

Wood Buffalo/Aransas Flock

The year 2007 was a wonderful year for the Aransas whooping crane flock! After reaching a record flock size of 237 in the 2006-07 winter, production was excellent in the summer.

Fifty-six of the record 65 nests (86.2%) in 2007 produced one or more chicks. This was a very high percentage. An estimated 4 known adult pairs failed to nest but were present on their territories. Thus, there were a minimum of 69 breeding pairs in the population. This number was close to the 67 adult pairs identified present at Aransas during the 2006-07 winter. The chick production in 2007 resulted from both high productivity and a large number of nests. Of the record 84 chicks documented hatching in 2007 in Wood Buffalo National Park, 40 chicks reached fledging age in mid-August. Thirty-nine of these juveniles made it to Texas (38 at Aransas, 1 solitary juvenile seen at Muleshoe NWR in the Texas Panhandle in late-November). This total included one set of “twins” that made it to Aransas. Only 9 white-plumaged cranes failed to show up in the fall and were listed as April through November mortality. The excellent production and low mortality allowed the population to reach a record 266 in the fall, 2007, a substantial increase of 29 birds from the previous winter. No whooping crane mortality was detected during the 2007-08 winter, or in the spring migration, 2008.

Interesting observations were made about one whooping crane hatched in 2004. This bird had been hit in the head at Aransas as a juvenile (presumably by a snake or a raptor) in April, 2005 and had nearly died. It is individually recognizable by the scar on its head and has been nicknamed “Scarbaby”. It failed to migrate in 2005 and 2006, but made its first migration north in 2007. It returned with a mate and carved out a territory at Aransas about 4 miles from its “Lobstick” parents.

The peak population of 266 at Aransas during the 2007-08 winter consisted of 144 adults, 83 subadults, and 39 juveniles. At most, 21 cranes were color-marked, representing 7.9% of the population. The estimate of 72 pairs occupying territories was 5 more than the previous winter. Cranes generally were found on the refuge (73), Lamar (9), San Jose Island (71), Matagorda Island (85), and Welder Flats (27). Matagorda Island that held 34.2% of the flock has in recent years surpassed the refuge for supporting the most cranes.

Quality food resources were considered to be very good throughout the fall and winter. The cranes fed heavily on wolfberry, blue crabs and fiddler crabs while at Aransas. Wolfberries were available for the cranes in November and December. Blue crabs declined in mid-winter, but a few were always present. Cranes used open bay habitats to some extent during winter low tide periods foraging on clams and/or invertebrates such as mud shrimp or bloodworms. Some upland use was observed on prescribed burns. Bay and marsh salinities were low the first half of the crane season but increased to around 20 parts per thousand by spring. Moderate use of fresh water sources was observed.

*****Tom Stehn, U.S. Whooping Crane Coordinator*****

THREATS TO WHOOPING CRANE HABITAT

Housing Developments at Aransas

Every year, USFWS reports to Congress on the status of all endangered species. In 2007, I changed the status of the whooping crane from “increasing” to “stable” based on what I perceived as growing threats. Even though whooping crane numbers are continuing to increase, threats to the winter range and migration corridor have become imminent.

In 2007, the USFWS provided comments on 4 housing developments at Aransas in areas occasionally used by whooping cranes. Construction has started on 3 of these developments. Whatever you’re hearing in the news about a mortgage crisis and slow down in the housing market just doesn’t seem to apply to the Texas Coast. The

homes being built are planned as retirement homes and/or second homes for the wealthy with canal access to keep a boat in the water right by the back door.

As real estate development pressures increase at Aransas, permanent protection of the crane's habitat is essential in order for the species to reach long-term recovery goals. It is quite apparent that there is currently not enough publicly-owned marsh to support the 1,000 cranes set as a target for downlisting. Without protecting additional lands, whooping cranes will not have enough winter area to support flock expansion, and recovery goals may never be reached. Whooping cranes already use wetlands and adjacent upland habitats outside of Aransas and Matagorda Island National Wildlife Refuges. With 39% of the flock currently wintering on private lands, protection from development is needed for those areas. Upland buffers a minimum of 300 meters wide are needed along all marsh areas used by the cranes to provide them necessary upland foraging habitat, access to fresh water sources, and a buffer from disturbance.

The Texas Nature Conservancy (TNC) with assistance from USFWS and other agencies is working hard trying to protect key areas with conservation easements placed on buffer areas and figure out a way for people and wildlife to coexist. Hopefully, the first two parcels to be protected with conservation easements will total approximately 4,200 acres and be located at a major crane use area at Welder Flats.

