Whooping

Crane Recovery:

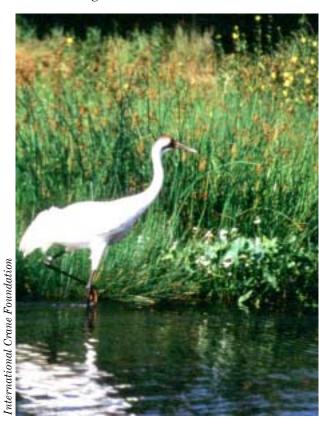
This year the Gulf Coast of Florida will witness a new experimental population of the world's rarest crane species. After more than a century of silence the wetlands of the eastern United States will welcome the trumpets of migrating whooping cranes, announcing their arrival at Chassahowitzka National Wildlife Refuge (NWR). After travelling south for several weeks from Necedah NWR in Wisconsin, and covering 1,250 miles, the cranes will arrive at their wintering destination in Citrus and Hernando counties in west central Florida.

How Far has the Whooping Crane Really Come?

U.S. Fish & Wildlife Service

The true journey of the whooping cranes started long ago. Among the best-known endangered species in North America, the whooping crane is slowly making a comeback due to a sustained conservation effort beginning in the 1940's. The U.S. Fish and Wildlife Service and other key partners have embarked on an international effort to protect and restore this unique symbol

of our endangered North American fauna. As with other endangered species, many factors contributed to the decline, but for the crane, loss of breeding habitat was the major cause. Historical accounts estimate only 700 to 1,400 cranes in 1860, but the continuing drainage of wetland habitats, conversion of grasslands to agriculture, and unregulated hunting pushed the cranes to the verge of extinction. By 1941, there were only 22 birds left in the wild, and in 1950, six of those were lost to a severe storm. The remaining 16 represent the sole ancestors of the current population, which has gradually increased due to careful management.



The rarest and tallest North American bird, the male can grou up to five feet tall. The red and black mask on the face and head constrast with the snowy white feathers and black wing tips, whooping cranes display an elaborate, yet graceful dance and unique call. Whooping cranes mate for life and in captivity can

Presently there are approximately 400 whooping cranes in North America. In 2001, the only wild migratory population consisted of 174 birds that winters in Aransas NWR on the gulf coast of Texas and summers in Wood Buffalo National Park in Canada. This wild population represents almost

half of the total number concentrated in one area and could one day be wiped out by disease, natural disaster, or human causes such as an oil spill. Future whooping crane survival depends on establishing additional, separate populations. The United States and Canada are working cooperatively towards recovering the species in portions of its historical range by creating these separate populations. There are 120 captive whooping cranes in North America. An additional non-migratory flock of 86 wild birds live on the Kissimmee Prairie of central Florida. Since migration is a learned behavior, the birds are expected to remain near the areas where they were released.

The Partnership

The International Whooping Crane Recovery Team was established in 1985, with the Canadian Wildlife Service and the U.S. Fish and Wildlife Service

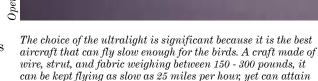
leading the way. In order to establish the second migratory flock of cranes in the eastern states, the Whooping Crane Eastern Partnership (WCEP) was formed in 1998. WCEP is a partnership of the following public agencies and private organizations working cooperatively with the Service to achieve crane recovery goals. The supporting organizations include:

- Friends of Necedah National Wildlife Refuge
- **International Crane Foundation**
- International Whooping Crane Recovery Team
- National Fish and Wildlife Foundation
- Natural Resources Foundation of Wisconsin
- Operation Migration, Inc.
- US Fish and Wildlife Service
- USGS National Wildlife Health Center
- USGS Patuxent Wildlife Research Center
- Wisconsin Department of Natural Resources

Of course this partnership extends beyond the list above. The huge scope of this migration requires the united efforts spanning seven states with approximately 25 private, state, and federal properties and will be used as stopover points for the birds, project aircraft, and personnel. This is only possible largely through private donations of funds, lands, services, or personnel by conservation-minded citizens.

Daily updates on the project will be available at the WCEP website www.bringbackthecranes.org.

There are many risks with an experiment like this, and some birds may even be lost during the migration, even though biologists are taking every precaution to ensure the success of the project. The cranes have been given a special designation as an experimental population under the Endangered



Species Act (ESA) to lessen possible conflicts between people and whooping crane conservation efforts. However, the intentional killing or harming of any whooping crane will still be a violation of Federal law punishable under the ESA and Migratory Bird Treaty Act. This designation is explained in the final rule published in the Federal Register on June 26, 2001. (Please check the websites below for a link)

The First Experimental Migration 2000

50 mph when necessary.

WCEP conducted a pilot project in the summer of 2000 using a captive-reared flock of sandhill crane chicks. The rearing techniques and migration logistics were tested using sandhill crane chicks from Necedah NWR. The migration covered 1,250 miles to Florida, making it the longest human-led migration ever. Eleven cranes started in Wisconsin on October 3, and arrived at their wintering location, St. Martin's Marsh Aquatic Preserve, 39 days later. The Aquatic Preserve is a state partner located north of the Chassahowitzka NWR. The sandhill cranes began their unassisted migration north in February.

