



THE UNISON CALL

- Newsletter of the North American Crane Working Group -

Fall/Winter 2011 (2012)

Vol. 22 No. 2

President's Note — February 2012

The North American Crane Working Group is a small but productive family of individuals who care deeply about the science and conservation of cranes. The focus of our activities is the Crane Workshop, held every 3–4 years, and the published proceedings that serve to capture and distribute new information about cranes. The main roles of our board are to plan workshops, get proceedings out, and keep the membership informed through our newsletter, *The Unison Call*, and website.

Since the membership last met at Grand Island, the face of the NACWG board has changed quite a bit, largely unexpectedly. Glenn Olsen stepped down as long-time board member, and from his more recent role as treasurer. However, Glenn remains active in crane research and re-introduction efforts as a wildlife veterinarian at US Geological Survey's Patuxent Wildlife Research Center. Daryl Henderson, our newsletter editor, quickly stepped up to replace Glenn as both board member and treasurer. This was an obvious fit since Daryl was already dealing with the membership list.

This January saw the departure of two more board members, Marilyn Spalding and Gay Gomez. Marilyn has had long involvement with Whooping Cranes and Sandhill Cranes as a wildlife veterinarian for Florida Fish and Wildlife Conservation Commission; she recently retired from that

agency. Gay Gomez was Associate Professor of Geography at McNeese University of Lake Charles, Louisiana, and provided valuable leadership for bringing whoopers back to Louisiana. Gay was elected to the board at our membership meeting in March 2011 but is accepting new challenges that take her to the Pacific Northwest and away from the crane world. We thank Glenn, Marilyn, and Gay for their contributions and service to the Working Group and wish them the best.

Because the membership meets just once every three years during our workshops and we want a complete board to keep the organization running well, the board acted to replace Gay and Marilyn with Dr. Sammy King and Dr. David Aborn. Sammy is professor and Unit Leader in the School of Renewable Natural Resources at Louisiana State University in Baton Rouge. He leads the research side of the Whooping Crane reintroduction at White Lake and leads other research on a broad range of topics in avian and wetland ecology. David Aborn is associate professor in the Department of Biological and Environmental Sciences at University of Tennessee-Chattanooga. He conducts research on aspects of avian ecology, including migration and wintering ecology of Sandhill Cranes in Tennessee. The current board is Jane Austin (president), Richard Urbanek (vice-president), Daryl Henderson (treasurer), and Felipe Chavez-Ramirez, Barry Hartup, Sammy

King, and David Aborn as members-at-large. Following our bylaws, this board will serve until the next workshop (2014), when we will hold new elections.

An important part of our mission is the dissemination of our knowledge via workshop proceedings. In this increasingly electronic world, having online access to articles is critical to the exchange of information across the scientific community. The International Crane Foundation (ICF) has graciously assisted in distributing both print and electronic copies. Currently, full articles are available online for the 1981 Proceedings, the Sixth (1992), Seventh (1997), Eighth (2001) and Tenth (2008) Proceedings, and with plans to get the Ninth (2005) also online soon. Printed copies of these and the Eleventh Proceedings (2011) are available at ICF. For direct links to the electronic articles, go to:

www.savingcranes.org/digital-books.html

We have extra copies of past proceedings stored at ICF, and we would like to reduce this inventory by distributing to crane biologists and field stations around the continent and indeed around the world. Know of some libraries of your state, federal, and academic institutions that could add these publication to their collections? Know some crane biologists outside North America who would like copies? Please get in touch with me (jaustin@usgs.gov) and we will work to distribute them.

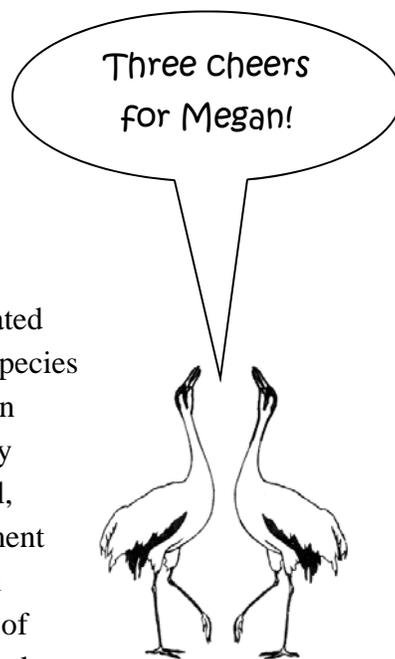
Reminder that as a member of NACWG, you are also part of the **Ornithological Council**, a coalition of ornithological organizations. The OC is a great resource for information on issues affecting ornithological research, including questions or problems about permits or import/export permits. And as an OC affiliate, you are now part of the **Ornithology Exchange** – an online community of individuals interested in ornithology, or the scientific study of birds. If you haven't already, check it out – and sign up as a member – at www.ornithologyexchange.org/

Jane Austin
USGS Northern Prairie Research Center
Jamestown, ND

Missing from the spring/summer edition of *The Unison Call* was our congratulations to **Megan Brown**.

Megan, who is affiliated with the Center for Species Survival, Smithsonian Conservation Biology Institute, Front Royal, VA, and the Department of Animal and Avian Sciences, University of Maryland, College Park, MD, was awarded **Best Student Paper** at the **12th North American Crane Workshop** in Grand Island, Nebraska for her presentation of “Chronic oxide as a fecal marker to identify individual Whooping Cranes” by Brown et al. The research was carried out at USGS Patuxent Wildlife Research Center. Congratulations to Megan for her outstanding work.

The many excellent oral presentations and posters by students at the 12th Workshop bode well for the future of crane research.



The Ornithological Council (OC) is establishing a small grants program aimed at integrating ornithological research and conservation. A 3-year pilot program (\$7500/year) will fund projects in South America, Central America and the Caribbean (Cuban Sandhills anyone?). For details contact Jane Austin.

A list of other grants and awards is available at BIRDNET, a website presented by the OC.

<http://www.nmnh.si.edu/BIRDNET/grants/index.html>

Regional Reports

Louisiana Whooping Cranes – February 2012

2010 Cohort

After dispersing away from the release pen most of the birds from this group of 10 left the marsh and moved north into agricultural areas, primarily rice and crawfish. As previously reported 1 bird became sick and was euthanized, 1 bird was likely killed by a predator, and a third bird disappeared and is presumed dead. Summer research of the remaining 7 focused on evaluating the habitat chosen by the birds.

In early October, 2 birds in a group of 3 were shot and killed by a pair of teenage boys. An eyewitness reported the shooting and state law enforcement agents were able to apprehend the suspects and move forward with pressing charges. The case will be going to court in the very near future. The third bird's transmitter failed and she disappeared at the same time the others were shot. With no additional data or sightings she is missing and presumed dead and foul play is suspected to be a factor in her disappearance. As a result of the shooting incident the Louisiana Department of Wildlife and Fisheries has stepped up our outreach and education efforts, including working to develop Whooping Crane-related lesson plans and curriculums that will be incorporated into public school classes for middle and high school students.

