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

Foreword

You are now reading the second electronic bulletin of the Finnish-Russian Development Programme on Sustainable Forest Management and Conservation of Biological Diversity in Northwest Russia (NWRDP). With this issue we would like to present you some of the proceedings and activities of the sustainable forestry and nature protection projects in 2002.

Forest sector development is a topical question in Russia. The declined forestry production should be made more efficient and productive. Both Russia and Finland have approved the international principles of sustainable use of natural resources and the necessity for nature protection.

Sustainable forestry benefits both countries. Finland is a significant importer of Russian timber, nearly 13 million cubic meters in 2001. Economically effective and ecologically sound forestry is also a prerequisite for any forest sector investments. Russia and Finland share a boundary of almost 1400 km, which is also the border between Russia and the European Union. As a result of these facts Northwest Russia and Finland have a long-established forestry and nature conservation cooperation. This bulletin has views on bilateral and international projects, meetings and publications.

Since 1997 NWRDP has been an important tool for implementing the bilateral sustainable forestry and nature conservation cooperation towards the above mentioned principles. One objective of the NWRDP is to increase exchange of information and coordinate activities with other bilateral and international programmes. NWRDP and its projects already have and will increase the cooperation activities with the Barents Euro-Arctic Council, International Contact Forum on Habitat Conservation in the Barents Region, European Union Tacis and Northern Dimension programmes, IUCN, UNESCO and national and international NGO's.

Tatu Torniainen, Riitta Hemmi, Jevgeni Jakovlev

Hopefully the articles of this bulletin are of interest to you. We would be grateful to get your comments - for good or for bad. The comments and suggestions you can send to the Finnish programme coordinators:
tatu.torniainen@mmm.fi, riitta.hemmi@ymparisto.fi, jevgeni.jakovlev@ymparisto.fi

Protection for the song lands of Karelia

At the beginning of August the government of the Karelian Republic approved the establishment of the Kalevala National Park. The forests and villages of the area were the homeland of the ancient rune singers and were travelled by Elias Lönnrot in the 1800s.

'When satellite pictures became widespread in the 1970s, we noticed that the extensive Viena Karelia forests near to the Finnish border had almost completely been spared from felling,' writes Professor Rauno Ruuhijärvi in the preface of the publication on the Kalevala National Park.

The Finnish Ministry for the Environment and the Karelian Republic started to cooperate to promote protection of the forests that had been spared completely from felling. The region's forests were studied preliminarily from 1992-1994 and in 1997 a proposal was made that a large conservation area be established within Vienansalo area and named the Kalevala National Park. At the beginning of August 2002, the government of the Karelian Republic approved the establishment of a 74,400-hectare Kalevala National Park.

The establishment of the National Park itself is still dependent on a decision from the Russian Federal Government. The park is, however, on the list of federal conservation areas to be established in the Russian Federation by 2010.

The feel of a real forest

'When you've spent a couple of days walking in the pristine Viena forests, hearing nothing but the sounds of nature, you begin to realise what a real forest is,' enthuses Senior Scientist Tapio Lindholm from the Finnish Environment Institute (SYKE). Capercaillie, black grouse, wolves and bears can all be found in these extensive forests, which have not even been blemished by forest lorry roads. The region contains pine and spruce stands, paludific forests, flourishing stream banks, poor fens, natural mires, small streams and lakes. There is also an abundance of fungi and fauna species that depend on rotten wood, and the region is a natural habitat to many rare and endangered species.

The Kalevala National Park is an important part of the Green Belt border area between Finland and the Russian Federation. The Green Belt is made up of well-preserved forest and mire ecosystems.

In the homeland of the rune singers

Elias Lönnrot travelled through the landscapes of the Kalevala National Park between 1830-1840 collecting the main runes for the Kalevala epic.

The park encompasses the village of Venehjärvi and, in the eastern corner of the park, Vuokkiniemi. Vuokkiniemi has a population of about five hundred and Venehjärvi approximately twenty. Vuokkiniemi has its own school.

‘The locals support conservation of the region because they live almost wholly in a natural economy where they fish, collect berries and mushrooms. Even after the establishment of the conservation area they will be entitled to use the nearby forest resources around them for their domestic needs,’ explains Senior Scientist Tapio Lindholm.
‘I visited the villages of Vuokkiniemi and Venehjärvi a couple of years ago. There are no longer any ancient rune singers, but the people of Venehjärvi in particular remember the old traditions of the village well,’ says Senior Researcher Anneli Asplund from the Finnish Literature Society. ‘The Viena Karelia song tradition was to sing about everything, as songs represented special narrative stories. The people also sang wedding songs and lamentations.’

The village of Latvajärvi is situated on the southern border of the Kalevala National Park and used to be home to the master rune singer Arhippa Perttunen. The village is on the border zone and is difficult to access nowadays. Asplund visited the village, though only one family lived there anymore.

Arhippa Perttunen’s son Miihkali was also a rune singer. He died in 1899. Many of his texts and compositions have been recorded.

Park twinning cooperation

A twin park for the Kalevala National Park is to be established on the Finnish side.

‘The idea of park twinning cooperation is to develop close cooperation between parks on both sides of the border,’ explains Senior Planner Lassi Karivalo from the Natural Heritage Services unit of the Finnish Forest and Park Service.

‘Eco-tourism and cultural tourism would both be linked with the Kalevala Park cooperation. Park twinning cooperation also incorporates information exchange between biology experts, as well as standardising inventories to make them comparable.

A real patchwork quilt on the Finnish side

‘The planned twin park on the Finnish side of the border is a real patchwork quilt,’ explains Nature Conservation Counsellor Pekka Salminen from the Finnish Ministry of the Environment.

Most of the areas are already protected by the old-growth forests conservation programme, and a number of the areas are legally protected nature conservation areas. All of the areas are also in the Natura 2000 proposal. Should there be a desire to establish a single Kalevala Park conservation area it would mean having to amend a number of existing laws and to abolish the legal bases of old conservation areas.

‘That’s why the aim is to proceed so that all the areas not currently protected by law would be turned into protected areas by decree. The combined surface area of these areas is approximately 13,000 hectares,’ Salminen continues. ‘The decree could also state that these and other areas that have previously been protected nature conservation areas be categorised as belonging to the Kalevala Park. On the Finnish side, the Karelia Park would be approximately 23,000 hectares in size. The decree could be passed as early as autumn this year.’

The 2,400 or so hectares of rich and diverse forest of Malahvia, located in the centre of the Finnish part of the park is still a slightly controversial topic. The forest is in Natura and is protected by the Forestry Act but the old-growth forests conservation working group has proposed that, in the future, it be turned

into a conservation area. Most of the area would, however, remain in its natural state. Within the framework of the Natura programme, a maintenance and upkeep plan will be drawn up for the area.

