



THE UNISON CALL

A Newsletter of the North American
Crane Working Group

Vol. 10, No. 2, 1998

YOU ARE INVITED TO THE EIGHTH NORTH AMERICAN CRANE WORKSHOP IN 2000

We're headed to **ALBUQUERQUE, NEW MEXICO, for the Eighth North American Crane Workshop, January 12-14, 2000!** Plans for the Workshop to be held at the Sheraton Old Town include: an icebreaker on Tuesday evening the 11th, technical sessions on Wednesday the 12th and Friday the 14th, and an awards banquet on Friday evening. Thursday, the 13th, is set aside for an all-day field trip to Bosque del Apache National Wildlife Refuge. John Taylor, Wildlife Biologist at Bosque, has been very generous and helpful in making local arrangements. We have planned the event to precede the Martin Luther King holiday for those who can take advantage of the long weekend to extend their visit. Possible additional field trips for the weekend are being investigated. Please mark the dates on your calendar and plan to attend the Workshop! It's a great opportunity to spend time with a whole flock of craniacs! More details will be given in the next *Unison Call*.

CALL FOR PAPERS!

Submissions are now being considered for inclusion in the Proceedings, which will be published immediately after the Workshop. See below for details.

AWARD NOMINATIONS are now being accepted for the L. H. Walkinshaw Crane Conservation Award. This award is given by the NACWG to an outstanding crane biologist, to recognize his/her contributions and achievements in crane conservation. The award is named for "Larry" Walkinshaw, an honored and respected man who dedicated a large part of his life to crane research. Send letters of nomination to: Scott Hereford, MS Sandhill Crane NWR, 7200 Crane Lane, Gautier, MS 39553.

TIME TO RENEW! It's time to renew your NACWG membership if you haven't done so. Please fill out the [renewal form](#) and send in with your dues.

ANNOUNCEMENTS

CALL FOR PAPERS!

Submissions are now being considered for inclusion in the Proceedings, which will be published immediately after the Workshop.

ABSTRACTS of 200 words or less are due April 1, 1999. These will be reviewed for acceptable content and authors will be notified as to their status by May 15. **FIRST DRAFTS** of papers will be due July 15. **FINAL DRAFTS WILL BE DUE AT THE CONFERENCE.**

FORMAT for abstracts and papers will follow Journal of Wildlife Management Guidelines.

ORIGINAL RESEARCH is encouraged, but review papers will be considered.

PAGE CHARGES (\$25.00 per page), will help defray the costs of publication. Individuals lacking such funds may apply for a waiver.

STUDENT AWARD. A monetary award will be presented to the student with the best paper.

An Editor for the Proceedings has not yet been named.

SEND ABSTRACTS TO: SCOTT G. HEREFORD
MS SANDHILL CRANE NWR
7200 CRANE LANE
GAUTIER, MISSISSIPPI 39553
Fax: 228/497-5407
E-mail: scott_hereford@fws.gov

WHOOPING CRANE RECOVERY TEAM (WCRT)

The WCRT met in Calgary August 12-14 with the Captive Management Team meeting the following day. All 10 team members and 30 participants total attended. Many important decisions were made. Team recommendations were later approved by the USFWS Regional Office in Albuquerque.

Major decisions included the following:

1. That the next whooping crane reintroduction would be a migratory flock.
2. That the Audubon Institute in New Orleans was approved as a new breeding center for whooping cranes, with 5 pairs to be shipped to that facility by the year 2003.
3. That a flock be established between Wisconsin and Chassahowitzka NWR in Florida, pending outcome of a study to be conducted by Dr. John Cannon of the suitability of

Wisconsin as a nesting site. Future flock expansion could later occur into Manitoba and Louisiana. Operation Migration was endorsed for carrying out this reintroduction once all the required permissions are obtained.

4. No more releases of whooping cranes in the Rocky Mountains will take place until certain biological and political criteria are met. The coordinators were authorized to approve a request for more whooping cranes in the Rockies provided chicks are available according to the approved priority, and the experimenters can obtain the appropriate federal, state, and flyway approvals.