Unfortunately in late November an additional bird was killed, likely by a predator, reducing the 2010 cohort to only 3 survivors. The 3 survivors remain separate from each other with 2 remaining in agricultural areas and the third returning to the pen and joining the new group of chicks.

2011 Cohort

On 1 December 2011, a second cohort of birds was shipped to Louisiana from the Patuxent Wildlife Research Center. As with the first cohort, the 16 new birds (7 males, 9 females) were initially held in the top-netted pen. Permanent bands and transmitters were attached to their legs on 8-9 December and the birds were released into the open pen on 27 December. On 31 December L4-10, a survivor from the first cohort, returned to the pen site and joined the 16 chicks. He had spent almost all summer and fall in the marsh just west of the release area and therefore had the strongest ties to the area. The 16 juveniles initially attempted to chase him away and while they continue to keep him away from the food shelter and the feeders they have generally become more tolerant of his presence. Food continues to be provided for the birds in the open pen but will be discontinued in the next few weeks. The birds have shown a similar pattern of movement and pen use to the previous cohort – roosting outside the pen at night but using the pen during the day, primarily in the afternoons. However, with more water across the marsh this group of birds is beginning to range further away from the pen and use areas on the east side of the property which the first cohort did not use.

Regional Reports *continued*

On 4 January, chick L14-11 was handled to replace the original transmitter she had been given which was not functioning properly and during this time she apparently suffered an injury that left her unable to fly. On 19 January she was brought to the LSU vet school for evaluation and radiographs revealed a fractured left coracoid bone. In order to give her the best chance of recovering the ability to fly and be released in Louisiana, surgery was performed on 27 January. Surgeons at the vet school realigned the ends of the fractured bone and attached a small metal plate to stabilize the site. Her recovery is going well thus far and we are hopeful she will soon be able to fly again so she can live in the wild in LA with the rest of the cohort.

Unfortunately one chick, L12-11, disappeared on 3 February. With no data from his transmitter and no sightings since then he is believed to be dead. As of 17 February, 18 (8 males, 10 females) birds remain alive in LA.

Sara Zimorski, Louisiana Department of Wildlife and Fisheries

News of the surgery was reported by KATC of Lafayette, LA.

www.katc.com/news/young-whooping-crane-recovering-from-broken-bone/

Update on Eastern Migratory Whooping Crane Reintroduction

Summer and Autumn 2011 — As of 23 July 2011, maximum size of the Eastern Migratory Population was 99 birds (51 males and 48 females). Distribution included 84 in Wisconsin, 1 each in Indiana, Michigan, and Minnesota, 6 at undetermined locations, and 6 missing for 8-14 months. An additional 8 juveniles were added to the population by the DAR (direct autumn release) method at Horicon NWR on 25 October. Five migrated to locations in Tennessee, Georgia, and Alabama; the wintering area of 3 juveniles was not determined. An additional juvenile initially reared as an ultralight-led bird (see below) left the ultralight-led migration and migrated with Sandhill Cranes to a wintering area in Florida.

Mortality — Mortalities from mid-July to mid-November included 1 adult female on Necedah NWR and 1 yearling male at another location in Juneau County, Wisconsin. The death of an adult male, paired and expected to nest in 2012, occurred at a wintering site in Indiana and is under investigation. A female of an established breeding pair was found with a severe leg injury on 31 January on her wintering territory in Indiana and was euthanized at the Indianapolis Zoo.

Autumn Migration of Ultralight-led Juveniles — The 2011 migration led by Operation Migration departed from White River Marsh State Wildlife Area, Green Lake County, on 9 October. One juvenile left the group on 21 October, was not retrieved, and migrated to an appropriate wintering site in Florida (see above). The remaining 9 juveniles reached northwestern Alabama on 11 December. On 4 February they were transported to Wheeler NWR, Morgan County, Alabama, and released 6 days later.

Winter 2011/12 — As of 17 February 2012 or the last winter location (for birds that have already begun spring migration), maximum size of the Eastern Migratory Population was 98 birds (49 males and 49 females). Estimated distribution at the end of the wintering period was 37 birds in Indiana, 4 in Illinois, 6 in Georgia, 7 in Alabama, 2 in South Carolina, 2 in North Carolina, 6 in Tennessee, 12 in Florida, 20 at undetermined locations, and 2 which have not been accounted for more than 6 months. These totals do not include the additional 5 males and 4 females released at Wheeler NWR on 10 February. Seven of the birds that wintered at undetermined locations were reported on spring migration (1 in Illinois and 6 in Kentucky).

Eva Szyszkoski, International Crane Foundation, Baraboo, Wisconsin

Remote Tracking of Aransas-Wood Buffalo Whooping Cranes

Since 2009, a partnership of agencies and organizations has been conducting research on the Aransas-Wood Buffalo population of Whooping Cranes. Fundamental objectives of our research efforts are: 1) to advance knowledge of Whooping Crane breeding, wintering, and migratory ecology, including threats to survival and population persistence; 2) to disseminate research findings in reports, presentations, and peer-reviewed literature to provide reliable scientific knowledge for conservation, management, and recovery of Whooping Cranes; and 3) to minimize negative effects of research activities to Whooping Cranes. Funds and personnel in support of this endeavor are being contributed by the Canadian Wildlife Service, The Crane Trust, Platte River Recovery Implementation Program, U.S. Fish and Wildlife Service, U.S. Geological Survey, Parks Canada, International Crane Foundation, and Gulf Coast Bird Observatory.

To meet objectives, members of the partnership have captured and marked 35 Whooping Cranes. We captured one juvenile and two adults along the Gulf Coast of Texas during winters 2009 and 2010. Capture teams marked nine juveniles during August 2010 and 12 juveniles during August 2011 at Wood Buffalo National Park in Canada. In December 2011, we successfully captured and marked 11 cranes on Aransas National Wildlife Refuge, eight of which were known or suspected paired adults.

Capture teams consist of individuals with experience handling and marking endangered cranes. At capture, a licensed veterinarian performs a health check on each crane, which includes an external examination and screenings for pathogens, toxins, and parasites. We affix all captured cranes with a satellite transmitter (Platform Transmitting Terminal) with Global Positioning System capabilities mounted on a two-piece leg band. The transmitter and leg band weigh approximately 72 g, which is <1.5% of body weight of adult cranes. Integrated solar panels on all exposed surfaces allow transmitters to function for approximately three to five years. Transmitters record GPS locations every six hours, providing detailed information on nocturnal and diurnal site use and general flight paths. Approximately every 56 hours, transmitters upload new data, which assists in identifying mortality events when possible.

We have been collecting location data on marked birds since December 2009 and expect data collection to continue for at least the next three years. As our sample of marked cranes has expanded in 2011, expectation among research partners has increased as we begin to explore the volume of rich information provided

Regional Reports *continued*

by marked individuals. Partners agree that this opportunity to mark wild Whooping Cranes with GPS technology represents an exceptional prospect to enhance our understanding of Whooping Cranes and assess risks they face during their entire life cycle.