Further information:
www.ymparisto.fi/kvasiat/lahialue/venmetsa/venmetsa.htm

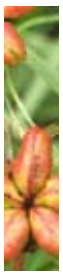
Literature:

*Natural Complexes, Flora and Fauna of the Proposed Kalevala National Park, the Finnish Environment series, Nr. 577, September 2002
*Martti Haavio, The last Rune Singers (1943), 3rd edition 1985
*I.K.Inha, Photographer in Viena Karelia 1894
*I.K.Inha, Song lands of the Kalevala (1911), 3rd edition 1999

Trips to Vienankarjala are organised by Juminkeko, based in Kuhmo, www.juminkeko.fi. The company is run by Markku and Sirpa Nieminen (tel. +358 (0)8 6530 670) and operates in cooperation with the Arhippa Perttunen Foundation.

Leena Huttunen

Great Andoma Watershed, biodiversity inventories in the Vologda Region



The Vologda State Pedagogical University and the Finnish Environment Institute have made a cooperation agreement within the development programme “Sustainable Forest Management and Conservation of Biological Diversity in Northwest Russia”. Biodiversity inventory of Great Andoma Watershed is the first step in Vologda Region towards the planned GAP-Analysis project of the nature protected areas network in Northwestern Russia.

Biodiversity inventory of Great Andoma Watershed is the first step in Vologda Region towards the planned GAP-Analysis project of the nature protected areas network in Northwestern Russia. The inventory work is based on the research carried out by the Karelian Research Centre of the Russian Academy of Sciences and the Vologda State Pedagogical University in the Andoma Upland area.

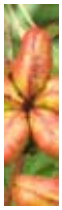
Here, at the “Atleka” height is the only place in Europe, where the water systems of the Atlantic and Arctic oceans as well as the continental Caspian Sea cross. Four regional protected areas have been established in the area with well preserved fragments of mid-boreal old-growth forests of over 180-200 years of age. The Andoma Upland is genetically and by its landscape similar to the Kirillovskaya Watershed and the Vepsovskaya Upland, where regional nature protected areas have been established as well.

In 2001-2002, the project has included inventory and evaluation of landscape, eco-system, flora and fauna diversity. The work was also focused on the assessment and analysis of the representativeness and gaps of the existing protected areas network and proposals for further improvement of the network. The project has been looking into the history of human settlement in the region and its cultural heritage.

Nine regional protected areas were studied under the project. The research confirmed the significance of these reserves as the reference examples of the nature of the Northwestern parts of Vologda Region. Over 300 rare and endangered plant species and 83 bird species have been identified. Six of these plants are registered in the Red Book of Russia. Thus, the monitoring work of nature protected areas was started in Volodga. The research work confirmed that the landscape approach forms one of the basis for GAP analysis in creating and developing a comprehensive protected areas network in Vologda Region. The work carried out so far has revealed lack of wetland and mire ecosystems within the protected area network. New protected areas are needed to secure the conservation of the congregating areas for migratory birds at the eastern coast of Lake Onega. These are some preliminary conclusions of the project, while processing of the field research data is still going on.

German A. Vorobyev
State Pedagogical University of Vologda

The Red Data Book of Vologda Region. Volume 2 – Plants and Fungi



The Red Data Book of Vologda Region. Volume 2 Plants and Fungi - project is carried out by the Vologda State Pedagogical University within the cooperation agreement with the Finnish Environment Institute. The project includes flora diversity research and proposals for conservation of endangered species.

The plants of the region have been under study since mid 19th century. The systematic and comprehensive research started in 1960's. In the years to follow, the floristic research carried out by the Departments of Botany at the Vologda State Pedagogic University and the University of St. Petersburg became more regular and intense. During this period a comprehensive herbarium was collected, which has been used as database for the Red Data Book of Vologda. Additionally the plant collections of the Komarov Botanical Institute of the Russian Academy of Sciences, the Moscow State University, The Darwin Strict Nature Reserve, the State Museum of History, Architecture and Arts of Vologda, the Museum Association of Cherepovets have been used.

The Flora List by Orlova (1993) listed 1022 vascular plant species belonging to 439 genera of 107 families. Data on the species and systematic diversity of mosses, fungi (lichen included) and algae is very preliminary, because bryo-, myco-, lichen and algae biota have not yet been studied sufficiently in the region. Earlier research shows that due to intense human activity in the region almost a third of all vascular plants have declined in some degree. Similarly, there is a great number of non-vascular plant species rated as rare.

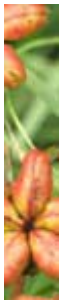
In 2001-2003, the project includes further inventory of herbaria, production of flora inventory texts, definition of the Red List categories of species, the required conservation measures and locality mapping. By preliminary estimate, the Red Data Book will enlist over 200 species of vascular and spore-bearing plants, 30 lichen, 30 higher fungi, 30 mosses and 3 algae species.

During the inventory of the Vologda State Pedagogic University herbarium accompanied by the field studies in 2001-2002, almost one hundred vascular plant species, new to Vologda Region flora, were detected. Most of these species are not indigenous, but adventives imported from other areas.

Field trips were conducted in summer 2002 to nine districts of Vologda Region (Vytegra, Babayevo, Belozero, Kyrillov, Vozhegda, Syamzhen, Totma, Veliky Ustyug and Ust-Kubinsk). A new herbarium of 2500 samples was collected. A number of specimen of rare vascular plant species were collected in the habitats earlier known only from literature. Species composition of mosses and fungi were discovered by the experts from the Komarov Botanical Institute of the Russian Academy of Sciences (St. Petersburg) They collected a huge material consisting of 250 mosses and 500 fungi specimen. Over 170 species descriptions and 100 color drawings of vascular plants have been produced by now for the Red Data Book. Field research data is being analyzed currently.

Tatjana A. Suslova
Vologda State Pedagogical University

Finnish-Russian Nature Conservation Seminar and Work Group Meeting in Finland, June 2002



"The Finnish-Russian Nature Conservation Cooperation Working Group has worked actively for seventeen years, starting in 1985. The group offers a forum for discussion and planning of nature protection activities also during these present unstable and confusing times. Human relations, friendship and the strong will to act for the benefit of nature without borders are the ele-ments of true sustainable development," said professor emeritus Rauno Ruuhijärvi at the seminar in Helsinki, 12.6.2002.

Nature conservation cooperation between the Soviet Union and Finland started back in the 1970s as one form of scientific-technical cooperation. Joint activities were undertaken by ministries, authorities, scientific institutes and universities of both countries. An official Finnish-Russian Working Group on Nature Conservation was established between the two countries in 1985. Since then, the Working Group has had a very important role in the nature protection of territories close to the Finnish-Russian border, even though Ministries, committees and regional administrative organs have changed several times, especially in Russia.

