

THE UNISON CALL

- A Newsletter of the North American Crane Working Group -

Fall/Winter 2005
Vol. 16 No. 2

THE TENTH NORTH AMERICAN CRANE WORKSHOP

Location: Zacatecas City, Zacatecas, Mexico

Date: February 7-10, 2006

Tentative schedule for the Tenth North American Crane Workshop:

- Welcome Social, evening Tuesday, February 7
- Technical sessions, all day Wednesday, February 8 and Friday, February 10
- Callejoneada (local street event with brass band and mescal) on Wednesday evening
- Thursday, February 9, is set aside for an all-day field trip to local natural sites
- Banquet on Friday evening with awards and entertainment
- Optional trips to surrounding areas can be arranged after the meeting depending on interest.
- The Whooping Crane Recovery Team will meet on February 6-7, just prior to the workshop.

The field trips, the concurrent fiesta, and the quaint setting in old colonial Mexico promise to make these meetings the most enjoyable ever. Make your plans and reservations with help from our website, www.nacwg.org. Remember there is no additional registration fee (but extra meals and field trip are, of course, extra) for accompanying spouse.

Note: NACWG is looking for an editor for these proceedings, so if you are interested, or know of someone who is, please contact Dr. Glenn Olsen (glenn_olsen@usgs.gov).

Regional Reports

The 2005 Christmas Count of the Aransas-Wood Buffalo Population

Every winter, my most important objective is to figure out how many whooping cranes are in the Aransas-Wood Buffalo flock. Armed with a Cessna 172 single-engine, high-wing aircraft and a 74-year-old pilot who has been flying for over 40 years, we go forth once a week and try to find every whooping crane.

The whooping cranes in winter as in summer are spread out over a range of about 50 miles. Armed with a knowledge of the location of last winter's territories written down as a reminder on the edge of nine aerial photos of the crane marshes attached to a clipboard on my lap, we methodically fly transects about 5 miles long by ¼-mile wide until all the crane winter range of about 54,600 acres is covered. Whereas in Wood Buffalo National Park where the only white objects are the whooping cranes, along with the occasional set of moose antlers or white tree trunk that can fool you at a distance, we have thousands of white objects to sort through at Aransas. I sometimes think that every white pelican, great and snowy egret for miles around flies to Aransas every week just to get counted. Even the white phase of a reddish egret can look like a whooping crane when you're a ¼-mile away from it. Throw in the occasional piece of white Styrofoam trash washed up into the marsh along with white refuge boundary signs, our eyes have much to sort through to find all the whooping cranes. But one thing at Aransas makes it easier to find whooping cranes than in Wood Buffalo. There are no trees at Aransas. In fact, Aransas salt marsh is very unique in that there is nothing out in it taller than a 5-foot whooping crane, the tallest bird in North America. So while in Wood Buffalo cranes can be hidden from view on the back side of a clump of spruce, they have no place to hide from us at Aransas.

The cranes have figured out how to overcome this handicap and resort to movements to throw off my count. We can spot a pair of cranes, only to have them take off and fly up to 3 miles to a prescribed burn to feed on acorns or to a freshwater pond to get a drink. Sometimes they even move further. For example, on 21 December 2005, a family group seen by us just after 8 a.m. was sighted again in a place about 10 miles away. The crane had flown across San Antonio Bay to a completely different part of the winter range. A color band on the adult male allowed me to know we had seen the same family group earlier. But sometimes we are fooled by such movements. That is why we fly once a week and wait until we get consistent counts before the final tally for the size of the flock is announced.

Research has shown that on average, we find about 95% of the flock on any given flight. This winter, even though the migration is presumably completed, I am not yet confident of a final tally. Two flights in December were hampered by dark clouds and poor visibility, making it way too hard to find every crane. On December 21, the skies cooperated and we had weather conditions that should have allowed us to find every crane. However, movements of the cranes added some uncertainty to the final tally. My best estimate is that on December 21st we tallied 216 whooping cranes. One additional whooping crane is in south Texas. This is presumably the juvenile that in 2004 separated from his parents in migration and wintered with sandhill cranes about 70 miles north of Aransas. This whooping crane doesn't know where Aransas is since its parents never showed it the fabulous wintering grounds where blue crabs are abundant and there are lots of shallow water ponds and tidal flats to roost in to remain safe from bobcats during the night. This whooping crane, #217 in the flock, is wintering about 30 miles north of Mexico in the Rio Grande Valley of extreme south Texas. During the fall, two whooping cranes that had arrived at Aransas turned up missing and are presumed dead. I knew they were missing because one was a juvenile, and one

