



Oregon Birding Association  
Oregon Fund for Ornithology  
P.O. Box 675  
Lincoln City, OR 97367-0675

RE: Completion Report for Friends of Ladd Marsh Grant

Spring and summer 2020 were very successful in terms of greater sandhill crane capture at Ladd Marsh Wildlife Area. We captured four after hatch year cranes (AHY) in March, placing Platform Transmitter Terminals (PTTs; also called satellite transmitters) on three and color banding the fourth. During June and July, we captured five pre-fledging colts. We did not have PTTs available for the colts so we marked them with color bands only. All five of those colts survived to fledge, an almost unheard of level of survival for crane colts at Ladd Marsh.

The new PTTs brought the number of active transmitters to 10 and further raised the cost of data collection. At our request, three PTTs originally placed in 2015 were "turned off" at the end of June 2020. Those transmitters were nearing the end of their lives and the data they contributed was unreliable and erratic. This action took us back to seven active transmitters.

Funds provided by OBA's Fund for Ornithology grant assisted with payment of the data collection fees during spring and summer 2020. We were able to track the newly marked cranes to their nesting areas on and off Ladd Marsh. Two of the cranes marked with PTTs in March occupied previously mapped nesting territories within the wildlife area. Those territories had been occupied by unmarked cranes for at least several years so we could now identify the birds in those areas. Further, one crane captured in March left Ladd Marsh and occupied a nesting territory above 4,000 feet elevation in the national forest. Monitoring PTT data from cranes marked in 2019 also led us to nesting territories at higher elevations on private land surrounded by national forest. This will contribute to a greater understanding of sandhill crane nesting habitat in northeast Oregon.

We appreciate the support of OBA's Fund for Ornithology to defray the cost of data collection from the PTTs on greater sandhill cranes. We will continue to monitor the cranes throughout the year as long as the PTTs continue to function. Through this effort, we will continue to add to the body of knowledge about sandhill cranes in the Intermountain West in general and northeast Oregon in particular.



Figure 1. March 2020 - Cathy Nowak and Justin Russell, ODFW, with LM034, an AHY crane, after banding and just before release.



Figure 2. June 2020 – L-R: Justin Russell, ODFW; Nolan Clements, Friends of Ladd Marsh; and Corey Crossley, ODFW with LM039, a pre-fledging colt, after banding.