5. The allocation of captive whooping crane chicks was set in the following priorities:

- a. Maintenance of captive flocks,
- b. Florida non-migratory releases,
- c. Wisconsin/Manitoba releases,
- d. Off-corridor experiments considered essential to FL, WI, or propagation,
- e. Education,
- f. Other experiments.

The Team at this "experimental" reintroduction phase did not want any potential mixing between reintroduced whooping cranes and the natural Aransas/Wood Buffalo population. This kept the Team from selecting a Manitoba to Louisiana route. If an eastern reintroduction proves to be successful, then these alternate locations are probable expansion areas. In mid-September, contacts were made with Wisconsin and USFWS-Region 3 informing them of WCRT recommendations, and permission was received for Dr. Cannon to start his assessment of Wisconsin marshes.

Most of the discussions with USFWS-Region 2 about Team recommendations centered around the Rocky Mountains. The Regional Director agreed that biological uncertainties need to be addressed about the suitability of the Rockies for whooping cranes, and is very aware of the political concerns with opposition from the Pacific Flyway Council and States. Until these parties WANT more whooping cranes, it would be difficult to get permission to place more whooping cranes in the west. Yellowstone National Park authorities are pushing hard for more whooping cranes. Kent Clegg has continued his valuable public relations work for the whoopers. He has met with USFWS-Region 2 and State of Wyoming to discuss his accomplishments and future plans. Dr. James Lewis is preparing a white paper that will address biological concerns about whoopers in the Rocky Mountains.

A new issue for whooping cranes is the proposed spring hunting season for snow geese to address the overpopulation problem and damage to Arctic nesting areas. In general, the snow goose migration occurs ahead of the whooper migration with little overlap in the U.S. except for a few early whooper migrants. Migration data were submitted to the Washington office.

Tom Stehn, Aransas, TX

Specimens

Arrangements were made with the Florida State Museum in Gainesville to hold whooping crane specimens from the Florida reintroduction project. Many of these

specimens resulted from bobcat predation and only certain parts (hollow bones, wing feathers, etc.) are usable.

Several facilities have young chicks (in general less than 30 days old, all necropsied) that would be available for museums or education institutions. Please contact Tom Stehn if you know of any requests for these chick specimens.

REGIONAL REPORTS

FLORIDA

During the first half of 1998 we saw lower than average survival (14 mortalities) of newly released chicks (probably associated with a number of factors) and lower than average survival (6 mortalities) of older birds (associated with a high-powered rifle, a powerline, and flightlessness during simultaneous molting of remiges). In contrast, during the second half of 1998 we saw higher than average survival (1 mortality) among whoopers older than 1 year of age. We lost 2 of 6 chicks released in November. At the end of the year there were 58 trackable whooping cranes in Florida. This included 6 pairs.

1998 was a year of record-breaking high temperatures and drought in Florida. At the end of the year, when marsh water levels should be fairly high at the beginning of the dry season, the levels were already low. This winter/spring we expect lower than average survival of newly released chicks and reduced breeding activity in older cranes.

Marty Folk, Kissimmee, FL

MISSISSIPPI

Results of the November crane census and year-round monitoring yielded a population of 90-100 Mississippi sandhill cranes. A pair that had disappeared and was presumed dead suddenly appeared in a local pasture in December with a young of the year, bringing the total fledged chicks to a record 4. There had been 3 fledged twice before in the last 33 years. A total of 20 pairs laid 23 nests.

Fifteen cranes in 3 cohorts will be transferred from Audubon's Species Survival Center to the refuge for acclimation in January and later released at 3 "pond pen" sites. Fourteen of the 17 from last year survive to date. A fifteenth, one of the notorious 4 stooges hanging out in a residential yard, was hit by a vehicle and suffered wing damage. That bird was sent to Audubon for rehabilitation. Permits were obtained for creating 3 additional shallow water areas on the refuge for future use as roosts and release sites.

Four adults were captured in September and had liver slices removed by Glenn Olsen in a project to determine if older birds that have not bred successfully have been exposed to contaminants at sublethal levels that may be interfering with breeding. Lab work will be done at Patuxent.

