



## SECTORAL EXPERIENCE WITH NATURA 2000



Prepared by:	ECNC Group
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Citation	Snethlage, M., B. Delbaere, P. Fernandez, L. García, M. Ferreira and M. Kaandorp (2012) <i><b>Sectoral Experience with Natura 2000</b></i> . ECNC Group, Tilburg / Leiden. 138 p.
Funding:	<b>This report is the main deliverable of the project "Sectoral Experience of Natura 2000" under contract 1400007222 with the Dutch Ministry of Economic Affairs, Innovation and Agriculture.</b>
Available from:	ECNC Group PO Box 90 154 NL-5000 LG TILBURG The Netherlands <a href="http://www.ecncgroup.eu">www.ecncgroup.eu</a>
Photos:	ECNC Group, Saxifraga, Wikimedia Commons

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## **Preface**

The implementation of Natura 2000 across Europe is in full swing. As the designation process of Sites of Community Interest has drawn to a close in many Member States, attention has been redirected to the management of the designated sites. Most Member States have opted for the development of management plans as a tool and framework for deciding on the best management practices.

The Dutch Ministry of Economic Affairs, Innovation and Agriculture has developed a comprehensive approach for the implementation of the Habitats and Birds Directives in the Netherlands. As in most Member States, the implementation phase is a challenging activity as it involves the cooperation of many stakeholders, including key economic sectors. Aware of the existence of different approaches in neighbouring countries addressing the same challenges encountered by the sectors, and hoping to find some useful recommendations for improving its own approach, the Ministry requested the ECNC Group to explore and investigate how the sectors of forestry, agriculture, and tourism and recreation in Denmark, France, Germany, the Netherlands and Poland go about resolving such challenges.

That is not to say that other sectors, such as transportation (especially construction and modernization of roads) and hydro-engineering (channelization of rivers, construction of artificial water reservoirs, and the construction of small hydroelectric power plants) are not important at the European level. But the experience with agriculture, forestry, and tourism and recreation seems to offer the most useful outcomes for the situation in the Netherlands.

This report provides a snapshot of the current Natura 2000 implementation, describing the experiences of selected sector representatives and conservation organizations regarding the challenges they encounter, and what solutions they have (jointly) developed to meet the objectives of nature conservation and the continuation and/or development of selected sectoral activities in and around these protected areas. It also specifically reviews the different opportunities which the implementation of Natura 2000 presents to sectoral activities.

The process whereby these management plans are developed and implemented differs quite substantially from country to country, from a centrally driven top-down approach, as in Denmark, to a participative bottom-up approach, as in the case of France. As all Member States are in the midst of the process, the strengths and weaknesses of the different approaches are not yet fully understood, although they give good indications that can be followed.

Therefore, as the phase of management plan implementation has not yet been finalised anywhere, the results presented in this report should be considered as indicative at best. The relative effectiveness of different approaches to Natura 2000 management plan implementation cannot at this stage be fully assessed. However, the material presented in this report gives numerous ideas, examples and recommendations for a better implementation of Natura 2000 in close cooperation with the sectors.

As similar challenges regarding Natura 2000 and economic sectors occur throughout Europe, I hope that the results and recommendations presented in this report will be of use to other Member States, the European Commission and sectoral umbrella organizations.

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## Acknowledgements

The authors wish to acknowledge the constructive feedback and very useful comments of and discussions with the **project core team** which consisted of:

*Ms Inka Gnittke (Federal Ministry for the Environment, Nature Conservation and Nuclear Safety, Germany); Dr Anna Liro (Director, Department for Natura 2000 Areas, General Directorate for Environmental Protection, Poland); Mr Ger de Peuter (Deputy Director of the Department for Nature, Ministry of Economic Affairs, Agriculture and Innovation (EL&I) the Netherlands); Ms Lucile Rambaud (Head of Natura 2000, Ministry of Ecology, Sustainable Development, Transport and Housing, Department of Natural Areas, France); Mr Lars Rudfeld (Head of Section, Nature Planning and Biodiversity, Danish Nature Agency, Denmark).*

During the process valuable guidance, feedback and inputs were received from the client (Dutch Ministry of EL&I), and more in particular from:

*Ms Marissa Giesen, Mr Dennis van Schaardenburg and Mr Eric van der Sommen.*

A large part of the input\* to the report came from in-depth interviews with the representatives of the three sectors and nature conservation organizations in the five countries covered by the project. We wish to thank all of them for their time and willingness to share their knowledge, views and opinions with us and for taking the time for sometimes lengthy, but always very informative and inspiring, discussions:

*1. Mr Pierre Beaudesson (Centre National de la Propriété Forestière, CNPF, France); 2. Mr Emile Bruls (Senior Project Leader, Kenniscentrum Recreatie, the Netherlands); 3. Ms Heidi Buur Holbeck (Specialkonsulent, Plan & Miljø, Denmark); 4. Ms Emanuelle Champion (Ligue pour la protection des oiseaux, LPO, France); 5. Mr Piotr Dabrowski (Chairman, Academy of Physical Education, Poland); 6. Ms Barbara Engels (Fachgebiet Tourismus, Sport und Erholungsvorsorge Bundesamt für Naturschutz, Germany); 7. Ms Marta Gaworska (Policy Adviser, Confederation of European Forest Owners, CEPF); 8. Mr Bo Håkansson (Danish Nature Conservation Union, Denmark); 9. Ms Anne-Mette Hjalager (Professor, Head of Centre, Danish Centre for Rural Research, University of Southern Denmark); 10. Ms Hanne Hübertz (Consultant and nature interpreter, Nordeco and Municipality of Rudersdal, Denmark); 11. Ms Christina Kaaber-Bühle, (Adviser, Danish Agriculture & Food Council, Denmark); 12. Mr Gerbrand van 't Klooster (Spatial Development Coordinator, Land en Tuinbouworganisatie, LTO Noord, the Netherlands); 13. Mr François Kremer (Policy Coordinator Natura 2000, European Commission DG Environment - Unit B.3 'Nature'); 14. Mr Jean-Pierre Mounet (Maître de conférences, Université Joseph Fourier de Grenoble, France); 15. Mr Stefan Müller-Kröhling (National Expert for Natura 2000 affairs, Landesanstalt für Forstwirtschaft Bayern, Germany); 16. Mr Paweł Pawlaczyk (Member of the Board, Naturalists' Club, Poland); 17. Mr Steffen Pinggen (Referent Umwelt, Deutscher Bauernverband e.V., DBV, Germany); 18. Ms Tania Runge (Senior Policy Adviser on Environmental Issues, COPA COGECA); 19. Mr Ralf Schlütter (North Rhine-Westphalia, Germany); 20. Ir Carleen Weebers (Senior Beleidsmedewerker, Bosschap, the Netherlands); 21. Mr Magnus Wessel (NABU-Artenschutz-Experte, NABU Naturschutzbund Deutschland e.V., Germany); 22. Ms Carole Zakine (Juriste Pole reflection SAF, Agriculteurs de France, France); 23. Mrs Claudine Zysberg (Project*

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\* In the text of this report the source of the statements is indicated by referring to the numbers in front of the names of the above-mentioned respondents.

*executive for tourism, sports and mountains, French Ministry of Ecology, Sustainable Development, Transport and Housing, France).*

Finally, we are also highly indebted to the experts who have taken the time to read through the draft report to confirm, elaborate and further develop some of the main findings, and also adding some very interesting case studies:

*Dr Jacques Baudry (Researcher, Institut National de Recherche Agronomique, France); Dr Raoul Beunen (Researcher, Wageningen University and Research Centre, the Netherlands); Ir Irene Bouwma (Researcher, Alterra, the Netherlands); Ms Joanna Cent (PhD Researcher, Jagellonian University, Poland); Ir Yves Froissart (Natura 2000 Consultant, France); Dr Herman Hötter (Director, Michael Otto Institute, Nature and Biodiversity Conservation Union, Germany); Dr Małgorzata Makomaska-Juchiewicz (Institute of Nature Conservation, Polish Academy of Sciences, Poland); Dr Riikka Paloniemi (Senior Researcher, Finnish Environment Institute, Finland).*



## **Executive summary**

Across Europe, the identification and designation of Natura 2000 sites has resulted in an unprecedented network of protected areas unequalled anywhere in the world, providing an important contribution to the conservation of European habitats and species of community importance.

The network is composed of 26,106 sites covering a total area of 949,910 km<sup>2</sup>, or 17.5% of the EU land area (European Commission 2012). Now that the designation phase has been completed in most Member States, attention is shifting to the management of these areas, whose ultimate goal is to ensure favourable conservation status for all species and habitats listed in the Annexes of the Habitats and Birds Directives.

Natura 2000 sites occur across all types of landscape, from urbanized coastal areas to mountains and intensive agricultural areas, suburban peripheral zones, port and industry development areas, etc. With increasing demands from society for natural resources and space to develop a wide range of economic activities, conflict around these sites is likely to appear.

The interactions between sectoral activities and the implementation of the Natura 2000 network are determined by an interplay of pressures of sectoral activities on nature conservation objectives and responses from conservation authorities to these activities and pressures.

In a climate in which sectoral activities and Natura 2000 implementation are frequently considered as competing interests, it is urgent that the real nature of these interactions be assessed in order to help support the discussion and decision-making process with objective recommendations.

The interactions between the sectoral activities and Natura 2000 implementation have been studied from the point of view of the agricultural, forestry, and tourism and recreation sectors and from the point of view of conservation organizations and government agencies. This has been done for Denmark, France, Germany, the Netherlands and Poland.

Much of the reported information is based on (subjective) opinions of the sectors (including the nature conservation 'sector') gathered through interviews. In spite of being subjective and biased, and often not a true reflection of the situation, these opinions have political and strategic importance and are part of the reality of the discussion process around Natura 2000.

The report sought to validate the opinions expressed by the sectors by confronting them with findings from (objective) research, data and cases of good and bad practice. In the last phase of the project, the main conclusions were discussed with a selection of academic experts whose research focuses on the implementation of Natura 2000.

Many factors influence the way in which sectoral activities are or are not allowed and integrated in the management of Natura 2000 sites. These include temporal, geographic, social, environmental, economic, and political factors. For example, water scarcity may be an important factor if it affects an area with protected wetlands and irrigation agriculture competing for the same limited resource. The impact of disturbance by visitors depends on the vulnerability of species to such disturbance and the number of visitors on a site, which in turn depends on its proximity to large urban areas or the overall attractiveness of the landscape as a tourist destination. Soil fertility and agricultural productivity, together with the ease of access to markets to sell the products determine the potential agricultural pressure. In areas with highly valued arable land, a Natura 2000 site might be perceived as a barrier to agricultural development, while in poor less favoured areas affected by land abandonment, the presence of a Natura 2000 site can mean an opportunity for alternative sources of income for the local communities, through branding, or ecotourism.

Also the stage of Natura 2000 implementation differs quite significantly, with France recently having to start applying article 6.3. (leading to renewed opposition from the sectors) and Poland accessing the EU only in 2004, thus having to catch up with the other Member States and being at a different stage with the involvement of sectors in the implementation process.

These differences are reflected in a number of Natura 2000 progress indicators, such as the SEBI2010 Sufficiency Index<sup>†</sup>, which is 100% for The Netherlands and Denmark, 98% for Germany, 93% for France and 17% for Poland (EEA 2009a). However when we look at the conservation status of the habitats and species, a different image emerges (EEA 2009b): only 8% of The Netherlands' habitats are in a favourable conservation status, compared for example to 34% in Germany and 21% in Poland. Twenty-four per cent of species in The Netherlands are in favourable conservation status, which is similar to the situation in Germany and France, but lower than in Denmark and Poland. These figures reflect the far stronger pressures (by sectoral activities) which densely populated countries with intensive land use have to deal with, compared with the situation in Poland, where pressures from sectoral activities are still very much lower.

The successful implementation of Natura 2000 thus depends on a large number of intrinsic and extrinsic factors which make it difficult to prepare a cookery book with ready-made recipes. The success in achieving favourable conservation status for habitats and species listed in the Annexes of the Birds and Habitats Directives, which is the bottom line of the Natura 2000 implementation, is therefore in essence a tailor-made, local and unique effort for each site (DVL 2007). That is not to say that no general conclusions and recommendations can be made that will help policymakers and practitioners in better implementing the Natura 2000 network. The findings of this project indicate that the best results in the three sectors in terms of Natura 2000 implementation are obtained by:

- joint decision-making at the local (site) level with individual stakeholders;
- providing viable and realistic financial to landowners and users: compensation payments, agro-environmental schemes or diversification of income-generating activities;
- adopting a transparent and efficient governance structure allowing face-to-face contacts and the building up of trust relationships;
- providing clear information adapted to the target audience.

General recommendations to the representatives of the forestry, agricultural, and tourism and recreation sectors include:

- engage in self-regulatory mechanisms such as charters and codes of conduct;
- (pro)actively participate in regional or site-based stakeholder processes for the development of Natura 2000 management plans;
- communicate in a transparent and correct way about the **dos and don'ts regarding Natura 2000 implementation**;
- build capacity of your constituency by offering training on aspects relating to Natura 2000 and building the necessary capacity;
- share knowledge on management approaches and solutions to challenges so as to build up an evidence base for adaptive management;
- cooperate with stakeholders to identify economic alternatives, including, for example, the operationalization of Payment for Ecosystem Services;
- integrate Natura 2000 management into regional and local land-use planning at an early stage.

Across the countries and sectors included in this report, there is a general acknowledgement and awareness that nature is valuable, providing a variety of services and benefits to society and the

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<sup>†</sup> State of progress by Member States in designating sufficient protected areas to provide for Habitats Directive (92/43/EEC) Annex I habitats and Annex II species

**sector's activities.** Most sector representatives therefore acknowledge that nature needs some form of protection and/or sustainable use.

Natura 2000 is an ambitious nature protection scheme that required Member States to designate areas and set conservation targets for a wide range of habitats and species of community importance. Developing and implementing successful management plans for Natura 2000 sites depends on the right mix of policy and regulations, governance (stakeholder involvement), information and awareness raising, human resources (education and training), knowledge (data collection, monitoring, research), financial resources, process management and technology and site management.

The following general recommendations for policymakers are described in greater detail on page 82 and further. For each header, the first paragraph briefly outlines the **challenges** while the second paragraph concentrates on the **recommendations**.

### **Policies, legislation and regulations**

Complicated (national) regulations, lack of understanding of the juridical part of the implementation process by key players, particularly regarding the granting of development permits in combination with the fact that Appropriate Assessments are often lacking, incomplete or insufficient, results in slow decision-making and associated uncertainty on the part of the interested parties. This often contributes to a general negative attitude towards the whole Natura 2000 implementation process.

It is important to invest in the development and application of clear, transparent, and fast procedures, even if they result in a negative planning decision for some individual stakeholders. Sectors can contribute by developing self-regulatory mechanisms such as charters. Knowledge institutions together with the sectors and the competent authorities can contribute by developing codes of conduct translating technical, juridical documents into clear and simple management guidelines.

### **Governance, stakeholder involvement and participation**

Top-down decision-making imposed by policymakers, (ecological) experts and others (including sector representatives) from outside the site or region (i.e. not directly affected) creates a sense of alienation among the local stakeholders. A formal and distant point of contact for the Natura 2000 implementation, difficult to reach and often no more than an email address, does not create the required sense of belonging and trust. It is often said that it is better not to engage the stakeholders rather than to do it on a pro-forma basis. A stakeholder engagement programme should be open and fair in order to be effective and not create more problems than it supposedly resolves.

Whether coordinated at the national, regional or local level, the implementation of management plans ultimately needs to be carried out at site level together with the landowners and land users. The local competent authorities (often the municipalities) need to adopt a governance model (often prescribed) that ensures that the implementation proceeds according to the national legislation, involves the stakeholders in planning and management, responds effectively to questions regarding rules and site management, and, most important, enjoys the trust of the stakeholders. This last point can be achieved by assigning the coordination to a local, trusted person who ideally signs up for the job for the long term in order to ensure continuity.

### Education and training

The successful implementation of Natura 2000 requires qualified and skilled professionals at all levels (from national and regional level policymaking, to local implementation through stakeholder involvement). The lack of knowledge and skills among the various stakeholders involved in the process has created many instances of delay in decision-making and permit-granting, simply because those responsible did not really know what to do and how.

Further investments in good education and training programmes are essential to ensure the continued smooth implementation of Natura 2000. Essential skills and knowledge include: project management, moderation, facilitation and conflict resolution for process managers (*animateurs Natura 2000*); in-depth knowledge of the regulations and procedures for the desk officers of the competent authorities (often at local or regional level); communication and debating skills for the main individual stakeholders; and specific habitat and species management skills for the site managers.

### Outreach, communication, information

Lack of information about the process of Natura 2000 implementation, its regulations, its financial opportunities, and the rights and duties of stakeholders has been widely identified as a major factor having caused many stakeholders' disenchantment with the process. Also among the wider public there is a lack of objective information which influences the discursive process, as specific cases are partially reported in the media and start living a life of their own, negatively influencing the public perception, based on wrong or partial facts.

Targeted information about the importance of nature, the services and benefits it provides to society, and the role of Natura 2000 to protect these values and services should be stepped up. In addition, objective information about the real limitations and opportunities associated with Natura 2000 are needed to put the process and its perceived constraints on development in realistic proportions. This will benefit the public debate and help defuse existing conflicts and also help prevent other conflicts from arising. The recognition of exemplary and innovative initiatives in Natura 2000 implementation through an award scheme at regional, national or European level (such as the Grand Prix Natura 2000 in France) can be a powerful tool to communicate a positive image about the network.

### Knowledge and data management

The lack of trustworthy and widely accepted knowledge and information about the state of species and habitats, and the effects of (sectoral) activities or pressures are essential for a good debate about site management planning and the development of sectoral activities. In many cases the best available knowledge is not sufficient to predict ecological responses to certain activities, and competent authorities tend to resort to the precautionary principle. This often causes delays in the granting of planning permits and contributes to a negative perception of the process.

The collection and management of data regarding the states and trends of habitats and species as well as those of drivers and pressures are essential to inform the various stages of the implementation process (site selection and designation, setting conservation targets, communication and awareness raising, monitoring of process and results, development of (adaptive) management approaches, etc.). It is a component of the implementation process which is often overlooked or whose importance is undervalued, and it is therefore chronically underfunded. Much useful information is collected but exchange is often lacking. More coordination would be an important step forwards. Stakeholders (landowners, land users, land managers) can to a certain extent be involved in the process of data gathering and monitoring.

### **Economic perspectives and financing**

The implementation of management measures for the conservation of Natura 2000 sites, habitats and species often requires changes to some forms of existing intensive land use, or maintenance or reintroduction of existing extensive practices. These cause increased costs, loss of income or barriers to development for certain stakeholders. For the conservation of natural values through Natura 2000 the common opinion is that those affected should be compensated for these losses and impediments. In addition, the various implementation mechanisms (communication, monitoring, farm extension, coordination, site management, etc.) are costly and need to be adequately funded.

Community budgets should be realistic and thus cover the investments needed to implement the Natura 2000 network. Allocation of such funds to the various components of the implementation process (such as communication, stakeholder involvement, practical management measures, monitoring and research, compensation for lost income, etc.) should be allocated fairly, and therefore the whole process should be considered when the funds are earmarked. If some components remain underfunded, they can jeopardize the overall effectiveness of the process. In addition, local financing opportunities for sustainable sectoral activities should be developed and promoted. In particular, functioning frameworks for the operationalization of Payments for Ecosystem Services should be developed and implemented.

### **Site management and planning**

Maintaining and restoring favourable conservation status for species and habitats often clashes with the effects of sectoral activities (such as draining, disturbance, pollution). Often the conflict arises from seemingly incompatible sectoral activities and conservation management practices. Landscape-level issues such as changes to the hydrology and atmospheric deposition often give rise to site-level conflicts which are difficult to address locally.

Good regulations, governance, planning, information, communication and funding as discussed above are essential ingredients towards a mutually acceptable solution. In addition, a wide variety of practical management and planning solutions have been developed over the years, allowing adapted forms of (lucrative) sectoral activities and minimizing their effects on the natural conditions. These include the use of low-pressure tyres to mow vulnerable meadows, aerial timber removal to avoid destruction of the wood topsoil, nitrogen filters to decrease the emissions and deposition of ammonia, dynamic drainage allowing high water tables inside protected areas and lower water tables in surrounding arable land. Good landscape or catchment level planning including the requirements for Natura 2000 can contribute to finding solutions for local issues (especially those related to water management and diffuse pollution).

## **1. Introduction**

This report presents the findings of a one-year project seeking to analyse the mutual interactions between the implementation of the Natura 2000 network and the activities of a selection of three sectors in five North-Western European EU Member States. The main question addressed by this **study was 'How can the (economic) activities of key sectors be reconciled with measures towards achieving a favourable conservation status of Natura 2000 sites?'**

This project, carried out by the ECNC Group, therefore aimed to identify the pressures from the sectors on Natura 2000 implementation, the responses from the nature conservation agencies/actors to these pressures, the conflicts that arise from the pressures and responses, and the solutions that have been found to address these conflicts.

The report presents a qualitative analysis based on a review of published sources, interviews with sector representatives, a selection and description of case studies and a final validation with researchers. Wherever possible, claims have been verified. However, much in the debate around Natura 2000 implementation is based upon opinions.

The results of this project come as the implementation process of management plans for Natura 2000 sites is under way in most Member States. Step by step, Member States and all stakeholders involved in this process are acquiring more **knowledge and experience about the do's and don'ts**. The results of this project therefore represent a snapshot of the implementation process and the first conclusions and recommendations based on partial implementation.

However, the authors consider that, in spite of this, the review and analysis of the current state of implementation and the conclusions and recommendations they generate can provide a valuable input to the Member States and other stakeholders in their efforts to improve the implementation of management plans for the sites. They also provide guidance to economic sectors on how to deal with challenges posed in connection with Natura 2000.

## **2. Background**

### **2.1. Objectives**

The report seeks in particular to contribute to greater knowledge of all stakeholders in the Netherlands and other EU Member States on how to address the nature conservation and economic development challenges associated with the implementation of Natura 2000.

In order to achieve this, the project aimed in particular:

1. to identify the main bottlenecks that sectors are facing with respect to Natura 2000 by means of interviews and desk studies, collecting new facts and cases of good practice for the sectors of agriculture, tourism and recreation in five EU Member States (including the Netherlands). Experiences with the forestry sector were included from France and Germany;
2. to analyse best practices and solutions in dealing with those bottlenecks (i.e. new opportunities created by what was initially considered a barrier) with Natura 2000 in these five EU Member States, as applied by sectors (bottom up). In particular, to analyse possible reasons for observed differences, and to derive generic conclusions (lessons learned).

### **2.2. Target groups**

The results of this research project should be of special interest to the following three main target groups:

1. Representatives of the target sectors (agriculture, tourism and recreation, and forestry) in the selected five countries (Germany, France, Poland, Denmark and the Netherlands).
2. Policymakers at European level (e.g. European Commission), in the Netherlands (e.g. parliament) and at local level, whose views on the image of Natura 2000 in relation to the selected sectors might be influenced by the results of this project.
3. Stakeholders involved in the Natura 2000 implementation process at the local level.

### **2.3. Theoretical conceptual framework**

In order to tease out the interactions between the sectoral activities and Natura 2000 implementation, the Pressure-State-Response (PSR) approach (OECD 1999) was adopted and adapted (see figures 1 and 2).

For the data gathering and analysis we considered that the challenges and opportunities in the implementation of Natura 2000 and the development of sectoral activities arose from the mutual impacts and benefits they have on one another. Development or intensification of sectoral activities (such as farming, forestry and tourism) are likely to result in additional pressures on the surrounding nature (habitats and species) protected under the Habitats and Birds Directives (mainly inside, but also outside Natura 2000 sites).



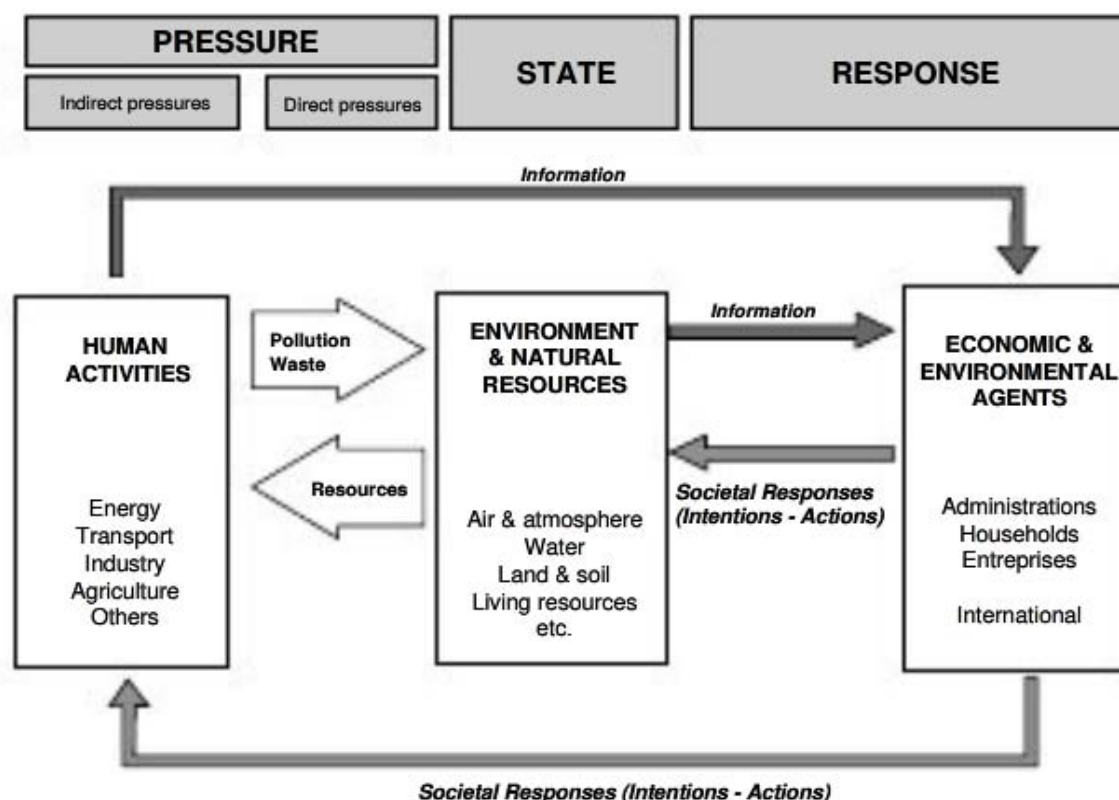


Figure 1 The original pressure-state-response (PSR) model (OECD 1999)

In order to reduce the impacts of these sectoral public and private activities, nature conservation bodies implement a wide range of responses (policy, regulations, etc.). These are often perceived by the sectors as barriers to their development, but can also result in mutually beneficial outcomes. In addition, the process of Natura 2000 implementation is very complex as it involves a wide range of stakeholders and has important financial and planning consequences. Such a process is always prone to generate conflicts and misunderstandings, which are also addressed in this report.

## 2.4. Research questions

The research questions addressed in this project report refer to the objectives of the study, i.e. to obtain a better understanding of the pressures and barriers and their solutions where Natura 2000 implementation meets sectoral activities. The main research question was formulated as follows:

### Main research question:

"How can the (economic) activities of key sectors be reconciled with measures towards achieving a favourable conservation status of Natura 2000 sites?"

A series of sub-questions was derived to highlight the various elements reflected in the main research question:

### Issues and challenges

1. How do the sectors' activities affect Natura 2000 implementation (habitats and species)?

2. How does the implementation of Natura 2000 affect the sectors?
3. What challenges do the sectors and nature conservation bodies face in the implementation of Natura 2000?

### **Solutions and opportunities**

4. What solutions for Natura 2000 implementation and sectoral activities have been found?
5. What problems remain unresolved and why?
6. What opportunities does the implementation of Natura 2000 offer to the sectors?

### **Lessons learned**

7. What recommendations or approaches can be distilled from the comparative analysis of the sectors in relation to the implementation of the Natura 2000 network?
8. What issues, problems, solutions and opportunities are common to the sectors with respect to the implementation of the Natura 2000 network?

## 3. Methodology

### 3.1. Introduction

The EU Habitats Directive (92/43/EEC) and the EU Birds Directive (79/409/EEC) and their transposition into national legislation in the five countries form the policy framework for this research project.

The main focus of the research was the identification of main bottlenecks, best practices and solutions that three sectors are experiencing with respect to Natura 2000 in five countries: Denmark, France, Germany, the Netherlands and Poland.

The three sectors included in this research project were:

1. **agriculture** (all countries)
2. **tourism and recreation** (all countries) and
3. **forestry** (this sector was studied in more detail for France and Germany, and was only touched upon for Denmark, the Netherlands and Poland).

In addition, the points of view of the conservation sector were also included.

The data for this research was collected in three ways:

- desk study
- interviews
- case studies.

### 3.2. Desk study: Literature study and internet review

This part of the assessment aimed primarily at documents and websites that describe experiences of stakeholders from the three sectors with Natura 2000. Written sources included: legal texts, peer-reviewed articles, grey literature, press releases and position papers. In addition, websites of the various governments, key organizations, partnerships and frameworks were examined.

### 3.3. Interviews: selection of experts and conducting the interviews

Representatives of the agricultural, tourism and recreation, and forestry sectors involved in the process of Natura 2000 implementation were invited to participate. The selection of experts started with a query from the substantial contacts database assembled by the ECNC group over the years in other Natura 2000 related projects. Some further contacts were added to this list based on the outcomes of the literature review. The consolidated list was discussed with the members of the core group, who made some additional suggestions. In the end the final list of interviewees changed substantially, because people who were contacted referred us to colleagues or refused to cooperate. The aim was to interview at least one sector representative per country and one at EU level.

### 3.4. Case studies: selection and description of cases of good and bad practice

The research area was limited to Denmark, France, Germany, the Netherlands and Poland for the agricultural, and tourism and recreation sectors; and to Germany and France for the forestry sector. Cases studies were collected during the desk study and the interview phase, resulting in a long list of cases. The final selection of cases was based on a good representation of the five countries, the three sectors and issues that followed from the analysis of the results. The main selection criterion was that the case should illustrate an outcome, conclusion or recommendation of the report.

### 3.5. Analysis of the results

Figure 2 shows the analytical framework used in the analysis of the results and their presentation in this report. It is based on the general Pressure-State-Response model presented in figure 1. The left side, in yellow shows a schematic presentation of the sectoral activities; the right side, in blue, shows a schematic illustration of the Natura 2000 management activities. Basically it shows that measures to improve the sector's production base (e.g. the soil for agriculture) can generate positive externalities for Natura 2000, but also cause pressures. Conversely, management measures needed to improve the (abiotic) condition of Natura 2000 sites (for achievement of favourable conservation status of habitats and species of Community importance) can generate positive benefits for the sector (e.g. restoring landscape features attractive to tourism) but also create barriers for the sectors (e.g. rewetting and higher water table). As an example, rewetting of an area to improve the hydrology of the Natura 2000 site is a response to an earlier pressure from the sector (drainage). Therefore, one can say that as a general rule, the more important the pressure from sectoral activities on a Natura 2000 site, the higher the barrier to these activities (e.g. as a result of regulation) becomes. This assumption was a guiding principle for the analysis in the following pages. However, the ultimate objective of the analysis was to identify and describe key learning points and opportunities for improving the implementation of Natura 2000 with the support of the sectors concerned.

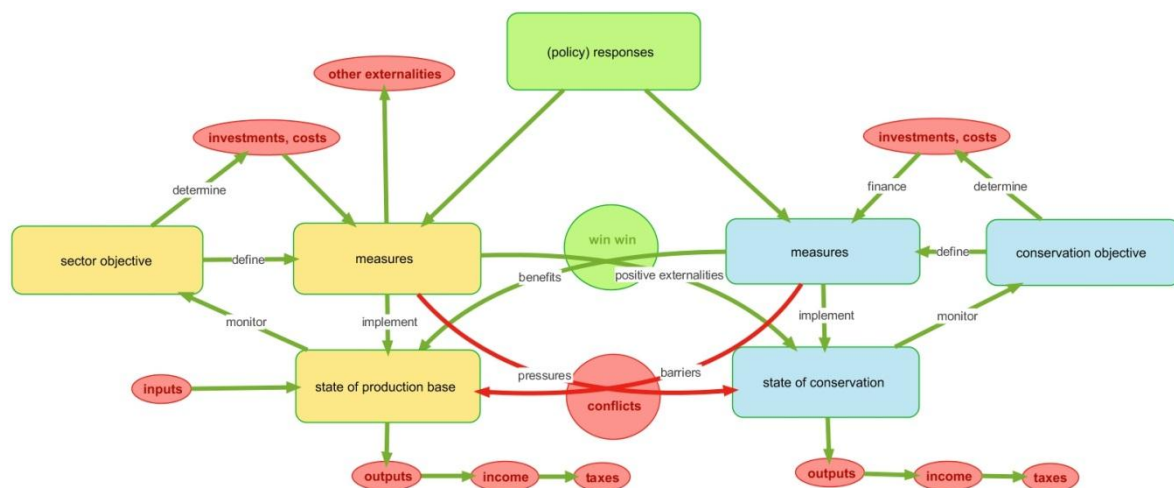


Figure 2 Analytical approach as a research-specific development of the PSR model shown in figure 1

This introduction hints at another assumption that is very important in interpreting the results and recommendations of this study: due to the interplay of many factors and influences around each individual Natura 2000 site, no two situations across Europe are exactly identical. Results must therefore be interpreted with care, and when recommendations are applied to specific new

situations, it is important to review the full set of relevant factors, and not focus on one solution only.

### **3.6. Validation of the results**

The information collected for this research project consists largely of opinions and expert knowledge, and is likely to be biased, as a large proportion of the interviewees have a lobbying function for their sector. In order to validate the outcome of the research, the preliminary results, conclusions and recommendations were discussed with a core group consisting of the Heads of Natura 2000 in the national nature protection agencies in the five countries. They met twice during the course of the project. The outcomes of the study were also submitted for review by a panel of academic experts who were interviewed towards the end of the project (May 2012).

### **3.7. The structure of this report**

This report starts with a description of the specific mutual roles, challenges, opportunities and solutions that arise for each of the three sectors with regard to the implementation of Natura 2000. This is followed by a general analysis of the pressures and responses between the sectors and the Natura 2000 implementation and an analysis of the factors that influence these mutual relations. Then a summary of generic solutions and opportunities is presented. Finally an overview of conclusions and derived recommendations is provided.

Throughout the report, the findings are illustrated with short descriptions of practical case studies presented in green boxes. In the selection of these cases, special attention has been given to the best possible representation of the countries, sectors and themes. The short case presentations in the text are described in greater detail in the annexes. A unique case study code provides an easy reference to the respective case in the annexes. Blue boxes are also included to illustrate the findings of the report but they refer to policies and processes, not to practical cases.

## 4. Results by sector

### 4.1. Introduction

As a general rule or outcome, the representatives of all three sectors acknowledge the importance of conserving nature and biodiversity. They report that their constituencies are aware of the direct benefits of nature to their sector and activities and the indirect benefits to society. Sectors such as agriculture and forestry that use biodiversity as a basis for production are generally inclined to support the idea that nature conservation benefits all of society. Adapted management and the limits it imposes on intensification or expansion should therefore be compensated.

### 4.2. Agriculture

#### 4.2.1. Introduction

The European rural landscape is very rich and diversified. The long history of land use has resulted in a rich cultural and natural heritage. In the 20th century, however, farmers were encouraged to intensify and apply monocultures. The modernization of agriculture was not possible everywhere (on poor or steep land, in remote areas, etc.). Therefore, rural areas developed in two opposing ways: intensification and abandonment. This landscape polarization has had serious negative impacts on European farmland biodiversity (European Commission 2005).

Of the three sectors included in this study, agriculture experiences the most conflicts with Natura 2000 implementation. Representatives of the sector are generally quite critical of Natura 2000 implementation and the conservation bodies consider agriculture as a challenging source of pressures on the Natura 2000 sites. It is here that finding a reciprocally satisfactory solution is the **biggest challenge**, and where the assertion 'the higher the pressure, the higher the barrier' seems most applicable. However, agriculture is also a sector where many innovative, mostly local, solutions are developed. Indeed, most respondents indicate that in spite of the obvious difficulties, mutual benefits can be obtained for farming and Natura 2000 implementation.

*Table 1 Basic country-level figures about Natura 2000 and agriculture*

	Denmark	France	Germany	Netherlands	Poland
<b>Total UAA (km<sup>2</sup>)</b>	32,263	401,532	209,928	25,507	196,053
<b>Total UAA (%)</b>	74.9	59.5	58.8	61.4	62.7
<b>% UAA under N2K</b>	4.7	8.1	10.9	4.5	11.6

Source: European Commission, DG Agriculture and Rural Development 2010.

#### 4.2.2. General description / roles

##### 4.2.2.1. Impacts of the agricultural sector on Natura 2000

In general terms, two types of impacts are reported: 1) direct, on-site impacts of farming practices in Natura 2000 sites, and 2) indirect, off-site impacts by farming practices in the vicinity of Natura 2000 sites. Although farmers need to consider Annex 4 species (animal and plant species of Community interest in need of strict protection) also outside Natura 2000 sites, the limitations this imposes on farming practices were only mentioned once (Germany).

The European Commission identifies the following four broad categories of agricultural impact on Natura 2000 sites, habitats and species (European Commission, DG Environment):

- **Abandonment.** Grasslands are no longer grazed or mowed; heathlands are no longer exploited traditionally; succession takes over and there is overgrowth by bushes, shrubs, woody plants. This happens when farmers lose interest, because the economic return no longer merits the effort, because hay is replaced as fodder by e.g. maize or industrial feedstuffs, because outdoor grazing makes way for housed livestock, etc. Farming focuses on other activities on less marginal land, or ceases altogether (rural depopulation).
- **Intensification: Grasslands are 'improved'** by draining, ploughing and sowing, applying fertilizer, etc., in order to get more cuts a year and higher yields per cut (silage). Such agro-industrial grasslands have low biodiversity value. Here we have a situation which is the opposite of abandonment – instead of declining farming, there are strong incentives to boost production.
- **Conversion:** Semi-natural grasslands, heathlands, etc. are converted to other land uses: afforestation (with low-biodiversity coniferous monocultures), arable land, vineyards, housing estates, quarries, development of various activities.
- **Ecologically inappropriate practices:** Mowing on the wrong dates, for instance, can disturb breeding birds or favour certain plant species to the detriment of others.

In **Denmark**, the main threats to biodiversity in agricultural areas are cultivation, pesticides, pollution by nutrients, land drainage and the clearing of habitats such as hedges and ponds (Danish Forest and Nature Agency, Agency Spatial and Environmental Planning, and National Environmental Research Institute 2009). Nitrogen emission and deposition from farm-based activities (intensive livestock breeding) is a major source of conflict between farmers and conservation bodies. It is a major threat for rare and vulnerable habitats such as dunes, oligotrophic waters, heath and scrub, dry grasslands, raised bogs, mires, fens and deciduous forests. An ammonia plan was launched in 2002, and emissions are steadily decreasing. There was a 30% reduction between 1989 and 2008 (Dinesen and Bjerregaard 2011), although emissions are still 50% above the EU norm (Van Doorn and Paulissen 2009). Since 2010, it is the effect on the environment (e.g. nitrogen leaching) that is the criterion for allowing a certain farming practice inside Natura 2000, not the practice itself (Danish Environment Ministry 2010). Nitrogen emissions and applications are regulated by several laws and regulations (Dinesen and Bjerregaard 2011; Ensink 2010; Kingdom of Denmark 2009), which shows the importance of this issue.

In **France**, intensive agriculture and its effects on pollution and water management are often cited as the major problem, followed by land abandonment and tourism. Regarding the conservation of high value farmland ecosystems, the conversion of natural and artificial grasslands into arable lands and planted forests, due to both conversion and land abandonment continues to be an important trend in France. However, urban sprawl is also a major contributor to the decrease in high nature value farmland (République française 2009).

In France, unlike for instance in the Netherlands, initially only on-site impacts were regarded as harmful to the conservation status of habitats in Natura 2000 sites. Gradually the notion of off-site impacts from agriculture was integrated into planning and legislation and into **people's** minds. Water extraction for irrigation was specifically mentioned as a key pressure impacting Natura 2000 sites<sup>4†</sup>.

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<sup>†</sup> From this point onwards, the numbers in superscript refer to the respondents we interviewed as part of this project. Their names can be found on page 8 of this report.



### Case 1 Conflicting interests in wet meadow management (Germany)

Bellheimer Wald has been designated under the Habitats and Birds Directives. It is a site composed of forest and agricultural land and surrounded by small villages. It has an important recreational function for the local residents. The open agricultural areas include many wet meadows which support a population of Corncrakes (*Crex crex*) and other listed species. On the outskirts of the site, planned expansion of sports facilities near the villages is causing increased pressure. Within the area conflicts arose over the use and management of the wet meadows that support many endangered species but are also valuable hay lands for the (intensified) production of fodder (hay). The management of the forest also results in a number of challenges, because of conflicting needs of the species they should protect: Woodpeckers require old growth patches with lots of dead wood, while Nightjars (*Caprimulgus europaeus*) fare best in open clear-cut areas. This site was one of the test sites of a nationwide project to better understand stakeholder involvement strategies in the management of Natura 2000 sites. The key to success in this case was strategic involvement of the stakeholders, the identification and recognition of the conservation and production needs, and the spatial and temporal zoning of activities and (water) management to best satisfy the various interests.

