

**NATURE AND
NATURAL RESOURCES**

Stefanos Fotiou, Päivi Lundvall, Noora Salonen,
Tuija Sievänen and Leena Suopajarvi (eds.)

Sustainable ecotourism - Integration of conservation and usage in Natura 2000 areas

Workshop in Ylläsjärvi, Finland



**Stefanos Fotiou, Päivi Lundvall, Noora Salonen,
Tuija Sievänen and Leena Suopajarvi (eds.)**

**Sustainable ecotourism - Integration of
conservation and usage in Natura 2000 areas**

Workshop in Ylläsjärvi, Finland

ROVANIEMI 2003

Authors

Preface

Päivi Lundvall
Jouni Rauhala

Recreation and nature tourism; well-being for the people

Ilkka Heikkinen

Developing sustainable tourism on Natura 2000 sites – opportunities and challenges

Kerstin Sundseth

Ecological sustainability of nature tourism

Pirkko Siikamäki

The World Ecotourism Summit

Stefanos Fotiou

The Great Teuravuoma Mire – nature and culture tourism destination in Finnish Lapland

Eino Lappalainen

Theme A: Social impacts of ecotourism

Leena Suopajärvi
Marjatta Hytönen
Kristina Lehtinen
Kyösti Palojarvi
Päivi Taavo

Theme B: Ecological sustainability in Natura 2000 areas

Päivi Lundvall
Charly Ebel
Heikki Eeronheimo
Joel Erkkonen
Eero Kaakinen
Sannamari Kääriäinen
Päivi Paalamo
Pirkko Siikamäki
Pekka Sulkava

Theme C: Participatory planning and ecotourism

Stefanos Fotiou
Paula Alho
Liisa Kajala
Xavier Quintana
Pekka Ränä

Theme D: Productisation of nature-based tourism activities

Tuija Sievänen
Jukka Kauppinen
Sakari Kokkonen
Eino Lappalainen
Jouni Rauhala
Sari Sivonen
Pasi Tanninen
Keijo Taskinen
Seija Tuulentie

Theme E: Preserving landscapes – combining conservation, tourism and forestry

Noora Salonen
Suvi Nenonen
Teemu Rintala
Andreas Schäfer
Leila Tuisku
Liisa Tyrväinen

Summary and closing remarks

Ilkka Heikkinen
Liinu Törvi

ISBN 952-11-1500-9
ISSN 1238-7312

Cover photo Matti Mela
Lay-out Kyllikki Koskela
Printing Edita Prima Oy
Helsinki 2003

Contents

Preface	5
I Section I. Abstracts	7
1.1 Recreation and Nature Tourism; well-being for the people	7
1.2 Developing sustainable tourism in Natura 2000 sites – Opportunities and challenges	9
1.2.1 Introduction	9
1.2.2 Tourism trends in the EU	9
1.2.3 Alternative forms of tourism	10
1.2.4 What does Natura 2000 have to offer	11
1.2.5 Can tourism and Natura 2000 work together	11
1.2.6 Practical recommendations for developing tourism around Natura 2000 sites	12
1.2.7 Conclusion	14
1.3 Ecological sustainability of nature tourism	15
1.4 The World Ecotourism Summit	16
1.5 The Great Teuravuoma mire–nature and cultural tourism destination in Finnish Lapland	17
2 Section II. Workshop themes	21
2.1 Theme A: Social impacts of ecotourism	21
2.1.1 Introduction	21
2.1.2 Ecotourism as a contentious concept	22
2.1.3 Ecotourism in the northern context	23
2.1.4 Social impact assessment (SIA)	25
2.1.5 Social impact assessment at the northern tourist site	26
2.1.6 Conclusion	27
Literature	28
2.2 Theme B: Ecological sustainability in Natura 2000 areas	29
2.2.1 What is ecological sustainability?	29
2.2.2 Different Natura 2000 areas	30
2.2.3 Tools to maintain ecological sustainability of Natura 2000 areas	31
2.2.4 Observations of overloading in Natura 2000 areas	34
2.2.5 Carrying capacity and limits of acceptable change	35
2.2.6 Involvement of local people and rising awareness of nature conservation	36
2.2.7 Conclusions	36
References	37
2.3 Theme C: Participatory planning and ecotourism	40
2.3.1 Introduction	40
2.3.2 Ecotourism	41
2.3.3 Planning	41
2.3.4 Participation	43
2.3.5 The stakeholders	45
2.3.6 Participatory tools	48
2.3.7 Conflict management	50
2.3.8 Conclusions	51

2.4 Theme D: Productisation of nature-based tourism activities	53
2.4.1 Introduction	53
2.4.2 Definitions	54
2.4.3 Understanding demand and forecasting.....	55
2.4.4 Factors of Supply: issues of quality, locality and authenticity	56
2.4.5 Integration of sustainable use of natural resources and the tourism industry	56
2.4.6 Networking and partnership—and developing a sense of locality and commitment.....	57
2.4.7 THE PRODUCT: spirit, story and survival in silence, safety and sublime space	58
2.5 Theme E: Preserving landscapes – combining conservation, tourism and forestry	60
2.5.1 Introduction	60
2.5.2 Forestry	60
2.5.3 Nature tourism	61
2.5.4 Conservation	62
2.5.5 Case 1. Integrating Tourism and Grouse Habitat Protection in the Black Forest	63
2.5.6 Case 2. Kätkätunturi	64
2.5.7 Case 3. A Proposal for the Ounasjoki Life Environment Project	65
2.5.8 Case 4. Restoration and Protection of the River Simojoki	66
2.5.9 Adapting conservation, forestry and tourism to the landscape – conclusions	67
References	68
3 Section III. Summary.....	70
3.1 Summary and closing remarks	70
3.1.1 Introduction	70
3.1.2 Summary of the results of the five workshops	71
3.1.3 Closing remarks	73
List of Participants	75
Documentation pages	78

Preface

When the Natura 2000 network was set up, its main purpose was to preserve biodiversity by maintaining or restoring natural habitats of European Community importance. The grounds for the Natura 2000 network lie in the Rio Conference (1992) where the United Nations framework convention on biological diversity was given. Finally, within the European Union, the Birds Directive (1979) and the Habitats Directive (1992) resulted in the creation of the Natura 2000 network for member states. However, the aim of Natura 2000 is not to create “nature refugees” where all human activity is prohibited. On the contrary, today the presence of beneficial human activity is seen as essential for maintaining biodiversity, especially in rural areas. This means that the use of Natura 2000 sites must be balanced with protection measures in a way that benefits both nature and humans without risks of overuse or harming the livelihood of local people.

During the last decades, tourism has become one of the major sectors of economic activities worldwide. With this growth, the demand for nature-based tourism is increasing and diversification of tourism products and destinations are taking place. The increasing pressure of nature-based tourism poses both prospects and threats. In particular, this is an urgent problem in the rural areas of the European Union where Natura 2000 sites can be seen as a resource for local people.

It is a demanding task to integrate the needs of nature conservation and tourism. To find tools for handling the topic, we organized an international workshop “Sustainable Ecotourism – Integration of Conservation and Usage in Natura 2000 Areas” which was held in Ylläsjärvi, Finland, on 18th–20th of September 2002. The workshop was organised as a part of the LIFE Nature Project ‘Protection and usage of Aapa mires with a rich avifauna’, which is co-ordinated by the Lapland Regional Environment Centre.

Our aim was to form a multi-scientific consensus on the topic by gathering together top scientists from both ecological and sociological branches and to exchange practical experiences with universities and governmental organisations. The three-day workshop consisted of lectures, parallel workshops, poster session and a short field trip to the Great Teuravuoma aapa mire complex. This volume includes abstracts of the introductory lectures and results of the parallel workshops. The five working groups were a) Social impacts of ecotourism (chair: Dr. Leena Suopajarvi), b) Ecological sustainability in Natura 2000 areas (chair: Dr. Päivi Lundvall), c) Participatory planning and ecotourism (chair: Dr. Stefanos Fotiou), d) Productisation of nature-based tourism activities (chair: Tuija Sievänen, M.Sc.) and e) Preserving landscapes—combining forestry, tourism and protection (chair: Dr. Liisa Tyrväinen).

The workshop brought together 41 people from Greece, Spain, Germany and Finland. In our opinion, a kind of consensus was reached during the days—even though there is still much to do to integrate the needs of conservation and use. The public also realized the importance to the theme of workshop, because several radio and newspaper interviews were done. This shows that local people living near Natura 2000 sites are truly interested in the use of these areas. There is a growing interest in keeping rural areas economically healthy. Thus, the Natura 2000 sites are seen as an essential part of the local environment and have a huge

importance in the development of the areas. In a way, the public attention hints at a demand for promoting both dissemination of information and participation of local people in the topics concerning Natura 2000 areas.

We want to express our warmest thanks to all the participants; each of them added a small bit to the pile. Especially we want to acknowledge the experienced professionals and group members who worked hard and unselfishly in compiling the group work papers.

Päivi Lundvall and Jouni Rauhala

Section I. Abstracts

1.1 Recreation and Nature Tourism; well-being for the people

Ilkka Heikkinen

Life Nature projects in Lapland have been very successful. They have proved on the local level that Natura 2000 areas can promote small-scale economics and provide jobs for workers who are used to working with their hands, for instance, with chainsaws and axes. It is also important that in Life Nature projects there are many young professionals working to develop nature conservation on a regional level. This stimulates intellectual capacity, which is needed in managing Natura 2000 areas. In many cases these groups meet during the projects and what is very important—find the way to common understanding. Ecotourism is connected to many of these projects. Professionals in this field have also given ideas of developing recreation in the wild and nature tourism more generally—one of the success stories is this area, Ylläs.

In accordance with the Finnish government's programme, the Ministry of the Environment set up a working group on May 2000 to draft a programme for developing recreation in the wild and nature tourism. The report was finalized in November 2001. The programme was adopted by the Finnish government in autumn 2002.

The working group proposed 29 different steps to be taken to promote recreation in the wild and nature tourism. The aim is to clarify and harmonise the responsibilities and goals of different actors, to give better preconditions for activities in the wild, and to preserve the attractiveness of important natural areas, for instance for many sites which have been proposed to be part of the Natura 2000 network. The aim also included better cooperation and more product development as well as increased knowledge and know-how.

The working group created a vision of the future by the year 2010:

Finnish nature will be widely used for recreation and nature tourism. The objective will be use that is sustainable ecologically, socially and economically. The basis of recreation will be the Nordic tradition of public access to the countryside (known as everyman's right). A network of natural areas and services, which are developed based on the demands of customers, will be established to support recreation and tourism. There will be more areas set aside for recreation in Southern Finland and services will also be increased in the south. The balance between demand and supply will be ensured through research and monitoring. Plans and projects will take into consideration the possible effects of recreation and nature tourism on the natural environment.

People living mostly in cities or towns will have a lot of leisure time. They will be using this time in many ways, both for recreation in their own neighbourhood and for nature tourism. Recreational activities will combine the wonders of nature,

individual lifestyles and needs and high technology. Services for recreational activities will be accessible regionally and nationwide. Recreation in the wild and nature tourism will be of great importance to the health and well-being of citizens.

Finland will also be attractive to tourists from neighbouring countries. Our strengths are quietness, clean nature, the exoticism of northern nature and local traditions, as well as services which are easy to reach, multiform, competitive and secure.

Enterprises in nature tourism are very professional and they are developed in networks. The education and training within this branch takes into account the demands of enterprises as well as nature tourism. There will be profitable enterprises in sparsely settled areas of archipelagos, the countryside, villages and at tourist centres. Actors of the public sector and the private sector will create nationwide networks for the production, selling and marketing of services which serve customers' needs.

The demand for nature tourism will increase faster than for other tourism. Nature tourism will be a significant part of regional economy and regional employment. The number of jobs will be doubled in ten years.

This vision is of course quite ambitious. I think that it is not too unrealistic because many ongoing trends are leading in the same direction. On the other hand, we must understand that many problems must be solved. Especially, we must be aware that social and economic conditions in sparsely settled areas, for instance in Lapland, have moved in a negative direction. People have left their home localities because of unemployment and lack of services. Also, it is always difficult to make good forecasts in such an unstable branch as tourism.

Despite these remarks, I am sure that it is possible to develop the Natura 2000 network in a sustainable way, not only for nature conservation but also for the well-being of people. In fact, there is pressure to do so because of the many doubts about the Natura 2000 network. We must show that taking care of biodiversity is clearly a part of our well-being, not a threat. On the other hand, we must also be aware of the primary purpose of the Natura 2000 network. We cannot jeopardize the conservation objectives of the network or of the individual sites. The Habitats Directive of the European Commission gives a solid framework for managing the sites and it seems that the development of best practices is continuing smoothly in cooperation with member states and the Commission.

This workshop can be an important step towards achieving the goals mentioned above. On behalf of the Ministry of the Environment, I wish you all very successful days.

1.2 Developing sustainable tourism in Natura 2000 sites – Opportunities and challenges

Kerstin Sundseth

1.2.1 Introduction

The Natura 2000 network, which was established ten years ago, now covers 15 per cent of the European Union's territory, an area equivalent to the size of Germany and Italy put together. With such a large area, Natura 2000 sites can no longer be considered independently of other rural land use activities. Instead, they should be fully integrated. Many Natura 2000 sites do after all need active management and human intervention to maintain their biological values. By the same token, these sites can also provide new opportunities for rural development, ranging from direct employment creation, alternative revenues, for example through extensive farming, and purely environmental benefits, such as water retention or flood prevention.

Tourism is also often cited as an important means of deriving economic benefits from Natura 2000. With more and more people seeking out nature-based holidays, the prospects have never been better; but, to be successful—and sustainable—tourism development requires careful planning. To assist in this process, Ecosystems Ltd was contracted by DG Enterprise to write a best practice guide¹ on 'using natural and cultural heritage to develop sustainable tourism in non-traditional areas'. The report examines recent trends in heritage-based tourism in Europe, the opportunities and constraints they present, and provides step-by-step guidance on how to go about developing such forms of tourism in a sustainable manner. Here are some of its findings as they relate to Natura 2000 areas.

1.2.2 Tourism trends in the EU

After almost half a century of sustained growth, Europe continues to be the world's top tourism destination. It accounts for 28 million jobs and 2 million businesses, the vast majority being micro-enterprises with less than ten employees. So, clearly tourism has a major impact on Europe's rural development, employment and environment policies.

What is more, these trends are continuing. Tourism has more than doubled in the last 20 years and is set to double again in the next 25, creating 100,000 new jobs a year. Already one in every two people go away from their homes for their holidays, which means it is no longer a luxury for the rich few but a way of life for all. These macro-figures do, however, hide some important shifts and changes. In fact, it is probably fair to say that tourism in Europe is at a crossroads: classic destinations are suffering—people are moving away from the coast and into the countryside. A European survey of tourists carried out in 1998 showed that almost a quarter of holiday-makers chose the countryside as their favourite tourism destination (most often in their own country) compared to 63 per cent who went to the sea. This is quite a different picture from ten years ago, when the vast majority would have chosen the sea.

¹ Available in five languages (English, French, German, Italian, Spanish) from DG Enterprise entr-tourism@cec.eu.int. It can also be downloaded from the Internet: http://europa.eu.int/comm/enterprise/services/policy-areas/studies/ecosystems/study_sustainability.htm

In fact, the alternative tourism market is expanding three times faster (8% growth rate) than the classic forms of tourism. The World Tourism Organisation (WTO) estimates that a quarter of all tourism will involve rural tourism in one form or another by 2025—that is around 140 million people. There may be several reasons for these shifting trends:

- people are becoming more experienced in travelling and discerning in their choice of destination, leading them to search for new places and new tourism products;
- people are more mobile—cross-border travel is easier than ever thanks to the liberalisation of the airlines, construction of new roads and European integration;
- people are taking shorter but more frequent holidays throughout the year;
- people are more active whilst on holiday, seeking out different activities;
- the European population is getting older but staying active longer;
- and finally people are increasingly concerned about the environment.

1.2.3 Alternative forms of tourism

Such significant changes will inevitably open up new opportunities for new destinations and new forms of tourism. Whether one calls it ecotourism, green tourism, nature tourism, rural tourism, adventure tourism or so on, it does not really matter. What is important is to be aware of the range of activities and interests that draw people to the countryside (and particularly Natura 2000 sites) and the profiles of those that are pursuing such holidays. Tourism in rural areas will never be able to attract large numbers of visitors (nor should it). So, to be profitable and sustainable it pays to know exactly what people want and who the tourists are. That way, tourism products can be created in relation to the potential demand and the environment and not the other way around. All too often a lot of time and money is spent on developing tourism attractions and then waiting for the tourists to arrive. Such initiatives are inevitably short-lived and often disastrous on all fronts: environmentally, socially and economically—especially in fragile rural areas.

So, who are the people interested in nature tourism and what are they interested in? Again, so much depends on their backgrounds and on what they are looking for once they are at their destination. In very general terms though, it seems that they tend to:

- be in the 39-59 age bracket range and better educated than the average tourist
- travel regionally, e.g. within their own country
- take short trips of 2-7 days, but more frequently and at any time of year
- travel independently rather than through tour operators.

They also want:

- a pleasant environment which has its own distinctive character
- a diversity of activities to keep them occupied
- contact with local people and they want to learn about the lifestyles and history of the locals
- a quality product and a personalised service (this is where accommodation and local products can play an important role).

1.2.4 What does Natura 2000 have to offer

The Natura 2000 network currently holds over 15,000 sites. Some are too fragile to be able to tolerate any form of tourism, others are not particularly attractive, but a significant proportion is indeed able to meet all of the above conditions. The diversity and wealth of Europe's natural heritage is after all enshrined in the whole concept of Natura 2000, and as such provides an endless range of interests and opportunities for the interested tourist (hiking, wildlife viewing, canoeing, riding, fishing, hunting, sightseeing, orienteering, dog sledging, white water rafting, ecology courses, to name but a few). The local natural heritage also creates a sense of belonging and of time which gives each area its own distinctive character and attraction.

It has to be said however that this potential is not often realised, people who live and work in and amongst this natural and cultural wealth are not always aware of what they have or how unique it is until others from the outside, tourists for example, come to marvel at it. The wooded pastures in Extremadura are a case in point. To many Extremadurans, these vast expanses of *dehesas* appear monotonous and 'boring', yet to foreigners (even Madridians) they look amazing—like the Serengeti plains of Africa—with their own special blend of rare animals (e.g. lynx, wolf, vultures). Perhaps the same is true of the large tundra areas in Lapland.

1.2.5 Can tourism and Natura 2000 work together

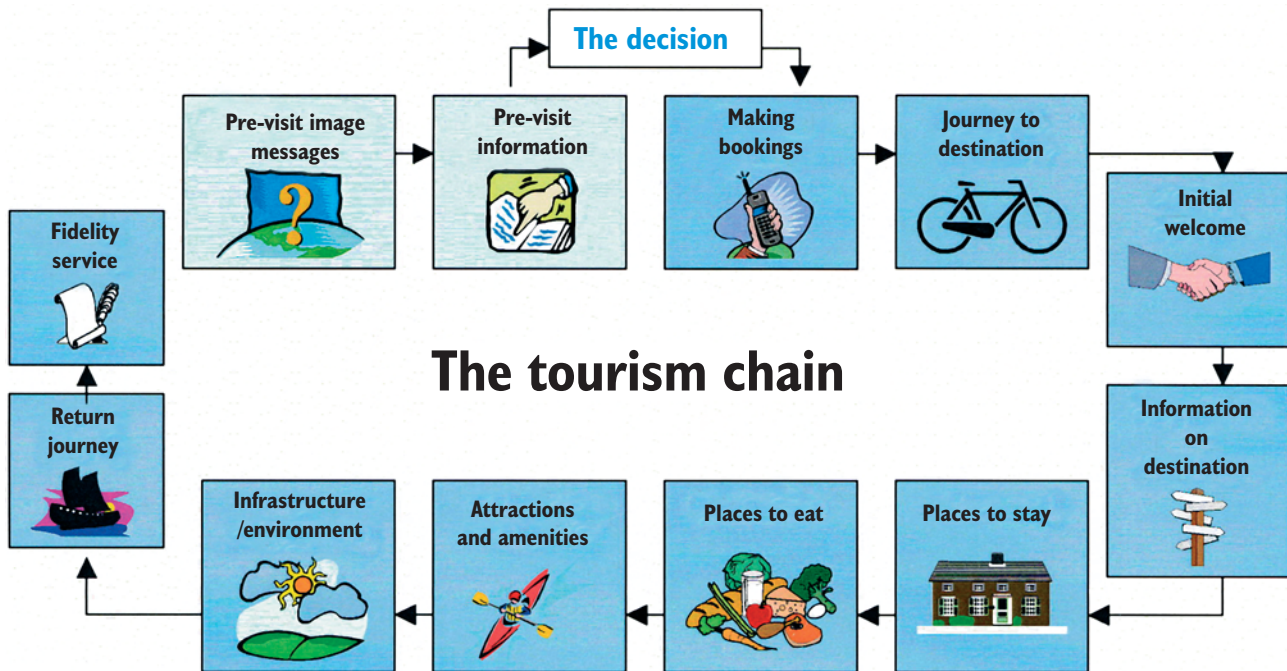
So, the question is, can tourism and Natura 2000 work together. The answer has to be a definite yes—provided that certain conditions are respected. There are a significant number of areas where the two can be mutually beneficial. On the one hand, tourism in and around Natura 2000 sites can help raise the general awareness and appreciation of the need for nature conservation policies and laws amongst the general public. If people are able to experience this natural wealth first hand, they are much more likely to be sensitive to the need for conserving these Natura 2000 areas. Tourism can also help generate additional resources to ensure the long-term management and maintenance of these sites.

On the other hand, Natura 2000 sites can provide the local area with a good tourism product which will meet the needs of nature tourists (irrespective of whether they act as a beacon to attract nature tourists in the first place or merely as a scenic backdrop). In turn, this will help enhance the overall attractiveness and 'pulling power' of the area. Like national parks, a Natura site could in time symbolise something special—something that attracts tourists to the area even if they never actually go to visit the site. Equally important is that Natura sites can also help revive, or at least contribute to the revival of, local economies by providing additional income and jobs. Tourism is very labour intensive and requires many different businesses to make a destination successful—not large companies but small family businesses with a handful of employees—just as one might find in rural areas.

This is not to say that developing tourism around a Natura 2000 site is an easy task. Quite the contrary. There are many obstacles and hurdles that have to be overcome beforehand. First, tourism has to be developed in such a way that it does not harm the very thing that attracts people to the area in the first place—be it the nature or the culture. Tourism also has to cope with all the problems of trying to develop an economic activity in rural areas where populations are low, the infrastructure is not well developed, and there is a lack of specialised skills and organisational networks. And finally tourism is highly dependent on outside factors, such as, popular destination sites and the interests of potential tourists, or other events that could disrupt tourism. The outbreak of foot-and-mouth disease

in the United Kingdom last year did more damage to the rural tourism sector than it did to the agricultural sector, because people were 'put off' going to the countryside even in areas not suffering from the disease.

So tourism development, if it is to be successful, does require a lot of coordination, hard work, resources and, above all, careful planning. This is because it is a very complex product. One need only look at all the ingredients that make up a good tourism product or destination—ignore one of these steps, such as not marketing properly or forgetting that there needs to be easy access to the area, and tourism will fail.