Sabrina Keen has been selected as the new Project Leader and she should report in early February. She comes from the BLM in Oregon where she has worked on endangered species issues. Jereme Phillips has been selected as the second permanent full-time Biotech (first time in 6 years with 2 PFT techs) and will report January 19.

Scott Hereford, Gautier, MS

TEXAS

Aransas

All the whooping cranes (181) started the migration by the end of April 1998 with no cranes remaining over the summer.

Summer events related to the Corps of Engineers Section 216 study included placement of 4 miles (20,887 feet) of cement mats at a cost of \$2 million to stop erosion along the Intracoastal Waterway. Other development projects included oil companies drilling wells on both the refuge and Matagorda Island. Some additional seismic exploration also took place in coastal bays.

As of 3 December, 156 adults and 16 chicks had returned to Aransas. One family group is known to still be in migration, so hopes are high that the record 182 birds present last winter will be broken.

Tom Stehn, Aransas, TX

*Population estimate on January 14, 1999, was a record **183!** Included: 100 adults, 65 sub-adults, 18 chicks.*

GREAT LAKES

1996 Fall Sandhill Crane Census.--Results were compiled by Len Schumann, U.S. Fish and Wildlife Service, East Lansing, Michigan. Of 29,753 individuals tallied during 23-31 October, 12,468 were counted in Wisconsin, 4,148 in Michigan, 12,936 at Jasper-Pulaski Fish and Wildlife Area (J-P) in Indiana, 100 at other sites in Indiana, 43 in Tennessee, and 58 in Georgia/Florida. Peak count at J-P, the major stopover on the migration route, was 26,366 on 14 November.

1997 Fall Sandhill Crane Census.--Results were compiled by Len Schumann. Of 29,448 individuals tallied during 29 October-3 November, 9,625 were counted at specific sites in Wisconsin, 5,363 in Michigan, 12,542 at J-P in Indiana, 73 at other sites in Indiana, 5 in Tennessee, 33 in Georgia/Florida, and 1,807 in unspecified areas. Peak count at J-P was 27,642 on 19 November.

1998 Fall Sandhill Crane Census.--The count at J-P on the fall census date, 28 October, was 11,154. Peak count at J-P was 15,800 on 25 November. Lack of a well-defined peak

in 1998 may have been related to the record mild fall and lack of freezing temperatures even into December.

Richard Urbanek, Seney, MI

CANADA

Whooping Crane Nesting Season Update

During the 1998 whooping crane nesting season there were 49 nesting pairs. At least 48 chicks were observed including 12 pairs with twin young. None of the twin pairs survived beyond June 19. Twenty four chicks survived to fledging age. The Canadian Wildlife Service conducted breeding pair surveys in May, hatching success surveys in June, and chick survival surveys in mid August. Jim Bredy and Tom Stehn of the USFWS assisted Brian Johns during the mid June summer range surveys.

Whooping Crane Fall Migration

One hundred and sixty-three Whooping Cranes including 10 young of the year were confirmed in Saskatchewan during the 1998 fall migration (some groups may have been seen in more than 1 location and reported as different birds). An early fall snow storm in central Saskatchewan dropped 30-50 cm of snow on Oct.11 and moved some birds south earlier than normal. Many others hung on into early November. As these later birds moved out of Canada they were bombarded by a horrendous snow and wind storm in the Dakotas on November 9-10 which dispersed birds and may have contributed to some losses.

Brian Johns, Saskatoon, Saskatchewan

ROCKY MOUNTAINS

A recruitment survey (% juveniles) of RMP cranes staging at San Luis Valley, CO, was conducted for the 27th consecutive year between 21 and 24 October 1998. Seventy-three flocks were sampled and 8,533 cranes were classified including 7,853 (92.0%) greater RMP cranes and 680 (8.0%) lessers from the Mid-Continent Population (MCP). The proportion of juvenile RMP cranes was 11.2% and for MCP lessers was 9.3%. Mean brood size for RMP families was 1.25 (n = 632 families) and a rare 3-chick brood was recorded. In 51 families of MCP lessers, mean brood size was 1.12.

