

WHOOPING CRANE RECOVERY ACTIVITIES
October, 2006 – March, 2007

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HIGHLIGHTS / LOW POINTS

The Aransas-Wood Buffalo population (AWBP) continued its historic growth with a record production year in 2006. A total of 76 chicks hatched from a record 62 nests, and 49 chicks fledged, including 8 sets of twins. Forty-five chicks made it to Aransas, including a record 7 sets of twins. Numbers at Aransas in the 2006-07 winter reached a record high of 237, up 23 from the previous spring. However, an estimated 22 cranes died between April and November, the second consecutive year of high mortality.

In a horrible tragedy in February, 17 of the ultralight-led whooping crane juveniles died in their pen in the Florida salt marsh at Chassahowitzka National Wildlife Refuge (NWR) during a violent storm that also claimed the lives of 20 people. Lightning apparently struck close to the birds, stunning the cranes and they fell into the flood waters and drowned. As a symbol of hope for the continued struggle to recover the species, one crane escaped from the pen and survived. The loss of the 17 cranes and other mortality dropped the total number of wild and captive whooping cranes in North America down from 518 in mid-December to 487 at the end of March, 2007.

ARANSAS – WOOD BUFFALO FLOCK

Wood Buffalo National Park, Canada

The whooping cranes had a record production year in 2006. A record 76 chicks hatched from 62 nests. Ten other pairs were on their traditional territories but failed to nest, accounting for 72 adult pairs in the flock. Canadian Whooping Crane Coordinator Brian Johns accounted for 235 cranes (144 adults, 15 singles, and 76 chicks) during the June production surveys flown by USFWS Pilot Jim Bredy, the highest total ever found on the nesting grounds.

Fall Migration, 2006

The fall migration was the 63rd whooping crane migration monitored since tracking began in the fall of 1975. It is a cooperative effort by private organizations, state and federal conservation agencies, and the Canadian Wildlife Service. U.S. records are compiled by Dr. Martha Tacha of USFWS-Endangered Species in Grand Island, Nebraska as follows:

The first dates recorded for confirmed observations of migrating whooping cranes were August 15 in Canada and September 12 in the United States. The last sighting date was December 2 in Texas. During fall migration there were 37 confirmed reports from Canada, with 4 of them after mid-October. Sightings (n = 93) were reported from Saskatchewan (34); Alberta (2); Manitoba, (1); North Dakota (14); South Dakota (5); Minnesota (1); Nebraska (6); Kansas (17); Oklahoma (8); New Mexico (1), and Texas (4).

Eleven sightings in Kansas were at or near Quivira NWR and Cheyenne Bottoms State Wildlife Area (SWA). Seven sightings were at Salt Plains NWR in Oklahoma. One sighting was made on the Platte River in Nebraska. A single crane was reported in Minnesota on November 4. The largest group reported was 14 cranes in Saskatchewan on October 22. In the U.S., the largest groups were seen in Oklahoma (different groups of 8 on November 2 and November 4).

The main migration across the U.S. got underway the first week in October with four confirmed sightings from North Dakota. A major cold front with snow swept down the entire Flyway October 10-12. The pace of the migration in the U.S. sped up with cranes quickly reaching Kansas and Nebraska. October 24th seemed to be a big migration day with whoopers reported all the way from Saskatchewan to Nebraska, Kansas, and even in New Mexico. Five whoopers were confirmed at Grulla NWR in New Mexico, just across the Texas border, the second time whoopers have been confirmed at Grulla. Hunting closures were implemented at Kirwin and Quivira NWRs in Kansas whenever whooping cranes were present.

In November, sightings indicated that nearly all whooping cranes were at least as far south as central Nebraska, although a single bird may have been in west central Minnesota on November 4.