To try to protect additional habitat, the TNC applied for a 1.5 million dollar grant from the Coastal Impacts Assistance Program to protect 5,000 acres of crane habitat in the next 3 years primarily through purchase of conservation easements. Matching funds would have to be obtained. This grant application was not funded in 2008. However, it made "the cut" of worthwhile projects for which there just weren't sufficient funds available. The TNC is hopeful that this is a good omen for receiving funding in future years.

In a related issue as the coast is developed, the growing demand for water threatens freshwater inflows at Aransas that are needed to maintain abundant blue crab populations, the primary food source for whooping cranes. The WCCA has continued to financially support the efforts of the San Marcos River Foundation to get freshwater inflows set aside for the bays.

Power Lines and Wind Farms in the Migration Corridor

Whooping crane habitat in the migration corridor is also threatened. Wind farms are being developed at a rapid pace in the Central Flyway. The best winds seem to overlap exactly the whooping crane migration corridor. Texas billionaire T. Boone Pickens has gotten heavily involved in wind energy development and envisions thousands of turbines stretching from Saskatchewan to Texas. That is the exact route of the migrating whooping cranes.

Wind industry installed 5,244 megawatts of power in 2007, expanding the nation's total wind power generating capacity by 45% in a single calendar year with an investment of over \$9 billion. This was the 3rd consecutive year of record-setting growth, establishing wind energy as one of the largest sources of new electricity supply for the country. The U.S. wind power fleet now numbers 16,818 megawatts across 34 states, about 1% of national usage, powering over 4.5 million homes. Texas has the most installed wind generating capacity of any state.

It is important to analyze the potential impact of literally tens of thousands of wind turbines that will be placed in the whooping crane migration corridor in the coming years. For example, one notably large proposed project on the border of the Dakotas called Titan is proposing to place 4,000 wind turbines over 200 square miles within the whooping crane migration corridor.

The majority of the wind farms do not require federal permits and thus there is no nexus for the companies to consult with USFWS under the Endangered Species Act (ESA). However, the projects must avoid "take" of endangered species under Section 10 of the ESA. In addition, USFWS is in some instances planning to allow

turbines to be placed on federal grassland easements in the whooping crane migration corridor. I'm concerned that potential impacts to whooping cranes need to be fully evaluated. I have started communicating directly with folks throughout the flyway and with wind farm consultants.

The Nebraska USFWS Endangered Species office in Grand Island, Nebraska has prepared GIS maps with updated information on the location of the whooping crane migration corridor. This is a very important tool for analyzing the risk to the species of specific wind farms. The data showed that 75% of all documented whooping crane stopovers occur in a migration corridor roughly 70 miles wide. Environmental consultants are using these maps to conclude that there will be no direct take of whooping cranes from individual projects; an analysis which I believe is flawed. For the totality of wind energy development, I feel there is a very definite issue of "take". Wind farms have the potential to directly kill whooping cranes either from the turbines themselves, associated power line development, or could result in "take" of habitat if whooping cranes tend to avoid wind farms. If cranes avoid them, the wind farms would be taking hundreds of square miles of migration stopover habitat away from the cranes. The National Academy of Science Report in 2004 on Platte River endangered species stated unequivocally the threat to whooping cranes if migration habitat is lost.

Early on in my meeting with wind companies, I talked of two possible scenarios for offsetting anticipated impacts of wind farms. These were to set aside whooping crane migration stopover habitat in perpetuity to counter potential loss of habitat from wind farm construction, as well as to mark all new power lines as well as existing power lines to offset the threat of whooping cranes colliding with a wind turbine or power lines built to support wind development. I have suggested to all Ecological Services offices that marking new power lines is not enough of an offset since whooping cranes still collide with marked lines. Existing lines need to be marked as well so that there is no net increase in the threat of collision. The focus on marking existing lines would be on lines near known whooping crane stopover locations and/or within 35-miles of the migration corridor center line. Hopefully all lines within one mile of a wetland would be marked since the collision threat is greatest near wetland stopover sites.

In 2007, USFWS biologists throughout the whooping crane migration corridor initiated conference calls to try to develop a unified approach to wind energy development issues and to help individual Ecological Services offices deal with consultation issues. Biologists decided a face-to-face meeting was needed and met in mid-December, 2007 in Lakewood, Colorado. From this meeting, it was decided to recommend that the industry prepare a Habitat Conservation Plan (HCP) for wind energy development for the entire U.S. whooping crane migration corridor. An HCP is a document that assigns a level of "take" of an endangered species from development actions that occur on private lands where there is no federal nexus and legalizes those actions if measures described in the HCP are carried out. Both Regional Directors were briefed in the spring, 2008 and plan to be involved in a whooping crane/wind energy summit that would invite key wind development companies from around the country to write the HCP. This meeting is planned for July, 2008.

