

Report of the Fourth Meeting of Siberian Crane Range States Baraboo, Wisconsin, United States 20-24 May 2001

BACKGROUND

The present meeting was the fourth in a series, assembling administrators and specialists from the countries participating in the *Memorandum of Understanding concerning Conservation Measures for the Siberian Crane*, an agreement developed in 1993 under the auspices of the Convention on Migratory Species (CMS). It had as its primary objective the review and further refinement of the Conservation Plan, which is an integral part of the Memorandum of Understanding. The previous meeting had been held in Ramsar, Islamic Republic of Iran, in December 1998.

Convened by the Secretariat of the Convention on Migratory Species and hosted by the International Crane Foundation, the meeting was attended by representatives of nine States and benefitted also from the participation of specialists and representatives of several non-governmental and intergovernmental organizations. The list of participants is given at Annex 1.

The States represented were: Azerbaijan, China, India, Kazakhstan, Mongolia, Pakistan, Russian Federation, United States of America, and Uzbekistan. Non-governmental and intergovernmental organizations represented were: Cracid Breeding and Conservation Center (Belgium), Crane Working Group of Eurasia (Russian Federation), International Crane Foundation (USA), Save the Environment - Afghanistan (SEA), Tourism and Wildlife Society of India, and the United Nations Environment Programme – Global Environment Facility (UNEP/GEF) Coordination Office.

Agenda Item 1: Opening remarks

Jim Harris, President of the International Crane Foundation (ICF), welcomed the delegates to the Fourth Meeting of Range States participating in the CMS *Memorandum of Understanding concerning Conservation Measures for the Siberian Crane*. He expressed his gratitude to the CMS Secretariat for facilitating the meeting and for the lead CMS had taken in developing and implementing the MoU. The meeting presented an opportunity for representatives of the countries involved to engage in dialogue and discuss next steps. He noted that the work undertaken on behalf of the Siberian crane was a model for flyway cooperation, which could be adapted for other bird species.

Mr. Harris went on to explain that one hundred and fifty years ago there were two cranes species in Wisconsin. The Whooping crane became locally extinct and the Sandhill crane had been reduced to less than one thousand individuals. Over the past sixty years, conservation efforts had helped restore the Sandhill population to 12,000 in the state, and it was hoped to reintroduce Whooping cranes soon. This illustrated not only that populations could be rescued from the brink of extinction, but also that long-term commitment was needed. Clearly, parallels could be drawn with the Siberian crane.

Douglas Hykle, CMS Deputy Executive Secretary, thanked ICF for hosting and organizing the Meeting. He welcomed the delegates and hoped they would be inspired by their visit to ICF, where two Siberian crane chicks had hatched in the previous weeks. Holding the meeting at Baraboo realised a long-held ambition to give others an opportunity to see ICF's remarkable

conservation facility. He remarked that there were many familiar faces present as well as some new ones, in particular a representative from Mongolia for the first time and new colleagues from Afghanistan. He paid tribute to the years of service of Ms. Shruti Sharma (India) who had now left her post at the Keoladeo Ghana National Park, having been actively involved in the MoU for many years. The present meeting would also be the last for Mr. Robert Vagg, who had serviced a number of the Range State gatherings and whose secondment with the CMS Secretariat was coming to an end.

Describing the work of the Convention on Migratory Species, Mr. Hykle explained that CMS was involved in the conservation of a wide array of species, including marine turtles, marine mammals, albatrosses and petrels, waterbirds and grassland birds, desert antelopes and African elephants. Seventy-three countries were Parties to the Convention, and another 15 were participating in its regional Agreements.

Endangered migratory species, such as the Siberian crane, were an important focus of CMS-work, but as a framework convention, CMS was also a vehicle for the development of specialized regional instruments. These ranged from legally-binding Agreements to less formal memoranda of understanding. The Siberian crane MoU was the first instrument of its kind under CMS, and it had since served as a model for others, including a proposed MoU for sea turtles of the Indian Ocean.

Wisconsin State Senator, Robert Welch, welcomed delegates to the meeting and explained further the significance of Wisconsin for crane populations and conservation efforts.

Delegates introduced themselves briefly. Apologies had been received from Djumamurad Saparmuradov of Turkmenistan and from the delegation of the Islamic Republic of Iran, who unfortunately been unable to secure exit or entry visas in time to enable them to attend the meeting.

Agenda Item 2: Adoption of the agenda and work programme

Mr. Hykle explained that the purpose of the meeting was to review progress in implementing the Conservation Plan since the last meeting held in Ramsar, Islamic Republic of Iran, in December 1998 and to agree on new activities for the next two years. He explained that the meeting would break into smaller working groups to examine specific areas of work in greater detail. Another important element was the linkage of the work of the MoU to the GEF-funded wetland project, which would be discussed later in the week. There being no further comments, the agenda and schedule were adopted without amendment (Annex 2).

Agenda Item 3: Detailed review of implementation of the Conservation Plan for 1999-2000

The Conservation Plan adopted at Ramsar was divided into two sections, devoted to the Western and Central flyways, respectively. The three main objectives, common to both flyways, were: (1) to reduce mortality; (2) to increase numbers and genetic diversity; and (3) to enhance international co-operation.

These three objectives were in turn subdivided into programmes and activities, applicable either generally or to specific countries. As agreement had been reached only at the conclusion of the 1998 meeting to extend the Memorandum to cover also the Eastern population, no conservation measures had yet been elaborated for Eastern Siberia and China.

The meeting systematically reviewed progress regarding the activities identified and agreed at Ramsar, with each country reporting on work undertaken, progress achieved and difficulties encountered. A summary of progress and results for the period 1999-2001 appears in the second to last column of the Conservation Plan. The detailed reports submitted by Range States, together with responses to a questionnaire circulated before the meeting, are presented in Annex 3.

