

THE UNISON CALL

- Newsletter of the North American Crane Working Group -

Vol. 28 No. 1, Spring/Summer 2017

President's Report

The North American Crane Working Group is a small but productive organization dedicated to conservation of cranes and their habitats. Our major functions are to sponsor a Workshop every three years and publish the Proceedings to serve as a major source of current research results and technical information on cranes and their habitats. We also produce this newsletter, of which our editor Daryl Henderson continues to do an excellent job, to keep our membership and the general public informed on current projects, issues, and status of populations. The NACWG also addresses specific crane conservation issues, and we hope to use our expertise to expand our role in this area.

Within the past year we have completed publication of Proceedings of Workshop 13 and in January held Workshop 14 in Chattanooga. At our business meeting at that Workshop, we voted to increase membership of our Board of Directors to 11 and are happy to have been joined by new Board members George Archibald, Megan Brown, Paige Smith, and Hillary Thompson to complement the 7 continuing Board members. We also took nominations for the site of the next Workshop to be held in 2020. Although preference for a western site was expressed, the decision has not yet been made and

NACWG welcomes further proposals from nominees as well as additional nominations. Although NACWG is in good financial shape, expenses of hosting Workshop 14 plus publishing Proceedings of Workshop 13 exceeded income by \$2,300. NACWG is a small organization and cannot absorb similar losses in the future. Unlike previous workshops, Workshop 14 had no sponsors; Workshop 15 will require sponsorship and additional assistance with funding.

Next order of business is publication of Proceedings of Workshop 14. To clarify style and formatting requirements that may have caused some confusion in the past, we consolidated Author Guidelines into a single document available on our website at www.nacwg.org/authors.html. We are fortunate this time to not only have an Editor-in-Chief in place at the beginning of this process, but to have two volunteer co-editors on board, Jane Austin and Richard Urbanek. Jane has done a great job taking most of the lead in this initial stage. We currently have received or have firm commitments for 9 research papers and 7 brief communications. To increase the number of papers, we are also extending the deadline for submission of manuscripts from 1 October 2017 to 16 January 2018. We greatly appreciate the authors who submitted their work by

the original deadline; that will greatly facilitate publication of Proceedings 14 in a timely manner, far in advance of the next Workshop.

One of the most significant and urgent issues involving North American cranes is the decision to discontinue the whooping crane propagation program at Patuxent Wildlife Research Center (see page 3). This flock is critical to survival of the species, to protect genetics, and to provide a source of birds for reintroductions. The NACWG Board is currently considering ways to decrease the negative impacts of this move, including encouraging federal funding to assist in placing birds in appropriate facilities and to offer to review capabilities of candidate facilities that would be needed to meet those goals. The NACWG is a member of the Ornithological Council and appreciates coordination and consultation we have had with their Director Ellen Paul in dealing with these types of issues.

NACWG is also trying to find ways to make itself better known. We are not central in the mainstream of current avian biology, not because we shouldn't be, but because we lack visibility. In the 1980s, when NACWG was formed, you could count on almost all of the crane experts in North America to attend, and the Whooping Crane Recovery Team and other organizations such as the Whooping Crane Conservation Association planned their meetings concurrently with the Workshop. Many new crane researchers do not appreciate the unique nature of this conference, and they also prefer to publish in journals with a much wider audience. The Proceedings are a peer-reviewed scientific publication, and all but the most recent issue is readily available online (www.nacwg.org/publications.html). However, the Proceedings are not indexed by any major service and papers do not appear in most literature searches. Many new biologists working on cranes know little about our organization or are not even aware of it. This is not only due to the article indexing problem but also because our website has no unique or organization-specific words in its name and will not appear (at least at the top) of any web search for information on cranes (most of what comes up is a list of websites about heavy construction equipment). NACWG is currently investigating solutions to these problems. As with this and all issues, your Board of Directors always welcomes your input. Feel free to let us know how we are doing and to offer your suggestions for improvements. I can be reached at richardurbanek@gmail.com.

Richard P. Urbanek, New Lisbon, Wisconsin

Announcements

MANUSCRIPT SUBMISSION DEADLINE EXTENDED

The deadline for submission of manuscripts for publication in Proceedings of the North American Workshop 14 has been extended. Please submit draft manuscripts to Co-editor-in-Chiefs Jane Austin (jaustin@usgs.gov) and Richard Urbanek (richardurbanek@gmail.com) by **16 January 2018**. Reviewed manuscripts will be returned to authors for revision within 3 months of receipt of the draft. The revised manuscripts are due to Co-editor-in-Chiefs within 3 months after reviewed manuscripts are received by authors. Publication is anticipated by May 2019. NACWG greatly appreciates authors who made their contributions by the original deadline. Those efforts will greatly increase timely publication.

HAPPY 100TH BIRTHDAY TO DR. RAY C. ERICKSON

Fellow Crane Lovers: Please help me celebrate the centennial of the birth of Ray C. Erickson. Dr. Erickson was born on January 30, 1918. Many of you know that he founded and led the Endangered Species Research Program at the Patuxent Wildlife Research Center. This means that he founded the Whooping Crane and Mississippi Sandhill Crane programs that have done so very much in research and conservation. He is alive and lucid, and would, I am sure, love to hear from you. Send your letters to dcellis@theriver.com (or **3722 E. Defiance St., Oracle, AZ 85623**) so I can assemble a surprise notebook for him in time for his birthday. — **David H. Ellis**

Patuxent Whooping Crane Propagation Program Terminated

After 51 years of operation, and without warning or public discussion, the United States Geological Survey announced in June it was ending its Whooping Crane Propagation Program at Patuxent Wildlife Research Center (PWRC) in Laurel, Maryland.

The closure comes in response to cuts of \$159.6 million to the USGS in the 2018 President's budget, according to the USGS document 'Program Changes'. The budget of the USGS Wildlife Program is being cut by \$10.7 million, which includes \$1.5 million previously allocated to the Whooping Crane program at PWRC.

