

WHOOPING CRANE RECOVERY ACTIVITIES

SEPTEMBER 1999 - FEBRUARY 2000

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HIGHLIGHTS

Aransas/Wood Buffalo flock reaches a record 188 ([See 1999-2000 Winter-Aransas](#)).

One pair of whooping cranes in Florida was incubating eggs in mid-February ([See Florida](#)).

Eastern migratory flock receives preliminary approvals from Florida and Wisconsin ([See Florida and Wisconsin](#)).

FALL MIGRATION - 1999

Weather during the fall migration was unseasonably mild, but the migration seemed to progress at about or slightly slower than the normal pace. The first dates recorded for confirmed observations of migrating whooping cranes were August 31 in Canada and September 16 in the U.S. The last sighting date was December 29. Sightings were reported from Alberta (1), Saskatchewan (32), North Dakota (14), Nebraska (5), Kansas (19), Oklahoma (8), and Texas (4) (Jobman 2000 - Cooperative Whooping Crane Tracking Report).

Two whooping cranes were at Last Mountain Lake in Saskatchewan on August 31. As of mid-October, the only confirmed whooping crane sightings were from Saskatchewan and North Dakota. Starting the week of October 20, sightings became numerous across the U.S. Whoopers were definitely on the move, including 20 birds at Quivira NWR, Kansas on October 23, and 14 whoopers at Salt Plains NWR, Oklahoma on October 26.

After a major front reached the Texas coast on November 2, high pressure throughout the central U.S. delayed the whooping crane migration. By November 6, forty-four different whoopers had been sighted at Quivira NWR in Kansas. The presence of 18 whoopers at Quivira on opening day of duck season resulted in the public refuge hunt being postponed until the whoopers departed. This spot has become a major stopover for small groups of whoopers in the fall. The latest recorded observation was December 29 in Barton County, Kansas.

FALL ARRIVALS AT ARANSAS - 1999

The average arrival date for the first whooping cranes at Aransas is October 16. In 1999, the first whoopers rode in behind a strong cold front that reached the Texas coast the

afternoon of October 17. They were first observed October 20 on a census flight with 8 adults and 1 juvenile present.

Excellent migration conditions were present at Aransas with northwest winds October 30 through November 3. An estimated 93 cranes arrived at Aransas between the end of October and middle of November. Cranes totalled 119 on November 17 and 182 on December 4. About 84% (156 whoopers) of the arrivals occurred between October 27 and December 4 (Jobman 2000).

1999-2000 WINTER - ARANSAS

A key difference this fall in the weekly census flights was the use of different pilots and aircraft. After completing several flights in October, the contract pilot for the past several years, Dr. Tom Taylor, had bypass surgery and is well on his way to recovery. However, there were no other pilots anywhere in Texas certified by the Office of Aircraft Safety, USDI for low level missions. A search was initiated to find and get approved another contract pilot, but this process took several months. In the interim, USFWS pilots Fred Roetker from Lafayette, Louisiana, and Jim Bredy from Albuquerque, New Mexico, moved the crane program forward by conducting the final three flights of 1999. Thanks go to these gentlemen who added more work to their full schedules. In January, Pilot and FAA Examiner Huey McDonald of Victoria Air Charter was certified by the OAS to do the crane flights. Our thanks go to Mr. McDonald for adding the crane flights to an already full schedule.

December census flights indicated between 183-189 cranes were present at Aransas. Two additional cranes were confirmed in Kansas and West Texas. One subadult was near Cheyenne Bottoms, Kansas, sighted December 28. Another subadult was sighted 35 miles south of Lubbock, Texas near Tahoka on December 29. The bird in West Texas wintered there, with a single again reported about 100 miles further north near Clarendon on February 16. This raised the estimated flock size to between a record 185 and 191 birds. There is some uncertainty about the size of the population. However, it is estimated that at least 188 were present which was a record number and surpassed last winter's peak of 183.

Included in the population at Aransas were 17 family groups. Although this number equalled the number of juveniles located on August surveys in Wood Buffalo, three pairs were known to have lost chicks prior to arrival at Aransas. Thus, at least 20 chicks were present in Wood Buffalo in mid-August. Some uncertainty existed on the number of family groups present at Aransas since all 17 were only found on the December 13 census. Two families may have left the wintering grounds for an extended period. An adult with a single chick was first located on San Jose Island. They were not in a known territory and the identity of these cranes remained unknown. This was believed to be the single adult with chick seen during the fall migration.