As in the history of the effort to save whooping cranes, there is now as great a need as ever for citizen involvement in protecting the species. Conservation will not happen unless people push to make it happen. The role of groups such as the WCCA is as important now as it was in the 1950s when the species was hanging on by a thread. The Endangered Species Act is quite strong in protecting individual birds, but can fall short in protecting needed habitat. Yet conservationists know that habitat is the key to protecting species. Without protecting the habitat needed for recovery, the number of whooping cranes will reach a point where the population is no longer growing. A massive effort is needed. Habitat protection is needed at Aransas, and it is needed in the migration corridor. Housing developments at Aransas and wind farm construction in the migration corridor are not going to be stopped. My goal is to get the housing developers and wind energy developers to pay a portion of the costs of conservation measures to protect habitat needed by the species.

****Tom Stehn, Biologist, Aransas National Wildlife Refuge****

Freshwater Inflows

One of the most important issues on the Texas coast is securing sufficient inflows of freshwater from our river systems into our bays to maintain the productivity of our bays and estuaries. During this last year, there have been important developments regarding freshwater inflow and while inflows are not yet secured, it does appear that progress is being made. However, progress has been made because groups and individuals are willing to fight for these inflows.

There are three different levels of this freshwater inflow fight. (1) There is a legislative initiative that was passed by the Texas Legislature during the session that ended in May. (2) There is litigation over the refusal of the Texas Commission on Environmental Quality to accept and process applications for certain water rights for the bays. (3) And there are administrative law proceedings where environmental groups have intervened in the applications of river authorities and cities to have water set aside for the bays at the same time that water rights are being given out for additional uses. Together, these various efforts represent progress in the fight for water for our bays and estuaries.

Legislative Action

This last session, the Legislature passed SB3. This bill created a process for identifying the amount of water needed by various bays. In theory, the amount of inflow agreed to would eventually be set aside and guaranteed for the bay. Under the law, each major estuary on the coast is the subject of a process to establish and ultimately set aside the inflow for that system. Each bay will have a stakeholder group and a group of scientific experts who ultimately will make a determination of the target inflows that will then guide future decisions on water rights. Galveston Bay will be the first bay to be evaluated. San Antonio Bay – arguably the most threatened of all of our bay systems with regard to freshwater inflow – is scheduled to be in the second of three groups to be evaluated scheduled to start in the fall, 2008. The process is not fast, but it is underway and it does establish a basis under Texas law for water to be set aside for inflow into the bay system, a major improvement over the old law.

Legal Action

Before this new legislation was passed, the old Texas Natural Resources Conservation Commission had passed rules that identified bay and estuarine inflows as a beneficial use under Texas law. Texas law also allows any person to apply for a water right for a beneficial use. Under this provision, the San Marcos River Foundation (SMRF) applied for about 1.1 million acre feet of inflow for San Antonio Bay. This application was soon followed by applications by the Matagorda Bay Foundation for inflows from the Lavaca and Navidad Rivers, the LCRA for inflows from the Colorado River, and Galveston Bay Conservation and Preservation Association and Galveston Bay Foundation for Trinity River inflows to Galveston Bay. The Caddo Lake Association also submitted an application for inflows to Caddo Lake. After the legislature and Governor Perry expressed displeasure at these applications and concern that Texas law did not allow such set asides, the TCEQ dismissed the permit applications. In turn, the TCEQ was sued by each of the groups whose applications had been dismissed (except for LCRA, who chose not to sue).

In 2006, Judge Covington of the Travis County District Court ruled in favor of SMRF, Caddo Lake, MBF and GBCPA/GBF, holding that the TCEQ had authority to process these permit applications and remanding the permits back to the agency. In turn, the Attorney General's office, on behalf of the TCEQ, appealed Judge Covington's decision to the Court of Appeals. Due to an overloaded appeals court docket, the case was transferred to the Corpus Christi Court of Appeals who heard oral arguments on all of the cases in October, 2007. We are now waiting for the Appeals Court decision to determine if these applications must be processed by TCEQ or not.

Contested Case Hearings on Permit Applications for Water Rights

Over the last few years, several permit applications have been filed by various water users in an attempt to get more water set aside, arguably before freshwater inflow requirements are clearly established. The City of Houston and San Jacinto River Authority have several permit applications pending in the Galveston Bay system. The Lower Colorado River Authority has applied for authorization to divert, store, and use those excess flood waters and unappropriated flows of the Colorado River downstream of O.H. Ivie Reservoir and downstream of Lake Brownwood in an amount not to exceed 853,514 acre-feet of water per year. The application by the Guadalupe Blanco River Authority, the San Antonio River Authority and the San Antonio Water System for almost 300,000 acre feet of Guadalupe River water was withdrawn after several years of opposition by the D.M. O'Connor Interests.

