In this issue:

- **Ecotourism Development in Northern Eurasia**
- **Victory for Dunaisky Zapovednik**
- **Protecting Whales in Russia’s Far Eastern Waters**
- **Poaching in the Dnieper Basin**
CONTENTS

Voice from the Wild (Letter from the Editor) .......................... 1

PROTECTED AREAS
An International Campaign Prevents Canal Construction through Dunaisky Zapovednik .......................... 2

ECOTOURISM
Ecotourism Development in Russia, Past and Future .......................... 5
Taking the Second Step towards Ecotourism Development in Karelia ................................................. 7
Birding for Sustainable Tourism in Pskov Region ........................................... 9
Adventures in Eastern Uzbekistan: Developing Tourism in Ugam-Chatkalsky National Park ........................................... 11
Scientific Tourism in Altai: American Students Visit Katunsky and Altaiisky Zapovedniki .......................... 14
Would Ecotourism be Practicable in Bashkortostan? ......................................... 17
Commercial Whale Watching in Russia: A Scientific and Conservation Tool, a Future for Communities ........................................... 18

ENDANGERED SPECIES
Russia’s Gray Whales Face an Uncertain Future .......................... 19
The Case against Orca Capture in Russia’s Far Eastern Waters ........................................... 22

ENVIRONMENTAL MANAGEMENT
Sanitation Clear-Cutting in Belovezh Forest ........................................... 24
Local Poachers Endanger the Rich Fisheries of the Dnieper River Basin ........................................... 29

CONSERVATION FINANCE
Winds of Change Blow through the Ministry of Natural Resources ........................................... 30

NEWS OF THE DAY
Kazakhstan’s First Bid for World Heritage Designation ........................................... 30
Moscow Mayor Urges Revival of Siberian River-Diversion Project ........................................... 31

BULLETIN BOARD ........................................... 32
ABSTRACTS IN RUSSIAN ........................................... 33

CONSERVATION CONTACTS Back cover

The mission of the Center for Russian Nature Conservation (CRNC) is to promote the conservation of nature in Russia and throughout the former Soviet Union, and to assist conservation groups in that region through information exchange, coordination of professional and education exchanges, and provision of technical assistance to protected areas. CRNC is a project of the Tides Center.

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Voice from the Wild (A letter from the Editor)

When the United States government created the National Park Service in 1916, it established a dual purpose for the service: to conserve nature and to provide for its enjoyment by current and future generations. For better or for worse, this dual mission has informed the development of protected areas in America, and in much of the Western world, ever since. The Russian system of zapovedniks, however, is unique precisely because it is not strongly rooted in recreation. “Zapovednik” comes from the Russian word zapovednyi, meaning restricted or prohibited. In an oft-quoted 1908 paper, Grigori Kozhevnikov, an early advocate for zapovedniks, wrote that Russia’s nature reserves “must be ‘zapovedniki’ in the full sense of the word ... nothing should be eliminated, nothing should be added or improved, nature should be left as it is and we shall watch the results.”

Kozhevnikov’s words are hardly a mandate for ecotourism, and that may be a part of the reason that ecotourism has been slower to take hold in Russia and Northern Eurasia than in other parts of the world. Over the past few years, however, ecotourism has gradually made inroads into the protected areas of the CIS, as directors of zapovedniks and, especially, national parks began to see ecotourism as a means of garnering support for biodiversity conservation, rather than as a threat to the inviolability of protected lands. The UN’s designation of 2002 as the Year of Ecotourism only increased the focus on ecotourism development in the CIS, leading to a wide range of ecotourism seminars, workshops, and projects throughout the region. In this issue of Russian Conservation News, we take a look at ecotourism development in Northern Eurasia, both in theory and in practice. Join us as we explore Vodlozersky National Park, already in the second phase of its tourism development plan, and share in our authors’ visions for bird watching in northwestern Russia, scientific tourism in Altai, and natural and cultural tours in the mountains of eastern Uzbekistan.

While some were working in 2002 to develop new sustainable tourism projects in protected areas, others were fighting for those areas’ very existence. Environmentalists scored a major victory in December, after a year-long campaign against the Ukrainian Ministry of Transportation’s plan to build a canal through the middle of Dunaisky Biosphere Zapovednik. We open this issue of RCN with a recount of that struggle and invite you to share in our celebration of an important victory for biodiversity conservation in Northern Eurasia.

We then ask you to keep this victory in mind as you make your way through the bulletin, for, unfortunately, not every threat to biodiversity has been so successfully thwarted. We draw your attention to the ancient forests of Belovezhskaya Pushcha National Park, in Belarus, where stands of old-growth spruce are threatened by the park’s two-year regime of sanitation clear-cutting. Public protest in Belarus has thus far proved powerless to change the park’s policy, but recently the issue has been attracting increasing international attention. The success of the campaign for Dunaisky Zapovednik hinged upon the support of the international community. We hope that placing international pressure on the Belarusian government will have the same effect, and that by spreading news of the situation to our international readership, we might do our part to ensure the protection of Belovezhskaya Pushcha’s remarkable forests.

Finally, we invite you to journey to the Sea of Okhotsk, a region of rich marine diversity off the coast of Far Eastern Russia. First we focus on the critically endangered western North Pacific gray whale population, one of only two gray whale populations remaining in the world. Then we investigate the possible effects of new Russian laws permitting orca capture in

Great tit (Parus major). Cover drawing by Irina Filus, Altaisky Zapovednik
By Vladimir Sesin

A note from the editors: As 2002 came to a close, environmentalists in Ukraine, and all over the world, had cause to celebrate. After more than a year of campaigning against the proposed construction of a canal through Dunaisky Biosphere Zapovednik, Ukrainian president Leonid Kuchma announced that he would not sign any decrees related to the zapovednik and that the Ministry of Transportation would have to dig the canal elsewhere. The president’s decision marked a major victory for environmental activists and ensured the ongoing preservation of one of Europe’s most biologically diverse wetlands. The following article recounts the Ukrainian Ministry of Transportation’s attempts to build through the middle of the zapovednik, and the successful efforts of activists around the world to avert the threat to the area’s biodiversity.

In autumn of 2001, the Ukrainian Ministry of Transportation began lobbying insistently for permission to construct a deep-water ship canal through the heart of Dunaisky Biosphere Zapovednik. The canal route supported by the Ministry would have connected the Danube River to Black Sea, cutting through the middle of the zapovednik’s strictly protected zone and traversing the fragile Bystroe Estuary.

Part of the international Danube Delta Biosphere Reserve, which spans the Ukraine-Romania border, Dunaisky Zapovednik protects part of the largest and most intact wetland complex in Europe. It is home to Ukraine’s largest nesting population of spoonbills (Platelia leucorodia), as well as large flocks of dalmation pelican (Pelecanus crispus), great white pelican (Pelecanus onocrotalus), and pygmy cormorant (Phalacrocorax pygmeus). The zapovednik’s waters protect populations of great sturgeon (Huso huso) and Black Sea salmon (Salmo trutta labrax), two species that are virtually extinct outside of the reserve. The unimpeded accumulation of silt in the Danube Delta also makes Dunaisky Zapovednik the only place in Europe where one can observe the natural formation of land and its colonization by flora and fauna.

Ukrainian law directly forbids any activity, economic or otherwise, that contradicts the purpose of biosphere reserves or other protected areas by interfering with natural processes or negatively affecting natural ecosystems. The Ministry of Transportation, therefore, drew up a proposal that would withdraw 5,600 hectares from the zapovednik’s total territory of 46,500 hectares. While perhaps legalizing the canal’s construction, the measure would have done little to avert the ecological effects of the proposed canal upon the Danube Delta. According to Viktor Pomanenko, Academic of the National Academy of Sciences of Ukraine and Director of the Institute of Hydrobiology of the National Academy of Sciences, “The operation of the canal as proposed by the Ministry will inflict significant damage to natural ecosystems, and its negative impact will be permanent.”

Two hundred and twenty-three species of birds, including 5 species listed in the European Red List and 31 species listed in the Red Data Book of Ukraine, inhabit the immedi-
ate zone of influence surrounding the proposed canal route. These territories, together with the adjoining shallows, form one of the most important areas in the zapovednik for nesting, migration, feeding, and wintering of waterfowl. Many of these birds inhabit sandbanks that could have been washed away by the increased flow of water brought about by the canal, while noise and altered habitat would have displaced other species.

Construction and operation of the canal would also have threatened fish inhabiting the Danube Delta, thereby adversely affecting local residents, whose livelihoods are based mainly on the fishing industry. The canal would have blocked the migration route of the Danube herring (Alosa pontica), which passes through the Bystroe Estuary, endangering the species and reducing its annual industrial catch by 90 tons. The process of deepening the canal to accommodate ship traffic and the dredging required to maintain the artificial depth, as well as waves created by ships passing through the canal, could also have led to youth death in rare and valuable species such as sturgeon (Acipenseridae sp.), schraetzer (Gymnocephalus schraetser), zingel (Zingel zingel), and Danube streber (Zingel streber streber). As a result of feeding ground damage, the annual catch of freshwater fish might have decreased by 19 tons, while marine catches might have decreased by as much as 80 tons.

The negative effects of the canal would not have subsided after its construction. Operation of the canal would have contaminated the estuary with petrochemicals, and ship

A Thank You from a Local Scientist and Activist

Dear friends and colleagues,

In December I sent you and many others our plea for help. Now I would like to inform you about the history and results of our Danube campaign.

In July and August, about 20 scientists of the National Academy of Sciences of Ukraine (NASU), including myself, prepared an environmental expert report on the construction of a deep shipping canal from the Danube to the Black Sea. The report was ordered by the Ministry of Transportation. The canal had to cross the Danube Biosphere Reserve. Besides supporting unique ecosystems and rare birds and plants, the Danube Delta supports the world’s largest population of European pond turtles (Emys orbicularis) and an endemic newt species, the Danube crested newt (Triturus dobrogicus). NASU concluded that the canal should not be constructed. But our government still intended to build it.

We started the Danube Campaign—it was long and difficult. We organized press conferences, publications, and an email and fax attack directed at our government and president. Russians organized a picket in front of the Ukrainian Embassy in Moscow. And finally our battle to save the Dunaisky Biosphere Reserve has been successful. We won only due to international support: several hundred letters, faxes, and emails from 64 countries were sent to the administration of our president. So my deep gratitude to all the people who supported us.

My best wishes for 2003!