The pioneering whooping cranes making the 2001 migration were produced from existing captive breeding flocks. The training began at Patuxent Wildlife Research Center even before hatching by exposing the eggs to crane calls and sounds of the ultralight engines. Once hatched, the chicks imprint on and are taught to follow the costumed pilot, the "surrogate parent" in the ultralight. After 40-60 days, they then are moved to Necedah NWR where they are taught to forage in as natural an environment as can be provided to encourage the birds' natural behavior. The birds are reared by



June 2000 - Necedah NWR, Wisconsin. A pilot experimental group of sandhill crane chicks is reared imprinting with crane- costumed people and an ultralight aircraft.

October 3, 2000 - Sandhill cranes begin longest human-led migration to Florida.

November 11, 2000 - Eleven sandhill cranes arrive at Chassahowitzka NWR in Florida, having flown 1250 miles.

February 25, 2001- Sandhill cranes begin their unassisted return migration north.

Late April 2001 - Sandhill cranes successfully complete their first unassisted migration arriving at Necedah NWR, Wisconsin.

July 2001 - Ten whooping crane chicks, raised at Patuxent Wildlife Research Center in Maryland are shipped to Necedah NWR where they will imprint with the ultralight and acclimate to central Wisconsin.

August 11, 2001 - First group of the young whooping cranes took their first flight as a group.

October 17, 2001 - Whooping cranes expected to begin migration to Florida by following ultralight.

December 2001 - Whooping cranes anticipated arrival at Chassahowitzka NWR. Length of migration to be determined by weather and the condition of the birds.

Late March or April 2002 - Young whooping cranes expected to begin their first unassisted migration north to Wisconsin.



people dressed in crane "costumes" using crane puppets. It is most critical that the human form and voice not become familiar to the birds. The birds' natural behavior, safety, and future survival are critical factors in this reintroduction.



The young cranes will follow an ultralight aircraft from Necedah NWR south through seven states of the eastern United States. Starting in mid-October, the wild birds will migrate during the day, stopping to feed and rest during the night. In the wild, young crane chicks are taught to migrate by following their parents south on the fall migration. However, because there are no adults when introducing this new population, the humans for now, have to take on the role of "surrogate parents." Once the cranes are taught the path, they should return on their own to Wisconsin next year. It takes nearly 5 years for whooping cranes to reach maturity. This new flock is expected to eventually nest in or near central Wisconsin at Necedah NWR and return to winter in Florida every year.

The reproductive rate of whooping cranes is very slow, but the population has gradually increased. Intensive management needs to continue to attain and maintain the desired population levels. Although the birds are federally protected from Canada to Mexico, preventing human encroachment on nesting and wintering habitat is crucial to saving this species. It will also take a coordinated effort along the migratory route to find ways to reduce mortality, and protect suitable stopover habitat. Increased public support for the recovery project and awareness of the value of these endangered habitats are necessary for the long-term continuation of projects like this.

The U.S. Fish and Wildlife Service

The U.S. Fish and Wildlife Service is working toward the goal of establishing a second population of wild whooping cranes migrating over our nation as we celebrate the Centennial Anniversary of the National Wildlife Refuge System in 2003.

The National Wildlife Refuge System began in 1903 when President Theodore Roosevelt protected tiny Pelican Island off the east coast of Florida - the first time the federal government set aside land just for the sake of wildlife. The National Wildlife Refuge System represents America's commitment to conserve our wildlife and our wild lands.

National Wildlife Refuges protect 94 million acres

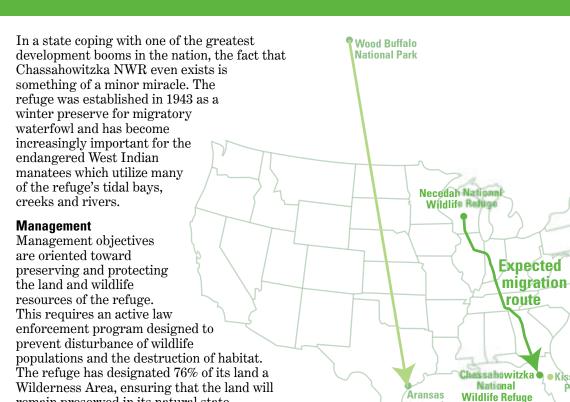
of land — more land than the entire system of national parks. Today more than 35 million Americans visit refuges each year to enjoy unique outdoor experiences. Most people come during peak periods of bird migration, when refuges are thriving with wildlife. School children, sportsmen, and wildlife watchers come to learn about the natural world and savor these special places. The U.S. Fish and Wildlife Service is undertaking a number of special nationwide efforts to strengthen the National Wildlife Refuge System, and will use the Centennial anniversary as a unique opportunity to build broad public understanding and appreciation for these conservation lands and their value to society. Look for local events in your paper or on the Internet at http://refuges.fws.gov/ centennial/.



