A joint publication of the Center for Russian Nature Conservation, the Pocono Environmental Education Center and the Biodiversity Conservation Center
The **Center for Russian Nature Conservation**, a project of the Tides Center, assists nature conservation efforts in Northern Eurasia through information exchange, facilitation of professional exchanges, and assistance with fundraising for partner organizations.

The **Pocono Environmental Education Center** runs school field trips, retreats, workshops for educators and family vacation programs in order to promote better understanding of the complexities of natural and human-designed environments.

The **Biodiversity Conservation Center** is a Russian non-profit, non-governmental organization aiming to preserve the biological diversity of Northern Eurasia. BCC’s programs help to conserve wilderness, endangered species and ecosystems, promote public environmental education, and assist other nature conservation groups to achieve these goals.
Voice from the Wild (Letter from the Editors)

Three years ago, the first issue of *Russian Conservation News* was published. Has much changed in the three years of the journal's existence? Many environmentalists and conservationists think so. For many of the people working in Zapovedniki, the time to dwell on the economic crisis is over; the time to aggressively face the new era has begun. Although financing continues to be the most serious problem for the Zapovedniki, the complete collapse of the Zapovednik system appears to have been forestalled. Small and large successes have contributed to a cumulative impact in conserving the unique protected areas of northern Eurasia. Among the notable successes is the persistent work of leaders at several Zapovedniki to win the allocation of funding from regional governments - an important precedent for the future! Judging from the immense popularity of March for Parks throughout northern Eurasia, it seems that perhaps public sentiment toward protected areas has also changed for the better.

However, this issue of *Russian Conservation News* confirms that history repeats itself. We see the continuation of the tendency for federal and regional authorities to violate the regulations and laws of the Russian Federation, threatening the country's natural areas and in some cases, jeopardizing the civil rights and even health of its citizens. Examples are numerous: the planned construction of the Moscow-St. Petersburg high-speed railroad, the transfer of First Group (protected) Forests to a less protected category, the frantic timber harvesting on territory designated for Kalevala National Park, the logging of old growth forests in Leningrad Region, and blatant attempts by some regional governments to skirt Environmental Impact Assessment requirements. Despite the successful passage of nature conservation legislation in the past three years, we see that in the absence of rule of law, nature conservation remains virtually crippled in Russia.

The past three years have witnessed the exciting developed of increased cooperation among groups and protected areas which had been scattered and weakened by the break-up of the Soviet Union. For instance, Zapovedniki and National Parks within Russia and among the other former Soviet Republics have formed associations through which they can exchange information and expertise. Environmental lawyers have united in the creation of a professional network. A National Strategy for Biodiversity Conservation is being developed for Russia. The number of environmentalists “on line” has exploded across the former Soviet Union, making instantaneous communication possible across eleven time zones. These cooperative efforts are significant, for they symbolize the growing strength of the conservation movement in the former Soviet Union. At the same time, as competition increases for the limited international funding, it will be important for western and domestic organizations to ensure that the larger, more influential conglomerations remain open to all, guarding against the tendency to monopolize information and resources.

In this issue, *Russian Conservation News* brings you information about the World Wide Fund for Nature's "Living Planet" campaign: with a note of urgency, WWF reminds us that if we act now, we still have a chance to preserve the world's unique wilderness areas and enter the third millennium with habitat intact enough to support the now-endangered Siberian tiger and other large and small creatures of the earth. WWF encourages governments, businesses, and individual citizens around the world to make their own Gifts to the Earth, big or small. *Russian Conservation News* invites you to join this campaign. What will be your Gift to the Earth?
Winds of Change Blow from the Caucasus Mountains

From the editors: In April a workshop titled "Financial Support and Management of Zapovedniki" brought together the directors of seventy-two Russian Zapovedniki, along with leaders of federal agencies and NGOs, at Teberdinski Zapovednik (in the Northern Caucasus). This event was significant simply because forums of this rank, with almost all of the Russian Zapovedniki represented, are infrequent. Meetings of such scale become "historical," serving as landmarks on the evolutionary path of the Zapovedniki system as a whole, as they create new ideas and identify directions for future development. A similar meeting in 1994 established the "Zapovednik" newsletter, a publication for Zapovedniki. The next workshop, held in Sochi in 1995, identified fundamental approaches in environmental education and outreach programs at Zapovedniki. The Zapovedniki directors at that meeting also issued a plea to create a Department of Protected Areas Management, which later did occur.

The meeting in Teberda was expected, to some extent, to be a turning point in the development of the Zapovedniki system. To view Zapovedniki as intricately linked by an entire system is a new concept in itself. Earlier, although Zapovedniki shared similar organizational features, they operated in isolation from each other, reporting only to Moscow. Obviously, the economic and political changes of the last several years have shaken the hierarchy of values in society. Former concepts of the place of Zapovedniki in society, as well as their role as scientific institutions and their financing and interactions with the outside world, do not work anymore. The hardships of the last few years have pushed the whole system to the verge of collapse. How can the Zapovedniki survive? How can they become an integral part of society, instead of a burden? How can work in Zapovedniki become attractive, even prestigious, to educated and skilled people? These and other acute problems require solutions. The directors came to Teberda to work out answers and identify ways to survive together as a system. Was this task achieved, and were expectations met? The following selection of the participants' comments provides insight into the current status of the Russian Zapovedniki system.

"I feel that the conference singly failed to live up to its potential." — Jonathan Rudge, Technical Advisor to the model management project.

"Between May 12 and 18 I was fortunate enough to attend the GEF/WWF-sponsored conference of Zapovednik directors in Teberda. The primary goal of the conference was to discuss the financial problems facing the management of Zapovedniks and potential sources of alternative funding.

"Over the course of the conference, a number of Zapovednik directors presented a variety of ways in which they have dealt with the financial crisis. A large number were able to report significant support from regional or local governments. Unfortunately, this was only possible where these governments had a strong economy or the Zapovednik was perceived to be of importance to the region (e.g., Teberdinski Zapovednik's role in the development and support of tourism in the North Caucasus). Discussion was also held on how fines could be used to supplement income by up to 10%, although long-term financial support from this sector is likely to be of declining value, if public awareness and ecological education activities are successful.

"The main focus of the conference was on short-term funding through grants and donor agencies. However, these did not appear to..."

1. Teberdinski Zapovednik
2. Les-na-Vorskie Zapovednik
3. Kurgaldzhinski Zapovednik
4. Nauruzmiski Zapovednik
5. Saratovskii Zakaznik
6. Koryakski Zapovednik
7. Pechoro-Ilychsky Zapovednik
be considered part of a process which could provide a springboard to long-term sustainable management and support of Zapovedniki. It is important that Zapovedniki directors approach all grants with a view of how these fit into and support an overall strategy and direction for the Zapovednik. However, there was some discussion on, and interest expressed in, the establishment of an independent foundation that would support long-term development in Zapovedniki.

“Suggested alternative sources of income to grants, such as the involvement and use of local donors and sponsors, seemed to attract considerable cynicism and suspicion (as witnessed in the vigorous discussion following the presentation of the director of Priolosko-Terrasny Zapovedniki). However, if all the recent efforts at public awareness-raising and environmental education are successful, it is highly likely that one of the positive outcomes will be an increasing source of reliable income from this sector. As such, it is probably more important to draw up protocols and procedures by which directors can confidently accept such sources of income with transparency, rather than turn them down outright.

“Although I found the conference personally informative and it provided a very good background for the development of our project, I feel that it singly failed to live up to its potential. Important as it was as a rare meeting of directors, with attendance one of the best ever experienced, it was very disappointing that little discussion took place on long-term strategy and policy. Though directors have come a considerably long way from reliance on the state to provide support, with there no longer being an expectation that the government will

A weak state means a weak Zapovedniki system.” — Vsevolod Stepanitski, head of the Department of Protected Areas Management within the State Committee on Environmental Protection, comments on the future of the system of Zapovedniki in Russia.

What are your main impressions from the meeting in Teberda?
“People have changed: they’ve stopped waiting for the President to give them money; instead they’ve begun relying on their own capabilities. Now the directors of Zapovedniki can act, although realities have not changed for the better for them.”

In your opinion, is the crisis in the Zapovedniki system over?
“The financial crisis is continuing, but the spiritual crisis has been overcome. People have stopped lamenting and complaining; they’ve come to the conclusion that the general collapse in the country will last a long time, and the only thing they can do is adapt to new realities.

“The future for Zapovedniki as a system is tightly linked to the fate of Russia as a state. For as long as Russia continues being a state, it will possess the federal Zapovedniki under its jurisdiction. We haven’t had any Zapovednik in Chechnya, but if we had one, what we could say today about its operations would probably be nothing.

Although the system has survived on the whole, the continual deficiency in financing does not benefit the system; it works towards its degradation.”

Do you think the Zapovedniki system needs a new strategy of development?
“We need not a new strategy, but a new concept for the Zapovedniki system. A concept that embraces the main objectives, principles and intentions of activities, as well as means of effective federal management. No document of legitimate power on the Zapovedniki concept exists so far. Instead, for a long time a system of views and ideas, good and interesting, but in many ways obsolete and unfitted to new realities, has played the role of a concept. A new concept must have authority.”

Who will take responsibility for development of a new concept?
“The Department of Protected Areas Management has already commenced some preliminary work on that. We will draw in other experts who share our ideas, because not only is a high professional level important, but so is the possibility of working as a team.”

In summary, I believe the conference can only be considered to have been partially successful. It dealt with only one component of the most pressing issue facing the Zapovedniki system. The central government failed to make any substantive comment on future funding (for both the short- and long-term) and provided very little strategic or policy support for the directors to take home. Although it is appreciated that political and legislative support at present is, at best, inconsistent, it is essential for the long-term development of the Zapovedniki system that the central government provide the directors and their staff clear support through well-defined management policies and strategies. Above all, however, I feel that the conference failed to grasp a rare opportunity to hold some far-reaching discussions on the long-term future of Zapovednik and development. If the Zapovedniki system is maintain an insupportable status quo, there appears to be little progress towards a rationalization of management and research expectations to reflect the current economic situation confronting

summer 1997, #12
Protected Areas

"A process started at the previous meeting in Sochi, uniting protected areas in informal associations, has yielded obvious results," — Natalia Danilina, Director of the Zapovedniki Environmental Education Center in Moscow. "The main outcome of the conference was the clear vision that a new concept is acutely needed. And this became obvious not only from the center's point of view. No, people from regions came with the desire to contribute their experience to the development of a concept, and they really had something to contribute.

"What became absolutely clear was that, in spite of all apprehension, the Zapovedniki system has survived. There was no feeling of total failure. However, the means of survival for some of the Zapovedniki were not always appropriate. To understand whether those means were justifiable, one needs to know the main goal, but the concept of a goal has been lacking.

"For me it was very important to notice that a process started at the previous meeting in Sochi, uniting protected areas in informal [geographical] associations, has yielded obvious results. Directors of those Zapovedniki that have been working together in regional unions were more demanding and took a more active position. There are five associations currently in the Russian Federation: Northwest, Middle Volga, Far East, Baikal and Ural. The first three are the most active, and that was noticeable during the workshop. They had common views on many points of development of the Zapovedniki system; they had already discussed a lot of problems and could act as a 'monolith.' I think that after the workshop there will be an impulse for non-associated Zapovedniki to unite and support one another.

"As far as environmental education is concerned, the meeting in Teberda was the first where directors did not debate the necessity of this field in their activities. To my mind, the tangibility of this work for directors is a great success."

"The system of federal management of Zapovedniki is changing radically," — Eugene Shvarts, chair of the board of the Biodiversity Conservation Center. "The federal budget provides only 35 percent of the necessary funds to Zapovedniki; therefore federal structures are losing their authority to rule the Zapovedniki system; they can only partially influence the policies and activities of Zapovedniki. Since the government has failed in maintaining its subordinated Zapovedniki, an additional burden is being placed on the regional administrations. Foreign sponsors are gradually changing their approaches to investing funds in Russian nature conservation, and the expectations of Zapovedniki administrations should be accordingly adjusted. The concept of funding Zapovedniki activities needs to be revised completely, and this should be done within the framework of a new concept for the Zapovedniki system."

---

Lessons from the Teberda Meeting

by Dr. Irina Prokhorova

Towards the end of the seminar at Teberdinski Zapovednik, each Zapovednik Director received a questionnaire to (i) evaluate the seminar itself and (ii) assess (preliminarily) the status of affairs in the whole system of protected areas. This article summarizes the first part of the survey, which was conducted by the Moscow Program Office of World Wide Fund for Nature (WWF), and suggests ways to increase the effectiveness of future meetings.

The questionnaire was designed with the high level of the respondents' consciousness and their professional expertise in mind. Most of the questions were therefore left open-ended, and the structure of the questionnaire could be considered background for an in-depth interview, rather than a proper form of survey. The advantage of this form of evaluative research is that it makes possible a deeper understanding of the respondents' perceptions and views and might bring to light some unexpected issues. The disadvantages are the limited, primarily quantitative assessment and the key role of the sociologist designing and carrying out the study. Only 42 completed questionnaires were returned, a response rate of 59 percent. All the same, certain conclusions and recommendations are already possible.

In general, the participants' expectations and goals in attending were rather modest. Thirty-five percent of the respondents mentioned "sharing and exchanging information and experience" as their aim; 33 percent — "personal contacts with colleagues, friends and administration"; only 14 percent expected to gain "additional new information on financial issues"; 9 percent wanted "to understand general policies and key questions for the development of the whole system" and 5 percent mentioned "additional information on how Zapovedniki should survive." This distribution demonstrates that in fact, for the majority of participants, meeting with their professional community as such meant more than concrete issues. This could be explained both by the feelings of loneliness and uncertainty mentioned in respondents' remarks and by the shortcomings of the preparatory work, which started too late and failed to give the participants a proper vision of the aims, goals and content of the
Protected Areas

An absolute majority of respondents (75 percent) said that the theme of the seminar does belong among the top priorities for Zapovedniki. Participants found the following aspects also worth considering: strategic vision of the development of a system (21%); legal basis for the operation of Zapovedniki and the system (16%); activities of Zapovedniki in a regional context, for additional funding, sustainable development, tourism, and supplementary economic activities (16%); internal management of Zapovedniki, including psychological aspects and staff training (9%). Only 7 percent were interested in additional information on scientific programs at Zapovedniki.

These remarks demonstrate a clearly expressed need for better understanding the strategy and prospects of the system of protected areas as a whole; the role and place of a Zapovednik in the system, on one hand, and in the regional context on the other, and therefore the tasks and responsibilities of individual Zapovedniki. Although most of the participants were satisfied with the content and structure of the seminar, 16 percent were concerned that the financial situation should have been discussed earlier, and that the information provided was not really new.

As far as outputs of the seminar that could be put to practical, day-to-day use, 19 percent mentioned recommendations on fund-raising (please see related diagram #2). Only seven percent found nothing useful for their routine work. Generally, the seminar more or less met the expectations of the participants.

A few conclusions can be drawn regarding the content and organization of such meetings. Proper attention should be paid to regional considerations, strategies for developing the system of protected areas, and clear definitions of the Zapovedniki’s tasks and responsibilities, given the continual shortfalls in federal budget financing.

The key issue of each meeting should be presented in the context of its place in the list of priorities. The content of a meeting on a selected theme must contain how-to skills, new information and lessons from experience; otherwise, the necessity for actually gathering together should be reconsidered. Regardless of the hardships of the moment, a general mood of mutual support and partnership should be maintained, in order not to leave participants feeling hopeless and isolated.

The views, needs and perceptions of Zapovedniki’s staff should be taken into account, in addition to preparing for meetings well in advance. Adequate organizational changes will provide for more efficient management of protected areas, for the benefit of the entire system.

Dr. Irina Prokhorova is a sociologist and specialist at the WWF Russian Program Office in Moscow, where further information is available.

Model Management Plans for Protected Areas

by Jonathan Rudge

In April this year a U.K.-funded model project for the management of three protected areas in Russia began. For eighteen months RHS Associates, a small wildlife and natural resources management company with extensive experience in developing countries, including protected area operations and land use management, will be working closely with local non-governmental organizations to provide technical expertise and strengthen the work on the ground.

Money for the project comes from the Kow How Fund, the bilateral part of Britain’s assistance to Central and Eastern European countries, out of the Foreign Office.

A series of workshops will include a wide range of individuals and organizations already involved in protected areas management in Russia. The Global Environmental Facility (GEF) will also be involved, as part of its countrywide program to improve natural resource management.

Although protected areas cover 4.1% of Russia’s territory (93,000 sq. km.), lack of resources and political and social upheaval in Russia have meant that their protection has become increasingly marginalized. Without management plans that involve all of the stakeholders, the enormous biodiversity contained in these areas could be lost forever. Two of the government departments responsible for management of these areas, the Department of Nature Reserves and the Division of National Parks, are aware of this and will work closely with the project team, which is addressing three areas — the Katunski Zapovednik in the Altai republic of Southern Siberia, the Tsentral’no-Lesnoy (Central Forest) Zapovednik and the Smolenskoe Poozer’e National Park.

