WHOOPING CRANE RECOVERY ACTIVITIES
April – September, 2003
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HIGHLIGHTS

An excellent nesting season in Canada raised expectations for a record number of whooping cranes to arrive at Aransas in the fall, 2003. In mid-August, a record 61 nests had fledged 28 chicks.

The central Florida whooping crane flock responded favorably to increased water levels and set records in 2003 for the most nests (8) and most fledged chicks produced (3). The pair that successfully fledged the first whooping crane chick (Lucky) in 2002 were successful parents in 2003, raising Lucky II. Survival of the 13 juveniles released in the 2002-03 winter was excellent, with only one mortality from a power line strike.

All 21 whooping cranes in the eastern migratory population left Florida on their own in the spring of 2003. All but one survived the summer. An additional 16 juveniles are well along in flight training and should leave on their first ultralight migration in October.

Captive whooping crane facilities had an excellent production season with 41 chicks fledged. Total whooping crane numbers in September, both captive (134) and wild (318), totaled 452.

ARANSAS – WOOD BUFFALO FLOCK

SPRING MIGRATION, 2003

An estimated 184 whooping cranes migrated north on schedule in the spring of 2003, ten more than had left Aransas in spring, 2002. Eighty-nine percent of the cranes (164) left Aransas between March 26 and April 15, with 114 whooping cranes starting the migration between April 9-15. All cranes had migrated by April 29.

Wally Jobman of the USFWS Endangered Species office in Grand Island, Nebraska continued his recording of whooping crane sightings. A total of 30 migration sightings were reported from Texas (1), Kansas (1), Nebraska (6), North Dakota (7), Montana (1), and Saskatchewan (14). No confirmed sightings were reported in Oklahoma or South Dakota. The first dates recorded for confirmed observations of migrating whooping cranes were March 31 in the U.S. and April 12 in Canada. All confirmed sightings in the U.S. were reported between March 31 and April 17. The last sighting date was May 19 in Canada. The migration progressed quickly, limiting the number of reported sightings.

WOOD BUFFALO NESTING GROUND SURVEYS, 2003

Brian Johns and Lea Craig-Moore of the Canadian Wildlife Service located a record 60 nests on breeding pair surveys in May. Water levels were normal, and not as good as the last two or three years, but still okay. The record nesting occurred in spite of a mid-May snowstorm that dumped 20 centimeters of snow on Fort Smith and the eastern edge of the nesting area. USFWS Pilot Jim Bredy along with Brian Johns and Tom Stehn conducted whooping crane production surveys June 11-16 in a Partenavia twin-engine aircraft. A 61st nest was located on the June surveys, shattering the previous high of 52 nests in 2001. The increase in nesting pairs resulted from excellent production in 1997 (a record 30 chicks) that are now adults. An estimated 3 known pairs failed to nest in 2003. Thus, there is a minimum of 64 breeding pairs in the population. In June, 2003 a total of 45 chicks including 3 sets of twins hatched, with 4 females still sitting on eggs. This compares with a 2002 total of 33 chicks including 5 sets of twins, with 5 females still sitting on eggs. The number of chicks (45) and twins (3) were similar to the summer of 1995 when 28 chicks survived to reach Aransas. If a similar percentage of chicks survive in 2003, the population should show a substantial increase.

During the June production survey, the loss was documented of both of the twin chicks at nest # 14, leaving 43 chicks with 2 sets of twins at the completion of the survey. This compares with 2002 end of survey results of 32 chicks with 4 sets of twins, and 2001 totals of 38 chicks with 9 sets of twins. Two instances of adult mortality were documented. These were at nest 44 where only one adult with a chick was present, and at one other nesting territory where one color-banded adult crane was observed as a single without its mate and did not nest. In mid-August surveys, 28 chicks were located by CWS, including one set of twins. With this number of chicks in August, hopes are high that the population will make a substantial increase in 2003, should break the all-time high of 188 set in 1999-2000, and could be somewhere above 195.

ARANSAS NATIONAL WILDLIFE REFUGE

The February coast-wide pickup of abandoned crab traps missed a considerable number on Matagorda Island due to bad weather and the remote location. Tom Stehn organized an additional pickup operation on April 14 that removed about 300 more traps. Thanks go to all the agency personnel that helped. Aerial surveys later found an additional 63 traps that will be picked up in the fall.