1.2.6 Practical recommendations for developing tourism around Natura 2000 sites

The report for DG Enterprise gives full guidance on how to develop tourism in a sustainable manner. There is time here to only pick out a few key recommendations:

a) Addressing the vulnerability of the site

This can be achieved by:

- Determining the fragility of the site at the outset to know what and how much it can withstand without significant damage (carrying capacity).
- Choosing markets in relation to these constraints (e.g. if the area is fragile then it may be better to focus on attracting a limited number of dedicated birdwatchers than a larger number of casual walkers).
- Planning the activities carefully to minimise the impact (In the Ylläs project we saw that the majority of visitors are happy to just ski the 5 km to the cafeteria and back. The cafeteria acts as a honey pot and leaves the rest of the area relatively untouched.).
- Monitor regularly to ensure that any problems are caught early before they damage the site and put the tourists off.
- Manage and fund the upkeep of the Natura 2000 sites through, for instance, the revenues generated by tourism.

b) Ensuring that you have a satisfied tourist

This can be achieved by:

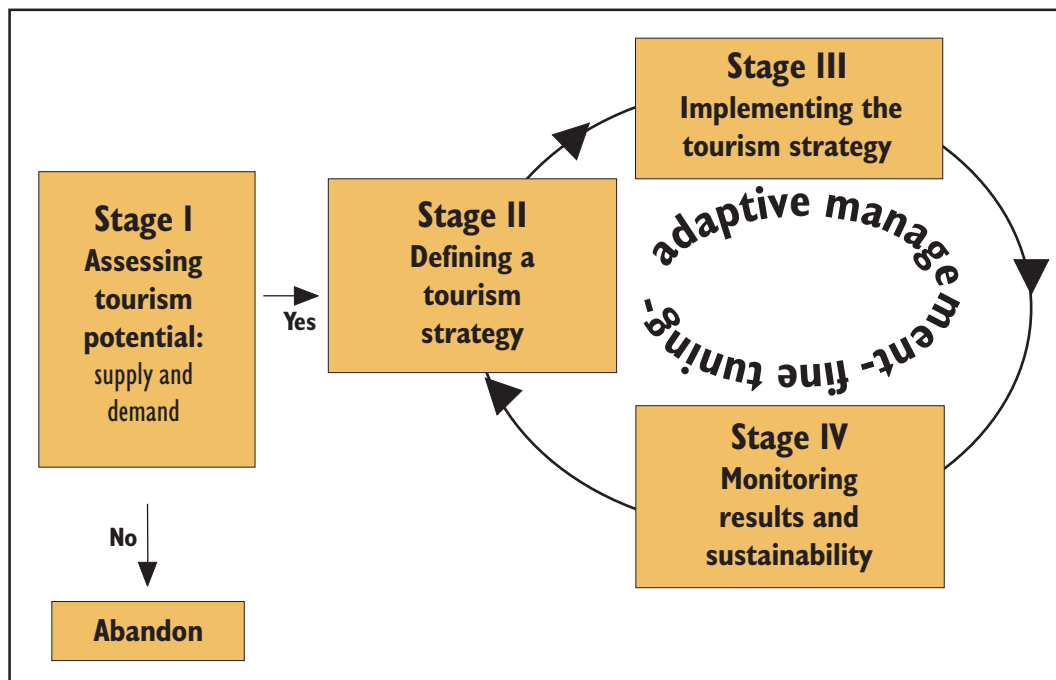
- Providing a personalised service that makes them feel welcome and encourages them to come back.
- Providing a quality product that gives them a memorable and positive image of the place so that they are more likely to tell others to go and visit.
- Providing a sufficient diversity of activities to keep them in the area for longer periods and to get them to come back at different times of the year.

c) Involving all stakeholders at the outset

Because of the complex nature of tourism, all potential stakeholders should be brought on board at the outset to:

- Motivate any potential small businesses across a range of sectors.
- Ensure adequate infrastructure (e.g. roads, shops, signposts, etc.).
- Provide the necessary training and funds to get started.

The best way to achieve all of these is to take a strategic approach to tourism development. This will help bring all elements of the jigsaw into place and ensure that the product is not only sustainable but also long lasting.



For nature-orientated tourism, there are several examples of specific guidelines on tourism development that are worth investigating, as they provide very helpful advice and models to work from. The first is the European charter for sustainable tourism in protected areas¹ and the second is the WWF Pan Parks initiative².

¹ For more details contact: French Federation for Regional Nature Parks, 4 rue Stockholm – F 75008 Paris, email: Isagaert@parcs-naturels-regionaux.tm.fr

² For more details contact: WWF International, Av de Mont Blanc, 1196 Gland, Switzerland, email: hkarjalainen@wwfint.org.

1.2.7 Conclusion

In conclusion, Natura 2000 and tourism have many mutual interests and can work well together in certain areas provided that particular pitfalls are avoided. The ideal scenario would be to develop a steady flow of tourists, who visit all year round, stay several days and want to come back time and time again, in other words, no mass tourism and no day trippers.

So, if tourism is an art, let it stand for:

- Agreement - means working together to pool resources,
- Resourcefulness - means being imaginative and effective in responding to market opportunities,
- Tempered actions - means establishing a balance between: supply and demand; competitive prices and investments; and the use of natural and cultural heritage features whilst safeguarding them.

All of these must be allowed to develop slowly over time to allow a chance to learn from experience, contain any damages and constantly rejuvenate the products.

1.3 Ecological sustainability of nature tourism

Pirkko Siikamäki

Ecological sustainability refers to the use of natural resources so that biological diversity and the functioning of ecosystems are not threatened. Since the use of protected areas for recreational purposes has grown dramatically in recent decades, careful planning, monitoring and management of sustainable recreation use is needed. Sustainability requires the understanding and the consideration of the motives, interests and values of all users and stakeholders. Management planning should be targeted simultaneously at ensuring biodiversity and a healthy environment, at providing nature resources in an economically sustainable way, and at ensuring the social acceptability of management actions. Potential impacts of nature tourism and recreational use of protected areas to the environment and biodiversity may include, for instance: 1) use of land and nature resources for tourism facilities and infrastructures; 2) damage to or destruction of ecosystems and habitats; 3) increased risk of erosion; 4) alterations to ecosystems and habitats; 5) increased risk of alien species; 6) waste disposal and pollution.

The major effect of recreation is often mechanical trampling of vegetation, which leads to changes in the properties of the soil. Soil moisture, topography and elevation greatly influence the vulnerability of a habitat to disturbance. Generally, wet sites are disturbed more easily than dry ones, but return more quickly to their original vegetation cover. The overall tolerance of vegetation to disturbance depends on the combined resistance and resilience of each species and the rate of regeneration after disturbance. Long-term disturbance may change the species composition, as vulnerable species disappear from their original habitats while more tolerant species are established in the area. The extreme consequence of trampling is complete removal of vegetation, which initiates erosion. Because the restoration of vegetation to severely damaged habitats is difficult and expensive, the vegetation response of different vegetation types should be taken into account already during the planning of recreational use.

The role of scientific research in the controlling and planning of the use of protected areas is crucial. Information on the potential impacts and direct measurements of recreational use on natural ecosystems and species is needed when the future use and management of areas are planned and directed. Moreover, research is needed in defining the indicators and standards of quality to be used in management and monitoring. As an example, I will briefly present preliminary results of a project (Dept. of Biology, University of Oulu) on recreation ecology conducted in Kuusamo, with the respective studies initiated in mountain regions of Finnish Lapland (Pallas-Ounastunturi National Park and the Kilpisjärvi area) in collaboration with the Finnish Forest Research Institute and the Finnish Forest and Park Service. The aim of our research is 1) to provide information on regeneration processes and tolerance of plants to recreation, and 2) to develop ecological and social principles for management of protected areas, for trail network planning, and for restoration of severely damaged habitats in Northern Finland. We are measuring the impacts of recreational use (e.g. skiing, pedestrian, horse) on vegetation by carrying out several experimental and monitoring studies. Additionally, we are investigating experimentally, sexual and vegetative regeneration and the introduction of invader species after disturbance by horse-riding. According to our preliminary results, the vegetation of northern environments are quite sensitive to mechanical trampling and other impacts of recreation. The sensitivity of vegetation in different forest types varied and plant functional types differ in their ability to recover after trampling. The main short-term impacts of horse-riding on vegetation seems to be the mechanical trampling and removal of vegetation and the introduction of invader species.

1.4 The World Ecotourism Summit

Stefanos Fotiou

The World Ecotourism Summit was held in Quebec City, Canada, from 19 to 22 May 2002. The summit was the principal event to mark 2002 as the International Year of Ecotourism. The summit was an initiative of the World Tourism Organisation (WTO) and the United Nations Environment Programme (UNEP). It was hosted by Tourisme Québec and the Canadian Tourism Commission. The purpose of the summit was to bring together governments, international agencies, non-governmental organisations (NGOs), tourism enterprises, representatives of local and indigenous communities, academic institutions and individuals with an interest in ecotourism, and enable them to learn from each other and identify some agreed principles and priorities for the future development and management of ecotourism.

More than 1100 delegates attended the World Ecotourism Summit, from 132 different countries and from the following groups:

- International agencies engaged in supporting conservation, tourism and sustainable development.
- National ministries of tourism, culture and the environment. In total, 30 ministers of state attended the summit.
- Non-governmental organisations working at an international or local level, representing conservation, indigenous communities, travellers and other interests.
- Private sector enterprises engaged directly or indirectly in ecotourism.
- Academics, consultants and other experts in the field of ecotourism.

The summit was organized under the following main discussion themes, which have also been the main themes of the International Year of Ecotourism:

- Ecotourism policy and planning: the sustainability challenge
- Regulation of ecotourism: institutional responsibilities and frameworks
- Product development, marketing and promotion of ecotourism: fostering
- Monitoring costs and benefits of ecotourism: ensuring equitable distribution among all stakeholders

One of the critical issues that were discussed during the summit concerns the definition of ecotourism. The participants of the summit agreed that ecotourism activities have the following characteristics, which distinguish ecotourism from the wider concept of sustainable tourism:

- contributes actively to the conservation of natural and cultural heritage;
- includes local and indigenous communities in its planning, development and operation, and contributing to their well-being;
- interprets the natural and cultural heritage of the destination to visitors;
- lends itself better to independent travellers, as well as to organized tours for small groups.

The main outcome of the summit was the “Quebec Declaration” which proposes specific measures to the various stakeholders of the ecotourism market.

1.5 The Great Teuravuoma mire–nature and cultural tourism destination in Finnish Lapland

Eino Lappalainen

The Teuravuoma aapa mire in Western Lapland, which lies some 150 kilometres north from the Arctic Circle, is the biggest single mire in Finland. It covers an area of 7,080 hectares, and is a part of the Great Teuravuoma mire complex, which covers an area in excess of 35,000 hectares. The mire complex is one of the most remarkable mire areas of the 700-km-wide aapa mire belt in Finland. The aapa mire belt stretches from the limit of the raised bogs in Southern Finland to the northernmost reaches of the country. North from the pine tree limit, and in the sub-alpine birch zone, permafrost peat mounds or palsas and other frost phenomena on aapa mires are apparent. In addition to Finland, aapa mires may be found in the northern parts of Sweden and Norway, in the Kola Peninsula, North Russia, and on the Western Siberian lowlands, mainly in the extensive runoff area of the Ob River. The most developed aapa mires (meaning the paludification process during the holocene, by which eg. lowlands have become swampy) are found in areas where precipitation is greater than evaporation. Changes in the climate and precipitation have greatly influenced on the development as well as on the paludification process of aapa mires. Therefore, the northern parts of Finland, in Lapland, encompass rather typical aapa mire areas. In addition, Finland has the greatest diversity of aapa mire types. These mires play an important role in nature. They are the sole breeding grounds in Europe for a number of rare species of bird, and they provide a refuge for many threatened plant species. Most of the European aapa mires are located in Finland. According to the European Union's (EU) Habitats Directive, these mires are classified as habitats of prime importance.

The term "aapa" originates from Northern Finland, yet has been adopted for international usage. Aapa mires are usually flat, slightly concave or sloping mires with a treeless heart consisting of wet flarks alternated with strings or ridges. Usually the centre parts of aapa mires are largely submerged during spring floods. Floods hold great significance for the expansion of the mire and its vegetation. Consequently, aapa mires are clearly minerotrophic and nutrient-rich. The central parts consist of wet and flark-like areas where *Menyanthes trifoliata*, *Carex chordorrhiza*, *C. limosa*, *C. aquatilis*, *C. rostrata*, *Eriophorum angustifolium*, *E. latifolium*, *E. russeolum*, *Warnstorfia exannulata*, *W. procera*, *Limprichia revolvens*, *Scorpidium scorpioides*, *Sphagnum obtusum* and many other species are common. Even fauna, particularly insect and bird species, is abundant.

Aapa mires receive their nutrients from the mineral soil underlying the mire or via groundwater and runoff from the surrounding areas. Spring floods, springs and the topography of surrounding areas have a huge impact on the expansion of an aapa mire. The catchment area is usually much larger than the mire itself. Especially during the time of spring floods, the central parts of aapa mires receive nutrients via runoff from their surroundings. At the edges of aapa mires there is a gradual change from wetland or mire, through paludified mineral soil, to forest. The borderline between an aapa mire and forest is seldom distinct. Under undisturbed conditions mires generally transgressively spread onto forested soils.

The area included in the national mire protection programme and the European NATURA 2000 network in the Great Teuravuoma mire complex is 6,400 ha and that of pristine mires, 9,000–10,000 ha. The afforested area covers some 10,000 ha and the area reserved for the peat industry is 400 ha. The drainage of the area was initiated as early as the end of the 1920s. After the Second World War, the

government of Finland established a farm where hay would be cultivated on an area of 500 ha. The hay was intended for horses that were used to transport timber from the great logging sites. However, quite soon the farm had to be closed down because of a rapid change in timber-harvesting techniques and machinery. Today, parts of this area are used as experimental areas for *Picea mariana* and *Larix laricina*.

The Great Teuravuoma aapa mire complex is hydrologically uniform and comprises 54 separate mires, 15 lakes and the Naamijoki River with tributaries. The total amount of peat accumulated during roughly the last 9500 years amounts to 260 million m³. There is as much as 234 million tonnes of water in peat layers. Peat is mostly brown moss (*Bryales*) and sedge (*Carex*) peat. White moss (*Sphagnum*) peat only occurs in the shallow margins of the mires. Inorganic iron-phosphorous precipitation is common in peat layers. Springs characterise the margin areas of mires. In the entire area, there are more than 150 springs feeding the mire basin.

The Naamijoki River with its tributaries has a 60–70 km channel suitable for boating and canoeing in the Arctic wilderness. This river also had an important role as a floating and transportation channel for timber and tar to cities and paper mills in the 19th and early 20th centuries.

The main parts of the mire complex are between 165–175 m above sea level. The highest hills, locally called “vaara”, are 220–250 m above sea level, only a few reach a height of over 300 m above sea level. In the holocene period, 9500–8500 years ago, the water level of the Baltic basin reached the Great Teuravuoma basin. This stage in the history of the Baltic Sea is called the Ancylus lake stage.

This mire basin was the northern fjord of Ancylus Lake, which reached from here as far as Northern Germany some 8500–9600 years ago. Clear evidence of human activity has been discovered from the shores of this lake, from, for instance, the Kurtakko village. The water level was approximately 175–180 metres above the current sea level, and during that geological period, the present mire islets were skerries of the great lake. Climatically, during this development stage, conditions were most favourable as the average temperature for the period between 6000–9000 years ago was a couple of degrees higher than nowadays. In Lapland the climate was so favourable that even the pine forests spread significantly further north than they do today. The treeless fell tops were also much smaller and more indented than they are today.

The oldest prehistoric findings of that time appear to date back to the mesolithic stoneage. The evidence discovered includes depressions of habitation dikes, dwelling hollows, hunting pits and tepee-stove sites. The most common tools discovered were chisel-shaped items made from greenstone (blades, maces, ice-picks) and quartz scrapers. These items have been acquired from Järvenpää, Kurtakko. Based on these and other findings of stone objects, it appears very likely that these objects were quarried from the locality. A possible Stone Age quarry of this kind may at least have been located at Konikoski, along the river Ylläsjoiki. One point of special interest is the prehistory of today’s mire islets, as many of these islands were also islands and islets of the ancient Lake Ancylus, and were therefore ideal for fishing and seal hunting. A fully comprehensive prehistoric study of the Great Teuravuoma environment has not as yet been carried out. However, based on studies conducted on, for example the village of Venejärvi and others, it may be presumed that there was habitation in the area dating back as far as the preceramic or mesolithic Stone Age, or the following earlier neolithic Stone Age. Chronologically, this would indicate human survival strategies in the current Great Teuravuoma environment for a period as long as 9000 years.

At the time when metal objects overtook stone objects in efficiency, deer hunting also increased. This period is termed the Metal Age (started approximately 2000–1000 B.C.). This period is seen as being a significant shaper of the culture of the Forest Lapp people. In the early stages, bows, arrows and spears were used as

tools for hunting, skis for travelling, perhaps even with the help of a dog. Typical evidence includes trap pits, which have been plotted in 32 sites in the municipality of Kolari. Various forms of reindeer fencing obtained their design from this period. The indigenous Forest Lapps who preceded agriculture also originated from this period. Evidence of dwellings from this period include tepee foundations and hearthstone structures. At least during this cultural period, wooden idols and figures were used, four of which have been discovered from the municipality of Kolari.

Of all the historical remains, the most impressive must be the duckboard route or corduroy road built between Kurtakko and Venejärvi during 1868–1881. This was repaired during 1926–1927 and used right up to the 1960s, when traversing mires gradually decreased and the duckboards began to rot and became covered with peat. Chronologically, the oldest relic is, however, the meadow hut owned by Jonne Vanha, a farmer, in the grassy meadow region on the shore of the river Naamijoki. The building belongs to one of the oldest surviving log-built constructions in the municipality of Kolari and dates back to the beginning of the 19th century. Messages and dates have been inscribed on the walls of the hut for future generations to read, the oldest of which dates back to 1827. To date, not all of the messages have been properly interpreted. This grassy meadow of the river Naamijoki had over 50 hay barns in the beginning of the 1950s and the meadow was a very important area for the collection of forage for cattle. Some of these barns were removed, others repaired in 1998–99. This grassy meadow is a traditional peasantry biotope region, and the largest remaining grassy meadow with a wilderness river environment in Finland. The cultural offering of the mire also includes Lake Iso-Kivijärvi, drained in the 1940s, as well as Lake Teurajärvi and Iso-Kivijärvi drainage channels. In the beginning of the 1950s the drained lake housed 21 barns. Only a few of these remain. The sides of the channels have become bushy (birch and willow have started to grow).

Other historical cultural remains are structures belonging to reindeer husbandry, tar burning and coaling, logging and the log-floating culture, agriculture and wartime. These include reindeer fences and round-up enclosures, tar-burning pits and coal-pit bottoms, peat and earth huts, forest cabins, dams, channels, log-floating chutes, timber depot and barking sites, dugouts for forest guardsmen, and home museums in local villages.

In its entirety the Great Teuravuoma area offers good facilities for experiencing nature and developing ecotourism activities and related products based on the environment of the mire region and the cultural heritage. By renewing the historical corduroy road and the adjoining various nature and cultural trails, a new type of place will be created where the Natura 2000 conservation programme can be implemented to offer local people opportunities for developing nature-based businesses and for the marketing of such for tourism purposes. At the same time, the Natura programme supplements activities in Ylläs, Levi and Olos that are mainly focussed on fell tourism. These destinations have an accommodation capacity of 25,000–30,000 beds.

Great Teuravuoma has applications for travel-product development as well as nature and cultural themes. These are as follows:

- The environmentally responsible use of mire vegetation, mire types and fauna in ecotourism and experiencing nature.
- Aapa mire lives—a study tour.
- The “mire tells” excursion intended for children.
- Camps for the disabled to experience nature.
- Nature training for commercial enterprises and related management skills and human relationship training.

- Camps for eliminating stress in the heart of the Teuravuoman mire countryside (e.g. the Forest of Silence camp on the shores of Lake Särkijärvi).
- Courses on well-being and related "mire-theme" products.
- Peat huts for accommodating people in the heart of the Teuravuoma mire countryside. This could even be connected with a Stone Age "new dwelling" on the shores of Lake Kurtakkojärvi.
- Services for experiencing the aapa mire environment and the Lapp wilderness. Existing services are: reindeer themes, horse-riding, skiing and snowmobiling.
- Village museums for illustrating life in days past.
- "Survival Excursions" to Teuravuoma, outside of the protected area.
- Wintertime camps for viewing northern lights on mire islands.
- Wintertime twilight night experiences and summertime nightless night experiences on the mire.
- Capercaillie displays on spring snow dunes in the Vinsankuusikko forest.
- Animal trails in the spring snow dunes of the river Naamijoki.
- Late spring break-of-dawn and bird song excursions.
- Nature sounds experiences on mire islands.
- Early summer trips to gather northern natural herbs and late summer trips to gather mushroom.
- Misty August nights on mire islands.
- The vibrant autumn shades of "ruska" on the aapa mires.
- Camps for learning about the natural values of the aapa mires and forests.
- Art camps in the countryside of Fell Lapland aapa mires: painting, photography, drawing.
- A summer 'night of the arts' on the aapa mire.
- Traditional biotopes and related tales of life.
- "Haymaking" experiences on grassy meadows. Used for feeding domestic animals.
- Prehistoric heritage and 9000 years of life around the Great Teuravuoma aapa mire.
- The increase in the use of natural herbs, berries and plants suitable for making decorative objects in supplementary services.
- "Aapa type" wines and liqueurs.
- Sheep farming in the management of traditional biotopes.
- Organically produced meat from sheep from the traditional biotope areas.
- Peat textiles.
- Red ochre-ecological Teuravuoma paint.
- Peat sauna and smoke sauna.
- Peat treatments using Arctic peat.
- Wilderness and aapa mire nature destinations marketed to foreigners.
- Prehistoric and historical period sites.

Section II. Workshop themes

2.1 Theme A: Social impacts of ecotourism

Chaired and compiled by: Leena Suopajärvi

Participants: Marjatta Hytönen, Kristina Lehtinen,
Kyösti Palojarvi and Päivi Taavo

2.1.1 Introduction

Tourism is the most important nature-based branch of industry in Finnish Lapland at the beginning of the new millennium. According to the latest statistics, collected by the Regional Council of Lapland, direct income from tourism in Lapland was estimated to be 324 million euros in the year 2000. Over one-third of this amount went to the accommodation and restaurant services, but also local retail business, passenger traffic and travel agents were getting their parts of the income. In Lapland about 10 per cent of the employment is engaged in the tourism sector: the estimate was in 2000 about 3230 work years in the business. These figures express the importance of the tourism industry in this northernmost county in Finland, which has for decades suffered from unemployment. Another problem, especially in the 1990s, was migration, which was caused by worse economic prospects in this area than in Finland on average (Laakkonen 2002, p. 3–4).



Reijo Kallioniemi

Nature is the most important reason why tourists come to Lapland. The comparatively clean, uncrowded and beautiful landscape and the quietness of nature are mentioned as the most important attractions in Lapland for both foreign and domestic travellers. Activities in nature are important: for example, about 90 per cent of domestic visitors come to cross-country ski or downhill ski during their visits to Lapland. In summer and autumn, hiking and fishing are important nature-based activities for tourists coming north (Kajala 1996, p. 44; see also Järvi-luoma 2001, p. 61–65).

According to the research literature, nature as an attraction is not losing its power in the future, quite the contrary. Nature-based tourism is estimated to grow faster than other branches of the industry. One reason for this trend is environmental consciousness. For example, according to surveys made in the Western world, people value more green products and environmental-friendly activities. As P. Wight (1994, p. 40) puts it: “There is no question that the marketplace is becoming ‘greener’, or more environmentally sensitive, both in terms of awareness and in the desire to contribute through its efforts towards a more sensitive approach to numerous activities and purchases”. Finnish Lapland, as a sparsely-populated and not industrialized area, offers good opportunities in this green marketplace.

After shortly sketching the context of the tourism industry in Lapland and especially the meaning of nature as an attraction for the industry’s future, it is time to turn to the issue of this paper: the social impacts of ecotourism. I will briefly discuss the concepts, ecotourism and social impacts, based on the research literature, and then report on the discussions of Workshop A, of the Ylläs Workshop, on the 19th of September 2002. The members of our group were Marjatta Hytönen, a researcher with the Finnish Forest Research Institute; Kristina Lehtinen, coordinator, from the Finnish Forest And Park Service; Kyösti Palojärvi, a forester with the Lapland Regional Environment Centre; and Päivi Taavo, a social science student at the University of Lapland. Furthermore, to hear local opinions about the tourism industry in the region, our group interviewed Tapio Niittyranta, a trade promoter from the municipality of Kolari and Ari Ruokojärvi, entrepreneur, who is producing and selling lambs wool products and locally made wine from his own farm in the village of Kurtakko.