Migration is always the most hazardous time for fledged whooping cranes. One crane group arrived at Aransas as one adult with one chick, an indication that a loss of one adult had occurred subsequent to fledging in August. It was probably these same birds sighted as 1+1 at Last Mountain Lake in Saskatchewan in October. One subadult whooping crane arrived at Aransas with a severe limp of the right leg and remained on the Lamar Peninsula all winter. The limp, possibly a result of a dislocated hip, got a little better by the spring but was still noticeable. A family group of cranes confirmed present on the Platte River October 23-November 6 near Gibbon, Nebraska had notable markings. Observers first thought the dark black color covering the legs and belly was mud and would wash off. After the color remained without diminishing, photos were obtained and circulated widely. No one had seen this in whooping cranes; numerous folks speculated about contact with oil causing the staining. The consensus was that all three cranes had walked into an oily pond and become soiled. Oiling can lead to health problems including loss of thermoregulation and damage to internal organs if the oil is ingested. However, the feathers did not appear matted or clumped together, and none of the black substance was spread to other parts of the body despite a normal amount of preening observed. Fecal samples were collected and sent in for analysis to see if they contained any petroleum products with results pending. Despite searching roost sites, no stained feathers were found to determine what had stained the cranes dark brown. The birds' behavior seemed normal in every way, although they did pass up several favorable days for migration and elected to stay on the Platte for 15 days. However, long stays in Nebraska by family groups is not unprecedented. This family group resumed migration November 6th and was sighted that night at Salt Plains NWR in northern Oklahoma. They apparently continued their migration on November 7th and were found at Aransas on the November 15th census flight.

Although most of the whooping cranes had made it to Aransas by November 23rd, 11 were still known present in Kansas and Oklahoma. One color banded family with twin chicks spent 27 days at Kirwin NWR in northern Kansas. They stayed on refuge property moving alternating between marshes and a nearby refuge corn field and avoided areas off-refuge open to hunting. A major cold front brought favorable migration conditions November 28-29 from Kansas to Texas and got the cranes in Kansas moving again. The twin family apparently departed Kirwin on November 29 and was believed to have made it to Aransas by December 4. A group of 4 adults present in the vicinity of Quivira NWR / Cheyenne Bottoms SWA resumed migration on November 30.

Four migration sighting reports were confirmed in Texas. The final migration sighting was a single bird with sandhills near Port Lavaca, just 15 miles northwest of the crane winter range. The Texas Parks and Wildlife Department was notified and wardens made a special effort to notify goose hunters in the area about the presence of a whooping crane. This single bird was present most of November and the first 9 days of December before presumably moving on to Aransas. The migration was complete.

Progress of the migration was quantified with weekly flights at Aransas during the fall. Seventeen percent of the arrivals (40 birds) occurred between October 20-November 1. An additional 75% of the flock (176 birds) arrived between November 2 and November 22. Thirteen birds (5%) arrived after November 29th, including the one crane just south of Port Lavaca, Texas.

<u>Dates</u>	<u>% of Flock</u>	<u># Whoopers Arriving at Aransas</u>
October 19-20	2	5
October 21 – November 1	17	40
November 2 – November 22	75	176
November 29- December 13	<u>6</u>	<u>13</u>
	100 %	234*

* Three birds summered at Aransas in 2006 and did not migrate.

Platte River, Nebraska

In November, the Cooperative Agreement for Management of the Platte River was signed by the governors of Colorado, Nebraska, Wyoming and the Department of the Interior. It took nine years, hundreds of meetings, a National Academy of Sciences study and a 16-pound Environmental Impact Statement to reach a compromise on this complex issue. The Recovery Program took effect January 1, 2007 and will provide \$187 million over 13 years to protect critical habitat, improve management of river flows and carry out a research and monitoring plan. The Program will help restore 10,000 acres of habitat and wetlands along the Platte River in central Nebraska, and provide protections for endangered species including whooping cranes, piping plover, interior least tern and pallid sturgeon.

In March 2007, early migrant whooping cranes made considerable use of the river with 6 different birds documented using the Platte. One of the birds reported was a lone juvenile. River flows were notably high.

Aransas National Wildlife Refuge

A news release sent out December 15, 2006 by USFWS Public Affairs - Region 2 shouted out the news of a record total of 237 whooping cranes at Aransas.

