EDITORS: MYRNA PEARMAN, SUSAN VAN DER HOEK

APRIL, 2020

A CELEBRATION OF SANDHILL CRANES

By Myrna Pearman

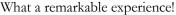
Since our RDRN meetings have been postponed due to the current situation, we thought we'd dedicate this issue to Sandhill Cranes. These majestic and graceful birds are now in the scope of some Alberta hunters, who are chafing for more "hunting opportunities," so are clambering for a season to be opened on them. Be sure to write your MP and MLA expressing opposition to this proposal!

I have been fortunate enough to see Sandhill Cranes both in migration and on their nesting grounds.

A friend and I have just returned from Kearney, Nebraska, where we—along with thousands of others—witnessed one of the most amazing mass animal migrations on the planet: the convergence of more than 80% of the world's population of Sandhill Cranes on Nebraska's Platte River valley, a critical sliver of threatened habitat in North America's Central Flyway. It is estimated that 1.2 million Greater and Lesser Sandhill Cranes will pass through in 2020.

The cranes arrive from far-flung wintering grounds in northern Mexico, Texas and New Mexico, and use this ancestral area to rest and refuel for a month as they prepare for the arduous journey to vast breeding grounds in Canada, Alaska and Siberia. The shallow braided channels of Nebraska's Platte River provide safe nighttime roost sites while the corn and waste grain in nearby farm fields provides them food to build up depleted fat reserves needed for migration. Adjacent wet meadows also provide critical feeding grounds as well as areas for them to rest, bathe and court.

Local conservation groups have capitalized on the spectacle by welcoming visitors from all over the world who flock to the area to see the cranes. A Crane Festival, interpretive centres, viewing decks, guided tours to viewing blinds, and self-guided driving tours are all offered so visitors can maximize their experience and the cranes can be viewed safely at close range. On this trip, we wandered the back roads to watch them feed, then were able to do an early morning tour to see them lift off the river to head out to feed for the day, and then another evening tour to watch them return to their roosts for the evening.









SEASONAL SIGHTS AND SOUNDS OF ALBERTA: THE GUTTURAL CRIES OF AN AN-CIENT BIRD, THE SANDHILL CRANE

By Dr. Sally Stuart

As spring arrives, I find myself listening and watching for any signs of Sandhill Cranes (*Grus canadensis*). Usually these birds pass just east of us, but occasionally a few spend the night on the edge of Cygnet Lake. On October 2, 2019, at 7:10 am, I stood transfixed, microphone in hand, as a group of approximately 70 cranes departed from the marsh and flew directly over head. The noise was deafening, exhilarating, yet mournful at the same time.

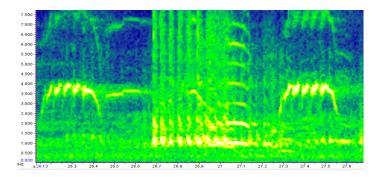
Cranes are magical birds. In 1872, the British naturalist, the Rev J G Wood was fascinated by them. He describes watching the Demoiselle or Numidian Crane in the zoological gardens (presumably in London): a slow and graceful bird who on occasions was seized with a fit of eccentricity, dancing about on the tips of its toes, flapping its wings and bowing its head in the most grotesque fashion.

Cranes have exceptionally long tracheas (windpipes) which coil inside their breast bone (sternum). They are able to adjust the length of their trachea, which combined with constriction of the



larynx and vocal membranes in the syrinx, allows them to make different frequency sounds. Flight calls, which rise and fall in pitch, are produced most often when flying. These calls have been described as rattling, bugling and trumpeting, and are indeed similar to the calls of swans. Using a sonogram (which is basically a picture of the sound, showing time and frequency) to analyze the calls as they flew overhead, I found the predominant fre-

quency of just over 1 KHz. This is shown in the central portion of the sonogram (below). It is this low frequency which allows the calls to travel over long distances of several kilometers.



As about 70 cranes were calling, it was impossible to analyze individual calls, but according to researchers, flight calls are normally made up of seven to 20 notes at about 15 notes per second. Cranes call frequently when taking off and flying. It is speculated that the abundance of calls just as they are taking off probably helps them avoid collisions. Mixed in with typical flight calls were the occasional rapidly emitted high pitched almost squeaky call, shown in the first and last portion of the sonogram. These were produced in clusters of 5 notes in a period of about 0.3 seconds and at a much higher frequency of about 3.5 KHz. This may be the flight call of the young crane, totally distinct from the adult and mesmerizingly beautiful.

It is always somewhat surprising to me that most bird species produce a wide variety of calls. A fascinating paper by Nesbitt and Bradley in 1997 showed that Sandhill Crane were no exception. They recognized 20 such calls and described them as purrs, flight calls, guard calls, honks and moans, to mention but a few. Some calls may even influence the physiology of female birds in preparation for breeding and egg production! Furthermore, purrs came in many varieties. Some were quiet sounds produced almost continuously when feeding and used for communication between family members over short distances. They would probably be inaudible to others such as predators. A slightly different purr is the flight intention purr, given just before they take off, followed by the flight purr - a quick, high pitched call. Yet another purr, the growl purr, is a sign of aggression. Aggression is always a risky enterprise. Dominant cranes joust with each other. This jousting can become quite violent as they will prod at each other with their beaks, claw their opponent with their feet and undergo gymnastic somersaulting movements. (Most likely the behaviour observed by the Rev Wood was an example of this. Behavioural ecology emerged as a science in the 1970s, so

he would probably have been unaware of the significance of this behaviour.) In many cases, calls on the ground will help avoid conflict,



especially if they travel long distances. Nesbitt and Bradley noted that calls may be enhanced by both posture of the bird and time of day. Territorial calls tend to be heard at sunrise and sunset. At these times the air is often clear and still, which enables the sounds to travel further.

