

# U.S.-Russia Cooperative Efforts for the Conservation of Wildlife and Wildlife Habitat



*Activities for 2009-2010*



Agreement between the Government of the United States of America  
and the Government of the Russian Federation  
on Cooperation in the Field of Protection of the Environment  
and Natural Resources

*“...the Parties shall work together to develop mutually agreed-upon policies in the field of protection of the environment and natural resources on a bilateral, regional and global basis.”*

The **Agreement between the Government of the United States of America and the Government of the Russian Federation on Cooperation in the Field of Protection of the Environment and Natural Resources** was signed on 23 June 1994 and supersedes the Agreement between the United States of America and the Government of the Union of Soviet Socialist Republics on Cooperation in the Field of Environmental Protection of 23 May 1972.

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#### Cover photographs:

Left top: Pacific walrus at Togiak National Wildlife Refuge, Alaska; FWS photo by Bill Hickey; source: <http://images.fws.gov>  
Left bottom: Crested auklets in Alaska; photo by Nikolai B. Konyukhov  
Right top: Saiga antelope; photo © Richard Reading  
Right bottom: During Pacific walrus tagging in 2006; photo by Anatoly Kochnev

### *Why do the United States and Russia cooperate on wildlife issues?*

As neighboring countries, the U.S. and Russia share certain populations of fish, marine mammals and migratory birds, many of which have economic, cultural and subsistence importance in addition to their ecosystem role and intrinsic value. To better manage and research wildlife, biologists engage in a number of cooperative conservation activities, including information sharing and joint scientific studies on the ground, in the air, on and below the sea, and using satellite technology. Russians and Americans have long maintained a dialogue on wildlife issues. Indeed, the first international treaty to address wildlife conservation was the North Pacific Fur Seal Convention of 1911. A more recent example: The U.S.-Russia Polar Bear Commission, which met for the first time in 2009, includes both Governmental and Native representatives.

### *What is the Environmental Agreement?*

The "Agreement between the Government of the United States of America and the Government of the Russian Federation on Cooperation in the Field of Protection of the Environment and Natural Resources", signed in 1994, is a mechanism for cooperation. The Agreement is between the U.S. and Russian governments, but the involvement of non-governmental organizations in conservation efforts is encouraged.

### *What does Area V refer to?*

The U.S.-U.S.S.R. Environmental Agreement, signed in 1972, listed a number of areas of cooperation, including air pollution and earthquake prediction. The fifth listed category was nature conservation, and the familiar term "Area V" has been used by long-time cooperators for decades. Though nature conservation is not the fifth listed category in the 1994 Agreement, the Agreement stipulates that "the Parties may agree that an institutional structure developed under [the 1972 Agreement] may continue without being reconstituted."

### *What is included in this list?*

This list of cooperative wildlife conservation activities occurring under the auspices of the Environmental Agreement has been prepared by the U.S. Fish and Wildlife Service in partnership with the Russian Ministry of Natural Resources and Environment. In June 2009, program leaders met in Moscow to review exchanges carried out in 2007-2008 and agree on activities for 2009-2010. This list is a result of those discussions and subsequent correspondence. Also included are certain efforts by non-governmental organizations. This is not an exhaustive list of all U.S.-Russia nature conservation activities by governmental and non-governmental partners, many of which are agreed upon through direct correspondence, or occur under different auspices.

### *What is Wildlife Without Borders?*

The Division of International Conservation of the U.S. Fish and Wildlife Service uses the term Wildlife Without Borders-Russia to refer to its regional (Russia/East Asia) efforts to partner for wildlife conservation. Since 1995, Wildlife Without Borders has provided \$1.3M in grant support for Russia's nature reserves and parks. Additionally, logistical and financial assistance is provided for exchanges of biologists; conferences, workshops and training opportunities are also organized. Read more at

<http://www.fws.gov/international/DIC/regional%20programs/russia/russia.html>

### *What about tiger conservation?*

The United States welcomes the opportunity to partner with Russia in efforts to conserve the tiger, a species of global concern. Governmental and non-governmental partnerships with Russia for tiger conservation commenced in the 1990s. In 1994, the U.S. Congress established the Rhinoceros and Tiger Conservation Fund. Funding from this program allows the U.S. Fish and Wildlife Service to provide support for the conservation of tigers throughout their range. More than \$1.5M in assistance for tiger conservation in Russia has been disbursed to date.

Read more at <http://www.fws.gov/international/DIC/species/tiger/tiger.html>



# Area V Work Plan for 2009-2010

Area V, "Protection of Nature and the Organization of Reserves"  
of the U.S.-Russia Agreement on Cooperation  
in the Field of Protection of the Environment and Natural Resources

American and Russian Area V project leaders and participants met in Moscow June 2-3, 2009 to review exchanges carried out in 2007-2008 and agree on activities for 2009-2010. The following Work Plan was adopted:

(NOTE: Wherever possible, principal participating U.S. and Russian agencies are indicated; see Key to Abbreviations on last page.)

## **Project 02.05-11 Conservation of Wild Species of Fauna**

The work of this Project is carried out under five Activities:

### **Activity 02.05-1101 Implementation of the U.S.-Russia Convention Concerning the Conservation of Migratory Birds and Their Environment**



*Left:*  
*Olga Shugaeva, Evgeny Syroechkovsky and Vladimir Andronov consult during a meeting in Honolulu, Hawaii in February 2009.*

*Right:*  
*Mike Silbernagle of James Campbell National Wildlife Refuge, Oahu, Hawaii and Evgeny Syroechkovsky; February 2009*



**PURPOSE:** Coordinate implementation of the 1976 bilateral Convention between the United States and U.S.S.R. (Russia) and promote the conservation and study of the more than 200 avian species listed in the Appendix to the Convention.