Aaron Pearse, USGS Northern Prairie Wildlife Research Center

Brad Strobel, USFWS Aransas National Wildlife Refuge

Aransas National Wildlife Refuge Whooping Crane Update – February 16, 2012

Precipitation/Salinity: The first two weeks of February produced a total of 1.89 inches of rain for the Aransas National Wildlife Refuge. Salinity levels in San Antonio Bay are currently recorded as 19.9 parts per thousand. These levels have dropped due to recent freshwater inflows from rain in Central Texas, as well as localized rainfall. Salinity levels in surrounding bays still remain higher than normal. High salinity levels affect the Whooping Cranes by forcing them to expend more energy trying to access fresh water.

Food Sources: The refuge continues to help alleviate low food resources by adding to the prescribed burn totals. This winter the refuge has burned 8,095 acres of habitat, where the Whooping Cranes have been observed eating the roasted acorns and other food sources. There are still an additional 6,129 acres planned for the remaining Whooping Crane season.

Research and Science: Over the years the Whooping Crane population has been growing, the habitat changing, and the birds naturally dispersing. The primary goal is to ensure the recovery of the species, and to do that the refuge and its partners must adjust with the ever-changing conditions.

In previous years, the refuge gauged the Whooping Crane population by counting individual birds within the survey area. The aerial surveys objective was focused on counting every individual bird regardless of where they were located within the survey area. This technique is no longer feasible because the population is increasing. Biologists are flying along a transect, straight lines set at specific distances within the survey area. Previously each survey consisted of a single flight, now one survey includes three flights on three separate days (weather permitting) within a preset timeframe. The birds counted represent an estimate of the population within the surveyed area. It is expected that some birds will not be included in the count, but this method (known as Distance Sampling) is commonly used to determine rare and endangered wildlife populations, including fin whales, Karner blue butterflies, and raptors.

Surveys: The January 2012 survey consisted of three flights conducted on January 26, 27, and 29. The flight of January 26 was cut short due to high winds. Surveys conducted on the 27th and 29th were approximately four and a half hours and each systematically searched Matagorda Island, San Jose Island, Blackjack

Peninsula, Lamar Peninsula, Dewberry Island and Welder Flats. Preliminary analysis estimates the population at approximately 245 individuals within the survey area. The second round of survey flights will take place in mid to late February.

Dispersing: Refuge officials have surveyed the primary wintering area but this does not represent all birds of the Aransas-Wood Buffalo population. Biologists are receiving many reports of Whooping Cranes outside the survey area in the following Texas counties: Matagorda, Refugio, Calhoun, Aransas, Williamson, San Patricio, Maverick, and Caldwell. There are also Whooping Cranes of the Aransas-Wood Buffalo population currently residing in Nebraska. These cranes are naturally supplementing their own food sources by wintering around freshwater lakes and other marshes.

Supplemental Feeding: Many people have inquired whether the refuge plans to implement a supplemental feeding program for Whooping Cranes this winter. At this time, the refuge is concerned about the negative impacts of supplemental feeding. Previous efforts to supplemental feed were not considered successful, as only a small portion of the birds actually fed on the shelled corn. Whooping Cranes are territorial and do not naturally gather together to feed. Encouraging them to do so changes their natural behavior; it also creates greater opportunities to transmit diseases, parasites, and makes them more vulnerable to predators. Furthermore, when left out in warm and moist environments, like coastal marsh areas, corn can grow *Aspergillus* molds. Aflatoxins, which are produced by the molds, can be lethal to Whooping Cranes and other wildlife. Where Whooping Cranes may be present, landowners should be aware of the risks that aflatoxins pose. If corn is being used for feeding other wildlife in areas where Whooping Cranes may be present, we highly recommend purchasing aflatoxin-free corn.

Excerpts taken from: www.fws.gov/southwest/refuges/texas/aransas/

Florida Non-migratory Flock of Whooping Cranes

As of 1 February 2012 we estimated there were 19 Whooping Cranes in the Florida resident population (8 males, 11 females) including 7 pairs. Again, this year, we will study the nesting ecology of these Whooping Cranes and Florida Sandhill Cranes. The goals are to determine causes of nest failure, compare the incubation behavior of the 2 species, and determine the efficacy of several research tools for these purposes. The nesting season has begun with our first Sandhill Crane nest just discovered in Polk County. Drought continues to plague Florida's wetlands. The northern range of these cranes is very dry and unlikely to support much crane nesting. Fortunately, further south, we have some water for nesting. On a different note...we are preparing several manuscripts on other topics as we wrap up our work on this flock.

Marty Folk, Florida Fish and Wildlife Conservation Commission

Regional Reports *continued*

Sandhill Crane Nesting Ecology Study underway in Homer, Alaska

In 2011, the International Crane Foundation's West Coast Sandhill Crane Project, headed by Gary Ivey, in partnership with Kachemak Crane Watch, began a three-year study of the nesting ecology of Lesser Sandhill Cranes in the Homer, Alaska area. In addition to documentation of crane nesting habitat, the project will develop an atlas of crane territory locations, estimate the local breeding population number, and determine their reproductive success. Most of the field work is being accomplished by Homer wildlife biologist Michelle Michaud. This project involves the local community who assist by reporting their observations of cranes during the breeding season.

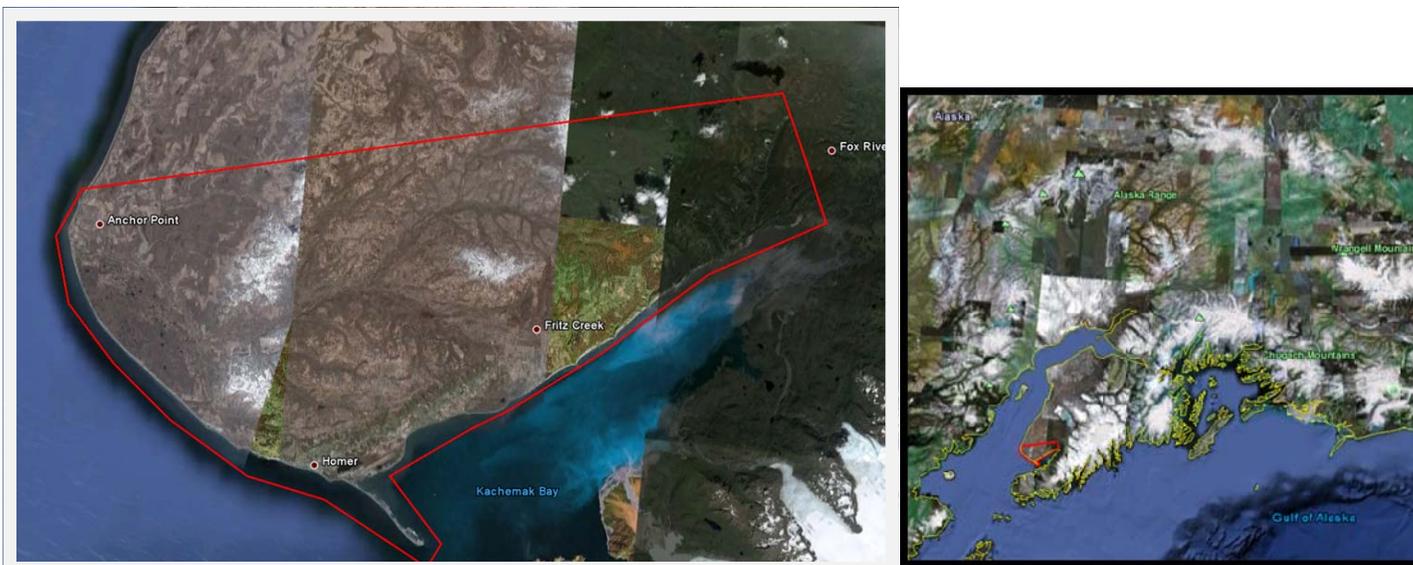
Habitat types documented as being used by nesting cranes in 2011 included tidal wetlands, upland areas, a small artificially constructed pond, and a wetland/upland complex. In 2008, the Kenai Watershed Forum (KWF) completed a wetland mapping and classification project and selected Relict Glacial Lakebed ecosystem wetlands with open water or emergent vegetation larger than 30 acres as probable Sandhill Crane nesting habitat (see <http://www.kenaiwetlands.net>). However, no nests were observed in lakebed wetlands in 2011.