Sincerely yours,

Dr. Tatiana Kotenko, National Academy of Sciences of Ukraine
Protected Areas

Joint Danube Survey Report Available

The technical report of the International Commission for the Protection of the Danube River (ICPDR) on the Joint Danube Survey (JDS) was released in September 2002. JDS was conducted in August-September 2001 and covered the entire river. A team of experts thoroughly examined the Danube River based on samples from more than 200 sites. This 261-page report presents complete results from the hydro-biological and hydro-chemical surveys as follows: hydro-biological - macrozoobenthos, phytobenthos, marophytes, phytoplankton, zooplankton, and microbiology; hydro-chemical - general characteristics, nutrients, heavy metals, and organic pollutants. The report wraps up with a synopsis of findings and conclusions and gives recommendations for the future. The Ramsar Bureau has a limited number of hard copies of the report to give away. Please send your requests to: europe@ramsar.org. The report can also be downloaded (20 MB, zipped PDF) from the Internet at http://www.icpdr.org/pls/danubis/danubis_db.dyn_navigator.show.

Vladimir Sesin is Coordinator of the Forest Program of the Kiev Environmental and Cultural Center. Supplemental information for this article came from the website of the Socio-Ecological Union (www.seu.ru).

Dunaisky Zapovednik protects the nesting grounds of large flocks of waterfowl. Photo by O. Berlova
Ecotourism

A note from the editors: The United Nations designated 2002 as the International Year of Ecotourism, sparking a series of ecotourism seminars and development projects throughout the CIS. Defined by the International Ecotourism Society as “responsible travel to natural areas that conserves the environment and sustains the well-being of local people,” ecotourism may prove to be an effective means of garnering support for the protected areas of Northern Eurasia while also aiding local communities. In this special section of RCN, we take a look at the path ecotourism development has taken in the CIS and where it may be headed in the future.

Ecotourism Development in Russia, Past and Future

By Natalia Moraleva

Within the next ten years, Russia may have a chance to become one of the world’s most attractive nations for tourism focused on nature and environmental education. Yet less than a decade ago, during ecotourism’s first stages of development in Russia, almost no one supported the idea. As recently as 1995 and 1996, many environmental organizations were either uninterested in ecotourism or actively opposed its development in zapovedniks. To the private sector, ecotourism seemed too complex and troublesome, and did not promise exceptional profits. Zapovednik directors, with few exceptions, could not understand why ecotourism was needed at all.

In these early years, Vsevolod Stepanitsky (director of the Department of Environmental Protection of the State Committee on the Environment of the Russian Federation 1990-2000) and international organizations, such as the United States Agency for International Development (USAID), the TACIS program of the European Union, and the Replication of

The Facts about Ecotourism in Russian National Parks *

- Total number of trails in Russia’s 35 national parks: 214
- Total length of trails in Russia’s national parks: 16,612 km
- Total number of visitors to Russia’s national parks in 2001: 1,597,800
- Number of Russian visitors on organized tours: 359,900
- Number of foreign visitors on organized tours: 6,590
- Total number of foreign visitors: 47,930
- Estimated number of visitors Russia’s national parks can sustain without harm to the natural environment: 13,101,200
- Number of parks reporting an average visit length of 1–2 days for 2001: 18
- Number of parks reporting an average of 3–5 days: 11
- Number of parks reporting an average of 6–10 days: 3
- Parks reporting visitors staying longer than 10 days: Sochinsky, Tunkinsky, and Samarskaya Luka National Parks
- Zapovednik receiving the largest annual number of visitors: Priosko-Terrasny Biosphere Zapovednik
- Number of visitors to Priosko-Terrasny Zapovednik: 12,000

* With the exception of data from Priosko-Terrasny Zapovednik, whose proximity to Moscow makes it among the most heavily visited zapovedniks, information for the entire zapovednik system was not available from the Ministry of Natural Resources, the central agency administering Russia’s nature reserves.

Source: Department of Protected Areas and Biodiversity of the Ministry of Natural Resources of the Russian Federation
Ecotourism

Lessons Learned (ROLL) project of the Institute for Sustainable Communities, offered the only real support for ecotourism development in Russia. Starting in 1996, this support led to a series of ecotourism development projects in zapovedniks in Primorsky Krai (Maritime Region), Khabarovsky Krai (Region), and Amur Oblast (Region), in the Russian Far East; in zapovedniks and national parks of the Altai-Sayan ecoregion; in zapovedniks in the North Caucasus; and in Vodlozersky National Park in northwestern Russia. (Please see accompanying article about ecotourism in Vodlozersky National Park on page 7.) The supporting organizations also led seminars, developed new tour routes, published advertising materials, conducted a mass media PR campaign, and created a website (www.ecotours.ru). These projects laid the foundation for a whole series of new initiatives in ecotourism development on protected areas and helped change attitudes toward tourism in national parks and zapovedniks.

Five years later, in 2001, the Association for Ecological Tourism was created as a forum for sharing experience among Russia’s protected territories staff, government agencies, and the private sector, and to unite these groups through a single set of principles for ecotourism development. The Association for Ecological Tourism was founded on the initiative of the Dersu Uzala Ecotourism Development Fund, as part of a World Wide Fund for Nature (WWF) ecotourism project in the Russian Far East, with funding from USAID. Its membership consists of zapovedniks and national parks, as well as a wide range of organizations, including the Ecological Travels Centre, Collection of Adventures interregional alliance, Green Network tourist agency, Astravel Travelers Association, and the Russian Association of Tourist Agencies. The Association for Ecological Tourism now conducts its activities under the aegis of the World Conservation Union (IUCN).

Ecotourism currently makes up 5 percent of all tourist activity in Russia (Financial News, 12 January 2003). However, the majority of tourists visiting Russia’s protected territories still cannot truly be called ecotourists. The demand for nature-oriented tourism in Russia is largely focused on traditional recreation in natural areas and on traditional tour routes that do not necessarily depend on the existence of protected areas. All too often, there is simply no demand for the ecological tours, lectures, and excursions prepared by Russian zapovedniks. Tourists come to zapovedniks and national parks with interests far-removed from the objectives of nature conservation and protected territories, and with little understanding of the principles and ethics of ecological tourism. Thus, the single most urgent objective of ecotourism development in Russia is to increase awareness of the goals and objectives of ecotourism and to heighten public understanding of protected areas not only as recreational areas, but as special territories offering a unique experience that must be enjoyed responsibly.

Natalia Moraleva is President of the Association for Ecological Tourism.

Arranging a Visit to Russia’s Protected Areas

Who to contact: There a number of organizations that lead tours to protected areas in Russia and which will also help you design a more personalized tour. RCN does not favor any of these, nor will we assume liability or responsibility for their activities. The Association of Ecological Tourism and Dersu Uzala Ecotourism Development Fund is a good starting point, and its staff can put you in touch with ecotourism firms that uphold international principles and standards for tours on protected lands (www.ecotours.ru). Dersu Uzala serves as advisor and partner to foreign ecotour operators such as the American environmental group Sierra Club. This year, Sierra will organize a trip to the western Sayan Mountains. Check out www.sierraclub.org/outings for more information about their “Journey to the Center of Asia.”

Another Russian organization is the Ecological Travels Centre (www.ecotravel.ru), which organizes practical field experience and scientifically oriented tours; and Collection of Adventures, which specializes in ecological programs for children (www.active-life.ru). The website of the Russian Nature Press (www.rusnatpress.org.uk) also has a list of Western and Russian agencies offering tours to Russian protected areas. (Please see Conservation Contacts on the back page of this issue for more detailed contact information for these organizations.)

For more information about the above, or about nature reserves or parks where ecological or scientific tourism is available, please contact Russian Conservation News or our Russian partner, Partnership for Zapovedniks, directly. (Our contacts are found on the back of this issue of RCN.)
During Soviet times, the Republic of Karelia was a veritable mecca for tourists. Located in far northwestern Russia, between Finland and the White Sea, the Republic of Karelia boasts crystal clear lakes and white-water rivers, vast tracts of virgin taiga, monuments of history and culture, and examples of northern architecture. Data from the republic’s archives show that more than 1.5 million people visited Karelia in 1989. With the beginning of perestroika, however, the number of tourists to Karelia drastically declined, and in the 1990s, the republic had to develop its ecotourism industry from scratch, without any support from the government.

Aware of the difficulties involved in redeveloping the republic's tourist infrastructure and organizing ecotourism, administrators of Vodlozersky National Park, located in southeastern Karelia, concluded that before any action could be taken, they must first draw up a plan for ecotourism development and determine up-to-date methods for its implementation. These plans were first developed in 1994 in a document entitled “Plan for Organizing and Developing Tourism in Vodlozersky National Park.”

This plan laid the foundations for the development of ecotourism in the park. The strategies outlined in it formed the basis for the General Plan for the Development of Tourism in Vodlozersky National Park and for the park’s business plan for tourism development. All of these documents envisaged three stages of ecotourism development for the park: organization (1996–1999), implementation (1999–2001), and development (2002–2010).

The first stage has already been completed, and the park is currently working on the second stage of development. The first stage involved the planning and initial development of tourist infrastructure, staff training, and the creation and active marketing of tourist products. Vodlozersky National Park now has two tourist bases, several cabins outfitted for tourists, dozens of camping areas, and a summer field station on Kologstrov Island for conducting environmental camps for children. The park has acquired equipment required for tourism, including transportation such as snowmobiles, buses, boats, rafts, and even a motorized sailboat named Saint Ilya modeled on a seventeenth century Russian ferry. Vodlozersky National Park also opened northwestern Russia’s first visitor center, located in Petrozavodsk, a city in southern Karelia. The visitor center is equipped with modern technology, and visitors have access to fascinating museum exhibits, as well as databases containing information about the history and ecology of the area. Thousands of residents and tourists have already flocked to the visitor center. When construction is completed, there will also be two visitor centers within the national park.

Vodlozersky National Park has developed many types of tourism, includ-
Ecotourism

White-water rafting, hiking and ski trails, snowmobile safaris, recreation on Vodlozer Lake, fishing, educational tours, and diverse forms of educational environmental fieldwork. The park received a license for international tourist activity in 1995, and in 1998 the park’s tour routes were certified by the government. The number of visitors to the park has grown steadily: from 400 visitors in 1994 to 10,000 visitors in 2002. Currently, while ecotourism is still in the implementation phase, most of its proceeds go towards building new sites and facilities for tourists. Each year, new routes through the park are completed. Park staff members are currently finishing construction of a 40-kilometer hiking trail, called Varishpeleda-Luza, which runs along an ancient monastery and trade route from Moscow to the White Sea.

Lack of trained personnel proved to be one of the greatest obstacles to organizing ecotourism activities in the national park. To overcome this, park staff created four-month courses to train guides for work in Vodlozersky National Park. Lectures and practical work covered the whole spectrum of park activities, including nature protection, scientific research, and environmental education. The course concluded with a two-week field practicum and exam. These courses turned out to be quite popular, attracting about 200 people in all, mostly tourism specialists from Russian zapovedniks and national parks. This may have been due in part to the fact that the classes were provided free of charge, thanks to the financial support of the State Committee on Labor and Employment of the Republic of Karelia. As a result of these courses, several dozen specialists were trained for the summer season, some of whom were subsequently hired on as staff members.

