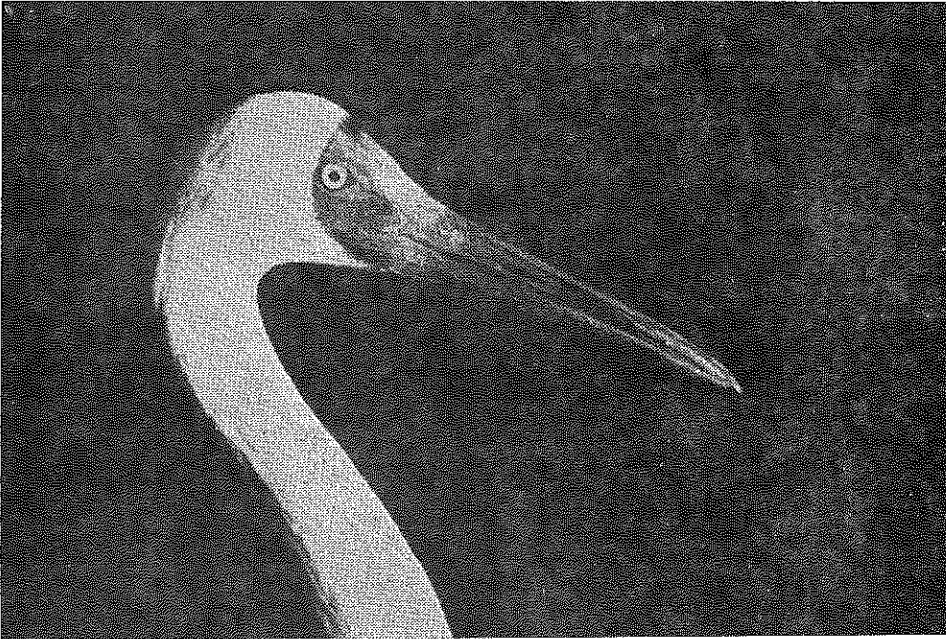


Siberian Cranes—great birds in peril

By Dr. Steven E Landfried, Public Affairs Officer, International Crane Foundation.



The Siberian Crane has bright yellow eyes and a large patch of bare, red skin on the forehead, which contrast with black wing tips and white feathers everywhere else, giving it a strikingly beautiful appearance. Pic. George Archibald.

In 1972, there were 77. By 1980, the number had declined to 33. How many Siberian cranes will arrive this winter at the famous Keoladeo Ghana Sanctuary in Bharatpur is a matter of much speculation. Some have questioned whether any Siberian cranes will have arrived in India by the time this article is read. Others fear that numbers will have been so drastically reduced, that extinction is inevitable during the 1980's.

Since many people know little about these birds, several basic questions often arise: What are Siberian cranes? Where do they come from? Why are they in such danger? And, can anything be done to save them? Let's begin with their appearance. Many people have remarked that the attractiveness of a Siberian crane is only fully appreciated by first-hand observation. As the famous British ornithologist, Allan Octavian Hume noted a century ago: "No plate, that has ever been given of this species, does any justice to its extreme elegance of form, or to the dense snowy, swan-like character of its plumage. To judge by the pictures,

the bird appears a gaunt, gawky, ill-proportioned creature; whereas in reality, it is the lily of birds, and stand in what position it may, the entire outline of its form presents a series of the most graceful and harmonious curves." (1881). Bright yellow eyes and a large patch of bare, red skin on the forehead contrast with black wing tips and white feathers everywhere else—giving a Siberian crane a strikingly beautiful appearance. The adults stand approximately 4½ feet tall. Where do the Siberian cranes come from? The dwindling group that has come to India for thousands—if not millions—of years spends most of the year in the Soviet Union, somewhere in the wetlands of the Ob River basin. Most of this group winters in India, but a few others (8-9 birds) have been reported in Iran near the Caspian Sea. Along their 5,000 kilometer journey, the Siberian cranes halt at stops in southern Russia and Afghanistan.