It is hoped that the participatory approach this project employs will provide a model for others, such as the GEF program, to use as they develop protected area management plans.

Jonathan Rudge is Technical Advisor for the model project.
Les-na-Vorsklo Standing Tall in its Third Century

by I.N. Panov

Adapted from an article in the newspaper, "Geography," No. 18, 1996.

Centuries of human economic activity have resulted in transformations of vast expanses of landscapes. For instance, take Central Russia's forest steppe zone, where almost all of the forests have been annihilated. The sparse remaining forest tracts are primarily secondary stands consisting of deciduous tree species. The formerly typical forested landscapes have become unique, thus greatly increasing the significance of their protection. Les-na-Vorsklo, "Forest on the Vorsklo River," Zapovednik represents one of just a few mountainous oak groves that have survived in the western part of the forest-steppe zone. It's located on the elevated right bank of the Vorsklo River in Belgorod Region (550 km. south of Moscow), near the Russian-Ukrainian border.

The oak grove has a long and rich history. For centuries the local forests were part of the abatis line — forest belts that served as a barrier defending Russian lands from nomadic invasions (Please see RCN #1, p. 12, for more information on abatis forests). Trees in these dense forests were felled in such a way as to make passage by the invading nomads impossible. Since the late seventeenth century, when the Russian Navy was founded and Peter the Great granted the territory to Boris Sheremetyev, the first Russian Field Marshal, these forests have been under special protection. Borisovka, the first settlement in the area and now a district administrative center, was named after Sheremetyev, whose descendants designated the oak grove at the Vorsklo River as a game sanctuary — and one of the first private Russian Zapovedniks was born.

The surrounding forests were being intensively cut and the land tilled for farming, but this oak grove, famous for its abundance of wildlife, remained undisturbed until the October Revolution in 1917. After the Revolution, a grove belonging to the nobility could not escape the wave of violations and massacres committed by peasants against the estates of the rich. Merciless harvesting and arson destroyed large areas of the preserved forests.

In the early 1920s, Sergei I. Malychev, entomologist, called for the creation of a Zapovednik in the former game sanctuary and then became its first Director. Thus were these unique natural systems saved from further destruction. When V. N. Sukachev, an academician, took charge of Les-na-Vorsklo Zapovednik, it was transferred to the jurisdiction of Leningrad State University and started being developed as a scientific center and field site for the University's joint biology/soil science department, for geobotanical, entomological, zoological and other studies.

During the sadly notorious federal campaign to liquidate Zapovednik in 1951, Les-na-Vorsklo was transformed into a forest study unit with a significant reduction of the protection regime. The subsequent timber harvesting resulted in the complete disappearance of such formerly common animals as beaver, wolf, deer and otter from the territory. The populations of animals such as fox, squirrel, wild boar and roe managed to recover after strict protection was resumed in 1978.

The local population continued calling the territory a Zapovednik all those 27 years, but they considered it more a site for common rational exploitation than an area of strict conservation. Though the status of strict nature reserve was restored, that attitude has remained unchanged.

The present territory of the Zapovednik comes to 1,120 hectares, and the buffer zone (orchards and the flood plain of the Vorsklo River) adds another 488 hectares. Only one Russian Zapovednik, Galicha Gora of 231 ha., boasts a smaller territory (while the largest Russian Zapovednik, Bolshoi Arkhiteiski, exceeds 4 million ha.).

Despite its small area, Les-na-Vorsklo plays a significant role in maintaining ecological balance in the region, as a site where animals, plants and natural mountainous oak grove ecosystems of the forest-steppe zone have been preserved. Its rugged, picturesque landscapes add to the Zapovednik's value. The greater part of the reserve is located several dozen meters above the
Vorskla’s steep-sloped valley. The loess, sandy and clay-filled deposits of the bedrock are easily washed out by water, creating amazingly deep, sharp, canyon-like ravines.

Intensive economic development surrounds Les-na-Vorskla. The circle of settlements has been squeezing towards the reserve for years, and now two villages and a district center are adjacent to the Zapovednik’s boundaries. Local inhabitants regularly trespass the borders, taking shortcuts to neighboring villages. The poor operation of local transportation and the lack of roads around the protected territory aggravate the trespassing problem. The scarcity of other forests in the region makes people use the Zapovednik as a recreational site and a nice place to gather mushrooms, berries and herbs.

Shots often ring out on the reserve territory, especially in its buffer zone. Poaching is a serious problem for Zapovednik rangers, since it has become a sort of sport not only to shoot an animal, but also to escape the inspectors. Inspectors have sometimes even come across local policemen driving an official car alongside the Zapovednik, with only vague reasons for paying a visit. It’s easy to imagine the effectiveness of law enforcement in the reserve, considering the constant insufficiency of personnel, equipment and means of transportation. For example, the Zapovednik has not owned a single car in all of its existence.

The sanitation cuttings conducted until recently provided local people with firewood and the Zapovednik’s budget with extra funds. However, the wood was carried away not by horses, but by large vehicles. To stop the negative effect on vegetation, the administration had to terminate sanitation cuttings, but this measure has worsened the financial standing of the Zapovednik and has led to a dearth of firewood for locals. Meanwhile, there was no money to supply local settlements with gas instead.

Nevertheless, in some ways the country’s economic crisis has benefited the eremita, Swallowtail (Papilio), and Catocala fraxini — are listed in the Red Data Book of Russia. The Zapovednik also boasts an ungulate population: roe, moose and boar are frequently encountered in its forests.

The rich species diversity and presence of both forest and steppe species is typical for intact pieces of the forest-steppe zone. Meadow-steppe sites similar to virgin steppe are now preserved on 75 hectares that have been added to the Zapovednik. These sites were rescued from tilling only because the rugged relief was so inconvenient for agriculture.

Les-na-Vorskla is valuable not only as an object of conservation and a research center, but also as a center for environmental education. The Zapovednik administration believes that prohibition and vindictive measures alone will not create mutual understanding with the local population. Significant attention must be paid to the formation of an environmental mentality, in order to gain appreciation and support from local residents.

The Zapovednik strives to provide materials on its history, acute problems, features of its wildlife and the legislative grounds for its status to the local newspaper on a regular basis. Botanical and ecological groups and a scientific society for children are working in the Zapovednik; a museum and dendrium with exotic plants have opened their doors for visitors. Every year about 100 tourist groups visit the Zapovednik.

Belgorodski Ecological Camp invites interested people to the Zapovednik every summer. March for Parks is another opportunity for Zapovednik employees to attract the attention and sympathy of their neighbors, and they use it to the utmost. Les-na-Vorskla also
welcomes scientific cooperation, therefore students from St. Petersburg, Moscow, Belgorod and other cities do field work here.

All of these efforts contribute to growing interest from the local people, especially children and adolescents. The Zapovednik has strong potential to become a regional center coordinating conservation activities in the region and cooperating with Ukrainian protected areas across the border.

I.N. Panov is a fourth-year student in the Geography Department of Moscow State University.

---

Prospects for the Creation of Biosphere Reserves in Kazakhstan

*by Rustam Khabibrakhmanov*

The idea of creating biosphere reserves in Kazakhstan first arose in 1993, when the Kazakh Ministry of Ecology and Bioresources signed an agreement with the German Nature Protection Union (NABU) providing for the creation and operation of four biosphere reserves in various regions of Kazakhstan. The agreement called for drafting and implementing a three-year program of research in those regions. Also in 1993, the Botanical Institute of Greifswald University and Kazakhstan’s Al-Farabi National University concluded an agreement on scientific collaboration that called, in part, for joint research programs, including the development of a plan for nature preservation zones (biosphere reserves and national parks).

In August 1993, the government of Kazakhstan established a working group to plan the country’s first reserve, the Tengiz-Kurgaldzhinski Biosphere Reserve, which was based on the Kurgaldzhinski and Nurzumski Zapovedniki. The working group has collected materials to prepare the scientific documentation for the biosphere reserve and has prepared an application to UNESCO to register this area as a biosphere reserve, with subsequent inclusion in the World Network of Biosphere Reserves. This year, the working group plans to survey the local population as a way to develop further recommendations for working with local people within the context of the biosphere reserve.

To bring non-government environmental organizations into the work of creating the biosphere reserves, the Environmental Problems Research Institute at Kazakh State University conducted a conference entitled “The Role of NGOs in Setting up Biosphere Reserves” in September 1996. A planned second conference will cover working with the local population.

Thus, thanks to private efforts supported by the Kazakh government, the necessary conditions now exist for the creation of a network of biosphere reserves. At the same time, several problems have also arisen.

For example, even though such reserves have been set up in Uzbekistan and Kyrgyzstan, Kazakhstan has had no experience establishing biosphere reserves because the country has not had the legal foundation for establishing this type of specially protected natural area. As a result, the government’s plan for park development through the year 2005 did not provide for the creation of biospheres. A draft law now under consideration in Kazakhstan provides for biosphere zapovedniki, but this type of specially protected area is not compatible with the goals and purposes of the biosphere reserves.

The difficult socio-economic situation and the severe shortage of material and financial resources in the country also complicate the plan to set up the biosphere reserves. Further, government agencies, land owners and the local popula-

---

Drawing by
A.N. Komorov from E.N. Spangenberg, "Vstrech s zhivotnymi" (permission for use granted by Komorov's granddaughter Martina Kblebnikova)
tion are poorly informed about the goals and functions of biosphere reserves. They do not have a clear picture of how they can participate in the biosphere reserves and how they will benefit from them.

In light of these problems, we can define several basic conditions necessary for the creation of a network of biosphere reserves in Kazakhstan. The most important of these is the development of an international agreement on biosphere reserves. Signing such an international document would give Kazakhstan the legal basis for setting up biosphere reserves. Nevertheless, it is extremely important that the new law on specially protected nature areas be passed to serve as the legal basis for all nature reserves in the republic.

The creation and successful operation of biosphere reserves require bringing in foreign investment and improving the government's investment policies. Drawing in material and financial resources would improve the country’s socio-economic infrastructure and help build economic interrelations in regions with biosphere reserves.

To gain the support of government administrative agencies, local landowners and the local population, there must be an active public education campaign, training for government employees, and laws to encourage and provide privileges for landowners with territory within biosphere reserves.

In addition, the biosphere reserves will be able to function properly only given comprehensive structure for management. It is extremely important to cease the endless reorganizations of the environmental protection agencies and the natural preserves. These reorganizations have been detrimental to the development of park administration in the country, including the establishment of biosphere reserves.

Finally, the development of a network of biosphere reserves could be promoted by Kazakhstan’s UNESCO Committee and environmental non-governmental organizations taking an active position in this regard.

In this light, it is possible to predict that Kazakhstan will be able to create 15 biosphere reserves, if a government-level plan for their creation can be drafted, and if the government supports the implementation of a program for biosphere reserves in Kazakhstan. It is necessary to accelerate the work to create biosphere reserves by stimulating activity by the government’s environmental protection agencies and by involving other interested organizations. The process will also require, in the initial stages, the participation of expert consultants and a flow of investment into the development of biosphere reserves.

Rustam Khambibrakhmanov is a member of the board at the VITA Ecology Center in Alma-Asa, Kazakhstan.

---

**FOCUS:**

**Energy Resources and Biodiversity Conservation**

From the Editors:

As the world's population continues to soar, modern economies across the globe continue to search for resources to increase their nation's wealth and save the world's ever-growing number of consumers.

The newly independent states of Russia and Central Asia are no exception. Harboring great stores of natural wealth, these new players in the global economy are faced with tremendous opportunities to increase their own profits. These northern Eurasian countries - as well as their western partners - continue to develop sources of “black gold” from beneath the earth's surface. But at what expense to public health and the already diminished wild denizens of nature? How can the benefits of mineral and material wealth be weighed against the irretrievable loss of wetlands and other important wildlife habitat? From Prudhoe Bay, Alaska to the Black Sea, environmentalists and other citizens struggle to measure - and in some cases, oppose - these costs of oil development.

However, in Russia, rule of law has yet to dominate the decision-making process; public access to and discussion of state information is still often tightly controlled. Given these factors, the oil industry poses a threat not only to biodiversity conservation but to the tentative foundation of a developing civil society. In the following articles we present a range of cases which demonstrate how the search for energy resources in Russia and Central Asia has jeopardized rare ecosystems and species and challenged citizens of the region to defend their natural heritage, and their civil rights.
Caspian Pipeline Consortium Threatens Black Sea Ecosystems

by Victoria Kolesnikova

To western readers of Russian Conservation News, the Black Sea is probably best known as a major destination for vacationing Russians. Indeed, the Black Sea coast -- 400 kilometers of which belongs to Russia -- has for generations been a popular recreation site. The Abrausski Peninsula, on the northeastern shore of the Black Sea, enjoys another distinction: vineyards, whose grapes are used in the world-renowned Abra-Durso wine, thrive here.

The Abrausski Peninsula is also valued for its natural diversity. Here, a Zakaznik (special purpose nature preserve) was established to protect this rare tract of Eastern Mediterranean juniper and pistachio forests. The marine ecosystem along the Abrausski Peninsula -- whose waters are the clearest, least polluted of the Russian Black Sea coast -- harbors many rare aquatic species. Currently, plans are underway to protect them with the creation of Utrish Biosphere Reserve. The reserve would incorporate coastal lands west of the Peninsula and possibly the Abrausski Zakaznik. (Please see the accompanying box on Abrausski Zakaznik and Utrish Biosphere Reserve).

However, the Caspian Pipeline Consortium (CPC) has foreseen other uses for this rare habitat. The CPC was founded in 1992 in order to construct a 1500-kilometer pipeline to transport crude oil from the Tengiz deposit in Kazakhstan across Russia to a terminal on the Black Sea coast near Novorossisk. The CPC has now proposed the construction of its terminal storage facilities on the territory of Abrausski Zakaznik, with the new terminal itself to be erected at Yuzhnaya Ozereika, a neighboring settlement.

Originally created by the governments of the Russian Federation, Kazakhstan, and Oman Sultanate, the CPC has since welcomed several international oil companies into its circle according to an agreement signed in December, 1996. Shares in CPC are divided among Russia (24%), Kazakhstan (19%), Oman (7%), Chevron (USA) - 15%, Mobil (USA) - 7.5%, Rosneft/Shell (Russia, the Netherlands) - 7.5%, Agip (Italy) - 2%, KazakhOil (Kazakhstan) - 1.75%, Orix (USA) - 1.75%.

The pipeline's initial capacity is expected to be 28 million tones of crude oil per year, with a projected capacity of up to 67 million tons annually by the year 2014. The total cost of the project is $4 billion and construction was scheduled to occur from 1997-1999.

Oil production is not new to Novorossiisk. The city is the largest oil port in Russia, with a highly developed infrastructure. CPC, however, does not plan to make use of the existing facilities now operated by the Russian federal oil company Transneft. Instead, the consortium plans to build a new terminal at a separate location. One reason for the choice to build a new structure -- in addition to the consortium's desire to maintain full control over the facility -- is cost. Construction of a new terminal, it

Accidents on Oil Pipelines

(Data from a review by Viktor Kutsenko in Zeleny Mir newsletter, #15, 1997.)

The main causes of pipeline damage are fires, explosions, and open oil fountains (the latter make up 68% of all accidents and cause the most negative impact on environment). The primary causes of oil spills are metal corrosion (inner, 86%; outer, 5.3%), flaws, defects in assembly, and mechanical damage.

About 50,000 accidents are registered annually on the 350,000 oil industry sites in Russia. In 1995-96 fifteen large-scale oil spills occurred. The largest one was in the Khanty-Mansi Region: 2,968 tons of oil were spilled into the Bolshoi Balyk River. There were 35,000 incidents on intra-industry pipelines in 1996.

Viktor Kutsenko is Superintendent of the Department of Environmental Safety under the State Committee on Environmental Protection.

Drawing by D. Fedorovski
Focus

turns out, will apparently be less expensive than refurbishing the existing structure.

The construction of a special port for oil piped in from Kazakhstan poses a threat to the Black Sea and its coastal ecosystems, endangering all of the countries situated along the Black Sea. This sea is a closed marine system: in the event of an oil spill, the pollution would remain virtually "locked" inside the sea’s basin. The risks of development here are made greater by the seismic activity of the region: Novorossisk has a seismic index of 8.3. Yuzhnaya Osereika, the settlement where construction is proposed, is an area of potential tectonic movement. Additionally, the region is characterized by tremendous hurricanes which can throw large vessels onto land. Such geological and climatic attributes point to a precarious future for the populations of humans and wildlife that inhabit the sea. Accidents are only too likely, especially considering the low level of our technical discipline.

Despite these potential hazards, an Environmental Impact Assessment being conducted by a special commission was halted in May, 1996, at the request of a CPC members. At that time, CPC was reorganizing its structure.

**Public opposition to the project**

The citizens of Krasnodar Krai, environmental organizations and twelve politically diverse public organizations in the region have opposed the project. These groups are not willing to allow the oil "giants" to economize at the expense of nature. They have initiated a protest campaign demanding that an Environmental Impact Assessment (EIA) be conducted with broad public discussion and participation. The public organizations have a legal basis for their demands: Article 19 of the federal Law on Environmental Impact Assessment states that the official review of proposed projects should reflect public opinion.

