

Lesser Sandhill Cranes, Annual Summary Homer, Alaska, Summer 2019

By Kachemak Crane Watch
A Project of the Center for Alaskan Coastal Studies

After a summer of little rainfall and record high temperatures, Homer's Sandhill Cranes had a successful nesting season with almost no bad weather to challenge them as they raised their colts. The last colt to fledge among those families reported to Kachemak Crane Watch, took wing on August 27, considerably later than those reported at the beginning of August. Predators are always a factor though. As of September 25, one family with two colts was still reported to be in Homer.

For the first time, deformities were noted in locally hatched crane colts. One colt was hatched with a deformed beak; it died about a month before fledging. Crane expert, Gary Ivey commented, "I have never seen this condition in cranes, so I would say it's very rare. I suspect it is a deformity. I have seen similar deformities in white pelicans."



Crane with deformed beak. Photo by Kailey Dee.

A second colt was reported with a short, crooked neck. It has to eat with its knees bent. This colt fledged, but we don't know how vigorous it is or whether it will make migration. It has been seen in different parts of Homer, so it is able to fly fairly well. "It sounds like a severe developmental deformity. I doubt it will be able to migrate, and I think its likelihood of survival is very low," said Ivey. As of September 21, 2019, this colt and its parents were still in Homer but that is the last reported sighting. (Short video of short-necked crane colt: <https://youtu.be/rR8bXqJJcPQ>)



Colt with deformed, short neck attempting to feed. Note the missing feathers on its legs. Last seen in Homer, Alaska on September 21, 2019. Photo by Nina Faust.

Sandhill Crane Count Days, the three Saturdays before the average departure date in mid-September, showed markedly different totals each Count Day between 6:30 p.m. and sunset. Cranes arrived slowly early in the count time period on August 24, but then steadily dropped in with sunlight illuminating their acrobatic, parachuting descent to the Slough. Most dropped among the foraging flock, calling, dancing, and socializing. The total that evening was 120, with 17 colts included.

August 31, only 62 finally gathered, including 15 colts. Two differences may account for the reduced numbers. The Slough's water level nearly covered the area due to a 21.7-foot high tide two hours before the count started. Then as the evening count progressed the tide went to a -2.1 at 10 p.m. One of the count participants reported just after the Slough count ended that there were 37 foraging down on the intertidal beach below her home. The second difference, six Bald Eagles were constantly harassing the cranes most of the evening causing the flock to fly frequently. Some cranes by-passed the Slough choosing to use other roost sites in the area.

The final Count Day, September 7th, recorded only 34 cranes total. This was roughly half the previous week's

count of 62. It is possible that some of the local Homer flock had already migrated, or perhaps they were using alternate roosts where there is less eagle activity. Beluga Slough becomes available as a roost site for the non-breeders once all the Slough's surviving colts of the year have fledged. For data on the counts at Beluga Slough the past two years, see the Beluga Slough Count Days Table at the end of this article.

Between September 14 through September 17, numerous callers reported large groups of cranes flying in from across Cook Inlet. Hundreds in V-formation flew over the ridge above Homer and some up Kachemak Bay to the Fox River Flats. On the 14th, the flock of 35 at Inspiration Ridge Preserve became agitated. Pairs were in unison calling in answer to the dramatic trumpeting heard in the distance. They all quickly gathered, pointed themselves in the same direction, and exploded into the air on track eastward to join the cranes gathering at the head of Kachemak Bay. This was one of the years that the upper air currents brought many of the migrating flocks from the Alaska Peninsula over Cook Inlet in line with Homer, Anchor Point, and North Fork area. Many years these large migrating flocks are reported crossing from Anchor Point north, mostly missing Homer.



Birders gather for Count Day Fly-in at Beluga Slough.