1. American, Russian and Japanese specialists will meet in Honolulu, Hawaii for one week in February 2009 to discuss migratory bird topics of mutual concern to the three countries. (FWS; MNRE, BBRC)
2. The two sides will compile information to be used in preparing a dual-language joint statement reporting on implementation of the Convention for the Years 1999-2006. This publication will be the fourth in a series of periodic reports. (The first three covered: 1981-1986; 1987-1992; 1993-1998). (FWS; MNRE, NBBL)
3. The two sides will continue to exchange bird banding and recovery data, as well as information on the ecology of diseases affecting migratory birds, including avian influenza. (IPEE; USGS-BRD, FWS)



*photo: U.S., Russian and Japanese participants in migratory bird conservation and management meetings held at the East-West Center in Honolulu, Hawaii in February 2009.*

## **Activity 02.05-1102      Study and Conservation of Cranes, Raptors and Other Rare Birds**

**PURPOSE:** Promote wild avian populations by encouraging conservation of critical habitat, scientific collaboration and educational outreach.

1. In 2009 the two sides will direct their efforts at finalizing the preparatory phase of Project Hope by undertaking the following activities:
  - Study possible migratory routes for Siberian cranes following ultralight aircraft across the Kyzylkum Desert (Kazakhstan, Uzbekistan);
  - Whenever possible, continue releases of Siberian cranes reared at Oksky Reserve in nesting areas at Kunovat Refuge, along migratory routes passing through Astrakhansky Reserve and Belozersky Refuge, and in wintering grounds in Iran. Monitor success of released birds using satellite transmitters as funds allow.
  - Release 2-4 Siberian cranes at the Dzheiran Eco-center (Uzbekistan) in an experiment to ascertain the suitability of an alternative wintering area there for this species. Monitor behavior, movements, and survival of released birds.
  - Continue to strengthen the environmental education component of the “Flight of Hope” Project. (ICF; VNIIPrirody)
2. In 2010 the two sides will develop a detailed five-year program for implementation of Project Hope, with special attention to questions of financing, logistics and obtaining all necessary licenses and permits. (ICF; VNIIPrirody)
3. The two sides will continue to exchange expertise and collaborate on the restoration of a peregrine falcon population in the Moscow region by releasing young birds reared in special breeding centers. (VNIIPrirody)
4. To improve captive rearing techniques for raptors and increase the genetic diversity of birds of prey maintained in breeding centers, reciprocal visits of 1-2 specialists from both countries will be planned in 2010. In addition, the U.S. side will transfer four captive-bred peregrine falcon chicks to the Russian side, and the Russian side will transfer four captive-bred goshawk chicks to the American side. (VNIIPrirody, Sapsan Foundation; High Plains Cooperative)
5. The two sides will cooperate on the study and banding of snowy owls on Wrangel Island, Russia. (USGS-BRD, FWS; MNRE)

## Activity 02.05-1103

## Study and Conservation of Polar Bears



Left:  
*Steven Kohl and Natalia Vavilova present documents to Polar Bear Commissioners Geoffrey Haskett and Amirkhan Amirkhanov; Moscow, September 2009*

Right:  
*Polar bear in the Bering Sea near St. Lawrence Island. FWS photo by Elizabeth Labunski*



**PURPOSE:** Promote research on the biology and seasonal movements of polar bears, and coordinate implementation of the U.S.-Russia Agreement on the Conservation and Management of the Alaska-Chukotka Polar Bear Population (2000).

1. One Russian specialist will visit the U.S. for 3-4 weeks in April-May 2009 to take part in the live capture, tagging and release of polar bears in field locations in the Chukchi Sea off Kotzebue and Point Hope, Alaska. (MMM-7; MNRE)
2. 10-12 American specialists will visit Moscow in September 2009 to take part in the first meeting of the Commission established under the U.S.-Russia Polar Bear Agreement. The administrative framework and procedures under which the Commission will operate will be adopted, and scientific and other working groups set up. (FWS, MMM-7; MNRE)
3. Two-three Russian specialists will visit the U.S. for 3-4 weeks in the spring of 2010 to continue marking and recapture studies of polar bears in field locations in the Chukchi Sea off Alaska. (MMM-7; MNRE)
4. The first meeting of the Scientific Working Group established under the U.S.-Russia Polar Bear Commission will be held in March 2010 in Anchorage. (FWS, MMM-7; MNRE)
5. The next meeting of the U.S.-Russia Polar Bear Commission will be held in June 2010 in Anchorage. (FWS, MMM-7; MNRE)



*photo: Participants in the first meeting of the Commission established under the Agreement on the Conservation and Management of the Alaska-Chukotka Polar Bear Population; Moscow, September 2009*

## Activity 02.05-1104

## “Protected Natural Areas”: see Project 02.05-51

## **Activity 02.05-1105      Cooperation among Zoos in Captive Breeding of Rare and Endangered Animals**

PURPOSE: Foster cooperation among U.S. and Russian zoos to preserve genetic diversity of rare and endangered species maintained in captivity, sponsor public education and outreach activities, conduct scientific research, and promote conservation of wild animals and their habitats.