**Work on designing Uttarish Biosphere Zapovednik is currently under way. It may incorporate the Abrusski Zakaznik, which was established to protect relict oak, pistachio and juniper forest habitats of some rare insects and several rare Mediterranean plant species, most of which exist only in this area and are included in the Red Book of Russia. Twenty-nine species of butterfly, several mollusk species, as well as numerous aquatic invertebrates and terrestrial mammals are also sheltered here.**

Creation of the Biosphere Zapovednik was determined to be urgent by the State Committee on Environmental Protection; plans are expected to be completed in 1997. However, the specific characteristics of the region — the numerous land users, recreational zones and resorts and consequently complicated land relations — are delaying progress. The administration of Anapa (a resort area) has finally received permission to establish one of the Zapovednik’s two planned sites in its region; however, the other site of Uttarish Zapovednik, proposed for Novorossiisk Region, has not yet been approved by the regional administration.

The law also requires a referendum on large projects with potentially major effects on the environment.

Elements of the CPC project clearly contradict the goals of the Strategic Action Plan for the Rehabilitation of the Black Sea, a multi-lateral initiative signed in October 1996 by the governments of Bulgaria, Georgia, Rumania, Turkey, Ukraine, and the Russian Federation. The Strategic Action Plan prescribes that:

*In marine and coastal areas, and in particular in wetlands, new conservation areas shall be designated and the protection of existing conservation areas enhanced. In drafting their National Biological Diversity Strategies, Black Sea states shall take into consideration the integrity of the Black Sea system by, for example, designating conservation areas which are of regional significance.*

The designation of Uttarish Biosphere Reserve and the protection of Abrusski Zakaznik and surrounding coastal ecosystems must be defended as the Caspian pipeline winds its way toward the Black Sea. The government of the Russian Federation has contradicted itself, signing the Strategic Action Plan with one hand and with the other signing off on the potentially environmentally disastrous terminal of the Caspian Pipeline Consortium.

Public organizations are asking Black Sea countries to support their effort to save the Black Sea. A package of documents opposing construction of the terminal was recently submitted to the Office of Environmental Protection in Istanbul, Turkey.

In July of this year, a roundtable meeting devoted to the environmental aspects of the CPC project was held in Krasnodar. Representatives from public organizations, CPC employees, and authorities from the regional administration gathered for discussions. Agreement was reached on two important points: First, the regional administration has accepted the fact that a public environmental impact statement must be conducted and has expressed its willingness to cooperate. CPC members agreed to submit copies of documents prepared for the state EIA to a group of public experts. Second, in light of the absence of any public hearings, the start of construction, scheduled for late 1997, has been postponed.

*Victoria Kolesnikova represents the press service of the SocioEcological Union.*

---

**Rainbow Keepers**, a radical NGO, staged a protest action against the pipeline project on July 2 to 4. On the first day, more than 1,500 Novorossiisk residents signed a petition against the proposed construction of the oil terminal. The Rainbow Keepers also met with the Novorossiisk administration and asked that they reject the plans for terminal construction near Yuzhnaya Osereika settlement and promote creation of the Novorossiisk section of Uttarish Biosphere Zapovednik.
The Living Bustard vs. Mythical Oil-Dollars: Will the Fate of Saratovski Zakaznik Become Typical for all Russian Zakazniki?

by Lydia Zlatogorskaya

Adapted from an article in the electronic bulletin of the Volga Ecological Information Agency. Amid the endless smooth fields and greenish lakes of Fedorovski District in Saratov Region, you find a tulip field. On virgin, unplowed land, an entire sea of yellow, red, pink and violet flowers. "Tulip Steppe," a unique 100-hectare site where 17 species of Shrenk tulips grow, was designated as a natural monument in 1991.

Next to it is the territory of Saratovski Federal Zakaznik (special purpose nature preserve), created in 1983 to preserve the Bustard (Otis tarda) and Little Bustard (Tetrax tetra), species listed in the Red Data Book of Russia. As many as 300 bustards come here every spring to nest, and old people say it has always been this way; the largest flying bird on Earth favored a spot in the region and did not abandon it, even during the massive campaign to till the virgin steppe. The Saratov population of Bustard is the second largest in Europe, after that of Spain. Saratovski Zakaznik is entered into the European Catalog of Important Bird Areas. The Zakaznik provides an opportunity for ornithologists from around the world to study Bustard in the wild.

This summer, however, may become the last season for the Saratov population of Bustard. The Bustard fields and the Tulip Steppe are under threat. A large oil and gas deposit is expected to be discovered on the territory of the Zakaznik, according to indirect data. The private Volgograd-based company Lukoil-PREM is planning to start developing the deposit.

At the beginning of the twentieth century, the Bustard (Otis tarda), a rare species listed in the Red Data Book of the USSR, inhabited the entire Eurasian steppe zone eastward to Altai, as well as a significant portion of the forest steppe and part of the forest zone. Since then its numbers have fallen off, dropping especially sharply in the 1950s and 1960s. Habitat destruction is probably the most likely cause of the bustard's decline. A number of activities have degraded their habitat, including grazing, road construction, plowing, and the use of pesticides, which not only poison the birds but the insects upon which they depend.

The numbers and range of the Little Bustard (Tetrax tetra) also decreased suddenly in the 1960s. The Little Bustard prefers pieces of land with a mosaic pattern of plant cover about 15 to 20 cm. (6 to 8 inches) high. Under favorable conditions Little Bustards form group settlements of 10 to 12 pairs on 100 hectares, though the nests are often only 200 meters apart. As with the Bustard, their typical biotopes have disappeared because of plowing and grazing and the consequent disturbance of their nests.

Saratov Zakaznik was established to protect the Bustard's nesting grounds. Its regime includes regulating the amount of cattle grazing, setting a specific period for cutting hay, not allowing people near the nest sites and limiting the amount of car traffic along roads passing nearby. (From the Red Data Book of the USSR.)

Despite existing legislation which prohibits prospecting for and exploitation of resources on the territory of Zakaznik, the company obtained a license to use the territory for a period of twenty years. The license was issued by the Volzhski Geological Committee, with the permission of the Saratov regional administration. The actual owner of the territory of the Zakaznik, the head of an agricultural enterprise, leased an area of 5 hectares to Lukoil-PREM for prospective drilling.

The Chair of the Saratov Regional Committee on Environmental Protection was the first person to refuse to sign the documents on land transfer, to the great surprise of the oil company; it was the first obstacle to their progress. The Fedorovski District administration has already received the first installment from the company, along with promises to provide local residents with oil-dollar wealth — roads, jobs — to create a local Kuwait in Saratov Region.

The oil company has started constructing bore holes, in violation of the Environmental Protection Act (1992); moreover, the project was never submitted for conduct of an Environmental Impact Assessment. The chair of the Committee on Environmental Protection of Fedorovski District issued a claim to terminate all construction work on May 20, 1997, however, construction of bored holes is continuing.

Members of the Russian Bird Conservation Union in Saratov have initi-
ated a protest campaign and are sending appeals to Russian President Boris Yeltsin, Dmitri Ayatskov, Governor of Saratov Region, the State Committee on Environmental Protection and the Regional Game Department. However, no constructive reply has been received so far.

Has the promised oil-dollar wealth so blinded the minds of regional powers that they will permit the ruin of what we think of as our riches, birds, flowers, steppe?

Lydia Zlatogorskaya is a journalist working for Volga Ecological Information Agency.

**Update:** Although permission for construction was granted only on the district level, no environmental impact assessment has been completed, and the head of the regional environmental committee has banned all oil drilling. However, construction of the oil tower is almost completed. The Saratov branch of the Russian Bird Conservation Union continues to battle the violation of legislation and is trying to find protection for the bustard.

---

**Breakage on a Saratov Pipeline: Anticipated Accident?**

*by Lydia Zlatogorskaya*

The largest damage to an oil pipeline in recent years occurred in Saratov Region on February 16, 1997. A pipe 820 mm in diameter broke because of a poorly welded joint made twenty-four years ago. The total volume of spilled oil was 1,500 tons; 400 tons of oil got into the Mechetka Brook and up to 200 tons — into the watershed of the Volgograd reservoir. Water samples taken in the reservoir next to the breakage site revealed that the oil content exceeded allowable norms by a factor of tens of thousands. In the mouth of the Mechetka River, the content of oil components exceeded the allowable amount by 3,808 times. The information literally exploded in the mass media in Russia. Newspapers, broadcasting and radio talked about the incident; journalists, scientists and experts visited the site of the breakage.

In a while all the fuss calmed down. Employees of the oil industry persuaded the community that oil did not get into the Volga River, that it was spread over the floodplain and there it was burned or collected, and soil was recultivated. However, the true picture is far from ideal.

The consequences of the accident are most tragically and dramatically apparent from a helicopter: black slopes of a gulch and riverbanks spoiled with crude oil, small oil spills in lowland sites, in huge collector pits. Clouds of black smoke are rolling over the land; reeds and bushes on the banks and straw used as an absorbent are burning. Fire has proven the most effective means for getting rid of the oil. Workers are gathering and taking away spoiled ground, recultivating the soil. Large trucks and heavy excavators are at work here and there. The forces of Civil Defense and the Ministry of Emergency Situations have been called upon to liquidate the damage.

The State Committee on Environmental Protection estimated the soil contamination damage at one billion rubles; the damage incurred to the Volga River is under evaluation. However, the oil industry can satisfy any financial claim: according to official statistics, more than 70 billion rubles will be spent to liquidate the consequences of the accident. But that is much cheaper than examining pipelines with modern equipment for leaky and loose junctions. Therefore such accidents are not extreme cases, but almost planned occasions, considering the twenty to thirty years of use of these pipelines. The concept of the irreversibility of the damage to nature is not considered at all.

Burning oil on lake Usinsk caused by the huge oil spill from a leaking pipeline. *(Photo: Greenpeace/Warford)*

What extreme accident needs to happen in order to halt the negligence and imprudence of nature exploitation agencies, and to rouse people to protection of their surroundings?

Lydia Zlatogorskaya is a journalist working for the Volga Ecological Information Agency.
Russian forests under siege: Green NGOs unite

(Abridged version of an article by Anya Menner)

The rich inheritance Russia possesses in its forests requires special care and alertness to preserve it for future generations. The contemporary status of Russian forestry, however, in many cases threatens the mere existence of forest ecosystems over vast expanses of the country. For example, taiga (boreal) forests in Russia have been drastically declining in area since the beginning of the century, and present tendencies do not leave any significant hope for their reversal. There are few undisturbed forests left in the southern taiga, and mixed conifer-deciduous forests have been gravely affected by timber harvesting and agriculture. Only fragmented tracts of intact forests have survived in the central and northern taiga, and now they, too, are threatened with exploitation. The concerted efforts of environmentalists will stop the destructive exploitation of Russia's forests.

In Russia, forestry is characterized by specific features, both positive and negative. Generally Russia maintains a very low level of forestry technology; forests are on the whole in poor sanitary condition and often subject to devastating forest fires, with natural reforestation prevailing over artificial. On the other hand, Russian forest legislation has a number of good provisions, such as state ownership of the forests; the division of forests into groups and categories of protection; and significant restrictions on use of First Group forests (which comprise approximately 25% of all the European forests of Russia).

The country's social and economic problems, along with corruption and incompetence in the legislative and executive branches, the ubiquitous violation of forest and nature protection legislation and the absence of legal oversight and judicial implementation, define the specifics of the milieu in which the Forest Club is operating. Forest Club activities focus on the most crucial contemporary tendencies in forest-related spheres. These include conservation of old-growth forests, implementation of sustainable forestry, development and support of information exchange and analysis of foreign aid (primarily from large international organizations).

In early 1996 several of the largest NGOs involved in the conservation of Russian forests united into an informal working group under the name of the Russian Forest Club. Members of the Forest Club represent the Socio-Ecological Union, Taiga Rescue Network-Russia, Greenpeace-Russia, the Biodiversity Conservation Center, Students' Nature Protection Movement (Druzhina), the Save the Pechora Committee and individual activists. These organizations banded together for a higher level of cooperation in order to consolidate and coordinate the forest-related activities of NGOs and thus strengthen forest conservation in Russia.

Forest Club members are willing to cooperate with environmentalists in foreign countries and greatly appreciate any assistance they receive. However, they are aware that methods which are quite effective abroad might be totally unfit for Russia. All projects, initiatives and demands must be verified as appropriate for Russian reality.

The Forest Club's work ranges from inventorying and mapping old-growth forests (in areas such as Karelia and Murmansk of northwestern Russia), to organizing public campaigns, conducting patrols of protected forests and attempting to influence forest legislation.

Cooperation and promotion of progressive ideas among forestry organizations and experts are facilitated by publication of the Russian-language Forest Bulletin. The bulletin provides current, in-depth information on conservation legislation, ideology, environmental education, the views of NGO leaders, and foreign experience and practices in forestry. Special columns are designated for a consulting service and letters from readers, which provide feedback. The electronic bulletin "Forest News" and its English-language counterpart have recently become available for readers.

Anya Menner is Managing Editor of RGN.
EDANGEROSED ECOSYSTEMS

Inventory of Karelian Forests Aims to Protect Old-Growth

by Mary Rees

This summer scientists from the Karelian Research Center (KRC) will conduct an inventory of the areas around Kalevala, Koitajoki and Tuulos — where new national parks have been proposed — with financing from the Finnish Ministry of Ecology. The Republic of Karelia is the northwestern region of Russia bordering Finland, with Petrozavodsk as its capital. NGO representatives and Karelian and Finnish government officials met at Kostomukshski Zapovednik June 16 to 18 to discuss which areas to cover and what methods to use in the inventoryization of Karelian old-growth forests. Volunteers and scientists from Karelian, Russian and Finnish NGOs are taking inventory of forests not included in the official plans, so that those areas might eventually be put under protection.

“They’re talking only about three national parks, nothing more,” said Dmitri Aksenov, of the Biodiversity Conservation Center and the Russian Forest Club. “We presented a map [of Karelia] by quadrants, with the virgin forests we consider it necessary to inventory. Many neighboring territories also interest us, therefore, we will carry out our inventoryization more broadly and try to get that included in the final design.”

Their task is especially urgent: the Finnish firm of Vainionpaa has been clearcutting old-growth forests included in the more extensive of two proposals for the Kalevala National Park. So far the Karelian government has refused to intervene and stop the logging, partly because it favors the plan for a park half the size. NGOs are promoting the park in its larger form, to preserve the largest expanse of old-growth possible. They want to show that endangered forest ecosystems also serve as habitat to about 45 rare and endangered species, and so are “a biodiversity gene bank,” according to Sergei Tsyplenev of Greenpeace Russia.

Karelia harbors much of the last remaining old-growth forest in Europe, including the westernmost large tract (100,000 ha.) of old-growth forest. These are primarily taiga forests dominated by spruce and pine, with some birch trees. Largely thanks to the boggy soil and lack of roads in northwest Karelia, the trees have reached ages of 150 to 400 years, while the forests themselves have been little touched since the glaciers receded 9,000 to 10,000 years ago, except for selective cutting early this century.

“I think the territory is so obviously virgin that there will be no problem gathering enough basic data to establish that it deserves protection,” said Alexei Kravchenko, who runs the Laboratory for Protection of Forest Ecosystems at KRC. “It’s typical taiga territory, of which rather little remains, with typical taiga flora and fauna and typical taiga dynamics.”

The idea of taking inventory of the Kalevala and Kostomuksha old-growth forests first came up last year, when, thanks to pressure from several international NGOs, Enso, a Finnish company that buys wood from Karelia, announced a moratorium on wood coming from Karelian old-growth areas. Companies in several European countries have refused to buy wood or wood products that might possibly come from old-growth forests. Inventory is now needed in order to certify the origin of the wood for export, to satisfy buyers abroad.

A careful description of what lives and grows in the forest is also the first step in establishing protected areas. Oleg Kuznetsov, a botanist at KRC who will be analyzing northwestern bogs from mid-July to mid-September, explained his methodology. After dividing swamps into quadrants, he and his colleagues look at what plant life is there, in what quantities and combinations, and identify rare species, in order to determine what types of bogs and what types of communities are in the old-growth
Endangered Ecosystems

forests. Kravchenko added that there will be base camps for stationary research, as well as routes going five kilometers out radially from each base, in order to gather data from almost every section of the proposed park.

After KRC collects and compiles the data — and perhaps accepts the data collected by NGOs; that point is not yet clear — they "will have enough to define finally the nature conservation status of the territory, define the boundaries and prepare all the materials for drafting the design," said Kravchenko, "because every park has to have a draft plan, and the plans are done by a specialized planning organization, Rosgiproles [Russian State Institute of Forest Drafting]."

The Karelian government is not obligated to accept the drafts recommended by Rosgiproles, however, and the Russian government is not likely to make any changes to whatever Karelia proposes: usually the federal level just confirms that the proposed area will be funded as protected lands under federal jurisdiction.

