



EASTERN **CRANE** BULLETIN

June 2018

The Eastern Crane E-bulletin is distributed to those interested in cranes in general, and specifically, the Eastern Populations of Sandhill and Whooping Cranes, as well as the continuing work for the protection of these birds and their habitats.

Migratory Bird Treaty Act Turns 100

By Cyndi Routledge

This summer the Migratory Bird Treaty Act (MBTA) turns 100 years old. To truly understand its history and significance let's take a brief look at how it came to be.

In the 1800's as our country grew in population millions of birds were being killed for food, feathers and scientific collection. Overuse of our natural resources was the norm. As a result, and with the absence of any regulations, bird populations began to drastically decline. By the end of the century, Great Auks, Labrador Ducks, Passenger Pigeons, Carolina Parakeets and the Heath Hen were extinct. In 1900 the first Audubon Societies were established as well as the first Christmas bird counts and in that same year Congress passed the Lacey Act – the first federal law protecting wildlife. Introduced by John Lacey and signed into law by President William McKinley this new law enforced civil and criminal penalties for illegally trading animals and plants and remains in effect today.

In 1916 the United States signed a treaty with Great Britain, who was acting on behalf of Canada, agreeing to stop all hunting of insectivorous birds and to establish the first hunting seasons for game birds. The goal of this treaty was to protect and preserve those species most beneficial to man and adopt a uniform system of protection. In 1917 in order to implement the treaty of the previous year, Canada established the Migratory Birds Convention Act (MBCA) which formed the basis for establishing sanctuaries and enacting regulations for migratory birds which still stands today. In response and to implement the act of 1916, Congress passed the Migratory Bird Treaty Act, and on July 3, 1918 President Woodrow Wilson signed it into law. From that day forth it has been a crime "for anyone to take, possess, import, export, transport, sell, purchase, barter, or offer for sale, purchase, or barter, any migratory bird, or the parts, nests, or eggs of such a bird except under the terms of a valid permit issued pursuant to Federal regulations." The Act survived a challenge in 1920 and was expanded in 1936. In the 1970's a similar treaty was signed with Mexico, Japan and the then Soviet Union. In 1972 an amendment was added that protected an additional 32 families of birds, and in 2004 most naturally occurring native species were ultimately included.

Prior to the 1918 MBTA, Sandhill Cranes were the target of unregulated hunting in North America, and by the beginning of the 20th century the population had plummeted to an extraordinary low. This species along with the Whooping Crane, American White Pelican and Trumpeter Swan were also hunted in the Midwest to supply the millinery feather trade. But with the establishment of the MBTA and the protection it provided the species, Sandhill Crane populations have slowly begun to rebound.

One of the many success stories of this law is that of the Snowy Egret. Breeding Snowy Egrets grow beautifully flowing curvy plumes that were coveted not only their beauty, but for the price milliners could charge for their adorned hats. As a result, by the late 18th century the Snowy Egret was near extinction. But thanks to early conservationists' efforts and the Migratory Bird Treaty Act Snowy Egrets are a common and beautiful sight along our coasts. Examples such as this prove that our conservation efforts are not in vain and we must remain vigilant and continue to protect it.

Congratulations Migratory Bird Treaty Act on 100 years of successfully protecting our treasured wildlife!

100 years of species protection threatened

George Archibald, a Canadian conservationist and co-founder of the International Crane Foundation says a new legal opinion, released December 22, 2017, by the United States Department of the Interior's Office of the Solicitor – the U.S.'s reinterpretation of the 100-year-old Migratory Bird Treaty Act (MBTA) – is "a big step back." Whooping Cranes will continue to be endangered as the proposed changes only put the cranes further at risk.

According to the memo, U.S. companies, including oil and gas industries, will no longer face penalties under the Migratory Bird Treaty Act for accidentally killing birds as a result of their work — e.g., deaths caused by power line strikes, lighted towers, oil waste tailings ponds, wind turbines, etc. Conservationists are deeply concerned that the reinterpretation means that companies will no longer have a financial incentive to avoid hazardous practices.

"These proposed changes will make it a much more dangerous world for the Whooping Crane," Archibald said. "One of the greatest threats to this species is industrial waste associated with accidents." If an environmental mishap such as an oil or chemical spill were to occur while the cranes are on their wintering grounds in Aransas, Texas, the world could easily lose most, if not all of the approximately 431 Whooping Cranes in the Wood Buffalo-Aransas flock, the only existing wild population of Whooping Cranes in the world.

Whooping Cranes migrate 2,500 miles north each spring from wintering grounds in Texas to the breeding grounds in Wood Buffalo National Park which straddles the border of Alberta and the Northwest Territories, Canada, and then 2,500 miles south again each fall. U.S. changes will not directly affect Canadian companies, however, as Canadian oil and gas producers are already required to follow a number of rules related to wildlife protection, including compliance with Canada's [Species at Risk Act](#), [Migratory Birds Convention Act](#) and other provincial or territorial laws.

"It is difficult to overstate their importance," Rhona Kindopp, manager of resource conservation for Wood Buffalo National Park said of the cranes. "They represent the last naturally-breeding Whooping Crane flock in the world and are a symbol of successful international co-operation in conservation."

The following is taken from the December 2017 reinterpretation of the Migratory Bird Treaty Act.

“Conclusion

The text, history, and purpose of the MBTA demonstrate that it is a law limited in relevant part to affirmative and purposeful actions, such as hunting and poaching, that reduce migratory birds and their nests and eggs, by killing or capturing, to human control. Even assuming that the text could be subject to multiple interpretations, courts and agencies are to avoid interpreting ambiguous laws in ways that raise grave Constitutional doubts if alternative interpretations are available. Interpreting the MBTA to criminalize incidental takings raises serious due process concerns and is contrary to the fundamental principle that ambiguity in criminal statutes must be resolved in favor of defendants. Based upon the text, history, and purpose of the MBTA, and consistent with decisions in the Courts of Appeals are the Fifth, Eighth, and Ninth circuits, there is an alternative interpretation that avoids these concerns. Thus, based on the foregoing, we conclude that the MBTA's prohibition on pursuing, hunting, taking, capturing, killing, or attempting to do the same applies only to direct and affirmative purposeful actions that reduce migratory birds, their eggs, or their nests, by killing or capturing, to human control.”

To read the recent legal opinion, M- 37050 - **The Migratory Bird Treaty Act Does Not Prohibit Incidental Take**, issued by the U.S. Department of the Interior, December 22, 2017, go here: <https://www.doi.gov/sites/doi.gov/files/uploads/m-37050.pdf>

Read more here:

<http://www.cbc.ca/news/canada/north/advocate-whooping-cranes-1.4550028>

Help Fight New Threats to the Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) is one of the most important conservation laws this country has to date. Passed by Congress in 1918 in response to public outcry over the mass slaughter of birds, which threatened egrets and other species with extirpation, 2018 marks its 100th anniversary. The current Administration is moving to gut the MBTA – erasing 100 years of conservation and opening the door to gruesome deaths for billions of birds as a result of human activity.

The Migratory Bird Treaty Act (MBTA) enables U.S. prosecutors to hold industries accountable for incidental deaths and injuries of protected birds. It has also been effective in inducing companies to modify practices before harm is done: adding screens to cover oil waste pits, marking power lines to make them more visible and changing the steady red light of communication towers to flashing to prevent bird collisions. According to studies, powerlines kill up to 175 million birds a year, communications towers up to 50 million birds per year, uncovered oil waste pits between 500,000 to 1 million birds per year and gas flares kill an unknown number as there are no reliable mortality estimates.