In 1997, with the goal of continuing and developing its staff training program, Vodlozersky National Park, in conjunction with Kuru College of Forestry in Finland and Hartpury College in England, began conducting yearly international courses to train ecotourism specialists. Over the course of one school year (August to June), students receive professional training in working in natural areas and a certificate of international standards, which qualifies them to work in tourist companies and environmental organizations. Students intern at tourist firms in Finland and Great Britain and participate in field practicums in Vodlozersky National Park, Lapland, and Wales. They receive a specialization in instructing and guiding, and they learn essential skills such as rafting, orienteering, driving, and rescue work. The course has proved immensely popular, both in Russia and abroad. Enrollment is boosted by the financial support available: students study free of charge and receive stipends of 1000 Finnish markkkaa (about $180), as well as other exemptions.

Over the past few years, Vodlozersky National Park has been sending its own staff to study at Russian schools specializing in tourism training: Petrovsky College, Tourist Lycee, the Academy of Tourism, and Karelia Pedagogical University. In 2000, Vodlozersky National Park and Petrovsky College founded a 2-year program to train specialists for work in the protected natural territories of northwestern Russia. This program covers all the skills and knowledge required for work in national parks.

The park’s work in getting tourist products into the market has been no less important. A division of tourism was created in 1997. Each year, staff members from this division present exhibits in all the major tourism conferences and fairs, both Russian and international. This allows the park to sign contracts and develop relationships with major tour operators. Such contact with the tourism industry resulted in the creation of autumn ecotours in the national park for journalists connected to mass media in Karelia, as well as correspondents for Russian media outlets. The park also designs advertising materials, such as booklets, cards, calendars, information bulletins, CD-ROMs, and videos. Park staff members have also developed a system for organizing press conferences and briefings. Vodlozersky National Park takes part in Russian and international conferences and seminars on ecotourism, which allow for information exchange, collective decision-making, and unified strategies. For example, the park participates in the activities of the Association of Zapovedniks and National Parks of Northwestern Russia.

### Arranging a Visit to Vodlozersky National Park

**Park Contacts:** Tel/Fax: +7(814—2) 76—43—79, 76—44—17; e-mail: vodloz@karelia.ru

**Getting there:** From Petrozavodsk, Vodlozersky Park can be reached by boat across Onezhskoe Lake or by train as far as Belomorsk and from there by park or local transportation. Arrangements can also be made for park transportation directly from Petrozavodsk.

**Cost:** $180—$475 per person for a weeklong tour of the park.
Birding for Sustainable Tourism in Pskov Region

By Sergei Bourmistrov

Over the past few years, Russia has turned increasing attention toward the idea of ecotourism. Considered an important component of sustainable development strategies, ecotourism has come to Russia largely through the efforts of international funds and environmental organizations. Development of ecotourism can be a means of spreading environmental education, creating jobs, revitalizing rural economies, and raising the standard of living of local populations. Among the benefits of ecotourism, nature protection takes center stage. In developing nations, for example, ecotourism represents a viable alternative to other, less sustainable forms of natural resource use, such as unsustainable agricultural practices, hunting, gathering of wild foods and medicinal plants, logging, mining, and mass resort tourism.

The World Wide Fund for Nature (WWF) has played a major role in fostering the development of ecotourism throughout Russia. WWF ecotourism projects are already underway in Far Eastern Russia, the Altai region, Bashkortostan, and European Russia. Now, as part of a project to promote ecotourism and evaluate its potential for development, WWF is planning two pilot bird watching tours in Pskov Region.

Located in northwestern Russia, south of St. Petersburg, and bordered to the west by Estonia, Latvia, and Belarus, Pskov Region is home to valuable southern taiga forests of pine, birch, aspen, and spruce, as well as linden, maple, and ash. These woodlands are already the site of WWF’s Pskov Model Forest project, which aims to provide a working model for sustainable forest management in northwestern Russia. Within the framework of the Model Forest project, development of ecotourism is considered an important step towards sustainable forest resource use, and thus the new project to promote and evaluate ecotourism within the area is an indispensable part of the larger forest management initiative.

The pilot bird watching project began in September of 2002, when Russian and foreign researchers convened in Pskov Region to assess the existing possibilities for ecotourism in the area. After studying the region and consulting with nongovernmental organizations, local government leaders, and other interested parties, experts suggested a pilot program of bird watching ecotours as a first step in developing and evaluating ecotourism in the Pskov taiga.

Pskov Region provides habitat to support a rich diversity of bird species, including many rare species. Thus far, Sebezhsky National Park, Polistovsky Zapovednik, and Remdovsky Zoological Preserve appear to possess the greatest potential for bird watching ecotours. Sebezhsky National Park alone has registered more than 190 species of...
Ecotourism

birds, quite a few of which are rare breeds that attract special attention from the birding community. These include the black stork (Ciconia nigra L.), white-tailed eagle (Haliaeetus albicilla), osprey (Pandion haliaetus L.), spotted eagle (Aquila clanga Pallas), lesser spotted eagle (Aquila pomarina Brehm), nine species of woodpecker, corncrake (Crex Crex L.), capercaillie (Tetrao urogallus L.), and mistle thrush (Turdus viscivorus L.), to name just a few. Remdovsky Preserve has registered sightings of 208 bird species, 37 of which are either rare or threatened. Migrating birds may also prove a significant attraction, particularly in the fall and spring, when bird watchers can observe their annual mass migrations. Development of infrastructure in Sebezhsky National Park to allow for greater access and education opportunities, the rich natural worlds of Polistovsky Zapovednik and Remdovsky Preserve, and nearby historical and cultural monuments would also provide a greater breadth to bird watching tours conducted in the area.

The idea of bird watching as a fascinating and environmentally educational leisure activity is not widespread in Russia. In Western Europe and North America, however, bird watching has become an extremely popular form of leisure, and the number of bird watchers has grown to rival that of amateur hunters and fishermen. Various calculations have estimated that 30–78 million people take part in bird watching tours annually, spending approximately $78 billion on the activity each year.

The tendency of bird lovers to join national and local ornithological societies may also make bird watching more conducive to development in countries like Russia, where ecotourism is relatively undeveloped. These societies are often influential organizations with the capacity to discuss and affect ornithological and environmental protection issues on a national scale. The Swedish Ornithological Society, for example, organizes courses, seminars, and excursions for its ten thousand members, and publishes a magazine devoted to ornithology. It has long offered its members organized bird watching tours in foreign countries. Britain alone boasts no less than thirty such societies. With their ability to disseminate information and organize tours, these ornithological societies may prove to be valuable partners in the Pskov bird watching project and in future endeavors.

The project’s two pilot bird watching tours are planned for spring and autumn of 2003. Foreign ecotourism experts, including directors of tourist agencies from Sweden and the UK, have been invited to participate in the tours, along with veteran birdwatchers, ornithologists, and staff from Pskov Region’s protected areas. Their experience in and knowledge of the international market for ecotourism will allow these experts to analyze the viability of ecotourism development in Pskov Region, and the presence of both foreign and Russian experts will provide an opportunity to develop the lasting contacts that will be essential in getting any ecotourism enterprise off the ground. Experts will evaluate the educational and recreational aspects of the tours, as well as the level of services offered, the professionalism of the guides, the region’s existing infrastructure, and potential Russian partners for further ecotourism development. Additionally, staff of the region’s protected areas, as well as local residents, will gain valuable experience in organizing ecotours and will have a chance to evaluate the possible economic opportunities associated with the development of ecotourism in the region.

The ecotourism development project in the Pskov Region is made possible by the financial support of the Swiss Agency for Development and Cooperation (SDC). Since the beginning of its work in Russia in 1994, SDC and WWF have worked together to bring about a series of cooperative projects for biodiversity conservation and sustainable forestry in Russia.

Sergei Bourmistrov is Project Leader of Pskov Model Forest, a project of the World Wide Fund for Nature’s Russian Program Office (WWF-RPO).

A photographer stalks his subject in Sebezhsky National Park.

Photo by S. Bourmistrov
Last November, 50 experts in ecological, adventure, and historical-cultural tourism gathered in Tashkent for a seminar on the development of ecological tourism in Ugam-Chatkalsky National Park. Situated on a fingerlike extension of easternmost Uzbekistan, the park is bounded along much of its length by Kazakhstan and Kyrgyzstan. Forests of juniper, pistachio, and other nut-bearing trees spot its rugged, mountainous terrain, and its breathtaking landscapes could lure tourists from the world over. With this in mind, experts at the seminar discussed means of attracting investment in tourist operations, the capacity of the region’s infrastructure to support tourists, and the creation of tourist products associated with the foothills of the Tashkent Region. The seminar was sponsored by Tacis, a European Union initiative to provide grant-financed assistance to support the transition to market economies and democratic societies in CIS countries, as part of its Central Asia Transboundary Biodiversity Project in the Western Tien Shan Mountain Range. Under the guidance of the Tacis biodiversity project, the seminar focused on ecotourism as a means of supporting the ecological balance of the park’s fragile ecosystems.

Uzbekistan currently has very few rural recreational areas: only .08 percent of total area of the country is devoted to rural recreation, compared to 3–8 percent in many countries worldwide. The pace of recreation development in Uzbekistan is checked by the country’s scarcity of forests, the significant distance separating forests from major population centers.

The breathtaking landscapes of eastern Uzbekistan draw tourists to Ugam-Chatkalsky National Park. Photo courtesy of Rabit Malik Tourist Association.
Ecotourism

centers, a relatively low level of mobility, and transportation difficulties. In spite of these hindrances, the tourist industry in Uzbekistan is growing, much of it in the form of hunting, fishing, rafting, trekking, and picnicking, all forms of tourism that make direct use of natural resources.

Yet national parks like Ugam-Chatkalsky seldom receive any benefit from this type of tourism. Profits are rarely directed toward supporting and restoring the ecosystems that human use may have thrown off balance. Nonetheless, tourism represents a viable alternative to the illegal and unsustainable natural resources use that currently plagues Uzbekistan’s natural areas. Practices such as unregulated collection of medicinal plants, unlicensed hunting, and illegal trade of rare species of flora and fauna particularly threaten Uzbekistan’s national parks.

Natural resource use of this type results in a loss of biodiversity, and restoration of damaged areas can require huge financial resources. It is thus essential to convince people that sustainable use of living nature is capable of producing greater profits than the hides, bones, and meat of animals.

Participants in the Tacis seminar focused on three possible directions for tourism development in Ugam-Chatkalsky National Park: adventure tourism, historical and educational tourism, and nature tourism, all of which can be considered components of ecotourism. Already, both local and foreign tourists participate in adventure tourism in and around the national park, though mostly in unorganized, unregulated forms. Local residents, especially, use the park’s resources without any guidance. Local tourists outnumber foreigners 5:1 in organized tours, while the ratio of locals to foreigners in unregulated tourist activity is 40:1.