Karelian authorities support the older plan for Kalevala Park, written in the late 1980s and consisting of three separate parts. Now, however, two of those parts have already been heavily logged.

"That's generally the usual practice," said Kravchenko. "As soon as we put forth some area for protection, they try to log it first thing. If in the late 1980s we proposed that territory, when we arrived in 1995, it had already been nearly completely cut down. That is, it's obvious that such territories are not suitable for a national park."

There is another reason to promote the larger version of the park. "Preservation of all the natural structures within a forest tract, including the normal population mosaic of large animals, is possible only when a large expanse is protected," said Alexei Yaroshenko of the Biodiversity Conservation Center. Yaroshenko named 30,000 hectares as the minimum necessary.

Kalevala National Park is also intended to preserve cultural heritage. Karelian-Finnish runes, from which the epic poem "Kalevala" was written, were collected in the villages of what are now the Kostomuksha and Kalevala regions early last century. Located close to the Russian-Finnish border, the park would form part of the Green Belt of Fennoscandia.

Mikhail Nikolaev of the Karelian Forestry Committee said at Kostomuksha that the Karelian government is now deciding whether to halt the cutting near Kostomuksha. He thought it would be stopped, but even with the encouraging words of the Karelian government officials at the mid-June meeting, NGO members still don't know whether their fieldwork will be accepted into official data bases, or whether protecting other Karelian forests will become a priority for the Karelian government anytime soon.

Mary Rees is Assistant Editor of RCN.

Karelia's timber lies waiting for export. (photos by Mary Rees)
Clearcutting of Group One Forests in Leningrad Region

by Charles Digges

Adapted from an article in "The St. Petersburg Times" on May 27.

In late May Vadim Gustov, governor of the Leningrad Region, was accused by environmentalists and members of his own administration of secretly granting three logging companies permission to cut down protected forests on the Karelian Isthmus.

Members of St. Petersburg's Green Party said the third week in May brought an explosion in the number of logging trucks crossing the Russian-Finnish border.

"If in the past we have seen 25 trucks a day, this past week and over the weekend we have seen more than 100 trucks a day," said Svetlana Nikitina, the organization's co-chairwoman. This group has positioned lookouts at the Trofyanovka border crossing.

"When this is done, we're going to be left with a desert," Nikitina said.

A visit by "The St. Petersburg Times" to supposedly protected forests near the village of Roshchino (Leningrad Region) and the resort region along the Gulf of Finland also revealed evidence of massive logging.

A historically popular spot for dachas and vacationers, the Karelian Isthmus' 15,000 square kilometers of forests and lakes has long been dear to nature-lovers. Gustov himself ran for governor last summer on an election platform that included reducing logging in the Leningrad Region.

But Sergei Orlov, appointed chairman of the controlling board of the regional Forestry Committee by the previous administration, said that on May 23 Gustov granted the Russian logging companies Timberland-Vyborg, Siro and Viner rights to log in the Karelian Isthmus.

If true, such a closed-door decision would violate local laws that stipulate logging rights be granted only through open and public tenders. It may also violate federal nature conservation and forestry laws.

Gustov himself could not be reached for comment, but his first deputy, Vitali Klimov, said that "though the environmentalists may not be entirely right [about the deal], there were some legal aspects in Gustov's decision] that need more consideration."

Klimov would not elaborate and referred further questions back to Orlov's regional Forestry Committee.

But Orlov was happy to elaborate. He said the three companies in question never could have won such a tender, because they will not be participating in serious forest repopulation efforts and will be exporting the lumber abroad.

Orlov said the three firms were chosen from a list of 45 companies participating in an on-going tender, many of which offered plans that did meet open competition criteria. The results of the open tender were not scheduled to be announced until late June.

"Gustov apparently chose these companies to help them in some way, because they never would have been chosen in an open tender," Orlov said.

He added that the three companies are "not in the best financial shape," and will be held by the Gustov agreement to only "minimum standards" of forest repopulation and clean up.

"They just don't meet the criteria," of an open competition, Orlov added.

Those criteria, he said, include a commitment from loggers to lease forest space for at least 45 years and, in doing so, to adhere to strict reforestation regulations protecting federal "category 1" forests — where, in any case, timber harvesting is never the primary goal.

But Orlov said Gustov's decision holds the three firms to just a five-year lease, effectively circumventing the reforestation requirements. They will also be exporting the logs — another factor that would have disqualified them in open competition.

"This is just an opportunity for [the firms] to make some quick money without the usual responsibility," Orlov said.

Just outside Roshchino, a swath of freshly cut tree trunks crushed by crane tires and truck tires near the intersection of the M-10 and A-122 highways widened approximately 100 meters into the forest to reveal a clearcut patch half the size of a soccer field. Another 300 meters up the M-10 highway to the north revealed a similar site.

"They do that so it's not visible from the road," said one local resident of 50 years, who requested anonymity. "The trucks come and go at night, and the plots are guarded by guard dogs; the trucks all have Finnish writing on the side... I doubt, when they log in Finland, they leave those sites like they leave these."

Whether these particular clearings were the result of work done by the firms Gustov chose is unclear. The Forestry Committee's Sergei Morozov, who oversees logging contracts in the region, said the three firms had not officially begun logging yet.

While spokesmen at the three firms contacted in late May confirmed they had received permission to begin logging, they referred further questions to their respective general directors, none of whom could be reached by press time.

Sergei Tsyplenkov of Greenpeace Moscow said it was common practice for the region to give logging rights on a short-term basis to companies who clearcut areas, then fold up their tents.
Gold Mining Threatens
Koryakski Nature Reserve

by Victor Nikiforov
(reprinted from WWF’s Arctic Bulletin
#2, 1997)

In December 1995 Victor
Chernomyrdin, Prime Minister of the
Russian Federation, signed a decree
establishing the 327-square-kilometer
Koryakski Zapovednik [strict scientific
nature reserve]. Koryakski Zapovednik is
the first protected area within the
Koryakski Autonomous District. Among
other valuable resources, the reserve
contains Parapolski Dol, one of the
largest habitats for ducks and geese in
northeast Asia.

Approximately 700,000
waterfowl come to
the area during
migration, and
several thousand
swans nest there. In
September 1994 the
Russian government had
included Parapolski Dol in its
list of sites that fulfill the criteria of the
Ramsar Convention on wetlands of
international importance.

Shortly after the establishment of
Koryakski Zapovednik, a threat to
Parapolski Dol arose. Ametistovoe, a
gold deposit with an estimated value
of $1.5 billion, lies in the immediate
vicinity of the site. No one has yet mined
the deposit because of its remote location
and the difficulties assessing the gold.
But Canadian investors have been lobby-
ing the government of the autonomous
district for exploitation of the deposit,
claiming that they will pay up to 80
percent of all the expenses.

Mining of the deposit would be
completely incompatible with the site’s
protected status and with the above-
mentioned decrees of the Russian
government. Those urging the
exploitation of the gold estimate
that it will take about 15 years.
During those years, development
plans include
construction near key
nesting sites of an airport
with a three-kilometer-
long, 300-meter-wide
runway capable of receiv-
ing large
planes. In addition, the process of extracting the
gold will require the extensive use of
toxic reagents.

What will become of this unique
wetlands area of international signifi-
cance? That is up to the government of
the autonomous district. World Wide
Fund for Nature (WWF) takes a special
interest in this issue because WWF-
Germany provided most of the financing
for establishment of Koryakski Zapoved-
nik. WWF-Germany raised $100,000 for
the project through a year-long market-
ing and mailing
campaign. WWF will
watch closely to see whether, in the
end, conservation wins out over gold.

Victor Nikiforov is Program Coordina-
tor at the World Wide Fund for Nature,
Russian Program Office.

Does World Heritage Include Gold?

The Virgin Forests of Komi Republic,
the first territory in Russia entered
onto the List of World Heritage Sites,
are under threat of commercial
exploitation. This territory comprises
Yugyd-Va National Park and Pechoro-
Illykski Zapovednik and its buffer
zone. The government of the Republic
recently decided to revise the borders
of Yugyd-Va National Park, to cut
200,000 ha. out of the Park’s territory
and open it up for gold mining. A gold
mining project in the Kozhim River
basin has already been developed.

Greenpeace-Russia and the Committee
to Save the Pechora issued an appeal
to the government of the Komi Republic
to terminate preparation for
commercial development of the
protected territory. There should be no
question of the possibility of turning a
World Heritage Site into a mine.
Earth Day — What We Can Do if We Don’t Have a Zapovednik

(reflections upon March for Parks)

by Kseniya Pakhorukova

March for Parks came to our country from the United States and has stirred communities located near Zapovedniki and National Parks. This spring Russia held March for Parks for just the third time, but it’s become obvious that this celebration has already rooted itself in the life of many people and protected areas. However, protected areas cover only a small percentage of the territory of Russia, and for people living in areas without Zapovedniki or National Parks, the words “March for Parks” don’t mean much. But nature, preserved to different degrees, exists everywhere. And in the spring many people in many regions celebrate Earth Day, demonstrating their love and care for nature.

This celebration appeared long ago in Russia, before the protected areas system was created, and it exists even now. It is nearly imperceptible: newspapers hardly write about it; radio and TV don’t cover it, but Earth Day apparently exists anyway.

Let’s review how this springtime celebration started in Russia. At the end of the nineteenth century, the first Earth Days were primarily festivals of tree planting. Mitrofan Turski, one of the most prominent Russian forestry experts, was an initiator of the event. He promoted the idea of harmony between people and nature. However, the celebration was adopted only with difficulty, since the Russian Orthodox church considered it worship of pagan powers.

Another festival of this kind was held for schoolchildren in the first days of May. Organizations called “May Unions” taught their members a thoughtful attitude to nature, with respect for the right of everything alive to live. Upon entering the union, children took an oath not to be reckless towards nature, nor to disturb nature. “May Unions” enjoyed great popularity, and in many regions both secular and church authorities participated in their activities, providing supplementary education and recreation. These traditions were gradually abandoned after the 1917 revolution.

In the 1930s the Soviet powers tried to revive celebration of Earth Day, but more as a manifestation of human subjugation of nature. Initiated by directives from the top, but without an adequate foundation among the population, the event subsequently perished. However, the bright and clear idea, as envisioned by Mitrofan Turski, of celebrating a day of help and closeness to nature, was preserved in many small towns and villages beyond the big cities.

For example, in Moscow Region local librarians became bearers and promoters of the idea. It’s strange, but for many of them, celebrating Earth Day is as natural as celebrating New Year’s. No one was able to explain the roots of the day: “It’s always been around.” On Earth Day many librarians who work at schools and at the same time conduct regular ecological seminars and groups, organize not only “theoretical” education about nature — book exhibitions, contests and ecological games — but also a practical part. Even cleaning up the woods nearby or getting rid of illegal garbage dumps becomes a festival. Planting trees is a truly heroic act, because it is always difficult to make a contract with forest management unions to receive young trees for planting, determine the place and provide instructors; not every librarian has enough enthusiasm to go through with it. For both children and adults, Earth Day turns into a delightful event in their humble provincial life. Local libraries often become cultural centers in small towns and settlements.

Most of the libraries holding Earth Day celebrations try to avoid mentioning them in their reports and conduct celebrations based on their own plans. They want the celebration to be for the soul, and not simply a formalized, official performance. Cooperating mostly with schools, the libraries stay somewhat in the shadows and are not at all active in seeking contacts with environmental NGOs from Moscow or other large urban centers. And that’s a great shame, because libraries possess tremendous educational and spiritual potential. If NGOs working for nature conservation could act in concert with regional and local libraries and support their efforts in environmental education, we could have more than one Earth Day a year.

Kseniya Pakhorukova works as editors’ assistant for Russian Conservation News.
Teaching Children the “Ins and Outs” of Biomonitoring

by Petr Mashkin

“The greatest goal of education is not knowledge, but action.” — Herbert Spencer, English philosopher and sociologist.

Monitoring the water quality of rivers, ponds and lakes and the condition of their self-purification systems is a pressing concern for all countries. There are national government programs for overseeing aquatic ecosystems in the developed countries, but there are enough specialists for just a limited number of observation points. Therefore, trained volunteers and students under their instructors’ guidance are also taught to evaluate the quality of water resources in such countries as the U.S., England and Germany. The data collected by schoolchildren to form a single data bank are processed by university researchers and used to analyze the situation in large river basins.

In Russia, biomonitoring programs for children are also being created. At this time we cannot afford expensive chemical tests, so we use simplified methods that are accessible to groups with some basic preparation. Conducting such research is completely within the capabilities of school kids with pedagogical leadership. In Moscow Region, Pushchino State University proposed a program to determine the water quality of the small tributaries of the Oka River and track changes in the parameters of mollusk populations; it has been supported by the Moscow Regional Committee on Nature Protection and the Moscow Regional Department of Education.

The currents of the Oka River in Serpukhov District (Moscow Region) were inspected annually from 1994 to 1996. In the course of the program, environmental education and ecological training are directly linked with the school kids’ practical application of theoretical knowledge. Moreover, continual, non-interrupted observations are indispensable to biomonitoring; this requires that the children take a responsible approach to the whole business, because data must be collected over many years’ time, and every group bears responsibility for its work.

We believe that at the first stage of creating a water-monitoring network, it’s necessary to use biological methods, the most accessible for a broad circle of research groups. Because no expensive, complicated equipment or chemical reagents are needed, these methods allow us to attract teachers and pupils for biomonitoring from both urban and rural schools, but especially rural, since the greater part of our water lies in rural areas. Moreover, biological means for evaluating the condition of aquatic ecosystems are integrated methods that trace the contemporary influence of various factors; they can signal the ecosystem’s biological “response” to nature preservation measures that have been carried out.

Because nature conservation measures in Russia have been sharply reduced, we must pay attention to the study of natural systems of river self-purification, with the goal of restoring them. Populations of bivalve mollusks (Mollusca) are one of this system’s basic components, along with higher orders of algae. An adult mollusk is capable of filtering up to 40 liters of water in 24 hours. Mollusks deposit many harmful substances, amounting to pseudo-feces, in the bottom sediments.

The method of researching populations of bivalve mollusks is maximally simplified for schoolchildren. On a coastal strip of the river (with a depth of about one to two feet), on test areas designated by surveying rods with a cord stretched at the level of the water’s surface, all of the Unio and Anodonta are extracted at defined ranges from the bottom sediments. (The species of mollusks are not determined.) The overall density and weight per square meter is calculated, as is the number of individuals and their weight in various groups determined by size. The shell length, which varies indirectly with age, is also measured. It’s especially necessary to trace changes in the proportion of young individuals in the population, because they are more sensitive to pollution of all kinds. After the measurements all of the mollusks are returned to the river.

Young Russians participate in biomonitoring programs
(Photo by Petr Mashkin)

Mollusk drawings courtesy of Zhidanov, V.S. “Akvariumnye rasteniya” Moscow: “Lesnaya promyshlennost”, 1987
Environmental Education

The measurements are noted down on special cards and sent to the data bank at Pushchino University. It's imperative to conduct research every year in the same stretches of the river, so that comparison of results will be correct. It will then be possible to draw conclusions about tendencies toward change in the environmental situation.

The second method usable by children is determining the water quality in small rivers and streams, since, in our opinion, being able to distinguish water suitable for drinking from low-quality water in field conditions is a necessary life skill. To do this, particular indicator-species of macro-invertebrates are selectively trapped, and by the collection of species and simple calculations, the water quality in small rivers is determined. The presence of caddis fly larvae (*Trichoptera*) and dobson fly larvae (*Corydalidae*) in a body of water says that the water quality is rather high, while the presence of a significant number of mosquito grubs and sedge worms (*Tubifex*) attests to a high level of contamination. Even if the stream's water is clear, cold and odorless, if at the same time there are no dobson fly, caddis fly, stone fly (*Plecoptera*) or May fly (*Ephemeroptera*) larvae, the water cannot be used for drinking, since it may contain elements that kill living organisms. The ability to distinguish water unfit for consumption from potable water is necessary for everyone, but especially for children.

Hydrobiological research, depending upon the age composition of the group and its level of preparation, can become more complex. One can begin with the easiest — investigating nearby bodies of water during weekend hikes. With accumulation of experience, research can be expanded through, for example, conducting studies along radial axes from a field camp or stationary summer camp, for inspection of distant areas. As a rule, most groups are limited to these simple methods; however, this research alone allows us to gather rather broad information about the condition of various bodies of water. If these observations are carried out regularly, the value of such data will increase even more.

Annual ecological expeditions, several days in length, constitute a more complex, interesting and informative form of research. The group moves along the river in kayaks, inspecting the condition of mollusk populations, describing the condition of populations of the most widespread higher algae, and finding indicator-species of macro-invertebrates in the studied ranges. With river travel, it's possible to study the particular traits of separate river sections and the shore belt, and to discover sites of illegal waste disposal, garbage dumps, and other infractions of the water protection regime of various reservoirs. Along the way the children pick up garbage along the riverbanks.

