

Whooping Crane Eastern Partnership

2017 Annual Report



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Introduction

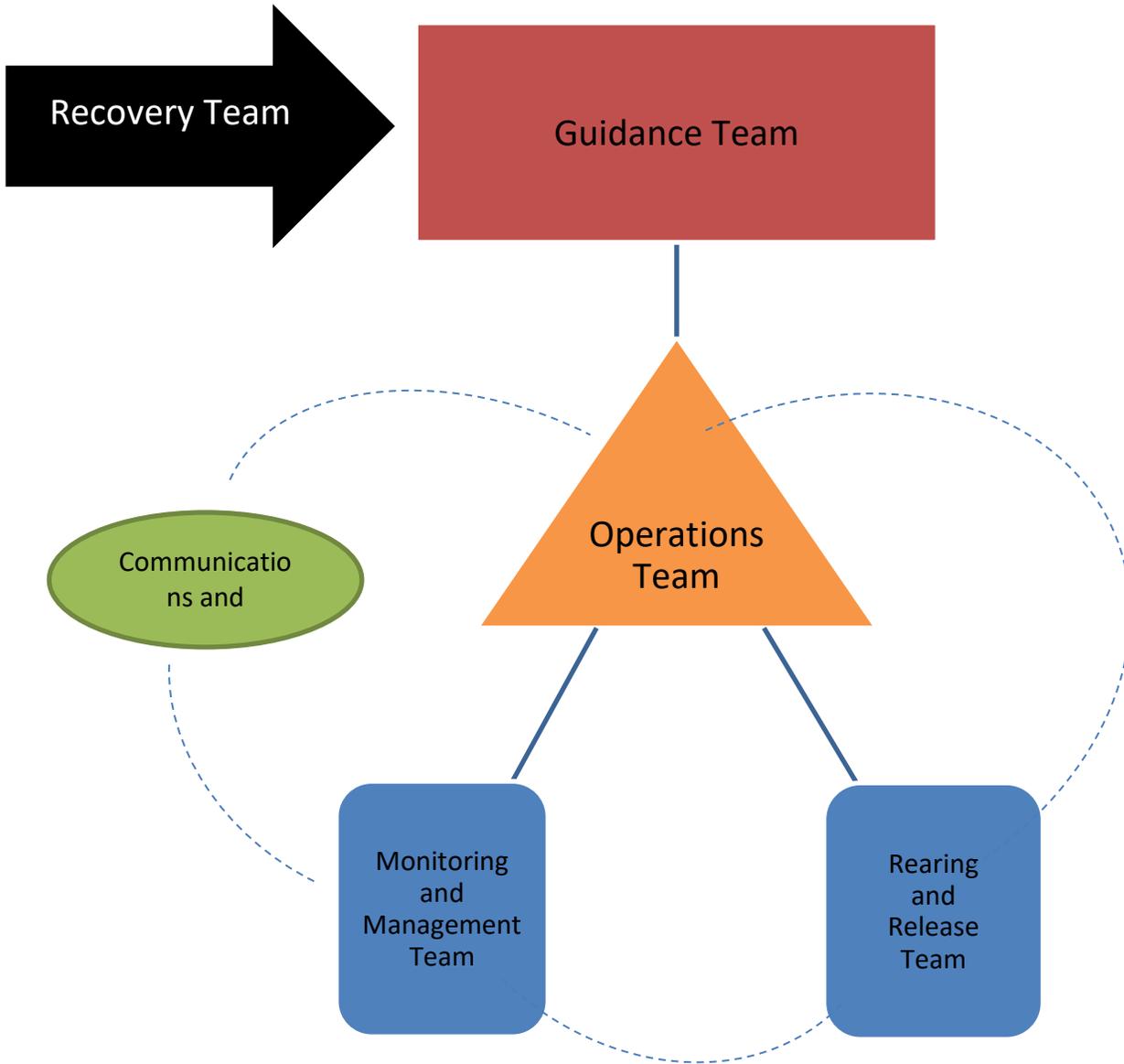
The Whooping Crane Eastern Partnership (WCEP) implements its activities through coordinated joint and individual efforts by Partners working with state and federal agencies that have jurisdiction over the whooping cranes and/or the habitats they use. The Partnership works through a team approach: key areas of WCEP activity and day-to-day decisions are addressed by one or more project teams that include individuals from Partners with expertise in that area.

Where is WCEP with respect to its fundamental goal of creating a self-sustaining Eastern Migratory Population (EMP) of whooping cranes? The minimal benchmark in the 2007 Third revision of the International Recovery Plan for a second population such as the EMP is a self-sustaining flock comprised of 100 birds and 25 breeding pairs. We appear to have met the goal, in part, for Criterion 1 this year: the maximum size of the eastern migratory population through 31 December 2017 was 110 birds (50 Female, 57 Male, 3 Unknown) and there were 25 breeding pairs this year.

While releases have continued into the EMP, lack of natural recruitment continues to be a major impediment to achieving the goal of a self-sustaining population. In spring, there were a total of 36 nests by 25 breeding pairs of cranes, from which 18 chicks hatched. Two of these chicks made it to fledging, wintered with their parents, and completed their first fall and spring migrations. The size of the EMP has remained relatively flat for recent years and additional birds are necessary to provide resilience, so that the number of nesting pairs may remain stable in the face of environmental and demographic variation in the coming years.

2017 was the second year the project did not rely on the ultralight-guided method to impart knowledge of the migration route on any of the young-of-year Whooping cranes. At the face-to-face meeting in January, plans were finalized to focus solely on the parent-rearing (PR) method, at the direction of the Whooping Crane Recovery Team and U.S. Fish & Wildlife Services. Accordingly, eleven parent-reared juveniles were released near adult Whooping Cranes in Wisconsin in the fall. They were released in Marquette, Marathon, Dodge, and Winnebago Counties. None of the parent-reared juveniles died prior to migration, however two died on fall migration. Additionally, seven costume-reared juveniles were raised at White River Marsh in Wisconsin and were released there in October. They were all translocated prior to fall migration. All seven juveniles survived to their wintering area. WCEP Partners coordinated their efforts to monitor the birds from the time of their release to their departing on migration.

