



# Forest & Nature in Northwest Russia

## FINNISH-RUSSIAN DEVELOPMENT PROGRAMME ON SUSTAINABLE FOREST MANAGEMENT AND CONSERVATION OF BIOLOGICAL DIVERSITY IN NORTHWEST RUSSIA

Second Phase (NWRDP II) for 2001-2004

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# Foreword

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After the completion of the first phase of the Finnish-Russian Development Programme on Sustainable Forest Management and Conservation of Biological Diversity in Northwest Russia (NWRDP) in 1997–2000, the Programme has entered its second phase for the years 2001-2004.

The cooperation has already produced noticeable progress in the fields of sustainable forest management and nature conservation in Northwest Russia. A lot of knowledge, information and experience has been gained and exchanged during these years through committed joined project work. The first phase created a good and challenging base for future cooperation.

In this bulletin we would like to give you a short review on the current nature protection and forestry projects of the NWRDP and briefly present international and multilateral cooperation, in which the Programme is involved.

In comparison with the previous 6 bulletins, the exception now is that we have given up the paper version and launched an electronic bulletin. We hope that this will suit and please our old readers and bring as well new ones thanks to the vast possibilities of the Internet.

The cooperation during these years has been going on – though, of course, not totally without problems. Due to the May 2000 major changes in the Russian forestry and nature conservation administration, the State Committee on Environmental Protection and Forest Service of the Russian Federation was dissolved and joined under one roof of the Ministry of Natural Resources. In addition, a new administration structure on a regional level, the Department of Natural Resources in the Northwest Russia, was established in St. Petersburg, and now also the Department has its own role in the cooperation.

Despite the changes in administration, the work has been and is going on. One of the important reasons for this and a helping factor here have been good personal contacts.

One of the main objectives of the Programme for the second phase is to increase international cooperation. Many stakeholders and countries are concerned about the status of the enormous forest resources in NW Russia concern. It should be our aim to help Russia to conserve its valuable nature, to apply alternative sustainable ways in using its forests and to develop the forestry practices towards increased economical, ecological, and social sustainability.

*Riitta Hemmi, Erna Lahti and Tatu Torniainen*

# Presentation of the NWRDP, Phase II



## **Forest resources in Northwest Russia – ecological and economic role**

Russian boreal forests constitute about 60 percent of the world's total boreal forest area. Over 80 percent of the Northwest Russia is covered by the boreal forest zone – taiga and sub-taiga forests. Therefore Russia's decisions concerning forestry and nature conservation are important for the future of the whole northern coniferous zone.

During the last years (1997-2000), a significant part of co-operation between Finland and Russia in the field of sustainable forestry and nature conservation has been organized in the framework of the Finnish-Russian Development Programme on Sustainable Forest Management and Conservation of Biological Diversity in Northwest Russia (NWRDP). The Programme covers both forestry and biodiversity issues. From the beginning of 2001, the Programme has entered the second phase for the years 2001–2004.

## **Objectives of the Programme**

The existence of internationally credible nature conservation areas' network and environmentally sound forestry practices form prerequisites for sustainable future of forestry in the whole world. The main aim of this Programme is to contribute to a balanced development of the forestry sector as well as encourage conservation of biodiversity in NW Russia.

One of the objectives of this bilateral co-operation is also to facilitate and promote international dialogue on needs and possibilities for sustainable forestry and nature protection in NW Russia. Cooperation naturally includes a comprehensive examination of issues related to cultural heritage, economic and social questions.

## **International commitments**

The Finnish-Russian co-operation is closely linked to the international initiatives and agreements concerning sustainable forest management and conservation of biodiversity, namely the United Nations Conference on Environment and Development (UNCED), Rio de Janeiro 1992 and the Ministerial Conference on the Protection of Forests in Europe, Helsinki 1993.

The Second Phase of the Programme will be co-ordinated with, and contribute to the Forest Sector Programme for the European Union Northern Dimension, which is elaborated in the framework of the Barents Euro-Arctic Council. In future, the direction of international co-operation will undoubtedly be towards strengthening a multi-partner approach, especially between the European Union and Russia. Also development of joint projects between the Nordic countries and Northwest Russia will be intensified.

## **Organisational structure**

Programme management structure consists of three levels:

- I Supervisory board,
- II Steering committees, and
- III Co-ordination of projects.

On the Finnish side the Programme is a joint venture of the Ministry of the Environment, the Ministry of Agriculture and Forestry, and the Ministry for Foreign Affairs. The Russian partner ministries are the Ministry of Natural Resources and the Ministry of Foreign Affairs.

In Finland the project co-ordination is carried out by the Finnish Environment Institute (biodiversity projects) and the Ministry of Agriculture and Forestry (forestry projects). On the Russian side the Committees of Natural Resources of the Regions and the Department of Natural Resources of the Northwest Russia Federal District act as partners. On the practical level in the co-operation take part many different actors, for example scientific and training institutions, forest organisations, etc.

## **Financing**

The Finnish contribution for the Programme implementation is financed from an assigned national source responsible for co-operation with neighbouring areas and co-ordinated by the Ministry for Foreign Affairs. In addition to the Finnish financing, Russian local, regional and federal funding are allocated to joint project activities.

In 2001 the total funding for the Programme was about 1 060 000 EURO.

## **Activities under NWRDP**

Jointly implemented development projects are the main form of the co-operation. Working in close co-operation the Finnish and Russian participants are equally responsible for project identification, preparation and implementation.

Joint projects are carried out in four regions of NW Russia: Karelian Republic, Leningrad, Murmansk, and Arkangelsk regions. In addition to these, there are forestry projects implemented also in Komi Republic and Novgorod region, and biodiversity projects in Vologda region.

Since 1997, during NWRDP Phase I, altogether 23 forestry and 18 biodiversity projects have been carried out in the framework of the Programme.

In the field of forestry the focus of co-operation has been on forest management practices, forest planning and information systems, forest certification and bio-energy. A lot of emphasis has been put on implementing and testing the model forest concept in the conditions of Northwest Russia. Regardless the project theme, research based development, as well as training have been cross-cutting elements in all co-operation.

Forestry projects started in 2001:

1. Development of education and training methods for the environmentally and ecologically sustainable utilisation of natural resources in the Leningrad region – Supplementary Project (estimated completion 2002).
2. Development of forest management in Northwest Russia (2003).
3. Development of training need assessment in Northwest Russia (2002).
4. Modelling and assessment of forest resources, their future use and economic accessibility in Northwest Russia (2002).
5. Improving the communication methods and practices in the forest sector of the Republic of Karelia (2002).
6. Development of forest certification in Russia (2001).
7. Finnish-Russian Working Group on Forest Certification (2001).

research of valuable nature objects and areas. Besides, examination of endangered species and contribution to their protection, as well as support for publication of regional Red Data Books on nature protected areas, endangered animals, plants and fungi have been central to these activities. Conducted projects have produced a considerable amount of valuable information about the nature, the state of nature and its need for protection in each different region.

Biodiversity projects started in 2001:

1. Renovation of Nature Information Centre for the planned National Park “Ladozhkie Shery“ in Sortavala, Karelian Republic (estimated completion 2002).
2. Study of the forest structure, past and present disturbance dynamics of biodiversity in a natural forest landscape in Paanajärvi, Karelian Republic (2001).
3. Publications of biodiversity inventories in the Republic of Karelia (2002).
4. Inventories of natural, cultural and landscape values of the “Great Andom“ watershed on the border area of Vologda, Arkangelsk regions and Karelian Republic, and the “Kirillov“ esker in the Vologda region (2002).
5. Publication of the Red Data Book of Vologda region (plants and fungi) (2002).
6. Official authorized approval of four proposed protected areas (Ozera Vuoksa, Termolovskij, Myllysaari, Reka Velichka) in Leningrad region (2001).
7. Establishment plans and studies for two proposed nature protected areas (Dolina reki Smorodinki, Prinevski) in Leningrad region (2001).
8. Comprehensive study of the existing 12 nature protected areas in Leningrad region (2001).
9. Starting phase of representativeness analyses of the protection areas network (Gap-analyses) in Leningrad, Murmansk, Arkangelsk and Vologda regions, and the Republic of Karelia (2001).

