



Winter of the Whooping Cranes

Three giant birds, far off course, make a lasting impression in North Carolina.

written by Walter Sturgeon

Last year, whooping cranes wintered in North Carolina for the first time in 130 years. One of the rarest birds in all of North America, the whooping crane had not been seen in North Carolina since 1875, when one was shot near Wilmington. But two years ago, the endangered bird appeared briefly on migration in the western part of the state. Last November, three whooping cranes settled down for the winter in Jones County, where they remained until spring.

The whooping crane has long been a symbol of regal beauty and of wildness. The birds are creatures of secluded wetlands, preferring to be apart from other creatures, including humans. As a member of the Whooping Crane Eastern Partnership team, I was lucky enough to watch the whoopers in Jones County for more than 25 hours spread over 15 trips I made to monitor them. The few other people who saw them got a fleeting glimpse as the cranes flew overhead or occasionally stood in a cornfield beside N.C. 41.

In full view, whooping cranes are hard to miss. The whooper is the tallest bird in North America, standing more than 5 feet at the head. They have a wingspan of more than 7 feet. Males are slightly larger than females and weigh up to 18 pounds.

Only 330 whooping cranes remain in the wild in North America, up from a low of 15 in 1941. Hunting and loss of habitat in the Midwest starting in the mid-1800s led to their drastic decline, and only a concerted effort to protect this species has saved it from extinction.

Cranes have stalked Earth's wetlands for some 60 million years. When Europeans first came to North America in the 1500s, whooping cranes occurred along the East Coast from New Jersey south to Florida.

In North Carolina, Capt. Philip Amadas observed them upon landing at Wokokon Island (in the vicinity of Ocracoke) in July 1589. When his men "discharged their harquebus [matchlock gun] shot, such a flocke of Cranes (the most part white) arose, with such a crye, re-doubled by many ecchos, as if an armie of men had showed altogether." John Lawson in his 1700 journey through the Carolinas wrote about 5-foot-tall birds that "are of a cream color and have a crimson spot on the crown of their heads."

By the early 1800s the whooping crane was pretty much gone from the East Coast. The last one seen in North Carolina until recently was shot by a gentleman in Wilmington who was out snipe hunting on April 22, 1875.

Conservationist Aldo Leopold lamented the loss not only of cranes but also of what they represent. In 1937, he wrote in "Marshland Elegy":

"Our appreciation of the crane grows with the slow unraveling of earthly history. His tribe, we now know, stems out of the remote Eocene. The other members of the fauna in which he originated are long since entombed within the hills. When we hear his call we hear no mere bird. We hear the trumpet in the orchestra of evolution. He is the symbol of our untamable past."



Flight path of captive-bred cranes

Fall '03 Spring '04 Fall '04 Spring '05

Cranes in the Carolinas
 The three whooping cranes that wintered in North Carolina last winter belong to a migratory flock established in Wisconsin in 2000 by conservation groups. The birds followed an ultralight aircraft to a Florida refuge in fall 2003 and flew north on their own to Michigan in spring 2004. On their fall 2004 migration, they landed at a South Carolina wildlife refuge before settling in Jones County in mid-November.