For background to the facts and figures on industrial [causes of bird mortality](#) in the United States including links to additional information, go here:

<https://www.audubon.org/news/the-white-house-turns-its-back-americas-birds>

To read more from the USFWS on Migratory Bird Mortality, go here:

<https://www.fws.gov/birds/bird-enthusiasts/threats-to-birds.php>

Join others in voicing your concern by signing this [American Bird Conservancy](#) petition:

<https://abcbirds.org/action/petition-mbta>

Eastern Migratory Population of WHOOPERS

Eastern Migratory Population, Whooping Crane Update – May 2018

Population Estimate

The current estimated eastern migratory population size is 102 (47 F, 52 M, 3 U). As of 1 May, at least 79 Whooping Cranes are in Wisconsin, 3 in Michigan, 3 in Illinois, and 1 in Iowa. The remaining birds' locations have not been confirmed in the last month.

2017 Wild-hatched chicks

W3-17 (U) is still in Adams Co, WI, likely with one other sub-adult.

W7-17 (F) left Edwards Co, IL and was last reported in Iowa Co, IA.

For information about the Parent-Reared 2017 Cohort and Costume-Reared 2017 Cohort, mortality, and for a map of where the birds were as of May 1, 2018, go here:

<http://operationmigration.org/InTheField/2018/05/01/emp-update-time-4/>

To learn more about the individual cranes in the eastern population, go here:

<http://operationmigration.org/InTheField/emp-whooping-crane-biographies/>

Wanderings of Parent-Reared Whooping Cranes 39-17 and 38-17

According to [Operation Migration](#), Parent-Reared (PR) Whooping Cranes [39-17](#) and [38-17](#) were released at [Horicon NWR](#) last fall. Unfortunately, both females gravitated to, and associated with, Sandhills rather than the Whoopers in the release area. Not an ideal start.

PR 38-17 gained the dubious distinction of becoming the first Whooping Crane in the Eastern Migratory Population *not* to migrate south for the winter, choosing instead to tough it out in Wisconsin through some extreme weather. PR 39-17 however did head south, traveling only as far as Jasper County, Indiana. Then this spring she headed due north only to find herself on the wrong side (east) of Lake Michigan! It took about a week, but her telemetry showed that she was slowly making her way south again. By April 29, she was back on track headed north for Wisconsin.

To read more about PR 38-17, go here:

<http://operationmigration.org/InTheField/class-of-2017/#38-17>

To read more about PR 39-17, go here: <http://operationmigration.org/InTheField/class-of-2017/#39-17>

For a map of 39-17's wanderings along Lake Michigan, go here:

<http://operationmigration.org/InTheField/2018/04/29/lake-michigan/>

First Whooper chicks of 2018 counted in Juneau County, WI

During an aerial nest survey in on May 7, 2018, Bev Paulan of [Operation Migration](#) discovered that #5-11 and #12-11 in Juneau County were accompanied by two small chicks! This makes them the first wild-hatched Whooping Crane chicks for the 2018 season. Welcome W1-18 and W2-18! Whoop! Whoop!

For great photos of the fluffballs as well as photos of several of the other 9 active nests, go here:

<http://operationmigration.org/InTheField/2018/05/08/first-crane-chicks-of-2018-are-on-the-landscape/>

International Crane Foundation captive flock grows by six Whooping Cranes

A [March 29 press release by the International Crane Foundation \(ICF\)](#) announced that three pairs of breeding Whooping Cranes had been relocated from the Patuxent Wildlife Research Center in Maryland to [Crane City](#) at the International Crane Foundation (ICF) headquarters. The new arrivals joined 38 Whooping Cranes already housed at ICF. As the cranes settle in it may take up to two years before they breed again.

When funding for Patuxent's captive breeding program was eliminated in 2017, new homes had to be determined for its 75 resident Whooping Cranes. In a collaborative effort by the Whooping Crane International Recovery team and the Association of Zoos and Aquariums Whooping Crane Species Survival Plan the following facilities were earmarked as breeding partners and would receive birds from Patuxent: [White Oak Conservation Center](#) in Florida, Dallas Zoo and San Antonio Zoo in Texas, [Smithsonian Conservation Biology Institute](#) in Virginia, the [Freeport-McMoRan Audubon Species Survival Center](#) in Louisiana, and the Calgary Zoo, Alberta Canada. Non-breeding birds will be placed at other institutions for exhibit purposes.

For background about Patuxent and its captive breeding program or to read, "End of an era – our deepest gratitude to the Patuxent Wildlife Research Center" by George Archibald, ICF Co-founder and Senior Conservationist, go here:

<https://www.savingcranes.org/end-of-an-era-our-deepest-gratitude-to-the-patuxent-wildlife-research-center/>

Whooping crane egg scorecard 2018

To follow this season's egg counts by the International Crane Foundation for both the captive and wild Whooping Crane nests, go here: <https://www.savingcranes.org/whooping-crane-egg-scorecard-2018/>

[Whooping Crane Eastern Partnership](#) – Project Info

Wild Populations

Aransas/Wood Buffalo flock	437
Florida non-migratory flock	14
Louisiana non-migratory flock	70
Eastern Migratory population	110
Total:	631

**as of March 2018*

For more information on captive breeding centers and facilities with Whooping Cranes used for education and displays, go here:

<http://www.bringbackthecranes.org/project-info/whooping-crane-numbers/>

Support Operation Migration conservation studies

[Operation Migration](#) is currently conducting a study in the White River Marsh area of Wisconsin to determine breeding success among Sandhill Cranes. Beginning in mid-April of this year, researchers found a number of Sandhill nests as well as a Whooping Crane nest. The results from the study will indicate how Whooping Cranes fare in the area and help guide future Whooping Crane management decisions.

Operation Migration is in its eighteenth year of Whooping Crane conservation and plans to keep going as long as it takes to safeguard the future for this iconic, endangered species, but the organization will need financial support from fellow “craniacs.” [Click here to contribute](#) and in the note section, please indicate the item (there is a list of needed supplies) you’d like to help fund.

“We feel our natural world is critically important. We believe our work is important. We think Whooping Cranes should hold a place of honor in the ecosystem and we hope you feel the same.”

Your help is appreciated! To find out more, including a list of things needed for Operation Migration’s ongoing field work, go here:

<http://operationmigration.org/InTheField/2018/05/14/a-bird-in-hand/>

Aransas-Wood Buffalo WHOOPERS

Ask Tom Stehn

[Friends of the Wild Whoopers](#) has created a question-and-answer section, “Ask Tom Stehn,” on its website in an effort to provide scientifically accurate information to the public regarding the Aransas-Wood Buffalo Whooping Crane flock, the only self-sustaining wild population on earth. Among the topics covered by Stehn will be those concerning conservation, management and future needs of the Aransas-Wood Buffalo population of wild Whooping Cranes.

The following is an excerpt from an answer Dr. Stehn gave a reader who asked him to recount a memorable experience from his long career with Whoopers. [Fascinating stuff! – Editor]

“I think the highlight of my career was the two times I helped radio-track whooping cranes between Texas and Saskatchewan in the spring of 1984 and 1985. I was on the road each time for almost exactly a month, watching the birds whenever they were on the ground, and then radioing the tracking aircraft when the birds started a migration flight. I even wrote a scientific article on the visual clues I would see starting about 30 minutes before a flight that “told” me the birds were going to migrate that day. One day I tracked from the aircraft, watching white crane dots soaring in circular patterns as they climbed on

thermals up to a mile high and then glide down at 60 mph to 1,000 feet before catching the next thermal. One day, the birds in Kansas had encountered extremely strong west winds and at the end of a day's flight were actually further away from their nesting grounds in Canada than from when they had started that morning since they were pushed so far to the east. About 45 minutes before sunset, the cranes took off in slow flapping flight (no thermals to soar on), and instead of heading on their usual bearing of 320 degrees (NNW), they flew due west (270 degrees). They were apparently course-correcting after realizing how they had been blown way too far east that day. Think for a second about the amazing navigation ability of a whooping crane that has a brain about the size of a golf ball. They always know where they are! They flew past sunset until there was just a glimmer of light remaining in the sky. The radio signals then became very weak and sporadic, indicating the birds were walking in shallow water. We figured out approximately where they were but couldn't see them behind a farm house. The next morning at sunrise, we approached the farmhouse and told the farmer that whooping cranes may have spent the night on his place. He told us there was a pond about 100 meters behind his house, and sure enough, when we walked back there, we found their tracks...."

