



THE UNISON CALL

- Newsletter of the North American Crane Working Group -

Spring/Summer 2012

Vol. 23 No. 1

Editor's Note — August 2012

Weird weather is the headline. Last year's mild autumn and winter, which brought unusual fall migration behavior, gave way to a one-two punch of record summer heat and drought in much of the United States. The hot, dry conditions have devastated non-irrigated crops and rangeland in many states. An NBC News report from early August told of a Platte River that is effectively waterless along a nearly 100-mile stretch from Kearney to Columbus, Nebraska. Irrigation in the state has prevented a total calamity — thank you Ogallala Aquifer. Fortunately, not all of North America is baking: farmers on the Canadian Prairies are anticipating bumper crops of wheat, canola and barley, providing some relief to the food supply. We hope the Boreal wildlife is faring equally well.

Also in the spotlight is the Aransas National Wildlife Refuge. Water availability there remains a critical issue for the Whooping Cranes that winter on the Texas Gulf Coast. We anxiously await Judge Janis Graham Jack's decision on the allocation of Guadalupe River Basin water into San Antonio Bay (see *The Unison Call*, Vol. 22, No. 2).

Accurate counts of the Whooping Cranes at Aransas NWR are essential to effective management of the Aransas–Wood Buffalo flock, so a recent

change in the way total crane numbers are determined (in fact now *estimated*) at the refuge has sparked criticism (see 'State of the Flock 2011-2012' on p 14).

Switching of crane-counting methods at Aransas NWR may be a self-inflicted wound, but what of having no choice other than to allow oil and gas exploration and development within the refuge proper? (see p 18) This begs the question, what is the meaning of 'refuge' when the place is not inviolate?

Happily, there is some upbeat news about Aransas: purchases of significant crane habitat near the refuge and a conservation easement on private land bordering San Antonio Bay are in the works (see p 12).

Looking ahead, the NACWG board will be meeting by conference call in September; the main item to be decided is where to hold the next workshop in 2014. Will it be Louisiana or Tennessee?

Thanks to all who contributed to this issue of *The Unison Call*. The *President's Note* by Jane Austin will return next issue.

Daryl Henderson

Workshop Proceedings Online

As mentioned by Jane Austin in the previous newsletter, the International Crane Foundation (ICF) has graciously assisted NACWG in distributing both print and electronic copies of our workshop proceedings. Full articles are now available online for **all** published proceedings, including the most recent Eleventh Proceedings (2010). For direct links to the electronic articles, go to:

<http://www.savingcranes.org/digital-books.html>

We thank ICF's Sara Gavney Moore and aviculture intern Kevin Stritzinger for their hard work in making these electronic proceedings available to all.


12th Proceedings Update

The *Proceedings of the Twelfth North American Crane Workshop* are progressing. By the extended June 1st deadline I had received 9 full papers, 3 Brief Communications, and 6 abstracts. I have begun sending submissions out for review, so authors should have comments back by the fall. Thank you to everyone who sent submissions, and thank you in advance to all the reviewers!

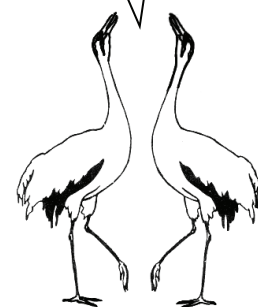
David Aborn, Proceedings Editor

Best Student Papers 12th North American Crane Workshop Grand Island, Nebraska

In addition to **Megan Brown**, who was recognized in the previous newsletter, there were two other recipients of awards for best student presentations at last year's workshop.



Three cheers for
Laura, Jessica &
Megan



Laura Navarrete took top prize for her timely paper, "Effects of wind farms on wintering Sandhill Cranes in the Southern High Plains of Texas", by Navarrete, Griffis-Kyle and Haukos. Laura is with the Department of Natural Resources Management, Texas Tech University, Lubbock.

Jessica Henkel won for her paper, "Evaluation of the genetic management of the endangered Mississippi Sandhill Crane (*Grus canadensis pulla*)." Jessica's research was conducted in association with Tulane University; the University of New Orleans; U.S. Fish and Wildlife Service, Gautier, MS; Audubon Center for Research on Endangered Species, New Orleans; and the University of Georgia, Athens.

See Henkel JR et al. (2012) Integrating microsatellite and pedigree analyses to facilitate the captive management of the endangered Mississippi sandhill crane (*Grus canadensis pulla*). *Zoo Biology* 31(3):322-335. DOI: 10.1002/zoo.20399

Regional Reports

International Crane Foundation (ICF) 2012 Whooping Crane Update

Coming into the 2012 breeding season ICF maintained a captive Whooping Crane flock of 33 birds ranging in age from 6 to 44 years. We carefully manage the genetics of all offspring produced by conducting artificial insemination (100% of our fertility is achieved through AI) with the dual goals of producing young both for “genetic holdbacks” (birds that are needed to maintain the genetic diversity age structure, and long-term sustainability of the captive flock) and birds suitable for release to the wild for ongoing reintroduction efforts (from lines that are well represented in captivity).

This year’s season started out with a set-back. One of our most consistent layers, a female named O’Malley who had produced 75 eggs since 1998, was killed by her mate. Her mate is also an important semen donor so we were unsure if he would continue to produce for us while being housed alone. Fortunately he continued to be a productive donor, and other successes, most notably first-time fertility achieved in a previously infertile egg layer, made up for the loss of O’Malley, at least in terms of numbers. A total of 44 Whooping Crane eggs were laid by 11 females (including 2 by O’Malley prior to her untimely demise). Of these 44 eggs, 6 were found broken, 20 were infertile, and 18 were fertile.

In cooperation with WCEP and the Whooping Crane Recovery Team reintroduction priorities, ICF shipped 8 of our fertile eggs to the Patuxent Wildlife Research Center for hatching and rearing. Seven of the ICF-produced eggs hatched: 1 died during rearing, 2 ICF chicks joined this year’s WCEP ultralight cohort, and 4 ICF chicks are destined for the Louisiana release project. Additionally, ICF coordinated management of eggs salvaged from the reintroduced eastern migratory Whooping Crane population now nesting in the wild in Wisconsin. Five of the 9 wild-produced eggs brought to ICF were fertile and viable after being recovered from abandoned nests or being removed following nest management protocols. Two of these were shipped to Patuxent where they both hatched and are now part of the Louisiana release cohort. The other 3 of these wild-produced eggs hatched at ICF and the resulting chicks are now members of the 2012 WCEP direct autumn release (DAR) cohort. ICF also received 2 fertile Whooping Crane eggs produced at Calgary Zoo’s Devonian Wildlife Conservation Centre. We shipped one of these to Patuxent and hatched one at ICF to join the DAR group.