The document goes on to say, "This eliminates the largest dedicated captive breeding effort for Endangered Species Act-listed cranes and eliminates capacity within the Department of Interior for avian studies that require controlled studies with large, rare birds. The program, while providing valuable contributions to whooping crane recovery, is no longer required to meet species recovery goals." (The underlined statement is not only self-serving, it is fundamentally incorrect. There is no updated recovery plan on which to base that claim, and neither a self-sustaining Whooping Crane Eastern Migratory Population nor a self-sustaining Louisiana non-migratory flock, the two beneficiaries of Patuxent's annual output of Whooping Crane chicks, is assured. — Ed.)

Planning is underway to allocate the Patuxent whoopers to other (non-governmental) facilities either for display, in the case of non-breeding birds, or to continue the propagation program through private funding. Details are sketchy, but contenders for the breeding cranes include the International Crane Foundation, Calgary Zoo's Devonian Wildlife Conservation Centre, White Oak Conservation Center (Yulee, FL), Smithsonian Conservation Biology Institute (Front Royal, VA), and Dallas Zoo. Only the first two locations have experience breeding Whooping Cranes.



Canus (1964-2003) was the first Whooping Crane in the propagation program at Patuxent Wildlife Research Center. Living to just shy of 39 years, he sired many offspring (by artificial insemination) and his genetic legacy lives on to this day. Canus was captured in Wood Buffalo National Park in September 1964 after it was observed he had sustained a wing injury that prevented him from flying (N.S. Novakowski, 'The Day We Rescued a Whooping Crane,' *Audubon Magazine*, July-August 1965, pp. 230-233). After capture he was transferred to Monte Vista National Wildlife Refuge in Colorado, where unfortunately his wing sustained further damage, eventually leading to its amputation despite efforts to save it. Canus was transferred to PWRC in 1966. The photo above, taken in 1966, shows Canus at PWRC recuperating after amputation surgery.

Record Numbers of Whooping Crane Nests and Chicks at Wood Buffalo National Park

A record number of Whooping Crane nests — 98 — was found in Wood Buffalo National Park during the 2017 nesting survey conducted May 18-21, according to Mike Keizer of Parks Canada. This number greatly surpasses the previous record of 82 nests set in 2014 (see table on page 8). The large jump in nests from previous years was a result of two factors: (i) the arrival at breeding age of the large cohort of birds that was produced during the period 2010 to 2013, and (ii) excellent habitat conditions that provided suitable nesting sites for the cranes, with most wetland basins being full of water.

Habitat conditions remained good throughout spring and summer, culminating in a record number of chicks — 63, including four sets of twins — counted in the fledgling survey conducted July 28 to August 1. The previous high of 49 chicks was set in 2006.

Sharon Irwin, a resource management officer with Parks Canada, said that hopes were high during the spring survey when they found 98 nests. "We had high hopes that the conditions would stay good over the summer," said Irwin. "I guess it was probably after day two of the [fledgling] survey — we had really good numbers — that we realized we were going to beat the record."

The nesting survey was carried out by Parks Canada, Environment & Climate Change Canada, and the Government of the Northwest Territories; the fledgling survey by Parks Canada and Environment & Climate Change Canada.

Thanks to Mike Keizer and Brian Johns. Some information on the chick survey, including the quotes from Sharon Irwin, was from a CBC News article published August 16.



Photo from the 2017 fledgling survey showing two parents and their twins (John McKinnon, Parks Canada).

Fall Migration 2017 — Saskatchewan Whooping Crane Encounter

by Kim and Val Mann



- Juvenile foraging (photo © V. Mann)
- Adult stretching wings after preening (photo © K. Mann)
- Family preening time (photo © K. Mann)

On Thursday October 5th, my sister Val and I travelled three hours north from our home in search of Whooping Cranes. The area around Meacham, Saskatchewan usually is our best bet to find the big, white birds.

We found a pair with a juvenile foraging in a slough next to the road. As we watched from inside our vehicle, they picked snails off pieces of submerged grasses, preened, and snoozed. After about fifteen minutes, a grain hauler came by and spooked them into flying. They disappeared over a hill and we continued on our way.

That afternoon, we decided to return to the slough in hopes of photographing crane footprints in the mud. We never expected the birds to be there again. But they were! This time, one adult was asleep, one was preening, and the young colt was trying everything he could to disturb his parents. They were enjoying the afternoon sun.



We stayed in our vehicle and took some more pictures. At one point, the youngster left his parents and foraged on his own. As he hunted, he slowly came toward us. The one parent kept watch but showed no signs of alarm. The juvenile was quite comical — a few times his foot got stuck in the mud and he would get a little freaked until he lifted himself out with a flap of those huge wings. Eventually he turned back and rejoined his parents.

We spent almost half an hour with them until they became restless and slowly walked up the side of the hill. By now we could hear and see what had disturbed them — another grain hauler came into view and off they flew.

Because of the super telephoto lens and image cropping, it looks like we were very close to the cranes; however, we were quite a distance back.

Thanks to Kim and Val for giving us this rare glimpse of a Whooping Crane family early in fall migration, and to Lorne Scott for bringing the Manns' photos to my attention. — Ed.

Hurricane Harvey

No one can forget the grim scenes of devastation and flooding brought by Hurricane Harvey as it wracked the Texas coast during the last week of August 2017.

At least two of our members, Liz Smith and Tom Stehn, had no choice but to evacuate as the Category 4 storm bore down on the Coastal Bend region, where the hurricane first made landfall.

In the coastal town of Rockport, which was hit by some of the strongest winds and badly damaged, the building that was the Texas base of the Whooping Crane Program of the International Crane Foundation was torn apart. In the aftermath, ICF supporters rallied by making donations to rebuild the facility.

Aransas National Wildlife Refuge and its natural environs sustained a direct hit, too, but showed good resiliency in comparison to much of the human-built infrastructure.

According to Liz Smith, the vegetation on the refuge is rebounding: grasses and forbs are covering bare ground, and Wolfberry plants, a dietary staple for wintering Whooping Cranes, are producing abundant fruit. The coastal marshes stayed largely intact. However, storm surge filled the freshwater ponds with saltwater, and low salinities in the bays could affect the abundance of blue crabs (another important crane food) in shallow areas.