Early next year, the LCRA permit application, arguably for all of the unappropriated water left in the Colorado River, will go to hearing before the TCEQ. At this time, the Matagorda Bay Foundation, the National Wildlife Federation, the Coastal Conservation Association, the Sierra Club and Texas Parks and Wildlife have intervened in the hearing process. These groups are prepared to contest this application if an agreement cannot be reached with the LCRA and TCEQ regarding setting water aside for Matagorda Bay. At this point, the parties are cautiously optimistic that an agreed settlement for Matagorda Bay might be possible.

The most threatened estuary on the coast is clearly San Antonio Bay. Recently, the GBRA has been negotiating with Exelon Corporation to provide approximately 75,000 acre- feet of surface water for the two new nuclear power plants proposed for Victoria County. GBRA had also promised that same water to be transported via pipeline to Kendall and Hayes Counties. There is simply not enough surface water in the Guadalupe River system to meet the commitments that have been made and are being made. Similarly, there are limited amounts of fresh groundwater to meet the basin's needs. The regional water planning process for this region – Region L – has its job cut out for it and is arguably a bona fide mess! Stay tuned. This region and this bay system will generate a lot of news in the water world in the future.

Groups Involved In These Fights

There are many groups that are involved in the fight for freshwater on the coast. NWF (www.nwf.org), Environmental Defense (www.environmentaldefense.org) and Sierra Club (www.sierraclub.org) have been active at the legislature as has CCA (www.ccatexas.org). SMRF (www.sanmarcosriver.org), MBF (jbb@blackburncarter.com) and GBCPA (www.gbcpa.net) / GBF (www.galvbay.org) have been willing to go to court for freshwater inflows. SMRF, MBF and GBCPA/GBF have each put up \$25,000 to file these permit applications. MBF, NWF, CCA and Sierra are fighting administratively for the Colorado River. Other administrative proceedings are pending. Without these groups, we would not be as far as we are. These groups all need financial assistance. Please consider sending something to one or more of these groups this holiday season, either in your name or in the name of a friend.

*****Jim Blackburn, Environmental Attorney, Texas*****

Update from the San Marcos River Foundation

The San Marcos River Foundation (SMRF) continues to wait on a decision from the Corpus Christi-based Court of Appeals about the Texas water right for instream flows and freshwater inflows to San Antonio Bay, near Aransas Wildlife Refuge. In February 2006 SMRF won its suit against the state agency, Texas Commission on Environmental Quality (TCEQ), for the mishandling of the SMRF water right application first filed in 2000. TCEQ denied the SMRF water right application in 2003. SMRF pledged in its water right application to dedicate the 1.15 million acre feet of water per year to instream flow of the San Marcos and Guadalupe rivers. (Thanks for WCCA's key financial support twice during these early years of litigation.) After SMRF's win in 2006, it was appealed by TCEQ and large water users who wanted to apply for that water instead of allowing SMRF to dedicate it to the flow of the river. The appeal was moved from Austin courts where the state capitol is located, to Corpus Christi, in

just a routine reallocation of cases to even out caseloads. The Corpus judges traveled to Austin in October '07, heard the appeal, and SMRF continues to wait on a decision.

Meanwhile there has been plenty of work to keep SMRF busy on water issues. The flows of the two rivers which feed San Antonio Bay and Aransas Bay systems depend a great deal on springflows from the Edwards Aquifer in central Texas during times of low rainfall. A rather shocking change in aquifer regulation came about in the '07 Texas legislative session. The amount of pumping allowed from commercial, agricultural and municipal wells in the Edwards Aquifer was increased, despite deep concerns expressed by San Marcos and New Braunfels, communities that depend on the two major springs that flow from this aquifer.

Rapid development in the entire central Texas Edwards Aquifer region is also increasing the numbers of unregulated residential wells for domestic use, that are likely to add to the problem of diminishing springflows in dry times. So SMRF felt that this was certainly not the time to be increasing the amount of pumping from the regulated larger wells. In fact, SMRF was one of many diverse stakeholders in the region which was gathering monthly to try to find a consensus-based solution to the aquifer over-pumping problems. This exercise was suggested by the U.S. Fish and Wildlife Service and is called a RIP or "Recovery Implementation Program". RIPs have been accomplished in other areas, to assist with the recovery of endangered silvery minnows in the Rio Grande in New Mexico, or salmon in the Pacific Northwest. Many hoped that the RIP would be the solution to end the decades of litigation and threats of federal intervention into Texas water law. And of course, the carrot of possible federal funding for alternative water projects, to keep the aquifer from being over-pumped, was a big factor in the enthusiasm for the RIP.

