

THE UNISON CALL

- A Newsletter of the North American Crane Working Group -

Autumn/Winter 2008
Vol. 19 No. 2

President's Message

The past year has been a busy one for the North American Crane Working Group. First and foremost, we held a great workshop in the Wisconsin Dells, with 117 participants from across North America as well as from Mexico, Russia, and Ukraine. The presentation of 38 papers, and 16 posters demonstrated the depth and breadth of scientific and cultural interest in cranes from North America and around the world. On our field day, we stood in the early morning light at Necedah National Wildlife Refuge to watch young whooping cranes in flight training with the ultralight pilots and had a wonderful opportunity to talk with the dedicated pilots of Operation Migration and see their craft up close. We also visited the cranberry marshes of the Glacial Lake Cranberries, Inc., where many sandhill cranes summer, and toured the International Crane Foundation. On the final evening, we enjoyed an impressionistic journey of cranes and the Florida ecosystem by Heather Henson and talented kite-fliers. At the evening banquet, we recognized Ernie Kuyt with the L. H. Walkinshaw award. The decision on who to award the Best Student Paper was extremely close, as there were many excellent papers by students; the award went to Rose Butler for her paper on mammalian nest predation in Mississippi sandhill cranes. As a field biologist, I came away from the meeting with a much deeper appreciation of the challenges and successes of those who work in care, propagation, and releases of cranes into the wild.

Another important part of our mission as a Working Group is the dissemination of our knowledge via workshop proceedings. The

proceedings from the 10th crane workshop, held in Zacatecas, Mexico, came out this fall. For the first time, this proceedings is recognized by the Library of Congress as a series, so the proceedings will receive appropriate recognition, and librarians will be able to shelve this and future proceedings together. Please encourage libraries of state, federal, and academic institutions to add this publication to their collections. The papers and abstracts from the 2008 workshop are already working their way through the editorial process with editor Dr. Barry Hartup. We look forward to an information-packed 11th proceedings.

On other notes for the year: Tom Hoffman, a long-time board member, most recently as treasurer, and the individual who ably organized the 2008 workshop, has stepped down. Our thanks for your excellent service and support of the NACWG! Thanks to Barry Hartup for stepping up the board, as well as taking on the challenges of editing the proceedings. Long-time NACWG member George Archibald was recognized as a "Champion" by Stanley Johnson, Ambassador for the Convention on the Conservation of Migratory Species of Wild Animals, for his long-standing commitment and collaboration with CMS in the protection of cranes. Finally, the International Crane Foundation's facility received its 5-year accreditation from the American Zoo Association. The Association's report recognizes that ICF is a "major contributor to conservation efforts, both locally and globally." ICF "excels in crane research and education, and AZA acknowledges the work done both at ICF and in the field."

Looking forward into 2009: Spring migration is just a short distance away (rather hard to believe

at this month with the deep cold and snows we're experiencing in the north this winter). The prairies should be very wet this spring! Wind energy continues to rapidly grow and expand its footprint across the Great Plains, with uncertain implications for migrating cranes.

In this increasingly electronic world, the Board recognizes we need to get the workshop proceedings more available. Currently, the 6th through the 8th Proceedings are available online through the International Crane Foundation. The board is working on getting all proceedings since 1976 available online as high-quality pdfs, with appropriate indexing for Google Scholar. To further enhance our electronic profile and access, we need a talented individual to update our web page (www.nacwg.org). If you have an interest and some web skills, please contact one of the board members.

Although we only meet once every three or four years, each workshop feels like being part of an extended family. Please encourage others you know that are involved with cranes to join our family and increase the network of craniacs across North America.

Jane Austin, President NACWG

Regional Reports

Wild Whooping Crane Population

This has been my most frustrating winter at Aransas. The whooping cranes are using unusual locations and are moving to uplands and water holes so frequently that I have been unable to get an accurate count of the population. My best estimate is that 232 adults and 38 juveniles equal a record 270 that made it to Aransas, surpassing last year's 266. The excellent production coming from Canada (that included one pair with two chicks) is cause for celebration, but the total numbers are a disappointment. Thirty-eight juveniles added to the population of 266 could have resulted in 304 whooping cranes arriving at Aransas. If 270 is a reasonable estimate of what did arrive, it means 34 whooping cranes, or 12.8% of the flock, died between spring and fall 2008.