2.1.2 Ecotourism as a contentious concept

According to David A. Fennell, who wrote an introduction to ecotourism in 1999, the roots of the concept can be traced to the late 1960s and early 1970s, when researchers became concerned over inappropriate use of natural resources. In the 1970s, researchers used the phrase *ecodevelopment* when talking about more responsible and environmentally sensitive forms of tourism. Also, the Canadian Forestry Service adopted the concept of ecotour, when marketing nature experiences and learning about nature to travellers in the mid-1970s. Hence, Fennell (1999, p. 32) argues that “ecotourism was viable long before the 1980s in practice, if not in name”.

International academic debate about the concept of *ecotourism* rose in the late 1980s and the discussion has been vivid until these days. Fennell compares different ideas and discusses especially the relation of ecotourism to the more broad concept of nature-related or nature-based tourism. According to him, ecotourism is a more strict version of nature-based tourism, including educative and sustainability components and the ethical nature of the experience of the travellers (Fennell 1999, p. 36). Based on these comparisons, his own definition is as follows:

“Ecotourism is a sustainable form of natural resource-based tourism that focuses primarily on experiencing and learning about nature, and which is ethically managed to be low-impact, non-consumptive, and locally oriented (control, benefits, and scale). It typically occurs in natural areas, and should contribute to the conservation or preservation of such areas” (Fennell 1999, p. 43).

These same ideas are also shared by other researchers. For example, Wight made already earlier a more detailed list of the key principles of the concept of ecotourism:

- it should not degrade the resource and should be developed in an environmentally sound manner
- it should provide long-term benefits to the resource, to the local community and industry (benefits may be conservation, scientific, social, cultural, or economic)
- it should provide first-hand, participatory and enlightening experiences
- it should involve education among all parties—local communities, government, non-governmental organisations, industry and tourists (before, during and after the trip)
- it should encourage all-party recognition of the intrinsic values of the resource
- it should involve acceptance of the resource on its own terms, and in recognition of its limits, which involves supply-oriented management
- it should promote understanding and involve partnerships between many players, which could include government, non-governmental organisations, industry, scientists and locals (both before and during operations)
- it should promote moral and ethical responsibilities and behaviour towards the natural and cultural environment by all players (Wight 1994, p. 39–40; see also Chalker 1994, p. 90–92)

Already these two definitions give a basis for understanding that ecotourism is a more strict branch of the nature-based tourism industry. Hence, our group began the discussion by trying to find our own understanding of what ecotourism could be in the context of Finnish Lapland. The debate was based on every participant’s academic background and practical experiences in the sphere of activity in northern Finland. During the discussion, the question of whether we can even use the concept of ecotourism, when talking about the tourism industry in Lapland, was posed.

2.1.3 Ecotourism in the northern context

Our group began the discussion about ecotourism in a critical way: Is ecological tourism possible at all? The ecological balance is definitely marked with a minus, if one considers that tourists are flying to Lapland, driving cars to the well-built accommodation (which stands half-empty for part of the year) and spending their savings on many not-so-necessary-home-coming-presents. Some of the members of the group were also tired of the use of the ‘eco-prefix’, and agreed with the critiques of P. Wight (1994, p. 41):

“In the last few years ecotourism has become a buzz word to sell a variety of products. In some ways this resembles the tendency of manufacturers to label numerous products as ‘green’ or ‘ecologically friendly’. The problem

has been that the consumers did not know what they were getting, nor its impact on the environment and did not know how the product differed from others, if, indeed, there was any difference.”

Hence, we thought that in a strict sense, we should forget the concept of ecotourism and not debate it. Instead of a scholarly debate, we decided to focus on our experiences and ideas of the relation between the suppliers, the tourism industry in Lapland, and the consumers, all those individual travellers seeking, after all, for the real experience of northern nature.

First, we thought that if the tourism industry wants to attract “deep green” travellers, the whole branch in Lapland will end up in a crisis. The point is that there are too few tourists who really share the true meaning of ecotourism that the marketing niche would be very small. And, on the other hand, ecotourists would use less transportation and the usual services, for example, and they would leave less money to the local entrepreneurs. For instance, two hikers who spend their week in the hills are less profitable to the local industry than two bar flies, who spend their days on slalom hills or on a snowmobile, enjoy a meal in a restaurant in the afternoon, and dance and drink the whole evening in the local restaurant, before going to sleep at a local hotel.

Secondly, we thought that perhaps ecotourists, hiking around in the fells’ landscape, searching for pure nature, are not actually ecologically the best users of the northern nature. Northern nature is very vulnerable and its carrying capacity can be reached very quickly, we thought. Because of erosion and littering, it is much better to have certain trails where all tourists are guided, especially if there are thousands of them.

After these general—but practical—considerations, according to my notes, we changed the discussion and turned to the question of the future opportunities of the tourism industry in Finnish Lapland. We all agreed that nature is indeed at the core of why tourists travel to Lapland, and that it is necessary that the tourism industry take environmental concerns seriously. In other words, if nature is ruined and environmental questions neglected, would there even be a tourism industry in Lapland in the future.

We tried to find answers to this. First, all entrepreneurs in the tourism industry in Lapland should be more concerned about environmental issues. There should be green products and green values behind the services offered to the tourists. To save nature, to be ecologically friendly, is to save expenses—at its best.

Secondly, the tourists coming to Lapland are usually keen on local life and local livelihoods. This means that tourists should receive information about attractions based on local livelihoods and have the possibility to enjoy locally produced products. The wine we drank in the poster session on one evening during the workshop was produced in the village of Kurtakko, not in Chile. Local production, based on berries picked around the farm, oh yes! At the best, the trip to Lapland could inspire all visitors to think about environmental issues and the human–nature relationship, especially because many of them are coming from crowded areas in the south and perhaps have lost close contact with the wilds of nature.

Hence, we ended up discussing where we demanded environmental consciousness among the producers in the tourism industry in Lapland: more environmentally friendly products and services, and products and attractions based on local livelihoods supporting those who live in the neighbourhood of the tourist centres. We also thought that information about locally produced and environmentally friendly products and services are necessary for the tourists, especially if they are more expensive. If you choose this line, you also have to tell why using the local product is more valuable than using the product sold by the global marketing machine.

2.1.4 Social impact assessment (SIA)

In the European context, the European Commission has pointed out that there should also be an assessment of social impacts of plans or projects that affect the environment, and ways should be found to use natural resources sustainably. The guidelines given by the European Commission were made to create good practices in environmental impact assessment and social impact assessment in the European Union member countries (http://europa.eu.int/comm/development/sector/environment/env_integ/env_integration_manual/frameset.html).

The European Commission is referring to the Interorganisational Committee on Guidelines and Principles for Social Assessment that defined social impacts in 1994 in the following way:

“The consequences to human populations of any public or private actions - that alter the ways in which people live, work, play, relate to one another, organise to meet their needs and generally cope as members of society.”

The European Commission is dividing social impacts into two parts: socio-economic impacts, such as employment, and services and socio-cultural impacts, for example changes in the norms and values of a society. The basic questions to be answered in a social impact assessment (SIA) are what are the impacts of a project, plan, programme or policy on people and who benefits and who loses. On the general level, the task of the social impact assessment is to identify potential social changes which may result in positive and negative environmental impacts and formulate measures to mitigate undesirable impacts and enhance positive impacts.

An SIA is usually restricted or limited to the local and regional level, but sometimes an assessment may also take into consideration national and international dimensions. Nevertheless, the geographical starting point is not always the best one: the starting point could also be to first define who are all the groups involved and base the analyses more on the idea of involvement instead of geographical boundary lines. The European Commission is also pointing out that even the local communities are not homogeneous—there are different occupational groups—and, for example, socio-economic stratification should be considered carefully in the SIA. In other words, disaggregating the population by economic status is important because access to capital and land can result in different responses to project benefits. In the assessment of social impacts it is also necessary to ensure that different groups on the local level are heard: including children, old people, women and any ethnic groups living in the area.

Social impact studies were made in Finland already in the 1970s, when, for example, Timo Järvikoski (1975) studied the opinions and expected changes among local residents caused by the construction of the Kemihaara/Vuotos –reservoir in the Eastern Lapland. Studies about (possible) local social impacts of harnessing the river Ounasjoki were also made in the mid-1970s on the household and municipality level (Asp, Luostarinen & Mäkinen 1977).

In 1994 Finland's Act and Decree on Environmental Impact Assessment Procedure (468/1994) came into force (EIA Act). Since then, there are those who feel that social impact assessment should also be included in all large plans and programmes which would affect the environment. The EIA Act could be divided into two levels when assessing social impacts: human impact assessment would focus on human health, living conditions and amenity and socio-economic and socio-cultural assessment would look at the changes in the community structure and, for example, taking care of traditional ways of life and the cultural heritage.

Directives and legislation at the European Union level and national level legislation provide the framework for putting SIA into practice. Nevertheless, there are differences on how SIA should be applied in practice. There is a wide variety of approaches to SIA because nowadays social impact assessment is often also used in smaller projects, usually voluntarily by the planners of the project.

In our workshop on the social impacts of ecotourism we tried to find our own understanding on how SIA should be conducted in the northern context of tourism.

2.1.5 Social impact assessment at the northern tourist site

At first our group discussed who should be included if we apply SIA to a certain tourist site, for example the Ylläs area in Finnish Lapland. Because of the normal limitations of time and money when doing research, we decided to concentrate on three levels: impacts on the local level and regional level, and the social impacts of tourism on the tourists themselves.

On the local level it is necessary to research the changes in the community caused by tourism, and also to analyse in detail what are the impacts on an individual level in different groups among the local residents. Tourism may cause profound changes in the localities. Different traditional occupational groups may lose access to the resource base of their income and also their status in the community. For example, in Lapland there have been occasional disputes between reindeer herders and the tourism industry. On the other hand, the tourism industry needs employees with qualifications such as education in services and foreign languages, and, especially in the high tourist seasons, employees from outside the local area may be hired. This factor may also change the local life in many ways. Some locals may win because of tourism, if they own land near the tourist site and they build and sell or rent cottages to tourists. On the other hand, those who do not own land, feel the changes in their near environment, but do not necessarily benefit from the tourism income themselves. This may cause serious disputes among local residents.

We heard an example from the municipality of Kolari. In the 1980s there were different opinions about the development of tourism: some thought that money invested in the Ylläs –area would take money away from the development of other areas in the municipality. Tapio Niittyrinta, a trade promoter, and Ari Ruokojärvi, an entrepreneur, said that it needed much work and changes in the local attitudes to get local people to understand the meaning of tourism in the area, and also to support new entrepreneurs coming to develop local services in the industry. According to Niittyrinta, attitudes towards tourism are nowadays more positive and co-operation between villages and local people has increased, because tourist income spreads also to the neighbouring villages around the tourist site.

When thinking about the social impacts of tourism on the individual level we had some concrete examples in the discussion. Especially in the branch of ecotourism enterprises there are small family businesses. For these, the tourism season is full of work, often work-days last around the clock, and burn-out among small entrepreneurs can be a serious by-product of the industry. On the other hand, when an old and peaceful home village changes into a tourist site with thousands of holidaymakers and new opportunities for evening entertainment, this can also cause changes in the family lives of local people. We discussed that SIA should thus emphasise well-being and experiences of local residents: a research plan should include qualitative research on changes in the local life and/or quantitative research on well-being using indicators developed in the scientific literature.

On the local and also on the regional level the tourism industry is important for the service sector in the area. Because of the tourist flows, the number of retail stores increase and local health services usually expand, both of which also benefit the local people. Besides this, many municipalities in Lapland get taxes from the tourism industry, but the tourism industry of course also needs large investments in infrastructure, for example for water supply.

Our group also discussed the importance of participatory planning in the SIA procedures. This must be a process where different kinds of interest groups and people are involved and their opinions should really be heard, when decisions are made for the future.

Tourists coming to the area should also be included in the SIA, because they are the customers who will decide the future of tourism in Lapland. Our group discussed what kinds of impacts ecotourism may have on individual well-being: experiencing and learning about nature in the North, better physical and mental health because of the holiday in Lapland, better understanding of different ways of life, opportunities in different places, and so on. At its best, tourism is a way to raise the level of environmental consciousness and shared responsibility for the future in the global context.

2.1.6 Conclusion

Ecotourism and social impact assessment are widely discussed concepts which are framed by European Union and national legislation and academic discussion. Nevertheless, the meanings given to the concepts should also be based on understanding the variety of different local contexts and ways of life.

As reported in this paper, ecotourism is a small branch of the tourism industry and it can hardly be the only way to develop tourism in the northern areas. However, concern for environmental issues should be a common practice in the tourism industry in Lapland, because nature is the most important attraction in the industry. There is no future for the tourism in Lapland, if care for the environment is neglected.

Decisions about the future of the tourism industry in Lapland should include environmental impact assessment and social impact assessment. Local authorities play a central role, because they are responsible for regional development and are intermediaries of information and new innovations. However, different interest groups also should be given the chance to participate in a communicative planning process on the local and regional level.

Literature

- Asp, Erkki & Luostarinen, Matti & Mäkinen, Hannu (1977): Ounasjoen sosiaalis-taloudellinen tutkimus. Selvitys rakentamisen yksityistaloudellisista vaikutuksista. Oulun ja Turun yliopistot. Lapin tutkimuksia n:o 1.
- Chalker (1994): Ecotourism: on the trail of destruction of sustainability? A minister's view. In Cater, Erlet and Lowman, Gwen (eds.) Ecotourism. A sustainable option? John Wiley & Sons Ltd, Chichester. p. 87–99.
- European Commission (2003): Environmental integration manual: good practice in EIA/SEA. http://europa.eu.int/comm/development/sector/environment/env_integ/env_integration_manual/frameset.html. 11.3.2003.
- Fennell, David A. (1999): Ecotourism. An Introduction. Routledge, London and New York.
- Järvikoski, Timo (1975): Kemihaaran allasalueen väestötutkimus. Vesihallituksen tiedotus 83, Helsinki.
- Järviluoma, Jari (2001): Luonnon merkitys matkailun vetovoimatekijänä: esimerkkeinä Levin, Pallaksen, Pyhän ja Luoston matkailukeskukset. In Järviluoma, Jari & Saarinen, Jarkko (eds.) Luonnon matkailu- ja virkistyskäyttö tutkimuskohteena. Metsäntutkimuslaitoksen tiedonantoja 796, Rovaniemi. 51–76.
- Kajala, Liisa (toim.) (1996): Lapin metsästrategia. Maa- ja metsätalousministeriön julkaisuja 2/1996. Helsinki.
- Laakkonen, Sami (2002): Lapin matkailustrategia 2003-2006. Luonnos 14.11.2002. <http://www.lapinliitto.fi/aluekehitys/matstra.pdf>. 11.3.2003.
- Wight, P. (1994): Environmentally responsible marketing of tourism. In Cater, Erlet and Lowman, Gwen (eds.) Ecotourism. A sustainable option? John Wiley & Sons Ltd, Chichester. p. 39–56.

2.2 Theme B: Ecological sustainability in Natura 2000 areas

Chaired and compiled by: Päivi Lundvall

Participants: Charly Ebel, Heikki Eeronheimo, Joel Erkkonen,
Eero Kaakinen, Sannamari Kääriäinen,
Päivi Paalamo, Pirkko Siikamäki and Pekka Sulkava

2.2.1 What is ecological sustainability?

Ecological sustainability means the use of natural resources in a way that the maintenance of ecological processes, and preservation of biodiversity and biological resources are not threatened. It aims to ensure utilization of areas and resources without the risk of ecological losses. Ecologically sustainable development meets the needs of present generations without compromising the ability of future generations to meet their needs—perceiving generations widely; not only human, but all living nature.

In daily use, and especially in Internet usage of terms, “sustainable use” and “sustainable development” seem to vary a lot. Unfortunately, terms are also used without explicitly stating what is intended. Sustainable use of natural resources involves ecological, economic and sociological components. In sustainable recreational use and tourism, the development should be designed so that it improves the quality of life in the host community, provides high-quality experiences for the visitors, and maintains the quality of the environment on which both the host community and the visitors are dependent on. It must be emphasised that ecological sustainability highlights nature conservation, while economically sustainable development stresses the continuation of utilisation of natural resource consumption by people in the long term. In considering the role of nature tourism in the sustainable use of biological resources and biodiversity, it is important that the potential adverse impacts are fully considered. These are roughly divided into



Markku Aikioniemä

environmental impacts and socio-economic impacts, the latter generally being those imposed on host communities. Although such impacts on biological resources may be less easy to quantify and analyse systematically, they may be at least as important as, if not more important than, environmental impacts in the long term.

Ecological sustainability in Natura 2000 areas is the most important question to be defined before these areas can be put to use. Promoting economically and socially sustainable development, while neglecting ecological sustainability can easily ruin the basis of the Natura 2000 network. However, one of the signals during the preparations for the Natura 2000 programme were that we would not create “nature refugees” where all human activity will be prohibited. The environmental administration is mostly responsible for balancing conservation and use through management and use plans.

To be sustainable, the use of Natura 2000 areas should be managed within the carrying capacity (CC) and limits of acceptable change (LAC) for ecosystems and sites. Moreover, different activities within protected areas should be planned so that they contribute somehow to the conservation of biodiversity. The precautionary principle should be taken into account so that the use of protected areas for tourism or other human activities is restricted, and when necessary prohibited in ecologically sensitive areas. The challenge for managing and planning the sustainable use of protected areas is actually in determining an optimal level of use and LAC in a way that biological values are ensured in the long term. To achieve the goal of sustainable development and gain momentum, an active co-operation between researchers, environmental authorities and other stakeholders is urgently needed.

2.2.2 Different Natura 2000 areas

Within the territory of the European Union (EU), the preservation of biological diversity is ensured through the Natura 2000 network. The objective is to protect different natural habitats and the habitats of wild fauna and flora. The conservation must take into account the economic, social and cultural requirements and the specific regional and local characteristics of each EU Member State.

Natura 2000 sites vary according to their habitat type, process or stage of succession, variety of species, and location within the European Union. Even if the habitat type and stage of succession are similar, areas will still be different because of random effects. This makes it practically impossible to measure ecological sustainability in Nature 2000 areas in general. Instead, ecological sustainability must be measured independently on each site or for each habitat type. Even though the impact of recreational use and tourism on the environment depends largely on the means of the use, the common main effect is mechanical trampling of vegetation (e.g. Chaplin and Shaver 1981). Soil moisture, topography and elevation greatly influence the vulnerability of a certain habitat to disturbance. As a rule of thumb it can be said that wet sites are disturbed more easily than dryer ones, but they return more easily to their original state (e.g. Cargill and Chapin 1981, Gallet and Roze 2001).

Natura 2000 sites differ in their response to recreational use and nature tourism. The resistance of habitats to degradation is dependent on several abiotic (soil type, humidity, topography) and biotic (soil organisms, vegetation, animal species) factors. The vegetation usually responds first to wear and tear, which can affect plants either directly or indirectly. Direct affects occur by mechanical wounding and are dependent on the structure of the plant. When mechanical damage continues for a long time the original species becomes less dense and stronger secondary species (e.g. several hay species, *Dicranum* and *Polytrichum* mosses) will begin to take over (Kaakinen et al. 1982). At the same time, the number of species decreases.

The indirect factors are related to physical and chemical changes in the ground, which can cause the vegetation to suffer from a lack of nutrition, water and oxygen (Kaakinen et al. 1982).

By comparing different Natura 2000 sites, we can begin to understand the ecological sustainability of these areas. For example, a small herb-rich forest area with some threatened species is much more vulnerable than a large river ecosystem. Further, any kind of recreational use does not risk the conservation status of natural dystrophic lakes, but even camping or hiking can easily damage an alpine mountain habitat if such activities are uncontrolled. This implies that all kinds of water habitats are usually more sustainable than different land habitats. The resistance of mire and bog habitats to wear and tear is dependent on the most prevalent moss species and thus also on the humidity (Kaakinen et al. 1982). The most vulnerable areas are flarks and flark fens, while the more resistant ones are bog woodlands. The comparison of Natura 2000 sites shows that, depending on the conservational values of a site, the same form of use can be a threat to one area but cause no risk to another area (Table 1).

The recovery of vegetation after damage also varies enormously in different habitats. In northern or otherwise extreme conditions the recovery is very time-consuming. It has been estimated that dry lichen ground cover needs about 30 years to recover from a footprint (Ahti 1957). In other words, it can be expressed that fertile habitats with high reproductive potential recover better from wear and tear than poor habitats (Kellomäki & Saastamoinen 1975). After inclusion in the Natura 2000 network the pressure for use of some areas has increased. Especially in areas with low population densities, where it is becoming more difficult to earn an income through agriculture, forestry and fishery, the Nature 2000 areas are seen as a new challenge to earning a living. For example, in Lapland, nature tourism and recreation are rapidly expanding businesses (Saarinen 2000). Natura 2000 sites are considered new resources which will help local people to continue living in the north. However, the pressure for use of these areas can cause risks of losing the biological values that make these areas special, and also a product to be marketed for nature tourism. Risks that can be estimated beforehand can possibly be eliminated by careful management and planning of recreational use. The management plan should be based on the conservation goals and priorities of an area. In management and use plans, objectives specific to each area can be identified, problems can be foreseen and solved with the help of stakeholders and other interest groups, means of implementation defined and long-term conservation guaranteed. The main aim is to prevent deterioration of the site and, if necessary, to provide for restoration.

2.2.3 Tools to maintain ecological sustainability of Natura 2000 areas

The conservation goals of each Natura 2000 site are defined in the Natura 2000 sheets which lay out the favourable conservation status of habitats and species. However, it must also be kept in mind that our knowledge of the natural values of many Natura 2000 areas is often insufficient. Because we must make decisions concerning the use of Natura 2000 sites, often on the basis of incomplete information on the biological values, and on the effects of different types of use, the precautionary principle should be always applied.

A favourable conservation status should be used to measure the ecological sustainability. Favourable conservation means the status of a protected organism or a protected habitat that is viable in the long term. Favourable conservation status is defined in the Habitats Directive:

The conservation status of a natural habitat will be taken as favourable when:

- its natural range and areas it covers within that range are stable or increasing, and
- the specific structure and functions which are necessary for its long-term maintenance exist and are likely to continue to exist for the foreseeable future.

The conservation status of a species will be taken as favourable when:

- population dynamics data on the species concerned indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats,
- the natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future, and
- there is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis.

Favourable conservation status can be used when measuring the level of ecologically sustainable use of Natura 2000 sites. It is also a useful term for stakeholders and decision-makers, especially in juridical questions, because the term contains not only ecological but also political and juridical elements (Kallio 2001). From the ecological point of view, the term is complicated, roughly it could be assured that favourable conservation status has been reached when there is no extinction debt of species in a habitat (Hanski 2002, unpublished). When the deterioration of a habitat has gone far enough, it is likely that extinction will happen. However, there is a time lag between habitat loss and extinction called extinction debt (Hanski and Ovaskainen 2000). For ecologists, it is an ambitious task to prevent the extinction debt from developing on Natura 2000 sites.

Furthermore, the surrounding area affects each Natura 2000 site. We can take an example from northern Finland: aapa mire, where the land acquisition for conservation purposes and restoration has been done and even management planning may be done. It seems that the conservation of the mire has been successful and the optimal level of use could be estimated. However, commercial forests and fields may surround the aapa mire. Several ditches located on the border area and surrounding the Natura 2000 site may interfere with the hydrological stability of the water area. This will result in continuing drainage of the mire, and an absence of aapa mire vegetation (Figure 1, Kaakinen unpublished). In addition, the surrounding area of each Natura 2000 site can affect the animal species living on the site. Large carnivorous birds and mammals often need, besides safe breeding areas, corridors between separated areas to ensure adequate hunting and breeding success and for the migration of new generations. For animals, human disturbance can be the most critical problem. This means that not only the protected area but also its surroundings should somehow be controlled, to guarantee successful nature conservation. This is supported by recent ecological studies. One large habitat or many small ones that are tightly connected to each other are better than widely fragmented habitats (Hanski & Ovaskainen 2000).