The tallest bird in North America has something special to 'whoop' about. The Aransas National Wildlife Refuge today announced the highest numbers of endangered whooping cranes are wintering in Texas in approximately the last 100 years. U.S. Fish and Wildlife Service Whooping Crane Coordinator Tom Stehn completed a census flight on December 13 and accounted for 237 whooping cranes. The current population exceeds by 17 the previous high of 220 whoopers present in the fall of 2005.

The increase in numbers is due to extremely good nest production last summer. The record population of 237 includes a record 45 young cranes that have completed their first migration to Texas. Especially notable are seven whooping crane pairs with two chicks each. Although whooping cranes normally hatch two chicks every year, usually only one of the youngsters is able to survive. "The presence of seven families with two chicks each is especially exciting since it surpasses the previous high of four sets that occurred way back in 1958," said Stehn. "This is a special year for the birds."

"The whooping crane continues to tell the story of what we can accomplish when we all work together in partnership to save a species," said Dr. Benjamin N. Tuggle, Director of the Southwest Region of U.S. Fish and Wildlife Service. "Many people in North America first learned of the plight of the whooping crane in grade school. It is especially gratifying to lead efforts to protect the species and to be able to report that this success story is continuing!"

The population in Texas reached a low of only 15 birds in 1941 before efforts were taken to protect the species and its habitat. The population has been growing at over four percent annually and reached 100 birds in 1987 and 200 birds in 2004. However, the whooping crane population continues to face many threats, including collisions with power lines in migration, limited genetic variability in the birds themselves, loss of crane migration habitat, and winter habitat threatened with loss of productivity due to reduced fresh water inflows, chemical spills and sea level rise.

Contract pilot Dr. Tom Taylor, 74 of Rockport, Texas came out of retirement to conduct flights in the fall and helped make the record count, his final flight as a commercial pilot. Dr. Taylor's experience conducting the crane flights for the past 13 years has been a huge help in finding all the cranes. In January, the Office of Aircraft Services approved for low level surveys a Cessna 210 owned by Air Logistic Solutions, San Antonio, Texas. Costs for this plane were 2.5 times higher than the previous aircraft, so flights were done

infrequently the first 4 months of 2007. Two flights were also done with USFWS aircraft stationed in Albuquerque, New Mexico and Lafayette, Louisiana.

Water Issues

Save Cedar Bayou, Inc. continued efforts to get Cedar Bayou dredged that serves as a connection between Critical Habitat and the Gulf of Mexico. The bayou re-opened several years ago by a tropical storm has remained open but flows are reduced due to siltation. An ongoing engineering study for the dredging entered the permitting phase, but a permit application submitted to the Army Corps of Engineers was withdrawn after numerous objections from resource agencies and a request for additional information to assess environmental impacts.

In November, the Texas Water Development Board approved a new long-term water plan for Texas. The plan calls for the construction of 14 major new dams and over 40 new pipelines, with total cost of implementation estimated at \$31 billion. A coalition of conservation groups criticized the plan, saying it could harm fish and wildlife and failed to break the state out of a 1950s mindset that favors large reservoirs and other expensive infrastructure despite their huge environmental and financial costs. These groups contend that the plan also fails to tap into the full potential of water conservation and drought management to meet the state's water needs.

At the end of March, the State Senate adopted a sweeping plan intended to help ensure the state's future water supply. The legislation would require basins to develop recommendations to meet instream needs at certain bays and estuaries. The Texas Commission on Environmental Quality (TCEQ) would be required to adopt the recommendations as environmental flow standards. The measure would require TCEQ to give consideration to water permit applicants based on conservation considerations like water levels, the environment and public need. This action was hailed by environmental groups. The measure would establish the Environmental Flows Advisory Group, made up of appointed members, to oversee the process. The bill also includes a framework for a \$750 million plan to create as many as 19 new water reservoirs in the next 20 years, a measure opposed by conservation groups.