<http://www.natura2000-dvl.de>

For more information, see **Annex DE07**

In **Germany**, activities that impact on the favourable conservation status are mentioned (e.g. mowing meadows during breeding season, spraying insecticides)<sup>17</sup>. Other impacts include nitrogen input from intensive agriculture, and changes land use for the production of biofuels. The conversion of meadows to arable land for biomass production is having an increased impact<sup>21</sup>. Indeed, increased demand for biofuels is likely to increase the land value in certain areas (e.g. Germany – Lower Saxony, North Rhine-Westphalia), which makes the agro-environmental payments less attractive for farmers. This is a current problem which might be exacerbated in the future. The intensification of farmland, loss of wetlands due to drainage, nitrogen atmospheric deposition, and eutrophication are also key impacts<sup>21</sup>.

Nitrogen deposition and desiccation are the most important pressures on terrestrial nature in **the Netherlands**. Almost 50% of the high nitrogen emissions come from ammonia emissions from agriculture. The other half comes from other national and international (30%) sources. Agriculture is responsible for about 60% of the desiccation problems, mainly as a result of drainage. The remaining 40% of the desiccation problems are caused by potable water extraction and irrigation (Milieu- en Natuurplanbureau, Kruitwagen, and Koelemeijer 2007). Animal husbandry is referred to as having the greatest impact, through ammonia deposition in nearby Natura 2000 sites (Taskforce Trojan 2008). Drainage is the second biggest impact, influencing water levels in Natura 2000 sites. Specific field preparation activities such as tillage and herbicide spraying are reported to have only a minor impact<sup>12, 20</sup>.

For **Poland** grassland management is specifically mentioned as having a particular impact on Natura 2000 objectives through water management, abandonment of mowing/grazing, modification of cultivation practices, and elimination of patches of wasteland<sup>16</sup>. Much of the farmland, especially in the south is still under extensive use. In the north there is a higher proportion of intensively farmed land, which has more impact on nature.

#### 4.2.2.2. Impacts of Natura 2000 on the agricultural sector

The reported responses regarding the impacts of Natura 2000 on the agricultural sector are more numerous and elaborate. They contain both positive and negative impacts. Also, the responses provided contain a mix of impacts on individual farmers, on specific agricultural activities, on economic and social aspects, as well as on the perception and attitude of the agricultural sector as a whole.

In general it seems that economic incentive is a prime factor for farmers to adopt policy measures, and especially so when farmers think about participation in measures enhancing the environment and biodiversity. However, these economic interests are expressed in various terms such as profit maximization, long-term farm viability and/or risk minimization. In addition, these economic considerations are profoundly affected by the social and cultural context related to stewardship and family values. Many farmers see it as their primary duty to ensure the continuity of their enterprise (Siebert, Toogood, and Knierim 2006). This research demonstrates that economic incentives such as agro-environmental schemes can be effective measures, but that the close emotional and cultural ties of farmers to their land must also be considered when contemplating the measures needed to implement Natura 2000.

High biodiversity generally corresponds to low agricultural output. Such areas are therefore well represented in the Natura 2000 network. Payments for Natura 2000 are therefore likely to offer a welcome alternative income option for farmers in these areas. In addition, in the CAP, payments have been decoupled from production and allocated to management to support good agricultural practice (European Commission 2005). However, it was reported that Natura 2000 is only one of the many challenges for modern agriculture, and is the main challenge for only a minority of farmers<sup>18</sup>. It is not yet known how much agricultural area actually falls under Natura 2000. As a consequence of Natura 2000, farmers are forced to extend their production methods. Imposed management practices such as extension and rewetting make the agricultural land much less **productive. Farmers in challenged areas (previously 'less favoured areas')** face an additional challenge because of Natura 2000. The impacts of Natura 2000 mainly affect plots inside designated areas<sup>18</sup>. Additional challenges for agriculture are related to land ownership: managing extensive areas for Natura 2000 or other nature objectives, is becoming more difficult, because farmers retire or move away, with abandonment as a result. Another aspect is that the combination of rewetting and late mowing causes problems in terms of use of labour capacity and machinery during a very concentrated period after the breeding season. A remaining challenge is the indirect effect of conservation successes on farmers for which no solution exists (e.g. flooding of farmland due to Eurasian beaver (*Castor fiber*) dams)<sup>18</sup>.

In **Denmark** a large part of Natura 2000 areas is under intensive farmland. According to the agricultural sector, intensive agriculture (with draining and fertilizing) is made impossible inside and near to Natura 2000 sites<sup>8</sup>. Economic losses incurred by owners are cited as an impact of Natura 2000. The municipalities, in charge of implementing the management plans in agricultural land, lack the funds for proper compensation<sup>8</sup>. The farming sector expects that if the Natura 2000 action plans are drafted by the municipalities, there will be more restrictions for the farmers. The most important challenges for the agricultural sector are associated with the reduction in nitrogen emissions and the proposed changes of land use. The 2006 Act on Livestock Farming Environmental Approvals (and its later amendments) and the 2007 New Environmental Act introduced quite exhaustive regulatory mechanisms for controlling and reducing the nitrogen deposition levels in Natura 2000 sites, deriving from local agriculture, with restrictions based on habitat-adapted calculations of the total nitrogen emission from the farm, specific demands on manure handling and requests to perform an environmental impact assessment for any proposed change, and to introduce eco-efficient (BAT, or best available) technologies (Danish Ministry of the Environment 2006 Dinesen and Bjerregaard 2011). The nitrogen control policies are therefore considered an important source of conflict with the agricultural sector.

In **France** many farmers have plots inside Natura 2000 areas and therefore all types of agricultural activities take place within Natura 2000. Initially, in France there was strong opposition from landowners and land users to the rigid, scientific, regulatory and top-down approach of designation. Following joint opposition from **the 'Group of 9', the government adopted a different approach** and opted for voluntary contractual arrangements, ignoring the appropriate assessments as stipulated by Article 6.3. of the Habitats Directive. Because of this change of policy much more support from landowners and land users was achieved, favouring the perception of and attitude towards Natura 2000 (especially with sector representatives at policymaking and lobbying level)<sup>4</sup>. However, this process resulted in a very much watered-down list of sites of smaller size<sup>4</sup>. For some

types of ecosystems (e.g. wetlands) farmers are supportive because of the additional financial support they can receive. For agricultural areas (arable land) drainage restrictions cause difficulties. For grassland, Natura 2000 is perceived as positive because of the management contracts. However, agro-environmental payments for habitat management do not always cover the costs, especially for habitats such as heathlands and bogs which require high management intensity (Yann Saugeras in ATEN 2009). Although the setting-up of Natura 2000 Steering Committees (*copil*) drafting management plans (*docob*) for each site has been a good way to bring together the stakeholders to make joint decisions about the site management, it is felt that the process is too complex and underfunded. Moreover, important knowledge gaps remain, making it difficult to assess the intended effect of certain conservation measures (Chambres d'agriculture 2010). It is also stated that properties inside Natura 2000 have lost real estate value, although owners and users do not oppose Natura 2000, because of the arrangement via contracts (Torre 2006). The strongest opposition comes mainly from landowners who are also hunters.

### **Case 2 Branding regional meat production (France)**

Extensive cattle farming has been a traditional land use in the Brière marshes for many years. The high costs and low meat production of the traditional practice combined with low meat prices on the regular market put stress on the farmers' incomes. New opportunities were therefore needed for the local farmers and other stakeholders near Brière Regional Park. The solution chosen was to brand the beef from local cattle that have been bred for centuries in the Brière marshes. The labelled beef is sold in local shops, supermarkets and school canteens.

For more information, see **Annex FR19**

In **Germany** there is general support from the farming community for nature conservation and awareness about the value of nature for society is high. However, there is strong opposition specifically to Natura 2000 as the instrument to implement nature protection. Fear is an important factor that feeds the farmers' opposition to Natura 2000, and is especially related to an expectation of additional constraints on production methods, over-regulation and limited opportunities for future development (Berger 2004). There is a higher proportion of Natura 2000 sites in less favoured areas than in intensive agricultural land. The inclusion of farm plots in Natura 2000 areas poses great restrictions on farmers. It is said that the proposed extensive farming practices are not competitive and (economically) not sustainable for wider application. Agricultural activities that put pressure on the maintenance of favourable conservation status of species and habitats are more affected than other activities. Designation as Natura 2000 has a negative effect on agricultural land value<sup>17</sup>. Specific restrictions for the dairy sector are that stocks and stables cannot expand in or near Natura 2000 sites. For arable crops there are some restrictions in terms of the choice of crop (e.g. no maize or biofuel crops in Natura 2000 sites). Outside Natura 2000 sites the presence of a number of Annex 4 species results in restrictions on agricultural practices (e.g. European hamster (*Cricetus cricetus*)).

In **the Netherlands** nature conservation itself is not regarded as a bottleneck by the agricultural community, but the way in which Natura 2000 was implemented is, due to institutionalization of the management plan process<sup>20</sup>. Very little agricultural land is included in Natura 2000 sites<sup>12</sup>. Therefore, the impacts of Natura 2000 are on the activities nearby the sites. A key impact of Natura 2000 on the agricultural sector is that, due to ammonia emissions, farmers do not receive permits to extend farms near Natura 2000 areas (with half to two-thirds of animal husbandries affected). The need for a drastic reduction in nitrogen emissions from intensive livestock breeding to achieve favourable conservation status requires important investments on the part of the farmers near Natura 2000 sites. The sector complains that in spite of an overall reduction of 50% in nitrogen emissions over the last 20 years, the farmers still face restrictions. The sector also claims that even if the agricultural nitrogen emissions were reduced to 0, deposition would still continue because of emissions from other sectors (industry and transport) (Maat and LTO 2010).

Perhaps in addition to the actual requested reductions in nitrogen emissions, what the sector - and especially the individual farmers - experiences from Natura 2000 implementation is the slow pace of decision-making and granting of permits, leaving them in a state of uncertainty about the future (LTO 2010b; LTO 2010a; Bleker 2011). It is said that investment around Natura 2000 sites suffers because the implementation process of the *Programmatiese Aanpak Stikstof* or PAS (see Box 3) is too slow<sup>12</sup>. However, before the stricter application of the law, permits were granted very easily, and too many construction and expansion permits were handed out<sup>20</sup>.

### **Case 3 Governance model at Wieden Weerribben causes local frictions between stakeholders (the Netherlands)**

The Wieden Weerribben is a lowland peat area of high natural beauty visited by over 1 million people each year. Close to 40,000 people live in its vicinity. The site is surrounded by intensively farmed land. In the 1990s it was decided to integrate the site into the National Ecological Network. This resulted in the expropriation of about 80 farmers to restore nature in the farmland. As a compensation, farmers outside the protected areas were allowed to intensify their activities. At that time, the sites also became part of the Natura 2000 network, which at the start was not a source of concern. However, before long, stakeholders started to protest against the designation of Natura 2000 and the limitation of activities surrounding the site. When the Dutch Government decided to draw up management plans for all Natura 2000 sites, Wieden Weerribben was chosen as a pilot site, in order to provide more clarity about the consequences of the Natura 2000 implementation on social and economic activities. The process was implemented and coordinated by the Province of Overijssel, which followed the guidelines provided by the Government quite closely. A working group was established with representatives of main stakeholder groups, but without individual stakeholders.

The main challenges were how to deal with nitrogen deposition, water quality and quantity. A difficult issue was the collection of objective information regarding water quality and nitrogen. The reliability of the information was the subject of many heated debates. The slow progress in the development of national guidelines on nitrogen caused severe delays in the process and led to widespread disenchantment. At the same time it was not clear whether there would be sufficient funds to implement the measures proposed in the management plan. Moreover, the working group provided very little information to the farmers and inhabitants of the area, which gave rise to quite some speculation and distrust. This case was compared to the UK Thanet Coast project, in which a study concluded that the governance choices that were made at the start of the project, especially those related to the level of stakeholder involvement, were crucial for the success of Natura 2000 implementation (Beunen and de Vries 2011).

Animal husbandry is by far the most impacted agricultural activity<sup>12</sup>. Tree growing is somewhat affected, whereas arable crops are hardly impacted. 133 out of 162 Natura 2000 sites are sensitive to nitrogen deposition (although officially designation has not been finalized yet), leading to restrictions for surrounding farmers. Hydrology is a major issue that has led to a deadlock in the Natura 2000 implementation process in five areas, and an issue that can be solved by technical measures in a further 88 sites. There is relatively strong opposition among farmers to Natura 2000. On the positive side, Natura 2000 may have created a slight competitive advantage over farmers in other EU Member States, because it accelerated the implementation of nitrogen emission reduction approaches, preparing Dutch farmers for implementing the EU National Emission Ceilings. Requirements of farmers in neighbouring countries are different, creating fewer restrictions as compared with Dutch farmers, which creates an unfair situation, especially in border areas<sup>12</sup>. Natura 2000 cannot provide any image improvement to the agricultural sector<sup>12</sup>.

From the procedural point of view the Ministry and the farming sector alike attribute the current deadlock to a lack of clarity about the interpretation of the rules and the use of the precautionary principle, and a lack of clarity about definitions and jurisprudence, causing juridical deadlock which severely slows down the process. This also feeds into the perceived lack of flexibility and room for development in and around Natura 2000 sites by a range of stakeholders, mainly the farmers around Natura 2000 sites. However, several sources report that there is a bias in public perception due to the fact that negative cases, such as a delay in permit-granting due to Natura 2000, are reported at length in the media. In contrast, although in the end most permits are granted after the necessary assessments or compensations have been made, these cases remain unreported.

**Case 4 Development of a management plan for Binnenveld Natura 2000 site still in deadlock (the Netherlands)**

Atmospheric nitrogen deposition poses a problem to reaching the environmental goals and the good conservation status of the Binnenveld. Farmland has largely been excluded from the designated Natura 2000 sites. However, the small size of the fragmented sites within a wider area of intensive agriculture means that the negative impacts of farming practices are imported due to edge effects. In spite of comprehensive stakeholder involvement in the development of the management plan and the appointment of an area manager, the process is still in deadlock. It shows that the conservation and management of small fragmented and vulnerable habitats dispersed in high intensity agricultural areas is very challenging, mainly for habitats requiring high water tables and low nutrient input.

For more information, see **Annex NL13**

In **Poland** (and other 'new' EU Member States) Natura 2000 sites include vast areas of high nature value farmland supporting a high level of biodiversity, and healthy populations of species that have already been decimated in Western Europe. Natura 2000 is considered an important limitation to investments in the agricultural sector (especially for large-scale intensive agriculture). This is especially true in the northern half of the country. In the Polish debate about Natura 2000 and agriculture, some claim that Western EU Member States have built their network in 'better conditions' (from an agricultural point of view): an existing well-developed transportation network and highly developed intensive agriculture before sites were designated. However, this is not perceived as being the main limitation by all agricultural stakeholders. For the smallholders in southern Poland (where extensive farming practices and a diverse landscape still support exceptional farmland biodiversity), many farmers see the agro-environmental payments and contracts as a good way out of their current harsh situation. But they find it difficult to access these funds due to administrative complications and the relatively high entry costs.

**4.2.2.3. Influence of the agricultural sector on the process**

All respondents make a distinction between their involvement in the designation phase and in developing and implementing management plans. A common statement is that in the designation phase the agricultural sector was not consulted or involved, whereas in the phase of developing management plans there was greater opportunity for involvement, although the procedures are not always inclusive and transparent.

At the EU level, it is reported that initially there was little attention for Natura 2000 from the agricultural sector, because the general understanding was that it would not be a problem if farming continued in the same way after Natura 2000 was established<sup>18</sup>.

It should also be noted that an important source of conflicts with farmers regarding Natura 2000 implementation is the lack of good information. Agricultural extension services often mainly focus on agricultural knowledge and lack good nature and environmental skills (Korn, Schliep, and Eppele 2005).

In **Denmark** the agricultural sector was directly involved in the designation process as well as in developing management plans, either via ministries or through public hearings. However, the agricultural sector does not take ownership of the management plans<sup>8</sup>. The agricultural sector would welcome more funds to improve communication with and information for the farmers regarding their role in the implementation of Natura 2000, as this would help to improve the ownership of the Natura 2000 implementation process by the sector.



### Case 5 Rewetting the surroundings of Dümmer Lake (Germany)

The marshlands and wet meadows that surrounded Dümmer Lake were drained in the 1950s to improve conditions for intensive agriculture. The dramatic changes in hydrology severely affected the characteristic wetland habitats and their associated species. In the 1980s conservationists lobbied for a restoration of the original nature, which would also benefit local ecotourism. There was opposition from the farmers and landowners, who faced deteriorating conditions for cattle breeding and fodder growing, and therefore a reduction in their income. The results in terms of nature conservation have been positive in the sense that habitats have been restored and characteristic species returned. In the areas directly surrounding the lake that were rewetted, two LIFE projects supported the new management practices. Farming is still allowed and indeed needed to maintain the habitats in a good condition, but management practices have been adapted: new low-impact machinery is used for hay cutting, the frequency of mowing has been reduced, and the management of non-productive plots is financially supported within an agro-environmental scheme. Intensive farming continues only outside the new rewetted buffer zone around the lake.

<http://www.naturschutzring-duemmer.de/>

For more information, see **Annex DE02**

For **France**, the respondents describe the process as outlined above. This included an initial top-down designation phase that was very much directed by national government and ecological experts, without involvement of the agricultural sector. The various landowners united and opposed the process through the Group of 9. Their actions resulted in a considerable change in policy, which allowed much more engagement of the agricultural sector in the process. However, it was the first time that farmers were not the only stakeholders defining what happened in the rural area, which was a difficult adaptation process. Site-specific steering committees (*copil*: *comités de pilotage*, see Box 1) were set up in which farmers participate. In addition to being just one among the many stakeholders, individual farmers who had previously been represented by their unions and associations were invited to take part in these *copils*.

#### Box 1 The Natura 2000 Steering Group in France: Comité de pilotage

Established at the time of the Natura 2000 designation, the Steering Committee (*copil*) is an official organ for consultation and debate about the site management. For terrestrial sites, it is the departmental prefect who establishes the *copil*. The number of appointed members is not fixed; it can vary depending on the site. The *copli* is chaired by a local elected representative or by the prefect of the department. Members include all stakeholders: representatives of public agencies and entities, local authorities, socio-professional organizations, nature conservation NGOs, land-users' organizations, property owners, etc.

The *copli* leads the development of the management plan (*document d'objectifs* or *docob*) of a Natura 2000 site. It then organizes the site management and monitoring of the implementation of actions decided in the *docob*. As the *copil* lacks any legal power, a local authority is appointed to ensure the administrative, technical and financial tasks related to the development of the *docob*. The local authority may carry out these tasks in-house or hire an agency or third party known as 'operator'.

In **Germany** the responsibility for nature policy, including Natura 2000, has devolved to the regional authorities of the Länder. Therefore, the development of management plans for Natura 2000 in agricultural areas differs from state to state (Bouwma *et al.* 2008). In some German *Bundesländer*, the Natura 2000 sites largely coincided with the existing protected areas. Therefore, there was little need for farmers to adjust to a new situation, except for the fact that the exception clause was rejected by the Commission. The agricultural sector was consulted during the designation process. Farmers' associations supplied their members with templates for dissenting statements during the revision of proposed sites, which resulted in an overload of submissions. Although the drafting of management plans is mandatory, landowners are not bound to implement them. Stakeholders are invited to round tables and can get involved through management contracts. However, only a minority of landowners take part in the round tables. NABU a conservation NGO is involved in the development and implementation of management plans<sup>21</sup>. In

Germany in 2005 there were concerns on the part of the farmers that the financial implications of the CAP reform (cutting the budget of pillar 2) would increase competition and thus conflict between the farmers and nature conservationists.

In **the Netherlands** agricultural organizations felt insufficiently consulted in the designation process<sup>12</sup>. The Interprovincial Agency (IPO) and the State Secretary said that different stakeholders are still insufficiently represented in the Natura 2000 Steering Committees (IPO 2010; Bleker 2011).

In **Poland** the agricultural sector is involved in the consultation on site proposals and in preparing management plans<sup>16</sup>. The actual management of Natura 2000 in agricultural land is facilitated via agro-environmental schemes. However, these opportunities have not been used as expected. Package 5: 'Conservation of threatened bird species and natural habitats in Natura 2000' is not popular among farmers. This is related to, among others, complicated procedures, high 'entry' costs (barrier for small farms), and the insufficient number of experts licensed to prepare the documentation needed. According to data from 2011, only 2000 farmers (of > 153,000 expected beneficiaries) made use of the package. This is especially true in the south, where land ownership is very fragmented and plot size very small. Entry costs to CAP payments for individual farmers are very high.

### **4.2.3. Factors causing the challenges**

The impacts, problems and challenges described above are caused by a number of factors. The respondents, being active at national or EU level, reported almost exclusively factors that relate to the process of Natura 2000 designation and implementation, not to factors relating to geography, ecology or other substantial issues. A common factor in all responses relates to the poor communication at the start of the Natura 2000 designation process and the lack of involvement of the agricultural sector.

The EC DG Environment notes that at the EU level widespread misunderstanding regarding the possible impacts of Natura 2000 on sectoral activities lies at the basis of many conflicts. This also includes the lack of recognition of the essential role of the agricultural sector to the maintenance and restoration of biodiversity. At the EU level the lack of a comprehensive farming system approach integrated with nature conservation objectives was said to be a key reason for some of the problems<sup>18</sup>. In general terms, modern regulations ignore the dynamics of (traditional) social interaction to solve problems in the rural world. Also, the seven-year cycle of EU agricultural policy does not provide sufficient continuity and security for farmers. Conflicts with the farming sector are expected to increase with the greening of the CAP, as it does not favour ownership of the problem by farmers<sup>18</sup>.

In **Denmark** the farmers' lack of information and understanding of how to manage Natura 2000 sites is seen as an important factor making the implementation more difficult.

In **France** the initial approach of top-down regulation caused a lot of protest from landowners and land users (united in the previously mentioned Group of 9). The policy switch towards management contracts (ignoring Article 6 of the Habitats Directive) provided a breakthrough and a lot of cooperation. The recent EC appeal to still implement Article 6 is causing renewed opposition from landowners. The initial communication about Natura 2000 was poor, and the French Government adopted a rigid, scientific, regulatory-based approach, which was at the basis of many of the challenges listed above. The administrative burden caused by overlapping and sometimes conflicting regulations for the management of Natura 2000 sites is seen as a barrier to successful management: 1. local regulations; 2. Natura 2000 contracts and charters; and 3. upcoming EIA Act (integrating Article 6). The level of agro-environmental payments does not always reflect the investment needed to adapt a management practice to achieve good environmental status. The complex, time-consuming and expensive process of developing a *docob* (*document d'objectifs*) is seen as a bottleneck by the *Chambres d'agriculture*. The process is always underfunded. Finally,



the *Chambres d'agriculture* also claim that there is a knowledge gap between management practices and their effect on biodiversity, which makes it difficult for the farmers to reach the conservation objectives (Chambres d'agriculture 2010).

### **Case 6 From meadow to plate (France)**

Forest succession in Quercy regional Natural Park threatened important habitats such as dry grassland and heaths. Under a Natura 2000 contract trees and shrubs were removed from the former grasslands acquired by the municipality. However, these needed active management in order to prevent the reestablishment of shrubs and forest. At the same time a local sheep farmer was looking for grazing land for her flock of sheep that were part of a concept hostel for tourists and pilgrims. An agreement was made between the municipality and the sheep farmer, and a grazing management scheme was established. Sheep grazing prevents the habitat from turning into forest. In addition, meat is produced for the local restaurant.

For more information, see **Annex FR02**

In **Germany** a lack of communication at the start was reported, followed by the sector feeling that it was given wrong information<sup>17</sup>. A causal factor on the policy side is the New Nature Conservation Act (1999) that transposed the Birds and Habitats Directives to the German level and which imposed legal obligations on farmers. In connection with these obligations, which were associated with extra investment costs or reduced income, financial compensation is insufficient. For example, the agricultural sector in North Rhine-Westphalia wonders if the financial measures for agro-environmental schemes would be sufficiently interesting for farmers to continue participating in them, especially in view of the ending of the EU set-aside policy, rising food prices and the increasing demand for biofuels (Bouwma *et al.* 2008). The legalistic approach of designating Natura 2000 is seen as a barrier, with no cooperative voluntary participatory approach adopted. The agricultural sector was kept out of the designation discussion, some felt that this was under the false premise that nothing would change for farmers<sup>17</sup>. When they were involved in discussions on management plans, it was too late as farmers were faced with limitations on their land. Some private sectors are not in favour of regulatory measures, and this blocks their acceptance<sup>21</sup>. Another respondent also noted the initial top-down approach and poor communication in the first phase, with public participation now being high on the agenda of the development of management plans. A further challenge noted is the lack of long-term funding for contractual management, or a single Natura 2000 implementation funding stream<sup>21</sup>. Indeed, the German Farmers Union claims that a reason for conflict lies in the competition between farmers and conservationists for EU EAFRD funds (DBV 2005).

### **Case 7 Nature conservation advisory service for farmers (Germany)**

In a process lasting hundreds of years, natural landscapes have been replaced by cultural ones. Nowadays modern farming techniques are blamed for the decrease in species numbers and the decay of cultural landscapes in Europe. The conversion from modern to organic farming makes a contribution to nature conservation. But will it be possible to combine the quantitative growth of organic farming with the aim of preserving and even increasing biodiversity? An advisory service was implemented in Germany to provide advice and education to farmers. This service should help organic farming to play a leading role in the move towards a multifunctional and environmentally friendly type of agriculture. A lot of measures have been implemented successfully on farms. The farmers' interest in an advisory service shows their goodwill towards integrating nature conservation objectives into their farming practices.

For more information, see **Annex DE25**

In **the Netherlands** the most important current bottleneck is dealing with nitrogen deposition. Managers and other stakeholders are busy with the development of the PAS (see Box 3). Delays with the introduction of the PAS and uncertainty about the final designation of some areas also create irritation among the stakeholders. It was reported that the lack of clarity regarding permits for animal husbandry has created a negative perception and attitude among farmers<sup>12</sup>. The laconic

attitude of public authorities towards concerns of the animal farming sector increased the negative perception. In certain instances, the combination of a lack of technical measures for area protection with a lack of will to change conservation objectives is a cause of conflicts. Initially, the juridical knowledge of competent authorities was quite low, resulting in many requests to the Council of State being rejected.

### **Box 2 Dispelling the myth that Natura 2000 blocks development**

A study (Backes *et al.* 2007) concluded that the application of Article 6 of the Habitats Directive in the Netherlands rarely resulted in the rejection of a development planning request. Projects were often delayed, but in most cases only on formal grounds: because the legally required Appropriate Assessment had not been carried out, or had been carried out only partly or poorly. With the exception of one case reviewed by the authors, all project development requests had been given a permit in the end. The authors did find it difficult to access the data required for their analysis and recommended that the outcomes of planning requests involving an Appropriate Assessment should be centrally registered, in order to allow better future assessments of the effect of Natura 2000 on development.

Finally, lack of involvement of the farming community in developing the Programmatic Approach to Nitrogen (PAS) as a possible solution to the ammonia deadlock may cause lack of support from farmers. An important factor that was raised is that perception may be partly based on incorrect and biased information<sup>20</sup>. A few negative cases can dominate the debate in the media, resulting in a negative perception of the entire process (Beunen, Duineveld, and Van Assche 2011). In the Netherlands, the difficult relationship between Natura 2000 implementation and the agricultural sector was partly a result of a very optimistic start of the process, when it was thought that nothing would change. However, the first years were characterized by numerous juridical cases where development permits were increasingly being rejected by the Council of State. Because of a limited understanding of the Natura 2000 jurisdiction, the permit process was greatly slowed down, which caused irritation. This resulted in a general and increasingly negative perception of nature conservation. Increasingly, other sectors and stakeholders, including the nature conservation sector itself, regarded the Natura implementation process as painful and difficult.

### **Case 8 Water management of the Naardermeer (the Netherlands)**

The Naardermeer is a key link in the establishment of the National Ecological Network, especially for the 'wet axis' which connects important wetland areas. Conservation of these wetland habitats and species depends on good management of water levels and water quality. The most comprehensive approach to achieve this is through area-wide management and buying farmland to convert it to nature. However, persuading landowners and farmers to sell their land in order to create a continuous area of natural water management is a great challenge, even when good compensation (financial or alternative land in the vicinity) is available. Some farmers refuse to sell their land and to relocate, even though financially the land swap is often a bargain for them. In addition, water management in the nature area has to comply with the requirements of the Water Framework Directive. A comprehensive water management plan coordinated by the water board for the area has therefore been developed with the involvement of all sectors and stakeholders concerned. Instead of a continuous buffer zone, a consensus option has been chosen in which farmland areas have low water levels and the conservation areas have higher, flexible water levels.

For more information, see **Annex NL07**

Nature-friendly farming is based on the principle of voluntary participation. However, there is only very limited interest for participation in agro-environmental schemes, and this interest is decreasing.

As a consequence, at present, voluntary agro-environmental schemes are not benefiting Natura 2000 (Bredenoord *et al.* 2011).

In **Poland** irreconcilable interests and misunderstandings were the key underlying factor causing most of the conflicts<sup>16</sup>. For Polish farmers Natura 2000 means forced continuation of extensive

farming, barriers to investment in agricultural production, barriers to development of infrastructure, or simply a barrier to intensification of agriculture and a barrier to the transformation of traditional farming into a more productive agricultural system. Polish farmers say they **'don't want to become the Skansen museum of Europe'**. Even if the environment and biodiversity are well preserved in Poland, the Natura 2000 issues and other new regulations need to be better explained and communicated. It is therefore also necessary to continue analysing the economic benefits and challenges of the Habitats and Birds Directives on rural activities, showing good examples through case studies to give incentive for SME (small and medium enterprises) to invest and develop local activities in the region (Eurosite, EUROPARC, and ELO 2007).

#### **Case 9 The conservation of agricultural biodiversity in Wigry National Park (Poland)**

Within the borders of the park around Wigry Lake there are several extensively managed farms. The regional conditions for agricultural production are difficult due to the climate, the poor quality of the soils and the topography. To improve the circumstances for farmers while supporting nature conservation, a project was set up that involved increasing the population of local breeds, conservation of the traditional regional apple orchards and promotion of local agricultural products through branding, while supporting nature conservation.

For more information, see **Annex PL30**

### **4.2.4. Opportunities and solutions**

The respondents list a number of concrete solutions and opportunities that may alleviate or take away some of the conflicts mentioned above. However, **none of the respondents thinks that a 'one size fits all' solution exists to overcome the current** barriers between the agricultural sector and Natura 2000.

#### **Case 10 Results-based agro-environmental payments increase process ownership (France)**

The species-rich siliceous grassland meadows of the Morvan depend on nature-friendly farming practices for their management. Earlier agro-environment contracts with the farmers were based on management practices and did not yield the expected results in terms of increased nature value, and also failed to enthuse the farmers. The relations between the farmers and the park managers suffered as a result. The problem was solved by applying result-oriented agro-environmental payments, as applied in Germany. Payments were no longer linked to prescribed management practices but to natural measurable results. From a list of 20 characteristic annual plant species for the habitat type, four have to be present on the land for it to be eligible for AES payments. The more results-oriented approach leaves the farmers more in control of the management of their meadows. It has also resulted in more exchange and much improved personal contact between the farmers and the park managers. The ecological results are also much better. Another factor that strongly increased the support from the farmers was their participation in a half-day training workshop on the management of siliceous meadows.

For more information, see **Annex FR05**

At EU level, EC DG Environment thinks that a key solution is in providing better information based on facts. It also sees a need for more practical involvement of the sector in implementation of Natura 2000, for which it would like to agree partnerships. The current guidelines under development should help improve communication with the sectors. The Natura 2000 Partner Network that the EC has set up provides a good platform for awarding and labelling Natura 2000 partners. The recently started New Biogeographic Process will promote better exchange of knowledge, and enhanced acceptance and support for Natura 2000. Finally, EC DG Environment sees a continued need to integrate between various planning initiatives such as the Water Framework Directive and sustainable forestry management plans.

Copa-Cogeca considers that Natura 2000 provides very few opportunities for agriculture<sup>18</sup>. Near urban or tourist regions Natura 2000 can be an asset to provide branding and marketing opportunities, but this should not be expected in remote or less well-known regions. The same holds true for local beef production in Natura 2000 areas and the potential for agrotourism. Regarding the role of communication in solving conflicts, it is essential that this is done by local, trusted persons. Also, the timing of communication should be adjusted to seasonal activities (e.g. no communication during harvest). Labour-intensive, traditional communication channels and face-to-face communication are preferred over cheaper IT-based solutions. As for broader communication and awareness raising, farmland species (such as the Skylark, Swallow and Partridge) can act as communication tools, ambassadors for nature-friendly farming. Win-win solutions for land use (multifunctional land use) are regarded as suboptimal<sup>18</sup>. Finally, technological solutions (such as biogas, dynamic drainage, nitrogen filters, etc.) are seen as a good option for combining intensive farming with Natura 2000 objectives, although the perception of the farmers is that conservationists do not favour such solutions<sup>18</sup>.

### **Case 11 Skjern River Delta: A nature restoration project with high socio-economic returns (Denmark)**

During the 20th century the lower stretches of the Skjern River (Denmark's largest river by catchment size) were drained and transformed into agricultural land for the production of wheat. The original wetlands and their associated fauna and flora disappeared. In the 1980s it was decided to restore the natural values of the wetlands. The initial opposition from the farmers had to be dealt with carefully and alternative sources of income found for them. An interest group consisting of representatives of all stakeholders was set up in 1998 to discuss the development of the area given the new conditions. In 2001 this group drew up a proposal for access and leisure activities in the Skjern River Delta, bearing wildlife in mind. To keep in touch with local people and to have a platform for information, discussion and communication, in 2001 the Forest and Nature Agency set up a new interest group for nature management, leisure activities, recreational facilities and information. Problems were solved through good communication and information, and public participation in the decision-making process. Alternative sources of income for the local population were identified: (eco)tourism, and cattle breeding were the main alternatives.

For more information, see **Annex DK02**

The agricultural sector in **Denmark** considers turning from traditional (intensive) farming to ecological farming as a way out of the deadlock near nature areas.

### **Case 12 Local stakeholders cooperate to save a butterfly (Denmark)**

The Marsh fritillary (a butterfly) lived in a restricted number of isolated Natura 2000 sites in North Jutland (Denmark), and its conservation status was worrying. Together with a wide range of stakeholders, including farmers, the ecological connectivity between the sites was improved and habitat was restored. An awareness-raising campaign resulted in more support for the project objectives and stakeholders are now actively participating in the activities by adapting their grazing management and using the success of the project as a marketing resource for local products.

For more information, see **Annex DK06**

The Agreement on Green Growth (2009) explicitly promotes organic farming sector as one of the solutions to limit the negative impacts of agriculture on the environment (Danish Forest and Nature Agency, Agency Spatial and Environmental Planning, and National Environmental Research Institute 2009; Kingdom of Denmark 2009). Other solutions may be found in agreeing management principles together with forestry and agricultural NGOs. There is a national programme of information and communication regarding the management of agricultural Natura 2000 sites, but the municipalities are insufficiently equipped to implement this communication effort at the local level.

The main opportunity listed for **France** is the continuation of management contracts to diversify **the farmers' income**. Whether this will remain a solution in the future will depend on the effect of implementing Article 6 of the Habitats Directive. Several national policy actions have been implemented in order to decrease the impacts of agricultural practices on biodiversity, including the Agriculture Action Plan of the National Strategy on Biodiversity which focuses on communication and awareness raising, mapping and monitoring of high nature value farmland, financial support through agro-environmental schemes, reduction of pesticide use, and environmental certification (République française 2009). The Chambers of Agriculture have trained 1,200 agricultural extension workers to support farmers to combine agricultural production with the preservation of the environment (Chambres d'agriculture 2010). Specifically related to Natura 2000, it seems that the inclusive participative approach through *copils* that was introduced in 1997 has been well received, as conflicts are no longer resolved through marches and demonstrations, as is the case with other environmental issues, but rather through communication and consultation (Torre 2006). The active participation of farmers in the *copils* has a clear, positive influence on the number of farmers participating in voluntary management contracts (Chambres d'agriculture 2010).

### **Case 13 Using conservation to develop new farming outlets in the Rhön (Germany)**

Rhön sheep are a local breed that used to graze the species-rich meadows of the Rhön and keep the landscape open. Changes in farming practices led to the slow disappearance of the flocks of sheep, and shrubs started to encroach upon the meadows. A comprehensive approach to the revitalization of the Rhön sheep was developed in the context of a LIFE project in close cooperation between the authorities of the Rhön Biosphere Reserve (also a Natura 2000 site) and the local farmers. This included restoration of the abandoned meadows, informal restructuring of the (historically) fragmented and dispersed land distribution, the reintroduction of the local sheep, and the creation of a branding and marketing outlet for the sheep meat. Farmers and shepherds reintroduced the sheep, and the local retailers and restaurants sold the meat and used it in traditional dishes. The sheep is used to brand the region and vice versa.

For more information, see **Annex DE05**

In **Germany** it was acknowledged that there are conflicts and tensions between agriculture and conservation, but it was stressed that farmers are custodians of the landscape and that there are good examples of cooperation (DBV 2008). However, farmers should get compensation for imposed economically unsustainable farming as a consequence of Natura 2000. The farming sector feels that nature conservation should be considered in the wider picture of global food security and global change. In this respect, it supports the FAO study towards 'sustainable intensification'<sup>17</sup>. It is recognized that farmers do take initiatives for nature, but not necessarily in the context of Natura 2000. With regard to set-aside, it is preferred to apply this at the field level rather than in separate patches in the field. Solutions can also be offered by better agricultural practices/technology that reduce pressures on the environment.

It is part of the Federal Government's biodiversity policies to encourage organic farming in combination with other environmentally friendly agricultural practices, and the proportion of organically farmed land is steadily increasing (FRG 2010). Natura 2000 may create branding and marketing opportunities for regional products, but only as an isolated solution for single farms or small regions, not for the entire sector. The social aspect in Natura 2000 implementation is essential, but also implemented differently across the *Länder*. For example, in Schleswig-Holstein, the main stakeholders (landowners and land users) are structurally involved in the setting-up and implementation of Natura 2000 management plans (DBV 2008). Also, training agricultural extension services in environmental issues, including Natura 2000 regulations and opportunities, is reported as an important activity to raise awareness and increase knowledge among German farmers (Korn, Schliep, and Eppele 2005). An additional solution mentioned by NABU (the German nature and biodiversity conservation union) is the setting-up of a network of volunteer Natura 2000 watchers (including farmers) who receive training and capacity-building support<sup>21</sup>. A success



factor for good management plans is the human factor, the personal chemistry between stakeholders who jointly focus on a solution instead of obstacles.

#### **Case 14 Raising awareness and sensibility (Germany)**

Schleswig-Holstein is a prime tourist destination for outdoor nature experience and outdoor sports activities, especially sailing and canoeing. These activities ensure a lot of revenue but have a potential impact on the Natura 2000 sites they use. To improve active participation in managing the nature areas in a sustainable way, round tables were organized to which local residents and land users, farmers and the tourism sector were invited to jointly develop a management plan.

For more information, see **Annex DE01**

In **the Netherlands** providing better information regarding Natura 2000 and its benefits (e.g. NGO programme AVE Natura, of the *Provinciale Milieufederaties*) is an essential step to regain the trust of the stakeholders (Oltmer, Hees, and Rougoor 2010). The Minister made a plea for more cooperation and mutual confidence between stakeholders: simplification of legal and juridical procedures, decentralization and an understandable translation of European Directives (Bleker 2011).

Much of the attention in finding a solution for the nature conservation and sectoral activities focuses on reducing nitrogen deposition by three means (Bouwma, Van Apeldoorn, and Kamphorst 2010):

- re-allocation of farms, specific areas have been designated where farms can be reallocated in order to reduce nitrogen deposition on nature conservation areas located nearby;
- reduction of nitrogen emission from farms by different farming techniques (air filters, manure injectors, etc.);
- restriction on the increase of livestock by a system of licensing. In practice this leads to restriction on the development of larger farms.

In the context of Natura 2000 this discussion has intensified. In the framework of the development of a management plan for the Natura 2000 site De Peel, the State Forest Service, the Province and farmers reached an agreement on achieving acceptable deposition levels from the point of view of nature conservation as well as farming development.

The Programmatic Approach to Nitrogen (PAS) is seen as a new tool for assessing nitrogen emissions that may provide a solution for farmers<sup>12</sup>. Through the PAS one can calculate trends in nitrogen deposition and allow limited development of individual farms as long as the net deposition for all farms continues to decrease towards a sufficient level (Arnouts and Kistenkas 2011). It is important to note that emissions in this framework are calculated in a scientifically objective way (Maat and LTO 2010). **It is essential to regain farmers' trust by taking time for the process**, engaging farmers in the development and implementation of management plans, and a less dominant role for the ecological approach.