The 11.2 recruitment rate in 1998 was the highest recorded since 1983 and the fourth highest in 27 years, exceeded only in 1972 (11.6%), 1973(12.0%) and 1983(11.6%). The high recruitment rate reflected excellent wetland water levels and chick rearing conditions on breeding areas in 1998.

Biologists Ron Garcia and Lisa Rawinski, Alamosa-Monte Vista NWR, and 3 volunteers counted 20,300 cranes during a ground survey on 14 October 1998 in the San Luis Valley.

In addition, they classified the status of 245 grainfields (barley and wheat) during the survey: 137 (56%) had been tilled, 60 (24%) had been tilled and watered to sprout waste grain, 2 (1%) were unharvested, and only 46 (19%) still remained in stubble. The increasing trend in the 1990's of fall tillage of grain stubble is of major concern because it reduces the availability of waste grain during the spring migration period for RMP cranes and waterfowl in the San Luis Valley.

Rod Drewien, Wayan, ID

ABOUT OUR MEMBERS

GAY GOMEZ sent us this update.....

In August 1998 I was appointed Assistant Professor of Geography at McNeese State University in Lake Charles, Louisiana, just north of the Chenier Plain wetlands that were once home to whooping cranes in winter, as well as a nonmigratory flock that nested north of White Lake. The story of the whooping crane in southwest Louisiana is woven into my book, *A WETLAND BIOGRAPHY: SEASONS ON LOUISIANA'S CHENIER PLAIN*, to be published by the University of Texas Press in December 1998. I look forward to continuing my research in this unique region of marshes, ridges, and chenier communities.

Lingle Receives 1998 Extension Wildlife Award

Nov.1998

SCOTTSBLUFF - Gary Lingle of Kearney received the 1998 Extension Wildlife Award during the Nebraska Cooperative Extension Association's annual meeting this week in Scottsbluff. Lingle is the Platte Watershed Program coordinator based at the Buffalo County Extension office in Kearney. He also is an extension educator.

The Michigan native moved to Nebraska in 1978 to study Platte River ecology with the U.S. Fish and Wildlife Service. Lingle was a founding member of the Wings Over the Platte task force and was honored as Crane Conservationist of the Year in 1997 by Wings Over the Platte. He has published more than 55 scientific and popular articles, including two books. Since 1989, he has organized and/or participated in youth camps, including Summer Orientation About Rivers, Crane Meadows Nature Center camps, and Nature Discovery Classroom.

As an extension educator, Lingle coached a Wildlife Habitat Evaluation team and serves on a number of committees of the tri-state Platte River agreement signed by Colorado, Wyoming, and Nebraska governors and U.S. Interior Department in July 1997. He also organized and published the proceedings of the Platte River Basin Ecosystem Symposium in 1997. Lingle is organizing the 10th symposium in February 1999 in Kearney.

Selection for the award is based on initiation and promotion of wildlife and related activities or programs, emphasizing wildlife and conservation in interdisciplinary efforts,

involvement with programs established by wildlife agencies, and cooperation and teamwork with other extension staff in establishing and promoting state or county wildlife-related programs.

CRANE RESEARCH

Search for a Reintroduction Site for a Migratory Population of Whooping Cranes

The Canadian Wildlife Service and the Delta Waterfowl and Wetlands Research Station, continued work to identify suitable reintroduction sites in the Interlake region of Manitoba. The 5 sites that were evaluated during 1997 for their habitat suitability and landowner/local government acceptance were further investigated in 1998 for their potential food resources. Despite some variation, the abundance and diversity of food items was fairly similar at all wetland complexes. No complex stood out as having a greater abundance of all food items.

Although no single wetland complex contained enough habitat to support the entire proposed population of 25 nesting pairs, the Interlake region as a whole would easily support a population of that size. The Shoal Lakes and Vestfold-Goulet complexes seem to hold the most promise as a release site.