The Edwards Aquifer RIP will be about the recovery of the endangered species in the springs and rivers near New Braunfels and Comal, which are invertebrates, salamanders, fish and a plant, Texas wild rice. But the whooping cranes would certainly be considered as well when the RIP plans are reviewed by the USFWS, because federal law dictates that no endangered species can be harmed in the way the agreement is structured. Most of the RIP stakeholders acknowledge that the crane's habitat is affected by the springflows, during dry times.

The Texas Legislature allowed increased aquifer pumping anyway, but they were interested in the RIP concept. They decided to set up specific deadlines for the RIP, and even appoint certain state agencies and organizations to the RIP Steering Committee, to get it moving faster than other RIPs in other states had been able to move. The Legislature also required certain state agencies to contribute to the basic beginning funding of the RIP, and asked the stakeholders to answer certain questions about aquifer management in one year, by convening scientists to review all the available science. Admittedly, a legislatively mandated deadline gave the RIP a kick start, but not all stakeholders were happy about being hijacked by the Legislature and told what to do. The whole RIP group kept meeting, finding ways to continue to express their own independence, but also ways to cooperate with the Legislature's deadlines and appointments without breaking away and forming a separate RIP process.

Considerable progress has been made in the past year and a good program manager has been hired, a memorandum of agreement has been signed by all parties involved, and operating rules or bylaws have been passed with extremely high quorums and majority votes required (in order to be a consensus based group). Grants are being written to fund projects, officers elected, and five new members have been added to the Steering Committee. These five are representatives that the group felt were not represented by the 21 Steering Committee members appointed by the Legislature. SMRF was appointed to one of these five new seats, a seat filled by their one staff person, Executive Director Dianne Wassenich. The other environmental representative on the 26 member committee is from the three Texas Living Waters groups which have worked on water issues for many years in Texas: the Sierra Club, National Wildlife Federation, and Environmental Defense.

A science subcommittee was appointed after a long wrangle, and existing aquifer studies are being reviewed by them. The RIP process will take several years to come to a conclusion, but along the way there will be

some decisions that will be important to the continued flow of these springs, so vital to the coastal bays and estuaries during droughts. The commitment to participate in the RIP is a serious one, since lately there are all day meetings or half day workshops once a week in the various committees! SMRF's single staff person is hard-pressed to manage the time commitment, but SMRF knows it is essential to work intensely right now on this aquifer issue. Without the aquifer springs, the river will not continue to flow, that provides water to the coastal bays and the whooping cranes' Texas wintering grounds. The website for the Edwards Aquifer RIP is www.earip.tamu.edu.

Yet another, brand-new stakeholder process for the river and coastal bays, outlined during the same legislative session that set up the RIP, is beginning in the Guadalupe Basin. In May, the Texas Living Waters groups are holding public forums to encourage and inform local coastal residents to participate. The stakeholders in that river basin will be gathering in 2008 and 2009 to use the best available scientific information to establish instream flow seasonal requirements to meet the environmental needs of rivers and bays. It remains to be seen exactly how this will work, and how much water will actually be left to provide what the rivers and bays need. In many parts of Texas the water rights to rivers have been granted out by the state, beyond what the rivers can actually supply in dry times. SMRF's water right, that is still in the court system mentioned in the first paragraph, may offer an important piece to this puzzle. SMRF has held up other allocations of this water to other uses while SMRF stays in the courts on its own water right application dedicated to instream flow. For more information on the upcoming stakeholder process on the Guadalupe River Basin, see www.texaswatermatters.org and look at the two items in the "What's Happening Now" column on the left.

SMRF will be sure to alert WCCA as soon as any news arrives on the appeals court decision, or any of these stakeholder processes. SMRF is very grateful for the recent generous donation from WCCA, the third in this 8 year saga. It will be used to assist in this ongoing water preservation project, now happening on many fronts.

The weather continues to be very dry in central Texas. In the Uvalde area where the Edwards Aquifer receives a great deal of its recharge from rainfall, they are seeing a drought that compares to a very serious one in 1904, even worse than the 1950's which most people consider the drought of record in Texas. Since there were heavy rains last year, the aquifer is still not considered critically low, so people are not forced to conserve water. But SMRF has been educating people as much as possible to the need for water conservation year round, and especially now when coastal bays are showing high salinities.