Sierra Club Statement on Senate Passage of Senate Bill 3 (3/27/2007)

"We are pleased that the Senate in Senate Bill 3 has endorsed the process for addressing the needs of flowing rivers and freshwater inflows to the state's bays and estuaries that was negotiated between environmentalists and water supply interests. We are also pleased that the Senate has recognized in this legislation the importance of water conservation and land stewardship in meeting our state's current and future water needs. We continue to be concerned about the designation of unique sites for dams and reservoirs that we feel would be environmentally destructive, costly, and unnecessary; and we intend to work on that issue as SB 3 moves to the Texas House. Texas needs to focus its water future on efficient water use, drought management, and

innovative water management strategies, not on the dams and reservoirs that may have made sense in the 1950s but don't make sense today."

Ken Kramer, Director, Lone Star Chapter, Sierra Club

The House, which passed a bill at the beginning of March calling for the protection of water flows, has not taken on the creation of a statewide water reservoir system. We will see if a major water bill is passed this session by the Texas legislature.

Since the early 1980s, San Antonians are among Texas' most conservative water users; daily per capita water consumption has dropped from 225 gallons to 130 gallons. However, the potential for water to enter the aquifer gets worse annually as more and more land is paved and developed over the aquifer as San Antonio and surrounding communities continue to grow.

Proper management of the Edwards Aquifer that surrounds San Antonio is crucial to protecting bay productivities and whooping cranes. Springs such as Comal Springs fed by the aquifer play heavily into the health of the Guadalupe River that provides inflows to the bay. During the drought in summer of 2006, Comal Springs accounted for 87 percent of the water flowing through the Guadalupe as it passed through the town of Victoria. Victoria gets its drinking water from the river. When a major drought hits Texas, it is estimated the springs could go dry and remain that way for more than two years.

Texas lawmakers are debating about whether to increase the amount of water pumped annually from the Edwards Aquifer, currently limited by court order to protect endangered species. In 1991, federal courts ruled that excessive pumping from the Edwards was threatening animal species unique to San Marcos and Comal Springs. In response, the Texas Legislature created the Edwards Aquifer Authority (EAA) and ordered it to control pumping, protect water quality and figure out how to handle droughts which afflict the region. The lawmakers capped total pumping at 450,000 acre-feet per year and ordered a reduction to 400,000 acre-feet by 2008. But they also ordered that historic pumping levels of established users be guaranteed. And when they added up the historic withdrawal permits, the EAA had granted permits to pump 549,000 acre-feet, more than the mandated cap. To get around this glaring contradiction, the EAA came up with a 2-tiered system of senior and junior pumping rights. Those with junior rights could pump their limit when water was plentiful, but their rights would evaporate once water levels reached critical low stages. Those with senior rights would only be curtailed when critical levels were reached.

In January, the State Attorney General ruled that the plan created by the EAA to limit pumping was not legally authorized. The EAA decided to raise the pumping limit to 549,000 temporarily until the legislature does so as well. In 2007, San Antonio legislators have filed bills increasing the limit on pumping from 400,000 acre-feet per year in 2008 to 549,000. How this may play out in Federal court to protect spring flows and endangered species is unknown. Those opposed to pumping limits have argued that the 450,000 acre-foot cap was a number plucked from mid-air. But those who rely on

Edwards spring flows for water, irrigation, ecotourism, and recreation have argued that additional pumping from the aquifer will diminish freshwater discharges to their detriment and adversely affect water systems, industrial and recreational water users, and threaten the health of saltwater estuaries and bays.

Now, 16 years after the federal court ruling, USFWS is assembling all those affected by spring flows, along with scientists and other interests, to devise scientifically based and defensible policies that hopefully will settle many disputes. In mid-February, the Recovery Implementation Program (RIP) for management of the Edwards Aquifer got underway. This RIP is a voluntary effort by all interested parties to create a long-term plan ultimately signed by the U.S. Secretary of the Interior and eligible for congressional funding. It is aimed to resolve the current chaos and adjust pumping levels for the aquifer based on sound science.