was a 28-year-old territorial male with a mate and chick. Juveniles and adult territorial pairs don't separate during winter, so when one turns up missing, it has died. However, we were unable to find the carcass of either bird. These two missing birds were the 218th and 219th in the flock this winter. Thus, the flock size has surpassed last winter's peak population in the Aransas-Wood Buffalo population of 217 and set a record.

Of the 31 chicks that fledged in Wood Buffalo in August, 30 of them have arrived at Aransas. The high point of the fall migration was the arrival at Aransas of one family group with two juveniles that had been seen in Saskatchewan on December 10 and was found at Aransas on December 16, proof of a very rapid migration trip. The very last juvenile to arrive was a real surprise. It did not show up until sometime between December 15-21, and only one adult was with the juvenile. Perhaps the other adult had gotten sick or injured during the migration which delayed their trip south. Unfortunately, one parent apparently did not survive.

With 30 new juveniles added to the population, the flock should have shown a substantial increase from last winter. There were an estimated 215 present in the flock last spring, so mortality between spring and fall was apparently much higher than average. It could be that as many as 26 whooping cranes, or 12% of the flock, died between spring and fall. Research has shown that the majority of mortality occurs in migration. Mortality factors include collisions with power lines, disease, and occasional shootings.

It could be that losses were not quite that high. Last spring, I struggled tallying all 215 on census flights, so it could be that several more cranes had died at Aransas last winter and had gone undetected. It is also possible that I will find a few more cranes on future census flights this winter. On December 21 on my most recent count, two sightings were received from birdwatchers each of two cranes in flight in different locations about 30 miles north of Aransas. If the sightings turn out to be valid, maybe the population could reach 223 this winter or even a few more. But it is realistic to expect that higher than average mortality has occurred between spring and fall which is very disappointing. Although the nesting pairs did their job this summer with good production, the flock apparently has run into other difficulties that we can only speculate about.

The Aransas-Wood Buffalo whooping crane has made a remarkable comeback from only 16 birds in 1941, but one of the aspects that makes the situation so fascinating is that no one knows how this comeback story is going to end. Only with continuing efforts to protect the species and provide the habitat that it needs can we expect the species to survive for generations to come.

Tom Stehn, U.S. Fish and Wildlife Service

Mississippi Sandhill Crane National Wildlife Refuge

After a potential high (12 chicks were alive at one time in June), only one chick is known to have fledged from the 29 nests (23 pairs) in the 2005 breeding season.

Hurricane Katrina hit the Mississippi Coast August 29 with 100+ mph winds and a historic storm surge causing unprecedented destruction along a 100-mile-wide swath. Luckily, nearly all the cranes are believed to have survived, although it will take several months yet to assess the population (see below). Within a month, all 32 radio-tagged cranes were accounted for. However, in the wake of the storm, there

were two confirmed crane mortalities and one missing, including two of the most important breeding females in the population. The refuge itself was outside storm surge range and had only minor damage except for thousands of downed trees. Of 35 field structures (blinds, pens, feed sheds, and traps), 31 were affected, with 15 damaged and 12 destroyed. Four blinds have been replaced to date. All refuge employees were affected by the storm and three families had gutted or destroyed homes. Two couples and one family moved into trailers on the refuge in the newly created Camp Crane and continue to reside there. The Fish and Wildlife Service went to unprecedented lengths to help their displaced employees and this assistance was greatly appreciated.

In the 26th year of the restocking program with the 2005-6 releases, two captive-reared cohorts were transferred and released from October to December (4 at Fontainebleau and 7 at Firetower). A third is planned for Duck Pond in February.

Lloyd Culp reported for duty as the new Project Leader in the immediate aftermath of Hurricane Katrina -- fun times for him. He brings over 30 years of experience as a refuge manager, the last 17 at Great Dismal Swamp NWR in Virginia. The MSCNWR manager position, vacant since 2002, will be filled in early 2006. A generous NACWG member has provided funds to the refuge to hire Jessica Stocking as a Biotech in January-February under Special Needs to support the post-storm crane assessment. Jessica just finished up a stint at ICF and will move on after Mississippi to work with cranes in Washington state.