Development of adventure tourism in Ugam-Chatkalsky National Park might include activities such as mountaineering, rafting, trekking, horse packing, hang-gliding and paragliding, and sailing. Much of the infrastructure required for these activities is already in place, and the foundation of adventure tourism – that is, the spectacular, rugged natural areas that make these activities possible and attractive – exists in abundance. The park is accessible by functioning roads, which, while not always in perfect shape, allow visitors to reach the tourist base at the entrance to the park without difficulty. Trails through the mountains and forests were blazed and marked during the Soviet period, and chair lifts run up the mountain slopes, carrying skiers in the winter and trekkers in the summer. Hotels and tourist bases provide nearby lodging, as well as a staff of instructors. Rescue services exist in several areas.

Historical and educational tourism, with a focus on visiting historical sites and learning about the region’s archaeology, ethnography, art, and ancient metalworking, might also be incorporated in tours of the national park. Although this approach to tourism has not yet been tried out on tourists to Ugam-Chatkalsky, the area boasts many objects of cultural and historic interest, such as religious artifacts, handicrafts, historical monuments, archeological excavations, and petroglyphs. This region is also home to settlements of diverse ethnic groups (Tajik, Kazakh, Uzbek, Kyrgyz, and mixed groups) which have preserved their traditional ethnic spirit, customs, and ways of life. Visitors to these villages might purchase traditional crafts produced by these people, thus providing material benefits to the local population.

Nature tourism represents a third significant direction for tourism in Ugam-Chatkalsky National Park. The park’s 570,000 hectares have been protected since 1947, thus preserving eastern Uzbekistan’s high mountain landscapes and nut-bearing forests, along with the 24 species of mammals and 100 species of invertebrates that inhabit them. The park’s lakes, mountains, flora and fauna, caves, and fossils make it an attractive place for visitors interested in nature and natural history. Already...
several tourist agencies have made active use of the park’s ecological resources to attract ornithologists, spelunkers, and botanists, as well as artists and poets attracted by the park’s spectacular landscapes.

Yet despite the park’s extensive natural and culture resources, Ugam-Chatkalsky faces a series of problems that impede full development of ecotourism in the area. Particularly in the realm of adventure tourism, which often requires sophisticated technology and experienced guides, local residents cannot offer the level of service and instruction expected by paying tourists, and certain services simply are not offered at all. The area lacks rescue services and medical centers within quick reach of tourist bases and encampments, and emergency services are further inhibited by the absence of technology that would allow for emergency communication during adventure activities. Cultural and ethnological tourism faces similar problems of inaccessibility. The remote villages that might prove most interesting to anthropologists and ethnologists are often not accessible by roads, and the local population is not prepared to offer standards of service expected by foreign tourists.

Eastern Uzbekistan’s labyrinthine borders have also posed problems for tourism in Ugam-Chatkalsky. After the events of 1999–2000, when Islamic militants entered the park from Kyrgyzstan, the Uzbek government imposed restrictions that severely limited tourism in the area. According to Vadima Shiryaeva, of the Asia-Raft tourist agency, “The lack of coordination between customs, police, and border patrol creates problems for visitors, and the potential for tourism in the park has sharply decreased. This zone has practically been crossed off the map of regional rafting.”

If these problems have detracted organized tourist operations, Ugam-Chatkalsky remains a favorite recreation spot for unguided “wild” tourists. The park suffers serious ecological damage in the summer and fall period, due to the seasonal influx of unregulated tourists. Because there is no appointed place for camping, campers pitch their tents anywhere they please, without regard for the park’s fragile ecosystems.

It is thus essential that any effort to develop tourism in Ugam-Chatkalsky National Park first establish guidelines for controlling the impact of tourism on the natural environment. Already research has pointed to areas that can sustain more or less human impact and therefore might be more or less conducive to tourist activities. According to Evgeny Butkov, an expert for Uzbekistan’s Ministry of Agriculture and Water, juniper stands can sustain between 5 and 10 people per hectare per hour, depending upon the recreation season, while the maximum human load that can be borne without damage is approximately 8 to 15 people. Artificially planted deciduous forest can sustain 3–5 people/ha/hr, with a maximum
It was a trip to remember for students from Northern Arizona University (NAU), July 19 through August 15 of 2002, twelve undergraduate and graduate students journeyed from the cool, dry climate of Flagstaff, Arizona, to what should have been a cool, dry climate in central Siberia. When the group arrived with their professor David Ostergren in Ust-Koksa, in the Altai Mountains, they were surprised by one of the wettest summers in recent memory. Fortunately, the expedition went well, and the hospitality of Katunsky Zapovednik and Altaisky Zapovednik staff and the surrounding communities was warm and welcoming.

When Americans think of Siberia, many think of a cold, inhospitable place, but during the summer months, it is an area of flowering plants and dense forests with weather that permits horse packing or backpacking expeditions into the taiga. The NAU students who made the trek to these lands this past summer came to explore Siberia’s rich ecosystems, as well as to investigate the management and policy challenges to nature protection in Russia. For Dr. Ostergren, who holds a Ph.D. in recreation and tourism and has been researching the changing circumstances of Russian zapovedniks since 1993, it was also a chance to contemplate the role that ecological or scientific tourism might play in sustaining Russia’s nature reserves.

Visiting zapovedniks is controversial. Some researchers, managers, and policy experts believe that no one should be allowed within, or even on the fringes of, the reserve’s strict nature protection zone. While it is true that excessive visitation would degrade these pristine natural areas, for the time being, the number of people visiting Altaisky and Katunsky Zapovedniks is relatively small, and all visitors are accompanied by zapovednik staff. This is a tremendous difference from the mass, self-guided tourism in American and European protected areas, and it allows Russian zapovedniks to highly regulate human impact on natural areas. Alexander Zateev of Katunsky Zapovednik estimated that 100 visitors had traveled on small portions of the zapovednik during the first eight months of 2002 and said that they plan to limit visitation to 500 per year. Altaisky Zapovednik recorded 203 visitors in 2001.
and 216 by August of 2002. These numbers include Russian school children as well as foreigners.

Dr. Ostergren’s research indicates that Russia’s zapovedniks may face a difficult choice. If visiting these areas for research and ecotourism becomes popular, managers may have a difficult time turning people away, especially as the potential financial and scientific support of such tourism grows. One way to limit visitors while preserving some of the economic benefits of ecotourism might be a two-tiered system for entrance fees. Russian school children, for instance, would continue to have access and guide support for a fee geared toward their ability to pay, while foreigners who are spending much more money just to travel to the area would pay higher, but still relatively reasonable fees. Russia’s museums, national parks, and several zapovedniks have already set a precedent for this, charging foreigners several times more than citizens of the Russian Federation.

Because zapovednik policy focuses on ecosystem research, any ecotourism conducted on zapovednik grounds should be strictly scientifically or environmentally oriented. Ostergren puts forth his own group of students as an example of “ecotourists” who are serious about learning about the environment and eager to aid the zapovednik in any way that they can. “It is essential that the group contribute more than money,” says Ostergren. This might mean maintaining trails or even collecting data for the zapovednik. Indeed, Ostergren believes that zapovedniks should look upon this type of scientific tourism as an opportunity to win not only financial aid, but also the invaluable support of their colleagues in the scientific and environmental world.

Taking a focused, scientific approach to ecotourism can also provide students with an unparalleled educational opportunity and can foster a lifetime commitment to nature protection in Russia and throughout the world. Their experiences at Altaisky and Katusky Zapovedniks profoundly affected Ostergren’s students and led some of them toward new avenues of research. For Brent Tyc, a geology major, the trip prompted an interest in nature conservation and the need to incorporate people’s values and interests into strategies for protecting natural areas. Lisa Taylor, an environmental sciences major, felt the visit prompted her to want to research technologies, infrastructure, and resource consumption in different cultures and environments. She said, “The trip convinced me of something I’ve been introduced to in school, but never really sunk in until I traveled to the zapovednik—the connection between protected areas and the surrounding communities.” Perhaps most importantly for Russia’s zapovedniks, these students have forged ties to the wilds of Altai that give them a more personal stake in issues of Russian nature conservation. “I got a better understanding of why the Russian steppe is so important and what measures are being used to protect it,” said Amber Shows, an environmental humanities and biology major. “I will always have an interest in Russian conservation efforts because it’s personal to me now.”

Even if tourism on zapovednik territory remains restricted to small groups of scientists and students, tourism in the surrounding areas is not likely to be so limited. While zapovedniks must continue to serve as sanctuaries where nature is left to run its course, untouched by human impact, providing general access to beautiful, spectacular natural areas is also an essential community service. Providing this service in a sustainable way, however, is not easy. This can be seen in the growing impact of tourists at Lake Teletskoye, an L-shaped lake located along the border of the northern part of Altaisky Zapovednik. The zapovednik’s boundary runs right down the middle of the lake, leaving the western half of this spectacularly deep lake open to general tourist recreation.
 Already some problems have begun to emerge, including pit toilets at water level only about 100 meters from the lake, motor boats that spill gas directly into the water, traffic, and noise pollution. If tourism blooms and more resorts are built, this disturbance could become a real problem. Involving zapovedniks in regional land planning and development might help control tourism in unprotected areas, but without an increase in zapovednik budgets, such involvement may be impossible.

Of course, visiting Russian zapovedniks also means interacting with Russian people, including scientists, tour guides, and villagers. Allowing Westerners to visit Russian wilderness areas not only promotes a greater understanding of the country's ecosystems and nature protection systems, but also allows for cultural exchange between foreigners and Russians. It is extremely important that scientific tourism benefit the community as well as the zapovednik. There is a growing realization that if zapovednik managers want public support for protected areas, the local population needs to find ways to replace the economic benefits of hunting, grazing, and food collecting in areas designated as national parks and zapovedniks. The American group contributed to the local economy by staying at local hotels and homes and purchasing local food.

Whatever economic benefits ecotourism brings, in Russia, as in America and throughout the world, the great majority of the zapovednik budget will still need to come from the government. Natural areas represent a benefit to all society, for generations to come. The only way that Russia will be able to continue conducting research and protecting nature is through government support.

Dr. Ostergren is planning another expedition in 2004 which will include students from Idaho State University as well as Northern Arizona University. “Both the zapovednik staff and I now know what my students are capable of doing,” Ostergren said. “In 2004 we will assist in collecting data for research and try to visit a national park as well. As long as we are careful about how we live on the protected landscape, this is one small contribution that we can make to international understanding and supporting the goals of Russian protected areas.”

David Ortiz is a Communications Specialist with Northern Arizona University Public Affairs. David Ostergren is an Assistant Professor of the Department of Political Science and the Center for Environmental Sciences and Education at Northern Arizona University. Dr. Ostergren notes that the trip could not have happened without a great deal of help from many people, and he and his students would like particularly to thank their interpreter Nadezhda Maleshina.