If no mortality had occurred between spring and fall, 1999, the 183 cranes present last winter added to the 17 juveniles would have brought the population to 200. Thus, with

the final population total estimated to be 188, this indicates a spring-fall mortality of $12/183 = 6.6\%$.

The cranes moved extensively to use prescribed burns and upland freshwater sources, making it difficult to get an exact count of the population. The lack of blue crabs in the marsh starting in December and the extensive prescribed burning program on the refuge resulted in cranes from other wintering areas leaving their territories and utilizing the refuge. Large groups of as many as 32 cranes formed, attracted to the prescribed burns and abundant acorn crop. It was impossible to know if territorial cranes were being overlooked on a census, or whether the cranes had become part of large refuge groups. The 112 cranes located on the refuge on February 3, 2000 was a record high.

The wolfberry crop was heavily utilized in November and December, but was just about over by the end of the year. Blue crab numbers declined in December to very low levels. A shift away from feeding on crabs was indicated by the number of cranes using open water habitat, including bays and large lakes. Food resources were considered marginal starting in January, 2000; thus the emphasis by the refuge to conduct a full complement of prescribed burns to make the abundant acorn crop available to the cranes. The cranes were believed to have experienced a net loss of energy reserves in January and February which could affect productivity on the breeding grounds in 2000.

Volunteer crane researcher Dr. Bernhard Wessling recorded about 20 crane unison calls and an equal number of guard calls at Aransas during 10 days in December. About 15 pairs gave both vocalizations so he can see if the two calls are related. He will need to analyze sonograms to ensure they are unique. This technique has great potential for "marking" pairs, but it is lots of work to get the recordings.

CAPTIVE MANAGEMENT TEAM

A meeting of the Whooping Crane Captive Management Team was held September 19-20 in Baraboo, Wisconsin. There was much useful sharing of information between captive managers. Based on the genetic work by Ken Jones and others, genetic considerations are now part of breeding and reintroduction decisions. Major decisions were reached on the genetic pairing of the captive flock. Applications from facilities for breeding and/or display of whooping cranes was acted upon by the team.

WHOOPING CRANE RECOVERY TEAM

The Canada/U.S. Whooping Crane Recovery Team met at the International Crane Foundation (ICF) September 21-23. Nearly 80 people attended. An aerial field trip to look at proposed reintroduction sites took place on the 21st, with air transportation provided by Terry Kohler of Windway Corporation. Our thanks go to Terry and Mary Kohler who are tremendous supporters of the recovery effort. Dr. John Cannon presented results of his site assessment study. The team heard spirited discussion from interested parties and made sure we had the advice of Wisconsin experts. The team selected central

Wisconsin as the primary release site. A briefing packet was submitted to USFWS-Region 2 which endorsed the Team's recommendation.

A second meeting of the Whooping Crane Recovery Team was held the evening of January 12 in Albuquerque, NM. Participants provided program updates. Three major action items decided upon were to:

1. write a joint Canada/U.S. Recovery Plan.
2. start a mortality analysis of the nonmigratory Florida reintroduction.
3. analyze the effects of egg pickup in Wood Buffalo National Park.

Researcher Kent Clegg addressed the team and expressed his concerns for the cessation of the whooping crane project in the west. The Team thanked Kent for his numerous contributions. Long-time member of the Canadian Team Dale Hjertaas from Saskatchewan announced his resignation from the team, primarily because his job is no longer dealing directly with endangered species issues. Our thanks go to Dale for many years of excellent service.

SPECIMENS

In the fall, captive centers and Florida completed distributing whooping crane specimens to nine universities. Ding Darling NWR in Florida received an adult for public exhibit purposes.

PERMITS

A programmatic CITES import permit was applied for and obtained for all whooping crane imports, including live birds, eggs, specimens, blood, feathers, etc. Although this permit will have to be renewed annually, the turnaround time will be much faster.

The Calgary Zoo exported to Patuxent two whooping crane juveniles on November 18. USDA permits were obtained for this, and a mechanism set up to handle the new fee collection system. These birds were socialized into cohorts with Patuxent juveniles before release in Florida. Blood serum was exported November 30 from Calgary to the National Wildlife Health Center in Madison, WI for testing for inclusion body disease. The NWHC is the only lab in North America that does this particular test. Many details are involved with these exports, and the staff at Calgary should be commended.