1. Long-term cooperation between the Moscow and Brookfield (Chicago) Zoos will continue. Information will be exchanged on captive animal management, breeding and veterinary care.
2. Collaboration between the Moscow, Omaha and San Diego Zoos on the design and construction of exhibits will continue.
3. The Moscow Zoo will continue to participate with U.S. partners in the International Species Information System (ISIS), Zoological Information Management System (ZIMS), American Association of Reptilian and Amphibian Veterinarians (AARAV), and other international zoo organizations.

## **Activity 02.05-1106      Conservation and Management of Marine Birds**

PURPOSE: Promote conservation of seabirds and shorebirds through exchange of information, field studies, and jointly formulated monitoring and management strategies.



*Murre colony on Tulenyi Island, Sakhalin Region, June 2009. Photo by Vladimir Burkanov*

1. The two sides will update and add new entries to the U.S.-Russia Seabird Colony Catalog database, containing information on the location, species composition and breeding population size for most of the estimated 1,000 seabird colonies in the Russian Far East. (MBM-7; RAS/RFE, IBPN)
2. The two sides will continue cooperation under the Important Bird Areas (IBA) Program for the Bering Sea region, which has identified 133 IBAs in Alaska (92) and Russia (41) as critical habitat for waterfowl, seabirds, shorebirds, songbirds and raptors. (MBM-7; MNRE, RAS/RFE, IBPN)
3. Coordination of joint research and monitoring of the effects of climate change on Beringian shorebird populations will continue, with the involvement of Native peoples of Alaska and Chukotka. (FWS; BBRC)

4. One Russian specialist will visit the U.S. for three months in the summer of 2010 to monitor rhinoceros auklets and other *Alcidae* in the Semidi Islands, Alaska. (FWS-Refuges; BBRC)

## **Project 02.05-21      Beringia Conservation Forum**

**PURPOSE:** Promote the study and conservation of ecosystems and fauna/flora species and their habitats common to the Aleutian (U.S.) and Commander (Russia) Islands and adjacent land areas of Alaska, Kamchatka and Chukotka. Work under this Project also furthers the goals of several other Area V projects and activities.

Alaska Maritime National Wildlife Refuge and Commander Islands Nature Reserve will continue to solidify their relationship through implementation of a Memorandum of Understanding signed in 2008. Among topics for collaboration are: seabird monitoring, invasive species management, and oil spill preparedness. Specific projects for 2009-2010 will include implementation of measures to reduce seabird bycatch during fishing operations, and comparative genetic studies of foxes on Shemya (U.S.) and Medny (Russia) Islands. (FWS-Refuges; MNRE)

## **Project 02.05-31      Cooperation in Wildlife Trade and Law Enforcement**

**PURPOSE:** Encourage communication among law enforcement officials in both countries to address problems of international wildlife commerce, with particular attention to the (CITES) Convention on International Trade in Endangered Species of Wild Fauna and Flora.

1. The two sides will continue to exchange information on policy questions pertaining to shipment of Caspian sturgeon and caviar products to the U.S., and also on the dates and duration of hunting seasons in Russia for brown bears and other species during which American and other foreign hunters may take and export trophies. (FWS-Law Enforcement; GlavOkhota, RNAFEE)

2. The two sides will consider holding a U.S.-Russia Conservation Law Workshop in Moscow in 2010. Its purpose will be, through a series of lectures and round-table discussions, to familiarize participants with principles of conservation law in the U.S. and Russia, including their genesis, significance and enforcement. The target audience will be attorneys, as well as non-attorney administrators in positions requiring extensive knowledge of wildlife conservation laws and their interpretation. (FWS; MNRE)

## **Project 02.05-41      Ecosystem Biodiversity**

The work of this Project is carried out under three Activities:

### **Activity 02.05-4101      Biosphere Reserves**

**PURPOSE:** Monitor natural processes in biosphere reserves of both countries and share data through established MABFauna, MABFlora, ACCESS and Biomass systems.

Both sides will continue to exchange information on the role of biosphere reserves and other protected territories in the conservation of biodiversity, with special attention to questions of ensuring sustainable development in the basins of the Mississippi and Volga Rivers. The possibility of exchanges of specialists for field work on specific topics will be considered. (IPEE; FWS)

### **Activity 02.05-4102      Arid Ecosystems**

PURPOSE: Promote the study and conservation of critical arid land areas and their endemic fauna and flora; develop strategies for combating desertification and loss of water resources.

1. One-two Russian specialists will visit the U.S. for two weeks in 2010 to discuss deployment of satellite collars on saiga antelopes in Astrakhan Province and Kalmykia. (IPEE; The Wilds, FWS)
2. Four-five American specialists will visit Russia for up to two weeks in 2010 to provide technical assistance in biomedical assessment, diagnostics, preventive medicine, neonatal survival, and effective systems for maintaining laboratory and medical records for saiga in Astrakhan Province and Kalmykia. (IPEE; The Wilds, FWS)

### **Activity 02.05-4103      Mountain Ecosystems**

PURPOSE: Promote the study and conservation of alpine systems and their unique biodiversity.

The two sides will continue consultations on comparative investigations of the Southern Appalachian and Southwest Caucasus Mountain Ecosystems. (IPEE; Colorado State University)

### **Activity 02.05-4104      Wetland and River Ecosystems**

PURPOSE: Promote the study and conservation of wetland and delta ecosystems, recognizing their importance in flood prevention, as habitat for fish and migratory birds, and as filters of pollutants and other harmful substances.