A major feature of this project is the development of an online "Crane Atlas" on the Kachemak Crane Watch website, where citizen-science observers can post their Sandhill Crane observations. The atlas will include a map to pinpoint crane territory locations and note other details such as number of chicks hatched or fledged. We hope to expand the use of the crane atlas to identify other nesting sites of cranes in Alaska and perhaps to other western states and to use the atlas as a tool to assist with monitoring of individual crane pairs as well as population trends.

Gary Ivey, International Crane Foundation

Michelle Michaud, Homer, AK

Below is a map of our study area (left) and a more general location map.



Cranes in the News

Hooded Crane at Hiwassee Wildlife Refuge

On December 13, 2011, two women from Kentucky were looking through the sea of Sandhill Cranes at Hiwassee Wildlife Refuge in Tennessee when they spotted a crane that looked different from the rest. They pointed it out to a local birder, Charles Murray, and he agreed that it was different. Charles contacted Jen Davis, an ICF tracking intern who was in the area, and she took a couple of digiscoped photos of the bird and e-mailed them to ICF. ICF identified the bird as a Hooded Crane (*Grus monacha*). Word began to spread about the crane almost immediately, and publicity grew. Initially, the story showed up in the local media, but by Christmas it had made national and international news. Charles Murray has been at Hiwassee almost every day, and has been keeping track of how many people have come to view the bird and where they are from. As of January 17, 2011, there have been over 2,800 visits (some people have returned more than once, so the actual number of visitors is a less). The highest 1-day total has been 341 people on December 31, 2011. People have come from 43 states and 10 foreign countries. The top ten states have been TN, GA, NC, AL, FL, OH, KY, PA, MO, and AR. The foreign countries represented are Canada, Ecuador, Russia, Israel, Panama, UK, Philippines, Romania, South Africa, and Cuba. It is unclear how many people from outside the United States traveled to Hiwassee specifically to view the Hooded Crane and how many were in the country already. Many people (myself included) have had the thrill of seeing three crane species at once (Sandhill, Whooping, Hooded). The nearby town of Dayton, TN hasn't seen this much excitement or this big an influx of people since they had the Scopes Trial!

There is some question as to whether the Hooded Crane is a truly wild bird that made its way here from Asia, or whether it might be an escapee from a captive facility. A Hooded Crane was seen in April of 2010 in Idaho, and there was another sighting in Nebraska in April 2011, and it is likely that this is the same bird. Evidence is growing that this is probably a wild bird. No captive facility that has Hooded Cranes has reported any escapes recently, and many facilities (but not all) pinion the wings and band the legs. The Hiwassee bird has no bands and is definitely able to fly. John Vanderpoel, a birder from Colorado, did a Big Year last year and made a special stop to view the bird. If the American Birding Association accepts it as a genuine record, it would bring John's total up to 742. Countable or not, it is still a nice bird to see and will probably stay at Hiwassee until the Sandhills migrate back north. If you would like to read some of the internet postings about the crane, some with links to photos and videos of it, visit <http://www.freelists.org/archive/tn-bird> and search through the postings in December and January.

David Aborn, Chattanooga, TN

On 9 February 2012, a Hooded Crane (presumably the same bird) was observed among Sandhill Cranes at Goose Pond Fish and Wildlife Area in Greene County, Indiana [see posts and photos by Matt Fraker and Greg Neise at the *North American Birding* website <<http://www.nabirding.com>>; Fraker also recorded a Common Crane near Grand Island, NE on 8 February]. — Daryl Henderson

International Crane Foundation on the Korean Peninsula

Pushed north by rampant development in the world's eighth largest economy, South Korea, and south by food shortages in North Korea, the lowlands of the 4km wide Demilitarized Zone (DMZ) and the sparsely populated nearby Civilian Controlled Zone (CCZ), that separates hostile neighbors, provides habitat in winter for one-third (1000) of the world's Red-crowned Cranes, half of the world's White-naped Cranes (3000), 250,000 White-fronted and Bean Geese, 1500 Black Vultures and other wildlife treasures. Political tension, solitude in the DMZ and an abundance of gleaning in harvested rice fields of the CCZ, makes the 38th parallel a paradise for migratory birds. However, if relations relax between the Koreas eventually leading to long-sought reunification, the lowlands of the DMZ are destined to become reunification cities. Other areas of the DMZ are too mountainous for such development and the wrong habitat for cranes.

Consequently, for the past five years the International Crane Foundation (ICF) with help from colleagues in China, Japan and South Korea, is spearheading a conservation program on the Anbyon Plain of North Korea by enabling the State Academy of Sciences in Pyongyang to help farmers in the Pisan Cooperative Farm develop organic farming practices to replace subsidized fertilizers formerly provided by the USSR, with the hope that gleaning will again be available for cranes and other birds. The North Korean Government has embraced the project and provided financial support for the expansion of organic farming and for the instruction of farmers from other regions through visits to the Anbyon Project. A pair of captive cranes from Pyongyang Zoo penned in the center of the plain, seven decoy cranes, 67 acres of flooded rice paddies, and amplification of crane calls as wild cranes fly overhead on their way to the DMZ, have attracted both Red-crowned Cranes and White-naped Cranes to land and spend some days on the Anbyon Plain. One group of Red-crowned remained for three weeks. In addition, more than 1000 geese, three species of ducks, and many herons and egrets were attracted to the flooded fields.

Efforts continue as goodwill flourishes between the farmers of the Pisan Cooperative Farm on the Anbyon Plain, and ornithologists from the State Academy of Sciences in Pyongyang. If the lowlands of the DMZ are lost, the cranes may have a safe winter home in North Korea. Meanwhile ICF continues to raise support to fuel this worthwhile undertaking.

