

Conservation Plan for the Eastern Population of Siberian Cranes

Introduction

The Eastern population of Siberian Cranes contains 2,600-3,000 birds, more than 99% of the world's total population of this species. The main breeding grounds cover 82,000 km² in the Yakutia region of north-eastern Siberia, south of the East Siberian Sea between the Yana and Kolyma Rivers. Non-breeding individuals range widely, and have occasionally been observed during the breeding season in the Russia-Mongolia-China border region, along the Onon, Uldza, and Khalkhin Gol Rivers, and in upper reaches of the Tuul River. The population migrates along a 5,100 km migration route following the Yana, Indigirka, and Kolyma River valleys, central and eastern Mongolia, and then into eastern China, with several resting areas and longer-term stopover points. Although some of these important traditional stopover points are now protected by the Zhalong, Momoge, Xianghai, Keerqin, and Shuangtaizihokou Nature Reserves, others remain unprotected. Vagrant individuals are occasionally reported in Japan, usually in the autumn.

The population winters in a limited number of wetlands along the middle Yangtze River in south-central China. Approximately 95% of the population winters in one area – the Poyang Lake Basin in northern Jiangxi Province. The Poyang Lake National Nature Reserve protects some of the most important wintering sites in this area, but the birds also use many sites outside the reserve, some of which are recently protected and others which are outside protected areas. The remainder of the known population, perhaps a hundred or more birds, winters at Dongting Lake in Hunan Province. The population may use other as yet unknown wintering sites in China.

The existence of this population had been noted in historical records, but there were no modern reports until ornithologists in China discovered the wintering birds at Poyang Lake in 1980. The population was thought to number only a few hundred until a larger flock of over 800 birds was reported in 1984. Subsequent surveys, using improved techniques, have allowed estimates of the total number to be revised upwards, but the size of this population is not precisely known. Midwinter counts at Poyang Lake in recent years suggest that the population may have increased above the current population estimate, with counts of 3,404 (2001/02), 4,004 (2002/03), 3,954 (2003/04), 3,119 (2004/05), 3,944 (2005/06) and 2,639 (2006/07) birds. However, the accuracy of these counts requires validation in view of the constraints of equipment, observer experience and coverage.

Potential and Actual Threats

The breeding grounds of this population are relatively undisturbed. Oil, however, has been discovered in and near the breeding grounds, and oil exploration and development pose a significant threat. Analysis of satellite imagery for Kytalyk has revealed an increase in the area of large lakes, inundating surrounding land used as breeding habitat by the Siberian Crane, which may be attributable to climate change. Further research is needed to better understand this potential threat.

The staging areas in the Aldan basin of southern Yakutia are coming under increasing pressure from economic development. These include seismic testing for oil and gas deposits which may affect Kyupsky Resource Reserve, the development of oil and gas pipelines, and a major hydro-electric generation scheme in the headwaters of the Aldan which may affect the hydrological regime. Overhead power transmission lines will cross the migration route at Kyupsky, and mitigation measures are currently being designed to reduce the risk of bird mortality. Road and railway development plans will further open up pristine natural areas.

Oil exploration in Mongolia poses a threat to unprotected Siberian Crane habitats, as the cranes are sensitive to the human disturbance associated with this industry, which is difficult to mitigate. The loss and degradation of wetland habitats is of greatest concern at critical staging areas, migration stopover, and wintering grounds. In particular, the diversion of

water resources for human use from rivers supplying key wetlands within nature reserves is a cause of major concern in the semi-arid climate of north-eastern China.

Although several of the Eastern population's major staging areas in north-eastern China are protected by nature reserves (principally the Zhalong, Momoge, Xianghai and Keerqin reserves), many others in the flyway remain unprotected. At the same time, there is limited information available about the migration route on which to base future protection efforts. Moreover, Siberian Cranes may use different migration routes in the spring and fall.

The threat to migration habitats is greatest in China's eastern provinces. In north-eastern Mongolia prolonged droughts in the Amur Basin, perhaps exacerbated by global warming, can have significant impacts on Siberian Crane wetland habitats. Recent climatic conditions in Yakutia have seen rivers and lakes shrinking, causing wetlands to become more accessible to hunters. In eastern Yakutia (taiga area in Kolyma River Basin), there is a threat of lead poisoning due to intensive hunting, especially in spring. Two immature Siberian Cranes in the Amga River area died due to ingestion of lead shot. Further research is needed to better define the most critical areas. Major water engineering projects could have significant impacts on the main wintering grounds of the species in the Yangtze valley.

An outbreak of Highly Pathogenic Avian Influenza (H5N1) began in December 2003 in Hong Kong and South Korea, and subsequently spread to a number of SE Asian countries. In 2005 the disease started a westward spread towards Central Asia, Europe and Africa and attracted global attention. HPAI incidences have been recorded in all CMS MoU Range States except Turkmenistan and Uzbekistan, with significant wild bird mortality in some cases. The highest risk concerns Globally Endangered species that congregate in locations where they could contract the disease. From this perspective, the risk posed to Siberian Cranes must be seen as significant, as over 95% of the world population over-winters at Lake Poyang in China, together with significant proportions of other globally threatened species populations. The proximity of large numbers of domestic and wild birds at Poyang Lake suggests that risks of transmission could be elevated.

Required Conservation Measures

Conservation of this population depends on preserving the known breeding habitats of the Siberian Cranes from potential disturbance arising from oil exploration; protecting additional staging areas and stopover points along migration routes; and strengthening management of the wintering grounds in China. Effective protection should be provided to the key areas for Siberian Crane staging and stopover, such as wetland complexes near Zhalong in Heilongjiang Province, China; wetland complexes near Momoge in Jilin Province, China; and important stopover points in south China between Bohai Bay and Poyang Lake. Many of the species' key habitats, both within and outside existing protected areas, are subject to increasing human population pressures, and are situated in areas conducive to intensive agricultural development. A sound approach, therefore, must be pursued to integrate conservation and development throughout staging and wintering areas in China. Oil exploration and development should be regulated at Dalainor Nature Reserve in Inner Mongolia Province of China, Momoge Nature Reserve in Jilin Province, Shuangtaizihekou Nature Reserve in Liaoning Province, and at the mouth of the Yellow River. This is needed to reduce not only the potential for direct damage from accidents, but also levels of human disturbance and habitat degradation through activities such as the building of roads. The extension of the protected areas network in Mongolia is likely to provide the greatest security against progressive oil exploration and development.

The security of known staging areas in the Aldan-Amga River Basin needs to be assured through the establishment of protected areas and strengthening protected areas management. Integration of ecological and cultural considerations into economic

development planning is essential to reduce the potential impact of a new wave of development planned for southern Yakutia (see above section on threats).

Education of local communities and control of hunting are also required. The restored Crane Working Group of Eurasia has initiated and organized Crane Celebrations since 2002, in which the people of different regions of Yakutia (Allaikhovsky Ulus - the Siberian Crane breeding grounds and Momsky, Ust-Maisky, Tattinski and Ust-Lenski Uluses along the migration route and Yakutsk) were involved. In 2006 Yakutia joined international project "Three White Cranes, Two Flyways, One World" where schools of China and the USA also involved.

Special attention should be given to Poyang Lake, where most Siberian Cranes spend the winter. Currently Poyang Lake National Nature Reserve accounts for only 6% of the total lake basin, and Siberian Cranes increasingly move outside the reserve. Additional wetlands in the basin have been protected by the establishment of new reserves, but management of these areas is still weak; additional protected areas are planned. Increased capacity of county level wildlife personnel is needed to staff these areas and also to protect cranes and other waterbirds outside protected areas. In recent years, more Siberian Cranes have been observed in Dongting Lake. Monitoring and habitat assessment for Siberian Cranes should be undertaken at Dongting Lake.

The conservation work at Poyang and Dongting Lakes must be coordinated with activities along the Yangtze River. Development activities in the upper parts of the Yangtze River may pose special threats to the survival of Siberian Cranes. For example, construction of the Three Gorges Dam on the Yangtze River may have profound impacts on the Eastern population of Siberian Cranes (as well as wintering populations of White-naped, Hooded, and Eurasian Cranes) by disrupting the hydrology of the floodplain wetlands along the middle Yangtze, including those at Poyang Lake, by artificially changing the hydrological regime of the river and associated lakes. These changes in the river basin's hydrological processes will in turn result in changes in the wetland plant communities upon which cranes depend. The possible impacts are complex and difficult to model.

The dam will also have substantial social and environmental impacts on the regional landscape. The disruption of upstream human communities, emigration, agricultural expansion, deforestation, and other land use changes will not only directly affect existing protected areas at Poyang Lake, but also areas outside the reserves. Additional projects elsewhere in this vast watershed – for example, along the rivers feeding Poyang from the south, or the South-North Water Diversion Project on the Yangtze – may further affect water levels at Poyang. While water control structures have the potential to mitigate some of the more direct and short-term impacts on the wetlands associated with the Yangtze, basic ecological studies of these areas should be conducted, and the longer-term impacts assessed.

The South-North Water Transfer project, which envisions three main lines – Eastern, Central and Western – linking the well-endowed Yangtze River Basin with water-short northern China, could also have significant impacts on wetlands and their biodiversity in the Yangtze valley. Construction on the Eastern route officially began on December 27, 2002. It will withdraw 15 billion cubic meters of water from the Yangtze. Construction of the Central route, carrying 14 billion cubic meters, was started in December 2003. The Western route, for 20 billion cubic meters, is unlikely to start before 2010.