The whooping cranes faced difficult conditions when they returned to Aransas in the fall of 2008. Their natural marsh foods were at low levels due to the prolonged drought. Blue crabs were present initially (an important food source for whooping cranes that make up 80-90% of their diet when available), but crab numbers dropped off through November. Blue crabs were scarce throughout December and January as tides were lowered by low pressure systems, and most of the remaining crabs moved out into the deeper bays. Although this is a typical winter pattern, the fall wolfberry crop was very low, a food that the cranes normally rely on heavily. Thus, the cranes were ill-prepared to face the scarcity of crabs. In addition, marsh salinities have remained above the threshold of 21 parts per thousand that forces cranes to seek out fresh water to drink. Although other winters have been "bad," these extreme conditions have not been documented at Aransas NWR in the last 26 years.

Lowered food reserves affect whooping cranes in two main ways; direct mortality and lowered future productivity. So far this winter, five whooping cranes are believed to have died (two carcasses were recovered, both were emaciated), whereas an average winter has zero or only one crane death. As a double whammy, research done by Dr. Felipe Chavez-Ramirez in 1994 documented that up to 37% of the whooping cranes failed to nest following a poor blue crab winter at Aransas NWR.

The whooping cranes are being seen in unusual places this winter. Many have left the salt marsh and are feeding on uplands. Up to four cranes foraged daily in the farm fields north of the refuge through December. A record 21 whooping cranes are wintering on the Lamar Peninsula utilizing game feeders in locations where we have never seen cranes before.

Three juveniles have separated from their parents. One of these separations occurred at Aransas with the juvenile spending a week foraging along a refuge roadside and was approached closely by the public, most unusual behavior. In the fall, one juvenile spent a couple months in the farm fields just a few miles north of Aransas. A third juvenile separated from its parents and was seen near in southern Nebraska through early December. When its roost pond froze, it continued the migration to Oklahoma. After its roost pond froze on January 25, it again continued on its way. The location of all three of these juveniles is currently unknown. A fourth juvenile at Aransas separated from its parents at the end of January.

Due to the food shortages, the unusual distribution of cranes observed, and the two emaciated crane carcasses recovered, supplemental feeding of whooping cranes with corn on the Aransas/Matagorda Island NWR Complex has been initiated and will be continued for at least one month. Prescribed burns have also been conducted to provide additional foraging opportunities. We hope these management actions will give the cranes a necessary boost to get them through the winter and hopefully forestall problems with production in 2009 in Canada.

Tom Stehn, U.S. Fish and Wildlife Service, Region 2

Whooping Cranes in Wood Buffalo National Park

You may not believe it after this winter but mean annual temperatures at Fort Smith over the last 60 years have actually increased 3° C, with winter temperatures increasing by 5° C. Annual precipitation from May 2007 to April 2008 was near normal resulting in the nesting area being fairly wet in spring 2008. April was 2° C colder than normal resulting in the spring melt of 2008 being about 7 days later than usual in the Whooping Crane nesting area. Spring and summer temperatures were slightly warmer than normal and there were no severe rain events accompanied by cold temperatures during chick hatching and the first 3 weeks after hatching in June. However, there was twice the normal amount of rainfall for the month.

Breeding pair surveys were carried out by the Canadian Wildlife Service (CWS) between May 16 and May 24. During the surveys, 66 Whooping Crane nests were discovered. All but 5 nests were discovered in Wood Buffalo National Park. Six pairs of cranes that had bred in previous years were also observed, for a total of 72 occupied territories. The total number of territorial pairs matched the number of territories occupied on the cranes' wintering grounds during the winter of 2007/08. Another 17 pairs of sub-adult or non-territorial cranes were also observed scattered throughout the breeding area.