In May, Tom Stehn completed his wintering grounds report on the 2002-03 winter that includes information on flock size, distribution, and habitat conditions encountered.

Summer rains benefited the bays during 2003, with bay salinities ranging between 5 and 15 parts per thousand for most of July and August. Rains of several inches in early July were added to when Hurricane Claudette slammed in to Port O'Connor, Texas just north of whooping crane critical habitat on July 15th, bringing 5.75 additional inches of rain. Bay waters covered the marshes, presumably lowering marsh salinities. Hurricane-force winds of up to 110 mph knocked out power to the refuge for 6 days, damaged a few bulkheads, boardwalks, and roofs, knocked down some trees, but in general the Texas coast received only minor damage. The entire refuge staff had boarded up the refuge and evacuated except for Manager Holbrook who spent hurricane day sitting on his front porch reading a book.

A 3-D geophysical seismic exploration got underway in mid-July that will involve exploding over 7,000 dynamite charges 60+ feet underground over 21,537 acres on the south end of Matagorda Island and surrounding bays. More strict operating procedures were put into place compared with the last seismic survey on the north end of Matagorda done about 6 years ago. No vehicles were allowed on survey or recording lines. Only aluminum-tracked vehicles were allowed on dry marsh and airboats in the wet areas.

FRESHWATER INFLOWS

Water issues were an important matter in the Texas legislature in the spring, 2003. Unfortunately, conservationists did not fare well. The San Marcos River Foundation's (SMRF) application for an instream flow for conservation purposes on the Guadalupe River was rejected in March but brought the urgent need of saving Texas rivers to the forefront. SMRF has filed for a re-hearing and has also started legal action. Texas legislators took action in May with the passage of Senate Bill 1639 which *prohibited* the issuance of new permits for river protection through September, 2005, pending the recommendations of a newly created Study Commission on Environmental Flows established to consider how to protect river flows and freshwater inflows into the bays that was commanded to prepare a report for the 2005 legislature. Permits for other uses will continue to be issued, reducing even the minimal amounts remaining in some river segments. *"What is the point of a study process if you've given away all the water before the study is finished?"* said Myron Hess legal counsel and director of Texas water programs for the National Wildlife Federation's Gulf States Natural Resource Center in Austin, Texas. The legislation arose as a result of applications filed by SMRF and others to obtain permits for the specific purpose of keeping water flowing in the state's rivers and into the bays and estuaries.

"Depending on whom state leaders appoint, the Study Commission could be an empty promise or it could lead to real progress for river and bay protection in Texas. Nothing will have a greater impact on the survival of fish and wildlife in Texas than how we manage our rivers and bays. Productive rivers and bays are an essential part of a healthy environment and a healthy economy. Coastal fishing and nature tourism are multi-billion dollar industries in Texas. Policy-makers must meet the challenge of addressing the water needs of future Texans in a way that protects our state's unique natural heritage. And we quickly need to get beyond the point of studying options for protecting rivers and start actually doing it" (e:mail from Dianne Wassenich of SMRF).

ADMINISTRATION

A draft of the revised Whooping Crane Recovery Plan with data current through the end of 2002 was turned in to the USFWS – Albuquerque in May, 2003. It is nearly 200 pages long.

Nichole Tadano of the National Wildlife Federation in Washington, DC is creating an on-line course on endangered species issues, including one lesson plan on the whooping crane.

Work by Dave Sharp and Tina Chouinard continued on a centralized web site to give identification and current population information to folks buying sandhill crane hunting licenses on-line. This involves getting all states hunting sandhills to post information on identifying whooping cranes. Many states have added information to their waterfowl brochures. As more and more states go to on-line licensing, the web site approach will become more useful.

Lobbying coordinated by the International Crane Foundation continued for the Crane Conservation Act.

PLATTE RIVER

In tragic news, Executive Director Dr. Paul Currier of the Platte River Whooping Crane Habitat Trust passed away April 19th following heart bypass surgery. The crane family misses Paul and commend him for the wonderful work he did. Dr. Felipe Chavez-Ramirez is currently Acting Director for the Trust.