George Archibald, International Crane Foundation

Sandhill Cranes in the California Delta

The *Contra Costa Times* ran a hopeful article on California's Sandhill Cranes by Denis Cuff in its February 3, 2012 print edition: "Back from the brink, time's on their side — With help from man, 'living fossils' making a Delta comeback." The same story can be found online, but with a more poetic title: "Sandhill cranes bring their trumpet and dance to the Delta each winter." The online article also contains a short slideshow with fine images and audio from the featured crane areas: Cosumnes River Preserve, Staten Island, and Woodbridge Ecological Preserve/ Isenberg Sandhill Crane Preserve. The Nature Conservancy's Jesse Roseman is quoted at length about ongoing conservation efforts (note that California does not allow cranes to be hunted), and ICF's Gary Ivey warns about threats to crane habitat, including breeding areas in Oregon.

http://www.contracostatimes.com/news/ci_19879355?IADID=Search-www.contracostatimes.com-www.contracostatimes.com

Sandhill Cranes Overwinter on Platte River

Editor's note: The following passages are from an article by Algis J. Laukaitis of the Lincoln Journal Star. The entire article can be accessed through the URL below.

LINCOLN, Nebr. (January 22, 2012) — A rare and spectacular thing has happened along the Platte River west of Grand Island: People have seen and heard flocks of Sandhill Cranes in January.

About 1,000 Sandhill Cranes have overwintered along the river near the National Audubon's Rowe Sanctuary at Gibbon.

"I've been there 50 years and I've never seen it," said noted ornithologist and author Paul Johnsgard of Lincoln. Normally, Sandhill Cranes pass through Nebraska in the fall on their way south, but severe drought conditions have devastated the crops in their wintering grounds of Texas, New Mexico and Oklahoma.

"It's pretty horrible. I think they (conditions) are maybe even worse for Whooping Cranes ... they need water to forage for food," Johnsgard said.

"We've had cranes since mid-November," said Kent Skaggs, office manager at Rowe Sanctuary. "At one point in time, we had about 5,000 in our immediate vicinity ... but it seems our numbers have dwindled to about 1,000."

Skaggs agreed with Johnsgard that wintering in Nebraska is unusual behavior.

"That's something that doesn't occur," he said. "As far as I can tell, this hasn't occurred anywhere (along the river) in recent history."

Plenty of open water and leftover corn in harvested fields has kept the cranes here, he said, along with the mild weather.

http://journalstar.com/news/state-and-regional/nebraska/sandhill-cranes-overwinter-on-platte-river/article_8ffa2a2c-f7c3-5f74-81ee-918ee9cca331.html#ixzz1k3QF3xtp

Hunters Find Sandhills Challenging During Kentucky's Inaugural Crane Season

*Editor's note: Following up on an article in the previous issue of *The Unison Call* (vol. 22, no. 1) is this (edited) news release from the Kentucky Department of Fish & Wildlife Resources.*

FRANKFORT, Ky. (January 19, 2012) — Larry Dreamis Hill failed in his quest to take a bird during Kentucky's inaugural Sandhill Crane hunting season – but says it wasn't for lack of effort.

"These birds were extremely challenging and seemed to change their patterns a little every day. I really enjoyed the challenge and look forward to future seasons of pursuing this bird. I remember when the first Sandhill Cranes showed up in Cecilia (in Hardin County) years ago – now I have the opportunity to hunt them. It's very exciting," said Hill, Cecilia's retired fire chief.

Kentucky's first modern hunting season for Sandhill Cranes came to a close Sunday, Jan. 15. The month-long season marked the first time in nearly 100 years that Kentucky sportsmen and sportswomen had the opportuni-

ty to hunt Sandhill Cranes in the Commonwealth. By closing day, hunters had harvested 50 birds. Kentucky had allowed for a maximum harvest of 400 Sandhill Cranes.

"The harvest number was not surprising to us because Kentucky does not have a tradition of Sandhill Crane hunting," said Rocky Pritchert, Migratory Bird Program coordinator for the Kentucky Department of Fish and Wildlife Resources. "These are extremely wary birds and are a challenge to hunt. Sandhill Cranes are hunted in a fashion similar to geese, using decoys in fields. Sandhill Cranes are hunted for their meat. They are generally regarded as the finest table fare among migratory birds."

Kentucky is the first state to allow hunting of the Eastern Population of Sandhill Cranes. The Mid-Continent Population of Sandhill Cranes has been hunted in some states for more than 50 years.

Last fall, a survey coordinated by the U.S. Fish and Wildlife Service counted a minimum of 72,000 Sandhill Cranes in the Eastern Population. "This population has experienced significant growth over the last decade and has reached a point where we can allow a limited harvest without impacting the population," said Pritchert. "As a biologist it is my responsibility to ensure harvest does not negatively impact the population and this season will not harm the Eastern Population of Sandhill Cranes."

This season, most of the cranes were harvested in Hardin and Barren counties. These are traditional wintering areas for Sandhill Cranes in Kentucky.

fw.ky.gov/newsrelease.asp?nid=1052

Additional information: 342 persons sought hunting permits; 332 were issued (10 applicants were disqualified). Most birds were taken in Barren County (24), followed by Hardin (19), McLean (2), Shelby (2), Allen (1), Breckinridge (1) and Woodford (1) counties.

A Sandhill Crane Hunt in Wisconsin?

Citing depredation of planted corn seed by a growing population of Sandhill Cranes, Wisconsin State Representative (and avid duck hunter) Joel Kleefisch began circulating a bill in early February that would allow regulated hunting of Sandhills in the state. The fate of the bill is uncertain. For its part, the Baraboo-based International Crane Foundation "maintains three strong positions relative to crane hunting. First, the cranes need help from everyone — including hunters, wildlife enthusiasts, farmers, and other landowners — to conserve wetlands that cranes and other waterbirds depend upon for survival. Second, any decisions about hunting should be based on the best scientific information available. Third, it is crucial for individuals to participate in public discussions on the subject." ICF also notes on its website that it has developed a chemical deterrent, Avipel®, that can be applied to corn seed before it is planted; the kernels thus treated are not consumed by cranes. <<http://www.savingcranes.org/hunting-issue.html>>

The story was reported by a number of news outlets, including *The Star Tribune* (Twin Cities) and *The New York Times*. The article in *The Star Tribune* is recommended. — Daryl Henderson

<http://www.startribune.com/sports/outdoors/138498304.html>

<http://www.nytimes.com/2012/02/24/us/wisconsin-consider-hunting-of-sandhill-crane.html>

Hunting Could Hurt Genetic Diversity of Sandhill Cranes, University of Wisconsin Research Suggests

By Nicole Miller

MADISON, Wis. (February 8, 2012) — As Wisconsin lawmakers debate whether to establish a hunting season for Sandhill Cranes, they may want to consider more than just the sheer number of birds, suggests a University of Wisconsin–Madison specialist in avian genetics.

A recent analysis of the crane's Eastern Population — which includes birds that spend their summers from the Midwest to the East Coast — indicates it also may be important to take into account the distribution of the bird's genetic diversity across the landscape.