Public seminar on 12.6.2002 in Helsinki

The Finnish-Russian Working Group on Nature Conservation has arranged joint meetings, generally once a year, to discuss, develop and resolve issues of nature protection near the border region, and of common interest for both countries. **Rauno Ruuhijärvi**, professor emeritus of the University of Helsinki, has been the key figure in the bilateral cooperation from the start, and chaired the Finnish party of the working group, from its establishment in 1985, until 2002. The chairman of the Russian side has been Ljudmila Kuleshova, professor of the State Research Institute "VNIIPriroda". In order to thank the long-term chairman Rauno Ruuhijärvi for his crucial role in promoting Finnish-Russian nature conservation, the Finnish Ministry of Environment arranged a public seminar on the 12th of June in Helsinki, followed by the working group meeting in Tammisaari the following day. The seminar provided the public and the media with a review of Finnish-Russian efforts in biodiversity conservation of East-Fennoscandia, and provided the opportunity to discuss problems and future plans. The seminar and meeting also provided the forum for introducing the new Finnish chairmen of the Working Group, Dr. **Aimo Saano**, Research Manager of Metsähallitus and Dr. **Tapio Lindholm**, Senior Scientist from the Finnish Environment Institute.

The seminar was opened and chaired by **Pekka Kangas**, General Manager of the Finnish Ministry of the Environment. He emphasized that the decisions on the use of the natural resources of Northern Europe are today considered to be international questions. More concern is being, and must continue to be, given to the conservation of biodiversity and sustainable principles of using natural resources, especially in forestry. Nongovernmental organizations both in Russia and Finland have been active in calling for the establishment of protected areas. Both countries are familiar with the basic problem: forests should be utilized for the needs of the national economy, but at the same time a sufficient level of nature protection level should be secured, and responsibility for conserving biodiversity must be taken. Nature conservation cooperation between the two countries has increased in recent years. More specialists and stakeholders are involved and new joint programs have been launched.

Professor **Rauno Ruuhijärvi** presented the history and present situation of Finnish-Russian nature conservation cooperation. The joint work was originally given concrete expression in Karelia. An internationally important twin park, the "Friendship Park" in the Kuhmo and Kostamus territories, was established from 1987-1990.

This marked the start of the development of the protected areas network. Planning and establishing the Paanajärvi and Vodlajärvi ('Vodlozersky') national parks were made the next objects of cooperation. The concept of the 'Green Belt of Fennoscandia', a zone of protected areas on the Finnish-Russian border regions, was launched. Biodiversity inventories and protected area planning for the Kalevala, Tolvajärvi, Koitajoki, Tuulos and Ladoga Skerries national parks were drawn up. Soon, with the help of the main cooperation partner in Karelia (the Karelian Research Center), the cooperation area began to extend to five other regions of Northwest Russia. In the Leningrad region the main emphasis has been on developing the protected area network on the Karelian Isthmus and on the proposed Ingermanlandskij Strict Nature Reserve, on the islands of the Eastern part of the Gulf of Finland. Nature inventories and national park recommendations were made for four locations in the Murmansk Region (Hiipinä, Laplandskij les, Kutsa and Terskij bereg). In the Arkhangelsk region cooperation has consisted of several international expeditions, which have resulted in conservation recommendations, as well as the inventories and proposal for the Onezhkoe Pomore National Park. The inventories of Great Andoma Watershed have been the fruit of the joint work in the Vologda Region. Cooperation with the City of St. Petersburg began in 2002 and will be concentrated on the development of protected areas owned and managed by the city, especially those vulnerable coastal areas around the Gulf of Finland.

Finnish-Russian conservation cooperation has led to the initiation of a joint project for the Northwest Russia region, a comprehensive assessment of the potential for representation and the gaps in the protected areas network in Northwest Russia (a GAP Analysis). This international project will link biological research to the needs of structural and economic assessment of the protected areas.

Oleg V. Chervjakov, Director of the Vodlozersky National Park, gave a presentation on the current situation and future perspectives of the protected areas of Northwest Russia. As Chairman of the Association of Strict Nature Reserves and National Parks in Northwest Russia he talked about the severe economic problems the protected areas of all statuses have – on the local, regional and federal levels. The parks have therefore developed stronger cooperation amongst themselves and also internationally. Recreational and tourist services are being developed, though infrastructure needs improving.

'Conservation of biodiversity in the Northern regions of Russia today and in the future' was the topic presented by **Valery A. Efimov**, Senior Specialist of the Laboratory for Protected Areas, Ecology and Culture, of the Institute of ecological problems of the North. In 2001 the Russian Academy of Science, together with the Ministry of Natural Resources of the Russian Federation, published the National Strategy for Conservation of Biodiversity in Russia. This strategy emphasizes the importance of developing the protected area network. The task is to protect rare, endemic, relic and typical species, nature complexes and ecosystems. Up until 1998, in the Arkhangelsk and Murmansk Regions and in the Republic of Karelia a total of 243 protected areas were established. Among these were 6 Strict Nature Reserves, 3 National Parks, 61 regional nature reserves (zakazniks) and 172 nature monuments. The share of protected areas is 5.2 % of the total area of these regions.

International cooperation has had a significant role in developing the protected areas network in the Arkhangelsk Region, and scientific expeditions have resulted in conservation recommendations.

Inventories and a proposal for the Onezhkoe Pomore National Park within Finnish-Russian cooperation will (hopefully in the very near future) result in the establishment of the national park.

The Finnish-Russian development program 'Sustainable Forest Management and Conservation of Biological Diversity in Northwest Russia' was presented by **Riitta Hemmi**, Coordinator of the Biodiversity projects of the program, from the Finnish Environment Institute. Since the beginning of the program in 1997 nearly 30 biodiversity conservation projects have been implemented in the six aforementioned regions of Northwest Russia. The main objective of the program is to support the development of the protected area network, most of the concrete projects being nature value inventories resulting in conservation area proposals. Support for regional Red Data Book publishing is also an important task of the program.

Aimo Saano presented the Metsähallitus nature conservation cooperation with Russia, i.e., cross-border protected area cooperation. Metsähallitus has the objective of creating an unbroken line of twin parks along the Finnish-Russian border, starting from the Gulf of Finland and ending at the Arctic Sea (Pasvik in Northern Lapland). This kind of network of twin parks enables harmonization of the running and man-agement activities of the protected areas. The Oulanka (Paanajärvi National Parks) and the Friendship Park (Kostamus Strict Nature Reserve) are good examples of working twin parks. The cooperation activities are carried out in biological field research, exchange of information, protected area manage-ment planning, ecological training, public awareness campaigns, building and furnishing information centres for protected areas, capacity-building of management personnel and ecological tourism.

Biosphere territory cooperation in Karelia was the topic presented by **Timo Hokkanen**, Senior Scientist of the Regional Environment Center of North-Karelia. Two biosphere territories have been established in the Finnish-Russian cross border region: the Biosphere Territory of North-Karelia on the Finnish side and the Lapland Biosphere territory on the Kola Peninsula, on the Russian side of the border. The territories are considered to be experiment and research areas in the international UNESCO 'Man and Biosphere' program. Over 400 biosphere territories have been launched all over the world. The biosphere territories always include protected areas (core areas), around which are non-protected, collaboration areas. Human activities are an important part of the biosphere concept.