WCEP Organizational Chart



Operations Team

Sarah Warner, U.S. Fish and Wildlife Service

Davin Lopez, Wisconsin Department of Natural Resources

Each WCEP operational team is intended to have co-chairs. These co-chairs make up the Operations Team. Project decisions that cannot be made within a team or between teams are made by the Operations Team. Building off the redevelopment of the Operations Team functionality that began in 2015, the Operation Team is continuing to attempt to have more input and discussion between teams in order to capitalize on each team's strengths and expertise. The Operations Team Co-chairs are also charged with updating the Guidance Team on the project needs, operations, and decisions. Beginning in 2015, to help facilitate communications between the Guidance Team and the Operations Team, the Operations Team Co-chairs sit in on the monthly Guidance Team calls. If the Operations Team is unable to come to agreement on a decision that involves multiple teams, they seek the support of the Guidance Team. In 2016, the

Operations Team accomplishments include:

- Monthly conference calls to discuss project operations held on the third Tuesday of each month; summary notes of the call are posted to the WCEP Google Drive.
- 2016 WCEP Annual Report was drafted by Operational Teams Co-chairs; compiled by the Communications and Outreach Team; reviewed and edited by the Operations Team and Guidance Team; finalized and posted on the BringBacktheCranes.org website. Drafting of 2017 Annual Report was initiated in March 2018.
- Continued efforts to more fully engage with the Guidance Team.
- Assisted the Rearing and Release Team with fully implementing Parent Rearing as the preferred chick rearing method.
- Oversaw the Monitoring and Management's Team novel (to WCEP) capturing and forced re-pairing in captivity of 16-11 and a captive female from ICF. Plans are pending for their release into the wild in fall 2018.

Rearing and Release Team

Prepared by Team Chairs: Kim Boardman, International Crane Foundation and Scott Tidmus, Disney's Animal Kingdom

2017 was a year of great change and growth with the Rearing and Release Team. News of closure of WCEP partner USGS Patuxent Wildlife Research Center's crane program meant adjusting plans and workload and helping members work through questions and concerns in regard to the future of this program. The Rearing and Release Team underwent some team restructuring in 2017 based on discussions and restructuring decisions made by the GT at the January meeting. The RRT expanded to involve more SSP members as well as incorporating select members of the former Research and Science Team into the team. As the year progressed the focus shifted to working with the birds and planning releases into the Wisconsin Rectangle.

During 2017, RRT maintained the 2016 SDM as a guidance document, but also considered the feasibility of the following modifications based on previous years' experiences:

- Earlier release timeframe (late August/early September) prior to fall movements of target birds
- Staggering releases of chicks into sub-adult groups
- Implementing hard releases versus use of short term acclimation pen
- Late afternoon release near roosting sites to promote proper roosting habitat use
- Group releases at White River Marsh SWA, Horicon NWR, or other suitable locations
- Modifications to temporary holding pen prior to release

An increased dialogue was implemented with the WCEP Monitoring and Management Team to help assist in site evaluation as part of their monitoring efforts as well as improvements to the post-release monitoring data sheets.

As in 2016, parent rearing was the main rearing strategy this season; however, due to high chick production, there was an opportunity to also rear accommodate a small costume reared cohort for release. In total 18 chicks were released into Wisconsin in 2017 (Diagram 1)

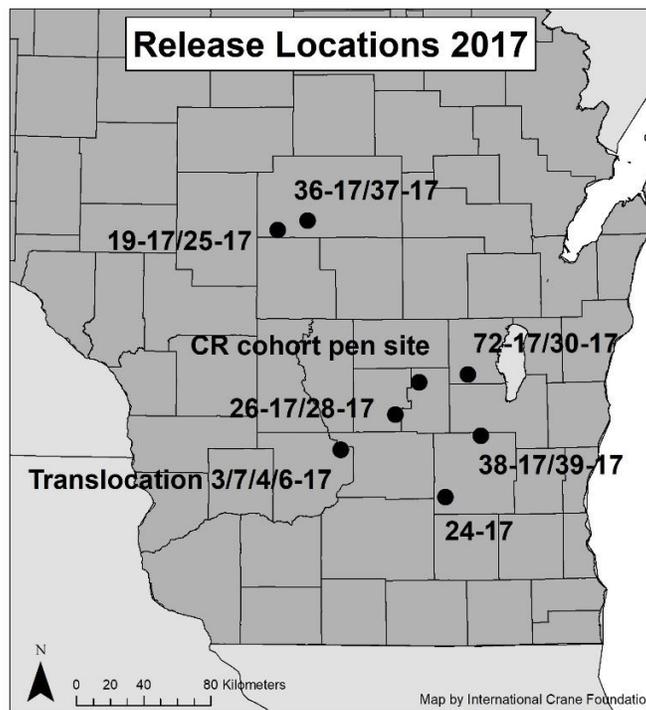


Diagram 1. Release Locations in WI of 2017 WCEP birds

2017 Costume Rearing Cohort Summary

USGS Patuxent Wildlife Research Center hatched and costume reared 7 chicks for the WCEP reintroduction project. Chicks were costume reared at Patuxent until the mean age of 52.7 days when they were relocated to the White River Marsh State Wildlife Area, courtesy of Windway Capital Corp, on 21 June. The chicks continued to be costume reared by staff of Operation Migration in the field and were officially released on 6 October. The cohort associated closely with adults 30-16/5-12, but failed to follow them on migration. The group displayed strong cohesiveness and remained in the area even after most Sandhill cranes had left the area for migration as well. It was decided to split the group up and translocate to areas where sandhills were still present for re-release.

WCEP 3-17/7-17: Captured from WRM 22 November and relocated to Sauk Co. where they were released in the company of staging sandhills near the WI River.

WCEP 4-17/6-17: Captured from WRM on 28 November and relocated to Sauk Co. where they were released in company of staging sandhills near the WI River.

WCEP 1-17, 2-17, 8-17: Remained at WRM until captured on 11 December and after veterinary exam were relocated to Goose Pond Fish and Wildlife Are, IN on 12 Dec. Shortly upon release, the trio flew an additional 40 miles to the southwest on their own.

2017 Parent Rearing Cohort Summary

USGS Patuxent Wildlife Research Center hatched 15 chicks for parent rearing. Four chicks died prior to transfer. The remaining 10 chicks were transferred to WI in 2 cohorts of 5 chicks each on 12 September and 3 October. All chicks were banded upon arrival and were released within 8 days of transfer to Wisconsin.

The International Crane Foundation hatched 2 chicks for parent rearing. One chick died prior to release. The remaining chick was banded on 13 September and released on 26 September in Winnebago Co.

All 11 chicks were hard released at target birds' roost locations. Refer to Table 1. For additional release and migration information.

Table 1. Summary of 2017 Parent Rearing Releases

Bird ID	Sex	Band date	Release County	Release Date	Release Time	Target adults	Death Note	Fall Migration Notes
19_17	M	9/12/17	Marathon	9/14/17	17:27	2-15/28-05		Left WI with target pair & 25-17 on 9 November. Wintered in Jackson Co, AL
24_17	M	9/12/17	Dodge	9/20/17	18:08	66-15		Left WI with sandhills on 19 Nov. Wintered in IL with 63-15 along IL.MO border.
25_17	M	9/12/17	Marathon	9/14/17	17:27	2-15/28-05		Left WI with target pair & 25-17 on 9 November. Wintered in Jackson Co, AL
26_17	F	9/12/17	Marquette	9/18/17	14:50	10-11/27-14	Remains found 12/16 Predation	Left WI on 6 Nov- unsure if accompanied. Remains found along IL/IN border on Wabash River
28_17	M	9/12/17	Marquette	9/18/17	14:50	10-11/27-14		Reported over winter in Okeechobee, FL
30_17	F	10/3/17	Winnebago	10/5/17	18:11	72-17		Left WI 11 Nov, possibly with sandhills. Wintered in Plaquemines Parish, LA
36_17	F	10/3/17	Marathon	10/9/17	17:50	29-16/39-16		Started migration with 37-17; Wintered in northern FL in vicinity of 71-16, but no confirmed sightings of birds together
37_17	F	10/3/17	Marathon	10/9/17	17:50	29-16/39-16	11/13/17 Powerline collision	Just started migration at time of death. Juneau Co, WI
38_17	F	10/3/17	Dodge	10/5/17	16:40	63-15		Did not migrate. Wintered at Horicon NWR, WI
39_17	F	10/3/17	Dodge	10/5/17	16:40	63-15		Left WI 9 Dec with sandhills. Wintered in Jasper Co, IN.
72_17	M	9/13/17	Winnebago	9/26/17	17:41	71-16		Left WI 16 Nov with sandhills. Wintered in Hendry Co, FL