To read more of "Ask Tom Stehn," go here: <https://friendsofthewildwhoopers.org/ask-tom-stehn/>
If you have a question about the wild flock send FOTWW an email at admin@FOTWW.org.

Whooping Crane facts for May 18 – Endangered Species day

Low population numbers, coupled with the loss of habitat and hunting pressures, nearly caused the Whooping Crane's extinction in the early 1900s. When the Endangered Species Act was passed in 1973, less than 50 Whooping Cranes survived in the wild. Now there are nearly 600 Whooping Cranes in the wild. And, while this number is slowly rising due in large part to the breeding success of the Aransas-Wood Buffalo population, as well as the work of the International Crane Foundation and others, the species is still endangered.

On their wintering grounds along the Gulf Coast of Texas, Whooping Cranes nearly exclusively feed on blue crabs and wolfberries, which differs from the population's diet of small mammals, insects and amphibians on their breeding grounds in Canada.

To read the "Top ten Whooping Crane facts for endangered species day" – May 18 – by the International Crane Foundation, go here: <https://www.savingcranes.org/whooping-crane-top-ten-for-endangered-species-day/>

General News

Alaska:

Kachemak Crane Watch concerned about increase of Sandhill Cranes in town

[Kachemak Crane Watch](#) (a project of the [Center for Alaskan Coastal Studies](#)) is dedicated to the protection of Lesser Sandhill Cranes and their habitat in Homer, Alaska and the surrounding Kachemak Bay area.

According to co-founder, Nina Faust, 200-250 Lesser Sandhill Cranes nest near Homer each season and have become an important part of the city's economy as visitors specifically come to see them.

Unfortunately, there has also been an increase in the number of people feeding the cranes in town resulting in the attraction of more cranes each year within city limits. Cranes are not meant to live in heavily populated areas where use of herbicides and pesticides, unfenced dogs, vehicle traffic and powerlines pose unintentional threats to them. Sandhills can also become aggressive when protecting their colts causing some safety concerns.

<http://kbbi.org/post/kachemak-crane-watch-concerned-about-increase-sandhill-cranes-town>

For more information, contact Nina Faust at 907-235-6262 or email: reports@cranewatch.org.

Arkansas:

Saline County hosts migrant Whooping Cranes

In late March 2018 a pair of Whooping Cranes stopped in Saline County, Arkansas to rest and forage. From their leg band color combinations it was determined that the visitors were [#5-12](#), dubbed "Uncle Henry" by researchers, and male Parent-Reared [#30-16](#). An observer in Florida had reported watching [#5-12](#) and [#30-16](#) leave [St. Mark's National Wildlife Refuge](#) in Wakulla County, Florida three days before their appearance in Saline County. In that time the cranes covered approximately 600 miles!

Florida:

Grasshopper and Hemlock are parents!

In early May 2018, biologists at the [White Oak Conservation Center](#) announced that the pair of Whooping Cranes, male [#16-11](#) "Grasshopper" and female "Hemlock," moved from the International Crane Foundation (ICF) in Wisconsin to the Yulee, Florida, refuge in 2016, and were new parents to a pair of fuzzy brown chicks!

Biologists had hoped that the two would pair bond and eventually breed, to add to the eastern population of Whooping Cranes. Odds for this happening seemed good as Grasshopper had already proved himself to be an attentive parent – in 2015 he mated with a Sandhill Crane and the two successfully raised a hybrid chick. Unfortunately, this was genetically the wrong road to go down, so the biologists decided to move Grasshopper along with Hemlock. Hemlock was also hatched and reared at ICF but due to a wing injury had failed to make her first migration in 2012, to White Oak.

The 16,000-acre refuge founded by philanthropist Howard Gilman had previously bred Sandhill Cranes but had no experience with Whooping Cranes. The combination of space and little human contact (cranes are monitored remotely) seems to have been the right combination for the pair.

Read more here:

[Eastern Crane Bulletin - December 2016 issue](#) (page 6)

"Pair of endangered Whooping Cranes relocated to Florida in hopes of future success in breeding;"

<https://kyc4sandhillcranes.files.wordpress.com/2015/06/the-eastern-crane-bulletin-e28093-december-2016.pdf>

Illinois:

Whooping Cranes in Illinois

In an April 1, 2018, photographer D.W. Brewer shares photographs of four Whooping Cranes from the [DAR-15 cohort](#) taken while they were in southern Illinois – mainly at Kaskaskia Island – for most of 2016. The "temporary residents" were: "Druid" [#67-15\(F\)](#), "Mendota" [#61-15\(M\)](#) (died in September 2017 at Horicon Marsh, WI), "Corky" [#63-15\(M\)](#) and "Flambeau" [#62-15](#) (F). Sadly, Flambeau died from a suspected powerline strike while on the island.

Brewer posted *"I have followed the plight of the Whooping Crane for almost 60 years. I never thought I would get the opportunity to image wild Whoopers, leave alone be able to image them here in Illinois. I have friends who discount these images because of the tracking devices. I welcome them because they are an indication we are making progress bringing the species back from almost certain extinction."*

To take the photos, Brewer stayed on public roads and never went onto private property; used an 800mm lens; and stayed at least 100 yards away from the cranes. He has donated his photographs to [Crab Orchard NWR](#) for their use in promoting conservation of the species and for public education.

To see D.W. Brewer's photographs of the Whoopers, and read more from him, go here:
<https://www.nikoncafe.com/threads/whooping-cranes-in-illinois.309795/>

Kentucky:

Editor's note: *The following is a Letter to the Editor from Melissa Easley of Murray, Kentucky. I think it speaks for many of us who would rather observe the cranes than to have a Sandhill season.*

Protect Sandhill Cranes

In 2018, we mark the centennial of the Migratory Bird Treaty Act, the most powerful and important bird protection law ever passed. In honor of this milestone, nature lovers around the world are joining forces to celebrate the "Year of the Bird" and commit to protecting birds today and for the next hundred years. It is a shame that in the same year the Kentucky Department of Fish and Wildlife Resource Commissioners have proposed the following:

- 1. Extend the limit to kill Sandhill Cranes from 400 to 1,400 cranes.*
- 2. Increase the length of the hunting season from 30 days to 56 days.*

The International Crane Foundation opposes the hunt. Birdwatchers oppose the hunt and even some hunters. The Eastern Sandhill Crane was once near extinction but has rebounded since 1930s. For years birdwatchers have enjoyed their abundance in the fields of Kentucky as they migrate through. They were not skittish like the hunted ducks that fly away at the drop of a hat, and it was easy to view them. However, with the sound of guns, they become easily excitable and fly away from our view. Often an endangered Whooping Crane will fly with them and can be mistaken for a Sandhill and shot.

Our own Wendell Berry wrote frequently about the beauty of the Sandhill Crane. Cranes have been found in the fossil records millions of years ago. Aldo Leopold wrote about the crane's call, "When we hear his call, we hear no mere bird. We hear the trumpet in the orchestra of evolution." I like a quote by Victor Hugo, "Beautiful is as useful as the useful, perhaps even more."