In total, ICF hatched 6 eggs produced here in Baraboo, 3 eggs produced by reintroduced Whooping Cranes in wild Wisconsin nests, and 1 egg produced at Calgary, for a total of 10 Whooping Crane chicks. At the time of writing, 1 chick has died of respiratory illness, 2 chicks are being held back at ICF for genetic management of the captive flock, and 7 are designated for release in the 2012 DAR program. We shipped 8 ICF-produced eggs to Patuxent to bolster the ultralight and Louisiana releases. As you can see, there is a lot of coordination and cooperation that goes on in order to get fertile eggs to where they can best serve our collective genetic and reintroduction goals! In addition to producing significant numbers of Whooping Cranes from our own captive flock, the International Crane Foundation is proud to continue playing a key role in coordinating movements of fertile eggs between facilities and contributing to virtually all aspects of ongoing Whooping Crane recovery efforts.

Bryant Tarr, Curator of Birds, International Crane Foundation, Baraboo, Wisconsin

Regional Reports *continued*

Whooping Crane Eastern Partnership Update

The Whooping Crane Eastern Partnership (WCEP) continues to work on reintroducing and monitoring an eastern migratory population of whoopers. There are currently over 100 adult birds in the population, 97 of them in Wisconsin. There are also currently two wild-hatched chicks still alive on the landscape. This was a record year for nests (29) and chicks hatched (9); however, the population still is struggling with low nest success and high mortality levels.

To help offset these issues, WCEP continues to supplement the population with captive-reared birds through both the Direct Autumn Release Program (DAR) and Operation Migration. There are currently seven chicks at Horicon National Wildlife Refuge that are slated to be released into groups of adult birds this fall as part of DAR. These chicks will ultimately follow the adults on their southern migration. There are also six chicks at White River Marsh Wildlife Area that are being trained to follow ultralight planes in order to learn the migratory route to Florida.

As WCEP enters its twelfth year of reintroducing Whooping Cranes into the eastern migratory population and continues to make important choices regarding the future strategic plans of the program, the WCEP Guidance Team has decided to participate in structured decision making (SDM) to develop options for the future of the reintroduction program. Throughout the summer and culminating in a week-long workshop in August, the Guidance Team, functional team leaders, and critical partners are engaging in the SDM process under the direction and facilitation of USGS's Mike Runge and Sarah Converse, and FWS's Pat Heglund.

More information about WCEP, including annual reports, can be found at:

<http://www.bringbackthecranes.org/>

Regular updates on WCEP activities can also be found on our Facebook page here:

<http://www.facebook.com/WhoopingCraneEasternPartnership>

***Davin L. Lopez, Conservation Biologist
Wisconsin Department of Natural Resources
Madison, Wisconsin***

Research and Monitoring Activities, Eastern Migratory Whooping Cranes 2012

Nest Monitoring

In a two-year effort to see if removing avian feeding black flies from the Necedah, WI area landscape has an impact on nesting success of Whooping Cranes, 2012 was the second year of experimental *Bacillus thuringiensis israelensis* (*Bti*) larvicide treatment. Samples of biting insects were collected with CO₂ traps placed in seven locations within Necedah National Wildlife Refuge. From March 25th to June 22nd, traps were operated twice a week during clear, calm weather to collect samples. Four sites also had an artificial nest with a plastic crane and a plaster-filled crane egg; glue boards were placed on both the crane head and egg to determine how many insects would land on them within a five-minute period. All insects collected were sent to Clemson University for identification and tabulation by Dr. Peter Adler.

There are three primary species of concern to Whooping Cranes: *Simulium annulus*, *S. johannseni* and *S. meridionale*. Preliminary results indicate that, while there was a pulse of *S. annulus* present on the landscape during the period of nest initiation, there were less than in previous sampling years. However, *S. johannseni*, which emerges after *annulus*, was detected in very limited numbers. This species is usually most numerous. *S. meridionale* was present on the landscape after most Whooping Cranes were finished incubating. Final results comparing insect numbers to nesting data are being prepared for WCEP Research and Science Team results meeting in mid-August.

Another facet of the experiment was to intensively monitor nests in the population to determine their fate (see 'Notes from the field' on page 6). Aerial surveys were conducted twice a day, nearly every day for most of the nesting season. Due to an unusually mild winter and very early, warm spring, the first nest was observed March 26th and the last concluded June 15th. A total of 29 nests were discovered; seven of these were second attempts after the failure of first nests. Nine new pairs attempted their first nest, including one two-year old female. Overall, nine eggs hatched and two chicks are still alive as of the end of July. As the age and experience level of this population continues to increase, we hope for continued nesting success.

Of note, one Whooping Crane pair (19-04 and 12-02) has pair-bonded, nest-built, laid and incubated eggs every year since 2008. However, in each of these years the eggs of this pair have been infertile. During a visit on May 1st to attempt to put a known fertile egg in the nest of this pair, the team was delighted to discover the first wild-hatched chick of 2012! This pair continues to prove they are excellent parents, and have raised the chick to fledging.

2011 Cohort Monitoring

2011 was the first year the modified Direct Autumn Release (mDAR) cohort was released at Horicon National Wildlife Refuge and an ultralight (UL) cohort was raised at White River Marsh State Wildlife Area. Of the 18 birds reared and released last year, all but two returned to Wisconsin. We have seen the return of eight birds to the new release areas, including four UL and four mDAR birds to Horicon NWR and four UL birds to White River SWA. The 2011 cohort has been spread throughout WI since their return, spending time in 14 different counties.

Monitoring Habitat Use

One question surrounding the release of Whooping Cranes into Central Wisconsin is how the cranes are moving throughout this landscape. In an effort to answer this question, ICF has spent the last three breeding seasons tracking selected pairs of Whooping Cranes throughout the region. Once a week from April through September we follow the Whooping Cranes from their morning roost until the cranes return to roost at night. Each hour the location of the Whooping Crane pair is determined either visually or is triangulated using the crane's unique radio signal. When the birds are visible the researchers take note of the crane's

Regional Reports *continued*

location, behavior and the type of habitat they are using; otherwise the radio signal is triangulated on a satellite image to determine habitat.

Analyzing all the data will begin after this field season; thus far much information has been gleaned, and even more questions have been raised. The appropriate mix of wetland and upland habitat types comprise a productive territory. Knowing what this composition is for the current population will enable state and federal lands to be managed appropriately for breeding Whooping Cranes. Whooping Cranes are one of few crane species to have a flightless molt; by studying their habitat choices at this time gives us information to better plan water level management on nesting grounds. Getting more precise estimates on territory sizes of breeding birds will allow us to better predict the potential carrying capacity of new release sites.