OBJECTIVE 1. REDUCE MORTALITY

Activity: Increase public awareness

It was reported that in many countries the ICF/CMS video or other similar material had been broadcast by television networks or shown at festivals and other such events. In most cases, the commentary had been translated into local languages. The *Sterkh Foundation* had produced its own video, which would be sent to ICF so that further copies could be made and distributed. As there was no television in Afghanistan, the ICF/CMS video had been shown at meetings to the refugee community.

In the Russian Federation, booklets had been produced and distributed for use in schools and with hunters. The *Sterkh Foundation* had begun to prepare a 60-page magazine, which would be ready within six weeks. A further edition was already being considered. A number of articles had been published in local and national papers, and a touring exhibition in the nesting grounds around Salekhard had been successful. Alexander Ermekov had participated in a phone-in programme in that area. The *Sterkh Foundation* now had its own website.

Despite the problems facing Afghanistan, efforts were being made to promote conservation education by issuing publications in local languages and by approaching community and religious leaders. Pamphlets had been produced, describing cranes in various local languages and including information on breeding and migration. The BBC had helped raise public awareness. ICF posters had been translated and sent to the Ministry of Agriculture.

In Pakistan, educational work had been carried out in the North-West Frontier Province and in the Punjab with the help of WWF. A number of conservation clubs had been visited and the video had been shown and leaflets distributed. Lectures had been held in villages to counter the threat of cranes being shot.

India had concentrated its education effort on schools, building on a general wildlife conservation theme throughout Rajasthan. Footage of cranes had been shown during film festivals and during wetland week and World Wetland Day, which Shruti Sharma had coordinated. Other features included puppet shows and school painting competitions. The annual crane censuses in April at Keoladeo also gave an opportunity for voluntary organisations to participate actively in conservation work. This was a well-established event, with Sarus crane surveys having taken place for eighteen years.

In Uzbekistan, an article, *The White Crane*, had been published and a series of lectures in universities had been held. Similar articles had been published in Azerbaijan.

Occasionally vagrant birds were sighted in Mongolia and two general brochures about cranes and other birds had been produced there. China too had produced general material, not specifically focussed on Siberian cranes or CMS, although CMS material had been adapted and incorporated. A very attractive book about the Siberian cranes at Poyang Lake had been published.

Delegates were requested to provide samples of all printed material to ICF for its archive.

Activity: Follow-up on reported sightings

In the Russian Federation, efforts were made to follow up sightings but the capacity to do so -- in terms of staff and finances -- was limited. Only one pair was known to migrate from Kunavat to India, but there were considerable data suggesting that other pairs and individuals existed along the range of the Central population. A questionnaire distributed to the west of the Urals had produced a number of promising responses, mainly about individual birds but also a pair with a chick. This area would be surveyed as soon as funds allowed.

In Afghanistan, SEA-s resources were limited so they supported the work of Ahmed Khan. During 1999, volunteer teams reported a pair of birds, thought from the description to be Siberian cranes, but no follow-up had been possible. No birds had been sighted in India other than the pair, which wintered at Keoladeo. No reports had been received from the Kurram Valley. Ahmed Khan had reported a sighting in February 2001, but this still required investigation and confirmation. Dr. Malik was confident that sufficient awareness raising effort had been undertaken to ensure that any sightings would be reported.

The postcard scheme in operation in Uzbekistan had resulted in a number of sightings of Eurasian cranes being recorded, but none related to Siberian cranes. In September 1999, four Siberian cranes had been sighted over a period of 2-3 days.

In Mongolia, a number of sightings had been reported between July and September, all in protected areas and reserves. Lack of resources prevented comprehensive investigation of these reports.

Activity: Educate local people and provide incentives and rewards

In the Russian Federation, booklets had been distributed to hunters through local hunting offices as they applied for their licences. At the end of the season, the hunters were supposed to report back on any sightings of Siberian cranes, among other things. No incentive scheme had been introduced yet. In Azerbaijan, a newspaper report provided a telephone number for people sighting Siberian cranes with the promise of a reward, but no calls had been received. In Uzbekistan, it was considered more important to develop education before instigating award schemes.

Crawford Prentice reported that the Iranian Department of Environment office in the province of Mazandaran had been active. Every year the 2nd of February was celebrated as World Wetlands Day and 2001 saw the thirtieth anniversary of the Ramsar Convention, which would be marked by celebrations. Award schemes had been introduced for school children-s art and the duck trapper who had made a considerable contribution to the conservation work in the damgahs, had been honoured. The Caspian Sea project was helping to raise public awareness of conservation issues in Gilan province.

In Afghanistan, school and community-based education was being carried out, concentrating on key sites. Hunting was not practiced during the breeding season. As an incentive, it had been promised that two schools would be built in 2000. In Pakistan, two hunters who had shown commitment and interest had been sent to ICF for training and on their return they passed on what they had learnt to the rest of their communities. Pakistan wished to build on this scheme as a basis for community-based reserves with high local involvement. 80% of hunting licence revenue was retained locally to fund community action. Government authorities and NGOs had cooperated to organise local annual crane festivals and rewards were made to people breeding cranes in captivity. The WWF award scheme had unfortunately been curtailed.

OBJECTIVE 2. INCREASE NUMBERS AND GENETIC DIVERSITY

Activity: Conduct satellite tracking

Dr. Sorokin reported that little success had been achieved recently with the Russian-made PTT transmitters. The sets fitted during 1999 stopped working after two weeks. Similarly in 2000, the sets stopped working before the birds embarked on their migration from Kunavat and Tyumen. Attempts to fit PTT sets on birds in Iran also failed, as Yuri Markin arrived too late in the season due to problems in securing a visa. It was unfortunate that technical problems had occurred which had not been encountered before. Other experts had also experienced similar problems with their equipment (for example, the Israelis working with Eurasian cranes, who found that five of the seven sets fitted malfunctioned).