Water wells damaged by Harvey and needed by Whooping Cranes during droughts, are being repaired thanks to a \$75,000 grant from the National Wildlife Federation. These wells, both on and off the refuge, replenish freshwater ponds the cranes drink from. Wade Harrell, the U.S. Fish and Wildlife Service's Whooping Crane Recovery Coordinator, and James Dodson, project manager for the San Antonio Bay Partnership, hope to have the repairs completed by the end of November. However, salinity in the freshwater ponds is still a concern. Dodson said most of the wells are shallow and were inundated by Harvey's storm surge.

Crane activity, including pond usage, will be intensely monitored in the months ahead.

The first Whooping Cranes of the season began arriving in early November.

The information above was from various news sources and articles, including 'Recovery', by Liz Smith, ICF Senior Whooping Crane Scientist, which appeared in the ICF newsletter *The Bugle* (November 2017), and 'Wells important to endangered species to be repaired', by Jessica Priest, *The Victoria Advocate* (October 17, 2017).

Conservation and Restoration of Whooping Crane Stopover Habitat

A Joint Project of the *Friends of the Wild Whoopers* and the U.S. Army Corps of Engineers

by Chester McConnell

The U. S. Army Corps of Engineers (USACE) and the Friends of the Wild Whoopers (FOTWW) are cooperating in identifying opportunities to promote the conservation and/or restoration of Whooping Crane stopover habitat, water resources and natural ecosystems both on a project-specific level and on a national level along the migration corridor (U.S. portion) of the Aransas—Wood Buffalo flock of Whooping Cranes. The project is consistent with the Corps' mission and authorities to protect water resources. These opportunities will include identifying possible stopover habitat, surveying during the migration season for the presence of Whooping Cranes, developing Whooping Crane stopover habitat and other efforts to assist the Corps in executing its responsibilities under its authorities.

A Memorandum of Understanding (MOU) is being formed which will be entered into by and between the USACE and the FOTWW. The parties will jointly support creative and sustainable solutions to water resources

challenges, and actively pursue the protection, restoration, and enhancement of Whooping Crane habitat, and the myriad species which rely on the habitats as well as habitat adjacent to facilities or lands under the control of the USACE or its Defense Department clients consistent with the USACE Civil Works, Regulatory, and Real Estate missions.

FOTWW has already initiated habitat surveys on eight USACE lakes to become more familiar with existing and potential stopover habitats and management needs. Whooping Cranes are currently using some USACE and other lakes as they migrate between Wood Buffalo National Park nesting grounds in Canada and Aransas National Wildlife Refuge wintering grounds on the Texas coast. FOTWW believes that USACE lakes will become much more important to Whooping Cranes as many small wetlands and ponds are lost to development and drought caused by global warming.

The FOTWW has completed similar projects on 32 military bases and 8 Indian Reservations. The most expensive part of establishing or improving habitat is land cost. However, if projects can be accomplished on government lands and Indian Reservations as proposed, then the cost would be relatively minimal.

For more information visit <http://friendsofthewildwhoopers.org/>

Also, see Chester's earlier article on the FOTWW stopover habitat project in The Unison Call, vol. 26, no. 2. — Ed.

George's Cranes — BOLO

George Archibald is asking anyone along the Eastern Flyway and near big wintering areas to be on the lookout for a family of Sandhill Cranes that produced two chicks on his acreage in Baraboo, Wisconsin this summer. The two juveniles were captured and banded on July 24, 2017.



Right leg — USFWS band / Yellow XC
Left leg — Yellow / Yellow / Blue

Right leg — USFWS band / Yellow YC
Left leg — White / Red/ Blue

(Because the hardcopy version of the newsletter is printed in B&W.)



Regional Reports

Summary of Aransas—Wood Buffalo Population Surveys for 2014-2017

	2014	2015	2016	2017
No. of nests detected at WBNP (May)	82	68	78	98†
No. of fledged chicks detected (Aug)	32*	23	45**	63***
Average no. of chicks per nest [#]	0.39	0.34	0.57	0.64
Additional territorial pairs (non-nesters)	43	20-24	18	?
Estimated total no. of birds at Aransas NWR within the primary survey area‡	308 (95% CI 267-350)	329 (95% CI 293-371)	431 (95% CI 371-493)	—
Estimated no. of juveniles at Aransas NWR	39 (95% CI 33-46)	38 (95% CI 33-43)	50 (95% CI 36-61)	—

†Most nests ever recorded. *Two families with twins; **one family with twins; ***four families with twins.

[#]20-year average is 0.48 chicks per nest.

‡Estimated numbers of birds **outside** the primary survey area in 2014, 2015 and 2016 were 6, 9, and 6, respectively.

Wood Buffalo National Park (WBNP) 2014 data are from *Northern Journal* (norj.ca), Sept. 1, 2014, quoting Mark Bidwell; WBNP 2015 data are from Bidwell and Conkin (March 2016), *Recovery and Ecology of Whooping Cranes: Monitoring of the Aransas-Wood Buffalo Population during the Breeding Season 2015 Report*; WBNP 2016 data are preliminary results from the Canadian Wildlife Service, with thanks to Mark Bidwell; 2017 nest survey data are from Mike Keizer, Parks Canada; 2017 fledgling data are from CBC News, August 16, 2017 (www.cbc.ca/news). Aransas NWR winter data are from 'Whooping Crane Updates' at the ANWR website.

The Whooping Crane winter count data collected at Aransas NWR in December 2016 were finally released by the U.S. Fish and Wildlife Service on September 18, 2017 (the bottom two entries in the '2016' column), a full month after the 2017 Wood Buffalo NP fledgling data were announced. No reason was given as to why it took 9 months to analyze and release the 2016 winter numbers. What is most concerning, however, is the large discrepancy in the estimated population totals between 2015 and 2016 (329 vs. 431, a 31% increase), not to mention the much expanded 95% confidence interval for 2016. The USFWS 'credits' the big year-on-year increase to having switched the type of aircraft used for the survey, from a Cessna 206 to a Quest Kodiak with better visibility for viewing cranes below. It therefore follows that all previous estimates based on the Cessna data (2011 to 2015) should now be considered as underestimates.