Under the UNEP/GEF SCWP¹, conservation actions are being taken to help assure the long-term survival of Siberian Crane habitats in the breeding grounds in Russia, as well as the staging areas and wintering site in China. Through the Siberian Crane Memorandum of Understanding, CMS and ICF will help promote conservation activities in any staging areas in Southeast Siberia, Mongolia and China, which are not included in the UNEP/GEF SCWP.

¹ Development of a Wetland Site and Flyway Network for Conservation of the Siberian Crane and Other Migratory Waterbirds in Asia.

Objective I: Reduce mortality						
Programme	Activity	Range State / Organisation	Collaborator	Progress/Results (2004-2007)	Further Specific Activities (2007-2009)	Priority
1.1. Determine and monitor prevailing threats of all types to the Siberian Crane and its habitats	a) Assess and monitor threats in the Siberian Crane nesting and wintering grounds and along the migration routes	ICF	All Range States-EP, UNEP/GEF SCWP		ICF: Provide technical assistance through the United Nations Environment Programme / Global Environment Facility Project "Development of a Wetland Site and Flyway Network for Conservation of the Siberian Crane and other Migratory Waterbirds in Asia" (UNEP/GEF Siberian Crane Wetlands Project or UNEP/GEF SCWP) as necessary.	1
		CH		CH: Depending on the national monitoring system for wildlife disease, flyway monitoring and winter surveys to collect related information.	CH: 1) Continue to study the relationship between water levels, water plants and waterbirds in the Poyang Lake Basin and Xianghai National Nature Reserve (NNR). 2) Continue to conduct the impact assessment of oil operations on the wetlands at Momoge NNR.	1
		MN		MN: Analysis of summer Siberian Crane sightings was provided. It was determined that the main threats for cranes near wetlands are disturbance from people and cattle.	MN: Continue studies on the impact of livestock and people on the lakes used by Siberian Cranes during the summer.	2
		RU		RU: Threat assessments were provided for model territories (MT) of the UNEP/GEF SCWP: Republic Resource Reserve (RRR) Kytalyk and Middle Aldan MT including Kuoluma-Chappanda, Chabda and Kyupsky RRRs. Main threat for Kytalyk RRR is the changing landscape due to climate change, which has decreased optimal breeding habitats for the Siberian Crane. Main threat in Middle Aldan MT is plans for power line construction, which can cause mortality of Siberian Cranes during migration. A general analysis of Siberian crane mortality was provided. Main reasons for mortality include poaching, lead poisoning and chick death. Monitoring of the avian influenza virus among wild birds was conducted in Middle Aldan in Yakutia.	RU: Continue research on threats during nesting period (assess quantitative and qualitative parameters of habitats), and during migrations and use of staging areas (monitoring of power line impact and pollution of water bodies by lead shot). Monitoring of avian influenza virus in populations of wild birds in Yakutia.	1

Programme	Activity	Range State / Organisation	Collaborator	Progress/Results (2004-2007)	Further Specific Activities (2007-2009)	Priority
1.1. Determine and monitor prevailing threats of all types to the Siberian Crane and its habitats	b) Identify and document best practice protocol for conservation and management of the Siberian Crane to minimize threats to the Siberian Crane and its habitats	ICF	UNEP/GEF SCWP	<p>CH: 1) Some sector management plans for Poyang Lake, Zhalong, Xianghai and Keerqin NNRs were developed and discussed with the related agencies. For example, the water management plan for Zhalong NNR was incorporated into the regional river basin planning.</p> <p>2) Some targeted studies were conducted to support the development of the sector management plans. For example, the results of water monitoring at Zhalong NNR benefit the design of water supply routine and sites.</p> <p>RU: Prepared report "Assessment of influence of electric power lines in villages of Eldikan and Sulgachi" and development of recommendations on minimization of its negative influence on migratory birds in Ust-Maisky and Amginsky Uluses (using Kyupsky and Kuoluma RRRs as examples).</p>	<p>ICF: Document best practice examples through UNEP/GEF SCWP for presentation at Ramsar and Convention on Migratory Species (CMS) Conference of the Parties (COPs).</p>	2
		CH			<p>CH: 1) Implement the sector management plans, and establish the cooperation and coordination mechanisms between different agencies.</p> <p>2) Continue to conduct ecological monitoring to ensure that activities are sustainable.</p>	1
		RU		<p>RU: Monitoring of electric power line impact on migratory birds, if funds are available.</p>		2
	c) Determine hunting seasons and best practices in areas used by Siberian Crane	CH		<p>CH: No hunting occurred in China. A few cases concerning illegal catching and poisoning were prosecuted.</p>	<p>CH: Increase patrolling frequency and reinforce the enforcement intensity.</p>	2
MN		<p>MN: Spring waterbird hunting season is from 1 April to 1 May and autumn hunting is from 1 September to 20 October. Hunting quotas are not determined.</p>				
RU		<p>RU: Spring hunting for waterbirds is usually opened for 7-10 days in May – early June in Yakutia. In 2007, for the first time a spring hunting quota for waterbirds was determined. Autumn hunting opens in August.</p>				

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1.2. Strengthen and improve enforcement of legislation for crane protection	a) Review existing national and local legislation to address gaps or challenges to Siberian Crane conservation.	CH	UNEP/GEF SCWP	CH: Zhalong and Xianghai NNRs management regulations were developed by the end of 2004, and sent for approval by the People's Congress of Heilongjiang and Jilin Provinces.	CH: Enhance coordination between the People's Congress of Heilongjiang and Jilin Provinces and the provincial forestry departments separately; push for the regulations to be issued as early as possible.	2
		MN		MN: Laws are implemented.	MN: Contribute to enforcement (observance of laws).	2
		RU		RU: Legislation of Yakutia on Special Protected Areas is being brought into correspondence with federal legislation of Russia Federation. Ministry of Nature Protection of Yakutia (Sakha Republic) is implementing agency. Institute for Biological Problems of the Cryolithozone (IBPC) and Yakutian staff of the UNEP/GEF SCWP took part in development of two laws – draft of Law on Nature Protection and draft of Law on Special Protected Areas.	RU: Continue development of normative legal basis at resource reserves in accordance with federal legislation under UNEP/GEF SCWP activity.	1
	b) Ensure effectiveness of law enforcement	CH		CH: 1) The police stations of Poyang Lake and Xianghai NNRs were upgraded to sub-bureaus.	CH: 1) Develop regulations for the staff for patrolling and reinforcement, and improve their equipment and capacity.	1

Objective II: Monitoring and Research						
Programme	Activity	Range State / Organisation	Collaborator	Progress/Results (2004-2007)	Further Specific Activities (2007-2009)	Priority
2.1. Monitor and study the Siberian Crane and its habitat	a) Conduct regular monitoring of known areas to determine estimated numbers of the Siberian Crane	CH	UNEP/GEF SCWP	<p>CH: 1) It is the first time that a site network approach has been adopted for conducting migratory waterbird monitoring along the Siberian Crane flyway in mainland China, from 2004 to the present time (ongoing).</p> <p>2) Three winter surveys were conducted in 2004, 2005 and 2006, and one aerial survey was conducted in the winter of 2005 in the Poyang Lake Basin under UNEP/GEF SCWP since the beginning of this project.</p>	<p>CH: 1) Continue to operate the national monitoring system, and conduct the flyway monitoring and wintering survey as well.</p> <p>2) Continue to coordinate with the RCU (Regional Coordination Unit) of the UNEP/GEF SCWP to allocate more funds to support the capture trial in the Poyang Lake Basin.</p> <p>3) Revise and update the monitoring plan along the Siberian Crane flyway annually, and continue to conduct monitoring activities.</p> <p>4) Continue to conduct winter waterbird surveys in Poyang Lake Basin, and breeding surveys of large waterbirds, including cranes at four Northeast China staging sites.</p>	1
		MN		<p>MN: Locations added to the Siberian Crane migration route, such as Ayagiin Lake and Onon-Baljinsky National Park (ONBP), were surveyed 1-3 times per year. During surveys in ONBP no Siberian Cranes were observed, but in Ayagin Lake flocks sizes of 1, 2, and 3 Siberian Cranes were recorded. Surveys were conducted in Mongol Daaguur and Ugtam 1-3 times per year, with researchers observing flocks of 1-3 Siberian Cranes. We did not have financial support for this research, so we conducted observations during other research.</p>	<p>MN: Continue monitoring at Siberian Crane sites.</p>	1
		RU		<p>RU: 1) Regular monitoring was conducted within the framework of IBPC programme on fundamental research since 1990 and under UNEP/GEF SCWP since 2003.</p> <p>2) Since 2004, monitoring of bird migration, including migration of the Siberian Crane, and also monitoring on breeding sites of Eurasian and Hooded Cranes was conducted annually at Middle Aldan model territory of the</p>	<p>RU: 1) Continue ground monitoring research studies in Kytalyk, Kyupsky, Kuoluma-Chappanda and Chabda RRRs.</p> <p>2) Develop special monitoring programme concerning satellite tracking of Siberian Cranes including both young and adult birds.</p>	1