In the remote Finnish-Russian border regions the crucial task is to offer alternatives to the one-sided economy and, at the same time, to protect nature and use natural resources reasonably. Linking nature protection and the economy requires comprehensive and versatile cooperation between people in research and administration and between local communities.

After the presentations there was a time of public discussion and comments. The constructive comments of the Finnish nature conservation non-governmental organisations were presented by **Jouni Nissinen**, The Finnish Nature League. He emphasized NGOs' role in the nature conservation work in the Northwest Russia. The NGOs are willing to cooperate in the proposed GAP-Analyses project and therefore would like to be included more intensively to the project planning.

Kari Vitie, Representative of the Finnish Forest Industry Association, emphasized the good relations and the cooperation that the Finnish forest industry companies share with the Russian Forest administration, industrial enterprises and NGOs. The Finnish forestry companies are, first and foremost, customers of Russia. The Finnish forest industry supports the principles of sustainable forestry, but Russian forest legislation must be adhered to.

After closing the seminar the Working Group participants acquainted themselves with the Tvärminne Zoological Station of the University of Helsinki, visited the information centre for the Ekenäs Archipelago National Park and spent the evening in the park. The national park is located in the western archipelago of the Uusimaa province. The park extends from the open marine area right across to the island of Älgö in the inner archipelago. The group hiked around the nature trail of the rather large island of Älgö. The island is covered with dense coniferous forests, and the eastern side of the island features a type of shallow, sheltered bay (flada) characteristic of the inner archipelago.

Working Group meeting in Ekenäs 13.6.2002

The meeting took place in the Ekenäs (Ekenäs in Swedish and Tammisaari in Finnish) town hall and the participants were warmly welcomed by Mayor **Henrik Winberg**. The meeting was chaired by **Nikolai S. Ivanov**, Department of the state control and perspective development in the field of nature management and environmental protection in Northwest Russia Federal District, and by **Aimo Saano**.

On the agenda there were many topical questions, starting with the nature protection reviews of the Northwest Russia regions and Finland. The nature conservation situation in the Republic of Karelia was presented by **Evgeni P. Ieshko**, Vice Chairman of the Karelian Research Center, by **Oleg V. Chervjakov**, Director of Vodlozersky National Park and by **Sergei V. Tarhov**, Director of the Kostamus Strict Nature Reserve. The review of the Leningrad Region and the City of St. Petersburg was given by **Georgi A. Noskov**, Professor of the Biological institute of St. Petersburg State University. The presentation of nature protection activities in the Arkhangelsk Region was given by **Valery A. Efimov**, Senior Specialist of the Laboratory for Protected Areas, Ecology and Culture, of the Institute of ecological problems of the North. The present situation regarding the planned national parks in the Murmansk Region was outlined by **Vjatseslav V. Nikonov**, Vice Director of the Kola Research Center, and by **Anatoly M. Hohlov** and **Olga A. Makarova**, Director and Vice Director of the Pasvik Strict Nature Reserve. The projects and present situation in the Vologa Region were outlined by **German A. Vorobyev**, Professor of the Vologda State Pedagogic University. **Pekka Salminen**, Nature Conservation Counselor of the Finnish Ministry of the Environment described the present nature conservation situation and programs in Finland.

Other topics discussed at the meeting were: the GAP Analyses project; regional Red Data Books as normative basis for conservation measures; twin park cooperation activities; the establishment of new protected areas in Northwest Russia, especially the Kalevala National Park and the Ingermanlandskij Strict Nature Reserve and international project proposals, such as the proposal of the IUCN “Natural Heritage of the Barents Region: Management of the Interests of Future generations” and the UNESCO World Heritage proposal “Green Belt”.

After the day’s active work and lively discussions all participants stated that the Working Group always has been, and will continue to be, a very important forum for nature conservation cooperation.Work could be intensified by organizing at least one intermediate chairmen meeting in between the Group meetings once a year. It was stated that, on the Russian side, the chairmanship and members should be officially appointed by the Ministry of Natural Resources of the Russian Federation. The minutes of the meeting were accepted unanimously and the document has been delivered to the Ministry of Natural Resources of the Russian Federation and to the Finnish Ministry of the Environment.

Riitta Hemmi
Finnish Environment Institute

Economic accessibility of forest resources

Forest policy aims:
In the discussions related to new forest policy of Russia, the large differences between forest resources and economically accessible forests have been mentioned to be among the largest problems in forest management planning. It has been also pointed that the division of Russian forests into “ecological reserves” and “forests available for management” would make it easier to define goals for forest management, currently suffering especially the low profitability.

Due to profitability reasons, forest harvesting has concentrated of the to the forests close to railways, main roads and watercourses. As result, young forests and less valuable species dominate in the harvested areas close to transportation routes and mature forests in more remote areas. Unbalanced harvesting is among the reasons for the increased pressure to start harvesting of ecologically valuable forests but that are accessible. Russia is facing a risk for economic and ecological diversification of wood supply from young and immature stands close to transportation means and wood demand on mature forests in remote or ecologically sensitive areas.

For the organization of forest use that would be based on market conditions, the RF Government is working on a law of forest concessions. The concessions should be available in principle for economically accessible forest resources (i.e. commercial forests). All forest users, including foreigners, should observe the emphasize in the law: a pre-condition for forest use on the basis of the concessions should be the assessment of economically accessible resources.

Low stumpage value

In the past, under the centrally planned economy, the State had covered the transportation costs of timber – on average transported to a distance of 1800 km. The change to a market economy has made the remote forests (i.e. most of the forests in Siberia), economically inaccessible for the markets.

The current threats for the forest sector in Russia include a risk that the forest sector may not be able to increase the production without foreign investments. Russia would then be in the situation where raw material export would be among the few (if not only) viable options to increase the use of its vast forest resources. In the short run, if the forest industries are not quickly revitalised Russia may even need to import more forest products, especially paper and paper products than currently is the case.

One major consequence of the low competitiveness of the forest industries in Russia has been low ability to pay stumpage for wood. The average stumpage price paid by forest industries is only approximately USD 1 per cubic meter. The low price accompanied with many structural problems in forest administration has resulted in a continued decrease in the profitability of forestry. This, on the other hand, has resulted in decreasing investments in forest management, silviculture and forest protection. From the forest sector’s point of view, it is thus essential to increase the competitiveness of forest industries and identify economically accessible forests that are capable of generating forest revenue.

Model to estimate economic accessibility

The economically optimal distribution of wood harvesting – in terms of geographical location – can be analysed with an objective to minimise transportation costs. When combined with wood price information, transportation costs can be used as a proxy for economic accessibility of forests. For practical application, the level and location of wood demand has to be estimated also.