A lawsuit filed in December by D.M. O'Connor Ranches of Victoria to strip the controversial Lower Guadalupe Water Supply Project (LGWSP) from the 2007 Texas Water Plan contended that last-minute inclusions of the project in the Region L plan violated state water code. The Texas A & M University study of inflows, bay and marsh productivity, blue crabs and whooping cranes, started when LGWSP was proposed, is scheduled to be completed in 2008.

Power Line and Wind Farm Issues in the Migration Corridor

Wind farm proposals with their associated transmission lines are starting to pop up in multiple places in the whooping crane migration corridor. It is already known that collisions with power lines are the number one source of mortality for fledged whooping cranes. The impact of wind turbines to whooping cranes is unknown but could adversely impact the species. A notably large project in South Dakota called Rolling Thunder is proposing to place 600 wind turbines over 200 square miles within the whooping crane migration corridor. Environmental consultants are concluding that there will be no direct take of whooping cranes, but I think the potential is there for “take” and needs to be fully evaluated. In some cases, smaller wind farms do not need federal permits so there is no federal nexus for them to consult with USFWS under the Endangered Species Act. However, they still have to avoid “take” of endangered species. USFWS may be planning to allow turbines to be placed on federal grassland easements in the whooping crane migration corridor. I’m concerned that potential impacts need to be fully evaluated.

Tom Stehn and Tom Wassenich’s paper entitled *Whooping Crane Collisions with Power Lines: an Issue Paper* presented at the 10th North American Crane Workshop held in Zacatecas, Mexico underwent peer review. Final edits were made on the manuscript in April. This paper documents the known loss of 45 whooping cranes to power line strikes in North America from 1956 to 2006. It also calculates the derived centerline of the whooping crane migration corridor and defines 100-mile and 200-mile wide corridor boundaries.

Dr. Karine Gil de Weir at the Platte River Whooping Crane Habitat Trust has taken the migration sighting data base analyzed by Austin and Richert in 1999 and updated it through 2006. This data is being put into a GIS database so that it can be made accessible to all entities planning developments in the migration corridor. The migration corridor as mapped by Stehn and Wassenich also needs to be converted into a GIS format.

ADMINISTRATION

Delays were encountered with finalizing both the *Whooping Crane Recovery Plan* and the *Memorandum of Understanding on the Conservation of the Whooping Crane*. After Canada decided to hold off signing both documents until after some of their review processes required by the Species At Risk Act (SARA) were completed, the recovery plan was routed to Texas for signature and is expected to be made final in May, 2007. The MOU was reviewed by USFWS-International Affairs in Washington, D.C., but a decision was made to have it reviewed by the State Department. The Canadian Wildlife Service continues to work on designation of critical habitat for the species.

The Whooping Crane Recovery Team meeting was held February 1-2 in Lafayette, Louisiana with field trips to White Lake and Marsh Island. The meetings were very productive with plans formulated for recovery actions in coming years. New initiatives approved in theory by the Recovery Team included a) a satellite radio-telemetry study of fledged whooping cranes to learn more about migration patterns and especially mortality, and b) resumption of a limited egg pickup to evaluate the affect of egg pickup on productivity. Multiple conditions need to be met before egg pickup would resume, including prior genetic studies, having a use for the eggs and room in the captive facilities to handle the eggs, and having a research plan for the egg pickup to be able to evaluate impacts to the population and securing funding. Funding for a radio-telemetry project may be available from the Platte River Cooperative Agreement. The next Recovery Team meeting may be held in Calgary in late January / early February, 2008, or else may be held in conjunction with the next North American Crane Workshop scheduled for September, 2008 in central Wisconsin.

A *Birder's World* poll listed the whooping crane as fifth on a list of birds that birders most wanted to see. The first 4 on the list were the ivory-billed woodpecker, painted bunting, snowy owl, and California condor. Aransas NWR was listed as one of the top 20 birding destinations in the U.S.