The Rearing and Release Team Co-chairs would like to extend a huge thanks to all the team members as well as Monitoring and Management Team member, Hillary Thompson, for their assistance with coordinating releases and monitoring efforts of this year's cohort.

Monitoring and Management Team

Prepared by Hillary Thompson, International Crane Foundation

During 2017, there were about 110 Whooping Cranes in the Eastern Migratory Population. The majority of these birds spent the summer in Wisconsin, with the exception of one juvenile male in Tennessee, two juvenile males in North Dakota, one juvenile female in South Dakota, and one adult male in Michigan (Fig. 1). In spring, there were a total of 36 nests by 25 breeding pairs of cranes, from which 18 chicks hatched. Two of these chicks made it to fledging, wintered with their parents, and completed their first fall and spring migrations. One family group wintered in Kentucky, and the other wintered in Alabama. In October and November, seven costume-reared and eleven parent-reared chicks were released in Wisconsin, in areas where there were other Whooping Cranes. The parent-reared chicks were released in Dodge, Marathon, Marquette, and Winnebago Counties. The costume-reared chicks were soft-released from the pen site at White River Marsh in Green Lake County, and associated with two older birds in the area but did not migrate south with them. The group of seven was eventually split into three groups, two of which were translocated to Sauk County, where they migrated south with Sandhill Cranes, and the third of which was translocated to Greene County Indiana, where they migrated south on their own. Survivorship of released chicks was higher in 2017 than in 2016, and none of the chicks died prior to migration. However, there have been two mortalities in the 2017 cohort, one from a powerline collision during migration in Wisconsin, and another from unknown causes (possibly predation) in Indiana. There were nine adult mortalities during 2017, due to gunshot, predation, vehicle collision, powerline collision, illness, and unknown causes. Members of the Whooping Crane Eastern Partnership captured six adult Whooping Cranes during 2017 for transmitter replacement, which will help us track individuals in this population to inform our management decisions and future releases.

Highlights related to monitoring and management of the EMP from 2017 include:

- There have been a total of 36 nests by 25 different pairs breeding in Wisconsin (not including female-female nests). Thirteen nests had eggs removed as part of the forced re-nesting protocol, 1 nest was abandoned and eggs were collected, 1 nest was incubated past full term, 18 chicks hatched from 5 first nests and 9 re-nests, and the remaining nests failed. Two wild-hatched chicks made it to fledging and survived their first fall and spring migrations.
- Six adults were captured for transmitter replacement and one wild-hatched chick was captured for initial banding.
- There were eleven mortalities confirmed during 2017: 7 in Wisconsin, 2 in Indiana, 1 in Georgia, and 1 in Arkansas.
- Eleven parent-reared juveniles were released near adult Whooping Cranes in Wisconsin in the fall. They were released in Marquette, Marathon, Dodge, and Winnebago Counties. None of the parent-reared juveniles died prior to migration, however two died on fall migration.
- Seven costume-reared juveniles were raised at White River Marsh in Wisconsin and were released there in October. They were all translocated prior to fall migration (see Captures and Banding section). All seven juveniles survived to their wintering area.

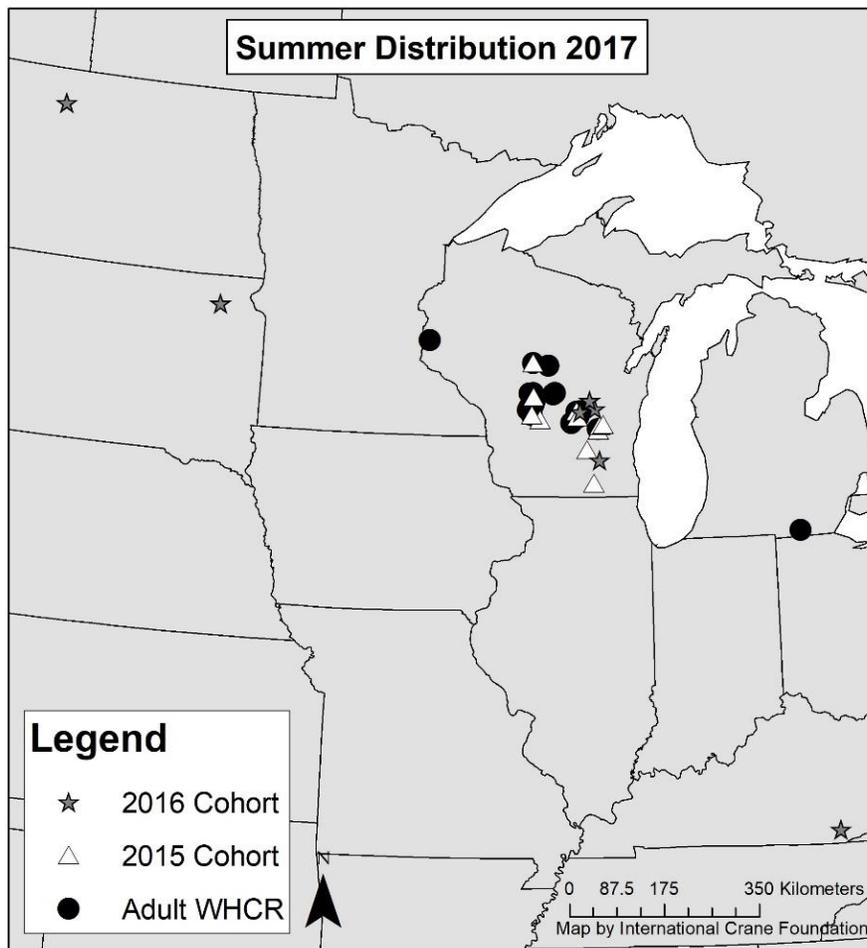


Figure 1. Summer distribution of the Eastern Migratory Population of Whooping Cranes during 2017.