The 2019 nesting season had extremely warm, dry weather and good success. Reports of crane arrivals began with the first report on April 2, when two were in Beluga Slough. The next reported sighting April 21 when a flock of 100 was reported grazing in the Slough. Fledging success this year was 64.7% (68 colts hatched from 38 reported nests and 44 survived to fledging). Last year, the overall fledging success rate was 76.2%, (63 colts hatched from 33 reported nests and 48 colts survived to fledging). That is an 8.3% drop over 2018. Six more nests were reported this year. The population of local cranes appears to be doing well overall. Kachemak Crane Watch has received more reports of new nests and cranes being seen in new locations, possible indicators of an increasing population.

Predation affects overall success of the nesting season. Reports of eagles, dogs, magpies, and bears destroying nests reduced the success rate. Based on consultation Dr. Ivey, another colt is suspected to have succumbed to a parasitic disease, based on described symptoms.

Adult mortality reports this year, for the first time, included a crane killed by flying into a fast-moving car on East End Road near the base of East Hill Road. Unfortunately, cranes in urban settings have more hazards than those in wilder locations. A loose dog mangled another crane, a preventable injury if people keep their dogs on a leash or at home. Birds worldwide are disappearing by the billions according to recent reports. We need to do what we can to protect birds that reside in our neighborhoods.

This year cranes arriving in the Sacramento Central Valley will find relatively good wintering conditions. According to Dr. Gary Ivey, a leading crane expert, "Water conditions are slightly above normal, so habitat conditions for cranes should be OK. Compatible crops continue to disappear as more vineyards are displacing them. I don't anticipate any major problems for cranes this year." The continuing loss of compatible crops is concerning for their long-term welfare.

A report from Bart McDermott, Refuge Manager of Stone Lakes NWR in Elk Grove CA near Sacramento describes the preparations that must be undertaken before Sandhill Cranes arrive in the Central Valley:

Wetland managers have been busy across the Central Valley this summer mowing, disking, and irrigating seasonal wetlands in preparation for the fall migration. The above average snowpack that the Sierras received this past winter has ensured managers they will have the water supply needed to flood their wetlands over the fall in anticipation of migrating water birds. As the days become shorter, the first wave of pintail ducks begins to arrive in the North Central Valley.



Stone Lakes National Wildlife Refuge personnel flood wetlands behind the headquarters as a foraging area on for Lesser and Greater Sandhill Cranes and other waterfowl. Photo by Bart McDermott.

The Sacramento-San Joaquin Delta area wetland managers met at Stone Lakes National Wildlife Refuge in early September to share their flood-up schedules and coordinate the winter crane roost surveys. The Delta wetland managers group is comprised of federal, state, and county agencies as well as some private conservation organizations like the Nature Conservancy (TNC). The coordinated crane roost counts were initiated just among the Delta wetland managers in 2015 with a total of just over 15,000 cranes. Wildlife Refuges in California were included in the roost count in 2018 with a total of 33,115 lesser and greater sandhill cranes.

The first pair of lesser sandhill cranes were spotted at Staten Island on 9/9/19. Cranes were also observed on the Cosumnes River Preserve on 9/20/19. Staff at Stone Lakes Refuge are out searching for the first cranes to arrive on the Refuge. Refuge staff will continue to monitor banded greater sandhill cranes from Modoc NWR over the winter, as well as any birds that may have been banded in the past by Gary Ivey at Malheur NWR or Homer, Alaska.

While efforts to manage habitat and protect cranes wintering on public and private land continues in the Central Valley, foraging habit to sustain birds over the winter continues to disappear to support the current housing boom, nut market, and California wine industry. The Central Valley of California is the most important waterfowl wintering area in the Pacific Flyway, supporting 60 percent of the total duck and goose population. Each winter thousands of birds migrate south to the Central Valley to forage for grains, plants and insects that reside within the agricultural fields, pastures, and seasonal wetlands. The greater sandhill crane, listed by the State as a threatened subspecies under the California Endangered Species Act (CESA), depends on the combination of managed wetlands and wildlife compatible farmland. Over the winter, sandhill cranes roost in managed seasonal wetlands or flooded agricultural fields and forage in row crop fields, irrigated pastures, and grasslands. Due to energetic limitations, winter home ranges for these birds are relatively small and require foraging areas within 3 miles of suitable roost sites (Ivey 2015).