LOUISIANA

During the Whooping Crane Recovery Team meeting, the team endorsed a process that if results are all positive could lead to a reintroduction of whooping cranes in Louisiana. The Recovery Team tasked the Whooping Crane Health Advisory Team with preparing a report by September on the potential health risks if whoopers reintroduced into Louisiana were to mix with cranes in the AWBP. The Team called for research needed to look at potential reintroduction sites and assess additional reintroduction issues. Two main sites

for future consideration sites are White Lake and Marsh Island. Dr. Sammy King of the Wildlife Cooperative Research Unit at LSU is working closely with the Louisiana Department of Wildlife and Fisheries and is looking for funding for the research. In a project the Recovery Team is looking at, some of the radioed sandhill cranes that Dr. King's students have radioed in the past two years have migrated north to both the Platte River in Nebraska and to Wisconsin, indicating the wintering sandhills in Louisiana are coming from two different flyways.

FLORIDA

Florida continued to monitor its remaining nonmigratory flock estimated to contain at least 45 birds. Many birds were captured with clap traps to replace transmitters, including an amazing total of 11 birds in October.

Dr. Marilyn Spalding presented to the Recovery Team a report stating that whooping crane nesting success in Florida was correlated with rainfall and water levels prior to the nesting season. With the state currently in a drought, the crew expected a slow year in regards to breeding activity. The marshes were mostly dry in Lake Country where 4 chicks fledged in 2006. Suboptimal water levels were present in areas further south in Polk and Osceola Counties, so some breeding activity may be attempted in those areas. The one nesting attempt started in March was abandoned in early April.

EASTERN MIGRATORY POPULATION (EMP)

The last 6 months for the team of biologists working to reintroduce a migratory flock of whooping cranes to the eastern U.S. has been one of tremendous accomplishments that were mostly snuffed out by one storm event. The team remained solid, supporting each other and carrying on through the tragedy. Let me start with four major accomplishments.

1. In the summer of 2006, the first whooping crane chick hatched in the wild in Wisconsin in more than a century survived and, led by its parents, migrated successfully to Florida and back. This wild chick hatched June 22 at Necedah NWR. Its sibling died just prior to fledging, presumably killed by a predator after its parents flew off with the other chick. In March, these cranes nicknamed "The First Family" returned back to Necedah. The chick separated from its parents upon returning and the parents nested and were observed incubating 2 eggs in early April.

2. Four cranes made their first southward migration this fall to Florida as part of the Direct Autumn Release (DAR) program. Biologists from the International Crane Foundation and the U.S. Fish and Wildlife Service reared the four cranes at Necedah NWR and released them in the company of older cranes, allowing the younger cranes to learn the migration route from wild cranes. This is the second year WCEP used DAR, which supplements the success of the ultralight migrations. One DAR bird died in January in Lafayette County, Florida, possibly from alligator or bobcat predation.

3. Wisconsin adopted a Whooping Crane Management Plan, a document written by Wisconsin Department of Natural Resources (DNR) staff with help from many partners. The Wisconsin DNR has also developed a whooping crane monitoring database that interfaces with GIS data and Natural Heritage Inventory information. Plans are to compose maps of whooping crane habitat and land use, develop specialized data summaries and other GIS products to support the Whooping Crane Management Plan.
4. Operation Migration and partners led 18 captive-raised juveniles from Wisconsin to Florida without the loss of a single bird to bring the size of the EMP to 83 birds! The migration took 76 days to cover the 1,234 miles, the slowest migration yet for the project. Weather-related delays kept the cranes and ultralights grounded in locations in Wisconsin, Indiana and Georgia for up to a week or longer in each state.

The ultralight-led class of 2006 includes one especially significant crane. Crane 2-06 is the first whooping crane hatched from the reintroduced eastern migratory population. When a pair of cranes from the ultralight-led class of 2002 abandoned their nest, biologists picked up the wild egg and rushed it to an incubator at the International Crane Foundation. Later transported to the east coast, the egg hatched May 7 at the Patuxent Wildlife Research Center. The chick was incorporated successfully into the ultralight class of 2006.