Prior to 2011, a complete census of the Whooping Cranes present at Aransas NWR was undertaken each winter, but that methodology was roundly criticized by some of the current monitoring team to justify the switch to the distance sampling protocol now in use [for a rebuttal of the criticisms, see Pugsek and Stehn (2016)]. What goes around comes around: it is now fair to question whether the new approach as currently done can give a reliable estimate of the true size

of the Aransas--Wood Buffalo flock. It seems the number is anyone's guess. At least we can be confident of one thing, that the population is increasing, based on the record number of nests and fledglings counted (not estimated) in Wood Buffalo NP this year. – Ed.

B.H. Pugsek and T.V. Stehn (2016) The utility of census or survey for monitoring whooping cranes in winter. Proceedings of the North American Crane Workshop 13:75-84.

Update on the Eastern Migratory Population of Whooping Cranes

Hillary Thompson, North America Program Crane Analyst, International Crane Foundation



Wild-hatched chick W7-17 with parents 14-08 and 24-08 at Necedah National Wildlife Refuge, 25 September 2017. Photo credit: Hillary Thompson/ICF

Reproduction

This year there were 37 confirmed nests by 26 pairs breeding in Wisconsin. Eggs from the first nests of 13 pairs were collected to force the pairs to re-nest later in the season and hopefully avoid nesting during the seasonal black fly emergence. Eighteen chicks hatched from four first nests and ten re-nests in Juneau, Adams, and Marathon Counties. Two of these chicks have fledged and are still with their parents on their breeding territories (W7-17 with parents in Juneau County, W3-17 with parents in Adams County). This is the first year for both pairs to have raised a chick to fledging.

Current population size

As of 13 October, the current estimated population size is 113 Whooping Cranes (51 females, 58 males, and 4 unknown). This total includes the 2017 costume-reared and parent-reared cohorts, as well as the two wild-hatched chicks. At this time, most Whooping Cranes are still in Wisconsin and have not yet begun migration. We have gotten reports of one bird in Michigan, one in Illinois, one in Iowa, and one in Kentucky (70-16 who never completed migration back to Wisconsin this spring/summer). Earlier this summer we had two one-year-old Whooping Cranes in North Dakota who have returned to Wisconsin, and one in South Dakota who has returned to northwestern Iowa.

2017 captive-reared cohort

This fall we released a total of 18 captive-raised juvenile Whooping Cranes, consisting of 7 costume-reared birds and 11 parent-reared birds. The costume-reared birds hatched at Patuxent National Wildlife Research Center in Maryland, and

Regional Reports *continued*



Wild-hatched chick W3-17 with parents 24-09 and 42-09 in Adams County, Wisconsin, 2 October 2017. Photo credit: Hillary Thompson/International Crane Foundation

were shipped to Wisconsin to be raised at White River Marsh. They were soft-released during October and have been associating with a 5 year-old male and a one-year-old male since their release. They are often seen foraging and roosting with these two older birds and are starting to explore new areas in and around the marsh. The 11 parent-reared Whooping Cranes were released at six different sites in Wisconsin that were being used by adult Whooping Cranes. All eleven of these birds are still alive and are in the same general area of their release. The parent-reared



Costume-reared cohort with adults 5-12 (male) and PR 30-16 (male) near White River Marsh in Green Lake County, Wisconsin, 9 October 2017. Photo credit: Doug Pellerin

chicks who are not currently seen associating with adult Whooping Cranes are often seen with Sandhill Cranes, foraging in fields and roosting in the marshes, preparing for migration. Some parent-reared birds are regularly associating with the adults near whom they were released. We have had an observation of two of the chicks imitating the adults dancing, as well as an observation of adults chasing away a coyote with the chicks following close behind. Observations like these are promising for the chicks to be learning behaviors from adults that will hopefully lead to longer survival and more successful reproduction. (Article submitted October 16, 2017.)



Release of parent-reared chick 37-17 in Marathon County, Wisconsin, 9 October 2017.

Photo credit: Hillary Thompson/International Crane Foundation

Recent Publication

J.G. Jorgensen, M. Bomberger Brown (2017). Temporal migration shifts in the Aransas-Wood Buffalo Population of Whooping Cranes (*Grus americana*) across North America. *Waterbirds* 40(3):195-206.

Abstract—Birds are altering the phenology of critical life history events, including migration, in response to the effects of global climate change. Whooping Cranes (*Grus americana*) are one of the most critically endangered birds in the world. Their remnant population, referred to as the Aransas-Wood Buffalo Population, numbers between 300–400 individuals and migrates between the U.S. Gulf of Mexico coast and north-central Canada twice each year. Previous analyses suggested Whooping Crane migration was temporally constant in spring and fall. New analyses of observations spanning 1942–2016 show Whooping Crane migration is now occurring earlier in spring by approximately 22 days and later in fall by approximately 21 days. Spring temperatures have also increased in the migration corridor during the same period; however, there is no apparent temperature pattern during the fall. In spring, earlier migrating Whooping Cranes stopped over for longer periods of time compared to late-migrating cranes. This result may be partially explained by single Whooping Cranes migrating with earlier migrating Sandhill Cranes (*Antigone canadensis*). These results have important conservation implications as the timing of Whooping Crane migration and availability of the habitat and foraging resources, including those associated with agriculture, on which this species relies will be increasingly affected by climate change.

Regional Reports *continued*

Louisiana Whooping Crane Update

Eva Szyszkoski, Louisiana Department of Wildlife and Fisheries

Reproduction – Eight pairs (6 on privately owned land, 2 at the White Lake WCA) produced 18 nests with eggs in 2017, the fourth year of nesting by the Louisiana flock. First nesting attempts were initiated in February and March. Re-nesting attempts were initiated an average of approximately 20 days after the first nest attempt was completed and occurred throughout April and May. Third nesting attempts were initiated an average of approximately 15 days after failure of the second nest attempt, or after disappearance of a chick in the case of one pair. See below for individual pair information.