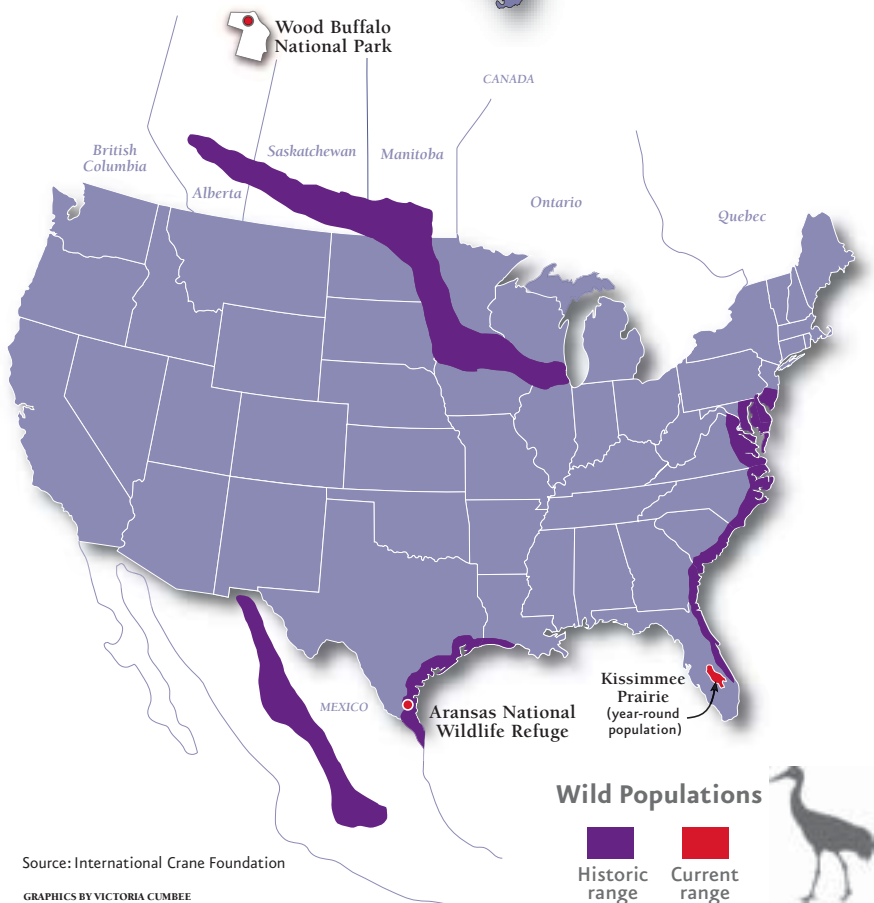
These words inspire the work of the Whooping Crane Eastern Partnership. This group of federal and state agencies and nonprofit organizations banded together in 2000 to establish a second migratory population of whooping cranes in eastern North America. The birds that wintered in North Carolina last year are a direct result of their efforts.

The straying cranes were part of a group of cranes that hatched in captivity in 2003. Once this new population reaches sexual maturity in two to three years, the birds will likely breed in central Wisconsin and winter along the Gulf Coast of Florida. Eight pairs have formed among the older birds, and several pairs attempted nests in Wisconsin last spring.

The cranes of Jones County certainly earned their quiet and restful winter stay. The trio landed in North Carolina through a series of mishaps that began in 2003. Two of the birds carry satellite transmitters and all three carry radio transmitters, so their journey was reasonably easy to track. In fall 2003 the birds flew to Chassahowitzka National Wildlife Refuge, an island off the Gulf Coast of Florida, in a 54-day migration from Wisconsin. The three birds—two females and a male—were among 16 newly fledged cranes that followed an ultralight aircraft from Necedah National Wildlife Refuge in central Wisconsin to Chassahowitzka.

Whooping Crane Ranges
 Historically, whooping cranes wintered along the Atlantic Coast from Florida to the Carolinas. The last one reported in North Carolina was shot in 1875. A lone flock of wild whooping cranes migrates between nesting grounds in Wood Buffalo National Park, Northern Alberta, and Aransas National Wildlife Refuge on the Gulf Coast of Texas. This flock numbers less than 200 birds.

Source: Operation Migration



Wild Populations

Historic range Current range

Source: International Crane Foundation
 GRAPHICS BY VICTORIA CLMEE

They wintered in and around the release pen in Florida and began the trip north in spring 2004.

Eight flew on the wrong side of the Appalachian Mountains, probably blown off course by a storm. They stopped in Macon County on April 1, 2004. Someone who had been asked not to disturb the cranes took his family to see them at dusk and spooked them. One flew into a power line but was able to continue. The birds showed up three days later in Ohio. They spent the rest of April in Ohio and continued north into Michigan on May 7.

Again, they missed a turn—this time winding up on the wrong side of Lake Michigan. Three found their way around the south end of the lake and made it back to the Necedah refuge in Wisconsin. The other five stayed in Michigan, where one was killed during the summer. The remaining four headed south last fall and stopped at Cape Romaine National Wildlife Refuge in South Carolina, where a bobcat killed another. The three survivors ended up in a North Carolina swamp in mid-November.

The whooping cranes' presence in Jones County was kept very quiet. Secrecy ensured they would not be driven from their roost site during the evening hours, when they would be most vulnerable to predators. Property owners in the area were cooperative and protected the privacy of their elegant visitors.

The cranes' roost site was an old oxbow swamp that had been cut off from the Trent River many years ago. The 65-acre swamp of cypresses, tupelos and water oaks was logged about 10 years ago, and drier areas have started to grow back to brush and small trees. Beavers have moved in, and their dams keep the water level under control, providing an ideal habitat for cranes. The swamp offered the visiting cranes a veritable grocery store stocked with minnows, crayfish, other invertebrates and tubers. On at least one occasion last winter, the Trent River swelled its banks and flooded the area, providing even more forage.