Winter 2016/2017

The maximum population size as of 31 December 2016 was 104 birds (54 males, 48 females, 2 unknown). The final wintering locations of Whooping Cranes in the EMP during winter 2016/2017 were as follows (Figure 2):

- Indiana – 30
- Illinois – 3
- Kentucky – 7
- Tennessee – 10
- Arkansas – 2
- Louisiana – 1
- Alabama – 27
- Georgia – 5
- Florida – 6
- Unknown – 13

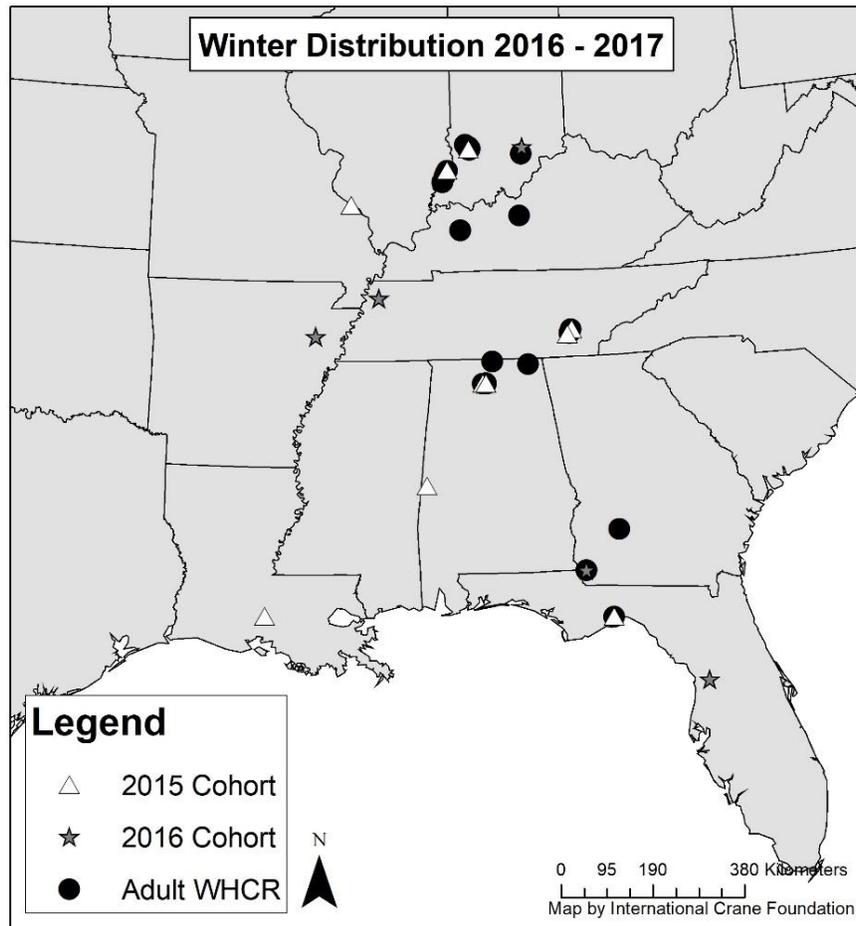


Figure 2. Distribution of the Eastern Migratory Population of Whooping Cranes during winter 2016-17.

Captures and Banding

- Thirteen pre-fledged wild-hatched chicks at Necedah National Wildlife Refuge were captured and outfitted with transmitters for a chick survival study in coordination with University of Wisconsin – Oshkosh and University of Wisconsin – Stevens Point. One wild-hatched chick (W7-17) was re-captured for placement of permanent bands and transmitter at Necedah NWR on 28 July. The other wild-hatched chick that survived to fledging was not captured for initial banding due to lack of permissions from private landowner to access property.
- Captures for transmitter replacement:
 - 16-07 Necedah NWR 30 October
 - 28-05 Marathon County 18 October
 - 41-09 Necedah NWR 17 April
 - 9-03 Necedah NWR 17 April
 - 9-05 Necedah NWR 16 April
 - 7-11 Goose Pond FWA Indiana 23 February
- Seven costume-reared juveniles were raised at White River Marsh during 2017. When all adults had migrated south in fall, the juveniles did not follow. The decision was made to split up the group of seven to hopefully encourage them to associate with Sandhill Cranes and migrate south. Two juveniles (3-17 and 7-17) were

captured at White River Marsh on 22 November, were translocated, and were released in Sauk County along the Wisconsin River in a flock of Sandhill Cranes. They migrated shortly after translocation, so two more of the costume-reared juveniles (4-17 and 6-17) were translocated to the same location on 28 November. The final three juveniles at White River Marsh (1-17, 2-17, and 8-17) still did not migrate south and were translocated to Goose Pond FWA Indiana on 12 December. These three migrated south from Goose Pond on the same day they were translocated.

Winter distribution as of 1 January 2018

The maximum population size as of 1 January 2018 was 110 (50 Female, 57 Male, 3 Unknown). The distribution of these birds at this time is as follows (Figure 3):

- Wisconsin – 1
- Indiana – 32
- Illinois – 7
- Kentucky – 8-10
- Tennessee – 8-9
- Louisiana – 2
- Alabama – 26
- Georgia – 2
- Florida – 5
- Unknown – 16-19