#### **More information:**

Biodiversity projects: <http://www.vyh.fi/kvasiat/lahialue/venmetsa/venmetsa.htm>

Forestry projects: <http://www.mmm.fi/english/forestry/nwrpd/default.htm>

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# 1. Nature protection projects

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## 1.1 Good news for the Onezhskoye Pomorye National Park



The Onega Peninsular is located in the northern part of the Arkhangelsk Region, almost in the center of the White Sea. The peninsular extends over 150 km into the sea. The peninsular can be divided in the Southern and Northern sections by an imaginary line drawn between the Ukhta Bay of the Onega Gulf and the Unskaya Bay of the Dvina Gulf. The National Park under the name “Onezhskoye Pomorye” (Onega coastline) is projected in the Northern section of the peninsular.

The landscape structure in the area changes from 1-2 metres above the sea level at the coast to 200 metres 10 km inside the peninsular at the Onega morainic ridge. The hills and ridges lie side by side with slumpy lowlands and lake bolsons. Sand-dunes are usual along the shores. Abundant water areas, including the sea, 2 135 lakes and 165 rivers, make the northern landscapes particularly impressive.

The only virgin boreal forest of sea coastal location to be found presently in Europe is situated here. The forest is quite a representative natural habitat of northern taiga, unique by its size and preservation features. Being in the midst of the White sea area, the Onega Peninsular with its forests plays a significant role as a major environmental component of the whole White sea region.

### **Rich biodiversity of flora and fauna**

The Onega Peninsular and its sea area sustain a high degree of biodiversity. The flora of the peninsular includes 500 proven vascular plant species under 246 classes of 78 familiae. At least five species are included in the Russian Red Book of Conservation and fourteen species - in the Arkhangelsk Regional Red Book.

The fauna of terrestrial vertebrates is represented by three amphibian, three reptile and 36 mammal species. There are at least 169 bird species, of which 20 birds are included in various Red Books of Conservation. The Onega Peninsula is a major migration hub for the birds in the Northern hemisphere.

The fish species are equally abundant. The rivers contain 23 species, 30 species of fish can be found in the lakes. There are 68 sea species. Major commercial fish species are herring and navaga with a 95 percent share of the total catch in the Onega and Dvina Gulfs. The bays of the peninsular are the breeding sites of herring and navaga.

Ten species of sea mammals live in the coastal waters, including ringed seal, sea hare, etc. White whales are usual here in summer. The benthos algae include 159 species in the coastal waters (36 green, 67 brown and 56 red algae species).

## **Rich in cultural heritage**

The Onega Peninsular has preserved the most concentrated and rich heritage of the Russian Pomor culture. At least seventeen archaeological monuments have been discovered here and are awaiting their scholars and researchers.

Old tent roof churches can be found here, e.g. The St. Nicholas Church from 1618 in the village of Purnema. The dwellings and household structures, fishery houses, barns, saunas, wooden bridges, etc. are of great architectural interest. All the villages of the area are of considerable cultural value, having preserved best in the whole Pomorye the elements of traditional livelihoods, ways of life, folklore dating back many centuries. Well-preserved place names are also a part of the rich cultural heritage.

The characteristic feature of this area is a traditional livelihood of the local population based exclusively on the traditional use of renewable biological resources.

## **Plans for a national park**

The Onezhskoye Pomorye National Park of 500 thousand ha has been designed and proposed within the Development programme of the Arkhangelsk protected area network for 1996-2005 with an aim to preserve the unique and diverse natural and cultural heritage of the White Sea coastal Russia.

An International environmental expedition visited the area in summer 1997. This large group of researchers and experts from Russia, Finland, Sweden and Germany carried out a survey of the peninsular and recommended that a national park be set up in the area. The recommendation made a statement of necessity to develop a synergy between the need for conservation of the natural and cultural values and the development of sustainable forestry and industry in the region.

## **Difficulties on the way**

The national park development efforts were complicated by the situation, when by the outset of the planning activities almost all the forests of the area had been already leased to forest developers for commercial felling. The loggers stations were set up in the central part of the peninsular, the timber transport roads built and the forest sector developed a strongly negative attitude towards the national park project.

Against this background, with the cooperation and financial support of Finland, an initial planning and designing stage commenced in 1999 aimed to produce feasibility study for the National Park. The feasibility study made the utmost to include the interests of the forest sector and provide a win-win solution for the issues of contradiction. The study made a proposal to reduce the National Park area from 500 to 300 thousand ha.

Such approach had major environmental drawbacks, being unable to secure the ecosystems of the Park from the impact of the commercial activities in the adjacent areas. Thus, additional conservation arrangements were to be designed to compensate for the impact of ongoing forestry development. However, the forestry industry was not happy even with this solution.

The national park development efforts stumbled at this conflict. Unfortunately, the forest industry was supported by the local administration of the Onega District and by the Regional Administration of Arkhangelsk.

## **New understanding and new possibilities**

A new understanding for the National Park had to be found in the course of long negotiations with the nature protection authorities, designers, research and environmental organizations, on the one hand, and the forest sector, the local and regional governments, on the other. The official decision to restart the National Park design and planning in 2002 was passed by the Coordination Council for Environmental Protection under the Regional Administration of Arkhangelsk held on 20 December 2001.

The Onezhskoye Pomorye National Park was supported by the Russian Federal Government, too (Ruling No. 725-R by the Government of the Russian Federation of May 23, 2001).

This altogether provides good possibility that the National Park would be launched in the nearest future.

The existing protected areas network in Russia and the countries of the Barents Euro-Arctic area does not presently include any other park or protected area, which would have a combination of the typical continental, boreal, coastal, sub-aquatic and aquatic landscapes together with the traditional cultural heritage of the sea coastal dwellers. The projected National Park “Onezhskoye Pomorye“ will provide such combination. The National Park will undoubtedly have international significance and universal value.

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## 1.2 National parks under development in Karelia



Tacis project “Karelia Parks Development” was working with national parks in Karelia in 1999-2001. The main objectives were to promote establishment of four new national parks and develop further the Paanajärvi National Park, which was founded in 1992.

The new, proposed national parks are the Kalevala NP (96 000 ha), Tuulos NP (62 000 ha), Koitajoki-Tolvajärvi NP (77 000 ha) and Ladoga Skerries NP (84 000 ha). All of these are located in the western part of the Karelian Republic, close to the Finnish border and they have already been included in a National park development programme by the Russian Federation.

The project was run by the Metsähallitus Consulting together with Finnish Environment Institute, Indufor and Kampsax International. The project office was situated in Petrozavodsk. The main part of the work was done by Russian experts, altogether 27 Russians and a smaller number of foreign experts were involved in the work. The project produced eight reports in Russian and English, coloured leaflets, posters and postcards of each territory. In addition, a cd-rom in three languages was prepared on the Paanajärvi NP. A Geographical Information System was created for each of the five parks.

Some eco-tourism activities in all these territories have already started. In the long run, the parks are very attractive especially for tourists from Finland and the big cities of Saint Petersburg and Moscow. Tourism development prospects are among the reasons for a positive attitude towards the parks among local administrations. The remote villages in Karelia need livelihoods and activities as an alternative for fairly heavy forestry. The project produced a report entitled “Tourism Strategy for the Karelian Green Belt“, where current tourism is analysed and new proposals are made. The impact of the new parks was studied in a “Socio-economic Assessment of New National Parks for Karelia“.