By early spring, I expected some movement from the cranes. On March 30, I arrived at 4:30 a.m. at the Jones County site. Checking for radio signals, I verified that the birds had not started their return migration. I climbed into a well-camouflaged deer stand at the northwest end of the cornfield where I had observed the birds over the past three months. Around 6:30 a.m. the signals got louder; the birds were in the air. For the next two hours, the signals



JAMIE CAMERON

rose and fell as the birds settled down, then took flight again. At 8:35 a.m. they landed in the shallow pond in front of the deer stand, only 100 feet away from me. I was able to take pictures as they walked out of the water and around the end of the pond. After 10 minutes they took off, circled the field twice, flew by the stand and headed off to the northwest. I monitored the radio signal until 9:20 a.m., when it finally faded out. It was as if they dropped in for goodbyes and a photo opportunity.

Now comes the unbelievable part. I left the receiver on for the entire trip back to my home in Nash County, where I breed captive cranes for conservation purposes. I thought I might get a signal from the birds as I, too, was traveling northwest.

These three whooping cranes arrived in Jones County last November and were on their way north by late March.



Members of the Operation Migration team train cranes to migrate by following an ultralight craft from Wisconsin to Florida.

Less than a mile from my house, I picked up a signal. I pulled into my driveway and got out my handheld directional antenna. During the next 30 minutes, I followed all three signals from the birds flying southeast to the northwest—and right over my house. When the signals were the loudest, my captive cranes started calling like I have never heard them before. Although I could not see the wild birds overhead, my captive cranes obviously saw them.

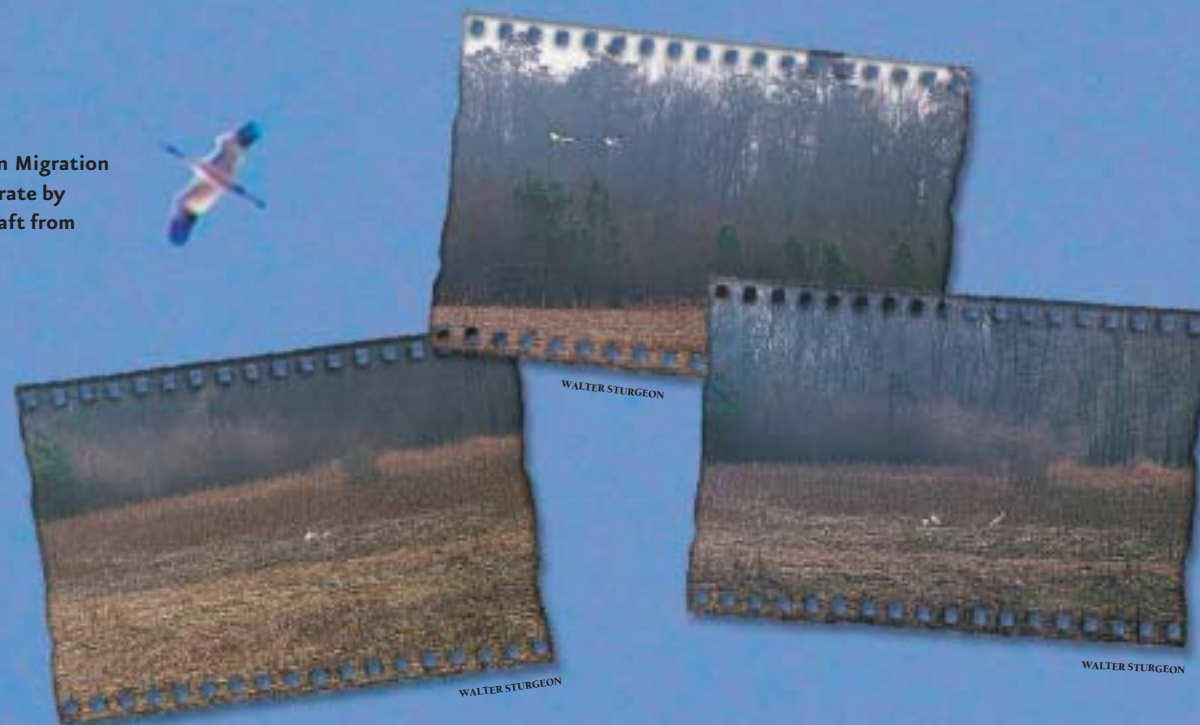
Other “craniacs” tracked their flight north through Virginia, West Virginia and Ohio, then up the east side of Lake Erie through Pennsylvania and New York and on into Canada. Reaching the Algonquin Provincial Park in southeastern Ontario in mid-April, they split up when the male and one female paired, which is normal behavior at this age. The pair eventually reached Chippewa County, Mich., on April 29. They headed south across the Straits of Mackinac until they reached central Michigan, the same place they spent the summer of 2004. On June 30 they were captured and moved back to

the Necedah Refuge in Wisconsin, where they had first followed the ultralight southward in 2003.

