

WHOOPING CRANE

The Issue

Whooping cranes, found only in North America, have not been numerous since the end of the last ice age, when weather shifts dried much of their wet meadow habitat. Once numbering perhaps more than 10,000 birds, the entire continental population had sunk to no more than 1,400 by 1870, experts estimate. At that time, the species began to decline precipitately.

Beginning in the 19th century, due mainly to the loss of remaining wetland habitat to agricultural drainage, the whooping crane population persistently sank, reaching a record low of 21 birds by the mid 1940s. By 1950 only one population remained, migrating from the Texas coast to remote Canadian wetlands. Recovery efforts have increased the bird's number to about 500 in the wild and in captivity, but threats to wetland habitat continue to jeopardize the species.

Natural History

With a snow-white body that contrasts with black wing tips, red feathers above the bill and eyes, black markings under the eyes and black legs, the whooping crane stands four to five feet tall, with a seven-and-a-half-foot wingspan—the tallest and largest wading bird in North America. Only one natural migratory population remains, currently about 220 cranes that travel between winter range along the Texas gulf coast and breeding habitat in Wood Buffalo National Park in Canada's Northwest Territories.

When migrating, the crane rests and feeds at wetlands along lakes and rivers, including sites along the vitally important Platte River in central Nebraska. It shares the Platte with a myriad of waterfowl, eagles and as many as half-a-million sandhill cranes, which are smaller than the whooping crane and predominately gray.

Listing

Federally listed as endangered in 1967, under the predecessor law to the Endangered Species Act, placing it among the first species ever listed.



USFWS

Management

Recovery has focused on captive breeding and on protection and monitoring of the wild flock. An early plan to establish a second migratory population that would travel between Grays Lake National Wildlife Refuge in Idaho and Bosque del Apache National Wildlife Refuge in New Mexico had biologists putting whooping crane eggs in sandhill crane nests, to be raised by the sandhills and taught to migrate by them. However, no whoopers in this project ever bred and mortality was high, prompting the U.S. Fish and Wildlife Service to drop the project. The Service is attempting to establish a population of nonmigratory whooping cranes in Florida as well as a migratory population that travels between Wisconsin and Florida.

Because of budget shortfalls, the Service has focused primarily on monitoring birds in the northern and southern ends of their range, with little or no formal monitoring during migration. However, key work by private groups has helped to protect vital habitat along the migratory route, particularly on the Platte River in Nebraska. The Platte River Whooping Crane Maintenance Trust was established in the late 1970s as a result of a National Wildlife Federation and Nebraska Wildlife Federation lawsuit to enforce Endangered Species Act protections against a Wyoming water-diversion project that would have affected water flow in the Platte. The trust now owns 10,000 acres of

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crane habitat along the river and annually clears away invasive, nonnative vegetation that makes the area unsuitable for cranes.

Recently the governors of Wyoming, Colorado and Nebraska signed an agreement ensuring healthy water flow for the heavily dammed Platte River, as required under the Endangered Species Act, and providing additional funding for habitat protection (see below under "Funding").

Moreover, some 60 citizen scientists volunteer as part of Whooper Watch, a program started in 2001 by the National Wildlife Federation and its Nebraska affiliate to monitor the central Platte River for whooping cranes. The information gathered about the bird's location and behavior helps management of crane habitat along the Platte.

Funding

The lawsuit brought in the late 1970s by the National Wildlife Federation and the Nebraska Wildlife Federation provided \$7.5 million for starting the Whooping Crane Trust. Presently, The Nature Conservancy is raising about \$800,000 to purchase a key crane roosting site along the Platte. The National Audubon Society has established the Rowe Sanctuary along the Platte, protecting crane habitat and providing birdwatchers with blinds for viewing cranes and other waterfowl. The Platte River Recovery Program will provide \$187 million for habitat protection during a 13-year period, with \$157 million from the U.S. Department of the Interior, \$24 million from Colorado and \$6 million from Wyoming. In addition to protecting 10,000 acres of central Platte habitat, the program also will help the endangered least tern and pallid sturgeon and the threatened piping plover.

Funding from all government sources for whooping crane recovery nationwide was \$1.8 million, according to the U.S. Fish and Wildlife Service fiscal year 2004 report (the most recent available) to Congress, *Federal and State Endangered and Threatened Species Expenditures*.^{*} This amount was spread over three categories or geographic areas of recovery, including experimental populations. Of that amount, \$865,000 came from the U.S. Fish and Wildlife Service.

^{*} The U.S. Fish and Wildlife *Federal and State Endangered and Threatened Species Expenditures* report incorporates subjective estimates provided by regulated entities without any independent verification and without effort to segregate Endangered Species Act expenditures from other related expenditures. However, for most listed species, no other funding data is available.

Local Contacts

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Other Threats

Prior to agricultural development in the West and Midwest, natural water flow cleared the Platte River of plant growth that would clog the stream and provide cover for predators, making the river less suitable for cranes and waterfowl. Dams and diversions installed during the past century have reduced the river's flow by 70 percent, requiring groups like the Whooping Crane Trust to clear brush out of the riverbed every year to maintain habitat. This problem may soon worsen.

THREATS FROM GLOBAL WARMING

Global warming threatens to reduce mountain snowfall, diminishing water flow into the Platte River. As discussed above, maintaining whooping crane river habitat has focused in part on keeping water diversion projects from severely draining the Platte. In the wake of global warming, decades of work on whooping crane recovery could be undone relatively quickly by changes in snowfall.

Sea-level rise as a result of global warming will submerge at least a portion of the crane's winter habitat on the Gulf of Mexico. A significant increase in the rate of sea-level rise due to melting glaciers and ice caps and to thermal expansion of the oceans is one of the most direct consequences of global warming. Scientists project an average sea level rise of 7 to 23 inches before this century ends and perhaps as much as 31 inches if the rate of ice melt from Greenland and Antarctica increases as some models predict. Along coasts with gradually sloped shores, such as Florida and the Gulf Coast, a 31-inch sea level rise translates into an advance of water by as much as 500 feet inland.

