

## Part V: Reference materials

**THE UNEP/GEF SIBERIAN CRANE WETLANDS PROJECT  
SUMMARY:  
CONSERVATION OF A NETWORK OF FLYWAY WETLANDS USING  
THE SIBERIAN CRANE AS A FLAGSHIP SPECIES**

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***Background***

Over the past 25 years, the International Crane Foundation (ICF) has been working with a network of experts in the countries home to the Siberian Crane to discover basic information including the location of its breeding grounds, the migration routes it uses, and the gauntlet of threats it encounters. This research has resulted in a good understanding of the life history of the species.

The Siberian Crane *Grus leucogeranus* is a critically endangered species that is dependent upon the existence of large open areas of shallow wetland habitats along its migration routes. It is the most specialized of the cranes, utilizing shallow wetland habitats at all stages of its migration cycle. It is Critically Endangered with a world population of less than 3000 individuals, the vast majority in the Eastern population with only a few remaining birds in Western/Central Asia. The eastern population breeds in northeastern Siberia and winters some 3100 miles to the south, primarily at Poyang Lake Basin in Central China; the western and central populations breed in northwestern Siberia in the Ob River basin (see Figure 1). The western flock winters in the south Caspian lowlands of Iran, while the central flock wintered in northern India near Bharatpur until recently, a journey of 3,700 miles.

Efforts for the conservation and recovery of this critically endangered species gained momentum in recent years through the Convention on the Conservation of Migratory Species (CMS) *Memorandum of Understanding Concerning Conservation Measures for the Siberian Crane*. These measures have included substantial investment in captive breeding and release programmes, where population levels have declined to unviable levels, in combination with habitat conservation and other measures.

***Global Environment Facility Project***

The next stage in this prolonged conservation effort was the development of a Global Environment Facility (GEF) Project under the United Nations Environment Programme (UNEP) coordinated by ICF in cooperation with CMS, and the governments of the People's Republic of China, Islamic Republic of Iran, Republic of Kazakhstan and Russian Federation. The project focuses specifically on the conservation of the international network of wetlands upon which the Siberian Crane depends, together with a wide range of other wetland biodiversity. The results of this project will provide a basis for the expansion of the wetland site networks and wider application of the approaches that have been developed in each participating country.

The project area covers the flyways used by populations of the Siberian Crane in Western / Central Asia and in East Asia, targeting key wetland sites located in China, Iran, Kazakhstan and Russia (see Figure 1). It does not cover the Central Asian-Indian Flyway of the Siberian Crane outside Russia and Kazakhstan where the species is virtually extinct, owing to the intractable nature of the threats to the few remaining birds. Parallel activities under the CMS MoU are addressing this population.

The project intervention strategy reflects the life history of the Siberian Crane, in that the selection of project sites covers the main breeding, wintering and staging areas for both western and eastern populations.

### ***Global Biodiversity Importance***

The wetlands that have been identified as sites for project intervention all meet the Ramsar Convention's criteria for Wetlands of International Importance and many have existing international designations (see Table 1). The flyways used by the Siberian Cranes are shared with many other species of migratory waterbirds, including at least 32 globally threatened waterbird species, and thus have significance far beyond conservation of the Siberian Crane alone. These flyway site networks sustain millions of migratory waterbirds along their migration routes, which span the Asian continent between northern breeding grounds and southern wintering areas. These wetlands are also of considerable socio-economic and cultural importance, supporting the livelihoods of local communities, as well as contributing to regional and national economic development in many cases.

### ***Project Aims and Activities***

The project is designed to improve the ecological integrity of a network of globally important wetlands that are of critical importance for migratory waterbirds and other wetland biodiversity, using the globally threatened Siberian Crane as a flagship for this effort. The project is undertaking actions principally at three levels, described below.

#### *(a) Site level*

The project is addressing threats to key wetlands of international importance that are of critical importance for the conservation of the Siberian Crane and other migratory waterbirds (see Table 1). A range of measures is being undertaken at each site in relation to its specific conditions in order to ensure its future ecological integrity. These measures involve stakeholder participation, and contribute to local community development through pilot sustainable livelihood projects where these are a priority. Site activities include strengthening legal protection and enforcement, developing and implementing site management plans, capacity building for site management, environmental education and public awareness programmes and alternative livelihood projects.