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2.1. Monitor and study the Siberian Crane and its habitat	a) Conduct regular monitoring of known areas to determine estimated numbers of the Siberian Crane			<p>UNEP/GEF SCWP. Footage was provided for Kytalyk RRR (2004-2005) and Kyupsky RRR (2005). However this work was not finished because of lack of professional cameramen and financial support. Reports on the Siberian Crane monitoring were submitted and approved by Steering Committee of the UNEP/GEF SCWP.</p> <p>3) According to IBPC programme on ground surveys of Siberian Crane breeding territories and along migration routes, monitoring was conducted in Kytalyk RRR and Middle Aldan MT and in Momsky Ulus.</p>			
	b) Determine new migration stopovers, wintering areas, as well as summering areas of Siberian Cranes through satellite or radio tracking, questionnaires, surveys, and other methods	ICF	CH, RU			<p>ICF: 1) Support migration monitoring, especially Bohai Bay, under National Fish and Wildlife Foundation (NFWF) grant in China.</p> <p>2) Supply 10 PTTs (satellite transmitters); test catching methods at Poyang Lake NNR; assist in PTT deployment in Yakutia; distribute data on PTT signals after deployment; communicate results through UNEP/GEF SCWP website, etc.</p>	1
		CH			<p>CH: Over five sites were newly discovered as stopover sites and one site as a summering site for Siberian Cranes through flyway monitoring.</p>	<p>CH: 1) Continue to conduct monitoring along the Siberian Crane flyway.</p> <p>2) Recommend an alternative trial capture at Poyang Lake NNR, if Siberian Cranes in breeding area of Yakutia are not captured successfully.</p>	1
	RU	UNEP/GEF SCWP		<p>RU: 1) Questionnaire was provided under the UNEP/GEF SCWP, report on results was prepared. Data from all known and newly identified sites in the north-taiga and forest-tundra subzones, and also sites outside of main breeding area of the Siberian Crane were compiled and analyzed.</p> <p>2) In 2005 and 2006 licenses for PTT use were not given. However eight Siberian Crane chicks were caught and banded with color plastic and standard metal rings in 2005. One of the marked chicks was sighted in autumn</p>	<p>RU: 1) Conduct search for Siberian Cranes in the eastern part of north-taiga sub-zone (Abyisky and Momsky Uluses) in 2007.</p> <p>2) Submit and adopt an application for 2008 for financing research in search of nesting and summering grounds of Siberian crane in Oleneksk, Zhigansk, Crednekolimsk, Nizhnekolimsk, Momsk and Abiy Uluses to Ministry of Nature Protection of Yakutia.</p> <p>3) Submit an application for 2007 and next</p>	1	

Programme	Activity	Range State / Organisation	Collaborator	Progress/Results (2004-2007)	Further Specific Activities (2007-2009)	Priority
2.1. Monitor and study the Siberian Crane and its habitat	b) Determine new migration stopovers, wintering areas, as well as summering areas of Siberian Cranes through satellite or radio tracking, questionnaires, surveys, and other methods			2005 on the wintering site in Poyang Lake, China. Information about the sightings was published in the Siberian Crane Flyway (SCF) News and the Crane Working Group of Eurasia (CWGE) Newsletter.	years for allocation of financing for research in West Yakutia (Zhigansk and Oleneksk Uluses) to ALROSA diamond mining corporation. 4) Continue activity on crane capture and banding with color rings and PTT in 2007, and possibly in 2008.	
	c) Investigate all reported sightings of the Siberian Crane	CH MN RU		<p>CH: Based on the flyway monitoring and winter survey to collect the sighting data.</p> <p>MN: 1) On 25 August 2005, five cranes were recorded in a small lake near Ulz River, Bayan-Dun Soum, Dornod Province. During next visit on 2 July 2005 we observed only one pair of each Eurasian and White-naped Cranes, but no Siberian Cranes were observed. 2) On 2 July 2006, a group of nine Siberian Cranes was sighted near Turgenii Tsagaan Lake, Bayan-Dun Soum, Dornod Province This is the largest number ever recorded of Siberian Cranes in Mongolia. They were feeding on slightly upland and grassy area not far from the lake. It seemed they were eating grasshoppers and insects. 3) On 4 August 2006, a group of eight very tall white cranes was sighted while driving south from Mongonmorit in Central Province.</p> <p>RU: 1) Article on summarized results of Siberian Crane monitoring, including satellite research, prepared and passed to Li Fengshan in the beginning of 2007 and to Simba Chan and Yutaki Kanai in November of 2007 for publication in China Crane News.</p>	<p>CH: Continue to conduct monitoring and survey to collect related re-sighting data, as well as from the bird watchers and volunteers.</p> <p>MN: Continue study of identified places for sightings of Siberian Cranes.</p> <p>RU: Plan to start investigation of reported sightings of the Siberian Crane from 2008.</p>	2 1 2

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2.1. Monitor and study the Siberian Crane and its habitat	c) Investigate all reported sightings of the Siberian Crane	RU		2) From October 19 th to November 6 th , 2007 the Yakutian Coordination Unit of the UNEP/GEF SCWP conducted monitoring of the Siberian Crane autumn migration in Momoge NNR along with nature reserve staff. Nearly 1600 Siberian Cranes were counted at this stopover. Three banded cranes were sighted (one was banded in 1991; the other two were banded in 2005).		
	d) Conduct ecological studies of the Siberian Crane in your country	ICF CH MN RU	UNEP/GEF SCWP, All Range States-EP ICF	CH: Study of the relationship between water levels, water plants and waterbirds was conducted in the three sub-lakes of Poyang Lake NNR. Preliminary results were concluded by the ICF experts. MN: Research conducted on biological aspects of Siberian Cranes. Research included Siberian crane location, migration, and flock number. RU: Ecological studies of the Siberian Crane have been conducted since 1990.	ICF: 1) Provide technical assistance through the UNEP/GEF SCWP as necessary, including ecological research at Poyang Lake Basin on waterbird distribution; water plants & water levels. 2) Collaborate with Chinese researchers on winter movements and habitat use of Siberian Cranes at Poyang Lake based on PTT signals. CH: Continue to conduct this study for the following years. MN: Continue ecological research. RU: Continue research on monitoring Siberian Crane in Kytalyk RRR and Middle Aldan MT in 2007-2009.	1 2 2 1
2.2. Maintain and contribute regional database on the Siberian Crane and its habitats	Regularly maintain and update regional database on the Siberian Crane and its habitats	All Range States-EP	SCFC		All Range States-EP: Continue to supply data for regional database covering all Siberian Crane sites according to the unified format. Need to add Mongolia (other countries already covered within the framework of the UNEP/GEF SCWP).	1

Programme	Activity	Range State / Organisation	Collaborator	Progress/Results (2004-2007)	Further Specific Activities (2007-2009)	Priority
2.2. Maintain and contribute regional database on the Siberian Crane and its habitats	Regularly maintain and update regional database on the Siberian Crane and its habitats	CH	SCFC, NEACWG	<p>CH: 1) Geographic Information System (GIS) for Songnen Plain and Poyang Lake Basin were developed in late 2006. Meanwhile, the subcontractors also held training for the local staff on how to operate the system, update the field data, and use the basic functions of the system.</p> <p>2) Contributed data to the Siberian Crane Flyway Coordination (SCFC).</p>	<p>CH: 1) Continue to improve and update the wetlands management system based on GIS for Songnen Plain and Poyang Lake Basin, and provide more technical support for the policy-making and site management plans.</p> <p>2) Establish the national database for the China sites under North East Asia Crane Working Group (NEACWG).</p>	1
		RU	SCFC	<p>RU: Database and GIS on Siberian Crane sightings outside main breeding area (sites of possible breeding and summering) was created for Yakutia.</p>	<p>RU: Create similar national database according to questionnaire data (sighting and status of Siberian Crane) and breeding habitats.</p>	1
2.3. Promote or take into account avian influenza surveillance at important crane sites.	a) Collaborate with, and complement activities of other agencies to strengthen sample collection for surveillance of avian influenza in migratory waterbirds at Siberian Crane and other important crane sites	ICF	WISA	<p>ICF: Drafted guidelines for reducing AI risks at wetland protected areas under UNEP/GEF SCWP and presented to PA managers at regional workshop in Nanchang in March 2007.</p>	<p>ICF: Finalize guidelines for reducing AI risks at wetland protected areas and make them available to all Range States and partner organisations.</p>	1
		RU	IBPC	<p>RU: Since 2006 research has been conducted under the following agreements - "Monitoring of virus A circulation in wild bird populations in Yakutia" in cooperation with the State Scientific Center of Virology and Biotechnology of "Vector" and "Monitoring of waterfowl in model territories of Yakutia (reproduction and conservation)" in cooperation with the Institute of Systematics and Ecology of the North Branch of RAS (Novosibirsk) and American colleagues.</p>	<p>RU: Organise avian influenza session during conference on North Pacific Migratory Birds Conservation in August 2007 in Yakutia.</p>	1
	b) Raise public awareness about avian influenza at network sites and other important crane sites	ICF	WISA		<p>ICF: Make guidelines and other information on AI and wild birds available through project websites.</p>	1