Scott Hereford, Mississippi Sandhill Crane NWR

Wood Buffalo National Park

During the fall migration of whooping cranes through southern Canada, one lake in particular was to host at least 24 different whooping cranes. Muskiki Lake, Saskatchewan, was the temporary home for the cranes for the first three weeks of October. On October 1, there were ten cranes present at the lake, including a couple of family groups with one young each. On October 3, there were 11 birds including three young.

On this date, one of the family groups was feeding in a field on the edge of the lake. The female of the pair appeared to be slightly separated from the mate and chick and later disappeared out of sight and did not seem tight to the rest of the family. I had questions about the behavior of that bird that would be answered in the upcoming days. On October 8, the first report came in of one adult and one young at the same lake with eight other birds and I suspected that they may have been part of that same pair. On October 12, I saw the single adult and one young about 2 miles from where I had seen the family originally. They were feeding with another pair. On October 18, we went out to where I had last seen her and found the carcass. It consisted of two piles of feathers and the rest of the body which had been dragged into a hawthorn bush. Her mate and chick were with two other pairs of cranes about 2 miles away. In total there were 19 other cranes there that day including four youngsters.

Upon inspecting the carcass, I discovered a band (band number 0599-09801). This bird had originally been banded Green-Red, but she had lost her coloured leg bands over the years. She was the first whooping crane ever banded. She was hatched from nest 10-77 near the Nyarling River and was banded on July 29, 1977 by Ernie Kuyt (retired CWS biologist). At the time of her death, she was 28 years old.

She began nesting as a 7-year-old along the Klewi River and had nested in 21 of the last 22 years. She had outlived at least one mate and had successfully taken ten young to the wintering grounds.

Her eleventh chick was still present at the lake with her mate on October 19, in the company of eight other adults. The mate and her 2005 young were seen on the wintering grounds on October 26, only seven days after they were last seen in Saskatchewan. Another family group with two young were observed at the lake on October 8, bringing the total number of whooping cranes using Muskiki Lake during the 2005 fall migration to 24.

Brian Johns, Canadian Wildlife Service

Eastern Migratory Whooping Crane Reintroduction

Summer 2005.--Two birds were retrieved from Mason County, Lower Michigan, and relocated to Necedah NWR on 30 June. As of 1 July, there were 43 birds (26 males and 17 females) in the eastern migratory population distributed as follows: core Central Wisconsin reintroduction area (35), southeastern Wisconsin (7), Vermont/New York (1). Approximately 30 whooping cranes roosted regularly on Necedah National Wildlife Refuge during the summer.

Autumn distribution was similar except that 3 yearling males spent most of autumn in central Minnesota and a group of 5 yearling males moved to southeastern Wisconsin.

Mortalities.--A yearling male died as a result of collision with a powerline in southeastern Wisconsin in early July. This male had been released into wild crane flocks in the preceding autumn and migrated appropriately. A 2-year-old male was found dead in late October on Necedah NWR; necropsy results are pending. The latter was the only mortality to occur on Necedah NWR of 12 total mortalities since the reintroduction began in 2001.

Breeding Pairs.--In addition to 7 existing confirmed pairs, 5 additional pairs formed or persisted during summer and autumn. Prospects are therefore good for reproduction in 2006.

Autumn Migration.--Departure dates from Wisconsin ranged from 9 to 24 November with the largest single-day departure (20 birds) on 17 November. First birds arrived in Florida on 15 November, and first birds arrived on Chassahowitzka NWR on 17 November. The female that summered in New York was retrieved from North Carolina and relocated to Florida on 16 December. Early winter distribution as of 1 January 2006 is as follows: Florida (34), Tennessee (7), South Carolina (1), North Carolina (1), and undetermined (2). The last returning wintering cranes cleared the Chassahowitzka pensite and moved to inland sites on 25 December.