The reintroduction of the Eastern Migratory population suffered a major blow February 2nd when 17 juveniles at the Chassahowitzka NWR were killed in a storm event that also took the lives of 20 people in tornadoes. The birds were in a top-netted pen to keep them safe from predators when a lightning strike estimated to have hit 150 feet from the pen stunned them, causing them to aspirate water and drown in the flood waters. The event received considerable media attention which the team addressed with several news releases and posting information on project web sites. The team initiated a series of conference calls to see what changes can be made for next year to prevent this from happening again. However, it was a very unusual storm (said to be the second most intense ever for that part of Florida) with 210 lightning strikes recorded within a 5-mile radius of the pen. Up until this event, no captive whooping crane anywhere had ever been killed by lightning.

One of the juveniles had escaped from the pen and survived. It may have hit the pen's door at just the right angle to have escaped. It was found several miles inland and survived the rest of the winter. For part of the winter after it was observed roosting on dry ground and thus vulnerable to predators, it was kept captive in a pen along with crane 5-01 25 miles northeast of Chassahowitzka at Halpata Tasthanaki Preserve managed by the Southwest Florida Water Management District. This bird provided hope to the team as they dealt with the tragedy.

A total of 6 older whooping cranes also died in 2006, approximately 9% of the flock. This was the first substantial mortality of the older birds in the population, but not exceeding similar levels documented for the AWBP. Thirteen birds were captured in

2006 to replace transmitters, including the one wild-hatched chick. At the end of March, the EMP totaled 60 cranes (35 males, 25 females).

Although most of the eastern migratory whooping cranes complete round-trip migrations between central Wisconsin and Florida, a few birds always seem to go their own way. For example, the distribution of birds on January 20, 2007 was Florida (46), Louisiana (1), South Carolina (3), Alabama (1), Tennessee (4), Indiana (4), and unknown (3). It was ironic to be meeting in Louisiana in early February with one of the EMP birds located north of New Orleans, the first wild whooping crane to be back in Louisiana since 1950. Two cranes were found later on in the winter at the Okefenokee Swamp, Georgia, the first documented use of that area by whooping cranes.

By the end of March, at least 43 birds had completed the migration back to central Wisconsin. Five were still in Florida, including the one juvenile that had survived the tragedy. One bird migrated back to New York, following its pattern of straying east. Three birds may be in Michigan.

The Whooping Crane Eastern Partnership (WCEP) met January 29-30 in Lafayette, Louisiana. The meeting was scheduled back-to-back with the Recovery Team meeting to save on travel costs. The Whooping Crane Conservation Association also had their meeting in Lafayette that week.

Necedah NWR in Wisconsin received a notice of funding to build a new visitor center. Congratulations to refuge manager Larry Wargowsky and staff who have worked tirelessly to make this proposal a reality. Construction probably won't get started until 2008.

On March 22, Operation Migration received a Partners in Flight award given in Portland, Oregon for their work with the reintroduction of a migratory flock of whooping cranes in the eastern U.S.

CAPTIVE FLOCKS

The captive flocks that consist of 145 birds at 5 breeding centers and 5 display facilities play an important role in recovery. These birds are a safeguard of the genetic material of the wild birds and produce offspring used in reintroduction programs. They also provide a home for whooping cranes with health problems unsuitable for release into the wild.

Two zoos received whooping cranes for the first time in 2006. One of the DAR birds in Wisconsin broke a wing in the pen, apparently hitting the fence during a thunderstorm. The bird underwent surgery at the University of Wisconsin – Madison Veterinary Hospital and was taken to the Milwaukee County Zoo for rehabilitation. A decision was made to keep it at the zoo where it will be put on display. Earlier in the summer, two DAR chicks were pulled from the project due to leg problems and were shipped to the Jacksonville Zoo in Florida on October 7 for display. My thanks go to the International Crane Foundation for their help assessing the facilities in Milwaukee and in Jacksonville

to ensure they were suitable for holding whooping cranes. This evaluation process involves a written application to USFWS and usually an inspection by crane experts.