However, Bosschap thinks that it would be better to coordinate the development of management plans at national level instead of provincial level with stakeholders<sup>20</sup>. In addition, **management plans should only be made for 'sense of urgency' sites, as many sites already have a management plan of their own**. There is room for improvement with respect to coordination and communication on the part of the organizations representing each sector. Codes of conduct can help landowners to manage their land without having to understand the complexity of existing legislation. There is a need for pragmatism and political will to lower the conservation ambition<sup>12</sup>. Another solution can be found in more cooperation in nature management, with diversification of farming activities and participation of farmers in nature management activities. Solutions should do justice to both nature and the agricultural sector (how do we make Natura 2000 implementation feasible and affordable?). In this respect, a plea was made for providing tax incentives related to water board

taxes for farmers who implement hydrologic measures in favour of Natura 2000 objectives<sup>20</sup>. A similar proposal relates to increasing tourist taxes to include a share for covering Natura 2000 management costs.

**Box 3 Programmatische Aanpak Stikstof (PAS) Programmatic Approach to Nitrogen (the Netherlands)**

In 133 of the 166 Natura 2000 sites in the Netherlands, the conservation status of habitats and species was threatened by an excessive input of nitrogen, emitted by agriculture, transport and industry. As a result the Council of State increasingly refused to grant permits for new activities that could lead to additional nitrogen emissions near the Natura 2000 sites. In order to enable the granting of new sectoral activity development permits, in 2009 the Government decided to develop a Programmatic Approach to Nitrogen. The main objectives of this approach were to reduce the deposition of nitrogen (regulation of emissions) and to restore nature values by adapted management (e.g. sod cutting). If successful, this strategy would allow the development of new sectoral activities in the long term. The idea is to create room for sectoral activities by reducing the total net input of nitrogen in a site-based approach. Once the room for development has been created, the precise locations of increased emissions are calculated based on a scientific GIS-based model, AERIUS, which calculates the room for additional emissions which are taken into account when assessing development requests.

<http://pas.natura2000.nl>

One respondent wants a sector-wide approach instead of a point-based approach with regard to nitrogen emissions<sup>12</sup>. However, according to another respondent, the conservation and water sectors are in favour of adopting a point-based approach for other sectors too<sup>20</sup>.

Good information is needed about alternatives, options and possible technical measures to avert the pressures of agriculture on the Natura 2000 site. Measures to combat desiccation by agriculture have been found in the dynamic water-level management where farmers can determine the (ground)water levels according to their needs instead of applying a permanent low **water level through drainage tubes. At a procedural level, a 'turnaround' system was introduced at** the request of certain stakeholders, notably the employers (VNO NCW), to allow the designation phase to follow discussions about the management. This sometimes increased the support for the process.

Boschap, the Dutch association of forest and nature owners, set up a number of committees that developed practical codes of conduct for landowners to manage their lands, making management decisions easier<sup>20</sup>.

In **Poland** in order to preserve farmland biodiversity, one should concentrate on the small holdings under traditional extensive management. These farms are mainly concentrated in the southern part of the country. For many farmers affected by Natura 2000, it is not the limitations imposed by the national enforcement of Natura 2000 that pose the biggest problems, but the difficulty for them to gain access to the agro-environmental payments, due to administrative complications. A solution that is being developed is the joint submission of agro-environmental payment requests by several smallholders. In addition, solutions proposed relate to building public support through information campaigns, events and advertising, working with students, and adopting a participatory approach in management planning<sup>16</sup>. In individual rural areas, solutions can also be found in selling local agricultural products and offering agrotourism opportunities. Polish practitioners conclude that the bottom-up approach, combined with an active presence in the field, ensuring good communication and understanding of environmental laws (European or national), e.g. by adapted guidelines, is vital to the success of Natura 2000 implementation (Eurosite, EUROPARC, and ELO 2007). Finally, one solution could be to increase and simplify payments for Natura 2000-oriented agro-environmental schemes. An effective proposal which is presently being studied by the Polish Parliament would be financial support from the State budget for rural municipalities whose development is hampered because their territory (partly) overlaps Natura 2000 areas.



**Case 15 Sheep-grazing to maintain an open landscape (Poland)**

The Popradzki Landscape Park with its typical open landscapes was threatened by overgrowth and shrub encroachment. This was caused by land abandonment as a result of the limited economically viable agricultural opportunities for farmers. Bringing back an indigenous sheep species and sheep farming into the region is a critically important measure to maintain the open landscapes of the region, and also a good business opportunity.

For more information, see **Annex PL10**

**4.3. Forestry****4.3.1. Introduction**

Forests cover approximately 50% of the terrestrial Natura 2000 network and, consequently, ensuring appropriate management in Natura 2000 sites covered by forests is a key element to be addressed in order to achieve the objectives of the nature directives (European Commission, own calculations based on Natura 2000 database of January 2011 and CORINE 2000 (European Commission DG, 2011)). Forest cover is increasing in most European countries, as a result of natural forest (re)generation and afforestation (République française 2009; FRG 2010).

*Table 2 Basic Member State level figures about Natura 2000 and forestry*

	Denmark	France	Germany	Netherlands	Poland
<b>Total forest area (km<sup>2</sup>)<sup>1</sup></b>	6344	161081	107080	3708	103787
<b>Forest cover (%)<sup>2</sup></b>	14.7	23.9	29.9	8.9	33.2
<b>% Forest under Natura 2000<sup>3</sup></b>	15.9	17.9	24.6	38.2	35.1
<b>% Privately owned forest</b>			67 <sup>4</sup>		18
<b>% Publicly owned forest</b>			33 <sup>4</sup>		82

Sources: 1. Wikipedia ; 2. (Eurostat 2009) ; 3. (European Commission, DG Agriculture and Rural Development 2010); 4. (FRG 2010).

It seems to be a general challenge to make national forest (management) plans and/or Forest Acts comply with Natura 2000 management requirements. Issues are taken up in various ways in the different countries. In comparison with agriculture, issues are different regarding the implementation of Natura 2000. The forest sector especially underlines that forestry is working with nature. With regard to Natura 2000 implementation this constitutes a benefit or opportunity at the same time as it constitutes a barrier. **It can be seen as a benefit, because the foresters' general attitude towards nature conservation is positive.** The challenge is that foresters observe that forestry is an activity that has been going on for generations, and that it supports the biodiversity that was present in the forests at the time of the designation. Therefore, they see little use in changing their management practices. On the other hand, as in agriculture, many forestry practices are intensifying (Watt *et al.*). In Germany it is a federal policy of the Ministry of Agriculture and Forestry to make forestry more productive. The drivers behind this policy are increased demand for biomass (for the production of biofuels) and timber for the export market<sup>21</sup>.

## **4.3.2. Roles and interaction between the forestry sector and Natura 2000 implementation**

### **4.3.2.1. Impacts of the forestry sector on Natura 2000**

Forestry and forest owners play a central role in managing Natura 2000 areas because of the extent of forest that is included in designated areas. At EU level, over half of the designated sites relate to forests<sup>7</sup>. In **Germany** 56% of Natura 2000 sites are forest. Some key impacts listed include: harvesting/thinning, among others to meet the growing demand for fuel wood; forest road and skidding track construction<sup>15</sup>. Also, forestry is intensifying, including through the increased demand for biomass for second generation biofuels<sup>21</sup>. For **France** the key impacts reported are the intensification of production, use of private woods, as well as being unaware of the appropriate assessments as part of Article 6 of the Habitats Directive<sup>4</sup>. Similarly for Poland, the key impacts are the intensification of production, and use of private woods.

### **4.3.2.2. Impacts of Natura 2000 on the forestry sector**

Some specific impacts at EU level relate to restrictions on activities, additional costs, shifting management objectives, limitation on development, and increased administrative burden<sup>7</sup>.

#### **Case 16 Grouse management in the Black Forest (Germany)**

Capercaillie and Hazelhen have been declining across large parts of their Central European range. Changing forest management and increasing disturbance by outdoor sports and tourism are important factors that have led to their decrease. The Black Forest population in south-western Germany is isolated and in need of better conservation to ensure its survival. Some of the hotspots of the Capercaillie range coincide with popular destinations for hikers. A study conducted to assess the pressures on this iconic bird resulted in recommendations for reducing disturbance and improving habitat. Apart from the disturbance, the study found that forestry operations resulting in the disappearance of open heath habitat, plantations with Spruce and the disappearance of blueberries in the forest negatively affected the grouse population. A plan was implemented that channelled the hikers away from the most sensitive areas by redesigning the footpaths through the forest and adapted management of the forest, increasing adequate feeding places for the grouse. Forest management focused on creating more semi-open spaces, and reducing Spruce plantation.

For more information, see **Annex DE09**

In comparison with agriculture, far fewer impacts of Natura 2000 are reported for the forestry sector. In **France** the transposition of the Birds and Habitats Directives into French law led to increased complexity of regulation<sup>1</sup>. There is also mention of extra burden on forestry by adding Natura 2000 impact assessments on top of environmental impact assessments. This means more costs, more complexity and limitations on forestry activities. A major bottleneck in this respect is that the management restrictions imposed under Natura 2000 are not eligible for most compensation mechanisms (ATEN 2007). A positive side effect of Natura 2000 that was reported was the abandoning of the plan for the construction of a motorway and railroad in the Sologne in Central France, which would have taken much privately owned land. On the other hand, forest and land value is reported to have decreased after Natura 2000 designation<sup>1</sup>. It is anticipated also in the forestry sector that the enforcement of Habitats Directive Article 6 will have a significant effect on the support for Natura 2000, notably by user groups such as tourism and recreation enterprises and hunters (de Ponchalón 2008).

For **Germany** Natura 2000 impacts on forestry were said to be very limited (Bundesamt für Naturschutz 2008)<sup>15</sup>. In most cases forest management that was in place before site designation can be carried on with few or no changes. Financial resources for additional investments or administrative burden are limited.

In **the Netherlands** forest owners and managers do not understand the double standards that are applied to the forest sector and the agricultural sector<sup>20</sup>. Limitations on forestry activities are stricter than those in adjacent agricultural fields, although both are used as a continuous habitat by several listed species.

Only few impacts are noted for **Poland**, with a possible clash between Natura 2000 objectives and forest production, and the issue of Natura 2000 being targeted at a certain proportion of unmanaged forest rich in dead wood<sup>16</sup>. There is a clear distinction to be made between the State-owned forest agencies, which simply have to implement the measures resulting from Natura 2000 legislation, and the private forest owners, who have to be encouraged to apply them. Public forest managers, knowing that they have no choice, tend to adopt a more positive approach towards the opportunities of Natura 2000, while many private owners are still quite strongly opposed. An important issue is that there are no environmental payments available for forest areas in Natura 2000 sites.

#### **Case 17 Conflict between forestry and conservation in Bialowieza National Park (Poland)**

The primeval lowland deciduous forest of Bialowieza is the last wilderness in Europe. It is mainly managed by the State Forest Agency, which exploits it commercially. In the 1990s two parallel management processes were started with the stakeholders. One resulted in a commercially oriented plan, the other in a conservation-oriented plan. As opinions differed on how to deal with forestry and nature conservation in the park, poor communication between the stakeholders and managers of the two parallel processes did not help in finding mutually acceptable solutions for all involved. The conflict is unresolved, with the main stakeholders still holding firm to their positions.

For more information, see **Annex PL08**

#### **4.3.2.3. Influence of the forestry sector on the Natura 2000 implementation process**

In many Member States forest owners were not informed of or involved in the designation process<sup>7</sup>. Forest owners experienced losing the right to manage their forests as they wish after their designation as Natura 2000. New obligations are being placed upon them, often without consultation, information provision or legal options for objections, resulting in insecurity with respect to their property rights as well as lack of compensation. Despite the impact on forestry, Natura 2000 has been integrated into the nature conservation activities of the sector.

In **France** 10% of the terrestrial Natura 2000 network consists of forests. The process of Natura 2000 designation in France, the subsequent protest by landowners, and the ensuing policy change are **described above under 'Agriculture'** (section 4.2). At first, the forest sector (as an active member of the Group of 9) was very critical of the (designation) process. This was mainly because of poor communication and involvement. They thought that stakeholders, and especially owners, should be included in all phases of Natura 2000 implementation, not only management. Forest management is considered to be in accordance with Natura 2000 management requirements if the forest management plan has been approved by the regional authorities and the owners have signed a Natura 2000 contract or Charter (Alphandéry and Fortier 2007). After the initial opposition in 1996, forest owners organizations have embraced the Natura 2000 implementation process and actively support their members' participation in the various measures and activities by providing information and extension (FNCOFOR 2010). However, the approach of agreeing management contracts is not widely adopted by the forestry sector, because they are exclusively focused on conservation and not on sustainable forestry<sup>1</sup>. Therefore, only a few contracts have been signed with private owners. Also, signing the voluntary Natura 2000 Charters (a condition to qualify for property tax exemption) was not embraced by private forest owners. The most popular measure is the sustainable management certificate. The **Centre National de la Propriété Forestière** (CNPF) participates in the Natura 2000 process through its regional councils (CRPF) in site-specific steering committees when private foresters are concerned (about 75% of France's forests)<sup>1</sup>. Public

forests are managed by the ONF (*Office National des Forêts*, National Forest Agency). Through the *copil* the forestry sector contributes to developing management plans (*docob: documents d'objectifs*). The private forest owners generally support the conservation of nature and biodiversity, but they are not in favour of Natura 2000 because of the red tape, regulations and restrictions that go with it.

In **Germany** forestry policy (and the integration of Natura 2000) is developed at *Länder* level (European Commission 2003). According to the German Government, forestry in Germany is sustainable. This is ensured by the legal requirements, especially the forestry acts at federal and *Länder* level, and a forestry tradition going back more than 200 years (FRG 2010). In Germany the forest administration was consulted in tranche II of pSCI (proposed Sites of Community Interest) notification to review and amend an initial list of proposed sites<sup>15</sup>. Private forest owners were also consulted in tranche III. Forest owners associations supplied their members with templates for dissenting statements during tranche II and III, resulting in too many submissions for the administration to handle.

### **Case 18 Finding economically viable alternatives in Hainich Forest (Germany)**

The Hainich forest covers 20,000 ha of continuous forest which boasts the largest coherent deciduous wood in Thuringia. Two recently abandoned Red Army military training areas have become a showcase for various stages of ecological succession, ranging from bare ground to close deciduous forest. Because the area lay near the borders of the former GDR, it remained relatively undisturbed, but since the fall of the Berlin Wall it has been under constant threat from infrastructure development plans. As in many other parts of East Germany, local unemployment is very high, so that decision-makers are putting all their efforts into working out concepts for the economic revival of the district. Because of the different aims and interests of landowners, environmental NGOs and other interest groups, the creation of the protected area was subject to deep conflicts. Although the National Park was established successfully, conflicts between protection and use postponed the implementation stage. The principal task of the LIFE project for the forest was to draw up a management plan which, besides the usual planning aspects, also grappled with social and economic issues, namely, how the planned national park could contribute to the local economy. To gain the support of the local inhabitants, the management planning work was accompanied during the project by intensive public relations work, in particular through exchanges with mayors and other representatives of communities located in existing national parks elsewhere.

For more information, see **Annex DE15**

Although it is mandatory to draft management plans, landowners are not bound to implement them. But forest owners can apply for additional compensation for conservation management practices in Natura 2000 sites. The forest administration is in charge of drafting the management plans for the forested parts, with Natura 2000 site managers at regional level overseeing the implementation. For non-forested land (including agriculture) the nature conservation administration is in charge. Stakeholders are invited to round tables and can get involved through management contracts. However, only a minority of landowners take part in the round tables.

### **Box 4 Long-term ecological forest management compulsory for Saxonian forests**

The State of Lower Saxony has introduced a compulsory sustainable forestry management programme (*Langfristigen ökologischen Waldentwicklung, LÖWE*) for all State-owned forests. It recognizes the many goods and services that forests provide to society. The management of the state forest is especially committed to the common good. It is based on the principles of proper and near-natural forestry and the government programme for long-term ecological development of state forests (*Langfristige Ökologische Waldentwicklung in den Landesforsten, LÖWE*).

[http://www.landesforsten.de/fileadmin/doku/Infomaterial/loewe20j\\_download.pdf](http://www.landesforsten.de/fileadmin/doku/Infomaterial/loewe20j_download.pdf)

In North Rhine-Westphalia, a long-term sustainable forestry policy has been implemented that also integrates the requirements of the Habitats Directive for SCIs. SCIs are the more natural forest

cores which are surrounded by forest subject to sustainable management practices. The model is compulsory and involves the owners, authorities and NGOs (European Commission 2003). The forest management plans for Natura 2000 sites do not differ much from those developed for nature reserves (Bouwma *et al.* 2008).

In Bavaria there is total transparency and stakeholder participation in the development of forest management plans (including through the use of the Internet). Tasks are divided between three competent authorities. The knowledge of experts and NGOs is valued and actively integrated (European Commission 2003).

The State of Lower Saxony has introduced the Löwe programme (*Langfristige ökologische Waldentwicklung*) 'close-to-nature' forestry, which integrates natural regeneration, comprehensive production and nature conservation strategy. It has resulted in a substantial reduction in the costs of planting and harvesting per cubic metre (see *Box 4*). This shows that under certain circumstances ecologically sound management can also be the most economically viable (European Commission 2003; Niedersächsische Landesforsten 2011).

In **Poland** most of the forest is publicly owned (82%). This makes the introduction of sustainable forest management (SFM) potentially easier, but the agency that manages the forests is at risk of becoming privatized as the State Forests National Forest Holding (*Państwowe Gospodarstwo Leśne Lasy Państwowe – PGL LP*). This business entity manages 78% of forests in Poland. Forests in National Parks and forests owned by local authorities and the State Treasury amount to 4% of the total forest area. The remaining 18% are private forests.

The forestry sector (with the State Forest Directorate being a strong actor) influences legislation and designation rounds<sup>16</sup>. They are also involved in preparing management plans. In state forests, the forest managers have the formal responsibility for managing Natura 2000 sites, with funding from the State. Wood resources are growing and sustainable forest management is increasing. The share of deciduous forests is growing (from 12 to 24% in state-owned forests). State-owned forests have older stands than privately owned ones.

### **4.3.3. Factors causing the challenges**

The respondents to the questionnaires do not report many reasons as forming the basis for the challenges and problems listed above. Factors listed at the EU level include lack of involvement, which damaged the confidence and trust between forest owners, environmental NGOs and public authorities<sup>7</sup>. The lack of trust is aggravated by the unclear situation about what can be done and who is responsible for what.

In **France** the process described for the agricultural sector also lies at the basis of issues with the agricultural sector: initial top-down regulation, followed by united protest of landowners, resulting in the adoption of a management contract approach<sup>1</sup>. More specific to the forestry sector is the need for foresters to comply with a wide range of regulations regarding the (environmental) management of their forests. Requirements from the Habitats Directive are an additional administrative burden but the public and private forest agencies have made great efforts to try and streamline them (Comas 2005).

Different sources and interviewees in **Germany** report very few conflicts between the forestry sector and Natura 2000 implementation. However, it is to be expected that policies to reach climate change targets (renewable energies) and the increased demand for timber on the international market will result in the intensification of forest production (FRG 2010), and this might give rise to future challenges.

For **Poland** poor communication and the resulting misunderstandings are reported as the key underlying factor causing most of the conflicts.



#### 4.3.4. Opportunities and solutions

At EU level, a key solution could be found in providing better information based on facts, and more practical involvement of the sector in the implementation of Natura 2000, also by forging partnerships<sup>13</sup>. The current guidelines under development should help improve communication with the sectors. The Natura 2000 Partner Network that the EC has set up provides a good platform for awarding and labelling Natura 2000 partners. The recently started New Biogeographic Process will promote better exchange of knowledge, and enhanced acceptance and support for Natura 2000. Finally, EC DG Environment sees a continued need to integrate between various planning initiatives such as the Water Framework Directive and sustainable forestry management plans.

##### Case 19 The Warburg Agreement (Germany)

Forest-associated biodiversity can only be preserved in cooperation with the forest owners. As early as 1992, the *Warburger Vereinbarung* (Warburg Agreement) between the State and forest owners was reached in the Federal State of North Rhine-Westphalia. The Warburg Agreement defines rules for cooperative nature conservation in the forest. For protected areas, regulations are limited to absolute necessities. The basic protective measures and accompanying regulations are developed in a dialogue with forest owners and tailored to the specific needs of each area. The local forest administrations proposed supplementary 'immediate measures' to secure and improve favourable conservation status for forest Sites of Community Importance (SCIs). Implementation of the measures is now achieved through voluntary agreements with the forest owners (contracts). Measures are financed through a specific state funding programme. The fact that plans originate from well-known and trusted administrations is an important precondition for high levels of forest owner participation.

There is a general understanding and acceptance of EU nature and biodiversity legislation among the forest owners at EU level<sup>7</sup>. Forest owners appreciate and understand the need for nature conservation and want to participate and take responsibility. Possible solutions or opportunities relate to the right attitude among decision-makers to promote a practical approach in integrating **forest owners' knowledge into designation processes and development of management plans**. Other solutions relate to better communication, support in capacity building, and assistance from state authorities and experts. Moving away from a negative understanding and misconception can be achieved by greater engagement of the forest owners in a participatory process and partnership approach. A compensation scheme and dedicated Natura 2000 fund are required and existing financial instruments should be simplified. There is a further need for clear understanding and transparency.

##### Case 20 Low impact timber removal in the Loisin reserve (France)

An alluvial forest designated as a Natura 2000 site and owned by the municipality needed to be restored to its original state. Several exotic species had grown which needed to be removed. However, the damp soil was very vulnerable to trampling and compaction. Therefore, a low impact aerial timber removal technique was applied to remove the logs without disturbing the vulnerable soil of the reserve. This costly restoration management activity was partly covered by community funds.

In **France** authorities produced guidance documents for biodiversity-oriented forest management which are of exceptional quality, because they combined scientific accuracy and practical recommendations. This was financed by LIFE Environment and was also successful as a tool to improve the acceptance of Natura 2000 among foresters, because the process of drafting the document was inclusive, participatory and bottom-up (European Commission 2003). Both CNPF (private forests) and *Fédération nationale des communes forestières* (FNCOFOR; public) actively promote Natura 2000 among their members and support them with information and assistance (CRPF)<sup>1</sup>. For example, adhesion to the Natura 2000 Charter promotes costless management measures that do not entitle the owner to funds from the agro-environmental schemes. However, it does give the owners a *garantie de gestion durable* (sustainable management guarantee) and

opens up some funding schemes and tax incentives not related to Natura 2000. The Charter is only applicable to areas that are designated under the Birds or Habitats Directive and have a **docob** (CRPF). In addition, the areas of **Chartes forestières de territoire** (CFT) often overlap with Natura 2000 sites. Addressing them simultaneously leads to win-win situations. In particular, the good project management and the involvement of the same stakeholders result in mutual benefits.

#### **Box 5 The Natura 2000 Charter (France)**

The Natura 2000 Charter is the other part of the voluntary contractual policy for Natura 2000. Unlike contracts, the Charter does not provide financial compensation. This tool allows signatories to engage in Natura 2000 implementation without requiring a heavy personal and financial investment. The Charter is signed for a period of five years and is a part of the management plan (**docob**). The Charter describes the **owner's commitments to sustainable management of the Natura 2000 site according to the guidelines** defined in the management plan, and the conservation of habitats and species present on the site. In general, the measures described in the Charter do not require an important investment on the part of the landowner or site manager. Adherence to the Natura 2000 Charter does not preclude the signing of a Natura 2000 contract and vice versa. The signing of a Natura 2000 Charter allows exemption from property tax on undeveloped land (TFPNB) and provides access to some public funding (including in forestry where signing the Natura 2000 Charter provides the guarantee of sustainable management of woods and forests located in the site).

However, there are few to no direct benefits of Natura 2000 for private forest owners<sup>1</sup>. Indeed, better ecological forest management benefits the community (tourism, marketing, branding, quality label for regional products) more than the forest owner who makes the investment. Setting up a sylvi-environmental scheme (e.g. nature-friendly Poplar culture) would provide a good opportunity. Increased payments for dead-wood management make this management practice more attractive to foresters. France has included the Forest Action Plan in its National Strategy for Biodiversity. It focuses on simplifying and streamlining procedures, better communication and awareness raising, the introduction of contract-based management in designated areas, and a better reflection of the multiple socio-economic benefits provided by protected forests (République française 2009). In wider terms, Payment for Ecosystem Services (PES) could provide an opportunity (notably in connection with the provision of clean water by forest conservation), but this needs further study and faces quite important practical challenges. With regard to the stakeholder process, the importance of the role of a facilitator, trusted by all stakeholders, was stressed. Even without the implementation of appropriate assessments, the contractual approach is considered very useful, although it should be accompanied by a regulatory approach<sup>4</sup>. Education is a key factor for success, as well as support and training of the local elected representatives and stakeholders.

#### **Case 21 Collaboration between foresters and conservation NGOs for sustainable forest management**

In France many private forests have been designated as Natura 2000 sites. Many of the forest owners are unaware of the details of Natura 2000. Often, the owners do not know how to manage their forests to maintain or improve the conservation status of the species and habitats protected in their forests. LPO (the French BirdLife partner) has launched a support programme for forest owners in the Antenne Valley. The cooperation between LPO and the local forest federation is leading to better acceptance of Natura 2000 among foresters. LPO gives ecological advice, and the forest federation gives management advice<sup>4</sup>.

A possible solution listed for **Germany** is for site managers to bring together some landowners who are willing to implement measures<sup>15</sup>. From a communication point of view the sector recognizes that it should make better use of communicating the wider benefits in terms of well-being, tourism and ecosystem services, such as the mitigation of natural hazards (FRG 2010). Certification of sustainable forest management is playing an increasingly important role in curbing illegal tree felling and non-sustainable, destructive use practices. Three certification systems are currently recognized in Germany. Approximately 66% of the land under forest (7.3 million ha) is

certified according to PEFC criteria, 4.3% according to FSC criteria (0.48 million ha) and 0.5% according to Naturland criteria (0.05 million ha), although it should be noted that some areas are certified under more than one system (FRG 2010).

Although the forestry sector was not interviewed for **the Netherlands** as part of this study, it was stated in more general terms that it would be better to coordinate the development of management plans at national level instead of province level with stakeholders. Also, management plans should only be made for 'sense of urgency' sites, as many sites already have a management plan of their own<sup>20</sup>.

#### **Box 6 Code of conduct for land managers (the Netherlands)**

A code of conduct was developed to help the owners, users and managers of nature areas (including foresters), to act in accordance with the Nature Protection Act (*Flora- en Faunawet*, which integrates the Habitats and Birds Directives and allows them to respect the law without having to study or consult it). The guidance was developed by the Dutch Forest Board (Bosschap) in close consultation with a number of key stakeholders such as the Forest Agency, Natuurmonumenten, the Landowners Association and others. The code of conduct is not a legal document but is based on the text and requirements of the law. Its great utility is that it allows the land managers to carry out their activities without infringing the Dutch Nature Protection Act. The code of conduct was approved by the Minister in 2009. (Bosschap 2009)

In **Poland** solutions proposed relate to building public support through information campaigns, events and advertising, working with students, and adopting a participatory approach in management planning but also the implementation of forest-environmental payments (similar to agro-environmental) addressed to private forest owners<sup>16</sup>.

## **4.4. Tourism**

### **4.4.1. General description / roles**

Interactions between the tourism sector and Natura 2000 differ from conflict to win-win situations. This depends very much on the nature of the site and the type of activities, which are very diverse, ranging from organized sports events to individual use of the site for leisure and recreation and the construction of tourist facilities such as hotels and ski infrastructure. In any case, public awareness and participation seem to be crucial to reach a balance.

In **Denmark** few Natura 2000 sites attract mass tourism and therefore the impact is manageable. However, some cross-country activities pose some problems. On the other hand, nature protected sites offer the opportunity to develop green tourism related to local income generation.

In **France** the main issues concern the environmental impact of non-regulated activities or those taking place outside areas open for public access. Other pressures are caused by the construction of facilities in mountain areas, over-frequented (usually as a consequence of public access right, especially along the coastal zones). Challenges for improving understanding between the various stakeholders include communication and stakeholder engagement, as well as opportunities for socio-economic development.

In **Germany** the main challenges to resolve the balance between Natura 2000 management and tourism occur in skiing areas and with festivals and events.

In **the Netherlands** the main issue can be described as conflict of interests between nature conservation and tourism activities, where uncertainty related to the intensity and nature of impacts and the legal framework hampers reaching solutions.



### **Case 22 Tourist facilities at Kennemerstrand (the Netherlands)**

The designation of a Natura 2000 area caused problems for the implementation of plans for recreational developments at the Kennemerstrand, IJmuiden. After improving the communication between authorities and stakeholders, and providing information about the Natura 2000 designation process, the solution adopted was a smaller-scale development of the location. Nature compensation measures around Lake Kennemer provided good results, including the establishment of a number of rare coastal plant species.

For more information, see **Annex NL03**

**Poland** reports less conflict, probably due to the early stage of tourism development, but this is rapidly increasing, especially in flat areas with new holiday resorts around large lakes, or with skiing facilities in the mountains and the building of second homes (used for holidays) in valuable natural areas, including Natura 2000 areas.

#### **4.4.1.1. Impacts of the tourism and recreation sector on Natura 2000**

The main impacts from tourism on Natura 2000 result from over-frequented and the construction of facilities. Some activities such as motorized sports, especially when they are practised informally, have negative impacts on the ecosystems and remain difficult to manage. This is exacerbated by the fact that land users (such as tourists and outdoor sportsmen) are often not aware of the high ecological values of certain habitats such as dry grasslands in Denmark. However, there are positive impacts when sport and leisure practitioners cooperate with nature managers in the field of research and public awareness, as reported in France.

At **Danish** sites known to be visited by large numbers of people, either locals or tourists, because of their natural beauty or proximity to major tourist attractions, deterioration is a threat to the favourable conservation status. This is worsened by a low level of awareness about the importance of certain habitats (e.g. dry grasslands) among locals and visitors. This may lead to greater impact from leisure activities, since impacts on these sites are not perceived as important. In Denmark, as well as Belgium and Ireland, there are relatively many problems with hunting and fishing activities compared with other recreational activities (Pröbstl et al. 2010). Windsurfing and kite surfing have caused disturbance to roosting birds and resting seals, and also require the construction of parking places on the shore, impacting some vulnerable dune habitats<sup>9</sup>.

### **Case 23 Restoration of dry grassland commons (Denmark)**

In Denmark, dry grasslands are a very fragmented habitat holding many Red List species. Many areas formerly covered with dry grasslands are in private ownership. Landowners and land users were involved in a project aimed at restoring the existing dry grasslands and recreating some former grasslands in order to connect the fragmented habitats. They were encouraged to sign up for agro-environmental schemes. Important success factors included: bringing together managers and owners of habitats and sites with similar issues and challenges, setting up a LIFE project with stakeholders to discuss the management of these areas and organizing meetings and study visits abroad.

For more information, see **Annex DK03**

In **France** great pressure comes from over-frequented (usually as a consequence of the right of public access, especially along the coastal zones) related to e.g. anchoring, fishing and nautical sports which pose problems to biodiversity conservation (Conservatoire du littoral 2009). In other sites, pressure comes from other sports such as cycling or motor sports (motorbikes, quad bikes, 4x4s) (Bruls, Busser, and Tuunter 2004). With respect to sports as recreational activity, it is important to distinguish between sporting events, which are easily managed, and 'informal' sports and recreation, which are more dispersed and thus difficult to manage (sports activities are considered to be those that are not motorized)<sup>14</sup>. This problem is more important close to urban agglomerations and coastal zones. Another impact category is the construction of facilities for

tourism, recreation and sport, not only caused by the construction itself but also because it increases visitor flows and can thus lead to over-frequented areas<sup>23</sup>.

#### **Case 24 Bountiles Tourist Frequentation Observatory in the Iles Chausey (France)**

The Chausey islands host thousands of visitors each summer, which affects the conservation of biodiversity in the area. Opposition to conservation plans was encountered mainly from fishermen and visitors from the mainland. The management plan for the area was elaborated through a consultative process. A study was executed to determine trends and behavioural aspects, with the aim of predicting potential conflicts. The results are discussed annually and presented to all socio-economic stakeholders. Awareness raising is carried out on good water sports practice, and pilot projects are used as a source of information on good practice.

For more information, see **Annex FR04**

However, recreational activities, and especially sports practitioners, can have a positive impact since they know the sites very well and can provide information e.g. on location and monitoring of species<sup>14</sup>. Furthermore, many sports federations (speleology, scuba diving) or recreation associations are proactive in raising environmental awareness<sup>23</sup>.

In **Germany** activities that require special facilities or new constructions must be considered as significant deteriorations (Pröbstl and Prutsch 2010)<sup>6</sup>. Some examples are big hotels and camping sites near protected areas by the sea. This is also associated with the impact from sea leisure activities such as riding personal watercraft, jet skis or motor boats. On land, motorbikes and four-wheel drives are also very aggressive and must be controlled and their impact assessed. Appropriate assessments must also include the effects emanating from outside the Natura 2000 sites. Projects, such as the expansion of a downhill skiing facility adjacent to a Natura 2000 site, must be assessed in a differentiated manner (Pröbstl and Prutsch 2010). Furthermore, festivals, events and sport competitions with high concentrations of people in or around Natura 2000 sites must be under the control of the local administrations, especially because of the development of infrastructure (e.g. electricity and motorization) leading to increasing damage to the area. This is the case of Walberlafest (see Case 33).

#### **Case 25 Visitor management on the island of Terschelling (the Netherlands)**

Tourism is the most important factor in the economy of the island of Terschelling, but it puts great pressure on the natural environment. A long-term vision plan for tourism management was developed and implemented. It relied to a great extent on concentrating tourist activities away from the vulnerable sites, and close monitoring of tourist flows and tourist satisfaction. Feedback from tourists was obtained through questionnaires. The local planning authorities and the National Forest Service worked closely together to achieve a good outcome.

For more information, see **Annex NL06**

In **the Netherlands**, the small size of the country, the high population density and intense economic activity result in a strongly fragmented landscape with small remaining areas of nature which are under high pressure. Many protected areas, including those designated under the Birds and Habitats Directives traditionally have an important function for tourism and recreation, in particular the lakes and wetlands for water sports. Disturbance from water sports and other outdoor activities needs careful planning and management in order to limit the impact. The intensity of the impact depends on the location of the activities (outside or inside a N2000 site), on the nature of the activities, and on the sensitivity of habitats and species to the activities.

In **Poland** the development of tourism in the last ten years has resulted in some degradation of valuable areas. There are very different activities because Poland has a vast and very diverse territory<sup>5</sup>. There are important areas of natural forests, meadows, fields and lakes classified as Natura 2000, but there is not much control at the moment. Camping is not allowed in these areas,

so there are no facilities for this purpose. However, many people concentrate in these places and camp, especially in the high season, and not all of them behave in a nature-friendly manner. There is also pressure on the lakes from the increased use of motor boats. Although there is increasing pressure around the lakes from new holiday resorts and roads, some lakes have been given the 'quiet-zone' tag. A similar situation occurs in the Baltic Sea and in the north of Warsaw up to the Russian border. Quads and other motorized activities in the countryside and the increasing number of competitions and events related to this are seen as a problem<sup>5</sup>.

**Case 26 Addressing disturbance caused by canoeing on the Drawa and Korytnica rivers (Poland)**

Heavy canoe-traffic on the Drawa and Korytnica rivers (about 20,000 people annually, concentrated in July and August) disturbs the rivers' habitats and sensitive animals. This leads to a negative impact on the protected area, which goes against the Natura 2000 site's conservation objectives. The problem has been solved by limiting the number of visitors and drawing up a protection action plan for the rivers.

For more information, see **Annex PL11**

**4.4.1.2. Impacts of Natura 2000 on the tourism and recreation sector**

Natura 2000 designation imposes some restrictions on tourism and leisure activities. However, opposition from the sector seems to be related more to insufficient knowledge and fear rather than to real limitations. This situation has evolved positively over time and opportunities are being used to the maximum, resulting in **the implementation of 'green' tourism strategies associated with nature protection and enjoyment**.

In **Denmark**, besides Natura 2000, the legal framework does not allow the construction of large tourism facilities in the middle of the countryside, so there is protection against this kind of development<sup>10</sup>. There are many examples of benefits for tourism e.g. in the case of Skjern River Delta, the nature restoration had a positive impact on the development of tourism, by increasing the wetland surface and meandering river length (Bruls, Busser, and Tuunter 2004). Natura 2000 offers the opportunity to develop the tourism network and strategy focusing on a nature site involving different administrations and private companies (e.g. Himmerland and Maribo lakes). This performance may qualify for certification, such as EUROPARC's **European Charter for Sustainable Tourism in Protected Areas** (see Box 7).

**Box 7 The European Charter for Sustainable Tourism in Protected Areas**

The Charter, developed and managed by EUROPARC Federation, aims to increase awareness of and support for Europe's protected areas as a fundamental part of our heritage, that should be preserved for, and enjoyed by, current and future generations. In addition, it promotes the idea of improving the sustainable development and management of tourism in protected areas, which takes account of the needs of the environment, local residents, local businesses and visitors. The Charter reflects the wish of authorities managing protected areas, local stakeholders, and representatives of the tourism sector to support and encourage tourism that accords with the principles of sustainable development.

In **France** initial opposition evolved towards a more collaborative attitude between nature site managers and tourism stakeholders. In many sites, especially in rural areas, Natura 2000 has a positive impact, since it allows the development of remarkable **'green' tourism strategies** thanks to funds being made available to become a Natura 2000 site. This fosters cooperation between nature managers and tourism providers, as well as cross-border cooperation. However, in some instances where activities have a greater impact, Natura 2000 designation entails limitations on leisure.

In **Germany** tourist activities and business entrepreneurs consider Natura 2000 sites to be a constraint. Nevertheless, in contrast with the situation in agriculture and forestry, the main reason

for critical attitudes seems to be a lack of information. However, a comparative survey in Germany, undertaken in 2001 and 2007, states that there is a high level of knowledge among representatives of outdoor sports associations. Natura 2000 is not based on general regulations, but conservation focuses on specific objectives (habitat types and species). Whether the sport or recreational activity is compatible with the conservation objectives of a Natura 2000 site depends on many factors, such as the type of activity, the number of participants, the intensity of use, the sensitivity of the species and/or the habitat, the existing stresses, and the cumulative effects at the site. If the impacts are assessed as important, activities must move to a different location, or the flow of visitors must be controlled. How much the prevalent activities or land uses are affected depends on the distribution pattern of protected species. This is the case with the voluntary agreement at Brodtener Ufer, one of the exemplary cases of good practice presented at the NaturSportInfo.de website launched by the German *Bundesamt für Naturschutz* (see Box 8).

### **Case 27 Staatsbosbeheer and Oerol on Terschelling (the Netherlands)**

The dunes of the island of Terschelling have been designated as a Natura 2000 site under the Birds and Habitats Directives. They are the breeding site for endangered bird species in the Netherlands such as the Short-eared owl (*Asio flammeus*), Hen harrier (*Circus cyaneus*) and Little tern (*Sterna albifrons*). Since 1981, an internationally renowned open-air theatre festival has been organized on the island, partly on the Natura 2000 site. It attracts 50,000 visitors, whose management poses particular challenges. The festival organizers and the site managers cooperate by jointly selecting the sites for the festival performances several months in advance based on a specific impact assessment carried out by an independent ecological consultancy. The festival performances are inspired by the dynamic nature of the island. Nature and culture thus jointly underpin a major economic activity for the local community.

For more information, see **Annex NL09**

In **the Netherlands** the general attitude of the tourism and recreation sector towards Natura 2000 implementation remains sceptical. In spite of the high approval rate of planning requests, the **sector's perception** is that development of activities and infrastructure will be limited as a result of Natura 2000 (Van Apeldoorn 2011). However, it is true that the implementation of the Natura 2000 legislation **can limit the recreation sector's development** possibilities, especially the water recreation sector (Van der Aa 2009), as well as limit the surface of recreation areas, due to designation as a Natura 2000 site or Natura 2000 buffer zone as the result of misapplication of the precautionary principle (HISWA Vereniging 2010). Furthermore, individual tourists cannot always use areas that are designated Natura 2000 sites. For instance, **designation of the Voorne's Duin** as a Natura 2000 site meant that ATB cyclists were breaking the law by cycling in that area (MTB-routes.nl, 28/10/11). However, there is an increasing number of tourism operators that discover the benefits of Natura 2000 designation, in particular in relation to the branding and marketing of their products and services (Van Apeldoorn 2011).

### **Box 8 NaturSportInfo: Resources for sports and nature conservation planning**

Outdoor sports and nature protection in the framework of Natura 2000 are not always easy to reconcile. However, there are many cases of best practices and tools that can assist site managers and sports authorities to find solutions for conflict situations. The Federal Agency for Nature Conservation (BfN) has launched a bilingual (German / French) website presenting a selection of cases of best practice in combining nature conservation and outdoor sports, together with a number of tools related to stakeholder involvement, communication, etc.

<http://www.bfn.de/natursport/>

In **Poland** increasing visitor numbers to the National Parks tends to cause pressures on the habitats and species by disturbance and through their increased infrastructure demands. The designation of site boundaries, such as those in Stepnica Community, contained crucial mistakes and was done without any public participation (see annex PL01). The general public does not know

the meaning of Natura 2000 designation. Stakeholders and tourism investors think of it as a limitation and restriction. The problem is that locals think that only projects such as downhill skiing enable local development. Of course, these new facilities or enlargements require an impact assessment on Natura 2000 sites.

