



EASTERN **CRANE** BULLETIN

December 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.

[Whooping crane shootings – what we know and why it matters](#)

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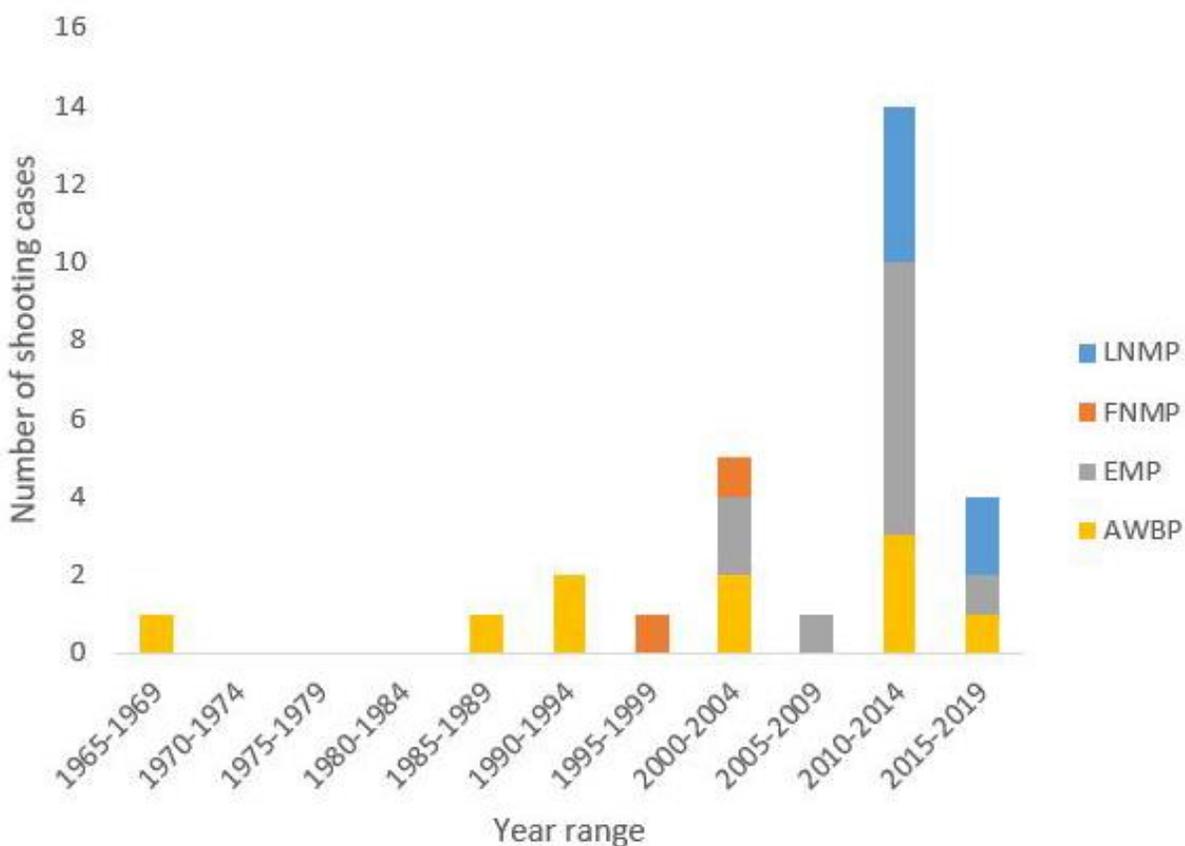


Photo by Ted Thousand

Illegal shootings are a major threat to the survival of Endangered Whooping Cranes. Historically, shootings contributed to the decline of Whooping Cranes to the brink of extinction. People shot Whooping Cranes for the millinery trade, trophy hunting, museum collections, sustenance and recreation. Today, those of us who work in conservation would like to think that we are past the period where people would shoot Whooping Cranes, but sadly this is not so – [most recently in July 2018, a man shot a Whooping Crane on private property in Louisiana.](#)

The International Crane Foundation takes this issue seriously. We've gathered information about 29 confirmed cases of Whooping Crane shootings since 1967, the year that the Whooping Crane was listed as a federally endangered species. What do these past cases tell us about the problem of Whooping Crane shootings?

State/Parish/Province	Number of known shooting cases	Number of Whooping Crane deaths by gunshot
Alabama	2	3
Florida	2	3
Georgia	1	3
Indiana	5	5
Kansas	1	2
Kentucky	1	2
Louisiana	6	9
Michigan	1	1
Saskatchewan	1	1
South Dakota	1	1
Texas	7	8
Wisconsin	1	1
Total	29	39



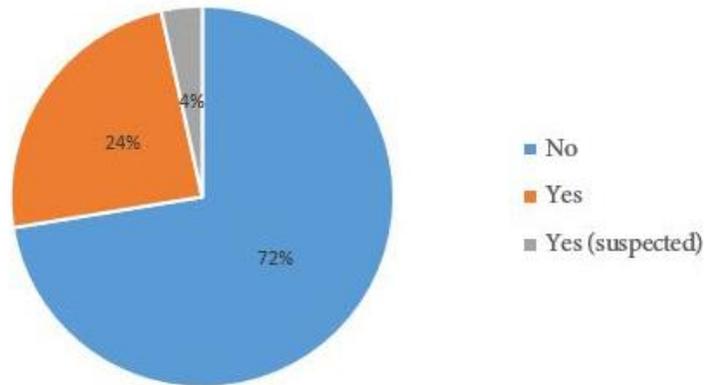
The number of Whooping Crane shootings has increased since reintroduction efforts began in the 1990s. Detectability of shooting incidents is likely higher in the reintroduced populations since they are more heavily monitored than the Aransas-Wood Buffalo population. Explanation of abbreviations: LNMP = Louisiana Non-Migratory Population, FNMP = Florida Non-Migratory Population, EMP = Eastern Migratory Population, AWBP = Aransas-Wood Buffalo Population.

Since Whooping Crane reintroductions began in the 1990s, the majority of shooting cases have taken place in reintroduced populations. In cases where the location of a Whooping Crane shooting could be defined as public or private land, twelve shooting cases took place on private land and three took place on public land.

All identified perpetrators were white men with an average age of 27.6. Some of the perpetrators had prior convictions such as a citation for driving under the influence of alcohol. In six cases the perpetrators also conducted concurrent crimes, such as vandalism of property, shooting other non-game wildlife or game wildlife out of season. In multiple cases, alcohol was listed as a possible contributing factor.

In the majority of cases, 71%, Whooping Crane shooting incidents were not related to hunting. In the few cases that involved hunters, the hunters were already in violation of a hunting regulation, such as shooting before legal hunting hours, when poor lighting makes identification difficult. In these cases, one might argue that the person was, in fact, poaching as people who violate hunting regulations are considered poachers.

Hunter-related?



The International Crane Foundation has taken this information and processed it through the lens of situational crime prevention and routine activity theory. Under this theory, in order for a crime to take place, there must be a suitable target — a motivated offender — and a lack of guardianship of the target. By knocking out one or more factors, a crime cannot occur. After reviewing the 25 common strategies to prevent crimes, we determined that a campaign to raise awareness and pride in the species would address many of the strategies.



We've engaged in awareness campaigns for three years in Alabama. And, we've started outreach activities in Indiana and Texas. In addition, the Louisiana Department of Wildlife and Fisheries is running an awareness campaign in Louisiana. Our campaigns are based on data from social science surveys conducted by Auburn University, data from Purdue University and information we have gathered on confirmed shooting cases. We are working with state and federal agencies, birders, hunting groups, schools, civic leaders and other local partners to get communities to give a WHOOP about Whooping Cranes. We are combining these campaigns with targeted efforts to educate key figures in the legal system so when Whooping Crane cases appear in court, perpetrators receive an appropriate sentence.

James Kawlewski and Amber Wilson, Whooping Crane Outreach Program Assistants in Indiana and Alabama, strike a pose with Hope, our Whooping Crane mascot.



Hillary Chavez, the 2017 Whooping Crane Naturalist Intern, talking to kids and families about Whooping Cranes at a community event in rural Wisconsin.

The winter of 2017-18 was the first winter in 10 years that we did not have a Whooping Crane shooting along the eastern flyway. This is important to note since winter is the most common season for shootings to take place. Our outreach work has helped educate people in both the eastern flyway and in Texas, and we are creating communities that care about Whooping Cranes. This is wonderful news to report, but our work is far from over.

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Eastern Migratory Population of WHOOPERS

Whooping Crane eastern population sees the best year yet for wild-hatched chicks

The following is from an October press release by the [International Crane Foundation](#).

Six wild-hatched Whooping Crane chicks in Wisconsin survived to fledge in 2018, the most since the Whooping Crane Eastern Partnership began restoring a migratory population of the endangered birds in the eastern United States.

The good news comes as the number of endangered wild Whooping Cranes in the west topped the 500 mark, with an estimated 505 Whoopers in a population that migrates from nesting grounds at Wood Buffalo National Park in Canada to winter habitat in Aransas, Texas.

Before the partnership began work, Whooping Cranes had not nested in the eastern United States since the late 1800s. The effort to bring them back began in 2001 when WCEP partners reintroduced seven captive-raised young Whooping Cranes in Wisconsin, where whoopers last nested in 1841. Using costumed humans standing in for adult cranes, and ultralight aircraft as guides, partners raised the young cranes and taught them the migratory route to Florida. The eastern migratory population in the wild now numbers about 100.