Three American specialists will visit Astrakhan State Biosphere Reserve for two days in May 2009 for familiarization with the wildlife and aquatic habitats of the Volga River delta ecosystem. (FWS; MNRE)

## **Project 02.05-51      Protected Natural Areas**

The work of this Project is carried out under two Activities:

## Activity 02.05-5101      Protected Areas Management



*May 2009*

*FWS National Wildlife Refuge System Chief Greg Siekaniec, FWS Alaska Regional Director Geoff Haskett and FWS Russia Program Coordinator Steven Kohl visited Astrakhan Nature Reserve at the invitation of Vsevolod Stepanitsky, Deputy Director for Federal Environmental Policy of the Russian Ministry of Natural Resources and Environment and reserve Director Nina Litvinova.*

*photo by Olga Repina, Russian Ministry of Natural Resources and Environment*

**PURPOSE:** Provide for comparative studies of refuges and nature reserves and the external factors affecting them, with emphasis on rare and endangered species of fauna and flora and their habitats.

1. The 7th Call for Proposals under the U.S. Fish and Wildlife Service program of grants to Russian reserves and national parks will be announced in May 2009. Previous grants have supported the work of these protected areas through purchase of field and communications equipment, motor vehicles and boats, support of facilities repair and maintenance, and public outreach activities. Review panels in Russia and the U.S. will evaluate all applications, and recipients will be announced by September 2009. Awards will be a maximum of \$10,000 each. (FWS; MNRE, Zapovedniks)
2. Nine specialists from the Khabarovskiy and Primorskiy regions of the Russian Far East will visit the U.S. for two weeks in August 2009 for familiarization with habitat management, law enforcement, educational activities and involvement of surrounding communities in several national wildlife refuges, national parks and national forests in Montana and Wyoming. (FWS, USFS; MNRE)
3. The two sides will continue collaboration in the monitoring and management of wildlife refuges and nature reserves in both countries. Topics include habitat protection, fauna and flora surveys and inventories, biostatistics, law enforcement, policies for dealing with such natural phenomena as fires and floods, and application of new technologies, such as GIS, to land and resource management. In 2010, 5-6 American refuge personnel will visit reserves in Siberia and Far Eastern Russia for exchange of expertise. A similar visit to U.S. protected areas by Russian reserve staff may also be arranged. (FWS-Refuges; MNRE)
4. The two sides will consider holding in 2010 or 2011 a conference on contemporary issues facing American and Russian protected area managers, including habitat conservation, law enforcement questions, public outreach, ensuring visitor safety, and application of the latest technologies for effective decision-making. (FWS; MNRE)
5. The two sides will consider holding in the summer of 2010 or 2011 a third workshop in the U.S. to train protected area managers and staff in the use of the Geographic Information System (GIS) as a tool for natural resource management. Up to 20 Russian conservation biologists will take part. (FWS, Wilkes Univ.; MNRE, RAS)



August 2009

*In partnership with Phoenix Fund, and with significant financial support from The Trust for Mutual Understanding, the "Wildlife Without Borders" program of the Division of International Conservation of the U.S. Fish and Wildlife Service organized a visit of nature reserve and national park staff from Primorye and Khabarovsk Krai to National Wildlife Refuges, National Parks and National Forest lands in Montana and Wyoming. Meetings were with federal, state, tribal, non-governmental and university partners.*

## **Activity 02.05-5102      Conservation Education**

**PURPOSE:** Promote public awareness of and commitment to the need to conserve wild species of fauna and flora and their habitats.

1. Two Russian specialists will visit the U.S. for ten days in February 2009 to attend the annual Refuge Friends workshop in Washington, D.C. and for familiarization with the organization and operation of volunteer programs at two U.S. national wildlife refuges in Maryland and the U.S. National Arboretum. (FWS-Refuges, Nat. Arb.-USDA; Zapovedniks, Komarov)



*photo:*  
Nina Alekseyeva (left) and Irina Peshnova

*Nina Alekseyeva, Volunteer Coordinator, Komarov Botanical Garden, St. Petersburg, Russia and Irina Peshnova, Volunteer Coordinator, Zapovedniks Ecocenter attended the National Wildlife System Friends Conference in Washington D.C. in February 2009 and visited Blackwater National Wildlife Refuge in Cambridge, Maryland, Patuxent Research Refuge in Laurel, Maryland, and the U.S. National Arboretum.*

2. In 2010 two Americans will be invited to take part in a two-week work camp for volunteers at either Baikal Nature Reserve or Kenozersky National park (Центр "Заповедники"; FWS-Refuges)

## **Project 02.05-61      Marine Mammals**

**PURPOSE:** Carry out cooperative studies and exchange scientific information to better manage and conserve marine mammal species shared by both countries.

## GENERAL

The 21st meeting of the U.S.-Russia Marine Mammal Working Group will be planned for October 2010 in Kaliningrad, Russia, with the participation of 8-10 American specialists.