Proposals for the establishment of each new national park were prepared by the project, including a Feasibility Study, a Development Plan and an Five year Action Plan. This model is following the Russian system and could hopefully offer all the material, which is needed for the Karelian Republic to forward the proposal to the Federal Government. At the moment, the Kalevala National Park seems to be closest to establishment, due to the decision by the Federal Government in March 2001 on the highest priority list of new national parks.

### **Kalevala National Park the most urgent one**

Protection of the Kalevala territory is most urgent, because it is the only one of the proposed parks with a great amount of timber within its borders. The local administrations of Kostomuksha and Louhi districts have approved the proposal made by the project. It was also presented in several public meetings in villages and got clear support of local people. Now it is up to the Karelian Government to ask for statements about the proposal and then to prepare its own proposal to the Federal Government.

The archipelago in the northern part of Lake Ladoga has the highest biodiversity in the whole republic. Protection of the islands and a broad strip of the continental shoreline is widely supported by the three local administrations of Sortavala, Pitkäranta and Lahdepohja as well as the republican and federal structures. Unfortunately, this national park could not be included in the federal list this time due to some small disagreements within the administration.

All new park territories have had a temporary protection, which will end by the end of this year. As for Kalevala, it might be clear, that cuttings or other activities are not threatening its nature before the park

establishment. The new Russian administration of natural resources will hopefully show its capacity in nature conservation by fulfilling fairly soon the decision of the Federal Government.

The whole proposed park in Ladoga is covered by the so-called first category forests, which are protected as they are situated within one kilometre from the shoreline. The local administrations there seem to actively protect the park territory against construction of summer cottages by people from Saint Petersburg. At the moment this is a serious threat elsewhere for shores and islands of Ladoga.

### **Action is needed**

Establishment of all four new national parks still needs domestic and international support. Especially, the future of Koitajoki-Tolvajärvi and Tuulos territories is open. The nature conservation status on these territories should be strengthened, so that later on a national park or nature park could be set up there. On the local level, Municipal Units of each proposed park were established together with the local administrations. All of them have now at least some personnel. The Tacis project purchased for cars, boats, snowmobiles and other brand new equipment needed for the park management. During the project, altogether 37 training courses, seminars and conferences were organised for the people working with nature conservation and parks in Karelia.

The Paanajärvi National Park has been favourably developed during the last few years. Nature tourism is growing slowly as the park is setting up visitor services. A new Visitor Centre is under construction in the settlement of Pyaozersky, about 50 km from the National Park. The exhibition plan for the VC was produced in the Tacis project. Most probably, it will be opened for visitors in 2002, when the park reaches the age of ten years.

*The reports of the project, printed in English and Russian: Management Plans of the four new parks, Tourism Strategy of the Green Belt, Development Plan for the Paanajärvi National Park, Socio-economic Assessment for New National Parks in Karelia and Ecotourism on the Way to Russia, can be ordered from Metsähallitus Consulting ([knowhow@metsa.fi](mailto:knowhow@metsa.fi)). Leaflets of the parks in English, Russia or Finnish and the cd-rom of the Paanajärvi National Park can be ordered from the Customer Service Point Karhuntassu in Kuusamo [karhuntassu@metsa.fi](mailto:karhuntassu@metsa.fi)*

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## 1.3 Nature protected areas network in the Karelian Isthmus: current status and future development



The Karelian Isthmus has a highly interesting landscape and history, being located at the south-eastern rim of the Baltic crystalline shield. The Isthmus covers 1 439 340 ha outside the urban area (Leningrad administrative Region: 1 397 420 ha and St. Petersburg municipal area: 41 920 ha).

As it lies between two large water bodies of Europe – Lake Ladoga and the Gulf of Finland, the Karelian Isthmus is of major conservation importance, being a factor of environmental balance for a huge region. However, the nature of the Karelian Isthmus is vulnerable due to the proximity of a 5 million urban conglomerate of St. Petersburg. Timber and other resources of the area are easily accessible and economically feasible to develop. Thus, conservation efforts by means of introducing a protected areas network become the most efficient and viable option.

### Initiatives for the network development

The process to establish such network in the area started in 1976. Decision No. 145 of the Regional Administration provided for development of six nature preserves and four nature sanctuaries in the Karelian Isthmus. In 1980's an attempt was made to create a National Park in the central section of the Isthmus, but the project could not be implemented then. The Integrated nature conservation scheme of the Leningrad Region proposed in 1989 included eleven new regional preserves and nature sanctuaries within the limits of the Karelian Isthmus. In the urban area of St. Petersburg, the Yuntolovsky preserve and The Komarovskiy Coast sanctuary were created in 1990 and 1992 thanks to the efforts by the Institute of Biology. Starting from 1997, the Leningrad Regional Government has allocated resources from the Environmental Fund for the development and design of four nature protected areas. Three of the territories: Motornoye-Zaostrovye, Orekhovskiy and Primorskoy Coast have already been incorporated in the Integrated conservation scheme, while the Prigranichny nature preserve has been proposed within the framework of the projected international network «Eastern Gulf of Finland».

The Finnish-Russian cooperation has been very significant for the development of the nature protection network in the Karelian Isthmus. Since 1998, the First and Second stages of the joint Development Programme on Sustainable Forest Management and Conservation of Biodiversity in Northwest Russia included ten protected areas under development by the Institute of Biology. Five of these territories (Kuznechnoye, Nizovskoye Bog, Termolovskiy, Prinevskiy and Smorodina) have been incorporated in the Integrated conservation scheme of the Leningrad Region. In 1998-99 the joint discussions by the Russian and Finnish experts produced an initiative to create five new territories (Anisimovo Lakes, Karelian Forest, Myllysaari, Vuoksa Lake, Velichka River). Additionally, three existing nature sanctuaries of local category (Gontovoye mire, Kokorevskiy and Lazarevskoye mire) will be upgraded to form two integrated nature preserves of regional category (Kokorevskiy and Morye).

### The network will broaden

The regional protected areas network of the Karelian Isthmus is currently represented by ten nature preserves (Berezovoye Islands, Lammin Suo Bog, Ozernoye mire, Vyborgskiy, Gladyshevskiy, Väärämäenselkä Ridge, Lindulovskaya Grove, Lake Melkovodnoye, Rakovoye Lakes, Yuntolovskiy) and four nature sanctuaries (Komarovskiy Coast, Lake Krasnoye, Lake Yastrebinoye, Gustoy Island). Eleven new preserves (Orekhovskiy, Prigranichny, Karelian Forest, Kuznechnoye, Nizovskoye Bog,

Termolovsky, Lake Vuoksa, Smorodinovski river valley, Prinevsky, Kokorevsky and Morye), four nature sanctuaries (Primorsky Coast, Anisimovo Lakes, Myllysaari and Velichka River) and one dendrological park (Otradnoye) are under planning.

Thus, the regional network of the Karelian Isthmus will include 21 nature preserves, 8 sanctuaries and one dendrological park in the course of 2-3 years.

The existing protected areas in the Karelian Isthmus cover 51 937 ha (without 53 990 ha of the water area under the Federal jurisdiction), including 3 580 ha of water and 48 357 ha of land, which amounts to three percent of the total area of the Isthmus. Upon introduction of the 14 projected reserves, their total area will increase by 49 418 ha (without 2 442 ha of the federal water area), including 4 553 ha of water and 44 865 ha of land. The protected areas network will then comprise 3,4 percent of the total area of the Karelian Isthmus.