Five of the six chicks that hatched in the wild and survived to flight stage in Wisconsin this year are offspring of Whooping Cranes released by WCEP in previous years. The sixth was a chick with one parent that was wild-hatched in 2010. Until 2018, the highest number of surviving wild-hatched chicks in the eastern population was three, in both 2015 and 2016. WCEP members, who continue to work to refine techniques to enhance chick survival in the wild, celebrated the progress.

“One of our biggest challenges with this population has been survival of chicks after they hatch,” said Kim Smith, chief operating officer for the International Crane Foundation, a WCEP member. “The partners are working hard to find methods that increase the chances that wild-hatched chicks live to fledge. We are encouraged to see this many chicks survive this year.”

To read the entire press release, go here:

<https://www.savingcranes.org/whooping-crane-eastern-population-sees-the-best-year-yet-for-wild-hatched-chicks/>

Update on Wisconsin winter Whooper

Last year a juvenile Whooping Crane stayed in Wisconsin the entire winter, despite severe weather. After release at the Horicon National Wildlife Refuge, Operation Migration (OM) monitored Parent-Reared* juveniles #38-17 and #39-17. When #39-17 decided to head south with a group of Sandhill Cranes, #38-17 chose to stay put at the refuge. After eluding several attempts to capture her, it was decided to provide her supplemental food and continued monitoring by OM. She survived the winter seemingly no worse for wear.

In August 2018 she began associating with a 3-year-old male Direct-Autumn Release (DAR) #63-15, and they hit it off. So much so that she has headed south with him. Both cranes were reported recently in Randolph Co., Illinois.

**Parent-Reared – cranes were reared at captive breeding centers (in enclosures) by their parents.*

Goodbye, Hemlock

In an October 9, 2018 press release from the Whooping Crane Eastern Partnership (WCEP), it was announced that Hemlock (#18-12) the female of the family transferred in August from White Oak Conservation in Florida to Horicon, was found dead on the refuge in September.

Hemlock was hatched at the International Crane Foundation headquarters in 2012 and subsequently transferred to White Oak Conservation in Florida in 2016 to pair with male Whooping Crane [Grasshopper \(#16-11\)](#). The young pair produced two chicks this spring, and after the chicks fledged the family was relocated in August 2018 to [Horicon National Wildlife Refuge](#) in eastern Wisconsin. Hemlock's body was found in late September, with no signs of predation. A necropsy was performed at the [National Wildlife Health Center](#) with no conclusive results. WCEP is awaiting further test results that may answer why Hemlock died.

On a happier note, Grasshopper and their two chicks have remained together and continue to do well. As of December 2, 2018, Grasshopper along with chicks #73-18 and #74-18 had begun migration and were reported in Jasper County, Indiana.

To learn more about the family's release at Horicon, go here:

<http://www.bringbackthecranes.org/uncategorized/whooping-crane-family-of-four-flown-north-to-horicon-marsh/>

To learn more about the following groups working on behalf of endangered Whooping Cranes, go to:

Whooping Crane Eastern Partnership: www.bringbackthecranes.org

International Crane Foundation: www.savingcranes.org

White Oak Conservation: www.whiteoakwildlife.org

Interactive "To the Brink and Back" Whooper timeline

Produced in 2016 by Hamline University's Center for Global Environmental Education, and co-produced by the International Crane Foundation, this timeline begins in the year 1200 with an early Native American crane-bone whistle found near Galveston, Texas, and projects to the year 2025. Highlights and milestones in the Whoopers' history are noted. A bar at the top of the timeline shows for any given date along the timeline, numbers of wild, captive and reintroduced cranes.

<https://www.savingcranes.org/whooper-timeline/>

Eastern Migratory Population, Whooping Crane Update – 1 December 2018

Population Estimate

The current estimated population size is 101 (45 F, 53 M, 3 U). As of 1 December, approximately 19 Whooping Cranes are in Illinois, 33 are in Indiana, 1 may still be in Michigan, 7 are in Kentucky, 5 are in Tennessee, 11 are in Alabama, and 1 is in Georgia. The remaining birds' locations have not been confirmed in the last month, or they have left Wisconsin but haven't yet been confirmed farther south. As of 27 November, five wild-hatched chicks are still alive, all of which have left Wisconsin with their parents. All the chicks are banded.

Mortality

[#36-17 \(F\)](#) migrated with females #2-15 and #28-05 from Wisconsin to Kentucky, where the remains of #36-17 were found on 21 November 2018. The cause of death is not yet known. The other two females are now in Meigs Co., TN.

For population estimate, 2018 season nesting results; 2018 release updates; updates for the 2017 Wild-hatched chicks, Parent-Reared 2017 Cohort, Costume-Reared 2017 Cohort, mortality, and to see a map of current Whooper locations, go here:

<http://www.bringbackthecranes.org/project-updates/>

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

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

Data courtesy of [Whooping Crane Eastern Partnership \(WCEP\)](#)

UL= ultralight (Chicks were captive-hatched, then raised by costumed handlers and taught to follow an ultralight for their first migration to Florida); **DAR=Direct Autumn Release** (Chicks are captive-hatched then released in the fall in the company of adult cranes from whom they will learn the migration route); **PR=Parent Reared** (chicks are captive-hatched and raised by captive Whooping Cranes, then released near a wild crane pair in hopes the pair will "adopt" the juvenile and lead it on migration); **W=Wild Hatched** to a wild Whooping Crane pair that then teach the migration route to the juvenile.

Editor: The following information is from the Whooping Crane Eastern Partnership (WCEP). Any change in cranes' behavior due to contact with people may have a negative impact on its well-being and safety.

What to do if you see a Whooping Crane

If you encounter a Whooping Crane in the wild, please give them the respect and distance they need. Do not approach birds on foot within 200 yards; remain in your vehicle; do not approach in a vehicle any closer than 100 yards. Also, please remain concealed and do not speak loudly enough that the birds can hear you. Finally, do not trespass on private property in an attempt to view or photograph Whooping Cranes.

Reporting Whooping Crane sightings to help WCEP trackers

The Whooping Crane Eastern Partnership would appreciate any Whooping Crane sightings to be reported to their website at: <https://www.savingcranes.org/report-whooping-crane/>

Reporting Whooping Crane sightings to others

(whenever posting on listservs, Partner Facebook pages, eBird, etc.)

When Whooping Cranes are present at the following nine sites, the name of the Refuge or park may be used on birding lists and on social media sites, however no other location information more specific than the name of the property should be used. When Whooping Cranes are present at other sites, **only the birds' county-level location should be** shared.

Wisconsin:

1. Necedah National Wildlife Refuge
2. Horicon National Wildlife Refuge
3. White River Marsh State Wildlife Area

Florida:

1. Chassahowitzka National Wildlife Refuge
2. St. Marks National Wildlife Refuge
3. Paynes Prairie Preserve State Park

Other:

1. Hiwassee State Wildlife Refuge, TN
2. Wheeler National Wildlife Refuge, AL
3. Goose Pond State Fish & Wildlife Area, IN

Please report all eastern Whooping Crane sightings

For an online form to report your sightings, go here:

<https://www.savingcranes.org/report-whooping-crane/>

Aransas-Wood Buffalo WHOOPERS

Whooping Cranes on the move in Saskatchewan

In October 2018, Brian Johns, Ret. Canadian Wildlife Service, heard reports from birders of seeing large groups of Whooping Cranes gathering on their staging grounds in Saskatchewan, Canada. Johns was able to observe and photograph a group of 151 of the wild population of Whooping Cranes foraging together in a field. How many people can say they have had that incredible experience?

Go here to see John's photo:

<https://friendsofthewildwhoopers.org/large-groups-whooping-cranes-saskatchewan/>

Wood Buffalo National Park Whooping Crane survey shows 24 fledglings

Parks Canada conducts two aerial surveys in Wood Buffalo National Park of the endangered wild population each year – once in May, when they count the number of breeding pairs with eggs, and once in August, when they count the fledglings that are almost ready to fly to Texas for the winter months.

While the spring survey recorded a whopping 87 nests with eggs, the August survey tallied only 24 fledglings. Generally, 86 nests would yield between 35 and 43 chicks that would survive to make the 2,500-mile journey to Texas. According to Rhona Kindopp, manager of resource conservation with Parks Canada in Fort Smith, despite a low number of fledglings, "it's still within the natural range of variation that we would expect from this species." Productivity is influenced greatly by weather, and the unseasonably cold and wet weather experienced in the area during early June as well as a higher recorded number of predators in the area have impacted fledgling numbers.

Read more about the importance of these surveys in the understanding and preservation of the species, go here:

<https://friendsofthewildwhoopers.org/24-fledglings-counted-during-whooping-crane-survey/>

If you have a question about the wild flock send FOTWW an email at admin@FOTWW.org.

Wintering at Aransas – here come the Whoopers!