The CWS with the assistance of the United States Fish and Wildlife Service conducted hatching success surveys between June 16 and June 22, 2008. These surveys were conducted after most nests had hatched. Pairs with either zero or one chick may have hatched one or two chicks but had already lost one or more young by the time the surveys were conducted so the chick counts are to be used as a

minimum number hatched. Sixty-four young were discovered during the surveys, including 12 pairs with two young each.

Whooping Crane fledging success surveys were carried out by the CWS from August 14 to August 19, 2008. A total of 41 young were discovered in 39 family groups.

In the spring of 2008, there were 41 confirmed sightings in prairie Canada, totaling 134 birds. The earliest recorded sighting was on April 5, 2008 and the latest recorded spring sighting was on May 10, 2008. At least three sub-adult Whooping Cranes spent at least part of the summer south of the breeding area in Saskatchewan. In the fall of 2008 there were 28 confirmed sightings, totaling 117 birds. The last birds were observed in Canada on October 27.

Brian Johns, Canadian Wildlife Service

Whooping Crane Numbers in North America, September 30, 2008

Wild Populations

	Adult	Young	Total	Adult Pairs
Aransas/Wood Buffalo	227	39	266 ^A	72
Rocky Mountains	0	0	0	0
Florida non-migratory	30 ^B	0	30 ^B	12
Wisconsin/Florida migratory	69	22 ^C	91	11
Subtotal in the Wild	326	61	387	95

^A The 266 cranes above is the estimated flock size in spring, 2008. Forty-one chicks fledged from a record 66 nests in 2008. Chicks hatched in 2008 are not added to the count until they reach Aransas in late fall.

^B This number reflects the 26 birds regularly monitored in Florida plus 4 additional cranes believed to be alive in unknown locations. No chicks fledged in the wild in 2008.

^C The 5 whooping crane breeding facilities (Patuxent Wildlife Research Center, International Crane Foundation, Calgary Zoo, San Antonio Zoo, and Species Survival Center in New Orleans) either provided eggs or hatched and raised chicks in 2008. Four eggs came from abandoned wild nests in Wisconsin and successfully hatched at Patuxent. Twenty-two chicks are currently being raised for the release programs in central Wisconsin (15 ultralight, 7 direct autumn release).

Captive Populations

	Adult	Young ^E	Total	Breeding Pairs
Patuxent WRC, Maryland	62	4	66	13
International Crane Foundation, WI	32	0	32	11
Devonian Wildl. Cons.Cent./Calgary	24	0	24	6
Species Survival Center, Louisiana	12	0	12	1

Calgary Zoo, Alberta	2	0	2	0
New Orleans Zoo, Louisiana	2	0	2	0
San Antonio Zoo, Texas	7	0	7	1
Homosassa Springs Wildl State Park	2	0	2	0
Lowry Park Zoo, Tampa, Florida	1	0	1	0
Jacksonville Zoo, Florida	2	0	2	0
Milwaukee County Zoo, Wisconsin	1	1	2	0
Subtotal in Captivity	147	5	152	32

^E Two of these young are genetic holdbacks and will remain in captivity as future breeding stock. The table does not reflect captive young that have entered reintroduction programs in 2008.

TOTALS (Wild + Captive) 387 + 152= 539

Tom Stehn, U.S. Fish and Wildlife Service, Region 2

Patuxent Wildlife Research Center

In 2008, USGS Patuxent Wildlife Research Center (Patuxent), Laurel, Maryland, hatched 27 whooping crane chicks. Though not equal to the record 32 hatches in 2007, this was the second highest total hatched at Patuxent. The slight decrease can be attributed to various factors. In 2008 one of Patuxent's long-time breeding females did not lay because her mate was hospitalized with a severe illness. A few other Patuxent females had a reduction in production, possibly related to an increase in AI handling. We also did not receive any eggs from the Florida non-migratory population this year as we did in 2007.