***Anne Lacy, Crane Research Coordinator
International Crane Foundation
Baraboo, Wisconsin***

with contributions by Amy Whitear, Hillary Thompson, Kat Dickerson and Paul Senner

Notes From the Field:

Update on Eastern Migratory Whooping Crane Reintroduction

Winter 2011/12 and Spring 2012.—Winter distribution, including 9 ultralight-led (UL) juveniles, was Florida (11), Kentucky (6), Tennessee (6), Indiana (38), Illinois (4), Alabama (16), North Carolina (2), South Carolina (2), Georgia (6), and state undetermined (17, 3 of the latter not reported since spring 2011). The UL juveniles were moved from Winston County, Alabama, to Wheeler NWR, where they were released on 10 February. The winter was mild and short, with many birds shortstopping to winter at more northern locations than usual. Mortalities during January–July included 1 adult female and 1 adult male wintering in Indiana, 1 adult male on breeding territory on Necedah NWR, 1 flightless molting subadult female on Necedah NWR, and 1 juvenile female in Polk County, northwestern Wisconsin. In addition, 1 direct autumn-released (DAR) juvenile released on Horicon NWR was not located after beginning autumn migration.

Reproduction.—Twenty-two pairs (16 on Necedah National Wildlife Refuge, 3 on State Wildlife Areas, 2 in private cranberry reservoirs in Wood and Adams Counties, and 1 on other private land in Adams County) produced 29 nests with eggs. No egg production was confirmed for 9 other potential, mainly young, breeding pairs. The second year of an off-refuge experimental treatment to control black fly larvae was completed and 9 of 22 first nests were incubated full-term, a marked improvement over previous years. Of 7 renests, 4-5 were incubated full-term. The second egg was collected from nests of experienced nesting pairs and transferred to captive propagation. Nine chicks hatched from 8 nests. Eggs in 5 nests were incubated full-term but did not hatch. As of 27 July, 2 chicks survive.

Current Population Size.— As of 27 July 2012, the eastern migratory population consisted of an estimated 103 birds (52 males and 51 females) including 96 in Wisconsin, 2 in Michigan, 2 at undetermined locations, and 3 missing at least 8 months.

***Eva Szyszkoski, WCEP Tracking Field Manager
International Crane Foundation
Baraboo, Wisconsin***

Louisiana Whooping Cranes – July 2012

In June the Louisiana Department of Wildlife and Fisheries announced a multi-faceted public education campaign designed to increase public awareness of the presence of Whooping Cranes in the state. This effort is being made possible due to a \$125,000 grant from Chevron and consists of billboards and radio announcements along with the development of an environmental education teaching module that specifically addresses the new non-migratory flock in Louisiana. Eight engaging, GLE-aligned lessons covering topics such as taxonomy, bird reproduction, ecosystems, adaptation, and endangered species will be distributed to Louisiana educators via day-long workshops to be held at four locations throughout the state. The lesson plans have been written for middle and high school students and the first teacher training workshops will start in August. There has been a great response to this campaign and a lot of excitement and enthusiasm generated about the project as a result.

Another piece of exciting news is that residents of Louisiana can now show their support for endangered species as well as help spread the word about Whooping Cranes through the purchase of the new Louisiana endangered species license plate!



2010 Cohort

Unfortunately in May the remains of L4-10 were recovered in the White Lake marsh, reducing our surviving 2010 cohort to only two birds. L3-10 and L5-10 are doing well but have remained alone and in the historic Cajun prairie region that is currently dominated by rice and crawfish farming. Interestingly L3-10 is only several miles away from a group of three 2011 birds and a single 2011 female but their paths have not yet crossed.

2011 Cohort

In the last update it was noted that one chick had disappeared and was presumed dead while the remainder were still concentrated in the White Lake refuge where the release pen is located. Since then the transmitter for the missing bird, L12-11 was recovered, but no remains of the bird were found. Additionally in early March food was removed from the pen and within one week three birds left the marsh and moved north into agricultural areas still within Vermilion Parish. Several weeks later three more birds left the marsh and also moved into agricultural areas in Vermilion Parish. They remained at that location for several months before moving NW into Jefferson-Davis Parish, again utilizing rice and crawfish fields. The remaining chicks (9, then 8) remained in the marsh until early July due to the significantly better conditions that were present compared to last spring when most of the southwest part of the state was in a severe drought. As the marsh finally dried up the eight remaining chicks left, initially heading west for a day or two before moving north. One female separated from the group, and is close to but separate from a trio and a single crane all in Jefferson-Davis Parish, while the other 7 continued north to Rapides Parish. With the rice and crawfish fields changing (harvest and drawdowns) we expect additional movement from the birds utilizing these areas over the next few months.

Regional Reports *continued*

In addition to L12-11 there have been two additional mortalities of the 2011 cohort; L9-11 was found dead, but not predated in the White Lake marsh in April but necropsy results were inconclusive as to the cause of death. Most recently L15-11 was found dead on private farmland where she had been for several weeks with two other birds. Predation appeared to be the cause of her death but necropsy results are pending.

Finally, I am thrilled to report that L14-11, the chick who had surgery to repair a broken left coracoid bone fully recovered the ability to fly. At the time her recovery felt slow and worrisome but looking back it was actually pretty quick and went very smoothly. She took her first very short and very low-to-the-ground flight 16 days after the surgery and took a more monumental flight over the fence and out of the pen 24 days after the surgery. From there she continued building up her strength as she flew in and out of the pen with the rest of the flock. About seven weeks after her surgery she was part of the trio that was first to leave the marsh once the food was removed from the pen site. She has remained in agriculture fields in Vermilion Parish with two and now one other Whooping Crane (L15-11 had been part of the trio before she died) and looks great, as if nothing had ever happened!

As of 27 July 2012, 15 birds (7 males, 8 females) remain alive in Louisiana and 14 chicks are currently being raised at Patuxent Wildlife Research Center for release later this year.

Sara Zimorski, Louisiana Department of Wildlife and Fisheries

Florida Non-Migratory Flock of Whooping Cranes

As of 17 July 2012 we estimated there were 18 Whooping Cranes in the Florida resident population (7 males, 11 females) including 7 pairs. Only 2 of 7 Whooping Crane pairs nested this season, likely due to poor wetland water levels associated with ongoing drought conditions. Fortunately our nesting study also included Florida Sandhill Cranes and we studied 18 nests this season. This marks the end of data-gathering for our comprehensive nesting study (although we may opportunistically study some whooper nests next season). Like last nesting season, camera traps again this year provided a fascinating look into the *secret lives of nesting cranes*. Florida Sandhill Cranes vigorously defended their nests against raccoons (*Procyon lotor*). Figure 1 shows just a few frames of many from a single long interaction.