Female	Male	Nest #	End reason	Egg information	Parish
L7-11	L8-11	1	Past full term	Infertile (2-2)	Avoyelles
		2	Egg swap/hatch	Infertile (2-2)	
		3	Past full term/att. egg swap	Infertile (2-2)	
L6-12	L8-13	1	Past full term	Infertile (1); unknown (1)	Jefferson Davis
		2	Past full term	Dead embryo (1-1)	
L3-11	L1-13	1	Past full term	Infertile (1-1)	Allen
		2	Failed - weather related	Unknown (2-2)	
		3	Past full term	Infertile (2-2)	
L11-11	L10-11	1	Past full term	Dead embryo (1-1)	Jefferson Davis
		2	Egg swap/hatch	Dead embryo (1-1)	
L13-11	L2-11	1	Failed – unknown cause	Infertile (1)	Allen
		2	Failed – unknown cause	Infertile (1); unknown (1)	
		3	Failed – possibly weather	Infertile (1); unknown (1)	
		4	Past full term	Infertile (2-2)	
L11-12*	L3-13*	1	Past full term	Infertile (1-1)	Vermilion
		2	Past full term	Dead embryo (1); unknown (1)	
L2-12*	L14-12*	1	Successful	Hatch (1-1)	Vermilion
L6-11	L1-11	1	Abandoned – unk. cause	Dead embryo (1)	Vermilion

(* denotes first-time nesters)

Wild-hatched chicks and egg swaps – Pair L7-11 and L8-11 hatched out one chick (LW1-17) from an egg produced by captive cranes at the Patuxent Wildlife Research Center in Maryland. The egg was swapped into their second nest attempt of the season on 12 April and LW1-17 hatched the following day. The pair raised LW1-17 until heavy rains and storms moved through the area overnight, flooding the property. A trail camera set up on the nesting platform, which the family had continued to use for roost, showed that LW1-17 disappeared shortly after 4:25 AM on 30 April at 17 days of age when the family moved off the flooded roost platform presumably attempting to find higher ground.

Pair L2-12 and L14-12 hatched out one chick (LW2-17) on 26 April 2017 at the White Lake WCA in Vermilion Parish. LW2-17 disappeared at 22-29 days of age.

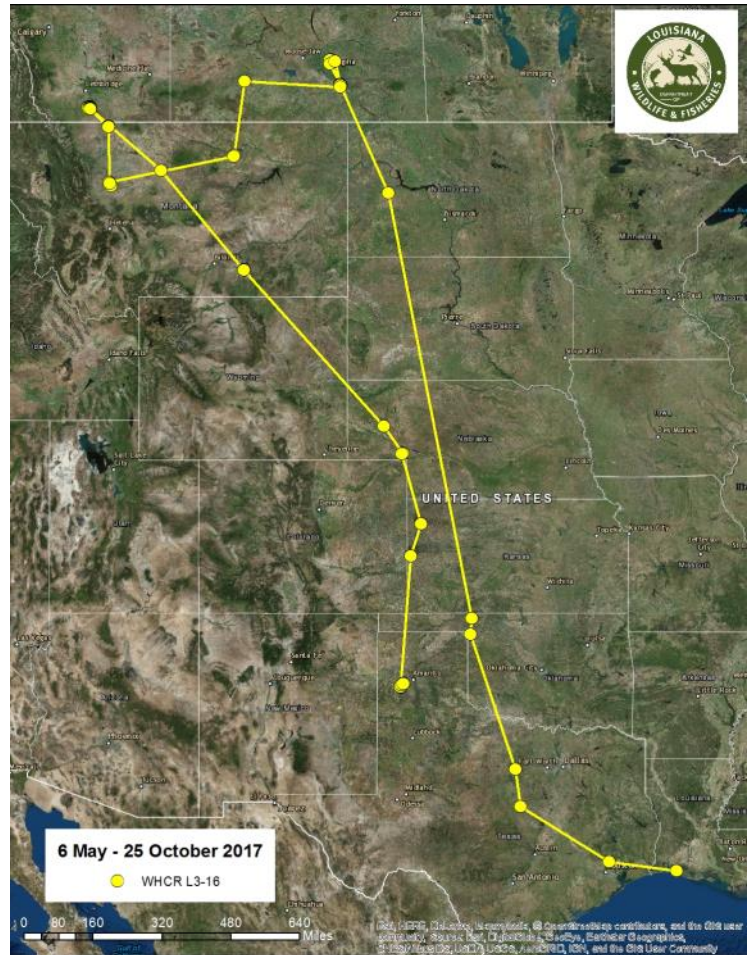
Pair L10-11 and L11-11 hatched out one chick (LW3-17) from an egg produced by a pair of cranes in the Eastern Migratory Population in Wisconsin that had been pulled prior to full-term incubation. The egg was swapped into their second nest attempt on 5 May and LW3-17 hatched out the following day. LW3-17 has fledged and is still alive and with its parents as of 25 October.

A third egg swap was attempted on pair L7-11 and L8-11's third nest attempt of the season using an egg produced by captive cranes from the Calgary Zoo; however, the pair, who were already past full term on their own eggs, abandoned the nest prior to the expected hatch date and the day after the egg swap on 21 June. Examination of the egg indicated that the embryo was malpositioned.



L7-11 & L8-11 remained on the roosting platform with chick LW1-17 as the water rose in the field. This trail camera photo was taken just before the pair attempted to leave the flooded field with the chick, who was subsequently lost (see text on page 12).

Map showing peregrination route of L3-16 (see text below).



Travel to other states – Nine yearling cranes spent the summer of 2017 in Texas, mainly in Orange, Montgomery and Jefferson Counties and one additional yearling spent approximately two months in Orange County. As of 25 October, two yearling males and four yearling females remain in the state.

One pair of three-year-old cranes arrived in Chicot County, Arkansas on 15 June and returned to Louisiana on 22 September.

Two yearling males (L3-16 & 4-16) departed Louisiana to the west on 6 May. They traveled north through Texas and into southern Saskatchewan, Canada where they were observed on 19 May. L3-16 moved west, south, west and back north into Alberta, Canada where he was observed alone on 31 August. He began traveling back south on 13 September and was located in Deaf Smith County, Texas on 25 October (see map). L4-16's remote transmitter failed shortly after the two left Louisiana and his status is unknown.

A handful of older birds also made trips into Texas, Mississippi and Arkansas; however, none spent more than 5 nights in a row in another state before returning to Louisiana.

Mortalities – Mortalities from mid-March through late October included two yearling females, four yearling males, two adult females and one adult male in Louisiana and one yearling male in Texas. These mortalities included last year's wild-hatched female LW1-16 and breeding male L14-12.