Louisiana:

Whooping Cranes in Florida may have new home in Louisiana

The U.S. Fish and Wildlife Service's (USFWS) Whooping Crane Recovery Team has proposed moving the remaining 14 Whooping Cranes that live at Kissimmee Prairie in central Florida to a larger and more robust population of cranes in Vermilion Parish, Louisiana. Both crane populations are non-migratory. Unlike the Louisiana population the experimental population in Florida did not thrive, experiencing a high rate of mortality and a low reproductive success related to habitat conditions, predation, and powerline strikes.

The Whooping Crane Recovery Team is encouraged by the progress in the Louisiana crane population. Since the program began in 2011, 125 Whooping Cranes have been released into southwestern Louisiana with 66 surviving today. The USFWS, the Florida Fish and Wildlife Commission and the Louisiana Department of Wildlife and Fisheries are working together on the proposed move.

As required by the National Environmental Policy Act, the USFWS drafted an environmental assessment related to this proposal.

To read the June 2017 draft of the Environmental Assessment, "A Proposal to Translocate Whooping Cranes from a Discontinued Non-essential Experimental Population (NEP) in Central Florida to an Ongoing NEP in Southwestern Louisiana," go here:

<https://www.fws.gov/southeast/pdf/environmental-assessment/a-proposal-to-translocate-whooping-cranes-from-a-discontinued-non-essential-experimental-population-in-central-florida-to-an-ongoing-nep-in-southwestern-louisiana.pdf>

Two People from Rayne Cited for Shooting Whooping Cranes

LDWF Press Release Date: 04/10/2018

Louisiana Department of Wildlife and Fisheries (LDWF) Enforcement agents cited a Louisiana man and a juvenile on April 3, 2018 in Acadia Parish for allegedly shooting two endangered Whooping Cranes.

After an almost two-year investigation, LDWF agents cited Kaenon A. Constantin, 25, and a juvenile from Rayne, for violating the Endangered Species Act, hunting from a public road and obstruction of justice. The cranes were found just south of Rayne off Hwy. 35 and Hains Hwy. on the afternoon of May 20, 2016. The cranes were recovered and sent in for a necropsy, which revealed they were both shot.

Through the course of the investigation, agents determined that Constantin and the juvenile shot the two Whooping Cranes with .22 caliber rifles on an all-terrain vehicle (ATV) from a public road. Agents seized two .22 caliber rifles and an ATV in connection with the violations.

Violating the Endangered Species Act brings up to a \$50,000 fine and a year in jail. Hunting from a public road carries up to a \$15,000 fine and six months in jail. Obstruction of justice brings up to 10 years in jail. LDWF has released 125 whooping cranes since 2011 and are currently tracking 66 whooping cranes. The cranes in this case were released in December of 2015.

To learn more about Louisiana's Whooping Crane population, go to www.wlf.louisiana.gov/wildlife/information or <https://www.facebook.com/lawhoopingcranes/>. To contribute to the Whooping Crane project or any LDWF initiative, go to the LWFF website at <http://lawff.org>

LDWF and Audubon Nature Institute join to rehabilitate injured Whooper

In Jefferson Davis Parish, early March 2018, seven-year-old male L10-11 was observed by KDWF biologists with an obvious injury to its left wing. Despite the injury, the crane continued to take turns incubating his nest. On March 20, Dr. Priscilla Joyner, associate veterinarian at [Audubon Freepport-McMoRan Audubon Species Survival Center](#), joined LDWF staff in the field to examine the bird and bandage its wing, but upon close examination she made the decision to transport the crane to the center for treatment.

The blood supply to the left wing had been traumatized in such a way that tissue necrosis had set in. In the wild, untreated, the crane would have died either from predation (due to the injury inhibiting its flight) or infection. It was decided to partially amputate the wing and therefore L10-11 cannot be released back into the wild. It is not known what caused the injury other than it was not due to a gunshot. Fortunately, L10-11 is healing well and adjusting to being in captivity. He will remain at Audubon SSC while he recovers and until a permanent captive home is identified.

Whooping Crane L10-11 was one of the oldest birds in the Louisiana population and had been with his mate since they were released as juveniles. The pair successfully hatched and reared a chick, LW3-17, last year. Eventually he will be paired with another female in a breeding setting to produce and/or incubate other eggs and raise chicks for release into the wild.

To read more about the collaborative efforts to rehabilitate L10-11, go here: <https://newsroom.audubonnatureinstitute.org/louisiana-department-of-wildlife-and-fisheries-and-audubon-nature-institute-join-hands-to-rehabilitate-injured-whooping-crane>

Louisiana non-migratory population update

As of April, 2018, the Louisiana non-migratory population of Whooping Cranes stands at a maximum of 66 individuals (33 males, 33 females), with the following estimated distribution: 54 in Louisiana, 11 in Texas and 1 unknown.

Wandering Whooper of NON-migratory population returns home!

Whooping Crane L3-16 is back in Louisiana! On the evening of April 4, 2018, he arrived at the same location in Cameron Parish that he had left in May 2017 – 333 days earlier! His travels took him through at least 8 different states and 2 Canadian provinces; summering in southern Alberta, Canada, and wintering in Lynn County, Texas. From everyone at Louisiana Department of Wildlife and Fisheries, “Welcome back L3-16 (and try to remember that you are supposed to be NON-migratory...!)”

For a map of L3-16’s travels, go here:

<https://www.facebook.com/lawhoopingcranes/photos/a.734069523365830.1073741828.733006696805446/1440266002746175/?type=3&theater>

For LDWF updates on the Louisiana non-migratory population of Whooping Cranes and their nests, go here: <https://www.facebook.com/lawhoopingcranes/>

Help the LDWF by reporting all Whooping Crane sightings

To report your sighting, go here: <http://www.wlf.louisiana.gov/webform/whooping-crane-reporting-form>

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Nebraska:

Crane Trust hosts deaf, hard-of-hearing students for special crane tour

In early March 2018, about 60 deaf and hard-of-hearing students, grades third through sixth visited the [Crane Trust](#) for a special crane-themed tour, then spent the night at nearby Camp Comeca. The visit to the Crane Trust was one of three activities planned state-wide each year for deaf and hard-of-hearing elementary students to help them connect and build a support system.

Three interpreters from the regional program provided interpretation in American Sign so that everyone could have full access to the presentations. The Crane Trust as well as other nature areas work to meet visitors’ special needs. Activities included a bus trip to nearby fields to observe Sandhills with the aid of scopes and binoculars, hiking, and folding origami paper cranes. Students experienced the sounds of nature through movement – Sandhills flying, “dancing,” feeding and resting. They spent time as a “council of cranes,” mimicking the intricate movements of the Sandhills that included “protecting” their nests, broken wings(!), mating dances, etc.

To learn more about the Crane Trust and its important work to preserve the Big Bend area habitat of the Platte River to support Whooping and Sandhill Cranes during migration, go here: <https://cranetrust.org>

Leucistic crane hangs out with Sandhills near Fort Kearny

In early April 2018 a very white, leucistic Sandhill Crane was reported with other Sandhills in a cornfield west of Kearny State Historical Park. Leucism is a genetic mutation producing only a partial loss of pigmentation, which is why many leucistic Sandhill Cranes have some gray feathers. This crane, however, was pure white with a red cap, dark eyes (not red as seen in albinism), and dark legs. Leucism does not affect eye color.

According to Bill Taddicken, [Rowe Sanctuary](#) Director, it is not unusual for a leucistic crane to be reported in the area every couple of years. “This one definitely is about the whitest Sandhill I’ve seen.”