The forest resources accessibility, or positive stumpage (forest rent) (r) can be estimated with the formula[1]

$$r = \frac{P_0 - R_1 - C_1}{m} - T - R_{2(x_i)} - C_{2(x_i)}$$

where,

P0= the price of processed wood product,
R1= normative profit of final product manufacturing,
C1= normative costs of production in product manufacturing,
m= consumption of wood per unit of the final product,
T= transportation costs for roundwood estimated according to actual tariffs,
C2(xi)= normative costs for harvesting, and
R2(xi)= normative profit in harvesting.

$$r - S \geq 0$$

S= normative costs for reforestation.

If forest rent (r) is more or equal to normative costs for reforestation (S), the forest resources in question can be considered economically accessible.

Economic rationale

The formula introduced has been tested in real life situation in Novgorod region, Northwest Russia. The first results justify the use of the model. The economic accessibility of forests can be estimated with available forest resource and cartographic information, and under current wood demand conditions.

In principle, the method for assessing the economic accessibility is simple and flexible. By changing any parameter in the formula, it is possible to study the respective changes in the economic accessibility of forest resources. For example, it is possible to study a (hypothetical) case in which a wood-processing mill was (re)located in the region and to analyze over which areas wood harvesting was economically feasible. Also, with given demand for wood, it would be possible to estimate which forests are economically inaccessible and thus economically more rational to classify as ecological reserves.

---

[1] Petrov A. P., Mamaev B. M., Tepliakov V. K., Shetinski E. A. 1997. Public forest management. Moskva, VNIITSlesresurs. 304 p
Petrov A. P. 1989. Determination methods of stampage prise and forest resources cost estimation. In: Lesnoe hoziastvo, N0. 8, p. 13-16</i>

Assuming profit maximising behaviour from forest logging companies, the rational strategy would be to start the stocking-up from "the best" forests (with much higher forest rent) and continue towards "the worst" (with minimum forest rent value) forests. Provided that "the best" resources would be exploited first, the economic accessibility information allows development of various policy means to direct forest utilisation into certain areas. For example, if less valuable forests were to be utilised first, their use could be compensated to make them economically more feasible to harvest. On the other hand, areas with high forest rent may not become economically accessible without strict protective rules.

Anssi Niskanen
European Forest Institute, Joensuu

Anatoly Petrov
Institute for the Forest Specialists Education and Training, Moscow

Galina Filiouchkina
Forest Technical Academy, St. Petersburg

Improving the communication methods and practises in the forest sector of the Republic of Karelia

Background:
Political factors: In 1999 the Government of the Republic of Karelia approved the Concept of socio-economical development on 1999 – 2002 – 2010 "Revival of Karelia". In the preface of the Concept (2nd ed. Petrozavodsk 2000) it's purpose was defined as "raising the living-standard of the people of Karelia". The main activities of the Government were concentrated in four directions: raising economic effectiveness, growth of the regional income, settlement of the social problems, and raising the welfare of the people. Six priority means to make the concept true were listed. Improving the forest sector was the first one in the list.

As the targets for developing the Karelian Forest Sector (KFS) were specified, the general objective included the effective use and renewal of the forest resources, and increasing demand and supply for the forest products.

The first step objective (for 2002) stated that the intensified functional structure of the KFS was the precondition for revitalising the KFS and new investments in particular.

In the context of the forest, the basic message of the governmental Concept is similar to the ideas developed during the process of the project "Improving the communication methods and practices in the forest sector of the Republic of Karelia". Among the multitude of the fields of management the project concentrated in the problems of communication because communication is a key factor in solving also the problems of the other fields of management.

Institutional factors: During the transition towards the market economy the Karelian forest sector is facing dramatic changes. Nowadays the forests are in the state property, i.e. the state takes care of the forest management, including protection, while private forest companies mostly do cuttings. As a new situation, this causes a problem of identification of the common objectives between (a) the state, as the owner and manager of the forest resources, (b) its different bodies dealing with forests, and (c) forest companies using forests for economic benefit. During the Soviet era the centrally planned economy incorporated command-based sector management, and planning could not ensure any cooperation among the parties within the forest sector. Interactive communication is a basic factor in creating cooperation between the parties.

Economic and financial factors: The other point of concern is the necessity of investments into the KFS for its further development. So far, the investment projects of domestic and foreign investors have failed. Among the other reasons of failure, the closed way of operations exercised by the KFS actors and lack of information about the KFS, both nationally and internationally, have been recognised. Therefore, it is necessary to improve the methods and practices of the internal communication between the KFS actors, on the one hand, and with their domestic and foreign partners, on the other hand. This will promote marketing of the Karelian wood-based products and improve the image of the KFS as a potential for investments.

Social and cultural conditions: The transitional economy has significantly increased the number of participants in the forest sector activities. Today there are at least the following stakeholders: the State, forest management organs, forest users, citizens and NGOs. The population and NGOs are not involved in forest use regulation at the stage of planning and implementation. There is a need of open communication with the public from the viewpoint of both the democratisation process and the public's relationship with the forest (fire protection, multiple forest uses, traditional forest culture etc.).

Objectives

Overall objective and indicators of the project were to promote development of the KFS by improving its interaction on the internal, national and international levels. Project purpose and indicators were to improve means and skills to develop communication practice of the KFS.

Activities undertaken

During the project following activities were carried out:

- Launching conference, Petrozavodsk, 14.11.2001
- Round-table discussions on forest communication
- Two workshops in Petrozavodsk and one both in Kajaani and Moscow, Pushkino
- Communication course, Petrozavodsk, 12-13.04.2002
- Designing of the Karelian FCP
- Concluding conference, Petrozavodsk, 14.05.2002
- Project management and leadership

Additional activities:

- Planning of by-products: Karelian Forest Information Centre and a textbook
- Creating and approving project proposal on 2003 "Improving the Interaction Based on Communication Between Stakeholders of the Forest Sector of the Republic of Karelia"

Results achieved

Following results were achieved during the project period:

a) View on communication has been harmonised among the Russian Working Group (RWG) members.
b) Initiative, responsibility and target-orientation of the RWG members has been increased.
c) Idea of the forest communication has gained increasing support among the KFS actors (according to presentations at the seminar, Nov 14, at the concluding conference, May, 14 and to the reports of the RWG members).
d) Forest communication contacts with the KFS actors have been increased.
e) By-products, the project ideas of the Karelian Forest Information Centre (Information Centre) and a textbook on forest communication have been launched.
f) Karelian Forest Communication Programme (FCP) has been created
g) Project proposal on 2003 "Improving the Interaction Based on Communication Between Stakeholders of the Forest Sector of the Republic of Karelia" has been prepared.
h) Project proposal on 2003 "Improving the Interaction Based on Communication Between Stakeholders of the Forest Sector of the Republic of Karelia" has been approved by Committee of Natural Resources of the Republic of Karelia.

Sakari Virtanen
Project Manager
Oy FEG – Forest and Environment Group Ltd.

Expertise in Russian Forestry

Objective of the project is to gather and produce information about forestry and wood procurement in northwest Russia and to refine this information to be easily accessible to Finnish forest companies and organisations. To reach the objective the project establishes two information service points, creates an internet service and produces publications about Russian forest sector.