In January, a programmatic CITES export permit was applied for to allow for the shipment of a live whooping crane to Calgary for pairing purposes.

WHOOPING CRANE CONSERVATION ASSOCIATION (WCCA)

The annual meeting of the WCCA was held January 15 in Albuquerque. Speakers made interesting presentations and spirited discussions followed. The WCCA appropriated

funds to continue food habits research on the nesting grounds, help with writing the joint Recovery Plan, and offered to assist with analysis of egg pickup data.

EIGHTH NORTH AMERICAN CRANE WORKSHOP

The Eighth North American Crane Workshop was held January 12-14. The workshop, sponsored by the North American Crane Working Group, is held every 3-4 years. Crane folks get together to present scientific papers. It is an excellent chance to present data and learn about different crane issues. The workshop and field trip to Bosque del Apache NWR were excellent.

INTRODUCED FLOCKS

FLORIDA

Seven whooping crane mortalities were recorded in Florida between September, 1999 and February, 2000. Bobcats took five, and alligators two. One of the alligator kills involved a 4-year-old on which blood tests may have indicated a chronic health problem, and the other a juvenile taken inside the release pen prior to release. Another juvenile was taken by a bobcat the first night post-release and was the only bird from that cohort to leave the release pen the first night. Two cranes were killed October 11 and 19 in the same hay field, presumably by the same bobcat. In a different location, two other cranes were also killed close to each other, again indicating one bobcat may be involved. Florida Biologist Steve Nesbitt believes that inappropriate use of water for roosting and/or crepuscular activity are contributing to the mortalities. He is still very concerned about the water exposure the cranes receive in captivity prior to release.

In the 1999-2000 winter, 33 juveniles were transported by the Kohlers (once again, thank you!) from captive centers to Florida for release. These birds were produced at Patuxent (23), ICF (6), Calgary (2), and San Antonio (2). Releases were made in December, February, and March. Thirty-one of the 33 were alive at the end of February, with the crane flock of 91 birds in Florida consisting of 60 adults and 31 juveniles. And most exciting, one pair was sitting on eggs starting the middle of February. However, the continued drought is expected to depress nesting efforts from other pairs.

The Whooping Crane Recovery Team in January discussed the need to continue analyzing mortality rates in the Florida reintroduction program. Biologist Steve Nesbitt has agreed to take on this task and will compare rates with known mortality of Florida and eastern greater sandhill crane populations. He will report to the team at the next meeting in January, 2001.

Funding issues remained unresolved for the Florida nonmigratory program. This work is supported by FLFWCC, USFWS-Endangered Species Region 2, and federal Section 6 funds. USFWS-Region 2 has asked USFWS-Region 4 to contribute dollars to the program since the reintroduction is being done in Region 4. Basically, all agencies doing

endangered species work are short of funds. On January 21, I forwarded a letter from Florida on the funding shortfall to Regions 2 and 4.

Several high level meetings were held between Region 2, Region 4 and staff of the FLFWCC at which the proposed migratory whooping crane reintroduction was discussed. I travelled to Florida for meetings on December 15 and also observed the nonmigratory reintroduction. Newspaper articles appeared in late January inquiring whether Florida was supportive. On February 3, the Commission unanimously approved to proceed with detailed planning for the migratory reintroduction project. Conditions for their continued support included that the migratory releases

- a) not affect the non-migratory flock,
- b) not affect current funding for nonmigratory whoopers,
- c) receive approval from Flyway Councils and all States involved,
- d) not impact Florida hunting programs,
- e) not allow outside pressure from non-government entities to affect current FLFWCC funding.

The role the FLFWCC will play in the migratory reintroduction is not yet defined.

RESEARCH - OPERATION MIGRATION

Joe Duff of Operation Migration submitted the following report:

"At Operation Migration we have spent the past year preparing for the 2000 field season when we will be working with sandhill cranes in Wisconsin. There were meetings to attend, ears to bend and funds to raise before the real work begins.

We have also been monitoring the birds from our 1998 study. During the last leg of our migration that fall we led the birds by aircraft from Green Sea, South Carolina to the Tom Yawkey Wildlife Center on Georgetown, SC. One bird dropped out of that flight and despite an exhaustive two-day search was not seen again until November of 1999. It was collected from a National Forest east of Ocala, Florida. The cause of death was unknown, but we can assume that once it left the protection of our flock it fell in with the wild migrants that use that corridor in the spring and fall. On the bright side it is evident that this bird did not associate with people during the year it spent on its own. I only wish we knew where it spent the summer.