*photo: Participants in the 20<sup>th</sup> meeting of the U.S.-Russia Marine Mammal Working Group held in Seattle, Washington at the National Marine Fisheries Service's National Marine Mammal Laboratory. photo by Josh London, NOAA/NMML*

## I. PINNIPEDS

### True Seals

1. One-two American specialists will visit Russia for 3-4 weeks in July-August 2009 or 2010 to study the abundance, haulout spatial structure and feeding habits of true seals in areas of summer congregation in Tauiskaya Bay (Sea of Okhotsk) to gain further understanding of the role of marine mammals in marine ecosystems. (NMML; Magadan NIRO)
2. Three-four American specialists will visit Russia for 4-6 weeks during June-August 2009 or 2010 for ecological studies of spotted seals on the west coast of Kamchatka and in the Kuril Islands. (NMML; KBPIG)
3. One-two American scientists will visit Russia for 2-3 weeks in August 2009 or 2010 for spotted seal biological studies in western Kamchatka using satellite tags and telemetric sensors. (NMML; Kamchata NIRO)
4. One Russian specialist will visit the U.S. for 3-4 weeks in 2009 or 2010 to collaborate in satellite telemetry studies and the collection of genetic samples of ice-associated phocid seal species in the Sea of Okhotsk, Sea of Japan and western Bering Sea. (NMML; KBPIG, Kamchatka NIRO)
5. One American specialist will visit Russia for 2-3 weeks in April 2010 for monitoring and telemetry studies of spotted seals on a shore haulout on Utashud Island (off southeastern Kamchatka) in order to study their migrations. (NMML; Sevvostrybvod)
6. One Russian scientist will visit the U.S. for 3-4 weeks in 2010 to take part in ice seal studies, which may include a research cruise along the ice edge in the Bering Sea. (NMML; KBPIG, Kamchatka NIRO)

## Eared Seals



*Deployment of a portable video camera on a sea lion female to study underwater foraging behavior during US-Russia expedition in June 2009. Lovushki Island, Kurils. Photo by Vladimir Burkanov*

1. One American specialist visit Russia for 3-4 weeks in July-August 2009-2010 to take part in surveys and haulout structure studies of Steller sea lions on Zavyalov Island in the Sea of Okhotsk. (NMML; Magadan NIRO)
2. Four-five American specialists will visit Russia during the period May-July 2009-2010 to take part in a cruise to survey Steller sea lion and Northern fur seal haulouts, tag newborn pups and study feeding ecology in Kamchatka, the Kuril and Commander Islands. (NMML, ASLC; KBPIG)
3. One-two American scientists will visit Russia for 3-4 weeks in August 2009-2010 to carry out telemetry research on Northern fur seals tagged in the Commander Islands to determine the routes of their foraging trips and migrations. (NMML; Kamchatka NIRO)
4. One American specialist will visit Petropavlovsk-Kamchatsky for 2-3 weeks in December 2009 or 2010 to analyze data obtained from Northern fur seals tagged in the Commander Islands to assess their survival rates and reproductive potential. (NMML; Kamchatka NIRO, KBPIG)
5. One-two Russian scientists will visit the U.S. for 2-3 weeks in August 2010 to conduct Northern fur seal pup assessments in the Pribilof Islands (Alaska). (NMML; KBPIG)
6. Two Russian scientists will conduct Steller sea lion studies at the Alaska SeaLife Center (Seward) in 2010 and 2011. (ASLC; KBPIG)

## Pacific Walrus

1. One Russian specialist will visit Alaska for two weeks in 2009 to contribute to a modeling effort to evaluate the effects of climate change on walrus populations. (USGS-BRD; Chukotka TINRO)
2. Two Russian specialists will take part in the biennial Conference on the Biology of Marine Mammals, to be held in October 2009 in Quebec City, Canada. A joint presentation will be made on the results of a U.S.-Russia comprehensive survey of Pacific walrus in 2006. (MMM-7; Giprorybflot)
3. One-three community representatives from the Chukotka region will visit Alaska for two weeks in 2009-2010 to exchange information with Alaska Native settlements about local conservation initiatives for walrus along the Arctic coast. (FWS)

4. One-two American specialists will visit Russia for 3-4 weeks in August-October 2009 or 2010 to study the population dynamics, age-sex structure and mortality of walrus on coastal haulouts on Kolyuchin Island, Cape Vankarem and Cape Schmidt in the Chukchi Sea. (MMM-7; Chukotka TINRO)
5. One-four representatives of Chukotka Native hunter organizations will visit Alaska for one week in 2009 or 2010 to plan walrus harvest monitoring projects in Chukotka. (U.S. Eskimo Walrus Commission)
6. Three Russian specialists will take part in the January 18-22, 2010 Marine Science Symposium in Anchorage, Alaska to discuss and present the final results of the U.S.-Russia comprehensive survey of Pacific walrus in 2006. (MMM-7; Giprorybflot, Chukotka TINRO)

### **Sea Otters**

1. One Russian specialist will visit the U.S. in May-July 2009 to take part in sea otter population field studies near Big Sur, California. (Monterey Bay Aquarium, USGS-BRD; MSU)
2. One-two American scientists will participate in a census and biological studies of sea otters in the northern Kuril Islands in June-July 2009 or 2010. (MMM-7; Kamchatka NIRO)
3. One-two American specialists will visit Russia in 2009-2010 for joint research on the reproductive biology of female sea otters in the Commander Islands using methods of determining sexual hormone levels in scat samples. (MMM-7; VNIRO)
4. Two Russian specialists will visit the U.S. for 3-4 weeks in the summer of 2010 to take part in sea otter population field studies in Glacier Bay, Alaska. (USGS-BRD; Kamchatka NIRO, VNIRO)

## **II. CETACEANS**



*Participants in US-Russia joint expedition to study cetaceans and pinnipeds, Avacha Bay, Kamchatka, June 2009. Photo by Vladimir Burkanov*