Inadequate knowledge of Russian forest sector and difficulties to obtain correct information have been to some extent a hindrance to productive co-operation between Russia and West-European countries. To pave the way to easier access to reliable and up-to-date information, Finnish Forest Research Institute (Metla) has launched a three-year (2002-2004) project Expertise in Russian Forestry to answer the information needs of the Finnish forest sector. The project is funded by the EU´s Interreg III A Karelia – programme and County Administrative Board of Eastern Finland.

Objective and results

Objective of the project is to gather and produce information about forestry and wood procurement in northwest Russia and to refine this information to be easily accessible to Finnish forest companies and organisations.

To reach the objective the project has established two information service points - in Joensuu and Kajaani - which serve the information needs of forest industry and administrative authorities of Eastern Finland. In the course of the project the central norm regulation (laws, statutes, regulations, instructions) related to forestry and forest use in Russia will be published in Finnish along with a general quide book “Pocket Book of Russian Forestry”, border area forestry telephone book and practical guide for wood importers. An Internet service with an on-line news service will be created to serve a wider public.

Coordinating organisation of the project is the Joensuu Research Centre of the Finnish Forest Research Institute. Other members of the project organisation are:

- Kainuun Etu Ltd. and Puugia - Centre for Wood Technology of the Joensuu Science Park, which answer for the functioning of the service points in Joensuu and Kajaani;
- Faculty of Forestry of the University of Joensuu and North-Karelia Polytechnic, which are responsible for teaching material production;
- Forest Engineering Faculty of the Petrozavodsk State University, which will provide the project with real-time information and ensure the contentual correctness of the produced material.

Role of enterprises

To ensure that the project directions are rational from the viewpoint of forest industry, forest companies will take part in the project by bringing out actual questions and needs related to operating in Russia, and describing the reality of wood import to other partners. Companies will develop project activities as a part of the project organisation. They will also be the first ones to utilise the produced new information.

Russian viewpoint

From the point of view of the Russian partner, the project promotes co-operation and business opportunities with the western partner and helps networking with Finnish enterprises. The project also supports the establishment of a Forest Information Centre to the Republic of Karelia as a parallel project to the on-going Interreg project.

Sari Karvinen
Joensuu Research Centre, Finnish Forest Research Institute

International ecological expedition to the intact forests of the Mezenskaya Pizhma river basin, Arkhangelsk Region, 6-11 August 2002

Maps of Russia's intact forest landscapes www.forest.ru/rus/publications/intact/!index-russia.html) published recently by Russian and international nature protection organisations show us clearly that there are still large intact old-growth forest tracts remaining in Northern Russia, and in particular, in the Arkhangelsk Region and the Komi republic.

According to the latest data obtained by the "Severolesproekt" Arkhangelsk forestry expedition, the total land area of mature and over-mature coniferous forests in the Arkhangelsk Region is 11 million hectares. Of this about 7 million hectares have been disturbed only minimally by human economic activity and can be referred to as old-growth, intact forests. As little as fifty years ago the republic of Karelia possessed similar heritage – as did Finland a hundred years ago – but in both places it is now gone, never to return.

From 1997-2001 four international ecological expeditions, aiming to evaluate the conservational value of intact forest areas in the Arkhangelsk Region, were held by nature protection organisations from Russia, Finland, Norway and Sweden, and since 1999 within the scope of cooperation of the International Contact Forum on Habitat Conservation in the Barents Region. The expeditions were: the Onega peninsula (1997), the Belomor-Kuloi plateau (1998), the Kozhozero landscape reserve (1999) and the Yula river basin (2001). The fifth expedition, which was the next logical step in the programme took place from 6-11 August, 2002 in the Mezenskaya Pizhma river basin – the most remote district of the Arkhangelsk Region.

In total, 17 participants (scientists, experts, representatives of nature protection organisations and technical assistants) from Russia and Finland took part in the expedition. Of these, eight participants were from Arkhangelsk: Dr. Valery Efimov (head of the expedition) and Dr. Alexander Davydov (Institute of Ecological Problems of the North, Russian Academy of Sciences); prof. Vasily Tsvetkov (Arkhangelsk Technical University), Mr. Vasily Voronin (Ecology Committee of the Arkhangelsk Regional Department of Natural Resources), Mr. Sergei Torkhov (Archangelsk forest inventory expedition), Mrs. Elena Rai (Pomorsky State University), Mr. Andrey Klimov (Sev PINRO) and Mr. Jevgeni Novoselov (artist), as well as two participants from Finland: Dr. Tapio Lindholm and Dr. Jevgeni

Jakovlev (Finnish Environment Institute, Helsinki). Additionally, there were six local guides with boats and a cook (Mrs. Nadezhda Makarova from Arkhangelsk). Thanks to the good preparation work participants had, over the five days, the opportunity to visit several extremely interesting areas of old growth forests and pristine mires, as well as the objects of cultural heritage themselves (the vast meadows along the river, the system of hunting lodges and the old villages of Shegmas and Kobylskaja). On the first day of the exhibition there was a flyover along the Mezenskaya Pizhma river (covering about 100 km). Field routes covered around 65 km (20 km by boat and 45 km on foot.

The area investigated is located within the North taiga sub-zone of the East European taiga zone, and belongs to the Timan taiga biogeographical province. Most of the area is covered by native taiga forest and mires. In the river valley, with its thick deposits of ancient soils from different geological ages, the landscape represents a complicated mosaic of forests and meadows. The first terraces of the river and its inflows are covered with alluvial meadows.

Forests. In total, about 550 hectares of forests in the Mezenskaya Pizhma river valley and also in a two-kilometre-wide zone on the left bank were surveyed. About thirty forest sites mostly dominated by spruce, pine, larch and birch were visited. The most common type of forest is mixed spruce-dominated forest with pine and larch. Lichen pine stands of pyrogenic origin, at different stages of succession, are also widely distributed in the area. There are also remains of relic forests dominated by larch (Larix sibirica). Most of the forest areas visited appeared intact or minimally transformed. Traces of selective cuttings of small intensity were noted only around settlements situated along the river. The main characteristics of the forest stands are:

- high age of the principal generation (160 years or more); the maximum age estimated for specific individual trees is 450 years
- uneven age structure
- "gap" or "window" dynamics of the development of stands
- monotonous structure of all vegetation levels
- large amount of dead wood (snags, brushwood and windfall) in various stages of decay.

Meadows are mostly confined to riverside areas. They are of anthropogenic origin and, during the course of their existence (400 years or more), have been used as hay meadows and pasture-land. Even now, the local people keep a large herd of horses, which roam freely through the pastureland during summertime. However, this traditional agriculture is quickly declining, and meadow flora is therefore gradually changing towards simplification of the species pool and an increasing proportion of particular species of weed.

There are several types of **Mires** (raised bogs, various fens and flooded fens). Open mires account for a significant proportion. All mires are in their natural condition, and have never been subject to drainage or other kinds of anthropogenic influence. The richest flora is typically found in the mires located by brooks.