"Wisconsin Sandhill Cranes went through a genetic bottleneck in the 1930s when they almost went extinct, and now we're starting to see a rapid increase in their population density and that's great," says Mark Berres, an assistant professor of animal sciences, who led the study. "But the genetic structure of the entire population is anything but uniform. We're finding that there are a lot of distinct breeding populations, including some in Wisconsin. These are unique sub-populations that are genetically distinct from all others."

With funding from the U.S. Fish and Wildlife Service, Berres used DNA fingerprinting to assess the genetic makeup of cranes across the Eastern Population's range. While he found a surprisingly good amount of genetic diversity throughout the population and quite a bit of genetic mixing, there were also a significant number of isolated sub-populations.

The unique genes in these populations could prove vital to the survival of the overall Sandhill Crane population down the line, perhaps giving the birds the ability to survive new diseases or adapt to changing environmental conditions, Berres explains. But because these sub-populations are relatively small, they are more vulnerable to hunting pressure.

"If people start harvesting them, I'm not sure how stable these populations will be," says Berres. "It's possible that if hunters are allowed to take 20 percent of the overall population, they could inadvertently take 99 percent of a particular sub-population."

From a low of just 25 mating pairs in the late 1930s, as estimated by famed naturalist Aldo Leopold, Wisconsin's Sandhill Crane population has rebounded thanks to a number of factors, including habitat conservation, increased farm acreage and hunting regulations. There are now more than 20,000 birds in the state, although this number is still significantly lower than historical levels.

"We have a pretty good understanding of why the birds are doing so well, but we're really just starting to figure out the population's breeding structure," says Berres. "To me it screams 'don't touch them.'"

Nicole Miller is with the UW College of Agricultural and Life Sciences (CALS) Communication Program. This news release can be found at: <http://news.cals.wisc.edu/departments/featured-articles/2012/02/08/hunting-could-hurt-genetic-diversity-of-sandhill-cranes-uw-research-suggests/>

Endangered: Texas Water and Whooping Cranes that Winter on the Texas Coast

*This article appeared recently in Texas Climate News (www.texasclimatenews.org/wp/?p=4048) and is reproduced with permission. Texas Climate News is published by the non-partisan **Houston Advanced Research Center** (www.harc.edu). HARC is a 501(c)(3) not-for-profit organization based in The Woodlands, Texas dedicated to improving human and ecosystem well-being through the application of sustainability science and principles of sustainable development. HARC's mission is to move knowledge to action to improve human well-being and the environment. Thanks go to Texas Climate News editor Bill Dawson and our own Tom Stehn. For two earlier (2009) articles concerning this topic, see Vol. 20, No. 1 of The Unison Call.*

By Michael Berryhill

In 1991 a blind, cave-dwelling salamander, two species of beetles, an eyeless crustacean and an inch-long fish helped change how Texas manages underground water. Using the federal Endangered Species Act, conservationists won a federal court order to protect these creatures by limiting the amount of water that can be pumped from the Edwards Aquifer.

Now a group of conservationists called The Aransas Project (TAP) is using the Endangered Species Act to challenge the management of surface water. The animal in question is no obscure salamander, but the most famous and charismatic animal in North America: the Whooping Crane. If a federal judge rules in favor of TAP, the way Texas manages the Guadalupe River and its estuary, San Antonio Bay, will be fundamentally changed. The state may have to guarantee that enough freshwater is allowed to flow from the Guadalupe into San Antonio Bay to nourish the blue crab population, the primary food there of the Whooping Crane.

During the first two weeks of December, experts on the cranes and estuaries argued in federal court about what caused the loss of 23 Whooping Cranes during their 2008-09 wintering season in Texas. Experts for TAP argued that the birds had died of emaciation and predation brought on by extreme drought. Experts for the Guadalupe Blanco River Authority, which represented the state's case, said that the birds had survived other droughts and are highly resilient. There was no solid proof that 23 died, since U.S. Fish and Wildlife officials found only four carcasses. The GBRA argued that the cranes are omnivorous and when blue crabs are down, Whooping Cranes can survive on other foods such as clams, snails, insects, snakes, fiddler crabs and fish as well as plants, including acorns and wolfberries, a wild pepper that favors brackish marshes. The defendants questioned whether

Whooping Cranes need to drink fresh water at all and whether blue crabs need freshwater inflows to reproduce.

A reporter for the Corpus Christi Caller-Times characterized the scientific testimony as tedious. But Judge Janis Graham Jack, who declared that she and her husband were birdwatchers and appreciated the annual \$5-million ecotourism business that has grown around the cranes, seemed both sympathetic and skeptical about the testimony. When she learned that U.S. Fish and Wildlife's most eminent specialist on the cranes was not available as an expert witness for either side because of federal rules, she had him subpoenaed. Before he retired last spring, Tom Stehn spent 29 years managing the Aransas National Wildlife Refuge where the cranes winter, and had made no secret that he thought the cranes deserved some measure of freshwater inflows.

In 2003 he told writer Joe Nick Patoski of the San Antonio Current, "We'd like to see environmental considerations done at an early stage. One of the problems with the Texas Water Plan [the state's water-supply blueprint] is the environment got short shrift. I bet there weren't a lot of biologists being talked to. Now they'll have to prove their case that the project [to take additional water from the Guadalupe River] won't impact endangered species."

Judge Jack pressed Stehn about his conviction that the 23 cranes died because of lack of freshwater inflows into the bay. "I just want to make sure they didn't go to New Mexico or to Antigua for the holidays," she said.

Stehn explained that unlike most birds, the flock of 260 or so Whooping Cranes is easy to count. They stake out family territories, usually two, three or at

most four birds, and were readily observed during his frequent airplane surveys. Stehn added that while he could only count 23 cranes as missing, he thought that more had probably died because of the drought.

Proving the cause of death of even a few birds is a tough problem. There have been periods of low freshwater inflows when large numbers of cranes did not die. But as drought continues on the Texas coast, more data is accumulating. One crane with a radio collar was found dead in mid-December and its body had been sent for a necropsy.

Human-caused climate change is probably a factor in aggravating the current record drought, according to Texas state climatologist John Nielsen-Gammon, who has said it is likely to last another year because of the La Niña weather pattern and to cause “continued drawdown in water supplies.”

Natural droughts are hard to predict, but Texas faces another drought that is predictable, the one that will be produced by its increasing population. Texas is estimated to grow from 25 million people to 46 million by 2060. In December, the Texas Water Development Board (TWDB) issued a sweeping update of its statewide water plan, which outlines projects estimated to cost \$53 billion. That number accounts for less than a quarter of the more than \$200 billion worth of infrastructure costs that the TWDB estimates the state needs during the next 50 years. Although state law requires that the Texas Parks and Wildlife Department study the freshwater needs of each Texas bay system, environmentalists have been complaining for several years that the Texas Commission on Environmental Quality and the Water Development Board have not fairly allocated water for the bays in regional water plans that comprise the state plan.