More positively, a cross-fostered chick (named ACrawford[®]) which had been colour-banded, had been reported at Tengiz Lake in Kazakhstan, among some Common cranes.

Activity: Protect habitat

In the Russian Federation, the position regarding industrial activity in and around the key sites had improved, while plans were being elaborated to increase the size of the nature reserve at Uvat. Administrative difficulties could not however be ruled out because the area straddled the boundary between two different local government areas (Tyumen and Khanty-Mansisk). A local reserve was being proposed at Belozeerski and the size of the Kytalyk reserve had been increased by 30%. A specialist was preparing the case for its nomination under the World Heritage Convention.

No new reserves had been declared in Afghanistan for 22 years. Efforts to lobby the current Agriculture Minister to support a seminar had so far not succeeded, but would continue as there appeared to be signs that activities by NGOs would be encouraged.

India had already a comprehensive legal framework for protecting species, so the focus of attention was turning to habitat protection. Policies were being developed to reduce the pressure on key sites by declaring satellite sites. Three such sites had been identified around Bharatpur: one was already being progressed and the other two would be actioned in due course. Supplementing the comments made by Mr. Kanwarjit Singh, the official representative of India, Mr. Harsh Vardan added that the government had adopted an enlightened approach to public participation and was ensuring that other interests -- notably irrigation and forestry -- were consulted, although conflicts of interest still existed. Public awareness and community support had grown steadily over the past twelve years, thanks in part to campaigns supported by ICF. Communication between the public and park rangers was good. Dr. Archibald drew the attention of the meeting to proposals by the Indian Agriculture Ministry to promote a modernization programme in a key area for Sarus cranes and Black storks, which was also a potential site for Siberian cranes. He was concerned that the plans threatened the cranes-habitat and suggested that the meeting consider raising the issue with the Indian authorities in a letter.

Uzbekistan had established a new reserve and a GEF project would help with the establishment of a second. Two biosphere reserves were being proposed. Two game management officers had been appointed in 1999. Community liaison would be a key element of the staff's job descriptions. The World Bank was providing funding for two new nature parks in Azerbaijan, where emphasis would be placed on community involvement.

In the Islamic Republic of Iran, a successful, well-attended public consultation meeting had taken place on 1 March 2001 at Fereidoonkenar as part of the preparation of the GEF wetlands project.

The way ahead had been cleared for more formal management of the area. The Department of Environment was to establish a No-shooting area, but traditional duck trapping would be allowed to continue. Initial steps towards declaring the area as a Ramsar site were being taken. Reports of the number of birds wintering at Fereidoorkenar varied between 6 and 8. Yuri Markin had only seen one, but Sadegh Sadeghi-Zadegan had seen five. The numbers still seemed to be dwindling. However, a male, which had previously lost its mate had been sighted with a new, unringed female, which raised the question of where the male had found her.

Activity: Monitor threats

The Wildlife Institute of India had undertaken studies on agricultural contaminants in Sarus cranes. The Russian Federation attached great importance to such work, which was being carried out in all key regions. Pakistan was suffering the effects of persistent drought, which had resulted in a number of wetlands drying up. Jim Harris reported that similar problems were being faced in China.

Activity: Reduce hunting pressure and other causes of mortality

Claire Mirande (ICF) reminded the meeting that if the Siberian crane numbers were to be successfully increased, then mortality rates had to be drastically reduced. Unfortunately, no progress had been achieved in compiling a list of hunting seasons in the Range States, and it was suggested that the Europe, Africa and Middle East office of Wetlands International might be approached again to do this exercise (in keeping with the undertaking made by the WI representative at the previous meeting). In view of the threat to Siberian cranes, efforts should be made to try to adjust hunting seasons to avoid coincidence with Siberian crane migration.

In the Russian Federation, the spring hunting season in many key areas had been abolished. Many hunters and hunters-organisations participated in the Conservation Union and worked conscientiously to complete and return reports. The Crane Working Group had also been resurrected and counted many hunters and heads of clubs among its membership.

In Pakistan, negotiations with local communities around Zhob had proved difficult concerning a ban on hunting. The Government had however banned hunting cranes throughout the country. In the North West Frontier Province, there was a proposal to increase hunting fees from 500 Rupees to 5000 Rupees. Work was still progressing on the establishment of community reserves. Pakistan had concentrated on hunting and conservation committees, which had been established in villages in the North West Frontier Province along the Kurram Valley. The provincial government was helping by providing printed material. Schools were visited regularly and information was broadcast on TV networks. Plans were being developed to establish an information centre to coordinate the message to hunters and display captive cranes.

Uzbekistan had already outlawed the hunting of cranes and was about to ratify the Ramsar Convention, which would lead to more suitable habitat being protected. The Azerbaijan State Committee had also issued a decree to enforce protection measures and was carrying out surveys along migration routes. Hunting seasons in Azerbaijan were already adjusted to take account of environmental conditions, such as water levels.

Activity: Strengthen national legislation and regulations

In the Russian Federation, local laws in all three main regions had been updated to comply with federal legislation. A new federal hunting law was currently in parliament and the All Russian Research Institute was heavily involved in the consultation process. The bill's second reading was due to take

place in the autumn of 2001. It was not proposed to introduce a blanket ban on hunting in the spring, but regions would have discretion to decide, dependent on local circumstances.

In Pakistan, a new wetlands policy was being drafted and a review of the wildlife protection legislation was under way. Responsibility for many aspects of conservation policy (although not for migratory species) was being devolved from the regional tier to the local tier of government; the repercussions of this change were still unclear. In India too, wetlands policy and existing wildlife legislation were being re-examined. The Wildlife Act was to be amended and stricter penalties were to be introduced. Although hunting was prohibited, counteracting poaching was still necessary. The message of sustainable use seemed to be understood and many farmers were actively supporting bird conservation efforts.