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2.3. Promote or take into account avian influenza surveillance at important crane sites.	c) Translate and disseminate international best practice/guidelines on response measures to avian influenza outbreaks in wild birds in and around network sites and other important crane sites	ICF	WISA		ICF: Translate and disseminate international best practice/guidelines on response measures to avian influenza outbreaks in wild birds in and around network sites and other important crane sites.	1
2.4. Evaluate efficacy and application of research/ monitoring	a) Review and evaluate research and monitoring activities for their efficacy	RU		RU: Monitoring provided through observation and PTT marking in former years allowed determination of migration routes and stopovers and the creation of a network of protected areas for the Siberian Crane and scientific basis for management planning.	RU: Extend and detail applied research in the course of further research studies.	2
	b) Apply monitoring and research results to improve management practices and mitigation of threats to the Siberian Crane	RU		RU: Research results are used for public awareness and ecological education.	RU: Receive additional missing materials during preparation of site management plans under UNEP/GEF SCWP.	2

Objective III: Increase numbers and genetic diversity						
Programme	Activity	Range State / Organisation	Collaborator	Progress/Results (2004-2007)	Further Specific Activities (2007-2009)	Priority
3.1. Promote recovery of the Siberian Crane populations	a) Produce eggs and chicks of Siberian and Eurasian Cranes for release programmes	All Range States-EP			All Range States-EP: Not applicable.	
	b) Restore Siberian Crane populations through release programmes	All Range States-EP			All Range States-EP: Not applicable.	
	c) Conduct genetic studies to manage the genetic diversity of wild and captive populations	RU	OCBC, IBPC, CH	RU: Joint research on genetic status of the Siberian Crane in captivity was conducted by the Oka Crane Breeding Center (OCBC) and IBPC. Results of research were published in Reports of the Russian Academy of Science (RAS). Russian scientists have discussed joint research on genetic polymorphism of the Siberian Crane with scientists from the Institute of Zoology of the Chinese Academy of Science (CAS) through a grant proposal for genetic research of the Siberian Crane in captivity in China.	RU: Initiate joint research on genetic polymorphism of the Siberian Crane in captivity in China in 2008 along with scientists of Institute of Zoology of CAS and with support of China National Coordination Unit (NCU). Apply for a grant on Siberian Crane genetic research to the Russian Fund of Fundamental Research (RFFI).	3
3.2. Develop safe migration routes for Siberian Cranes based on those used by Eurasian Cranes	a) Identify and survey relatively safe habitats of the Eurasian Crane population - one that frequents ecologically suitable areas on the breeding grounds, along the migration route and on the wintering grounds - into which Siberian cranes could be (re)introduced	All Range States-EP			All Range States-EP: Not applicable.	

Programme	Activity	Range State / Organisation	Collaborator	Progress/Results (2004-2007)	Further Specific Activities (2007-2009)	Priority
3.2. Develop safe migration routes for Siberian Cranes based on those used by Eurasian Cranes	b) Determine migration routes and wintering sites of various populations of the Eurasian Crane within the current and former range of the Siberian Crane populations through satellite or radio tracking, questionnaires, surveys, and other methods	All Range States-EP			All Range States-EP: Not applicable.	
	c) Develop safe migration routes for Siberian Cranes using migration routes of Eurasian Cranes.	All Range States-EP			All Range States-EP: Not applicable.	
	d) Monitor Siberian Cranes released into the wild or reared by Eurasian Cranes	All Range States-EP			All Range States-EP: Not applicable.	

Objective IV: Protect and manage habitats of importance for the Siberian Crane						
Programme	Activity	Range State / Organisation	Collaborator	Progress/Results (2004-2007)	Further Specific Activities (2007-2009)	Priority
4. Protect and manage habitats of importance for the Siberian Crane	a) Improve institutional and the physical protection and monitoring of the Siberian Crane sites	CH	UNEP/GEF SCWP, NNRs	<p>CH: 1) Nanjishan NNR was passed at the experts' workshop sponsored by the State Forestry Administration (SFA) of China, and was a national nature reserve candidate in late 2005. So far, it is still waiting for the issue of the China State Council.</p> <p>2) Duchang Provincial NR was established in 2005.</p> <p>3) With lack of basic information on wildlife, plants and hydrology for Momoge and Keerqin NNRs, we just prepared the Ramsar Information Sheet for Keerqin NNR.</p>	<p>CH: 1) Develop master plan to seek funding support from the central government, if Nanjishan NNR is officially designated as a National Nature Reserve.</p> <p>2) Promote the establishment of one new nature reserve in Poyang Lake Basin.</p> <p>3) Provide technical support for completion of the Ramsar Information Sheet for Keerqin and Momoge NNRs and the boundary modification of the functional areas for Momoge NNR and push the governments at different levels to approve the application.</p>	1
		MN		<p>MN: In 2006 in the OBNP, the separate protection administration was appointed. Staff number seven people.</p>	<p>MN: Suggest proposal to create international protected area including OBNP in Mongolia and Sokhondinsky State Nature Reserve in Russia (WWF -Mongolia is working on this).</p>	1
		RU	UNEP/GEF SCWP, WWF-Russia	<p>RU: 1) It was planned to expand Kuoluma-Chappanda RRR including valuable wetlands of adjacent Tomponsky Ulus (Province). Activity was delayed because 1) lack of finance to support visit to this distant site by experts and 2) status of the site as protected area is not determined (preparation of documents for this area as protected area according to the federal law is ongoing).</p> <p>2) Plans to expand Chukochiya and Alaseya sites of RRR Chaigurgino are delayed because their status as protected areas of republic level according to federal law is not determined yet.</p> <p>3) In 2005 during workshop in Kytalyk RRR, within the framework of the UNEP/GEF SCWP, it was decided to nominate only site of Elon absolute rest zone as World Heritage Monument, but not all territory of Kytalyk RRR. Related nomination documents were submitted to WWF-Russia.</p>	<p>RU: 1) Establish a Nature Park with Kytalyk RRR separate from the Board of Nature Protection Inspection as the first stage. This will allow the appointment of an interested leader and permanent staff of inspectors and rangers. In order to facilitate the process of park organisation and raising effectiveness of Siberian Crane protection, it is reasonable to include in the reserve the territories of regularly used crane habitat. Inclusion of marine and coastal areas demands a great number of permits and agreement at federal level that is difficult to do.</p> <p>2) Include Kytalyk RRR into the list of Ramsar Sites as the second stage. This will provide the reserve with adequate international status, required financing and proper protection.</p>	1

Programme	Activity	Range State / Organisation	Collaborator	Progress/Results (2004-2007)	Further Specific Activities (2007-2009)	Priority
4. Protect and manage habitats of importance for the Siberian Crane	b) Secure protection through collaboration with local communities and/or legal measures for inadequately protected or newly identified areas of importance for the Siberian Crane	CH	UNEP/GEF SCWP	<p>CH: 1) The site management plans were developed through participation of site management committees and the provincial advisory groups.</p> <p>2) Fifteen protection stations were established at the county level for Poyang Lake NNR.</p> <p>3) Wetlands Protection Regulations for Jiangxi and Heilongjiang Provinces were issued in 2004 and 2005 separately.</p>	<p>CH: 1) Implement the sector management plans in the following years.</p> <p>2) Continue to operate the site management committees or community co-management committees, and the provincial advisory groups as well.</p> <p>3) Reinforce the Wetlands Protection Regulations for Jiangxi and Heilongjiang strictly.</p>	1
		RU		<p>RU: 1) Status of RRRs in Middle Aldan Model Territory is being considered by the Ministry of Nature Protection to bring into correspondence with Federal Law on Special Protected Areas of the Russia Federation. Such activity is not completed for Kytalyk RRR.</p> <p>2) The Steering Committee was established for Kytalyk RRR, where key local persons were involved.</p>	<p>RU: 1) Make RRR status legally recognized at federal level.</p> <p>2) Establish a Steering Committee for MT Middle Aldan.</p>	2
	c) Develop management plans for Siberian Crane sites		UNEP/GEF SCWP	<p>CH: 1) The master plan for Poyang Lake NNR was approved by the SFA in April 2006.</p> <p>2) Mid and long-term management plan for Zhalong NNR was developed in November 2006, including community co-management, public education, monitoring and scientific research, and water management etc.</p> <p>3) Sector management plans, including community participatory plan, expansion of the existing ecotourism plan, water resources co-management plan and public education plan for Poyang Lake, Zhalong, Xianghai and Keerqin NNRs were developed in Phase I of the UNEP/GEF SCWP.</p>	<p>CH: 1) Establish a review system to revise and update the sector mgt plans as required.</p> <p>2) Stimulate the sector plans to be incorporated with the local governmental plans including the water mgt plan and ecotourism plan.</p> <p>3) Launch the wetlands restoration project in Keerqin or Xianghai or Zhalong NNRs.</p> <p>4) Complete the management plans and public education plans for Keerqin and Momoge NNRs by the end of 2007.</p>	1
		RU		<p>RU: 1) Management plans were not developed because of delay in completing unified guidelines on wetland management planning at federal level. Inga Bysykatova was hired as Consultant on management plans under the UNEP/GEF SCWP.</p>	<p>RU: 1) Develop management plans for Kytalyk RRR and MT Middle Aldan in the period defined by consultant workplan.</p> <p>2) Collect additional necessary information through site visits along with ECORA representatives.</p>	2