*****Dianne Wassenich, San Marcos River Foundation*****

Challenges in Canada

Threats to whooping cranes are also present “north of the border” in Canada. The Alberta government recently decided that Environmental Assessments (EA's) would no longer be necessary for large power lines. Getting more electricity distributed to the citizens has become so urgent that EA's were determined to cost too much, take too long, and were largely “unnecessary”. Another threat in Canada was brought to light recently when 500 ducks entered toxic tailing ponds in the oilsands area north of Fort McMurray, Alberta. Only 5 ducks had any hope for recovery from exposure to the oily chemicals. There are 50 square kilometers of these toxic ponds, and they lie within the migration path of the whooping crane. Propane canons are routinely used to haze birds from this area. Thanks to Ernie Kuyt (whooping crane expert, retired biologist with the Canadian Wildlife Service) for sending newspaper articles describing these threats to wildlife in Canada.

Reintroducing a Migratory Flock of Whooping Cranes

It has been sixty million years since the first crane-like birds began the slow evolution that created the white ghosts that now grace our wetlands. Twelve thousand years have passed since the last glacier laid down the substrate that

is now Necedah National Wildlife Refuge. It's been one hundred and thirty years since the last Whooping crane nest was reported in Wisconsin and sixty three years since the population reach a low point of only 21 individuals.

The reintroduction of Whooping cranes into the eastern flyway began in 2001 and whether you measure time in millennia or decades it makes those 7 years seem insignificant by comparison; however they were anything but trivial. The wild population grew to 382 birds, 72 of them migrating between Wisconsin and Florida and thousands, if not millions of people, now know about Whooping cranes and the plight of migratory species. No matter how you measure time, you quantify the success of a wildlife reintroduction by the number of animals that survive to reach breeding age and the education opportunities it provides. By any gauge the reintroduction conducted by the Whooping Crane Eastern Partnership has been successful, but not without challenges.

Building numbers during the start up years of any wildlife restoration project is critical to its success. The loss of an entire generation of birds to a storm in Florida early in 2007 interrupted the annual releases and set the project back more than just one season. The attrition that occurs in the intervening 2 years between releases impacts the entire population; but last year 17 more birds were led to Florida using the ultralight method and another 10 were released in Wisconsin using the Direct Autumn Release technique.

After a long investigation which included all the factors that could have contributed to the loss of the class of 07, the WCEP Project Direction Team (PDT) released an Unusual Mortality Report. Several modifications to the management of the overwintering birds were adopted and a new automatic gate was installed at the Chassahowitzka National Wildlife Refuge in Florida. This apparatus uses a float system and gravity to open the gate when the storm driven tide reaches a predetermined level. Additionally a search was launched to find an alternate wintering site. In order to reduce the risk of a recurrence, the PDT decided, at their winter meeting, to split the flock in 2008. If all the permits can be put in place in time, half the birds will winter at St Marks National Wildlife Refuge near Tallahassee and the remainder will carry on to Chassahowitzka.

On average it takes 23 flights for the Operation Migration team to cover the 1250 miles between Wisconsin and Florida, but every year it seem to take longer to get those infrequent, good flying days. Last year the migration took 97 days to complete. Part of the problem has been the obstacle presented by the mountains in Kentucky and Tennessee. Even light winds can become treacherous when they are forced up over rocky ridges. Over the past winter a new route was identified that will take the team south through Illinois. They will pass over western Kentucky and Tennessee and into Alabama. They will skirt around the western extent of the mountains before turning east to enter the panhandle district of Florida. At a staging area northeast of Tallahassee the birds will be divided and half will be led to St Marks. The team will then continue east to join the old route leading to Chassahowitzka.

This new pathway keeps the team of birds and pilots over flatter, more open territory. This will improve their options in case they need to land and it will make it easier to track wayward birds that drop out. Most of all it should allow them to fly on more days and shorten the migration.

Each fall the ultralight led migration begins in early to mid October once the birds are all flying together as a cohesive flock. If that harmony could be achieved earlier it might be possible to leave Wisconsin before the cold winds blow and the weather turns reliably unpredictable. One advantage wild birds have is they are free to test their wings and practice flying more than once a day. Maybe that additional exercise is why they generally fledge earlier. To test the theory this season the birds will be trained in the evening, in addition to their normal early morning sessions.

As a result of the additional attention Whooping cranes have brought to the Necedah NWR a new visitors center will be built beginning this year. The five million dollar project will also include a thermal pond from which heat and cooling can be sourced. In order to dig that pond, the primary water feature at Necedah will have to be drawn

down this summer. This will also fit into their habitat management plan of periodically draining wetlands in order to protect the ecosystem. The draw down will begin after any nesting pairs have moved on and excavation on the pool will start in August. This will mean the main training site at Necedah will not be usable this season so a new site will be constructed within a different water system a little farther to the north.