Many of the Natura 2000 sites have already earlier been protected under national conservation programmes and their natural values can hardly be denied. From this it can be concluded that in some cases national conservation laws may be stricter than the Natura 2000 programme. However, some Natura 2000 areas have gone through changes, which have resulted in deterioration of the conservation values. In Finland this has happened with especially different mire and bog habitats. The use of mires started already decades ago. The national mire protection programme was implemented in two stages, in 1979 and 1981, but the

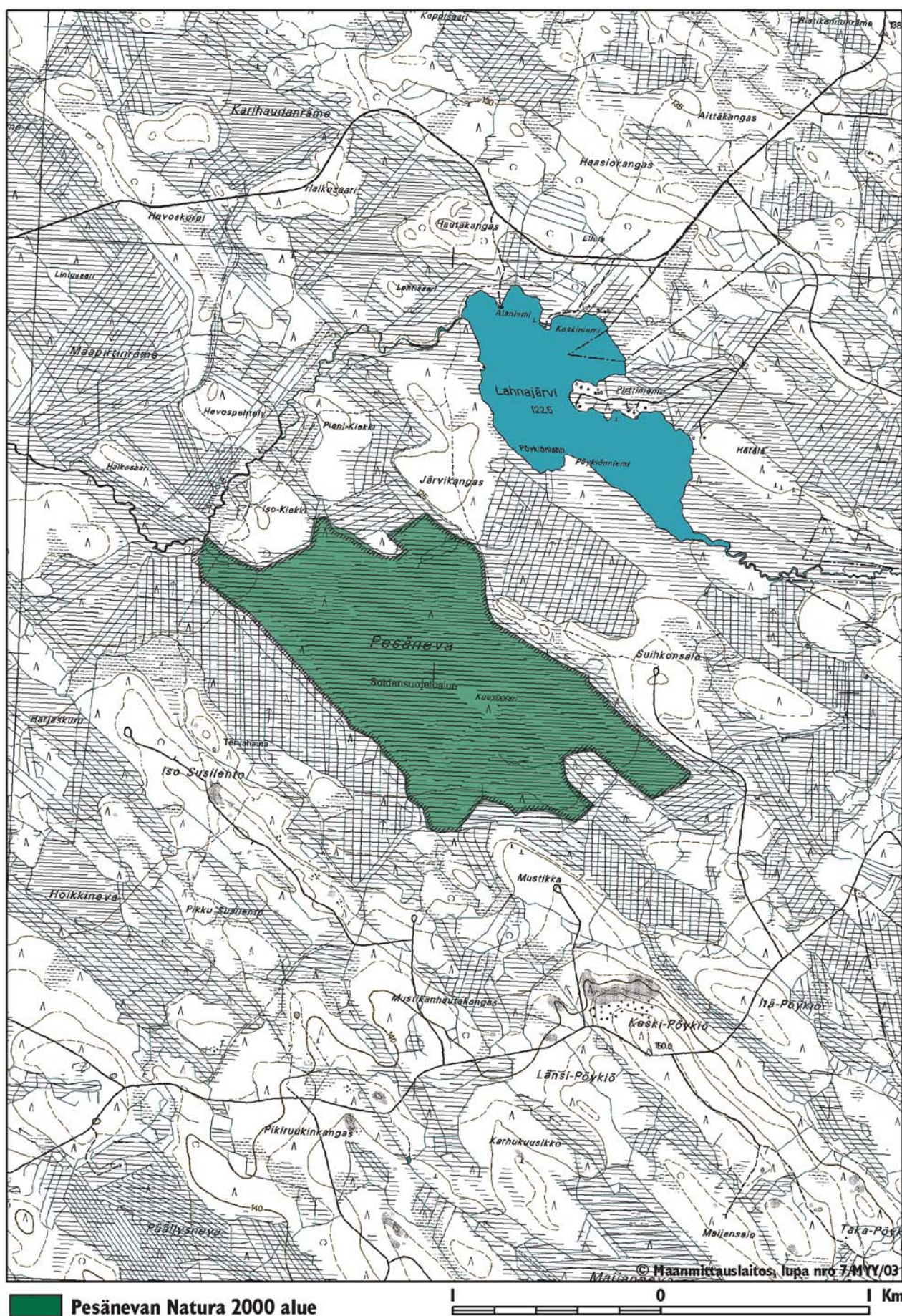


Figure 1.

implementation was slow and some delays occurred. When the Natura 2000 programme was launched, the deterioration of some areas had already started because of ditching, harvesting in the area or some other dramatic changes in neighbouring areas. Luckily, under the Natura 2000 programme we were able to apply for and use Life-Nature financing in the restoration of these areas. According to scientific evaluation, we have a quite large body of background information, and thus good chances for success in the restoration work. Especially, the greatest ecological and economic benefits will be gained by the restoration of areas tightly connected to existing remnants of biologically diverse areas, thus facilitating the migration of target species to the restored areas (Hanski 2000).

Management and use plans can be specifically designed for sites or integrated into other development plans to reach the same goal. In Finland a working committee of the Ministry of the Environment is looking at how the management and use planning should be done and how to prioritise targets. In the near future, provincial-level plans will be drawn up and, within the plans, the valuable natural areas will be placed in order of importance and development principles will be formulated for the management and public use of these areas. In the Province of Northern Ostrobothnia such a plan has already been made (Anon. 2002). The Northern Ostrobothnia Regional Environment Centre, the Forest and Park Service and the Regional Council of Northern Ostrobothnia decided the work priorities at the provincial administration level. This plan will function as background material for decision-making and management plans. The results are applied on the provincial scale and they will direct measures for the recreational use of the areas. In the general plan, areas to be developed and managed were selected in particular on the basis of their national and international significance, attractiveness and the general need for nature conservation. Prioritisation will also help financiers and implementers to direct their target funding. In a provincial-level plan, the type of use can also be decided. Sometimes it is practical to concentrate nature tourism and recreational use in specific areas, while keeping other sites to minimum use.

2.2.4 Observations of overloading in Natura 2000 areas

A certain amount of change is natural in the succession of ecosystems. However, when the use of sites increases, the natural direction and rate of change are often altered. Unnatural alterations can be observed by regular and detailed follow-up programmes.

Direct effects of increased use are normally quite easy to detect and stop, like erosion of trails. At some Natura 2000 sites an increase in both poaching and legal hunting can be expected, because of new trails and duckboards attracting all kind of users, also hunters. If the level of harvesting cannot be controlled in an efficient way, the population densities of game species are likely to decrease.

The ecological effects of recreation use on ecosystems are difficult to predict, detect and prohibit. An example of a complex ecological impact of recreation on the environment is the effects of horse riding on an ecosystem. The environmental impacts of horse riding generally consist of damage to vegetation, increased trail depth and width, soil erosion and compaction and the introduction of weed species (e.g. Whitam and Comfort 1996, Newsome et al. 2002). According to preliminary results of an ongoing research project in Oulanka National Park, horses can potentially serve as seed-dispersal vectors of weeds and other invasive plant species (Törn et al., unpublished data). Weed seeds were viable and became successfully established in experimental plots with no upper layer of soil. This indicates that the introduction of invading species into this area is quite likely a result of horse riding, at least in the short term.

Different animal species and even individual animals have different tolerance levels to human activities. The tolerance level may vary according to animal size, age, phase of lifecycle, habitat type of living area and individual experiences of humans. In general, an increase in human activities results in a decrease in species diversity (Hammit and Cole 1987). More encounters between humans and wildlife often results in unintentional harassment of the animals. An animal under stress may experience an alteration in breeding success and the number of produced offspring. Additionally, the stress caused by human disturbance can alter an animal's resistance to predators, diseases and parasites, and, consequently, affect the animal's survival and reproduction (e.g. Creel et al. 2002).

The impact of soil erosion on vegetation may affect seed production and cause population-level changes leading to changes in the diversity of plant species. More frequent trampling changes ground vegetation and causes erosion, which also has an effect on soil properties and decomposers (Richter et al. 2001, Wright & Coleman 2002). These changes may seem minor, but they may have significant effects on food chains or feedbacks of ecosystem. Understanding the effects of several trophic-level interactions in ecosystem is complicated even for specialised research scientists. In addition to trampling, contamination by pollutants may cause problems on the same sites. If vegetation and the humus layer are damaged, the density of decomposers usually decreases, which affects the normal puffer mechanisms. In time, this may facilitate the movement of polluting particles into mineral soils and water systems.

The impact of nature tourism and recreation on different water habitats and the degree of impact of different uses is not yet well understood. Probably, with greater use, aquatic plant production will be altered. In some cases, erosion of riverbanks may increase and the greater amounts of suspended matter may be a visible water-quality factor.

2.2.5 Carrying capacity and limits of acceptable change

Carrying capacity (K) has been used in several biological models to determine the maximum population size that can be supported by a given environment (e.g. Lotka-Volterra model on interspecific competition, Lotka 1932, Volterra 1926). In game biology the same term has been used to describe the appropriate level of hunting that a population can tolerate. The carrying capacity concept (CC) has also been applied to describe a sustainable level of recreational use (O'Reilly, 1986, McCool 1995). In recreational ecology, carrying capacity is conventionally defined as the number of visitors an area can sustain without degrading natural resources and visitor experiences. However, it is technically very demanding (probably impossible) to follow up ecosystem-level damages just as it is socially and politically difficult to regulate the number of visitors in each area.

Nowadays, it is accepted that some kind of change happens in every ecosystem. In the term *limits of acceptable change* (LAC) the focus is shifted from the number of users involved to the degree of change which is acceptable in a specific area (Hendee, Stankey and Lucas 1990, McCool 1994). The LAC concept is based on nine steps, where different parameters, such as vegetation and littering, and their indicators (e.g. presence of seedlings and litter) are monitored to detect when the limits are reached. LAC is quite widely used in large wilderness areas and national parks where the number of visitors is high. LAC is not useful in all situations. For example, there should not be acceptable changes in areas where highly threatened species exist.

In Finland, the Natural Heritage Services of Metsähallitus (the Finnish Forest and Park Service) is entrusted with the care of most of the state-owned areas reserved for nature conservation and recreation. It is also responsible for the

management of these areas and controls their use. During the past ten years, the recreational use of national parks has doubled. For Metsähallitus it is very important to have clear principles of sustainable nature tourism use for conservation areas throughout the country. Therefore, it has started the preparation of principles of sustainable use of areas; the project will be completed in 2003. The idea is that there are nine general principles for all conservation areas that will always be taken into account when dealing with nature tourism. The principles include ecological, economic and social dimensions of nature tourism. In addition to this, the LAC process will be applied in Metsähallitus when creating a tool for assessing the impacts of nature tourism on conservation areas. In the LAC process, the general principles of nature tourism will be divided into more detailed aims and indicators. Furthermore, the management actions will be defined beforehand if the limit of acceptable change of a certain indicator is being approached or reached.

2.2.6 Involvement of local people and rising awareness of nature conservation

Balancing conservation and use requires true co-operation with all interest groups. Especially important are local people living beside Natura 2000 areas. Up to now, in most areas, the only contacts with local people have been through the complaints of the people concerned and the responses of the environmental administration relating to the preparation of the Natura 2000 network. A few years ago, when the network was being prepared in Finland the atmosphere was quite negative, especially among local farmers and some politicians. More recently, the environmental administration has noticed local détente. The opportunities offered by Natura 2000 and nature conservation are now seen and understood better.

Now, the environmental administration actively seeks information on what is important to local people. The information can be gained by research on social matters and by straightforward and open contacts with local people. One approach is public participation in the preparation of management and use plans. According to a social study that has been made of three Natura 2000 sites in Lapland, surprisingly few local people concerned with Natura 2000 were aware of management and use planning (Taavo 2002, unpublished). This should be a sign to the environmental administration that it should stress raising the awareness of local people of nature conservation and increasing their participation in the coming years. Public participation will most likely result in greater co-operation in both planning and management. The use of local workmen, and their excavators and other equipment, in the management and restoration of areas provides them with an income and gives them a feeling of a common spirit. A special task for the environmental administration is to provide information on nature conservation of and guidance in using Natura 2000 areas. For some sites it is quite possible to prepare guidelines for the use of these areas together with different interest groups and stakeholders. The commitment to conservation is easier, if the rules are planned together.

2.2.7 Conclusions

Finding a balance between the conservation and use of wildlands is extremely demanding and the task should not be underestimated. On an ecological level we still have a poor understanding of even the roles which dominant species play in their communities (Haukioja 1995). For each area, extensive knowledge of resident species, their interactions and the need for their protection is required. After gaining

sufficient knowledge of ecological factors, we are ready to estimate what kind of use can be planned for an area and permitted without the risk of depleting the conservation values.

To ensure the ecologically sustainable use of Natura 2000 sites, the basic ecology of both species and natural processes of each habitat must be steered by follow-up programmes. The lack of ecological knowledge should not be used as a reason for neglecting the potential risks, rather the precautionary principle should be applied.

The limits of acceptable change (LAC) and carrying capacity (CC) can be means to achieve the goals of conservation in some Natura 2000 sites. The detailed tools and indicator species have to be defined for each focus area separately. To find suitable indicators a lot of background data, research and biological tests on pilot areas are needed. Moreover, there are multidisciplinary tools (e.g. environmental impact assessment (EIA); adaptive ecosystem management (AEM)) that have been developed recently (e.g. Prato 2001). These should be properly tested and, if found useful, also applied to the management of protected areas. The praiseworthy outcome can only be reached by promoting true dialogue and co-operation in research, administration, management and use.

References

- Anon. 2001: Arvokkaiden luontokohteiden hoidon ja käytön priorisointi Pohjois-Pohjanmaalla. Julkaisu A:29 (sarjanumero liittyy Pohjois-Pohjanmaan liiton sarjaan). Pohjois-Pohjanmaan liitto, Metsähallitus ja Pohjois-Pohjanmaan ympäristökeskus.
- Cargill, S.M. & Chapin III, F.S. 1981. Application of successional theory to tundra restoration: a review. - *Arctic and Alpine Research* 19:366-372.
- Chapin, F.S. III and Shaver, G.R. 1981. Changes in soil properties and vegetation following disturbance of Alaskan arctic tundra. *Journal of Applied Ecology* 18: 605-617.
- Creel, S., Fox, J. E., Hardy, A., Sands, J. Garrott, B. and Peterson, R.O. 2002. Snowmobile activity and glucocorticoid stress responses in wolves and elk. *Conservation Biology* 16: 809-814.
- Gallet, S. and Roze, F. 2001. Resistance of Atlantic heathlands to trampling in Brittany (France): influence of vegetation type, season and weather conditions. *Biological Conservation* 97: 189-198.
- Hanski I. 2001: Extinction debt and species credit in boreal forests: modelling the consequences of different approaches to biodiversity conservation. *Ann. Zool. Fennici* 37: 271-280.
- Hanski I. and Ovaskainen O. 2001: Extinction debt at extinction threshold. *Conservation Biology* 16: 666-663.
- Hammit W. E. and Cole D. N. 1987: *Wildland recreation – ecology and management*. John Wiley & Sons Publishers.
- Haukioja E. 1995: What is the biological importance of biodiversity. pp.8-16. In Hiedanpää J. & Haila Y (eds.) *Biodiversiteetin arvo päätöksenteon ongelmana*. Sykesarja C2. Turun yliopisto.
- Hendee J. C., Stankey G. H. and Lucas R. C. 1990: *Wilderness management*. North American Press, Golden, CO.
- Kaakinen Eero, Ryyänänen, Päivi and Savola, Marjukka 1982: Pudasjärven Syötteen alueen kasvillisuuskartoitus ja sen käytännön sovellutukset alueen matkailu- ja virkistyskäyttöä varten. Oulun yliopiston kasvitieteen laitoksen monisteita. No. 16.
- Kallio P. 2001: Suotuista suojelutason luonnonsuojeluvoimassa. Edita.198pp.
- Lotka A. J. 1932 The growth of mixed populations: two species competing for a common food supply. *Journal of the Washington Academy of Science*, 22: 461-469.

- McCool S. 1994. Planning for sustainable nature dependent tourism development: the limits of acceptable change system. *Tourism recreation research* 19: 51-55.
- Newsome, D., Milewski, A., Phillips, N., and Annear, R. 2002: Effects of horse riding on national parks and other natural ecosystems in Australia: implications for management. *Journal of Ecotourism* 2002: 52-74.
- O'Reilly, A.M. 1986. Tourism carrying capacity – concept and issues. *Tourism Management* 7: 254 -258.
- Prato, T. 2001: Modelling carrying capacity for national parks. *Ecological Economics* 39: 321-331.
- Richter D. D. Jr, Markewitz D., Foreword by Reiners W. A., Sánchez P. 2001. *Understanding Soil Change. Soil Sustainability over Millennia, Centuries, and Decades*, Cambridge University press.
- Saarinen J. 2002. *Tourism in the Northern Wilderness Areas: Wilderness Discourses and the Development of Natura-Based Tourism in Northern Finland. Ecotourism, Wilderness and Mountains. Issues, Strategies and Regional Development. Conference Proceedings.* Department of Tourism, University of Otago, Dunedin.
- Twynam, D., Johnston, M., Payne, B. and Kingston, S.: *Ecotourism and sustainable tourism guidelines – an annotated bibliography.* Available at: <http://www.ecotourism.org/retiesselfr.html> on 10th of June 2003.
- Whinam, J. and Comfort, M. 1996. The impact of commercial horse riding on sub-alpine environments at Cradle Mountain, Tasmania, Australia. *Journal of Environmental Management* 47: 61-70.
- Volterra 1926. Fluctuations in the abundance of species considered mathematically. *Nature* 118: 558-560.
- Wright C. J. and Coleman D. C. 2002. Responses of soil microbial biomass, nematode trophic groups, N-mineralization, and litter decomposition to disturbance events in the southern Appalachians. *Soil Biology and Biochemistry* 34 (1) (2002) pp. 13-25.

Table 1. Comparing Natura 2000 areas leads to understanding the differences in ecological sustainability of areas.

Natura 2000 area	Conservational value	Usage	Threats	Successful conservation
Käsivarsi wilderness area Lapland, Finland	SCI, SPA, national wilderness area Alpine and boreal heaths Nordic subarctic forests Palsa mires Habitats directive Annex II, 2 threatened species, Birds directive, Annex I, 4 threatened species	Reindeer herding Recreation Nature tourism	Over-herding Patchy erosion Disturbance of threatened species and decrease in their population densities Habitat alteration through species diversity and food chains	Awareness raising Guidance of tourist entrepreneurs Decrease in number of reindeer Follow-up Research
River Tornionjoki Lapland, Finland	SCI, Fennoscandian natural rivers	Fishing, Recreation, Nature tourism	No known threats	Follow-up Research
Teuravuoma-Kivijärvenvuoma Lapland, Finland	SCI, SPA, belongs partly to national mire conservation programme Aapa mires, Bog woodland Birds directive, Annex I, 3 threatened species	Recreation Nature tourism Hunting Reindeer herding	Increase in hunting pressure Walking outside marked routes Disturbance of threatened species and decrease in their population densities	Awareness raising Guidance of tourist entrepreneurs Guidance of tourists Controlling hunting Participatory methods Follow-up
Islands of Bothnian Bay Northern Ostrobothnia, Finland	SCI, SPA, belongs partly to national park Natural forests of land upheaval, Boreal Baltic coastal meadows Bird directive Annex I, 7 threatened species	Recreation Nature tourism Professional fishing Hunting Dredging of boat lanes	Disturbance of threatened species and decrease in their population densities	Awareness raising Follow-up Research Participatory methods Controlling hunting
Oulanka Northern Ostrobothnia, Finland	SCI, SPA, National Park Western taiga. Aapa mires Birds directive, Annex I, 2 threatened species, Habitats directive, Annex II, 3 threatened species	Recreation Nature tourism Reindeer herding	Disturbance of threatened species and decrease in their population densities Erosion Habitat alteration through changes in species diversity and food chains	Awareness raising Follow-up
Black forest Baden-Württemberg, Germany	SCI, SPA Active raised bogs, bog woodland, mountain heath, dystrophic lakes, natural forests Bird directive Annex I, II threatened species	Recreation Nature tourism Forestry Traffic	Disturbance of threatened species and decrease in their population densities Deterioration of habitat Trampling and damages in the vegetation cover	Guidance of tourists Awareness raising Support of endangered bird species by special restrictions in forest use

2.3 Theme C: Participatory planning and ecotourism

Chaired and compiled by: Stefanos Fotiou

Participants: Paula Alho, Liisa Kajala, Xavier Quintana and Pekka Ränkä

2.3.1 Introduction

The objective of this section is to present the main issues governing the participatory planning of ecotourism. This section is based on the parallel session “Participatory Planning of Ecotourism” that was organised under the workshop of “Sustainable Ecotourism – Integration of Conservation and Usage in Natura 2000 Areas” in Finland on September 2002 under the LIFE project “Protection and usage of Aapa mires with a rich avifauna”. The text of this section has been written with one main aim, which can be summarized in the following phrase:

“How local stakeholders in protected areas can be helped in their effort to plan and develop tourism activities that can: i) contribute to nature conservation, ii) create local income, and iii) be socially just?”

Or in other words: “How can local stakeholders in protected areas plan and develop sustainable tourism practices?”

Ecotourism has been identified as an economic activity that is compatible with nature conservation. Speaking more realistically it should be said that ecotourism is an economic activity that has a great potential to be compatible with nature conservation. The transformation of this potentiality into reality depends on:

- the definition that is given to ecotourism,
- the design of the planning process,
- the implementation on the sites.



Jouni Rauhala

The text of this section is organised in the subsequent manner. Some epigrammatic comments on the various definitions of ecotourism are given, followed by a brief analysis of the importance of the planning process. Then the meaning of the participatory approach is presented. This presentation is based on the identification of the main groups of stakeholders that are involved in the development of tourism in protected areas. In the following chapter the main participatory tools are presented. After a short comment on conflict management the section closes with conclusions.

2.3.2 Ecotourism

One of the first definitions of ecotourism was given by the International Ecotourism Society. According to them “ecotourism is responsible travel to natural areas that conserves the environment and sustains the well being of local people”.

The IUCN defines ecotourism as “environmentally responsible travel and visitation to relatively undisturbed natural areas, in order to enjoy and appreciate nature (and any accompanying cultural features - both past and present) that promotes conservation, has low negative visitor impact, and provides for beneficially active socio-economic involvement of local populations”.

There are many definitions of ecotourism that can be found in the international literature. There are also a lot of cases where ecotourism is not presented as a concept but as a “market segment”. Usually these definitions give more importance to the sites where ecotourism occurs rather than to the activities that are implemented in an ecotourism programme. Nevertheless, most of the ecotourism definitions have some common elements that can be taken as the main characteristics of ecotourism. These elements state that ecotourism:

- contributes to conservation of biodiversity,
- sustains the well being of local people,
- includes an interpretation-learning experience,
- involves responsible action on the part of tourists and the tourism industry,
- is delivered primarily to small groups by small-scale businesses,
- requires the lowest possible consumption of non-renewable resources,
- stresses local participation, ownership and business opportunities, particularly for rural people.

Ecotourism is often related to sustainable tourism. While the author of this section believes that ecotourism is a distinctive part of the tourism industry and sustainable tourism is an aspect that should be achieved in the tourism industry as a whole, it is not a mistake to accept that ecotourism fulfils the requirements of sustainable tourism. According to this, the following definition of ecotourism is used for the purposes of this text:

“Ecotourism is sustainable tourism in nature areas that has strong elements of education and sensitisation and includes clear references to the cultural heritage of the local population.”

2.3.3 Planning

Planning is one of the most important management techniques. Planning refers to the strategic, political or operational level. Planning is preparing a sequence of action steps to achieve some specific goal. If planning is done effectively, the necessary time and effort of achieving the goal can be reduced.

In other words, planning is closely related to the issue of efficiency. A plan is like a map. When following a plan, we can always see how much we have progressed towards our goal and how far we are from our destination. Knowing where we are is essential for making good decisions on where to go or what to do next.

One more reason why planning is needed is the “Pareto Rule” or the “80/20 Rule”. It is well established that for unstructured activities 80 percent of the effort give less than 20 percent of the valuable outcome. So it is more efficient to spend more time on deciding what to do next, than to take many unnecessary, unfocused, and inefficient steps.

Planning is also crucial for meeting the needs during each action step regarding time, money, or other resources. With careful planning we often can see if at some point we are likely to face a problem. It is much easier to adjust a plan to avoid or smoothen a coming crisis, rather than to deal with the crisis when it comes unexpectedly.