Unfortunately the satellite tracking devices on the other birds have both failed. One unit was on one of the birds that were transported north to New York State and the other on a bird that remained in South Carolina. We now rely on sightings. The trans-located birds, after a movement to Ontario, were last reported in southern Ohio. These birds appear to have been tamed down by misguided animal enthusiasts. They are tolerant of humans but do not seek the company of people. They show a preference for proper habitat and are not a nuisance. The birds that were left behind have prospered. They moved further south by 100 km to the Donnelley Plantation and are not approachable. The Donnelley Wildlife

Management Area in South Carolina was looked at by Dr. Cannon for possible whooper releases but was considered unsuitable. This is the spot where our cranes from 1998 have decided to call home, indicating they do have a natural eye for good sandhill habitat. They seem to be happily ensconced in good habitat and avoiding all things human. At last report, all seemed to be thriving. It will be interesting to watch their spring behavior."

ROCKY MOUNTAINS

The carcass of one of the two remaining ultralight whooping cranes was recovered August 29 in Rich County in northeast Utah where it had apparently been summering. The cause of death was unknown. This whooping crane was part of Kent Clegg's ultralight experiment in the fall of 1997. It had been attacked by an eagle in Colorado on its initial flight south, was stitched up by a vet, and trucked the rest of the way to New Mexico. The two remaining ultralight whoopers started the spring, 1999 migration from Bosque on March 12 and were last sighted together April 11 near Heber City, Utah. The one surviving ultralight whooping crane moved on to the Arbon Valley, Idaho on May 16, and summered just west of Grays Lake.

The three remaining whooping cranes in the Rocky Mountains are two cross-fostered birds from 1982 and 1984, and one ultralight bird from 1997. All three are wintering in the Rio Grande Valley, New Mexico. The one whooper-sandhill hybrid has been missing since the spring of 1999 and is believed dead.

RESEARCH - DAVE ELLIS (following submitted by Dr. Ellis)

In 1998 and 1999, Patuxent crews conducted two stage-by-stage migrations from central Utah to southern Arizona. The idea is to trailer the cranes south, then stop and fly the birds at 15-30 mile intervals in hopes they can learn the route without subjecting themselves and the crew to the hazards of trucking and ultralight migrations. In 1998 only 6 cranes survived and they seemed disoriented come spring. However, in 1999, all birds survived and 3 of these birds, after spending a few days at the southern terminus, were transported north and freed. All 3 flew south (as hoped) to the exact latitude of the southern terminus but were displaced somewhat east. Now we wait to see what spring will bring.

WISCONSIN

The Whooping Crane Recovery Team at meetings in September recommended central Wisconsin as the preferred release site for eastern migratory whooping cranes. This recommendation was contingent upon completion of additional analysis of contaminant hazards, impacts of noise from military overflights, and a successful ultralight migration with sandhill cranes to Florida.

Much progress was made on the proposed eastern migratory whooping crane project. A briefing was given September 9 to the USFWS directorate in Washington D.C.. Represented were Regions 2, 3, 4, and the Wisconsin Department of Natural Resources

(DNR). Additional briefings were made later that day to USFWS staff, the National Fish and Wildlife Foundation, and Wisconsin Congressional aids.

Involved parties made a presentation to the Wisconsin DNR in Madison on October 27, after which the DNR formally endorsed the proposed whooping crane reintroduction project in central WI. Project personnel then met for 1 1/2 days to coordinate roles and responsibilities of the numerous partners. Five teams were formed that involved outreach, fund raising/budget, bird field team, regulations/permits, and Flyway/State coordination. All operations will be overseen by a policy team, include representatives from states and regions. Many people contributed to a 12-year draft plan and budget needs document written by USFWS Ecological Services-Green Bay for the proposed project.

On January 12, I participated in a two-hour conference call with Endangered Species - Green Bay and personnel from three regions and two states about the Regulatory process for reintroducing a new migratory flock of whooping cranes in the east. This process is quite complex and may take two years to complete. Included are NEPA compliance, an Environmental Assessment, State Environmental Policy Acts, proposed 10j Rule, Section 7 consultation, biological opinion, permits, etc. The next round of project meetings was held in Madison, Wisconsin on January 18-19 for the eastern migratory whooping crane reintroduction project. I attended committee meetings for the Bird Team and Contaminant Team, and then met with the entire project team the next day.