On another part of the refuge the Direct Autumn Release project will begin its fourth season. Ten birds were released in 2007 by a team from the International Crane Foundation and the US Fish and Wildlife Service. This method is being tested to see if Whooping crane chicks, raised in isolation, can be released in the fall and successfully follow the older, more experienced birds on their first migration south. So far none of the DAR birds have reached the average breeding age of five years so it's still in the experimental phase. If successful this method would be ideal for injecting genetically important birds into the population to improve the pedigree of the flock or augmenting the numbers during years of low production.

As the population grows the job of monitoring all the birds becomes more difficult but also presents more opportunity for learning. In addition to the information published by the WCEP Tracking Team in the annual report, there are several research papers produced on topics from stress levels and health issues of Whooping cranes to migration history and project results. The Wisconsin Department of Natural Resources has produced a Whooping Crane Management Plan which will be used as a model for other state plans and the Data Management Team will eventually create a repository for all the information collected during this project.

The survival of Whooping cranes can be credited mostly to their own tenacity. They endure in the face of increasing threats --- with a little help from their friends. But the real legacy of the Whooping Crane Eastern Partnership will be the message that it leaves behind. It is a shining example of small non profits and large government agencies cooperating to achieve what neither could alone and a demonstration of how jurisdictions, state lines and international borders can be crossed to safeguard a creature that was here long before us. If this example can change attitudes, then there is a good chance that Whooping cranes will survive for another millennia.

*****Joe Duff, Operation Migration*****

John Christian Retires as Whooping Crane Eastern Partnership Chairperson

John Christian, United States Fish and Wildlife Service (USFWS), recently stepped down as chairperson of the Whooping Crane Eastern Partnership (WCEP), a coalition of Federal, state, and both domestic and international non-governmental organizations dedicated to bringing back the whooping crane as a breeding species in eastern North America. John's replacement is Louise Clemency, USFWS, supervisor of the Green Bay (Wisconsin) field office.

John Christian has led the remarkable and challenging ongoing recovery of the eastern experimental population of the whooping crane. John has worked tirelessly for over eight years in putting together a disparate group of ultra light pilots, conservationists, zoologists, aviculturalists, veterinarians, and Federal, state, and private biologists to mold together a working group that has overseen five years of raising young whooping cranes, taking the birds from the initial egg laying at several facilities from Patuxent to Baraboo to Calgary, through intensive "flight training" at Wisconsin's Necedah National Wildlife refuge, and to a long and oftentimes tedious and occasionally dangerous flight to wintering grounds in the Florida peninsula.

His cooperative efforts in times of great project need, at always being able to find the right person to facilitate the solutions to a problem, either on the breeding and wintering grounds or along the migration route has saved many a bird from difficult circumstances. He has worked closely with the many partners including Patuxent Wildlife Research Center, the International Crane Foundation, Operation Migration, the National Wildlife Health Center,

and various zoos as well as with the department of natural resources in every state along the flyway to facilitate a smooth pathway both legally and biologically for these rare birds.

At the two annual meetings John has stressed the “Power of Partnership,” a paradigm that has served the reintroduction program well and has generated similar programs with positive results in other USFWS and state wildlife endeavors. John has always looked at the glass as half full and his optimism has been infective. At each meeting that John has chaired we are reminded of the childhood book “the Little Engine that Could” and its theme that I think I can repeated over and over eventually translates into I know I can. At the end of the meeting John literally was the cheerleader with all the partners standing and John exhorting them to “give me a W, give me an H” and so on. The long-term result was an enthusiastic group invigorated to accept the next set of challenges in the months to come.

Mr. Christian’s leadership has overseen the early experimental flights with sandhill cranes (*Grus canadensis*) to a current population of migrant whooping cranes that numbers 72 birds. During his tenure the first successful nesting and fledging of a migratory whooping crane east of the Mississippi River in over 80 years occurred at Necedah NWR. Other pairs have bonded and laid eggs and the future for this second migratory flock is cautiously optimistic. Many research projects have spun out of this project including West Nile vaccination development for both sandhill and whooping cranes, the ongoing experiment of direct autumn release birds (“DAR birds”), and innovations in pen rearing and parenting. The presence of these whooping cranes at sites along the migratory route have led to increased conservation efforts and additional lands dedicated to wetland species in several states including Wisconsin and Indiana.

