

Last Call for the Siberian Crane

A determined captive breeding effort must succeed for this stately bird to rise from the ashes of war

by George Archibald

Two magnificently sculpted cranes stand in the throne room of the emperor's summer palace in Beijing (Peking), China. The pair served the emperors as symbols of long life and happiness. Although the Chinese and other peoples have for centuries painted and sculpted cranes as harbingers of good fortune, the majestic birds could best serve the contemporary world as symbols of crisis.

The status of the Siberian crane (*Grus leucogeranus*) is particularly revealing. This endangered crane, intermediate in size between a sandhill

crane and a whooping crane, has a long, powerful beak and, except for black primary feathers and a bright red face, is snow white. Within recent memory, the cranes numbered in the thousands, but as of 1979/80 the species had been reduced to approximately 250 to 300 individuals.

The attrition of this species has not been a consequence of environmental problems on its breeding grounds, which are vast expanses of sparsely inhabited tundra in Siberia. Rather, the Siberian cranes have been pressed hard by hunting and wetland destruction along their migration routes and wintering range. Now the cranes' precarious hold on existence is threatened by violent political upheavals in the Near East.

Two populations of wild Siberian cranes remain. One group breeds in western Siberia and migrates in two flocks. One flock, numbering nine birds in 1978, winters in the Caspian lowlands, which traverse the northern border of Iran. Although Iran is predominantly a country of mountains and desert, the Caspian lowlands receive precipitation adequate to sustain cultivated crops, forests, and wetlands. In recent years Iran's Department of the Environment, under the inspired leadership of Eskandar Firouz, established several wetland sanctuaries for migratory birds. Ironically, I found the relict population of cranes utilizing flooded rice fields that are part of large duck-trapping complexes.

In an attempt to restock Siberian crane populations that have been extirpated, the International Crane Foundation (ICF), Iran's Department of the Environment, and the USSR Ministry of Agriculture in 1975 began a cooperative program to place Siberian crane eggs produced in captivity into the nests of wild common

cranes (*Grus grus*). The hope was that the common crane foster parents, nesting in wetlands in the western USSR, would teach their Siberian crane "offspring" the migration route to wintering areas in Iran. Since the Islamic revolution, however, the future of the foster-parenting project, the status of the relict flock of Siberian cranes, and the fate of the wetland sanctuaries is in question.

The second flock from the western Siberian crane population migrates 3,700 miles to winter at the Keoladeo Ghana Sanctuary in north-central India. These birds breed in one of the least populated areas of the world, and winter in one of the most densely populated. On the way, they stop to feed and rest at a large saline lake called Ab-i-Estada in Afghanistan, before continuing over the Hindu Kush Mountains to India. The cranes are hunted for food during their stopover in Afghanistan. As a result, this flock has declined from seventy-seven birds in 1970 to fifteen in the winter of 1980/81. In 1978 the Ministry of Agriculture of Afghanistan, in cooperation with the U.N.'s Food and Agriculture Organization and the World Wildlife Fund-International, proposed to establish Ab-i-Estada as a nature reserve and provide wardens to protect the cranes from poachers. Tragically, the recent outbreak of hostilities in Afghanistan has thwarted these conservation efforts. During a state of war, the protein packaged in a Siberian crane may spell survival for a tribesman in the backcountry.

The second, larger population of Siberian cranes, numbering about 200, breeds in eastern Siberia and winters on as yet undetermined wetlands in the basin of the Yangtze River in northeastern China. Chinese ornithologists are conducting ground sur-



George Archibald; International Crane Foundation

Cranes can be bought at food stalls in Afghan towns, above. Hunting, and the outbreak of hostilities in Afghanistan, could mean the demise of the Siberian cranes that winter in India, opposite.



veys to search for the wintering Siberian cranes and hope to initiate aerial surveys sometime this year. But if the wetlands used by this population are flooded by waters backed up from one of the three dams now planned along the Yangtze or if they are drained for agriculture before the birds are found, the prospects for this flock will be bleak.

George Archibald; International Crane Foundation

On the brighter side, the ICF, located in Baraboo, Wisconsin, and the Soviet Ministry of Agriculture have established a "species bank" of captive Siberian cranes. By collecting eggs from the wild, hatching them in incubators, and hand raising the resultant chicks, ICF has established a population of twelve individuals while the Soviets maintain thirteen

birds at their captive propagation center in the Oka State Nature Reserve about 200 miles southeast of Moscow.

In this era of environmental and political crises, captive breeding of Siberian cranes may offer the last hope for the survival of the species. When the smoke from the bombs clears, perhaps this great white bird will once again rise to command the skies. □



George H. Harrison

Stately in flight and on the ground, Siberian cranes annually undertake long migrations from their breeding areas in the Soviet Union to their wintering grounds in China, Iran, and in the Keoladeo Ghana Sanctuary in north-central India, below.