This quarter also signaled the end of routine, long-term monitoring of this population of Whooping Cranes. The 2 primary staff that monitored the flock in recent years (Kathy Chappell and Steve Baynes) ended their employment with our agency. To celebrate Steve and Kathy's term of employment with the project, and to commemorate this long-term project in general, a reunion of staff and select partners was held at Marty Folk's house on 2 June (Figure 2). Some dedicated alumni/partners traveled from Arizona, Maryland, and Wisconsin to make this a wonderful event.

Marty Folk, Florida Fish and Wildlife Conservation Commission

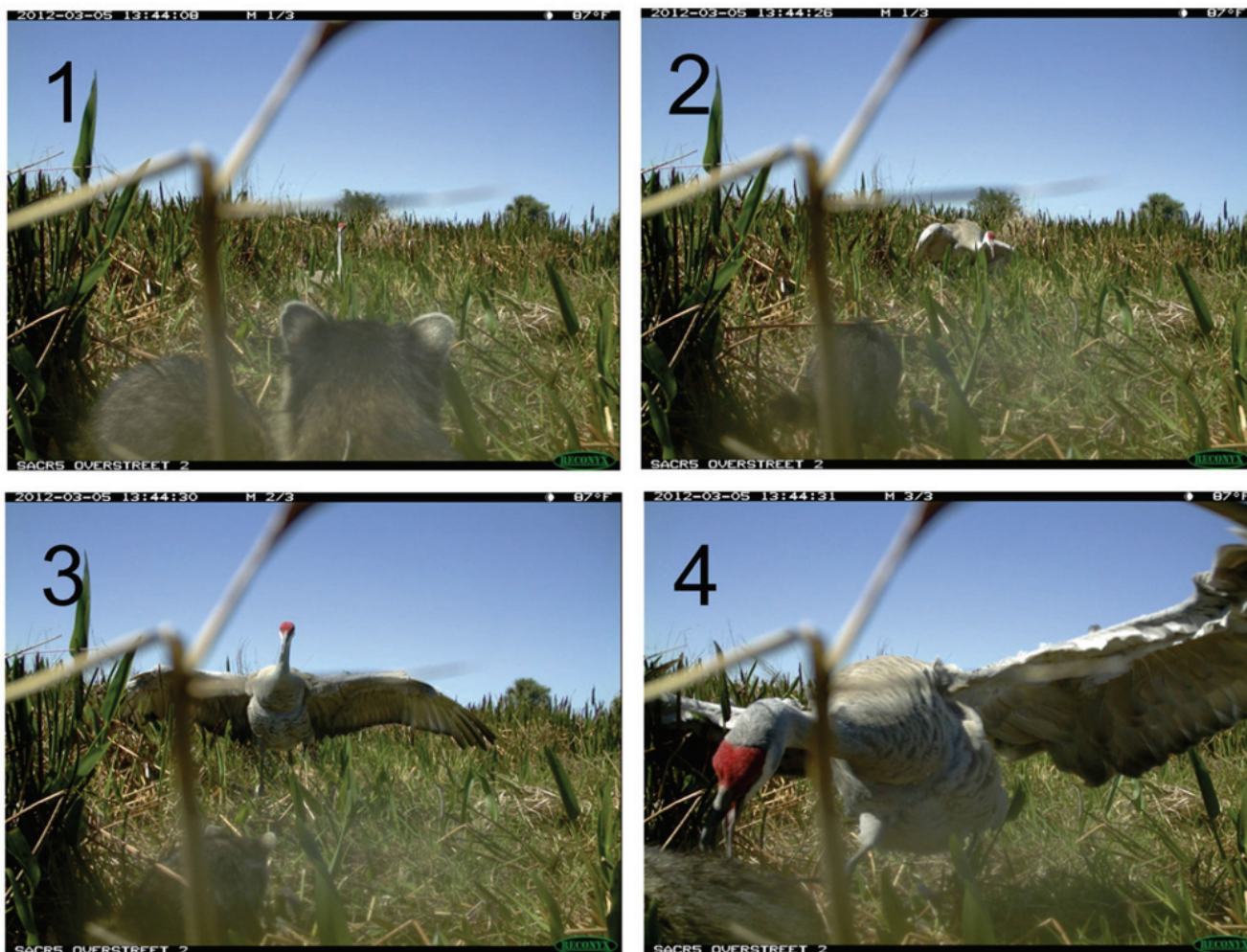


Fig. 1. Images taken by camera trap at Sandhill Crane nest. 1: Two raccoons are looking at the incubating crane. 2: One decides to approach the bird. 3: The crane rises in predator-defense mode to meet the raccoon; the raccoon backs off. 4: The crane stabs the raccoon with an open bill.



Fig. 2. Attendees of a reunion of the Florida Whooping Cane project, 2 June 2012.

Regional Reports *continued*

Summary of the 2011-2012 Whooping Crane Season from Aransas National Wildlife Refuge

The Whooping Cranes of the Aransas Wood Buffalo population have departed the Texas coast and are now nesting in Wood Buffalo National Park in the Northwest Territories of Canada. This year's flock of cranes faced many challenges while on their wintering grounds including drought, red tide, high salinity levels in the bays, and apparent food shortages.

The Aransas National Wildlife Refuge took measures to address issues of water and food availability for the cranes while they were in Texas. The refuge upgraded and refurbished several freshwater sources for the cranes and other wildlife which helped reduce the amount of energy the cranes needed to expend to find freshwater. Federal wildland firefighters also conducted multiple prescribed burns treating a total of 12,300 acres of habitat which increased the availability of food for the cranes. Throughout the season the cranes were seen feeding in the burned areas on roasted acorns, a common source of food.

The Whooping Crane population is increasing and counting individual birds is no longer feasible. As a result, this year the refuge changed how it estimates the population of Whooping Cranes and is using a new technique known as Distance Sampling. In previous years, the refuge conducted aerial surveys to count individual birds. All birds were counted within the survey area. In using Distance Sampling, biologists fly along a grid, specific lines set at specific distances within the survey area; each survey includes three flights flown on three separate days (weather permitting) within a preset timeframe. The birds counted during those three flights are used as a percentage to determine the population of the sampled area. Factored into the Distance Sampling method is the recognition that some birds will not be included in the count. This survey method is commonly used to determine rare and endangered wildlife populations.

This season the wild Whooping Crane population estimate was 245 birds within the survey area which includes the Refuge and nearby areas. This is not considered a total population estimate because it does not reflect the Whooping Cranes that did not winter within the survey area. Many birds were documented well outside of the survey area, including sightings in Nebraska, Central Texas, and Kansas.