Programme	Activity	Range State / Organisation	Collaborator	Progress/Results (2004-2007)	Further Specific Activities (2007-2009)	Priority
4. Protect and manage habitats of importance for the Siberian Crane	c) Develop management plans for Siberian Crane sites			<p>2) Documentation on Alaseya and Chukochiya sites for preparation of management plans for these sites was compiled.</p> <p>3) Inga Bysykatova, Consultant on management planning, participated in the UNEP/GEF SCWP Regional Training Workshop on Management Planning in China in March 2007.</p>		
	d) Conduct applied research on the Siberian Crane sites in support of site management	<p>ICF</p> <p>CH</p>	<p>UNEP/GEF SCWP, NNRS</p>	<p>ICF: Applied research study on ecological relationships at Poyang Lake NNR was continued and preliminary results obtained. Technical assistance provided for ecological monitoring at Zhalong NNR and for power transmission line bird deterrent devices for Yakutia.</p> <p>CH: 1) The study of the relationship between waterbirds, plants and water levels at Poyang Lake NNR is being continued under the UNEP/GEF SCWP since the inception in 2003. The results were applied in regulating the water level.</p> <p>2) Water, bird and plant monitoring are being conducted in Zhalong NNR. The water monitoring contributed a lot towards developing the water mgt plan for Zhalong NNR in 2005. Meanwhile, in March of 2006, the water supply plan for Zhalong NNR wetlands was incorporated into the regional water distribution plan of Nenjiang River with support from the UNEP/GEF SCWP.</p> <p>3) The relationship study between waterbirds, plants and water level at Xianghai NNR is also being conducted, which provides technical support for the wetland restoration project and water management plan.</p> <p>4) Baseline surveys on wildlife, plants and hydrology were conducted in Momoge and Keerqin NNRS. The results were applied in the development of the Ramsar Information Sheets and the site mgt plans.</p> <p>5) Wetlands mgt system for Poyang Lake Basin and Songnen Plain based on GIS were developed, which provided technical support for the policy-maker and local manager.</p>	<p>ICF: Continue the previous activities and provide technical assistance to colleagues in China and Yakutia as required under the UNEP/GEF SCWP.</p> <p>CH: 1) Continue to conduct the relationship study in Poyang Lake Basin and Xianghai NNR to provide technical support for the site.</p> <p>2) Continue to conduct water, bird and plant monitoring in Zhalong NNR, which will provide the basic data and information for the development of the detailed water replenishment plan for Zhalong NNR wetlands, and the upcoming wetlands restoration project.</p> <p>3) Conduct wetland monitoring in Momoge and Keerqin NNRS, which will provide technical support for the wetland restoration project.</p> <p>4) Continue to maintain and update the GIS systems for Poyang Lake Basin and Songnen Plain, and provide the technical support.</p>	<p>2</p> <p>2</p>

Programme	Activity	Range State / Organisation	Collaborator	Progress/Results (2004-2007)	Further Specific Activities (2007-2009)	Priority	
4. Protect and manage habitats of importance for the Siberian Crane		RU		RU: Detailed inventories of Kytalyk RRR and MT Middle Aldan are in preparation.	RU: Continue to conduct applied research.	2	
	e) Monitor and assess the environmental impacts of human development on habitats of importance for the Siberian Crane, including possible impacts of climate change	ICF	CH			ICF: Support bird and plant monitoring and applied research on wetland fragmentation at Zhalong NNR under NFWF grant.	1
		CH	CH		CH: Establishing good cooperation mechanism with the oil company in Momoge NNR. One pilot activity for restoring the wetlands for Momoge NNR in the oil field was conducted with financial support from the oil company.	CH: Conduct the impact assessment of the oil field operation on the wetlands in Momoge NNR, which will aid in controlling and managing the oil field operation.	1
		MN			MN: Initial information was collected as a base for detailed research.	MN: Study anthropogenic impact and pasture livestock breeding on Siberian Crane habitats in the Onon and Ulz River Basins including impacts of climate change.	1
		RU		RU: 1) Long-term research studies on impacts of climate change and other factors on landscape structure of Siberian Crane breeding sites in Kytalyk RRR are in progress. Expanding of water surface and reducing of optimal breeding sites for the Siberian Crane was observed. 2) Detailed systematization of wetlands of MT Middle Aldan was conducted. 3) Ecological examination of industrial projects for South Yakutia is underway.	RU: 1) Continue research on monitoring and assessment of environmental impacts. 2) Monitor project implementation and impacts of exploitation of natural resources including oil and gas.	1	
	f) Provide training and capacity building for sites of importance for Siberian Cranes	CH	UNEP/GEF SCWP	CH: 1) China NCU of the UNEP/GEF SCWP has organised at least 15 training courses on community co-management, public education, ecotourism, interpretation and design, survey and monitoring, site mgt, computer and internet, MS project software and so on. 2) For the site level, each project site has conducted related training courses related to the needs of different research or activities, such as wetland monitoring, identification of plant and wildlife, community mobilization and intervention, public education and so on.	CH: 1) Revise and update the China national training strategy based on the training needs analysis, and conduct the related trainings as required. 2) Develop mechanisms to increase transfer of knowledge and skills from consultants to local staff. 3) Improve the field monitoring equipment with co-financing from the national monitoring system for wildlife disease and other projects.	1	

Programme	Activity	Range State / Organisation	Collaborator	Progress/Results (2004-2007)	Further Specific Activities (2007-2009)	Priority
4. Protect and manage habitats of importance for the Siberian Crane	f) Provide training and capacity building for sites of importance for Siberian Cranes	MN	MNP, UNEP/GEF SCWP	3) For the site level, some technical staff got the financial support from the UNEP/GEF SCWP to support fellowship studies. 4) Infrastructure was improved or newly built, such as wetland center for Jiangxi, Integrated building for Keerqin NNR, and guest house and wetland museum for Momoge NNR were constructed. MN: The educational training is going on Special Programme in OBNP. The training is for rangers and local people.	MN: Introduce in practice regular experience sharing in training and research, especially through the protected area network.	2
		RU		RU: 1) Ministry of Nature Protection, in particular Departments of Biological Resources and Protected Areas, organised trainings annually, where Yakutian staff of the UNEP/GEF SCWP participated. 2) Under the UNEP/GEF SCWP, the Steering Committee for Yakutia was established. Head of Allaikhovsky Inspection of Nature Protection who responds for training for rangers and capacity of Kytalyk RRR is a member of this Steering Committee.	RU: 1) Participate and assist governmental structures in training, since Yakutian Coordination Unit of the UNEP/GEF SCWP can't deal with it due to lack of funds and authorization. 2) Re-establish Kytalyk RRR Administration to facilitate activities on forming the staff of Resource Reserve inspectors.	2
	g) Manage buffer zones and external threats for protected areas critical for the Siberian Crane	CH	NNRs	CH: 1) Local farmers were employed as the patrolling staff for Zhalong, Xianghai and Keerqin NNRs to prevent livestock releasing, land reclamation and egg collection. 2) Site management committees were established to coordinate the development of the nature reserves. 3) A cooperative mechanism was established with the oil company in Momoge NNR, and one pilot activity for restoring the wetlands in the oil field was conducted with financial support from the oil company.	CH: 1) Continue to employ local farmers as the patrolling staff for Zhalong, Xianghai and Keerqin NNRs. 2) Continue to operate the site management committees. 3) Continue to maintain the cooperative mechanism with the oil company in Momoge NNR.	2
		MN		MN: 1) The local rangers now control OBNP and its buffer zone with financial support for the entire territory.	MN: Hire separate rangers to control buffer zone if financing is available.	2

Programme	Activity	Range State / Organisation	Collaborator	Progress/Results (2004-2007)	Further Specific Activities (2007-2009)	Priority
4. Protect and manage habitats of importance for the Siberian Crane	g) Manage buffer zones and external threats for protected areas critical for the Siberian Crane	MN RU		2) One ranger was hired by Khentii Province to guard Khurkh Khuiten Valley. This area is included in the Ramsar Site List and the NEACSN (North East Asia Crane Site Network).	RU: Agree on protection of habitats of rare crane species in the Maya River Valley with the administration of the Khabarovsk Region.	2

Objective V: Increase public awareness and ecological education						
Programme	Activity	Range State / Organisation	Collaborator	Progress/Results (2004-2007)	Further Specific Activities (2007-2009)	Priority
5.1. Share information on Siberian Crane conservation efforts.	a) Publicize information on the Siberian Crane conservation efforts in mass media, public and scientific magazines	ICF CWGE, SCFC CH	CH MN, RU	SCFC: Articles about Siberian Crane sightings were published in electronic SCF News and the CWGE Newsletter. CH: 1) The CCTV, Beijing TV and local TV stations reported the related activities under the UNEP/GEF SCWP, including the Jiangxi TV, Hunan TV, Jilin TV, Heilongjiang TV and so on, especially for the public education, training, workshops and surveys and monitoring. 2) Some newspapers and newsletters published the news and primary results of the UNEP/GEF SCWP including the China Cranes News, China Wildlife, UNEP newsletter of China, China Daily, Beijing Evening Newspaper, Jiangxi Daily, Qiqihar Daily and so on.	ICF: Support education activities at sites in China through NFWF grant. SCFC: Continue to publish information about Siberian Crane research, monitoring and conservation in SCF News and the CWGE Newsletter. CH: 1) Develop a simple communications strategy with assistance from the RCU of the UNEP/GEF SCWP Communication Coordinators. 2) Speed up the publication of scientific results so that they are released as quickly as possible. 3) Contribute information and data to the regional partners.	2 2 2