Planning of ecotourism in protected areas is all about making sure that the needs of local people, whether it be for jobs, homes, or income are met in a planned, co-ordinated and fair way. Planning tries to ensure that tourism development proposals are located and designed so that they are in keeping with the character of the protected area.

The main output of a planning process for ecotourism development in protected areas is the “Master Plan of Ecotourism Development”. This master plan clearly defines all the following:

- The vision of ecotourism development in the protected area. The vision is a short statement that describes the planners “mental picture” of the protected area after a certain time (usually 10 or 20 years). An example of a vision statement may be the following: “After 20 years Kerkini lake* will be a place that will be mentioned as an exemplary case of ecotourism development”.
- The strategy of implementation. The strategy defines the main priority lines that are required for the achievement of the vision. Examples of strategy priorities for the fulfilment of the aforementioned vision may be the following: “1. Ecotourism will be developed on the basis of innovative actions for the benefit of nature and the local people”; or “2. The conservation of rare habitats is a prerequisite for the development of exemplary ecotourism activities”. Strategy refers more to higher levels of stakeholders and administration.
- The action plan. The strategic priorities that have been identified should be implemented through concrete actions. Examples of actions for the implementation of the aforementioned strategic priorities may be: “1.1 The local municipal council will establish a centre for know-how transfer on the field of ecotourism development. The centre will be established during the next 2 years. Financing for the establishment of the centre will be acquired within the National Operational Programme for the Environment”; or “2.1 A programme for the conservation of *Pelecanus crispus* will be implemented annually by the Aristotle University of Thessaloniki”. Each action should result in a concrete project. The necessary resources and the time planning for each action should also be identified.

** A lake in Northern Greece which belongs to the Natura 2000 network.*

The action plan proposes specific ecotourism projects. The implementation of these projects requires a complimentary planning process that may be described as the effort to organise the actions that will fulfil the ecotourism project objectives identified from an ecotourism project idea.

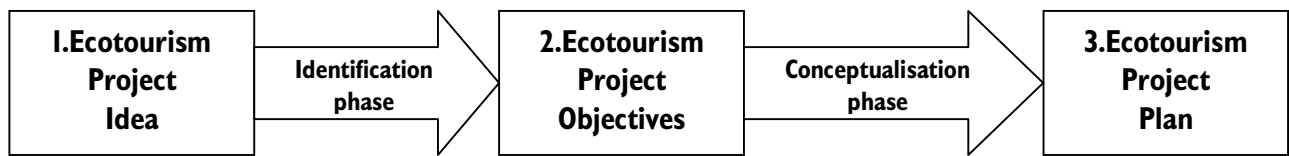


Figure 1. A simplified planning process of an ecotourism project.

As a final comment it should be kept in mind that planning guarantees the efficient implementation of ecotourism development in protected areas.

2.3.4 Participation

According to the World Bank, “participation is a process through which stakeholders influence and share control over development initiatives and the decisions and resources which affect them”. A lot of authors state that participation is more than a process, that it is a way of being and a guide, and it is also an output and a goal, in that it can give many outcomes. The aim of participation is to lead to collaboration, which subsequently is a stage in the direction of developing and increasing social capital.

Participatory planning was developed as an answer to the observation that “the standard methods of research widespread in the development process during the ’70s were inadequate”. Traditional planning methods such as “questionnaires to visitors”, “experts’ opinion” and other techniques were seen as top down, influenced, time consuming, extractive, often mistaken and expensive approaches. Understanding that this wasn’t working led to the advance of RRA – Rapid Rural Appraisal. RRA uses methodology from several sources, such as extension, agro-ecosystem analysis, anthropology, and social research, and is a series of tools and techniques such as matrices, rich pictures, mapping, and seasonal calendars, which are often diagrammatic and analytical.

The next stage was the Participatory Rural Appraisal (PRA). PRA has since evolved into other entities such as PLA (participatory learning in action), PAR (participatory action research) and PP (participatory planning – the focus is on planning more than research).

Some main common themes that run through definitions of participation are as follows:

- common responsibility,
- capacity building,
- social learning,
- empowerment,
- social capital,
- sustainability, and
- planning leading to action, learning, monitoring, evaluation, collaboration.

The context of participation is more connected with the effectiveness of an action rather than its efficiency*. The use of participation principles during the development of ecotourism in protected areas can guarantee the effectiveness of the proposed actions. Bearing in mind that planning guarantees the efficiency of an action, participatory planning of ecotourism is a process that can lead to effective and efficient actions for the development of ecotourism. Combining that with the definition of ecotourism it led us to state that: "participatory planning of sustainable tourism activities in protected areas can guarantee the benefit of the local population and of nature".

Driskell* gives a very detailed list of participation principles that should be used in development projects. Some of these principles can also be adapted to the participatory planning of ecotourism in protected areas and are briefly as follows:

- Local scale. While participatory planning of ecotourism may be promoted on a regional, national or even international scale, its implementation is intrinsically local. It is focused on and tailored to the needs and issues of the local community and environment.
- Empowerment. Participation is about local residents exercising their power, and right, to be involved in the decisions that affect them. "Outsiders" may play a role as facilitators, animators, or technical specialists, but they are there to listen to, learn from, and provide support to the local community; not to dictate solutions or preconceived outcomes based on their own biases or perspectives.
- Transparency. The aims of participatory ecotourism projects are clear to all the participants. Outside experts involved in participatory projects—including local municipal officials, sponsoring agencies, development professionals and others—are clear about who they are, what they are doing there, and what can and cannot be expected of them.
- Partnership. Participatory processes include all members of the community. The critical question for any participatory project is not so much who participated, but who did not.
- Interactivity. Participation is interactive. It is about local residents having a voice and listening to the other voices in their community. Participatory development is a community-wide dialogue.
- Flexibility and Responsibility. Because the process responds to local needs and conditions, every process is different. While there may be consistency in the general approach, the exact sequence of steps is never the same. Facilitators are flexible and respond to changing needs and conditions, relying on their own best judgement rather than a rigid set of rules to determine the best course of action at any point in time. Sponsoring agencies and professionals are willing to give participation the time it needs, knowing that it cannot be rushed. Time is allowed for people to voice their opinions, to listen to others, to explore and analyse issues and alternatives, and to formulate and carry out plans of action.
- Information. Participation builds on local knowledge—the information and insights that local residents have about the area where they live and the issues that affect their lives. It also brings in information from outside the community—technical expertise or process skills—to ensure that local residents are aware of the available options and to help facilitate the group process. Making links to global issues or trends can also inform local decisions, including potential exchanges of data and information between communities.

* Effectiveness: To do the right thing. Efficiency: To do the things right.

* Driskell, D. 2002. "Creating Better Cities with Children and Youth. A Manual for Participation".

Paris/London: UNESCO Publishing/Earthscan

- **Educative orientation.** Participatory planning of ecotourism is a learning process for everyone involved. It is a process of knowledge transfer between participants at all levels. If participation is to succeed, participants must keep an open mind, including a willingness to learn, change attitudes, and forge new ways of understanding.
- **Transformation.** The ultimate goal of participatory development is some form of transformation in the local social, and natural community. This transformation is not limited to physical and economic changes, but also encompasses changes in the relationship between the local community and the society at-large; changes in the relationships between participants; and (perhaps most importantly) changes in the personal values and perceptions of everyone involved.
- **Sustainability.** If local residents support an ecotourism development project and feel that it responds to their needs, they are more likely to participate in its implementation and ongoing management, thereby supporting project sustainability. In a larger sense, sustainable development of ecotourism in protected areas can only be achieved through participation, as it fosters local skills and capacities as well as a strong sense of personal responsibility and commitment to action.

2.3.5 *The stakeholders*

According to Ramirez the word stakeholder was first recorded in 1708 as “a person who holds the stake or stakes in a bet”; the current definition is “a person with an interest or concern in something”. Freeman gives his definition of a stakeholder as “any group or individual who can affect, or is affected by, the achievement of a corporation’s purpose”. In the context of natural resource management, however, Rölöf and Wagemakers offer a more appropriate definition: “Stakeholders are natural resource users and managers”. For the purposes of our analysis we define a stakeholder as “a person, a group/body or an institution who has a direct or indirect, tangible or intangible interest in the area”. The concept of stakeholder is closely related to the notion of “interest”. In ecotourism in protected areas a stakeholder can be anyone with an interest either in tourism development or in nature conservation. Stakeholder analysis is a very important task in the design of a participatory planning process for ecotourism development in a protected area. Stakeholder analysis is the first step in the identification phase that was presented in Figure 1. The analysis begins with the identification of stakeholders. The main tools for identifying who the stakeholders are is to answer such simple questions as:

- Who is responsible for the management of the protected area?
- Who has the legal power to enforce the environmental law in the given area?
- Who has a potential benefit from the tourism development?

The most important stakeholders who have to be taken into account when we want to initiate a participatory planning process for ecotourism development in a protected area are:

- the local inhabitants,
- the visitors to the area,
- the management bodies of the protected area,
- the tour operators,
- the local tourism service providers, and
- the environmental NGOs.

Another, more important task, is to identify the relevant “intensity” of the stakeholder in the protected area. The term “intensity” should be seen as a more general term than that of “power”. It encompasses the authority of the stakeholder, and the stakeholder’s operational capacity in and importance to the study area. A method that can be used for the measurement of the intensity of stakeholders was presented at the seminar and is briefly described in the following paragraphs.

The proposed method has been developed by the author and was used for the identification and mapping of stakeholders for Kerkin Lake. It based on the classification of stakeholders according to the following criteria.

- 1) The level of their function. Three different levels can be used:
 - a) Strategy level. It includes stakeholders (mainly institutions) that set-up general strategies which affect the management status of the area. These strategies are not related directly to the specific area. What connects these stakeholders to the area is that the site has characteristics that are of interest to the stakeholders.
 - b) Policy level. It includes stakeholders whose main purpose is to implement strategies. They decide policy measures for different sectors and they may address the specific site directly or indirectly.
 - c) Operational level. It includes stakeholders that are acting on the site. They are addressed directly by the policy measures and their main purpose is to implement specific projects or to do business. In most cases they have a direct tangible interest (either financial or not) in the site.
- 2) Level of their geographical location.
 - a) Local.
 - b) Regional.
 - c) National.
 - d) International.
- 3) Level of their participation.
 - a) Active participation.
 - b) Instrumental participation.
 - c) Passive participation.
- 4) Time dimension.
 - a) Daily involvement.
 - b) Occasional involvement.
 - c) Rare involvement.
- 5) Financial power. Three different levels can be used:
 - a) Independent. Stakeholders with great financial power; this power can be used even for imposing measures or actions in situations where conflicts cannot be resolved with a negotiation approach.
 - b) Semi-independent. Stakeholders with considerable financial power; this power is sufficient for the planning of measures, but the implementation of the measures is dependent on other stakeholders as well.
 - c) Dependent. Stakeholders that either have relatively minimal financial power, or stakeholders with relatively substantial financial means that are provided “under conditions” to them by other stakeholders.

In order to describe better the “intensity” of the stakeholder, we can use a quantitative measure. We call this measure “Stakeholders Aggregate Intensity Factor” (SAIF). SAIF is calculated with the following method. For each criterion that is used for the description of the stakeholder, a value between 1 and 10 is attributed to different levels. The most intense level takes a value of 10, the least intense, a value of 1, and where other levels exist between these two, intermediate values are attributed to them. For example, for the functional criterion, the strategy level is assigned 1 point, the policy level, 5 points, and the operational level, 10 points, implying that actions and measures of the stakeholders on the operational level are more directly connected to the study area, and actions and measures of the stakeholders on the strategy level affect mainly indirectly the social, economic and natural environment of the study area.

The weight of each level in the different criteria is presented in Table 1.

Table 1. Weights of “Stakeholders Aggregate Intensity Factor”

Criterion	Weight
Function	
Level	
Operational (O)	10
Policy (P)	5
Strategy (S)	1
Location	
Local (L)	10
Regional (R)	6
National (N)	4
International (I)	1
Participation	
Active (A)	10
Instrumental (I)	5
Passive (P)	1
Time	
Daily (D)	10
Occasionally (O)	5
Rare (R)	1
Financial Power	
Independent (I)	10
Semi-independent (S)	5
Dependent (D)	1

The Stakeholders Aggregate Intensity Factor is calculated for each stakeholder as the sum of the weights of the individual criteria. In this way, SAIF may range between 5 and 50. A SAIF index of 50 gives an indication of a very intense stakeholder for the study area. It is very important to mention that the SAIF index is just an indication of the relative importance of each stakeholder, and as an indication it may be of help in decision-making and planning, but it does not impose any decisions or planning.

Some stakeholders belong to more than one category for some of the aforementioned criteria. For example, the Central Service of the Ministry of the Environment functions both on the strategy and policy level. In these cases the SAIF component is the one with the highest weight.

According to this method, each stakeholder is presented with the form in Table 2 (the example concerns DG-ENV).

Table 2. A model for stakeholders' presentation.

Name

European Commission DG Environment (DG-ENV)

Type

Institution

Short Description

One of the missions of DG-ENV of the EC is “To maintain and improve the quality of life through a high level of protection of our natural resources, effective risk assessment and management and the timely implementation of Community legislation.” There are numerous legislative documents of DG-ENV that “enforce” the implementation of the aforementioned mission statement. Three of these documents are closely connected with the management of the natural environment. At this point the relation between DG-ENV and the protected areas starts. These three documents are

- Directive 79/409 (known as the “birds directive”)
- Directive 92/43 (known as the “habitats directive”)
- Directive 2000/60 (known as the “water directive”)

The first two of these directives have established the “NATURA 2000” network, which is a network of sites that are considered of Community Importance for nature conservation. Kerkini Lake is one of these sites in Greece.

“Stakeholders Aggregate Intensity Factor” components

Function	Location	Participation	Time	Financial	SAIF
O P S	L R N I	A I P	D O R	I S D	
x	x	x	x	x	18

The next step in stakeholder analysis is stakeholder mapping. With stakeholder mapping we can identify clusters of stakeholders that can be treated with similar participatory tools. An example of a stakeholder map is given in Annex 1. The example is again from Kerkini Lake in Northern Greece. Stakeholders have been mapped according to their functional level (strategic, policy, operational) and according to their geographical location.

2.3.6 Participatory tools

Participatory planning of ecotourism in protected areas requires distinctive skills and the use of adequate tools. The facilitators of the participatory process can select between a set of tools but they should take into account the validity of each tool for each specific process.

In the identification phase of an ecotourism project the most important tools are related to stakeholder analysis and the data collection tasks in order to synthesise the objectives. The main tools for participatory data collection are:

- **Semi-Structured Interviews (SSI).** Semi-structured interviews are the principal tools used in Participatory Planning. They are conducted using sub-topics to guide the specific questions thought up by the planners during the interview. SSIs are conducted with informants who have good knowledge of the history of the protected area and its resources, and with others using pre-selected sub-topics as guidelines. In this method, the questions are formulated during the interview. Questions should be precise and easy to understand. Leading questions should not be used while conducting interviews. An interview guide should be prepared to keep the discussion focus on the issues at hand but flexibility is also needed to make the interview natural, relaxed and conversational rather than a formal interview.

- **Key Informant Interview.** General information about the tourism activities or the environment of a protected area are common knowledge or known to almost everybody within a site. However, there is detailed information or knowledge about certain topics, which can be obtained through key informant interviews. A key informant is an individual who has depth of knowledge about ecotourism or about the protected area management and is willing to talk about it.
- **Focus groups** are semi-structured discussions with a small group of persons sharing a common feature (i.e., women belonging to an agrotourism cooperation, users of a public service, etc.). A small list of open-ended topics, posed as questions is used to focus the discussion. Focus groups have been increasingly used in participatory planning to identify and describe insider perceptions, attitudes, and perceived needs.
- **Iteration.** Iteration is one of the techniques for collecting information in Participatory Planning methods. In this technique, the same question is repeatedly asked in different situations for confirming the given information. A very high pay-off from flexibility of the methodology through iteration occurs in the ability to reform questions and formulate new questions, especially within the interview itself.
- **Probing.** The main function of a probe is to encourage the respondent to answer more fully and accurately. Furthermore, it also helps to structure the respondent's answer and makes sure that all topics of interest are covered. Always start questions with who, what, why, when, and how (the 'six helpers') for helping to establish the basic situation.
- **Observation.** This has also been used as a technique especially in the social sciences for a long time. In this technique, related indicators are used in the field to verify the collected information or to generate questions.
- **Seasonal calendars.** Seasonal calendars are used in order to identify the daily behaviour of the stakeholders during a calendar year. The identification of patterns of behaviour during the year will allow the planners to design processes and procedures that fit the local operational status.
- **Timeline.** A timeline exercise (or community history) is a tool for gathering information about important events, activities, and development aspects of the local community's history. Such information is useful in understanding the roots of the present situation, the present-day attitudes and behaviour of people, or how these events influenced or shaped the community's developments over time.

In the conceptualisation phase (refer to Figure 1) analogous tools are available to the planners. The analysis tools include, but are not limited to, the following:

- **Objectives Trees.** The analysis of objectives is similarly visualized in the form of a tree just like a problem tree. The work process starts by turning the core problem that should be faced with the ecotourism project into a positive description, arriving at the core objective. Still using the problem tree, the analysis is extended upwards and downwards by making the 'causes' into 'means' and the 'effects' into 'ends'.
- **Assessment Matrix** is a tool used to carry out an 'Analysis of Alternatives'. The information is presented in a matrix format, with the selection criteria placed in the row and the ecotourism project options in the column of the matrix. A scoring or weighing system for each of the criteria must be established and agreed upon. This system is used for assessing the relative importance of the different ecotourism project options and the results of the analysis are recorded in the matrix.

- Group brainstorming. Brainstorming is a basic idea-gathering technique employed in many group exercises. It is based on a freewheeling discussion started by an open-ended and somehow provocative question forwarded by the facilitator. It should be clear that brainstorming is a free and non-committal way of exploring ideas, i.e., there is no commitment to something if a person suggests exploring an issue as a potential solution.
- Ranking exercises, which may be done with groups or individuals, are a way to enable people to express their preferences and priorities about a given issue. When followed by a discussion of the 'reasons' for the ranking, the technique may generate insights about the criteria through which different individuals, groups or social actors make decisions on the kinds of issues of interest.

2.3.7 Conflict management

It is very common that in a participatory planning process conflicts between stakeholders will appear. The role of the planner-facilitator is crucial in confronting the conflicts. We can distinguish between two main groups of conflicts. The first group includes conflicts that arise because of mutually exclusive interests between stakeholders. In such cases the group of planners (including the local stakeholders) should decide on a 0/1 basis on the inclusion or exclusion of some activities. The democratic process can be used in order to confront conflicts in the nature of a mutually exclusive interest.

The second group of conflicts includes the ones that arise because of different perceptions of a common issue. In most of these cases conflicts may be handled with the use of simulation games of asymmetric information. Such games aim to make stakeholders act "virtually" under various circumstances. In the majority of cases the different perceptions of a common issue are the result of asymmetric information. While information is said to be a public good, not all the stakeholders have access to all the available information about a specific issue. The communication gap between stakeholders is one main source of asymmetric information. This gap can be bridged with the use of simulation games. In these games each participant obtains a "role" and a discussion is performed based on a given scenario. There are specific steps for setting up and running a simulation game. These steps are briefly as follows:

- Scenario Preparation. A set of notes for the simulation game is prepared. The scenario is available to all the participants and it should be based on examples from the real life of the site. The scenario should include:
 - a description of the conflict,
 - the roles of the stakeholders, which should be very clearly defined (i.e. the mayor, the hotelier, the president of the local environmental NGO), and
 - a description of the rules.
- Preparation of an observation checklist of features to be observed and assessed.
- Creation of asymmetric information. Each participant possesses two or more "pieces" of information (i.e. the president of the local NGO is a member of the National Natura 2000 Committee, the Mayor is the main shareholder of the regional bank, the hotelier is thinking of being a candidate in the next municipal elections). Each participant knows his or her own information, and also some, but NOT all, of the information concerning the other participants. The distribution of information between the participants may be random or may serve specific purposes. Participants

can reveal their own information at any time that they wish, or they may try to signal their information in discussions with another participant or with the group. It should be clear to the participants that information is not a secret but it is something unevenly distributed within the group.

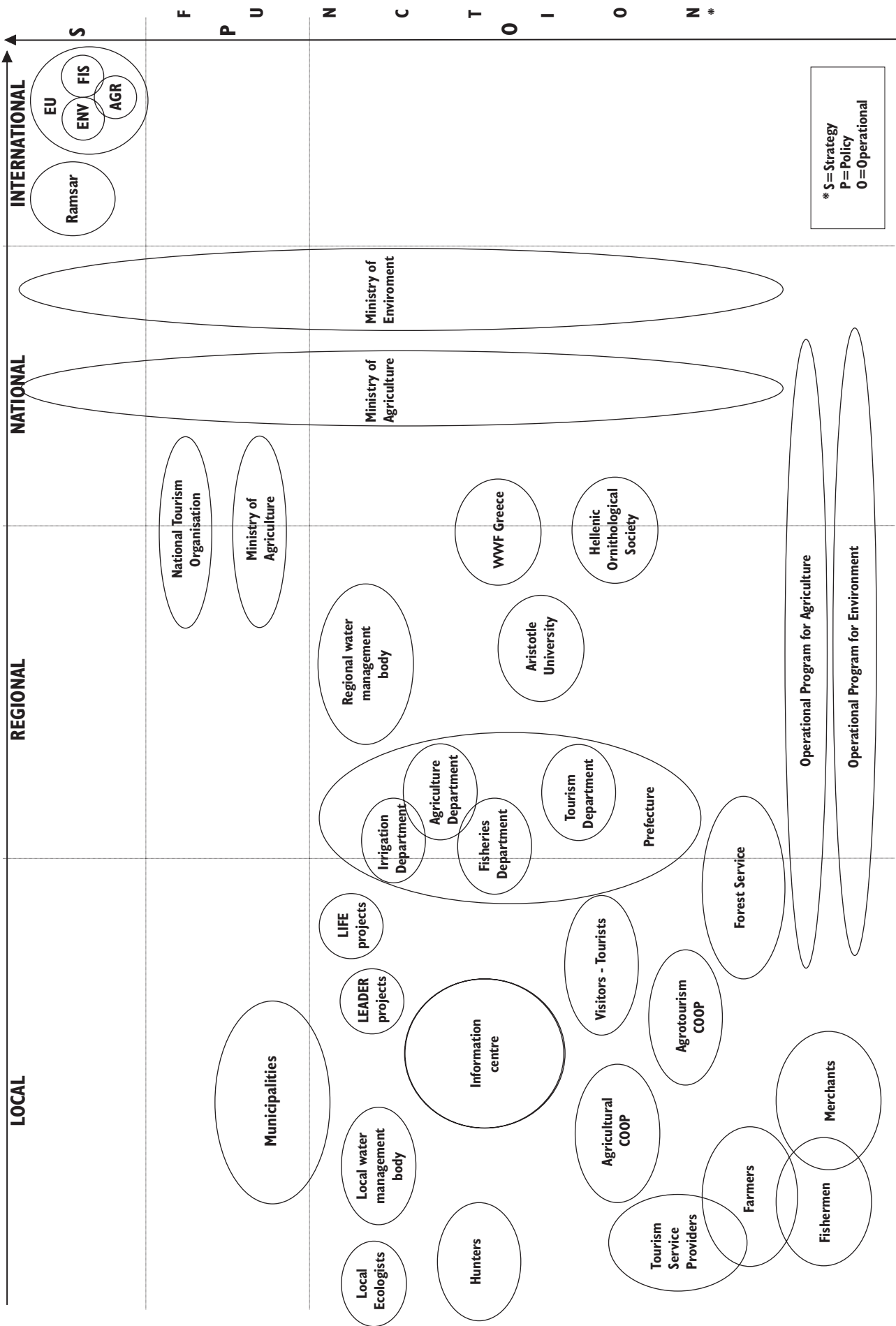
- The group starts to discuss and the facilitator of the game takes notes. Participants should respect the rules of the game (i.e. given situations about the protection status of the site) and try to influence the decision for their benefit. At the same time, they try to communicate to the other participants their perception on given issues. The observer does not influence the discussion.
- At the end of the discussion if no common decision has been taken the facilitator presents her or his notes and, together with the participants, tries to identify the conflict “nodes”. These can be identified as the specific parts of the discussion that generated conflicts or the parts where the conflicts were not solved despite the fact that they were recognised.
- Then each participant takes another role and explains what she or he thinks about the new position.