The third bird, a female, headed east from Algonquin Provincial Park to Quebec near the New York border. In June she was seen foraging in Vermont, then dropped from sight until mid-August, when she was spotted in upper New York State. At this writing, the Eastern Partnership was considering capturing the bird and moving her back to Wisconsin in time to migrate south with the others this fall.

Let us hope this won't be the last time these magnificent birds find a winter home in North Carolina. My wish is that someday wild cranes will learn how to migrate from older birds, not ultralights, and will become so abundant that everyone will get to glimpse them on their annual flight across the continent. ✦

Walter Sturgeon is assistant director of the N.C. Museum of Natural Sciences, president of the Whooping Crane Conservation Association and an Operation Migration team member.



Flying Away Home

Whooping cranes have a very slow reproductive rate, which is one reason their numbers declined so precipitously in the last century. It is also proving to be the means by which wildlife biologists are able to reintroduce them into the wild.

A whooping crane pair normally raises only one chick a year, although two eggs are laid three days apart. The second egg will hatch two to three days after the first if the nest is not abandoned once the first egg



INTERNATIONAL CRANE FOUNDATION

hatches. If the second chick hatches, the older chick will likely kill it or a predator will snatch it while the parents tend its older, bigger sibling. Only on rare occasions do both chicks survive to fledging.

In 1967 biologists began collecting second eggs from wild nests in Wood Buffalo National Park in northern Alberta, Canada. Their goal was to establish a captive flock at Patuxent Wildlife Research Center in Maryland. Since then, four other breeding facilities have been established—three in the United States (New Orleans, San Antonio and Baraboo, Wisc.) and one in Canada at Calgary. The young cranes used in restoration projects come from these captive populations and must be taught how to migrate (see *Nature's Ways*, page 39).

Eggs are transported to Patuxent, Md., for hatching. The chicks are reared in complete isolation from humans except for costumed

handlers, to ensure they will remain wild and wary of people. Training to follow an ultralight aircraft begins as soon as they can go outside at a few days old. Actually, training starts a little earlier; the sound of the ultralight imprints on the chicks while they are still in the egg. At about 30 days old, the birds are transported to Wisconsin. The ultralight runs up and down a runway until the birds can follow the craft into the air for their first sustained flight, at around the age of 75 days. The scene is reminiscent of the Wright Brothers at Kitty Hawk. The first flight usually lasts just a few minutes. Over the summer, the flights will get longer until the birds follow the ultralight out of Wisconsin in mid-October.

Operation Migration

Operation Migration (www.operationmigration.org), a nonprofit organization, has been flying birds behind ultralight aircraft since the early 1990s. Its early successes inspired the feature-length film “Fly Away Home” about a girl leading a flock of hand-raised Canada geese on migration. Experience gained from working with Canada geese and later with sandhill cranes gave the group confidence in 2001 to work with the endangered whooping crane. In four years, 52 whooping cranes have been led from Wisconsin to Florida, and 42 of them are still alive. Most losses have been to bobcats, including three this past winter.

The migration route runs through Wisconsin, Illinois, Indiana, Kentucky, Tennessee, Georgia and Florida. The flight



OPERATION MIGRATION

Workers wear costumes to prevent captive-bred chicks from becoming accustomed to humans. The right sleeve of the costume imitates an adult crane's head. A brown chick hatched in May will be almost pure white by the end of its first winter.

takes place in carefully planned stages. Each day's flight starts in the early morning and covers anywhere from 20 to 200 miles, depending on the weather and the abilities of the birds. The average day's flight covers 56 miles, and the number of legs to the journey averages 22. The ultralights can fly up to 50 mph and can carry three hours' worth of fuel.

A series of host sites along the way are at the ready; a portable pen will be constructed near where the aircraft lands. At least 14 crew members are needed to get all planes and support vehicles from stop to stop. Having two traveling pens allows for setup at the next anticipated stop while one pen is in use. By early December the birds reach the release pen at Chassahowitzka near Crystal River, Fla.



OPERATION MIGRATION

During their first winter the birds enjoy regular feedings, to entice them to return to roost in the 4-acre open area with predator-proof fencing. By late March or early April, they are ready to start the journey north on their own or in small groups.