The results of hydrobiological research, along with other data, are used by district committees for environmental protection to analyze change in the ecological situation in rivers. Schoolchildren have the chance to follow the reaction of local powers to exposed infractions of nature protection legislation. Despite the difficult economic situation, the Serpukhov district ecological committee is supporting the children's expeditions financially, and the Serpukhov Employment Center is making small payments to youth inspecting reservoirs.

Into the bargain the problem of summer vacation for children is also resolved: a vacation in field conditions is less expensive than in stationary camps. In 1997 the program is spreading over the entire Moscow Region, and we are collaborating with the Central "Young Naturalist" Station of Russia to expand across Russia.

We often love to assert that we have the planet on loan from our children and grandchildren. We further believe that they have the right to check personally what condition their inheritance is in.

Gathering samples on the Oka River (Photo by Petr Mashkin)

Life in Nature allows children to sense their unity with Nature and see firsthand the casualties inflicted upon Nature by human activity. In organizing such regular work on ecological investigation of reservoirs for children, perhaps we will save greater means for rehabilitating the "children of asphalt."

The program's methodological conditions and recommendations for conducting evaluations of river water quality, as well as of parameters of populations of bivalve mollusks, were published by Pushchino State University in two pocket-size brochures: Mashkin, P. V., "Biological Methods for Evaluating the Condition of Water Ecosystems," Pushchino, 1996; and Aslanidi, K. B., and V. M. Vachadze, "Biomonitoring? It's very simple," Pushchino, 1996.

The methodology for researching the conditions of populations of bivalve mollusks has been included in the collection, "Ecological Monitoring," Russian Ecological Federal Information Agency of the Ministry of the Environment, Moscow, 1996, in a series of other methods recommended for use in academic institutions of the Russian Federation.

Petr Mashkin is superintendent of the Problematics Laboratory for Monitoring Aquatic Ecosystems at Pushchino State University.

Summer 1997, #12
ENDANGERED SPECIES

Ringed Seals in the Gulf of Finland Mysteriously . . . Drowned

by Mary Rees

Baltic Ringed Seals (Phoca hispida botnica) and Grey Seals (Halichoerus grypus) are the two seal species now found in the Gulf of Finland, in northwest Russia. If current threats to the small population of Ringed Seals are not removed, however, there may soon be just one species left in the Gulf.

According to the findings of an international group of scholars, Ringed Seals live in three isolated populations around the Baltic Sea: the majority, about 4,000 Ringed Seals, live in the Bothnian Bay (stretching between Sweden and Finland); another 1,500 live in the Estonian (northern) part of the Gulf of Riga; the remaining 150 to 200 Ringed Seals reside in the Gulf of Finland, just south of the Berezoye Islands. The small numbers left in the Finnish Gulf are the result of a recent catastrophic drop in population.

In the winter of 1991-1992, 150 Ringed Seal corpses were found in the Gulf of Finland. There were no obvious signs of cause of death, no pathogens or remnants of poison in the seals' flesh. When Finnish pathologists had performed thorough autopsies, they discovered a surprising fact.

"It turned out that most of them had drowned, which is highly unlikely for a sea mammal, you must agree," says Roustam Sagitov, Associate Professor at St. Petersburg State University and a permanent member of the Helsinki Commission working group on biodiversity and nature protection (EC-Nature). The exact cause of death is not yet known, but scientists suspect that some poisonous chemicals buried or sunk by the military near the island of Bolshoy Tutors (on Russia's westernmost limit in the Gulf) during or after World War II are to blame. Most of the corpses were found in this area, and because research has shown that Ringed Seals live very locally and are very conservative about migration, the source of the problem must lie somewhere close at hand.

"They dive to a very great depth — we know with the help of satellites — to 90 or 100 meters, and it's very possible that, having fallen to the bottom, they come into contact with some kind of poisonous chemical substance," Sagitov explains. "Something happens: maybe the respiratory center of the brain gets blocked, maybe something else. No one knows yet."

According to official data, there is no pollution in the area and nothing is known about possible chemical pollutants. The claim of "military secrets" may prevent researchers from ever unearthing the truth.

Some natural phenomenon could also have caused the mysterious deaths, Sagitov added. For example, the seals may have been exposed to a toxic algae that doesn't harm the cold-blooded fish who eat it, but does harm mammals who feed on the fish. There may have been some intensive blossoming of these toxic algae.

"We have to look at this more fully. It's a subject for supplementary research," says Sagitov. "The situation is critical with Ringed Seals; such numbers are very small."

Overall, however, Russian scientists have been studying Baltic seal populations in the Finnish Gulf for a relatively short time, and so they have very little historical data with which to compare the present situation. Despite the plethora of scientific institutions in St. Petersburg, the Leningrad Region as an area of study was one big blind spot. It was much more prestigious for scientists to work on Kamchatka or in Central Asia; as a result, the fauna and flora of the Central Asian desert or of Kamchatka are far better known than that of the area immediately surrounding one of Russia's strongest scientific centers.

With the breakup of the Soviet Union, great international interest in Russia and nature preservation arose. Sagitov first became involved in seal research when Finnish scientists asked him to find a Russian scholar who researched marine mammals. When it turned out that no one had ever studied the ecology of seals in the Finnish Gulf, Sagitov himself took an interest. Now specialists from St. Petersburg State University, the Estonian Institute of Marine Research, the Finnish Game and Fisheries Research Institute, and the Norwegian Institute of Marine Research have been collaborating in research for five years, doing annual counts by air using the same methodology everywhere, to yield reliable data for all areas of the Baltic.

One of the first joint Finnish-Russian efforts was an observational flight over the Gulf in a military helicopter in April, 1992.

"All by itself, this was very out-of-the-ordinary, because (a) it was a Russian military helicopter starting from a military base, and (b) in that military helicopter foreigners were flying into a forbidden zone that had always been forbidden during the time of the Soviet Union," Sagitov said.

On that first trip the zoologists chanced to see a group of Ringed Seals concentrated on the ice to the south of the Berezoye Islands. It became apparent, with further observation, that this was a major gathering place for the Gulf of Finland population. Unfortunately, this place of concentration is located to the
Endangered Species

south of Primorsk, where construction of a huge new port is planned. The potential danger comes from the channel leading to the port: if the approach to the port is lain south of Berezovye, the Ringed Seal population in the Finnish Gulf would be lost.

In theory, the threat should amount to nothing. In December, 1996 the Administration of the Leningrad Region officially decided to establish a Zakaznik (special purpose nature preserve) on the Berezovye Islands and surrounding waters; it is the water, after all, that is most valuable in the struggle to save the seal.

But “it’s one matter on paper, and another in real life,” says Sagitov. Protection staff and money to pay them are needed.

“Last year it shocked me that snowmobile tracks were found on the ice, many kilometers from shore,” he added. “Of course that’s a terrible disturbance for the seals during the critical period of molting and nursing the young.”

Unlike the isolated groups of Ringed Seals, “there is one single grey seal population in the Baltic Sea,” according to WWF Baltic Bulletin 1/95. After spending the winter in the Gulf of Riga, on the Aland Archipelago in Finland or in ice dens further north, Grey Seals actively migrate when the ice melts. Those who come east to spend the summer in the Gulf of Finland gather in two places, on the islands of the Kurgalski Reef (north of Kurgalski Peninsula) and on Vigrund Island, both located in the southern part of the Gulf.

Though the Grey Seal population seems stable at 5,000 to 6,000, there is constant pressure from Swedish and Finnish fishermen to allow limited hunting of Grey Seals. According to some accounts, the Grey Seals destroy fishing nets, while “stealing” about 10 to 15 percent of the salmon caught in them. So far the Helsinki Commission has not given permission for hunting.

In order to ensure greater security for all of the seals, more protected areas are needed. Recommendation 9/1 of the Helsinki Commission calls for participant countries to organize protected areas especially for seals. Only when these sanctuaries are organized and protected is fully executed, and when the cause of death is established and eliminated, will the Finnish Gulf population of Ringed Seals be able to recover and stabilize.

Mary Rees is Assistant Editor of RCN.

Drawings reprinted from the Russian Red Data Book.

Mass Death of Baikal Seals in May

Compiled from materials supplied by Gary Cook and Irina Dyatkovskaya.

In late May, investigators discovered about fifty dead nerpa, Baikal Seals (Phoca sibirica) within sight of the Baikalsk Pulp and Paper Plant, located at the southern tip of Lake Baikal, in Irkutsk Region. Because of the extremely high level of dioxins found in the fat of Baikal Seals (please see the related box), many environmentalists suspect a link between these deaths and the continued release of dioxins and other toxic materials into the lake from the Baikalsk Plant.

At the same time, according to local sources, there could be other reasons for some of the deaths. For example, quite a few seals and pups were wounded, according to investigating limnologists and Roman Pukalov, a representative from Greenpeace Russia. Their conclusion was that at least some of the nerpa died as the result of uncontrolled hunting and then drifted ashore after the ice broke. (Please see RCN#6 for an article on the problem of overhunting the Baikal seal.)

The local newspapers “Sovetskaya molodezh” and “Vostochno-Sibirskaya Pravda” reported on May 29 that the nerpa were found on May 8-9 and May 14-15, after heavy storms. All were in the southern part of the lake, some just 18 kilometers from Baikalsk, and none were on the Buryatia side.

In addition to the above explanations, Valentin Drukker, Deputy Director of the Limnological Institute, suggested disease as a possible cause of the numerous deaths. Preliminary autopsies have ruled out disease, which reduced the Baikal Seal population in 1988. Final conclusions about the cause have not yet been made.

According to Nikolai Pronin of the Buryat Institute of Biology, this may be a regular springtime phenomenon, a so-called nerpa “departure.” As a rule the reason for mass deaths in such cases stems from the necessity for biological regulation of the population. It also has been suggested that if the nerpa deaths were of a technogenic character, there would also be a lot of dead fish. A special commission was appointed to determine the cause or causes of death.

Besides the autopsies being conducted in Germany and Siberia, other actions in response to this tragedy include a letter of concern to the Gore-Chernomyrdin Commission urging officials to take immediate steps to protect the nerpa’s habitat and secure its safety. Environmentalists from Earth Island Institute and its Baikal Watch, International Marine
Endangered Species

Mammal, and Rethink Paper programs, as well as from the Pacific Environment and Resources Center and Baikal Environmental Wave, wrote and signed the letter, in which they ask the Commission to ensure the closure of the Baikalsk Plant, as has been decreed more than once by the Russian government.

Despite the fact that Baikal was recently named a World Natural Heritage Site, the Baikalsk Plant continues to operate, and in an appallingly irresponsible manner, endangering one of the most significant ecosystems in the world. Unlike the other two cellulose plants in the region, Ust-Elmski and Bratski, the Baikalsk Plant has found support and assistance and was planning to increase cellulose production (at least for a few months during the summer) after completing regular maintenance in early June.

Whether or not dioxins from the Plant are discovered to be at the root of this latest spate of deaths, they are indisputably harmful to animal and human life and can only lead to similar scenes in the future, directly or indirectly. Dioxins have been shown to weaken the immune system, thereby leaving contaminated populations more vulnerable to disease and epidemic.

Further, while the Plant continues to emit such poisonous effluents, the economy as well as nature suffers. Toxic pollutants could well deter would-be visitors to Baikal, thereby reducing the potential for developing the tourism and fishing industries around southern Baikal. As the lake’s ecology declines, the region’s opportunity for building a sustainable and thriving economy also declines.

Gary Cook is Director of Baikal Watch, an Earth Island Institute program.

Irina Dyatlovskaia is Executive Director of the Baikal Center for Ecological and Citizen Initiatives in Irkutsk.

Baikal Pulp and Paper Plant. One of the main polluters of the Baikal Lake (photo courtesy of Greenpeace, Russia)

Baikal Seal Deaths: Recent Events
- Dioxins were first detected in the fat of Baikal seals more than 10 years ago. Dioxin is a notorious by-product of the pulp and paper manufacturing process used by the Baikalsk Pulp and Paper Plant.
- In 1996, research scientists from the Chemical Institute of the Russian Academy of Sciences determined that there are extremely high levels of dioxins in the fat of the Baikal nerpa, measuring as high as 175 picograms per kilogram. These levels exceed what has been found in marine mammal species inhabiting the most polluted areas of the Baltic Sea.
- On May 26, 1997 Reuters/CNN reported that dozens of dead nerpa seals were found at Lake Baikal, their corpses clustered near the pulp and paper mill.
- On May 27, 1997 these deaths were confirmed by eyewitnesses and recorded on videotape by investigators from the Siberian Branch of the Russian

Rare and Endangered Fish Species in Russia

by Dr. Nikolai L. Sibilin

The total number of fish species inhabiting bodies of fresh water in Russia comes to 350. Traditionally this also includes species that make their home in the Caspian Sea (which can be considered a large saline lake) and lampreys (nine species), which are fishlike organisms, but more primitive than fish, since they do not have jaws. Lampreys spawn in rivers and brooks. Fresh water species also embrace anadromous fish species, those that spawn in fresh waters and “fuel up” in marine waters; their young can live in fresh waters for several months or years and then migrate to the sea. Some fresh water fish species, such as goby, sculpin and flounder, have adapted to water of varying salinity.

It has been discovered that no fewer than 10 percent of fish species are rare or endangered in various regions in Russia. According to the federal law “On the Animal World” (1995), all rare and
Endangered species are listed in the Red Data Book of the Russian Federation and Red Data Books of subjects of the Russian Federation (republics, regions and other administrative units). The Red Data Book of Russia, the most recent edition of which is in preparation now (please see RCN #11), lists 39 fish species, as well as four lamprey species, all together representing 13 families. Purely marine species are not included in the Red Data Books because of difficulties in assessing their current status. Among the 39 fish species, 20 species are listed entirely and the others partially - their subspecies, population groups or forms are entered into the Red Data Book; lamprey species are all listed entirely (please see the related table). Depending on their status, fish species belong to one of four categories: most likely extinct, endangered, vulnerable, and rare.

The main reason for the aggravation of a species’ status and its entrance into the Red Data Book is human-induced transformation of habitat: polluting waters with industrial and agricultural sewage, constructing dams, cutting and floating wood, and introducing new species. Impudent exploitation of fish resources and illegal fishing also contribute greatly to the extinction of species. Even slight changes in habitat can be a sufficient cause for a particular population or a species of narrow range to be threatened with extinction.

The most economically valuable, migrating species, are usually subjected to an entire complex of threatening factors, which make them very vulnerable. It is well-known that fish fatten up before spawning, and historically men have harvested those fat fish on their spawning migration routes. However, for centuries the number of fish men could harvest did not threaten the whole population. Now, though, contemporary conditions allow people to drag all of the fish out of small rivers. Almost all large rivers are dammed, preventing fish from migrating to their spawning grounds. The insatiable appetite of poachers, coupled with modern fishing equipment, make fish populations absolutely unprotected from extermination. Quotas for commercial fishing made without proper substantiation or in pursuit of extra profit can easily undermine valuable fish resources. All of this explains why so many species, subspecies and populations of sturgeon, salmon and whitefish are listed in the Red Data Book.

Specifics of fish censuses, mostly connected to difficulties in observation and counting, result in a situation where trends threatening for populations are hard to notice. The danger becomes evident only when the decrease in numbers of a certain species is great and what’s needed are not preventive, but restorative measures.

Currently, experts working on conservation of endangered plant and animal species, including fish, have agreed that not only should species as formal units of biodiversity be preserved, but also every population composing the species. This is the only way to conserve the genetic variability of species. However, listing all of the endangered populations in the Red Data Book of Russia is an unreal task, but each subject of the Russian Federation has the right to create a regional Red Data Book.

Registration of a species in the Red Data Books is a very important step for conservation, since the listed species automatically becomes protected from harvesting. Taking is allowed only for the purposes of study or artificial reproduction. For Red Data Book species, especially those listed under Category I (endangered species) some special conservation measures are provided, including artificial reproduction, organization of specially protected areas, cryoconservation of genes in fluid nitrogen for creation of gene banks, and close monitoring of numbers.

For a long time artificial reproduction of valuable fish species in Russia managed somewhat to mitigate the negative consequences of overexploitation of fish resources. But the recent economic changes have drastically reduced the effectiveness of this measure. Many of the reproduction plants that released fish juveniles into the wild have ceased operations due to budget cuts, while others have switched to entirely commercial reproduction.

Unfortunately, creation of a protected area specifically to preserve some particular fish species is unlikely; no precedents have been reported so far. However, when threatened fish species are added to the set of a site’s valuable natural features, they can be taken under protection altogether. For example, a Zakaznik has recently been created in Moscow Region where an intact forest tract and a small river have harbored a number of valuable species of plants and animals, including grayling and brook lamp, For these measures to be effective, each particular threatened species or population requires a specially designed conservation program and stable financing for its implementation.