To see a photo of the crane, go here:

http://www.theindependent.com/news/regional/kearney/fairest-of-them-all-rare-white-crane-hangs-out-with/article_46a56677-159b-5767-b5e2-3003901c6b1f.html

North Carolina:

Sandhills visit Beaufort

Central sites manager for the [North Carolina Coastal Reserve and National Estuarine Research Reserve](#), Paula Gillikin, has been documenting a pair of Greater Sandhill Cranes that visit the Beaufort area each fall/winter since 2013. While the pair spend their days in agricultural fields looking for food, they seek refuge at night at the nearby [Rachel Carson Reserve](#), a site also managed by Gillikin that is only two and a half miles away from the feeding sites frequented by the cranes. The shallow, open tidal flats on the south side of the reserve are a perfect roosting spot for the birds.

Once a rare occurrence, annual sightings of Sandhills in North Carolina are becoming a bit more common. Along with the Beaufort pair, three Sandhills have spent the winter in the Pungo Unit of the [Pocosin Lakes National Wildlife Refuge](#). A group of four cranes made the Swansboro area their winter home in 2007-09. And in 2015, a pair hung out in the parking lot of a Bojangles restaurant in Sanford for four weeks during spring migration.

Not that long ago unregulated hunting and loss of wetland habitat had seriously threatened Sandhills in the eastern United States. Protection by the Migratory Bird Treaty Act along with the preservation and restoration of wetlands within their traditional range has been critical to the cranes’ recovery and survival.

To read more about the North Carolina National Estuarine Research Reserve, go here:

<https://www.nerra.org/reserves/north-carolina-national-estuarine-research-reserve/>

Coastal Review Online (Sam Bland)

<https://www.coastalreview.org/2018/04/sams-field-notes-sandhill-cranes/>

Tennessee:

2017-2018 Tennessee Sandhill Crane Winter Population and Hunting Season Report

Following are the reported numbers of adult and juvenile Sandhill Cranes shot by STW (statewide) and SCZ (portion of state south of Interstate 40 and east of State Highway 56), tag holders in Tennessee during the 2017-18 hunting season:

Total killed – 830 cranes: Adults - 714; Juveniles – 116

Number shot but not retrieved (“crippling loss”) – 107

Total – 937

To read the full “2017-2018 Tennessee Sandhill Crane Winter Population and Hunting Season Report” by Jamie Feddersen, Certified Wildlife Biologist/ Migratory Game Bird Program Leader, Tennessee Wildlife Resources Agency, go here:

<https://kyc4sandhillcranes.files.wordpress.com/2018/05/2017-18-tn-sacr-winter-pop-and-hunting-season-report.pdf>

Habitat Matters!

Nebraska:

Harlan County Lake ready for Whooping Cranes

[Friends of the Wild Whoopers \(FOTWW\)](#) visited the [U.S. Army Corps of Engineers \(COE\) Harlan County Lake](#) recently as part of its continuing work to assess potential “stopover habitats” for Whooping Cranes of the Aransas-Wood Buffalo population.

[Harlan County Lake](#) is large and has a comprehensive program. At top of conservation pool, the lake covers 13,250 surface acres. At top of the flood control pool, the lake covers 23,100 surface acres. A total of 17,750 acres of land surrounds the lake’s nearly 75 miles of shoreline where considerable areas of the lake’s nearly 75 miles of shoreline is shallow and is available as good “stopover roosting areas” for the cranes. Whoopers normally roost in areas with a water depth of 2 inches to 10 inches to help protect themselves from predators.

According to FOTWW, there have been considerable fluctuations in lake water levels over the years. During drawdowns of lake waters large expanses of mud flats and shallow pools are created that favor many wading birds including Whooping Cranes. Most importantly, much of the lake bed has a gradual rise in elevation allowing shallow areas to form near the shoreline even when water levels in the lake rise and some shallow areas become too deep for wading birds.

Harlan County Lake’s 7,875 acres of grassland is primarily classified as mixed grass prairie. Native prairies are managed by prescribed fire and hay production. Such practices help prevent invasion by non-native species, enhance prairie community health and increase wildlife habitat values. These grasslands can also provide important foraging areas for Whooping Cranes.

To read more about this FOTWW project, go here:

<https://friendsofthewildwhoopers.org/harlan-county-lake-whooping-cranes/>

Platte Basin Timelapse Project connects people to nature

In April 2018 Michael Forsberg, an award-winning conservation photographer, University of Nebraska at Kearney (UNK) Associate Professor of Biology Mary Harner and University of Nebraska-Lincoln (UNL) assistant professor and longtime Nebraska Educational Television documentary producer Michael Farrell gave an update on the [Platte Basin Timelapse Project](#), co-founded in 2011 by Forsberg and Farrell. Both of whom are on the faculty of UNL’s Institute of Agriculture and Natural Resources.

The project has approximately 50 cameras – HD Nikons powered with solar panels – at basin sites from its Rocky Mountain headwaters to where the Platte River flows into the Missouri River near Plattsmouth, Nebraska. All three speakers talked about the project’s value in collecting Platte Basin data as science and also the need to use the images and other information to educate a broader audience about the source of their water, the basin’s features and condition, and wildlife that depend on the water source.

Harner, whose career has focused on studying rivers, including the Platte and its Sandhills tributaries, said a goal of UNK research is to connect people more broadly to the natural world around them. She added that time-lapse images collected while doing research can be used to “increase awareness of this biodiversity we have here right in our backyard.” Looking at the same locations in different seasons and over the years shows that the land is alive. “It’s breathing and there is a rhythm to it,” Forsberg said.

The project has collected approximately 2-million images now from cameras along rivers and streams, at lakes, and on mountains, livestock tanks and irrigation pivots. These cameras have operated during every hour of daylight, 365 days a year for years. More than half of them are equipped with cellphone technology that can send their images to researchers – proof that the cameras are working. But the “high

country” cameras without cell service must be checked every few months by technicians who also collect full data cards to send to project staff and replace them with new cards. Over the years, five cameras have been lost to floodwaters, two were vandalized and one was stolen, Farrell said.

Harner and her UNK team are part of a Purdue University project to collect sounds of vanishing landscapes, with her focus being grasslands – to help ensure they don’t vanish. Audio devices placed at [Rowe Sanctuary](#) and the [Crane Trust](#) have recorded five minutes of sounds every hour around the clock for three years. Cameras, acoustic recorders and other tools were used to capture data about light, temperature, wind and nature sounds during the August 21, 2017, total solar eclipse, she said.

“All living things are related in their need for water to survive,” Farrell said, yet people tend to see natural resources as separate things. Leaders would like to see the [Platte Basin Timelapse Project](#) last at least a decade, to 2021.

http://www. Kearneyhub.com/news/agriculture/platte-basin-timelapse-project-connects-people-to-nature/article_e893ff5c-451b-11e8-bcb2-074cda6a0ffa.html

For more information and links go to the Eastern Crane Bulletin/September 2016 issue, page 9 “In search of understanding – the Platte Basin journey,” here:

<https://kyc4sandhillcranes.files.wordpress.com/2015/06/the-eastern-crane-bulletin-e28093-september-2016.pdf>

Texas:

Land transactions benefit wildlife and recreation

A pair of land transactions in opposite corners of Texas promise to expand the amount of public lands and create new opportunities for hunting, fishing, hiking and bird watching. More importantly it will protect almost 20-square-miles of some of the most critically imperiled wildlife and fisheries habitat in Southeast Texas and add 25-square-miles of Rio Grande-bordering Trans-Pecos landscape to the state’s largest wildlife management area.