#### **4.4.1.3. Influence of the sector on the process**

In general terms, the tourism and recreation sector has cooperated with authorities in the implementation of Natura 2000, once common objectives have been agreed that result in benefits for both sides.

In **Denmark** no specific opposition has been encountered, and instead a good level of cooperation is usual. Some Natura 2000 sites are also designated as national or regional parks; many of these have a '**user council**' in which the tourism sector is involved<sup>10</sup>. For example, in Skjern River Delta, local people were not used to having an internationally important habitat area right on their doorstep. In order to find out the needs and expectations of local people and tourists with respect to the newly created nature area, an interest group for leisure activities was set up by the Ministry of the Environment in 1998. The group consisted of representatives of all stakeholders (ranging from hunters and farmers to the local museum and the nature protection organization). Later on, to keep in touch with local people and to have a platform to inform, discuss and continue communication, the Forest and Nature Agency set up a new interest group for nature management, leisure activities, recreation facilities and information in 2001 (Bruls, Busser, and Tuunter 2004).

In **France** there was initial position against Natura 2000, because of the fear that it would prevent tourism sector development. This has been overcome through communication and public awareness, mainly through the steering committees (*copil*, see Box 1) for each site. They are made up of representatives from administration, local authorities, nature associations, farmers, forest owners, and sometimes people working in the tourism industry and sports associations. The objectives document (*docob*) is made by the regional environment directorate, with a precise description of the Natura 2000 site, the protected species and the authorized and prohibited activities. This document is discussed with all those involved in the area. The function of the steering committee is to advise on the management of the site. The regional prefect decides on who may join the pilot committees (Gijsbertse and Bruls 2004). Moreover, under the Law on Sports (2000), the departments must elaborate the *Plan départemental des espaces, sites et itinéraires* (PDESI) for nature sports. This involves setting up departmental committees for the plans, where all concerned stakeholders (conservationists, forestry, agriculture, nature sports, tourism) meet. Many of these members also belong to the Natura 2000 steering committee, so the sport and recreational perspective is also considered by this committee<sup>23</sup>. Furthermore, the voluntary agreements between conservation organisms and sports and recreational activities federations and clubs have achieved the most success in finding solutions<sup>23</sup>. However, in cases like the Natural Reserve *Haute Chaîne du Jura*, directly concerned stakeholders (rental companies, guides, visitors) are not represented in the management structures, so they complain not only about activities and regulations which affect them, but also about the nature reserve management as a whole.

#### **Box 9 Best practice guide for outdoor sports in Germany**

'Conflict prevention and increasing acceptance' is the motto of five nature sports federations, which collected good practice solutions for outdoor sports in Natura 2000 sites and presented them in a brochure. It shows that there are many practical solutions that allow the practise of outdoor sports without harmful effects on nature. It is a joint initiative of the Federation of Friends of the Earth Germany (BUND), the German Aero Club eV (Aero Club), the German Alpine Association (DAV), the German Hang-Glider Association (DHV), the German Canoe Association (DKV), the German Equestrian Association (FN), the German Mountain Bike Association (DIMB) and the Curatorium Sports und Natur e.V. The project was funded by the German Federal Environmental Agency (DBU) and the German Olympic Sports Federation (DSB).

<http://www.natura2000-und-sport.de>



In **Germany** most tourism, outdoor recreation and sports stakeholders are not very familiar with the goals of Natura 2000, with the exception of tourism communities with a large proportion of protected areas, such as the Alps. It is crucial that the majority of tourism entrepreneurs and marketing agencies are open-minded towards Natura 2000, and perceive it as an opportunity for strengthening regional identities and marketing. Moreover, since 2001 the collaboration between sport associations and the Ministry of Environment has been very important, as has the setting up of a Code of Ethics for nature-minded athletes/sportspeople. Several recent publications assert that the '**significance of nature**' in choosing a destination is still increasing; both pristine landscape and intact nature frequently rank as the most important factors when tourists choose destinations. Hotel entrepreneurs may appreciate the strong protection of the environment around their facility, as the value of the hotel facilities increases. These hotels may also offer guided tours in protected areas of European significance. For example, the Schloss Elmau Hotel in the Bavarian Alps benefits from the fabulous surroundings of a large-scale Natura 2000 site (Pröbstl and Prutsch 2010).

In **the Netherlands**, the recreation and nature sectors have long been at odds because of conflicting interests. Recently however, **both sides have started to consider each other's points of view** more respectfully. An approach that has provided good results is when the recreation and nature sectors jointly identify opportunities for development of activities or accommodation where nature values are the lowest while reducing these pressures where the benefits for nature would be the largest (Bruls et al. 2004). This dynamic interaction between the Natura 2000 management bodies and the recreation sector requires an inclusive regional approach though, but can be quite successful, because part of the financial benefits from the development can be invested in the purchase, restoration and/or management of nature within the area considered (for example the project Hart van de Heuvelrug, near Utrecht [www.hartvandeheuvelrug.nl](http://www.hartvandeheuvelrug.nl), where not only tourism and nature were considered, but also housing development and transport infrastructure). Such a regional approach instead of a site specific approach helps tourist operators spread their activities over a larger area thereby decreasing the pressure on the Natura 2000 site. The condition for this to be successful is that the surrounding landscape offers enough interest for tourism and recreation (Vogelaar 2010).

As a growing economy, **Poland** is now experiencing the process of abandonment of rural areas, but at the same time it still conserves traditional knowledge, lifestyles and preserved landscapes which can support the new trend of sustainable tourism. They have many more possibilities than a country like Germany, for example. Stakeholders now agree that rather than halting the growth of the tourism sector, there is great potential for integrating biodiversity concerns of the Natura 2000 network into the growth of their sector. There is also a high level of knowledge among representatives of outdoor sports associations (such as the Polish Tourist Country-Lovers' Society, PTTK, which has its own statutes. The statutory aim of PTTK is activity concerning physical development, culture, education and environmental protection, so they also help in the proper management of sites.

#### **Case 28 Ecotourism in the Pisz forest (Poland)**

Increased and unregulated tourism poses threats to the vulnerable species in the forests and mires of Pisz. However, tourism is also a source of income for local people. By organizing and managing visitors and offering them good facilities away from the most vulnerable spots, the negative impacts can be minimized while reaping the fruits of ecotourism.

For more information, see **Annex PL04**

#### **4.4.2. Factors causing the challenges**

Considering the cases reviewed, it seems that the main factor causing problems and misunderstandings is the lack of information on Natura 2000, resulting in a lack of understanding and fear of imposed restrictions on activities. Furthermore, in some cases it appears that **stakeholders' involvement has not been properly conducted. Another important factor is the difficulty of assessing the real impact of tourism and leisure on nature.** Finally, the availability of funds for nature management seems to be an important challenge.

In **Denmark** the communication on monitoring of nature values and tourism flows is very complex, and hampers the long-term involvement of local people in the management of the sites<sup>10</sup>. There is limited awareness of the importance of certain habitats (e.g. dry grasslands) among locals and visitors. This may lead to greater impact from leisure, since impacts on these sites are not perceived as important. The financial situation of municipalities results in limited money and personnel for Natura 2000 site management, although they hold the main responsibility for this. As a consequence, actions are very limited. When the site is also a national or regional park, the State becomes financially more involved<sup>10</sup>.

In **France** a general factor causing problems is the fear that recreational activities will be limited or forbidden. Regarding nature sports, this fear is related to the recent publication of a Decree (9/4/2010) making impact studies compulsory in Natura 2000 sites for the majority of nature sports (République française 2010). The informal activities are problematic, especially in most vulnerable habitats, because they are dispersed and there is not a clear interlocutor. The problem is even more important in proximity to urban agglomerations and in coastal areas, where the frequentation is very high. The most important problem is the construction of facilities in the mountains, which often leads to conflicts with local authorities. It is not only the construction of the facilities, but also the increased frequentation, which causes problems<sup>23</sup>. Authoritarian decisions (especially on sites where the protection status is high) without stakeholder engagement are very likely to lead to conflicts<sup>14</sup>.

##### ***Case 29 Management of sports activities in the Steinhuder Meer Nature Park (Germany)***

Zoning and an interpretation trail combine residents' needs and conservation objectives at Steinhuder Meer. The large number of visitors formed a disturbing pressure on the natural values of this site. In order to combine the recreational and conservation use of the site, zoning was introduced, concentrating recreational activities in two restricted areas of the lake. Nature experience of the site has been promoted by the creation of a nature path around the park. Vulnerable parts of the lake have been closed off with buoys.

For more information, see **Annex DE03**

In **Germany** one of the main factors causing problems is the lack of information to the tourist/recreational operators, leading to a lack of understanding and awareness about Natura 2000. Individual tourists have the same problem and they cannot recognize what limitations are imposed on sports and recreational activities in these areas. Local administrations are responsible for supplying information and assessing tourism sector/operators about their possibilities in Natura 2000 habitats, but they do not really do this in an effective manner.

With respect to nature management funding, Bavaria is a successful example of how Structural Funds (European Social Fund - ESF) can be used for the professional management of Natura 2000 sites. Unfortunately, this financing option is seldom used.

In **the Netherlands** there are three main factors causing the challenges: (1) confusion among the stakeholders due to insufficient knowledge of the Natura 2000 designation process and the conflict between spatial legislation and Natura 2000 legislation (Van den Bosch 2007); (2) uncertainty regarding the way impacts on nature are determined (e.g. noise pollution caused by boats and its



impacts on Red-throated divers, *Gavia stellata*), the lack of data availability and the unknown causality between activities and their impacts (Van den Bosch 2007; Van der Aa 2009; RECRON *et al.* 2009); and (3) distrust of the government by the stakeholders due to insufficient knowledge, and conflicts between legislation. The course and contents of processes are unclear and uncertain. Furthermore, the tourism sector fears that not all existing practices have been included in the inventory of existing practices for the elaboration of management plans. Therefore, a policy framework should be created in such a way that neglected activities can be included easily in future (Sportvisserij Nederland 2010).

One of the main reasons why **Poland** is one step behind in Natura 2000 implementation is its late incorporation into the European Union. In order to meet the dates scheduled by the EU, the Ministry established site boundaries without having enough information. On the other hand, the information provided by the administrations and environmental education in local communities are often inadequate. Individual tourists in Poland are not well informed in Natura 2000 areas which are not Nature Parks, National Parks, etc<sup>1</sup>.

According to the Standards of Public Participation, 'The public which participates on consultation of Management Plans of Natura 2000 sites, is an open and unlimited circle of persons comprising all members and organizational forms of a society.' (Austrian Council of Ministers 2008) However, in practice, information flow and consultation are limited to a closed circle of identified stakeholders .

Conservation initiatives such as that in Barycz Valley normally come from independent organizations and NGOs, not from the regional or local governments.

#### **4.4.3. Opportunities and solutions**

It is clear that Natura 2000 offers many opportunities to the tourism sector, rather than constraints. Worldwide tourism strategies in or close to nature sites are being implemented on the basis of no-negative impact and environmentally friendly practices. This is the case for many sites in Europe, especially in rural and remote areas. Natura 2000 designation allows not only the raising of awareness on the natural values of the site but also fundraising to implement projects where nature conservation and tourism development go together. The best solutions in case of conflicts are public engagement in the decision-making process. This can be done in many forms: agreements, stakeholder forums, steering committees, etc. A normal prerequisite for successful public participation is raising awareness. Some other solutions to control tourism flow can be found in the establishment of a frequentation observatory (see France) or the establishment of tracks and trails to exclude sensitive areas from frequentation (see Denmark, Germany and the Netherlands).

In **Denmark**, there are clear synergies between nature restoration and conservation and environmentally friendly leisure activities and tourism (Bruls, Busser, and Tuunter 2004). This can be well illustrated through various examples.

In the case of Skjern River Delta, the nature restoration had a positive impact on the development of tourism, by increasing the wetland surface and meandering river length (Bruls, Busser, and Tuunter 2004). Following major land acquisition, most of the nature area is owned by the State. The Danish Forest and Nature Agency under the Ministry of Environment is responsible for managing and maintaining the area. Nature management comprises making agreements with neighbours and local people about leisure activities (Bruls, Busser, and Tuunter 2004). The nature **site is accessible from different towns and by public transport, and the nature area's car parks**, which are all on the edge of the area, can be reached along many public roads by motor vehicle (Danish Forest and Nature Agency 2004).

In order to find the needs and expectations of local people and tourists with respect to the newly created nature area, in 1998 an interest group for leisure activities was set up by the Ministry of the Environment. The group consisted of representatives from all stakeholders (ranging from

hunters and farmers to the local museum and the nature protection organization). Later on, to keep in touch with local people and to have a platform to inform, discuss and continue communication, the Forest and Nature Agency set up a new interest group for nature management, leisure activities, recreation facilities and information in 2001 (Bruls, Busser, and Tuunter 2004). There is a strong commitment from the Danish Government (restoration project decided by parliament) and financial support was obtained through the Life Nature and Life Environment projects.

### **Case 30 Sustainable tourism development in the Maribo Lakes Nature Park (Denmark)**

The Maribo Lakes Nature Park is a wildlife sanctuary, designated as both a Ramsar and a Natura 2000 protected site. It covers approximately 5,000 ha, including four lakes. Most of the area is privately owned. Management of the area requires a high degree of collaboration, coordination, volunteer agreements and a **general acceptance of the management tools**. A **'Strategy and Action Plan for Sustainable Tourism Development in the Maribo Lakes Nature Park, 2012-2016'** was developed with stakeholder involvement to improve the economic and nature status of the area. A coordinated process of consultation and active participation of all stakeholders led to a high degree of acceptance of the management plans and their implementation.

For more information, see **Annex DK01**

In Klinteskoven, restoration and the creation of footpaths aim to minimize the impact from visitors by preventing access to the most sensitive areas, while information materials aim to raise awareness on the importance of conserving and respecting dry grasslands.

In Maribo Lakes, the **'Strategy and Action Plan for Sustainable Tourism Development in the Maribo Lakes Nature Park, 2012-2016'** (Maribo Lakes Natura Park 2010) was developed through a participatory process, whereby landowners, local tourism initiatives, NGOs, the Nature Park ranger and municipal staff and politicians were consulted at various stages of the process: in the initial **stage by means of individual interviews with members of the Nature Park's User Council**, and later in the process through a series of workshops discussing the SWOT analysis, the draft strategy, the vision and the suggested action plan. It may qualify for certification, e.g. the EUROPARC Charter for Sustainable Tourism in wilderness areas (Maribo Lakes Natura Park 2010). The management system is functioning well but requires a high degree of collaboration, coordination, volunteer agreements and a general acceptance of the management tools, such as overall strategies, management plans, User Council consultations, access agreements, etc. The two municipalities concerned are active and partners in the EU-funded project **'Parks & Benefits'**.

### **Case 31 Green holiday in Himmerland (Denmark)**

The Himmerland region was suffering from a declining local economy, as it does not receive as many tourists as the west coast of the country. A tourism network cooperation of 138 members was created with the support of the State to promote green holidays linked to the eight Natura 2000 sites in the region. A nature discovery trail linking the various Natura 2000 sites and a guidebook provided the incentive for visitors to explore the natural beauty of the region, thereby also increasing their acceptance and appreciation by the local population. Local organic food is promoted in the hotels and restaurants, training is given about farmhouse holidays and experiences are shared through the network.

For more information, see **Annex DK05**

Finally, in the Himmerland area, a tourism strategy focused on **'green'** products was selected and successfully implemented. Twelve municipalities founded Destination Himmerland (DH), a tourism network cooperation made up of 138 members from the public and private sectors. Its main tasks are marketing and tourism product development in Himmerland, and it also provides guidance for **local tourism companies**. DH has implemented the project **'Green Holiday in Himmerland'**. In practice, the project involved supporting dialogue between members of the network, implementing

concrete actions and providing guidance and information about national and international initiatives related to sustainable development. Great importance was attached to the involvement of the local population in the development of their area. At the beginning of the project, members of the network were contacted about it and interested members met regularly and collaborate. The creation of a supramunicipal structure to promote tourism and the implementation of field actions can be acknowledged as key success factors of this case.

In **France** in 1989 the Ministry of Environment and the Ministry of Tourism signed an agreement to reduce the negative impact of tourism on the environment, promote nature tourism and involve leisure and tourism activities in nature protection (Gijsbertse and Bruls 2004).

Public awareness and stakeholder engagement have been crucial in gaining support for the Natura 2000 process. The participation committees have enabled agreement on common objectives, with the participation of the tourism sector. Other more specific solutions can be found in the frequentation observatory created for the Chausey Islands. Based on its results, there have been pilot projects to limit anchoring and recreational fisheries, and awareness raising on good nautical sport practices. In the case of *Gorges de l'Aveyron, causses proches et vallée de la Vère*, the *Syndicat Mixte du Pays Midi-Quercy* is responsible for facilitating and mediating the development of the objectives document (*docob*); the association is very active and managed to gather the tourist stakeholders around the table to agree on a '**good tourist practices charter**', signed by 62 tourism stakeholders. In the case of Port-Cros, the *Syndicat mixte* has formalized a charter for diving and proposed a partnership with clubs and service providers; the latter commit themselves to limit practices that could endanger the environment and agree to increase the turnaround time between two sling loads (and so, by avoiding too much turbidity, also allow a better quality of service). Providers who have signed the charter are recognized as partners of the Park<sup>14</sup>. It is important to highlight the contribution to the 'technical guide for the assessment of sport activities impacts on Natura 2000 sites'. This guide is aimed at minimizing the impact from sport activities, but also it fosters awareness<sup>23</sup>.

Regarding opportunities, Natura 2000 facilitates fundraising for marketing and improving facilities, promotion of ecotourism, networking and cooperation between nature managers and tourism providers (e.g. Cévennes), transnational cooperation (e.g. Rhin vivant), and diversification of the tourism offer, e.g. through '**bird tourism**' (e.g. Les Sept Îles)<sup>4</sup>.

### **Case 32 Rhin vivant (France and Germany)**

The LIFE Nature Project '**Rhin vivant**' is one of the largest areas covered by Natura 2000 sites (16,000 ha). Twelve partners are involved in restoring and conserving the gravel banks, reed marshes and alluvial forests of the Rhine. The LIFE-Project across several local Natura 2000 sites combines numerous partners from Switzerland, France, Luxembourg, Germany and the Netherlands. All have agreed to the common goal of restoring the unique natural habitats of the Rhine landscapes. People did not know that there was nature along the Rhine. The river always had a bad name, because of the chemical plants and motorways on its banks. An action plan for the promotion of sustainable tourism along the river was developed, with the goal of positioning the region as an ecotourism destination for activities such as birdwatching. The programme also encourages transboundary networking. So far, the project has been a great success. The Rhine Corridor is now presented as a new green destination with a logo, website, information boards, five discovery trails, a journal and a leaflet on good practices.

In the case of Rhin vivant, participation in European projects (Interreg and Life Nature) and the creation of a cross-border association (FR-DE) to promote the site have enabled the protection of nature and the enhancement of tourism. An action plan for the promotion of sustainable tourism along the river was developed, with the goal of positioning the region with ecotourism products such as birdwatching. The Rhine Corridor is now presented as a new green destination, with a logo, website, information boards, five discovery trails, a journal and a leaflet on good practices.

The National Park of Cévennes has supported an association of tourism service providers, **Cévennes écotourisme**, for defining a strategy and action plan. It gathers together 90 tourism professionals who have committed themselves to high-quality tourism respecting environment and culture. Furthermore, the National Park of Cévennes has signed the EUROPARC Charter for Sustainable Tourism in Protected Areas.

### **Case 33 Managing the impact of traditional Walberlafest festival (Germany)**

The '**Walberlafest**' festival in Bavaria, Germany has taken place for over 200 years and thus has a long tradition and is an important part of the regional culture. Becoming ever more popular and modern, it was having an increasing impact on nature. The economic interests of the community and the interests of nature protection organizations and the rural district office conflicted on how to proceed. The local area manager was asked to mediate between the parties. Discussing the issue around the table and looking for consensus led to a solution which allows the festival to continue, albeit subject to a number of conditions.

For more information, see **Annex DE06**

The Ministry of Ecology, the Federation of Regional Nature Parks, the French tourism agency and the bird protection association LPO researched the opportunities for 'bird tourism' and analysed ten bird areas. One of these areas is 'les Sept Iles'. The visits are organized by four boat companies that operate in partnership with the LPO. The boats can land on only one island. LPO also manages a museum at the Great Island<sup>4</sup>.

In **Germany** experience over the past few years has shown that suitable and acceptable results can be achieved when the stakeholders or population concerned are invited to participate in designing solutions: voluntary agreements, cooperative development of new forms of visitor management and implementation via contracts and other landscape management measures. Good tools to defuse conflicts and reach agreements are round tables or assemblies. The different stakeholders with conflicting interests, including organizations, administrations and the community (property owners, farmers, administrations, schools, interested citizens, organizations, etc.), are invited to these meetings (annually or more often). Problems and interests are demonstrated and solutions and compromises are sought. The organizer and moderator of the round table is the Area Manager (in German **Gebietsbetreuer**). The Area Manager is a neutral, permanent contact person for the different stakeholders and interest groups in the region who mediates between them by moderating the meetings, promoting sympathy and understanding for nature protection, monitoring Natura 2000 habitats and species, and reporting on developments, among other important tasks. As for events such as the **Walberlafest**, a joint inspection of the location before and after the event enables the identification and resolution of problems in the area by, for example, closing off sensitive areas (see also the Dutch Oerol case). The creation of a unique management plan for each site is a crucial component for the successful establishment of Natura 2000 sites. Frequently, the planning process is an ideal tool to prevent latent conflicts and to solve existing conflicts, and it also establishes the preconditions for long-term cooperation. Furthermore, the trend to promote more individual experiences and regional identity as counterarguments to globalization might constitute the foundation for mutually beneficial cooperation between nature conservation and tourism. This trend opens opportunities to use the many attractive and natural habitats related to Natura 2000 sites for promoting destinations, or to actually use this label for a landscape for the branding of local or regional tourism destinations.

The German Ministry of Environment developed information materials in collaboration with the sports associations, such as the German Olympic Sport Association in early 2001. Afterwards, during the early stages of implementation of Natura 2000, restrictions were often defined prematurely, which led to an early and high engagement of associations - especially nature-based sports such as sailing, horseback riding, cross-country skiing, and mountain biking.

In **the Netherlands** disturbance by tourism and recreation is mainly addressed by planning and zoning: allowing use of Natura 2000 sites by sports and tourism, but in specially designated areas,

making sure there are areas of rest for the wildlife. Possible win-win solutions to increase support lie in looking for flexibility in space and time. It must be acknowledged, however, that some deadlocks do not have a win-win solution. Solutions can also be found by wider planning for recreation related to the Natura 2000 site such as: not planning activities only inside the Natura 2000 perimeter, but also in the surrounding landscape. Combined with zoning inside the Natura 2000 site, this can lead to win-win solutions. In summary, the communication with the responsible authorities, a bottom-up approach and timely and open communication with all stakeholders seem to be very important, as illustrated by the following cases.

### **Case 34 Bringing the main tourism players together: Regiegroep Recreatie & Toerisme in Natura 2000**

The tourism, sports and recreation sector is an important user of Natura 2000 sites and therefore has an important stake in their management. The sector consists of many representative bodies looking after the interests of specific user sports and tourism groups (e.g. water sports, hiking, biking, etc.). The lack of central coordination has been mentioned by several respondents as one of the weaknesses of the sector in influencing the Natura 2000 implementation process. In the Netherlands, the response to this fragmented representation has been to set up an interest group for tourism and recreation to follow the Natura 2000 implementation process.

<http://www.regiegroeprecreatie-natuur.nl>

In the case of cycling activities in the Natura 2000 site Voorne's Duin, a legal cycling track has been designated to solve the problems. Important factors in this process were: (1) the process was led by an active and engaged local authority; (2) the communication process for the initiator, constructor and the local community was guided by an active and engaged nature management organization; and (3) an open communication process that includes all stakeholders (Van Apeldoorn 2011; Bruls, Busser, and Tuunter 2004).

### **Box 10 S(up)port for Nature (the Netherlands)**

Every year, countless sporting events are organized in forests and nature areas. Both recreational and professional athletes enjoy practising their sport in a natural environment. Site managers generally have a positive attitude towards such events, but underline that nature legislation, vulnerable habitats and other visitors should be respected. However, the organizers of sports events do not necessarily know all aspects of nature-friendly event organization. A group of nature management NGOs and sports associations have therefore jointly developed a **nature management system called "S(up)port for Nature"** aimed at preventing damage to the soil and nature, to prevent inconvenience to residents and visitors and to promote the safety of the event. S(up)port for Nature consists of two parts: a roadmap describing all the steps to organize a nature-friendly sports event and a standard agreement between site manager and event organizer.

<http://www.supportfornature.nl>

In the planning of nature conservation and tourism based on the 'grow and shrink' scenario in the Veluwe region, key factors are: (1) the integral approach regarding the area's benefits for both recreation and nature; (2) aiming for the same goal (quality improvement) improves the cooperation between the sectors; and (3) daring to differentiate in nature values. In some parts of the **Centraal Veluws Natuurgebied** no special conservation values occur at all, according to the Birds and Habitats Directives; this results in more space for recreation development (Bruls, Busser, and Tuunter 2004).

In **Poland** the process of official designation of the sites is being finalized. Much of the land in Natura 2000 areas is privately owned and the emphasis is on ensuring that future management is sustainable. The cooperation between NGOs, experts and scientists and the Department of Nature Conservation in the Ministry of Environment, responsible for the sites designation, must be more active and constant. Nature conservation has great potential in rural tourism, because of the vast

and well-preserved areas of pristine landscapes, but there is also a progressive abandonment of the land and rural life. Municipalities from the Barycz Valley and Stepnica community are aware of this and started Integrated Strategies of Development, through Local Action Groups (which later became the Barycz Valley Foundation) and with the combined forces of NGOs, ecological farmers, **agrotourism associations, and producers. They have also developed the new Barycz Valley's** tourist image. Although these and other examples, such as the Biebrza, tend to show a positive contribution of Natura 2000 to the local economy by linking it to sustainable (eco)tourism, branding and marketing models, the extent to which this approach can be applied to many different regions remains uncertain.

***Case 35 Integrated strategy for rural development in the Barycz Valley (Poland)***

In the Barycz Valley, intensification of fish farming and land abandonment had led to a negative trend for nature conservation. The development of tourism in the last ten years had resulted in the destruction and **degradation of valuable areas. Because of the area's Natura 2000 designation, other ways of creating** income had to be found. Local NGOs and communes joined forces and started rural development activities. Local stakeholders created a Local Action Group (which later became the Barycz Valley Foundation) and worked out an Integrated Strategy for Rural Development in the Barycz Valley. Within the initiatives, local resources (communities, natural resources, local knowledge) were used as a basis for long-term development. All activities were planned taking into account the water protection and rehabilitation of the river valley, and also aimed to connect nature conservation with income creation.

For more information, see **Annex PL02**



## **5. Analysis and discussion**

### **5.1. Introduction**

The previous chapters have described the findings of the study by sector in each country. The following section will analyse the commonalities and differences between sectoral experiences with Natura 2000 implementation as a way to draw some general conclusions and recommendations that should provide new insights into a better coexistence of Natura 2000 and sectoral activities.

Often some of these factors are givens (geology, geography, climate, etc.), but understanding their influence on the interactions between sectoral activities and the conservation activities helps identify the opportunities for mutual benefits in similar and other situations.

The nature and intensity of the mutual impacts between the selected economic sectors and the implementation of Natura 2000 are determined by a wide array of factors that operate together and have a combined effect.

The analysis of the relevant factors that determine pressures on Natura 2000 sites and barriers to sectoral activities and development is very relevant, because the same conservation objectives, nature management measures, or sectoral activities result in very distinct effects according to the specific constellation of factors and the local idiosyncrasies in terms of landscape, economy and society.

Understanding the site and its attributes as a functional part of the local and regional landscape, economy and social setting and not as an isolated entity in itself, allows a better identification of solutions to the challenges of competing interests between the local users of the site and other stakeholders, and leads to better decision-making regarding the priorities that are addressed in the management plan.

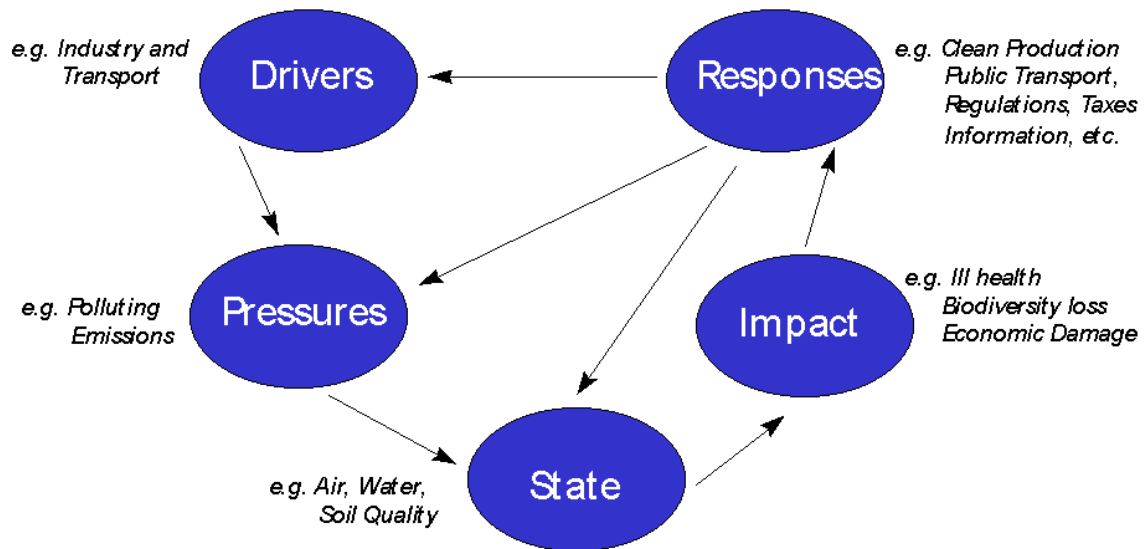
### **5.2. Pressures and responses**

#### **5.2.1. Relating causes to effects and responses**

In this study we are considering the connection between selected economic sectors and Natura 2000 areas. This is done in terms of the impacts that certain economic activities of these sectors may have on species and habitats in Natura 2000 areas, as well as the consequences of the legal conservation of such species and habitats for the sectors concerned. It looks in particular at the way the sectors deal with such consequences, how they respond to it.

A useful way to describe these cause-effect relationships is by using the DPSIR framework (Driving Force, Pressure, State, Impact, Response; as adopted by the European Environment Agency).





#### Example of the DPSIR model (Source: EEA, 2011)

This framework can best be described here by using Natura 2000 and a sector as an example, looking initially at the impacts from a sector (e.g. tourism) on a Natura 2000 site.

**Driver:** the driver is the broad socio-economic force that that 'drives' a number of more concrete decisions and actions in society. For example, one of the drivers is the growing ability and desire of people around the globe to spend leisure time. This is because in general people tend to have more spare time and more economic capacity and at the same time tourism and recreation opportunities are getting cheaper.

**Pressures:** the pressures resulting from the selected driver that are of relevance to a Natura 2000 site could include for example the construction of access roads, of hotel accommodation, or of skiing facilities. These primary pressures in turn are connected to immediate pressures such as increased visitor flows, increased air pollution from car and aeroplane traffic, or habitat destruction.

**State:** the state describes the situation of the subject at hand. In the case of a Natura 2000 site this would most easily be described in terms of size of the site, number and size and quality of habitats, species numbers and their population size, or the overall conservation status.

**Impact:** the impact is strongly connected to 'State', as it indicates the change in this state as a consequence of the pressures under view. In the current example, the impact could be decreasing or increasing populations of protected species in the Natura 2000 site, habitat quality changing because of altered environmental conditions, or the overall conservation status becoming less favourable. Impact can also be wider in terms of the impact on the local community or society at large. This could include local people staying away from a Natura 2000 area because of too many tourists, health impacts because of increased traffic, or increased employment options in the tourist facilities.

**Response:** there can be many responses to the observed impacts and they depend on the actor concerned. In the example given, possible responses include awareness campaigns by the site managers for tourists visiting the Natura 2000 site, adapted management practices, access restrictions (in terms of time or space), changed development plans by the tourism sector, selecting sustainable approaches for accommodation or even court cases brought by the local community.

The application of the DPSIR framework is a rather simplified structure, presenting cause-effect relations in a relatively linear way and focusing on a specific perspective (in the example above the perspective is a Natura 2000 site and impacts on such a site). In reality, however, cause-effect relations are nested, interconnected and operate more in a web-like structure. Also, what is considered a beneficial response from one perspective, may cause a pressure from another. The example below provides an illustration of this, by having a tourist activity as the central perspective with Natura 2000 causing impacts.

**Driver:** the global recognition that biodiversity is declining and it is important for biodiversity and for people to halt this decline. At the level of the EU this includes the specific responsibility to conserve species and habitats.

**Pressures:** the pressures connected to this driver relate to the protection of species, habitats and individual sites. In the example, possible pressures for a tourist activity could include restrictions on the development of facilities in and around a given site, restrictions concerning reduced access to certain parts of an area or during certain times of the year, or prohibition of any development.

**State:** the state can in this case be described on the basis of numbers of tourists visiting a Natura 2000 site, number of overnight stays, economic income for local communities from tourism activities, or number of local people working for the tourism sector.

**Impact:** possible impacts on the state of tourism around a site as a result of Natura 2000 designation may include reduced or increased numbers of visitors, changing income from tourism, or changing number of local people employed in the tourism sector.

**Responses:** also here responses vary by actor. They may include shifting of tourism options towards ecotourism, promoting a Natura 2000 area based on its natural assets, branding regional products that are connected to the site, or cooperating with a wider range of local stakeholders to identify win-win situations.

### **5.2.2. Sectoral pressures on Natura 2000**

The above framework has been applied to the information that was provided in the interviews and literature for the three selected sectors. An additional element has been added to connect the challenges posed to the sectors to the DPSIR framework for the sector concerned. The simplified connections are visualized on the following pages.

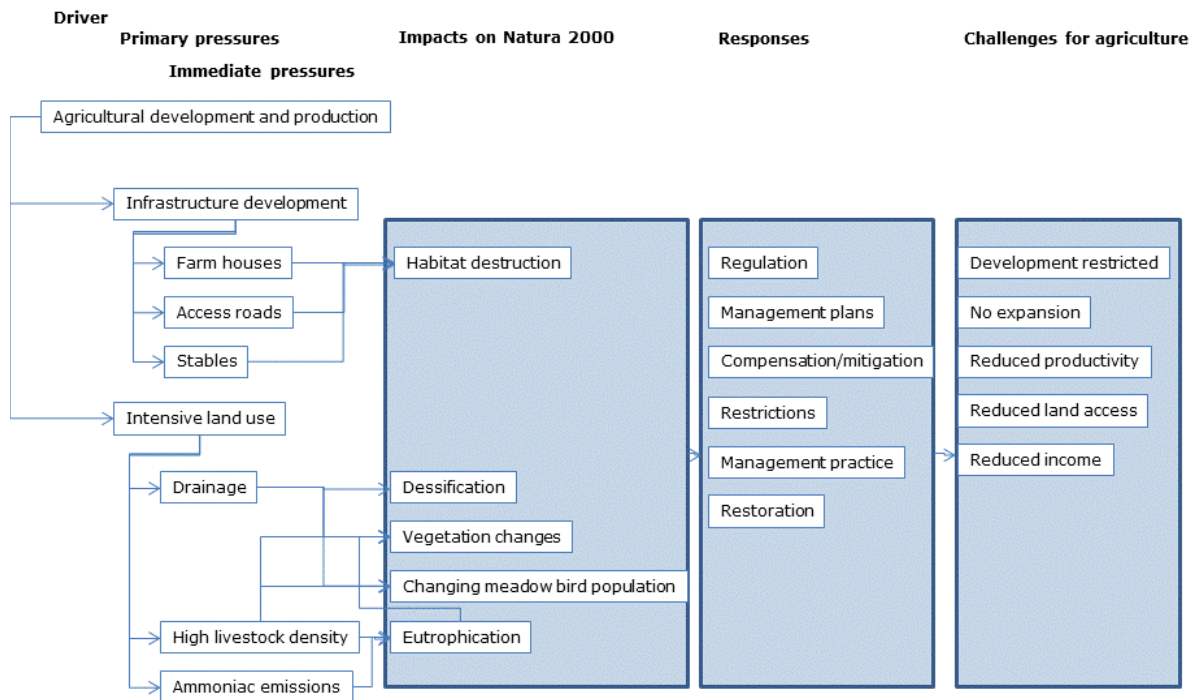


Figure 3 Visualization of some cause-effect relations between agriculture and Natura 2000 and some associated challenges for agriculture. Elements are based on responses received.

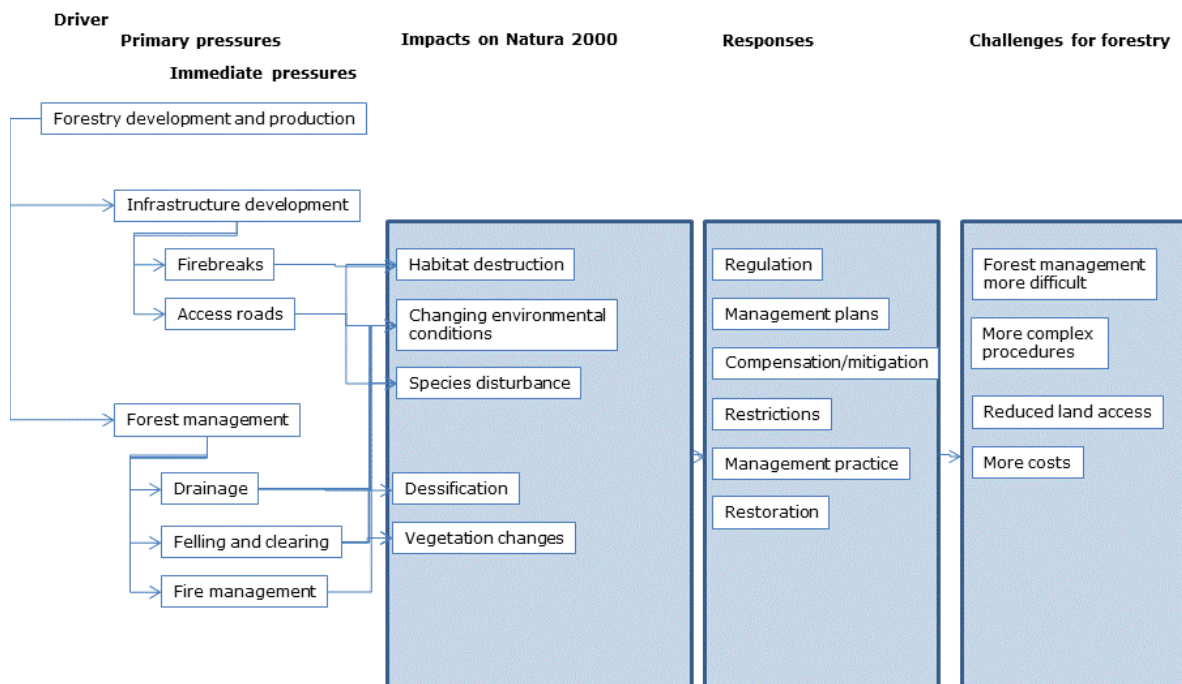


Figure 4 Visualization of some cause-effect relations between forestry and Natura 2000 and some associated challenges for forestry. Elements are based on responses received.

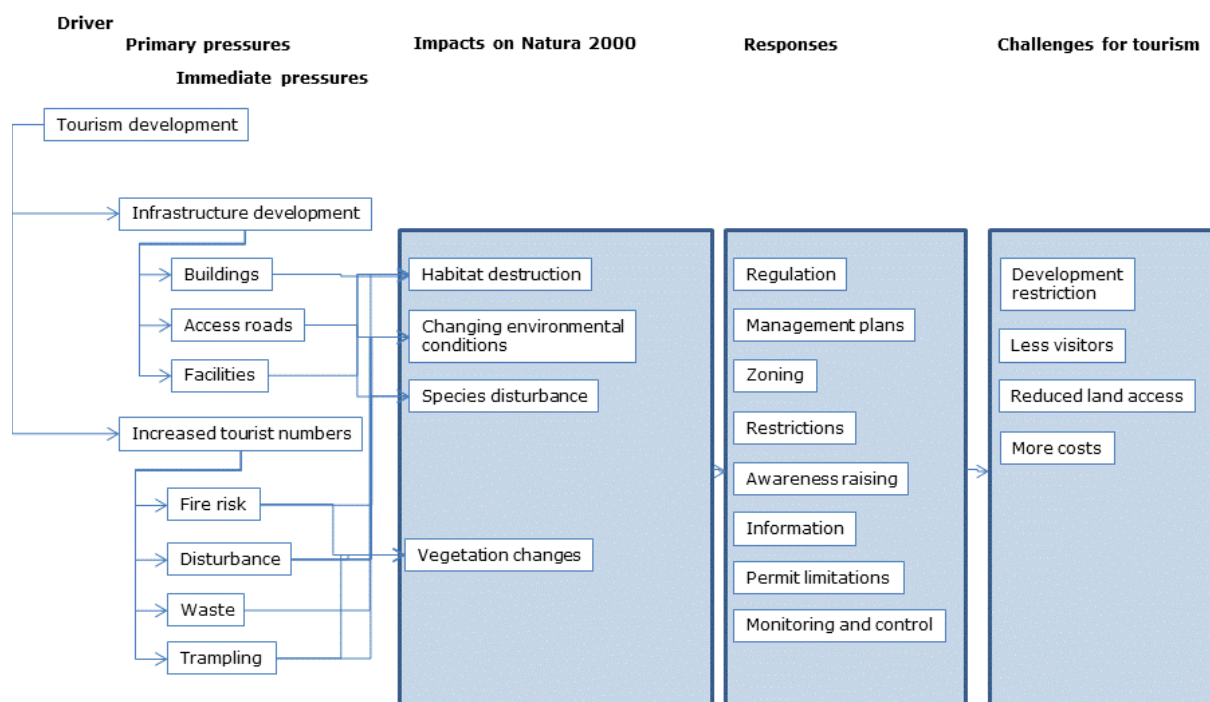


Figure 5 Visualization of some cause-effect relations between tourism and Natura 2000 and some associated challenges for tourism. Elements are based on responses received.