Simulation games are not always successful. They require a very skilled facilitator, a clever and realistic scenario and educated participants. Even if they cannot be used directly in conflict management, they can be used for training of facilitators and planners.

2.3.8 Conclusions

Nature conservation and tourism development can be two faces of the same coin. During the last 10 years the word “ecotourism” has increasingly entered not only the programmes of international NGOs, but also those of national and international development organisations. Meanwhile, it is generally recognised that ecotourism is a dynamic growth sector, with active and preventative potentials, and a sector which can act as a key player in sectoral policies. Ecotourism can contribute to the sustainable management of Natura 2000 sites provided that integrated participatory planning will be used for its development. All the stakeholders involved in the management of Natura 2000 sites should be included in a participatory process for the development of ecotourism. A process like that should focus on the following issues:

- Local stakeholders have the right to control and co-manage tourism resources within protected areas.
- This control and co-management should respect the priorities that are required for the conservation of the protected area.
- Participatory processes should be planned and implemented on the basis of participatory principles.
- Participants should be made aware that it may not be possible to implement every aspect of an ecotourism development plan or to pursue the participatory approach at all levels of negotiation. Uncertainty about future political, social, economic, and ecological realities may limit the effectiveness of a participatory approach.
- The most difficult part of any participatory ecotourism development plan is not technical information gathering or research, but dealing with power struggles and diverse histories, on the local, regional, and national levels.
- The development of ecotourism should incorporate sustainable use of natural resources using methods that maintain the integrity of the ecosystem and that have been used traditionally by the local people. Usually innovative tools are based on the habits of the local communities.



2.4 Theme D: Productisation of nature-based tourism activities

Chaired and compiled by: Tuija Sievänen

Participants: Jukka Kauppinen, Sakari Kokkonen, Eino Lappalainen,
Jouni Rauhala, Sari Sivonen, Pasi Tanninen,
Keijo Taskinen and Seija Tuulentie

2.4.1 Introduction

Group D of the workshop discussed how to develop nature-based tourism in Lapland, and particularly taking advantage of nature conservation areas. The specific task was to develop ideas for suitable products for the tourism industry. The discussion on 'Productisation of nature-based tourism activities' started out with looking for a definition of nature-based tourism that applies best to the tourism business in Lapland. As the task of the group also included the use of nature conservation areas for nature-based tourism, there were some limitations to consider. The next step in the discussion was to frame and look for forecasts of



Aarno Torvinen

what the demand for nature-based tourism activities could be in the near future. Finally, the participants ended up generating ideas for possible attractive products that a tourist would be willing to buy. What is the 'product'? Is it a service or a product which the entrepreneur offers, or is it the experience that the tourist gets when visiting in Lapland? This report will compile the ideas and opinions that group D produced in the seminar.

The group members represented a multiple array of nature-based tourism suppliers: local tourism entrepreneur and tourism project manager, nature conservation area managers and planners, nature guides, administrators and researchers. All members of the group also had experience with nature-based tourism as a client.

2.4.2 Definitions

Nature-based tourism

Nature-based tourism is a type of travelling for which the natural environment is the principal attraction and the motive. In Lapland, even though the natural values in nature conservation areas are a strong attraction for travel to the region, many activities and areas are some distance from the tourism centres, and thus the use of motorized vehicles is necessary to some extent. There is space enough for motorized recreation. There is a need to develop land use further, which will separate motorized and non-motorized recreation on the local level.

Product and productisation

The product is a service or a thing which people want to buy. For a better understanding of what kind of products tourists want, it is necessary to look at the demand, which, in Lapland, is both domestic and international. For a better understanding of what the region and the business can offer, there is a need to make a basic analysis of the supply factors, the potential of both the natural and human resources of the region.

Actors and networking

The key actor in tourism is the tourism entrepreneur, and the key factors of success are the private business ideas and innovativeness. But, the tourism industry is also dependent on a supportive community, neighbouring landowners, and institutional actors. The communication and networking between these actors is essential to the success of nature-based tourism. A well-working method for communication and cooperation is a key issue in all regions. Those methods have to be tailored to each region and area individually, but there are common issues to be learned from successful cases that can be applied in others. The workshop offers an opportunity to share common experiences of methods and communication.

The network should cover all actors in the area: the network should reach from the smallest tourism entrepreneur to the actors in the bigger tourism nucleus (e.g., hotel chains). Many times the journey consists of various individual parts and activities; the tourist may want to canoe for a day, and then possibly do some hiking and bird watching. Each of these activities should be produced by an entrepreneur who is an expert in his field and can provide a high quality tourism product or experience. This way tourism itself will benefit various entrepreneurs in the area and the tourist can experience the best services available.

2.4.3 Understanding demand and forecasting

Analysis of demand

A very basic task in each region and area is a careful analysis of the demand for products. What kind of people or groups of people, and what segments of these groups are interested in the type of nature-based tourism products that the region or area in question could possibly offer. The analysis of demand has to consider all levels of demand: desired experiences and activities which provide these experiences according to each type of clients. In other words, people differ in their expectations of experiences.

Secondly, a comprehensive analysis of the benefits and outcomes of participation in nature-based tourism is needed. This is needed for understanding on several levels the client, entrepreneur, public land manager (municipality or state), community, regional economy and society as a whole. Thirdly, there is a need to analyse the products and services which offer the best support to gain those benefits and outcomes (see the analysis of supply).

This type of work is typically done in a process which includes communication by local people and communities (village level), participatory planning on the community (municipality) level, and which ends up as part of strategic development programmes on the regional or national level. Supportive research and the gathering of best practice information are essential ways to produce information for such a process.

For instance, an example can be seen from Ylläs: local people together with public land managers gathered several times for meetings and discussions; between meetings they worked on 'homework' and then met again. The result was a public land use plan and a project plan for managing nature conservation and recreation areas for the benefit of the tourism industry and the local people.

Examples of demand analysis: the quality issues of demand

- An example of scale of demand in Lapland:
 - A wealthy Finn is ready to pay for an isolated cottage in the middle of the wilderness in November while searching for an experience of extreme solitude and silence.
 - A Japanese tourist is willing to accept a relatively high number of other groups and many activities around when looking for an experience of northern lights. A much smaller volume of space is enough.
- Ways to travel: motorized and non-motorized use; the issues of the experience and access, and the issue of environmental impacts
 - Motorized recreation allows the physically less capable and less skilful people to experience the space of Lapland; it is an attraction to many urbanized, technologically oriented people.
 - Non-motorized recreation offers more traditions, nature values and experiences that are physically demanding. It has fewer impacts on the environment or on other visitors.

Forecasting of future customers in Lapland

There are several groups of people who are expected to form the major groups of clients in Lapland in the future. The new 'old' group are retired people or people with empty nests who have relatively good health, money to spend on travelling and a lot of free time. They tend to take longer trips in terms of distance and duration, and most of them prefer to travel fairly comfortably. Another group of

people consists of well-educated young people who tend to have limited time resources but fairly much money to spend on travelling. They prefer short trips in duration, but are ready to travel long distances. The stressed middle-aged people have limited time resources and they are less eager to travel long distance, which takes extra effort and energy. These groups can come both from Finland and from abroad to Lapland. Within these groups, all have individual interests in numerous activities. The fourth group of people are the traditional families with children of school age, who are mainly interested in skiing sports. There is still much to learn about how domestic demand and customers differ from international demand and customers, and what are their different expectations of experiences.

2.4.4 Factors of Supply: issues of quality, locality and authenticity

In Finland, nature is an abundant resource, and this applies particularly to Lapland. One-fourth of the area of Lapland belongs to protected areas. There are more than 20 large recreational and protected wilderness areas with an abundance of recreational facilities and services. There is less competition between different uses of forest resources (e.g. reindeer husbandry, forestry, mining, tourism) compared to earlier times, even though some local conflicts have taken place just recently in the Levi area.

But, nature alone is not enough for developing even nature-based tourism. The human resources are as essential as the natural resources. A key issue is where the human resources are found. One of the surprising observations in the group work was that there is a shortage of local actors in many communities in Lapland, even though the unemployment rate is as high as 27% (in 2000). The work-force structure is changing slowly, and even though young people move into tourism jobs, there is a need to bring workers in from outside the region. This certainly can be a threat to the atmosphere and authenticity of the locality if or when the 'outsiders' are more or less only visitors (such as seasonal workers), and do not have knowledge of local traditions and are not able to share these traditions with the tourists. The demand for a quality workforce in the tourism industry is the same as for all cultural resources: locality, authenticity and a high level of professional skills.

Quality means many choices according to individual values and aspirations. In the context of nature tourism, quality often refers to small scale, small groups, and other characteristics, which distinguish nature tourism from mass tourism.

Information delivery is a key issue also from suppliers' point of view. Marketing is important for entrepreneurs. Delivery of information of services and provision of guidelines for environmentally sound behavior in protected areas are essential tasks for a successful visitor management on the public lands.

2.4.5 Integration of sustainable use of natural resources and the tourism industry

The important issue to discuss was how to integrate sustainable use of natural resources and nature-based tourism. Metsähallitus, as a public lands manager, is in the process of producing common guidelines for the whole country concerning land resources and recreation facilities for supporting nature-based tourism enterprises. A key principle is to offer baselines for environmentally sound recreational use and to find ways to limit the damage that recreational use may cause to sensitive ecosystems. The best tool is careful planning and advanced management methods.

Monitoring of both the use and impacts is a necessary action and tool for realizing the goals of integration. Visitor studies in recreational and protected areas are used to better understand the demand for recreational opportunities.

According to the new strategy in Metsähallitus, the supply of recreation facilities will be concentrated according to demand, and quality standards are being developed to provide the best possible opportunities for good recreational experiences.

One of the coming challenges in Metsähallitus is how the cooperation with local tourism enterprises will continue after the planning phase. Metsähallitus has a double role: its principle mission is to provide recreation opportunities to 'everyman', to the general public. But, there are great expectations that Metsähallitus and the resources it manages also offer a strong foundation for nature-based tourism business. In Lapland, this is very true.

2.4.6 Networking and partnership—and developing a sense of locality and commitment

Cooperation and communication

The experience of tourism development in Lapland shows that large-scale tourism centres are needed as a driving force for the development of smaller-scale tourism enterprises. A close cooperation will benefit both types of businesses. The small businesses are typically those who take their clients to protected areas. From the land manager's point of view, this is a problem to some extent: how to inform, educate and control a number of small businesses so that they follow the guidelines of environmentally sound recreational use. On the other hand, if the communication works, it is even better to work with small businesses. They may be better able to maintain the traditions and values of the local people, and even to enhance the natural and cultural values of the local community.

In communities and villages, there is a need to have a key person, 'the driver', who encourages others to actualize the business ideas and to work together.

Learning from the Teuravuoma case

A local nature tourism development project is the Teuravuoma Aapa Mire Project, which was carefully described and studied by the group members. There are several important lessons to learn from the Teuravuoma experiences. First, in the Teuravuoma project it was understood from the very beginning that it was important to combine the use of the natural and cultural resources of the local community. Secondly, the local village people had initiative and a strong commitment. A few key persons who were devoted to the project were essential to the success of developing ideas and the implementation of construction projects, both public and private ones. Thirdly, the Teuravuoma area is located close to a well-developed tourist centre, which offers a ready supply of customers. But, there is still work to be done, such as improving the networking between local actors. In summary, all these factors together make it possible that the Teuravuoma area may be a successful nature tourism destination.

The Teuravuoma project offers a good model for other areas on how to develop a successful project for the nature tourism business in a rural community. The model does not mean that others can take the ideas of 'products'; rather it means to offer a model of the process and methods on how to put up a successful project, and further how to establish a successful nature tourism business area. The local traditions and 'the common memory' together with sensitive and well-planned use of the natural environment can be the starting point to a successful nature tourism community and business area.

2.4.7 THE PRODUCT: *spirit, story and survival in silence, safety and sublime space*

Self-actualization is a key word describing how people get their most memorable experiences. There are plenty of good examples already on how it is possible to create and develop opportunities for such activities. In Teuravuoma, a Sámi family enterprise offers a chance to feed reindeer and even to participate in collecting them from the forest to the yard.

One of the most difficult tasks is to develop a product which sells information. The personal guide service is naturally a typical way to sell information, but new innovative methods should be developed. To develop educational nature tourism is a challenge. For example, the mire can be a setting for many educational events: to teach ecological knowledge of flora and fauna, to teach how peat is used for products such as clothing, how herbs are used in drinks (tea), food, cosmetics and medicine, or how to use the swamp as a arena for strenuous exercise, such as swamp walking or swamp volleyball.

The word 'therapy' is used to describe a new dimension in and motive for nature-based tourism. Besides its ordinary medicinal uses related to healing illnesses, easing pain and caring for disabled people, some applications are already seen in riding and canoeing in nature. The silence of nature is a new quality in the tourism business, which could be promoted as 'therapy' to stressed, physically healthy urban people.

In addition to efficient mass tourism, there is nowadays a growing demand for alternative ways of travelling. Such a sparsely populated and large region as Lapland offers interesting opportunities for hikes and other trips that last longer than normal package tours. This idea of slowing down is already applied in very different settings, for example the Italian "slow cities" movement. Moving slowly, as it was done in earlier centuries, could be a new kind of experience for modern people.

The best qualities which Lapland can sell, in general, are silence, safety and space. All these qualities of the environment are more and more rare in continental Europe, and in many parts of the world. For an urbanite, silence means not only an environment without sound, but also the sounds of nature: the wind, birds or the particular sounds heard in a mire. When a local tourism entrepreneur wants to develop a product of its own, there are three more s-words that could be of help: spirit, story and survival. 'Local spirit' makes the atmosphere authentic. A good story adds a taste of history or tradition, or local art or humour adds a human dimension to the surrounding nature. Many people have a hidden need to feel the limits of human capabilities. This hidden need may be very different from one person to another, but to have a chance to get close to the limit, can add a lot to the experience. One person needs to climb up a rock wall to experience survival; another person may experience it only by walking in a dark forest in the moonlight. Group D recommends products which provide the first three s-words—silence, safety and space—and which have as a final touch one of the last three s-words—spirit, story and survival. All these qualities and elements give Lapland's nature a special taste for every visitor.

One of the product ideas in the Teuravuoma project is a low-activity stress-free camp in the heart of the Teuravuoma mire countryside during the Kaamos season. Kaamos is the time of the year when the sun does not rise in the north at all; the night lasts 24 hours.

MY PEAK EXPERIENCE

Task: Describe one of your best experiences in nature.

- Spending a week in a cottage in the middle of the wilderness in November; to listen to silence and to be alone.
- A sunny summer day in the Aapa mire, sitting down at the edge of the mire after gathering a bucketful of cloudberry, drinking coffee and looking at a distance over the open space. The wind dries your skirt and takes away all mosquitoes, and the strong smell of the mire surrounds you. And your mind is free.
- Ski trip to the Halti fell in one day, the feeling of freedom and strength.
- Skiing one week in the fells as a teenager, loving Lapland for the rest of my life.
- Hiking in the wilderness, looking down over the edge of Kevo canyon.
- Riding in the forest in the early morning hours of an autumn day, listening to the silence and hearing only the breathing of the horse.
- Sailing in a sudden storm, and being able to handle the boat. The experience of the fight against nature. Feeling of capability and the self winning, not nature.
- Walking on an old board trail in the mire in the morning when the fog hangs over the area, but there is one metre of clearness underneath the fog, two different worlds, impossible to explain.

2.5 Theme E: Preserving landscapes – combining conservation, tourism and forestry

Chaired by: Liisa Tyrväinen

Compiled by: Noora Salonen

Participants: Suvi Nenonen, Teemu Rintala, Andreas Schäfer and Leila Tuisku

2.5.1 Introduction

Forestry has been a traditional land use in most of the boreal areas of the European Union. During the last decades, nature conservation has become an urgent issue. Scenically valuable conservation areas are also attracting nature-based tourism to these areas. Nature-based tourism has been increasing rapidly and has nowadays become a primary source of income in the regions concerned (four example cases). Today, carefully planned and implemented conservation is needed to maintain the nature values that are, among other things, important for tourism in and the attractiveness of these areas. The most crucial nature values for tourism are the landscape values that are easily affected by traditional forestry management practices. In a situation like this, conflicts between different interest groups can be expected. To avoid these conflicts, new approaches, for example participatory planning, have to be developed. In this paper we will analyse the difficulties of combining forestry, conservation and nature tourism through four example cases. One of these cases is in central Europe in the Feldberg area and the other three are in Lapland, in northern Finland.

2.5.2 Forestry

Approximately 86%, or 26.3 million hectares, of the total land surface area of Finland is classified as forestland. The Finnish government owns about a quarter of the country's land area, that is, about 8.8 million hectares. Of this, 3.3 million hectares are in commercial use for forestry. A large part of Finland's forests is owned by private citizens—approximately 440 000 Finns own around 16 million hectares.



Aapo Mäenpää

Most of the state-owned forests are located in Lapland where the state owns almost 70% of the land. Slightly under 30% of the forestry land in Lapland is owned privately and only a few percent is owned by companies and communities. For more information see:

<http://www.ffcs-finland.org/suo/esittely/perustiedot/momistus.htm>;
<http://www.ffcs-finland.org/suo/esittely/standardit/sms1001.htm>;
<http://www.ffcs-finland.org/suo/esittely/perustiedot/mvarat.htm>;
<http://arkisto.sll.fi/metsat/omistus.html>.

Because the land ownership of forests in Finland is mostly private, there can easily arise conflicts between wood production, nature conservation and tourism. This is the case particularly in the northern parts of Europe, where wood production is the main function of forests (Tyrväinen et al. 2002). Annually, the proportion of private forests used for wood production in Finland is approximately 80%. Every year, 100,000–150,000 timber sales are made and the average sale is some 400 m³ (<http://www.ffcs-finland.org/suo/esittely/perustiedot/momistus.htm>).

The environment is mainly evaluated in terms of the landscape (Zube et al. 1982), where scenery becomes one of the most important reasons for the choice of destination (Tyrväinen et al. 2001). Landscape preferences studies show that traditional forestry and agriculture have a large impact on landscape values (Ribe 1989, Tyrväinen et al. 2001). The attitude is particularly negative towards clear-cuttings, which is a widely used method in commercial forestry (e.g. Benson & Ullrich 1981). To maintain and improve the landscape values and the conditions for nature tourism, a balance should be found between forestry and tourism. Though forest planning in Finland is traditionally at a high level, the need for a more developed planning system is important for further progress. An essential part of combining forestry and tourism is taking the landscapes and nature tourism into consideration in forest planning.

How the forests are managed in Finland is stipulated under the Forest Act, in which the minimum level of forestry is defined. During 1993, the Forestry Development Centre Tapio, together with forest enterprises, published new forest management guidelines which included requirements for taking biodiversity into consideration in forest management. Through silvicultural and basic forest improvement work an effort is being made to ensure high quality and economically valuable timber production, without ignoring the sustainability of forestry and forest biodiversity. On the basis of the Act on the Financing of Sustainable Forestry, which came into force at the beginning of 1997, it is possible to obtain money from the State not only for safeguarding the sustainability of wood production, but also for maintaining forest biodiversity and managing forest ecosystems. Annually, some 165,000 hectares of forestland are regenerated. This represents less than one percent of the total area of forestland. Natural regeneration takes place on almost a third of the regeneration areas (http://www.ffcs-finland.org/eng/esittely/perustiedot/perustiedot_e.htm). Nevertheless, the landscape values should get more acknowledgment in the current planning system if a balance between forestry and tourism is going to be achieved.

2.5.3 Nature tourism

Tourism is continuously increasing within the European Union, especially in areas where clean nature is still found. In Finland, the most important nature tourism areas are traditionally located in northern and eastern Finland. In Europe the most important areas for tourism are the densely populated western Europe and the southern Mediterranean area.

Internationally, tourism is considered increasingly important and a form of economy that greatly uses the wilderness environments and rural areas in general in its operations (e.g. Hall & Jenkins 1998, Hall & Page 1999). Tourism and outdoor recreation in nature are of great importance to the welfare of local people and tourists. Nature-based tourism creates jobs and increases employment in rural areas where other job opportunities are limited. For example, in Lapland, tourism already employs more than any other industry that directly uses the regional natural resources (Saarinen 2002). In Finland, the demand for nature-based tourism is expected to grow 8% annually within the next decade (e.g. Programme for Forest Recreation and Nature Tourism Development in Finland 2002).

The quality of the environment and the success of the tourism product are strongly dependent on each other. In spite of this, the tourism sector has been slow to adopt environmental sustainability and responsibility (Saarinen et al. 2000). Gradually, the principles of sustainability have led to different codes of conduct for different destinations, activities and tourists. These have in turn led to the development of environmental agreements, eco-labels and prizes of high quality (Borg 1998).

Many travellers consider Finland as a place where they can find peace, silence, clean air and nature and beautiful landscapes. In Finland, water bodies, forests and agricultural areas form the basic structure of landscapes for nature tourism (Tyrväinen et al. 2002). However, an increase in tourism can have a negative effect on nature if there has been no careful planning for the sustainable use of the natural resources (see Lundvall et al. elsewhere in this publ.). Nature in the north can be vulnerable and its renewal is very slow. Tourism cannot grow successfully if the environment is not taken into consideration. The carrying capacity of the destination area is reached when the tourists or local inhabitants begin to react to the adverse impacts of tourism (Borg 1998). Carrying capacity, the opportunity spectrum, best practice and environmental assessment have been studied a lot during recent years and these are widely used as tools to promote sustainable tourism planning. However, the need for developing new methods to combine tourism, nature conservation and traditional land use, in this case forestry, still exists.

2.5.4 Conservation

The most obvious and traditional way of maintaining biological diversity is to establish nature conservation areas. In Finland, nature conservation areas have been set aside since the 1930s. The first were national parks and strict nature reserves, which were intended to preserve specific natural and landscape values. All the existing ecosystems, however, were not systematically included in these large, but relatively few, areas (<http://www.ymparisto.fi/eng/environ/naturcon/natureco.htm>).

Following the recognition that modern land use practices severely threaten biodiversity, various national programmes were initiated to protect the main ecosystem types. These programmes were based on large-scale methodological inventories and covered both state-owned and private land. The Finnish government has approved national conservation programmes for the following: national parks, strict nature reserves, mire conservation areas, herb-rich forest areas, old-growth natural forest areas, bird wetlands, glacial fluvial esker formations, river rapids, shoreline protection areas and wilderness areas (<http://www.ymparisto.fi/eng/environ/naturcon/natureco.htm>).

The previous nature conservation legislation only recognized nature conservation areas with appurtenant strict regulations. The present Nature Conservation Act also includes the protection of minor sites important with regard to biodiversity and habitats. These include the rare natural woods rich in valuable broad-leaved

deciduous species, hazel woods, common alder woods, sandy shores in their natural state and juniper meadows. It is estimated that there are only a few thousand of the habitat types listed in the Act. As they are quite small in area, they are threatened by the current land use system that favours extensive forestry, farming and other expansive types of land use. Moreover, the aim is not to keep these areas beyond human touch. The aim of the legislation is for these areas to be used and managed in such a way as to maintain their special characteristics as regards vegetation and other species (<http://www.ymparisto.fi/eng/environ/naturcon/natureco.htm>).

Most of the nature conservation areas in Finland are in the north. The surface area covered by the Natura 2000 network in Lapland is approximately 3 million hectares, including 156 sites. Wilderness areas cover 50% and different water areas approximately 8.5% of the total area. The areas proposed for the Natura 2000 network mainly consist of existing conservation areas, wilderness areas, and sites covered by protection programmes.

Nature conservation areas are one of the main attraction factors for tourists (Buckley 1999). Finnish tourists also appreciate old-growth forests with large heavy timber, deciduous trees, and relatively good visibility (Tyrväinen et al. 2001). One of the main challenges in nature protection is to find ways to increase the amount of protected old-growth forests located in South Finland (Tyrväinen et al. 2002).