In early April 2018, the Conservation Fund transferred an 8,169-acre parcel of the 12,376-acre Sabine Ranch in Jefferson County to the U.S. Fish and Wildlife Service. This move comes less than two years after the Conservation Fund purchased the 20-square-mile property. The almost 13-square-mile tract, holds critically imperiled coastal prairie and wetlands and a portion of the largest remaining intact freshwater marsh in the state and will be an excellent addition to the adjacent 59,000-acre [McFaddin National Wildlife Refuge](#) – serving to expand and enhance wildlife viewing opportunities in the protected coastal marsh and prairie habitat along the [Great Texas Coastal Birding Trail](#) there.

Willow Slough Marsh, an environmentally crucial freshwater marsh system, and the native grasslands of the adjacent coastal prairie provide premium breeding and wintering habitat for numerous species. Several threatened or endangered species are found on the property, including Black Rails, Sprague’s Pipit and Alligator Snapping Turtles. In the last couple of years, the property has been visited by Whooping Cranes that are part of an effort in southwest Louisiana to establish a self-sustaining resident flock of the endangered cranes (part of the reintroduced eastern population).

According to the Conservation Fund, protecting the Sabine Ranch will not only have a positive effect on water quality, shallow aquatic habitats, emergent tidal marshes, migratory and shore birds, and a range of other coastal habitat species but as sea levels rise and storms intensify, its prairies and wetlands will serve to reinforce the resilience of the area as a coastal buffer against hurricanes and flooding. As most recently observed during the flooding caused by Hurricane Harvey in 2017 when the Sabine Ranch’s wetlands and prairie were estimated to have absorbed and stored approximately 12 billion gallons of rainwater.

The proposal for the purchase of a 16,000-acre tract of land in Brewster County from the Texas General Land Office was to be considered and voted on by the Texas Parks and Wildlife Commission on May 24, 2018. That 25-square-mile tract, which includes seven miles of frontage along the Rio Grande and holds habitat supporting bighorn sheep, black bear, Gambel's and Scaled Quail and other endemic Trans-Pecos wildlife, would be added to the adjacent 103,000-acre [Black Gap Wildlife Management Area](#) just east of Big Bend National Park.

To read about the March 2017 acquisition of the Sabine Ranch by The Conservation Fund, go here:

<http://www.nfwf.org/gulf/Documents/tx-sabine-acquisition-17oc.pdf>

For more about the Conservation Fund, go here: <https://www.conservationfund.org/projects/sabine-ranch-texas>

And, for more information on the amazing habitat on the Sabine Ranch, go here:

<https://www.houstonchronicle.com/sports/outdoors/article/Major-additions-in-the-works-for-Texas-public-12853991.php>

For more information and nine interactive driving maps of the Great Texas Wildlife Trails, go here:

<https://tpwd.texas.gov/huntwild/wildlife/wildlife-trails/>

Race to save coastal habitat for cranes

Due to the gradual but steady growth of the Aransas-Wood Buffalo population, Whooping Cranes have outgrown their winter habitat at the [Aransas National Wildlife Refuge](#), prompting organizations that include the [Texas Nature Conservancy](#), [Coastal Bend Bays and Estuaries Program](#), the [International Crane Foundation \(ICF\)](#) and U.S. Fish and Wildlife Service to continue efforts to protect secluded crane habitat and marshes as they becomes available, through either conservation easement or purchase, before the land is sold for development.

The flock has slowly expanded in all directions in search of suitable wintering habitat, but mainly to the north and south along the coast due to habitat availability. In a study by Tom Stehn, now retired Whooping Crane Coordinator for U.S. Fish and Wildlife Service, and Felipe Prieto, USFWS, "Crane pairs have opted to establish territories in or close to the traditional winter area rather than moving long distances along the coast. This distribution seems based on the preference of the male crane to establish a territory as close as possible to its parents." Since a Whooping Crane territory must contain enough food to support a pair or family group throughout the winter, territories must have a minimum size, calculated to average about 425 acres, roughly 2/3's of a square mile."

The continued rise in sea levels may make much of the current crane habitat too deep for the species to use by the next century. At the current rate "Uplands [today] are tomorrow's wetlands," says Dr. Liz Smith, ICF Senior Whooping Crane Scientist. According to Wade Harrell, the coordinator for Whooping Crane recovery at the U.S. Fish and Wildlife Service, with three feet of sea level rise, the protected land that could support over 1,000 Whooping Cranes today would only support 465 cranes in 2100.

Warmer winters, precipitated by climate change, have resulted in reduction of prolonged freezing weather needed to kill invasive black mangrove that has now been reported spreading into estuaries where the cranes feed. Invading mangrove will crowd out many of the salt marsh plants including Carolina wolfberry that the cranes rely heavily upon for food.

So, with the quadruple threat of human development, sea level rise, reduced freshwater inflows that depress blue crab numbers, and mangrove invasion, the winter habitat and the Whooping Crane remains in jeopardy.

To read the full article referenced above, "Changes in Winter Whooping Crane Territories and Range 1950-2006" by Stehn and Prieto, see this issue of the ECB under "Science News."

To read more in the Eastern Crane Bulletin / December 2014 issue, pages 7-8; "Wintering territories and sea level rise pose new concerns for Whoopers," go here:

<https://kyc4sandhillcranes.files.wordpress.com/2014/03/the-eastern-crane-bulletin-e28093-december-2014.pdf>

Muleshoe National Wildlife Refuge was first in Texas

Among the last standing, untouched native [shortgrass prairie](#), Texas' oldest National Wildlife Refuge was originally established as the [Muleshoe Migratory Waterfowl Refuge](#) when President Franklin D. Roosevelt signed Executive Order No. 7214 on October 24, 1935. Then, in 1940, Roosevelt issued a proclamation changing the name to [Muleshoe National Wildlife Refuge](#).

In the early 1930s, Lesser Sandhill Cranes and other migratory birds were using the high plains of Texas in increasing numbers. They roosted on the saline or playa lakes at night and flew to surrounding agricultural fields during the day to feed. Experiencing the devastating Dust Bowl at that time, and despite the Migratory Bird Treaty Act of 1918, there were numerous cases of farmers shooting birds out of season in this region of Texas.

The Bureau of Biological Survey considered 20 areas in the Texas Panhandle for the refuge before they decided the lakes south of Muleshoe were the best for acquisition and development by the agency. The lakes were in the heart of the area reporting the most damage from the feeding activities of migratory birds. When established, Muleshoe NWR was the smallest refuge purchased by the agency – approximately 5,800-acres. The refuge became a win-win situation for regional farmers as well as migratory birds with the resulting acquisition of lands needed for the refuge. The refuge's first manager, James Walton, took charge in August 1937.

Not only did the refuge provide protection for birds, but also in its first years gave much-needed jobs for unemployed men. With the establishment of the [Works Progress Administration Project](#) in 1938, the headquarters buildings, residence, diversion canals and dikes were built. The WPA workers planted approximately 80,000 tree and shrub seedlings on refuge lands during the spring of 1938.

Muleshoe NWR is part of the [High Plains Natural Area](#) and was designated as a [National Natural Landmark of the Great Plains Natural Region](#) on August 11, 1980. The designation promotes good land stewardship for the protection and restoration of natural resources.

<http://www.lubbockonline.com/news/20180428/caprock-chroniclesmuleshoe-national-wildlife-refuge-was-states-first-refuge>

ENVIRONMENTAL impact issues:

Wisconsin:

Wisconsin wildlife studies measure climate and wetlands change

Scientists, wetlands conservationists and biologists are currently studying the health of the Wisconsin ecosystems, based on impact of the rapidly changing climate. For example, studies show that a 30-year trend toward less long-term snow cover in the region has affected species dependent on it, such as the Snowshoe Hare and Ruffed Grouse – both are now experiencing a significant decline in populations.