Sandhill Cranes are very ancient birds and have likely followed the same migration routes for millions of years. They are extremely efficient fliers, able to coast at speeds of 70 km an hour. They also take advantage of thermal soaring which utilizes columns of warm air created as the ground is heated by the sun. In this time of social isolation, I scan the skies hoping for a glimpse of a creature which can freely cross borders, returning once more to Alberta to begin its spring breeding ritual.

DID YOU KNOW?

By Susan van der Hoek

A group of cranes has many collective nouns, including a "construction," "dance," "sedge," "siege" and "swoop."

SANDHILL CRANE SAGA

By Myrna Pearman (Blog Post myrnapearman.com June 20, 2018)

For years, I have been hoping to find a pair of nesting Sandhill Cranes. They are quite common in the west country during the breeding season but their nests –usually tucked into the middle of a swamp – are notoriously difficult to find.

On May 31, a friend and I stopped by the observation tower at Medicine River Wildlife Centre. How surprised and delighted we were to spot a Sandhill Crane sitting quietly on her nest a mere 100 m from the tower! The nest location was inaccessible from the shoreline, but clearly visible and ideal for observation and photography from the tower, so I shared the location with a few other photographers.

While away for the following weekend on a trip in Saskatchewan, a visiting photographer advised that, on the morning of June 3, one colt had hatched. She was able to get some superb photos of both adults and the first colt on the nest sitting beside the remaining egg. Reluctant to leave the prairies behind (we were on a quest to find Burrowing Owls), we nevertheless decided that the crane hatching was not to be missed. So, we hurriedly packed up and sped back home.

We arrived at the tower in the early evening and watched the nest until dusk. The male did not show up, but we were able to see the colt jump around on the nest and attempt to clamber up on its mother's back.

We were back at the blind at 6:00 AM the next morning, joined by a few other keen photographers. We huddled against the



wind and the mosquitos, and our efforts were rewarded at about 8:00 AM when we saw the male amble towards the nest. As he approached, the female slowly rose up, revealing the second colt. One of the colts caught an unexpected ride up on her back. It stood up between her wings, let out a squawk and then tumbled down onto the nest. The male kept his distance, watchful and wary.

To our surprise, the two colts didn't take kindly to each other. An energetic tussle ensued, with each trying to throw the other off the nest. The adults seemed nonplussed about the scrimmage, which eventually ended in an apparent stand-off.

We watched the new family for another four hours. The young eventually jumped off the nest and swam awkwardly through the shallows to a nearby clump of swamp grass, where they were fed by the adults. Thereafter, we caught only occasional glimpses of little rusty heads moving about in the long vegetation. The female returned to the nest a few times, once standing atop it as if examining something, but usually to dig through the vegetation for apparent morsels.

Around 9:30 AM, she returned to the nest with both the colts. After climbing back up onto the nest mound, they pressed their way under her wings and had a half-hour nap. By 10:00 AM they reappeared when Mom stood up. The three of them then left the nest to rejoin the male. By noon they had moved off quite a distance from the nest area, so we bid them adieu and packed up our things.

What a memorable nature experience we were privileged to have witnessed!





FLOWER FOCUS AND BIRD FOCUS

Postponed until further notice

PROTECT ALBERTA'S PARKS (FROM CANADIAN PARKS AND WILDERNESS SOCIETY)

The Government of Alberta's announcement in early March to close or partially close 20 parks to public access and remove an additional 164 sites, has been a critical issue for us this past month. CPAWS has asked the public to help them stop these changes by expressing opposition to your MLA. Over 4,400 Albertans took action! An additional 6,600 letters have come in from across the country! Those who wrote letters were not alone in their concern with the removal and closure of parks sites. A new public opinion survey that came out last week found 7 in 10 Albertans oppose the removal of parks from the Alberta Parks system. In addition, outdoor retailers, RV dealers, Backcountry Hunters and Anglers, and even Rural Municipalities Alberta have publicly expressed their concerns over this issue.

However, much of the media around the announcement left us with a few questions. This confusion motivated our team to dig a littler deeper and check some of the concerning statements we had seen. We answered some questions such as:

- Will the parks still be protected?
- What are you allowed to do on vacant public land?
- Is the government selling public land?
- Did the government really remove the requirement for consultation from the Alberta Parks Consultation Framework just before this announcement? (Spoiler YES!). You can read the answers to all of this and more in the CPAWS latest blog

Alberta Parks Fact Check: 13 Truths and a Lie About the Announced Changes to Alberta Parks





7 in 10 Albertans

system

oppose the closure or removal of

parks from the Alberta Parks

The Red Deer River Naturalists, the first natural history organization to be established in Alberta, was incorporated as a society in 1906. The objectives of the society are to foster an increased knowledge, understanding and appreciation of natural history, and to support conservation measures dealing with our environment, wildlife and natural resources.

Annual membership is \$15.00 for individuals and \$20.00 for families.

Regular meetings are held at 7:30 p.m. on the fourth Thursday of most months at the Kerry Wood Nature Centre, 6300-45 Ave., Red Deer, AB. Non-members are welcome.

Members are encouraged to contribute to this newsletter. The deadline is the last Friday of the month.

Box 785 Red Deer, AB T4N 5H2 Phone/Fax: 403.347.8200

rdrn.nature@gmail.com www.rdrn.ca

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Photos, unless otherwise noted, by Myrna Pearman