Direct Autumn Release (DAR):--Four juveniles were costume/isolation-reared and then released on Necedah NWR with older whooping cranes and sandhill cranes. These juveniles began migration on 24 November. One female reached near Louisville, Kentucky (255 miles), on the first day of migration. The other three juveniles reached Hiwassee Wildlife Refuge, Tennessee, on the second day of migration. The first female had separated from other cranes and after some local movements was retrieved and relocated 28 miles eastward. She continued migration alone and unassisted; with no guidance from other cranes, she found Hiwassee in 2 days. As of 1 January 2006 she remains at Hiwassee with another DAR female.

Another DAR female is in Alachua County, Florida, and the male DAR juvenile has not yet been located after departing from Hiwassee on 30 November.

2005 Ultralight-led Migration.--The migration departed from Necedah NWR on 14 October. The flock of 19 juvenile whooping cranes arrived on Halpata Tastanaki Preserve, Marion County, Florida, on 13 December. The latter is a site used for holding the juveniles until older returning birds have cleared the Chassahowitzka pensite.

Current Population Size:--After release of the 19 ultralight-led juveniles, the eastern migratory population will number 64 individuals.

Richard P. Urbanek, U.S. Fish and Wildlife Service, and Lara E. A. Fondow, International Crane Foundation, on behalf of Whooping Crane Eastern Partnership

Patuxent Wildlife Research Center

Patuxent Wildlife Research Center had a successful year in 2005. Two whooping crane females laid eggs for the first time this year, giving us a total of thirteen laying females. We raised, trained, and sent 21 whooping crane chicks to Wisconsin for the WCEP ultralight migration project. This also included chicks that hatched from eggs provided by the International Crane Foundation and the Audubon Species Survival Center. In addition to our release efforts in 2005, the Patuxent crane program has also participated in West Nile Virus vaccine trials, avian influenza testing, an investigation of factors affecting hatchability, and a study comparing captive rearing procedures.

The latter study is to evaluate a slightly different method of raising whooper chicks for the WCEP restoration. Current methods call for housing the chicks to be imprinted on the ultralight in the small indoor/outdoor pens; we would like to produce and train more chicks for this restoration program but are at capacity in the current facility. We have modified outdoor pens for younger cranes, and this year several of the earlier hatched chicks were moved to those outdoor pens at about 4 weeks of age. There are advantages of outdoor pens (more exercise, less time on concrete substrate, etc.), and we have taken measurements of physical and social development including the time spent following the ultralight trike, to look for differences in the two rearing environments/methods.

As of 1 January 2006 Patuxent held 55 whooping cranes and 135 sandhill cranes.

Jane Chandler and John French, USGS Patuxent Wildlife Research Center

News and Announcements

Noteworthy Surgical Outcomes at ICF

Thanks to the collaboration between the International Crane Foundation (ICF) and the University of Wisconsin School of Veterinary Medicine (SVM), an ICF Whooping Crane named Eliot has been given a chance for survival after a unique surgery. Four days after Eliot was hatched this June, our aviculture

staff found she had health problems, with audible gurgling from suspected aspiration of food or water. The condition proved unresponsive to medical treatments despite several weeks of therapy and various diagnostic evaluations to pin down the exact location and nature of the problem. Eventually a computed tomography (CT) scan and lung biopsy via laparoscopy confirmed the presence of foreign material throughout the right lung.

A pleural pneumonectomy, or partial lung removal, was performed by Dr. Dale Bjorling, chairman of the Department of Surgical Sciences at the SVM in August. An incision over the right flank and removal of the upper half of the 4th rib was required to expose the diseased lung. Ultimately, 2/3 of the right lung was removed in an attempt to limit the disease. Pathology tests revealed that the lung contained lesions with foreign material and mixed infection of bacteria and *Aspergillus fumigatus*, a fungal pathogen.

The anatomical approach was facilitated by the use of Fisher and Goodman's 1955 treatise "The Myology of the Whooping Crane" and creative application of the one description I could find on this procedure in companion birds. Dr. Avery Bennett (who performed a tarsal joint replacement surgery in a Siberian crane years ago for ICF) made helpful suggestions on the approach and the stapling device that would be used to excise the lung (sure enough, I tracked him down with a Google search!). The skill and willingness shown by the anesthesia service at the SVM was also instrumental in the successful outcome.