#### *(b) National level*

The project is undertaking specific actions to strengthen the national legislative, policy and planning framework for wetland and waterbird conservation, strengthen capacity for international cooperation, and national activities that support site conservation such as monitoring, training, education and public awareness programmes. These activities are being coordinated with other national wetlands projects and programmes and are strengthening mechanisms for integrated wetland management through inter-sectoral collaboration. In China, flyway coordination within the country is a priority.

#### *(c) International level*

The project is focusing on building capacity for the coordination of flyway networks of wetlands along the West/Central and East Asian flyways for migratory waterbirds, led by sites of importance for the flagship species. These networks are being carefully coordinated with other flyway conservation initiatives (such as the East Asia – Australasia Flyway Partnership, Central Asian Flyway initiative and Africa – Eurasia Waterbird Agreement (AEWA) under CMS, and Crane Working Group of Eurasia) in order to form an integrated programme, contributing significantly towards the implementation of international conventions and in delivering activities under the Conservation Plans of the CMS *Memorandum of Understanding Concerning*

*Conservation Measures for the Siberian Crane.* This component is accompanied by applied field research in support of flyway conservation.

Specifically, a regional coordination centre has been established in Moscow, which links with the above-mentioned initiatives. The project is also strengthening capacity for flyway coordination in China and Yakutia and facilitating an enhanced level of flyway conservation activities in line with existing plans and institutional frameworks.

**Further Information**

For further information on the project, please see the following websites:

[www.scwp.info](http://www.scwp.info) (project website)

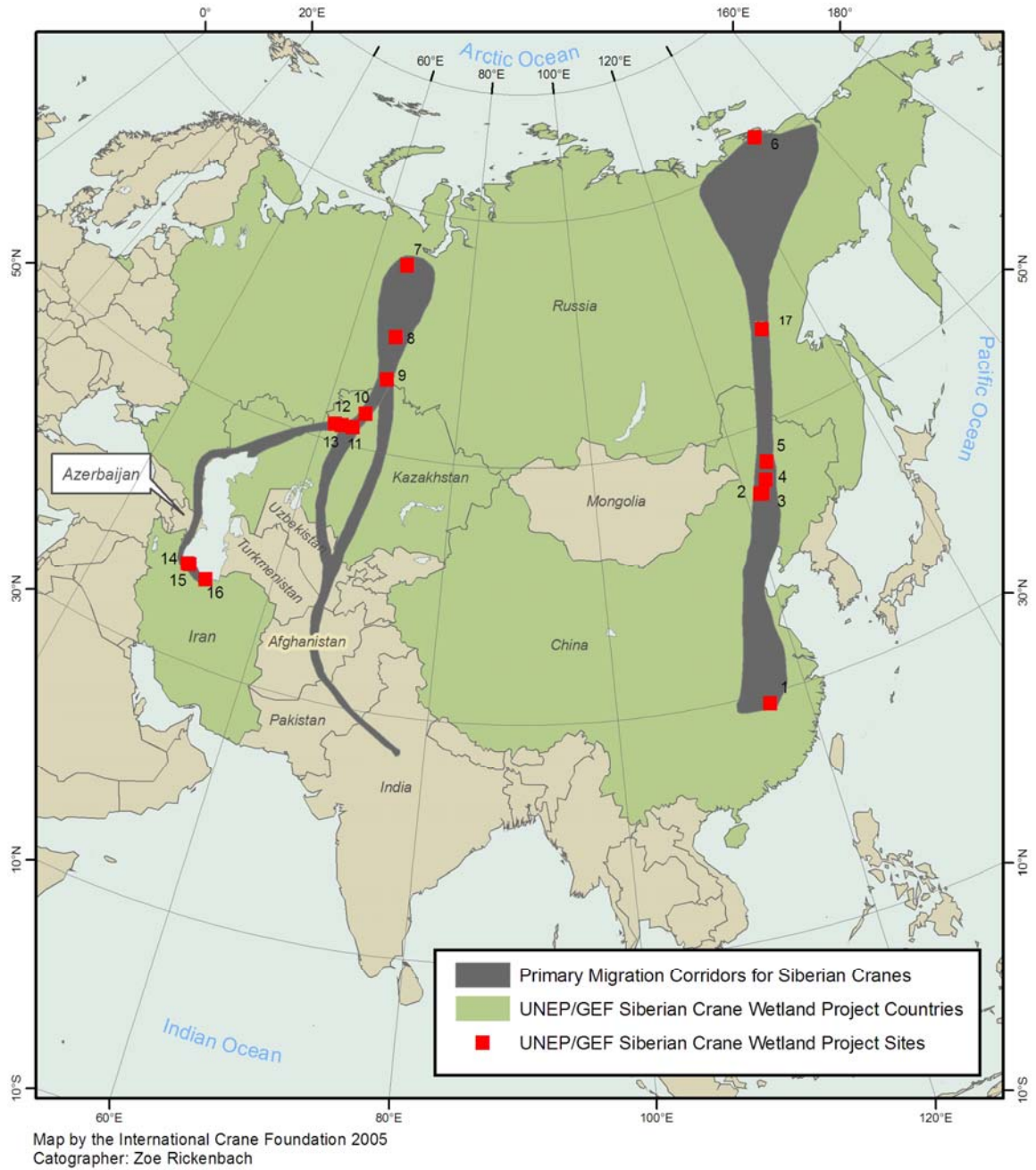
[www.sibeflyway.org](http://www.sibeflyway.org) (Siberian Crane Flyway Coordination website)