The flora and fauna of the area are highly typical of minimally transformed natural taiga forests and include many rare and endangered species listed in the red data books of the Russian Federation and the Arkhangelsk Region. The species pool of plants is considered as both high and diverse. In comparison with western taiga areas, local flora is enriched by presence of many plant species of Siberian origin. The highest variety of vascular plants was noted in the river valley with complicated relief, particularly in calcareous-rich sites enriched with nemoral plant species.

According to information obtained from local hunters, several species of large mammal, e.g. bear, wolf, wolverine, elk and otter are quite common to the area. The same is said of large predatory birds. Along with common forest species such as goshawk, sparrow hawk and peregrine, several rare species (white-tailed eagle, fish hawk and eagle owl) have been spotted as well. Hunting is still very popular with local people. Hunters usually visit a particular area where they are trying to maintain a system of traps for wood grouse, black grouse and hazel hen. The most common game animals are marten, squirrel, hare and elk.

The area used to be well colonised by species of fungi and insects associated with dead wood (particularly spruce, pine and larch in different stages of decay), and these largely retained their natural patterns.

Water in the whole river system of Mezenskaya Pizhma and its tributaries is extremely clean and the river can thus serve as the benchmark for estimating water pollution in research work.

Mezenskaya Pizhma is the spawning river of salmon. More than 15 species of fish have been recorded, of which the most valuable are the different species and subspecies of salmon and grayling. Due to unrestricted fishing activity the stocks of these fish species need restoring. Over the last fifteen years, scientists and experts from both the Northern branch of the Polar research fishery institute (SevPINRO) and the Sevrybvod Institute of Arkhangelsk have conducted annual monitoring work on the natural reproduction of valuable fish species.

Along with well-preserved natural biotopes, the major objects of cultural heritage were observed. Due to the remoteness of this territory they still remain unexplored, and require special attention from archaeologists, ethnographers and historians of culture. The most notable objects are:

- archaeological sites from the Neolithic era (2000 years BC);
- a toponymic complex verifying the presence, in the past, of ancient tribes with old-Finnish languages in the territory, which is also characteristically toponymic of Northern Russia;
- old-fashioned villages still retaining their traditional layout, wooden architectural monuments, such as courtyards (five-wall and six-wall) and small warehouses built on pillars or racks (to prevent animals from reaching stored foodstuffs);
- a system of small hunting lodges along the river, and traditional trapping.

The portage system from the river Mezenskaya Pizhma to the Pechora Pizhma river is the oldest in the Northeast Arkhangelsk Region and this system was the main method for the ancient Novgorodians. The expedition of folklore and ethnography specialists led by N. Kolpakova in the 1950s has gathered, in the area, the best-known legends (bylines) of the Novgorod period.

The area in question clearly has a key role to play in terms of preserving the natural biodiversity and cultural heritage of Northern Europe. At the moment, however, a serious threat has hung over all these unique natural complexes, which are not integrated at all into the network of protected areas, either on a federal level in Russia or on a regional level in the Arkhangelsk Region. Even though the forests of the area studied are still inaccessible for cutting due to the absence of roads, they are considered as potential resources for long-term felling in the very near future.

All scientists and experts who took part in the expedition suggested establishing a new national park on the area studied. The borders of the proposed national park should be situated far from the existing timber transportation roads and determined on the basis of landscape attributes, namely, the

Mezenskaya Pizhma river basin and the rocky outcrops of the "Chetlassky kamen" ridge. The proposal of the expedition participants is that the national park should incorporate the forests of Leshukonsky Forestry Enterprise of the Arkhangelsk Region Department of Natural Resources and Environmental Protection in the Russian Federation Ministry of Natural Resources (Vozhgorskoe forestry enterprise, No. 4-9, 17-23, 31-40, 42-288). The total area of the proposed national park is about 250,000 hectares.

The participants of the expedition address, The participants of the expedition address, to the Head of to the Administration of the Arkhangelsk Region Committee of Ecology, to the Leshukonskij Municipality and to the Arkhangelsk Region Department of Natural Resources and Environmental Protection in the Russian Federation Ministry of Natural Resources, a request to make all necessary decisions to ensure the preservation of old growth forests and biodiversity in the Mezenskaya Pizhma river basin.

The participants of the expedition express their gratitude to the Finnish Ministry of the Environment, the Directorate for Nature Management, Norway and the Västerbotten Regional Council, Sweden for their financial support, and to the Arkhangelsk Region Department of Natural Resources and Environmental Protection in the Russian Federation Ministry of Natural Resources, the Administration of the Arkhangelsk Region Committee of Ecolo, and the Institute of Ecological Problems of the North (of the Ural branch of the Russian Academy of Sciences) for their excellent organisation of the expedition.

Jevgeni Jakovlev
Finnish Environment Institute

International workshop meeting : GAP-Analysis and regional Red Data Books in the conservation of landscape and biological diversity in the Northwest Russia (Vologda, Vologda State Pedagogical University, 21 – 25 October 2002)

The seminar was organised by the Finnish Environment Institute, Finland; the Directorate of Nature Management, Norway; the Regional Council of Västerbotten, Sweden, and the Vologda State Pedagogical University.

Thirty six representatives of governmental and non-governmental environmental organisations from Moscow, St. Petersburg, Karelia, Arkhangelsk, Vologda, Murmansk, and Leningrad regions participated in the seminar .

The programme of the seminar included discussion on preparatory issues for the GAP analysis of the special nature protected areas network in the Northwest Russia. The participants provided information on the upcoming regional Red Data Books of Endangered Species against the background of new IUCN criteria (1994). The project coordinators and leading Russian, Finnish and Norwegian Red Data Book experts presented their reviews of the GAP project at the plenary session of the seminar. This was followed by three workshops on Tuesday afternoon, and morning and afternoon sessions on

Wednesday. The workshops included a number of prepared reports and a roundtable discussion. The results of the discussions are described in the Resolution adopted by the seminar.

The international training seminar discussed the objectives of the GAP analysis project. The landscape approach was reiterated as being a major method for evaluating the layout of the nature protected areas in the Northwest Russia. Special attention should be given to the remaining virgin forests. The preparatory coordinators of the project (Finnish Environment Institute and the Biological Institute of Saint-Petersburg State University) backed by the project working group of 21 members were given the task to produce, by March 1st, a feasibility study in compliance with the European standards for international financing applications.

The participants of the seminar appealed to the Ministry of Natural Resources of Russian Federation to speed up the official endorsement of the GAP analysis preliminary project plan adopted by the Expert council of the North-western Department of Natural resources on 22 April 2002 and presented to the Ministry in June 2002.

Regional Red Data Books were discussed as an integral part of the GAP analysis project. The international training seminar asked the Department of the state control and perspective development in the field of nature management and environmental protection in Northwest Russia Federal District to create a committee or a working group on Red Data Books with representation from all constituencies of the Northwest Federal Region.