1. One-two American specialists will visit Russia for 3-4 weeks during the period July-August 2009 or 2010 for toxicological research on gray whales in Mechigmsky and Lavrentia Bays (Bering Sea) to determine the reasons for and origin of the specific odor of body tissues in some harvested whales. (NMML; Chukotka TINRO)
2. One-two American specialists will visit Russia for 4-6 weeks during the period July-September 2009 or 2010 for joint telemetry studies and genetic research on beluga whales in the Gulf of Anadyr to

determine their movements, wintering areas and degree of population discreteness. (NMML; Chukotka TINRO)

3. Two-three American specialists will take part in an expedition to deploy satellite tags on large cetaceans in Far Eastern Russia in August-September 2009 or 2010. (NMML; KBPIG)

4. Two Russian specialists will visit the Alaska SeaLife Center (Seward) for periods of up to one month for beluga whale research in 2010 and 2011. (ASLC; KBPIG)

## **Project 02.05-71      Animal and Plant Ecology**

The work of this Project is carried out under seven Activities:

### **Activity 02.05-7101      Conservation of Rare and Endangered Species of Plants and Comparative Studies of North American and Eurasian Flora**



#### *Impact of Colonial Nesting Seabirds on Vegetation*

*Dr. Elena Glazkova (center) of the Komarov Botanical Institute in St. Petersburg, Russia, conducted field work in Alaska in August 2008 with staff of the U.S. Forest Service. Travel was supported by the Ecological Society of America's Foreign Scientist Travel Program, U.S. Forest Service International Programs, and the "Wildlife Without Borders" program of the Division of International Conservation of the U.S. Fish and Wildlife Service.*

**PURPOSE:** Promote cooperation among botanical gardens and arboreta in both countries, including exchanges of seeds and other plant materials endemic to each country for propagation and growing, and organization of joint botanical research and collecting expeditions.

1. Six Russian specialists will visit the U.S. for one week in December 2009 to meet with American colleagues at the U.S. National Arboretum (Washington, D.C.) to plan bilateral activities for 2010 and 2011. (Nat. Arb.-USDA; Main Bot. Garden, CSBG, Komarov, RAS-Ural, RAS/RFE)

2. The two sides will update a bilingual website ([www.usrubep.org](http://www.usrubep.org)) launched in 2007 to highlight U.S.-Russia botanical cooperation under the Environmental Agreement. Information is available on scientific developments, recent publications, and upcoming conferences and expeditions. (Nat. Arb.-USDA, FWS; Main Bot. Garden, RAS).

### **Activity 02.05-7102      Northern Migratory Waterfowl**

**PURPOSE:** Determine nesting grounds, migratory routes, wintering areas, adaptation to environmental change, and productivity of geese, ducks and other waterfowl species to better conserve and manage them.

1. One Russian specialist will visit the U.S. for two weeks in March 2009 to present the results of studies of Wrangel Island snow geese at the annual meeting of the Pacific Flyway Study Committee in Klamath Falls, Oregon. That specialist will also be invited to attend the Pacific Flyway Study Committee meeting to take place in early 2010. (FWS; MNRE)

2. In 2009-2010 specialists from both countries will continue comparative spectacled eider field studies in the Chaun Bay area of western Chukotka, Russia, and Kigigak Island on the Yukon-Kuskokwim delta of Alaska. Topics for collaboration include monitoring of nesting chronology and productivity, capture and marking of adult females to estimate annual survival, and collection of blood samples for lead contaminant analyses. (FWS; MNRE)

3. Beginning in 2009, Red Rock Lakes National Wildlife Refuge (U.S.) invites the Biology Department of Moscow State University to send graduate students to Montana to take part in collaborative studies of waterfowl and other species of migratory birds in high-altitude wetlands, shallow lakes and marshes. (FWS-Refuges; MSU)

### **Activity 02.05-7103      Holarctic Mammals**

**PURPOSE:** Investigate the systematics, zoogeography and genetic variability of mammals of the holarctic, with the goal of conserving gene pools of those species.

1. Russian Biologists will continue to collect samples of European bison for assessment of their genetic status at Texas A&M University. Two American specialists will visit Russia during the summer of 2010 to assess progress in the translocation of European bison to the Ust'-Kobenskoe Forest (Vologda Oblast) and review the genetic status of the translocated animals. (USGS-BRD, Texas A&M Univ., Montana State Univ.; IPEE)

2. Two Russian specialists will visit the U.S. for two months in the spring of 2009 to work with colleagues at the University of Wisconsin to evaluate and map the most productive caribou calving grounds in the Northern Hemisphere and determine where refuges or reserves need to be established to protect those areas. Consultations will also be held with the U.S. Department of the Interior's National Wildlife Health Center in Madison, Wisconsin, on the effects of industrial pollution on ungulate health. (Univ. of Wisconsin, NHWC; IPEE)

3. Collaboration will continue on brown bear studies in European Russia using census and remote sensing data collected from 521 separate tracts. Russian and American biologists will complete analyses of human impacts on brown bears and habitat fragmentation, and publish results already presented at three international conferences. (Univ. of Wisconsin; IPEE)

### **Activity 02.05-7104      Chemical Senses and Communication in Animals**

**PURPOSE:** Investigate the functions and mechanisms of taste and smell as related to the disciplines of physiology, biochemistry, endocrinology, immunology, nutrition, behavior and genetics.