Over the last year three known Whooping Crane deaths were documented on the Texas coast. All three were GPS-marked birds that were recovered and sent to federal facilities for official necropsy. The report from the first carcass (recovered December 7, 2011), issued by the National Wildlife Health Center (NWHC), indicated the bird had a systemic blood infection. This type of systemic infection has been known to cause death in birds. The second Whooping Crane carcass (recovered January 18, 2012), was sent to the U.S. Fish and Wildlife Service's (Service) forensics lab in Ashland, OR and the report indicated the bird had been shot. A reward of up to \$2,500 is offered for information leading to the apprehension of the individual(s) responsible for the shooting of this Whooping Crane. This incident is currently being investigated by the Service and anyone with information should contact the Office of Law Enforcement at (361)575-8608. Due to the poor condition of the third carcass (recovered February 29, 2012), the NWHC necropsy results were inconclusive with regard to the cause of death.

Despite significant challenges, Whooping Crane recovery efforts led by the Service and the Canadian Wildlife Service, in cooperation with many public and private partners, has resulted in a steady increase in the population from a low of 15 birds in 1941 to at least 245 wild migrating whoopers and nearly 500 total in North America today.

The refuge will issue a final "State of the Cranes" report summarizing the significant events that occurred during the 2011-12 Whooping Crane season. The report is expected to be completed by August 2012.

News release, USFWS Southwest Region, June 14, 2012

http://www.fws.gov/southwest/refuges/texas/aransas/pdf/061412_WCSeasonSummary.pdf

Cranes in the News

New Nature Reserve to be Established in Siberian Crane Breeding Area in Northern Yakutia

The Department of Nature Protection in the Republic of Yakutia in northeastern Russia announced on Tuesday March 13, 2012, that the government is establishing a large nature reserve centering on lands where Gary Krapu (USGS Northern Prairie Wildlife Research Center) and Inga Bysykatova, a scientist with the Russian Academy of Science at the Institute for Biological Problems of the Permafrost Zone at Yakutsk, discovered high densities of endangered Siberian Cranes breeding near the Laptev Sea (see 2009 report in *The Unison Call*, Vol. 20, No. 2). The nature reserve designation came after the International Crane Foundation and Russian crane scientists, acting on the results of the study, requested that the Government of Yakutia protect these lands because of their exceptional importance to Siberian Cranes.

NPWRC memo contributed by Jane Austin

Happy Birthday Last Mountain Lake – 125 Years and Going Strong!

SASKATOON, Sask. (July 6, 2012) — For more than 125 years, Last Mountain Lake Migratory Bird Sanctuary has been a safe haven for more than 300 bird species and resident wildlife.

Last Mountain Lake is located between Regina and Saskatoon in the heart of Canada's prairies. With over 15,000 hectares protected, this is clearly a place of ecological value. "The number of geese during the fall migration is staggering," says Environment Canada biologist Kerry Hecker. "A whirlwind of Snow Geese spiral up into the air, it's almost deafening." In just one day of observations, Hecker recorded over 450,000 Snow Geese, 200,000 ducks and innumerable song and shore birds.

The sanctuary is also important to a quarter of Canada's vulnerable, threatened, or endangered bird species, like the **Whooping Crane**, who rest there during the long journey from their wintering grounds in Texas to their summer nesting home in Wood Buffalo National Park in northern Alberta and the Northwest Territories.

Established in 1887, Last Mountain Lake is North America's first federal bird sanctuary.

Edited news release from Environment Canada (www.ec.gc.ca)

WCCA Trustees Approve \$286,750 for Crane Habitat Purchases on Texas Coast

Trustees of the Whooping Crane Conservation Association recently approved expenditure of \$286,750 to acquire three tracts of private land currently used by Whooping Cranes. These sites are located within the lands designated as Critical Habitat wintering area for Whooping Cranes along the Texas Coast. Critical habitat contains those habitat qualities essential to conservation and recovery of the species. The Trustees believe it is important for the Association to do everything possible to protect these sites from residential and commercial development and to preserve them for continued use by the cranes. A majority of the funds committed for these acquisitions came from bequests to WCCA from two women. LuRae A. Brinkerhoff provided \$281,515 in 1998 and Elizabeth F. Overton gave \$36,260 in 1999. The Association is deeply grateful for the donations by these women that will do so much to preserve habitat for the cranes. The purchase of these sites, scheduled for this summer, will support goals of the Canada/U.S. International Recovery Team.

The Association is partnering with The Coastal Bend Bays and Estuaries Program, and The Nature Conservancy, to purchase fee title on two tracts totaling 168 acres of freshwater and estuarine marshes, tidal mudflats, and saline uplands on Copano Bay. The total cost is estimated to be \$348,800 with 25 percent (\$86,750) being WCCA's share. The southern unit is part of a territory that a pair and their chicks have used for several years. The northern unit is used by subadults and unpaired adult Whooping Cranes. We anticipate that the properties will eventually be transferred into the public trust, and possibly become part of Aransas National Wildlife Refuge. Other protected lands in the vicinity are Goose Island State Park, the Lamar and Tatton Units of Aransas National Wildlife Refuge, and the Mission-Aransas National Estuarine Research Reserve.

The Association is also partnering with The Nature Conservancy to acquire a conservation easement on 108.8 acres of private land bordering San Antonio Bay. The easement will restrict any action that would be detrimental to the conservation purpose for Whooping Cranes and their habitat. This area is used as wintering habitat by two dozen Whooping Cranes often referred to as the Welder Flats population. The easement would prohibit further development or construction on this tract which borders resort properties known as Falcon Point Ranch.

The property is a prime piece of the Ranch, suitable for development, which borders salt marsh used by Whooping Cranes. Other protected crane habitats in the vicinity are Welder Flats Wildlife Management Area, Welder Flats Coastal Preserve, Guadalupe River Wildlife Management Area, and Aransas National Wildlife Area. The Whooping Crane Conservation Association's \$200,000 contribution for the easement will be combined with other public and private funding to fulfill the total real estate, contractual and land acquisition cost of \$1,050,187.

This article was posted July 4, 2011 on the WCCA website (www.whoopingcrane.com).

Thanks to WCCA's Chester McConnell

Kansas Extends Hours for Sandhill Crane Hunting

Editor's note: the following excerpts are from an article by Maria Sudekum, posted June 29, 2012 on the website of The San Francisco Chronicle (and on other news websites as well). The entire article can be accessed through the link below.

KANSAS CITY, Mo. Kansas has extended its hours for hunting Sandhill Cranes, raising concerns among conservationists about the potential impact on the endangered Whooping Crane, which migrates through some of the same areas. The Kansas Department of Wildlife, Parks and Tourism lengthened the hours for Sandhill Crane hunting from sunrise to sunset.