On October 22, a pair of Whooping Cranes was spotted at Aransas National Wildlife Refuge near Mustang Lake. Their arrival was the first in the southward migration of the wild population of Whoopers from their breeding grounds at Wood Buffalo National Park in Canada to their wintering grounds at Aransas. As of early November, observers have reported seeing Whooping Cranes in every state along the Central Flyway from North Dakota to Texas. “Based on what we’ve seen the last few years, it’ll likely be late December or early January before the entire population is in coastal Texas,” according to Wade Harrell, U.S. Fish & Wildlife Service Whooping Crane Recovery Coordinator. The migration to Texas can take up to 50 days, with the population typically traveling in small groups and stopping to rest and refuel along the way.

The Aransas-Wood Buffalo population, the only natural flock of Whooping Cranes in the world, spends each winter in and around the Aransas National Wildlife Refuge near Rockport. However, with population expansion in recent years they have begun spending time in less traditional areas, venturing some distance from the refuge to find food and other resources.

Along with the wild population of Whooping Cranes migrating from Canada, Texas hosts a few visiting Whooping Cranes from the “non-migratory,” reintroduced population in southwest Louisiana. The reintroduced cranes are all marked with leg bands and have been most commonly spotted in southeastern Texas, near Beaumont.

“These iconic, endangered species deserve our respect as they migrate through the central flyway, and we ask the public to avoid disturbing them if spotted,” states Wade Harrell, U.S. Fish & Wildlife Service Whooping Crane Recovery Coordinator.

What sort of conditions will the Whoopers find upon arrival at Aransas NWR?

September saw at least 17.54” of rain reported at Aransas NWR. This is around half of the NWR’s average annual rainfall and it created fresh conditions in the coastal marshes and standing water across large portions of the Refuge. Since June, 36.19” of rain has been recorded, and the [National Weather Service 3-month outlook](#) suggests that the fall weather pattern will continue to be wetter and warmer than normal. Generally, wet periods bode well for Whooping Crane food, such as blue crabs and wolfberries, in the marsh.

The Aransas NWR team was able to burn one large unit (3,780 acres) on Matagorda Island on June 15. The burned area consists of upland prairies adjacent to coastal marsh areas that are heavily used by Whooping Cranes. By maintaining coastal prairie habitats in a relatively open, brush-free condition, the refuge provides additional foraging habitat that would not normally be available to the Whooping Cranes. Summer burns are typically more effective at suppressing brush species in refuge prairies than winter burns, and thus are an important habitat management tool at Aransas NWR.

Read more here: <https://friendsofthewildwhoopers.org/wintering-whooping-crane-update-6/>

President of “Friends of The Wild Whoopers” speaks at Fort Worth Audubon

Chester McConnell, president of Friends of the Wild Whoopers (FOTWW), spoke November 8, 2018, at a meeting of the Fort Worth Audubon Society. His talk covered the biology of the wild population of Whooping Cranes and explained the efforts of FOTWW to protect, improve and develop “stopover habitats” for these endangered birds.

McConnell spent almost 54-years of his professional career evaluating land-use, stream projects, wetland protection, conducting wildlife research, monitoring populations and managing wildlife habitats. Since retiring, he has focused his time on the wild Whooping Cranes and wetland and stream protection.

McConnell learned about Whooping Cranes in the 5th grade and later became a lifetime member of the Whooping Crane Conservation Association, serving in positions of Trustee and President. Currently, he serves as President of Friends of the Wild Whoopers, a private, non-profit group whose mission is to help preserve and protect the Aransas/Wood Buffalo population of wild Whooping Cranes and their habitat.

To date, FOTWW has evaluated potential Whooping Crane habitats on 21 military bases, 8 Indian Reservations, and 14 U.S. Army Corps of Engineers lakes – an effort resulting in unprecedented cooperation between the FOTWW and the U.S. Army Corps of Engineers at suitable stopover sites in Texas, Oklahoma, Kansas, Nebraska, South Dakota and North Dakota.

As impressive as this is, McConnell hasn't stopped, continuing in the effort to safeguard the world's only wild population of Whoopers.

To learn more about Friends of the Wild Whoopers and support the work they are doing, go here:
<https://friendsofthewildwhoopers.org>

General News

Canada:

Calgary Zoo's conservation program boasts Whooping Crane twins

Although Whooping Cranes usually lay two eggs in a clutch, it is common for only one chick to survive to fledge. Therefore "twins" are considered to be rare in the wild population of cranes and even rarer in captive breeding programs.

So, it was exciting news for the reintroduction program when Hemlock and Grasshopper successfully raised two colts to fledging at the White Oak Conservation in Florida before the family was released at Horicon Marsh in August of this year.

When the set of twins hatched in June at the [Calgary Zoo's Devonian Wildlife Conservation Centre's](#) "cranedominiums," it was more cause for celebration. The parents of "Nebula" and "Gamora" are a young pair of Whooping Cranes that just began breeding last year, so their parenting skills were somewhat lacking. Biologists at the center decided to place the colts with one of the facility's longest breeding pairs – cranes that just so happened to be their grandparents.

One twin is slated to be released into the wild, and the other will be kept at the facility in hopes of continuing its genetic line.

Indiana:

Whooping Cranes arrive early in Indiana

Two Whooping Cranes of the eastern migratory population (EMP), arrived in Indiana this year at the end of September. According to Danielle Williams, Whooping Crane Outreach Program Assistant for the [International Crane Foundation](#), this was a fairly early arrival date. The pair was identified as #18-03, a

male (Leg bands: Left: green/red/white Right: green/red), and [Direct Autumn Release \(DAR\) #36-09](#), a female (Leg bands: Left: green/red/green Right: white/red).

The cranes pair-bonded in Fall 2011 and have developed a reputation for arriving early. In Fall 2015 they were reported in Greene County, Indiana, by November 13, having migrated from Wisconsin sometime in the two weeks prior to that. Then in Fall 2016 they were the first pair of Whoopers reported – on October 11 – on their winter territory in Greene County, Indiana. This was the earliest report of Whooping Cranes in the county since the beginning of the EMP reintroduction in 2001. This pair is consistently the first to arrive and the last to leave Indiana. They are often visible from the visitor center at Goose Pond Fish and Wildlife Area.

More than half the population of eastern migratory Whooping Cranes spend part or all of the winter in Indiana. Both Whoopers and the more abundant Sandhill Cranes can easily be seen through the winter at Jasper-Pulaski Fish and Wildlife Area in Medaryville and Goose Pond Fish and Wildlife Area in Linton. "Indiana provides crucial habitat for this extremely rare bird," Williams said.

Kansas:

Kansas wildlife officials investigate Sandhill poaching

Wildlife officials are asking for the public's help after several Sandhill Cranes were poached and left to rot on a playa in eastern Wallace Co. The Kansas Department of Wildlife, Parks and Tourism said in a [Facebook post](#) that the [Sandhill Cranes](#) were found October 16, 2018.

Sandhill Cranes have been hunted in Kansas since 1993 and in the Central Flyway since 1961. Hunting regulations have been formulated and contingency plans utilized to minimize the chance of endangered Whooping Cranes being accidentally shot by Sandhill Crane hunters. Although Sandhill Cranes start concentrating in large numbers during late October, the start of the hunting season was purposely delayed to the Wednesday following the first Saturday in November to allow most of the Whooping Cranes to migrate through the state. The penalty for shooting a Whooping Crane is a fine of up to \$100,000 and/or up to one year in prison.

Anyone with information is asked to call the Wallace County Game Warden at (785) 342-7382 or Operation Game Thief at 1- 877- 426-3843.

Kentucky:

2018-2019 Sandhill Crane season

The following information concerning changes to the Kentucky Sandhill Crane season is courtesy of John Brunjes, Migratory Bird Coordinator for the KY Department of Fish and Wildlife Resources (KDFWR).

“Under the Eastern Population Management Plan, after states complete an experimental season, there is a standard framework available to all states. That framework includes framework dates of September 1- January 31, a sixty-day season, and permits = 10% of your peak survey numbers, and maximum of 3 cranes per hunter/season. That is the info that will be included in the Federal Register. Because our changes fall within these frameworks, no special mention is needed. The only special mention will be the 1,357 tags that are available to Kentucky.”

Under the Kentucky experimental season; 400 permits were issued and each of those came with 2 tags to harvest a crane – therefore, 800 tags were issued during that period until this season’s change. The

agency can now issue up to 1,357 tags, a 70% increase (for this season; the number will fluctuate each season). Hunters must take the identification test each year – before issuance of permits and tags.

To listen to a “Kentucky Afield” interview with John Brunjes (SACR segment begins 09:53; interview begins 19:20) about the regulation changes, go here: https://www.ket.org/episode/KKYAF_003443/

Louisiana:

LDWF receives 12 juvenile Whooping Cranes at Rockefeller Wildlife Refuge

On November 19, 2018, twelve juvenile Whooping Cranes were received at [Rockefeller Wildlife Refuge](#) near Grand Chenier. Of the new arrivals, seven juvenile Whooping Cranes came from the International Crane Foundation and five cranes hatched and reared at [Freeport-McMoRan Audubon Species Survival Center](#) in New Orleans, part of the [Audubon Nature Institute](#).

First released into a large, enclosed pen for acclimation to their new surroundings, the arrivals will then be released onto the refuge, bringing the Louisiana wild population to 75 Whooping Crane. Designated in Louisiana as a non-essential, experimental population (NEP) under the provisions of the Endangered Species Act, the designation and its implementing regulation were developed to be more compatible with routine human activities in the reintroduction area. The initial cohort of birds received in 2011 marked the first presence of Whooping Cranes in the wild in Louisiana since 1950. (“Cohort” in this case refers to young cranes assembled without parents to socialize together so they will thrive as a group.)