Uzbekistan had abolished the spring hunting season and the autumn season was flexible. Special provisions applied along key rivers. In Azerbaijan, two acts had been passed to protect wild animals (in 1999) and habitats (in 2000). Resources to implement the measures were however scarce.

Activity: Continue cross-fostering

In 1999 twenty juveniles were reared in Russia from 25 eggs, including six donated by ICF. At Kunavat, two Siberian crane eggs were placed in Common crane nests and two chicks were released. It had proved impossible to follow up results from the cross-fostering attempts, but two Siberian cranes released in Kunavat and four from Tyumen had migrated. One disappeared before the migration season. In 2000, further birds were released and more cross-fostering was attempted. One wild pair accepted an egg placed in their nest. Of the juveniles released, all successfully started off on their migration, but further data were sporadic rather than systematic. One cross-fostered bird released south of Tyumen, three years before, was sighted again. Financial and technical problems had meant that helicopter survey work was less extensive than in the past.

No alternative small aircraft (cheaper than helicopters) were presently available, apparently as a result of the break-up of the Aeroflot company. A French film company had been able to provide some support, and effort had been concentrated in known areas rather than on surveys in new sites. The cost of hiring the helicopter had come down (\$800 per hour compared with a peak of \$1200), but only six hours had been spent in the air, against an optimal 30-40 hours. It was considered regrettable that a good programme had been hampered by lack of equipment.

It was deemed important in future to discover the juveniles-wintering grounds, as the birds did not reach Iran but did return to the nesting grounds.

Activity: Conduct migration studies

In India, PTT transmitters had been placed on Common cranes at Keoladeo National Park and these had been tracked back to southwestern Siberia, near sites where Siberian cranes had been released. It was therefore hoped that Siberian cranes might follow Common cranes to Keoladeo. Because of the exclusion of the Central population from the GEF wetlands project, continuation of this work under the CMS Memorandum of Understanding was important. In India, the Aligarh Muslim University was carrying out research. The Wild Bird Society of Japan was active in Gujarat and PTT work was being carried out on other species in Assam. Dr. Archibald pointed out that a number of birds had been released along the flyway of the Central population and they had all disappeared. As the route of the flyway was known reasonably well, he suggested that more time and effort should be placed on finding out the reasons for

the population's decline and counteracting threats identified. Survey work was considered to be a priority for Azerbaijan which was crossed by many crane species on migration.

Activity: Establish a Siberian Crane flock at Keoladeo National Park for education / research purposes

A proposal to establish a captive flock at Keoladeo had been made at the Third Range States meeting in Ramsar in 1998, but permission from the Government had not been obtained to build the necessary enclosure within the grounds because it was considered contrary to the aims of the park.

OBJECTIVE 3. ENHANCE INTERNATIONAL COOPERATION

Activity: Organize regular meetings of Range States

The CMS Secretariat had made provision in the Convention's budget for the present MoU Range State meeting, which was taking place about two and a half years after the last one. Ideally there should be an interval of two years between meetings. CMS had continued to facilitate the attendance of experts and official representatives from most of the Range States. However, budgetary and policy constraints meant that the Convention could sponsor only one technical expert from countries ranked relatively high on the United Nations scale of assessments, which is used to determine eligibility for sponsorship. It was hoped that the Governments concerned would be able to find the resources to support the attendance of their official representative, and in this way a broad area of interests could be represented. With advance knowledge that the next Range State meeting should take place around the middle of 2003, there was ample time to make the necessary budgetary justifications. This concerned China, India, Islamic Republic of Iran and Russian Federation, in particular.

It was clarified that, of course, it was for the Governments to decide whom they wished to send to the meetings, taking into account the expertise needed to deal with the subject matter. In view of the infrequency of meetings and turn-over in personnel, the Secretariat considered it useful however to remind Governments of who had attended meetings in the past, in order to try to ensure a measure of continuity.

National representatives were asked by the Secretariat to confirm, as soon as possible after the meeting, the names of the national government focal points and technical experts. The following Range States and participating organizations were already able to confirm their representatives:

COUNTRY / ORGANISATION	OFFICIAL REPRESENTATIVE	TECHNICAL EXPERT
China	Zhang Dehui	Qian Fawen
India		Wildlife Institute of India
Mongolia	Natsagdorjin Tseveenmyadag	N. Tseveenmyadag
Russian Federation Western/Central Population Eastern Population	Alexander Sorokin	Anastassia Shilina Maria Vladimirtseva
Uzbekistan	Adiljon Atadjanov	A. Djalaliddin Azimov
ICF	Not applicable	Claire Mirande

Activity: Improve exchange of information and technical expertise

Exchange of basic information was considered crucial to this collaborative effort. All delegates were urged, for example, to ensure that neighbouring countries and ICF were informed when the Siberian cranes left the nesting grounds, wintering grounds or stop-over sites. Arrangements should also be made for sufficient back-up during absences if key staff were engaged in field work at important times, to ensure that the chain of communication remained intact. With the exception of Yuri Markin, at Oka Nature Reserve, all participants appeared to have access to e-mail, although not entirely reliable in some cases.

The Secretariat reported that it had not been able to complete the composite report for the year 1999, as not all countries had provided national data. In an attempt to make the task of reporting progress on implementation of the Conservation Plan easier, a questionnaire had been designed and had been used as the basis of requesting information in advance of the present meeting. Most delegations had responded favourably to the questionnaire, but some felt that more space should be provided for free text and detailed explanations.

Activity: Fund-raising for a comprehensive conservation programme

In the Russian Federation, other small-scale fund-raising efforts included donations from the Sterkh Foundation, which had provided \$25,000 for Dr. Sorokin's work and \$25,000 for two years from the French film company, Galatee. The Tyumen Oblast authorities had provided in-kind support in terms of staff time and equipment. Some money donated by industry to an ecological fund had been used. National government provided regular donations and WWF ran a number of small projects and funded NGO work. The provincial authorities co-operated well with NGOs, but there were rules to ensure that grant funding was rotated.