Whereas Sandhill Crane numbers in the Midwest have annually increased in what is considered a conservation success story. Richard Beilfuss, president and CEO of the Baraboo-based International Crane Foundation, is concerned about changes that “bode poorly” for cranes in the future, such as the February legislation in Madison scaling back wetland protections.

“Part of that is to really buffer against climate change we need a whole range of wetlands. We need wetlands that in really dry years will still stay wet and you need wetlands that in really wet years won't get

too deep,” said Beilfuss. “If you have this diversity of wetlands, you buffer against those changes, a healthy landscape has a whole range of wetlands, so it gets us through the booms and the busts.”

According to Beilfuss, part of the success of Sandhill Cranes and the recently near-extinct Whooping Cranes, has been in the development of wetlands across the state, including small patches around Madison developed in coordination with farmers.

Tally Hamilton, who works with the Natural Resources Conservation Service (NRCS) in Portage as a farm bill biologist said that there have been good numbers of applications recently for Wetland Reserve Easements as well as a lot of interest for it in the state. There have been a half dozen NRCS easements over the years where Whooping Cranes have been on them, utilizing the habitat – a good sign that the process is working.

To read more about animals and birds affected by

http://www.wiscnews.com/portagedailyregister/news/local/environment/wisconsin-wildlife-studies-trying-to-measure-climate-and-policy-change/article_697257e8-b3e8-5a0d-8700-d349aecdff46.html

Texas:

Plastic rears its ugly head in Corpus Christi Bay

If issued a wastewater permit a plastics facility funded by ExxonMobil and the Saudi Arabian government, would discharge more than 13 million gallons a day of toxic wastewater in Corpus Christi Bay. It will exceed legal pollution standards, as the [Center for Biological Diversity](#) notes in a petition filed May 9, 2018 with the Texas Commission on Environmental Quality. Along with the wastewater permit the facility must also obtain several air permits.

According to the Center’s press release, “the plant, which would receive more than \$1 billion in state tax breaks, would “crack” the ethane in natural gas to produce almost 2 million tons of ethylene and polyethylene annually. Polyethylene pellets are the basic building blocks of plastic products. The Texas plant is part of a multibillion-dollar push by the fossil fuel industry to increase global plastic production by 40 percent over the next decade.”

“This facility will dump millions of gallons of toxic wastewater a day into beautiful Corpus Christi Bay. That’s right in the middle of critical habitat for endangered Whooping Cranes,” said Emily Jeffers, an attorney with the Center. “Texas and its wildlife will pay a heavy price just to produce more cheap plastic that will litter our oceans and landscapes. Texans don’t want toxins in their bays and rivers, and they don’t want plastics polluting our oceans and seafood.”

To read the full Center for Biological Diversity press release, go here:

http://www.biologicaldiversity.org/news/press_releases/2018/texas-plastics-plant-05-09-2018.php

Science News:

Determining the Diet of Whooping Cranes (*Grus americana*) Through Field Measurements

Barzen, Jeb & Thousand, Ted & Welch, Julia & Fitzpatrick, Megan & Tran, Triet. (2018). Determining the Diet of Whooping Cranes (*Grus americana*) Through Field Measurements. *Waterbirds*. 41. 22-34. 10.1675/063.041.0104.

Abstract: Though an important measure for ecological studies, obtaining foraging data through direct observation is rarely assessed independently. Using field measurements (foraging habitat, food acquisition behavior, and food manipulation time), the summer diet of Whooping Cranes (*Grus*

americana) in Wisconsin, USA, was determined; foods consumed based on foraging behavior were identified; and ingestion for Sandhill Cranes (*Antigone canadensis*) was assessed. Based on 102 observations, Whooping Cranes occupying six territories consumed 17 food items (verified with images), of which 90 samples from nine foods were modeled. Food manipulation time predicted food size: $\ln(y) = 3.50 + 0.45\ln(x) - 0.05\ln(x^2)$ ($r^2 = 0.63$, $P < 0.001$). Classification tree analysis identified consumed food using foraging behavior (error rate = 17%). A schematic model with the same three behavioral variables and an additional variable of direct observation identified 93% of 90 items. With Sandhill Cranes, observed swallows predicted actual swallows ($y = 1.12x - 6.18$ ($r^2 = 0.85$, 95% CI of slope = 0.79 to 1.45, 95% CI of y-intercept = -50.55 to 38.19)). Field observation of diet and ingestion can be applied to any bird species that uses open habitats where food acquisition behavior and food size vary enough to inform models of foraging behavior. Received 21 August 2017, accepted 24 October 2017.

A full-text PDF download is available from Jeb Barzen at:

https://www.researchgate.net/publication/324117354_Determining_the_Diet_of_Whooping_Cranes_Grus_americanana_Through_Field_Measurements

Opportunistically Collected Data Reveal Habitat Selection by Migrating Whooping Cranes in the U.S. Northern Plains

Author(s): Neal D. **Niemuth**, Adam J. **Ryba**, Aaron T. **Pearse**, Susan M. **Kvas**, David A. **Brandt**, Brian **Wangler**, Jane E. **Austin**, and Martha J. **Carlisle**

Source: The Condor, 120(2):343-356. 2018

Published By: American Ornithological Society

<https://doi.org/10.1650/CONDOR-17-80.1>

URL: <http://www.bioone.org/doi/full/10.1650/CONDOR-17-80.1>

Abstract: The Whooping Crane (*Grus americana*) is a federally endangered species in the United States and Canada that relies on wetland, grassland, and cropland habitat during its long migration between wintering grounds in coastal Texas, USA, and breeding sites in Alberta and Northwest Territories, Canada. We combined opportunistic Whooping Crane sightings with landscape data to identify correlates of Whooping Crane occurrence along the migration corridor in North Dakota and South Dakota, USA. Whooping Cranes selected landscapes characterized by diverse wetland communities and upland foraging opportunities. Model performance substantially improved when variables related to detection were included, emphasizing the importance of accounting for biases associated with detection and reporting of birds in opportunistic datasets. We created a predictive map showing relative probability of occurrence across the study region by applying our model to GIS data layers; validation using independent, unbiased locations from birds equipped with platform transmitting terminals indicated that our final model adequately predicted habitat use by migrant Whooping Cranes. The probability map demonstrated that existing conservation efforts have protected much top-tier Whooping Crane habitat, especially in the portions of North Dakota and South Dakota that lie east of the Missouri River. Our results can support species recovery by informing prioritization for acquisition and restoration of landscapes that provide safe roosting and foraging habitats. Our results can also guide the siting of structures such as wind towers and electrical transmission and distribution lines, which pose a strike and mortality risk to migrating Whooping Cranes.

