An inside look at the whooping crane reintroduction Planes, Cranes and Autom

Story By Ashley Spratt Photos Courtesy Whooping Crane Eastern Partnership

ach fall, a flock of yearling whooping cranes departs from Necedah National Wildlife Refuge in central Wisconsin for a 1,200-mile journey across the skies of Illinois, Kentucky, Tennessee, Alabama and Georgia. Their destination: wintering grounds on the Gulf Coast of Florida.

So what makes this migration different from that of any other migratory bird? The answer is twofold: their ultralight-aircraft chaperones, and their status as an endangered species.

Since 2001, the Whooping Crane Eastern Partnership, an international coalition of public and private agencies and organizations, has been working to establish a self-sustaining migratory population of whooping cranes in the Eastern United States. Whooping cranes (*Grus americana*) were on the verge of extinction due to hunting and habitat loss in the 1940s, and were listed as federally endangered by the U.S. Fish and Wildlife Service in 1967.

To meet this population goal, pilots from Operation Migration, a WCEP founding partner, have been leading flocks of captive-reared whooping cranes south behind ultralight aircraft. Having been shown the way once, the young birds initiate their return migration in the spring, and in subsequent years continue to migrate on their own.

In addition to the ultralight-led birds,

biologists from the International Crane Foundation and the USFWS rear whooping cranes at Necedah NWR to be released in the company of older cranes. The young birds then learn the migration route from the older ones. Direct Autumn Release method supplements the ultralight migrations and has been used since 2005.

"The state of Illinois is a key partner in this unprecedented effort to reintroduce whooping cranes into the eastern flyway," said John Christian of the USFWS. "We are grateful for the efforts of the Department of Natural Resources and our other state colleagues in helping to make this project a success. Quite simply, we couldn't do this without them."

The birds travel about 130 miles

project. biles





through southern Wisconsin before crossing over the border into Illinois. Last year, the migration route took the birds through Winnebago, LaSalle, Livingston, Piatt, Cumberland and Wayne counties.

"We applaud the efforts of the WCEP in bringing these majestic birds back into wild populations," said Department of Natural Resources Director Marc Miller. "Illinois is fortunate to have the opportunity to see this nearly extinct species migrating through the state again after nearly a 100-year absence."

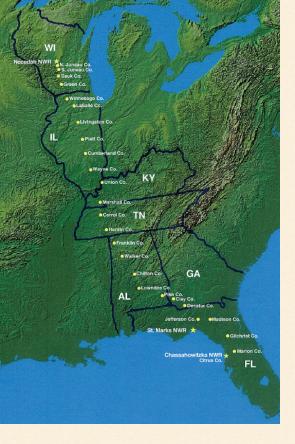
At 5 feet tall, the whooping crane is the tallest bird in North America. Black wingtips and a mostly white body are distinguishing features. To increase awareness for the project and highlight the recovery efforts of the partnership, the public is given opportunities along the migration route to see the ultralights and birds in flight. The following is an account of one viewer's flyover experience:

I squinted to make out the triangular shape of the lead ultralight. Soon after I spotted the ultralight, I saw a thin, white string following closely behind on one wing. It was not until the caravan closed in on the airport could you discern that the string actually was a flock of cranes. And not just any cranes: endangered whooping cranes. The birds glided in a perfect line behind the left wing of the aircraft, barely flapping a wing. The pilot circled the crowd overbead...once...and then a second time. The birds were in view for around 10-15 minutes, before the pilot beaded directly into the sun, and off to the pen site, where the birds and crew would rest in preparation for the next leg of the journey the following morning.

Operation Migration pilots have flown 9,777.2 miles, and while leading the Class of 2009 on this fall's migration south, will cross over the 10,000th mile somewhere in the skies of Illinois. This landmark mile-marker is the equivalent of flying almost halfway around the world.

"The people of Illinois have been very supportive of this incredible wildlife reintroduction project," said





Cyndi Duda of the USFWS, Chicago Field Office. "Every year, Illinois citizens commit to be MileMaker sponsors, providing private funding to defray the costs of this 1,285 mile migration." The MileMaker program (visit http://operationmigration.org/mile_makers.htm) provides private citizens, groups, schools and conservation enthusiasts a chance to sponsor miles along the migration route.

Along the migration route, the ground and flight crew arrange stopover locations to refuel their energy for the miles that lay ahead.

Vicky Wegner has been an Illinois stopover host for the migration crew since 2002. Her involvement with the whooping crane project came after meeting the Operation Migration Crew at Brookfield Zoo, where she was volunteering part-time during the spring of 2002.

"I've worked with bird conservation for a long time," Wegner said. "What's so unique about this project is that it is a result of the combined efforts of so many personalities, an eclectic but

> Strict protocols are followed to ensure that young whooping cranes never see a human face, hand or leg.

The 1,285-mile crane migration takes several months to complete, with stopover hosts providing crew support along the way.

unbelievably dedicated bunch of people. You would think with a project like this you would have all scientists and biologists, but instead you have staff and volunteers from many fields communication, education, marketing, biology and research."