Students visited Teletskoye Lake in Altaisky Zapovednik.
Ecotourism

Would Ecotourism be Practicable in Bashkortostan?

By Rodney Cole

During the summer of 2002 my wife and I were fortunate to be able to travel in Bashkortostan, visiting one of the national parks and three of the zapovedniks in that area of the southern Urals. This was indeed a rare opportunity: most British people have only the vaguest idea of where the Urals are, let alone any notion of what they are like. Yet as we traveled around, we realized that there would surely be other people who would love to travel here and see something of the varied natural landscape and wildlife.

There is a great deal in the southern Urals that ecotourists would be delighted to see. Bashkiriya National Park boasts some magnificent limestone landscapes, along with its associated karst features, such as swallow holes and caves, and distinctive calico (limestone-loving) flora, such as orchids. Shulgan-Tash Zapovednik has a fascinating cave system, the spectacularly beautiful Belaya River flowing within a limestone gorge, and a scientific program devoted to the preservation of its indigenous forest subspecies of the wild honeybee (Apis mellifera). Bashkirsky Zapovednik provides fascinating mountain flora that contrasts with that of the deciduous forest further south, with mountain steppe affording a further dimension to a wild and beautiful mountain landscape. Yuzhno-Uralsky Zapovednik, located just that much further north and a bit higher in elevation, possesses a yet more contrasting taiga landscape, with mountain tundra elements on higher ground.

History and culture might also be incorporated into ecotours of the southern Urals. The history of Russia’s zapovednik system is fascinating in itself, and far too little is known outside Russia about the achievement of creating these reserves. Russian and Bashkir villages also provide a potential cultural attraction in the region. The farming-based way of life that we saw in the Urals was much more like what existed forty years ago in Britain, before everything gave way to mechanized and specialized agriculture, and would be of great interest to those who value intimate contact with nature. Moreover, incorporating contact with the local community could also involve material gains for the hosts and other local residents.

In short, there is enormous scope for mounting enjoyable and informative trips to Bashkortostan. However, tourism in zapovedniks should not mean mass tourism: it should mean catering to that widening section of society, abroad and within Russia, that is sympathetic to the objectives of the reserves. Zapovednik staff will need to take measures to manage human access to sensitive areas, such as the fragile hillside adjacent to the natural stone bridge and waterfall at Kuperlya in Bashkiriya National Park. The rare plants and thin soils of this cliff area would be particularly sensitive to erosion caused by excessive human visitation. Most importantly, ecotourism need not violate the sanctity of the bulk of the reserve, and indeed must not. If people have access to an interpretation center, a viewing point, walks, and perhaps a talk or a video, they will be able to establish meaningful contact with nature without infringing upon the core of the reserve.

It does appear that something imagi-
Ecotourism

Commercial Whale Watching in Russia: A Scientific and Conservation Tool, a Future for Communities

Adapted from a paper by Erich Hoyt, Haruko Sato, Alexander Burdin, and Rauno Lauhakangas

A $1.25 billion industry operated in 87 countries worldwide, whale watching represents an increasingly significant example of the ways in which ecotourism can successfully intertwine science and conservation with economic development. While development of whale watching in Russia has so far been tentative, the country’s Arctic and Far Eastern waters possess both the spectacular marine ecosystems and the “social” cetaceans that might be considered the raw materials of the whale watching industry.

Whale watching is not altogether unknown in Russia. Commercial whale watching began here in the 1990s as converted Russian ice-breakers escorted foreign tourists through Arctic waters, where tourists could spot bowhead whales (Balaena mysticetus) and beluga whales (Delphinapterus leucas). Western cruise companies offer nature cruises to Far Eastern Russia which include regular cetacean sightings. A Finnish initiative has also begun arranging trips to the White Sea to observe beluga whales. In the summer of 2001, this initiative led nine trips to Arctic Russia, bringing 200 mostly Finnish tourists to the White Sea, for a total whale watch expenditure of $96,000, a large part of which was spent in Russia. These trips have already improved the economic prospects for the Solovetskiye Islands, and future expansions could increase the number of tourists to 700-1000 people, for a total expenditure of approximately $500,000.

Commercial whale watching also provides an economic alternative to exploitation of whales for meat or for placement in marine zoos. In 1999, the Russian government attempted to begin commercial hunting of beluga whales, and in 2002, Russia granted permits for the capture of up to five orcas (Orcinus Orca) in the waters off Sakhalin Island (please see accompanying article, page 22). As social, vocal cetaceans, beluga whales and orcas are considered Russia’s most accessible and charismatic whales for tourism. Development of whale watching focused on these species might act as a counterweight to economic arguments in support of permitting their hunting or capture.

Whale watching tours can also function as a tool for, and a means of funding, marine research. Several organizations, such as Earthwatch and the Tethys Research Institute in Italy, facilitate the development of partnerships between scientists and whale watching operations internationally. The partnership between science and commerce can also extend to environmental education and conservation. High-quality whale watching is an engaging educational experience that motivates participants to care about marine conservation. As Russia’s coastal communities begin to face seemingly irreconcilable choices between economic development and environmental conservation, whale watching may well provide a middle ground that benefits communities, science, and the whales themselves.

Erich Hoyt is Co-director of the Far East Russia Orca Project (FEROP) and Senior Research Associate of the Whale and Dolphin Conservation Society (WDCS). He is working with the WDCS to investigate whale watching and marine ecotourism throughout Russia and will produce a report in late 2003. Haruko Sato is Principal Investigator of FEROP. Alexander Burdin is Co-director of the FEROP and Chief of the Laboratory of Animal Ecology of the Kamchatka Institute of Ecology and Nature Management. Rauno Lauhakangas is a high-energy physicist at the Helsinki Institute of Physics who leads nature and beluga research tours to the White Sea.

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Endangered Species

Russia’s Gray Whales Face an Uncertain Future

By Dmitri Lisitsyn and Natalia Barannikova

Bordering much of Russia’s eastern coastline, and bounded to the east by Kamchatka and the Kuril Islands, the Sea of Okhotsk is one of the world’s cleanest bodies of water and one of the richest in marine biodiversity. More than one hundred species of fish, as well as dozens of species of crabs, shellfish, and mollusks attract fishermen and scientists to these waters from all over the world. Yet few are aware that the Sea of Okhotsk is also home to a wide variety of marine mammals, including dolphins, seals, and an unusually diverse population of whales. These Far Eastern waters provide habitat for the largest mammal in the world, the blue whale (Balaenoptera musculus), as well as the fin whale (Balaenoptera physalus), sei whale (Balaenoptera borealis), humpback whale (Megaptera novaeangliae), northern right whale (Eubalaena glacialis), bowhead whale (Balaena mysticetus), Cuvier’s beaked whale (Ziphius cavirostris), minke whale (Balaenoptera acutorostrata), sperm whale ( Physeter catodon), beluga whale (Delphinapterus leucas), and orca (Orcinus orca).

Although many of these cetaceans are extremely rare and endangered, there is one species which merits a more detailed exploration: the gray whale (Eschrichtius robustus). Once at home in both the Atlantic and Pacific oceans, only two populations of this species survive today. The larger of the two, the eastern North Pacific population, spends the summer in the shallow waters of the Chukchi Sea, between northern Alaska and Siberia, and winters off the coast of California. Thanks to the full protection accorded to the species in 1946 by the International Whaling Commission (IWC), this stock appears to have stabilized at a population of several thousand whales and is considered at lower risk for extinction. Unfortunately, the same cannot be said of the second stock, the western North Pacific population, which inhabits the coastal waters off northeastern Sakhalin Island, a Russian island located in the southwestern part of the Sea of Okhostk, just east of mainland Russia and north of the Sea of Japan.

Due to intensive hunting in the past, the western North Pacific population of these giants, which can reach 15 meters in length and weigh 35 tons, has been reduced to barely more than 70 individuals. Although this stock, too, has been protected under the International Convention for the Regulation of Whaling (ICRW) since 1946, not all countries have observed this convention. The Republic of Korea (South Korea) and China did not join the IWC until 1978 and 1980, respectively, and the Democratic People’s Republic of Korea (North Korea) is not a member to this day. Whaling depleted the population so drastically that by the early 1970s, many researchers believed that the western North Pacific stock had become extinct. In 1977, however, sightings revealed that a small community had miraculously survived and continued to frequent the summer waters off the northeastern coast of Sakhalin.
Recent studies have shown this population to be genetically differentiated from the eastern North Pacific population, and it is listed as a geographically distinct, critically endangered population by the World Conservation Union (IUCN).

Although gray whales have been protected from hunting in Russia, China, South Korea, and Japan for more than two decades, the western North Pacific population has continued to experience decline, in number and in health. A group of scientists from Kamchatka, Vladivostok, and the US have been studying these whales for four years, yet remain unable to explain the decline of the species. However, since this research was previously funded by oil companies conducting oil exploration in the waters off Sakhalin Island, researchers were unable to publish hypotheses about human influence affecting the northeastern shelf. This has only changed recently, resulting in resolutions from the IWC that recommend reducing anthropogenic influence on gray whales and their habitat, and bringing international attention to the issue.

Currently, the largest concentration of gray whales in the western North Pacific is found in the southern part of Piltun Bay, located along the northeastern coast of Sakhalin Island. Since the middle of the 1990s, oil exploration and extraction have been conducted on the northeastern shelf of the island, and in Piltun Bay itself, not far from the feeding grounds of the gray whale. For several years now, these waters have been subject to constant noise and vibrations caused by drilling, helicopters, ship traffic, and the construction of drilling platforms. Drilling wastes dumped into the sea have polluted the water, and construction has destroyed marine habitat, especially on the ocean floor.

Experts have been particularly concerned about the effect of noise and vibrations upon the gray whale population. Studies of the western North Pacific gray whale population in 1997 showed that a period of seismic exploration in the Piltun-Astokhsk oil field corresponded with a change in the average speed and direction of the whales’ movements, which became quicker, more sudden, and marked by more frequent breathing. The whales also exhibited a change in behavior during the early stages of construction of the Molikpaq drilling platform, when for more than a month boat traffic in the region was extremely heavy. In 1999, a group of scientists conducting acoustic research in the area of the Molikpaq platform and nearby gray whale habitat concluded that low-frequency sounds caused by oil extraction could have a negative effect on the whales. As oil activity in this region is planned to continue for several decades, during which time more drilling platforms will be built, and pipelines and other infrastructure will be constructed, the industry may prove a major threat to this critically endangered species.

Perhaps a more obvious effect of oil exploration upon the gray whale population is pollution. Water quality near Sakhalin Island fell dramatically during the summer of 1998, when several hundred thousand
cubic meters of earth were removed from the sea floor during the construction of the Molikpaq platform. Working in direct proximity to the permanent feeding grounds of the gray whale population, construction crews used a special suction-tube dredger to bring the seafloor mud aboard ships and then used it as fill for the area beneath the platform and for other construction purposes. After the platform’s construction, forty thousand cubic meters of building stone were lowered into the water for use in strengthening the platform’s foundation. This construction process was accompanied by a sharp rise in the amount of sediment suspended in the region’s waters.