The hours had been 30 minutes after sunrise until 2 p.m. from opening day in early November through November 30. The hours were sunrise to 2 p.m. from December 1 through the end of the season in early January.

In 2004, two Whooping Cranes were found shot to death by hunters in Kansas.

Ron Klataske, director of Audubon of Kansas, said...the extended hunting could jeopardize Whooping Cranes. ...the low-light times of day — dawn and dusk — are when a Whooping Crane is most likely to be mistaken for a Sandhill Crane.

...“There might be 30,000 Sandhills flying around. Who is checking to see if there is a Whooping Crane among them? Nobody,” Klataske said.

<http://www.sfgate.com/news/article/Kansas-extends-hours-for-sandhill-crane-hunting-3673965.php>

Update: Wisconsin Hunters Continue to Push for Sandhill Crane Season

A state assembly bill introduced in February to allow regulated hunting of Sandhill Cranes in Wisconsin (see *The Unison Call*, Vol. 22, no. 2) never made it to a vote. However, hunting interests such as the Wisconsin Conservation Congress continue to press for a Sandhill Crane season. Among the Congress's 2012 Spring Hearing Advisory Questions voted on by its members was the following:

“The Sandhill Crane population in Wisconsin has grown in size and a population has been established. Some farmers in Wisconsin are reporting high levels of crop damage by Sandhill Cranes. Other Mississippi Flyway states are currently petitioning the U.S. Fish & Wildlife Service for a hunting season on the eastern Sandhill Crane. *Are you in favor of the Wisconsin Conservation Congress asking the Wisconsin Legislature to give the Department of Natural Resources authority to develop a hunting season for Sandhill Cranes?*”

At its June meeting, the Wisconsin Natural Resources Board heard presentations from Kent Van Horn (Bureau of Wildlife Management) and Jeb Barzen (International Crane Foundation) on the status of the eastern population of Sandhill Cranes, crop damage in Wisconsin, and potential solutions to minimize crop damage.

Stay tuned.

Editor's note: The following article is reproduced with permission of The Aransas Project. The article was motivated out of concern for the state of the Wood Buffalo–Aransas Whooping Crane flock, and it raises questions over the USFWS's newly adopted method (distance sampling) for estimating numbers of Whooping Cranes wintering at Aransas NWR. The USFWS is expected to release its own State of the Cranes report sometime in August (also, see the summary on page 10). Thanks to The Aransas Project and Tom Stehn.

State of the Flock 2011-2012

July 9, 2012: *The Aransas Project (TAP) prepared this State of the Flock 2011-2012 report to provide critical information to our members and to the public regarding the well-being of the Wood Buffalo-Aransas Whooping Crane flock after the 2011-2012 wintering season.*

Whooping Crane Flock Numbers Plunge during Winter 2011-2012

A recent news release issued by the Southwestern Region of the United States Fish and Wildlife Service (USFWS) confirms that the winter of 2011-2012 was one of the worst winter seasons in Texas for the Wood Buffalo-Aransas flock, the last remaining natural flock of Whooping Cranes that winters at Aransas National Wildlife Refuge (see Figure).

USFWS official reports put the flock size at the end of the previous winter of 2010-2011 at 279 cranes. In the winter of 2011-2012, on the aerial surveys in late January 2012, USFWS counted only 193 birds and then used statistical methods to extrapolate from that number an estimated flock size of 245. This statistical estimate represents a decrease in flock size of 12.2% from the previous winter. This represents one of the largest declines in flock size ever recorded.

Despite these facts, USFWS officials have made several public statements, including “The flock is so large they can't count individual birds,” that paint an overly optimistic, and ultimately misleading, portrait of the state of the Aransas-Wood Buffalo flock.

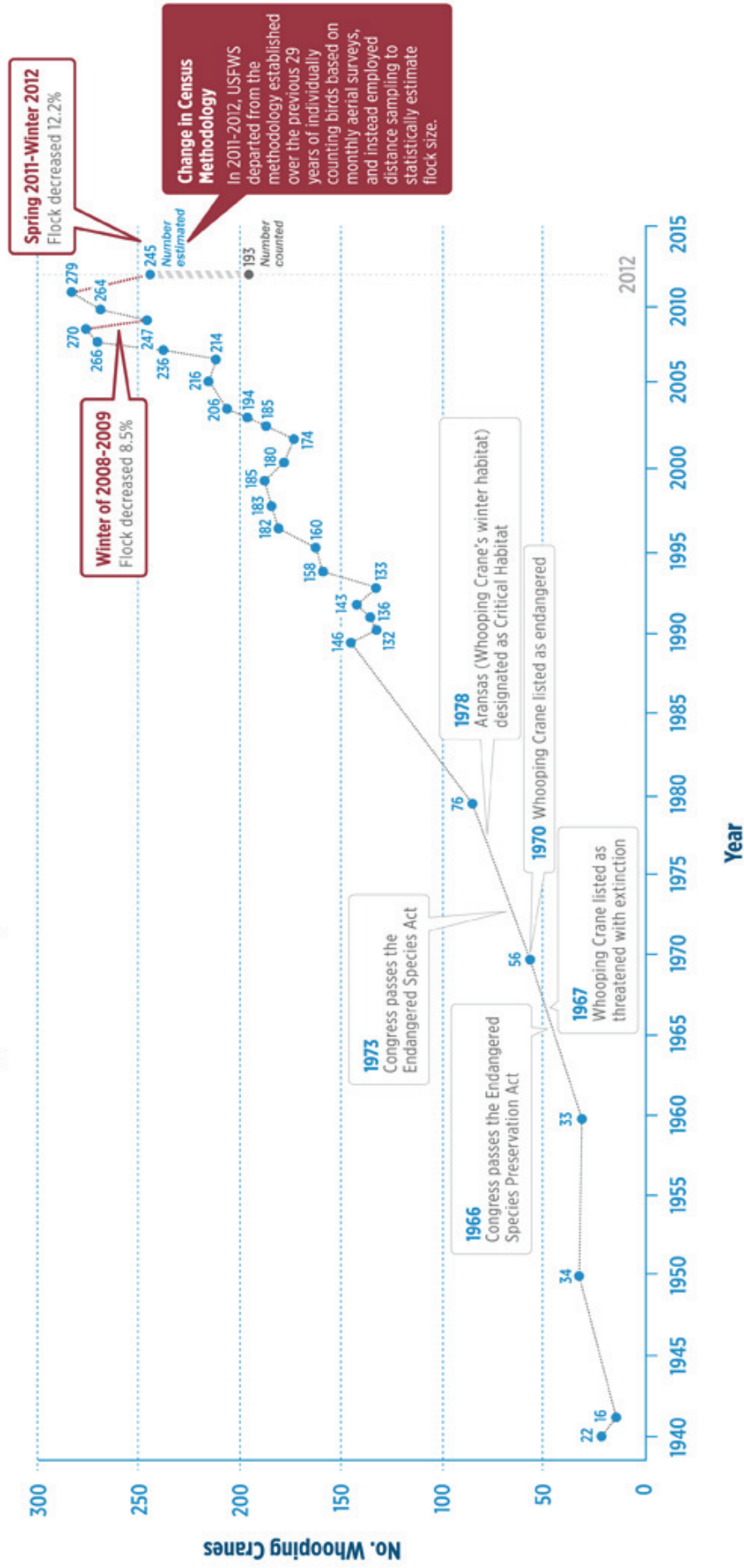
“The recent statements attributed to USFWS leave the public with the impression that the flock numbers are up,” says TAP legal counsel Jim Blackburn. “Yet, according to their own official reports, there are fewer birds. Any way you do the math, 245 is less than 279.”