The above figures show that **challenges regarding Natura 2000 implementation and the sectors' activities and development aspirations** can be addressed by a wide range of solutions at different scales of intervention. Many factors influence the nature and intensity of relations between Natura 2000 implementation and the sectoral activities. Therefore, each case must be well understood before the right solution can be found. However, even if there is a full understanding of the issues and the practical solutions to address them, the selection of the best answer to a situation must always be carried out in close consultation with the stakeholders, if the solution is to become viable, accepted, implemented and supported in the long run.

#### Box 11 The successful approach to stakeholder involvement in France revisited

Following the strong opposition to the implementation process by the main stakeholder groups in France, which brought the designation process to a standstill in 1996, the French Government agreed a new approach based on voluntary contractual participation for the management of Natura 2000 sites. Together with the structured stakeholder-based approach to the development of management plans, this led to an increased acceptance of the Natura 2000 network among many stakeholders. However, this approach did not take Article 6.3. of the Habitats Directive into account, which calls for an appropriate assessment of activities inside and outside the site likely to have a negative impact on listed species or habitats. What was a success from the point of view of social acceptance and stakeholder involvement did not yield the desired results in the field in terms of reaching favourable conservation status. Therefore, the European Commission requested France to integrate Article 6.3. into French law. This is now putting renewed pressure on the support for Natura 2000 by the stakeholders.

The results of the literature review, the interviews and the analysis of cases of good practice point to a wide array of solutions that are being implemented to ensure the best possible coexistence of sectoral activities and the achievement of Natura 2000 conservation targets. They are presented in the following sections.

## **5.3. Policies, legislation and regulation**

### **5.3.1. Legacy of the process of designation**

Although it is almost finalized, many respondents still report that the mistakes of the designation process still have a deep negative impact on their perception of Natura 2000. Although the lessons learned from the mistakes made during the implementation phase cannot be applied to the designation phase itself, they can at least in part be used to avoid similar problems in the subsequent phases related to the development and implementation of management plans and the issuing of planning and project permits. In Poland, for instance, where the designation process is still very recent and the mistakes made in designation and delineation of boundaries are still fresh in **people's** minds, there was insufficient public participation in the designation process<sup>5</sup>. Overall, perhaps with the exception of Denmark, respondents reported a lack of involvement, participation and information in the designation phase. Some fear that an insufficient level of participation in the development of management plans can result in a similar level of alienation on the part of stakeholders with regard to the management of the sites if a top-down approach in consultation with representative organizations alone, and not individual stakeholders, is followed.

#### ***Case 36 Overlapping nature protection regulations form an administrative barrier to local development (Poland)***

Kampinos National Park has been included in the Natura 2000 network. The authority for decision-making in granting permits for sectoral activities is shared by the Director of the National Park and the Regional Director of Environmental Protection. Both competent authorities may judge differently regarding the granting of a permit, as the criteria for impact assessment are different and their mutual competencies are not fixed by law.

For more information, see **Annex PL06**

### **5.3.2. The development of management plans for Natura 2000 areas**

The development of management plans for Natura 2000 areas is not compulsory according to EU directives. However, most Member States have opted to resort to this approach for the implementation of site management. Several issues with the development of management and implementation of management plans affect the possible positive participation of or the arising of conflicts in the sectors under review (EEB 2011):

- lack of clear site-specific conservation objectives;
- lack of clear responsibilities as to management planning;
- underfunding of Natura 2000 management measures;
- underperforming public participation (including from sectors) in management decision-making.

Although it provides a useful framework, the development of a Natura 2000 site management plan is also criticized, for instance because it is a rather expensive solution. In many cases it is necessary to combine management plans for Natura 2000 areas with other already existing management plans concerning these sites (for national parks, for nature reserves, forest management plans and others). Moreover, the scope of Natura 2000 management plans (even in their simplified form) is very wide and demanding, instead of being mainly the list of tasks to be done. The usefulness of a management plan is determined by how it is used: as a means or as a



goal. In order to be effective, a management plan should be used as a means for helping the actual management process, not a goal in itself (as often seems to be the case).

### **5.3.3. Voluntary regulatory frameworks and guidance**

Several sectors have also recognized the advantages of forms of self-regulation, such as codes of conduct and charters. The codes of conduct and charters are a type of self-regulation that results from the observation that the continued and sustainable activity of the sector depends on the good state of conservation of the nature upon which it depends. These approaches are therefore mostly found among sports associations and tourism organizations. They can also involve multiple partners such as site managers and users organizations (such as sports or tourism associations). However, (organic) farmers also use this approach as a marketing tool. Charters are another type of voluntary association with a set of rules. The most widely applied is the Charte Natura 2000 in France, which is part of the official process of Natura 2000 implementation, but distinguishes itself by its voluntary nature.

Examples of voluntary regulatory frameworks include the following: *Charte de bonnes pratiques avec les acteurs du tourisme* (Quercy, France) is a charter developed by the tourism sector in the Quercy region in southern France in which tourism practitioners are informed about the value of local nature for their sectors and the simple measures that can be taken to manage it sustainably. Several German outdoor sports associations together with Friends of the Earth published a brochure outlining all the measures that can be implemented to minimize the impacts of sports activities on Natura 2000 sites (see Box 9). The French Motorcycle Federation, aware of the potential impacts of motorcyclists on nature, developed a comprehensive 'Green Handlebar' (*Guidon Vert*) programme to promote nature-friendly cycling behaviour among its members. Subscribers to the programme adhere to the good practice recommendations, but can also benefit from legal support and discounts. In the Netherlands, 'S(up)port for Nature' is a framework agreement between site managers and the organizers of sports events (see Box 10). Charters such as the Natura 2000 Charter in France (see Box 5) define general site management practices and entitle the signatory to tax incentives. The European Charter of Sustainable Tourism in Protected Areas (EUROPARC) is also based on voluntary participation and focuses on the enhancement of natural heritage and the promotion of livelihoods based on sustainable tourism (see Box 7). Finally, a recent development in the Netherlands is the development of a Code of conduct for recreation on the IJsselmeer by a wide range of water recreation stakeholders in cooperation with nature management organizations (see Case 37)

#### **Case 37 Code of conduct for recreation on the IJsselmeer (the Netherlands)**

The management of the IJsselmeer - a large lake and Natura 2000 site - is a challenge, especially because of the large numbers of resting birds found there and the number of recreational activities (surfing, kitesurfing, fishing, sailing, etc.) that take place there. The managing authorities decided to define a framework that is beneficial for both nature and the recreation sector, with clear expectations for each sector. The outcome of years of sometimes difficult negotiations has been the drafting of a code of conduct for the recreation sector. This has been adopted by all stakeholders (including tourist organizations, local authorities and conservation NGOs). It indicates the vulnerable areas that should be avoided, and gives practical advice on how to avoid disturbing resting birds.

For more information, see **Annex NL02**

## 5.4. Planning approaches and site management

### 5.4.1. Size, shape and fragmentation

The relative size of management units for production by the sectors (fields, production forests, sports accommodation) and for nature conservation, their position in the landscape, and their position relative to one another (juxtaposed or overlapping) are strong determinants as to the potential future nature impacts, sector barriers and resulting conflicts. They also determine the leeway for possible future development or intensification of certain activities.

For small Natura 2000 sites, the border effects of any external pressure are relatively important and therefore more difficult to absorb, especially if the sites are spatially isolated. The response in terms of restrictions on sector development or activities as a result of an appropriate assessment will be relatively more stringent. For small protected sites (small remaining habitat patches, or very restricted delimitation) there is little or no space for compensatory measures within the Natura 2000 network. This has, for example, been a problem in the case of small sites designated in the Dutch Rivers Region (*rivierengebied*) where there was no room to take compensatory measures. If the Natura 2000 site had been larger, the compensatory measures could have been taken within the site, as requested by the European Commission<sup>20</sup>.

Current and future (potential) conflicts can be solved or avoided if the site is not considered as an isolated patch of valuable nature to conserve, but as an integral part of the landscape. In some cases it pays to invest in purchasing land around the site to implement site-wide management and reduce edge effects, e.g. in the case of hydrological measures.

As a general rule, in order to contribute to achieving a favourable conservation status, it helps to consider the site as a functional landscape unit and to make sure that important dynamic landscape processes (especially those related to hydrology) are maintained. This requires a landscape or water catchments approach.

Composite sites composed of a mosaic of protected sites amidst other (intensive) land use such as arable farming also present specific challenges to conservation management, and are likely to result in barriers to sectoral development and conflicts between various users of the wider landscape. A mosaic of various types of land use (if their requirements are different and mutually exclusive) can be a source of conflict from the perspective of all parties involved, and severely impact on the regional process, especially where regional ecological measures such as water or nutrient management are needed to restore favourable conditions in the protected sites.

#### **Box 12 The turnaround principle (the Netherlands)**

The Dutch 'turnaround' process (*omkering*) allows discussion with stakeholders about the conservation objectives, the management measures and the site perimeter before final designation by the State. This process has been introduced to create more support for Natura 2000 among the (sectoral) stakeholders and to eliminate some fears. Important aspects discussed in this process are the achievability and affordability (*haalbaarheid en betaalbaarheid*) of the management practices needed to reach the favourable conservation status. In theory it could result in a more efficient and effective delimitation of the site perimeter to improve management and conservation. Different stakeholders view this approach in different ways. Although the principle has some potential, conservation organizations were not unanimously happy with it, as the process resulted in the scrapping of a number of sites and lowering conservation objectives in others (Klaassen 2009).

Sectoral activities have direct impacts inside Natura 2000 sites (farmland inside designated area, tourism, sports and recreation, forestry), but activities around a site also can have indirect impacts. In order to minimize the undesired effects of these activities on conservation objectives,



restrictions on activities are put in place. Appropriate assessments are carried out to assess the impact of activities on the conservation objectives. The detailed perimeter of the Natura 2000 site relative to the protected habitat and area of other land use can be the source of future conflict. Farmers owning land inside the perimeter of the designated site often experience real difficulties in continuing farming, as the land use and production options of these lands are much more limited.

### **Case 38 Land purchase to allow area-wide ecological integrity to be restored (Poland)**

The area of Kampinos has many private owners and management is very fragmented. Ecological management (in particular water management) is very difficult as the plots are used for different purposes. In order to restore good ecological conditions for the forests and grassland habitats and species, the approach adopted is to buy land, which is then included in the protected area so that water levels can be managed throughout the entire site.

For more information, see Annex **PL07**

Many conflicts arising from pressures on the Natura 2000 site and barriers to sectoral activities can be pre-empted by good forward planning, taking into account the geographical specificities and condition of the site relative to surrounding land uses. By looking in detail at the future management measures, better final designation is possible. If stakeholders are involved, this can create more support for the process. However, this process should not be used as a means to limit the ambitions of Natura 2000 in spatial terms and in terms of conservation objectives.

## **5.4.2. Local habitat issues**

The range of possible sectoral activities in and around Natura 2000 sites and their potential impacts depends to a large extent on the habitats and their characteristics and specific vulnerabilities. Prevalent habitats and species in a specific designated Natura 2000 site are another important factor that determine the likelihood that impacts, barriers and conflicts will arise. Indeed, the Birds and Habitats Directives are mainly concerned with ensuring the favourable state of conservation of species and habitats of Community importance.

Certain habitats exert a very strong attraction on specific activities. For example, beaches attract mass tourism. Some target species for these habitats are specifically sensitive to the pressures from these activities (disturbance). Some habitat/activity combinations present exceptional challenges because of the pressures they produce, while other combinations do not result in any noticeable pressure. As an example, mass tourism on beaches causes such pressure that most ground-nesting birds from sandy beach habitats have vanished from many historic breeding grounds in North-Western Europe. The measures needed to enable them to recover (closing the beaches during the summer season) would have such a profound socio-economic impact that they are only implemented on a very local scale. Habitats that are most vulnerable to tourist pressure include coasts, dunes, mountains and certain open water habitats (lakes, streams)<sup>23</sup>, as shown in the cases of Grouse management in the Black Forest (Case 16) and the Kennemermeer (Case 22).

## **5.4.3. Landscape-level and regional issues**

The position of the site and sectoral activities in the landscape and their position relative to markets, urban centres, transport infrastructure and resulting social and economic activities, are factors to take into account in planning for Natura 2000 at a regional or landscape level, as they will influence the value of the land, the cost of management, the pressure by visitors and other users.

For example, with regard to tourism, leisure and sports, the distance from urban centres determines the likely pressure from disturbance by visitors. Also, the attractiveness of landscape features

combined with adequate tourist infrastructure determines the pressure to be expected from tourists<sup>23</sup>. Measures to pre-empt and solve conflicts between sectoral activities depend on such factors.

The beauty and attractiveness of a site can be both a blessing and a curse for site management. Sites with dramatic scenery will attract a wide range of users (tourists, outdoor sports, etc.) and thus be significant for the local economy. The stakeholders understand that local economic development is linked to the preservation of the natural resource, so their perception of Natura 2000 is more positive, and part of the income is invested in the maintenance of the resource.

#### **5.4.4. Water-related issues**

As reported in chapter 4, water management is a key challenge in the planning of sectoral development and nature conservation, giving rise to many conflicts between the sectors and nature conservation. In many instances the hydrological requirements of agriculture, forestry and nature conservation are antagonistic and mutually exclusive and a reason for heavy debate and stalemate (see Case 4, Case 5, Case 3). In general, arable fields need to be well drained to allow access for machinery and good aeration of the root zone, while many protected habitats need gradients in hydrological conditions, requiring a regionally high water table. This is a typical example of the balance of interests between the productive sectors and the conservation sector analysed in this study. However, solutions have been developed and implemented, often a combination of adapted management and technology (see Case 39).

##### **Case 39 Nieuw Limburgs Peil (the Netherlands)**

Regional water management in an area with various types of land use, such as intensive crop farming and nature conservation, presents specific challenges. As a general rule, arable farmers want to be able to control the water levels of their fields to optimize the conditions for soil preparation and growth of the crops. This means draining in spring to allow heavy machinery to prepare the soil, plant the crop, spray pesticides, etc. Traditionally, the water levels are managed at a regional level, and therefore also affect the preserved semi-natural habitats (including Natura 2000). Low water levels in spring are very detrimental to ensuring a favourable conservation status of many protected habitats and species. In the context of the *Nieuw Limburgs Peil* programme, water level management has been decentralized from the regional level to plot level. Farmers can adjust the water levels in their plots and site managers can do the same for their Natura 2000 site.

For more information, see **Annex NL24**

#### **5.4.5. Nutrient management and pollution**

Another important factor is the nutrient cycle and the important changes to it caused by sectoral activities. Increased inputs of nutrients in nature reserves destabilize the ecological balance and cause important pressures, requiring special management measures. Nutrients such as nitrogen are emitted by the agricultural sector, industry and transport. They enrich the Natura 2000 sites through atmospheric deposition or contaminated water. In areas of intensive agriculture this poses an important threat to the Natura 2000 sites. Various measures are taken to limit the damage caused by excess nitrogen deposition, such as burning and removal of topsoil and/or biomass. In general, these remedial measures limit the accumulation of nitrogen, but they can also disrupt the balance of other essential nutrients. Therefore, it is more effective to tackle the emission and deposition. This means either limiting or reducing intensive livestock farming near Natura 2000 sites or making costly technological investments to filter nitrogen at the source. In the Netherlands nitrogen deposition is one of the main challenges for achieving favourable conservation status for habitats and species, and has imposed limitations on the expansion of the sector. A science-based

assessment framework has been developed (*Programmatische Aanpak Stikstof*) to model the emissions and impacts on the sites and distribute nitrogen emission rights based on individual needs near Natura 2000 sites. The distribution of emission rights is based on an area-wide assessment and not a farm-based assessment (see Box 3).

In many cases a conflict situation arises from direct impacts on the Natura 2000 site (i.e. the habitats and species for which it was selected) from specific pressures caused by the sectoral activities. In a participative approach to address these pressures, technological solutions can sometimes play a role, although the farming sector complains that nature conservation organizations often dismiss them. Examples of technological solutions that can help reduce the impact of sectoral activities on Natura 2000 sites include: 'controlled drainage' where nutrients leaching from the field in drainage water are efficiently recycled; 'biogas installations' where manure sludge is converted into gas instead of being spread on the fields (where it is likely to pollute surface water and groundwater); 'dynamic drainage' (see Case 39) where a system of local sluices allows field-based regulation of groundwater levels with less impact on adjacent nature areas; the installation of 'nitrogen filters' on stables to reduce atmospheric nitrogen emissions; 'precision farming' where, based on detailed soil maps and GPS location, only the required amount of fertilizers and other products are applied within a field; 'adapted machinery for forestry and agriculture' that reduce pressure on and disturbance of vegetation and topsoil; and 'internal field segregation' where small plots are included for the survival of field birds.

## **5.5. Governance, stakeholder involvement and participation**

### **5.5.1. Managing the implementation process**

Acceptance of restrictions on sectoral activities associated with the implementation of the Birds and Habitats Directives can be substantially increased through good process management. Specific planning and process management instruments can support the process of stakeholder participation and increase acceptance of certain proposed alternatives.

In the Netherlands, some economic sectors favour the reintroduction of the *hand aan de kraan* (hand on the tap) principle: allowing development and closely monitoring the effects on nature. If negative impacts are observed, the intensity of the activity can be reduced or halted. Also in the Netherlands, the main business platforms together with IUCN signed a statement of intention underlining the importance of protecting nature through Natura 2000, but doing so in a flexible way that also allows room for businesses to develop. Clear and consistent rules are then needed. Finally, looking for flexibility in size, time and space, combined with an integrated approach to tackle different pressures or issues simultaneously (for example water (dessication) and nitrogen deposition) is an approach that should be integrated into the planning stage. In the case of the reduction of nitrogen emission, the fact that no deadlines have been imposed for achieving favourable conservation status means that the reduction of emissions can be introduced gradually, allowing the farmers to adapt to the new situation. Another opportunity is to consider the net reduction of nitrogen emissions at site level instead of at farm level (Taskforce Trojan 2008). In this way one farm can use another farm's credits to expand (*gebiedsgericht salderen*; see also Box 3).

From the planning perspective, the setting up of comprehensive and inclusive local development plans where Natura 2000 is shown to be an asset for soft forms of enterprise, such as ecotourism, branding of local products, and investing in their quality (e.g. the Barycz River in Poland Case 35) proves to be a successful approach.

Examples of successful flexible process management of Natura 2000 implementation include: the joint development of comprehensive site management plans with clear, agreed targets for the landowners and land users (*documents d'objectifs*, or *docob*, in France); careful zoning of recreation activities in space and time (see Case 16 and Case 29); the *Programmatistische Aanpak Stikstof* (PAS; Programmatic Approach to Nitrogen; see Box 3) and *Gebiedsgericht salderen* (area credits for nitrogen); the 'turnaround principle' (Box 12) and *Hand aan de kraan* (rapid response to negative impact, i.e. allowing sectoral activities while monitoring their impact on the conservation status of habitats and species, and stopping the activities when a negative influence is noticed).

#### **Case 40 New governance model to help conserve the Little bustard (France)**

Over the last four decades, numbers of the Little bustard have strongly declined in parts of its range in France as a result of intensification and changes in farming practices. Eleven Special Protection Areas (SPAs) were designated in central and western France to help conserve this iconic open-field bird. Farmers in these areas were approached by LPO, BirdLife partner in France, to participate in management measures to benefit the habitat of this species. The best available knowledge on ecology and farming practices was shared and agro-environmental schemes were put in place. The project was supported by LIFE co-financing. At a later stage, a knowledge-sharing network of the main stakeholders (farmers) was set up to share information. A technical advisory committee was established to provide rapid specific management advice to farmers.

For more information, see **Annex FR22**

### **5.5.2. Stakeholder involvement**

The active involvement of stakeholders is reported by all sectors as an essential (if not the key) component of a successful implementation of Natura 2000 (Bouwma *et al.* 2010). The lack of information, consultation and participation of stakeholders in the selection and designation phases is continuously mentioned by many partners as the root cause of Natura 2000's **poor image**. As an example, the active participation of local farmers and other stakeholders in the reconversion of agricultural fields to wetland led to a change in attitude from very negative to positive (see **Case 11**). In another instance, the establishment of local alliances and round tables for stakeholders led to a better understanding of Natura 2000 and the active involvement of those concerned (Germany, Schleswig-Holstein, see **Case 14**). A critical factor reported from Germany that facilitates further acceptance and cooperation is the appointment of a local Natura 2000 coordinator. In France participation of the *Chambres d'agriculture* in the drafting of the *docobs* (management plans) is a good way for the farming community to understand the relation between farming and biodiversity and to have a say in the combination of economic development and conservation. In Denmark there are active policies to reduce the impact of farming on nature (including Natura 2000 sites) by promoting organic agriculture and re-establishing wetlands. Farmers are either financially compensated for loss in income or offered land elsewhere. A better analysis and encouragement of the benefits of Natura 2000 for sustainable rural development, supporting and communicating such activities for management of Natura 2000 sites in Poland in a bottom-up, inclusive approach with stakeholder involvement and good communication of legal aspects, can help further involvement of local stakeholders.

Stakeholder involvement is a current mantra in the development and implementation of management plans for Natura 2000 across Europe and more generally for protected areas management across the world. However, it is far from adequately implemented, and often much better on paper than in the field. In Natura 2000 it has been slowly introduced as a reaction to the original top-down, science-driven, technocratic approach of site designation and implementation. Some countries, such as France, have made it the institutionalized core of their Natura 2000 implementation approach, while in other countries stakeholder involvement is more loosely coordinated. These results are confirmed by the recent EEB report on Natura 2000 management

plans, which seems to indicate that Member States that include stakeholder participation as part of a consistent approach to Natura 2000 implementation report fewer tensions (EEB 2011).

#### **Case 41 Marais Vernier: a successful dialogue between stakeholders (France)**

The Marais Vernier was one of the 37 cases implemented in the framework of a LIFE project to gather experience with the participative implementation of Natura 2000 in France. The designation of Marais Vernier as a Natura 2000 site caused much unrest and hostility among stakeholders. Because of the need to manage water levels cooperatively, management plans were developed to work in a concerted participatory way together with the stakeholders. This collaboration between hunters, farmers, local residents and conservationists led to good results. Success factors were the leading role of the mayor and the contracting of a coordinator, both of whom were trusted by hunters and citizens, and the openness of the regional authorities in the consultation rounds.

For more information, see **Annex FR03**

A successful process of Natura 2000 implementation at site level requires a well-organized process of information, awareness raising and confidence building. The role of a trusted facilitator is essential<sup>4</sup>. Successful facilitators should in any case have the following qualities:

- good knowledge about nature and ecology (essential);
- good facilitation skills;
- good interpersonal skills;
- good conflict resolution skills.

#### **Box 13 Natura 2000 facilitation network in France**

France has opted for an inclusive and transparent development of Natura 2000 management plans. This inclusive approach presupposes a strong coordination and process management. The role of the moderator or facilitator is not an easy one. This person needs a good combination of skills to bring together stakeholders with often conflicting interests. In order to continuously improve the skills of the facilitators (*animateurs*) a network has been set up, managed by the *Atelier technique des espaces naturels* (ATEN). It offers an online platform for exchange of experience, a resources database, regular professional meetings, and specific training for Natura 2000 facilitators.

<http://www.espaces-naturels.fr/Natura-2000>

It is observed in many cases that the increased stakeholder involvement in the current phase (development and implementation of management plans) increases acceptance of Natura 2000 by the local stakeholders. Each country or region has developed its own approaches to stakeholder participation. In France the process is formalized in the obligation to set up a Steering Committee (*Comité de pilotage*) for each Natura 2000 site (see Box 1). In Germany, the involvement of stakeholders is less formalized but encouraged: each *Land* (State) develops its own approach, and NGOs also play an active role in improving the process. For example, Schleswig-Holstein has been at the forefront when it comes to communication, information and stakeholder involvement by the organization of local alliances, round tables, stakeholder platforms and information sessions. The German conservation association NABU introduced the Natura 2000 watchers, local stakeholders who, on a voluntary basis, keep an eye on the implementation process of their Natura 2000 site(s). They can be local nature conservationists, or other stakeholders such as farmers or members of the public. Their role is to monitor progress, and to interact with the other stakeholders in order to support the implementation process. NABU organizes training sessions to equip the volunteers with the required skills and knowledge to perform this task. Such training of stakeholders in basic communication and participation skills is also provided to French farmers (see Box 14).

### **Box 14 Training stakeholders to participate in debates (France)**

In France the difficulty for certain groups of stakeholders to actively take part in the participative process of management plan development has been identified as a major bottleneck. For example, farmers have difficulties in adapting to the new power relations regarding decision-making in the rural areas, where there were far fewer stakeholder groups in the past. One way to reach a better consensus, and therefore acceptance of the decisions by the farmers, has been to provide training in debating to the farmers.

### **5.5.3. The human factor**

The human factor is reported as a key component for the success of participatory planning for Natura 2000 implementation in relation to sectoral activities. It relates to the adaptation of people to changes in their living environment, changes in shifts in power and influence, changes from traditional to modern societies. The increasing imposition of urban values on the rural landscape is also a factor to take into consideration.

### **Case 42 Nature as raw material for development at Lille Vildmose (Denmark)**

Raised bogs in the area were threatened by peat mining and agriculture (nitrate deposition). After its designation as a Natura 2000 site, changes in land use were needed in order to achieve a good conservation status and restore the active raised bog. The different sectors (agriculture, forestry, tourism) had to be involved in developing the new management plan. Great effort was put into communication activities to convince the stakeholders that this project would result in an overall benefit (also socio-economic) for the region.

For more information, see **Annex DK04**

Farmers in particular seem to find it difficult to adapt to the new reality of land use in rural areas. Having to participate in discussions about the management of their land as one land user among many is a new situation which takes time to accept. In France farmers are having difficulties participating in the Natura 2000 steering committees (*copil*) because of this new reality, and because they are not used to defending their interests in a group of other, often new, stakeholders in the rural landscape<sup>22</sup>.

### **Case 43 Additional investments needed to maintain dry fields in wet nature area of the Ruiten Aa (the Netherlands)**

The full and comprehensive restoration of the damp valley of the Ruiten Aa (a brook) is not possible because the hydrological unit includes a number of dry farmland fields. Expensive hydrological engineering measures need to be taken to rewet the nature site, while keeping the fields dry. This has led to (temporary) deadlock. From the nature perspective, this is a high loss situation, because the measures that are having to be taken now to allow differentiated water level management will have to be cancelled once the fields are acquired.

For more information, see **Annex NL14**

In addition, the parallel implementation of many territorial policies (most of them as a result of obligations resulting from different European directives) is not sufficiently coordinated. Water, spatial planning, infrastructure and nature conservation are all discussed with the same stakeholders but in different circuits. The stakeholders themselves (farmers, landowners, recreation entrepreneurs, etc.) or their representative organizations are invited to many meetings, but they simply lack the capacity and finally the willingness to participate in so many discussions which often address the same issues from a slightly different perspective (e.g. planning for water, planning for (green) infrastructure, planning for Natura 2000, etc.).



The need to adapt to new circumstances as well as the speed at which these changes occur have an important influence on the likelihood that farmers will adapt and accept. New practices often require important investments to be made, and demand a change of mind on the part of the farmer.

## **5.6. Communication, education and public awareness**

### **5.6.1. Communication: sharing knowledge, information and experience**

There is still a need to repair the damage done during the site selection and designation phases. For many practitioners, the best strategy to advance in terms of participative site management and acceptance of nature conservation practices in Natura 2000 sites is to remain silent about Natura 2000. In many communities and sectors, Natura 2000 has led to such fears in the first phases that mentioning it in current communication only has adverse effects. Moreover, in general the public discourse regarding Natura 2000 is very much focused on the perceived limitations imposed by Natura 2000 on the development of sectoral activities.

#### **Box 15 The French Natura 2000 Awards (*Grand Prix Natura 2000*; France)**

For several years, elected officials, associations, professionals and all the inhabitants of Natura 2000 sites have been carry out exemplary joint actions for site protection and conservation, as well as for awareness raising, information, public involvement, scientific monitoring, European exchanges, etc.

Relaunched in 2012, the Natura 2000 Awards once again provide the opportunity to praise the commitment of local initiatives by rewarding the most exemplary ones. They help support a process of improvement of actions on the ground. Awards are granted in the following categories:

- Category 1: Action aimed at achieving good conservation status
- Category 2: Communication / awareness raising / outreach
- Category 3: International and inter-site cooperation: network activities
- Category 4: Innovation and scientific and methodological monitoring
- Category 5: Consistency of public policy

A ceremony for the Natura 2000 Awards will be held in the autumn and will also be an opportunity to celebrate the 20th anniversary of the Habitats Directive. <http://grandsprix.n2000.fr/>

Opposition and resistance to Natura 2000 by stakeholders (farmers, foresters, hunters, citizens) is often shown to arise from misinformation. In general, it is the result of the unjustified fear that no form of activity or development is possible within or around Natura 2000 areas. As seen in previous chapters, it seems that the lack of flexibility and room for development due to Natura 2000, for instance in the Netherlands, is to a great extent an issue of perception. Indeed, EU and national regulations regarding Natura 2000 are only stringent as to the conservation objectives for habitats and species. They do not say anything about the management practices. Therefore, there should be ample flexibility to look for solutions that accommodate conservation priorities and sustainable development.

Therefore, communication and awareness raising are considered across all sectors as important factors contributing to a better involvement of the sectors in the implementation of Natura 2000. There are, however, quite a few good examples of Natura 2000 communication and its positive effect on the process of acceptance by and active involvement of the sectors. Quite a few respondents argue that now may be the time to shed **Natura 2000's** negative image (associated with the designation phase) and to start promoting Natura 2000 as a brand for local and regional sustainable opportunities. Providing enough, accurate information about Natura 2000 is therefore

widely reported as one of the keys to successful implementation. Promoting a positive image of Natura 2000 can help change the perception of key players. For example, in France a Grand Prix Natura 2000 was introduced in 2010, rewarding exemplary actions in various aspects of Natura 2000 implementation (see **Box 15**).

### 5.6.2. The use of iconic species

Some of the most successful approaches to communication about Natura 2000 make use of iconic species that a wide range of audiences can relate to. Examples include the Corncrake (*Crex crex*), as illustrated in the case 'The cattle farmer and the bird' (see Case 46). The Skylark (*Alauda arvensis*) and the Barn swallow (*Hirundo rustica*), common and well-known but declining farmland birds, have also been used to promote biodiversity-friendly practices among farmers, in both Germany and the Netherlands. Skylarks have always been present in most arable fields, but have declined as a result of the intensification of farming practices. Barn swallows are more associated with farm buildings and suffer from farm rationalization. Both species enable awareness-raising about farm-related biodiversity and practices to maintain and promote it. For the Skylark, these include the insertion of patches of bare soil in the cropped fields (Skylark plots), which also benefit other species. The project is a joint initiative of a nature conservation organization (NABU) and the German Farmers Union. Farmland birds are also used in several cases as conservation icons to promote the application of nature-friendly management practices by farmers. In the Dutch bulb-growing area (*Bollenstreek*), it was discovered that certain field-bird species such as the Yellow wagtail (*Motacilla flava*) fared quite well. Awareness-raising campaigns were organized among the bulb growers under the name *Bollenvogels* (bulb birds). They subsequently started to implement bird-friendly management practices. In another example, farm producers and large agrofood companies such as Heineken, McCain and Unilever started a project called *Veldleeuwerik* (Skylark) to promote biodiversity-friendly farming practices. Farmland birds such as the Yellow wagtail, Skylark and Meadow pipit (*Anthus pratensis*) were used as indicators to measure the effectiveness of the measures and additionally as an effective way to communicate about the project results.

#### Case 44 New farming practices for the Aquatic warbler in Biebrza Marshes (Poland)

Abandonment of traditional land use in the peat mires of Biebrza led to a deterioration of the habitat of the globally endangered Aquatic warbler. A LIFE project supported the development of new management methods and a special agro-environmental scheme was introduced to re-establish good habitat for the warbler.

For more information, see **Annex PL03**

### 5.6.3. Education and training

The introduction of Natura 2000 in the countryside has resulted in important changes for a large number of stakeholders. These changes relate to the need for them to actively take part in new forms of consultation, the application of new management practices and in general their active participation in a far more complex society. An important factor in the implementation of Natura 2000 is the lack of specific knowledge and skills of certain stakeholders. Communication and information campaigns can help raise awareness, but in some cases more specific training is required to prepare the stakeholders for their new roles in the process. Local Natura 2000 coordinators need a wide range of skills in order to perform their job successfully: a basic knowledge about the ecology of the habitats and species, good interpersonal skills, good moderation and facilitation abilities. Site managers need to be kept up to date with specific management measures and approaches. An efficient monitoring of species and habitats requires

field workers with a combination of species identification skills and statistical sampling methods and monitoring protocols. NGOs or (semi-)public bodies in general play an important role in developing and providing this training.

#### **5.6.4. Encouragement of good practices**

Another strategy to highlight good practices and contributions of Natura 2000 to local development are programmes for the certification of and awards for products and services related to Natura 2000. Such prizes, awards and other initiatives can positively influence others to make better efforts in the management, communication and sustainable development of Natura 2000 sites. Also, awards and certifications support promotional activities of the products and services concerned. Examples of awards and certificates include the Green Key, Blue Flag, Quality Coast, Village+, ECEAT (European Centre for Eco Agro Tourism), the Best of Life+ and Grand Prix Natura 2000 (see **Box 15**). Although most of them do not directly target Natura 2000 related actions, they are likely to result in actions that directly or indirectly benefit the conditions in and around the Natura 2000 sites.

### **5.7. Knowledge management**

#### **5.7.1. Evidence-based planning and decision-making**

The lack of a strong scientific underpinning of the selection of pSCIs has been a weakness reported from all countries included in this study, except Denmark. The process of designation was supposed to be science-driven. It has been reported by France, Germany and Poland as having undermined the acceptance of the designated sites. Indeed, opponents of Natura 2000 managed on various occasions to demonstrate the weak or non-existent scientific underpinning of a supposedly science-based selection process (i.e. in France). At the beginning of the selection process many core data about species, habitats and sites were indeed still incomplete. The development of current management plans is also suffering from a lack of sufficient and reliable data on the state of species and habitats in the sites and the pressures from the sectors. This is reported in particular from the tourism and recreation sector. A lack of precise data on visitor flows makes it difficult to draw up efficient visitor management plans.

Monitoring and control of Natura 2000 implementation are low on the list of priorities of most Member States (EEB 2011). The lack of a clear biodiversity baseline for many sites and the lack of clarity about the current conservation status of the species and habitats make it very difficult to set clear objectives and to measure progress, and thus to assess the effectiveness of management measures or the impact of activities. This lack of a clear understanding of the impacts of certain activities on habitats and species, and the associated use of the precautionary principle, is difficult for many developers to accept, and therefore does not help to improve their perception of Natura 2000.

A specific approach developed by the tourism sector to contribute to rational planning of visitor flows in vulnerable protected areas is the *Observatoire Bountiles*, a method to help collect relevant visitor data for the development of a coherent site management plan (see Case 24).

**Box 16 OBN: A knowledge network for nature management (the Netherlands)**

*Kennisnetwerk Ontwikkeling + Beheer Natuurkwaliteit* (OBN) was established at the beginning of the 1990s as an advisory and research body of the Ministry of Economic Affairs, Agriculture and Innovation. In the early years it focused on the reduction of acidification, eutrophication and desiccation of protected nature areas. Because of the encouraging results, the scope of activities was widened to all forms of nature restoration and management at landscape scale. Its current objective is to generate, disseminate and apply knowledge regarding nature restoration for Natura 2000 management, PAS (see **Box 3**) the habitat approach and the development of new nature.

Within the organization all stakeholders are requested to report problems and issues related to nature management, which are then included in the research programme. The core of the network consists of 7 expert teams which cover the main landscape types present in the Netherlands. In addition, a fauna expert team gives specific advice to the 7 landscape expert teams. The Forestry Board (*Boswachter*) coordinates the network. OBN's publications include specific habitat-related practical management and restoration advice for site managers.

<http://www.natuurkennis.nl>

### **5.7.2. Sharing knowledge and experience: a better science-management policy interface**

Although the value of pure research is not contested, there is a need to dedicate a part of research efforts to answer the practical, urgent knowledge needs of policymakers, planners and site managers. In addition, management solutions are typically developed at the local level based on local understanding, expert knowledge and general management guidelines.

Throughout the 26,000 Natura 2000 sites a vast corpus of practical knowledge and experience has thus been accumulated. Platforms and networks where practical knowledge, science and policy can interact are needed to ensure that the best solutions for the implementation of Natura 2000 are available for the stakeholders to apply. At European level, the New Biogeographic Process, started in 2011, is one such platform where policymakers, researchers, sector representatives and NGOs exchange existing knowledge and discuss future research needs (see Box 17). At national level, the knowledge network for nature management (*Kennisnetwerk Ontwikkeling + Beheer Natuurkwaliteit* (OBN), see Box 16) has been created as a platform for science, policy and site management interaction. The applied research agenda is determined by the steering committee, composed of members representing practice (site managers), science (researchers) and policy (civil servants). This ensures that the scientific results are as relevant as possible to the management and policy questions.

**Box 17 The New Biogeographic Process**

The purpose of the New Biogeographic Process, coordinated by the European Commission, is to help Member States to manage Natura 2000 as a coherent ecological network, whilst exchanging experience and best practice, addressing objectives and priorities, and enhancing cooperation and synergies. The process should contribute to the achievement of Favourable Conservation Status (FCS) for those habitats and species of Community interest (listed in Annex one of the Habitats Directive) that have been identified as having priority within the given biogeographic region, with a special focus on the contribution of the Natura 2000 network, but without ignoring horizontal measures where necessary. It brings together experts (biologists, ecologists), site managers, policymakers and other stakeholders in a series of meetings to discuss issues of common concern and identify possible ways to deal with common management challenges. The process will result in a communication platform to enable a rapid and easy exchange of ideas and knowledge.

## **5.8. Economic perspectives and financing**

The bottom line for many stakeholders (especially landowners and land users) is that the implementation of Natura 2000 management practices costs money and/or reduces the income from sectoral activities. Economic considerations therefore play an important role in the discussion about Natura 2000 implementation. Financial support for management practices that help to maintain or restore the favourable conservation status of species and habitats of Community importance are in general the instruments most favoured by the landowners and land users in the sectors included in this review. The most widely applied financial incentives for Natura 2000 management are part of the Common Agricultural Policy (CAP) and refer to agro-environmental schemes. They basically compensate for the losses incurred by farmers when they adopt less impacting agricultural practices. Similar schemes are not yet widely applied and available for sustainable forestry. Other ways to support the application of favourable management practices include tax incentives. These are not applied in all Member States. In France they are associated with the voluntary signing of the Natura 2000 Charter. On the whole, however, the implementation of Natura 2000 is severely underfunded, especially site management and monitoring. The training and capacity-building of site managers also lack adequate financing (EEB 2011).

### **Case 45 Hohe Schrecke – Old forest with a future (Germany)**

The Natura 2000 site Hohe Schrecke in Germany used to consist of old cultural landscapes and former military zones. Since 2002, all 14 municipalities that border the forest have been committed to cooperating in a conservation-oriented regional development project for this area. The forest areas still owned by Thuringia were introduced into the project, and purchases of private forest land have been made in order to preserve the species-rich beech forest communities. Cooperation with local stakeholders has led to changing the forest into a motor for the regional economy: tourism, production and marketing of regional products, sustainable forestry and sustainable energy production. The State of Thuringia provides funding to innovative projects combining local sustainable business and nature conservation.

For more information, see **Annex DE04**

Moreover, conservation benefits are shared (beautiful landscape and rich biodiversity supporting tourism industry, water purification, air purification, erosion control, climate adaption and mitigation, etc.), but the investments are not, or only partly or insufficiently. Payment for ecosystem services is still in an early stage, and its implementation faces important practical challenges. For example, the benefits of investments in adapted sustainable management practices do not always return to those who make the investments (e.g. French foresters). Natura 2000 benefits the community: more tourism, regional branding and marketing, but private forest owners who are supposed to manage the forest as a natural resource do not get any benefits and are merely limited in the economic activities they are allowed to perform. The contracts and payments are only available for conservation measures, but not for sustainable forestry management, as in agro-environmental schemes.