With sufficient and good guidance, nature tourists, entrepreneurs and local people can be shown how to use the environment sustainably. Areas that are more vulnerable can be protected more efficiently by minimizing the usage of those areas and by directing travellers to areas that better withstand heavy use.

2.5.5 Case 1. Integrating Tourism and Grouse Habitat Protection in the Black Forest

The Feldberg area in the southern Black Forest is important from the point of view of nature protection. The area is located in central Europe and it is one of the preferred tourist attractions. For local communities, tourism is the primary source of income. Besides agriculture and forestry, different kinds of outdoor recreational activities in natural areas cause various environmental impacts.

The idea of the European Union Life Nature project named “Integrated Habitat Protection for Grouse in the Black Forest” was to harmonize tourism and nature protection and minimize conflicts between these two activities. Different forms of usage had to be combined so that each activity would have its own setting. Also, the favourable conservation status had to be secured. Within a test area of 7000 ha around the Feldberg, the uniqueness of the landscape had to be preserved. The activity level of tourism was supposed to remain the same or increase.

To realize these objectives, nesting and reproduction areas for gallinaceous birds were established and protected. When utilizing natural resources, observing indicator species is a functional means for monitoring changes in species habitat and impacts on the biodiversity. In the Black Forest, the Hazel Grouse (*Bonasa bonasia*) and the Capercaillie (*Tetrao urogallus*) are indicator species for environmental quality, and thus, for nature being quite undisturbed. Some areas were maintained as wilderness areas, which are completely protected from tourism.

Recreation in natural areas was concentrated in easily accessible areas and nearby the settlement. The parking and waste disposal places were located near nature trails and routes and near frequently travelled roads to minimize needless traffic. The transition routes, recreational structures and services were well planned and connected to each other.

One of the targets was to clarify what are the main features that people consider beautiful and attractive in the landscape. In most parts of the project area, forest management measures were allowed, so when managing forests, peoples' appreciation of these landscape features should be taken into consideration. The biggest problem was to convince the landowners of the special meaning of the landscapes and the balance between the quality of landscapes and different forest management methods. The landowners had to be convinced that a beautiful landscape could be a new source of income for them, for nature entrepreneurs and for the local people. It was important that landowners realized that nature-based tourism and natural landscapes could make their own surrounding environment more valuable. The landowners were encouraged to manage their forests by taking into consideration the recommendations on the landscapes, not by strict rules and regulations. Some privately owned pilot areas were held up as examples for other landowners and inspired them to take the landscape values into consideration in their own forest management measures. Landowners became confident that they wouldn't lose anything by taking the landscape values into account in their actions along with the wood production targets.

2.5.6 Case 2. Kätkätunturi

Kätkätunturi is not a Natura 2000 site or protected under any national protection programme. However, it is a scenically valuable area and is presented here as an example of a conflict that can arise when land uses are not properly planned and generally accepted by all interest groups. Kätkätunturi is a 504-metre high fell in the Kittilä region in Lapland. The area is bounded by the river Ounasjoki, which is a Natura 2000 site. The main part of the Kätkätunturi area is defined as a forestry area. The fell is situated next to the famous tourism centre Levi, which has expanded enormously in recent decades.

Kätkätunturi has a great scenic value for tourism entrepreneurs, tourists and the local people. Its nature is important also to the local authorities. In spite of similar views towards the special features of the fell, major conflicts have arisen between the landowners and the authorities. The struggle has been going on for several years already.

The municipality of Kittilä wants to protect Kätkätunturi from fellings and building projects and keep it in its natural state. The Levi terrain has already been sacrificed for tourism. Because the land of Kätkätunturi is owned mostly by private people the situation is difficult. The landowners do not want to lose a source of income, that is, timber sales. They also know the importance and economic value of the area for tourism. The municipality of Kittilä has offered to buy the land, but the problem is the price of the land. The landowners think that because there is no financial value defined for landscape and recreational values, the price the municipality is offering is too low.

This is a delicate situation. So far, no agreements have been made between the municipality and the landowners. The authorities now aim, for the moment, to keep the channels of communication as open as possible with the landowners. Forestry management measures are allowed in the Kätkätunturi area, and one fear is that the landowners will start such fellings that will diminish the landscape values. There has been no unanimity achieved in regional planning or price politics. Most of the landowners feel that they have not been involved enough and that their needs and concerns have been ignored.

Representatives of the Lapland Regional Environment Centre, Suunnittelukeskus Oy, the Lapland Forestry Centre, the municipality of Kittilä and the landowners have formed a working group to solve the problems in the Kätkä-

tunturi area. No solutions have yet been found for this difficult problem. The working group has stated that regional and national politicians will make the final decisions.

2.5.7 Case 3. A Proposal for the Ounasjoki Life Environment Project

The river Ounasjoki, Finland's longest freely flowing river, is situated in the area of four regions in Lapland, in the northernmost corner of the European Union. The objective of the project is the sustainable usage of the river environment and providing guidelines for forest management and nature tourism. The main methods used are restoring the river and activating the landowners in taking the landscape values into account in the planning and management of forests. The view of the natural landscape from the river and a river route that will be planned, will serve both tourists and local recreational users. Also, a network of nature entrepreneurs will be established. Simulation models will be used to test the newest forestry planning methods that can be applied in multiple use forestry planning and for directing cuttings to maintain the view of the riverscape (Lundvall & Salonen 2002 unpubl.). The aim is also to make sure that the quality of the water stays good even with an increase in the number of different activities. To observe and recognize the signs of possible overloading of the environment caused by tourism and forestry, indicator species will be used and the most important features of the natural environment will be monitored for damage.

There are more than 500 landowners in key positions in this large river area. The personal values and needs of these 500 landowners have to be clarified during the project. According to a study made in southern Finland, the most important forest values and objectives for land ownership are emotional values for owning the land, possibilities for outdoor recreation and incomes from timber sales (Tyrväinen et al. 2002). Therefore, the landowners as well as the local tourism entrepreneurs and other inhabitants should be committed to all planning drawn up for their land and the region they live in. The needs, opinions and characteristics of the local people should be also taken into account when formulating areal plans or guidelines. This will make the plans easier to accept and implement for the people concerned.

As in the project in the Feldberg area, forest management measures will be allowed also in the Ounasjoki area. The aim is to design and develop together with the landowners such management methods that will ensure about the same level of income from the forests as before, but that takes the landscape values into account at the same time. The idea is to have landowners participate in the project from the beginning and to establish a few pilot areas where the special features of the landscapes have been taken into account in forest management planning. This type of forest management planning has to be introduced as an advantage that increases not only the level of nature conservation but tourism and employment in the area. If all the interest groups concerned participate from the very beginning, the project has a good base on which to proceed. The participation of all interested parties also helps to improve the attitude towards nature tourism and conservation. The current planning system should better take into account the needs of landowners during the planning process. The project faces a considerable challenge in changing and developing the traditional planning system and finding new ways to communicate with the landowners. The whole planning system has to be reformed and the landowners have to be involved from the beginning of the planning process.

The definitions of the terms 'landscape' and 'scenery' have been agreed on by all the stakeholders concerned. Furthermore, the authorities and public officials might benefit from further training that would help them to harmonize their ways

of working in the fields of forestry, tourism and nature conservation. It would be advantageous if all the authorities would operate under the same principles and rules when working with landowners, local people and tourists. In a way, the new Administrative Procedure Act has provided for this already in Finland.

2.5.8 Case 4. Restoration and Protection of the River Simojoki

The natural rivers of Fennoscandia are very important habitat types in terms of the conservation of biodiversity in northern Europe. Species dependent on these habitats are adapted to their unique features, such as the long winter and the long period of ice-cover, which is followed by rapid snow melt and ice break-up in spring. This increases enormously the already large annual amplitudes in discharge and also affects the water quality. In Finland there are very few remaining rivers representing the Fennoscandian natural rivers habitat type due to, among other things, extensive water power construction.

The main stream of the river Simojoki belongs to the Natura 2000 network and represents the Fennoscandian natural rivers habitat type. The Simojoki is one of the few unbuilt rivers which empties into the Bothnian Bay. The anadromous fish species, such as salmon (*Salmo salar*), trout (*Salmo trutta*), whitefish (*Coregonus lavaretus*) and lampern (*Lampetra fluviatilis*) spawn and breed naturally in the river area. The catchment area of the river Simojoki is protected against power plant construction, in accordance with the Rapids Protection Act. It also belongs to a special water protection programme.

The project area encompasses the main stream of the river Simojoki and its catchment area, which lie largely in the municipalities of Ranua and Simo in Southern Lapland. The catchment area of the Simojoki is 3160 km², of which lakes account for some 5.7%. The Simojoki begins its run from Simojärvi Lake and it empties into the Bothnian Bay. The river is 193 km long, with 32 km of rapids. The descent of the river is 176 m.

The river Simojoki is a typical Fennoscandian natural river with large annual and seasonal amplitudes in discharge. The natural causes of this fluctuation are a lack of flow-balancing lakes downstream, the long winter and related ice-covered period, and rapid melting of snow in spring.

Human influence on the water quality and ecology of the river in the area has been strong. The river has been cleaned for timber floating during the 1950s and 1960s, which resulted in a marked decrease in biodiversity and changes in river channel morphology. Forestry, agriculture, peat mining, and scattered settlements have increased nutrient and suspended solid loading as well as sludge deposition in the river.

The main aim of this Life project, carried out by the Lapland Regional Environment Centre, is to restore and ensure the favourable conservation status of the river Simojoki. By restoring the river and decreasing the loading, it would be possible to return to and maintain the earlier natural conditions of the river. At the same time, the project aims to promote tourism and recreation in the area and education.

The actions by which loading will be reduced are raising public awareness about the sources and effects of diffuse loading and the means for decreasing it, establishing buffer zones between fields and the river and elaborating management and re-use plans for three peat-mining areas released from production. The buffer zones and peat-mining areas serve as pilot trials and the experience gained will be used in similar areas. For the follow-up to the results of the restoration and water protection actions, a monitoring system based on the Water Framework Directive

will be set up. This will be the first time this has been done on a Natura 2000 site and in Finland. Experiences gained from this project will also be applied to other Natura 2000 sites.

Even though the importance of nature conservation is gradually gaining acceptance by the public in Lapland, the production and publication of various kinds of material describing the project and its actions which also support the economic life of the riverside area form an essential part of this project. The participation of the local population in the implementation of the project is another way to generate positive attitudes towards protection of the river Simojoki, and nature conservation in general. Furthermore, one aim of the project is for the local people to gradually consider protected areas as resources, from which new employment for the region can be created.

Expected results of this project are:

1. Restoration of a Fennoscandian natural river, thus enhancing its favourable conservation status.
2. Public awareness information material about sources and effects of diffuse loading and means to decrease it.
3. Pilot areas for agricultural buffer zones and management and re-use plans for three peat-mining areas released from production.
4. Follow-up to the ecological impacts of the restoration and water protection actions, in accordance with the Water Framework Directive, will start for the river Simojoki.
5. Information material serving ecotourism and agrotourism businesses (e.g. guide for hiking along the river, website).
6. Local people will gradually come to consider nature conservation areas as one of the keystones in the development of rural areas, partly because the project will create employment in the municipalities during the restoration phase of the river and partly through subsequent sustainable eco- and agro-tourism.

2.5.9 Adapting conservation, forestry and tourism to the landscape – conclusions

One of the main things that has to be clarified is the personal needs and values of the landowners and local people. If they are involved from the beginning of the planning process and the plans drawn up for and actions taken on their land are based on their own wishes and views, their attitude towards the actions will be much more positive and constructive. According to the study (Tyrväinen 2002) that was made in southern Finland, landowners are most willing to take care of the visual attractiveness of their forests and to manage for cultural biotopes such as meadows and pastures. Other relatively well-accepted management measures are additional thinnings and managing saplings stands during early growth stages. Only a small number of the landowners are willing to postpone the regeneration of forests to promote nature tourism (Tyrväinen et al. 2002).

The target of the conservation actions should be concrete so that everyone can easily visualise it in the protected environment or landscape. For example, indicator species should be visible and well-known species so that people can recognize them and be able to observe possible changes in their habitats (Lundvall & Salonen 2002). Furthermore, the routes and constructions built have to serve also the local people besides the entrepreneurs and tourists. According to studies made by Päivi Taavo, a student (Taavo 2002, unpubl.), about 57% of interviewed

(52) landowners saw that routes and constructions are useful and serve local people, which should be taken into account in planning. All the interest groups and local people concerned should feel that they benefit somehow from the actions taken.

Generally in Finland, increased proficiency and better forest management methods have improved the quality of the landscapes a little bit. In spite of this, some of these methods, for example lengthening of the recycling times and gradual regeneration of the stands, cause extra costs for the landowners. These actions are an investment in conservation and tourism, which will bring economic benefits through higher tourism income to the area. However, the landowners also have to be compensated for financial losses. According to Tyrväinen et al. (2002) at the national forest policy level, a more flexible system of subsidies for forestry should be developed. The financial support should not only be targeted for wood production and conservation but should also cover landscape management measures needed in nature tourism development areas (Tyrväinen et al. 2002).

References

- Benson, R.E. & Ullrich, J.R. 1981. Visual impacts of forest management activities; findings on public preferences. USDA Forest Service. Research Paper INT-262.
- Borg, P. 1998. Kestävyyden kriteerit matkailuelinkeinon palveluksessa. In: Saarinen, J. & Järviluoma, J. (toim.). Kestävyys luonnon virkistys- ja matkailukäytössä. Metsäntutkimuslaitoksen tiedonantoja 671: 5-14.
- Buckley, R. 1999. Tools and indicators for managing tourism in parks. *Annals of tourism research* 26(1), 207-210.
- Finnish Forest Certification System, 1.3.2003 – 20.3.2003. Forest Certification in Finland. Basic information on Finland's forestry. Internet: http://www.ffcs-finland.org/eng/esittely/perustiedot/perustiedot_e.htm
- Finnish Forest Certification System, 1.3.2003 – 20.3.2003. Metsäsertifiointi Suomessa. Metsätalouden perustietoja. Metsänomistus. Internet: <http://www.ffcs-finland.org/suo/esittely/perustiedot/momistus.htm>
- Finnish Forest Certification System, 1.3.2003 – 20.3.2003. Metsäsertifiointi Suomessa. Standardit. SMS 1001 Järjestelmän soveltaminen vaihtoehtoisilla toteutustasoilla. Internet: <http://www.ffcs-finland.org/suo/esittely/standardit/sms1001.htm>
- Finnish Forest Certification System, 1.3.2003 – 20.3.2003. Metsäsertifiointi Suomessa. Metsätalouden perustietoja. Metsävarat. Internet: <http://www.ffcs-finland.org/suo/esittely/perustiedot/mvarat.htm>
- Hall, C.M. & Jenkins, J.M. 1998. *Tourism and recreation in rural areas*. Chichester: John Wiley.
- Hall, C.M. & Page, S.J. 1999. *The geography of tourism: environment, place and space*. London and New York: Routledge.
- Lundvall, P. & Salonen, N. 2002. Providing guidelines for sustainable ecotourism and multiple use forest planning on the Ounasjoki riverscape. A Proposal for Life Environment fund. Unpublished.
- Programme for forest recreation and nature tourism development in Finland 2002. Ministry of the Environment. Department of Land Use. Helsinki. The Finnish Environment 535. 48 p. (in Finnish with English summary).
- Ribe, R.G. 1989. The aesthetics of forestry: What has empirical preference research taught us? *Environmental Management*, 13, 55-74.
- Saarinen, J. 2002. Tourism in the Northern Wilderness Areas: Wilderness Discourses and the Development of Nature-Based Tourism in Northern Finland. In: *Ecotourism, Wilderness and Mountains: Issues, Strategies and Regional Development*. Conference Proceedings. Department of Tourism, University of Otago, Dunedin, 2002.
- Saarinen, J., Jortikka, S. & Virtanen, E. (toim.) 2000. *Luonto, matkailu ja luonnonsuojelu*. Metsäntutkimuslaitoksen tiedonantoja 760: 5-12.

- Suomen luonnonsuojeluliitto ry, 1.3.2003 – 20.3.2003. Metsien suojelu. Metsätalousmaan omistajien jakautuminen metsäkeskuksittain. Internet: <http://arkisto.sll.fi/metsat/omistus.html>
- Taavo, P. 2002. Social impacts of protection of Aapa mires. Unpublished.
- Tyrväinen, L., Nousiainen, I., Silvennoinen, H. & Tahvanainen, L. 2001. Rural tourism in Finland: Tourists' Expectation of Landscape and Environment. *Scandinavian Journal of Hospitality and Tourism Research*. Vol. 1(2): 133-149.
- Tyrväinen, L., Nousiainen, I. & Silvennoinen, H. 2002 Nature based tourism in Finland: An analysis of development potentials and constraints. In: Barros, S. (ed.). *Collaboration and Partnership in Forestry*, All Division 6 IUFRO Meeting, Valdivia, Chile 2002, http://www.infor.cl/webinfor/eventos/IUFRO_Valdivia2002/Index.htm.
- Ympäristöhallinto. In English. Finnish Environment. Nature conservation. Networks of conservation areas. Internet: <http://www.ymparisto.fi/eng/environ/naturcon/natureco.htm>
- Zube, E.H., Shell, J.R. & Taylor, J.G. 1982. Landscape perception: research, application and theory. *Landscape Planning*, 9, 1-33.

Section III. Summary

Presented by Mr. Ilkka Heikkinen, Director, Nature Conservation, Finnish Ministry of the Environment

3.1 Summary and closing remarks

3.1.1 Introduction

The introductory part of the workshop consisted of presentations dealing with the issue on local, regional, national, European and global scales. Theoretical points of view and measures of good planning were discussed.

The question of exact definitions for “ecotourism”, “nature-based tourism” and “nature tourism” were discussed. The risk of misusing these terms as slogans without an overall picture about the tourism industry itself was recognized.

When concentrating tourism in Natura 2000 areas we must take into account all possibilities both positive and negative. It is essential that people accept the Natura 2000 network as an integral part of the European Union’s environmental policy. Most of the people do understand that taking care of biodiversity is our duty – we are saving the richness of nature for future generations.

In many rural areas of Europe economic problems have caused unemployment and emigration. The demographic structure perhaps does not give a positive picture of the future. In these conditions it can be difficult to accept nature conservation if it is seen as a competitor with the local economy.

Tourism offers opportunities for economic recovery. Natura 2000 sites are potentially important areas for ecotourism. This branch of the tourism industry should be used wisely. However, ecotourism alone is not a solution for structural problems, but it can be an important part of local and regional development. On the local level, ecotourism certainly gives hope and it can be a short or a long step towards a better future.

Some Natura 2000 sites may tolerate high numbers of tourists, while other sites should be totally closed. In accordance with the Habitats Directive, it is obligatory to safeguard the conservation objectives of each site. One important tool available to planners and decision-makers is the environmental impact assessment, which requires field studies on the site. It seems that industrial mass tourism is hardly suitable for most of the Natura 2000 sites. The risk of unwanted impacts on the environment increases when an individual tourist acts irresponsibly. There can be exceptions to this of course, depending on the specific conditions of the site itself.

3.1.2 Summary of the results of the five workshops

Social impacts of ecotourism

The workshop was critical towards the concept of ecotourism: Can tourism ever be ecologically sustainable in remote and sparsely settled areas, as in Lapland, if we are looking at the whole production chain? For example, we have to accept long-distance flights and the use of motor vehicles in building the infrastructure needed in tourism industry.

Despite this, however, the workshop suggests that in the particular case of Lapland there should be a “northern certificate system” developed together with entrepreneurs to stress the importance of concern for the environment. Ecotourism is competing with other nature-based services in trying to attract tourists who have a respect for nature, who seek experiences of nature and who also have an interest in the local way of life and traditional livelihoods. This is why ecotourism is always a small-scale business in the local area. Social impacts should be assessed by developing the existing planning processes and also by conducting case studies.

The workshop discussed the river Ounasjoki case, and saw it as an exemplary case on the local level. There is an attempt to launch a Life Environment project in a long area, which consists of a river landscape reaching from Hetta in the municipality of Enontekiö to the city of Rovaniemi. The project will deal with landscape management, while the river itself has been proposed for the Natura 2000 network based on ecological criteria given in the Habitat Directive. It is important to stress that Natura 2000 in this very case is not a reason to protect the landscape but the future prospects for ecotourism are better if the landscape is well managed.

The main objective in the tourism business is that the customers are satisfied. Hopefully, nature experiences could contribute to an improvement in psychological well-being and to an increase of environmental consciousness.

Ecological sustainability in Natura 2000 areas

Natura 2000 sites vary greatly, which makes it extremely difficult to measure the ecological sustainability as a whole. The conservation goals are defined in the Natura 2000 data sheet of each area, and are aimed at achieving a favourable conservation status of habitats and species. Natura 2000 sites differ in their tolerance to impacts from recreation and nature tourism. For example, a small herb-rich forest area with some threatened species is much more vulnerable than a large river ecosystem. It is recommended that each Natura 2000 site is carefully evaluated for vulnerability to different forms of use. Then nature tourism can be directed to suitable areas. A management plan is based on the conservation goals and priorities of an area. The limits of acceptable change (LAC) and carrying capacity (CC) can be methods to achieve the goals. The detailed tools and indicator species have to be defined for each focus area separately. For finding suitable indicators, basic background data, research and biological tests in pilot areas are needed. There also should be dialogue between people working in research, administration and management. The involvement of local people and the rising awareness of conservation are also important.

Participatory Planning of Ecotourism

Although participatory planning is not the magic word that will solve all the issues of ecotourism development on Natura 2000 sites, it is obvious that it is a necessary process.

Participation is needed for ecotourism planning in relevant underdeveloped Natura 2000 areas, but also to regulate tourism on Natura 2000 sites that are suffering from mass tourism.

There are always cases of ecotourism development on Natura 2000 sites where even if a holistic participatory process is not followed, the use of participatory tools can be very helpful.

In a successful participatory planning process of ecotourism development on Natura 2000 sites, the perceptions of the people are more impartial and collective subjectivity can be achieved.

Productisation of nature-based activities

Nature-based tourism was defined in the workshop to also include recreation with motorized vehicles.

To understand what product a customer wants to buy, we should look at the equilibrium of demand and supply.

Demand:

A careful analysis of the desired experiences and activities is needed. Services, which support the benefits and outcomes of nature-based tourism participation, should be found. The client base should be recognized. The workshop also discussed the scale. For example, some customers may seek extreme solitude and quietness, while other customers may accept the company of other people and are satisfied with simply experiencing the magic of the northern light and the open space.

Supply:

There is a shortage of local actors who are ready to work together in the productisation of nature-based activities. The administration should help the local initiatives and disseminate knowledge about best practises.

The workshop examined the Teuravuoma case. The importance of combining the natural and cultural resources proved to be essential. The actions of key people in the village and the strong commitment of the local people were seen as driving forces behind the project. The existing mass tourist centre nearby Teuravuoma would guarantee a supply of customers. A carefully planned project can draw the potential ecotourists from a large but diverse mass. This confirms the hypothesis that an individual tourist can play different roles depending on if demand and supply are balanced.

Combining forestry, conservation and tourism

The key themes discussed were (i) what type of adaptations are needed in traditional forest management practises in rural areas to meet the expectations of nature tourists towards the landscape and environment; and (ii) how to involve local forest owners in nature tourism and conservation projects and how to implement new forest management methods targeted to enhance the quality of landscapes. A multidisciplinary approach and demonstration sites were stressed as suitable methods to tackle the issues.

A successful project trying to combine forestry, conservation and tourism would need to take into consideration at least the following topics:

- a) Choose an indicator species for monitoring conservation, which also has social values, i.e. choose species that are somehow important to the local community or to the public.

- b) One should be aware of the motives for forest ownership. The attitudes of landowners towards a new conservation or tourism project depend crucially on how well the views of landowners are integrated into the development plans for the forests.
- c) There is not enough know-how related to what kind of forest management is ecologically and socially acceptable in nature tourism areas. Detailed landscape management guidelines based on up-to-date research results are needed. Furthermore, the forest planners and managers need to be educated to adopt the new planning and management methods.