[www.savingcranes.org](http://www.savingcranes.org) (ICF website)

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**Figure 6. The UNEP/GEF Siberian Crane Wetlands Project Sites**



**Note: see Table 1 for site information**

TABLE 1: PROTECTION STATUS AND INTERNATIONAL SIGNIFICANCE OF WETLANDS SELECTED AS PROJECT SITES

| Country (nos. refer to location in Fig. 6) | Site Name                               | International Recognition & Designations              | National Protection Status                  | IUCN Protected Area Category | Selected List of Rare or Threatened Species of International Importance  |
|--|---|---|---|------------------------------|--|
| China-1                                    | Poyang Lake Basin (Jiangxi)             | Ramsar (part), NEACSN, Global 200 Ecoregion, AWI, IBA | NNR (part), MAB network site                | IV (part)                    | Oriental White Stork, Black-faced Spoonbill, Lesser White-fronted Goose, Swan Goose, Mandarin Duck, Baer's Pochard, Siberian Crane, Hooded Crane, White-naped Crane, Swinhoe's Rail, Grey-headed Lapwing, Saunders's Gull, Great Bustard ( <i>Otis tarda</i> ), Japanese Marsh Warbler ( <i>Megalurus pryori</i> ) |
| China-2                                    | Xianghai Nature Reserve (Jilin)         | Ramsar, AWI NEACSN, IBA                               | NNR, MAB network site                       | IV                           | Oriental White Stork, Swan Goose, Baer's Pochard, Siberian Crane, Hooded Crane, Red-crowned Crane, White-naped Crane, Grey-headed Lapwing, Far Eastern Curlew, Asian Dowitcher, Great Bustard, Jankowski's Bunting ( <i>Emberiza jankowski</i> )   |
| China-3                                    | Momoge Nature Reserve (Jilin)           | AWI, IBA  | NNR   | IV                           | Oriental White Stork, Swan Goose, Baer's Pochard, Siberian Crane, Hooded Crane, Red-crowned Crane, White-naped Crane, Grey-headed Lapwing, Far Eastern Curlew, Asian Dowitcher, Great Bustard  |
| China-4                                    | Keerqin Nature Reserve (Inner Mongolia) | AWI, IBA  | NNR, MAB network site                       | IV                           | Oriental White Stork, Swan Goose, Baer's Pochard, Siberian Crane, Hooded Crane, Red-crowned Crane, White-naped Crane, Grey-headed Lapwing, Far Eastern Curlew, Asian Dowitcher, Great Bustard  |
| China-5                                    | Zhalong Nature Reserve (Heilongjiang)   | Ramsar, AWI NEACSN, IBA                               | NNR   | IV                           | Oriental White Stork, Black-headed Ibis, Swan Goose, Baer's Pochard, Siberian Crane, Hooded Crane, Red-crowned Crane, White-naped Crane, Grey-headed Lapwing, Far Eastern Curlew, Asian Dowitcher, Japanese Marsh Warbler  |
| Russia-6                                   | Kytalyk Resource Reserve                | NEACSN; proposed World Heritage Site; IBA             | Republic Resource Reserve                   | VI, IV (part)                | Siberian Crane, Lesser White-fronted Goose, Baikal Teal, Spectacled Eider, Steller's Eider, White-tailed Eagle<br>Mammal species – Polar Bear ( <i>Ursus maritimus</i> )<br>Fish species –Siberian Sturgeon, <i>Stenodus leucichthys</i> , <i>Coregonus lavaretus</i> , <i>C. nasus</i> , <i>C. peled</i>          |
| Russia-7                                   | Kunovat River Basin Wetlands            | Ramsar  | 3 Wildlife Refuges (zakazniks), Nature Park | VI, IV                       | Siberian Crane, Lesser White-fronted Goose, Red-breasted Goose   |

