadows has been carried out.

Wildlife Estonia has been restoring the freshwater habitats within frames of three LIFE projects called Happyfish, Life-Happyriver and Life-Springday.

Laptop-based presentation

**Mr Meelis Tambets**

*Eesti Loodushoiu Keskus (Wildlife Estonia)*

E [meelis.tambets@gmail.com](mailto:meelis.tambets@gmail.com)

### 11. LIFE to ad(d)mire wetland restoration Project, Sweden

Wetlands have an important role to play in preserving biodiversity. Many plants and animals depend on wetland biotopes, and nearly 15% of Sweden's threatened species live in peatlands or on freshwater margins. Hydrological changes and plant invasion in wetlands adversely affect the animals and plants that live there. Tall plant and forest invasion in drained mires is a major problem for several bird species and for the plants displaced by the invaders. Invasion of wetlands can also be caused by the release of plant nutrients on neighbouring lands through forestry activities. Nitrogen deposition is a contributing factor to vegetation changes in some regions. Some parts of the wetlands have historically been used as meadows, but agricultural modernisation has made this use unprofitable and therefore almost none of these sites are in use today. Several species live in these sites, but their populations are decreasing or becoming extinct because of overgrowth and new management practices. Southern Sweden in particular has seen a significant loss of wetlands (e.g. approximately 90% in Skåne region). Sweden nevertheless remains one of the most wetland rich countries in the world.

Publications/laptop-based presentation/leaflets

**Mr Johan Rova**

*Jönköping County Administrative Board, Sweden*

E [johan.rova@lansstyrelsen.se](mailto:johan.rova@lansstyrelsen.se)

### 12. Information on ongoing and past LIFE projects, Lithuania

Information on ongoing and past LIFE projects: "Protection of Pond Turtle and Amphibians in the Northern European Lowlands LIFE05NAT/LT/000094"; "ECONAT Development of Pilot Ecological Network through Nature Frame Areas in Southern Lithuania LIFE09LT/NAT/00581" and "Restoration of Raised Bog of Aukstumala in Nemunas Delta Regional Park LIFE12 NAT/LT/000965".

Poster/roll up banner

**Mr Edmundas Greimas**

*Lithuanian Fund for Nature*

E [edmundas.g@glis.lt](mailto:edmundas.g@glis.lt)

### 13. LIFE Light & Fire, Finland

The Light & Fire LIFE Project aims to protect the biodiversity of sunlit habitats and habitats created by fire in 69 Natura 2000 areas in Finland. These environments have undergone major changes in recent decades and many of the habitats and associated plant and insect species have become severely threatened. Main restoration measures include controlled burning of forests, restoration of sunlit habitat as well as management of Baltic sandy beaches and dunes. Also habitat restoration and translocation of *Pulsatilla patens* - one of the most endangered plant species in Europe – and restoration camps for volunteers are included in the project taking place from 2014-2020 with the help of EU LIFE+ funding.

Poster/publications/roll up banner/ peatland restoration manuals

**Mr Tuomas Haapalehto**

*Metsähallitus Parks & Wildlife Finland*

[tuomas.haapalehto@metsa.fi](mailto:tuomas.haapalehto@metsa.fi)

#### 14. Hercules project

The project builds on the development and application of innovative technologies and tools for assessing cultural landscapes. The strong involvement of small and medium-sized enterprises and non-governmental organisations provides a prototype for the empowerment of these institutions in landscape planning and management. The project cooperates closely with public and private authorities, agencies, and associations of citizens at local, national, and EU levels. Five objectives address the key topics of the call and form the structure of the project:

- |                     |   |
|---------------------|---|
| <b>Objective 1:</b> | To synthesise existing knowledge on drivers, patterns, and outcomes of persistence and change in Europe's cultural landscapes   |
| <b>Objective 2:</b> | To perform targeted case studies to develop in-depth insights on dynamics and values of cultural landscapes   |
| <b>Objective 3:</b> | To develop a typology of cultural landscapes and scale-up case study insights using observations and landscape modelling  |
| <b>Objective 4:</b> | To develop visions for re-coupling social and ecological components in cultural landscapes and translate them into policy and management options  |
| <b>Objective 5:</b> | To design and implement a community-based Knowledge Hub for Good Landscape Practice and test it with land users, agencies, small and medium-sized enterprises, and citizen associations |

Publications/leaflets/short videos on laptop

**Ms Marie-Alice Budniok**

*ELO - European Landowners' Organization - ASBL*

E [legal@elo.org](mailto:legal@elo.org)

**Ms Emmanuelle Mikosz**

*ELO asbl*

E [emmanuelle.mikosz@elo.org](mailto:emmanuelle.mikosz@elo.org)

## 15. Various publications

Publications

**Ms Monika Kotulak**

*CEEweb for Biodiversity*

[kotulak@ceeweb.org](mailto:kotulak@ceeweb.org)

## 16. Arcadis biodiversity consultancy services

With a short PowerPoint presentation and some videos I will show the type of consultancy services Arcadis is providing in the field of biodiversity, ecosystem services, green infrastructure, natural capital and Natura 2000.

Laptop-based presentation/flag

**Mr Hans van Gossum**

*Arcadis*

E [hans.vangossum@arcadis.com](mailto:hans.vangossum@arcadis.com)

## 17. LIFE Towards integrated management of freshwater Natura 2000 sites and habitats

A presentation “links between WFD and HD surface water habitat types” about some of the boreal freshwater habitat types and their relation to the Water Framework Directive habitat types and a flyer about the FRESHABIT LIFE IP-project, which aims to improve the ecological and conservation status of freshwater N2000 sites and habitats in Finland.

Leaflets/PowerPoint presentation

**Mr Jari Ilmonen**

**Ms Pauliina Louhi**

*Parks & Wildlife Finland*

E [pauliina.louhi@metsa.fi](mailto:pauliina.louhi@metsa.fi)

**18. LIFE National Conservation and Management Programme for Natura 2000 sites in Latvia**

The LIFE project "National Conservation and Management Programme for Natura 2000 sites in Latvia" (2012-2017, coordinating beneficiary Nature Conservation Agency of Latvia) became the main platform for large-scale restoration and conservation planning in Latvia. It was the first attempt to identify grassland restoration priorities at national level. Cooperation among the project team, the Ministry of Environmental Protection and Regional Development, and the Ministry of Agriculture resulted in several synergies ensuring improved governance.

Poster/presentation

***Ms Solvita Rusina***

*Nature Conservation Agency*

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