CAPTIVE FLOCKS

PATUXENT

Patuxent fledged 26 whooping crane chicks for the Florida nonmigratory flock in 1999. Two birds from Calgary and two from San Antonio were flown to Patuxent and socialized into cohorts. Birds headed for Florida were given access to ponds to learn proper roosting behavior. Patuxent volunteers spent great effort going through pens with new metal detectors to try to eliminate the metal ingestion problem.

Dr. George Gee received a Certificate of Appreciation from ICF in recognition of his pioneering work and contribution to the study and preservation of cranes over the past decade. The certificate reads, "The conservation of the Mississippi Sandhill Crane and the flourishing captive population of Whooping Cranes are tributes to you and your colleagues at the Patuxent Wildlife Research Center". Congratulations to Dr. Gee.

In the fall, West Nile virus threatened the cranes at Patuxent. It was found in adjacent counties, but not on the Research center. Crows are most susceptible to this virus, but it did kill two captive cranes in Connecticut. Future monitoring for the virus will have to be done, but there appears no simple way to prevent exposure from mosquitos.

White Oak made final arrangements in February to ship a whooping crane to Patuxent to benefit pair formation based on new genetic information presented to the Recovery Team.

In January, Patuxent sent two documents, a review of the crane program and an implementation plan, to USFWS-Region 2. A review of the crane program had been held last March by a team of six members. The report and plan call for strengthening the research role of the center, but phasing out starting immediately operations that deal with propagation. All "propagation" cranes would be moved to other facilities by the year 2009, and research on reintroduction methods would be completed by 2015. Communications are ongoing between USFWS-Region 2 and USGS.

INTERNATIONAL CRANE FOUNDATION (ICF)

In 1999, six whooping crane juveniles raised at ICF were transported to Florida on November 17 for release. Our thanks go to Terry Kohler of Windway Corporation for flying the 6 juveniles from ICF to Patuxent.

I was honored to be the speaker on September 18 at the annual board meeting of the International Crane Foundation, and also gave a seminar at the Amoco crane exhibit earlier that day. ICF graciously hosted the Recovery Team meeting in September. Their staff and facilities are great.

CALGARY

Two whooping crane juveniles produced at the Calgary Zoo in 1999 were shipped to Patuxent in November. The birds were socialized into a cohort and transported to Florida for release. Much effort is involved in this program, and Calgary should be congratulated for their fine work. Also, crane blood serum was imported to the National Wildlife Health Lab in Madison, WI for testing for inclusion body disease of cranes. Madison is the only lab in North America that can test for this disease.

NEW ORLEANS

Plans were made to ship two additional whooping cranes to New Orleans in 2000. Audubon Center for Research on Endangered Species has graciously invited the Recovery and Captive Management Teams to hold their next meeting in New Orleans the week of January 22-26, 2001.

SAN ANTONIO

San Antonio fledged two whooping cranes in 1999. The juveniles were flown to Patuxent on November 18 where they were socialized into cohorts and later transported to Florida for release. Congratulations to San Antonio for this production and isolation-rearing of the cranes.

Work has begun to totally renovate the whooping crane exhibits at the zoo. This work should be completed this spring. The two whooping crane pairs are currently being housed off-exhibit.

WHOOPING CRANE NUMBERS / February 29, 2000

Wild Populations

Location	Adults	Young	Total
Aransas/Wood Buffalo NP	171	17	188
Rocky Mountains	3	0	3
Florida	60	31	91
Subtotal in Wild	234	48	282

Captive Populations

Location	Adults	Young	Total	Breeding Pairs
Patuxent WRC, Md.	44	3	47	10
International Crane Foundation, Wis.	29	1	30	6
Calgary Zoo, Alta.	21	0	21	3
San Antonio Zoological Gardens, Tex.	4	0	4	2
Lowery Park Zoo, Tampa, Fla.	1	0	1	0
White Oak Conservation Center, Fla..	1	0	1	0
Audubon Institute, New Orleans, La.	2	0	2	0
Subtotal	102	4	106	21

TOTALS (Wild + Captive) = 388

Compiled by Tom Stehn, March 21, 2000.