As Natura 2000 implementation is widely perceived as imposing restrictions on the development of the regional economy that result in barriers for sectoral activities, one powerful manner to dispel this perception is to demonstrate the contrary through the integration of Natura 2000 based economic activities into regional and sustainable economic development plans. It should be noted that this is not a panacea and that such an approach only works when specific conditions are met.

Also part of the target group of such approaches remains quite sceptical, alleging that the supposed branding power of Natura 2000 is much less than the landscape or cultural historic value of the landscape used as a brand for marketing regional products. All the same, Natura 2000 sites often are part of the conservation strategy for regions with a strong identity where biodiversity is an essential component of this identity. Even if Natura 2000 is not at the core of the branding and identity, the protection Natura 2000 offers to the landscape and its natural values is an instrument

that helps to preserve the basis of the branding and marketing. The restrictions on certain sectoral activities (such as intensive farming) in and around Natura 2000 sites can sometimes be compensated through a wide array of activities related to the regional identity, maintained and conserved thanks to the Natura 2000 protection. This can focus on sustainable tourism, farming and forestry, together with an appealing storyline based on a mix of cultural, historical and natural heritage.

**Case 46 The cattle farmer and the bird (France)**

Changing farming practices put pressure on the conservation of species-rich valley meadows and especially on the habitat of the bird species Corncrake (*Crex crex*). Farmers, aware of the importance of preserving this iconic species, formed an association and developed a cattle breeding scheme that maintained the high biological diversity of the meadows and the habitat of the Corncrake. They branded and marketed the meat under the brand 'The cattle farmer and the bird' (*l'éleveur et l'oiseau*).

For more information, see **Annex FR07**

Examples of regional approaches identified as part of this study include: Case 2 Branding regional meat production (France), Case 6 From meadow to plate (France), Case 9 The conservation of agricultural biodiversity in Wigry National Park (Poland), Case 13 Using conservation to develop new farming outlets in the Rhön (Germany), Case 15 Sheep-grazing to maintain an open landscape (Poland), Case 18 Finding economically viable alternatives in Hainich Forest (Germany), Case 45 Hohe Schrecke – Old forest with a future (Germany) and Case 46 The cattle farmer and the bird (France).



## 6. Conclusions

The main research question addressed by this study was 'How can the (economic) activities of key sectors be reconciled with measures towards achieving a favourable conservation status of Natura 2000 sites?' We have addressed this question by reviewing literature, collecting case examples, and interviewing sector representatives and experts. On the basis of our study on agriculture, forestry, and tourism and recreation in Denmark, France, Germany, the Netherlands and Poland, and while being aware of the fact that Natura 2000 implementation is in full swing at different speeds in different countries, we can derive the following conclusions.

### General

- There are clear differences between the five Member States included in this review as far as the perception, the challenges and the approaches to Natura 2000 implementation are concerned.
- There is a general feeling that the approach that was adopted during the identification, selection and designation phases was too much top-down, science-driven (but often based on weak and incomplete data), lacked sufficient involvement of stakeholders. Although not legally required by the directives, this lack of consultation and communication in the first phases still **has a bearing on some sectors' representatives'** negative perception of Natura 2000.
- Most sector representatives indicate that they are in favour of the conservation and sustainable management of nature, but that they are still disenfranchised by the problematic history of Natura 2000 implementation and not yet convinced of the improved implementation strategy. The challenge is to move all sectors together to transform words and support for nature into actions.
- Many sector representatives deplore the fact that the process of Natura 2000 implementation (nowadays mainly focusing on management plans) remains very much an issue of public institutions and NGOs. They would like to play a more active role in the development and implementation of Natura 2000 management plans.
- Although the study presents only a snapshot of the process, it shows that the implementation of Natura 2000 in the five countries has resulted so far in a wide range of original and innovative approaches to deal with the many challenges encountered.

### Agriculture

- Of the three sectors considered in this study, agriculture is widely perceived as the sector where most challenges emerge in relation to the implementation of Natura 2000.
- Likewise, agriculture is also the sector that reports encountering the most problems and challenges with Natura 2000 implementation.
- There is much scepticism among the farmers' representatives as to the benefits for local rural development provided by Natura 2000 through branding, etc. These can be no more than local solutions to specific local challenges, i.e. not widely applicable to structural problems in the sector.
- Especially pressing issues are: water management (field drainage near wetlands), pollution (nitrogen deposition and pesticides), both linked to the intensification of agricultural production systems, as well as abandonment and transformation of agricultural land (afforestation, building).

## **Forestry**

- The forestry sector in general considers itself to be in tune with nature conservation and Natura 2000, claiming that active forest management has a tradition of many centuries and is therefore partly to be credited for its current biodiversity.
- Both in forestry and agriculture the increasing demand for biofuels makes biodiversity-friendly management of these areas increasingly difficult: land prices are increasing and compensation through agro-environmental schemes cannot compete with income generated by biofuels.
- As a part of economic development and climate change policies, national policies in France and Germany are actively promoting more intensive forestry (including for biofuel production).

## **Tourism, sports and recreation**

- In the tourism, sports and recreation sector there seems to be the most awareness that Natura 2000 and nature conservation in general very much underpin this economic sector, and that therefore efforts need to be made to cooperate on mutually beneficial solutions.
- Tourism is a very heterogeneous sector with different interests and little central representation. The big distinction in terms of interactions with Natura 2000 is as follows: organized events (festivals, races, etc.), individual practitioners (walkers, joggers, birdwatchers, etc.), and supporting infrastructure (hotels, car parks, golf courses). Each requires a different approach when dealing with Natura 2000.

## **Cross-cutting issues**

- Land ownership and management responsibilities of protected areas designated under the Birds and Habitats Directives also determine the way in which an implementation process is shaped.
- Lack of information, or wrong perception of the implications of Natura 2000 designation, often hamper a clear discussion and decision-making based on facts. Debates and planning processes and decisions often tend to grind to a halt as a result of emotional discussions.
- The geographic origin of pressures linked to sectoral activities varies greatly between the countries. In some countries, such as the Netherlands (with many small and fragmented sites), the most important pressures (e.g. nitrogen deposition, desiccation) come from outside, whereas in other countries activities inside the Natura 2000 sites (forest management, tourism) cause the most pressures.
- Many landowners and land users build their existence on the land they own or use. Changes to the often intimate relationship with their land are often hard to accept and require time to be adopted.

## **Solutions**

### *As many solutions as situations...*

- There are many strategies to cope with and resolve the conflicting interests between sectoral activities and Natura 2000 implementation: regulation, planning, (financial) incentives, encouragement of good practices, communication and participation, and technological solutions.

- There is no one solution that fits all. The mutual interactions between conservation and sectoral economic activities are influenced by a wide range of factors: abiotic, biotic, social, economic and institutional.
- The best solution for each situation where sectoral activities conflict with Natura 2000 implementation will consist of a unique mix of regulation, planning, incentives and participation.
- The exchange of best practices (such as provided as part of this study) provides essential inspiration and input for Natura 2000 process managers to make the best recipe for their site.

***The key role of communication and sectoral involvement***

- Communication and stakeholder participation at critical phases in the Natura 2000 implementation process seem to be essential for an efficient delivery of the Natura 2000 objectives, in particular the development and implementation of management plans.
- Many different approaches have been developed and tested to attain better involvement of the stakeholders, with varying degree of success.
- An essential condition for the successful involvement of stakeholders (mainly landowners and land users) is to take the process and their engagement seriously, and not merely as a formality. Formal consultations that are not given any follow-up disenfranchise stakeholders and lose their future support.

***Building trust and encouraging voluntary participation***

- Building a trusted relationship with the landowners and land users without a hidden agenda and providing enough time for them to adapt to a new situation can help in gaining acceptance of the restrictions imposed by Natura 2000.
- Having a local, trusted person to act as Natura 2000 coordinator also helps to get the more reluctant stakeholders on board.
- Close contact with the Natura 2000 managers, such as farmers, helps in finding tailor-made solutions or approaches best adapted to their current practices. As an example, discussions with French farmers led to the change from measures-based payments to results-based payments, which they preferred.
- Knowledge and good information are also essential to win the trust of the stakeholders. In order to be credible, Natura 2000 process managers and facilitators need to have a wide range of personal and communication skills, but they also need to know what they are talking about.

***Planning and technological solutions***

- Clever planning and the use of technological tools can also help to combine sectoral activities with Natura 2000 implementation. Obvious examples include spatial and temporal zoning of activities in vulnerable sites (e.g. breeding grounds).
- Where intensive land use surrounds or partially overlaps Natura 2000 areas, pressures from these activities (drainage, pesticide use, nitrogen deposition, soil compaction) can sometimes be relieved by technology (such as nitrogen filters, use of wide tyres, dynamic water level management).
- Planning and technical solutions need to go hand in hand with good communication and participation in order to be effective.

*Economic perspectives*

- A solution advanced in Poland is that rural municipalities whose development is curbed because they are located partly or entirely within Natura 2000 could be given financial support from the State budget.
- A functioning framework for Payments for Ecosystem Services could be a promising way forward to finance part of the management of Natura 2000 sites that provide wider social benefits such as water purification, natural hazard mitigation, carbon storage, etc. This would be especially useful for forest owners who now find it difficult to compensate the loss of income as a result of sustainable forest management.

## 7. Recommendations

The following section translates the results of the project into recommendations for a better integration of Natura 2000 implementation and sectoral activities. Specific recommendations are given for the following stakeholders: public authorities, conservation NGOs (including site managers), and the agricultural, tourism and forestry sectors. The following aspects of Natura 2000 implementation are covered: Policies, legislation and regulations; Governance, stakeholder involvement and participation; Outreach, communication, information; Education and training; Knowledge and data management; Economic perspectives and financing; and Site management and planning solutions. Wherever possible, recommendations are illustrated with a case of good practice collected as part of the project.

### **Policies, legislation and regulations**

**Public authorities** – Make sure that development regulations and permit-granting processes for sectoral activities are well organized, transparent, clear and fair. It is especially important for all stakeholders, including the nature conservation sector, that the decision-making should be as open, fair, quick, transparent and objective as possible, because delays and lack of transparency create an atmosphere of distrust and frustration towards the Natura 2000 implementation process.

**Nature conservation NGOs** – Together with landowners and land users, develop easy and practical codes of conduct which translate the often complex national nature protection regulations into practical management guidance.

*See for example:* Box 6 Code of conduct for land managers (the Netherlands), *page 40*

**Agriculture** – Contribute to the development and the implementation of regulatory frameworks, such as for the atmospheric deposition of nitrogen.

*See for example:* Box 3 *Programmatische Aanpak Stikstof* (PAS) Programmatic Approach to Nitrogen (the Netherlands), *page 31*

**Forestry** – Develop and promote self-regulatory mechanisms for sustainable forest management, preferably linked to Natura 2000 regulation.

*See for example:* Case 19 The Warburg Agreement (Germany), *page 42*

**Tourism** – Promote the development and introduction of generic (country-wide) or site-specific, self-regulatory mechanisms for the different subsectors (various types of outdoor sports), such as charters or codes of conduct.

*See for example:* Case 37 Code of conduct for recreation on the IJsselmeer (the Netherlands), *page 64*

### **Governance, stakeholder involvement and participation**

As a general principle, all stakeholders should acknowledge and recognize that the process can be slow, and that the management measures are for the long term. Some parts of the process or the adaptation of some stakeholders to the new situation need to be given time.

**Public authorities** – Play a proactive and leading role in setting up effective governance structures for the management of Natura 2000 sites. At national level, public authorities should

provide a detailed framework, clear guidelines and the necessary resources to the regional and local level competent authorities that are in charge of and responsible for Natura 2000 implementation. As far as possible, the implementation of Natura 2000 policy should be integrated with other relevant territorial policies, such as the Water Framework Directive. This ensures coherence between the objectives and implementation processes and allows consultation and participation processes to be combined and more efficient. At the local and regional levels, public (competent) authorities could:

- make the process of stakeholder involvement as open and inclusive as possible;
- make sure that stakeholders can also participate on an individual basis, and not only through their (sector) representatives;
- make sure that the results of consultations or participatory processes are duly acknowledged in the reports and minutes of the meetings and reflected in the decision-making process (i.e. avoid pro-forma consultations);
- ensure continuity in the process, for example by allowing a generous funding horizon for compensation and contractual agreements, and contracting process managers dedicated to a long-term investment in the process (i.e. avoid using short-term consultancies to do the job and then leave);
- make sure that there is an easy-to-reach and unique contact point for each Natura 2000 site, where the stakeholders can obtain quick and authoritative answers to their questions about the process and regulations of Natura 2000 implementation;
- set up local groups of experts to give tailor-made ecological management advice to landowners and land users.

*See for example:* Case 40 New governance model to help conserve the Little bustard (France), page 69

**Nature conservation NGOs** - Take an active role in the governance structure, either as active participants or as leaders of the process, if requested by the responsible bodies. In addition:

- recognize that nature areas are also used by other stakeholders and be open to their views and needs;
- contribute to the process by making relevant information available (e.g. nature data);
- play the role of mediator if so requested;
- play an active role as process catalyser, e.g. by setting up a network of Natura 2000 watchers;
- offer training on facilitation, moderation and conflict resolution techniques to Natura 2000 coordinators.

**Agricultural sector** - Take an active part in the governance structure, participate in the stakeholder platforms and meetings. Recognize that there is an increasing number and variety of stakeholders in the rural areas whose interests must be taken into account in planning and decision-making.

**Forestry sector** - Where appropriate, take an active role in the governance structure, , e.g. in the steering committee, working groups, expert groups.

**Tourism** - Contribute to the development or improvement of effective national or regional Natura 2000 governance models and take an active role in the site-level governance structure.

*See for example:* Case 14 Raising awareness and sensibility (Germany), page 35; Case 34 Bringing the main tourism players together: *Regiegroep Recreatie & Toerisme* in Natura 2000, page 56

**Outreach, communication, information**



**Public authorities** – Providing up-to-date information to the stakeholders involved in the process is a crucial role of the public authorities. It is especially important to provide clear and understandable information about the governance, about the progress at regular intervals, and about the roles of the stakeholders, and the opportunities and the limitations associated with Natura 2000 implementation. Internal communication and information within the public authorities; it is particularly crucial to provide good information about Natura 2000 implementation to the local and regional level public authorities, as they are the ones having to coordinate the process and answer the stakeholders' questions.

Set up a national (or regional) scheme to award good practice in Natura 2000 management, as a way to communicate good approaches and to encourage good practice by the power of example.

*See for example*, Box 15 The French Natura 2000 Awards (Grand Prix Natura 2000; France), *page 72*

**Nature conservation NGOs** – Make use of the expertise in managing nature areas to help to inform the general public and other stakeholders about Natura 2000, and play an active role in the public debate about the values and benefits of protected areas, in particular Natura 2000 sites. In partnership with the public authorities and/or the sectors, provide guidance and information to the stakeholders involved at local to national levels with the implementation of Natura 2000. Play a role in the translation of research outcomes and the practical management measures.

*See for example* Box 6 Code of conduct for land managers (the Netherlands), *page 44*

**Agricultural sector** – In close cooperation with the authorities and NGOs regularly disseminate accurate information about the dos and don'ts related to Natura 2000 implementation. In particular, provide information about the (new) opportunities provided by Natura 2000, and about the funding opportunities for compensation and contractual management.

**Forestry sector** – Provide specific information to foresters and forest owners regarding Natura 2000 implementation, focusing on management issues and funding opportunities.

**Tourism** – Provide information about Natura 2000 sites, in the form of brochures, maps, information panels, videos. The target group is much more diffuse than for other sectors, and therefore messages and means should be adapted. More need for wider public approach.

### **Education and training**

**Public authorities** – Make sure that the competent authorities at the local and regional levels have the right skills and knowledge to coordinate the drafting and implementation of Natura 2000 management plans. This requires knowledge about the regulations, and skills in setting up the participatory process, project management and good communication.

**Nature conservation NGOs** – Support the responsible authorities in developing training and capacity-building material for specific sectors and users. Develop and offer on-site visits and short courses about the values and management of Natura 2000 sites. Cooperate with the three sectors to train farmers, foresters and tourism professionals in some essential skills, such as participatory decision-making and site management, as well as some less essential but desirable skills, such as species identification and monitoring.

**Agricultural sector** – Build farmers' capacity regarding nature-friendly management practices, e.g. by training farm extension workers in the ecological aspects of farming.

*See for example*: Case 7 Nature conservation advisory service for farmers (Germany), *page 30*

Train farmers to take part in participatory decision-making in order to reach better agreements with other stakeholders during management planning meetings.

**Forestry sector** – Train foresters to take part in participatory decision-making in order to reach better agreements with other stakeholders during management planning meetings.

**Tourism sector** – Provide training to tourism and recreation professionals in communicating about Natura 2000 and nature conservation in general in the areas where the leisure activities take place.

### **Knowledge and data management**

**Public authorities** – Create and fund partnerships and efficient structures for data gathering, monitoring, storage and disclosure to inform the Natura 2000 implementation process. Relevant information includes data about the state of conservation (distribution and population trends of species and habitats), the pressures (e.g. visitors), and threats and drivers. Careful and structured monitoring of policy effectiveness and implementation of regulations can help to dispel myths about Natura 2000 as a bottleneck to local development by providing objective information.

*See for example:* Box 2 Dispelling the myth that Natura 2000 blocks , *page 31*

**Nature conservation NGOs** – Work together with the competent authorities in the collection, management, analysis and interpretation of data relevant to Natura 2000 management. Share the information with all the stakeholders (in particular site managers).

*See for example:* Box 16 OBN: A knowledge network for nature management (the Netherlands), *page 75*

**Agricultural sector** – Work together with conservation NGOs or competent authorities in the gathering and monitoring of specific species or environmental variables.

*See for example:* *Veldleeuwerik* and *Bollenvogels projects on page 73*

**Forestry sector** – Share forestry data and information with the competent authorities during the process.

**Tourism sector** – Contribute relevant knowledge and information to help inform the planning and decision-making process.

*See for example:* Case 24 Bountiles Tourist Frequentation Observatory in the Iles Chausey (France), *page 46*

### **Economic perspectives and financing**

**Public authorities** – At national level, make sure that sufficient funds are available for the implementation of the management plans. Give sufficient priority to Natura 2000 implementation in the national budget and lobby for a better reflection of Natura 2000 in the relevant Community funds such as the CAP. At local and regional levels, make access to available national funds for contract management or compensation as easy and transparent as possible. Support the dissemination of good practices regarding economic opportunities for sectors in and around Natura 2000 sites. Make sure that the importance society attributes to nature and its conservation is reflected in a comprehensive scheme of contracts, agro-environmental payments or fiscal benefits. Earmark additional systematic fiscal transfers to municipalities affected by Natura 2000. Make a thorough regional analysis of all the needs associated with a successful Natura 2000

implementation (including developing new management plans or using existing ones, stakeholder participation, financial compensation, training, education, communication, monitoring) before distributing the limited budget. Coordinate the development of a functioning scheme of Payment for Ecosystem Services (PES).

**Nature conservation NGOs** – Play an active role in finding alternative income solutions for landowners and land users. Initiate, support and/or coordinate collective initiatives for regional branding and marketing strategies associated with Natura 2000 sites. Support landowners, land users and managers in applying for compensation and contractual management agreements.

**Agricultural sector** – Explore the economic alternatives provided by Natura 2000 in terms of alternative management and land use. Consider contract-based management within the framework of agro-environmental schemes. Participate in area-based processes (based on regional branding and identity) with other actors to learn about opportunities for new partnerships and production models.

*See for example:* Case 2 Branding regional meat production (France), *page 25*; Case 6 From meadow to plate (France), *page 30*; Case 13 Using conservation to develop new farming outlets in the Rhön (Germany), *page 34*

**Forestry sector** – Cooperate with other stakeholders (land users, neighbouring landowners and NGOs) to develop integrated regional sustainable development plans in which forested Natura 2000 sites are included as a resource. Support investigation into workable Payment for Ecosystem Services (PES) schemes.

*See for example:* Case 45 Hohe Schrecke – Old forest with a future (Germany), *page 76*

**Tourism sector** – Investigate opportunities for regional branding of Natura 2000 sites for sustainable or ecological tourism development. Work together with other stakeholders to develop a comprehensive regional development approach based on local values, including the natural heritage protected through Natura 2000.

*See for example:* Case 28 Ecotourism in the Pisz forest (Poland), *page 50*; Case 30 Sustainable tourism development in the Maribo Lakes Nature Park (Denmark), *page 53*; Case 31 Green holiday in Himmerland (Denmark), *page 53*; Case 32 Rhin vivant (France and Germany), *page 54*; Case 9 The conservation of agricultural biodiversity in Wigry National Park (Poland), *page 32*

### **Site management and planning solutions**

**Public authorities** – Ensure that Natura 2000 implementation is well integrated into the (regional) spatial planning and (local) land-use planning processes. Try mainstreaming the development of land-use and management plans as much as possible (e.g. implementation of Natura 2000, Water Framework Directive, National Park MP).

*See for example:* Case 36 Overlapping nature protection regulations form an administrative barrier to local development (Poland), *page 63*

**Nature Conservation NGOs** – Cooperate with other owners, users and stakeholders to apply good practice solutions locally. Participate in the development of site management plans.

**Agricultural sector** – Develop and/or adopt specific nature-friendly management practices in collaboration with public authorities, site managers and NGOs.

*See for example:* Case 39 Nieuw Limburgs Peil (the Netherlands), *page 67*

**Forestry sector** – Develop and implement sustainable forest management practices. Work together with other stakeholders (e.g. tourism sector, nature conservation NGOs) to develop comprehensive management plans.

*See for example:* Case 20 Low impact timber removal in the Loisin reserve (France), **page 42**

**Tourism sector** – Cooperate with other stakeholders (land-owners, site managers) to develop practical visitor management plans.

*See for example:* Case 25 Visitor management on the island of Terschelling (the Netherlands), **page 46**; Case 16 Grouse management in the Black Forest (Germany), **page 38**

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## **Annex – Interview questions**

### **A. Questionnaire for experts**

1. What is your role/responsibility/experience in relation to Natura 2000?

#### **The implementation process**

2. Can you describe the process by which the Natura 2000 sites have been designated (in your country)?
3. Were the three sectors (agriculture, forestry and tourism) involved in the designation process? If so, how were they consulted?
4. How is the management of the Natura 2000 sites organized? (financial arrangements, are management plans required?)
5. What is the share of the three sectors in terms of ownership and management of the Natura 2000 sites?
6. How are the three sectors involved in the management of Natura 2000 sites?
7. Can you describe the range of activities of the three sectors within Natura 2000 sites?
8. Who is involved in the formulation of the nature objectives and in the management of Natura 2000 sites?

#### **Challenges and opportunities**

9. Can you describe the most important challenging issues with the three sectors about the implementation of the Natura 2000 network?
10. To what extent do the sectoral activities conflict with Natura 2000 objectives?
11. Do stakeholders from the various sectors in general support the Natura 2000 objectives? Have specific activities been undertaken to generate public support?
12. What factors affect the relations between Natura 2000 and sectoral activities?
  - 12.a. Nature of the sites (e.g. does the size, habitat type and prevalent land use of the N2K site influence the impact on the sector's activities?)
  - 12.b. Conservation measures (e.g. does the nature of the management Natura 2000 sites affect the sector's activities?)
  - 12.c. Nature of the sector's activities (e.g. are some activities more affected than others?)
  - 12.d. Geography (e.g. is there a difference between activities taking place inside or outside of a N2K site?)
  - 12.e. Land ownership and access
  - 12.f. Communication and participation (e.g. is there evidence that a poor communication / participation strategy has had a negative impact on the engagement of the sector)
  - 12.g. Other factors: e.g. institutional, legal, policy, economic
13. Are there some combinations of the above mentioned factors that typically lead to problems/conflicts?

14. Are there some combinations of the above mentioned factors that typically offer prospects to solutions (win-win situations)?
15. Do you know of any exemplary cases illustrating how Natura 2000 implementation and activities in your sector led to:
  - 15.a. an unresolved situation?  
*[please also give (web) reference or contact details]*
  - 15.b. a mutually beneficial solution / opportunity?  
*[please also give (web) reference or contact details]*

## **B. Questionnaire for stakeholders**

1. What is your role/responsibility/experience in relation to Natura 2000?

### **Relation between your sector and Natura 2000**

2. Can you describe the kind of activities related to your sector that take place in or around Natura 2000 sites?
3. What are the consequences of the designation of Natura 2000 sites for these activities?
4. What factors affect the relations between Natura 2000 and your sector?
  - 4.a. Nature of the sites (e.g. does the size, habitat type and prevalent land use of the N2K site influence the **impact on the sector's activities?**)
  - 4.b. Conservation measures (e.g. does the nature of the management Natura 2000 sites affect **the sector's activities?**)
  - 4.c. Nature of the sector's activities (e.g. are some activities more affected than others?)
  - 4.d. Geography (e.g. is there a difference between activities taking place inside or outside of a N2K site?)
  - 4.e. Land ownership and access
  - 4.f. Communication and participation (e.g. is there evidence that a poor communication / participation strategy has had a negative impact on the engagement of the sector)
  - 4.g. Other factors: e.g. institutional, legal, policy, economic
5. Are there some combinations of the above mentioned factors that typically lead to problems?
6. Are there some combinations of the above mentioned factors that typically offer prospects to solutions (win-win situations)?

### **Participation and involvement of your sector in the Natura 2000 implementation process**

7. At what phase of the Natura 2000 implementation process did your sector become involved?
8. (How) was your sector involved in the selection and designation of the Natura 2000 sites?
9. Is your sector formally involved in the management of Natura 2000 sites, and if so can you describe this involvement?
10. Do the people / does the organization you represent support Natura 2000? Has this support changed with time?
11. What are your impressions of the discussions about the management of Natura 2000 sites? How do other organizations feel about these discussions?

### **Challenges**

12. Are there current uses and activities of your sector that conflict with Natura 2000 objectives? If so please name and shortly describe how your sector dealt with this.
13. Has the designation process led to discussions about the activities of your sector in the Natura 2000 network?
14. What challenges does the Natura 2000 implementation (from designation to management) present to your sector? Please give some examples.

### **Solutions and opportunities**

15. Did your sector take active steps to address the issues which conflict with the Natura 2000 implementation? (if any)
16. What opportunities does Natura 2000 offer to your sector?
17. Are there specific activities of your sector that contribute to the management of the Natura 2000 sites? If so, please name and describe
18. Do you know of any exemplary cases illustrating how Natura 2000 implementation and activities in your sector led to:
  - 18.a. an unresolved situation?  
[please give web reference or contact details]
  - 18.b a mutually beneficial solution / opportunity?  
[please give web reference or contact details]

## **Annex – Full descriptions of case studies**

The following cases, the vast majority of which are briefly presented in text boxes throughout the text are described in greater detail in the following pages:

- DE01 - Raising awareness and sensibility
- DE02 - Rewetting the surroundings of Dümmer Lake
- DE03 - Management of sports activities in the Steinhuder Meer Nature Park
- DE04 - Hohe Schrecke – Old forest with a future (Germany)
- DE05 - Using conservation to develop new farming outlets in the Rhön
- DE06 - Managing the impact of traditional Walberlafest festival
- DE07 - Finding economically viable alternatives in Hainich Forest
- DE09 - Grouse management in the Black Forest
- DE15 - Management plan for the future Hainich nature reserve
- DE25 - Nature conservation advisory service for farmers
- DK01 - Sustainable tourism development in the Maribo Lakes Nature Park
- DK02 - Skjern River Delta: A nature restoration project with high socio-economic returns
- DK03 - Restoration of dry grassland commons
- DK04 - Nature as raw material for development at Lille Vildmose
- DK05 - Green holiday in Himmerland
- DK06 - Local stakeholders cooperate to save a butterfly
- FR02 - From meadow to plate
- FR03 - Marais Vernier: a successful dialogue between stakeholders
- FR04 - Bountiles Tourist Frequentation Observatory in the Iles Chausey
- FR05 - Results-based agro-environmental payments increase process ownership
- FR07 - The cattle farmer and the bird
- FR19 - Branding regional meat production
- FR22 - New governance model to help conserve the Little bustard
- NL02 - Code of conduct for recreation on the IJsselmeer
- NL03 - Tourist facilities at Kennemerstrand
- NL06 - Visitor management on the island of Terschelling
- NL07 - Water management of the Naardermeer
- NL09 - Staatsbosbeheer and Oerol on Terschelling
- NL13 - Development of a management plan for Binnenveld Natura 2000 site still in a deadlock
- NL14 - Additional investments needed to maintain dry fields in wet nature area of the Ruiten Aa
- NL24 - Nieuw Limburgs Peil
- PL01 - Implementation of Natura 2000 in Stepnica
- PL02 - Integrated strategy for rural development in the Barycz Valley
- PL03 - New farming practices for the Aquatic warbler in Biebrza Marshes
- PL04 - Ecotourism in the Pisz forest
- PL06 - Overlapping nature protection regulations form an administrative barrier to local development
- PL07 - Land purchase to allow area-wide ecological integrity to be restored
- PL08 - Conflict between forestry and conservation in Białowieża National Park
- PL10 - Sheep-grazing to maintain an open landscape
- PL11 - Addressing disturbance caused by canoeing on the Drawa and Korytnica rivers
- PL30 - The conservation of agricultural biodiversity in Wigry National Park



## Raising awareness and sensibility

**Case:** DE01

**Country:** Germany

**Region:** Schleswig-Holstein

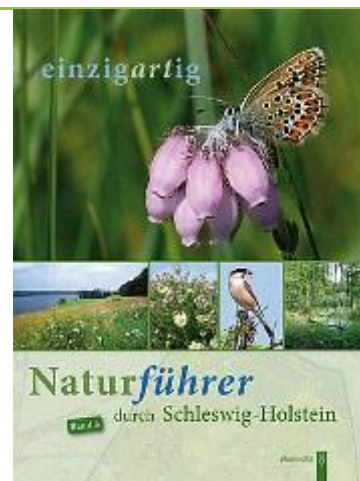
**Site (N2K code) :** various

**Contact:** Claudia Visse

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**Sector:** Tourism



**Background** – Schleswig-Holstein is a prime tourist destination for outdoor nature experience and outdoor sports activities, especially sailing and canoeing. These activities ensure a lot of revenue but have a potential impact on the Natura 2000 sites they use.

**Challenges** – There was a lack of active participation in site management; and a lack of information to stakeholders, including tourists, resulting in unnecessary disturbance.

**Approach** – The approach was focused on information, communication, awareness raising of the stakeholders (farmers, sports and tourist organizations). The management of the sportspeople and tourists was mainly achieved through the signing of voluntary agreements and the development of information material in which Natura 2000 sites are explained, myths around Natura 2000 are dispelled, routes are described and codes of conduct are presented. There is a special active cooperation with the sailing and canoeing associations.

**Results** – Practical measures included: communication campaigns; publications; information bus; leaflet dispelling the Natura 2000 myths and prejudices; voluntary management agreements.

**Factors of success / failure** – Cooperation with different (stakeholder) organizations, good communication campaign.

**Lessons learned (optional)** –

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<http://www.natura2000-dvl.de/index.php?id=412>

<http://www.natura2000-dvl.de/index.php?id=412>

Photo: Cover of the Natura 2000 guide, Landesamt für Landwirtschaft, Umwelt u. Ländliche Räume des Landes Schleswig-Holstein ([www.schleswig-holstein.de/LLUR/](http://www.schleswig-holstein.de/LLUR/))

## Rewetting the surroundings of Dümmer Lake

**Case:** DE02

**Country:** Germany

**Region:** Niedersachsen

**Site (N2K code):** Dümmer  
(DE3415301)

**Contact:** Renate Thole

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**Sector:** agriculture, tourism



**Background** – In 1953 the wet meadows surrounding Dümmer Lake were drained to make way for intensive agriculture. An exceptionally important bird area for staging migratory birds and for breeding birds was lost. In 1987 the government of Lower Saxony decided to regenerate the original wet meadows and their extensive farming management.

**Challenges** – Conservationists wanted to restore the original high value farmland with high water tables, rich flora and breeding meadow birds. The farmers had benefited from the drainage in the 1950s and did not want to lose their economic benefits from agriculture.

**Approach** – The problem was solved by informing the farmers about Natura 2000. Farming activity could continue, but subject to adapted management. Losses in income could be compensated through community funds. This was followed by the purchase of large areas of land and the restoration of a humid water regime in the meadows. In order to compensate for the economic loss for the local community, investments were made to improve local nature based recreation, by constructing cycle paths, walking trails and observation cabins. Stakeholders were involved in the process coordinated by the Dümmer Forum.

**Results** – In the unique case of the Dümmer wetlands, the state of Lower Saxony purchased 9,000 ha to set up the Natura 2000 site. The money and the founding of the Dümmer Forum, in which stakeholders were actively involved in free discussion of all manner of management problems, reduced the gap between the wishes, needs and interests of the different stakeholders.

**Factors of success / failure** – Stakeholder involvement and the presentation of the Natura 2000 restoration project as a comprehensive plan, including adapted farming use and the promotion of nature based tourism.

**Lessons learned (optional)** –

### References

[http://ec.europa.eu/environment/life/project/Projects/index.cfm?fuseaction=home.showFile&rep=laymanReport&fil=LIFE02\\_NAT\\_D\\_008456\\_LAYMAN.pdf](http://ec.europa.eu/environment/life/project/Projects/index.cfm?fuseaction=home.showFile&rep=laymanReport&fil=LIFE02_NAT_D_008456_LAYMAN.pdf)

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Photo: Wet meadows at Dümmerlohausen, Corradox

([http://upload.wikimedia.org/wikipedia/commons/c/cf/Duemmerlohausen\\_Wiese.JPG](http://upload.wikimedia.org/wikipedia/commons/c/cf/Duemmerlohausen_Wiese.JPG))

## Management of sports activities in the Steinhuder Meer Nature Park

**Case:** DE03

**Country:** Germany

**Region:** Hannover

**Place:** Neustadt am Rübenberge

**Site (N2K code):** Steinhuder Meer  
(DE3521401)

**Contact:** -

**Sector:** Tourism



**Background** – Steinhuder Meer is one of the most attractive recreational areas in the Greater Hannover conurbation. Among the visitors, it attracts many sportspeople, who come and enjoy the outdoor activities in a beautiful natural environment. It is also an important Natura 2000 site under the Birds Directive with a special importance for a number of breeding and staging birds, including White-tailed Eagle (*Haliaeetus albicilla*), Osprey (*Pandion haliaetus*), Bittern (*Botaurus stellaris*), Nightjar (*Caprimulgus europaeus*) and Red-backed Shrike (*Lanius collurio*).

**Challenges** – To combine the site as an important recreational area while conserving the habitats and species of European importance. This meant giving special attention to the (potential) disturbing pressure on the natural values of the site by the many users (visitors, sportsmen).

**Approach** – In order to combine the recreational and conservation use of the site, zoning was introduced, concentrating recreational activities in two restricted areas of the lake. In addition, nature experience of the site has been promoted by the creation of a nature path around the park. Vulnerable parts of the lake have been closed off with buoys.

**Results** – Less human disturbance of important nature areas of the Steinhuder Meer Nature Park as a result of water sports activities, while offering a better nature experience to the visitors. The measures have been rewarding with the recent return of the White-tailed Eagle and the Osprey as breeding birds.

**Factors of success / failure** – Zoning of restricted areas and areas where recreational activities are allowed.

**Lessons learned (optional)** –

Photo: Osprey, Mark Zekhuis ([www.freenatureimages.eu](http://www.freenatureimages.eu))

## Hohe Schrecke - Old forest with a future

**Case** DE04

**Country** Germany

**Region** Thuringia and Sachsen-Anhalt

**Place** Ostrand der Hohen Schrecke

**Site (N2K code)** Hohe Schrecke

(DE4734303)

**Contact:** Christian Kellner

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**Sector:** Tourism, forestry



**Background** – After centuries of extensive farming and being used as a military area for 50 years, this forest habitat of about 7,000 ha in northern Thuringia has acquired a rich structure with a high proportion of dead wood. Large parts of the forest correspond to the potential natural (climax) vegetation and, typical for Central Europe, it includes important Beech stands, in addition to semi-bog habitats. The 600 species of fungi demonstrate the important biodiversity of the site. The forest area is surrounded by a zone of orchards, fields, hedgerows, shrubs and dry grasslands. This landscape is used extensively for agriculture and is in a good state of preservation.

**Challenges** – The largest area fraction of the Hohe Schrecke is in private and state ownership. The challenge facing the local communities was to compensate for the loss in jobs and local economic activity following the dismantling of the military base.

**Approach** – Since 2002, all 14 municipalities that border the forest have committed themselves to conservation-oriented regional development. The forest areas that were still in possession of Thuringia were introduced to the project, and purchases of private forest land have been made in order to preserve the species-rich beech forest communities. In order to avoid a production oriented management of the forest that would severely degrade its natural values, preference was given to a model of nature conservation based regional development. This included the financial support to sustainable energy, tourism and farm production and branding projects.

**Results** – Thanks to the adopted approach over 1,000 hectares could be preserved. It was combined with the execution of a feasibility study for conservation-oriented regional development, development of nature-friendly visitor attractions in cooperation with regional cultural attractions. The study identified alleys for small initiatives which together gave a boost to the local employment and economy.

**Factors of success / failure** – The strong commitment of all communities involved suggests a high level of acceptance of the project.

**Lessons learned (optional)** –

### References

[http://www.bfn.de/0203\\_hohe-schrecke-wald.html](http://www.bfn.de/0203_hohe-schrecke-wald.html)

<http://www.hohe-schrecke.net>

<http://www.naturstiftung.de/index.php?pageid=181>

Photo: <http://www.bund-thueringen.de>

## Using conservation to develop new farming outlets in the Rhön

**Case:** DE05  
**Country:** Germany  
**Region:** Between Bavaria, Hessen and Thuringia  
**Place :** Near Tann (Rhön)  
**Site (N2K code) :** Hohe Rhön (DE5525307)  
**Contact:**  
**Sector:** Agriculture, tourism



**Background –** In the Rhön region there has been a sharp decrease in the numbers of the local breeds of sheep over the past 50 years. In the past, species-rich calcareous grasslands in the former GDR had been grazed by great flocks of sheep but after the transition to a market economy these flocks, no longer protected by a closed market with guaranteed consumers, rapidly disappeared.

**Challenges –** To help the survival of local farmers and maintain the valuable landscape and its species-rich dry grasslands, by bringing back the Rhön sheep to fulfil its important ecological role again.

**Approach –** Within the context of a LIFE project a comprehensive approach to the revitalization of the Rhön sheep was developed in close cooperation with the Rhön Biosphere Reserve authorities and the local farmers. The objective was to re-establish a living landscape actively used by local farmers who could make a living out of their practices, and avoid a museum landscape solely managed by conservationists. Working groups were organized identifying the challenges and possible solutions to the current situation. Land fragmentation was seen as a barrier and an informal land swap between farmers was launched to consolidate the fields and facilitate their management. Finally a comprehensive branding and marketing strategy and infrastructure was developed as part of a second LIFE project to achieve a greater demand and better prices for the sheep meat.

**Results –** Farmers and shepherds reintroduced the sheep, and the local retailers and restaurants now sell the meat and the traditional dishes. The sheep are used for branding the region and vice versa. Information and guidelines addressing environmental issues are given to tourists.

**Factors of success / failure –** With the new approach in hotels and restaurants, the business has received publicity. New jobs have been created and other organizations and farmers are following the example.

**Lessons learned (optional) –** The strength of this LIFE-Nature beneficiary's work lay in its attention to the local community, notably the farmers. Without their active participation, long-term maintenance of the habitats restored thanks to the funds invested through LIFE-Nature, would be impossible. However, unlike the volunteers who come to work camps to lend a hand with management work, farmers have businesses to run and need a sufficient return to survive on the marketplace and earn a livelihood. So in addition to kick-starting agro-programmes the projects went one step further in making land use conform to Natura 2000 guidelines attractive to farmers, by investing in infrastructure (local slaughter and processing, cool stores, farm shops) and networks (between farmers and local butchers, restaurants, hotels) through which produce can be sold at good prices directly to consumers, using the benefits to nature conservation as a selling point. This example of 'ecologically-orientated business' demonstrates that change is possible and can be very successful.

### References

[http://ec.europa.eu/environment/nature/info/pubs/docs/nat2000/sust\\_tourism\\_gpract.pdf](http://ec.europa.eu/environment/nature/info/pubs/docs/nat2000/sust_tourism_gpract.pdf)  
[http://ec.europa.eu/environment/nature/natura2000/management/gp/farming/01case\\_rhon.html](http://ec.europa.eu/environment/nature/natura2000/management/gp/farming/01case_rhon.html)  
<http://biosphaerenreservat-rhoen.de/en/>

Photo: A flock of Rhön Sheep returns to the meadows (www.rhoenlamm.de)

## Managing the impact of traditional Walberlafest festival

**Case:** DE06  
**Country:** Germany  
**Region:** Bavaria  
**Site (N2K code):** Ehrenbürg und Katzenköpfe (DE6233372)  
**Contact:** Andreas Niedling  
Andreas.Niedling@lra-fo.de  
**Sector:** Tourism



**Background** – The ‘Walberlafest’ has taken place for over 200 years and thus has a long tradition and is an important part of the regional culture. The location of the festival is a prominent hill, which is both a popular destination for recreation and a protected natural area. The festival is very popular and attracts thousands of visitors each year. The mass of people coming to the mountain causes damage to the landscape. In recent decades the festival’s infrastructure (i.e. electricity and motorization) has developed, leading to increasing damage to the area.