Further development plans include additional 20 825 ha (1,4 percent of the Isthmus area). Altogether the projected and proposed system of nature protection areas in the Karelian Isthmus would cover 8,5 percent of the total area, which basically corresponds to the international standards of conservation. To manage this system a new Directorate of nature protected areas is being created under the Leningrad Regional Department of nature management and environmental security.

The network would incorporate all major ecosystem types that require enhanced protection, including old growth mid-taiga and southern taiga boreal forests, raised bogs and mesotrophic mires, upper and influx river sections, coastal and island areas in the Lake Ladoga and the Gulf of Finland, inner lakes, rare fauna and flora habitats of the Red Book of endangered species of Leningrad, migration routes and places of reproduction, as well as ecosystems in the intermediate relief types of terrain. This composition will ensure conservation of sustainable biodiversity and major types of model landscapes.

### **Problems to resolve**

The unresolved problem while getting approvals on the protected areas network consists in the conflict between the conservation targets and the interests of other agencies (e.g. forest leasing, corporate and private use of hunting sites, mineral resources). The recreational housing developers are trying to erect major obstacles, too. Thus, the territory and the layout of the new protected areas are often dependent on the balance of power and influence rather than on the environmental concerns or natural feasibility.

International response to the conservation projects and the positive image created by the mass media have a great impact of the environmental posture taken by the authorities of the Leningrad Region. The publication of the Red Book of Leningrad produced within the Finnish-Russian Development Programme on Sustainable Forest Management and Conservation of Biodiversity in Northwest Russia has been particularly instrumental in promoting the enlargement of the protected areas network. The first volume of the total three of the Red Book is dedicated to the development of nature protected areas in the Karelian Isthmus, as one of the most beautiful and vulnerable pieces of nature in the Leningrad Region.

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## 1.4 National Nature Reserve «Ingermanlandsky» - background and development prospects



The idea to create a nature reserve in the eastern part of the Gulf of Finland dates back almost a century ago. The prominent Russian natural scientists from St. Petersburg – Borodin, Komarov, Fedchenko, professor A.P. Semenov-Tyan-Shansky and professor V.P. Semenov-Tyan-Shansky were among the first to bring forward this idea. Unfortunately, due to the complicated military, political and economic situation in the Baltic region and in general, the project could not be implemented at that time.

The current development of nature reserve network in the Gulf of Finland began more than fifteen years ago. The Finnish environmental scientists showed a great interest towards a possible nature reserve in the border area with Russia. A National Park on the northern coast of the Gulf was discussed by the Finnish minister of Environment Mr K. Bärlund and the Head of the Russian State Committee for Nature Protection Mr N. Vorontsov in autumn 1990. The National Park proposed in the Russian territory should later be incorporated with the Finnish National Park «Eastern Gulf of Finland» created in 1982.

In 1992, on the basis of the decision by the Russian Ministry of Environment, the National Nature Protection research institute (VNII Prirody) offered to the Research Institute of Biology an option for joint development of a project proposal aimed to create a nature reserve area at the northern coast and archipelago of the Gulf of Finland close to the Finnish border. A project R&D group was formed of the ecologists from the Institute of Biology of the University of St. Petersburg, Institute of Zoology and Institute of Botany of the Russian Academy of Sciences and other research institutions of St. Petersburg. The group headed by Mr G. Noskov started field research in the archipelago. The research activities were financed by the Regional Committee of Environment within the framework programme «Development of the Russian-Finnish island nature reserve». Major research was conducted by integrated multi-purpose field missions in 1992-95 headed by professor D. Osipov, director of the Institute of Biology. The field missions visited the following islands: Seskar archipelago, Kokor, Malyi, Gogland, Bolshoy Tyuters, Malyi Tyuters, Severnyi and Yuzhnyi Virginy, Nerva, Sommers, Kozlinskiy, Malyi Kozlyonok, Kopytin, Zubets, Dolgy Rif, Bolshoy Fiskar archipelago, Dolgyi Kamen, Krutoyar, Otradny, and many smaller islands.

**The field research showed that a network of special protected areas of various conservation types would be feasible, including:**

1. National nature reserve «Ingermanlandsky» of cluster type covering the islands,
2. Integrated regional preserve «Prigranichny» covering the northern coast,
3. Integrated regional preserve «Kurgalsky» covering the Kurgolovsky peninsula.

This approach was discussed at the Finnish-Russian workshop «Nature reserves development and nature conservation» held in Kuhmo, Finland in October 1993. The proposed reserve structure was supported in October 1994 by the Ministry of Nature Management and Environmental Security of the Regional government of Leningrad. The Fifth Russian-Finnish workshop approved the proposal at its meeting in St. Petersburg on October 31, 1994. The Regional Ministry gave a go ahead to the Institute of Biology to finalize the project in 1995-96 within the programme «Nature reserve network development in the Eastern Gulf of Finland». This work was financed by the Non-budgetary Environmental Fund of the Leningrad Region.

The effort has so far produced the following outcome: Regional integrated preserve «Kurgalsky» was created in 2000. The project proposal was finalized and approved, the state environmental appraisal and the official decision were made for the Regional integrated preserve «Prigranichny». The decision was taken by the Regional Government of Leningrad to create the «Ingermanlandsky» nature reserve. The National reserve «Ingermanlandsky» was incorporated into the Federal list of projected national reserves and parks of the Russian Federation for 2001-2010 officially approved by Decision No. 725-R of the Russian Government of 23 May 2001. The draft Governmental decree on «Ingermanlandsky» has been approved by most stakeholders at the Federal level. This project has so far been the only one in the Federal list to receive positive results from the Federal Environmental appraisal procedure.

The reserve will consist of nine separate areas located in the central Gulf of Finland on the following islands: Dolgyi Kamen, Kopytin, Bolshoy Fiskar, Skala Hally, Virginy, Malyy Tyuters, Bolshoy Tyuters, Skala Vigrund, Seskar.

This project is mainly designed to provide for conservation of the natural habitats of the eastern Baltic coastal area, to preserve biodiversity and rare species in the region, which is being under growing pressure induced by the development of new oil and coal transport terminals. Being situated close to the border areas, the project requires integrated and coordinated approach with foreign environmental authorities in all fields of activity. However, the need for international cooperation is most acute while implementing scientific research.

**The following guidelines are proposed for further research efforts in the reserve:**

1. Inventory of flora and fauna species to produce fully annotated list of species.
  - 1.1. Distribution of rare vascular plant species.
  - 1.2. Composition of algae, lichen and mushroom species.
  - 1.3. Comprehensive list of mammal species.
  - 1.4. Comprehensive list of the nesting bird species.
  - 1.5. Comprehensive list of amphibian and reptile species of the islands.
  - 1.6. List of water and ground borne invertebrate and insect species.
  
2. Ecosystem status research.
  - 2.2. Hydrobiological littoral description.
  - 2.3. Heliad description and monitoring.
  - 2.3. Forest status monitoring. Transborder pollution impact assessment for forest ecosystems.
  - 2.4. Soil origin and current status.
  - 2.5. Large scale geobotanic mapping.
  - 2.6. Quantity and distribution of species in waterfowl colonies.
  
3. Species specific research.
  - 3.1. Conservation measures and ecology of rare nesting species (e.g. Gray goose, Barnacle goose, Scoter, Sheldrake, Lesser black-headed gull, Caspian tern, Little tern, Razorbill, Black guillemot, etc.).
  - 3.2. Seal population, ecology, seasonal changes and distribution.
  - 3.3. Species distribution and biotope distribution of bats.
  - 3.4. Area distribution and quantity of European cormorant.

#### 4. Bird migration research.

##### 4.1. Waterfowl species, quantity and sites.

##### 4.2. Species, quantity and routes of the birds of passage.

The research can be carried out by experts from a variety of Russian research institutions, e.g. Institute of Biology and other departments of the University of Saint Petersburg, Institute of Biology and Institute of Zoology of the Russian Academy of Sciences, the St. Petersburg-based Institute for Space and Airborne Geology Research, as well as experts from Finland and other Nordic and Baltic countries.