Changes in Winter Whooping Crane Territories and Range 1950-2006

Thomas V. **Stehn**, U.S. Fish and Wildlife Service, P.O. Box 100, Austwell, TX 77950, USA

Felipe **Prieto**, U.S. Fish and Wildlife Service, P.O. Box 100, Austwell, TX 77950, USA

Abstract: The whooping crane (*Grus americana*) winters on the Texas coast primarily in salt marsh habitat. The location of adult whooping crane winter territories during 9 winters between 1950 and 2006 was derived from aerial census data digitized onto infrared photos using GIS software. Range expansion, including changes in distribution and size of winter territories, was analyzed over a 57-year period as flock size increased by 765%. Crane pairs have opted to establish territories in or close to the traditional winter area rather than moving long distances along the coast. This distribution seems based on the preference

of the male crane to establish a territory as close as possible to its parents. Colonizing occurred to the nearby areas of Matagorda Island in 1958, San Jose Island in 1969, Lamar Peninsula in 1971, and Welder Flats in 1973. Minimum territory sizes were calculated to be 101 ha for Aransas National Wildlife Refuge and West St. Charles Bay, 139 ha for Welder Flats, 204 ha for Matagorda Island and Welder Flats, and 304 ha for San Jose Island. Salt marsh habitat was measured to determine if enough winter area is present to reach recovery targets and to predict expected use patterns for the near future. Based on an average winter territory size of 172 ha, the current winter range and contiguous areas can support up to 576 whooping cranes. Additional salt marsh habitat was measured in a 111-km radius from Aransas National Wildlife Refuge. If suitable, this non-contiguous area could support an additional 580 whooping cranes to reach a total flock size of 1,156. However, with the Texas coast undergoing rapid development and sea level rise, there is insufficient protected habitat for whooping cranes to reach recovery targets. *PROCEEDINGS OF THE NORTH AMERICAN CRANE WORKSHOP 11:40-56 / 2010*

To read the full article and see maps of the changes in winter habitat range (pages 40-56), go here:
<https://www.savingcranes.org/proceedings-of-the-eleventh-north-american-crane-workshop/>

Using photomedicine to care for aging cranes

The [International Crane Foundation](#)'s veterinary team has made advancements in the areas of animal husbandry and avian veterinary medicine, and in turn have contributed to longer lifespans among captive cranes, both at the International Crane Foundation and elsewhere. With aging come more geriatric medical conditions, including osteoarthritis, cancer and cardiovascular disease. Osteoarthritis affects 10% of the flock at the Foundation.

Recent research in the area of low-level light therapy has shown excellent results in treating chronic pain associated with osteoarthritis, with no known side effects. Lower energy laser or light-emitting diode (LED) sources can be applied to the affected tissue and promote changes at the cellular level, providing stimulation to support tissue healing and decrease pain.

To read the International Crane Foundation's press release and to see a treatment in progress, go here:
<https://www.savingcranes.org/using-photomedicine-to-care-for-aging-cranes/?bblinkid=83654171&bbemailid=7190521&bbejrid=550648711>

Citizen scientists poised to make difference

Corinna M. Holfus, the Texas Whooping Crane Outreach Coordinator with the [International Crane Foundation](#) (ICF), knows the value of citizen scientists. With only three ICF staff at the Texas office it is challenging to gather all the data needed for ongoing crane studies. "If it weren't for citizen science projects, there's no way we could understand the birds in the way that we do," Holfus said.

In March 2018, the International Crane Foundation partnered with [Audubon Texas](#) to conduct a citizen science-based, monitoring project. At the TERN CAMP (Texas Estuarine Research Network & Crane Activity Monitoring Project), participating [Master Naturalists](#) were trained to monitor shorebirds for Audubon and Whooping Cranes for ICF.

This year the Master Naturalists observed endangered Whooping Cranes on the Lamar Peninsula in Rockport for 20 minutes at a time. They logged, in 15-second increments not only crane behavior, but wind speed; wind direction; temperature; GPS coordinates; and whether the habitat was salt marsh, upland or urban. All activity was analyzed and recorded for the ICF database.

If you are interested in future TERN training, please contact: Corinna M. Holfus, Whooping Crane Outreach Coordinator, (832) 967-9829 or cholfus@savingcranes.org

To read the January 2018 newsletter of the Mid-Coast Chapter Texas Master Naturalists, go here:
<http://www.midcoast-tmn.org/pdf/newsletter2018-1.pdf>

Kudos:

Cameron LNG receives Whooping Crane Stewardship Award

The Louisiana Department of Wildlife and Fisheries (LDWF) and Louisiana Wildlife and Fisheries Foundation (LWFF) recently recognized Cameron LNG, a natural gas liquification facility, with the Whooping Crane Stewardship Award for its financial support of LDWF's reintroduction project in southwest Louisiana.

For the past three years, Houston-based Cameron LNG has partnered with LDWF and the reintroduction project, providing satellite transmitter equipment and associated communications costs for tracking the movement of the whooping cranes. The Stewardship Award is presented to companies in Louisiana willing to make a financial pledge to the restoration of Whooping Cranes in the state.

George Archibald, co-founder of the International Crane Foundation, presented Stevie Trahan, External Relations Manager with Cameron LNG, with Chris Davis' wildlife portrait "Taking Flight" in appreciation of the corporate support provided for the project.

Whooping Crane Eastern Partnership members honored

The [Wisconsin Society for Ornithology](#) (WSO) Awards Program recognizes individuals or organizations that have made outstanding achievements in advancing bird conservation, promoting the field of ornithology, and contributing to the Society. At WSO's annual convention, member groups of the Whooping Crane Eastern Partnership were awarded the 2018 Special Recognition Award for their ongoing work with Whooping Cranes.

The award read, "For their important work in restoring a self-sustaining migratory population of Whooping Cranes to eastern North America."

Accepting on behalf of the partnership were:

Joe Duff & Heather Ray, [Operation Migration](#)

Anne Lacy, [International Crane Foundation](#)

Davin Lopez, [Wisconsin Department of Natural Resources](#)

Brad Strobel, U.S. Fish and Wildlife Service, and

Robert Doyle, [U.S.G.S Patuxent Wildlife Research Center](#)

Congratulations and thanks to all!

NYC mural project spotlights birds endangered by climate change

Thanks to art gallery owner Avi Gitler, birds have been springing up all over the old Harlem-based neighborhood in New York City. The paintings are all part of an ambitious public art installation in Upper Manhattan called the [Audubon Mural Project](#). It all began when in 2014 Gitler commissioned an artist to paint murals near his new gallery to attract attention. The artist chose a Flamingo for the first mural, sparking Gitler's idea that maybe all the murals should be of birds?

In particular because [John James Audubon](#), an American ornithologist, naturalist, and painter, spent the last decade of his life living on a huge farm in the Manhattan, New York City area and happens to be buried just five blocks away from Gitler's gallery. After several murals had been completed the birds caught the attention of the National Audubon Society (NAS). As the National Audubon Society's groundbreaking [Birds and Climate Change Report](#) had just been released in September 2014, NAS asked that the project be expanded to raise awareness of the plight of birds – would Gitler consider the creation of murals of the 314 birds threatened by global warming in this century?

It is not easy to find suitable painting spaces in New York City as the project won't paint just anywhere. "We're looking to beautify, so we're looking for unloved spaces," Gitler says. "We like walls where there's a lot of peeling paint, or brickwork that's seen better days or has a couple of old faded [graffiti] tags." Despite the logistical hurdles, by the end of March 2018, 83 avian murals – by artists from varied backgrounds, with varying styles – had been completed. The project is funded with grants and donations. All artists receive a small honorarium and a growing audience for their work.

In Upper Manhattan, the project has a new partner, NYC Audubon, which organizes monthly two-hour walks to see the murals and Audubon's grave. For more info on the Audubon Mural Program, go to audubon.org/amp, where you can also see the murals, learn more about the artists and the birds, and print out a map of the mural locations so you could visit any time.

To read the National Audubon Society's report of birds affected by climate change, go here: <http://climate.audubon.org/article/audubon-report-glance>
or, watch a short video, here: https://www.youtube.com/watch?v=aN2-a82_3mg

To see the Sandhill Crane mural by artist Kim Power, go here: <https://www.audubon.org/news/sandhill-crane-kim-power>

<https://www.nytimes.com/2017/10/24/opinion/audubon-public-art-nyc.html?ref=collection%2Fsectioncollection%2Fopinion&action=click&contentCollection=opinion®ion=r=0>
To see the 83 species painted thus far in the Audubon Mural Project, go to: <http://www.audubon.org/amp>
<https://www.northjersey.com/story/entertainment/2018/03/21/nyc-mural-project-spotlights-birds-endangered-climate-change/403278002/>

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