In India, both NGOs and the Keoladeo National Park received funding, but the Government had to ensure an equitable distribution of support. Keoladeo fared well against strong competition.

ICF noted that it could only provide grants if it was itself successful with fund-raising. ICF had provided a \$2000 grant to help with education work in Uzbekistan. A great deal of time had been spent on preparing the GEF proposal, which was ICF's first venture in trying to secure such a large grant. Funds had also been obtained from the Kohler Foundation as well as practical support from the CBCC. International companies, particularly those involved in mineral exploration, such as Chevron and Amoco, were potential donors. All national representatives were urged to make further efforts to attract more support. Mr. Geer Scheres (CBCC) explained that his organization provided funding for breeding centres to help maintain captive populations both in institutions and in the countries of origin. Travel grants were also available to enable representatives to attend training courses and meetings.

Mr. Dave Ferguson reported that the United States had been directly and indirectly involved in Siberian crane research projects through its funding of projects with the Bombay Natural History Society and at Keoladeo concerning contaminants in birds of prey. These birds seemed particularly sensitive to chemical contaminants, but other species sharing the same habitat were also vulnerable, including Sarus cranes. The United States Fish and Wildlife Service (USFWS) was also cooperating with the WBSJ in PTT work. The USFWS has a budget line to fund projects aimed at key species and habitat decline. It was possible that this scheme would be extended to cover cranes.

Dr. Archibald mentioned a huge donation made by Ted Turner to the United Nations, which was being administered through a foundation. He suggested that every encouragement

should be given to securing World Heritage Site status to important habitats for cranes, such as Yakutia, which then might be eligible for grants from this source via UNESCO.

INTRODUCTION TO THE EASTERN POPULATION

Before leaving this agenda item, which focussed on reviewing activities already included in the Conservation Plan, Range States of the Eastern Population of Siberian cranes were invited to give an overview of the situation in their countries.

Zhang Dehui presented an overview of activities being undertaken in China at a local and national level. The State Forestry Administration (SFA) had overall responsibility and had completed a national plan for crane conservation and an examination of how it was carrying out its duties. China had produced a national list of protected species with scientific and economic value. Surveys carried out by the National Bird Banding Centre were supported by the SFA.

A large number of sites had been proposed for inclusion in the GEF project in China. The most important was Poyang Lake, where the provincial government was considering ways to increase the percentage of the lake under protection, especially the known wintering areas of the cranes. A separate GEF project was dealing with management of nature reserves. In the wake of the 1998 floods, the Government was carrying out extensive wetland restoration projects. Local people were being employed as rangers in one reserve and a crane festival at another helped increase people's interest in conservation work. Research was being carried out on breeding Siberian cranes in captivity. The most recent census data indicated that the Siberian crane population was approximately 3,000 individuals.

Nikolai Germogenov explained the work of his organisation in Yakutia, Russian Federation. The institute was responsible for research and conservation of wild animals. Regarding Siberian cranes, a number of attempts to fit PTTs and identification markings had been undertaken. In total, 97 pairs had been located within an area of 7500 km². (approximately one tenth of the total area). As well as scientific papers, a brochure had been published and a book, 'Ecology and Conservation of the Siberian crane in Yakutia' was in preparation. WWF was active in two key sites and the nomination of the Kytalyk reserve as a World Heritage Site was being prepared.

Dr. Tseveenmyadag explained that six species of cranes were found in Mongolia. Siberian cranes were known to cross Mongolian territory on their migration. Increased awareness had led to an increase in the number of sightings, with 16 reported in the 1999-2000 season, mainly flying in groups of between three and five birds. Cranes were highly revered in Mongolian culture and were therefore unlikely to be hunted or shot.

Agenda Item 4: Development of the Work Programme for 2001-2003

The discussion of the work programme for the balance of 2001 through 2003 was divided into six thematic areas, each with a facilitator, as follows: (1) Survey requirements (Alexander Sorokin); (2) Releases (Anastasia Shilina); (3) Captive breeding (Geer Scheres); (4) Research (Claire Mirande); (5) Public awareness and education (Mumtaz Malik); and (6) Coordination of information exchange (Elena Ilyashenko).

The essential points raised in the presentations were circulated to the separate Flyway/Population Working Groups to ensure that appropriate consideration was given to them in the preparation of the Conservation Plans for each population.

THEMATIC ELEMENTS

(1) *Survey requirements*

Alexander Sorokin concentrated on the key areas where survey work needed to be carried out, stressing that much depended on the availability of suitable aircraft and the necessary finances to meet the equipment rental costs. The nesting grounds at Kunovat were the top priority, and areas to the east of Kunovat would be surveyed if sufficient time in the air could be funded. Other areas of particular importance were the region between Kunovat and Uvat, the areas surrounding the core nesting grounds in Yakutia, an area to the west of the Urals where reports of Siberian cranes needed to be investigated, and potential wintering grounds of the Central population. Reports had been received of Siberian cranes being sighted in Jordan, and it would be interesting to follow this up and, if confirmed, to establish from which nesting grounds these birds originated.

In terms of survey techniques, light aircraft and helicopter were preferred, although high prices were a deterrent. There was considerable potential in developing the use of micro-light aircraft. Questionnaires would continue to be distributed in advance in survey areas, in order to use local information provided by hunters and other inhabitants to focus effort in the most promising areas. Groundwork would continue in the wintering areas where the terrain was more accessible.