Furthermore, for the past several years, drilling wastes produced by the Piltun-Astokhsk oil field and other fields on the Sakhalin shelf have been released into the Sea of Okhotsk, potentially contaminating the waters with petrochemicals used in the drilling process. The powerful East Sakhalin Current, as well as wind-affected and tidal oscillations, can carry toxic matter and suspended particles from drilling muds a significant distance. As these particles eventually settle to the ocean floor, they degrade the habitat of bottom-dwelling organisms: a layer a few millimeters thick can kill the bottom-dwelling organisms that make up the bulk of the gray whale’s diet.

As the only cetacean species that feeds on bottom-dwelling organisms, the gray whale may be particularly vulnerable to the effects of drilling waste pollution. The whales feed by diving to the ocean floor and scooping sediment from the sea bottom. They then filter the water and silt through their baleen, leaving only the amphipods (small crustaceans) that constitute a large part of the whale’s diet. The effects of drilling waste accumulation on the sea floor could be disastrous, first killing the bottom-dwelling organisms, and then starving the whale population. Researchers have expressed increasing concern over the number of emaciated or “skinny” whales with below-average body fat reserves, a condition first observed only in 1999. Because feeding is believed to take place almost exclusively in the whale’s summer territory, it is essential, particularly for pregnant females and young whales, that they have access to sufficient food supplies to fuel what amounts to a six-month fast in their winter grounds (currently unknown, but believed to be near the Korean Peninsula, in the Sea of Japan). The gray whale’s feeding habits also confine it to a limited stretch of the Sakhalin shelf, in waters normally no deeper than 25 meters and more often between 10 and 20 meters, where the amphipods are found. Displacement to less desirable feeding grounds due to seismographic disturbance may also play a role in the population’s declining health.

The extremely low population of the western North Pacific stock makes it especially vulnerable to human influence. If we merely study these beautiful giants, and take no measures to protect them, in a few years we may have nothing left to study, or to protect. Conservation of endangered marine animals off the coast of Sakhalin must begin with minimizing the danger and pollution caused by oil exploration and extraction—and this must be done in deeds, not merely in words. Prohibiting the dumping of harmful drilling and oil wastes into the sea is an essential step towards limiting the effects of oil exploration on the marine life of the Sea of Okhotsk. Such a measure would give us a better chance of protecting not only the rare gray whale, but also fish, crabs, and other...
The world’s largest species of dolphin, orcas are perhaps better known as captive performers than as the wild, intelligent, and highly social creatures that dwell freely in seas all over the planet. Since 1961, at least 134 orcas, or killer whales, have been taken from the wild and placed in captivity. As of October 2002, 12 marine parks in 5 countries held a total of 48 orcas, 23 taken from the wild and 25 born in captivity. The marine adventure park Sea World attributes up to 70 percent of its income to visitors attracted by its killer whale shows. A single captive orca can fetch as much as one million dollars on the international market.

The Russian government appeared eager to cash in on this market in early 2002, when it passed a decree establishing a quota of five permits for the capture of orcas (Orcinus orca) in Russian Far East (RFE) waters off Sakhalin Island. The scientific and environmental community has criticized the government’s decision to issue the permits, which allow the captured whales to be sold and exported to aquariums. The marine adventure park Sea World attributes up to 70 percent of its income to visitors attracted by its killer whale shows. A single captive orca can fetch as much as one million dollars on the international market.

Of the five permits allocated by the government in 2002, only two were taken up. No orcas were captured with these two permits. However, despite international opposition, the Russian government apparently has no plans to revoke the permits or to reduce the quota for the coming year. In fact, the Russian Federation has actually doubled the number of permits available for 2003, allowing capture of up to ten orcas. Approved in November of 2002, the new quota also expands the geographic scope of the permits, allowing orca captures in additional areas off eastern Kamchatka and in the northern Sea of Okhotsk.

Scientists currently know too little about the orca communities inhabiting Russia’s Far East waters to predict the effect that five or ten captures might have on the population. However, studies in other areas have shown that even a small number of removals can adversely affect orca populations.

The vulnerability of orca communities is due in part to their complex social structure of pods and sub-pods, which can easily be disrupted by capture. Maintaining the bonds of pods and sub-pods appears to be crucial to orcas’ survival and ability to reproduce. Although no pods are known to have been dissolved due to capture, removal of individual members has eliminated several sub-pods. Capture of young females endangers the reproductive viability of the pod, while removal of older females can severely disrupt the pod’s integrity and deprive young orcas of the essential instruction they require. Capture occasionally results in premature death of remaining orcas, and orcas attempting to remain with their captured relatives can be injured or even killed during removal. Orca communities’ resilience to disruption and population loss is further limited by the species’ low birth rate and high rate of infant mortality, which result in an annual population increase of only 2–3 percent.

If our current knowledge of orca behavior provides strong arguments
against orca capture, just as compelling is our sheer lack of knowledge about these animals. Research in the eastern North Pacific has shown that individual orca communities can exhibit vastly different behavior, even within overlapping ranges. Although the Far East Russia Orca Project, supported by the Whale and Dolphin Conservation Society, Alaska Sea Life Center, and other groups, recently began a long-term study of orca populations in RFE waters, very little information on these particular communities is presently available.

Orcas are listed in Appendix II of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). Under the CITES framework, export permits may be issued for Appendix II species only if the export will not be detrimental to the survival of that species. When the effect of trade upon a species remains unclear, both CITES and the international scientific community advocate use of the precautionary principle to protect the species from risks that are not yet clearly understood. Given the incomplete knowledge of orca biology and the effects of capture on the species, it is impossible to claim with honesty or certainty that importing wild orcas from Far East Russian waters will not be detrimental to the survival of the species. It is thus the responsibility of the Russian government to invoke the precautionary principle and revoke its permits for orca capture, sale, and export.

Laura Trice is Assistant Editor of Russian Conservation News. This article is based on materials provided by Erich Hoyt of the Far East Russia Orca Project and from the websites of the Far East Russia Orca Project (www.russianorca.narod.ru) and the Whale and Dolphin Conservation Society (www.wdcs.org).

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Sanitation Clear-Cutting in Belovezh Forest

By Georgi Kozulko

Beginning in the summer of 2001, and continuing throughout 2002, the administration of Belovezhskaya Pushcha National Park, headed by General Director Nikolai Bambiza, attempted to implement a special protective regime of sanitation clear-cutting in the protected zone of the forest. Ostensibly aimed at fighting a European spruce bark beetle (Ips typographus) infestation, the level of harvesting proposed by Bambiza had not been seen in Belovezh Forest since WWI. Since early summer of 2001, more than 100,000 m³ of wood have been felled in Belovezhskaya Pushcha National Park, including ancient spruce trees valuable to the forest’s genetic diversity. The park’s administration insists that the harvest is meant to protect the forest. Yet this claim is undermined by the lack of scientific support for sanitation clear-cutting and by recent changes in park policy that emphasize timber production over conservation.

Considered the most serious entomological threat to Europe’s coniferous forests, European spruce bark beetles bore into the bark of trees, creating “galleries” in the cambium where they lay their eggs each spring. When the eggs hatch, larva tunnel into the tree’s vascular system, depriving it of water and nutrients, and eventually girdling it from the inside.

Because beetle-infested trees remain valuable as timber, logging operations in commercial forests are often moved to infested areas as a means of containing the outbreak. According to Yakova Marchenko, director of Bellesozashchita, the state institute for forest monitoring and protection, 1.5 million m³ of Belarus’s spruce forest were subject to felling as a means of eradicating the beetles in 2001, an amount that was projected to increase to 2.5–3

Map by M. Dubinin
millions of cubic meters in 2002. Among the forested areas affected in Belarus were the forests of Belovezhskaya Pushcha National Park, one of the largest intact forests in Eastern Europe. The park’s forest department reported 300 sites of infestation during the 2001–2002 beetle infestation, representing approximately 70,000 m³ of spruce wood over 600 hectares.

The park’s response to the beetle infestation began in early summer of 2001, when the park’s general director Nikolai Bambiza ordered sanitation clear-cutting in infested areas, without receiving the official permission required for harvesting protected forest. Park specialists, journalists, and scientists immediately opposed the administration’s plans for widespread felling of Belovezhskaya Pushcha’s ancient, protected woodlands. Yet despite public protest, as well as the opposition of a government commission, park administrators continued to fell large tracts of forest, insisting that clear-cutting in infested areas constituted a protective measure. “World experience has shown,” they claimed, “that the most effective means of fighting beetles is felling newly infested trees” (Zarya, 18 December 2001).

In fact, there is little scientific support for sanitation clear-cutting as a protective means of eradicating European spruce bark beetle infestations, particularly when used to the exclusion of other methods. European practice has demonstrated that harvesting infested trees is actually of limited use and can even help spread the infestation. The most effective approach to eradicating European spruce bark beetles is now believed to be a combination of trap trees (downed trees or logs used to attract beetles away from living trees) and pheromone-baited traps, along with quality monitoring.

Such pest control methods are practiced in national parks in Eastern and Western Europe, which this author visited a year before the bark beetle outbreak in Belarus. One of these, Shumava National Park in the Czech Republic, had faced a similar European spruce bark beetle infestation in 1996. The administration of Shumava National Park conducted an experiment, leaving 1000 hectares untouched while treating the remaining 3000 hectares of strictly protected spruce forest with trap trees and pheromone-baited traps. Thanks to the careful work of scientists and forest managers, they were able to completely save the spruce on these 3000 hectares—without felling a single tree.

Swedish specialists confirmed this experience. In his letter of January 11, 2002, the well-respected Swedish entomologist Gunar Isaksson writes, “My preliminary conclusion is that harvesting should not take place in old-growth forests or protected territories. The experience of Sweden and Lithuania has shown that bark beetle attacks on old-growth forest run their course and die out naturally within three to four years if the trees are not felled. In territories where felling takes place, removal of the dead spruce in the winter may even facilitate the spread of bark beetles (in connection with the removal of their natural predators).”

As we see, none of these countries advocate felling as a means of controlling bark beetle infestations in protected forests. Uncut forests preserve a larger complex of the bark beetle’s predators and parasites, whose numbers also rise as the bark beetle population increases and which are ultimately responsible for suppressing the infestation. While selective, carefully planned felling in May and June may limit bark beetle infestation, year round logging in spruce stands cannot be justified.