Work got underway on the National Academy of Science's one year review of Critical Habitat designation of 4 endangered species on the Platte River as proposed by Representative Osborne of Nebraska to see if the designation is based on sound science. Public hearings were held in Nebraska May 6 and August 11. Tom Stehn traveled to Nebraska for the May hearing and presented information on the whooping crane. The Platte River is the third-most habitat used in the whooping crane migration and habitat needs to be restored from the historic decline that has occurred in the Platte River channel that has become deeper and forested. The USFWS Endangered Species office in Grand Island supplied additional requests for data. This has taken up considerable staff time and Interior Department funding of more than 600,000 dollars to pay NAS to conduct the study.

GENETICS

Graduate student Ken Jones has defended his PhD thesis at the U. of Illinois at Chicago and taken a post-doctorate position at Kansas State University. He will be studying how global change effects soil nematode communities. Ken will continue working with the whooping crane studbook and hopes someday to continue genetics research on cranes. However, he will not currently be doing any genetic work on cranes. Thus, funding will have to be found to get paternity testing done next year at commercial labs.

CENTRAL FLORIDA

The following information is paraphrased from the July 2003 Unison Call newsletter written by Marty Folk and Steve Nesbitt of the Florida Fish and Wildlife Conservation Commission.

> The central Florida whooping crane flock responded favorably to the increased water levels and set records in 2003 for the most nests (8) and most fledged chicks produced (3). One pair lost 2 month-old chicks, but then re-nested and successfully fledged a single chick. Six of 8 nests hatched chicks, quite an improvement over the 2 of 14 nests that hatched during drought years. The pair that successfully fledged the first whooping crane chick (Lucky) in 2002, also were successful parents in 2003, raising Lucky II. Lucky I left his parents and is hanging around other whooping cranes, including some of the captive juveniles released in 2003. Survival of the 13 juveniles released in the 2002-03 winter was excellent, with only one mortality from a power line strike. One crane collided with a power line, breaking the transmitter completely off. A 9-year-old male died of electrocution after encountering a power line. Another bird suffered a broken leg but did regain use of the leg, walking with a limp.

In June, the Florida crane project routinely monitored 72 whooping cranes, including 16 pairs. Presumably more than 80 whooping cranes are alive in Florida. Updates on the flock are being posted by the WCCA's Chester McConnell on http://whoopingcrane.com/wccaflockstatus.htm.

Infectious Bursal Disease (IBD) is a viral disease that may have caused increased mortality (>50%) in the 2001-02 winter cohorts released in Florida. IBD is known from domestic poultry where it only affects birds in their first year. It is not known if the cranes are picking it up in Florida or are first exposed at the captive facilities. One juvenile at Patuxent tested positive for IBD this summer. Testing of archived samples from Florida indicates that the virus has been present in previous years when cohort mortality was high, but a definitive association has not yet been made. We need to learn about the biology of the virus, source and transmission, presence in wild Florida sandhill cranes and captive flocks, effectiveness of a vaccine, and continued surveillance of future and archived sera. Vitally important research by Dr. Marilyn Spalding received partial first-year funding from the Whooping Crane Eastern Partnership.

THE WHOOPING CRANE EASTERN PARTNERSHIP (WCEP)

All 21 whooping cranes (5 subadult whooping cranes from 2001 and 16 juveniles from 2002) in the eastern migratory whooping crane population headed back entirely on their own to Wisconsin from west central Florida in the spring, 2003. All returned to central Wisconsin except for 1 female that stopped short in northern Illinois where she summered, and a second female that got off track in northern Georgia and migrated well west of the migration routes used by the other cranes. It was noteworthy that the latter bird had been trucked through a large portion of Georgia during her first fall migration which may have interfered with her staying on the return route. On May 3, project personnel in costume approached this off-course bird in southeastern Ohio and easily captured her and returned her to central Wisconsin. One female after returning to Wisconsin crossed the border into southeastern Minnesota where she spent most of the summer. Three females after returning to Wisconsin strayed to the northwest and were reported 6 miles across the border of South Dakota in Deuel County. As per written agreement, South Dakota was quickly notified and decisions made jointly on how to handle the cranes. After the Central Flyway Council requested the birds be captured and returned to Wisconsin, and after the roost pond of the 3 cranes dried up and they moved 60 miles further west, a joint decision was reached to capture the 3 females. A capture was completed with some difficulty, and the feistiest of the 3 cranes developed capture myopathy and subsequently died after days of intensive therapy at Necedah NWR. This loss was unfortunate, but the capture of the whooping cranes was driven by the desire of the central Flyway Council and by the section of the Endangered Species Act that does not want mixing of endangered and experimental nonessential populations of a species, even if the birds are color-banded and their origin known. One of the whooping cranes from 2001 spent her second summer at Horicon NWR east of the release site at Necedah. It is noteworthy that all the straying whooping cranes were females (1 in Illinois, 1 at Horicon, 3 in South Dakota). This was anticipated, with better homing by males anticipated back to the release site at Necedah.