At times John has had to be both cheerleader, peacemaker, and psychologist as project highs such as the flight of the first young birds have had to be tempered with the tragic loss of 2006’s young birds to a hurricane-like lightning storm. He has never wavered from the intended goal of establishing 25 breeding pairs and 125 individual birds and thanks to his leadership we are over halfway to that goal. Assessing the needs of aviators, biologists, aviculturalists, wildlife managers, administrators, and the general public has been a delicate and sometimes frustrating balancing act that only someone with John’s skill sets could successfully negotiate. John was recently one of two recipients in Region 3, USFWS, of the prestigious Recovery Champion Award, dedicated to those groups and individuals who are making significant contributions to the recovery of endangered and threatened species.

Northwest Airlines’ current financial difficulties would have come about a lot quicker had it not been for John’s innumerable trips around the country on behalf of whoopers. John has hobnobbed at a gamut of social events from Washington dinners and friends of state and federal refuge fund raising dinners to state flyway barbecues, Cajun crawfish boils, and the famous Necedah Lion’s Whooping Crane and Wildlife Festival held the third weekend of September. Much to some folks’ consternation at this festival, John had usually promised to be there and was often an early morning no-show according to Necedah NWR manager and fair founder Larry Wargowsky until someone figured out that John had been there all along dressed up as a wandering whooping crane and delighting fair goers. He is suspected to have scored free pancakes on the side because no one was willing to say no to a hungry and very large-billed whooping crane.

The Whooping Crane Conservation Association and the conservation field at large owe a great debt of gratitude for John’s tireless efforts on behalf of Whooping Cranes and other migratory birds. John plans to remain actively involved with the program and we hope that we can tap into more of his creativity and love for the resource. John never misses a chance to tell the whooping crane story whether it’s to perfect strangers on his many airplane rides or to a room full of professional waterbird managers. Hopefully this ongoing story will have a successful resolution and these cranes will successfully breed east of the Mississippi River and establish this long-sought second migratory population.

**** Bob Russell, US Fish and Wildlife Service****

Florida Resident Flock Update

The Florida population of whooping cranes currently consists of 33 birds (12 pairs). Despite on-going drought, there have been 5 nests this season. Two nests hatched 2 chicks each, but none of the chicks survived. One chick was taken by a crow and predation was also suspected for the other 3. Two nests are still being incubated and one nest failed (pair abandoned it when the marsh dried up). Record drought is making it impossible for these water-dependent birds to succeed with reproduction.

Major partners for the Florida reintroduction are meeting this summer to decide if future releases should be considered for this flock. Tools used in this decision-making process will include population models that will provide probabilities of success under differing release strategies and their respective costs. The future of the flock really hinges on how well the *wild-hatched* whooping cranes will survive and reproduce. The wild-hatched birds will have to do better than the *release-birds* for the goal of a self-sustaining population ever to be realized.

*****Marty Folk, Florida Fish and Wildlife Conservation Commission*****

What does the WCCA do with its money?

Dues money is used toward the costs of printing and mailing the biannual newsletter. In addition, the Association awards grants for efforts that directly benefit the whooping crane. This past year, grants were awarded to Operation Migration for their work with the reintroduction of migratory whooping cranes and to the San Marcos River Foundation for their work in the conservation of water in the Texas wintering grounds. See articles in this issue by these organizations.

WCCA recognizes 2 New Emeritus Trustees

The WCCA has awarded 2 long-term members as Emeritus Trustees. Bill Huey (of Tesuque, NM) and Larry Smith (of Albuquerque, NM) are pioneering conservationists whose involvement with the WCCA and whooping crane conservation date back decades. Congratulations Larry and Bill!

A Note from Membership Chair/Secretary Judith Buhrman

The former secretary of the WCCA lives on the coast of Louisiana. That she managed to keep any records at all during and after the onslaught of Katrina and worse, Rita, seems miraculous to me. Let us honor long-time secretary/membership chair, Mary Courville, who managed to keep track of membership in the face of great adversity. Manually, at that.

We recently sent out a message to everyone who didn't appear to be on the list of current members that we derived from comparing our mailing list with the membership list that Mary managed to preserve in 3 x 5 card form. You responded! A heartfelt thank you to all of you who answered. Supporting my belief that those who care about the biological riches of this world are really nice people, nobody complained or scolded. Now, we have work to do, as you will read in this newsletter.

Honor Roll of Donors

Thanks to the following individuals who contributed extra money over and above their annual dues. All contributions will be used toward conservation of the whooping crane. Donations in memory of Jerry Pratt: **Mr. and Mrs. Arthur Courville, Mr. and Mrs. William Huey, Ms. Zoe Lynch, and Mr. and Mrs. Walter Sturgeon.** Other donations: **Harold Albers, Carolyn Allen, Allan Beach, Angie Delozier, Mary Douglas, Jake Edwards, Dale Funk, R M Lockhart, N Jack Mackenzie, Glenn McCormick, Martha Morrow, Nellie Rempel, Anteo Talevi.**