Programme	Activity	Range State / Organisation	Collaborator	Progress/Results (2004-2007)	Further Specific Activities (2007-2009)	Priority
5.1. Share information on Siberian Crane conservation efforts	a) Publicize information on the Siberian Crane conservation efforts in mass media, public and scientific magazines	MN	ICF	<p>MN: 1) Siberian Crane video produced by ICF was broadcast on Mongolian national television once. The VHS video that was given to Mongolia is now gone.</p> <p>2) Television team completed a video on bird migration including part or route at Ayaiin Lake. This video was broadcast on the Ulaanbaator and local TV channel. Also the documentary movie about Siberian Cranes and other threatened species of birds, presented by Mongolian researchers and operators was broadcast on Mongolian TV five times.</p> <p>3) Information about Siberian Crane migration and roosting locations were publicized a few times in the Mongolian and foreign newspapers.</p>	<p>MN: 1) Obtain VHS video about the Siberian Crane again.</p> <p>2) Continue to publish information about the Siberian Crane sightings, including foreign magazines.</p>	2
		RU	National TV, WWF-Russia, CWGE	<p>RU: 1) Fragments of video films about Siberian Cranes in Yakutia were broadcast regularly on TV during television broadcasts about the UNEP/GEF SCWP and other rare birds of Yakutia.</p> <p>2) Agreement between IBPC, National TV Company "Sakha" and "Olonkho" are under preparation. Some activities on preparing informational video films about Siberian Cranes and their broadcast on TV are included in the agreement.</p> <p>3) "Strategy on Siberian Crane Protection" in English was prepared and sent to WWF-Russia for printing in Moscow. But printing was delayed due to unknown reasons.</p> <p>4) Scientific and informational articles were published in Collection of papers «Cranes of Eurasia» и «Cranes of Eurasia-2» and the CWGE Newsletters.</p> <p>5) Monograph on the Siberian Crane is under preparation. Its content was adjusted with George Archibald. Unfortunately we have not yet obtained some historic materials on</p>	<p>RU: 1) Sign agreement between IBPC, National TV Company "Sakha" and "Olonkho" Association. Through this agreement prepare informational video films about Siberian Cranes and broadcast them on TV.</p> <p>2) Obtain financial support to publish "Strategy on Siberian Crane Protection" in English. Request WWF-Russia to publish (V. Nikiforov).</p> <p>3) Publish results of Siberian Crane research in scientific magazines such as <i>Ornithology</i>, <i>Siberian Ecological Magazine</i>, etc.</p> <p>4) Publish book on Siberian Crane in the beginning of 2008. Texts of foreign authors will be published in English; texts of Russians authors will be published in Russian.</p>	2

Programme	Activity	Range State / Organisation	Collaborator	Progress/Results (2004-2007)	Further Specific Activities (2007-2009)	Priority
5.1. Share information on Siberian Crane conservation efforts	a) Publicize information on the Siberian Crane conservation efforts in mass media, public and scientific magazines			Siberian Crane breeding sites in Yakutia from the "Sterkh" Project implemented in the late 1970s from Dr. Sorokin, which should be included in monograph. 6) All information about Siberian Cranes to date were compiled for article and sent for publication in China Crane News.		
	b) Develop, produce and share information and education materials for public awareness and to support education and information programmes	ICF	SCFC	ICF: 1) The SCFC coordinated the distribution of Robert Bateman poster. All Range States received their versions of the poster. Mongolian posters are finished. No requests received for reprinting. 2) Stickers of Siberian Crane in English, Russian, Yakutian, Farsi and Chinese languages with design by artist Sergei Pogonin were produced and distributed. 3) New poster, calendar and booklet "Lily of Birds" on Siberian Crane and wetlands in Russian and English languages were printed for distribution at the CMS (Convention of Migratory Species) MoU6 meeting.	ICF: 1) Continue to provide the range states with awareness materials especially for the Crane Celebration. 2) Provide new layouts of posters. 3) Provide new layouts of stickers to Range States. 4) Provide layout of the Siberian Crane booklet and materials to China and other interested countries for translation in national language and printing. 5) Maintain the UNEP/GEF SCWP and SCFC websites.	2
		CN	NNRs	CH: 1) Joint summer camps were held in Zhalong and Xianghai NNRs, with partial funding from the NFWF/ConocoPhillips SPIRIT of Conservation Migratory Bird Programme. 2) Local school curriculum for Zhalong NNR was published with funding from the NFWF/ConocoPhillips SPIRIT of Conservation Migratory Bird Programme, which is also adopted for other sites. 3) Local school curricula were developed and distributed widely, and the educational materials for Keerqin NNR and Poyang Lake Basin are being developed.	CH: 1) Develop local school curricula for Keerqin NNR with funds from the NFWF/ConocoPhillips SPIRIT of Conservation Migratory Bird Programme. 2) Finalize the public education book for Poyang Lake Basin and incorporate into the local education system. 3) Jointly conduct some public education activities with the support of the NFWF/ConocoPhillips SPIRIT of Conservation Migratory Bird Programme.	2
MN	SCFC	MN: Siberian Crane posters by Robert Bateman were shared widely. Four types of booklets (250 copies of each) on the Siberian Crane and other rare species were prepared, printed and distributed.	MN: Share booklets, calendars and posters on the Siberian Crane widely.	2		

Programme	Activity	Range State / Organisation	Collaborator	Progress/Results (2004-2007)	Further Specific Activities (2007-2009)	Priority
5.2. Community involvement	a) Develop education and information programmes and public events for target groups of local people (especially hunters) on protection of the Siberian Crane and its habitats	CH			3) Develop an ecotourism booklet and improve the interpretation system for Xianghai NNR. 4) Conduct public education activities for target groups of local communities while developing the site mgt plans and public education plans for Momoge and Keerqin NNRs.	
		MN	SCFC	MN: Crane Celebrations were organised on 1 September 2005 and 2006 in Dornod (Eastern) Province.	MN: 1) Conduct Crane Celebrations in Central and Inner Mongolia. 2) Work out and realize education programmes.	2
		RU	UNEP/GEF SCWP, SCFC, CWGE	RU: 1) Meeting with students of school in Petropavlovsk Village was organised in winter 2005 by Nikolai Yegorov, Consultant on Siberian Crane breeding. 2) Summer ecological work with students of Kuyptsy Village was organised in May-June of 2005 by IBPC staff. 3) Consultant on ecotourism under the UNEP/GEF SCWP collaborated on preliminary ecological tours for Kytalyk RRR and calculated budget for their creation. These tours are proposed for wealthy foreign tourists who are interested in wild tundra nature. 4) Number of Crane Celebration participants are increasing and now this event is organised widely in Yakutia, not only inside Siberian Crane breeding area.	RU: 1) Hire Ecological Education Consultant in 2007. Involve model local settlements and schools along flyway in the campaign through the internet, distribution of materials, consultative support in Yakutsk and during field expedition of crane experts, without visits targeted specifically for education. Conduct local and provincial contests and implement new education project, "Three White Cranes, Two Flyways, One World". 2) Repair and supply with equipment Chabda RRR lodge for workshops and expeditions. 3) Plan to conduct international ecological workshops for children, students and young professionals in Chabda RRR, in framework of the UNEP/GEF SCWP in 2008. Plan to get co-financing from "Bargary" Foundation (Sakha Republic). 4) Evaluate ecotourism potential in Middle Aldan site. 5) Expand Crane Celebrations. Since 2007 include Crane Celebrations in All-Republic State Action "Nature and We," especially contest for children "Siberian Crane is the Bird of Happiness."	1

Programme	Activity	Range State / Organisation	Collaborator	Progress/Results (2004-2007)	Further Specific Activities (2007-2009)	Priority
5.2. Community involvement	b) Establish learning/information center	CN	NNRs	CH: Wetland Center for Jiangxi, Wetlands Museum for Momoge NNR and Public Education Center for Keerqin NNR were established in 2005, early 2006 and early 2007 separately.	CH: Open the center or museum for the public, especially for the local students and farmers.	2
5.3. Sustainable livelihood opportunities	Initiate and facilitate sustainable livelihood projects for local communities	CN	NNRs	<p>CH: 1) Community participatory management plans for Poyang Lake Basin, Zhalong and Xianghai NNRs were developed in the end of 2005.</p> <p>2) The detailed implementation plans for four pilot activities for Poyang Lake Basin, two for Zhalong NNR, and two for Xianghai NNR were developed and approved by the China NCU of the UNEP/GEF SCWP.</p> <p>MN: Negative impact of overgrazing around steppe lakes on ecosystems, including Siberian Crane and other rare birds habitats, was determined.</p> <p>RU: Analysis of questionnaire results on practice of non traditional private and collective farms (horse and pig breeding, poultry keeping and vegetable-growing) was conducted.</p>	<p>CH: 1) Implement the community pilot activities in Poyang Lake Basin, Zhalong and Xianghai NNRs.</p> <p>2) Monitor and evaluate the progress and efficiency of the community pilot activities to determine the sustainable resources and replicated activities.</p>	2
		MN			<p>MN: Work on proposals for cattle density decreasing by organising new water wells and pastures.</p>	2
		RU			<p>RU: Work on proposals to develop herd horse breeding in Allaikhovskiy Ulus of Yakutia.</p>	3