Although the Stone Lakes Refuge, and other conservation areas, such as the Consumnes River Preserve, have provided some of the key roosting habitat, each year crane and waterbird winter range continues to be at risk. Over the past twenty years there has been a steady increase in the number of agricultural fields being converted to orchard, vineyards and housing developments. The Service currently manages only 40% of Refuge Project Boundary through fee-title and conservation easements.



Creeping subdivision developments on the edge of Stone Lakes National Wildlife Refuge in the Sacramento Valley. Photo by Dr. Gary Ivey.

Completing the Refuge has been stifled by high land values and limited federal funding. However, the Refuge continues to be an important interface between urban development and the small number of remaining dairies and ranches that provide critical foraging areas for cranes.

Fortunately, we have many partners and conservation groups around the Refuge to assist us with protecting wintering crane habitat. Point Blue has produced a number of studies in the Central Valley involving water tracking of wetlands, shorebird and waterfowl migrations, and sandhill crane habitat availability in the Delta. There are other local conservation groups like the Environmental Council of Sacramento (ECOS) and Save Our Sandhill Cranes (SOS) that are advocating for sandhill crane habitat. The Refuge Friends Group, Friends of Stone Lakes NWR, has been following several issues that would affect the Refuge and impact migratory birds involving a large scale water delivery project that would cross the Refuge, a local urban boundary expansion to build more housing tracks and commercial buildings in compatible farmland, and a 12 story glass medical center with a helicopter pad in the flight path of wintering snow geese.

Sean Wirth, Board Member and Conservation Chair of Save Our Sandhill Cranes, provided Kachemak Crane Watch with further information on mitigation efforts to protect habitat and roosting areas in the Sacramento area. Crane advocates throughout the area are making a concerted and coordinated effort to assure mitigation for loss of valuable habitat areas, work that is vital to the nesting success of Homer's Sandhill Cranes.

After more than a dozen years of significant time investment by Save Our Sandhill Cranes, the South Sacramento Habitat Conservation Plan has been completed, reviewed, certified, and permitted. The Plan will result in 10,320 acres of modeled Sandhill Crane habitat being conserved in South Sacramento County over the next 50 years as mitigation for urban development projects to the north. Since the vast majority of the currently conserved Sandhill Crane habitat is within the floodplain and at or below sea level, the Plan also calls for at

1,000 acres of upland forage habitat to be protected. These upland acres are prime choices for urban development, so their acquisition will be very expensive. The permit period for the Plan is 50 years, and we have a seat at the table to review implementation on the Implementation Review Committee over that same 50 years.

After a prolonged battle over the massive twin tunnel infrastructure project that would have quadrupled the amount of water that southern California and the southern San Joaquin Valley could have siphoned from our northern California rivers, the project was pulled. The Greater Sandhill Crane was an essential element in the effort to stop the massively destructive project because of its special status as a California Fully Protected Species, a designation it received before the California Endangered Species Act was penned. The project proponents had to demonstrate that no Sandhill Cranes would be harmed in the construction and operation of the project, and despite their vigorous



Staten Island Sandhill Crane wintering and foraging area.
Photo by Dr. Gary Ivey

mathematical gymnastics, they were never able to convincingly do this. Now we have to gear up to fight the spawn of that first project as they attempt to get buy in for a single tunnel project which would also be massively destructive to Sandhill Crane habitat.

We continue to fight the growth ambitions of a couple of the southern cities in the county that want to pave over all of our local farmland and put in low density sprawl developments and malls. It is a well understood scientific fact that Sandhill Cranes have no need for malls, parking lots or urban sprawl. Sprawl and agriculture conversion to crops like vineyards and orchards continue to gobble up viable Crane habitat at an alarming rate.