Once again, several partners contributed to the Whooping Crane Eastern Partnership (WCEP) effort by sending eggs to be hatched at Patuxent. In addition to the 11 chicks hatched from eggs laid at Patuxent, eight chicks hatched from eggs from the Calgary Zoo, three chicks hatched from eggs from the International Crane Foundation, one chick from an egg from the Audubon Center for Research in Endangered Species in New Orleans, Louisiana, and four chicks came from eggs taken from abandoned nests at Necedah National Wildlife Refuge. Hatch dates ranged from May 4 to June 15, a span of 43 days. Twenty of the chicks that hatched were shipped out to Necedah NWR in late June and July 2008 to continue their flight training at the refuge. Two chicks were held back at Patuxent, and five chicks died.

A dedicated crew of Patuxent and Operation Migration personnel plus some wonderful volunteers worked many hours to raise and train this year's cadre of whooping crane chicks. All this was done in the stifling heat and humidity of a Maryland summer, while completely covered in a full length crane costume, hood with mask, and black rubber boots.

In 2008 whooping crane colts were divided in three groups as in past years. The average age at shipment to Necedah was 46.4 days of age (\pm 3.9 days, range 38-52 days of age). The shipment dates were 25 June, 9 July, and 29 July.

Medical losses were less in 2008 (26%) than in 2007 (31%). All chicks were vaccinated for both West Nile virus and eastern equine encephalitis virus. In spite of this, one chick died at Patuxent from an infection with eastern equine encephalitis virus in the fall. This can happen despite giving preventive vaccinations. Most likely the individual crane failed to develop adequate protection following vaccination. All chicks were tested for internal parasites and given treatment. All whooping crane chicks received extensive health examinations prior to shipping, including radiographs for ingested metal foreign bodies. No ingested metal foreign bodies have been found in the past 4 years.

Caring for and raising whooping cranes at Patuxent is a full-time job. Adult birds need and receive daily care, decisions are made on pairing new birds, and behavioral observations are made on a daily basis to determine the physiological condition and the health of the birds. Work increases five-fold as the breeding season opens with the cranes performing mating dances, nest building and egg laying as winter moves to spring. Patuxent has a dedicated crew working with the whooping cranes all year long, and we receive additional help from volunteers and Operation Migration staff during the critical chick rearing period from May through the end of July. We are grateful to all for their dedication. We also thank Operation Migration for use of the ultralight aircraft used in training, for some of the crane costumes and vocalizers, and for the crates used to ship the cranes to Necedah National Wildlife Refuge. In addition to help from Operation Migration, we had help from another partner and a non-partner. Disney World sent two of their animal care personnel to help raise whooping crane chicks, and one animal care person joined the effort from Sea World. We are also grateful for the help from our partners, the U. S. Fish and Wildlife Service staff led by Refuge Manager Brad Knudsen, for their help in housing interns, for assistance with facilities problems throughout the year, and for help in maintaining the closure of the crane area during the breeding season.

We are sad to say farewell to two of our crane staff at Patuxent. Tammy Otto left in the fall to join her husband, who is pursuing graduate studies in Michigan, and Dan Sprague left as of January 2009 to accept another position at Patuxent with the Contaminants Group.

This report is condensed from the Whooping Crane Eastern Partnership Annual Report distributed to partners and the Whooping Crane Recovery Team. For a copy of the complete WCEP report, contact the author.

Glenn H. Olsen, Patuxent Wildlife Research Center, Laurel, Maryland

Eastern Migratory Whooping Crane Reintroductions

Summer and Autumn 2008.—On 4 July the population consisted of 68 known or later verified individuals (38 males and 30 females) and possibly one male not recorded since October 2007. Distribution of birds during the period included 56 in Wisconsin, seven in Minnesota, four in Lower Michigan, and one in Indiana. An additional seven individuals were added to the population by release of six DAR (direct autumn release) juveniles and one juvenile removed from the ultralight cohort on 18 and 22 October, respectively, on Necedah NWR. Six surviving juveniles migrated appropriately with older whooping cranes to locations in Tennessee and Florida.

Mortality.—Three mortalities were confirmed during July-December 2008. These included a seven-year-old unpaired female, a newly released DAR juvenile on Necedah NWR, and a paired yearling female in north-central Florida. Mortality of another yearling female was suspected in southeastern

Michigan in November.