For the first time ever, a wild whooping crane showed up at a zoo holding captive whooping cranes. EMP wild crane # 5-01, a male that had lost its mate, flew into the captive crane pens at Homosassa Springs State Wildlife Park and started courting the female crane. It was captured and later released, but again returned to Homosassa. It was held for several weeks in a pen at Halpata and then taken north and released at Paynes Prairie State Preserve near Gainesville, Florida. It remained in that area until just a few days before it initiated the spring migration. We hope 5-01 will pair up with a new female and forget about the female at Homosassa Springs. Homosassa had moved their two cranes off-exhibit to an area with a roof in case 5-01 had decided to return. I thank Homosassa for their help throughout this incident. When 5-01 first landed at Homosassa, the captive pair was being socialized and was still being held in adjacent pens. They were put together on February 13, just in time for a romantic Valentine's Day. However, the male is not full voiced so we don't know if he would be able to chase away an aggressive bird such as 5-01 if it returned. My thanks go to Marianne Wellington of the International Crane Foundation for her help with pairing the 2 cranes at Homosassa. The pair is a welcome addition to Homosassa that focuses on displaying native Florida wildlife.

In October, Tom Stehn traveled to the Freeport McMoRan Audubon Species Survival Center (SSC) in New Orleans to inspect the new crane pens designed to hold 5 breeding pairs. The new pens, complete with a large pond in each one, are very impressive. The contractor finished work by the end of the year, but the staff continued to add finishing touches.

At the Recovery Team meeting in February, all the flock managers got together for an evening session with flock geneticist Dr. Ken Jones. Decisions were made about shipping birds between facilities mostly to pair up young birds. The plan included shipping birds to SSC to be placed in the new facility.

The whooping crane pair on public exhibit for years at the San Antonio Zoo was taken off-exhibit due to construction of a new African exhibit. The move did not disrupt their production with two eggs laid in March.

WHOOPING CRANE NUMBERS – APRIL 17, 2007

Wild Populations

	Adult	Young	Total	Adult Pairs
Aransas/Wood Buffalo	191	45	236	71
Rocky Mountains	0	0	0	0
Florida non-migratory	41	4	45 ^A	17
Wisconsin/Florida migratory	55	4 ^B	59	5
Subtotal in the Wild	287	53	340	93

^A number reflects the birds regularly monitored in Florida. A few additional cranes could be present in unknown locations. Four chicks fledged in the wild in 2006.

^B One pair hatched twin chicks, the first whooping cranes to hatch in the wild in Wisconsin in over 100 years. One of the twins survived. Eighteen captive-reared juveniles completed the migration between Wisconsin and Florida following ultralight aircraft, but 17 of these died in a tragic loss in the release pen during severe thunderstorms on Feb. 2. Four captive-reared young were released into the wild at Necedah National Wildlife Refuge in central Wisconsin and successfully completed their migration to Florida with wild cranes. Two of these subsequently died in Florida from suspected bobcat predation.

Captive Populations

	Adult	Young*	Total	Breeding Pairs
Patuxent WRC, Maryland	57	3	60	15
International Crane Foundation, WI	31	5	36	11
Devonian Wildl.Cons. Center / Calgary Zoo	21	3	24	6
Species Survival Center, Louisiana	8	0	8	1
New Orleans Zoo, Louisiana	2	0	2	0
San Antonio Zoo, Texas	8	0	8	1
Homosassa Springs Wildl State Park	2	0	2	0
Lowry Park Zoo, Tampa, Florida	2	0	2	0
Jacksonville Zoo, Florida	0	2 ^D	2	0
Milwaukee County Zoo, Wisconsin	0	1 ^E	1	0
Subtotal in Captivity	131	14	145	34

* Numbers are of young remaining at the captive centers after eggs and/or birds were shipped out for reintroductions in 2006. In most cases, these young are genetically valuable and will become future captive breeding stock.

^D Two juveniles at the Necedah NWR had health problems and were shipped to the Jacksonville Zoo in Florida in October, 2006.

^E One juvenile scheduled for wild release in Wisconsin broke its wing and is undergoing rehabilitation at the Milwaukee County Zoo and will remain there in captivity.

TOTALS (Wild + Captive) 340 + 145= 485