The TWDB explains the allocation of surface water this way:

“When issuing a new water right, the Texas Commission on Environmental Quality assigns a priority date, specifies the volume of water that can be used each year, and may allow users to divert or impound the water. Water rights do not guarantee that water will be available, but they are considered property interests that may be bought, sold, or

leased. The agency also grants term permits and temporary permits, which do not have priority dates and are not considered property rights. The water rights system works hand in hand with the regional water planning process: the agency may not issue a new water right unless it addresses a water supply need in a manner that is consistent with the regional water plans and the state water plan.

“In general, Texas has very little water remaining for appropriation to new users. In some river basins, water is over appropriated, meaning that the rights already in place amount to more water than is typically available during drought. This lack of ‘new’ surface water makes the work of water planners all the more important. Now more than ever, regional water plans must make efficient use of the water that is available during times of drought.”

Here and there, the TWDB acknowledges environmental issues. In the Water Plan study for Region L, which includes the Guadalupe River and its estuary, San Antonio Bay, the agency states: “Concerns have also been expressed that increased uses of existing water rights may reduce freshwater inflows to bays and estuaries.” But that’s as far as it goes.

The study notes that endangered migratory species, such as the Whooping Crane, must be protected, but the concern seems to be whether proposed reservoirs might be disruptive: “Reasonable and prudent measures should be taken to avoid and minimize the potential effects of project activities on threatened and endangered species...”

Although the state of Texas has been studying freshwater inflows into the bays since the 1980s, the need for such inflows does not appear in the technical summaries of the TDWB’s regional and statewide plans. In projecting the state’s future water needs, for example, the numbers come in only six categories: municipal, manufacturing, mining, steam-electric, livestock and irrigation. Wildlife does not figure centrally in the regional planning, yet freshwater is essential for the bays’ nurseries, where fish, oysters, shrimp, and crabs spend part of their early lives.

“The only exception in the Region L plan,” its authors state, “comes with regard to the Edwards Aquifer. Development of new water supply sources for Bexar, Comal, and Hays Counties reduces reliance on the

Edwards Aquifer during drought thereby contributing to maintenance of spring flow and protection of endangered species. The Regional Water Plan recognizes the on-going efforts of the participants in the Edwards Aquifer Recovery Implementation Program (EARIP) to develop a Habitat Conservation Plan which will help to define the requirements for maintenance of spring flow and protection of endangered species and meet with approval from the U.S. Fish & Wildlife Service.”

A “Recovery Implementation Plan” for the Whooping Crane, or RIP, to use the federal lingo, is just what The Aransas Project hopes to get the state to agree to. Such a plan requires both sides to negotiate the science and the water planning numbers.

The Edwards Aquifer Plan, for example, guarantees 320,000 acre-feet of water during a drought of record.

TAP’s expert witness on the correlation of freshwater inflows to Whooping Crane mortality, Ron Sass of Rice University, used the numbers in the table (*at right*) as evidence. The underlined numbers in Sass’s analysis represent the correlation between crane mortality and low inflows. The GBRA lawyers attacked Sass’s numbers and conclusions, which lie at the heart of the plaintiffs’ case.

Lawyers for the Guadalupe Blanco River Authority complained in court that if the Aransas Project wins its case, it would confiscate all the inflow for nature and devastate industry and agriculture in the basin.

But Jim Blackburn, the Houston environmental lawyer and lead attorney for the plaintiffs, contends that argument is nonsense. He has said his hope is that during times of extreme drought that everyone, including the Whooping Cranes, would get a share of the water.

How much water would be enough to protect the Whooping Crane and bay ecosystem? TAP’s expert witness on bay salinity, Joseph Trungale, stated in a court deposition: “Changes in inflow as a result of decreased or increased diversions can have a significant impact on salinities; i.e. this analysis shows that a 100,000 acre feet difference over several months or a year, can make a difference and significantly raise or lower salinities over large parts of the bay.” GBRA experts on salinity testified that 100,000 acre feet was too little to affect the bay’s salinity.

At the end of the trial in mid-December, Judge Jack told both sides to write their final arguments and present them as briefs

Freshwater Inflows and Whooping Crane Mortality

Year	Jul-Dec Flow (acre-feet)	Whooping Crane Winter Mortality no. & %
1988-89	349,774	6— <u>4.3</u>
1989-90	209,089	5— <u>3.4</u>
1990-91	668,959	11— <u>7.8</u>
1991-92	1,479,729	1—0.7
1992-93	1,113,110	0—0.0
1993-94	598,466	7— <u>4.9</u>
1994-95	923,221	0—0.0
1995-96	499,553	1—0.6
1996-97	394,376	0—0.0
1997-98	1,371,562	1—0.5
1998-99	4,095,870	0—0.0
1999-00	327,744	1—0.5
2000-01	372,035	6— <u>3.3</u>
2001-02	2,161,718	2—1.1
2002-03	5,419,319	1—0.5
2003-04	987,272	1—0.5
2004-05	3,385,520	2—0.9
2005-06	570,863	6— <u>2.7</u>
2006-07	513,614	0—0.0
2007-08	3,399,637	0—0.0
2008-09	344,119	23— <u>8.5</u>

See also a scatter plot of these data on page 18.

later this spring. She said she expected to immerse herself in the trial documents and arguments during the summer and then make a ruling. She also urged both sides to talk about a settlement.

Bill West, the general manager of the GBRA, said there is a possibility of a settlement, but “senior water rights are off the table.” Under state law, the holders of senior water rights are entitled to priority over those who hold junior rights during periods of drought and can take all the water they want. The GBRA, which supplies agricultural, industrial and municipal users, is the largest holder of such rights. TAP argues that it would be fairer if all users, including the bay, got a share of the water during drought.

West said that instead of arguing over water rights, TAP and the GBRA should work toward acquiring and protecting more habitat on the Texas coast for the Whooping Cranes. The federal goal is to establish a flock of a thousand migrating cranes in the Aransas area. He said that through purchases and conservation easements, the flock’s territory could be expanded further north along Matagorda Bay, and further south along Copano, Corpus Christi and Nueces Bays. “We’re saying that even if the salinity varies, they can accommodate to that if they have adequate habitat.”

Blackburn said he was open to a settlement if it is reasonable, “but this litigation was about water. We think we proved a significant statistical relationship between freshwater inflows and Whooping Crane mortality.”

If Judge Jack agrees with that science, she can force the GBRA to yield its senior water rights to the cranes and the bay. Such a settlement might win water for San Antonio Bay, but what about the other major Texas estuaries? Advocates for Galveston Bay have complained that in April the state approved such low freshwater inflows that the bay’s wildlife is unprotected. The Whooping Crane suit could serve as a signal to Texas water planners to include the Texas bays, including their multimillion-dollar fishing and tourism industries, as part of the planning, along with cities, industry and agriculture. Or it could be a signal that in the coming water wars – which increasing droughts and other climate-change impacts that scientists have projected for Texas could undoubtedly aggravate – both planners and conservationists need to lawyer up.