Autumn Migration of Ultralight-led Juveniles.—The 2008 migration led by Operation Migration to Florida departed from Necedah NWR on 17 October. Seven juveniles completed migration to St. Marks NWR on 17 January 2009 and seven others to Chassahowitzka NWR on 23 January.

Winter 2008/09.—As of late January 2009, the estimated maximum size of the population was 73 birds (42 males and 31 females). Distribution was Indiana (1), Tennessee (19), Alabama (7), South Carolina (4), Georgia (4), Florida (31), and undetermined (7). The 14 ultralight-led juveniles noted above will be added to the population after a brief acclimation period in a top-netted pen at each site.

Richard P. Urbanek, U.S. Fish and Wildlife Service, for Whooping Crane Eastern Partnership

Florida Resident Whooping Cranes

For over a year, in a series of meetings, project partners have been deliberating the prospects for future releases into the non-migratory flock of whooping cranes in Florida. Eight experts representing major project partners and two facilitators (Clint Moore and Sarah Converse, USGS Patuxent Wildlife Research Center) participated in a workshop for this purpose in Gainesville on 25 and 26 August 2008. Major considerations weighed in the decision process included: (1) likelihood of attaining a successful population, (2) project costs, (3) the ability of the captive facilities to provide birds for other releases, (4) information gain, and (5) public relations. The resulting report was presented to the International Whooping Crane Recovery Team on 24 September 2008. At that meeting, the Team used the report and other considerations to formulate a statement of recommendations regarding the Florida flock of whooping cranes:

“...The Team wishes to thank the Patuxent Wildlife Research Center for their report entitled “Releases of Whooping Cranes to the Florida Non-Migratory Flock: a Structured Decision-Making Approach”. The decision process focused on the probabilities of success for the Florida non-migratory whooping crane flock given different assumptions and different levels of continued releases. Although the Team recognizes the difficulties of reintroducing avian species, even the most optimistic assumptions in the study provided no more than a 41% chance of achieving a self-sustaining population, and most values were around 20% or less. The Team feels that 24 whooping crane chicks per year are not available for continued releases in Florida. Releasing fewer than 24 birds annually lowers the probability for success even further. The Team feels that the water regimes produced by periodic droughts in Florida make it extremely unlikely that reproduction in wild-hatched Florida whooping cranes will ever achieve production rates adequate for success. In addition, crane habitat in Florida is faced with tremendous pressure from developers and is expected to decline in the coming decades. **Therefore, the Team recommends that no further releases of captive-reared whooping cranes be made into the Florida non-migratory population.** The Team recommends that the Florida Fish and Wildlife Conservation Commission (FWC) continue to study the remaining non-migratory whooping cranes to maximize learning. The Team hopes that FWC will continue to make valuable contributions to the Whooping Crane Eastern Partnership and consider an expanded involvement with the wild migratory whooping cranes wintering in Florida.”

The FWC accepted the Team's recommendations; the resulting news release by our agency can be viewed at: http://research.myfwc.com/news/view_article.asp?id=31345. We will continue studying the surviving members of this flock which as of 27 January 2009 consisted of 29 birds (11M, 18F). All males are paired so there are no prospects for additional pairing other than from natural reproduction. Priority data to be collected includes sources of mortality for older birds, especially males which are not living past 10 years of age in this flock. We also will study the survival and breeding biology of wild-fledged birds, of which there are five in the flock at present (nine total fledged for the project), and general breeding biology of all pairs.

Low productivity of released whooping cranes has been associated in part with wetland water levels, but inappropriate behavior could also be a factor. A subset of whooping cranes that were captive-reared and released into the wilds of Florida have demonstrated that they are capable of doing everything necessary to pair, nest, lay eggs, hatch chicks, and raise chicks up to independence. However, some pairs were unable to hatch their eggs, even after multiple attempts. We will analyze behavioral data (collected via video surveillance at nests) to compare the incubation behavior of successful pairs vs. unsuccessful pairs. The behavioral data from successful nests will allow us to describe basic nesting biology of the whooping cranes; this baseline information can then be applied in the analysis of nesting behavior in other flocks.