Successful research effort at the initial stage is not possible without financial support within the framework of the Federal and Regional development programmes. The applications for such financing have been already filed by the Institute of Biology.

The «Ingermanlandsky» nature reserve has an enormous potential for recreation and environmental education. Being located in the border area of Finland and Russia, it provides good opportunities for international ecotourism. The nature reserve will open the islands and the adjacent areas of the Gulf of Finland for public visits. It will also have a direct impact on the prospects to create the regional preserves «Prigranichny» and «Kurgalsky» and a nature protected area at Gogland.

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*State University of St. Petersburg, Research Institute of Biology*

## 2. Forestry projects

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### 2.1 Landscape Ecological Planning of Forestry on the Karelian Isthmus



The Project started in January 1999 with the objective of developing a new approach to ensure economically viable, socially acceptable and ecologically sustainable management of forest resources on the Karelian Isthmus. The purpose of the project was to prepare an integrated land use and forestry plan and to develop new methods for planning, managing and monitoring the use of forest resources at the management unit (leskhoz, lesnichestvo) level as well as to increase the capacity of local personnel to adopt and further develop these new methods.

The Project was implemented as a joint effort of Finnish and Russian forestry organisations. Metsähallitus Consulting was the main co-ordinator of the work assisted by its Russian counterpart, the former Forest Committee of Leningrad Region being in charge for the monitoring of the allocation of Russian resources. Other implementing organisations were the Forestry Development Centre Tapio from Finland and the Northwest State Forest Inventory and Management Planning Enterprise and the St.Petersburg Forest Research Institute from Russia. Experts from the Finnish Forest Research Institute participated in the work.

The main achievements of the Project were the preparation of long term scenarios for forestry on the Karelian Isthmus and landscape ecological forest management plans for two model areas (~50 000 ha) as well as the increased capacity of local staff to further develop and adopt the new methods, which were introduced. Based on the objectives, the work was divided into three components (1) Isthmus level forest management and land use planning, (2) demonstration of modern forest management at operational unit level and (3) human capacity development. The results of the Project by components are as follows:

#### **Component 1: Isthmus level forest management and land use planning**

- opportunities to develop the multipurpose use of Isthmus forests
- regional criteria and indicators (C&I) for sustainable management of Isthmus forests
- analysis of existing nature protection areas network and recommendations for its development
- long term scenarios for the development of forest resources on the Karelian Isthmus employing developed mathematical models, which allow forecasts on the basis of the forms of alternative types of use
- Isthmus level thematic maps and GIS

#### **Component 2: Modern forest management at operational unit level**

- ecological inventory of and landscape ecological forest management plans for the two model areas (methods and plans approved and enforced by Russian authorities)
- modern technology for planning, managing and monitoring the use of local forest resources, which enables continuous updating of system data

- GIS hardware and software developed to analyse forestry and ecological data
- analytic tools (thematic maps, reports, etc) developed to assist decision makers
- methodology for landscape classification worked out and tested
- criteria and indicators (C&I) for operational unit level practical forestry activities developed

### **Component 3: Human capacity development**

- task related training for project staff organised and implemented both in Finland and Russia
- principles of participatory planning of forest management introduced and training material produced and distributed
- adult training of professional staff facilitated and programme worked out, as well as implementation of the training programme started
- training material (video, brochures, booklets, field training track) developed and produced as well as distributed
- trainers trained to further distribute the know-how in landscape ecological planning of forestry in Russia

The results achieved by the Project received appreciation from different stakeholders of the forest and environment sector (Federal level forestry organisations, World Bank, WWF, forest industry). The participatory approach applied in the Project facilitated the close involvement of various institutions (universities, ecological committees, local administration, WWF, etc.) as well as the local people (forest renters, local inhabitants) and was well received by local parties. The latest public meetings in the model territories and the final seminar of the Project were held in June 2001 in Vyborg, Roschino and St.Petersburg. The experience gained under the Project is expected to further benefit the participating parties.

*Zoltan Kosy*  
*Metsähallitus (Finnish Forest and Park Service)*

## 2.2 Sustainable Forest Management in the Kargopol District of the Arkhangelsk Region: Review of the Finnish Project Coordinator on the gained experience



### General:

The Kargopol Forest Project focused on strategic planning of forestry and utilisation of natural resources. The project consisted of seven components and it was implemented during 1999-2001. The project was financed by the Ministry of Agriculture and Forestry of Finland with the sum of EUR 378 000 (FIM 2,25 million).

1. Strategic forestry and natural resources development plan for Kenozero National Park
2. Strategic development plan for the activities of the forest sector in the Kargopol District
3. Development of reforestation systems in the Kargopol District
4. Treatment of young stands and thinnings in the Kargopol District
5. Restoration of cultural landscape in Kenozero National Park
6. Development of non-wood forest products
7. Coordination and dissemination

The Russian partners of the project were Kargopol Forest Management Unit (Leskhoz) under the Committee of Natural Resources of the Arkhangelsk Region and Kenozero National Park. Additionally, Russian specialists from the Northern Forest Research Institute, the Arkhangelsk State Technical University and the regional forest management enterprise participated in the project implementation.

Forest Management Units are in charge of the official control of forest utilisation. At the same time, they are utilising forest resources themselves. According to the Russian forestry officials, forest management units should give up the economic utilisation of forests. However, forest management units can receive only 30 % of their expenses from the federal state budget. The rest of the money must be obtained from harvesting or selling transportation services using their own equipment.

The Arkhangelsk forest officials did not have any earlier experience on the international cooperation. The level of the theoretical knowledge is quite high in Russia but practical development activities are restricted due to inadequate funding. Dissemination of information is a problem. In the development of dissemination the quality and clarity (e.g. the use of graphs and figures) of presentations by the Russian specialists must be emphasised. As a positive experience it can be mentioned that different forestry institutions in the Arkhangelsk Region are able to cooperate with each other. This is demonstrated by active dissemination of gained experience and information to other regional forest management units. The Russian side especially emphasised the usefulness of the establishment of sample plots in harvesting and forest regeneration because these plots are going to serve the development activities in forestry for many years.

Regarding future project planning, the number of beneficiaries of projects supported by the Finnish government could be limited in order to get more substantial results instead of spreading the resources too thinly.

## **Strategic planning**

The development of a strategic plan for the forest management unit was based on the fact that the federal funding will not increase in the near future. Forest management units need to develop marketing of roundwood and non-wood forest products to generate income. According to the legislation, a forest management unit does not have a right to deal with commerce and therefore they must find local cooperation partners. The directors of forest management units need to analyse the contents of the developed strategic plan, and take necessary measures and make amendments to the plan later, if necessary.

On the basis of the three years' experience it can be said that marketing of roundwood should be intensified in order to increase stumpage prices. The stumpage price depends on the size of harvesting area, harvesting volume and the average diameter of timber. On the other hand, thinnings have not been carried out because the regional forest industry procures its pulpwood from final fellings. The wood harvested in thinnings could be used as fuelwood. In Finland, there have been different development projects on this issue.

Forest management units have no direct rights to sell large volumes of roundwood for local or export markets. Timber buyers usually make deals with bigger agents who are able to guarantee timely deliveries of adequate quantity and quality. Forest management units should aim to cooperate with local agents if they have no license to commercial activities of their own.

The strategic plan for Kenozero National Park contributed to the creation of a management system, which is based on the objective assessment of current state and utilisation of available resources. On the basis of this assessment, informed decisions can be made concerning nature protection, tourism development, ecological education and the maintenance of cultural heritage. These are typically the main activities of national park management in Russia.