Current Population Size – As of 25 October 2017, the Louisiana non-migratory population consisted of a maximum of 49 cranes (24 males, 24 females and 1 unknown).

Regional Reports *continued*

Mississippi Sandhill Crane Update

Scott Hereford, Mississippi Sandhill Crane NWR, Gautier, MS

Nesting — A record high 37 pairs nested, far surpassing the previous high of 25. There was a record high 49 total nests; 12 pairs re-nested. We found 12 nests. There were at least eight first-time pairs and two new territories. One new pair nested in the same 5-acre pond as an established pair, the 105-meter inter-nest distance was the closest ever recorded here. Five pairs fledged one chick each, including first-time pair 831 and unbanded.

We found **three eggs** in the Beasley nest, also a first here going all the way back to 1965. One of the three eggs was infertile and smaller than the other two. That egg was likely laid by a second female, 'Aunt Alice', who associates with the pair outside the nesting season. That association was obviously much closer this year. We collected a camera trap image showing the second female incubating the clutch!

UAS — For the second year, we tested the potential of a micro Unmanned Aerial System ('drone') to detect crane eggs/chicks to assist with monitoring nest success and inform decisions on spring prescribed burning. This time we evaluated recorded video data. We hired Innovative Imaging Research out of nearby Stennis Space Center for one day in May. From quadcopter-based recorded video, we were able to detect an active nest in a savanna (the adult walking nearby helped) and an active nest in a small pond. We were unable to see known nest structures in a pond under a tree canopy. A FWS employee and certified UAS pilot visited the refuge for a week in June. We were able to observe a pair and chick walking in a savanna.

Trapping — We made our first successful captures using two new trap designs, both based on the wooden coffin trap first used in the mid 1990s. The portable tent trap and the 'soft' coffin are both made from fabric and hence much lighter than the wood coffin. For the portable tent, the fabric is attached by cable ties to a PVC frame and has a ridge shaped top to deter cranes from jumping on top where they cannot be grabbed. The soft coffin trap is fabric attached to six T posts by cable tie and can be set up in the field in minutes.



Nest with a trio of eggs, a first for the refuge.

The Unison Call is a forum to share updates, news and opinions. It is published twice yearly (spring/summer and fall/winter) by the **North American Crane Working Group**, a 501(c)(3) non-profit organization incorporated in Wisconsin. Both print and electronic (PDF) versions are produced; PDFs of past issues of the newsletter can be downloaded free of charge from our website (www.nacwg.org). **The views expressed in *The Unison Call* are those of the individual authors and do not necessarily represent the positions of NACWG.** Comments and contributions are always welcome.

Daryl Henderson, Editor
nysquirrel1@gmail.com

Please renew your membership for 2018! (see back page)

(Attendees of the Chattanooga Workshop are in good standing until the next workshop.)

Lesser Sandhill Cranes in Homer, Alaska

by Kachemak Crane Watch



Sandhill Cranes flying past Grewingk Glacier on their way to areas on the Homer bench below, September 8, 2017. Photo: Nina Faust

Thanks to reports to Kachemak Crane Watch we know that some of Homer's Sandhill Cranes migrated south on September 7. Another group of roughly 80 cranes was observed migrating out on a glorious fall morning at 11:30 a.m. the next day. Also on September 8, cranes were reported flying in several flocks of hundreds over the Stariski Creek area coming from across the Inlet. These cranes were probably part of the western Alaska population. Cranes choose ideal weather to aid their long flight, preferring a strong frontal wind followed by high pressure bringing upper air currents from the northwest.

On September 9, the third of three Annual Sandhill Crane Count Days sponsored by Kachemak Crane Watch validated the earlier local crane departure, with a count of 40 adults and 16 colts. On the previous Count Days (August 26 and September 2), 117 cranes including 14 colts, and 136 cranes including 25 colts were counted at Beluga Slough.

This is the second fall season that the cranes have gathered to roost at Beluga Slough. Local cranes also use other locations in the area, including Mariner Park Lagoon, Lampert Lake, and wetlands in the Anchor River/Fritz Creek Critical Habitat Area.

The grand finale of this year's crane migration occurred on September 17, when a series of Sandhill Cranes (many apparently from western Alaska) flew overhead as they 'kettled up'. They were distinctive, forming their characteristic V flying shape. They flew over Homer and Kachemak Bay, spiraling around, regrouping, then surging on toward the wintering grounds with a mighty triumphant crane chorus reverberating all around the Bay. What a memorable sight and goodbye-until-next-year message. Not often are we fortunate enough to have the wind currents just right to bring so many cranes over our area, but this year was a gorgeous spectacle of migration.

The local crane population, despite all the hazards of raising flightless young, seems to be holding its own. Kachemak Crane Watch estimates the local population to be stable at about 200 to 250 individuals. It is difficult to know the exact number of cranes using the area from Anchor Point south to the head of Kachemak Bay because there are so many wetland areas away from people, and not everyone who sees cranes calls in the sighting.

Some family groups linger in the area after the main migratory flock departure date. If a pair nests late they will remain in the area to allow their colts time to get ready for the 2400-mile migration to the Central Valley of California around Sacramento. Most cranes lay their eggs in the first week or two of May. After 30 days, the eggs hatch, usually in the first week or two of June. The parents have 60-70 days to safely raise the chicks to fledging.

Regional Reports *continued*



Sandhill Cranes landing late in the evening of September 7, 2017 at Inspiration Ridge Preserve, Homer, AK. Photo: Nina Faust



Sandhill Cranes at Inspiration Ridge Preserve leaving on migration to California's Central Valley, September 9, 2017. Photo: Nina Faust

Kachemak Crane Watch continued monitoring nesting success this year. Twenty-nine nests were confirmed compared to 30 last year. That is about the average number of nesting pairs reported over the years. The 29 pairs produced 54 colts, with 34 reported fledging roughly 70 days after hatching, a 63% success rate, 2% more than last year.

Part of Kachemak Crane Watch's mission is public education. Information on this year's crane sightings shows a cautionary tale emerging that is important to discuss. What is different this year is the strong uptick in cranes hanging out in the main part of town, due in large part to an increase in the number of people putting out corn for the cranes. We are at a point where problems are starting because people are choosing to attract cranes into areas where they should not be encouraged.