B. Sommerfeld/C. de Sobrino/B. Johns

Whooping Crane Diet and Chick Mortality Study

Diet: During the summer of 1997 it was observed that cranes fed primarily in small shallow diatom ponds. These ponds and the surrounding shorelines were sampled for potential prey items including: fish, invertebrates, amphibians and small mammals. Water parameters were also measured including: water depth; colour; percent and type of emergent vegetation; PH; dissolved oxygen; conductivity; salinity; chlorophyll a; phosphorus; and substrate cores taken . In 1997 80% of feeding ponds contained fish, while only 33% of nonfeeding ponds contained fish. Other potential food items caught during pond sampling included: pond snails, wheel snails, dragonfly larvae, diving beetles, water boatmen, backswimmers, and giant water bugs. In 1998 feeding and nonfeeding ponds were again sampled, with similar results to 1997. Whooping Crane feeding trials at the Calgary Zoo were conducted with small fish and invertebrates captured in the Whooping Crane breeding area in Wood Buffalo National Park. The prey items were fed to a pair of cranes to determine catchability, preference, and digestibility of prey items. This trial was part of a larger joint study between Parks Canada, the Univ. of Alberta and the CWS to evaluate the quality of the current Whooping Crane breeding habitat in Wood Buffalo National Park. This baseline data will be used to evaluate potential future release sites for Whooping Cranes in eastern North America.

Chick Survival:

Whooping cranes usually lay a clutch of two eggs. However, they rarely raise more than one young, despite hatching success of 70-80%. Between 1964 and 1996, no whooping crane family arrived on their wintering grounds in Texas with two young. A family arrived with both young in 1997 for the first time in 32 years. Brood reduction is a common strategy in many avian species. To ensure the survival of one offspring, females lay and incubate eggs over several days resulting in asynchronous hatching of the chicks. This staggered hatching is considered an adaptation for periods of food shortage during the nestling stage; broods can be reduced to match prevailing food conditions. This usually results in the first chick having an advantage over its sibling(s).

Eight pairs of whooping cranes were monitored throughout the summer of 1997. Each pair hatched out two chicks by mid June. By the end of June, only one pair had both of their chicks. No direct causes for the losses of single chicks were determined as ground searches for the missing chicks were unsuccessful. In early June, 1998, six pairs of whooping cranes each with two chicks were selected for further study and six lightweight transmitters were glued onto the chick's backs. Only one chick from a set of twins had a transmitter attached; on three occasions it was the smaller chick, while on three occasions it was the larger chick. Dr. Bob Cooper of the Calgary Zoo conducted health assessments to determine their overall fitness. Within a week of hatching, all three of the smaller chicks had perished while the larger chicks were doing fine. Based on the health assessments the three smaller chicks were generally not as "fit" as the larger chicks. A necropsy on one of the chicks revealed it had pneumonia, while another chick that died appeared to be under prolonged severe stress (there was evidence of sibling aggression). The fate of the third chick is unknown although its transmitter was located 2 km away from its parents on a roosting location for ravens . Based on this and previous data, the first two weeks following hatching is the most critical period in chick survival.

D. Bergeson

Rocky Mountains Reintroduction Project

The two ultralight whooping cranes captured by Kent Clegg in the spring 1998 migration in Wyoming and Colorado were released in Yellowstone National Park. The birds were very popular with tourists and became easy to approach. Kent captured one of the two. It was transported by helicopter--funded by the WCCA--to Bechler Meadows, a large marsh in the southwest corner of the Park, where it quickly associated with a summering cross-fostered adult whooper. The ultralight whooper that remained at Slough Creek became more wild, associated for the rest of the summer with a sandhill family, and stayed away from people.

The two remaining cross-fostered whoopers summered at Red Rocks NWR, and Bechler Meadows in Yellowstone NP. The sandhill crane-whooping crane hybrid also summered in Yellowstone.

All three Yellowstone whooping cranes started the fall migration and staged in the Teton Basin west of Driggs, Idaho, in late September. This movement occurred after the close of the special sandhill crane hunt in Idaho, so no conflicts occurred. The two cross-fostered whoopers made it to the Rio Grande Valley by December. The ultralight whoopers migrated as singles. One arrived at Bosque del Apache NWR December 7. The other was seen in northern New Mexico near Farmington but is currently missing. Five of the seven sandhills flown behind the ultralight in fall 1997 have also returned to Bosque.

Tom Stehn, Aransas, TX

Thanks to all who contributed to this newsletter!