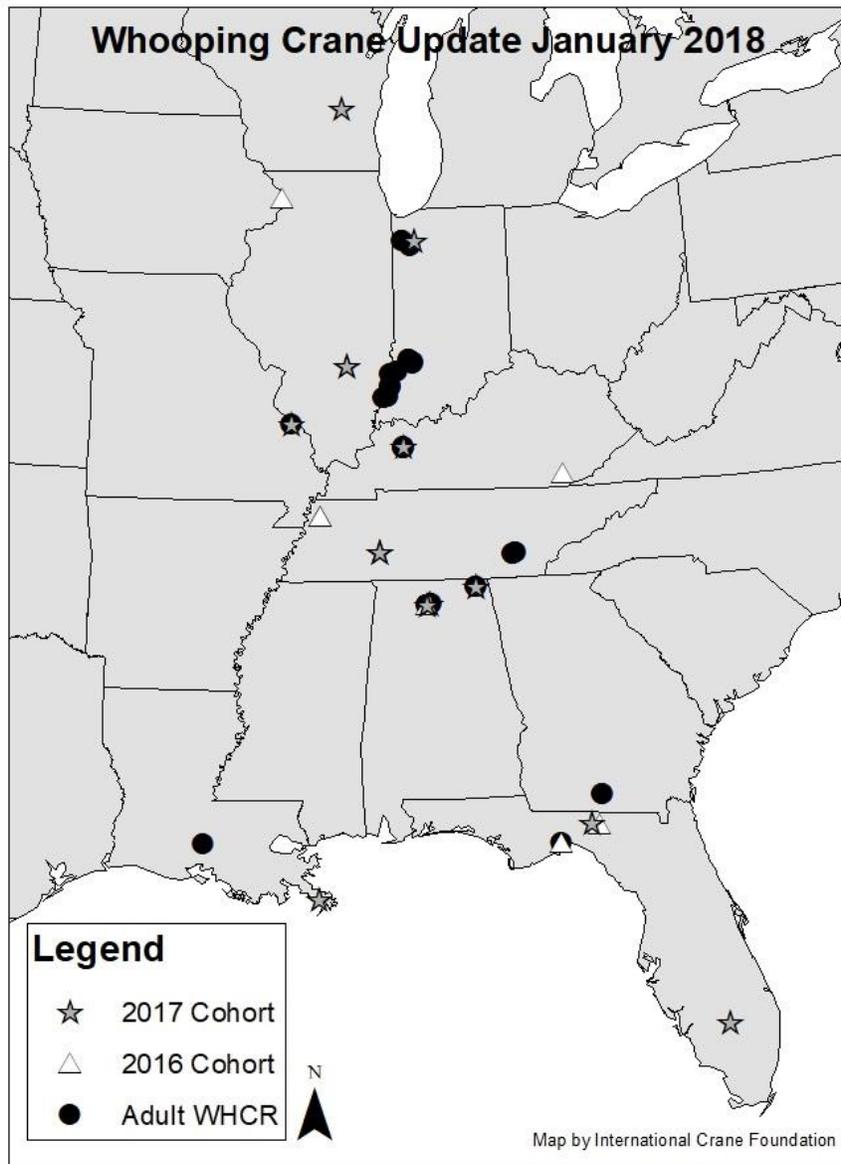


Figure 3. Distribution of wintering Whooping Cranes in the Eastern Migratory Population as of 1 January 2018.

Survival

- As of 31 December 2017, there have been 286 Whooping Cranes released since the beginning of the reintroduction in 2001. This number does not include the 17 HY2006 ultralight-led juveniles that died during confinement in a storm and one HY2007 ultralight-led juvenile that was removed from the project prior to release. There have been fifteen wild-hatched chicks that survived to fledging, thirteen of which have been recruited to the EMP (see Reproduction section below). The total released or wild-hatched chicks in this population since 2001 is 298 (Figure 4), of which 110 (36.9 %) may be alive in the EMP as of 31 December 2017 (Figure 5).
- There were eleven confirmed mortalities recorded in 2017 (not including wild-hatched chicks born in 2017):

- 4-11 – 3 January, gunshot
- 38-16 – 8 March, vehicle collision
- 8-14 – 26 March, possible powerline collision or predation
- 27-06 – 18 May, predation
- 20-14 – 3 July, predation
- 16-02 – 28 July, cause unknown
- 8-15 – 24 August, possible powerline collision
- 61-15 – 21 September, cause unknown
- 37-17 – 13 November, powerline collision
- 19-11 – 16 November, predation
- 26-17 – 16 December, likely predation

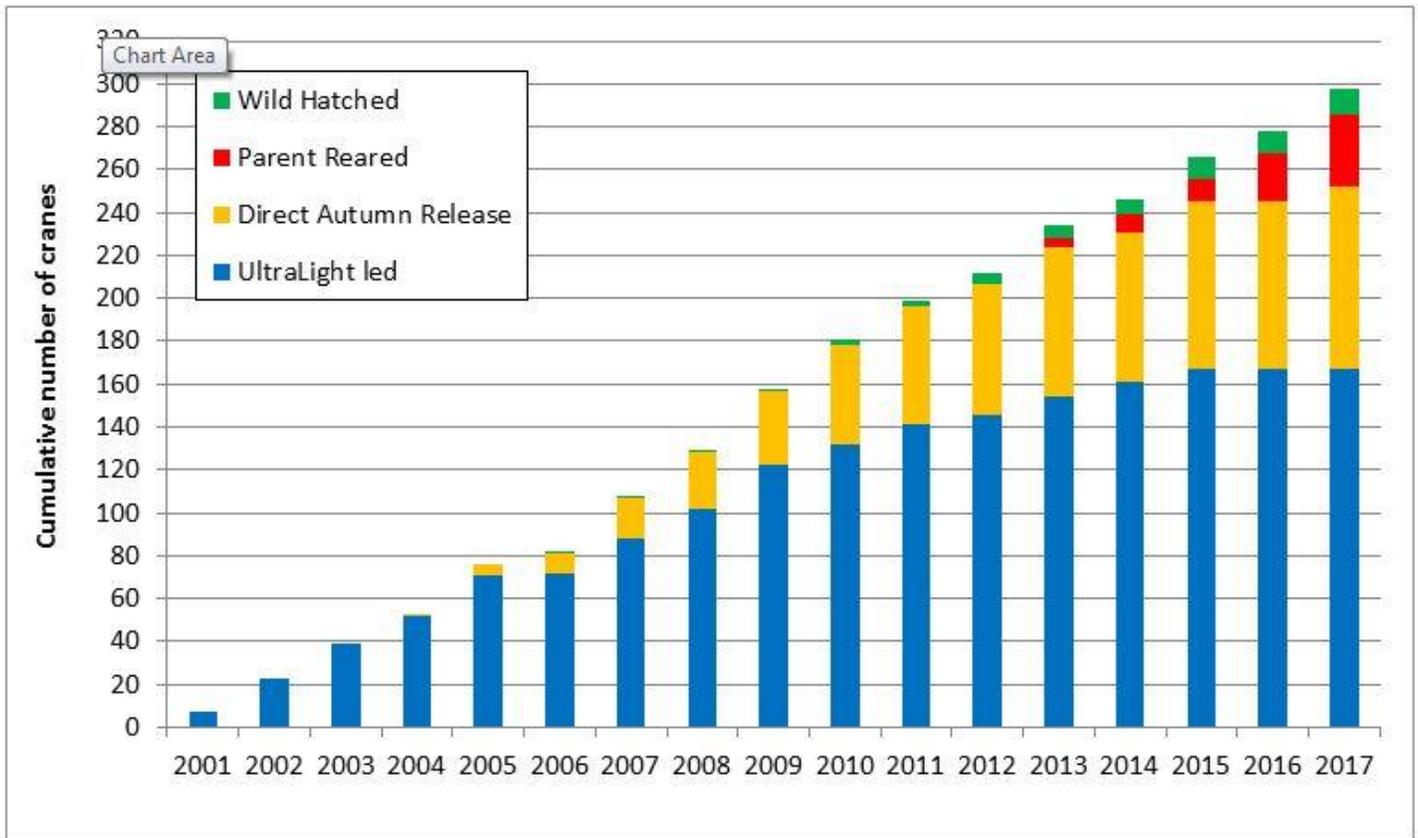


Figure 4. Cumulative number of cranes added to the Eastern Migratory Population by rearing method since 2001. As of 2017, there have been 167 UltraLight led, 85 Direct Autumn Release, 34 Parent Reared, and 12 Wild Hatched Whooping Cranes added to the EMP.