In the case of Belovezhskaya Pushcha National Park, the park administration appeared to be less concerned with containing the bark beetle outbreak than with simply harvesting as many trees as possible. On July 12, 2001, a group of Belovezhskaya Pushcha park staff (in which the author was
Environmental Management

In 2001, just as the bark beetles were beginning to appear, the Presidential Administration appointed a new general director of the national park, Nikolai Bambiza. After a preliminary inspection of Belovezh Forest, he started upon a course of felling protected forest, and as soon as the first signs of bark beetle infestation appeared, Bambiza ordered the infested areas logged. The year-round sanitation clear-cutting that has been conducted since then has no basis in conservation science. Rather, it appears that park administrators simply seized the infestation as an opportunity to pursue widespread logging, producing more timber, in fact, than they had the capacity to clear and use.

Over the past year, the volume of timber logged in Belovezhskaya Pushcha National Park has only increased. Approximately 48,100 m³ were felled in the first quarter of 2002, followed by 56,600 m³ in the third quarter. The Belarusian public has tried repeatedly to bring this matter to the attention of the President of Belarus, but nothing has come of their attempts. At this point, the only solution may be to bring the park's disregard for national environmental legislation and its conscious degradation of Belovezh Forest to the attention of international environmental organizations, such as the United Nations Educational, Scientific, and Cultural Organization (UNESCO), UNESCO's program on Man and the Biosphere (MAB), and the Council of Europe.

Georgi Kozulko is a Candidate of Biological Sciences and former Deputy Director of Science Research at Belovezhskaya Pushcha National Park. This article was originally published in Russian in “Belarusian Forest Newspaper,” № 26(380), 11 July 2002, pp 5, 7.
Heaps of roach (Rutilus rutilus), mountains of crayfish (Astacus astacus), fresh catfish (Silurus glanis), carp (Cyprinus carpio), zander (Sander lucioperca), and caviar fill the stalls of city markets and roadside stands in Kiev and in towns surrounding the Dnieper River Basin. Yet a recent project, funded by the Global Environmental Facility under the auspices of a project of the United Nations Development Program (UNDP) for environmental restoration of the Dnieper River, has shown that a large portion of these offerings was harvested illegally.

The Ukrainian government has failed to control poaching by local residents. Photo by S. Shcherbak

By Sergei Shcherbak and Sergei Afanasiev

A total of 10 percent of Ukraine’s population, or more than 4 million people, fish in some capacity. More than 90 percent of these 4 million people live, and fish, in the Dnieper River Basin. While the majority of these people fish only rarely and harvest no more than 5 kg of fish per year, a small percentage of Ukraine’s amateur fishermen catch more than 300 kg of fish annually. Although these “amateurs” are not able to obtain commercial fishing licenses and cannot legally sell their catch, many are able to sell fish in markets throughout the country, where illegal fish sales remain largely unregulated.

According to results of the GEF study, amateur fishermen in Ukraine catch approximately 170,000 tons of fish per year and spend $100 million on the sport annually. These numbers far exceed the official quotas for Ukraine’s commercial fishing industry, which was limited to a catch of 14,500 tons in the reservoirs of the Dnieper River in 2000. The size of the amateur catch in the Dnieper Basin – at least ten times greater than the official commercial quota – points not only to the threat local fishermen pose to the country’s fishing reserves, but also to the existence of a thriving black market for illegally-caught fish.

In the spring of 2002, inspectors and volunteers for the Independent Environmental Security Service, a non-governmental environmental protection organization, investigated illegal sales of freshwater fish and invertebrates in markets and for unsanctioned local sale in Kiev. Fish sold illegally in these markets included zander (Sander lucioperca), carp bream (Abramis brama), roach (Rutilus rutilus), northern pike (Esox lucius), sterlet (Acipenser ruthenus), fringebarbel sturgeon (Acipenser nudiventris) and more than twenty other species of fish. In particular, crayfish (Astacus astacus) were sold in huge quantities in city markets and in more than ten mobile stands. The number of crayfish sold in Kiev markets alone exceeded the entire crayfish quota for the Dnieper Basin.
Environmental Management

Other organizations fighting poaching in the Dnieper River Basin:

**Green World.**
Key Contact: Sergei Fedorinchik.
Email: fedoryn@grworld.FreeNet.Kiev.UA

**Green World – Lugansk.**
Key Contact: Valerii Anatolevich Denschik.
Email: grworld@ua.fm

**Cities of Melitopol and Tokmak, Zaporozhskaya Region.**
Key Contact: Sergei Ivko.
Email: mpi@comint.net

in 2000. Furthermore, during a ban on catfish catches, up to eighty tons of the species were sold in markets in Kiev. Overall, this city’s markets offer illegally caught fish worth an estimated $4,000 per day.

Moreover, amateur fishing often takes place during periods when fishing is prohibited. During the fishing ban of spring to early summer 2002, amateur fishermen caught no fewer than 53.5 tons of roach *Rutilus rutilus* in the lower reaches of the Desna and Dnieper Rivers. In the same year, during the spring migration of ziege *Pelecus cultratus*, amateur fishermen brought in at least 20 tons of this species in the lower Desna River. In the winter of 1998, during another seasonal ban on fishing, amateur fishermen on the Kiev Reservoir caught approximately 195 tons of migrating zander *Sander lucioperca* and 25 tons of migrating catfish *Silurus glanis*, a catch 10 times greater than the 1999 commercial quota for zander and 27 times greater than the quota for catfish.

The Agency for Protection and Management of Living Aquatic Resources, the Inspection for Regulation of Fishing (Fish Inspection), and the Environmental Inspection, which have branches in every region of Ukraine, are responsible for enforcing the laws that protect fish stocks. These agencies, however, are hampered by weak legislative powers and a lack of technical equipment (informal talks with Fish Inspection staff members revealed that a typical regional Fish Inspection, with 4–6 inspectors, 2–4 boats, and 1–2 cars, was allotted only 150 liters of gas for all of 2001). The Fish Inspection lost its right to impose fines for poaching in 2001, and a project addressing government fish protection structures, called “The Condition of Government Structures of Fish Protection,” has been awaiting approval in the Cabinet of Ministers for about ten years now.

Recent statistics show a laughably low level of criminal punishment for fish poaching. The criminal codex lists no more than thirty people officially charged with poaching per year. An interdepartmental operation known as “Spawning,” intended as a yearly crackdown on illegal fishing, is supposed to take place throughout all Ukraine, but in the Dnieper Basin the operation has only been conducted in the reservoirs along the lower reaches of the river. Public inspectors, often local residents who volunteer to aid the Fish and Environmental Inspections, have also proved to be ineffective in preventing illegal fishing. Of the total number of violations recorded, only one percent are recorded by public inspectors, a number which reflects the low level of citizen action in this sphere.

The existing high level of fish and crayfish poaching is endangering Ukraine’s natural areas. Illegal catches in the Dnieper Basin degrade fish stocks, undermine our ability to restore valuable species of fish such as catfish and zander, and weaken spawning schools of bream and roach by depriving them of valuable breeders. The critical situation in the Dnieper River Basin can be attributed to the local population’s lack of understanding of sustainable fish resource use, the absence of developed infrastructure for amateur fishing, weak governmental enforcement structures, and transitional economic and social problems. However, the situation may be ameliorated through a combination of scientific planning and monitoring, reorganization of government structures, legislative initiatives, further limits on fish species permitted for fishing, education, development of amateur fishing organizations, and development of a network of protected wetland territories.

A New Hope for the Dnieper River

For more information on the GEF program for sustainable development of the Dnieper River, please see “A New Hope for the Dnieper River” by Sergei Shcherbak, published in Russian Conservation News #29, page 32. To order back issues, please contact us at rcn@igc.org.
Over the past three years, Russia’s system of protected areas and the people working within it have found themselves in a tense and uncertain position with regard to their present, and future, standing in the government. This period of instability began in May of 2000 with the liquidation of the State Committee on Environmental Protection and the Federal Forest Service and the creation of the Ministry of Natural Resources under the leadership of Minister Boris Yatskevich. The new ministry had not even had time to form an administrative structure of federal and regional branches and begin work when, in June of 2001, a new minister, Vitaly Artyukhov, was appointed to replace Yatskevich.

This appointment had far-reaching consequences for protected areas management in Russia: between August and November of 2001, Minister Artyukhov replaced virtually every head of every agency and department in the Ministry of Natural Resources. The new minister discharged staff members without any consideration of the quality of their work. Rather, the main reason for dismissing department heads appeared to be the creation of a new administrative structure.

Notes on the Russian Federal Budget for 2003

Following are highlights of an unclassified January 27, 2003 cable by the US Embassy in Moscow regarding the Russian federal budget for 2003:

The government of Russia’s 2003 federal budget has been approved by the State Duma and the Federation Council and on December 24 was signed into law by President Vladimir Putin.

The Russian Academy of Sciences received an increase of 29.7 percent, which gives it $281 million for the year.

The Ministry of Natural Resources had its budget increased by 5.7 percent to $532 million, but funds specifically earmarked for ecology and natural resources across the whole federal budget were down 23.7 percent to $17.9 million. The Arctic Ocean Program will be funded at $7.1 million, an increase of 58.9 percent over 2002 levels.

Actual amounts that programs receive can vary significantly; just because a line item is budgeted for a certain amount of money does not mean that program will ultimately be funded at the full level. Additionally, legislation throughout the year can supplement or supplant these programs.

Table 1: Changes in Federal Spending for Zapovedniks between 2000 and 2003

<table>
<thead>
<tr>
<th>Year</th>
<th>Federal Spending for Zapovedniks (in millions of dollars)</th>
<th>Annual Inflation Rate (expressed as a percentage)</th>
<th>Real Growth of Federal Spending for Zapovedniks (adjusted for inflation and expressed as percentage change from one year to the next)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>3,09</td>
<td>26.8</td>
<td></td>
</tr>
<tr>
<td>2001</td>
<td>5,89</td>
<td>18.5</td>
<td>+ 72.1</td>
</tr>
<tr>
<td>2002</td>
<td>10,67</td>
<td>16.0</td>
<td>+ 65.2</td>
</tr>
<tr>
<td>2003</td>
<td>11,17</td>
<td>12.0*</td>
<td>- 7.3</td>
</tr>
</tbody>
</table>

* If the actual rate of inflation for 2003 is greater than the expected rate of 12 percent, the level of funding for zapovedniks in 2003 will be correspondingly lower in comparison with 2000–2002.
Kazakhstan’s First Bid for World Heritage Designation

By Kymbat Imangalieva

In late August of 2002, a group of international experts from the World Conservation Union (IUCN) met in Kazakhstan to evaluate Kourgaldzhinsky and Naurzumsky Zapovedniki for designation as World Heritage Sites. These two zapovedniki preserve the steppe landscapes of north central Kazakhstan and the systems of fresh and saltwater lakes that run through them, providing nesting grounds for hundreds of thousands of migratory birds.