|               |   |  |  |                |   |
|---------------|---|--|--|----------------|---|
| Russia-8      | Konda and Aymka Rivers Basin (Uvat Region)                            |  | 2 Wildlife Refuges (zakazniks)                           | VI, IV         | Siberian Crane, Lesser White-fronted Goose, Red-breasted Goose, Slender-billed Curlew, Great Snipe, White-tailed Eagle, Imperial Eagle, Aquatic Warbler   |
| Russia-9      | Trans-boundary Wetlands in Tyumen and Kurgan Regions                  | Ramsar   | 5 Wildlife Refuges (zakazniks), 1 Nature Monument, temp. | IV, III (part) | Dalmatian Pelican, Siberian Crane, Lesser White-fronted Goose, Red-breasted Goose, White-headed Duck, Corncrake, Sociable Lapwing   |
| Kazakhstan-10 | Tyuntuygur Hollow – Zhanshura Lake                                    |  | None   | -              | Siberian Crane, Lesser White-fronted Goose, Red-breasted Goose, Little Bustard  |
| Kazakhstan-11 | Naurzum Lake System (including Sarykopa Lake System and Lake Kulagol) | Nominated Ramsar Site; Nominated World Heritage Site | Nature Reserve   | 1a             | Siberian Crane, Dalmatian Pelican, Lesser White-fronted Goose, Red-breasted Goose, White-headed Duck, Ferruginous Duck, White-tailed Eagle, Imperial Eagle, Little Bustard ( <i>Tetrax tetrax</i> )                   |
| Kazakhstan-12 | Zharsor and Urkash Lakes  |  | None   | -              | Siberian Crane?, Lesser White-fronted Goose, Red-breasted Goose, Ferruginous Duck, Little Bustard, Sociable Lapwing, White-tailed Eagle, Imperial Eagle   |
| Kazakhstan-13 | Kulykol Lake  |  | Local NHA  | IV             | Siberian Crane, Lesser White-fronted Goose, Red-breasted Goose, White-headed Duck, Sociable Lapwing, Little Bustard   |
| Iran-14       | Bujagh / Sefid Rud Delta  | Ramsar, IBA, MEWI                                    | National Park  | IV             | Dalmatian Pelican?, Pygmy Cormorant, Siberian Crane?, Lesser White-fronted Goose?, Red-breasted Goose, White-headed Duck, White-tailed Eagle, Imperial Eagle. Fish species – Sturgeon                                 |
| Iran-15       | Amirkelayeh & Rud Posht   | Ramsar, IBA, MEWI                                    | Wildlife Refuge (part)                                   | 1a (part)      | Pygmy Cormorant, Marbled Teal, Ferruginous Duck, White-tailed Eagle   |
| Iran-16       | Fereydoon Kenar, Ezbaran & Sorkhe Rud Damgahs                         | Ramsar, IBA, MIWE                                    | Non Shooting Area  | IV (part)      | Dalmatian Pelican and Pygmy Cormorant (occasional visitors), Siberian Crane, Lesser White-fronted Goose, Red-breasted Goose, White-tailed Eagle, Imperial Eagle, Greater Spotted Eagle, Great Snipe, Ferruginous Duck |
| Russia-17     | Middle Aldan Complex  |  | 4 Republic Resource Reserves                             | VI, IV         | Siberian Crane, Hooded Crane, Baikal Teal   |

**Key** - AWI: Asian Wetlands Inventory (Scott 1989); IBA: Important Bird Area (Evans 1994; BirdLife International 2004); MEWI: Middle East Wetlands Inventory (Scott 1995); NEACSN: NE Asia Crane Site Network (Chan 1999); Ramsar: Ramsar Site; NHA Non Hunting Area; NNR National Nature Reserve; MAB Man & Biosphere Reserve.