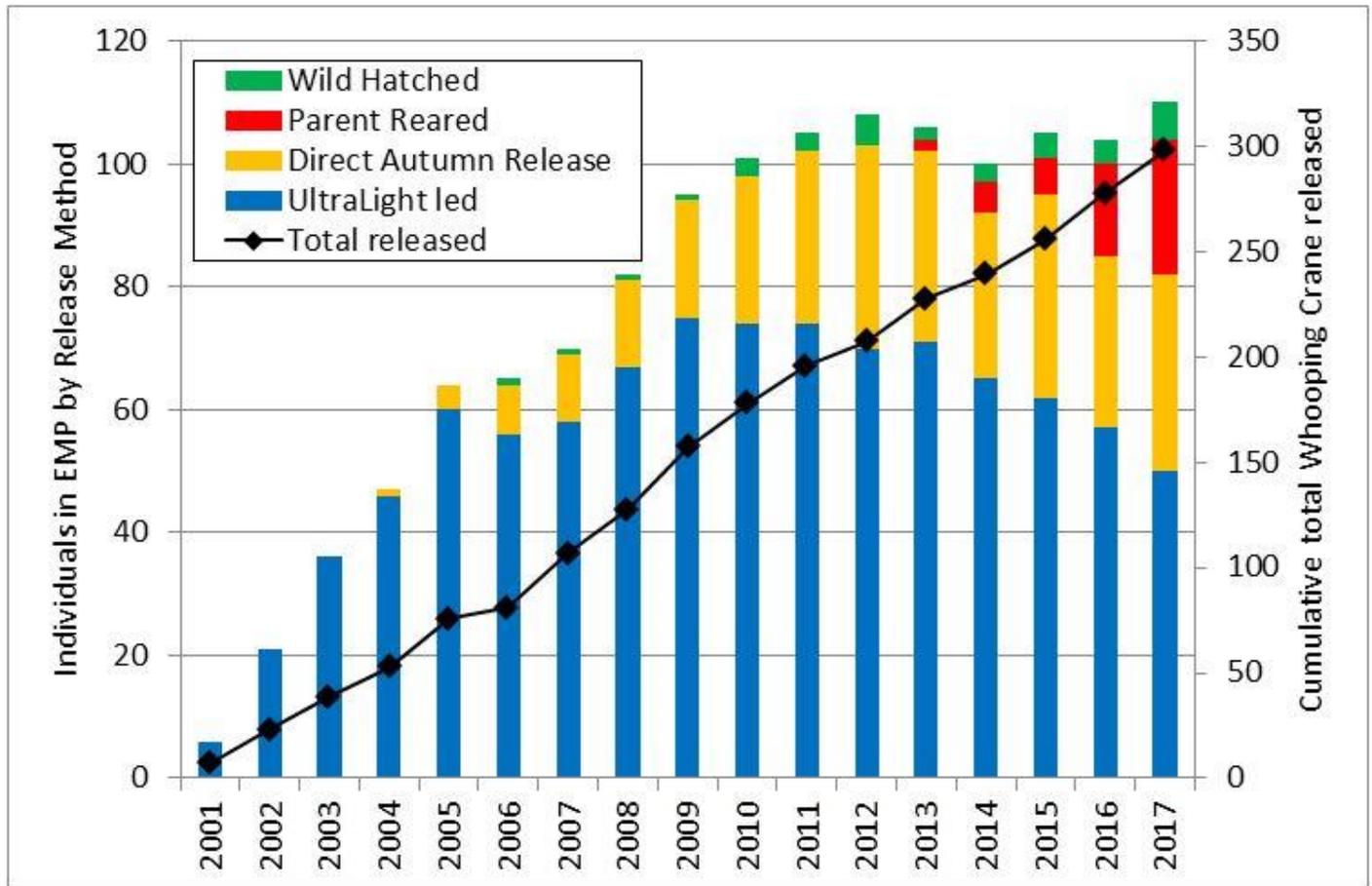


Figure 5. Population size of EMP by rearing method. As of 31 December 2017 there were 110 birds recorded in the EMP (left axis; 58 males, 49 females, 3 unknown). Black line indicates the total birds released into the population cumulatively (right axis; same number as figure 4, above).

Reproduction

- During 2017, there was a total of 36 nests by 25 different pairs breeding in Wisconsin, not including two female-female nests. Thirteen nests had eggs removed as part of the forced re-nesting protocol, 1 nest was abandoned and eggs were collected, 1 nest was incubated past full term, 18 chicks hatched from 5 first nests and 9 re-nests, and the remaining nests failed (Table 1).
- Two wild-hatched chicks made it to fledging, survived the winter, and returned to Wisconsin in spring 2018 (Table 2).
- To date, there have been a total of 276 nests (213 first nests, and 63 re-nests), leading to 105 chicks hatched in the wild and 15 fledged chicks. As of 31 December 2017, six wild-hatched birds survive in the wild (Tables 2 & 3).

Table 1. Nesting summary for 2017. Asterisks indicate a re-nest.

Female	Male	Nest outcome	Date completed	County	Chick(s)
36_09	18_03	failed	4/14/2017	Juneau	
19_14	12_05	failed	4/15/2017	Juneau	
24_08	14_08	failed	4/16/2017	Juneau	
13_03	9_05	active nest management	4/16/2017	Juneau	
W1_06	1_10	active nest management	4/16/2017	Juneau	
18_02	13_02	active nest management	4/16/2017	Juneau	
25_09	2_04	active nest management	4/16/2017	Juneau	
26_09	27_06	active nest management	4/16/2017	Juneau	
16_07	1_04	active nest management	4/16/2017	Juneau	
W3_10	8_04	active nest management	4/16/2017	Juneau	
10_10	41_09	active nest management	4/17/2017	Juneau	
17_07	10_09	active nest management	4/17/2017	Juneau	
12_03	29_09	active nest management	4/17/2017	Juneau	
32_09	7_07	active nest management	4/17/2017	Juneau	
17_11	19_11	active nest management	4/17/2017	Juneau	
9_03	3_04	active nest management	4/17/2017	Juneau	
59_13	1_11	failed	4/19/2017	St. Croix	
12_11	5_11	hatched (2 of 2)	4/30/17	Juneau	W1-17, W2-17
42_09	24_09	hatched (1 of 2)	5/4/17	Adams	W3-17 (fledged)
5_10	28_08	hatched (1 of 2)	5/8/17	Marathon	W4-17
7_11	3_11	hatched (1 of unknown)	5/8/17	Adams	W5-17

3_14	4_12	failed	5/8/17	Green Lake	
32_09	7_07	failed*	5/15/17	Juneau	
59_13	1_11	failed*	5/16/17	St. Croix	
6_15	38_09	failed	5/18/17	Juneau	
36_09	18_03	hatched (1 of 2)*	5/25/17	Juneau	W6-17
34_09	4_08	incubated past full term	5/30/17	Juneau	
24_08	14_08	hatched (2 of 2)*	6/1/17	Juneau	W7-17 (fledged), W8-17
W3_10	8_04	hatched (2 of 2)*	6/1/17	Juneau	W9-17, W10-17
W1_06	1_10	hatched (1 of 2)*	6/2/17	Juneau	W11-17
13_03	9_05	hatched (1 of 1)*	6/5/17	Juneau	W12-17
12_03	29_09	hatched (1 of 1)*	6/5/17	Juneau	W13-17
9_03	3_04	hatched (1 of 2)*	6/5/17	Juneau	W14-17
20_14	37_07	hatched (1 of 1)	6/5/17	Juneau	W15-17
25_09	2_04	hatched (2 of 2)*	6/14/17	Juneau	W16-17, W17-17
17_07	10_09	hatched (1 of 2)*	6/15/17	Juneau	W18-17