While Judge Jack considers the data for the winter of

2008-09, Whooping Cranes have returned to their refuge along the shores of the San Antonio Bay-Guadalupe Estuary during Texas’ worst drought on record. The GBRA presented evidence from a \$2.1-million study called SAGES, an acronym for the San Antonio Guadalupe Estuarine System. The SAGES study states that crabs reproduce well in high salinities, but crane expert Tom Stehn strongly contested this conclusion, saying it was based on laboratory studies only. The general observation of field biologists is that crabs decline when the salinity of the bays is high. Indeed, the usually robust crab fishery that operates in San Antonio Bay has dwindled to two or three boats going out for half a day. Whooping Crane guide Tommy Moore, who watches the cranes almost daily from his boat, says the cranes are not finding crabs, but feeding on dead fish, and he fears that such a diet increases their susceptibility to disease.

The GBRA’s experts contend that Whooping Cranes are highly adaptable to brackish conditions and may not even need to drink fresh water. Again this contradicts years of field observations in which biologists have seen cranes fly as much as three miles to fresh water to drink. Frequent daily flights for water, they contend, weaken the birds, making them vulnerable to hunger and predators.

At least one family of three Whooping Cranes flew to the Aransas refuge this fall and found conditions so bad that they flew a couple of hundred miles inland to Granger Lake near Austin. It appears that as many as six cranes may spend the winter there, attracting hundreds of bird watchers who have never seen whoopers so far from their natural territory on the coast.

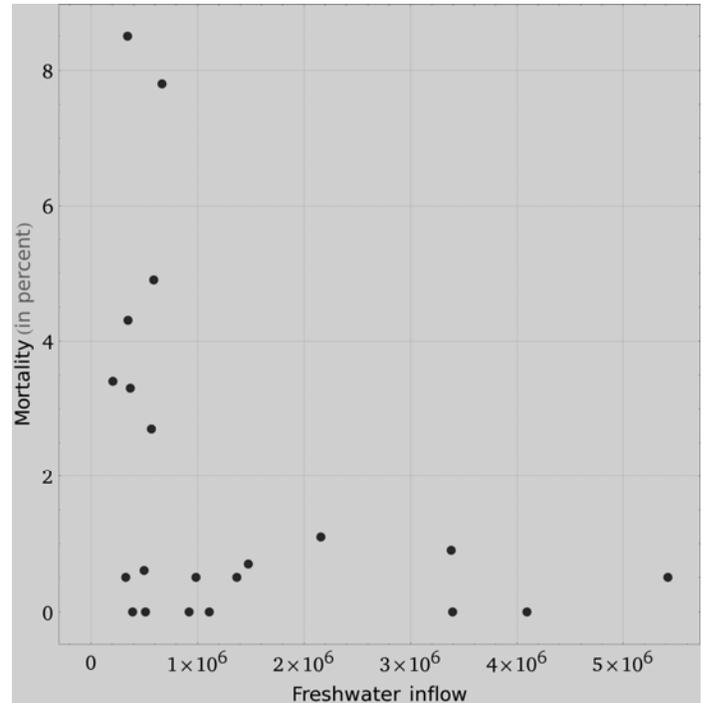
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Michael Berryhill is chair of journalism at Texas Southern University and a former editor of Texas Parks and Wildlife Magazine.

A graphic look at freshwater inflows into San Antonio Bay and Whooping Crane mortality in Texas

I've been playing recently with WolframAlpha® Pro <www.wolframalpha.com/pro/>, which bills itself as a “computational knowledge engine.” Wondering what it would do with Ron Sass’s crane mortality data (see the table on page 16), I uploaded an Excel file of the data, pressed a button, and was rewarded (after several tries) with multiple different outputs, including the scatter plot shown on the right.

Whooping Crane mortality (percent) on the Y-axis is plotted against Freshwater inflow (acre-feet) on the X-axis. Each of the 21 points on the graph corresponds to one of the year-ranges in the table. Two things are apparent: 1) there can be some crane mortality at any level of inflow; 2) the level of mortality can skyrocket (and usually does so) at low inflows (below ~700,000 acre-feet). Cranes (and crabs) deserve a share of fresh-water, too. — *Daryl Henderson*



Please renew your NACWG membership for 2012

Please renew your membership for 2012. Fill out the form on the last page and send it along with your check (payable to ‘NACWG’) to Daryl Henderson at the address on the form. Thank you to those members who have already renewed.

Please indicate whether you wish to receive both a print copy and an electronic (PDF) copy of *The Unison Call* newsletter, or just one version. The electronic version will be emailed to members several weeks before the printed version is available to be mailed. Currently, ~20% of members have opted to receive the electronic version only.

The Unison Call is a forum to share updates, news and opinions. It is published twice yearly (spring/summer and fall/winter) by the North American Crane Working Group <www.nacwg.org>. The views expressed in *The Unison Call* are those of the authors and do not necessarily represent the positions of NACWG. Comments and contributions are always welcome. [If you have not been receiving the electronic version, it’s because we don’t have your (correct) email address.]

Correction: *Eglin* Air Force Base (in Florida) was misspelled in the memoriam to Thom Lewis (vol. 22, no. 1).

Daryl Henderson, Stony Brook, NY
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Congratulations to NACWG member Kathy Sullivan

In August, Kathy Sullivan (*Craniac* turned *Buzzard Lady*) was awarded Arizona Game and Fish Department's **Employee of the Year**. Kathy was awarded this distinction based on her untiring efforts as the state's Condor Coordinator. Check out this link to learn more about what she is up to since she evolved from whoopers to condors: <http://www.youtube.com/watch?v=LsU4jGH6Rs0>

Kathy's husband Jeff orchestrated a surprise visit by Kathy's and his parents to attend the award ceremony (See Figure; Kathy is second from left). I have read through the lengthy award nomination form and I will tell you this award was much deserved. Those of us who have had the privilege to be associated with her are very happy for her! Please join me in congratulating Kathy!

— *submission anonymous for the safety of the submitter*



And while we're on the subject of condors and cranes, last year I read John Nielsen's book, *Condor: To the Brink and Back — The Life and Times of One Giant Bird* (2006, HarperCollins). On page 164, there's this passage:

"Noel Snyder marched in the front of his group, carrying a pair of antiseptic gloves and a black padded suitcase that seemed to double as a good luck talisman: in the 1960s, other field biologists had used this case to carry whooping crane eggs off to captive breeding centers. Since condor eggs were roughly the same size as crane eggs, Snyder had the case sent to him when the permits came through that allowed him to take condor eggs. 'It had thermometers sticking out of the top so we could make sure the eggs were warm enough,' he said."

That was 30 years ago, but I wonder if the suitcase is still in California, maybe just collecting dust on a shelf. If so, shouldn't we ask for it back to be put on display at Patuxent or the International Crane Foundation for public viewing? It is after all an important historical artifact in the field of wildlife conservation. — Daryl Henderson

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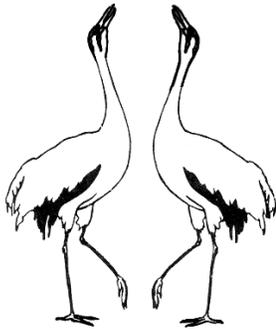
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