WCEP continued operations for reintroductions in 2003 that included project planning, fund raising, hatching and training chicks at Patuxent, health checks and flight training at Necedah NWR. This year, 2 of the eggs for the ultralight project were produced and flown in to Patuxent from the San Antonio Zoo, and 1 egg came from the International Crane Foundation. Sixteen cranes were flown from Patuxent to Necedah aboard a Windway Corporation aircraft, 10 young whoopers on June 19th, and 7 on July 1st. One crane pulled from the ultralight cohort at Patuxent because of health problems later tested positive for infectious bursal disease, the disease that caused excessive mortality in all 2001-02 releases in central Florida. Ultralight training proceeded ahead of schedule throughout the spring and summer, with project veterinary staff dealing with some minor ailments. One crane collided with the ultralight and had to be euthanized. Partnership planning meetings were held in Wisconsin September 18-19, 2003.

In May, WCEP received the U.S. Secretary of the Interior's 4 C's award for all aspects of the project. In June, Operation Migration received the silver award in the category of "Rehabilitation and Restoration" during the annual Canadian Geographic sponsored contest. Joe Duff and others, including former volunteer Deke Clark who is well on his way towards recovery from
stroke, attended the Canadian Environmental Awards gala event June 2nd in Toronto, Ontario. Operation Migration was selected from over 150 nominees to receive the award. Joe Duff and

Bill Lishman, co-founders of OM, each received one of sixteen 2002 Conservation Achievement Awards presented by the National Wildlife Federation at a ceremony held in Washington, DC in May 2003. The two received their Special Achievement Awards for their "Extraordinary Contribution to the Conservation of Wildlife and Natural Resources".

CAPTIVE FLOCKS

Weekly phone conference calls with flock managers were held throughout the spring to decide on egg disposition. These calls resulted in the transfer of 3 eggs to Patuxent for the ultralight reintroduction project, and helped provide desired cohort size for the central Florida project. Thanks go out to all the captive programs for their tremendous cooperation and willingness to help.

AUDUBON CENTER FOR RESEARCH ON ENDANGERED SPECIES (ACRES)

One pair moved to ACRES in 2000 laid four eggs, the first whooping crane eggs laid at the facility that houses 30 adult Mississippi sandhill cranes and 8 whooping cranes. One egg was broken by the pair, and 3 eggs failed to hatch, but this was an excellent start with high hopes for next year.

CALGARY ZOO

In 2003, 4 whooping crane females in Calgary laid 21 eggs. Three eggs hatched, but one chick had to be euthanized due to leg problems. One chick was costume reared and will be placed on display at the Calgary Zoo. One chick will be sent to Patuxent for socialization into a cohort going to the Florida non-migratory flock.

The Calgary Zoo sent Dwight Knapik to Patuxent in the spring for training to do artificial insemination (AI). Megan Lauber from ACRES traveled to Calgary in the second week of March and trained the staff in AI. AI was done on one sandhill pair and one whooping crane pair. It is hoped that production at Calgary should increase greatly in future years now that AI is being started.

HOMOSASSA SPRINGS WILDLIFE STATE PARK

Homosassa Springs Wildlife State Park successfully completed renovations to a crane pen in the spring. One whooping crane was transferred from the Lowry Park Zoo and put on permanent display at Homosassa in May. The crane was reported enjoying poking along a waterway eating earthworms, grubs, and minnows and seems well at ease on display. A second whooping crane was approved to go to Homosassa once a new exhibit is constructed.