## **Forest regeneration**

Cooperation in forest regeneration began in the Arkhangelsk Region in the Velsk nursery already four years ago. Commercial cooperation has supported the development activities. Nurseries of containerised seedlings have been delivered to Velsk on commercial basis. Two sample plots were planted during the project. One plot was on old final felling area and the other on an area, which had paludified after felling. An additional sample plot of natural regeneration provides reference information for the research arrangements. Planting material has been delivered from six forest management units. Success of forest regeneration will be studied in the sample plots using different forest cultivation methods, vegetation places, tree species, soil treatment and containerised seedlings. The growth experiments started in the Velsk nursery have been producing a basis for the field studies. The most problematic issues compared to the Finnish conditions are the peat preparation and the availability of good fertilizers.

The abundant low-productive broadleaved young stands in the region should be regenerated by coniferous species. Local forest industry is not able to utilise birch pulpwood. The afforestation of these areas requires a remarkable increase in plant production. The establishment of model seed production stands and the development of containerised seedlings could help in this, which is a possible topic for future projects.

## **Thinnings**

Finnish and Russian methods and forest machinery have been compared in the thinnings of sample plots. High productivity of the Finnish machines has been observed. Harvesting machines suitable for the cut-to-length method are under-utilised in the Arkhangelsk Region. As a result of the project, new harvesting methods can be recommended for the other forest management units.

Care should be taken when introducing Finnish thinning instruction in Russia due to the following reasons: (i) the soil structure differs from the Finnish one because the Arkhangelsk Region was not covered by ice during the latest glacial period. Vegetation and site classification cannot be adapted directly. The intensity of harvesting may have to be lower than in the Finnish harvesting models. The lower thinning intensity is required also by the late first thinnings, which are typically carried out when the mean height of stand is already 15 metres.

There is no buyer for pulpwood from thinnings in Russia and small-size timber is normally left standing. However, experimental thinnings will be continued, although presently the forest management units have a restricted right to make thinnings. In the future the harvesting rights are likely to be given only to owners of cutting and rent rights of forests.

There is a need for improving the forest legislation in Russia. Management obligation of young stands should be included in forest rent agreements. Timber from first thinnings could be utilised as fuelwood. Harvesting instructions are to be based on both economic and technical feasibility. In Finland, the frequency of harvesting has decreased and the volume of each harvesting increased over the years, mainly for economic reasons. Nowadays, Russian instructions are commonly not observed, and forest management units receive a large part of their annual income as different sanction and penalty fees.

### **Non-wood forest products**

The utilisation of forest mushrooms can be increased from the current level. The soils in the Arkhangelsk Region are more fertile and therefore mushroom selection is wider than in Finland. In addition to the household utilisation, attention should be paid to the development of domestic and international markets, which would have a positive impact on local economy.

The first step is training of specialists. The first 18 advisers have been trained during the mushroom course. A delivery network could be created in the Arkhangelsk-Kargopol-Vologda region with the support of these trained advisers. Forest management units would work as supporting organisations in training of local entrepreneurs and mushroom trader companies. In future, the planned forestry information centre in the Kargopol District could be a supporting unit in such training.

### **Equipment deliveries**

Equipment deliveries included chain and brush saws, safety clothes, forest trailers, and forest measurement instruments for Kargopol Forest Management Unit and Kenozero National Park. The Russian side would have preferred local purchases. This option was not used because the equipment would have cost the same in Russia. In addition, the Finnish side was interested in delivering Finnish technology for experimental use. The project budget (EUR 74 000) imposed some restrictions on the equipment to be purchased. The equipment is suitable for first and later thinnings using the cut-to-length method. The beneficiaries can make their own conclusions on the productivity and suitability of the equipment in local conditions. Commercial deliveries are hindered by bureaucracy and high customs fees in Russia.

*Pasi Poikonen  
Indufor Oy*

## 3. International projects

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### 3.1 The Second Meeting of the International Contact Forum on Habitat Conservation in the Barents Region in Petrozavodsk, November 26-29, 2001



Finland, Sweden and Norway have all had bilateral cooperation in nature conservation with Russia for more than ten years. The idea of joining the efforts and creating a multilateral cooperation forum arose in the summer 1998, when the Russian, Norwegian, Swedish and Finnish specialists participated in an international scientific expedition in Belomore-Kuloi Plateau, Archangelsk region.

The International Contact Forum on Habitat Conservation in the Barents Region was officially established in Trondheim, Norway, November 1999 by the initiative of the Biodiversity Group under the bilateral Russian-Norwegian Commission on Environmental Cooperation. The Contact Forum is a cooperation arena for all stakeholders interested in habitat conservation issues in the Barents Region - authorities, specialists, representatives of indigenous peoples organisations and other interested institutions and NGOs. The Barents Region includes the regions of Nordland, Troms and Finnmark (Norway), Norrbotten, Västerbotten (Sweden), Oulu and Lappland (Finland), Murmansk, Karelian Republic, Archangelsk, Nenets Autonomous Region and from the beginning of 2002 also Komi (Russia).

According to the forum mandate agreed at the first meeting in Trondheim, the Contact Forum will focus its work on proper management of existing protected areas, on the need for additional protected areas and on other activities relevant for habitat conservation. For the two first years of its existence the Contact Forum has been effectively chaired by Norway.

#### **The second meeting of the Forum**

The second Contact Forum meeting took place in the capital of the Republic of Karelia, Petrozavodsk, 26–29 November 2001. The meeting was organised and led by the Norwegian Directorate for Nature Management with the assistance of the Vodlozersky National Park. The main objective of the meeting was to further increase and improve cooperation in the field of habitat conservation between the Barents States. The Contact Forum offered a possibility to discuss on-going projects, future cooperation and exchange of information and experience concerning the management and activities of protected areas.

On behalf of the hosting region, Republic of Karelia, Mr. Valery A. Shljamin, Minister of the Foreign Relations, greeted the Contact Forum emphasising the importance of international cooperation in nature protection activities. The conclusions and recommendations of the Contact Forum work are expected by the authorities now, when the new strategy of environmental and nature protection is under development for the Northwest Russia.

Mr. Nikolai S. Ivanov, Head of Biodiversity Division of the Department of Nature Resources in Northwest Region, Ministry of Nature Resources of the Russian Federation, expressed full support for the Contact Forum work. A new scientific-technical council for protected areas and biodiversity conservation is established within the Department, having administrative and scientific representatives of all re-

gions of Northwest Russia. The Council will be ready to handle Contact Forum recommendations for new protected areas, project proposals to support the existing conservation areas and development of sustainable tourism in Northwest Russia.

Altogether 70 representatives from environmental authorities, scientific institutes, nature protected areas, NGOs, indigenous peoples from the Barents Region gathered for the four days' seminar. The participants described the present status of nature protection in their countries and regions, presented results and progress of the habitat conservation projects and suggested new project initiatives.

### **The need to develop protected areas**

Directors of Russian National Parks and Strict Nature Reserves (Zapovedniks) located in the Barents Region presented their current status and future plans. The general opinion was that the parks are today facing severe problems, which mainly are due to the financial difficulties and continuous organisational changes in the federal protected area administration. However, the parks are committed to develop their management and activities. International cooperation projects are important. A big international cooperation project to develop the Barents Region protected area network was supported by many participants. The vertical Green Belt of Fennoscandia, from the Gulf of Finland to the Barents Sea, could be accompanied by the horizontal belt of protected areas in the north of Norway, Sweden, Finland and Russia.