Included in the introduced Louisiana wild population number are the five, wild-hatched chicks that successfully fledged in southwest Louisiana last spring. Those five chicks represent a high count for a single year since the project began in 2011, and represent a major milestone in the Whooping Crane reintroduction project.

The Louisiana Department of Wildlife and Fisheries (LDWF) and the Audubon Nature Institute have been longtime leaders in Whooping Crane conservation in Louisiana and are continuing to expand their partnership with the goal of developing a self-sustaining population of Whooping Cranes in Louisiana. With that support, LDWF and Audubon are committed to the long-term growth and stability of the Whooping Crane population to save the species from extinction, supported by generous donors including U.S. Fish and Wildlife Service, Chevron, Conoco Phillips, Cameron LNG, Coypu Foundation and the Louisiana Wildlife and Fisheries Foundation.

To see photos of the 2018 cohort’s arrival and a video of an interview with LDWF Whooping Crane biologist Sara Zimorski, go here:

<https://ldwf.cantoflight.com/v/2018WhoopingCraneRelease/album/SGRLU?column=video&id=d9o0ne5kb d1hrd6s9ljr4jg87s>

and here:

<https://ldwf.cantoflight.com/v/2018WhoopingCraneRelease/album/SGRLU?column=video&id=fcn1e05plt3 lbakd5huj8gvo59>

Chevron lends a hand with Louisiana Whoopers

From its start in 2011, Chevron has invested in the Louisiana Department of Wildlife and Fisheries (LDWF) Whooping Crane reintroduction project. In addition to Chevron’s financial contributions their employees have also given volunteer hours.

LDWF uses grant funding from Chevron for three critical areas of support:

1. Satellite transmitter equipment and associated communications costs for tracking the cranes.
2. Public outreach campaign (billboards, TV and radio) to educate the public about the species.
3. Lesson plans, classroom tools and educational workshops for Louisiana middle and high school teachers about endangered species and LDWF’s conservation programs.

Louisiana milestones:

1. 2016 - first verified hatching of a chick in the state since 1939. (LW1-16 died May 2017)
2. 2017 Audubon Nature Institute increased number of chicks raised at rearing facilities to supplement both migratory and non-migratory WHCR populations in LA;
3. As of 2018, LDWF has introduced 125 juvenile WHCR to LA ecosystem; seven wild-hatched chicks fledged successfully.

The Louisiana project will be considered successful when there are numbers capable of sustaining a population of about 120 individuals and 30 productive pairs for 10 years without additional restocking.

Watch as LDWF biologists release a cohort of juvenile whooping cranes at White Lake Wetlands Conservation Area (WCA) near Gueydan on Thursday, Dec. 3, 2015.

<https://youtu.be/wpW3muKiYh8>

Or, for Chevron's infographic of the history of Louisiana Whooping Cranes, go here:

<https://www.chevron.com/stories/wild-files-whooping-cranes-of-louisiana>

Help LDWF by reporting all Whooping Crane sightings

Anyone encountering a Whooping Crane is advised to observe the bird from a distance and to please report your sighting to the Louisiana Department of Wildlife and Fisheries by using the following link:

<http://www.wlf.louisiana.gov/webform/whooping-crane-reporting-form>

Anyone witnessing suspicious activity involving Whooping Cranes is advised to call the LDWF's Enforcement Division at 1-800-442-2511 or use the tip411 program, which may offer a cash reward for information leading to arrests or convictions. To use the tip411 program, citizens can text LADWF and their tip to 847411 or download the "LADWF Tips" iPhone app from the Apple iTunes store free of charge. Citizen Observer, the tip411 provider, uses technology that removes all identifying information before LDWF receives the text so that LDWF cannot identify the sender.

Nebraska:

Report sightings of WHCR in Nebraska

Information gathered from reported crane sightings is used to positively affect Whooping Crane habitat conservation and recovery efforts.

Report any sightings to Game and Parks at 402-471-0641 or online at:

<http://outdoornebraska.gov/whoopingcrane/>

Oklahoma:

Report a WHCR sighting in Oklahoma

Most Whooping Cranes in Oklahoma are reported from mid-October through November. Sightings often come from western Oklahoma, typically east of Guymon and west of Interstate 35.

To report a WHCR sighting in Oklahoma, fill out the online report form at wildlifedepartment.com. Be sure to have the date, specific location of the sighting, as well as the number of birds seen and any applicable band information (color or number sequence). You can also call a biologist at 580-571-5820 or 405-990-7259.

The online report form, found at wildlifedepartment.com, collects the date and specific location of the sighting, as well as the number of birds seen and any applicable band information (color or number sequence). Offline reports can be made to Fullerton at (580) 571-5820 or Mark Howery, Wildlife Diversity biologist for the Wildlife Department, at (405) 990-7259.

Tennessee:

2018-2019 Sandhill season

This will be the second year for the statewide TN Sandhill Crane hunting season, beginning December 1 and continuing through January 27, 2019. Hunting in the southeast crane zone has a split season. The first segment is December 1 – January 17, 2019. The second is January 21-27. Daily hours of hunting are a half-hour before sunrise until 3:00 p.m. EST, 2:00 p.m. CST.

A computer draw was held for statewide crane hunting tags, and a hand-draw was conducted by the TWRA in the southeast zone. Hunters in the statewide drawing were issued two tags each, while those in the southeast zone received three tags. Hunters who received a white tag (1) can hunt cranes anywhere in the state open to hunting, while those issued yellow tags (3) must stay within the designated southeast zone.

For reporting taken cranes, previous requirements called for the check-in portion of the tag to be mailed to the TWRA within 24 hours. This year TWRA requests check-in be made online similar to the process of checking big game online or on the TWRA App.

As the eastern population of Greater Sandhill Cranes has increased, the U.S Fish and Wildlife Service has granted TWRA wider latitude to provide hunting tags. However, the agency is closely monitoring the crane season, and requires hunters to know how to differentiate Sandhill Cranes from the rare and protected Whooping Cranes.

Requirements include:

- Passing a Sandhill Crane Identification Test, available on TWRA's website at www.tnwildlife.org
 - A validation code that the test has been completed must be recorded on all tags;
 - Completing a post-hunt survey within 10 days of the season closure. Those issued statewide tags should complete the survey online or on the TWRA App.
-

Texas:

Exhibit of rare, endangered, common and extinct taxidermy birds is now on display at the Welder Wildlife Foundation

The [Rob and Bessie Welder Wildlife Refuge](http://www.welderwildlife.org) is a private, nonprofit organization created in 1954 to promote research and education in the fields of wildlife science, conservation and range management. The 7,800-acre ranch on the Aransas River annually hosts about 6,000 students, researchers, and curious visitors.

In the early 1990's, Donald Eugene Bowman, a retired research chemist made several trips to the refuge while Lynn Drawe was assistant director. At that time, he mentioned his taxidermy collection to staffers once or twice but then, in 2003, Bowman brought one of his birds to show Drawe indicating that the Smithsonian Museum was interested in the collection. Drawe was so impressed he made a pitch to the Welder trustees that they accept the collection before the Smithsonian took it. That same year, Bowman,

regarded by many as one of the top 10 bird taxidermists in North America, donated more than 300 of his birds to the Welder Wildlife Foundation in Stinton, Texas.

The [Donald E. Bowman bird collection](#) is housed in the newly remodeled Natural History Museum at the Welder Wildlife Refuge. Considered one of the premier bird collections in the world, it contains 405 specimens, many native to south Texas, posed in natural positions, representing 170 species from 25 bird families and 92 genera. It also contains specimens of two extinct bird species – the Passenger Pigeon (*Ectopistes migratorius*) and Heath Hen (*Tympanuchus cupido cupido*), considered a race of the Greater Prairie-chicken. [Terry Chase at Chase Studio](#), specializing in natural history exhibits, and master American wildlife artist [Francis Lee Jaques](#), created murals and 3-D glass compositions that place the birds in a natural context.

To see some photos of the exhibit, and to read more, go here:

<https://www.caller.com/story/sports/outdoors/2018/11/19/biggest-taxidermy-bird-exhibit-opens-south-texas/1593454002/>

Report WHCR sightings in Texas

Wade Harrell, U.S. Whooping Crane Recovery Coordinator, asks people to report Whooping Crane sightings on the [Texas Whooper Watch](#) Project page on [iNaturalist.org](#). Please provide a count, an estimate of how far away you stood from the crane, the habitat you observed it in, any hazards that were present and its behavior and condition. Creating an account on [ebird.org](#) is also a good way to do this. While photos are encouraged, people should not get closer than 1,000 feet. Remember, if the bird changes its behavior in any way due to your presence, you are too close!

TX Whooper Watch Project

https://tpwd.texas.gov/huntwild/wild/wildlife_diversity/texas_nature_trackers/whooper-watch/report.phtml/
For questions specific to this project, please email: whoopingcranes@tpwd.texas.gov

Habitat Matters!