1. One Russian specialist will visit the U.S. for one month in April-May 2009 to attend the annual meeting of the Association for Chemoreception Sciences (Sarasota, Florida) and continue studies of chemosensory biology and genotyping at Monell Chemical Senses Center in Philadelphia. (IPEE; Monell)

2. Two Russian specialists will visit the U.S. for up to two months in 2010 to conduct research on sensitivity of laboratory mice to biological substances and take part in studies to determine non-toxic regulators of reproductive functions in voles. (IPEE; Monell, USDA).

### **Activity 02.05-7105      Application of Contemporary Technology in Ecological Studies of Large Mammals**

**PURPOSE:** Develop joint methods to collect and process remotely-sensed microwave and optical data, integrate analyses of satellite data from telemetry and environmental remote sensing, and create database structures and models for ecological studies of large mammals in Arctic environments.

Collaborative research will continue on the effects of climate change on the spatial and temporal distributions and physical characteristics of habitats used by Arctic marine and terrestrial mammals. Specific topics for 2009-2010 will include: (1) Arctic marine ice cover modeling at various times of the year, (2) key sea ice habitat parameters affected by climate, and (3) relationships between the timing of tundra vegetation growth, seasonal distributions of sea ice, and characteristics of late-winter and early-spring atmospheric circulation patterns.

For this work three Russian specialists will visit the U.S. (Alaska) for up to two months in the winter of 2009-2010, and two American specialists will visit Russia in the summer of 2010 for up to two months. (IPEE; USGS-BRD)

### **Activity 02.05-7106      Wildlife Health and Disease**

**PURPOSE:** Cooperate in the study, prevention and treatment of wildlife diseases of microbial, parasitic and chemical origin common to both countries.

1. Throughout 2009 and 2010 the two sides will closely monitor outbreaks of avian influenza and exchange the latest information about its prevention, diagnosis, spread, pathology and threats to humans. Clinical samples may also be jointly analyzed. (NWHC, FWS; BBRC, RAS/SIB)

2. One American specialist will visit Russia for one month in August-September 2009 to take part in screening of wild birds for H5N1 avian influenza virus in wild waterfowl populations in Sakha/Yakutia, to assess potential threats to endangered bird species. (NWHC; RAS/SIB)

### **Activity 02.05-7107      Invasive Species of Fauna and Flora**

**PURPOSE:** Mitigate the environmental damage caused by invasive species.

1. In 2009-2010 the two sides will exchange information on risk assessment and management of invaders in several ecosystem types, and modeling and predicting the end results of invasive processes. In addition, arrangements may be made for an exchange of up to two specialists from each country in 2010 for field work for periods of up to one month, at times to be determined through mutual correspondence. (IBIW, IPEE; FWS, USGS-BRD)

2. American specialists will be invited to take part in the Third International Symposium on Invasive Species, which will be held September 28-October 2, 2010 in Borok, Russia. (IBIW, IPEE; FWS, USGS-BRD, USFS, EPA)

## **Project 02.05-81 Ichthyology and Aquaculture**

The work of this project is carried out under four Activities:

### **Activity 02.05-8101 Fish Culture, Nutrition and Disease**

**PURPOSE:** Improve fisheries management, increase productivity through fish culture, restore fishery resources, and exchange information on the physiology, nutrition, diseases, genetics and reproductive biology of species of mutual interest.



*photo: Participants in the Third U.S.-Russia Conference on Aquatic Animal Health*

*USGS photo by Rocco Cipriano*

The Third U.S.-Russia Conference on Aquatic Animal Health will be held July 13-17, 2009 in Shepherdstown, West Virginia, U.S. Up to 18 Russian specialists will attend the conference, whose major topics are: effects of human activities, pollutants/contaminants and climate change on fish health; impact of disease within aquatic and marine ecosystems; and interactions among wild and captive fish. (USGS-BRD; IFF)

### **Activity 02.05-8102 Study and Conservation of Sturgeon**

**PURPOSE:** Promote sound management of sturgeon populations in both countries. (Questions relating to international trade of caviar and other sturgeon products are addressed under Project 02.05-31.)

Exchanges of information, samples and sturgeon specialists in 2009-2010 will be arranged as the need arises. (IPEE, RNAFEE; FWS, USGS-BRD)

### **Activity 02.05-8103 Study and Conservation of Salmon**

**PURPOSE:** Promote sound management of salmon populations in both countries.

1. Under an ongoing project to study and conserve steelhead salmon and other native fish species and their habitats on the Kamchatka Peninsula, up to eight specialists from the Wild Salmon Center (Oregon), Moscow State University and other organizations in both countries will continue expeditionary field work in Kamchatka during the summer and fall of 2009-2010 to collect samples and analyze data. (WSC, FLBS; IPEE, MSU, Wild Fishes and Biodiversity Foundation, Kamchatka, Russian Salmon Fund; other partners)
2. In recognition of the environmental, economic and social importance of high priority Pacific salmon rivers in both countries, American and Russian government agencies, scientific institutes and non-governmental organizations will collaborate to identify, study, monitor and protect those rivers. To that end, technical expertise and financial resources may be exchanged among the participants. (WSC, FWS; IPEE, Sakhalin Salmon Initiative, Wild Fishes and Biodiversity Foundation, Kamchatka, The Wildlife Foundation, Khabarovsk, institutes of Russian Federal Fisheries Agency; other partners)
3. In recent years fishery biologists in the U.S. and Russia have gained much knowledge about threats to wild salmon populations from interactions with hatchery-produced fish in both freshwater and marine environments. Those threats include loss of reproductive fitness and productivity, and mixed stock harvest. In 2009-2010, a steering group composed of governmental and academic specialists from both countries will be established and convened to share information on hatchery-wild interactions and discuss future cooperative activities. Up to 12 Russian specialists will be invited to attend an international conference, to be held May 4-7, 2010 in Portland, Oregon, on the ecological interactions of hatchery and wild salmon, and to take part in additional work sessions planned by the steering committee for the following week. In 2009-2010 the Institute of General Genetics (Russian Academy of Sciences) will conduct field studies of interactions between hatchery-produced and wild chum salmon populations in Sakhalin and the Kuril Islands, with emphasis on genetic and ecological factors. Eventual expansion of these studies to include other Pacific salmon species will serve to further the goals of the newly-established wild-hatchery steering group. (IGG, IPEE, MSU; WSC, FWS; other partners)