Nikolai I. Shilin is Senior Scientific Researcher in the Laboratory of the Red Data Book at the All-Russian Institute on Nature Conservation.
<table>
<thead>
<tr>
<th>Family</th>
<th>Species/Subspecies*</th>
<th>Status</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Petromyzontidae</td>
<td><em>Petromyzon marinus</em>&lt;br&gt;<em>Caspiochrona wagneri</em>&lt;br&gt;<em>Lampetra fluviatilis</em>&lt;br&gt;<em>Eudonotyson mariae</em></td>
<td>Endangered</td>
<td>Migratory</td>
</tr>
<tr>
<td>Acipenseridae</td>
<td><em>Acipenser sturio</em> (S)&lt;br&gt;<em>A. medirostris = A. mikadoi</em> (S)&lt;br&gt;<em>A. nudibranch</em> (S)&lt;br&gt;<em>A. baeri baeri</em> (SS)&lt;br&gt;<em>A. baeri baeri</em> (SS)&lt;br&gt;<em>Huso huso maeoticus</em> (SS)&lt;br&gt;<em>A. ruthenus</em> (P)&lt;br&gt;<em>A. schrencki</em> (P)&lt;br&gt;<em>H. davidianus</em> (P)</td>
<td>Most Likely Extinct&lt;br&gt;Endangered&lt;br&gt;Vulnerable&lt;br&gt;Vulnerable&lt;br&gt;Vulnerable&lt;br&gt;Vulnerable&lt;br&gt;Endangered&lt;br&gt;Endangered</td>
<td>populations of the Dnieper, Don, Kuban, Ural, Sura Rivers, upper and middle reaches of the Kama River&lt;br&gt;population of the upper part of the Amur River&lt;br&gt;population of the upper part of the Amur River</td>
</tr>
<tr>
<td>Salmonidae</td>
<td><em>Salvelinus svtovodovii</em> (S)&lt;br&gt;<em>Salvelinus elgycenius</em> (S)&lt;br&gt;<em>Salmo sntary morph sebago</em> (F)&lt;br&gt;<em>S.trutta</em> (SS), <em>S.mykiss</em> (SS)&lt;br&gt;<em>Salvelinus alpinus erythrinus</em> (SS)&lt;br&gt;<em>Hucho taimen</em>&lt;br&gt;<em>Hucho perral</em> (P)&lt;br&gt;<em>Brachymystax lenok</em> (P)</td>
<td>Rare&lt;br&gt;Rare&lt;br&gt;Vulnerable&lt;br&gt;Vulnerable&lt;br&gt;Vulnerable&lt;br&gt;Vulnerable&lt;br&gt;Vulnerable&lt;br&gt;Endangered</td>
<td>endemic species&lt;br&gt;endemic species&lt;br&gt;fresh water form&lt;br&gt;the southernmost subspecies&lt;br&gt;population of Sakhalin Island&lt;br&gt;population of the Ob River basin</td>
</tr>
<tr>
<td>Coregonidae</td>
<td><em>Prosopium caurifer</em> (S)&lt;br&gt;<em>Coregonus lavaretus baeri</em> (SS)&lt;br&gt;<em>C. I. baikalii</em> (SS)&lt;br&gt;<em>C. I. tayarzhet</em> (P)&lt;br&gt;<em>Coregonus albula pereslavicus</em> (SS)&lt;br&gt;<em>Stenodus leucichthys leucichthys</em> (SS, P)&lt;br&gt;<em>S. I. redina</em> (SS, P)</td>
<td>Rare&lt;br&gt;Vulnerable&lt;br&gt;Rare&lt;br&gt;Vulnerable&lt;br&gt;Vulnerable&lt;br&gt;Vulnerable&lt;br&gt;Endangered</td>
<td>population of Kubenskoe Lake, Vologda Region&lt;br&gt;inhabit Preschevo Lake, Yaroslav Region&lt;br&gt;population of the Ural River&lt;br&gt;populations of the lakes and rivers of the European part of Russia</td>
</tr>
<tr>
<td>Thymallidae</td>
<td><em>Thymallus thamallus</em> (P)</td>
<td>Vulnerable</td>
<td>populations of the basins of the Upper Volga and Ural Rivers</td>
</tr>
<tr>
<td>Cyprinidae</td>
<td><em>Rutilus frisii</em> (S)&lt;br&gt;<em>Esox lucius</em> (S)&lt;br&gt;<em>Mylopharyngodon piceus</em> (S)&lt;br&gt;<em>Megalobrama terminalis</em> (S)&lt;br&gt;<em>Plecostomus gibbons</em> (S)&lt;br&gt;<em>Barbus barbus borysthenicus</em> (SS)&lt;br&gt;<em>Chalcichthys chalcoides menoi</em> (SS)&lt;br&gt;<em>Alburnodes bipunctatus rossicus</em> (SS)</td>
<td>Endangered&lt;br&gt;Endangered&lt;br&gt;Endangered&lt;br&gt;Endangered&lt;br&gt;Endangered&lt;br&gt;Endangered&lt;br&gt;Vulnerable&lt;br&gt;Vulnerable&lt;br&gt;Vulnerable</td>
<td>Black and Caspian Sea basins&lt;br&gt;the Amur River basin</td>
</tr>
<tr>
<td>Cobitidae</td>
<td><em>Sabanejewia caucasica</em> (S)</td>
<td>Rare</td>
<td></td>
</tr>
<tr>
<td>Siluridae</td>
<td><em>Silurus soldatovi</em> (S)</td>
<td>Vulnerable</td>
<td>the Amur River basin</td>
</tr>
<tr>
<td>Percidae</td>
<td><em>Sizostedion volgensis</em> (P)</td>
<td>Rare</td>
<td>population of the Ural River basin</td>
</tr>
<tr>
<td>Cottidae</td>
<td><em>Cottus gobio</em> (S)</td>
<td>Vulnerable</td>
<td></td>
</tr>
<tr>
<td>Gadidae</td>
<td><em>Gadus morhua kildinensis</em> (SS)</td>
<td>Endangered</td>
<td>inhabits only a small lake of Kildin Island, Barents Sea</td>
</tr>
<tr>
<td>Percichthyididae</td>
<td><em>Siniperca Chuna-tsu</em> (S)</td>
<td>Vulnerable</td>
<td>the Amur River basin</td>
</tr>
</tbody>
</table>

Table by N. Shilin, T. Thornton
* S (listed by entire species). SS (listed by subspecies). P (listed by populations)
Population Assessment of the Striped Hyena in Georgia

by Jason Badridze, Zurab Gurielidze and Levan Butkhuzi

The Striped Hyena (*Hyaena hyaena*) is one of the least researched species belonging to the Hyaenidae family. The world range of the species covers a significant area, starting from the central eastern portion of Africa, as the population's extreme southern border, and extending up to the Caucasus in the north and through most of India to the east. According to present data, the species as a whole cannot be designated as endangered, though certain populations (or subspecies) can be considered threatened or critically endangered, such as the Caucasian and Central Asian populations, respectively. Our research focused on one subgroup of the Caucasian population of Striped Hyenas.

Before the present project, which was carried out between September 1995 and August 1996, there was unfortunately no research on population assessment or other aspects of the species' ecology in Georgia. The Georgian Red Data Book describes the Striped Hyena as extinct in the wild or inhabiting "inaccessible regions." However, the reports of local hunters and shepherds proved this assessment to be false, and habitat inaccessibility did not inhibit our research.

We had no clear picture of the conditions of the population before the project began, yet the contradictions among different sources of information led us to hope that individuals could be found in the target area. Our research was conducted primarily in the southeastern regions of Georgia, on the Lori Plateau and Shiraki Steppe, covering approximately 3200 sq. km. (please see the accompanying map), and in neighboring areas of Azerbaijan (about 1000 sq. km.). The area studied by vehicle totaled approximately 7000 km., and the territory covered on foot came to 1000 sq. km.

To assess the Striped Hyena population and its basic food sources, as well as the amount of human impact, three specialists and five volunteers or student members of Noah's Ark Center for the Recovery of Endangered Species (NACRES) engaged in tracking the animal, analyzing scat, making direct observations, estimating the numbers of potential "competitor" species and questioning local hunters and shepherds.

We were fortunate enough to sight three adult individuals in two different seasons. Trapping and scat analysis revealed that the investigated territory in Georgia probably shelters five individuals. Taking into account the food needs of other carnivores (such as wolf, jackal, fox, lynx, and bear) and birds of prey (vultures and other large birds) in the area, and using the available information on food availability in the Striped Hyena's other habitats in the Caucasus, we can presume that the total area of distribution could maintain a population of approximately 100 individuals.

Human disturbance affects hyena numbers more seriously than any other factor. Hostility towards the animal provokes hunters and villagers to kill hyenas on every convenient occasion, and there has been a tremendous increase in poaching in the country during and after the civil war, when a tremendous number of weapons were circulating through the country beyond the control of authorities. Human activity has significantly affected other animal species in the region as well. This territory has come under great pressure from non-sustainable husbandry: it is used intensively as livestock, primarily sheep. Thus, a large area is undergoing serious erosion, causing a decrease in food sources for the hyena. Some ungulates, such as the Goitsed [Persian] Gazelle (*Gazella subgutturosa*), have critically declined in number or completely disappeared.

Unfortunately, we cannot promote hyena recovery in the region until poaching and overgrazing are reduced. Solving these problems would save not only the hyena, but other species throughout the arid zones as well. We hope that the decision makers of this country will find time for nature preservation and, more importantly, will understand that if they do not, they will be cutting off the branch on which we all are sitting.

NACRES gratefully acknowledges full financial support from Fauna & Flora International for research and assessment of the Striped Hyena.

Jason Badridze, Zurab Gurielidze and Levan Butkhuzi are members of Noah's Ark Center for the Recovery of Endangered Species (NACRES), an IUCN member.
Financing Russian Zapovedniki in 1996

Excerpts from a report by Vsevolod Stépanitski.

Adapted from the “Informational Bulletin for Zapovedniki and National Parks,” #20, 1997.

Note: all figures were originally reported in rubles; the conversion into U.S. dollars was based on the average rate in 1996, with $1 equal to 5,100 rubles.

According to data reported by Zapovedniki to the Federal Committee on Environmental Protection, the total officially confirmed budget for major activities of the whole Zapovedniki system amounted to $9,936,215 in 1996. The federal budget (including the Federal Ecological Fund) provided 68.6 percent of all money received by the Zapovedniki ($6,816,939).

Support from regional budgets — those of subjects of Russian Federation — and non-budgetary funds brought in $1,432,975 and comprised 14.3 percent of the overall Zapovedniki budget. Only sixteen Zapovedniki managed to obtain funding from regional governments of the Russian Federation. However, in some cases this provided significant sustenance for protected areas. For example, Shulgan-Tash Zapovednik received 54 percent of its annual budget ($79,019) from the Republic of Bashkortostan. Verkhne-Tazovski Zapovednik (in Western Siberia) received 38 percent of its annual budget ($108,000) from the Tyumen Region budget.

Municipal budgets supported ten Zapovedniki in 1996. Verkhne-Tazovski and Yuganski Zapovedniki (Tyumen Region, Western Siberia) managed to get the most significant support: $30,772 (11% of the annual budget) and $29,792 (13%), respectively.

Regional ecological funds provided support for 60 Zapovedniki in 41 regions. For Tsentralno-Chernozemny Zapovednik this support provided 78 percent of its annual budget ($38,220). Yuganski Zapovedniki obtained $121,912 which came to 52 percent of its annual budget.

Other non-budgetary funds maintained 15 Zapovedniki in 12 regions; the most significant funding was obtained by Teberdinski Zapovednik: $87,024 (33% of its annual budget).

Sixty-one Zapovedniki managed to earn their own money; the share of those funds in the total budget came to 7.7 percent ($751,189). Zhigulevski and Kavkazski Zapovedniki, for instance, earned about half of their annual budgets, 50 and 46 percent ($50,568 and $68,404) respectively. The share of funds received from visitors amounted to 1.9 percent of the total budget of all Zapovedniki ($192,217). Funds earned by the Zapovedniki through permitted land use are of similar volume, $175,537 (1.8%). Other means of self-financing employed by Zapovedniki included fines and claims (1.2%), scientific contracts (0.6%), breeding facilities and farming (0.2%), other visitors’ services (0.6%) and other activities (1.3%).

Foreign grants made up 7.2 percent of the total budget for Zapovedniki and brought $7,179,872 to seventeen Russian Zapovedniki in 1996. For Sikhote-Alinski and Bryanskii Les Zapovedniki, foreign support constituted about two-thirds of their annual budgets, at 67 percent and 61 percent ($327,712 and $78,596) respectively. Three foreign organizations — US AID ($343,980), World Wide Fund For Nature (WWF) ($300,742) and the John D. and Catherine T. MacArthur Foundation ($46,216) — were major donors in 1996.

Domestic donors sponsored 26 Zapovedniki in 1996, this share amounted to $214,150, or 2.2 percent of the total Zapovedniki budget. Industrial enterprises and banks provided the major part of these donations, 69 percent (45% and 24% respectively). For Bureinski Zapovednik support from Russian sponsors made up 46% of its annual budget (or $58,408); Tsentralno-Lesnoi Zapovednik obtained 21% of its budget from this source.

Among the eighty-one Zapovedniki functioning as institutions in 1996, forty-seven had a budget of less than average, which was estimated at $123,754. The ten “poorest” Zapovedniki are led by Bolshaya Kokshaga Zapovednik, with an annual budget $17,836, 94 percent of which is federal funding. Sikhote-Alinski Zapovednik, with an annual budget of $488,824 and 39 percent federal support, tops the list of ten “richest” Zapovedniki.

The situation with regional support is
not the same in all subjects of the Russian Federation. In some, regional administrations demonstrated understanding and willingness to support "their" Zapovedniki, despite the Zapovedniki's subordination to the federal government. With gratitude one can name Khanty-Mansiya Region (which provided 56% of their Zapovedniki budget), Bashkortostan Republic (58%), Tatarstan Republic (63%), Rostov Region (78%), Yamalo-Nenets Region (49%), Nizhni Novgorod Region (52%) and a few others.

However, in several regions the administration could not find even one dollar (in either their budgets or their ecological funds) for their Zapovedniki — as in Tuva Republic, Mari-El Republic, Dagestan Republic, Krasnodar Region, Sakhalin Region and Ryazan Region. In Kalmykia Republic the administration found $390 for their single Zapovednik, and the only Zapovednik in Kaluga Region obtained $196.

To sum up, one can state that the federal budget (including the federal ecological fund) remained, in general, the main source of financing for Russian Zapovedniki in 1996 and covered about two-thirds of all expenditures for the total Zapovedniki system in the Russian Federation. This tendency is expected to continue in 1997.

Vsevolod Stepantitski is the Chair of the Department of Protected Areas Management in the State Committee on Environmental Protection.

---

# Information in Ukraine

Not So Hard to Find

**Paul Gorius** responds to the article on conservation financing in Ukraine, published in RCN#11.

In the latest edition of *Russian Conservation News* (#11), there is an article by Oleg Listopad and Eugene Simonov entitled "Who Finances Nature Conservation in Ukraine?" I am afraid that for at least one project that I know about personally (because I am the project leader), it is inaccurate and misleading.

The project is IUCN No. 75212, "Sustainable Agriculture and Steppe Biodiversity in Russia" (not "European Steppes Protection Plan" as stated by the authors). It has an overall budget of 405,000 Swiss Francs ($275,000) spread over three years, with four major project components and covering two countries.

What really puzzles me, however, is the statement that "it is very difficult to find any information about it in Ukraine." The authors know that the local focal point is INECO, so why not call them up and ask, or failing that, contact IUCN?

The first stage of the project was to establish Steppe Forums in Russia and Ukraine, which are open for all interested participants. The Ukraine Steppe Forum alone has over 90 people involved from NGOs, ministries, farming organizations and research institutes; there has been national and local media coverage of the project; leaflets and briefing documents, in English, Ukrainian and Russian, have been widely distributed.

The second stage of the project, completed and in the process of verification and publication, was to prepare preliminary GIS-based inventories of steppe sites in European Russia and Ukraine. The third stage, now in progress, is to conduct on-farm studies to prepare sustainable agriculture management plans; and fourth will be the consolidation of the work to produce national guidelines for sustainable agriculture and steppe biodiversity.

**Paul Gorius** is project leader of the IUCN project, "Sustainable Agriculture and Steppe Biodiversity in Russia."
Russia is Preparing a National Strategy on Biodiversity

by Arkadi Tishkov

The Russian Federation ratified the Convention on Biodiversity Conservation in 1995. Understanding that fulfilling the pledges of the Convention is a serious task, the Federal Government decreed the establishment of an Interagency Commission on Biodiversity as the responsible structure of management. The next step—the key point of the Convention—is the development of a National Strategy on Biodiversity. Russia, though it has great experience in nature conservation, has not yet got such a strategy.

An extensive project on nature conservation in Russia developed by the Global Environmental Facility (GEF) includes the work of elaborating a National Strategy as an especially important part, assuming that any investments in nature conservation and the development of a Zapovednik system without a National Strategy can address only a limited circle of issues. Thus, the elaboration of a National Strategy (NS) and corresponding Action Plan is of primary importance in Russia just now.