Working together and sharing knowledge from both ends of the crane flyway helps foster understanding of the need to protect areas at both ends of the migration route for survival of cranes for future generations. Even in Homer, we have work to do. Beluga Slough, an area where three crane pairs nest and raise their young within view of delighted residents and visitors observing their life cycle from the boardwalk, needs some assistance. This summer many intrusions by hikers, photographers, and dogs into the cranes' nesting area off the boardwalk were observed. Despite signs and efforts by naturalists that lead occasional wildlife walks along the Slough, the number of incursions did not slow down. This winter Kachemak Crane Watch intends to make a brochure about the need to stay out of the nesting area and to keep dogs on a leash. (See article: http://www.homertribune.com/article/1932protect_beluga_slough_and_its_incredible)

Kachemak Crane Watch appreciates all the Citizen Scientists who provide detailed information about the cranes nesting nearby and local non-breeding flocks using the area. Learning about breeding success, mortality, and disease opens a window to the health and productivity of our local cranes. All the reports, including reports of the non-breeding flocks, helps make that window much clearer. Citizen Science, collaborating with groups like Save Our Sandhill Cranes in Sacramento and the International Crane Foundation, and providing information to the general public are all ways to help educate people about cranes in both their summer and winter habitats.

Sign up for our email list on the Kachemak Crane Watch website at www.cranewatch.org. Remember, when you see cranes in the Kachemak Bay area from Anchor Point south, send your report to reports@cranewatch.org or call Kachemak Crane Watch at 235-6262. Reports to our main number and email are much more likely to reach Kachemak Crane Watch than random posts on social media.

Sandhill Cranes are enduring symbols of wilderness, their ancient trumpeting calls a reminder that constant vigilance is needed to preserve this magnificent species.

~Edgar Bailey, Co-founder, Kachemak Crane Watch



Pre-migration flock heading taking the colts for a practice flight.



Sunrise arrival at Inspiration Ridge Preserve

Tables

First Reported Arrival Dates	
Year	Number
2019	April 2
2018	April 7
2017	March 29
2016	April 1
2015	April 21
2014	April 14
2013	April 19
2012	April 11
2011	April 21
2010	April 18
2009	April 9
2008	April 3
2007	April 2
2006	April 7
2005	April 13
2004	April 17
2003	April 20

Number of Reported Fledged Colts From Anchor Point South	
Year	Number
2019	44
2018	49
2017	34
2016	30
2015	17
2014	24
2013	20
2012	24
2011	21
2010	36
2009	34
2008	33
2007	35
2006	36
2005	29
2004	23

Largest Premigration Flock at IRP	
Year	Number
2019	88
2018	95
2017	100
2016	86
2015	99
2014	38
2013	95
2012	120
2011	105
2010	61
2009	82
2008	90
2007	118
2006	80
2005	78
2004	55
2003	100+

Nest Data					
Year	Nests	Colts Hatched	Colts Fledged	Nest Success	Fledging Success
2019	38	68	44	78.9%	64.7%
2018	33	63	48	87.9%	76.2%
2017	29	54	34	-	63%
2016	30	49	30	-	61.2%

Beluga Slough Count Days									
Count Day	8/26/17	9/2/17	9/9/17	8/25/18	9/1/18	9/8/18	8/24/19	8/31/19	9/7/19
Colts	14	25	16	27	38	25	17	15	9
Adults	103	111	40	87	99	152	103	47	25
Total Cranes	117	136	56	114	137	177	120	62	34



This Nesting Crane sign or one very similar can be purchased for \$20 one-sided, or \$30 two-sided. They are available at North West Signs and Vinyl // Bay Welding Services, Jamin Bultman // Graphic Designer, jamin@northwestak.com // [907.235.5106](tel:907.235.5106) // [907.315.7567](tel:907.315.7567)

Crane Links:

Kachemak Crane Watch: www.cranewatch.org
 Save Our Sandhill Cranes: <http://soscranes.org>
 International Crane Foundation: <https://www.savingcranes.org>

Kachemak Crane Watch Youtube Videos: <https://www.youtube.com/playlist?list=PLE5DF4095CA03BCCC>