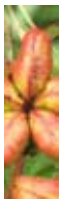
The seminar programme ended with an excursion to the “Russian North” National Park and to the Kirillov-Belozersky Monastery.

The participants of the seminar expressed their gratitude to the Finnish Environment Institute, Directorate of Nature Management, Norway, the Regional Council of Västerbotten, Sweden for financial support, and to Vologda State Pedagogical University for hosting the international training seminar on GAP analysis and regional Red Books of Endangered Species for landscape and biodiversity conservation in Northwest Russia.

Jevgeni Jakovlev
Finnish Environment Institute

Publications

Nature in northern Europe - Biodiversity in a changing environment



This 350-page book about biodiversity, “Nature in Northern Europe – Biodiversity in a changing environment”, is the end-product of a major Northern European co-operation project. It complies the latest essential information about plant and animal species and their habitats, while assessing the need for nature conservation.

The book covers the Nordic Countries, Scotland, the Baltic Countries and northwestern Russia including Murmansk, Leningrad, Pskov, Novgorod, Kaliningrad regions and the Republic of Karelia.

A fascinating insight into nature in northern Europe

This book starts by examining the significance of biological diversity; then continues with a review of the natural history of Northern Europe, describing the spread of species into Northern Europe after the ice receded, before assessing in detail how people have shaped plant and animal communities and their habitats – and how nature is faring today under various pressures. Finally, the book sets out the crucial arguments as to how the diversity of our natural surroundings could and should be protected. The book will appeal to anyone interested in nature, as well as teachers, students, researchers and decision makers.

Clear maps and diagrams together with excellent photographs ensure that the book’s detailed scientific content is presented in an attractive and accessible way. The book includes also nearly 200 drawings of plants, animals and fungi drawn by four artists. Among them is Evgeny A. Koblik from Russia, Senior Scientist of the Zoological Museum of Moscow State University, M. Sc. in Biology.

“Nature in Northern Europe – Biodiversity in a changing environment” was published in 2002 in English, Finnish, Estonian, Latvian and Russian. Many authors and specialists from each country were involved in the different phases of the five years’ comprehensive work. The Secretariat of the Editorial Group was located in the Nature Division of the Finnish Environment Institute.

The book has been financed by the Nordic Council of Ministers and printed by Edita Plc. in Helsinki.

Orders: www.edita.fi/netmarket

For more information contact:
Deputy Editor: Marja Pylvänäinen, Finnish Environment Institute SYKE/ Nature Division, e-mail: marja.pylvanainen@ymparisto.fi, tel. +358 9 40300 750

Editor-in-chief: Eeva-Liisa Hallanaro, e-mail: eeva-liisa@nic.fi

Natural complexes, flora and fauna of the proposed Kalevala National Park

The aim of this study is to analyse the present condition of natural ecosystems, in particular, the biodiversity of forests, mires and lakes in an area to the north of the town of Kostamus in the northwest part of Russian Karelia, close to the Finnish border.

The boreal taiga forest area consists of old growth forests with large quantities of naturally decaying wood material and a multi-layered forest canopy. Mires, lakes and rivers thousands of years in age lend the landscape its mosaic pattern. The flora and fauna of the area are also typical of boreal ecosystems. Indeed, many of the species found here are specialists of old growth forests and are unable to survive in managed forests. The survival of these species is thus totally dependent on the establishment of nature conservation areas such as this. After inventories and analyses were performed the area was put forward as a potential national park and the name suggested for it was Kalevala National Park. The Park is named in honour of the Finnish national epic poem, the Kalevala, which was assembled in the first half of the 19th century by the scholar Elias Lönnrot from oral poetry he had collected from people living in the villages of the area.

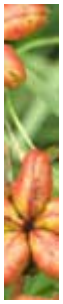
The present study and publication are the results of Finnish-Russian cooperation between the Finnish Ministry of the Environment and the nature conservation authorities of Karelia. The study was undertaken by scientists of the Karelian Research Centre, Russian Academy of Sciences and of the Biodiversity Conservation department of the 'Sustainable Forest Management and Conservation of Biological Diversity in Northwest Russia' development programme managed by the Finnish Environment Institute.

The editing of this publication was almost complete when in August 2002 the government of the Republic of Karelia took the decision to establish Kalevala National Park over an area of 74 400 hectares. This official decision indicates that the long-term Finnish-Russian cooperative effort has borne fruit and that the detailed information contained within this publication is of real significance.

Gromtsev, Andrey N. (ed.), Natural Complexes, flora and fauna of the proposed Kalevala National Park, 2002. Finnish Environment Institute and Karelian Research Centre, Russian Academy of Sciences, Series "Suomen ympäristö 577" (The Finnish Environment 577). Edita Prima Ltd, Helsinki 2002.

Orders: www.edita.fi/netmarket

Red Data Book of Nature of the Leningrad Region



Volume 3 of the Red Data Book of the Leningrad region – Animals, St. Petersburg, 2002, 480 pages, has been published in October 2002. This is the last volume of the bilingual edition with parallel texts in Russian and English. Volume 3 comprises a list of 602 vertebrates and invertebrates that require protection. Detailed description, including drawings, distribution maps, appearance, ecological characteristics, limiting factors and recommended conservation measures, is given for 298 species.

Volume 1 – Protected Areas, St. Petersburg, 1999, 400 pages, contains data on 56 nature protected areas established in the Leningrad region and in Saint-Petersburg, as well as on 60 projected and proposed nature protected areas. The descriptions of every protected area include landscape maps, nature sites, reference to the relevant Nature Protection Acts and decisions taken by the authorities. Also included in Vol. 1 is a brief outline of thirty geological sites proposed for conservation.

Volume 2 – Plants and Fungi, St. Petersburg, 2000, 672 pages, contains data of 528 plants and fungi that require protection. The descriptions of every species include pictures, maps, appearance, environmental characteristics, limiting factors and recommended protection measures.

Red Data Book of Nature of the Leningrad Region is a normative document, because the statute based on it is approved by the Leningrad Region Government. Red Data Book is an important tool for conservation of biological diversity and support of ecological development.

The book is also designed to serve biologists, ecologists, college teachers and youth environmentalist clubs, nature protection experts, university students, all friends of Nature.

The book has been prepared and printed with the financial support from the Ecological Fund of the Leningrad Region and the Finnish Ministry of the Environment.

Editor-in-Chief : Professor **Georgy Noskov**, Institute of Biology, University of Saint-Petersburg, email: gnoskov@area.usr.pu.ru

Please send your book orders to the following bookstores,
in Finland:

- Akateeminen kirjakauppa, Keskuskatu 1- Pohjoisesplanadi 39, FIN-00100 Helsinki, www.akateeminen.com

in Russia:

- St. Petersburg Dom Knigi, 191186 St. Petersburg, Nevskij prospect, d. 28
- Akadem Kniga, 191104 St. Petersburg, Liteinij prospekt, 57
- St. Petersburg State University, “Knizhnyi salon”, 199034 St. Petersburg, Universitetskaya nab. 11