Chassahowitzka National Wildlife Refuge

Chassahowitzka National Wildlife Refuge on Florida's Gulf Coast is one of a nationwide system of 535 refuges, set aside to protect over 31,000 acres of estuaries and hardwood swamps. The refuge is home to a wide array of wildlife: over 250 species of birds, 50 species of reptiles and amphibians, and at least 25 species of mammals. Chassahowitzka was chosen as the study site for the whooping crane reintroduction because it can provide extensive feeding habitat, with an abundance of blue crabs, and open areas which the cranes require.

Minimizing disturbance (including avoiding human contact) is essential to the success of this experimental population of whooping cranes. Since it will take a number of years for this introduction to establish a migratory population, access to the birds and project areas during this critical period may be limited.



The entire state of Florida is a fire-based ecosystem that has historically burned every three to ten years. Prescribed fire is used to enhance the habitat and food availability for not only the cranes, but for other endangered and threatened species as well.

remain preserved in its natural state.

Visiting the Refuge

There are no entrance fees for the refuge which is open daily and accessible only by boat. There is a small visitor center at the administrative office in Crystal River which is open to the public, 7:30 am -4:00 pm on weekdays.

Rentals, charters, or guided trips may be arranged by contacting the Nature Coast Chamber of Commerce for listings (352/628 2666). Make reservations in advance.

Getting there:

From Tampa (approximately 40 miles south of the refuge) take I-75 north towards Brooksville Exit 61. Follow Highway 98 west. Pass over Highway 19 north continuing on Highway 98/480. Follow the signs to the Chassahowitzka River Campground, the refuge's main boat ramp, about one mile from the Highway 19 turnoff.

Facilities/Disabled Access

Limited to boats. Dog Island Recreation Area has a pier boardwalk, picnic shelter, and toilet facilities for the public.

Please refer to refuge brochures and tear-off sheets for more specific information regarding the refuge.

Rewarding Experiences as a Volunteer

Volunteering is one way you can contribute to our nation's fish and wildlife resources. You can enjoy a productive and rewarding experience as a volunteer with the US Fish and Wildlife Service. Many natural resources have been protected by

contributions from people like you whose awareness of endangered species and threatened habitats has made a difference. You can help by making others aware of these problems and working with the WCEP partners. Awareness and education are powerful tools in wildlife conservation.

Obtain more information from the following websites.

The Whooping Crane Eastern Partnership http://www.bringbackthecranes.org

Canadian Wildlife Service - Whooping Crane Page http://www.cws-scf.ec.gc.ca/hww-fap/whooping/ whoop.html

USFWS Endangered Species - The Whooping Crane http://endangered.fws.gov/i/B0F.html Biologue-

http://species.fws.gov/bio whoo.html PDF File-

http://www.nctc.fws.gov/library/Pubs/crane.pdf Questions and Answershttp://midwest.fws.gov/whoopingcrane/ wcraneganda.html

If you would like more information about this refuge, the refuge system, or if you would like to volunteer your services, please contact:

Refuge Manager Chassahowitzka National Wildlife Refuge 1502 SE Kings Bay Drive Crystal River, FL 34429 Phone: 352/563 2088 Fax: 352/795 7961 Email:fw4 rw.chassahowitzka@fws.gov Website:

http://chassahowitzka.fws.gov

Whooping Crane Facts

Description

Tallest North American bird; males up to five feet tall with up to a seven foot wingspread are larger than females. Snowy white with black wing tips. Immatures are reddish cinnamon becoming mottled as white feathers replace the dark. Red on forehead and cheeks. Bill is dark olive-gray becoming lighter during breeding season. Eyes are yellow. Feet and legs are dark

Reproduction

Are monogamous forming life-long pair, but will re-mate following the death of a mate. In courtship pairs dance and leap with flapping wings, bills pointed upward. They may also bow, toss tufts of grass in the air and make loud trumpeting or whooping calls. Their ground nests made of bulrush usually contain two eggs, but rarely more than one chick will survive. Both parents incubate 29-31 days. Young leave nest within a few hours of hatching. Both parents feed young. Fledglings are ready to fly at about three months. They, in turn, will not reproduce until age four. Natural life span can be up to 25 years and up to 40 years in captivity.

Habitat

Nest in marshy areas among bulrushes, cattails and sedges, which provide protection from predators as well as food. At night, when not incubating, they roost in shallow water where they are safe from predators such as coyotes and bobcats. Prefers open areas.

Range

The original migratory flock winters at Aransas NWR on the Texas Gulf Coast and nests in Wood Buffalo National Park in Canada. A second introduced non-migratory flock lives vear-round in central Florida. The success of this project will establish another migratory flock of cranes in the estern United States.

Food sources

Are omnivorous (feeding on plants and animals), eating insects, crabs, clams, cravfish, frogs, rodents, small birds, berries, acorns and other wild fruit.

Status

Is a federally endangered species in the United States.