A brain-storming workshop to identify issues involved in creating the NS was held in early June in Odintsovo (Moscow Region). Twenty experts representing an entire range of interests in development and realization of the NS (federal agencies, fundamental and applied science, NGOs, higher education) spent three days in discussions. The main result was elaborating the general concept of NS, defining stages and approaches for further development, and identifying priorities in NS and the common points among the various experts' views.

The gathered experts agreed that the National Strategy on Biodiversity must integrate the strategies of the long-term activities of all the branches of power, economic sectors and population groups involved and interested in biodiversity conservation. It should be a governmental document with power of recommendation on concrete action plans.

The participants were unanimous that Russia should not simply follow foreign experience (at the moment about fifty countries have already developed National Strategies). Instead, the best way is to identify the specifics of Russia and adapt foreign practices and experience to them.

It was decided that the National Strategy would be developed in coordination with an Action Plan; it must be divided into stages, with the option of making corrections at the end of each stage; and the formulated National Strategy must provide for mechanisms of its realization.

Priorities in the National Strategy were given to territorial principles of biodiversity conservation, rather than conservation of particular species. Federal agencies will bear regulating power and interact with regions on the sustainable use and preservation of biodiversity. Among other priorities, seminar participants identified the improvement and adjustment of economic mechanisms (such as taxes and leases) for effective biodiversity conservation, development of strong international cooperation to ensure the execution of the pledges of international conventions, and preservation of the large, surviving ecosystems in Russia. Basic concepts of biodiversity will be spread among key groups of the population and sectors of society (in the form of a national idea, regional and group values or religious ideals).

A broad survey on basic problems of wildlife among different groups of potential participants in development and implementation of NS will be conducted. The range of participants will embrace not only experts directly involved in conservation or use of natural sites, but also experts in spheres that affect the conditions of those sites (such as industry, politics or finance) or have special interest in nature (religious and cultural institutions, for example).

This survey will help develop adequate approaches for executing the Strategy.

The process of development of the NS is open for discussion, and we urge our colleagues abroad to share their experiences so that Russia can learn from both your successes and failures.

Professor Arkadi Tishkov is a manager of the Strategy on Biodiversity Conservation, a component of the GEF project in Russia.
Arkadi Tishkov comments on development of a National Strategy on Biodiversity

(Interview conducted by Kseniya Pakborukova).

What do you see as the basic principle in development of the NS? We do not need to invest funds in inventing new approaches and methods — we have a lot already developed. The main task is to make them work, to integrate them into the NS and adapt them to international standards.

What provisions does Russia have for bringing the goals of the NS to fruition? Discussing the potential for realization of the NS, we start from the fact that a lot has already been done in nature conservation. The framework for NS has already existed on the federal level. A Department of Biological Resources Conservation exists and operates within the State Committee on Environmental Protection, experts on rare species conservation work continually with those developing protected areas; the Federal Program on Biodiversity Conservation is currently underway. We have a developed system for implementing the statements of various international conventions. Besides, Russia can boast of tremendous scientific potential — we have experts in biology, ecology and geography with very high qualifications. Perhaps nowhere else you can find so much data accumulated from long-term monitoring of different natural systems. The whole territory of the Russian Federation has been studied fairly well, and we already know what we have in terms of biodiversity. Also the agencies connected to the use of natural resources (such as forestry, fisheries and game) can apply their experience and information on species in development and realization of the NS.

What can you say about the current status of federal policies on biodiversity conservation? At the moment we don’t have a legislative basis for carrying out directed and clear federal policies in this area. We have good laws, such as the Laws on Natural Protected Areas, On the Animal World, on Environmental Impact Assessment, the Forest Code, which constitute a framework for federal policies, but the means for their execution have not been elaborated. The mechanisms of interaction between the center (federal level) and regions need improvement. Currently many regions are trying to appropriate all of the biological resources on their territory and declare them regional property. Such attitudes create tremendous difficulties in conservation of species, especially those migrating through different administrative units that have different policies on biodiversity.

The National Strategy must provide for mechanisms of interaction in pairs — center-regions, groups of regions - center, region-region — that will work towards effective biodiversity conservation.

What agencies could be interested in cooperation on biodiversity conservation, considering the current tendency in the economy to neglect the environment? We will focus our efforts, first of all, on agencies that use biological resources — fisheries, game agencies, recreation and tourism. Regional administrations must also become our allies, since they need their regional resources to be replenished. The Tax Code now in preparation might include provisions that nature exploitation agencies act also as nature conservationists.

What basic principles concerning the development of a protected areas system must be included in the National Strategy? We should exercise the principle of universality in nature conservation. There should be no “unprotected” territories. All nature must be under protection, and this protected nature must represent two categories: for current use and reserved, with varying approaches to conservation.

Subscribe to SURVIVING TOGETHER

Each quarterly issue is devoted to efforts to support sustaining societies in Eurasia. ST is the only publication covering environment, alternative energy, sustainable agriculture, economics, civil society, health and women's issues in all 15 republics of the former Soviet Union. In-country correspondents and activists provide original reports and photographs.

To subscribe, send a check in US Dollars drawn on a US bank to:
ISAR, 1601 Connecticut Ave, NW #301, Washington, DC 20009 <postmaster@isar.org>
(202) 387-3934

Not sure? Select article from a recent issue dan be viewed on ISAR’s web site:
http://www.isar.org/isar/ST.html

SUBSCRIPTION RATES
Students/Seniors .......$20
Individuals ............$25
International ..........$45
Corporate ..............$50
Libraries and Organizations ......$35
Russia Responds to WWF 2000: the “Living Planet” Campaign

(Excerpts from WWF’s “Living Planet” Campaign promotional materials, provided by the Russia Program Office of the World Wide Fund for Nature)

As humanity nears the start of the next millennium, we face an enormous challenge. The destructive impact of the “human footprint” has increased by two-thirds over the past three decades, and all over the world, forests, wetlands, oceans and coasts are being degraded at a rate never before experienced. World Wide Fund for Nature (WWF) has initiated an international campaign to rescue vanishing life on our planet, thus preserving an inhabitable planet for future generations. The impetus behind WWF’s Living Planet Campaign is to make the last 1000 days of this century a turning point in the struggle to preserve Earth’s fragile web of life.

To conserve the Living Planet, people must protect the natural ecosystems upon which life depends. WWF has identified approximately 200 key “ecoregions” — called the Global 200 — which are important for their rich diversity of species and biological distinctiveness, which the campaign will work to conserve.

Besides conservation of the Global 200, the Campaign embraces saving endangered species such as the tiger, the African black rhino, and the giant panda, species that have no chance to survive unless we act now. Another issue addressed in the Campaign is changing the patterns of resource consumption by promoting thoughtful use of the Earth’s fossil fuels, timber and fish.

Through the Campaign, WWF aims to mobilize people, business, industry and governments to take action and lay the foundation for conservation in the twenty-first century. The Living Planet Campaign is a “conservation action campaign” driven by three interconnecting initiatives:

- To generate new levels of public concern about threats to Earth’s ecosystems;
- To offer a sophisticated range of examples and mechanisms by which individuals, business, industry and governments can make a difference;
- To raise significant new funds to achieve critical conservation goals.

Through concrete actions for the conservation of the Global 200 ecoregions, called “Gifts to the Earth,” WWF is urging everyone, from homemakers, students and business professionals to heads of state, to support the Campaign. The campaign, led by WWF’s Russia Program, has started its march on the territory of the Russian Federation. Megzimbank, one of the first Russian conservation sponsors, is providing sponsorship. The following are important Gifts to the Earth, made to the Living Campaign in Russia since its launch in October, 1996:

The Sakha Republic protects 70 million hectares of Siberia.

Mikhail Nikolaev, President of the Sakha Republic (Yakutia), has pledged to protect an area roughly twice the size of Germany (70 million hectares), by the year 2000. This Gift to the Earth will result in one of the world’s largest systems of protected areas. (See region 5 on map)

The Komi Republic supports WWF’s efforts to protect the Pechora-Ilych Region.

The Government of the Komi Republic has offered to support WWF’s conservation activities in the unique, pristine forests of the Pechora-Ilych Region. The chairman of the Komi Government pledged support for Pechora-Ilychsky Zapovednik through the year 2000 and allocated some $255,000 of the Republic’s budget for implementation of the conservation program. (See region 6 on map)

The Governor of Kamchatka Region, Vladimir Biryukov, has decided to increase the area of protected natural territories.

With increase of the natural reserves in support of the Living Planet Campaign, the total area of protected natural territories on Kamchatka is brought to 31 percent: the Kluchevskaya Group of volcanoes — 500,000 hectares, Karymski Nature Park — 125,000 ha., and the “Blue Lakes” — 5,000 ha. (See region 7 on map)

The Governor of Khabarovsk Region, Victor Isbaut, organizes nature reserves.

By establishing an interrelated network of protected areas, the government supports the protection of a total area of 800,000...

Illustration courtesy of WWF
Governor Gennadi Nedelin extends the protected areas of Taimyr.
With the establishment of two new nature reserves, Brekhovski Ostrova, with 250,000 ha., and Popigaiski, with 200,000 ha., protected areas will be extended to 20 percent of the Territory of Taimyr. (See region 9 on map)

Altai Republic develops new programs.
The Chair of the Altai Government V. Chaptynov has proclaimed his intention to develop and start implementing a National Program on Snow Leopard Conservation by the year 1999. He will also seek federal and international status for Belukha Nature Park and Kuyunski Ethnic-Nature Park. (See region 2 on map)

Bashkortostan Republic is increasing its area of protected territories.
M. Rakhimov, President of Bashkortostan Republic, pledged to add another 1,900,000 ha. to the total area of protected territories of different ranks, and to take under special protection 2,300,000 ha., which would amount to 16 percent of the Republic’s territory, by the year 2000. One Zapovednik, one National Park and two nature parks will be created as Gifts to the Earth, and about $3.5 billion will be allotted for maintenance of protected areas.

Yegor Stroev, Governor of Orel Region, has pledged to develop reintroduction projects.
A decision was made to implement several projects for reintroduction of endangered bison, desman, and rapture species. The goal was set to transform Orlovskoe Polesie National Park into one of the best Parks in Russia.

Maxim Blokh, Chief Editor and General Director of “Et Cetera” Publishing House, made an agreement with the WWF Russian Program to include information about WWF and the Living Planet Campaign in “Philipok,” a multi-colored almanac to be published quarterly with a circulation of 325,000. The almanac will be distributed free of charge to all first and second grade pupils in Moscow.

The next millennium is approaching, please join the Living Planet Campaign — become an Earth Keeper!

Global 200 Eco-Regions within Russia’s borders

Temperate Forests
1. Russian Far East Temperate Forests
2. Altai-Sayan Montane Forests
3. Caucasus and Northeast Anatolia

Temperate Grasslands
4. Daurian Steppe

Boreal Forests and Taiga
5. Central & Eastern Siberian Boreal Forest
6. Urals Boreal Forests and Taiga
7. Kamchatka Boreal Forests and Taiga

Arctic Tundra
8. Chukotski Coastal Tundra
9. Taimyr Coastal Tundra

Polar and Subpolar Marine Ecosystems
10. Bering Sea

For more information about the Global 200, contact Patrick Hurley in the Conservation Science Program at World Wildlife Fund, Washington, DC: (202) 778-9725
NEWS OF THE DAY

“All-Nation” Class Action Suit: the Russian People Don’t Want Their Money Spent on Environmentally Harmful Projects

by Maria Kosolapova and Vera Mishchenko

An unprecedented event occurred on February 27, 1997: an “all-nation” class action suit — the first in the history of our country — about the invalidity of two presidential decrees and two governmental regulations on construction and funding of a high-speed railroad from Moscow to St. Petersburg, was brought before the Supreme Court.

This suit appeared for two reasons: the illegality of adopting the governmental documents and the continuation of illegal funding for construction. The documents were passed in violation of the Environmental Protection Law and Environmental Impact Assessment Law. Promoters began executing the project without a positive conclusion to the State Environmental Impact Assessment. The process of the Assessment itself was conducted with violations of existing legislation, a fact confirmed in an official letter from the General Public Prosecutor of the Russian Federation. Financially the project, carried out by the Russian stock company RAO VSM, does no good for the federal budget, since no less than 51 percent of expenditures (75 trillion rubles in all) will be covered by the budget.

This suit was a unique attempt by Russian citizens to defend their rights and the interests of the country in the Supreme Court. A broad public campaign initiated by NGOs and supported by the Committee on Ecology of the State Duma have stirred people concerned about ecological safety. Environmental lawyers from Ecojuris Institute prepared the claim thoroughly. About 350 citizens from all over Russia acted as plaintiffs; letters of attorney came from Siberia and Kamchatka, from Kazan, Ryazan, Kostroma and other cities (Russian legislation permits lawsuits to be conducted through representatives). More than thirty organizations and institutions sued RAO VSM and the government in this case.

However, the Supreme Court refused even to consider the suit, claiming that the case was not under its jurisdiction. The Court considered the disputed government documents “normative acts” (those applicable to any person or organization in the country and establishing rules for an indefinite group of people, as do laws and regulations). According to acting legislation, Supreme Court can consider only lawsuits protesting “non-normative” acts of the President, Federal Council and Government of the Russian Federation (those that refer to a particular group or organization).

The governmental decrees and regulations on the construction and financing of the high-speed railroad are clearly not “normative,” since they refer to a particular project and to the concrete executor of the project, RAO VSM.

“The reasons for rejection are far-fetched and have nothing to do with legislation,” said Vera Mishchenko, one of the Russian lawyers who initiated the lawsuit. “The Supreme Court’s finding only proves its unwillingness to see the President and federal government as defendants.”

The next step is to appeal to the Constitutional Court. Though the plaintiffs do not debate the correspondence of the disputed documents with the Russian Constitution, they claim violation of

Update on the Moscow—St. Petersburg High-Speed Railroad

From the editors: more than two years have passed since we first drew your attention to the plans for building a high-speed railroad from Moscow to St. Petersburg. The route will be 654 km. long, and the cost of the project is about $10 billion. Four regions — Leningrad, Moscow, Tver and Novgorod — will be bisected by a concrete corridor 2 to 4 meters high. The new route will cut through many valuable natural terrains, Valdaiisk National Park and seven nature preserves among them. Construction will require cutting 5,300 ha. of forests.

From the very beginning, the project engendered debates and the protests of environmentalists and the populations of the involved regions (please see RBC #5 and #6 for more information). Temps have been boiling since then without stop. NGOs, state institutions, regular citizens and deputies have undertaken tremendous efforts to terminate the construction and bury the project. The powers standing behind the project executors, however, responded with all possible might. The Russian government recently obtained a loan from Great Britain to continue construction of the railroad. This spring one more attempt by environmentalists to find justice failed. Nevertheless, we urge our readers to join the campaign against this environmentally adverse project and support Russian environmentalists.

based on information from Maria Kosolapova and Vera Mishchenko

(adapted from an article in the “Bulletin of the Moscow Branch of ISAR,” #1 Spring 1997)
acting legislation.

The Constitutional Court is therefore eligible to determine only whether the documents are “normative” or not.

Lawyers from Ecojiris Institute have prepared the complaint, on behalf of Russian citizens and public organizations, for the Constitutional Court.

The wave against the high-speed railroad is growing in size: if 350 plaintiffs appealed to the Supreme Court, now more than 2,000 citizens from 27 administrative units have joined the campaign and delegated their rights to the lawyers. Deputies from the State Duma supported the position of the broad public and also issued a request to the Constitutional Court. Plaintiffs are eager to continue the struggle and appeal even to the International Court, if the Russian higher echelons of justice fail to observe the legislation.

Maria Kosolapova is coordinator of the St. Petersburg - Moscow Interregional Union of Nongovernmental Ecological Organizations.

Vera Misbchenko is a lawyer at Ecojiris.

---

What is the Price of Rivers in Russia?

by S. I. Rozanov and Petr Masbkin

Supplying water to large cities is becoming an ever more acute problem all over the world. In recent years there has been a shortage of water in the cities of the southern Moscow Region, especially water fit for drinking that meets the sanitary norms for salt content, bacteria and harmful admixtures.

Moscow uses more than 6.7 million cubic meters of water daily, including about 6.5 million cubic meters of drinking quality water. An enormous amount of water goes to waste because of the poor organization of the water supply and worn-out equipment. The systems of water collection, water preparation, transport and distribution to consumers in Moscow amount to a barrel full of holes. How much drinking water is needed, how much for technical use and how much for emergencies have not been determined. These are not simple questions, but they require answers. Generally, there are enough clean water sources in Moscow Region, though they are not limitless. The system of reservoirs that accumulate vernal waters and provide the lion’s share of Moscow’s demand is working at its limit. The Moscow River has been ruined because of excessive water-pumping, and a series of other rivers are subject to significant anthropogenic pressure.

Every year the burden on the water-purifying system, including obligatory filtration, is growing. The northern and western reservoirs, which gather surface water, are not protected from contaminated run-off from fields, dirty village streets or airborne pollutants from nearby gigantic industries.