Indiana:

Prairie Border Nature Preserve hopes to “reset the clock” in Kankakee Marsh

A walk along the mile-long interpretive trail’s flat to lightly undulating turf gives the visitor a good sampling of the seasonal wetlands and oak savannahs found at the [Prairie Border Nature Preserve](#) in northwest Indiana. This and nine other preserves in the area are owned and overseen by The Nature Conservancy (TNC). The Prairie Border Nature Preserve restoration by TNC is the culmination of years devoted to restoring key habitats that surround Jasper-Pulaski Fish and Wildlife Area – an area where Sandhill Cranes stage in the tens of thousands during migration.

Over three hundred years ago, the “Grand Marsh of the Kankakee,” included the meandering Kankakee River and freshwater wetlands, covering nearly one-million acres in northwestern Indiana. The restored land the Prairie Border Nature Preserve now occupies was originally a landscape of sandy rises that created islands of prairie grasses and scattered oaks, surrounded by a sea of prairie and marshes.

When The Nature Conservancy started restoration work in 2014, the area was all farmland. Contractors removed the upper level of soil on 4-acres where there had been crops and used it to fill most of a drainage ditch that had kept the land dry. Due to the fact that the area had once been a marsh the water

table was already high, so the land quickly converted back. Thanks to the hard work by the TNC, the 40-acres of grasslands now host 150 native plant species.

Original oak savannah is a mix of predominantly oaks that are spread far enough apart to allow native grasses to grow. In the past the area had been logged and used as cattle pasture. During restoration work, invasive species were removed, and cherry and sassafras trees were cut back to allow the oaks to dominate, as they once did in this habitat.

Four interpretive signs along the trail give the visitor extensive information about what can be seen on the 240-acre preserve. All of the restoration work was made possible with “mitigation” dollars from Northern Indiana Public Service Company (NIPSCO) to offset habitat that the utility company had to disturb elsewhere.

For a PDF about the history of the Prairie Border Nature Preserve land to accompany the one-mile interpretive trail, go here:

<https://bloximages.newyork1.vip.townnews.com/southbendtribune.com/content/tncms/assets/v3/editorial/5/02/502c20a0-8517-5110-b941-fd302ee55bb7/5bec132f82c32.pdf.pdf>

Kansas:

Celebration of Cranes highlights Quivira NWR

At the end of October, [Audubon of Kansas](#) (AOK) reported that nearly two dozen of the wild population of Whooping Cranes were spotted at Quivira National Wildlife Refuge. On November 3, Audubon sponsored guided tours during the “Celebration of Cranes” at the Refuge. The goal of the tours was to highlight the importance of the 22,135-acre [Quivira National Wildlife Refuge](#) for Whooping Cranes, Sandhill Cranes and hundreds of thousands of other migratory birds throughout the year, as well as introducing the public to the incredible wildlife viewing opportunities there at Quivira.

The wetlands and shallow waters of the refuge provide the most important spring and fall migratory stopover habitat for federally endangered Whooping Cranes. They stop at the refuge to forage and rest during the 2,500-mile migration between their nesting territory at Wood Buffalo National Park in northern Canada’s Northwest Territory and their wintering habitat at Aransas National Wildlife Refuge along the Texas Gulf Coast.

Montana:

West Valley bird viewing area now open

Flathead Land Trust recently completed conservation easements with the Grosswiler and Marvin families to conserve almost 400-acres of a critical area of pothole wetlands – part of the only known staging area for Sandhill Cranes in the Flathead Valley. Under the conservation easements, the land will remain in private ownership and continue to be farmed and managed by the landowner while protecting the valuable bird and wildlife habitat in perpetuity. The families have been farming in the West Valley for over 100 years and the conservation project will preserve their agricultural legacy.

Conservation easements do not always allow public access; however, the Grosswiler and Marvin families have allowed for a quarter acre of the conserved land to be used as a public bird and wildlife viewing area. Thanks to over 80 partners and contributors from the community, the public viewing area overlooking the unique pothole wetland habitat opened this fall.

Texas:

Powderhorn Ranch becomes wildlife management area

More than 15,000 acres of the Powderhorn Ranch along the Texas coast in Calhoun County, prime unspoiled coastal prairie, is now a state wildlife management area. The just-completed transfer of the property to the department is the culmination of a multi-year, \$37.7 million land acquisition deal.

Although public access to the property will be limited as operations and infrastructure gear up, the area is anticipating offering opportunities for low-impact activities like guided group birding tours as early as spring 2019.

Safeguarding this natural treasure has been contemplated for more than 30 years by several conservation organizations and wildlife agencies, including The Conservation Fund, The Nature Conservancy, the National Fish and Wildlife Foundation and the Texas Parks and Wildlife Department. These organizations played a critical role in the acquisition and long-term conservation of the property. The Texas Parks and Wildlife Foundation spearheaded the fundraising for the \$50 million project, which includes the purchase of the property, habitat restoration and management, as well as a long-term endowment. A significant portion of the funding for the project has been provided by the National Fish and Wildlife Foundation's Gulf Environmental Benefit Fund, which was created with dollars paid by BP and Transocean in the wake of the Deepwater Horizon oil spill. The National Fish and Wildlife Foundation has provided \$34.5 million for the project, making this the biggest land acquisition in the nation so far using BP spill restoration dollars.

"Our primary management objectives right now focus on the restoration of native grassland and savannah, and for improving existing hydrology to enhance freshwater wetlands habitat for wildlife, particularly Whooping Cranes that have expanded onto the property," said Dan Walker, area manager at Powderhorn WMA. "We've already made progress toward returning the land to grassland prairie, clearing dense brush on about 4,000 acres. This restoration effort will be very valuable for research and as a demonstration area for landowners in coastal counties from Matagorda to Willacy."

The Texas Parks and Wildlife Foundation has now completed several of the goals it set out as part of this collaboration with multiple conservation partners, including completing initial work to restore thousands of acres of native coastal prairie, raising an endowment for continued habitat management and placing a conservation easement on the property.

ENVIRONMENTAL impact issues:

Current administration poses major threat to birds in allowing 'incidental' killings

On the campaign trail in 2016, the president-elect pondered the enormous mortality of birds. *"The wind kills all your birds," he said at a rally. "All your birds, killed. You know, the environmentalists never talk about that."* While in reality, wind turbines kill an average of 234,000 birds a year – a mere fraction of the overall 709 million birds killed each year by industrial activity in the United States.

Being a bird today in the United States is tough. Billions die each year, whether killed by outdoor cats; collisions with electrical lines; communication towers; vehicles, skyscraper windows, collisions with wind turbines; electrocutions, poisonings, oil, tar and brine pits; evaporation ponds; tanks and tubs; heater-treaters, trays, and other open-top containers; open pipes, vents and exhaust stacks; oil spills, and entanglement in fishing nets, baited hooks and gear.

Add to that the new challenges posed by [climate change](#). Seasons are shifting resulting in food not being available at the time migrants need it most. As shown in the [National Audubon Birds and Climate Change Report, “314 Species on the Brink: Shrinking and shifting ranges could imperil nearly half of U.S. birds within this century,”](#) nearly half of U.S. bird species are at risk of extinction this century, from climate change alone.

Bird conservationists are now alarmed by a fresh threat – the Trump administration. In a striking new stance on a longstanding law protecting migrating birds, the federal government will essentially allow the “incidental” killing of birds via buildings, energy production and other developments that act as avian death traps.

Until now, The Bird Migratory Treaty Act has prevented the intentional killing of these species while also requiring that industries ensure they take reasonable steps to prevent foreseeable, unintended harm. For example, industries covered oil pits that birds mistake for water, restricted the use of some poisons or made electrical lines and wind turbines more visible to creatures on the wing.

In yet another bad turn of events for birds and the environment, the Interior Department just removed bans on using lead ammunition and fishing tackle in wildlife refuges. Biologists and rehab centers are reporting alarming increases in the number of lead-poisoned birds of prey they are finding/treating – including both the Bald and Golden Eagles. After nearly being wiped out in the 1960s due to the use of the pesticide DDT, conservation success stories are in danger of backsliding.

“The new opinion is that birds are no longer of consequence,” said Steve Holmer, vice-president of policy at the [American Bird Conservancy](#). “It’s a carte blanche situation.” Even in an administration that has sought to loosen any restrictions on oil, gas and the coal industry, the decision stands out. O’Neill said: “It is beyond anyone why the administration would want to make it easier to remove these protections and kill birds.”

The National Audubon Society, along with the attorneys general of eight states, recently launched a [legal attempt](#) to halt the Trump administration from reinterpreting the [Migratory Bird Treaty Act](#), a 100-year-old law that safeguards about 1,000 migrating species. Nearly one-in-10 of these species are federally listed as threatened.

Learn more about what is at stake if The Bird Migratory Treaty Act is weakened or eliminated, go here: <https://www.fws.gov/birds/policies-and-regulations/laws-legislations/migratory-bird-treaty-act.php>

For more information see USFWS – *Threats to Birds / Migratory Bird Mortality: Questions and answers*, here: <https://www.fws.gov/birds/bird-enthusiasts/threats-to-birds.php>

Alabama:

Agricultural pesticide use on Wheeler Wildlife Refuge complex conflicts with Refuge mission

In the report – [No Refuge](#) – published May 2018 by the [Center for Biological Diversity](#), it was revealed that almost half a million pounds of pesticides – many of which are known to be particularly harmful to endangered species and migrating birds – were dumped on national wildlife refuges in 2016 alone. They included deadly herbicides like Monsanto’s [dicamba](#), [glyphosate](#) and Dow Chemical’s [2,4-D](#). Based on a comprehensive review of public records, the report explains how these chemicals are used mostly by private farmers to grow conventional row crops like corn, soybeans and sorghum on refuge land.