Objective VI: Enhance national and international cooperation and information exchange						
Programme	Activity	Range State / Organisation	Collaborator	Progress/Results (2004-2007)	Further Specific Activities (2007-2009)	Priority
6.1. Improve national and international cooperation and information exchange	a) Designate a national lead agency responsible for coordinating the Siberian Crane conservation and management policy	SCFC	All Range States-EP		SCFC: Maintain and update focal point list regularly.	1
		All Range States-EP	CMS	All Range States-EP: Administrative and technical focal points were designated for participation at the Sixth Range State meeting in Almaty, Kazakhstan in May 2007.	All Range States-EP: 1) Identify technical and administrative focal points. 2) Inform CMS Secretariat of any changes in responsibilities.	1
		CH	CMS	CH: The SFA is the only national lead agency to coordinate the Siberian Crane conservation and management policy.	CH: Strengthen coordination and cooperation between different government agencies, including the departments of water resources and agriculture.	1
		MN	CMS	MN: Ministry of Nature Protection and Environment of the Republic of Mongolia is designated as lead agency.		
		RU	CMS	RU: Ministry of Natural Resources of the Russian Federation is designated as lead agency.		
	b) Collaborate and conduct international research and monitoring	CMS		CMS: The Siberian Crane MoU is often cited as an example of how a flagship species is being used by CMS and the conservation community to conserve not only the species but other waterbirds as well.	CMS: Call attention to the importance of conserving Siberian Cranes and their habitats over their entire range, at relevant international conferences.	1
		ICF	CH, RU	ICF: In 2005 and 2006 field works and color banding in Yakutia were supported. China NCU and RCU of the UNEP/GEF SCWP also participated in these field works.	ICF: Support PTT study of Siberian Cranes along Eastern Flyway (China and Yakutia).	1
CN		NNRs	CH: 1) Participated in monitoring and research activities supported by the NFWF/ConocoPhillips SPIRIT of Conservation Migratory Bird Programme and undertaken by ICF. 2) Two staff from China participated in the joint breeding survey in Yakutia in August 2006. 3) Staff of Poyang Lake NNR participated in the winter survey, which was organised by the WWF-China Yangtze Programme.	CH: Conduct staff exchange with Yakutian colleagues and invite them to visit stop-over sites or wintering sites in China.	1	

Programme	Activity	Range State / Organisation	Collaborator	Progress/Results (2004-2007)	Further Specific Activities (2007-2009)	Priority
6.1. Improve national and international cooperation and information exchange	b) Collaborate and conduct international research and monitoring	MN	RU	<p>MN: 1) Regular participation in international meetings and joint international field works in Mongolia was provided.</p> <p>2) In 2004 all 22 lakes in Khurk River basin and Buir and Ganga Lakes were included in the Ramsar Site List.</p> <p>3) Worked very close with international protected areas administration and specialists. Specialists from Mongol Daguur and OBNP in Mongolia working together with specialists from Daurский and Sokhodinskiy State Nature Reserves in Russia, and Dalai Lake NNR in China. To develop relationship we visited each other to exchange experiences and information.</p>	<p>MN: 1) Conduct international expedition in Mongolia to investigate summer habitats of the Siberian Crane in 2008-2009. Participate in field expeditions in Yakutia.</p> <p>2) Plan to establish Mongolian-Russian joint protected area.</p>	1
		RU	CH, WBSJ, ICF, US FWS, CWGE, Institute of Zoology CAS; Washington University, Institute of Genetics and Biology SB RAS	<p>RU: 1) IBPC staff cooperated with China NCU of the UNEP/GEF SCWP. Two Chinese representatives participated in field work in Yakutia.</p> <p>2) IBPC staff cooperated with RC WBSJ (one of the banded Siberian Cranes was sighted in Japan in 2005), ICF and United States Fish and Wildlife Service (USFWS).</p> <p>3) Discussion on joint research on the genetics of Siberian Cranes kept in captivity in China continued with Chinese experts.</p> <p>4) Contact was made with Lei Fu-Min, Institute of Zoology of CAS, but its development has stopped. Grant application to RFFI on joined project was not submitted. We hope for help from China NCU of the UNEP/GEF SCWP to restore this contact.</p>	<p>RU: 1) Conduct joint Chinese-Russian expedition in the most intensive flyways of the Siberian Crane.</p> <p>2) Continue efforts to conclude a treaty with Zoological Institute of CAS.</p> <p>3) Continue efforts to conclude a 4-lateral treaty between Zoological Institute of CAS, George Washington University, Institute of Cytology and Genetics of Siberian Branch of RAS, and IBPC.</p> <p>4) Attend the International Scientific Conference "Cranes of Palearctic: Biology and Conservation" of the CWGE in Rostov NR in October 2007.</p> <p>5) Participate in CWGE activities.</p>	1
	d) Provide central coordination of information exchange through SCFC and regional database /GIS on the Siberian Crane and its sites	ICF	All Range States-EP		<p>ICF: Agreement reached at Fifth Steering Committee Meeting of the UNEP/GEF SCWP that data will be the property of the range states under the CMS MoU and will be shared openly among participants.</p>	

Programme	Activity	Range State / Organisation	Collaborator	Progress/Results (2004-2007)	Further Specific Activities (2007-2009)	Priority
6.1. Improve national and international cooperation and information exchange	d) Provide central coordination of information exchange through SCFC and regional database /GIS on the Siberian Crane and its sites	SCFC	All Range States-EP	SCFC: Information on Siberian Crane sightings at breeding, resting and wintering areas along the flyways was collected and distributed immediately among interested people and agencies. This information was distributed electronically via the SCF News and then as a hard copy through the CWGE Newsletter. Information was also uploaded to the SCFC website, but during the last year the website was not updated. Information on Siberian Crane sightings were entered into the Siberian Crane database.	SCFC: Continue to collect and share information. Update SCFC website and establish Russian version of the website. Continue to update the Siberian Crane database.	1
		All Range States-EP	SCFC	All Range States-EP: Information for publication in electronic SCW News, the GWGE Newsletter and the CWGE collection of papers was provided.	All Range States-EP: Provide data to the SCFC on the Siberian Crane sightings and on activities related to CMS MoU implementation for SCF News.	1
		CH	SCFC	CH: China NCU of the UNEP/GEF SCWP nominated Ms. Liu Hua as the contact person to collect the sightings and observations from the five project sites, the 13 monitoring units along the Siberian flyway within China, and related media or newsletters, and share with the SCFC.	CH: 1) Continue to enhance the coordination mechanism of this reporting system. 2) Try to share the observations and sightings with the SCFC in a timely manner.	1
		MN	SCFC	MN: Sending all information about sightings of Siberian Crane to SCFC.	MN: Conduct trainings and experience exchange on GIS implementation.	1
		RU	SCFC	RU: Information about activity on Siberian Crane observation was sent to SCFC regularly.	RU: Continue to send information on the Siberian Crane sightings and conservation activity to the SCFC.	1
	e) Submit an annual report on implementation of the Siberian Crane MoU to the UNEP/CMS Secretariat	CMS, ICF	All Range States-EP	CMS, ICF: 1) The publication No. 10 "Conservation Measures for the Siberian Crane – Third Edition." UNEP/CMS ed. 2005, included CMS MoU5 meeting report, conservation plans for three populations, and Siberian Crane references was compiled, revised, translated into Russian, printed and distributed among Range States. 3) New template of Conservation plan for all three populations prepared and presented at the Sixth Range State meeting for discussion and approve.	CMS, ICF: 1) Compile and distribute CMS MoU6 meeting report, including revised Conservation Plans for three populations with limited number of copies. 2) Send reminder to countries with request to update electronic database. 3) Hire specialist to create electronic reporting database. Upload report database to CMS website. Upload country reports there with request of additional information from countries.	1

Programme	Activity	Range State / Organisation	Collaborator	Progress/Results (2004-2007)	Further Specific Activities (2007-2009)	Priority
6.1. Improve national and international cooperation and information exchange	e) Submit an annual report on implementation of the Siberian Crane MoU to the UNEP/CMS Secretariat	All Range States-EP	CMS	3) Reminder for country report was shared just before CMS MoU6 meeting. 4) National report template was prepared, discussed at CMS MoU6 meeting and approved by Range States. All Range States-EP: National reports were submitted to CMS. However a process for allowing annual review, future planning, and exchange of information is required. An outcome of this annual review can be an annual report which will feed into the proposed online reporting.	All Range States-EP: 1) Use the revised report template until further notice. 2) Update report annually.	1
		CH	CMS	CH: China NCU of the UNEP/GEF SCWP has completed the national report and submitted it to the secretariat.	CH: Continue to collect related information and data to complete the national report on time.	1
	f) Host and attend regular meetings of the Siberian Crane Range States	CMS, ICF	All Range States-EP	CMS, ICF: 1) Organised in cooperation with Kazakhstan the sixth Range State meeting in Almaty in May 2007. Participation of experts from Range States was supported by ICF through the UNEP/GEF SCWP and other sources. 2) WI and CBCC signed the Memorandum at CMS MoU6. All Range States-EP: Attended CMS MoU6 Range States meeting in Almaty, Kazakhstan, 15-19 May 2007. CH, MN: So far, China and Mongolia did not host any Range States meeting for the CMS MoU.	CMS, ICF: 1) Work with host country of CMS MoU7 to ensure that the meeting is financially secure. 2) Liaise with other potential co-operating organisations as appropriate that signal their interest to sign the CMS MoU. 3) BirdLife International should be considered their new Species Champions campaign for Critically Endangered species. All Range States-EP: Host and attend CMS MoU regular meetings. CH: Discuss in the board meeting of SFA to determine when China may hold this meeting.	1 1 1
6.2. Development of the Western/ Central Asia Site Network for the Siberian Crane and other waterbirds	a) Nominate additional sites for the WCASN	All Range States-EP		All Range States-EP: Not applicable.	All Range States-EP: Not applicable.	
	b) Coordinate with Central Asian Flyway initiative on site network development	All Range States-EP		All Range States-EP: Not applicable.	All Range States-EP: Not applicable.	