Kachemak Crane Watch has received reports from residents about cranes walking down busy streets, hanging in local neighborhood yards, and nesting in town. We have had complaints about cranes digging up lawns and flower gardens and scratching cars.

While a few cranes have nested in town over the years, the number of nesting pairs in town has increased as has the number of non-breeders in small flocks dropping in around town. This is of concern because more cranes in busy neighborhoods may result in injuries to people as the cranes defend their territories and protect their colts; and to the cranes themselves from cars, loose dogs, and injuries from flying into powerlines. Some folks use herbicides on lawns in town. Worms from these treated lawns fed to very young colts can kill them.

In urban areas of Florida, many of these same issues emerging here had come to a head with cranes becoming aggressive and even attacking children. To address the problem, the Florida Fish and Wildlife Conservation Commission banned the feeding of cranes.

But there is more to this emerging tale. On September 8, the day of the main local migration, someone came into the neighborhood of a nesting crane pair and shot their two colts on private property right next to where the cranes spent most of their summer. The neighbors who had observed the cranes nesting were furious and distraught. This senseless,



Two fledged colts enjoying some independent time from their parents, September 4, 2017. Photo: Nina Faust

unethical killing within a neighborhood is a dangerous practice. How something like this can be legal certainly needs review. It is not safe, ethical or sportsman-like. Perhaps a Sandhill Crane hunting closure within 1/4 or 1/2 mile of the road system would protect cranes until they resume their wild lives as they join migrating flocks heading south. This could be accomplished through a proposal to the Board of Game.

With the cranes' departure, we will miss their ethereal calls, exuberant ballet dances, and magnificent aerial spirals, soaring, and parachuting in for landings, only to leave us with images to dream about until they return. At least this year, after completing the difficult journey south, habitat conditions on their wintering grounds should be better. California received a significant amount of rain, so there will be enough water to flood fields and keep wetlands on refuges full.

Kachemak Crane Watch appreciates Citizen Science cooperators whose efforts in reporting breeding success and non-breeding flock numbers help keep track of Homer's Sandhill Crane population. Citizen Science, and working with other crane groups like Save Our Sandhill Cranes in Sacramento and the International Crane Foundation, helps Kachemak Crane Watch gather and share information to educate people about cranes in both their summer and winter habitats.

For more information on Kachemak Crane Watch, visit www.cranewatch.org

Thanks to Nina Faust and Edgar Bailey for this contribution

Cranes in the News

TEXAS MAN CONVICTED OF KILLING WHOOPING CRANES HEADED TO PRISON AFTER VIOLATING TERMS OF PROBATION

BEAUMONT, Texas (14 July 2017) – A 20-year-old Beaumont, Texas man was sentenced to federal prison for violating the terms of his probation in the Eastern District of Texas, announced Acting U.S. Attorney Brit Featherston today.

Trey Joseph Frederick was sentenced to five years of federal probation in October, 2016 after he pleaded guilty to a violation of the Endangered Species Act. In January, 2016, a Texas Game Warden received two calls reporting that two Whooping Cranes (part of the Louisiana reintroduced flock) had been shot in Jefferson County, Texas. Further investigation revealed that Frederick had been seen in the area with a hunting rifle and claimed to be hunting geese. Federal agents contacted Frederick at his home, where he admitted to killing the cranes.

Today, Frederick was back in federal court facing charges that he violated the terms of his probation for, among other things*, using an AR-15 assault rifle to hunt from a roadway in Jefferson County. The terms of Frederick's probation specifically prohibited him from owning or possessing firearms, ammunition or any other dangerous weapon. Frederick is also prohibited from hunting or fishing anywhere in the United States. During his court appearance today, U. S. Magistrate Judge Zack Hawthorn sentenced Frederick to 11 months incarceration to be followed by a one-year term of supervised release.

Acting U.S. Attorney Featherston made the following statement, "Trey Frederick was given the opportunity of probation when he was first convicted of killing two federally protected Whooping Cranes. Apparently, Mr. Frederick did not appreciate the leniency he was given, and today, he learned the consequences. Mr. Frederick will now have 11 months to contemplate his actions."

This case was investigated by special agents with the U.S. Fish and Wildlife Service, Office of Law Enforcement, and Game Wardens with the Texas Parks and Wildlife Department and prosecuted by Assistant U.S. Attorney Joseph R. Batte. (*Edited news release, U.S. Attorney's Office, Eastern District of Texas.*)

*The court also heard that Frederick had not reported regularly to his probation officer, not paid any restitution (\$12,907.50 each to the International Crane Foundation and the Texas Parks and Wildlife Foundation), tried to purchase a firearm, and applied for a Montana hunting license.

In Memoriam

Robert H. Horwich

Dr. Robert H. Horwich of Gays Mills, Wisconsin, born on December 31, 1940, in Paterson, New Jersey, died following a brief illness on February 7, 2017, at Gundersen Hospital in La Crosse, WI. Rob always had a keen interest in animals and he devoted his life to their conservation. Although his high school guidance counselor told him he could never earn a Ph.D., he received a B.S. from Rutgers University and an M.S. and Ph.D. from University of Maryland. In his dissertation, Rob investigated the social behavior of squirrels. His career spanned obtaining a post-doctoral appointment in India from the Smithsonian Institute, directing the Maryland House Natural History Museum, researching infant primate development at the Brookfield Zoo, developing reintroduction methods at the International Crane Foundation, and founding and directing Community Conservation, Inc.

Rob lived simply and generously, especially after moving to Wisconsin in 1976. Even his rare extravagance was modest: adding an extra sugar pack to a cup of coffee, giving dollar bills to children for cakewalk fundraisers, or buying suitcases full of trinkets. This latter practice was part of Rob's life as an artist; he turned the shiny detritus of consumer society into bizarre, beautiful, irreverent sculpture. Visitors to his humble home on One Quiet Lane were greeted to the likes of plastic action figures glued with geometric arrangements of feathers and tinsel on gaudy Tupperware platters. Rob's affinity for the unconventional allowed him to see solutions when others saw only problems.