(2) *Releases*

Anastasia Shilina reported that over one hundred chicks reared by various methods had been released since 1992. Techniques included Acostume-rearing® (chicks reared by people wearing white overalls and a crane puppet glove to avoid imprinting the chicks on humans); cross-fostering (where Siberian crane eggs were placed in the nests of other crane species, which then reared the chicks) and parent-rearing. Techniques used in the United States to teach cranes how to migrate, by encouraging them to follow a micro-light aircraft, could be adapted and possibly combined with airlifting cranes to wintering grounds. Releasing birds in small numbers in staging grounds, where they tended to follow other migrating cranes, had proved more successful than releasing them in the wintering grounds. Unfortunately, the number of PTT sets available had been limited, and few of the released birds had been tracked. The unreliability of PTT equipment was also a problem.

(3) *Captive breeding*

Geer Scheres spoke on the subject of captive breeding, which was a useful instrument to supplement *in situ* conservation work for critically endangered species, as it helped maintain numbers and genetic diversity. The very low numbers of wild birds in the Western and Central populations could be augmented by releasing specimens originating from the captive breeding programmes in Oka, ICF and the CBCC, which together maintained a flock of about 120 birds which were receiving expert care. These establishments could also produce eggs for cross-fostering programmes and birds to be used for educational purposes. He stressed that comprehensive follow-up work was required to ensure the survival in the wild of greater numbers of captive-bred birds.

(4) *Research*

Claire Mirande concentrated on key areas of research. Surveys using PTTs were important, with due consideration given to the best type of equipment. Weight, reliability, longevity and cost were the decisive factors in determining which PTT equipment to use. Techniques in conservation work pioneered in other species could be adapted, such as the use of micro-light aircraft to teach cranes migration routes and voice-printing to enable recognition of individual birds, to help with tracking.

Ecological studies were being carried out in Yakutia and at Poyang Lake where the inter-relationship between water levels and waterbirds was being examined. Climate change and heavy metal poisoning were also being studied, as well as factors leading cranes to use certain sites and habitats in preference to others.

(5) *Public awareness and education*

Dr. Malik introduced the subject of public awareness and education, identifying a number of key partners for conservationists. These were:

- \$ Government agencies (including agriculture and planning agencies, the judiciary and law enforcement agencies);
- \$ the general public, who should be reached through the media;
- \$ children, who should be encouraged to form conservation clubs at school and participate in art and essay or poetry writing competitions (their interest could also be awakened through field trips);
- \$ hunters, whose presence on the ground could be both a force for good and bad developments but, when persuaded to cooperate, were useful allies; and
- \$ companies, who needed to be persuaded to adopt environmentally friendly practices, and also where possible to act as sponsors for conservation work.

(6) *Coordination of information exchange*

Elena Ilyashenko outlined the key elements necessary for a properly coordinated exchange of information. As well as technical considerations, such as efficiency of e-mail services in various countries, structures needed to be put in place for communication. Key contact points needed to be identified so that Government officials, technical experts and field workers in the reserves were made aware of developments as soon as possible. Regular newsletters were a traditional method of communication, but interactive web-sites were becoming more and more popular. (Dr. Archibald mentioned the South African AGrus Grapevine® which allowed the web site visitor to enter information.) Claire Mirande found that it was often necessary to prompt people to visit web-sites, but this was much easier with the advent and spread of e-mail. In Afghanistan, where electronic communication systems were less frequent, word of mouth was still the most effective way of spreading the message, and community and religious leaders were important figures to win over.

POPULATION WORKING GROUPS

The meeting divided into working groups covering the Western, Central and Eastern populations. These were facilitated by Crawford Prentice, George Archibald and Jim Harris respectively. Their task was to revise – or in the case of the Eastern population, elaborate – a programme of activities for the forthcoming two and a half years. Many of the activities contained in the Plan adopted at Ramsar in December 1998 would remain valid, while other items could be deleted and new items added. A fourth major objective (AProtect and manage habitat®) was added to each component of the Conservation Plan.

It was also agreed that each activity should be assigned a priority rating, to help with the decisions about the allocation of resources, with A1® signifying Aurgent®, A2® signifying Aimportant® and A3® signifying Ato be undertaken when resources allow®. It was noted that it was unrealistic to expect every action to be completed during the two-year period for which the Conservation Plan was adopted, and that many activities would carry on over a longer period.

Eastern Population

A conservation plan was developed for the Eastern population, to take account of the extension of the Memorandum to cover the Eastern flyway, and the participation of China and Mongolia. The management and protection of habitat were considered the most important activity and it was expected that the GEF project would contribute significantly. China intended to extend the legal protection in and around Poyang Lake. Management plans would be developed for Keerqin, Momoge and Xianghai. In Eastern Siberia, two small territories in the taiga would be targeted (east of Alazeya) and a management plan developed for Kytalyk.

In China, further consideration would be given to creating buffer zones around Poyang Lake and further baseline surveys would be conducted at Keerqin and Momoge. Further investigations would be carried out into insect control at Xianghai and Keerqin, where damage was being caused to elm trees and other plants. Crane monitoring would be carried out at all sites. Alternative livelihood plans would also be developed as part of site-specific community development plans in conjunction with buffer zone schemes. Staff training would be undertaken in five key sites. Considerable infrastructure improvements were planned for Keerqin and Momoge.

In Mongolia, a management plan for a new reserve at Onon-Bajinsky was being drawn up. Action was being taken in the buffer zones surrounding the national park; wardens were guarding the site and educational programmes were being instigated. Bayan-Nuur was to be incorporated into the national park. Annual ground surveys were to form the basis of national park management plans.

Public education efforts would be continued using the ICF/CMS video and other appropriate footage. ICF agreed to send the Russian language version of the video to Dr. Germogenov and to Mongolia. Although hunting was considered to be less of a factor for the Eastern population, the mass media would be used to publicize conservation activities and encourage sightings to be reported, especially along the migration route and in the taiga in Russia and in the area between Poyang and the Yellow River Delta in China. The Northeast Asian Crane Site Network would discuss the use of a standard reporting form. Existing formats would be examined and the new version would attempt to address all the points and concerns raised.