**Challenges** – The economic interests of the community and the interests of nature protection organizations and the rural district office are poles apart on some issues. Insufficient information is often the reason for problems.

**Approach** – Conflict is defused by regular round-table meetings, to which the stakeholders with conflicting interests are invited.

**Results** – The festival is now controlled by official regulations of the local administrations. Structural Funds (European Social Fund - ESF) are being used for the professional management of this Natura 2000 site.

**Factors of success / failure** – Inform stakeholders about possibilities and effects of their activities.

**Lessons learned (optional)** – To shift from stakeholder opposition to participation and cooperation, demonstrate the sustainable economic advantages and benefits of Natura 2000.

### References

[http://ec.europa.eu/environment/nature/natura2000/management/docs/report%20LOT3\\_Task%202-Best\\_cases.pdf](http://ec.europa.eu/environment/nature/natura2000/management/docs/report%20LOT3_Task%202-Best_cases.pdf)

Photo: Altdorf Hagenhausen, Klaus M. (+<http://commons.wikimedia.org/wiki/File:Altdorf-Hagenhausen1.jpg>)



## Finding consensus in wet meadow management

**Case:** DE07

**Country:** Germany

**Region:** Rhineland Palatinate

**Place:** Bellheim

**Site (N2K code):** Bellheimer Wald mit

Queichtal (DE6715302)

**Contact:** Peter Keller

Tel.: +49 06341/5590-646

natura-palatina@t-online.de

**Sector:** Agriculture, tourism, forestry



**Background** – The area covers approximately 4,500 ha, of which approximately 70% forest and 30% open land. The open land is composed mainly of various grassland habitats and some farmland. Next to farming, forestry, sports and recreation form the main uses of the land. The site is important for the conservation of Bechstein's Bat, Crested Newt, Weather Loach (*Misgurnus*), Black and Blue Large Blue, Large Copper, Helmet Damselfly, Stag Beetle, Corncrake, Nightjar, Middle Spotted Woodpecker and Honey Buzzard.

**Challenges** – The designation of the area as a Natura 2000 site led to a range of conflicts with local users. There was a problem with sports facilities predating the designation and the limitations imposed on future expansion of these facilities. There were also conflicting interests regarding the use of the meadows for fodder production and species conservation. The designation of N2K site led to restrictions on the development of leisure and facilities and to intensive the use of meadows by the farmers.

**Approach** – Stakeholders were informed about Natura 2000. In order to find a way out of the deadlock, discussions between farmers and conservationists were organized to assess the interests and concerns of the different user groups. Farmers received compensation payments to use the meadows extensively and mow at a later date. The farming and conservation communities cooperated; both wanted to maintain the meadows: farmers as a source of fodder, conservationists for conservation of flora and fauna. Traditional irrigation techniques and infrastructure for the water meadows were restored (DVL 2007). After a project plan was developed, support was obtained from DVL, which has contacts with the German Umweltstiftung (environmental foundation). It was decided to introduce the management changes gradually in order to give the farmers the time to adapt to the new conditions. A special mowing pattern results in the creation of a grassland mosaic especially benefiting the flowers and meadow breeding birds such as the Corncrake. The next step was to enlist the support of politicians. The concrete management measures discussed with the land owners were accompanied by an intensive information campaign targeting all the communities living around the park: brochures, information panels, nature trails informed the visitors about the need for and impact of the specific management measures.

**Results** – Thanks to the involvement of the various stakeholders in discussion groups, the different interests became clear and a plan for the gradual transition to the wet meadow management was developed and implemented. This resulted in an improvement of the quality of the meadow habitat for the open field species. Other practical measures included: communication; publications; information bus; leaflet about N2K prejudices; voluntary agreements.

**Factors of success / failure** – A key factor for success was having a group of people supporting the project objectives, and having one person to do the work (and money to pay for this job).

**Lessons learned (optional)** – The importance of good coordination and of informing and involving the stakeholders about Natura 2000. Payment of compensation to farmers to use the meadows extensively and mow at a later date.

### References

Photo: Stag Beetle (*Lucanus cervus*), Mark Zekhuis, Saxifraga ([www.freenatureimages.eu](http://www.freenatureimages.eu))

## Grouse tourism and forestry in the Black Forest

**Case:** DE09  
**Country:** Germany  
**Region:** Baden-Württemberg  
**Place :** Nordschwarzwald  
**Site (N2K code):** DE7415441  
**Contact:** Daniel Brandt  
Tel.: +49 721 9264355  
Daniel.Brandt@rp.bwl.de  
**Sector:** Forestry



**Background –** The Grindenschwarzwald in the northern Black Forest is one of the strongholds of the Natura 2000 Network in the region. It comprises a mosaic of woods, bogs and species-rich mountain heaths. Remarkably, this area is also one of the few remaining strongholds for mountain birds in Germany outside of the Alps. It is also an important recreational region that attracts up to 3,000 tourists per day.

**Challenges –** Bird species that are sensitive to disturbance bear the brunt of this visitor pressure and, prior to the launch of the project, their populations were decreasing. The abandonment of ancient land uses is also a major conservation problem.

**Approach –** Ten local partners, public and private, agreed to undertake a joint LIFE initiative for an integrated approach towards preserving the Grindenschwarzwald's nature and landscape value. The project team concentrated its efforts on habitat conservation and visitor guidance measures. Around 110 ha of mountain heaths were identified for restoration by scrub clearance and just under 200 ha of forest area were optimized for grouse and other woodland birds, through selective tree cutting and opening-up of the canopy. These habitat conservation measures were accompanied by intensive public relations work and direct visitor management actions.

**Results –** The results showed that the project's objectives were reached and even surpassed. Clearly marked nature trails lead the visitors to the most interesting spots and best viewpoints, while leading them away from the areas inhabited by the shy grouse. Adapted forest management practices have allowed recreating a better mosaic of suitable habitat for the various phases of the life cycle of the grouse. The decline of their populations has been slowed.

**Factors of success / failure –** The project team succeeded in establishing good cooperation between nature conservation, forestry, agriculture and tourism in the region. Ideas to improve foreseen actions, or simply ways of doing things better, were developed and then disseminated within the large group of people involved in this project.

**Lessons learned (optional) –** The project's communication efforts between partners and other stakeholders were particularly noteworthy.

### References

[http://ec.europa.eu/environment/life/project/Projects/index.cfm?fuseaction=search.dspPage&n\\_pr oj\\_id=1693](http://ec.europa.eu/environment/life/project/Projects/index.cfm?fuseaction=search.dspPage&n_pr oj_id=1693)

Photo: Capercaillie (*Tetrao urogallus*); Chris van Rijswijk ([www.dutchbirding.nl](http://www.dutchbirding.nl))

## Management plan for the future Hainich nature reserve

**Case:** DE15

**Country:** Germany

**Region:** Thuringia and Sachsen-Anhalt

**Site (N2K code):** Hainich (DE4828301)

**Contact** Uwe Spangenberg

Tel.: +49 361 21 44 330

**Sector** Tourism



**Background** – The Hainich area covers 20,000 ha of a mainly forested ridge in the Thuringian Basin, over which almost no roads run and which boasts the largest coherent deciduous wood in Thuringia. Two recently abandoned Red Army military training areas have become a showcase for undisturbed ecological succession from bare ground to deciduous forest. With their total surface area of 8,000 ha they are the most extensive sites in Germany where succession towards a beech forest can be observed. Other remarkable sites in the Hainich are the 4,000 ha of *Plenterwälder* (forests shaped by centuries of traditional selective logging) and 25 ha of juniper heathland.

**Challenges** – Since the fall of the Berlin Wall this area has been under constant threat from infrastructure development plans. As in many other parts of East Germany, local unemployment is very high, so that decision-makers are putting all their efforts into working out concepts for the economic revival of the district. Because of the different aims and interests of landowners, environmental NGOs and other interest groups, the creation of a protected area was subject to deep conflicts.

**Approach** – To gain the support of the local inhabitants, the management planning work (funded by a LIFE project) was accompanied during the project by intensive public relations work, in particular through exchanges with mayors and other representatives of communities located in existing national parks elsewhere. The planned establishment of a national park in the Hainich to preserve the beech forests and the succession zones could at the same time offer the local communities promising opportunities and function as a catalyst for economic development.

**Results** – An effective multifunctional management approach was developed with inclusion of stakeholders; the selective felling of beeches (*Plenterwaldwirtschaft*) was explicitly encouraged and maintained.

**Factors of success / failure** – Cooperation of different stakeholders.

**Lessons learned (optional)** –

### References

<http://www.nationalpark-hainich.de/ueberblick/english.html?Fsize=2>

Meder, R. & N. Weber (2000) Die Gruendung des Nationalparks Hainich in Thueringen aus forstpolitischer Sicht.

Photo: Canopy walk in Hainich National Park, Fritz Geller-Grimm (<http://commons.wikimedia.org>)

## Nature conservation advisory service for farmers

**Case:** DE25

**Country:** Germany

**Region:** Lower Saxony

**Site (N2K code):** various

**Contact:** -

**Sector:** Agriculture



**Background** – In a process lasting hundreds of years, natural landscapes in large parts of Germany have been replaced by cultural ones. Nowadays modern farming techniques are being blamed for the decrease in species numbers and the decay of cultural landscapes in Europe.

**Challenges** – Will it be possible to combine the quantitative growth of organic farming to feed the people with the aim of preserving and even increasing biodiversity?

**Approach** – There is a growing demand to improve organic farming guidelines and to integrate the task of nature development and the ‘production of biodiversity’ into the existing regulations. However, a better landscape is not produced by better regulations, but by farmers who are willing to change the management of their land, who are convinced of the need for this task, and who change their attitude towards nature. This requires advice and education; it calls for a participatory approach and cooperation between landscape planners, farmers and nature conservation experts.

**Results** – The conversion to organic farming already makes a contribution to nature conservation. In addition, by integrating certain nature conservation measures (such as the planting of structural elements), organic farming plays a leading role in the move towards a multifunctional and environmentally friendly type of agriculture. Many farmers have sought advice and a lot of measures have been implemented successfully on their farms. The interest in an advisory service shows the farmers’ good will towards integrating nature conservation objectives into their farming practices.

**Factors of success / failure** – An advisory service for organic farming was established in the German state of Lower Saxony, which helped the farmers to solve their problems.

**Lessons learned (optional)** –

**References**

Photo: Functional agro-biodiversity workshop, ZLTO

## Sustainable tourism development in the Maribo Lakes Nature Park

**Case:** DK01  
**Country:** Denmark  
**Region:** South-eastern Denmark  
**Place:** Maribo Lakes Nature Park  
**Site (N2K code):** Maribosøerne (DK006X087)  
**Contact:** Hanne Hübertz  
 Tel.: +45 268 222 74  
[hh@nordeco.dk](mailto:hh@nordeco.dk)  
**Sector:** Tourism

Maribo Lakes Nature Park -  
 strategy and action plan for  
 sustainable tourism  
 2012 - 2016



**Background** – The Maribo Lakes Nature Park is located in the municipalities of Lolland and Guldborgsund and is one of Denmark's first regional nature parks. It is a wildlife sanctuary, designated as both a Ramsar and a Natura 2000 area. It covers approximately 5,000 ha, including four lakes. Most of the area is privately owned. The two municipalities therefore share the management responsibility with the private landowners, in consultation with a User Council established in 2008.

**Challenges** – The shared management system is functioning well but requires a high degree of collaboration, coordination, volunteer agreements and a general acceptance of the management tools, such as overall strategies, management plans, User Council consultations, access agreements, etc. Economic depression of the area should improve.

**Approach** – A 'Strategy and Action Plan for Sustainable Tourism Development in the Maribo Lakes Nature Park, 2012-2016' was developed with stakeholder involvement.

**Results** – The Strategy and Action Plan was developed in a participatory process, whereby landowners, local tourism initiatives, NGOs, the Nature Park ranger and municipal staff and politicians were consulted at various stages of the process: in the initial stage by means of individual interviews with members of the Nature Park's User Council, and later in the process through a series of workshops discussing the strength, weaknesses, opportunities and threats (SWOT) of the various options, the draft strategy, the vision and the suggested action plan. A draft version of the action plan was reviewed and improved by the User Council members. Fundraising at the EU and cooperation with other countries is being followed up.

**Factors of success / failure** – Cooperation with stakeholders in realizing a strategy and action plan for the area.

**Lessons learned (optional)** –

### References

[http://www.naturparkmaribo.dk/mediafiles/23/other/english\\_version\\_19\\_aug.doc.pdf](http://www.naturparkmaribo.dk/mediafiles/23/other/english_version_19_aug.doc.pdf)

Photo: [www.naturparkmaribo.dk](http://www.naturparkmaribo.dk)



## Skjern River Delta: A nature restoration project with high socio-economic returns

**Case:** DK02  
**Country:** Denmark  
**Region:** West Jutland  
**Site (N2K code):** Skjern Å  
(DK00CX162)  
**Contact:** Niels Dahlin Lisborg  
[ndl@sns.dk](mailto:ndl@sns.dk)  
Tel.: +45 394 72 000  
**Sector:** Tourism, agriculture



**Background** – During the 20th century the lower stretches of Skjern River (Denmark's largest river by catchment size) were drained and transformed into agricultural land for the production of wheat. The original wetlands and their associated fauna and flora disappeared. In the 1980s it was decided to restore the natural values of the wetlands. The initial opposition from the farmers had to be dealt with carefully and alternative sources of income found for them.

**Challenges** – The main problem was the loss of livelihood for the wheat farmers.

**Approach** – The problem was solved through good communication and information, and public participation in the decision-making process. Alternative sources of income for the local population were identified: (eco)tourism and cattle breeding were the main alternatives. An interest group for leisure activities was set up, consisting of representatives of all stakeholders (ranging from hunters and farmers to the local museum and the nature protection organization). This group drew up a proposal for access and leisure activities in the Skjern River Delta, bearing wildlife in mind.

**Results** – The proposal from the interest group resulted in the execution of recreation and information plans by the Forest and Nature Agency, with the objective of giving the local people and tourists the best opportunities to enjoy nature and recreational activities while safeguarding the development of nature and ensuring nature protection.

**Factors of success / failure** – For this long-term project public participation, information, legal issues, and construction work all needed to reach a satisfying result.

**Lessons learned (optional)** –

### References

[http://www.stichtingrecreatie.nl/kicproj.nsf/0/237EC09919C21852C1256E16004D5B93/\\$file/Jewels\\_in\\_the\\_crown.pdf](http://www.stichtingrecreatie.nl/kicproj.nsf/0/237EC09919C21852C1256E16004D5B93/$file/Jewels_in_the_crown.pdf)  
[http://ec.europa.eu/environment/life/project/Projects/index.cfm?fuseaction=search.dspPage&n\\_pr oj\\_id=1725](http://ec.europa.eu/environment/life/project/Projects/index.cfm?fuseaction=search.dspPage&n_pr oj_id=1725)  
[http://ec.europa.eu/environment/life/project/Projects/index.cfm?fuseaction=search.dspPage&n\\_pr oj\\_id=1485](http://ec.europa.eu/environment/life/project/Projects/index.cfm?fuseaction=search.dspPage&n_pr oj_id=1485)

Photo: Tourist infrastructure in the Skjern River Delta ([www.skjernaakano.dk](http://www.skjernaakano.dk))

## Restoration of dry grassland commons

**Case:** DK03  
**Country:** Denmark  
**Region:** Jutland  
**Place:** Rodgild  
**Site (N2K code):** Mols Bjerger med kystvande (DK00DX300)  
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[sra@sns.dk](mailto:sra@sns.dk)  
**Sector:** Agriculture, forestry, tourism



**Background** – As in most parts of Europe, dry grasslands and the specific flora and fauna values linked to these habitats have largely disappeared from Denmark, due the combined effects of lack of grazing, scrub encroachment and invasion of non-native species.

**Challenges** – To restore the most valuable Danish grassland sites within Natura 2000 back to a favourable conservation status, and to secure their long-term management. Considering that 53% of the project area is in private ownership, cooperation with landowners was an essential prerequisite for the project's final success.

**Approach** – The Danish Ministry of Environment launched a national strategy through a LIFE project. The project's target was to increase the area of the Annex I dry grassland habitats from 715 ha to 983 ha. This involved the conversion of 178 ha of plantations and arable land back to grasslands, thus helping to counteract habitat fragmentation. It also required the clearing of overgrowth and encroaching scrub from over 900 ha. Grazing was to be introduced on 599 ha so that by the end of the project more than 1,780 ha would be managed for conservation.

**Results** – The project exceeded the target of increasing the area of the three grassland habitat types from 715 ha to 983 ha. Actions included the conversion of plantations, arable land and other areas to dry grassland, contributing significantly to counteracting the fragmentation of dry grasslands; the clearing of overgrowth from dry grasslands; removal of tree encroachment; and the establishment or securing of appropriate grazing regimes, including the introduction of grazing. One of the project sites, Mols Bjerger in Jutland, has also been selected as a pilot site for developing a national model for national parks in Denmark.

**Factors of success / failure** – Efforts on stakeholder dialogue and awareness-raising, as well as activities to encourage landowners to sign agro-environmental contracts, resulted in cooperation with local landowners. Bringing together the managers and users of a habitat group (dry grassland on commons) with similar management and conservation issues, allows for a better exchange of experience and knowledge. The project group meetings support these exchanges and additionally study visits to nearby similar areas in Germany add to the knowledge of best management practice.

**Lessons learned (optional)** –

### References

[http://ec.europa.eu/environment/life/project/Projects/index.cfm?fuseaction=search.dspPage&n\\_pr oj\\_id=2649](http://ec.europa.eu/environment/life/project/Projects/index.cfm?fuseaction=search.dspPage&n_pr oj_id=2649)  
<http://www.naturstyrelsen.dk/International/English/Topics/Countryside/EULIFE.htm>

Photo: Cycling in Mols Bjerger National Park ([www.visitmolsbjerger.dk](http://www.visitmolsbjerger.dk))



## Nature as raw material for development at Lille Vildmose

**Case:** DK04

**Country:** Denmark

**Region:** North Jutland

**Site (N2K code):** Lille Vildmose  
(DK00FX007)

**Contact:** [info@lillevildmose.dk](mailto:info@lillevildmose.dk)

**Sector:** Agriculture, tourism and forestry



**Background** – Lille Vildmose is a special nature reserve and Natura 2000 site, covering an area of 75 km<sup>2</sup>. The site is currently an important carbon store, given the volumes of peat, but this is under threat through peat extraction. It is also a valuable site for nature tourists, particularly birdwatchers, given the spectacular number of Cormorants (*Phalacrocorax carbo*) breeding along the lakes.

**Challenges** – Peat extraction is releasing a lot of carbon into the atmosphere and degrading the natural values of the area. The challenge is to find local economic alternatives for the peat extraction activities, in order to preserve this endangered habitat and its important carbon sink function. In order to implement such a transition from the local peat-based economy to a more sustainable variant based on tourism, information and cooperation among stakeholders needed to be facilitated.

**Approach** – A study addressing the socioeconomic changes associated with the new objectives for the peat land was commissioned. Stakeholder meetings were organized to assess the concrete opportunities which the cultural and natural heritage offered in terms of business development.

**Results** – The study recognized that Lille Vildmose has a significant potential for the development of activities based on the cultural and natural history of the site which offers an alternative source of employment and enterprise to the unsustainable peat extraction industry. Stakeholder discussions highlighted a number of potential initiatives that could benefit the region, including building on the cultural heritage of the site, nature restoration, attracting tourists, and the development of the historic peat train, the infrastructure of which is still largely in place, and educational and research activities. A visitor centre was opened. A conservative estimate suggests that proper implementation of a local development plan, building on Natura 2000, will result in 150 full-time jobs for the area.

**Factors of success / failure** – A study of socio-economic alternatives and opportunities informed the process for the development of a management and development plan together with stakeholders whose involvement resulted in cooperation and execution of the plans.

**Lessons learned (optional) –**

### References

<http://www.ieep.eu/assets/63/denmarkcasestudy.pdf>

<http://www.cbd.int/doc/case-studies/inc/cs-inc-eur-pbbhandbook-workshop2009-en.pdf>

[www.lillevildmose.dk](http://www.lillevildmose.dk)

Photo: Great cormorant, Fir0002/Flagstaffotos (<http://commons.wikimedia.org>)

## Green holiday in Himmerland

**Case:** DK05

**Country:** Denmark

**Region:** North Jutland

**Place:** Himmerland

**Site (N2K code):** Rold Skov, Lindenberg

Ådal og Madum Sø (DK00FX126)

**Contact:** -

**Sector:** Tourism



**Background** – The Himmerland area, situated in northern Jutland in Denmark, has seven varied Natura 2000 sites (lakes, broads, river valleys, forest, moors, fjords, bogs). Compared with the west coast of Denmark, the area does not receive many tourists.

**Challenges** – The aim is to build up the tourism activity in the area through the development of exciting 'green' tourist products. Himmerland should develop as an active, green holiday and recreational area. It aims to create jobs and reduce the negative effects of tourism on the environment.

**Approach** – Twelve municipalities founded 'Destination Himmerland', a tourism network cooperation with 138 members from the public and the private sectors. Its main tasks are marketing and tourism product development in Himmerland. It also provides guidance for local tourism companies. The outstanding natural heritage protected in seven Natura 2000 sites, serves as one of the resources to attract visitors to the area. Part of the activities to help visitors discover the natural riches of Himmerland included the setting out of an exploration route which can be discovered by bicycle, car or public transport and a nature guide to go with it.

**Results** – A nature trail connecting the seven Natura 2000 sites in Himmerland was implemented and information panels as well as a guidebook were produced. In addition local entrepreneurs were trained, contacts were encouraged between local entrepreneurs and organic farmers, and information was provided on environmental certification and sustainable tourism.

**Factors of success / failure** – The public-private partnership and having the initiative deeply rooted in the local community contributed to the initiative's success. Dialogue and effective networks, together with the development of joint promotion, were also factors of success. The approach of a network of Natura 2000 sites as a shared resource for local sustainable development seemed quite effective.

**Lessons learned (optional)** – Practical actions appeared to be very important.

### References

[http://ec.europa.eu/environment/nature/info/pubs/docs/nat2000/sust\\_tourism\\_gpract.pdf](http://ec.europa.eu/environment/nature/info/pubs/docs/nat2000/sust_tourism_gpract.pdf)

Photo: Lille Økssø, Torben Nielsen (<http://www.fugleognatur.dk>)

## Local stakeholders cooperate to save a butterfly

**Case:** DK06  
**Country:** Denmark  
**Region:** North  
 Jutland  
**Site (N2K code):**  
 Store Vildmose  
 (DK00FX120)  
**Contact:** -  
**Sector:** Agriculture



**Background** – The population of the vulnerable butterfly Marsh fritillary (*Euphydryas aurinia*) has been declining in Denmark, which has an internationally significant population. Its conservation status was worrying.

**Challenges** – Working at a landscape scale to restore the habitat condition and connectivity for the Marsh fritillary and bringing stakeholders (landowners and land users) on board for the conservation actions.

**Approach** – The area of *E. aurinia* breeding habitat in favourable condition was increased. The connectivity between breeding patches within six Natura 2000 sites was increased. A comprehensive information campaign was conducted to raise awareness about the vulnerable butterfly among landowners and local authorities.

**Results** – ASPEA managed and restored about 500 ha of *E. aurinia* habitats, and as a result the negative trend for the Marsh fritillary has been curbed. This outcome was documented through an intensive monitoring programme; practical experience was gained, and a comprehensive information campaign was conducted. Five hundred landowners in the action areas were informed about the activities, which included meetings and excursions. The Danish *E. aurinia* sites have been restored to a favourable habitat condition in which their long-term survival is now much more secure. Public appreciation of the grassland habitats has been created, and they are now recognized as a coherent ecological entity of international significance. The outcome of this LIFE-Nature project has provided a solid foundation upon which other initiatives have already begun to build (e.g. amenity access, local wildlife and recreation businesses, marketing of the beef from traditional breeds grazed on the project sites).

**Factors of success / failure** – The establishment of successful partnerships with local farmers will allow the appropriate grazing management of the project sites to continue in the longer term. This will generate a substantial body of survey data and analysis to inform ongoing management of the project sites and other *E. aurinia* projects.

**Lessons learned (optional)** –

### References

[http://ec.europa.eu/environment/life/project/Projects/index.cfm?fuseaction=home.showFile&rep=laymanReport&fil=LIFE05\\_NAT\\_DK\\_000151\\_LAYMAN.pdf](http://ec.europa.eu/environment/life/project/Projects/index.cfm?fuseaction=home.showFile&rep=laymanReport&fil=LIFE05_NAT_DK_000151_LAYMAN.pdf)

Photo: Marsh fritillary (*Euphydryas aurinia*); Mark Zekhuis, Saxifraga ([www.freenatureimages.eu](http://www.freenatureimages.eu))

## From meadow to plate

**Case:** FR02

**Country:** France

**Region:** Quercy

**Place:** Espagnac-Sainte-Eulalie

**Site (N2K code):** Basse vallée du Célé  
(FR7300913)

**Contact:** Muriel Sutto

[saidguioz@wanadoo.fr](mailto:saidguioz@wanadoo.fr)

Tel.: +33 05 65 11 41 50

**Sector:** Agriculture



**Background** – Poor economic prospects for farmers on dry grasslands resulted to land abandonment. As a result, these sites of community interest were slowly being encroached by forest.

**Challenges** – The challenge for these sites was to prevent the important dry grassland habitats and their characteristic associated species from disappearing due to natural succession, while creating an opportunity for sustainable local agricultural economic activity.

**Approach** – In 2005, the municipality of Espagnac-Sainte-Eulalie purchased former grasslands and dry heaths of Community interest. First the scrubs, bushes and trees were removed by cutting and burning. A Natura 2000 contract was used to finance this activity. Next the areas were fenced off and a system of grazing management was established to maintain these environments in a good conservation state. At the same time, a local sheep farmer was looking for grazing lands to her sheep which were part of a plan for a traditional hostel. A local marketing strategy was developed to ensure a demand and a good price for the sheep meat which was sold locally to the hostel and tourists.

**Results** – The grasslands were restored and are now being grazed by sheep to prevent the habitat from turning into forest. The lamb meat is used in the kitchen of the village hostel which can now offer food to tourists and pilgrims who are on their way to Santiago de Compostela (the Way of St. James). By owning these patches of land for grazing, the municipality has created a viable cooperation between nature conservation and local sustainable development.

**Factors of success / failure** – Looking for mutually beneficial partnerships between traditional grassland management and an economically viable activity.

**Lessons learned (optional)** – This initiative was given an award in the context of the Grand Prix Natura 2000, an initiative of the French government to spread best practice about Natura 2000 management and implementation.

### References

<http://www.developpement-durable.gouv.fr/Le-livre-des-grands-prix-Natura.html>

Photo: Sheep grazing in the Basse Vallée du Célé ([www.developpement-durable.gouv.fr/Galerie-photos.html](http://www.developpement-durable.gouv.fr/Galerie-photos.html))



## Collaboration and trust lead to successful management of Marais Vernier

**Case:** FR03

**Country:** France

**Region:** Basse Normandie

**Place:** Pont-Audemer

**Site (N2K code):** Marais Vernier et basse vallée de la Risle (FR2300122)

**Contact:** Thierry Lecomte - Ingénieur en chef

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**Sector:** Tourism, agriculture



**Background** – The Marais Vernier wetlands are located in the last loop of the Seine just before it reaches the sea, and cover 4,500 ha, of which 1,800 ha are bogs (the largest alkaline bog area in France). This area contains a large number of habitats, some of which are Annex I habitats, and several Annex II animal species. The Marais Vernier was threatened by a large number of socio-economic activities and their intensification (intensive agriculture, urbanization, hunting, industrialization, infrastructure, transport, tourism, recreation). The first protection measures date back to the 1950s, before the designation of the Natura 2000 site. The interests of local farmers, hunters and landowners in the area gave rise to conflicts when the area was designated a Natura 2000 site, especially since other protected areas were being designated in the same region..

**Challenges** – the challenge was to reconcile the widely differing interests of the various land owners and users of the Marais Vernier (who soon turned out to be strongly opposed to the Natura 2000 management plans) while conserving and restoring the natural values of the site.

**Approach** – A management plan for the site had to be developed in 1998 as part of a pilot project funded by LIFE. Local stakeholders organized a general meeting about Natura 2000 with the aim of creating an association opposing the project. All stakeholders were involved, bringing together the major socio-economic players in the site. Five commissions were created, each specializing in a particular field: hunting and fishing, agriculture, protected areas, forests, and elected representatives. After their initial opposition to the creation of the site, they soon recognized that there was no use in fighting its establishment, and that they'd better join them if they couldn't beat them. In addition they soon realized that the designation of the site would not result in a ban on all activities, but that it would reinforce management practices already existing in the site. And more importantly now these management actions could be partly financed by community funds.

**Results** – The management document (*docob*) was approved and signed in 1998. It was soon followed by the first voluntary management contracts. After the adoption of a new law in 2001, a new management plan had to be developed to complement the first one. Finalised in 2003, it resulted in the signature of a further number of management contracts. This case shows that a strong initial opposition on the part of the stakeholders can be turned into a successful cooperation if the right process and people are involved. Thanks to the Natura 2000 management plan, additional funds from the ERDF could be used for the financing of some important works (cleaning of the Grand'Mare).

**Factors of success / failure** – Transparency and hard work of the regional authorities during the process. Close participation of the local mayor and the contracting of a coordinator representing the stakeholders' opinions. The good information during the many stakeholder meetings that Natura 2000 is about nature conservation not against but with the users and owners, supported by the signing of flexible contracts with the managers.

**Lessons learned (optional)** – The first meeting included several other projects and sites, and the information provided about the consequences of Natura 2000 was not clear, which led to confusion and heated debates. This pilot site shows that the richness of the dialogue, the association of stakeholders and the adoption of a sustainable development project brings more to the local economy.

### References

[http://www.novethic.fr/novethic/planete/environnement/ressources\\_naturelles/gestion\\_marais\\_vernier\\_dialogue\\_reussi\\_entre\\_parties\\_prenantes/73830.jsp](http://www.novethic.fr/novethic/planete/environnement/ressources_naturelles/gestion_marais_vernier_dialogue_reussi_entre_parties_prenantes/73830.jsp)

Photo: Marais Vernier ([www.normandie-accueil.fr](http://www.normandie-accueil.fr))

## Better knowledge for an improved visitor management

**Case:** FR04

**Country:** France

**Region:** Normandie

**Site (N2K code):** Chausey (FR2510037)

**Sector:** Tourism



**Background** – The Chausey Islands (in French, *les Iles Chausey*) are a large archipelago located in Normandy, not far from the mainland. Each summer they host thousands of visitors, especially fishermen during the spring tides in September. The Chausey Islands were declared a Site of Community Importance in 2004 and a Special Protection Zone in 2005, thus entering into the Natura 2000 network.

**Challenges** – There is great pressure on biodiversity conservation on the islands from anchoring, shore fishing and water sports. The state wanted to implement Natura 2000, but came up against opposition, mainly from fishermen and visitors from the mainland (14,000 signatures were collected against the conservation plan). The needs from the tourism sector needed to be reconciled with the conservation targets.

**Approach** – A first step in developing a management plan was to make sure to understand the needs and behaviour of the visitors to the archipelago. For this the Bountiles methodology developed in the Mediterranean Marine Protected Areas was adapted and used. It is based on visitor counts (direct visual counts, analysis of aerial photographs) and questionnaires. The outcomes of these measurements were validated with behavioural field observations in order to extract a limited number of indicators relevant for the site. Subsequently field observations concentrated on the collection of information to calculate these indicators. Based on these outcomes, the management plan for the area was elaborated through a consultative process.

**Results** – Two coastguards, two boats and an office (also for scientific purposes) were established. The results of the observations are discussed annually in the working group, and they are presented to all socio-economic stakeholders at the management committee in annual meetings in order to devise the best possible visitor management plan.

**Factors of success / failure** – There have been pilot projects to limit anchoring and recreational fishing, and awareness raising on good water sports practice.

**Lessons learned (optional)** –

**References**

<http://www.ileschausey.com/textes/sci/natura.htm>

Photo: Chausey islands, Hervé de Costarmor (<http://commons.wikimedia.org>)

## Result-based agro-environmental payments in the Morvan

**Case:** FR05

**Country:** France

**Region:** Bourgogne

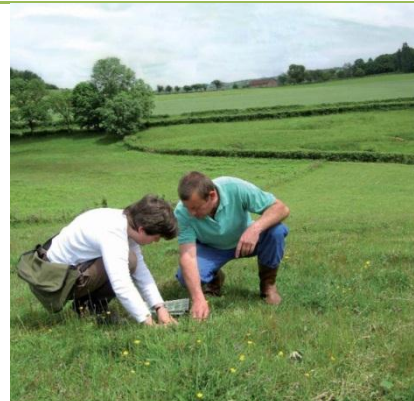
**Place**

**Site (N2K code) :** Bocage, forêts et milieux humides du Sud Morvan (FR2601015)

**Contact:** Isabelle Civette

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**Sector:** Agriculture



**Background** – Earlier agro-environment contracts with farmers owning siliceous meadows in this area were based on management practices and did not yield the expected results in terms of increased nature value. Community money was spent on agro-environment payments, but the results were disappointing. The relations between the farmers and the park managers suffered because of this.

**Challenges** – To improve the relation between park managers and farmers. To arrive at an approach for dealing with siliceous meadows that satisfies both parties.

**Approach** – The agro-environment payments were changed from being management/resources oriented to results oriented. Under this approach, payments are not linked to prescribed management practices but to natural measurable results. From a list of 20 characteristic annual plant species for the habitat type, four have to be present on the land for it to be eligible for agro-environmental payments. In order to keep contact with the stakeholders, the Natura 2000 team in the Morvan set up a Facebook page on which announcements are posted.

**Results** – The more results-oriented approach leaves the farmer more in control of management. There is no requirements imposed from outside. Park and Natura 2000 managers and extension workers inspect the meadows together with the farmer and his family. The farmer talks about his management practices, the extension worker talks about the habitat. There is more exchange and much improved personal contact. The ecological results are also much better.

**Factors of success / failure** – Adopting a result-oriented approach to the payment system. Another factor that strongly increased the farmers' support was their participation in a half-day workshop on siliceous meadows.

**Lessons learned (optional)** –

**References**

[http://boutique-en-ligne.espaces-naturels.fr/media/downloadable/files/links/r/e/revue-28\\_internet.pdf](http://boutique-en-ligne.espaces-naturels.fr/media/downloadable/files/links/r/e/revue-28_internet.pdf), page 19

<http://www.facebook.com/pages/Natura-2000-en-Morvan/>

Photo: A farmer and an ecologist inspect the flowers in a meadow, Aline Corbeaux ([www.aten.fr](http://www.aten.fr))



## The cattle farmer and the bird

**Case:** FR07

**Country:** France

**Region:** Loire valley

**Site (N2K code):** Basses vallées angevines (FR5200630)

**Contact:** François Oudot

Tel.: +33 02 41 96 77 53

**Sector :** Agriculture



**Background** – The survival of a little-known bird, the Corncrake (*Crex crex*), was endangered. The Corncrake is difficult to see and is identified mainly by its song. Its habitat in the Loire valley is recognized as one of the most beautiful natural wetland regions in Europe. These large grazing areas allow flooding to spread out and harbour the region's greatest biological diversity. Without the cattle farmers' practices and know-how, they would revert to fallow land and lose their qualities. Natura 2000 classification marks the beginning of the recognition of the area's importance.

**Challenges** – Land abandonment and the planting of Poplar trees have reduced biodiversity and threaten this exceptional habitat. The aim is to maintain and enhance the natural balance of these valleys.

**Approach** – A Steering Committee was established to develop the first agro-environmental programme. Contracts were drawn up with farmers with the aim of maintaining grassland areas and undertaking late mowing, which is of particular importance for breeding birds like the Corncrake. In this way, the farmers have created a unique farming situation by adapting their techniques to protect the environment. The brand 'The cattle farmer and the bird, beef from the valleys' was developed, showing the close link between the farmers and their actions for the environment and the survival of an endangered species.

**Results** – About 30 farms now belong to the brand association (out of a potential of about 200 farms). Since the introduction of agro-environmental measures the situation has changed at the maintenance level (farm maintenance, decrease in fallow land) and with respect to Poplar tree plantations (afforestation regulations), and botanical and ornithological habitats have been saved.

**Factors of success / failure** – Farmers participated in the decisions concerning development in the valleys. The results achieved would not have been possible without the farmers' expertise.

**Lessons learned (optional)** –

**References**

[http://www.natura.org/DOC/fr\\_loire\\_bva\\_loire\\_fr.pdf](http://www.natura.org/DOC/fr_loire_bva_loire_fr.pdf)

Photo: Selling the meat at a local market ([www.anjou-agricole.com](http://www.anjou-agricole.com))

## Branding regional meat production

**Case:** FR19

**Country:** France

**Region:** Loire Atlantique

**Site (N2K code):** Grande Brière (FR5212008)

**Contact:** Chantal Deniaux

Tel.: +33 02 53 46 62 34

**Sector:** Tourism, agriculture



**Background** – Cattle breeding is an ancient tradition in the Brière Natura 2000 site, where the farmers were able to adapt their activity to the wet conditions of the marshes. In spring, the cattle are transported by boat to the islands where they graze for the rest of the year. Grazing is an important activity for maintaining the ecological balance of the wetland habitats. However, changing economic conditions make it difficult for the farmers to continue making a profit.

**Challenges** – To maintain the cattle grazing which is indispensable for the open character of the marshlands, while improving the economic position of the local farmers in Brière Regional Park.

**Approach** – Together with the Chamber of Agriculture, the local farmers decided to develop a brand for the Brière meat so that they could continue their extensive farming practices. They established the Brière Cattle Breeders Association, comprising thirty farmers, a slaughterer, a transport and distribution company, as well as representatives of the Regional Park and the Chamber of Agriculture. The objective of the association is to generate added value for the meat produced in the marshes of the regional park, to ensure product quality and to market the products. Criteria which the brand must meet include: grazing methods are in accordance with the national guidelines for habitat management, cattle graze in the marshes, any supplementary feed used is non GMO fodder, and **the animals' well-being** is respected. These criteria correspond to the promotion of three core values: local products that benefit the local economy; management practices that respect the environment; and small family-based businesses.

**Results** – This approach enabled the farmers to continue their traditional grazing practice, thereby ensuring continued extensive grazing of the marshes, protecting their biodiversity and characteristic landscape features. In addition, the local marketing of the products ensures a short supply chain which reduces transport costs and emissions. The natural, healthy meat is sold locally to schools and restaurants. Local farmers and retailers profit from this new way of branding local beef.

**Factors of success / failure** – Cooperation between farmers and retailers and tourist organizations to brand this traditional beef.

**Lessons learned (optional)** –

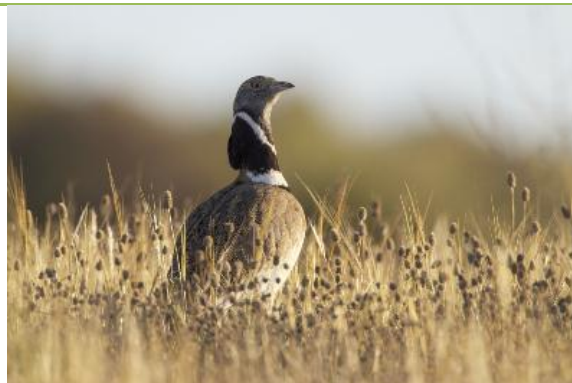
**References**

<http://www.parc-naturel-briere.fr/index.php?id=13185>

Photo: <http://www.saintnazaire.net/24772-la-viande-bovine-de-briere-est-dans-les-bacs.html>

## New governance model to help conserve the Little bustard

**Case:** FR22  
**Country:** France  
**Region:** Poitou-Charentes, Pays de la Loire, Centre  
**Site (N2K code):** LIFE96 NAT/F/003207  
**Contact :** Yves Froissart  
 yf.froissart@free.fr  
**Sector:** Agriculture



**Background** – The Little bustard (*Tetrax tetrax*) is a bird that inhabits wide, open landscapes, originally steppes, but it has also adapted to arable land, including cereal fields. Traditional rotation farming yielding a mosaic of annual crops such as grain, pastures and fodder crops such as legumes are ideal. Consequently, significant populations of Little bustard inhabited agricultural districts of France which had only vast fields of crops and livestock pasture. However, agriculture in these French Bustard strongholds has been changing in recent decades towards large cereal and oilseed fields in which livestock no longer has a place. The market support premiums made arable farming financially far more interesting, so sheep and cattle farming was in steep decline. In turn, the fodder crops that they eat are no longer planted. The resulting arable monocultures **do not meet the habitat requirements of the Little bustard, and so by 1995 France's Little bustard population was less than a third of what it was in 1980.**

**Challenges** – To ensure the return of a favourable conservation status for the Little bustard in a landscape strongly affected by changes in agricultural practices.