INTERNATIONAL CRANE FOUNDATION (ICF)

ICF had 8 producing females lay 36 eggs. Seventeen eggs were fertile, and 14 hatched. One of these eggs was transported to Patuxent for inclusion in the ultralight project. Two chicks died. Eight chicks will be socialized into a cohort and shipped to Florida. Three chicks will be kept back for genetic reasons as replacement birds for captivity.

Losses of white-plumaged whooping cranes included a bird with a recurrent respiratory problem that was caused by a large mass in the syrinx. Also, one crane may have been spooked by a low altitude parachute airplane, crashed into the fence and broke a wing, and subsequently died. The freezer at ICF broke down and all specimens ruined before the problem was discovered. Skeletal material was salvaged and transferred to the U. of Wisconsin – Madison.

ICF remained heavily involved supporting the Wisconsin to Florida whooping crane reintroduction. ICF personnel monitored the released birds throughout the year and captured wayward cranes in Ohio and South Dakota. ICF provided veterinary and crane keeper staff to Necedah NWR throughout the summer.

LOWRY PARK ZOO

The Lowry Park Zoo in Tampa, Florida currently holds three whooping cranes. Two are a recently formed pair permanently on display. The other bird is from the central Florida reintroduction that is undergoing rehabilitation. One other whooping crane was transferred to the Homosassa Springs Wildlife State Park in May.

PATUXENT WILDLIFE RESEARCH CENTER

Cranes at the USGS Patuxent Wildlife Research Center had a productive spring. Twenty-seven whooping cranes were hatched from 51 eggs. Additionally, 2 eggs from the San Antonio Zoo and one egg from ICF were hatched and assigned to the ultralight project that ended up with 19 chicks. Seventeen of these chicks were shipped to Wisconsin. Ten chicks were raised for the Florida non-migratory release project. In addition to the whooping crane propagation and ultralight training, Patuxent raised sandhill crane chicks for a glider project in California, and others for a West Nile virus study. It was a very busy spring, and the staff not at full strength due to unfilled vacancies had to work long days and considerable overtime. Some positive personnel moves were made, but the position of research scientist formerly filled by George Gee remained vacant due to budget concerns and personnel ceilings, and more technicians are needed. Letters were written urging Patuxent to fill staff vacancies before research programs are seriously diminished and crane production is seriously hampered.

SAN ANTONIO ZOO

The two pairs at the San Antonio Zoo produced 2 eggs that were transported to Patuxent where chicks hatched and were assigned to the ultralight project. This was the first year San Antonio contributed cranes to the Eastern Partnership, but it meant they did not costume-raise any chicks for the Florida nonmigratory flock this year.

WHOOPING CRANE NUMBERS / September 12, 2003

Wild Populations

	Adult	Young	Total
Aransas/Wood Buffalo NP	167	28	195 *
Rocky Mountains	0	0	0
Florida non-migratory	84	3	87 **
Wisconsin/Florida migratory	20	16	36
Subtotal in the Wild	271	47	318

***** This number is the anticipated number that will arrive at Aransas in fall, 2003. It is based on average adult mortality between spring and fall, and the 28 chicks seen by CWS biologists in August, 2003. Note the official size of the population is still 184 as of spring, 2003.

****** This number is an estimate since not all whooping cranes in Florida can be found on a regular basis.

Captive Populations

	Adult	Young	Total	Breeding Pairs
Patuxent WRC, Maryland	49	11	60	10
International Crane Foundation, WI	26	10*	36	10
Devonian Wildl. Cons.Cent./Calgary	17	2*	19	6
ACRES, New Orleans	8	0	8	0
New Orleans Zoo	2	0	2	0
San Antonio Zoo, Texas	6	0	6	2
Lowery Park Zoo, Tampa, Florida	3	0	3	0
Subtotal in Captivity	111	23	134	28

* ICF and the San Antonio Zoo both produced eggs that were transported to Patuxent and are listed as young at Patuxent.

TOTALS (Wild + Captive) 318 + 134 = 452