When endangered cranes being raised in captivity were losing their wild instincts due to human contact, Rob pioneered the use of puppets and costumes to rear them. When dam construction on the Kickapoo River was abandoned and the repossessed land was being abused and argued over, he saw opportunity to create a community-managed nature reserve. And first in Belize, and then in places around the world, when local people were blamed for loss of wildlife, Rob saw that informed and inspired communities have the power to conserve the beauty and integrity of their homelands. In Belize, Rob realized that the howler monkeys he was studying were disappearing, so he refocused his efforts from academic research to conservation. He worked with local villagers to create the Community Baboon Sanctuary, which became an internationally renowned model for conservation.

Later in his career, in India, Rob refined his simple but profoundly effective method as he worked to conserve forests for an endangered monkey called the Golden Langur. He told local people that their forests were special, he asked for their help conserving the forests, and then helped them to create community groups equipped for this mission. This approach catalyzed interest and pride, and from a few villages, the project proliferated into a federation of groups in 130 villages throughout the region working on Golden Langur conservation. Rob called this process "conservation contagion," and he persisted tirelessly to hasten its spread: in 15 countries Rob worked with 200 communities to conserve 1.5 million acres.

Just weeks before his death, he was working in Cameroon with local communities to conserve habitat for the Cross River gorilla, of which only a few hundred remain in the world. Since Rob consistently sought to catalyze rather than maintain influence, many of his efforts have carried on without him. He authored and co-authored numerous scientific articles and several books, was featured in and helped to produce a number of films, and served on various boards and committees.

Rob will be missed for his gentle and friendly spirit, for his delightfully odd sense of humor, and for his quiet, fierce love of the natural world. He was preceded in death by his parents Edwin N. and Edna M. (Goldstein) Horwich. He is survived by his sister Janet Weinberg and his nieces Lisa and Emily, his community of friends in rural Wisconsin, and a global network of people and places he touched.

Submitted by Janet Weinberg via James Lewis

Glen Smart

Glen Smart, one of the early contributors to our efforts to save the whooping cranes, passed away in January 2017.

In late May 1967, Glen, Ray Erickson (USFWS), and Ernie Kuyt (CWS) collected six eggs in Wood Buffalo National Park in northern Alberta and Northwest Territories and with those eggs the captive flock was born. Out of the six eggs collected five hatched. This effort marked the beginning of a long and fruitful international cooperation between the United States Fish and Wildlife Service and the Canadian Wildlife Service in conserving these birds. There were 50 birds in the wild flock at that time.

Glen was an outstanding aviculturist as well as field biologist. From 1965 until retirement in 1990, he worked as a research biologist for the endangered-species division at Patuxent. He played a key role as the lead aviculturist in establishing the whooping crane captive flock.

Besides Glen's work with the cranes, he was an excellent taxidermist and amassed a large collection. He asked other aviculturists who had a bird die to save them for him and over the years he collected hundreds of birds to mount. He even made up a Labrador duck from parts of many other birds that couldn't be distinguished on the surface from the few old skins that still exist. He donated his collection to the University of Missouri. The collection now lines the walls of the north-south hallway of the first floor of the Anheuser-Busch Natural Resources Building. The collection includes 287 specimens of waterfowl and upland game birds representing avian diversity from all continents of the world, excluding Antarctica. The specimens are used as teaching tools in a number of fisheries and wildlife courses, including ornithology, water fowl biology and management, and advanced waterfowl ecology. Included in the collection are two species that are now extinct, as well as several species that are currently listed as threatened or endangered.

Glen was a prolific and outstanding wood carver, and from his work as a taxidermist he had a detailed knowledge of the shape and color of his subjects. He carved a wide variety of birds, including songbirds, waterfowl, pheasants, cranes and many more. When the Whooping Crane Conservation Association wanted an award that recognized Jerry Pratt's contribution to whooping crane conservation, they went to Glen, who donated a carved standing whooping crane. The carving became the master that was used to cast the bronze award now known as the Jerome J. Pratt Whooping Crane Conservation Award. He also donated numerous carvings to bird clubs and nonprofit organizations that used them to raise money for conservation projects. Many of his carvings were also used as unique awards by the International Wild Waterfowl Association. Over a period of 50 years he did over 2500 carvings and as his skill grew he advanced from competitor to judge in world championship competitions. His works are scattered across America and I have seen them in many homes in Europe. I still remember the full-sized whooping crane that he had in his living room and consider it my favorite of all his carvings.

I visited with Glen at many conservation and bird club meetings in the 40 plus years I knew him. I guess the one visit with Glen that left the greatest impression occurred several years ago when the Operation Migration ultra-light airplane-led migration was stalled in Benton, Kentucky. I called Glen and invited him down for a visit and to see the whooping crane chicks. He and two of his friends drove to Benton and after a long camp visit I dressed Glen up in one of our crane-handler costumes. The two of us walked out to the pen and maintained the silence that was required when around the birds. We had 15 chicks in the pen. After spending several minutes watching the birds we walked back. As we neared the campsite we removed our head gear and I could see that Glen's eyes were moist and the only thing he could get out was, "That was how many birds there were in 1941".

Glen, 84, of Cape Girardeau, Missouri, passed away on Friday, January 6, 2017, at Saint Francis Medical Center. He was born August 9, 1932, in Rector, Arkansas, to William Holens and Edith Eron (Hickman) Smart. He was a graduate of Campbell (Missouri) High School and received bachelor's degrees in teaching and zoology from Southeast Missouri State University and a master's degree in zoology from the University of Missouri in Columbia. After college, Glen was an aerial photographer in the U.S. Air Force for four years. He married Patricia Ann Thompson on August 18, 1957.

Loving survivors include his wife of 59 years, Patricia Smart of Cape Girardeau; sons, Michael (Emily) Smart of Cape Girardeau and Phillip Smart of Crownsville, Maryland; granddaughters, Megan and Allison Smart; and many nieces and nephews.

Walt Sturgeon

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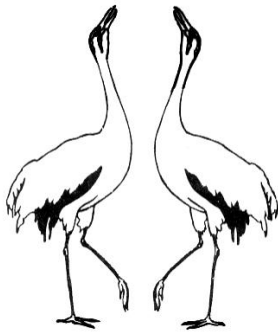
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