Attempts would be made to fit PTTs on 5 to 8 wild juvenile Siberian cranes in the late summer 2001 in Yakutia with a view to finding more summer sites, focusing on the Yana river. ICF would try to arrange for the satellite information to be retrieved at discount prices. In China, efforts would concentrate on the migration routes leading to Poyang Lake. Regulations concerning crane conservation would continue to be strictly enforced, and in China it was hoped to establish more stations where public information could be distributed and the problems of poisoning highlighted. The Eastern population would continue to be monitored and censuses carried out. The reasons for the fluctuating number of juveniles (ranging from 6-18%) would be investigated.

Attention would be paid to coordination of work in different fora and, to the extent possible, the focal point for various initiatives would be the same person (especially the GEF project and the CMS MoU). The Northeast Asian Crane Site Network would provide the basis for flyway coordination for the Eastern population as all three participating Range States were involved in this forum. Countries represented along the eastern flyway would institute a series of exchange visits, with plans already underway for Chinese and Mongolian experts to visit Kytalyk and for two Russian experts to visit the stopover sites in China in April 2002.

Western Population

The video prepared by the *Sterkh Foundation* would be distributed and broadcast in addition to material provided by ICF. Azerbaijan would adapt the questionnaires used in Kazakhstan and Russia. Attempts would be made to obtain air-time on television to highlight crane conservation immediately before the migration.

The authorities in Iran would notify colleagues in Azerbaijan when the birds left the winter grounds and full use would be made of the Flyway officer in this regard. Liaison would also be maintained with experts in Dagestan. All Range States agreed to alert colleagues as soon as sightings were made, and Kazakhstan undertook to adopt a systematic approach to investigating new sites.

In the Russian Federation, ideally as many as 50 hours would be spent conducting aerial surveys -- although 20 hours was probably more realistic. Contact would be maintained with the CBCC to see whether a light aircraft could be made available for the 2002 season. If funding could be secured, helicopter surveys would be conducted in the area west of the Urals. The PTT programme would continue at Kunavat and Uvat.

Ten cross-fostered and costume reared birds would be released. In Russia, existing programmes aimed at enhancing genetic diversity would carry on as before. Eggs produced at Oka would be used in 2001 and hopefully further eggs from the CBCC in 2002. Only two PTT sets were currently available.

The Flyway Officer would be assigned the task of assessing threats to cranes and would compile information about hunting seasons and evaluate the extent of the threat posed by hunting.

Central Population

The principal problem for the Central population was that it contained only two known birds, although it was suspected that others might winter somewhere other than Keoladeo. Funding for research was limited and the Central population had been excluded from the GEF project. Hunting was suspected of being the primary cause of the collapse of the population and this potential threat needed to be addressed if it were ever to recover. Hostilities in the region had also possibly contributed to the decline in numbers.

Claire Mirande reminded the meeting that the success of the project to restore Siberian crane populations depended on reducing mortality rates from their current 20% to less than 10%. The Western population appeared still to be in decline. Dr. Malik stressed that it was important for plans to be in place for when the crane populations had recovered.

It was considered important to screen the ICF/CMS video along the migration route in order to raise awareness. Material produced by the *Sterkh Foundation* was also suitable for education work; a version existed in English, and other countries were at liberty to translate it into other languages as required. Keoladeo National Park had achieved a great deal in raising awareness and might provide some ideas for the Crane Centre which Dr. Malik was proposing in Pakistan.

Occasional sightings of Siberian cranes had been reported: a pair at the GEF site of Lake Tanges in 2000, two at Naurzum in Kazakhstan and one in Afghanistan in 1998. The region also had populations of Common and Demoiselle cranes; the survival of these species was an indicator of how safe the flyway was for all crane species. PTTs could be fitted to other crane species to help determine migration routes and stop-over sites. This type of activity was being carried out

in Gujarat and in Assam on Common cranes. Further work was required to study the overlap of the Western and Central populations. It was considered unlikely that birds would use one migration one year and another route the next.

Other suitable habitats for wintering grounds needed to be identified. Just 100 km east of Keoladeo there were promising wetland sites, where older residents remember having seen Siberian cranes in the past. Traditionally managed agriculture land also provided good habitat for a flock of 4000 Sarus cranes, but this was being threatened by a modernisation programme. Possible crane habitat was also available in Baluchistan, Pakistan.

Agenda Item 5: Revision of the CMS Memorandum of Understanding

Extension of the Memorandum to Mongolia

Mr. Hykle reminded the meeting that a representative from Mongolia was participating in the activities of the Memorandum of Understanding for the first time. He invited the meeting to consider extending a formal invitation to Mongolia to join the MoU. This was approved unanimously and the Secretariat undertook to follow up the matter with the Mongolian authorities. This proposal would be tabled formally at the next meeting when delegates would be required to bring credentials to approve the necessary changes to the Memorandum.

Cracid Breeding and Conservation Center (CBCC)

Mr. Hykle recalled that two non-governmental organizations (ICF and WBSJ) were formally recognized as partners in the Memorandum. In recognition of the important international work being done by CBCC in supplying eggs for captive breeding programmes, it has been suggested that CBCC should also be invited to join the MoU. This proposal would also be tabled formally at the next meeting.

Agenda Item 6: Global Environment Facility (GEF) Project

Crawford Prentice gave a brief description of the GEF process. The PDF-B preparatory project had been completed and preparation of the full project brief was in the final stages prior to submission of the proposal to the GEF authorities. The overall budget for the project amounted to \$20 million, comprising a grant of \$10 million from GEF and a comparable amount in matching funding from the participating States and organizations. Participating countries were to continue their discussions on the project brief at a special session on Thursday, 24 May. He added that some revision of the scope of the proposal might be necessary, because of the ambitious range of activities proposed at the local, national and flyway level, dealing with site protection, legislation and capacity building.