3.1.3 Closing remarks

It is a philosophical question whether we protect the nature for itself or for the benefit of human kind. In this case we have a good reason to leave this fundamental question aside. The Natura 2000 network is something that has not been tried earlier on this scale in any part of the world. It is a policy measure which has its roots in the Biodiversity Convention. When we speak about policy in a democratic society we are always speaking about people.

Biodiversity cannot be preserved only by creating protected areas with strict restrictions. There is also a need for restoration of ecosystems and in many cases continuing the traditional management of natural resources. This work cannot be done from an office desk. The real world lies on the local level.

To ensure the continuity of the Natura 2000 process it is essential that citizens of European Union member states not only accept the policy, but are also ready to take part in actions which promote its aims. The presentations and discussions in this workshop have showed that we already have good examples of local win-win strategies. There is a good reason to be optimistic for the future.

Ecotourism can provide employment and better future prospects on the local level. It can be an activity, which by means of education, raises the public's awareness of the need to preserve biodiversity. I think that the most important outcome is a deep and true experience of nature. That is what most ecotourists really seek and, on the other hand, it is the most effective way to prove that a policy, which safeguards the values of nature, is something that is worthy of support.

Creating the Natura 2000 network has been the responsibility of governments and public administration. They still have the responsibility for organising the management of the sites and making certain that the obligatory conservation measures are carried out.

According to the presentations and discussions in this workshop, ecotourism seems to be a meeting point for public administration, local people, enterprises and customers. We must understand that ecotourism is a part of the tourist industry. It works under rules of economical action. In the end, the customer makes the decisions.

The workshop discussed also the responsibility of the customer. The theme is very interesting in the perspective of decisions made at the 2002 World Summit on Sustainable Development in Johannesburg. I think that our workshop opened a small window to this question.

It was really fruitful that the workshop was able to examine thoroughly a local case study—the Teuravuoma aapa mire project. I think that without this, the workshop would not have realized the importance of local commitment, not only in the protection of the environment, but also in creating sustainable tourism. In regard to discussion about responsibilities, it must also to be said that commitment is needed from all parties. Commitment is a special duty for public administration.

Funding of nature conservation and actions promoting sustainable tourism or ecotourism in Natura 2000 areas was not exactly an issue of the workshop. However, the theme arose in discussions. I think that our experiences from successful Life Nature projects in Lapland show that a relatively small amount of project funding can lead to remarkable progress on the local and regional level in these special circumstances. Our projects have succeeded also because there have been professional people working in them and we had good advice from the European Commission and Ecosystems Ltd.

It is easy to light a fire, but to keep it burning can be difficult. I think there is a need to discuss if it is time to change the funding policy from individual projects to more general and longer programmes. Otherwise there is a risk that the achievements of today and the intellectual capacity gained during the projects will be lost.

The prospects of ecotourism seem to be quite positive just now. We can surely say that the Natura 2000 network has already been a benefit to the growth of ecotourism. We have also had some wise advice: it is dangerous to believe that the trends of today will last into the future. There is also a risk that the concept of ecotourism becomes inflated, if there is no way to guarantee the quality of services or the positive relationship to conservation objectives. To stress the importance of ecotourism as a magic word can be misleading, if we do not at the same time speak honestly and clearly about the conservation objectives of Natura 2000.

List of Participants

Paula Alho
EU Coordinator
Lapland Regional Environment Centre
P.O. Box 8060
96101 Rovaniemi, Finland
paula.alho@ymparisto.fi

Charly Ebel
Project Manager
Bezirksstelle für Naturschutz und
Landschaftspflege Karlsruhe
Schwarzwaldstr. 106
77815 Bühl-Neusatz, Germany
charly.ebel@freenet.de

Heikki Eeronheimo
Area Manager
Metsähallitus/Natural Heritage Service
Koskikatu 44-46
96100 Rovaniemi, Finland
heikki.eeronheimo@metsa.fi

Joel Erkkonen
Senior Planning Officer
Metsähallitus/Natural Heritage Service
P.O. Box 8016
96101 Rovaniemi, Finland
joel.erkkonen@metsa.fi

Anja Finne
National Expert
European Commission
B-1049 Bruxelles, Belgique
anja.finne@cec.eu.int

Stefanos Fotiou
Deputy Head of Department
The Gouladris Natural History Museum
Greek Biotope/Wetland Centre
14 Km Thessaloniki-Mihaniona
P.O. Box 60394
57001 Thermi, Greece
fotiou@ekby.gr

Ilkka Heikkinen
Director, Nature Conservation
Ministry of the Environment
P.O. Box 35
00023 Valtioneuvosto, Helsinki, Finland
ilkka.heikkinen@ymparisto.fi

Marjatta Hytönen
Researcher
Finnish Forest Research Institute
Unioninkatu 40 A
00170 Helsinki, Finland
marjatta.hytonen@metla.fi

Sauli Hyvönen
Coordinator
Lapland Regional Environment Centre
P.O. Box 8060
96101 Rovaniemi, Finland
sauli.hyvonen@ymparisto.fi

Liisa Kajala
Planner
Wilderness Management
Metsähallitus/Natural Heritage Service
Inarintie
99870 Inari, Finland
liisa.kajala@metsa.fi

Marita Karling
Nature Link International G.E.I.E.
11, Rue Beckers, B-1040 Brussels, Belgium
marita.karling@ecosystems.be

Jukka Kauppinen
Lapland Regional Environment Centre
Ylläsjarventie 1 A
95990 Kurtakko, Finland
jukka.kauppinen@kurtakko.fi

Sakari Kokkonen
Area Manager
Metsähallitus/Natural Heritage Service
Luontopalvelut
P.O. Box 8016
96101 Rovaniemi, Finland
sakari.kokkonen@metsa.fi

Sannamari Kääriäinen
Biologist
Lapland Regional Environment Centre
P.O. Box 8060
96101 Rovaniemi, Finland
sannamari.kaariainen@ymparisto.fi

Eino Lappalainen
State Geologist, Prof. honoris causae
Ropsitie 4
70150 Kuopio, Finland
eino.lappalainen@pp.inet.fi

Kristiina Lehtinen
Geologist
GFS
P.O. Box 77
96101 Rovaniemi, Finland
kristiina.lehtinen@gtk.fi

Päivi Lundvall
Ecologist
Lapland Regional Environment Centre
P.O. Box 8060
96101 Rovaniemi, Finland
paivi.lundvall@ymparisto.fi

Suvi Nenonen
Project Coordinator
Lapland Regional Environment Centre
P.O. Box 8060
96101 Rovaniemi, Finland
suvi.nenonen@ymparisto.fi

Tapio Niittyranta
Coordinator
Municipality of Kolari
P.O. Box 76
95901 Kolari, Finland
tapio.niittyranta@kolari.fi

Päivi Paalamo
Senior Planning Officer
Metsähallitus/Natural Heritage Service
P.O. Box 8016
96101 Rovaniemi, Finland
paivi.paalamo@metso.fi

Kyösti Palojarvi
Master of Forestry
Lapland Regional Environment Centre
P.O. Box 8060
96101 Rovaniemi, Finland
kyosti.palojarvi@ymparisto.fi

Olavi Parpala
Director
Lapland Regional Environment Centre
P.O. Box 8060
96101 Rovaniemi, Finland
olavi.parpala@ymparisto.fi

Xavier Quintana
University of Girona
Fac. Ciencies Campus Mountilivi
17071 Girona, Spain
xavier.quintana@udg.es

Jouni Rauhala
Forest Engineer
Lapland Regional Environment Centre
P.O. Box 8060
96101 Rovaniemi, Finland
jouni.rauhala@ymparisto.fi

Teemu Rintala
Project Coordinator
Central Finland Regional Environment Centre
P.O. Box 110
40101 Jyväskylä, Finland
teemu.rintala@ymparisto.fi

Pekka Räinä
Biologist
Lapland Regional Environment Centre
P.O. Box 8060
96101 Rovaniemi, Finland
pekka.raina@ymparisto.fi

Noora Salonen
Forest Engineer
Lapland Regional Environment Centre
P.O. Box 8060
96101 Rovaniemi, Finland
noora.salonen@ymparisto.fi

Andreas Schäfer
Dipl Forst Ing
Fachgemeinschaft für Wald-Wild-
Landschaftsökologie
Mozartweg 8
79189 Bad Krozingen, Germany
andr.schaefer@t-online.de

Tuija Sievänen
Researcher
Finnish Forest Research Institute
Unioninkatu 40 A
00170 Helsinki, Finland
tuija.sievanen@metla.fi

Pirkko Siikamäki
Station Director
Oulanka Biological Station
University of Oulu
Liikasenvaarantie 134
93999 Kuusamo, Finland
pirkko.siikamaki@oulu.fi

Sari Sivonen
Planning Officer
Lapland Regional Environment Centre
P.O. Box 8060
96101 Rovaniemi, Finland
sari.sivonen@ymparisto.fi

Pekka Sulkava
Senior Planning Officer
Metsähallitus/Natural Heritage Service
Peuratie 15
99400 Enontekiö, Finland
pekka.sulkava@metsa.fi

Kerstin Sundseth
Nature Link International G.E.I.E
11, Rue Beckers
B-1040 Brussels, Belgium
kerstin.sundseth@ecosystems.be

Leena Suopajarvi
University of Lapland
P.O. Box 122
96101 Rovaniemi, Finland
leena.suopajarvi@urova.fi

Päivi Taavo
Student
University of Lapland
P.O. Box 122
96101 Rovaniemi, Finland
ptaavo@urova.fi

Pasi Tanninen
Planning Officer
Sodankylä institute
99600 Sodankylä, Finland
pasi.tanninen@sodankyla.fi

Keijo Taskinen
Biologist
Arctic idea Oy
Lemmenlaaksontie 6
95970 Äkäslompolo, Finland
keijo.taskinen@luukku.com

Leila Tuisku
Secretary
Metsähallitus/Natural Heritage Service
P.O. Box 8016
96101 Rovaniemi, Finland
leila.tuisku@metsa.fi

Seija Tuulentie
Senior Researcher
Finnish Forest Research Institute
P.O. Box 16
96101 Rovaniemi, Finland
seija.tuulentie@metla.fi

Liisa Tyrväinen
University of Helsinki
Department of Forest Ecology
P.O. Box 27
00014 Helsinki, Finland
liisa.tyrvainen@helsinki.fi

Liinu Törvi
Biologist
Lapland Regional Environment Centre
P.O. Box 8060
96101 Rovaniemi, Finland
liinu.torvi@ymparisto.fi

Local advisers:

Ari and Tuula Ruokojärvi, Ylläksen Viini and Willa,
Ylläs Wine and Wool

Sami and Marjut Tiensuu, Samin porotila,
Sami's Reindeer Farm

Documentation page

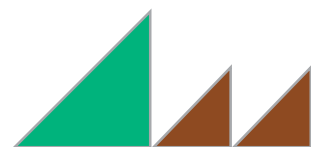
Publisher	Lapland Regional Environment centre	Date	October 2003
Author(s)	Stefanos Fotiou, Päivi Lundvall, Noora Salonen, Tuija Sievänen and Leena Suopajarvi (eds.)		
Title of publication	Sustainable ecotourism - Integration of conservation and usage in Natura 2000 areas Workshop in Ylläsjärvi, Finland		
Parts of publication/ other project publications			
Abstract	<p>During the last decades tourism has become one of the major sectors of economic activities world-wide. With this growth, the demand for the nature-based tourism is increasing and diversification of tourism products and destinations are taking place. The increasing pressure of nature-based tourism poses both prospects and threats. Within the EU the nature-based tourism destinations are usually sites belonging to Natura 2000 network. The Natura 2000 sites are also seen as an essential part of local environment and they have a great importance to the development of the area. The public attention stresses the demand for promoting dissemination and participation of local people in the topics concerning Natura 2000 areas. Therefore it is essential that all interest groups, participate in preparing the management plans of the Natura 2000 sites. As the aim of Natura 2000 was not to create “nature refugees” where all human activities are prohibited, the use of Natura 2000 areas must be adjusted on the level that gives mutual benefit for both nature and local people without risks of overuse.</p> <p>To focus the prospects and threats of Natura 2000 sites, The Central Lapland Life-nature project organized a three-day workshop. The aim was to form a multi-scientific consensus of the topic by gathering together the top scientists from both ecological and sociological branches and to change practical experiences between universities and governmental organizations. This publication includes the abstracts of the introductory lectures and results of the parallel workshops. The five working groups were a) Social impacts of ecotourism, b) Ecological sustainability in Natura 2000 areas, c) Participatory planning and ecotourism, d) Productisation of nature-based tourism activities and e) Preserving landscapes – combining conservation, tourism and forestry.</p>		
Keywords	Natura 2000 sites, Life -projects, ecological sustainability, ecotourism, social impacts, participatory planning, nature conservation, productisation, forestry, landscape, aapa mires, rural areas, development, Ylläsjärvi, Finland		
Publication series and number	The Finnish Environment		
Theme of publication	Nature and natural resources		
Project name and number, if any	Protection and usage of aapa mires with a rich avifaunaLIFE OONAT/FIN/007060		
Financier/ commissioner	Lapland Regional Environment Centre, Life Nature fund		
Project organization	Lapland Regional Environment Centre, Forest and Park Service		
	ISSN 1238-7312	ISBN 952-11-1500-9	
	No. of pages 80	Language English	
	Restrictions Public	Price 5 EUR (incl. VAT 8 %)	
For sale at/ distributor	Lapland Regional Environment Centre PL 8060, 96101 Rovaniemi tel. (016) 329 4111, fax (016) 310 340	Edita Publishing Oy, Myyntipalvelu PL 800, 00043 Edita tel. 020 450 05, fax 020 450 2380	
Financier of publication			
Printing place and year	Edita Prima Oy, Helsinki 2003		

Kuvailulehti

Julkaisija	Lapin ympäristökeskus	Julkaisu-aika Lokakuu 2003
Tekijä(t)	Stefanos Fotiou, Päivi Lundvall, Noora Salonen, Tuija Sievänen ja Leena Suopajarvi (toim)	
Julkaisun nimi	Sustainable ecotourism - Integration of conservation and usage in Natura 2000 areas Workshop in Ylläsjärvi, Finland (Kestävä luontomatkailu - suojelun ja käytön yhteensovittaminen Natura 2000 alueilla Workshop Ylläsjärvellä	
Julkaisun osat/ muut saman projektin tuottamat julkaisut Tiivistelmä	<p>Matkailu on maailmantaloudellisesti yksi merkittävimmistä kasvusektoreista. Kasvun myötä luontoon perustuvaan matkailuun kohdistuu erilaisia tavoitteita liittyen tuotteistamiseen ja markkinointiin. Tämä sisältää paitsi aluekehityksen kannalta huomattavia mahdollisuuksia myös uhkia luonnon kestävyydelle. EU:n alueella luontomatkailun kohteet kuuluvat usein myös Natura 2000 verkostoon. Paikallisesti Natura 2000 alueet koetaan oleellisena osana ihmisten elin-ympäristöä ja niillä on myös sosiaalisesti suuri merkitys. Näiden intressien vuoksi Natura 2000 alueiden hoito- ja käyttösuunnittelussa on huomioitava erityisen tarkasti kaikki sidosryhmät mukaan lukien paikalliset asukkaat. Natura 2000 verkoston luomisen yhteydessä korostettiin, ettei tavoitteena ole luoda täysin eristyksissä olevia suojelualueita. Sen sijaan alueiden hoito ja käyttö pyritään sovittamaan tasolle, jolla säilytetään sekä paikallisten ihmisten elinmahdollisuu-det että luonnonsuojeluarvot.</p> <p>Kartoittaakseen Natura 2000 alueisiin kohdistuvia mahdollisuuksia ja uhkia Keski-Lapin Life -luontohanke järjesti kolmipäiväisen työpajamuotoisen seminaarin. Seminaarin tavoitteena oli koota sekä metsä-, luonnon- että yhteiskuntatieteiden tutkijoita, ympäristöhallinnon virkamiehiä ja Life -hankkeiden vetäjiä pohtimaan yhteensovittamisen eri näkökulmia ja kertomaan omista kokemuksistaan. Tähän julkaisuun on koottu seminaarin teemaan johdatteiden esitelmien tiivistelmät ja viiden työryhmän tulokset. Viidessä työpajassa käsitellyt aiheet ovat: a) Luonto-matkailun sosiaaliset vaikutukset, b) Natura 2000 alueiden ekologinen kestävyys, c) Luonto-matkailu ja osallistava suunnittelu, d) Luontoon perustuvan matkailun tuotteistaminen ja e) Maisemien säilyttäminen - metsätalouden, matkailun ja suojelun yhdistäminen.</p>	
Asiasanat	Natura 2000 alueet, Life -projektit, ekologinen kestävyys, luontomatkailu, sosiaaliset vaikutukset, osallistava suunnittelu, luonnonsuojelu, tuotteistaminen, metsätalous, maisemat, aapasuo, maatalousalueet, aluekehitys, Ylläsjärvi, Finland	
Julkaisusarjan nimi ja numero	Suomen ympäristö 651	
Julkaisun teema	Luonto ja luonnonvarat	
Projektihankkeen nimi ja projektinumero	Keski-Lapin linnustollisesti arvokkaiden aapasoiden suojelu ja käyttö LIFEONAT/007060	
Rahoittaja/ toimeksiantaja	Lapin ympäristökeskus, EU:n LIFE Luonto -rahasto	
Projektiryhmään kuuluvat organisaatiot	Lapin ympäristökeskus, Metsähallitus	
	ISSN 1238-7312	ISBN 952-11-1500-9
	Sivu 80	Kieli Englanti
	Luottamuksellisuus Julkinen	Hinta 5 EUR (sis. alv. 8 %)
Julkaisun myynti/ jakaja	Lapin ympäristökeskus PL 8060, 96101 Rovaniemi puh. (016) 329 4111, fax (016) 310 340	Edita Publishing Oy PL 800, 00043 Edita puh. 020 450 05, fax 020 450 2380
Julkaisun kustantaja	Edita Prima Oy, Helsinki 2003	
Painopaikka ja -aika		

Sisdoallosiidu

Almmustahtti	Almmustahttináigi Golggotmánnu 2003	
	Lappi birasguovddáš	
Dahkki(t)	Stefanos Fotiou, Päivi Lundvall, Noora Salonen, Tuija Sievänen ja Leena Suopajärvi (doaimm)	
Prentosa namma	Bistevaš luondoturisma - suodjaleami ja geavaheami oktiiheiveheapmi Natura 2000 guovlluin Workshop Ylläsjärvis (Sustainable ecotourism - Integration of conservation and usage in Natura 2000 areas Workshop in Ylläsjärvi, Finland)	
Prentosa oasis / eará seammá prošeavtta prentosat		
Čeahkkáigeassu	<p>Turisma lea máilmmi ekonomijja dáfus okta dehaleamos šaddansektorain. Šaddama mielde lundui vuoddeaddji turismai čuhcet sierralágan ulbmilat guoskkadin buktagin ráhkadeami ja márkanastima. Dát sisttisdoallá earret guovloovdaneami dáfus mearkkašahhti vejolašvuođaid muhto maiddái áitagiid luonddu gierdamii. EU:a guovllus luondoturisma čuožahagat gullet dájvja maiddái Natura 2000 fierpmádahkii. Báikkálaččat Natura 2000 guovllut vásihuvvojit olbmuid eallinberrasa dehalaš oassin ja dain lea maiddái sosiálalaččat stuorra mearkkašupmi. Dáid intreassaid dihte Natura 2000 guovlluid dikšun- ja geavahanplánas galgá vuhtiiváldit erenomáš dárkilit buot čanasjoavkkuid, nu ahte fárus leat maiddái báikkálaš ássit. Natura 2000 fierpmádaga ráhkadeami oktavuodas deattuhuvvui, ahte ulbmilin ii leat dahkat ollásit sirrejuvvon suodjalanguovlluid. Go fas guovlluid dikšun- ja geavahanplána geahččaluvvo heivehuvvot dássái, mainna sealluhuvvojit sihke báikkálaš olbmuid eallinvejolašvuođat ja luondusuodjalarárvvut.</p> <p>Kártema várás Natura 2000 guovlluide čuoheci vejolašvuođaid ja áitagiid Gaska - Lappi Life -luondu fidnu ordnii golmmabeaivásaš bargobádjehápmásaš seminára. Seminára ulbmilin lei čohkket sihke vuode-, luonddu- ja servodatdiehtagiid dutkiid, birashálddahusa virgeolbmuid ja Life -fidnuid jodiheaddjiid guorahallat oktiiheiveheami sierra oainnuid ja muitalit iežaset vásihusain. Dán prentosii leat čohkkejuvvon seminára temái láidestan ovdaságaid čeahkkáigeasut ja viđa bargosjoavkku bohtosat. Viđa bargobájis giedahallon fáttat leat: a) Luondoturisma sosiálalaš váikkuhusat, b) Natura 2000 guovlluid ekologalaš giedilvuohta, c) Luondoturisma ja oassálasti plánen d) Lundui vuoddeaddji turisma buktagin ráhkadeapmi ja e) Duovdagiid sealluheapmi - meahccedoalu, turisma ja suodjaleami ovtasteapmi.</p>	
Guovddášáššit	Natura 2000, suodjalanguovlu, Life -prošeakta, ekologalaš giedilvuohta, luondoturisma, sosiálalaš váikkuhusat, oassálasti plánen, luondusuodjaleapmi, buktagin ráhkadeapmi, meahccedoallu, duovdda, dálanguovlu, guovloovdaneapmi, Ylläsjärvi, Suopma	
Prentosa namma ja nummir	Suoma biras 651	
Prentosa temá	Luondu ja luonduriggodagat	
Prošeaktabarggu namma ja nummir	Gaska-Lappi lottiid dáfus divrras áhpejekkiid suodjaleapmi ja geavaheapmi LIFEONAT/FIN/007060	
Ruhtadeaddji/ doaimmaaddi	Lappi birasguovddáš, EU:a ja LIFE Luondu -foanda	
Prošeaktajovkui gulleaš organisašuvnnat	Lappi birasguovddáš, Meahciráddehus	
	ISSN 1238-7312	ISBN 952-11-1500-9
	Siidut 80	Giella Eangalsgiella
	Luhtolašvuohta Almmolaš	Haddi 5 EUR
Prentosa vuovdin / juohkki	Lappi birasguovddáš PL 8060, 96101 ROAVVENJÁRGA telefon (016) 329 4111, fákša (016) 310 340	Edita Publishing Oy PL 800, 00043 Editä telefon 020 450 05, fákša 020 450 2380
Prentosa goasttedeadji		
Prentenbáiki ja áigi	Edita Prima Oy, Helsinki 2003	



NATURE AND NATURAL RESOURCES

Sustainable ecotourism - Integration of conservation and usage in Natura 2000 areas

Workshop in Ylläsjärvi, Finland

During the last decades, tourism has become one of the major sectors of economic activities worldwide. With this growth, the demand for nature-based tourism is increasing and diversification of tourism products and destinations are taking place. The increasing pressure of nature-based tourism poses both prospects and threats. In particular, this is an urgent problem in the rural areas of the European Union where Natura 2000 sites can be seen as a resource for local people.

To find tools for handling the subject, Lapland Regional Environment Centre organized an international workshop "Sustainable Ecotourism – Integration of Conservation and Usage in Natura 2000 Areas" which was held in Ylläsjärvi, Finland, on 18th–20th of September 2002. The workshop was organized as a part of the LIFE Nature Project 'Protection and usage of Aapa mires with a rich avifauna'. The aim was to form a multi-scientific consensus on the topic by gathering together top scientists from both ecological and sociological branches and to exchange practical experiences with universities and governmental organisations from different EU member states. This volume includes abstracts of the introductory lectures and results of the parallel workshops.

Keski-Lapin linnustollisesti arvokkaiden aapasoiden suojelu ja käyttö



LAPLAND REGIONAL
ENVIRONMENT CENTRE

Protection and usage of aapa mires with a rich avifauna

ISBN 952-11-1500-9

ISSN 1238-7312

Sale of publications:
Lapland Regional Environment centre
FIN-96101 Rovaniemi, Finland
P.O.Box 8060
Phone +358 16 329 4111,
fax +358 16 310 340

Edita Publishing Oy
P.O.Box 800
FIN-00043 Editra, Finland
Phone +358 20 450 05,
fax +358 20 450 2380