Based on the aerial survey in late February 2012, USFWS reports that the flock size was estimated to be 196, notably less than the previous estimate of 245.

“Recent public statements by USFWS officials at the Refuge paint a rosy picture of the health of the flock when the scientific record says otherwise,” says Blackburn. “The facts are these—the size of the flock, even by USFWS' own estimation, is *lower* than during the prior year, and the scientific record from electronically-monitored cranes in the flock suggests more cranes may have died than in the drought of 2008-2009, *which was the highest mortality ever recorded*. But we'll never know what really happened, because USFWS has abandoned the methodology of counting individual cranes each month, as was done for 29 years, and instead has resorted to *distance sampling* of the birds, from which they then statistically extrapolate to provide an estimate of the flock size.”

Continued on page 16

Wood Buffalo-Aransas (Natural) Flock Population 1940-2012



USFWS Methodology Faulted

Beginning in the winter of 2011-2012, USFWS altered its methodology for tracking how many cranes are in the flock. “Every year but this year for 29 years, the former refuge biologist, Tom Stehn, did monthly flyovers during the wintering season and methodically counted every crane on the refuge, using both territories and defined transects to identify the birds,” says Blackburn. “This year the refuge didn’t do a census to count the cranes as they have every other year, but instead used a sampling method and also decreased the frequency of the flights.” Blackburn says TAP believes this methodology to be less reliable.

Stehn himself questioned the validity of the USFWS sampling methodology in a recent interview with the *Corpus Christi Caller-Times*. In the interview, Stehn noted that the current sampling methodology used by USFWS, known as “distance sampling,” has an error range of 15%, which Stehn believes is far too high when dealing with a population of fewer than 300 endangered cranes.

Stehn told the *Caller-Times*, "I'm really frustrated and disappointed with the changes in the census the refuge has made. It's simply not accurate enough when you're dealing with such a small population of endangered birds."

Stehn noted that the aerial census methodology he employed for nearly 30 years used flyovers on a much tighter grid and allowed him more flexibility to conduct more thorough searches off the search grid.

USFWS has cited the growing number of cranes in the flock as its justification for resorting to a sampling and estimating approach, rather than actual counting. Blackburn comments, “We don’t really understand that, because Tom Stehn seemed to manage just fine with more cranes. Recent statements by USFWS would make you think that they were covered up in cranes down there, which even their estimates don’t support.”

Tracking Data Suggest Unprecedented Crane Mortality

Recent statements by USFWS also create the impression that the number of cranes that died this past winter was far less than during the drought of 2008-2009 because fewer crane carcasses were found. A recent sworn statement filed by Whooping Crane expert, Dr. Felipe Chavez-Ramirez, the principal investigator in an ongoing research project electronically tracking 31 cranes in the Aransas flock using GPS bands, suggests that crane mortality may actually be higher than USFWS reports indicate.

According to Dr. Chavez-Ramirez’ statement:

- The carcasses of three juvenile cranes were recovered during the 2011-2012 wintering season
- Out of the 31 banded cranes, this is a mortality rate of 9.6%
- Out of the ten banded juvenile cranes, the mortality rate is 30%
- The documented mortality rate of 9.6% in this monitored subgroup of birds is “unprecedented” and exceeds the previous high mortality rate of 8.5% during winter 2008-2009

Blackburn says this scientific evidence suggests that more cranes may have perished due to the drought in 2011-2012 than in the prior drought of 2008-2009. “It seems like USFWS is sticking their heads in the sand down there in terms of the health of the flock,” says Blackburn.

Conclusion

The Aransas Project continues to seek responsible water management of the Guadalupe River Basin to ensure adequate freshwater inflows to the bays and estuaries that provide the winter habitat for the endangered

Whooping Cranes. Until this problem is addressed, the future health of the bays and estuaries and of the Whooping Cranes will not be secure. “What we need, and should expect from USFWS, is a clear-eyed, scientific view of the state of the flock,” says TAP Regional Director Ron Outen. “TAP feels that residents of the Coastal Bend and the broader public need to know what is happening down here. We hope that it contributes to a better understanding of this critical and ongoing issue for the state of Texas.”

About The Aransas Project

The Aransas Project (TAP) is a 501(c)(3) nonprofit organization that brings together an alliance of municipalities, businesses, organizations, and citizens who want responsible water management of the Guadalupe River Basin to ensure freshwater flows to the bays and estuaries that it supports. These bays and estuaries provide critical habitat for the last freely migrating flock of endangered Whooping Cranes, as well as serving as the lifeblood for coastal economies. TAP Members include Aransas County, Aransas County Navigation District, Town of Fulton, City of Rockport, International Crane Foundation, the Coastal Bend Guides Association, and more.

In March 2010, TAP filed a lawsuit against several officials of the Texas Commission on Environmental Quality (TCEQ) in their official capacities for illegal harm and harassment of Whooping Cranes at and adjacent to Aransas National Wildlife Refuge in violation of the Endangered Species Act. This case went to trial before the United States District Court for the Southern District of Texas in December 2011, and is currently pending before the Court for decision.

www.TheAransasProject.org

For more information, contact:

Katherine Jones, kat@hellomilkshake.com or Shannon Ratliff, shannon@hellomilkshake.com

Tom Stehn, ‘The Crane Man’

Texas Monthly recently published an article called *The Crane Man* by Michael Berryhill, focusing on Tom Stehn’s 2011 testimony in The Aransas Project’s lawsuit (see above) to ensure there is adequate flow of freshwater into San Antonio Bay for the benefit of Whooping Cranes at Aransas National Wildlife Refuge (also see the related *Texas Climate News* article by Michael Berryhill in Vol. 22, No. 2 of *The Unison Call*).