Eliot was returned later the same day to ICF and has shown a normal recovery, despite audible respiratory sounds that have not totally resolved. No one is quite sure how the surgery has affected the dynamics of her respiratory function, but our one-lung bird has gained weight normally since the surgery and seems to be doing well going into the winter. Originally slated to be a part of the Direct Autumn Release cohort for the WCEP project, Eliot will remain at ICF and hopefully become a part of our captive breeding flock since she is of high genetic value.

Interestingly, Eliot would never have hatched if not for the ICF-SVM collaboration. In January 2004, Eliot's mother O'Malley ruptured the tendon associated with extending her right knee (i.e., quadriceps t.) during routine handling. The tendon was repaired by Dr. Susan Schaefer, an orthopedic surgeon at the SVM, who received her first experience working with cranes as an intern at ICF. O'Malley underwent a prolonged convalescence under the care of the ICF aviculture and veterinary staff. This often fatal injury healed well and the bird walks without a limp. She even laid five eggs later that spring! This year, O'Malley laid 6 eggs, producing five hatchlings for WCEP and captive breeding.

The collaboration between ICF and the SVM goes back more than 20 years, but a formal MoU has been in place since 2000, expanding opportunities to apply conservation medicine principles to crane management and recovery.

*Barry Hartup, International Crane Foundation
(Additional material from Mike Putnam & Tania Banak)*

Hunter Education DVD for Goose and Crane Hunters Now Available

Texas Parks and Wildlife Department announces the release of a new DVD called "Be Sure Before You Shoot." Designed in the format of the old "Shoot? Don't Shoot" videos, the 17-minute DVD is designed to help goose and crane hunters, especially those in the Central Flyway, avoid take of protected nongame

species. The video presents 24 scenes of birds in flight, including snow and blue geese, Canada geese, white-fronted geese, sandhill cranes, and 11 nongame species. The DVD places an added emphasis on identification and conservation of endangered whooping cranes. Copies of the DVD are available for \$10 (including shipping; checks payable to TPWD Nongame Fund) from:

Wildlife Diversity Program
Texas Parks & Wildlife Department
3000 So. IH-35, Suite 100
Austin, TX 78704

Questions about the video may be directed to *Lee Ann Linam*
(lainam@wimberley-tx.com; 512-847-9480).

Thank You, Fellow Craniacs.

I wish to thank my NACWG colleagues and friends for their generous financial and moral support in the wake of Hurricane Katrina. I cannot find the words to properly express the deep gratitude and affection I feel for you all. Know that it has meant a very great deal to us that you are behind us in rebuilding our lives and home. It has been a challenging few months to say the least but I am fortunate in so many ways: my family is safe, I have a job, we have a place to stay, and lots of wonderful family and friends there for us when we needed it most. Special thanks to Tracy Grazia for serving as my liaison with all of you and to Tom Hoffmann. By the way, we have new roof, walls, fireplace, and hope to be back in our new house in February.

Scott Hereford

Dues! Dues! Dues!

Remember, it is dues time! Please send in your completed membership form along with your payment to Tom Hoffmann.

Editor's Note: *The Unison Call* is a forum to share updates and opinions. Articles are not peer reviewed. Reviews and opinions included in any section of the newsletter are those of the author and do not necessarily represent the views of the NACWG.

The Unison Call is published twice yearly, winter/spring and summer/fall. Membership is based on a calendar year. Contributions, suggestions, opinions, drawings, cartoons, and photographs are welcome.

Items can be sent to: David and Cathy Ellis, Editors
HC 1 Box 4420, Oracle, AZ 85623
E-mail: dcellis@theriver.com

Deadlines are normally June 10 and December 10. Please send information as a Microsoft Word attachment (e-mail) whenever possible.

Crane Trivia: How many cranes are there worldwide? (Do your calculations and send your answers to the editors. We plan to publish some estimates in the next *Unison Call*.)

You are invited to join the North American Crane Working Group

Membership is based on a calendar year. A membership directory is periodically mailed to members. Provide the contact information below **that you want printed** in the directory.

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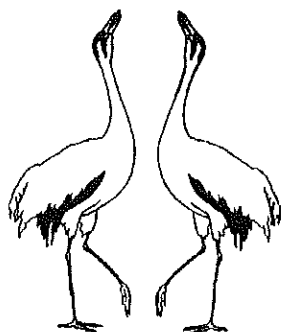
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