In an effort to spur the Fish and Wildlife Service to end harmful agricultural pesticide use on refuge lands, the Center for Biological Diversity and allies filed a petition in September 2018 that asked the agency to address pesticide use on the Wheeler National Wildlife Refuge Complex in Alabama. Wheeler was established to protect endangered species like the Alabama Cavefish and migrating birds like the federally endangered Whooping Crane.

The Wheeler National Wildlife Refuge Complex comprises seven refuges spread over 38,000 acres in northern Alabama. Two of these refuges, the [Key Cave](#) and [Wheeler National Wildlife Refuges](#), allow the cooperative farming of over 3,000 acres of refuge lands. Corresponding with that use, in 2016 a combined 58 gallons and 7 pounds of pesticides were applied to approximately 1,090 acres of agricultural crops on those refuges.

Due to its ecological significance for globally threatened bird species, Wheeler NWR is considered a [category A1 Important Bird Area](#) by [BirdLife International](#) and the [National Audubon Society](#). Wheeler also maintains eight sites on the [North Alabama Birding Trail](#).

The following information is included in the joint petition to the USFWS.

In total, Wheeler NWR is believed to support more than 285 bird species, including an estimated 20,000 Sandhill Cranes, as well as a wide variety of mammals, reptiles, amphibians, fish, mussels, snails, and plants. Federally protected non-bird species that have been documented on or in close proximity to Wheeler NWR, and that may be adversely affected by exposure to agricultural pesticides, include: the endangered Gray Bat, the endangered Anthony's Riversnail, the endangered Armored Snail, the endangered Pink Mucket, the endangered Rough Pigtoe, and the endangered Slender Campeloma.

"In addition, approximately one third of the eastern experimental population of [federally endangered] Whooping Cranes winter on the Wheeler NWR and, as a result, the refuge serves as "an increasingly important part of the recovery of this endangered species. ... The refuge is also considered an important release site for Whooping Cranes, with the large agricultural fields available on the refuge – the same fields where agricultural pesticides harmful to cranes are or may be sprayed under the Wheeler Farming CD – making this location "very attractive for releasing Whooping Cranes."

"...Conservation Groups are concerned that the cooperative farming program on the Wheeler Complex does not support the objectives of Refuge System and the purposes of the refuges on which the program is approved because it continues, without meaningful analysis or stipulation, to authorize the use of non-essential agricultural pesticides known to be extremely harmful to the plants and animals that these refuges were created to protect.

"... Specifically, the Wheeler National Wildlife Refuge (Wheeler NWR), a refuge in the complex, was created by Franklin D. Roosevelt in 1938 "as a refuge and breeding ground for migratory birds and other wildlife," and as an "inviolable sanctuary" for migratory birds. ... Each of these refuges was created to support the mission of the Refuge System, which is "to administer a national network of lands and waters for the conservation, management, and where appropriate, restoration of the fish, wildlife, and plant resources and their habitats within the United States."

"No Refuge: How America's national wildlife refuges are needlessly sprayed with nearly half a million pounds of pesticides each year" by Hannah Conner, Center for Biological Diversity, May 2018
https://www.biologicaldiversity.org/campaigns/pesticides_reduction/pdfs/No-Refuge.pdf

To read the September 2018 joint Petition (Center for Biological Diversity, Tennessee Riverkeeper and Center for Food Safety) to Re-open the comment period or, in the alternative, for reconsideration of the service's "compatibility determination for cooperative farming" for the Wheeler National Wildlife Refuge Complex, go here:
https://www.biologicaldiversity.org/news/press_releases/2018/wheeler-national-wildlife-refuge-09-06-2018.php

To read more from the Center for Biological Diversity, "Getting Agricultural Pesticides Out of Our Wildlife Refuges," go here:
<https://www.biologicaldiversity.org/publications/earth/newsletter-fall-2018.pdf>

To read more at National Audubon Society, Important Bird Areas, Wheeler National Wildlife Refuge, Alabama, go here: <https://www.audubon.org/important-bird-areas/wheeler-national-wildlife-refuge>

Kansas:

Whoopers find ally in Kansas utility companies

The Kansas Electric Utility Whooping Crane Conservation Plan and associated Advisory Group was formed in 2013 in response to line-marking guidance released by the U.S. Fish and Wildlife Service in 2010. Members of the Advisory Group include the Kansas Electric Power Cooperative; Kansas Biological Survey; Midwest Energy; Westar Energy; Kansas Department of Wildlife, Parks and Tourism; Kansas Ornithological Society; The Nature Conservancy; Sunflower Electric Power Corp.; and the U.S Fish and Wildlife Service (advisory).

The focus of the group's work is to reduce the threat of cranes colliding with powerlines in Kansas, especially around the Quivira National Wildlife Refuge and Cheyenne Bottoms. Both of which are important stopover areas between the wintering and breeding grounds of the wild population of endangered Whooping Cranes. The refuges provide needed habitat for the cranes to roost and feed before continuing their 2,500-mile journey.

All powerlines within 5 miles of Cheyenne Bottoms and Quivira were assessed for marking based on the surrounding landscape and documented habitat selection criteria often used by Whooping Cranes. Using guidelines developed by the [Avian Power Line Interaction Committee](#), various marker designs have been utilized. While installation of most markers can be done by hand, some require the use of helicopters for transmission lines that are not accessible from the ground due to height and safety reasons.

"Since 2015, 160 miles of 'high-priority' lines designated at Cheyenne Bottoms and Quivira have been marked," said Eric Johnson, Biology Coordinator for Westar Energy. "By the end of 2019 all 113 miles of high-priority lines at Cheyenne Bottoms will be completed and 90 miles out of 130 will be marked at Quivira."

In addition to this, an American Bird Conservancy and International Crane Foundation Whooping Crane [mapping study](#) provided additional data, analyzing the distribution of wind turbines and associated powerlines and towers near stopover sites in the crane's migratory corridor. These intersections with powerlines will be reviewed by the companies for inclusion in line-marking efforts in the future as cranes may be most at risk from collisions or electrocutions during ascent and descent.

To read the American Bird Conservancy's press release, and view the Powerline Priority Marking Areas maps for both Cheyenne Bottoms and Quivira, go here:

<https://abcbirds.org/article/cranes-find-ally-in-power-companies/>

To read the joint report by the International Crane Foundation and the American Bird Conservancy, go here: [Whooping Crane Migration Stopover Habitat Assessment Tool for Wind Energy and Power Line Development](#)

Science News:

Editor: *Looking for that perfect gift for the serious "Craniac" on your holiday gift list? Just in time, hot off the press – (you will not be disappointed!):*

Whooping Cranes: Biology and Conservation, 1st edition

Series Editors: Philip Nyhus

Series Volume Editors: John French Sarah Converse Jane Austin

"Whooping Cranes: Biology and Conservation covers one of the most endangered birds in North America, and the subject of intense research and highly visible conservation activity. The volume summarizes

current biological information on Whooping Cranes and provides the basis for future research necessary for conservation of this species.

“This edited volume concentrates on work completed in the past 20 years in the areas of population biology, behavior and social structure, habitat use, disease and health, captive breeding, and Whooping Crane conservation. Much of the information presented comes from the study and management of remnant and reintroduced populations of Whooping Cranes in the field; some information is from experimentation and breeding of captive Whooping Cranes.”

Available in both eBook and hardcover formats, the targeted audience is:

“Professionals who work on cranes, including researchers in the fields of small population biology, endangered species, conservation, genetic management, avian breeding biology, wildlife veterinarians, captive breeding, habitat management, those involved in husbandry; administrators of management agencies or NGOs; conservationists in other fields; teachers of Conservation Biology or Ornithology and their students; and scholars, practitioners, decision-makers, students, and individuals interested in understanding the complex challenges and opportunities to conserving and restoring the world’s biological diversity.”

To order your book, go here:

<https://www.elsevier.com/books/whooping-cranes-biology-and-conservation/nyhus/978-0-12-803555-9>

Survey of Gross and Histopathologic Findings in Two Wintering Subpopulations of Sandhill Cranes (*Antigone Canadensis*)

[Martha Hensel](#), [Miranda Bertram](#), Raquel Rech, [Gabriel L. Hamer](#) and [Sarah A. Hamer](#)

Journal of Wildlife Diseases 54(1):156-160. 2018

<https://doi.org/10.7589/2017-02-036>

Abstract: Sandhill Cranes (*Antigone canadensis*) of the midcontinent population (MCP) and Rocky Mountain population (RMP) are migratory game birds with stable populations that travel between Canada and the southern US and Mexico. In the winters of 2012-14, we performed gross and histologic examinations of 43 hunter-harvested Sandhill Cranes in Texas (MCP) and New Mexico (RMP) to assess the impact of disease on populations. Lesions were significantly more common in the MCP relative to the RMP, likely reflecting differential environmental exposure to pathogens and parasites. Grossly, liver nodules and esophageal granulomas were present in 8-39% of birds. In feces from over half of birds, we found coccidian oocysts with mitochondrial gene sequences identical to those of *Eimeria gruis* and *Eimeria reichenowi* previously obtained from sympatric Whooping Cranes (*Grus americana*). Over one-quarter of birds had liver and cardiac lesions suggestive of disseminated visceral coccidiosis. We documented proliferative colitis due to *Cryptosporidium* in a wild Sandhill Crane. Additionally, several endoparasites were found in histologic sections from several cranes, including a bird with respiratory trematodiasis and two birds with *Tetrameres* sp. in the proventriculus associated with ductal ectasia. In addition to describing lesions and parasites that impact Sandhill Crane health, these pathology data may also be relevant for the conservation of endangered Whooping Cranes using a surrogate species approach.