As a stopover host Wegner cooks, launders, and provides hot showers and other comfort-of-home amenities to the flight and ground crew. Depending on the length of the migration, the crew can spend several months away from their family and homes.

"The hospitality offered to us by stopover hosts along the migration is phenomenal," said Liz Condie, a member of the Operation Migration ground crew. "These volunteers provide us with a home away from home, and we cannot thank them enough."

"It sounds very romantic, because it is a very cutting-edge project, but the average person doesn't really know how much planning, strategy, decision-making skill, and dedication—both physical and mental—goes into it," Wegner said. "It can be a grueling few months during the winter, especially for the pilots. When they come down from the air, they're frozen solid."

The reintroduction of an eastern population of migratory whooping cranes

Learn more

Whooping Crane Eastern Partnership founding members are the International Crane Foundation, Operation Migration, Inc., Wisconsin Department of Natural Resources, U.S. Fish and Wildlife Service, the U.S. Geological Survey's Patuxent Wildlife Research Center and National Wildlife Research Center, the National Fish and Wildlife Foundation, the Natural Resources Foundation of Wisconsin, and the International Whooping Crane Recovery Team.

Many other flyway states, provinces, private individuals and conservation groups have joined forces with and support WCEP by donating resources, funding and personnel. More than 70 percent of the project's budget comes from private sources in the form of grants, public donations and corporate sponsors.

A Wisconsin Whooping Crane Management Plan that describes project goals and management and monitoring strategies shared and implemented by the partners is online at: http://dnr.wi.gov/org/ land/er/birds/wcrane/wcraneplan.htm.

For more information on the project, its partners and how you can help, visit the WCEP Web site at www.bringback thecranes.org/.

depends upon the use of captive flocks to provide offspring for the ultralight-led migration and Direct Autumn Release projects. Captive flocks are maintained at Patuxent Wildlife Research Center in Maryland, the International Crane Foundation in Baraboo, Wis., the Calgary Zoo, the San Antonio Zoo and the Audubon Center for Research of Endangered Species at the Audubon Species Survival Center in New Orleans, La.





To keep the birds as wild as possible, researchers wear a crane costume disguise—and never talk when working with the birds.

Just hours before an egg hatches, movement can be detected and peeping sounds can be heard from the egg. For chicks that will be used on the ultralightled migration, the handlers begin to play sounds of the ultralight aircraft engine to begin the imprinting process. Once the birds are transported to Necedah National Wildlife Refuge in the summer, they begin training to fly behind the ultralight aircraft. This process involves strict protocol to ensure that the birds do not get accustomed to humans.

Sara Zimorski, with the International Crane Foundation, a member of the WCEP monitoring team, said: "In fact, the cranes never see a human face, or hand, or leg. That's because WCEP researchers, and even OM's pilots, all wear crane costumes designed to disguise the human form when they handle or are around the cranes."

In the spring and fall, Zimorski and other project staff from the International Crane Foundation and the USFWS track and monitor previous year's cohorts of cranes in an effort to learn as much as possible about their unassisted journeys and the habitat choices they make both along the way and on their summering and wintering grounds. Most graduated classes of whooping cranes spend the summer in central Wisconsin, where they use areas on or near the Necedah NWR, as well as other public and private lands.

"Education is crucial for this project to succeed," said Joan Garland, outreach coordinator with International Crane Foundation. "We cannot reach our goal without the support of the public, especially those future generations of conservationists that will be caring for our environment and endangered species later on."

Angela Cambier is a third-grade teacher at West Elementary in Sycamore, about 50 miles west of Chicago. A teacher for 17 years, Cambier started to follow the migration three years ago, and, like many teachers at schools along the migration route, began to integrate the project into her students' curriculum.

Cambier uses Journey North, an education program that provides activities, lesson plans and other educational tools to teachers interested in bringing the study of migratory birds and conservation into their classrooms.

"At the start of the year, we build our background knowledge about the whooping crane as a species, how it became endangered, and the mission of WCEP," Cambier said. "Once the migration starts, each child is assigned a chick to follow and keeps a journal to track the bird's personality traits and biography. They will write from different perspectives: What would it be like to be a pilot? What would it be like to be one of the birds? We also check in with the flight crew via Operation Migration's online Field Journal two to three times a week to see their location along the migration route."

WCEP partners also provide educational visits to schools along the migration route to educate students on the importance of bird conservation, the plight of the whooping crane and the mission of reintroducing whooping cranes into an eastern migratory population.

"Last year the students were really excited when Heather Ray from Operation Migration came by for a visit," Cambier said. "They asked all kinds of questions, like 'how are the chicks doing?', 'what is it like to fly?' which really extended their learning. They started using the vocabulary, using words like 'imprinting.' Many teachers that participate in the Journey North program, and are engaged with the WCEP project, say the issue of conservation fits into all areas of a curriculum, from reading and writing to science and art.

"It is such a great topic and project to introduce to students. As educators it is our responsibility to help prepare them to be stewards of the land as adults. Who knows, maybe some of them will work for the Fish and Wildlife Service or another conservation organization in the future."

Critical to the whooping crane reintroduction project is garnering public support, which starts by educating tomorrow's leaders.