The outlook for the 2009 breeding season is bleak due to on-going drought. We expect ≤ 3 nests this season. Last summer's Tropical Storm Fay, a good rain-maker, dumped up to 30 inches of rain in parts of Florida, but not in the whooping crane range of central Florida.

Marty Folk, Florida Fish and Wildlife Conservation Commission

Mississippi Sandhill Crane National Wildlife Refuge

The final 2008 number for crane nests was 33 resulting in three fledged, including the first ever from the Fontainebleau Unit. The year-end population was estimated to be 101 cranes, including 90 banded individuals, approximately 24 wild-hatched, 51 Audubon-reared, 10 Patuxent-reared, and eight White Oak-reared. Seven carcasses were discovered and another twelve or so disappeared in 2008. Several reappeared from previous years.

Twenty captive-reared juveniles in three cohorts were transferred to the refuge in December for acclimation in the Gautier, Fontainebleau, and Ben Williams Pens. In preparation for the transfer, 0.5 roost ponds were either built or expanded in three pens. This was the first time the new Fontainebleau Pen was used. Nineteen were debrailled and released in January. Fifteen survive as three were killed by predators and one by vehicle impact along I-10. We have a third intern who will focus on predator removal.

To add or change out worn leg bands and/or radios and collect blood for genetic study with Jessica Henkel and Jerry Howard of the University of New Orleans we captured 17 birds since the last Unison Call. UNO student Rose Butler has been collecting data on the refuge predator population using scent and cameras along eight different transects.

Scott Hereford, Mississippi Sandhill Crane NWR, Gautier, Mississippi

News and Announcements

Editors Steve Nesbitt and Marty Folk have completed publication of the **Proceedings of the Tenth North American Crane Workshop**. Copies were mailed out in early December. A PDF version was sent to Richard Urbanek for posting on the web.

Membership dues for 2009. Glenn Olsen, new NACWG treasurer, wants to remind everyone that 2009 membership dues should be remitted immediately. Beginning next mailing, the expiration date of your membership will appear in parentheses on the mailing label after your name.

Note from the FWS Newsletter (<http://www.fws.gov/news/pdf/FWSNewsWin09final.pdf>):

“Honoring nearly a decade of whooping crane recovery efforts, John Christian, Assistant Regional Director for Migratory Birds and State Programs for the Midwest Region, received a National Audubon Society’s Green Hero Award for his instrumental role in establishing and supporting the Whooping Crane Eastern Partnership (WCEP). Funded by Toyota, the Together Green program, ‘aims to provide inspiration, leadership and opportunities that inspire people everywhere to take action at home, in their communities and beyond to improve the health of our environment.’

“Christian was instrumental in establishing and co-chairing WCEP, a coalition of Federal, state and non-governmental organizations dedicated to restoring the endangered whooping crane as a self-sustaining species in eastern North America.”

Now Available: *The Louisiana Coast: Guide to an American Wetland*, by Gay Gomez. The book, published by Texas A&M University Press as part of their Nature Guide and Gulf Coast Studies Series, includes 182 color photos (most by the author), five maps, and lots of information on land, people, and issues in the Louisiana coastal region which was once home to whooping cranes. The book lists for \$24.00 and is available through major bookstores and from the press at 800-826-8911 or www.tamu.edu/upress.

Did everyone see the “Grin and Bear It” cartoon by Fred Wagner this fall? Doctor to the patient in the hospital bed, “Your ultralight-plane crash would have been bad enough without those whooping cranes crashing on you.”

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:

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3722 Defiance St., Oracle, AZ 85623
E-mail: dcellis@theriver.com

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

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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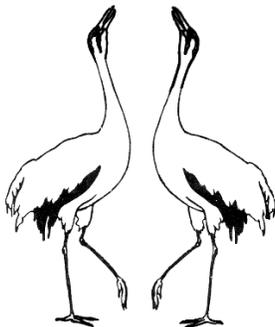
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