Investigating Whooping Crane Habitat in Relation to Hydrology, Channel Morphology and a Water-Centric Management Strategy on the Central Platte River, Nebraska

[Jason M. Farnsworth](#), [David M. Baasch](#), [Patrick D. Farrell](#), [Chadwin B. Smith](#), [Kevin L. Werbylo](#)

Heliyon 4 (2018) e00851. doi: 10.1016/j.heliyon.2018. e00851

Abstract: The Flow-Sediment-Mechanical approach is one of two management strategies presented in the Platte River Recovery Implementation Program's (Program) Adaptive Management Plan to create and maintain suitable riverine habitat (≥ 200 m wide unobstructed channels) for whooping cranes (*Grus americana*). The Program's Flow-Sediment-Mechanical management strategy consists of sediment

augmentation, mechanical vegetation clearing and channel widening, channel consolidation, and short duration high flow releases of 142–227 m³/s for three to five days in two out of three years in order to increase the unvegetated width of the main channel and, by extension, create and maintain suitable habitat for whooping crane use. We examined the influence of a range of hydrologic and physical metrics on total unvegetated channel width (TUCW) and maximum unobstructed channel width (MUOCW) during the period of 2007–2015 and applied those findings to assess the performance of the Flow-Sediment-Mechanical management strategy for creating and maintaining whooping crane roosting habitat. Our investigation highlights uncertainties that are introduced when exploring the relationship between physical process drivers and species habitat metrics. We identified a strong positive relationship between peak flows and TUCW and MUOCW within the Associated Habitat Reach of the central Platte River. However, the peak discharge magnitude and duration needed to create highly favorable whooping crane roosting habitat within our study area are much greater than short duration high flow releases, as currently envisioned. We also found disking in combination with herbicide application to vegetated portions of the channel are effective for creating and maintaining highly favorable unobstructed channel widths for whooping cranes in all but the very driest years. As such, resource managers could prioritize the treatment of mid channel-islands that are vegetated to increase the suitability of roosting habitat for whooping cranes.

For a full text, downloadable pdf of the paper, go here:

<https://www.heliyon.com/article/e00851/pdf>

A Simulation Model for the Management of Sandhill Cranes

Miller, Richard S.; Hochbaum, George S.; and Botkin, Daniel B., "A Simulation Model for the Management of Sandhill Cranes" (1972). Yale School of Forestry & Environmental Studies Bulletin Series. 51.

https://elischolar.library.yale.edu/yale_fes_bulletin/51

https://elischolar.library.yale.edu/cgi/viewcontent.cgi?article=1067&context=yale_fes_bulletin

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Differential changes in the onset of spring across US National Wildlife Refuges and North American migratory bird flyways

Eric K. Waller^{1*}, Theresa M. Crimmins^{2,3}, Jessica J. Walker⁴, Erin E. Posthumus^{2,3}, Jake F. Weltzin^{2,5}

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PLoS ONE 13(9): e0202495. <https://doi.org/10.1371/journal.pone.0202495> September 12, 2018

Abstract

Warming temperatures associated with climate change can have indirect effects on migratory birds that rely on seasonally available food resources and habitats that vary across spatial and temporal scales. We used two heat-based indices of spring onset, the First Leaf Index (FLI) and the First Bloom Index (FBI), as proxies of habitat change for the period 1901 to 2012 at three spatial scales: the US National Wildlife Refuge System; the four major bird migratory flyways in North America; and the seasonal ranges (i.e., breeding and non-breeding grounds) of two migratory bird species, Blue-winged Warbler (*Vermivora cyanoptera*) and Whooping Crane (*Grus americana*). Our results show that relative to the historical range

of variability, the onset of spring is now earlier in 76% of all wildlife refuges and extremely early (i.e., exceeding 95% of historical conditions) in 49% of refuges. In all flyways but the Pacific, the rate of spring advance is generally greater at higher latitudes than at lower latitudes. This differential rate of advance in spring onset is most pronounced in the Atlantic flyway, presumably because of a “warming hole” in the southeastern US. Both FLI and FBI have advanced markedly in the breeding ranges – but not the non-breeding ranges – of the two selected bird species, albeit with considerable intra-range variation. Differences among species in terms of migratory patterns and the location and extent of seasonal habitats, as well as shifts in habitat conditions over time, may complicate predictions of the vulnerability of migratory birds to climate change effects. This study provides insight into how differential shifts in the phenology of disparate but linked habitats could inform local- to land- scape-scale management strategies for the conservation of migratory bird populations.

In Memoriam:

Remembering Jim Harris – Champion for the conservation of cranes and wetlands

“The haunting calls of the world’s cranes are sadder today because they have lost a devoted friend, and the conservation community has lost a true hero.” – Kenneth Strom, National Audubon Society

“On September 19, 2018, we lost a dear friend and champion for the conservation of cranes and wetlands... Jim’s passionate commitment to safeguarding cranes and the places they live, his overwhelming enthusiasm and eloquent words that inspired people, his courage and perseverance in most difficult circumstances, and his genuine interest in and care for those around him, were admired and will always be remembered.”

From 1984, when Jim Harris first joined the [International Crane Foundation \(ICF\)](#) as the Director of Public Education, until his retirement in early 2018, Harris worked tirelessly to bring together diverse groups around the world to find solutions for providing water for wetlands and cranes, all the while never losing sight of, or consideration of the needs of local communities. Without a doubt, his efforts helped shape the course of crane and wetland conservation.

Read Jim Harris’s obituary here:

https://www.iucn.org/sites/dev/files/content/documents/2018/james_harris_obituary_1950-2018.pdf

The Art of Cranes:

Alabama:

Shadows live in “Night After Night O’ Moon”

Inspired by time spent at Wheeler NWR and in Japan, Birmingham artist, [Douglas Pierre Baulos](#) has incorporated crane “shadow puppets”, created by Decatur High students and cut from handmade paper, in his “Night After Night O’ Moon” interactive, ecological installation at the Carnegie Visual Arts Center in Decatur.

Laying the flower stencil on paper made from dried north Alabama hosta and iris fibers, artist Doug Baulos adorned the wing of a shadow puppet crane with a 300-year-old Japanese pattern by punching holes in the paper. “The light will shine through the holes and it will look kind of like constellations in the sky,” Baulos said.

The mixed media installation exhibit opened November 27 and will remain up to coincide with the annual [Festival of the Cranes](#), a two-day celebration of the Whooping and Sandhill Cranes, at Wheeler National Wildlife Refuge. The festival is scheduled for January 12-13, 2019.

Go here to see photos of the shadow cranes and the student artists involved:

https://www.decatordaily.com/life/entertainment/in-the-shadows-birmingham-artist-works-with-students-to-create/article_2ff2f619-769a-5c1a-be2b-36c286be4593.html

Illinois:

Poetry of Whooping Crane dance

The following poem by Brian "Fox" Ellis and animated by Vin Luong celebrates the dance and migration of Whooping Cranes. This animation is part of a larger documentary about the Illinois River, Voices for the River.

<https://www.youtube.com/watch?v=JPWe05X8S1A>

To meet John James Audubon, one of numerous historical characters that come to life through Brian "Fox" Ellis's superb storytelling, go here:

<http://foxtalesint.com/index.php/20-programs/history-in-person/118-adventures-with-audubon>

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Georgia:

"Journey of the Whooping Crane"

"Journey of the Whooping Crane" is a one-hour natural history documentary by Red Sky Productions in production for Georgia Public Broadcasting to illustrate the remarkable life story of Whooping Cranes and those involved with the conservation efforts of the species. Viewers not only have the opportunity to see inside Wood Buffalo National Park in the Northwest Territories of Canada – the sole breeding ground of the last wild flock – but will follow along as Whooping cranes are tracked on their phenomenal 2,500-mile migration south to their fragile wintering area in Aransas National Wildlife Refuge on the gulf coast of Texas. The documentary includes interviews with scientists who have dedicated their lives to cranes, including Dr. George Archibald, co-founder of the International Crane Foundation.

"Journey of the Whooping Crane," a documentary by Red Sky Productions aired December 5, 2018 at 8:00PM on Georgia Public Broadcasting.

To learn more about it, go here: <http://whooping-crane.org>

Watch an introductory short video here: <https://youtu.be/uG9KoZABefU>

Digital download will be available mid to late December 2018.