I sought permission from *Texas Monthly* to reprint the article here, but did not receive a reply to my request. The following is the first paragraph, a teaser...

Early last December, Tom Stehn was enjoying his retirement in Aransas Pass, soaking in his hot tub after a morning of windsurfing, when the phone rang. He grimaced for a moment but hopped out of the water naked to see who was bothering him. A U.S. marshal was calling from his car, which was parked in Stehn’s driveway. A federal judge in Corpus Christi wanted him to testify about the deaths of 23 whooping cranes he’d reported during the winter of 2008 to 2009, two years before he had retired. The marshal asked if Stehn could come to court immediately. “All right,” he said, “but give me a minute to put on my clothes.”

The entire article can be read at <http://www.texasmonthly.com/preview/2012-08-01/letterfromaransaspass>

D. Henderson

Proposed New Oil and Gas Development in Aransas National Wildlife Refuge

Editor's note: The following passages were extracted piecemeal from the two documents listed at the bottom of the page (the first sentence is from the news release of July 18 announcing a 30-day period for public comment; the remainder of the text is from various places in the draft environmental assessment report, with minor editing).

In accordance with U.S. Fish and Wildlife Service policy, Aransas National Wildlife Refuge must provide reasonable access to mineral owners to allow development and extraction of their minerals underneath refuge lands.

Hilcorp Energy Corporation (HEC) proposes to explore for, develop, and produce oil and gas from two wells to be drilled within the Aransas Unit on the Blackjack Peninsula of the Aransas NWR.

The proposed well sites are situated in habitat documented as Ridge and Swale upland plant community. Well sites, pipelines, and appurtenant structures will be located along existing roads, rights-of-way, and prior developed areas to the greatest extent practicable.

Aransas NWR was established by Executive Order No. 7784 on December 31, 1937, which authorized the purchase of the surface lands of the Blackjack Peninsula, Bludworth Island, and Cape Carlos to be set apart as a refuge and breeding ground for migratory birds and other wildlife. Subsequently, in the late 1940's, the imperiled status of the Whooping Crane (*Grus americana*) gave greater prominence to the tidal flats of the refuge because they serve as the crane's wintering grounds. To this day, refuge management is primarily for waterfowl, shorebirds, wading birds, Whooping Crane, and secondarily for other wildlife.

Predating the establishment of Aransas NWR, the St. Charles Company leased its mineral rights on the Blackjack Peninsula on September 6, 1934, to allow the development of oil and gas resources. That lease is now held by HEC. As such, HEC has the lawful right to explore, produce and develop the mineral resources underlying the Blackjack Peninsula.

To best realize the requirement to conduct exploration, production, and development operations in a manner that, to the greatest extent practicable, prevents damage, erosion, pollution, or contamination to refuge lands, waters, facilities, and vegetation, as well as minimizing interference with refuge operations and disturbance to wildlife, HEC has solicited the Service's input on its operational plans and is applying for a Special Use Permit.

Issues that have been raised for evaluation during scoping are as follows:

1. Impacts to wildlife habitat, including soils and vegetation.
2. Impacts to wetlands.
3. Impacts to endangered species.
4. Impacts from 24 hour/day drilling operations.
5. Cumulative impacts from exploration, production, and access construction and operation.

With no choice but to allow HEC to pursue its mineral claims, the preferred permitting option of the USFWS is to issue the company a Special Use Permit with Special Use Conditions, which would afford some level of oversight. — Editor

News release: July 18, 2012, Comments Solicited on *Draft* Environmental Assessment for Proposed New Oil and Gas Development on Aransas National Wildlife Refuge

Draft Environmental Assessment: Hilcorp Energy Company 2012 Proposed Exploration, Production and Development Operations Located on Aransas National Wildlife Refuge (49 pages)

(<http://www.fws.gov/southwest/refuges/texas/aransas>)

New Research Paper on Whooping Cranes

Pearse, AT and Selbo, SM (2012) Model of whooping crane energetics as foundation for development of a method to assess potential take during migration: U.S. Geological Survey Open-File Report 2012–1156, 13 p.

Abstract: A whooping crane energetic model was developed as a component of a larger effort to ascertain potential take, as defined by the Endangered Species Act, of whooping cranes from proposed development of wind-energy infrastructure in the Great Plains of North America. The primary objectives of this energetic model were to (1) predict extra flight energy that whooping cranes may require to find suitable migration stop-over sites if they are unable to use a primary site; and (2) express energy expended as additional time required to replenish lipid reserves used to fuel flight. The energetic model is based on three elements related to energy: expenditure of energy, intake of energy, and constraints to energy intake. The energetic model estimates each element and recognizes interactions among them. This framework will be most useful when integrated into a migration model that predicts incidence of avoidance of wind towers by whooping cranes and distances they might fly to find alternative stopover habitat. This report details work conducted in accordance with the U.S. Geological Survey and U.S. Fish and Wildlife Service Quick Response Program funded in fiscal year 2011 and will serve as a final report.

<http://pubs.usgs.gov/of/2012/1156/>

Contributed by Jane Austin

Florida Wildlife Now Available Online

Florida Wildlife, a magazine published since 1947 by the Florida Fish and Wildlife Conservation Commission, has gone digital. What's more, the inaugural July/August online edition contains an interesting story of how a Sandhill Crane was rescued from deep mud of Orange Lake, then stabilized, rehabilitated and released. The overall operation was a joint effort of the FWC, the University of Florida College of Veterinary Medicine, and Tampa's Lowry Park Zoo. Marty Folk is quoted at length in the article.

Referring to the magazine's online articles, Marty notes that some of the pages have multiple photos, so it is important to scroll through them (clicking on a photo also reveals a caption). Marty also reported that the released bird had been given multiple names; the most common one was "Mud Pie", but Marty said he preferred "The Crane Formerly Known as Stick-in-the-Mud."

<http://www.floridawildlifemagazine.com/sandhill-crane-released.html>

Thanks to Marty Folk

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. Both print and electronic (PDF) versions are produced; PDFs of past issues of the newsletter can be downloaded free of charge from our website (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.

Daryl Henderson, Stony Brook, NY
dshender@optonline.net

You are invited to join the North American Crane Working Group

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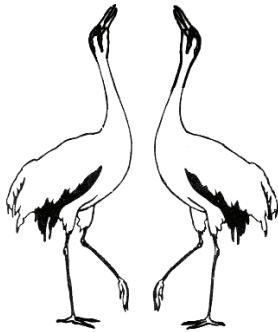
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