Table 2. Nest initiation dates, number of nests, number of chicks hatched, and number of chicks fledged 2005-2017

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Total
First Nest Initiation	16 Apr	5-6 Apr	3 Apr	7 Apr	2 Apr	<1 Apr	3-4 Apr	<26 Mar	15 Apr	7 Apr	1-3 Apr	29-31 Mar	30 Mar	
# First Nests	2	5	4	11	12	12	20	22	21	25	27	27	25	213
# Renests	0	1	1	0	5	5	2	7	2	3	10	16	11	63
Total Nests	2	6	5	11	17	17	22	29	23	28	37	43	36	276
# Hatched	0	2	0	0	2	7	4	9	3	13	24	23	18	105
# Fledged	0	1	0	0	0	2	0	2	1	1	3	3*	2	15

*One chick (W3-16) was old enough to have fledged when it died, but flights were never observed.

Table 3. Pairs that have successfully fledged chicks with years of fledging

Sire	Dam	Year(s)		
11_02	17_02	2006		
3_04	9_03	2010	2013	2015
12_02	19_04	2010	2012	2014
9_05	13_03	2012		
10_09	17_07	2015		
2_04	25_09	2015		
29_09	12_03	2016		
1_04	8_05	2016		
12_02*	4_11*	2016		

14_08	24_08	2017		
24_09	42_09	2017		

*12_02 died before chick fledged. Chick was old enough to have fledged when it died, but flights were never observed. 4-11 was found shot at her wintering area at the beginning of 2017.

Communications and Outreach Team

The WCEP Communications and Outreach Team (COT) is responsible for all external communications on behalf of WCEP. It also functions to improve internal communication among the functional teams that make up WCEP, and is the main group responsible for maintaining the WCEP Google Drive, the main repository for notes and documents generated by the various WCEP teams. The COT draws from the expertise of our members, many of whom have experience in public communications and media relations. On occasion we also pull in other employees of WCEP partners when we feel it is necessary to get additional perspective on press releases and other COT activities. Many partners in WCEP participated in external outreach efforts in 2017.

Communications this year followed similar patterns to previous years. In 2017, we are creating a new event-driven Communications Plan with a schedule for press releases, social media posts, and other major communications for WCEP.

WCEP Website

www.bringbackthecranes.org had 11,771 unique visitors in 2017. This represents a decrease of 8% from 2016 when the site had 12,795 visitors. When combined with founding-partner websites: <http://www.operationmigration.org> (81,295) and www.savingcranes.org (34,461), a total of 115,756 unique visitors were reached with WCEP specific information in 2017.

- The number of “pageviews” also decreased with 30,879 versus 35,489 (2016). This represents a drop of 13%. A “pageview” is defined as the total number of pages viewed. Repeated views of a single page are counted.
- Our “sessions” total likewise dropped for 2017 with 15,279 vs 17,265 for the previous year. A “session” is the period time a user is actively engaged with multiple pages on a website.

Where are they coming from?

Of the 15,279 sessions, search engines generated 6022 visits, while referring websites and social media sites generated the balance. The top referring website was links.govdelivery.com with 30.8% of referral traffic, followed by operationmigration.org with 22.7%

WCEP also launched a new website using a WordPress platform. The WordPress platform is a much easier interface than the previous HTML platform, and enables multiple WCEP personnel to be able to update and add content. Previously only two people in WCEP had the required HTML technical skills to update the existing website. Ideally, this will allow WCEP to make the website much more dynamic than in years past. On the heels of the new website, WCEP launched a new Whooping Crane reporting site that provides feedback and relatively up to date individual location information (following WCEP guidelines on the precision of location reporting).

Whooping Crane Documentaries (both worked on editing in 2017)

WCEP facilitated the work of two documentary production companies in 2016:

- Red Sky Productions (Rhett Turner, Greg Pope) began filming a documentary about Whooping cranes in 2015 when they joined Operation Migration on the journey south. They subsequently captured footage of the Parent-Reared releases in the fall of 2016.
- Farzad Sangari is a documentary filmmaker currently making a documentary about Jon Mooallem's book *The Wild Ones*. In order to capture WCEP's more recent work (since the book was published) he brought a crew to Wisconsin to film the 2016 parent-reared releases. Once COT introduced Farzad's crew to the release teams, they coordinated directly to enable filming of all aspects of the releases.

WCEP Media Releases/Articles

The COT issued ad hoc press releases throughout the year in response to important milestones, such as: Whooping Cranes notch nesting milestones in Wisconsin; Breeding season produces history-making wild chicks; Using a variety of techniques, efforts continue to return whooping cranes to the eastern United States.

Monthly Project Updates produced by ICF were shared on the social media channels and through the Partners' websites.

Traditional Media Coverage

Coverage of Whooping Crane Eastern Partnership (keyword) appeared in the following outlets during 2017. Sixty-nine total media stories with total reach **47,205,103**:

Headline	Source	Reach
Wildlife park to focus on whooping cranes Dec. 20	ChronicleOnline.com	14,893
More state news briefs	Hudson Star Observer	7,606
More state briefs	New Richmond News	5,990
More state news	New Richmond News	5,990
Sandhill cranes bounce back from brink as migration over Illinois to peak next week	True Viral News	24,624
Sandhill cranes bounce back from brink as migration over Illinois to peak next week	Chicago Tribune	8,176,573
More state news	New Richmond News	8,169
More state news	New Richmond News	6,159

Breeding Season Produces History-Making Wisconsin Wild Chicks	Before It's News	723,482
Breeding Season Produces History-Making Wisconsin Wild Chicks	AmmoLand.com	308,179
Breeding season produces history-making wild chicks	APG Media of Wisconsin	22,587
Online Whooping crane chat takes flight at noon Thursday	EnvironmentGuru	13,505
Wisconsin whooping cranes hit important nesting milestones	Outdoor News	18,696
Wisconsin whooping cranes hit important nesting milestones	Greater Milwaukee Today (AP)	10,844
Wisconsin whooping cranes hit important nesting milestones	WKOW 27	172,948
Wisconsin whooping cranes hit important nesting milestones	Fox6now.com	698,180
Wisconsin whooping cranes hit important nesting milestones	WMTV - NBC15	74,383
Wisconsin whooping cranes hit important nesting milestones	WSAW	62,504
Wisconsin whooping cranes hit important nesting milestones	FOX 11 Online	100,187
Wisconsin whooping cranes hit important nesting milestones	Roanoke.com	256,055
Wisconsin whooping cranes hit important nesting milestones	AP (Hosted)	4,124,796
Wisconsin Whooping Cranes Hit Important Nesting Milestones	US News & World Report	11,459,931
Wisconsin whooping cranes hit important nesting milestones	TwinCities.com	543,754
Wisconsin whooping cranes hit important nesting milestones	Agriculture News - EIN	1,418
Wisconsin whooping cranes hit important nesting milestones	The Daily Progress	125,615
Wisconsin whooping cranes hit important nesting milestones	WREX.com	3,8019
Wisconsin whooping cranes hit important nesting milestones	WXOW News 19	30,821