**Activity 02.05-8104      Comparative Studies of Fisheries in Large Lakes and Rivers of the U.S. and Russia**

PURPOSE: Study the ecology of endemic fishes of the Great Lakes (U.S.), Lake Baikal (Russia) and other important lake and river systems of both countries, with emphasis on comparative parasitology.

Up to 20 Russian specialists will be invited to attend the Third U.S.-Russia-China Symposium on Ecology and Fishery Biodiversity in Large Rivers of East Asia and North America, to be held September 20-24, 2010 in Memphis, Tennessee. (FWS, USGS-BRD, EPA; TINRO, Khabarovsk TINRO, MNRE, RAS/RFE)

**Project 02.05-91      Ecology and Dynamics of Arctic Marine Ecosystems (BERPAC)**

PURPOSE: Study the status and dynamics of the Bering and Chukchi Seas, including their assimilative capacity, bioindicators of ocean pollution, and effects of human-caused disturbances, to establish a scientific basis for predicting major ecological, geochemical and geophysical trends and processes.

In early 2010 the American side will publish the English language edition of a joint monograph presenting the long-range scientific results of the September 1993 BERPAC expedition. (FWS, USGS-BRD; RAS)

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*photo: U.S.-Russia meeting at the Ministry of Natural Resources and Environment, Moscow; June 2009*

## List of Acronyms and Abbreviations

ASC	USGS Alaska Science Center, Anchorage
ASLC	Alaska SeaLife Center, Seward
BBRC	Russian Bird Banding and Ringing Center, Russian Academy of Sciences, Moscow
Chukotka TINRO	Chukotka Branch of Pacific Federal Fisheries Research Center, Anadyr
CSBG	Central Siberian Botanical Garden, Russian Academy of Sciences, Novosibirsk
EPA	U.S. Environmental Protection Agency
FLBS	Flathead Lake Biological Station (University of Montana)
FWS	U.S. Fish and Wildlife Service
FWS-Refuges	FWS Division of Refuges
Giprorybflot	Federal Fleet Development and Research Institute, St. Petersburg
GlavOkhota	Department of Hunting Management and Forestry, Russian Min. of Agriculture
IBIW	Institute of the Biology of Inland Waters, Russian Academy of Sciences, Borok
ICF	International Crane Foundation, Baraboo, Wisconsin
IFF	All-Russian Federal Research Institute of Freshwater Fisheries, Dmitrov
IGG	Institute of General Genetics, Russian Academy of Sciences, Moscow
IPEE	Institute of Ecology and Evolution, Russian Academy of Sciences, Moscow
Kamchatka NIRO	Kamchatka Federal Fisheries and Oceans Research Institute
KBPIG	Kamchatka Branch, Pacific Institute of Geography, Academy of Sciences
Khabarovsk TINRO	Khabarovsk Branch of Pacific Federal Fisheries Research Center
Komarov	Komarov Botanical Institute/Garden, Russian Academy of Sciences, St. Petersburg
Main Bot. Garden	Main Botanical Garden, Russian Academy of Sciences, Moscow
Magadan NIRO	Magadan Federal Fisheries and Oceans Research Institute
MBM-7	Region 7 FWS Migratory Bird Management (Alaska)
MMM-7	Region 7 FWS Marine Mammals Management (Alaska)
MNRE	Russian Ministry of Natural Resources and Environment
Monell	Monell Chemical Senses Center, Philadelphia
MSU	Moscow State University
Nat. Arb.-USDA	National Arboretum, Department of Agriculture
NBBL	USGS National Bird Banding Laboratory, Laurel, Maryland
NMML	NOAA/NMFS National Marine Mammal Laboratory, Seattle
NMNH	Smithsonian National Museum of Natural History, Washington, DC
NWHC	USGS National Wildlife Health Center, Madison, Wisconsin
RAS	Russian Academy of Sciences
RAS/RFE	Far East Branch of Russian Academy of Sciences
RAS/SIB	Siberian Branch of Russian Academy of Sciences
RAS-Ural	Urals Branch of Russian Academy of Sciences
RNAFEE	Russian National Association of Fishery Enterprises, Entrepreneurs and Exporters
Sevvostrybvod	Northeast Fisheries Agency, Kamchatka
SWFC	NOAA/NMFS Southwest Fisheries Center, La Jolla, California
TINRO	Russian Pacific Federal Fisheries Research Center, Vladivostok
USFS	U.S. Forest Service
USGS-BRD	Biological Resources Division of U.S. Geological Survey
VNIIPrirody	Russian Federal Research Institute for Nature Protection, MNRE, Moscow
VNIRO	Russian Federal Fisheries and Oceans Research Institute, Moscow
WSC	Wild Salmon Center, Portland, Oregon
Zapovedniks	Zapovedniks Environmental Education Center, Moscow