He explained that the GEF project was consistent with Objectives 1 and 3 of the CMS MoU and qualified for GEF-funding under the coastal, marine and freshwater category. Because the focus was on ecosystem management, captive-breeding initiatives were ineligible for support under the project. It had been decided not to include the Central Population (with just two confirmed birds and seven Range States on the migration route) in the project, as this would have diminished its viability with the GEF. Other existing or planned initiatives were more appropriate for dealing with the Central Population. As it was, the four countries left (China, Islamic Republic of Iran, Kazakhstan, and Russian Federation) still meant that the project had an international feature uncommon in GEF proposals, which tended to deal with single countries. He added that the rather cumbersome title of the project (A Conservation Strategies for

Wetlands and Migration Corridors required by Siberian cranes and Other Migratory Waterbirds in Asia[®]) needed to be revised.

He stressed that the project could not address or solve every problem, but should be seen as part of the overall effort to improve the conservation status of Siberian cranes. The project would complement other initiatives, such as the Asia-Pacific Migratory Waterbird Strategy (2001-2005), the African-Eurasian Waterbird Agreement (AEWA) and its associated GEF project, the Central Asian Flyway initiative, the Caspian Environment Programme, and various national GEF wetlands projects in Iran, China, Kazakhstan and the Volga Delta. Efforts would be made to ensure cooperation and synergies, while avoiding duplication.

The Project adopted a three-tier approach, focusing on sites (currently at nineteen, the project was possibly being over-ambitious), national efforts and flyway cooperation. Work at site level would concentrate on legal protection, management plans, reducing human pressures, and stakeholder participation. At a national level, the key themes would be legal protection and education and awareness, while at the flyway level, capacity building and extending existing networks such as the Northeast Asia Crane Network would be the main activities.

Mr. Hykle suggested that in view of the positive experience in Baraboo of holding the CMS Range State and GEF Project Steering Committee meetings back-to-back, it would be useful to examine options for fully integrating the two meetings in the future, in order to maximize use of the available time and to economize on travel costs.

Agenda Item 7: Any other business

Habitat Selection by Cranes in Wisconsin

Jeb Barzen (ICF) presented the findings of research into the selection of habitat by cranes in Wisconsin, as a follow up to a field trip to the nearby town of Briggsville. The study had examined four levels of habitat: physical and geographical range; home range of an individual or social group; usage of various habitat components; and food items. A combination of wetlands, agricultural land and forestry determined the propensity of cranes to use a particular area. It was also significant whether corn was being and had recently been grown in particular fields.

Robert Bateman Poster

David Ferguson (USA) reported on progress concerning the production of a poster using a painting by the renowned Canadian wildlife artist, Robert Bateman. Certain rights to the painting had been given to ICF and the original painting had been sold, with the proceeds donated to crane conservation.

With regard to the production of a promotional poster, all Range States had been contacted and asked to provide some simple text, a slogan and key addresses. A postcard and a flyer would also be produced with supplementary information.

Six versions of the poster had been prepared in six language groups, for target audiences in the following countries: China (Mandarin and English); India (Hindi and English); Iran (Farsi), Kazakhstan-Turkmenistan-Uzbekistan (Russian); Pakistan-Afghanistan (Urdu, Pashto and English) and Russian Federation (Russian). The posters would be printed in India and sent to the Range States for distribution. A small working group led by Harsh Vardan and David Ferguson met to discuss final arrangements for completing the poster, which would be distributed to the Range States within six weeks.

It was suggested, as a separate activity, that a signed, professionally-framed print of the original poster be sent to State Presidents or other appropriate high-ranking dignitaries to raise the profile of Siberian crane conservation in each of the MoU signatory States. Additional publicity could be obtained by linking the presentation of the print to International Crane Day, in 2002. The CMS Secretariat undertook to develop the idea further in collaboration with ICF.

Next meeting of the Range States

Provisionally, it was agreed that the Fifth Meeting of Siberian crane Range States would take place in two years' time, with Kazakhstan suggested as the venue. Confirmation of the date and venue would follow in due course, once the CMS Secretariat had approached the Kazak authorities to seek their formal endorsement.

Agenda Item 8: Closure of the meeting

National representatives were invited to confirm their endorsement of the revised Conservation Plan, to be circulated in final form after the meeting. The Chinese delegation noted that they needed to consult with their authorities in Beijing before final approval could be given to the Conservation Plan.

The Secretariat undertook to finalize and distribute a report of the meeting, by August 2001.

After the customary expressions of thanks to those who had helped organise the meeting, Mr. Harris closed the session on 24 May 2001.



Memorandum of Understanding concerning
Conservation Measures for the Siberian Crane
4th Meeting of the Range States, 20-24 May 2001



Sponsored by the
Convention on the Conservation of Migratory Species of Wild Animals
Held at the International Crane Foundation
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**Memorandum of Understanding concerning
Conservation Measures for the Siberian Crane
4th Meeting of the Range States, 20-24 May 2001**



Provisional Agenda

1. Opening remarks (Host Organization and Secretariat)
2. Adoption of the agenda and work programme
3. Detailed review of implementation of the Conservation Plan for 1999-2000

Main objectives:

- 1) Reduce mortality
 - 2) Increase numbers and genetic diversity
 - 3) Enhance international co-operation
4. Development of work programme for 2001-2002
 - a) Survey requirements
 - b) Releases
 - c) PTT monitoring
 - d) Related studies on common cranes
 - e) Education needs
 - f) Co-ordination of information exchange
 - g) New objective(s)
 5. Revision of the CMS Memorandum of Understanding
 6. Global Environment Facility (GEF) project
 7. Any other business
 8. Closure of the meeting