Wisconsin whooping cranes hit important nesting milestones	KBJR 6	20,224
Wisconsin whooping cranes hit important nesting milestones	WQOW TV	45,568
Wisconsin whooping cranes hit important nesting milestones	StarTribune.com	1,906,546
Wisconsin whooping cranes hit important nesting milestones	The Washington Times	4,598,542
Wisconsin whooping cranes hit important nesting milestones	Laredo Morning Times	30,295
Wisconsin whooping cranes hit important nesting milestones	San Antonio Express-News	859,282
Wisconsin whooping cranes hit important nesting milestones	Clay Center Dispatch	9,638
Wisconsin whooping cranes hit important nesting milestones	Fort Bend Herald	7,719
Wisconsin whooping cranes hit important nesting milestones	Madison.com	682,660
Wisconsin whooping cranes hit important nesting milestones	La Crosse Tribune (AP)	98,497
Wisconsin whooping cranes hit important nesting milestones	The Eagle	137,378
Wisconsin whooping cranes hit important nesting milestones	WiscNews	57,637
Wisconsin whooping cranes hit important nesting milestones	Chippewa Herald	26,138
Wisconsin whooping cranes hit important nesting milestones	Beloit Daily News	40,612
Whooping Crane Restoration Group Announces Two Milestones	WRJC Radio	786
Whooping Cranes achieve two important nesting milestones	La Crosse Tribune (AP)	98,497
Whooping Cranes achieve two important nesting milestones	Chippewa Herald	26,138
Whooping Cranes achieve two important nesting milestones	Madison.com	682,660
Whooping Cranes achieve two important nesting milestones	WiscNews	57,637

Whooping cranes achieve two important nesting milestones	La Crosse Tribune (AP)	98,497
Whooping Cranes achieve two important nesting milestones	The Journal Times Online	71,091
Whooping cranes achieve two important nesting milestones	The Journal Times Online	71,091
Reward for info on whooping crane shot in Greene County	Rushville Republican	4,462
Several Conservation Organizations Come Together To Offer Rewards In Whooping Crane Killing	WBIW.com - 1340 AM	14,975
Reward in whooping crane shooting now at \$6,500	Kokomo Tribune	28,878
Reward in whooping crane shooting now at \$6,500	Terre Haute	27,799
Reward in whooping crane shooting now at \$6,500	News And Tribune	33,836
Reward in whooping crane shooting now at \$6,500	The Washington Times-Herald	4,865
Reward in whooping crane shooting now at \$6,500	Goshen News	18,410
Reward in whooping crane shooting now at \$6,500	Rushville Republican	4,462
Reward in whooping crane shooting now at \$6,500	Hendricks County Flyer	7,540
Reward in whooping crane shooting now at \$6,500	Greensburg Daily News	10,531
Reward in whooping crane shooting now at \$6,500	Herald Bulletin	29,557
Whooping crane shot in Ind., feds offer reward	IndyStar	1,072,899
Whooping crane shot in Ind., feds offer reward	Cincinnati Enquirer	515,660
Indiana whooping crane shot; feds offer reward	The Courier-Journal	440,516
One lonely whooping crane in Wis. makes special trip south	Winona Post	3,420
Whooping crane researchers evaluate first year of new reintroduction techniques	Apg -WI.com	23,781

WCEP Social Media Sites

WCEP has social media accounts on both Twitter and Facebook. We currently have around 355 Twitter followers and nearly 1,954 Facebook followers. We post updates on Facebook, as well as articles related to other endangered species recovery efforts and linking to WCEP partner projects. Social media sites provide WCEP with an additional tool to better reach new and existing audiences about the project and its partners.

Through increased usage and exposure, the number of “Likes” on the WCEP Facebook page grew from 1,785 on 1 January 2017 to 1,954 on 31 December 2017, representing a 9% growth rate over the 12 months.

WCEP primarily uses Twitter to broadcast press releases and updates. During 2017, WCEP sent out 19 Tweets that garnered 8,759 “impressions.” (An “impression” is defined as a Tweet that was delivered to an account, although not necessarily read. The main focus of Twitter for WCEP is to get news stories into the hands of like-minded conservation organizations and into newsrooms).

Education and outreach programs and events

WCEP partners conducted many programs and outreach events designed to raise awareness about Whooping Cranes and the EMP reintroduction project. We continued to work with our core audience, as well as building our following with outreach events and materials designed to reach non-traditional audiences. Presentations about Whooping Cranes were given at schools, assisted living facilities, and other venues.

Birding and crane-specific festivals are an important part of WCEP outreach. This year WCEP partners tabled and presented at the Whooping Crane Festival in Port Aransas, Texas; the Whooping Crane Festival in Princeton, Wisconsin; the Sandhill Crane Festival in Lodi, California; International Migratory Bird Day in Florida; and the Festival of the Cranes in Decatur, Alabama.

Operation Migration’s outreach efforts through its Field Journal and social media websites continued to reach a wide audience with frequent updates. Other outreach efforts included public tours at the International Crane Foundation.

Jane Duden retired from Journey North, an educational website covering several migratory species that reaches an audience of over 150,000 visitors per month. Journey North helped foster a personal connection to the Whooping Cranes in the EMP through providing in-depth information and updates about each individual Whooping Crane chick throughout its lifetime. Jane was presented with a letter and a gift on behalf of WCEP to thank her for her efforts. In 2017, Operation Migration adopted the biography pages on their site and provided updates for the kids about the

releases and migration to continue this great work.

In 2017, ICF continued a third year of outreach in Wisconsin. ICF repeated many of the previous year’s activities, with outreach events, presence at gun shows and nature festivals, and K-12



education. ICF's Whooping Crane outreach intern lead the program and reached over 2,300 people through which had over 2,000 attendees in 2018.

The winter of 2017-18 was the first year of ICF's Whooping Crane outreach program in Indiana. It was an exciting year. ICF was able to hire seasonal employees in both Alabama and Indiana. Between the two programs, we have 6,998 interactions at 130 outreach events. This does not include traditional and social media. Sassafras Audubon Society in Bloomington, Indiana presented James Kawlewski, ICF's employee in Indiana, with the "Conservationist of the Year" award.

The winter of 2017-18 was the first winter in 10 years that we did *not* have a Whooping Crane shooting. This is important to note, since winter is the most common season for shootings to take place. This could be an outlier year, but ICF believes that our outreach programs are working. We are creating communities that care about Whooping Cranes through our education and awareness campaigns in Alabama, Indiana, Texas, and Wisconsin.