Programme	Activity	Range State / Organisation	Collaborator	Progress/Results (2004-2007)	Further Specific Activities (2007-2009)	Priority
6.3. Support Siberian Crane conservation activities through the East Asian–Australasian Flyway Partnership	a) Collaborate with the North-East Asia Crane Working Group of the East Asian – Australasian Flyway Partnership to integrate Siberian Crane conservation with flyway level activities for migratory waterbirds in the annual Partnership workplans	ICF	NEACWG	<p>ICF, CMS: Joined the East Asian – Australasian Flyway Partnership (EAAFP) at its launch and first meeting in November 2006.</p> <p>CH: 1) The breeding surveys of large waterbirds including cranes were conducted in the NE sites since 2004. 2) The database system for the China in the frame of NEACSN is being developed based on the Siberian Crane regional database.</p> <p>MN: Documents to include OBNP to NEACSN were prepared. Some important sites for the bird in OBNP already included in Important Bird Area (IBA).</p> <p>RU: For the first stage Middle Aldan RRR including Kyupsky and Kuoluma-Chappanda sites with adjusted territories and Chabda RRR with adjusted territories were considered to include in NEACSN.</p>	ICF: Participate in NEACWG meetings supported by the UNEP/GEF SCWP.	2
		ICF / CMS			ICF, CMS: Participate in EAAFP meetings to represent interests of the CMS MoU.	2
		CH	NEACWG		CH: 1) Help to nominate the candidate for NEACWG in the terms of reference according to the provisions of NEACWG. 2) Develop, maintain and update the database for China in the frame of the NEACWG.	1
		MN	NEACWG		MN: Add OBNP to sites of the NEACWG in 2009.	1
		RU	NEACWG		RU: 1) Send documents on protected areas of Central Yakutia for nomination to NEACWG to the Ministry of Nature Protection of Sakha Republic and to the Ministry of Natural Resources of Russian Federation. 2) Prepare documents about Chaigurgino RRR in cooperation with ECORA Project for nomination to NEACWG and submit them to republic and federal governmental agencies.	1
6.4. Capacity building	a) Determine country's needs, in terms of human resources, knowledge and facilities, in order to build capacity to strengthen conservation measures for the Siberian Crane and its habitats	RU	UNEP/GEF SCWP	RU: Lists of required equipment were prepared for both model territories (Kytalyk RRR and Middle Aldan) of the UNEP/GEF SCWP, including co-financing by Ministry of Nature Protection of Sakha Republic (Yakutia).		

Programme	Activity	Range State / Organisation	Collaborator	Progress/Results (2004-2007)	Further Specific Activities (2007-2009)	Priority
6.4. Capacity building	b) Provide training to support conservation of the Siberian Crane and its habitats	<p>UNEP/GEF SCWP, ICF</p> <p>MN</p> <p>RU</p>	<p>CH, RU</p> <p>NEACWG</p> <p>UNEP/GEF SCWP</p>	<p>ICF: 1) RCU and China NCU of the UNEP/GEF SCWP in cooperation with Jiangxi Wildlife Management Bureau organised Regional training in management planning and other issues in Nanchang, China, in March 2007.</p> <p>2) The SCFC and SCWP Director took part in a training workshop on education and ecotourism which was held in the framework of NEACSN activities.</p> <p>MN: International training on management planning under NEACSN in 2003 was organised in Ulaanbaatar.</p> <p>RU: Inga Bysykatova, Consultant on management planning under the UNEP/GEF SCWP, and Yakov Sivtsev, Head of the Department on Special Protected Areas of the MNP, and Rudolf Baryshev, Head of Ust-Maya Inspection of Nature Protection, participated in the Regional Training Workshop on Management Planning in Nanchang, China, in March of 2007.</p>	ICF: Support exchange of Yakutian and Chinese experts through the UNEP/GEF SCWP and other projects.	2
6.5. Raise funds to support a comprehensive conservation programme supporting CMS MoU implementation	a) Develop comprehensive project proposal(s) to submit to appropriate agencies for possible funding	<p>CMS</p> <p>ICF</p>	SCFC	<p>CMS: CMS Secretariat extended the SCFC contract by entering into a three- year agreement with ICF for 2006-08.</p> <p>ICF: 1) Currently in Year 5 of the UNEP/GEF SCWP. Mid-term review completed and Phase 2 goals revised.</p> <p>2) The SCFC salary co-financed by the UNEP/GEF SCWP.</p> <p>3) Increased SCFC budget under the UNEP/GEF SCWP to fund assistants in Moscow as needed. In March 2007, hired two (25% time each) Communication Coordinators to help SCFC with these activities.</p>	<p>CMS: Work with Range States, ICF and others, including CMS COP9, to secure funding for CMS MoU7.</p> <p>ICF: Continue to fund the SCFC through UNEP/GEF SCWP until end of project in March 2009. ICF will work with CMS to fund this critical position.</p>	<p>1</p> <p>1</p>

Programme	Activity	Range State / Organisation	Collaborator	Progress/Results (2004-2007)	Further Specific Activities (2007-2009)	Priority	
6.5. Raise funds to support a comprehensive conservation programme supporting CMS MoU implementation	a) Develop comprehensive project proposal(s) to submit to appropriate agencies for possible funding	CH	CMS	<p>CH: 1) Nanjishan NNR has submitted one proposal related to the community participatory management practices to the IUCN and got approval in 2004.</p> <p>2) Received funding from Euros Foundation to support the public education activities in Zhalong NNR.</p> <p>3) Received funding from Japanese Foundation to restore the wetlands for Xianghai NNR.</p>	<p>CH: 1) Ensure regular funds are allocated to the site of NEACWG and EAAFP in China.</p> <p>2) Provide administrative support for any sites to raise funds from the different channels.</p>	1	
		MN				<p>MN: Mobilize technical and finance assistance from international sponsors.</p>	1
	b) Develop small-scale project proposals to submit to CMS or ICF for their consideration	CH	<p>SCWP, NEACWG and EAAFP</p> <p>CMS, NEACWG</p>	<p>CH: SFA and local governments have provided some co-financing for the UNEP/GEF SCWP in China.</p> <p>MN: CMS and NEACSN supported in participation in international seminar, workshops, meeting.</p>	<p>CH: Encourage the sites to develop the small-scale project proposals to submit to CMS Secretariat.</p>	1	
		MN					
	c) Appeal to governments for funding of Siberian Crane conservation activities related to the Siberian Crane MoU	CMS	<p>All Range States-WP, ICF</p>	<p>SFA</p>	<p>CH: 1) SFA allocated some funds to the related provincial forestry departments to coordinate activities related to Siberian Crane conservation.</p>	<p>CMS: 1) Explore feasibility to establish trust fund and leverage additional funding from national governments and other international sources.</p> <p>2) Provide letters of support for efforts of national agencies and cooperating partners to secure additional funding for MoU-related activities.</p> <p>3) Continue to coordinate with Friends of CMS to determine what support could be provided to the MoU's implementation in collaboration with ICF.</p>	1
						CH	<p>CH: 1) Continue to allocate some funds to support the provincial forestry departments to coordinate activities related to Siberian Crane conservation.</p>

Programme	Activity	Range State / Organisation	Collaborator	Progress/Results (2004-2007)	Further Specific Activities (2007-2009)	Priority
6.5. Raise funds to support a comprehensive conservation programme supporting CMS MoU implementation	c) Appeal to governments for funding of Siberian Crane conservation activities related to the Siberian Crane MoU	CH	SFA	<p>2) Support the sites to get the national budget for improvement of infrastructure, equipment and staff capacity building for Poyang Lake, Xianghai and Keerqin NNRs.</p> <p>3) Coordinated with the oil company to provide the funding to conduct the wetland restoration project for Momoge.</p> <p>4) SFA allocated regular funds to support the protection of the non-commercial forests at Xianghai and Keerqin.</p>	<p>2) Ensure the regular fund allocation to the site of national monitoring system for wildlife disease.</p> <p>3) Promote the incorporation of Siberian Crane sites into the national wetlands monitoring system.</p> <p>4) Promote the incorporation of Siberian Crane sites into the national wetlands restoration programme.</p> <p>5) Ensure that regular funds are allocated to Xianghai and Zhalong NNRs to protect the non-commercial forest annually.</p>	
		MN	MNP	<p>MN: 1) Every year government provides 20.000 US dollars in financial support for OBNP. Staff of three rangers also financed by Ministry of Nature Protection.</p> <p>2) Rangers and researchers working in protected areas are financed by Government.</p>		

Figure 4: Map of Siberian Crane Eastern Flyway