**Approach** – LPO, BirdLife partner in France, embarked on a LIFE project in 1996 to try to halt this process of decline by informing farmers about the Little bustard and introducing innovative agro-environmental measures to stimulate farmers to continue practices in favour of the bird. LPO worked through its network of local associations, each of which elaborated possible agro-environmental measures together with the farmers, the local chambers of agriculture and officials of the Ministries of Agriculture and Environment. The proposed contracts were based on the available knowledge of Bustard ecology, but their technical feasibility was discussed with farmers and agronomists. To make them more attractive for farmers, the contracts were annual, with an option to renew or cancel at the end of each year. It was felt that contracts of longer duration would have made farmers reluctant to participate in the experiment.

**Results** – The total area covered by these new agro-environmental contracts rose rapidly from 0 in 1997 to 505 ha in 1999-2000 (covering 30% of known Little bustard nesting areas in the project area). The area under agro-environmental management is only 4% of the Special Protection Areas (SPAs) designated for Bustard conservation. Therefore, the decline of the species has continued, although at a slower pace than in areas not managed for Bustard conservation.

**Factors of success / failure** – The adoption of a governance structure adapted to the local situation was deemed to be a strong factor of success. There were four distinct levels of governance: the *copil* or steering committee, chaired by the municipality; the stakeholder group, coordinated by LPO; a technical advisory committee, answering management questions from the farmers; and a farmers' group, bringing together the farmers of the various sites to exchange experience and for further training. Contacts between the different groups were maintained by the Natura 2000 manager (*animateur Natura 2000*).

**Lessons learned (optional)** – Bringing together land managers, landowners and land users from several Natura 2000 sites sharing the same challenges and conditions promotes a better exchange of good practice and experience. A governance model reflecting the specific needs and roles of the stakeholders can be applied to one or more sites; , for example, in the case of this project: a steering committee, a network of practitioners, and a technical advisory committee.

### References

Photo: Little bustard (*Tetrax tetrax*), Luc Hoogenstein, Saxifraga ([www.freenatureimages.eu](http://www.freenatureimages.eu))

## Code of conduct for recreation on the IJsselmeer

**Case:** NL02

**Country:** The Netherlands

**Region:** Flevoland

**Site (N2K code):** IJsselmeer (NL1000002)

**Sector:** Tourism



**Background** – The IJsselmeer used to be an inland sea, but was cut off from the sea by the construction of a dam and has since been split up into several large lakes. Within these different compartments nature has adapted both below and above water level to the changed circumstances. This nutrient-rich area attracts many bird species. After designation of the IJsselmeer as a Natura 2000 site, the various stakeholders in the tourism and recreation sector were very concerned about how this new situation would affect their economic activities. The discussions and negotiations between the tourism stakeholders and the conservation authorities and NGOs were very difficult.

**Challenges** – One of the challenges for the restoration and conservation of a favourable conservation status in the area is the management of outdoor water-related recreational activities (surfing, kite surfing, fishing, sailing, etc.) in order to reduce their impact on resting birds.

**Approach** – To break the deadlock the platform of tourism and recreation associations, together with the local authorities and the conservation NGOs, decided to take some practical steps towards a compromise solution. This resulted in the development of a code of conduct for users of the IJsselmeer, in particular sailors, surfers and anglers. The code of conduct includes very practical information about areas that should be avoided at certain times of the year, areas that are out of bounds (i.e. enjoy full protection) and what to do when nearing a group of resting birds.

**Results** – All parties contributed to drafting the code of conduct and seem satisfied with the compromise. However, monitoring during the 2012 summer season will show whether the code has indeed had a positive effect. Having a code of conduct is not enough - the target groups need to know about it and apply it. Therefore, its introduction is being accompanied by a large-scale information and awareness-raising campaign.

**Factors of success / failure** – A clear framework and discussion with relevant stakeholders make it possible to have both nature and recreational activities.

**Lessons learned (optional)** –

### References

<http://www.natura2000ijsselmeergebied.nl/>

Projectteam beheerplan Natura 2000 voor het IJsselmeergebied. *Nieuwsbrief Beheerplan Natura 2000 IJsselmeergebied*. 2009: 9

Photo: Protected area Stoenckherne on the IJsselmeer, Gouwenaar (<http://commons.wikimedia.org/>)

## Tourist facilities at Kennemerstrand

**Case:** NL03  
**Country:** The Netherlands  
**Region:** Noord-Holland  
**Place:** IJmuiden  
**Site (N2K code):** Kennemerland-zuid  
(NL1000012)  
**Contact:** Mike Mannaart  
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m.mannaart@eucc.net  
**Sector:** Tourism



**Background** – The extension of harbour walls to protect the port of IJmuiden changed the sea currents and led to the creation of a beach. Here, the dynamic landscape with natural dune-forming processes resulted in a high level of exceptional biodiversity. The Municipality of Velsen and the provincial government planned to develop a coastal recreational area, involving the construction of a lake, 500 holiday homes, a local campsite, shops and restaurants, marina and other tourist facilities, including the expansion of a campsite. During this process, the designation of the area as a Natura 2000 site led to a number of problems.

**Challenges** – To come to a satisfying outcome for all parties, while taking the Natura 2000 designation into account. A conflict between spatial planning legislation and Natura 2000 also arose.

**Approach** – Knowledge of the Natura 2000 designation process was improved, as was communication between authorities and stakeholders. The development of tourist infrastructure was allowed, but on a more modest scale than originally planned. Some compensation for nature loss was included.

**Results** – The Natura 2000 designation resulted in a smaller-scale development of the location. The compensation areas around the new recreational lake were a great success as they allowed the establishment of a number of rare coastal plant species.

**Factors of success / failure** – Improvement of communication and the provision of information.

**Lessons learned (optional)** – It is important that the role of the competent authority (municipality) be well defined. The permitting authority (province) should provide clear rules on the Natura 2000 process. A nature management organization provides information on ecology and legislation.

### References

[http://www.kennemerstrand.nl/page\\_1170715408619.html](http://www.kennemerstrand.nl/page_1170715408619.html)

Photo: Lake Kennemer, with the marina in the background, Anneke Koper  
(<http://www.knnv.nl/haarlem/kennemerstrandwerkgroep.htm>)



## Visitor management on the island of Terschelling

**Case:** NL06  
**Country:** The Netherlands  
**Region:** Friesland  
**Place:** Terschelling  
**Site (N2K code):** Duinen Terschelling (NL2003059)  
**Contact:** -  
**Sector:** Tourism



**Background** – Terschelling is one of the Frisian islands in the Wadden Sea. It has about 4,700 inhabitants. Fifty per cent of the island is designated under Natura 2000. Tourism is the most important factor in the local economy and puts great pressure on the natural environment.

**Challenges** – To maintain tourism as an important income-earner for the island, while reducing its impact on nature.

**Approach** – In 1974 the municipality drew up a long-term vision plan, which integrated policies for agriculture, nature protection and tourism development. This was consistent with the policies and management plans of the National Forest Service. The plans resulted in regular monitoring of the needs of tourists, the measurement of tourism flows, the use of zoning techniques, the reduction of seasonal variations in tourist numbers, and the close integration of tourism development policies and nature conservation.

**Results** – Zoning led to a concentration of tourists in the most suitable areas, resulting in less impact on the more vulnerable sites. Although the number of visitors has doubled since 1977, Terschelling has recorded an increase in the number of birds and species compared with 20 years ago.

**Factors of success / failure** – Monitoring and supervising the impacts of tourism has been an essential part of the visitor management activities to prevent adverse impacts. Gaining feedback from visitors gave a good insight into their needs. The good results were made possible by the close cooperation between the National Forest Service and local planning authorities.

**Lessons learned (optional)** –

### References

[http://ec.europa.eu/environment/nature/info/pubs/docs/nat2000/sust\\_tourism\\_gpract.pdf](http://ec.europa.eu/environment/nature/info/pubs/docs/nat2000/sust_tourism_gpract.pdf), page 28

Photo: Oerol Festival on Terschelling, Jochem Henstra (<http://commons.wikimedia.org>)



## Water management of the Naardermeer

**Case:** NL07

**Country:** The Netherlands

**Region:** Noord-Holland

**Place:** Naarden

**Site (N2K code):** Naardermeer

(NL3000061)

**Contact:** Gradus Lemmen

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**Sector :** Agriculture



**Background** – The Naardermeer was the first protected area in the Netherlands. It is a lowland fen area with lakes and reed beds, important for the conservation of a large number of wetland species. It has been identified as a crucial wet link in the National Ecological Network. In order to increase its connectivity with surrounding wetland nature areas, adequate water management to improve the abiotic conditions is crucial for the conservation of habitats and species.

**Challenges** – To expand the humid conditions in the buffer zone surrounding the lake and reintroduce a natural water regime as far as possible, while taking account of the needs of other land users (especially farmers).

**Approach** – Introducing a comprehensive area-wide natural hydrological regime would be the best result for nature conservation. This would require the purchase of agricultural land, but some farmers remain opposed to selling their land. Therefore, a more costly and flexible management approach was needed. The needs of nature conservation were integrated into the water management plan, which also included the requirements of the Water Framework Directive and the agricultural sector. A water management plan was developed and discussed through a process of stakeholder involvement. This resulted in flexible solutions in which the different patches of land use were subject to individual water management.

**Results** – The plan that was developed through comprehensive stakeholder involvement (including Natuurmonumenten as the main owner and manager of the Natura 2000 site) took into account the needs of various stakeholder groups. Instead of being able to apply uniform natural water management in the entire buffer zone and ecological connection, some farming areas were hydrologically isolated and a low water-table regime was restored for better farming conditions, while the water levels were raised in the nature buffer zone.

**Factors of success / failure** – In spite of the availability of good compensation land in the vicinity, some farmers refused to sell their land and to relocate, which caused a delay in the improvement of the water conditions and in the achievement of the nature objectives. Additional costs were incurred in order to realize the management plan. However, this more flexible approach, taking into account the needs of all stakeholders, has reduced the antagonism between interest groups in the area.

**Lessons learned (optional) –**

### References

<http://www.natuurmonumenten.nl/natuurbehoud>

<http://www.agv.nl/plannen/ruimtelijke-ordening/watergebiedsplannen-0/naardermeer>

Photo: Impression of the wet ecological connectivity at the Naardermeer, Natuurmonumenten ([www.natuurmonumenten.nl](http://www.natuurmonumenten.nl))

## Planning for outdoor theatre festival

**Case:** NL09

**Country:** The Netherlands

**Region:** Friesland

**Place:** Terschelling (Island)

**Site (N2K code):** Duinen Terschelling  
(NL3009007)

**Contact:** Remi Hougee  
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Tel.: 06-57572620

**Sector:** Tourism



**Background** – Since 1981 Oerol has grown to a major international annual open-air theatre festival. It currently attracts over 55,000 visitors who come to enjoy the many innovative theatre performances, many of which are situated in the natural setting of the Terschelling Dunes, protected as a national park and as a Natura 2000 site.

**Challenges** – Although the island is accustomed to many visitors throughout the year, attracted by the sea, the beaches, the dunes, etc., the peak visitor flow in June because of Oerol presents some specific challenges, as the art performances take place throughout the island, in the midst of the breeding and flowering season.

**Approach** – In January, the organization team of Oerol and Staatsbosbeheer (State Forest Agency) visited the intended venues that have been assessed by an independent ecological consultant for their suitability for 'Oerol use'. As both nature and the Oerol programme are highly dynamic, this assessment has to be repeated every year, to the mutual satisfaction of both parties. The trampling of the ground by Oerol visitors has even become included as a management practice in dune restoration activities where forested dunes are restored to open dune landscape.

**Results** – The theatre festival attracts many visitors to the island who contribute to the local economy. The protected nature is an integral part of the festival and thus directly supports this economic cultural activity.

**Factors of success / failure** – Looking for opportunities and win-win situations, good planning and agreements between the main players (festival organizers and nature managers).

### Lessons learned (optional)

**References** <http://staatsbosbeheerterschelling.wordpress.com/2011/06/17/staatsbosbeheer-en-oerol/>  
<http://www.oerol.nl>

Photo: Beach sculpture, Oerol, Terschelling, Gerrit Bart (www.flickr.com)

## Development of a management plan for Binnenveld in deadlock

**Case:** NL13

**Country:** The Netherlands

**Region:** Gelderland

**Site (N2K code):** Bennekomse Meent  
(NL2003006)

**Sector:** Agriculture



**Background** – The Binnenveld is an area of about 50 ha that is characterized by a complex water management structure. It has been a nature reserve for many decades. Three Natura 2000 sites have been designated in the area, because of the rare and threatened habitats and associated species there which depend on upward seepage of nutrient-poor, calcareous water. Historical land conversion and the more recent change to intensive agriculture have reduced the area and quality of these habitats and populations.

**Challenges** – The change to intensive agriculture has created unfavourable habitat conditions. It would be possible to recover the species-rich habitats by connecting large parts of the currently fragmented habitats and adapting water management. For these habitats, which depend on nutrient-poor conditions, atmospheric nitrogen deposition poses a problem to reaching the environmental goals and the good conservation status of the Binnenveld. Improvement of the species and habitats distribution, extension of the area and a higher nature quality are the main challenges, as these objectives clash with the needs of the local farming communities.

**Approach** – The development of a management plan for the Natura 2000 sites in the Binnenveld is a difficult process. An area manager has been appointed to try to bring together the main parties involved (**farmers' associations, individual farmers, water board and nature conservation NGOs**). A detailed management plan has been drawn up, expressing the urgency of the main important issues, but agreement has not been reached with all parties.

**Results** – The process seems to be in deadlock over the issue of creating the right abiotic conditions for the recovery and restoration of the habitats inside the Natura 2000 sites. Water levels, fragmentation and atmospheric nitrogen deposition continue to be important pressures. Not all farmers accept the higher water levels and lower permissible nitrogen emission rates, necessary to restore the habitats, because these measures reduce their income. In order to achieve a working water and nutrient management system in this area, all relevant parcels of land must be included, but this is not yet the case.

**Factors of success / failure** – The difficulty in this situation resides in the fragmented nature and limited surface area of the individual Natura 2000 sites within a wider zone of intensive agriculture requiring low water levels and producing high nitrogen emissions. Even though most agricultural land has been excluded from the Natura 2000 sites, the intensive land-use practices (such as maize fields that require a low water table and receive large quantities of fertilizer) surrounding the small parcels result in great pressure on the water-dependent low nutrient status.

**Lessons learned (optional)** –

### References

<http://www.inhetbinnenveld.nl/>

<http://natura2000beheerplannen.nl/pages/binnenveld-bennekomste-meent.aspx>

Photo: Bennekomse Meent (<http://www.synbiosys.alterra.nl/natura2000/>)

## Additional investments needed to maintain dry fields within wet nature area of the Ruiten Aa

**Case:** NL14

**Country:** The Netherlands

**Region:** Groningen

**Site (N2K code):** Lieftingsbroek (NL2003028)

**Contact:** Nico Altena

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**Sector:** Agriculture



**Background** – It is planned to restore 200 ha of damp meadows along the Ruiten Aa (a small brook), which means that the site has to be rewetted in order to restore the favourable conditions of the habitats in the Natura 2000 site the Lieftingsbroek. The brook valley comprises stretches of dry farmland that require low water tables. This means that expensive measures need to be taken to implement the restoration without affecting the farmland, and therefore there is (temporary) deadlock. From a conservation perspective, it is a high loss situation, because the measures having to be taken now to allow differentiated water level management will have to be cancelled once the fields are acquired.

**Challenges** – To come to a satisfying solution for the farmers and the hydrological conditions of the site.

**Approach** – Attempts are being made to acquire the lands and to communicate with the farmers about alternative possibilities. If this is not possible, additional investments will have to be found for solutions to maintain the dry fields within the wet nature area until the lands can be acquired.

**Results** – Taking into account the needs and interests of other land users (especially farmers) requires additional investments to be made in differentiated water management. Although the management of a hydrological unit as a whole is far easier and cheaper, the reality is that other users and owners are present. Alternatives can be offered (compensation for loss of income, buying the land and offering alternative fields outside the protected area), but if a farmer insists on staying, technical water management measures may be the only (temporary) way out.

**Factors of success / failure** – Landowners who want a different water management regime on their land than that planned for the nature site in which their land is located.

**Lessons learned (optional)** –

**References**

<http://www.natuurmonumenten.nl/natuurbeschoud>

Photo: Hydrological engineering at the Ruiten Aa, Dienst Landelijk Gebied

([www.dienstlandelijkgebied.nl/projecten/groningen/groningen/dossier/ruiten-aa/beeldimpressie](http://www.dienstlandelijkgebied.nl/projecten/groningen/groningen/dossier/ruiten-aa/beeldimpressie))

## Nieuw Limburgs Peil: flexible drainage

**Case:** NL24

**Country:** The Netherlands

**Region:** Limburg

**Site (N2K code):** Peelvenen

**Contact:**

Waterschap Peel en

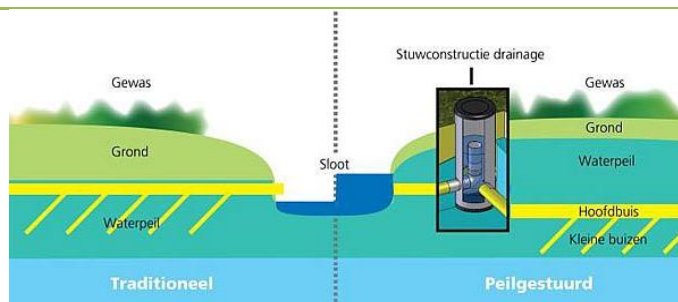
Maasvallei

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**Sector:** Agriculture



**Background** - Most Natura 2000 sites in the Netherlands face two important threats: nitrogen deposition, and desiccation, both linked to agriculture. Farmers want to manage the water levels in their fields so that they are optimal for agriculture. With low water levels (approx. 1 metre below the surface) they can prepare the land. When the crops grow in summer, they can irrigate their fields if there is a moisture deficit. This practice has a very negative impact on nearby nature reserves. The constantly low water levels are even worsened in summer when the farmers pump groundwater for irrigation. This system is also detrimental to water management, because in winter and spring when there is lots of rain, the ditches, canals and rivers must drain vast quantities of water, which puts great stress on the system and leads to inundations.

**Challenges** - This water issue was a constant bottleneck for negotiations between farmers and conservationists in many parts of the Netherlands, especially the sand areas.

**Approach** - To break the deadlock farmers, conservationists and other stakeholders (water agencies, province, municipalities) came together to find a solution. It was decided to test a new method of dynamic water level management. Instead of the water agency keeping the water table in the region at 1 metre below the surface and draining all the water into the rivers, farmers can individually regulate the water level in their fields. Water tables are thus maintained at quite a high level during most of the year. Levels are only lowered in spring when the soil has to be tilled.

**Results** - This is a win-win situation. High water levels mean that moisture conditions in nature areas have improved significantly. There are fewer expenses than with year-long drainage. Higher water levels in summer mean that there is less need for costly irrigation. As less water is drained, more nutrients are retained in the soil and less fertilizer is needed.

**Factors of success / failure** - Joint exploration of possible win-win solutions, cooperation and discussion among stakeholders, combined with technical solutions.

**Lessons learned (optional)**

**References (Vogelaar 2010)**

Vogelaar, Esther. 2010. Ecologie vs. economie? Flexibele oplossingen binnen het Natura 2000-beleid. Delft: Hogeschool INHolland, May 28. [http://www.google.nl/url?sa=t&source=web&cd=1&ved=0CBkQFjAA&url=http%3A%2F%2Fwww.natura2000.nl%2Ffiles%2Fflexibele-oplossingen-binnen-n2000.pdf&ei=WpMETqzjIogAOr\\_5yLON&usq=AFQjCNHKFUWcKoaMEtC8qiiYLhtKayORww](http://www.google.nl/url?sa=t&source=web&cd=1&ved=0CBkQFjAA&url=http%3A%2F%2Fwww.natura2000.nl%2Ffiles%2Fflexibele-oplossingen-binnen-n2000.pdf&ei=WpMETqzjIogAOr_5yLON&usq=AFQjCNHKFUWcKoaMEtC8qiiYLhtKayORww).

Source: [http://www.deltaplanhogezandgronden.nl/best\\_practices/peilgestuurde](http://www.deltaplanhogezandgronden.nl/best_practices/peilgestuurde)



## Implementation of Natura 2000 in Stepnica

**Case:** PL01  
**Country:** Poland  
**Region:** West Pomerania  
**Place:** Stepnica  
**Site (N2K code):** Zalew Szczeciński  
**PLB320009 & Laki Skoszewskie**  
**PLB320007**  
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**Sector:** Tourism



**Background** - Stepnica Local Community is located on the western part of Szczecin Lagoon. Most of the community (about 60%) is designated as Natura 2000, because of its very high nature values. However, the boundaries were designated without any public participation and, moreover, many mistakes were made.

**Challenges** - It was clear to all local stakeholders that the northern part of the community can and should be a part of the Natura 2000 European challenge. In local spatial planning, tourism is seen as one of the most important directions to follow for local sustainable development.

**Approach** - Preliminary activities have been undertaken together with the Society for the Coast (EUCC-Poland). Just a year after the activities started, the combination of active nature conservation, agriculture and tourism seems to be producing very promising results. The question of what kind of economic development is possible and what is prohibited inside Natura 2000 sites is still under discussion.

**Results** - As in many European countries, implementation of Natura 2000 creates many problems for almost everyone. However, successful implementation depends first of all on how this system is accepted by local inhabitants.

**Factors of success / failure** - In Poland a very important aspect is that crucial mistakes were made when designating many of the site boundaries. However, there are some good examples: Natura 2000 is beginning to be accepted, because it can mean even small-scale local development. For example, in tourism.

**Lessons learned** - This case study shows that Natura 2000 implementation is possible, in spite of the fundamental problems, thanks to the following aspects:

1. Local initiatives by stakeholders and NGOs (such as EUCC-Poland) can support the local administration by providing advice to assist in understanding and implementing Natura 2000 in coastal zones.
2. Natura 2000: The European Ecological Network must be understood not as a system of restrictions, but as a system of sustainable management, especially in the areas that are attractive for tourism.
3. A bottom-up approach is needed at all levels of Natura 2000 establishment.
4. Participation in international nature and management activities can be very useful. The CoPraNet Project is the best example of applying existing good experience to local development.

### References

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[http://www.natura.org/natura2000management/pl\\_odra\\_delta\\_nature\\_park.html](http://www.natura.org/natura2000management/pl_odra_delta_nature_park.html)

Photo: Entrance to the Park, Renifer (www.panoramio.com)



## Integrated strategy for rural development in the Barycz Valley

**Case:** PL02  
**Country:** Poland  
**Region:** Silesia  
**Site (N2K code):** Dolina Baryczy (PLB020001)  
**Contact:** Monika Kotulak  
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kotulak.m@gmail.com  
**Sector:** Tourism



**Background** – The Barycz River together with a complex of large and small fish ponds (130 in total) forms a paradise for numerous birds, and for this reason it has been designated as a Special Protection Area (SPA). The conservation values of the Barycz Valley are threatened by both the intensification of fish farming and the abandonment of agricultural land. These threats result from trends in rural development (e.g. decreasing and ageing rural population, disappearing traditional local culture, rural impoverishment, unemployment).

**Challenges** – Because of the Natura 2000 designation, other ways of creating income had to be found. Before the project started there was no cooperation among local governments. The development of tourism in the last ten years has resulted in the destruction and degradation of valuable areas. Tourism infrastructure encroaches on critical habitats. These negative trends have to change.

**Approach** – Local NGOs and eight communes joined forces and started rural development activities with the support of the European Union LEADER+ Programme, which also proved valuable for the conservation status of the Natura 2000 site. Local stakeholders created a Local Action Group (which later became the Barycz Valley Foundation) and worked out an Integrated Strategy for Rural Development in the Barycz Valley. Within the initiative local resources (communities, natural resources, local knowledge) were used as a basis for long-term development. All activities were planned taking into account the water protection and rehabilitation of the river valley, and also aimed to connect nature conservation with income creation.

**Results** – Activities included an inventory of bird habitats and habitat reconstructions, as well as the organization of training sessions and workshops, festivals and exhibitions about the values of Barycz Valley and Natura 2000 in general. Consultations were held with local people and investors about planned investments in the region. Training sessions were organized for local people who wanted to start tourism activities, and a tourist traffic monitoring scheme was established. The quality of local products improved and Barycz Valley became better known, while local people's awareness about ecotourism and Natura 2000 increased.

**Factors of success / failure** – Mobilization of local government and people, development of various forms of tourism (nature-friendly tourism, agrotourism farm network), dissemination of information about the values and possibilities in the region, improvements in the quality of local products, and nature protection and ecological education led to a great change in the Barycz Valley. The development is now wisely utilizing the great natural values, which are a condition and an opportunity at the same time. Stakeholders agree that, rather than halting the growth of the tourism sector, there is great potential for integrating biodiversity concerns into the sector's growth. Experiences in living in harmony with nature which were developed in the Barycz Valley are being successfully applied in other valuable nature areas. Cooperation among local communities was necessary to ensure the sustainable development of the region.

**Lessons learned (optional) –**

### References

[http://www.ceeweb.org/workinggroups/natura2000/resources/Bestpractice/PL\\_1.pdf](http://www.ceeweb.org/workinggroups/natura2000/resources/Bestpractice/PL_1.pdf)

Photo: Photo: Thatched roof house in the Barycz area, Panek (<http://commons.wikimedia.org>)

## New farming practices for the Aquatic warbler in Biebrza Marshes

**Case:** PL03  
**Country:** Poland  
**Region:** Mazuria  
**Site (N2K code):** Ostoja Biebrzańska  
(PLB200006)  
**Sector:** Tourism, agriculture



**Background** – The peat meadows of the Biebrza Valley (about 30,000 ha) hold 2,500 pairs of Aquatic warblers (*Acrocephalus paludicola*), almost 20% of the world population. Since traditional cultivation by hand scything ceased around 1970, successional overgrowth has become the main threat to this habitat. Up to 2007, over 20% of open fen meadows disappeared and the overall habitat quality has deteriorated. The establishment of the Biebrza National Park in 1993 could not stop this negative development of the Aquatic warbler's habitat. Traditional farming of the marshlands is no longer economically viable, which is leading to encroachment by bushes and deterioration of the warbler's habitat.

**Challenges** – To find a landscape-scale solution for the restoration and sustainable management of the peat meadows.

**Approach** – Through LIFE funding to support the landowners and farmers of the fen environments, the development of new management techniques is being supported via agro-environmental schemes. Purpose-built prototype mowing machinery with very low ground pressure and a fast working speed is now used across the site.

**Results** – The national park has made 12,000 ha of public land available for management under lease agreements that guarantee benefits for biodiversity, especially Aquatic warblers. A targeted Aquatic warbler agro-environmental package provides a financial incentive for local farmers and enterprises to take up the lease and implement the management measures. In the near future, infrastructure will be put in place to allow the biomass harvested to be used for fuel, e.g. through the production of briquettes. This will contribute to the management costs in the future.

**Factors of success / failure** – With the help of LIFE funding it was possible to carry out the necessary measures in cooperation with local farmers.

**Lessons learned (optional)** –

### References

[http://www.ceeweb.org/workinggroups/natura2000/resources/Bestpractice/2010\\_updatedcases/Poland/PL\\_Bartolwizna.pdf](http://www.ceeweb.org/workinggroups/natura2000/resources/Bestpractice/2010_updatedcases/Poland/PL_Bartolwizna.pdf)  
<http://eunis.eea.europa.eu/sites/PLB200006/>

Photo: Aquatic warbler, S. Seyfert ([http://commons.wikimedia.org/wiki/File:Seggenrohrsaenger\\_hand.jpg](http://commons.wikimedia.org/wiki/File:Seggenrohrsaenger_hand.jpg))

## Ecotourism in the Pisz forest

**Case:** PL04  
**Country:** Poland  
**Region:** North-east Poland  
**Site (N2K code):** Puszcza Piska  
(PLB280008)  
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**Sector:** Tourism



**Background** – The Pisz forest lies on the border between the Great Mazury lake region and the Mazury lowlands; the Pisa and Krutynia rivers flow through this area. Many lakes, including the largest in Poland (1,097 km<sup>2</sup>), are located here.

**Challenges** – To offer an economic outlook to the communities in and around the Pisz forest.

**Approach** – ‘Wnukowo’ ecotourism, a micro-enterprise aimed at creating biodiversity benefits, was established. The enterprise offers lakeside bed and breakfast accommodation, sells local agricultural products and foodstuffs, and rents out kayaks, canoes and motorized yachts. Camping facilities (2 ha) are also available on the shore of the Mazurian lake Beldan.

**Results** – Tourists are educated about nature conservation through the products and activities sold by Wnukowo. For example, the piped water, showers, toilets and sewage comply with the strict standards and requirements of the Mazurian Landscape Park. The enterprise indirectly benefits biodiversity by attracting backpackers and drawing illegal camping away from neighbouring nature reserves. The operations and services provided by this and many similar firms in the region are extremely important for the protection of aquatic biodiversity on the lakeshore and in the wider ecosystem.

**Factors of success / failure** – Introducing another form of tourism (ecotourism), which generates income in a sustainable way.

**Lessons learned (optional)** –

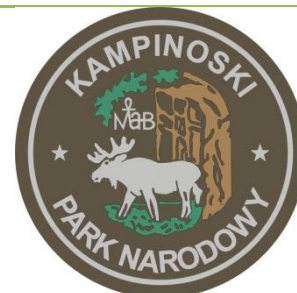
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<http://www.cbd.int/doc/case-studies/inc/cs-inc-eur-pbbhandbook-workshop2009-en.pdf>  
<http://www.birdlife.org/datazone/sitefactsheet.php?id=975>  
[http://ec.europa.eu/environment/nature/partnerships/docs/btau\\_handbook.pdf](http://ec.europa.eu/environment/nature/partnerships/docs/btau_handbook.pdf)

Photo: Canoeing in the Mazurian Lake District ([www.masurianlakedistrict.com](http://www.masurianlakedistrict.com))

## Overlapping nature protection regulations form an administrative barrier to local development

**Case:** PL06  
**Country:** Poland  
**Region:** Central Poland  
**Place:** Warsaw  
**Site (N2K code):** Puszcza Kampinoska (PLC140001)  
**Contact:** Jan Danylow  
danylow@kampinoski-pn.gov.pl  
**Sector:** Forestry



**Background** – Part of Kampinos National Park has been designated as a Natura 2000 area. This situation in which areas of a National Park and a Natura 2000 site overlap each other is quite complicated, because the Director of the National Park and the Regional Director of Environmental Protection have to cooperate on decisions. There are no official acts laying down procedures, and they both have the authority to make decisions regarding the granting of permits, etc.

**Challenges** – To harmonize the laws and regulations governing the sites under the National Parks Act and under the Birds and Habitats Directives.

**Approach** – Planned investments in the area where the two nature protection regulations overlap should be referred to the Director of the National Park when they concern the influence of the planned investment on the park, and to the Regional Director of Nature Protection when they concern the influence of the planned investment on the Natura 2000 site. Their opinions may, of course, differ and in such cases the investor is forced to appeal to either the Minister of the Environment (the superior of the National Park) or the General Director of Nature Protection (the superior of the Regional Director of Nature Protection).

**Results** – None so far.

**Factors of success / failure** – This is an example of a potential bottleneck for various types of sectoral development resulting from concurrent but non harmonized nature protection regulations.

**Lessons learned (optional)** – It is very important to anticipate possible conflicting regulations resulting from overlapping designations, and to make legal provisions to avoid contradictions in their implementation.

### References

[http://ec.europa.eu/environment/nature/natura2000/management/docs/report%20LOT3\\_Task%202-Best\\_cases.pdf](http://ec.europa.eu/environment/nature/natura2000/management/docs/report%20LOT3_Task%202-Best_cases.pdf)

Photo: Logo of the Kampinos National Park

## Land purchase to allow area-wide ecological integrity to be restored

**Case:** PL07  
**Country:** Poland  
**Region:** Central Poland  
**Place:** Warsaw  
**Site (N2K code):** Puszcza Kampinoska (PLC140001)  
**Contact:** Jerzy Misiak  
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**Sector:** Agriculture, forestry



**Background** – Kampinos National Park was established in 1959 and is one of the best preserved complexes of inland dunes and marshlands in Europe. It is the second largest national park in Poland. The area of Kampinos has many private owners. Therefore, management is very fragmented, and realization of favourable hydrological conditions is difficult.

**Challenges** – The challenge is to restore water systems, restructure forest stands and maintain open ecosystems in order to preserve biodiversity.

**Approach** – A land purchase programme, a large-scale project which mainly targets private landowners, is being realized in the park. Its aim is to implement proper nature protection measures. The approach adopted is to buy land and include it in the protected area so that it is possible to manage water levels throughout the entire site. Landowners are encouraged to sell their land, which is purchased using financial resources from the central budget or ecological funds. Valuable (from the ecological point of view) **fragments of land within the park's boundaries** are sometimes traded for equivalent fragments outside the main park complex. Currently the park has the right of pre-emption in purchasing the land.

**Results** – Since the project started in 1974, 10,570 ha of land have been purchased by the park; 2,860 ha still remain to be purchased. Buildings have been demolished, forests have been planted on some of the purchased land, and other areas have been left to succession.

**Factors of success / failure** – Funding to purchase private land was one of the key factors for success.

**Lessons learned (optional)** –

### References

[http://www.natura.org/natura2000management/pl\\_puszcza\\_kampinoska.html](http://www.natura.org/natura2000management/pl_puszcza_kampinoska.html)

Photo: European crane (*Grus grus*) at Kampinos National Park, Wojsyl (<http://commons.wikimedia.org>)

## Conflict between forestry and conservation in Bialowieza National Park

**Case:** PL08

**Country:** Poland

**Region:** East Poland

**Site (N2K code) :** Puszcza Białowieska

(PLC200004)

**Sector:** Forestry



**Background** – Bialowieza Primeval Forest (BPF) is located on the Polish-Belarusian border. Bialowieza Forest is one of the best preserved areas of European lowland forests, but the Bialowieza National Park covers only about 16% of the area. A conflict in the Polish part of BPF started at the end of the 1980s; it revolved around the use of the state-owned land (forestry vs. protection). The conflict came to a head in 2000, and resulted in very offensive actions. This was the turning point, and the conflict started to ease: the Ministry of the Environment withdrew from the idea of park expansion. Both 'management groups' withdrew from the process of conflict management. The ban on felling the trees older than 100 years was lifted in 2003; a forest reserve of more than 8,500 ha was established in the area managed by the State Forest Agency. The Agency was allowed to continue logging at the previous rate, which means more intensity, because they take the same amount of wood as before, but from a much smaller area.

**Challenges** – To find a solution to this conflict, in which the expansion of the park will bring changes in land use, but also more sustainable future development for local communities. Further commercial exploitation of the forest will increase changes in the natural forests and make the forest less attractive for visitors.

**Approach** – Two parallel management processes were started in the 1990s in cooperation with the stakeholders.

**Results** – One of the management plans resulted in a commercially oriented plan, the other in a conservation-oriented plan. The conflict was not resolved, with the main stakeholders still holding firm to their positions. Actions undertaken during the process include:

- Elaboration of a number of sociological, economic and socio-economic reports on the future effects of the national park's expansion and changes in character and intensity of forest use. Unfortunately, some of their conclusions are contradictory.
- Some outside investors built new tourist facilities in Bialowieza village. This has increased the number of visitors, bringing income for local people, but also increasing pressure on the area of the small national park.
- Owing to the conflict, the national park area doubled, increasing the level of nature protection in the area. A network of nature reserves, covering about 12,000 ha, has been established, covering most of the old BPF forest stands. Many stakeholders are still unhappy with the situation.

**Factors of success / failure** – The creation of different management plans shows the absence of cooperation between all parties from the start.

**Lessons learned (optional)** – Conflict management should be carried out by one management team only, or in cooperation if many teams are involved. The management team should not have a ready-made solution, but should allow for it to develop during the conflict management process. All decisions must take into account the opinions of all stakeholders involved in the conflict, whichever side they are on.

### References

Photo: Forest in Bialowieza National Park (<http://commons.wikimedia.org>)



## Sheep-grazing to maintain an open landscape

**Case:** PL10

**Country:** Poland

**Region:** Southern Poland

**Site (N2K code):** Ostoja Popradzka  
(PLH120019)

**Sector:** Agriculture



**Background** – Within the Popradzki Landscape Park, the typical open landscapes were threatened by overgrowth and shrub encroachment. This was caused by land abandonment as a result of the limited economically viable agricultural opportunities available.

**Challenges** – To maintain the open landscapes of the region.

**Approach** – According to information provided by authorities of the Popradzki Landscape Park, increasing the population of a traditional sheep species (which almost completely disappeared between 1980 and the late 1990s) and bringing back sheep farming into the region are critically important to maintaining the open landscapes of the region. An old indigenous sheep race is being bred and preserved, and the sheep farm carries out extensive grazing on montane meadows. The micro-enterprise has its own herd but also leases sheep from a number of other farmers.

**Results** – Montane meadows and pasture biodiversity are preserved, and the environmental objectives of the Popradzki Landscape Park are supported. The sheep farm has expanded the scale of production to enhance its income based on the production and sale of cheese, mutton, wool and “grazing services”.

**Factors of success / failure** – Cooperation with local farmers made this win-win situation possible. It is good for nature and good for business.

**Lessons learned (optional)** – In this area of Poland, farmers now have an important role to play in supporting the management of the Natura 2000 site of Ostoja Popradzka.

### References

<http://www.cbd.int/doc/case-studies/inc/cs-inc-eur-pbbhandbook-workshop2009-en.pdf>

<http://natura2000.eea.europa.eu/Natura2000/SDF.aspx?site=PLH120019>

Photo: Popradzki Landscape Park ([www.campaya.co.uk](http://www.campaya.co.uk))

## Addressing disturbance caused by canoeing on the Drawa and Korytnica rivers

**Case:** PL11  
**Country:** Poland  
**Region:** Wielkopolska  
**Place:** River Drawa  
**Site (N2K code):** Ostoja Sobkowsko-Korytnicka (PLH260032)  
**Contact:** Pawel Pawlaczyk  
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**Sector:** Tourism



**Background** – Heavy canoe-traffic on the Drawa and Korytnicka rivers (about 20,000 people annually, concentrated in July and August) is accepted by Drawa National Park. The rivers are habitats of sensitive animals such as Otter (*Lutra lutra*) and Kingfisher (*Alcedo atthis*). The large numbers of people canoeing in July and August influence the animals' behaviour in the protected area, which must be considered as negative impact on the Natura 2000 site's conservation objectives.

**Challenges** – To reduce the impact of canoe traffic on the Drawa and Korytnica rivers and prevent any deterioration and important species disturbance.

**Approach** – Local meetings and discussion with stakeholders were planned. Action was necessary to establish and impose reasonable limits on the tourist numbers (canoeists). In parallel, other forms of activities were proposed, to balance the 'social impact' of having to limit canoe traffic. An annual protection action plan for the national park was established, containing rules for public access to the park that take the Natura 2000 site's objectives into account.

**Results** – In order to ensure rest and quiet for the Otters and Kingfishers during the breeding season, canoeing is now forbidden until the end of July. As a passive dissuasive measure, dead trees are no longer being removed from the river, making canoeing more difficult.

**Factors of success / failure** – Good regulations were key to success.

**Lessons learned (optional)** –

### References

[http://www.ceeweb.org/workinggroups/natura2000/resources/Bestpractice/2010\\_updatedcases/Poland/PL\\_DrawaRiver.pdf](http://www.ceeweb.org/workinggroups/natura2000/resources/Bestpractice/2010_updatedcases/Poland/PL_DrawaRiver.pdf)

Photo: European otter, Kevin Law (<http://commons.wikimedia.org>)

## The conservation of agricultural biodiversity in Wigry National Park

**Case:** PL30  
**Country:** Poland  
**Region:** North-eastern Poland  
**Place:** Ostoja Wigierska  
**Site (N2K code):** Ostoja Wigierska (PLH200004)  
**Sector:** Agriculture



**Background** – This part of Poland is called the ‘Green Lungs’ of Poland and is rich in pristine nature. Characteristic of the area of Wigry National Park is the high diversity of ecosystems. Within the borders of the park around Wigry Lake there are small lakes, rivers, swamps, forests and rural areas. The park covers a total area of 15,086 ha, with 2,229 ha of agricultural land. The farms in the region are usually extensively managed. The regional conditions for agricultural production are difficult due to the climate, the poor quality of the soils and the topography.

**Challenges** – To improve the circumstances for farmers while supporting nature conservation.

**Approach** – A project was developed to help the farmers to increase both their income and biodiversity. Meetings were held with the farmers and stakeholders. To support nature conservation and the sustainable use of natural resources in the region, the project ‘Conservation of agricultural biodiversity in Wigry National Park’ was established. The objectives of the project are the conservation of the existing agro-biodiversity by increasing the population of local breeds that are at risk of extinction, and the conservation of the traditional regional apple orchards. In the long term, the project aims for the sustainable development of the region by improving the ecological knowledge of the local community.

**Results** – The desired result from these efforts is agricultural production that is consistent with the natural environment in Wigry National Park.

**Factors of success / failure** – Key factors for success are the increased earnings of the farmers through the development of agrotourism and the promotion of local agricultural products from the area of Wigry National Park.

**Lessons learned (optional)** –

### References

<http://www.wigry.win.pl/>

Photo: Malinowka apple (<http://www.wigry.win.pl/>)