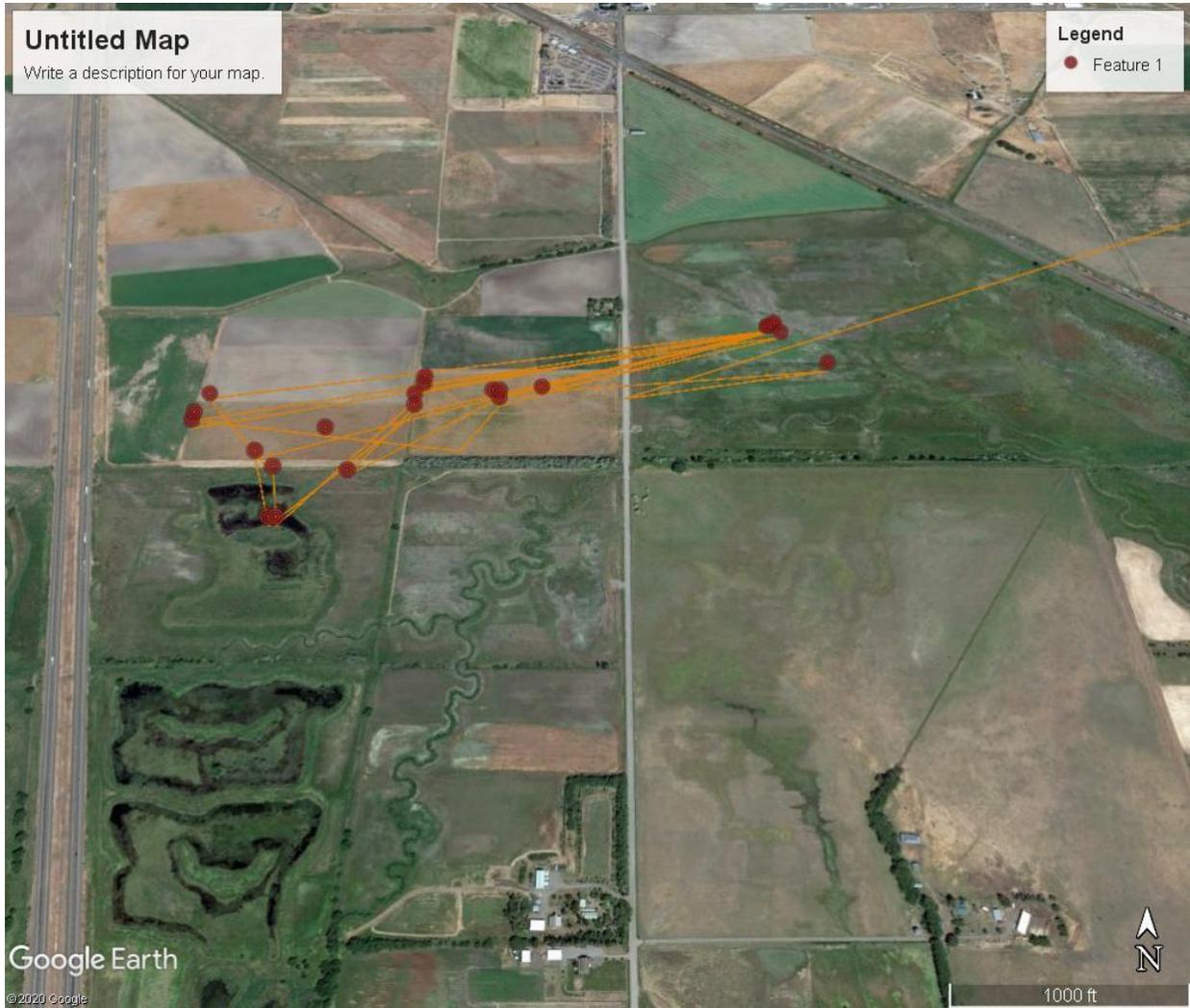


Figure 3. An example of post banding movements of an adult sandhill crane after capture and banding on Ladd Marsh Wildlife Area 2020.

## 2021 Project Update

This update, prepared in August, 2021, follows the completion report submitted in 2020. The OBA – OFO grant funds were exhausted in 2020 in payment of data download fees for PTTs (transmitters) placed on greater sandhill cranes. Seven PTTs remain functional on living cranes in 2021. Additional captures were made in 2021 and are summarized below. The project has transitioned to doctoral research with Texas Tech University (TTU) although it remains associated with Friends of Ladd Marsh and Oregon Department of Fish and Wildlife.

A crew of 11 TTU graduate and undergraduate students came to Ladd Marsh in March 2021 to assist with rocket net capture of adult (AHY) greater sandhill cranes (cranes). It was our most successful spring capture week to date. We caught 10 new cranes and placed GSM (Global System for Mobile Communication) transmitters on 6 of them; we color-banded the rest. This was our first-time using GSM transmitters which work using cellular networks and are less than one-half the cost of the PTTs we used previously. We also recaptured a crane (LM021), we had previously captured as a pre-fledging colt in 2017. He was captured together with his mate, LM072, which received a GSM. Although LM021 carries a PTT, it will soon reach the end of its useful life. Attaching a GSM to his mate will allow us to follow this pair at least a few more years into the future if they stay together. In July, we hand captured one pre-fledging colt (LM049) and color-banded it. That colt has successfully fledged.

With the addition of 6 cranes with GSM transmitters, we now have 13 cranes recording GPS location data several times each day. Four of the GSM-marked cranes occupied nesting territories within Ladd Marsh Wildlife Area and at least one fledged a colt in 2021. One GSM-marked crane (LM072) along with her mate (LM021) occupied a nesting territory a few miles west of La Grande. The remaining GSM-marked crane left the area a couple weeks after capture, heading north. The last location from the bird was in central British Columbia. It has not been heard from since. Although it might have settled into an area without cell service, it should have begun post-breeding movements by now; it is presumed dead.

Cranes around LMWA have begun gathering in flocks in grain fields, pastures, and meadows as they prepare for fall migration. Most cranes will depart south in the last week of September or the first week of October. We will be watching the telemetry to learn where the newly marked cranes travel to for the winter of 2021-2022.

We appreciate the support of the OBA Oregon Fund for Ornithology to assist with data collection fees in the continuing effort to learn more about the population affiliations of LMWA greater sandhill cranes.



Cathy Nowak with the Texas Tech students on one of 11 adult greater sandhill cranes captured in 2021.