Mr. Tapio Lindholm from the Finnish Environment Institute presented the project proposal "GAP-Analyses in Northwest Russia, Special Protected Areas Biological Research" to be a comprehensive and topical international project to assess the representativeness of the protected areas network as a whole in Northwest Russia. The original project plan is developed in cooperation with the experts of St. Petersburg and Moscow scientific institutes together with their Finnish colleges. The GAP-Analyses will connect biological research to the need of structural and economic assessment of the protected areas, from the recreation, ecotourism and environmental point of view. The project proposal aroused discussion, which will be continued between the specialists in the near future in order to determine the scope, objectives, contents, activities and participation in the project.

A field visit to the Vodlozero National Park was organised at the end of the Contact Forum meeting. On the way the participants of the visit had the opportunity to see examples of the old-growth forests, and also cultural and historical monuments of Karelia. Overnight stay was organised in the Varispelda tourist village guest houses, which are under construction. The aim is to create a special type of village, combining features of a traditional Karelian village with tourist services and accommodation. Besides the nature protection functions, the Varispelda village project supports conservation and revival of local traditions of wooden architecture, local crafts and historical landscape. The participants had a possibility to try the hiking trails near the village, a relaxing smoke sauna bath and a delicious dinner in a good company.

### **Future of the Contact Forum**

During the four days of the Contact Forum meeting a lot of informative lectures and many intensive debates were held. The organisers asked for suggestions to improve the work of the Contact Forum. The opinion of the majority was that the Contact Forum should remain as it is: an open discussion forum for all stakeholders on nature conservation issues in the Barents Region. A lot of new project ideas were generated, but so far the Contact Forum does not have special financial instruments for implementing all those initiatives. However, expressing recommendations to decision makers, preparing project proposals and finding financing possibilities is easier and more effective, when several stakeholders, regions and countries join their efforts.

The participants decided that Finland will be the new Chair of the Contact Forum and suggested Russia to act as a Co-chair for the next two years. The Contact Forum representatives expressed their gratitude to the Norwegian and Russian organisers for the opportunity to make new contacts and exchange information and experience with colleagues across the Barents Region, to present the aspects of their own work and to contribute to the Contact Forum with own ideas, project plans and offers for collaboration. The next meeting will be held in the year 2003 and Finland will be responsible for organising it.

*Directorate for Nature Management, Norway, will publish a report on the proceedings and conclusions of the Second Meeting of Contact Forum. The materials will be available by contacting: [postmotlak@dirnat.no](mailto:postmotlak@dirnat.no)*

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## 3.2 WWF Arctic Bulletin - "CAFF Delivers Report on Arctic Flora and Fauna"



"What is the overall state of the Arctic's natural environment?" This sweeping question defines the ambitions of *Arctic Flora and Fauna: Status and Conservation*. This plain-language report was delivered by the Arctic Council working group CAFF (Conservation of Arctic Flora and Fauna), in Rovaniemi, Finland, on June 11, at the celebration of the 10th anniversary of the Arctic Environmental Protection Strategy.

Although a simple answer to its opening question remains elusive, the 272-page book makes a valiant effort to summarize what is known while also explaining how Arctic ecosystems function. This latter aspect of the book is intended to provide readers a context in which to understand figures on population sizes or the extent of protected areas.

The idea of producing the report can be traced to a workshop sponsored by WWF-Arctic Programme and the United Nations Environment Programme (UNEP) in Karrebæksminde, Denmark, in September 1997. Workshop participants noted that CAFF lacked a visible showcase for its work and recommended a substantial report that could capture the range of issues and concerns covered by CAFF and address the need for circumpolar cooperation on conservation in the Arctic. The CAFF Working Group supported the idea, which was endorsed by the Arctic Council in September 1998.

At that point, a small editorial team got to work. Team members developed an overall strategy for the report and an outline, both of which were refined at the 1999 CAFF meeting in Yellowknife, Canada. As a result, the book's general text, which gives an overview of Arctic ecosystems and conservation, is supplemented by 75 boxes that describe specific topics in greater detail, ranging from species to places, from ecological processes to conservation threats. In addition, the book is copiously illustrated in color with photographs, maps, and diagrams. Ideally, the report will be useful and interesting both to those who pick it up from time to time and to those who read it from cover to cover.

## **Human threats**

For the most part, the available information on the state of the Arctic environment is encouraging. Geese, for example, are thriving with the sole exception of the lesser white-fronted goose and subpopulations of various species in Eastern Siberia. In the decade since CAFF was formed, Russia has doubled the total area of its zapovedniks (strict nature preserves) in the Arctic. CAFF has also begun to address the conservation of rare, endemic vascular plants and the threat of seabird bycatch in commercial fisheries.

On the other hand, much remains to be done. Fragmentation and the impacts of roads, pipelines, dams, and transmission wires are serious threats across much of the region. Overharvesting of certain species is a problem in some areas. Climate change may radically alter the structure and functioning of Arctic ecosystems, with results that are hard to predict but may include the demise of certain species and populations, such as the Peary caribou. Pollution, the introduction of alien species and diseases, and more intensive human pressures such as uncontrolled tourism must also be addressed if the Arctic is to remain in its current state.

## **Obvious need for protection**

As the report makes clear, conservation in the Arctic depends greatly on national and sub-national efforts, but multilateral and circumpolar cooperation are also necessary to protect migratory and shared populations and to address widespread threats. In addition, greater sharing of information on ecological status and on the effectiveness of specific conservation measures will help countries identify problems and take action. The editorial team was surprised at the difficulty of obtaining reliable information from around the Arctic on such basic parameters as population sizes. While a great deal of current information is included in the chapter “Status and Trends in Species and Populations,” long-term trend information is in most cases unreliable or unavailable.

While the report is attractive and substantive, and thus should draw considerable attention to Arctic conservation and to CAFF itself, it does not include recommendations for action. The challenge now facing the CAFF Working Group is to develop specific recommendations for action to be presented to the Arctic Council at its next meeting in the fall of 2002. The book provides the basis for such recommendations, which should demonstrate how CAFF and others can lead the way to realizing the hope expressed in the book’s final lines: “In much of the world, conservation is a matter of protecting what is left, or trying to restore what has been damaged. The Arctic offers a rare opportunity to demonstrate that humans can conserve a region, not as an afterthought, but as a priority”.

*The book Arctic Flora and Fauna – Status and Conservation can be ordered from Edita, Finland, by e-mail: [asiakaspalvelu@edita.fi](mailto:asiakaspalvelu@edita.fi), by internet: <http://www.edita.fi/netmarket/>, by phone +358 020 450 05, by fax: +358 020 450 2380. The price is 46,25 EUR.*

*Henry Huntington*

### 3.3 Barents region forest sector initiative under development



#### Background:

In the Barents cooperation, the role of the forest sector was recognised in 1999 when an initiative was set up with the goal of improving rural development in the Boreal forest region covering the forested areas of Norway, Sweden, Finland and Northwest Russia. The forest sector initiative was formulated at the meeting of the Committee of Senior Officials of the Barents Euro-Arctic Council on 21 April 1999. Relying on this initiative and the subsequent expert seminar organised by the WGEC/BEAC in Petrozavodsk in October 1999, the Barents Euro-Arctic Council in March 2000 in Oulu welcomed the decision to create a Forest Sector Task Force.

One of the major goals was to prepare a Northern Dimension Forest Sector Programme (NDFSP). As the Russian Ambassador Mr. A. Obukhov, Chairman of the CSO/BEAC, stated in the foreword of the programme on 14 March, 2001, the challenge ahead was enormous. It was necessary to integrate national and international development work in the areas of forest management, environmental conservation and forest industries, taking into account both field and national governmental level. From the very start it was obvious that for the sake of sustainable forestry, intensified efforts were needed to strengthen existing bilateral and multilateral cooperation between the northern nations, the European union, with its proclaimed Northern Dimension policy, and other intergovernmental institutions.