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Recent and Upcoming Events:

San Joaquin County Sandhill Crane afternoon tours offered

Dates: October 6, 2018 - February 2019

Location: [Woodbridge Ecological Reserve \(a.k.a. Isenberg Crane Reserve\)](#)

Sacramento-San Joaquin Delta, just west of Lodi in San Joaquin County, CA

Note: *It is required that you must pre-register for your tour as tour size is limited to 30 people and there are no accommodations for drop-ins at the tour site.*

The California Department of Fish and Wildlife (CDFW) is now accepting online reservations for docent-led tours of Sandhill Cranes and their wetland habitat. "We are very pleased to offer public tours at the reserve and to showcase the benefits of the restored wetlands," said CDFW Bay Delta Region Manager Gregg Erickson. "These natural resources belong to everyone. All of us have a part in taking care of them as well as enjoying them."

For more information and to register for a tour, go here: <https://www.wildlife.ca.gov/regions/3/crane-tour>
Or here:

<https://cdfgnews.wordpress.com/2018/09/07/registration-now-open-for-fall-sandhill-crane-tours-in-san-joaquin-county/>

Aransas National Wildlife Refuge celebration / Aransas NWR

Date: October 13, 2018

9:00am – 3:00pm

Location: [Aransas National Wildlife Refuge](#)

1 Wildlife Circle, Austwell, Texas 77950

Included during the festival is archery and BB gun target shooting, a kids' fishing tank, casting practice, fly-fishing demonstrations, kayaking, face painting, kids' crafts, nature journaling, live animals from the refuge and local bays. Kids can even try their hand at putting out "fire" with the refuge fire crew. Aransas NWR partnered with [Texas Parks and Wildlife](#) (Coastal Fisheries and [Goose Island State Park](#)), [Texas Master Naturalists](#), [International Crane Foundation](#), Coastal Bend Bays and Estuaries, Rockport Kayak, and the Friends of Aransas NWR.

Learn more about the [Refuge Day Celebration](#) here, or by calling (361) 349-1181.

Celebration of Cranes / Quivira NWR

November 3, 2018

Quivira National Wildlife Refuge, Stafford County, Kansas

Saturday's tours begin at 8:00 a.m., from the Quivira Headquarters/Visitors Center.

Visitors are requested to RSVP at aok@audubonofkansas.org, so enough tour vans can be available.

All is free.

Audubon of Kansas is sponsoring the event and invites anyone interested to view and learn about cranes with the help of expert guides.

2018 Crane Fest / Mississippi Sandhill Crane NWR

Date: December 8, 2018

9:00 a.m. - 3:00 p.m.

Location: Mississippi Sandhill Crane National Wildlife Refuge Visitor Center and Headquarters

7200 Crane Lane, Gautier, Mississippi

(1/2 mile north of exit 61 on Interstate 10)

Celebrating 43 years of conservation, visitors are invited to join refuge staff in special activities to learn more about how we manage the refuge for the Mississippi Sandhill Crane as well as numerous other species that make their home in the pine savanna habitat found on the refuge. Some of the festival

highlight presentations will include the hawks, owls, and falcons of the Environmental Studies Center; the creepy, crawling insects of the Audubon Institute's BugMobile, and special demonstrations of traditional Choctaw dance and music. The festival is free and open to the public.

[Click to download the Schedule of Presentations, Booths and Activities!](#) (.pdf)

For more information call 228-497-6322 ext. 101

Or visit: www.fws.gov/refuge/mississippi_sandhill_crane

Holiday with the Cranes on Galveston Island

Dates: December 8-9, 2018

Location: Galveston Island, TX

Holiday with the Cranes is presented by the Galveston Island Nature Tourism Council, a nonprofit volunteer organization that helps connect people with nature experiences and outdoor adventures and promotes the value of natural habitats and resources in the Galveston Island area.

For more festival information including the festival itinerary, and to register for fieldtrips please go here:

<http://www.galvestonnaturetourism.org/holiday-with-the-cranes-2018/>

Or here: GalvestonNatureTourism.org

Sandhill Crane Kayak Tour at Hiwassee Wildlife Refuge

Date: Saturday, December 15, 2018

10:00 a.m. - 3:30 p.m.

Location: Hiwassee Wildlife Refuge, TN

"Outdoor Chattanooga" will lead a guided and equipped kayak tour at the Hiwassee Wildlife Refuge to view the migrating Sandhill Cranes. The Hiwassee Refuge is located at the confluence of the Tennessee and Hiwassee Rivers, about one hour north of Chattanooga. The area attracts a variety of birds and during the winter, as many as 15,000 to 20,000 cranes have been known to overwinter on Hiwassee Island. This site has the largest winter flock of Sandhill Cranes in the southeast United States outside of Florida.

Cost: \$45 per person, which includes guides, equipment, and transportation from Greenway Farm. Registration and payment are required in advance. Currently, this tour is full, with a waitlist, but Outdoor Chattanooga may be contacted about hosting a possible second tour in January 2019. Call 423-643-6888 or email Outdoor Chattanooga to register or learn more."

Festival of the Cranes / Wheeler NWR

Dates: January 12 - January 13, 2019

Saturday 6:30 a.m. - 5:00 p.m.

Sunday 8:00 a.m. - 5:00 p.m.

Location: Wheeler National Wildlife Refuge

3121 Visitors Center Road

Decatur, AL 35603

For a brochure with information of the upcoming festival, go here:

https://www.fws.gov/uploadedFiles/Region_4/NWRS/Zone_3/Wheeler_Complex/Wheeler/Images/Festival_of_Cranes/Festival%20Flyer%202019.pdf

Or, go here:

www.friendsofwheelerrefuge.com and www.fws.gov/wheeler

Over 14,000 Sandhill Cranes, along with a growing number of Whooping Cranes from the eastern migratory population, now spend the winter at Wheeler NWR. Festival attendees are able to view the cranes from an enclosed, heated observation tower.

Some festival events and activities will include:

- A concert by Grammy winner John Paul White on January 11 at the Princess Theatre and the “Celebration of Flight,” a performance combining dance, music and puppets of giant dragonflies and cranes created by Heather Henson, daughter of Jim Henson, on Jan. 12.
- President Theodore Roosevelt (Joe Wiegand) will be joining us both days.
- Professional photographer David Akoubian of Bear Woods Photography
- There will be educational displays, hands on children activities and of course, the Cranes!
- Auburn University Southeastern Raptor Center's birds of prey presentations will take place at the historic Princess Theater in downtown Decatur. Shuttles will be available.

25th Wings Over Willcox 2019

Dates: January 17, 2019 - January 20, 2019

Location: Willcox, Arizona

The “Wings Over Willcox” festival is the perfect opportunity to see winter migrants and other wildlife of southeastern Arizona. The festival includes tours for photography, geology, history, botany, agriculture and, of course, thousands of Sandhill Cranes. Free admission. For tour fees and registration, call or register on-line.

For more information and to register, go here: (520) 384-2272, and www.wingsoverwillcox.com; for a PDF of the [2019 Wings Over Willcox event registration form](#).

28th Tennessee Sandhill Crane Festival / Hiwassee Wildlife Refuge

Dates: January 19-20, 2019

8:00 a.m. to 4:00 p.m. daily

Location: Birchwood Community Center and the Hiwassee Wildlife Refuge
Birchwood, Tennessee

Along with the star of the weekend, the Sandhill Crane, many types of waterfowl, Bald Eagles, a possible Golden Eagle, White Pelicans and even Whooping Cranes may be spotted. Free buses run the short distance from the Birchwood Community Center to the Hiwassee Refuge and Cherokee Removal Memorial. Both the memorial and refuge provide great birding opportunities, with views of the Hiwassee. Volunteers with scopes will be at each location to help novice birders or curious visitors.

For more information, go here: <https://www.tn.gov/twra/wildlife/birds/sandhill-crane-festival.html>

Kentucky Nature Watch Weekend

Dates: January 23 - January 27, 2019

Tour options: Sunset: Wednesday, Thursday, Friday, Saturday

Sunrise: Saturday and Sunday

Location: Barren River Lake State Resort Park

1149 State Park Road

Lucas, KY 42156

Limited space available so registration is required.

Registration fee: Adults \$45; Seniors \$40; Children \$30.

Each year thousands of Sandhill Cranes make Barren River Lake a stop on their journey back home. Tours last approximately 3 hours each and include a guided van trip to potential roosting sites and area cornfields where the cranes feed.

For more information, package options, or to register, call (270) 646-2151 or visit parks.ky.gov, or The Facebook Event link: <https://www.facebook.com/events/486326778524825/>

[Editor: The statewide Kentucky Sandhill Crane season ends Sunday, January 27, 2019]

23rd Annual Whooping Crane Festival – 2019 / Port Aransas

Dates: February 21-24, 2019

Location: Port Aransas and Mustang Island, TX

The Whooping Crane Festival celebrates the annual return of the cranes to their wintering habitat at the Aransas National Wildlife Refuge. The Texas Coastal Bend is the only place where you can see the world's last naturally-occurring population of Whooping Cranes.

World renowned crane expert, Dr. George Archibald, Co-Founder of the International Crane Foundation, will be one of the featured speakers, along with representatives from Wood Buffalo National Park, the Aransas National Wildlife Refuge, and more.

For more information and to register, go here: <http://www.whoopingcranefestival.org/>

Or, call 800-45-COAST, or 361-749-5919

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Specializing in Winter Hummingbird banding

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