The use of subsurface waters is also proceeding intensively. They are pumped out more quickly than they are replenished, and in many parts of the Moscow Region the level has already fallen to a depth of 100 or more meters.

Most of the groundwater sources in the center of the Moscow Region, according to the data of “Geocenter Moscow,” are terribly polluted because of violations of usage rules and water protection zones. Uncontrolled drilling of new artesian bore-holes is flourishing, and old ones are used practically without oversight.

For these and other reasons a scheme for a unified system of water supply for Moscow and Moscow Region, using groundwater, is being developed. To supply the region, extraction of 2.6 million cubic meters a day (30 cubic m/sec) is planned. The primary buttress for the regional water supply is the southern Priokskoe underground reservoir. From this productive layer, called “the underground Oka” locally, 1.2 million cubic m. a day (14 cubic m/sec) would be drawn.

The Tarussko-Mikhailovsky aquifer, from which pumping will be done, is tied hydraulically with the waters of the Oka River, through a natural filter on the bottom made of a layer of sand and gravel, uneven in thickness, and a comparatively thin layer of “active silts” in which live numerous organisms that comprise the main part of the self-cleansing system of reservoirs. The condition of the populations of these organisms, on the territory of Serpukhov district, leaves much to be desired, and they’re practically absent where the pumping is planned. Moreover, the dredging work necessary to maintain the present volume of ship travel leads to continual breaching of this filter’s structure and therefore to poor quality water.

With the southern supply, although the water will be collected from an under-
ground spring, all the same, surface waters will be used for drinking purposes. About 90% of the underground water will come from the Oka River, passing through an alluvial filter. In both cases, pumping from the Moscow River and from the Priol'skoe deposit, purification takes place with the help of filters, in the first case artificial, in the second, natural. The alluvial filter catches suspensions well, but is powerless against dissolved poisonous substances and the radionuclides that could appear if an accident occurs at the Smolensk or Tversk atomic station. Besides, pollution of the Oka didn't begin yesterday; a definite level of pollution has been reached. No one knows the filter's remaining capacity to function efficiently. If there were a great increase in the filtration rate, the water quality would suffer. We can replace artificial filters and make a reasonable back-up supply of them, but how do we resurrect an enormous, polluted natural filter?

Another question is how much water can be taken from the Oka. It will be necessary at the start to recalculate and reduce the norms for overflow of all water-users downstream (but the project's authors weren't interested in asking the opinions of those 17 subjects of the Russian Federation). Over recent decades the water level in the Oka has dropped by 150 to 270 cm, on various sections. The erosional processes activated by this drop will ruin meadows, pasturelands and forest soils for several more decades, if the water level does not rise. The more intensive the drop in the Oka's water level, the more intensive the processes of soil erosion will be; until the angle of repose is reached, ravines will grow, shores will be washed away and brooks and streams will cut into the underlying soil.

Water collection is not the only reason for this physical transformation. The main cause is the multi-year gravel and sand quarrying from the riverbed of the Upper Oka. The trench thus formed even itself out with earth washed from upstream, while the river digs into its bottom even more deeply, shifting its bed. What's more, to transport river sand, the cheapest of building materials, the cheapest means — aquatic — are employed, using the most advantageous, large-load, deep-hulled vessels, and to accommodate these ships the Oka is dredged regularly. These two processes deepen the river's cut, so that the majority of the water flows along the deepened channel. The biologically productive shallow waters along the banks — where fish reproduce and fatten themselves, areas with dense populations of mollusk-filters and higher algae — are lost. In the estimates of ichthyologists, if the river's normal habits were restored, the Oka could feed at least ten times as many fish as at present. On the other hand, if water is pumped, the uptake will lead to an additional drop of 7-10 cm. in the Oka's water level.

The area of proposed water collection, where limestone formations abound, is also not entirely safe geologically. It's hard to say how these formations would act under such great pumping.

Practically all of the cities situated along the Volga have just one source for their water supply, the water of the Volga. Realization of the federal program 'Revival of the Volga' implies as well the revival of the Oka, one of its most important tributaries. Thus, because of the effects of the planned water collection on the Oka's ecosystems, it's absolutely necessary to be maximally responsible and obtain agreement on such actions with all of the subjects of the Federation.

But in favor of the 'water lobby,' the government is planning to infringe upon environmental protection legislation. Without conducting an Environmental Impact Assessment, without technical or economic substantiation for construction, and ignoring the protests of the population and of the scientific community, the governments of Moscow and Moscow Region confirmed in December 1996 the start of the design process and the diversion of land parcels for construction of the first part of the southern water supply system in 1997. This decision provoked a protest in the Moscow Regional Duma, where an inquiry was filed by the ecological commission of the Pushchino Research Center of the Russian Academy of Sciences, but the government has not replied. With such strong governmental pressure while conducting ecological studies and exploring possible alternatives, we need to call upon experts of other countries with experience in the use of such systems. It's not worth waiting, however, for the Oka and Volga to be added to the list of regions — such as Aral — experiencing ecological catastrophes.

For many Russian cities, first and foremost, those on the Volga, there are only two possible paths: adopting modern technology to ensure drinking water quality and restoring the ecosystems of the Volga and Oka Rivers. To do that we have to refuse not only the construction of the southern water-pumping station. Further, geologists can already say precisely which deposits of nonmetallic materials could replace the quarrying of river-bottom sediments. We urgently need to relinquish river-quarries; then the necessity for deepening the river will disappear, and the Oka can be left in peace. Then the river itself will resurrect its system of reaches and shoals, its biological systems of self-purification and populations of various fish species. And we must adapt not rivers to ships, but the other way around — the ships to rivers. Then only small-hulled vessels will travel along the Oka.

Of course, much in the program for restoration of the Volga and Oka has not yet been worked out, but if we do not begin at least working, as a start, on ending the destruction of the rivers' ecosystems, then not only we, but our children and grandchildren as well will feel the consequences of boundless exploitation of the rivers.

S. I. Rozanov supervises the Laboratory of the Biophysics of Biocenosis at the Institute of Cell Biophysics of the Russian Academy of Sciences.

Petr Mashkin is in charge of the Problematics Laboratory for Monitoring Aquatic Ecosystems at Pushchino State University.
Silverwood Wildlife Sanctuary (San Diego) and Nizhnesvirski Zapovednik Become “Sister Sanctuaries”

The San Diego Audubon Society has signed an agreement with Nizhnesvirski Zapovednik to participate in a cooperative “Sister Sanctuary” program through its Silverwood Wildlife Sanctuary. The two nature reserves will share information on natural history, research and organization, and will host visitors from the sister entity when possible. San Diego Audubon Society will provide logistical support to Nizhnesvirski, based on a “wish list” of things that Nizhnesvirski most needs.

Nizhnesvirski Zapovednik, located on the eastern shore of Lake Ladoga, was established primarily for monitoring migratory birds that nest in the Arctic and move through Eastern Europe to wintering grounds in Africa and the Middle East. Because of budgetary cutbacks, however, staff at the reserve were finding it harder to maintain their ongoing research projects. Phil Pryde, vice-president of the San Diego Audubon Society, conceived the idea of sister sanctuaries while visiting Nizhnesvirski in July 1996, when he saw that a little help would go a long way.

The 725-acre Silverwood Wildlife Sanctuary is located twenty miles northeast of the city of San Diego and is owned and managed by the San Diego Audubon Society, which emphasizes habitat preservation and environmental education. The American Association for the Support of Ecological Initiatives, based in Connecticut, and “Adonis,” its affiliated organization in St. Petersburg, will serve as the logistical intermediaries for the two nature reserves.

For more information, please contact Phil Pryde, tel.: 619-594-5525 (w); 619-465-9492 (h); fax: 619-594-4938; e-mail: <ppryde@mail.sdsu.edu>

Russian Arctic: On the Threshold of Catastrophe

by Alexei Yablokov, Chairman of the Board at the Center for Russian Environmental Policy.

The Center for Russian Environmental Policy, with support from John D. and Catherine T. MacArthur Foundation, presents an analytical compilation, in Russian, on the problems of the Russian Arctic, entitled “Russian Arctic: On the Threshold of Catastrophe.”

A large group of well-known specialists, primarily belonging to the Institute of Geography of the Russian Academy of Sciences, makes an extensive review on the current status and tendencies of the ecological changes in the Russian Arctic. The collection covers a broad spectrum of issues — from the specifics of flora and fauna to the effects of certain branches of industry on Arctic ecosystems, from the condition of sea ice to trends in human health to the fate of indigenous peoples in the region. The main conclusion is bad: the Russian Arctic is on the threshold of ecological catastrophe, and several regions have already entered it.

The book offers an analysis of the causes of and possible solutions to existing problems. The authors do not stop at mere presentation of the facts, but also formulate possible and desirable directions in federal and regional policies for protection and development of the Arctic region. Among the main points is the necessity for developing and adopting a National Arctic Doctrine on the federal level.

The book is of interest for politicians, economists, researchers and managers of Arctic issues alike. We would like to continue refining our analysis, making it more profound in collaboration with all interested organizations.

For additional information about the book contact:
Center for Russian Environmental Policy
Vavilova St., 26, Moscow 117808, Russia.
Phone: (095) 952-2423; fax: (905) 952-3007;
e-mail: <anzaus@glas.apc.org>

IUCN Journal Focuses on Biodiversity in Former Soviet Union

The October, 1996 issue of IUCN’s journal PARKS highlights protected areas in the former Soviet Union. Following a short overview, the journal contains five articles about Zapovedniks and the problems of biodiversity protection in the post-Soviet era.

To order this issue (Vol. 6, No. 3, Oct 1996) or a subscription to the journal, contact: PARKS, 56 Kingfisher Court, Hambridge Road, Newbury, RG14 5SJ, United Kingdom.
E-mail: <parks@naturebureau.co.uk>
CONSERVATION

All-Russian Institute on Nature Conservation, Laboratory for Red Data Book, Nikolai Shlin. p/o VIILAR, Znamenskoe-Sadki, Moscow 115628, Russia. Phone: (095) 934-4205; fax: (095) 423-23-22.

Baikal Center for Ecological and Citizen Initiatives, Irina Dyatlovskaya, Executive Director. Irsukt. e-mail: <irskut@glasnet.ru>

Biodiversity Conservation Center, Evgeny Shvarts, Chair. P.O. Box 4, Moscow 127276, Russia. Phone/fax: (095) 482-1888; e-mail: <bio@odrivers.glas.ac.org>

Department of Protected Areas Management, State Committee on Environmental Protection, Vsevolod Stepanov, Chair, 8/1 Kedrova St., Moscow 117874, Russia.

Department of Vertebrate Zoology, St. Petersburg State University, Roustorm Sagitov, Associate Professor. St. Petersburg 190034, Russia. Phone: (812) 218-9689 (w); 583-7867 (f); fax: (812) 218-1346; e-mail: <sagitov@zool.bio.pu.ru>

Ecojurs Institute, Vera Mishchenko, President. P.O. Box 172, Moscow 103009 Russia. Phone/fax: (095) 921-5174; e-mail: <ecojurs@glas.ac.org>

Forest Club, Forest Bulletin, Vladimir Zakharov, Editor. P.O. Box 211, Moscow 121019, Russia. Phone/fax: (095) 482-1888; e-mail: <fff@gmail.com>

Forest Research Institute, Karelian Research Center, Alexei Kravchenko. Pushkinskaya St. 11, Petrapavlovsk 185000 Karelia.

Greenpeace-Russia, Sergei Tsyplenkov, Elena Surovkinina, Dolgurovskaya St., 21, build. 1, Moscow, 103006 Russia. Phone: (095) 978-3950, 251-9073; fax: (095) 251-9088; e-mail: <gsrussia@glas.ac.org>

Krasnodar Branch of the Social-Ecological Union, Vladimir Fedorovich. P.O. Box 5269, Krasnodar 350039, Russia. Phone: (8612) 56-71-95 (w); 56-71-96 (f); e-mail: <rubina@glas.ac.org>

Les-na-Vorskle Zapovednik, Alexander Shapovalov. Belgorod, Belgorod Region 309350 Russia. Phone: (07240) 5-1616, 1-0616; e-mail: <rubina@glas.ac.org>

Living Planet Campaign, WWF, Faina Zakharova, Coordinator. P.O. Box 55 125319 Moscow, Russia. Phone: (095) 156-4202, 156-4141; e-mail: <wwfrus@glas.ac.org>

CONSERVATION

National Strategy on Biodiversity, Component of GEF Project, Arkadi Tishkov, Component Director. State Committee on Environmental Protection, 8/1 Kedrova St., Moscow 117874, Russia. Phone: (095) 125-2870; e-mail: <tiskov@bbei.msk.ru>

Noah's Ark Center for the Recovery of Endangered Species (NARECS), Jason Baidridge. P.O. Box 20, Thilisi 390079 Georgia. Phone/fax: (88332) 22-5791; e-mail: <jason@narecs.ge>

The Problematics Laboratory for Monitoring Aquatic Ecosystems, Pushchino State University, Petr V. Mashkin, Superintendent, Propekt Nauki 3, Pushchino 142292 Russia. Phone: (0967) 7350 04 (from Moscow); (0967) 7350 04 (from other cities); e-mail: <eco@adm.psu.ru>

Rainbow Keepers' Environmental Movement, Olga Miryaysova, Coordinator. Phone: (095) 298-3087; e-mail: <rk@glas.ac.org>

Russian Bird Conservation Union, Saratov branch, Alexander Antonchikov. Phone: (8452) 24-5785, 91-0159; e-mail: <alex@ef.saratov.ru>

Socio-Ecological Union Press Service, Victoria Kolesnikova. Phone: (095) 298-3087, e-mail: <press@ccu.glasnet.ru>

Sustainable Agriculture and Steppe Biodiversity in Russia, Paul Gorup, Project Leader. Kiev. Phone: 227-7523; email: <100347.1526@CompuServe.COM>

VITA Ecological Center, Rustam Habibrahmanov, Director. 14 Cherkasskaya Obozorna St., Almaty, Kazakhstan. Phone: (3272) 63-2966; fax: (3272) 63-5244; e-mail: <ecocenum@glas.ac.org>

Volga Ecological Information Agency (AVE-Info), Department of Biosphere Problems, Natalia Felchern, Director. Kostina St., 2-145, 60354 Zhiguli Novgorod, Russia. Phone: (8312) 30-2890; 30-2891; fax: (8312) 30-2890; e-mail: <postmaster@avcinfo.nov.ru>

World Wide Fund for Nature (WWF), Russian Program, Viktor Nikiforov, Program Coordinator. P.O. Box 55, 125319 Moscow. Phone: (095) 156-4202, 156-4141; e-mail: <nikiforov@wwfrus.glasnet.ru>

Zapovednik Environmental Educational Center, Natalia Danilina, Director. 27 Krasnaya St., Moscow 117218, Russia. Phone: (095) 129-0688; e-mail: <chipmunk@glas.ac.org>

Foreign persons/organizations mentioned in this issue:

American Association for the Support of Ecological Initiatives (AAESE), William K. Wascher, Jr., Executive Director. 150 Coleman Road, Middletown, CT 06457 USA. Phone: (860) 346-1570; fax: (860) 347-8459; e-mail: <100341.4050@compuserve.com>

Baikal Watch, Gary Cook, Director. Earth Island Institute, 300 Broadway, Suite 28, San Francisco, CA 94113. Phone: (415) 788-3666; fax: (415) 788-7324; e-mail: <baikalwatch@earthisland.org>

Center for Russian Nature Conservation, Director Margaret Williams. c/o WWF, 1250 24th Street, NW, Washington, DC 20036

Russians Conservation News

RHS Associates, Jonathan Rudger, Technical Advisor. 40 Bow Lane, London EC4M 9DT Great Britain. Phone: (in London) +44(0)975 352995; (in Moscow) 095-482-1888, 903-9321; fax: +7 095-482-1888; e-mail: <dubrovia@glas.ac.org> <rudger@glas.ac.org>

San Diego Audubon Society, Phil Pidgeon, Vice-President of S.D. Audubon. San Diego State University, Department of Geography, San Diego, CA 92182. Phone: 619-594-5525 (w); 619-465-9492 (h); fax: 619-594-4938; e-mail: <sppridge@mail.sdsu.edu>

World Wildlife Fund, 1250 24th Street, NW, Washington, DC 20036

LETTERS TO THE EDITOR can be mailed to;
Margaret Williams
Russian Conservation News
PEEC/CRN
R.R. 2, Box 1010
Dingmans Ferry, PA 18328
Tel: (202) 778-9573
E-mail: <rcn@igc.org>

Subscribe to Russian Conservation News!

Sponsor .......... $500
Patron ............ $100
Supporter .......... $50
Organization .......... $25
Individual .......... $15
Student .......... $10

- Foreign subscriptions: add $6 for Canada and $15 for all other countries
- Back issues available for $5 each
- Make check or money order in U.S. currency payable to “PEEC/CRN” and send to:
  PEEC/CRN
  R.R. 2, Box 1010
  Dingmans Ferry, PA 18328