A project of the United Nations Educational, Scientific, and Cultural Organization (UNESCO), the World Heritage Convention was created to define and conserve the world’s cultural and natural heritage. Of the five former Soviet Central Asian republics, Kazakhstan is the first to nominate natural territories for inclusion on UNESCO’s World Heritage List (although cultural sites in Uzbekistan and Turkmenistan are already listed).

The nominated territories protect valuable tracts of natural steppe, an endangered ecosystem that once covered a vast swath of Kazakhstan, Russia, and Ukraine, but has suffered a high level of fragmentation and disturbance. Forty-four percent of Kazakhstan lies in the steppe zone, and despite massive cultivation of steppe in the 1950s and 1960s for agriculture, the country has managed to preserve areas of intact steppe ecosystems, along with the flora and fauna characteristic of these landscapes. Regions of intact steppe, which have been subject to degradation in other parts of Kazakhstan, continue to flourish on the territories of the nominated zapovedniki.

Kourgaldzhinsky and Naurzumsky Zapovedniki also protect some of the most expansive aquatic ecosystems of the steppe zone, including Tengiz and Kourgaldzhin Lakes, with a total area of 2600 km², and Naurzum and Sarykopin Lakes, with a total area of 1222 km². Located at the confluence of Central Asian and Siberian-Southern European migration routes, Tengiz and Kourgaldzhin Lakes support 112 species of birds and up to 350,000 nesting individuals, while Naurzum and Sarykopin Lakes support 110 species and up to 250,000 individuals. Tengiz Lake is home to the northernmost nesting grounds of the pink flamingo (Phoenicopterus roseus Pallas), while the zapovedniki’s complex systems of fresh and saltwater lakes provide nesting grounds for such rare species as the great white pelican (Pelecanus onocrotalus), dalmation pelican (Pelecanus crispus), whooper swan (Cygnus cygnus), Eurasian spoonbill (Platalea leucorodia), white-headed duck (Oxyura leucocephala), and great black-headed gull (Larus ichthyæetus).

These zapovedniki represent Kazakhstan’s last large, intact areas of melkosopochnik (a sandy, highly eroded plateau) and Turgai steppe, and offer clear examples of important and enduring ecological and biological processes that influence the evolution and development of terrestrial, river, and lake ecosystems. As such, and as areas of exotic natural beauty, Kourgaldzhinsky and Naurzumsky Zapovedniki meet UNESCO’s criteria for inclusion in the World Heritage List.

The World Heritage Committee will make a preliminary decision on Kazakhstan’s nomination in January or February of 2003, and will reach a final decision in July at a meeting of UNESCO in Paris.

Kymbat Imangalieva works for the Initiative for Social Action and Renewal in Eurasia Central Asia Office (ISAR-Central Asia).
Moscow Mayor Urges Revival of Siberian River-Diversion Project

In December, Yuri Luzhkov, mayor of Moscow, reportedly urged Russian president Vladimir Putin to revive a century-old project to divert Russia’s northern rivers to southern Russia and Central Asia. His proposed project would rechannel part of the flow of the Ob River, which runs north through the Siberian city of Omsk to the Kara Sea. This would require digging an open canal 2250 km long and 200 meters wide, from Khanty-Mansiyska, in central western Siberia, through Kazakhstan, to Uzbekistan.

Due to the area’s topography, the diverted water would have to be carried uphill, with the aid of eight pump stations and an annual 10.2 billion kilowatt-hours of electricity. The project could cost as much as $30 billion, and new electric stations would have to be built to support its energy needs. The completed canal would transport a total of 27 – 30 km³ of water to Central Asia per year, or about 6 – 7 percent of the Ob’s annual flow volume.

Luzhkov noted that in the twenty-first century water “will become an important strategic material, and moreover, a significant source of global conflict and a dominant human problem.” The mayor believes that using Russia’s vast water resources to irrigate the Central Asian states could be a powerful geopolitical influence on a region that appears to be pulling away from Russia. Central Asian governments have also developed a renewed interest in the project.

The idea of diverting the flow of northern rivers to Central Asia is not new. First broached at the end of the nineteenth century, the idea was officially studied by the Imperial Academy of Sciences of Russia in 1902. The Soviet government made preparations to actually implement a river-diversion project in the 1960s, but its plans eventually petered out. The idea resurfaced at the end of the 1970s, when the passage of Brezhnev’s Food Plan, which provided for large investments in the USSR’s agro-industrial complex, fueled development of a project to divert water from both the Ob and North Dvina Rivers. In 1986, however, under pressure from the public and the scientific community, Mikhail Gorbachev laid the project to rest.

According to Sergei Markov, director of the Institute for Political Research, the project’s opponents will be “huge in number: environmental organizations, European political structures, which depend on environmental groups in many ways, and various influential groups that depend on money from the Russian government – the auto and aerospace industries, the army, and others.” Moreover, the possible buyers for the diverted water – the Central Asian republics – are not capable of paying for it.

President Putin’s reaction to Mayor Luzhkov’s proposal is not yet known.

Compiled by RCN editors based on reports from the websites of Russian environmental organizations and news services.

Proposed canal route for the diversion of water from the Ob River to Central Asia.

Map by M. Dubinin
5th INTERNATIONAL GREEN WALK

Buryatia, Lake Baikal, Russia,
Summer 2003

The 5th International Green Walk (IGW) will take place in one of the most beautiful and significant regions of Buryatia - the Barguzine Valley. Participants walk along primary roads, camping in tents and meeting with locals, businesses, and organizations along the way. Final preparations for campsites, local projects, and other logistics will be made in January-February 2003. Please see http://www.reapintl.com/gw-5-announcement.html for more information.

SUSTAINING THE BERING SEA: AN INTERNATIONAL CONFERENCE FOR COLLABORATION

Girdwood, Alaska, 2-5 April 2003

This international conference will focus on the Bering Sea as a shared resource, with all of the nations involved affected by the action or inaction of any one nation in the management of the Bering. Scientists, government representatives, NGOs, business representatives, and indigenous leaders from the U.S., Japan, and Russia are being brought together to share information and to develop an international approach to ensure the sustainability of the Bering Sea.

For more information, please visit http://www.pacificenvironment.org/marine/beringconference.htm or call Jennifer Eyres, Pacific Environment's Exchange Coordinator at 510-251-8800 x 307.

INTERNATIONAL SYMPOSIUM

The Current Status of Populations and Protection of Geese of the White Sea-Baltic Flyway

Olenets, Republic of Karelia, 20-25 April 2003

This symposium will investigate the current status of different species of geese, problems of migration, the ecology of nesting and wintering grounds, and methods for calculating goose populations. Practical seminars will address improvement of hunting management and protection measure for goose populations at migration stopover points; agriculture and the protection of geese; and the current status of European populations of the lesser white-fronted goose (Anser erythropus).

For more information please contact Tatiana Kharkina. Tel: +7 (814 2) 783622. Fax: +7 (814 2) 769810. Email: biodiv@krc.karelia.ru. Internet: http://www.krc.karelia.ru/conference/, http://biology.krc.karelia.ru.

THIRD INTERNATIONAL CONFERENCE OF THE REGIONAL ENVIRONMENTAL CENTRE FOR THE CAUCASUS

Sustainable Development of Mountainous Regions of the Caucasus, Tbilisi, Georgia, July 2003

The overall objective of this conference is to identify ways to over-
Аннотации статей, представленных в номере

«В защиту лесов Казахстана». Инна Антипченко. Лесная кампания Форума экологов Казахстана выступила с предложениями по реформированию лесного хозяйства страны. Последняя редакция Лесного Кодекса РФ может привести к переводу особо ценных лесных массивов в ленточные боры в категорию "резерваций", и, соответственно, к проведению рубок главного пользования, чего нельзя допустить ни в коем случае.

«Лесной бизнес может провоцировать большую ответственность в защите лесов, чем Министерство природных ресурсов РФ». Владимир Захаров. Многие из руководителей лесного бизнеса начинают понимать, что период дикого капитализма прошел, что гораздо выгоднее и перспективнее вкладывать средства в развитие переработки и выпуска готовой продукции. Но, к сожалению, инвестиции в производство осмысливаются немногим, поскольку нет чёткой государственной политики в этой области. В то же время, в политической сфере, в частности, большая проблема наступления заготовок и торговли необработанным лесом.

Экосистемы в опасности.

«Экологическое разнообразие и устойчивое землепользование в районах высоко- когорного Таиландии». Алексей Гуна. Высоко в горах северо-западного Таиланда на высоте более 3 тыс. метров над уровнем моря в чрезвычайно географии и культурной изоляции от всего мира проживает этническая группа — яйнок. Это небольшой остров древнейшей цивилизации, где сохранились уникальные способы ведения устойчивого сельского хозяйства на экстремальных высотах. В статье рассказывается о людях долины Яй- нок, их культуре и экологических традициях.


Виды животных и растений находящиеся под угрозой исчезновения.

«Военное похищение живущей популяции зубра в центре европейской части России. Владимир Кальмий». Жизнь в дикой природе — это единственная возможность сохранить европейского зубра — к этому выводу пришло международное научное сообщество. Создание вольно живущей популяции зубра в национальном парке "Орловское Поле" пред- ставляет собой начальный этап в реинтродукции зубра в сохранившихся и восста- навливаемых лесопойных экосистемах центральной части России.

«Проблемы сохранения европейских зубров в питомниках России». Екате- рина Пиблова. Для того, чтобы вырас- тить зубра в питомнике, дождаться его по- ловозрелости и получить потомство требу- ется от 4 до 6 лет. Затраты на содержание и выращивание зубр значительно выше тех доходов, которые питомники получают после реализации животных в места их дальнейшего пребывания. Сложилась пара- доксальная ситуация: зубры нужны только работникам питомников. Но без помощи — питомницы не выживают, не смогут выпол- нять свои задачи, как не выживут и воль- ные популяции зубров, поскольку даже в действующую популяцию нужно обязательно добавить свежий материал.

Опыт неправительственных организаций.

«Водно-болотные угодья Армении: опыт НПО и их сохранении и научни- чении». Карен Джекнеджян. «Созо по профессиональной и предприниматель- ской деятельности» — неправительственная, некоммерческая организация, которая была с 1988 г. и концентрирует свои усилия на сохранении водно-болотных угодий Армении. Проводит научные исследования и инвентаризации заболоченных земель, оценивает их экологическое и экономическую значимость, проводит обучение менед- жеров таких угодий.

Новости дня.

«Подарок Земле от Амурской области». 13 июня 2002 года Губернатор Амурской области Леонид Коротков подписал постановление о создании на территории Амурской области шести новых особо охраняемых природных территорий: пять заказников и один озеленитель природы общей площадью 734 тысяч гектаров. Еще более решительный шаг сделал Губернатор Приморского края, который подписал распоряжение об расширении ООПТ края на 1,8 млн га, что представляет собой первый визит президента Путин в Дальневосточный морской заповедник». Визит Президента РФ имел большой резонанс в СМИ и позволил...