Unlike the winter of 1979-80, when mild weather in the north and severe drought in India disrupted normal migration patterns,

Siberian cranes typically arrive at Bharatpur in late November or early December. They then spend about three months feeding and preparing for the long northerly trek. The spring migration usually commences in early March. Breeding is believed to occur in Siberia during May. A larger and rapidly declining eastern population of Siberian cranes is believed to follow a similar timetable in its migration from the Asian tundras of Yakutia to unknown wintering areas in China. Why are India's Siberian cranes in danger of extinction? First, human population pressures have seen the elimination—through draining or landfills—of suitable wetland habitats all along their international migration route. While in India and during migration, Siberian cranes feed primarily on fresh water sedge tubers *cyperus rotundus*. Unlike the abundant Indian Sarus and Eastern Common cranes with relatively diverse appetites, Siberian cranes rarely, if ever, feed in dry corn or wheat fields.

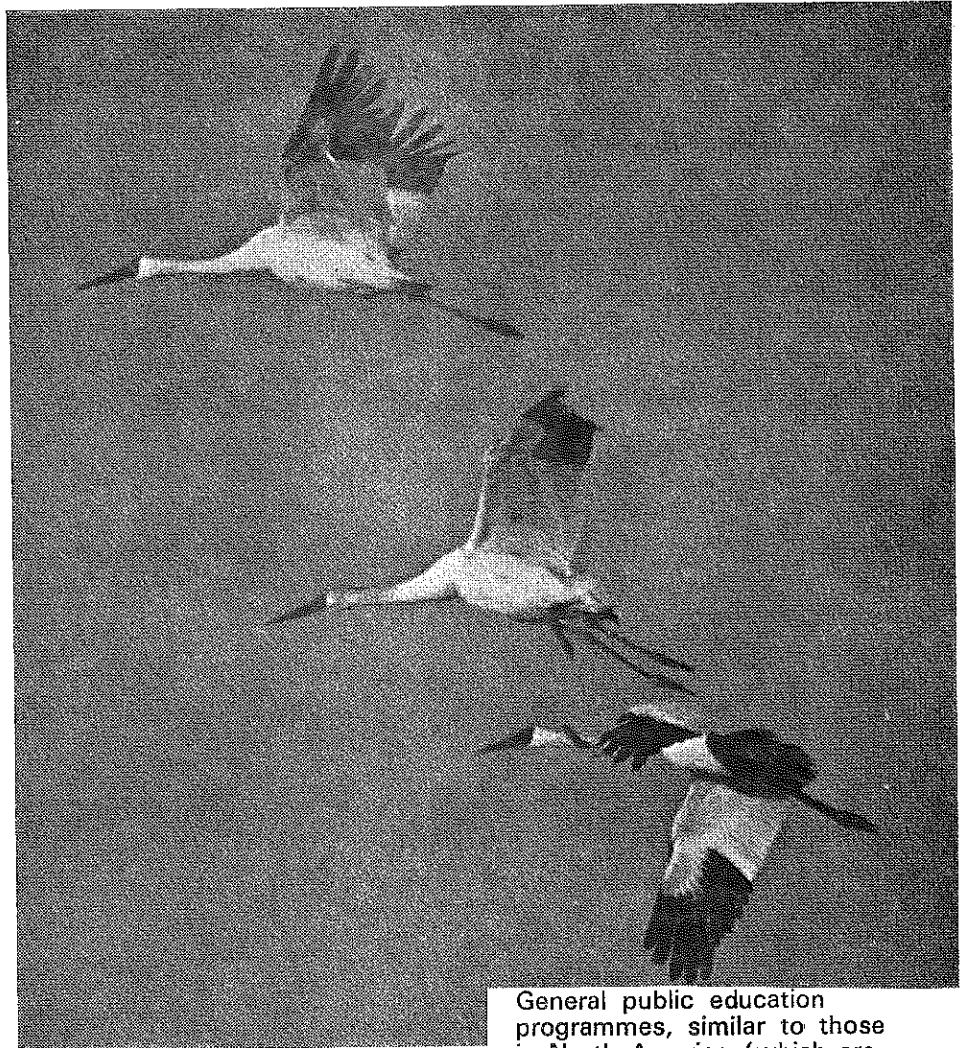
This makes them much less adaptable than their cousins in time of drought. The same can be said for when they arrive at traditional breeding, wintering, or stop-over areas and find a field or a polluted pond in place of a wetland marsh. As human populations continue to expand, development pressures on the remaining wetlands may eliminate the few undisturbed links in their chain of survival. While drainage of international wetlands has been a long-term reason for reductions of Siberian crane populations, hunting is probably the most serious problem at this time. Because hunting is believed minimal in the Soviet Union and India, the greatest hunting pressures probably occur in war-torn Afghanistan, and perhaps nearby Pakistan. For centuries, Muslim nomads in the area have hunted wildlife as a food source. The ravages of war have probably placed a greater than normal burden on wildlife. Because the nomads are essentially out-of-touch with many environmental education channels,