#### Forest sector aspects in the Barents region

The forests of the Northern Dimension area have immense global importance because of their broad expanse, their biodiversity, their role in the global carbon cycle, and their actual and potential influence on international trade in forest products. Utilisation of the forest resource has become the cornerstone of many livelihoods and social systems in the Northern Dimension region, especially in Northwest Russia where the potential successes and problems are clearly greater than in other forested regions in the North-European countries. The painful quest for a market economy has paralyzed both forest management and forest industries and created high unemployment in many rural villages in Russia.

The goal of the increased integration of the forest sector in Northern Europe is to identify and achieve common targets for sustainable forestry and livelihoods through collaboration amongst Northern Dimension countries. Achieving sustainable forestry and livelihoods will require diverse actions in different places, but all actions will have to prove ecologically beneficial, economically efficient and socially productive.

A sound policy, institutional and legal framework will always be needed, as will sustained and optimal production of forest products, protection of the environment and active contributions to people's livelihoods. This does not mean just sustaining timber yields – other products and services are important too and many have a high social value. Practical sustainable forestry is therefore about undertaking the best available practices, based on current scientific and traditional knowledge, which allow multiple objectives and needs to be met, without degrading the forest resources. Forest managers must define the balance of different objectives to achieve. These objectives may also change over time as different products and services become more valued, and as we learn more about what the forest can sustain.

## **Examples of good performance**

Despite the difficulties in the forest sector's development, there has also been positive steps taken. A major thing to consider is the fact that wood and timber exports from Northwest Russia to Finland has been close to 15 million m<sup>3</sup>, on top of the millions of cubic metres exported to other countries in the region.

In the field of forest preservation tangible progress has been made. Protected area networks have a solid basis in the region, but their further development is called for by many. In western countries attempts to increase the protected area for is often in conflict with the pattern of private ownership, whilst in Russia the challenge is more one of priorities in public decision-making. Local and indigenous people have traditionally had a weak voice in such decisions, and their effective rights and capacity to negotiate need to be considerably improved.

A great number of concrete steps have been taken in the development of various types of preservation areas. The magnificent chain of preservation areas like the biosphere reserves of Oulanka and Paanajärvi along the Finnish-Russian border and Lake Vodla preserve in the eastern part of Russian Karelia or even the largest European preserves in the Republic of Komi have been and will be a challenge for international cooperation.

The Model forest concept has provided a tool to develop all the three elements of the sustainable forest management. This internationally developed concept with the balanced promotion of ecological, social and economical needs has been applied in various ways particularly in Russian Karelia, Komi and Pskov.

Forest certification is proving to be a key market-based instrument emerging from environmental concern – with impact on forest management, supply chains and policy thinking. Scandinavian countries are increasingly encouraging the spread of forests and forest products certified as sustainable, pursuing different strategies and alliances with key bodies, notably the Forest Stewardship Council and the Pan-European Forest Certification system. There are major challenges of introducing certification as an effective tool in Northwest Russia, and these have to be tackled concertedly.

## **Inferior level of management and utilisation of forest resources in NWR**

The situation in Northwest Russia is rather different from other countries of the Northern Dimension. The forested lands of the European part of Russia cover 166 million hectares – 49 percent of the total forest area in Europe west of the Ural mountains, and more than three times that of the Nordic countries. The annual productivity of these Northwest Russian forests is estimated to be over 280 million m<sup>3</sup>. In theory, the calculation of sustainable yield and annual allowable cut should be closely related to such estimates. But calculations of this kind are questionable in the current context of institutional and economic uncertainty in the region. However, even half of this annual wood productivity, when harvested, represents a significant proportion of the European and world market for wood products, and thus changes in harvest levels can dramatically affect such markets.

The branches of forestry and forest industry – silviculture, logging, and wood processing – traditionally provided the major sources of livelihood for about 20 percent of the population of Northwest Russia. However, over the last decade this proportion has steadily declined, coinciding with a process of major change in forest management and administration which caused uncertainties in ownership, harvesting levels, and long-term impacts of the patchy implementation of different management plans.

The transition of the forest industry in response to the demands of market economy has largely changed all previously developed institutions of wood production, harvesting and utilisation. This has had dramatic consequences for living standards of employees and their communities. Between 1991 and 1998, harvesting levels in all regions decreased by 35-65 percent. However, during the last few years harvesting has gradually recovered.

The causes of this downturn in the Northwest Russian forest industry lie in the insecurity prevailing in both civil and forestry legislation, especially in rights of ownership, rent and lease relations, and in conflicting rules for harvesting, regeneration and utilisation of forest resources. The unstable economic and political situation has deterred investors who otherwise could make positive long-term contributions to development, and has attracted the less scrupulous business people.

### **Need for institutional and human resource development**

In the rapidly evolving societies in Europe, the forestry sector has encountered a large number of unexpected barriers to development. A low interest towards traditional forestry education has been found in many countries in Western Europe. A great number of areas of higher education have been reorganised in order to meet the challenges of the younger generation. New names of disciplines like “Life Sciences“ or “Natural Resources Management“ have replaced “Silviculture“ or “Forest Technology“ in many universities. Even in the Nordic universities where forestry education has a strong foundation, many study places remained vacant.

There is a great potential in human resources of young talented people studying forestry and wood technology in the Universities of Northwest Russia. University education has been seen as a profitable investment for the future. The same attitude can be seen at the society level, especially in Russian Karelia where the Republic has placed a high priority on the progressive development of the University.

Institutional and human capacity building is one of the most challenging areas for the improved integration under the label of the Northern Dimension. Integration of the highly skilled Russian students in Natural Sciences, especially in Mathematics and Physics, into the strong orientation towards applications in western countries, gives a good basis to meet the challenges of the market, which value environmentally friendly forest products. It is difficult to foresee a boom in ground breaking innovations in the wood product sector in the western Northern Dimension countries, due to lack of interest among young people.

### **Northern Dimension Forest Sector Programme – cooperation and commitment, learning and development**

*Objectives and action points* have been prioritised in the NDFSP. These need to be converted into specific implemented projects and initiatives by a diverse range of stakeholders:

1. *Management of NDFSP.* Development of a coherent, prioritised programme building stronger forest management systems, and fostering cross-institutional learning and complementary joint programmes.
2. *Policy development.* Development of forestry research and information systems, national forestry programmes, legislation and workable rules, restructuring of institutions and forest ownership, cross-sectoral policy integration, and forest environmental services.
3. *Investment.* Financing mechanisms, investment incentives and conditions for a diversity of production strategies, business-to-business exchanges, new markets, small- and medium-scale enterprises and company-community forestry partnerships.

4. *Participation and learning*. Participatory forest management, communication and extension programmes, and in-service learning systems.
5. *Forestry operations*. Integrated model forests, best-practice in forest-linked livelihood strategies, and local value adding forest products.

**The next steps to develop the NDFSP further are also spelled out. These are:**

1. Stakeholder engagement and prioritisation of actions
2. Generating political commitment
3. Developing detailed initiatives
4. 'Ground-truthing' the NDFSP
5. Coordination and management

### **Main integration principles for the forest sector of the Northern Europe**

NDFSP adopts the following 'key principles' for national forest programmes:

National sovereignty and country leadership

Consistency with national policies and international commitments

Integration with sustainable development strategies

Partnership and participation

Holistic and inter-sectoral approaches

### **NDFSP is a 'cycle' connecting the four core elements in the continuous process**

*Negotiating goals and roles* – stakeholders understanding each other and hammering out core aims and positions

*Building institutions and prioritising actions* – organising the capacity around the agreed roles and all the actions needed

*Implementing practical actions for sustainable forestry and livelihoods* – securing support for the prioritised actions and carrying them out

*Monitoring and learning* – tracking and reviewing implementation to ensure learning and adaptation

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