they are not apt to know that the great white cranes are verging on extinction. Virtually none are likely to know that Hume considered Siberian cranes "unfit for the table". But even if they did, many nomads may be so hungry that some food is better than none. As a result, the fact that a particular bird faces extinction may have little relevance to them at this or any time.

Nature, itself, is a third threat to Siberian cranes. In 1979, Bharatpur experienced its most prolonged and serious drought in many decades. The failure of the monsoon caught everyone by surprise. So, when two separate groups of Siberian cranes arrived at the Ghana Sanctuary in December 1979 and early January 1980, they found most of the jheels dried up and the sedge tubers impossible to dig out of the rock-hard ground. Although the drilling of several wells was authorised, only two or three were produced. But the resulting water arrived too late for the jheels to be flooded in time to make sufficient tubers available for excavation by the Siberian cranes. Unable to find enough food at the Ghana Sanctuary, the birds regularly flew away to unknown destinations. On only a few occasions was the full complement of 33 birds there at one time. Finally, the entire group had abandoned the sanctuary by the first week in February—nearly five weeks earlier than usual.

Whether the birds found suitable alternative food sites or sources is uncertain. In any event, nature undoubtedly dealt a lethal blow to those birds unable to find sufficient food to fortify them for the long flight north. Needless-to-say, another drought within the next few years could be devastating for the remaining Siberian cranes.

Their slow reproduction rate also works against the survival of the Siberian cranes. Since adult pairs mate for life, it may take years to replace partners lost to hunting, drought, accidents, or natural causes. Another problem is that pairs raise no more than one chick a year. While the female lays a clutch of two eggs, no reports exist of parents bringing two chicks to Bharatpur. This makes it unlikely that depleted populations



A Siberian Crane family.

could rebound quickly—even if monumental conservation efforts were begun immediately. In short, the future looks very bleak. But as long as there are still some birds and a determination by conservation minded groups and individuals, there is still hope. But, what can be done?

All along the migration route, efforts must be made to identify and secure crucial wetland habitats. Creative thinking must find ways to discourage hunting, especially in Afghanistan. Perhaps wildlife sanctuaries can better prepare for cyclical quirks of nature in advance (e.g., by having reserve or alternative water sources ready in case of another drought). More research will provide additional data about special and nutritional needs of Siberian cranes.

General public education programmes, similar to those in North America (which are credited with reversing the decline of the Whooping cranes), could be adapted to the four range countries of the Siberian crane. Teachers could be encouraged to include environmental education units—focusing on the plight of Siberian cranes—in science and social studies classes at all levels. Nature clubs and wildlife groups could organise waterfowl counts to monitor waterfowl populations and stress the importance of wetlands to wildlife. Indeed, readers of this article could spread the word to parents, friends, conservationists and political leaders. Certainly, greater awareness will make thoughtful intervention more likely. No one knows how many years the Siberian cranes have left in India. But they are a national treasure—a natural work of art which beautifies and enhances the planet. It is important that efforts be directed towards ensuring that India will continue to provide these magnificent birds with a safe, adequate, and undisturbed winter haven.