

FIRST CONFIRMED BREEDING RECORD OF THE SANDHILL CRANE IN THE CRESTON VALLEY, BRITISH COLUMBIA

Linda M. Van Damme¹, Bob Stubbs², and Pauline Dupas²

¹619 20th Avenue South, Creston, BC. V0B 1G5

²421 Second Street, Nelson, BC. V1L 2L4

Abstract

The early history and present status of the Sandhill Crane (*Grus canadensis*) in the Creston valley, British Columbia, is documented, including first breeding.

Introduction

The Sandhill Crane (*Grus canadensis*) has been expanding its range into southeastern British Columbia over the past three decades with new breeding range expansion extending into the Columbia River and lower Blaeberry River valleys, north of Golden (Campbell et al. 1990, Leighton 2005). This note discusses historical and current occurrences, and breeding behaviour, of the Sandhill Crane in the Creston valley region of southeastern British Columbia from 1931 through 2006.

Historical Overview

Some of the earliest reported field studies on the avifauna of the Creston valley (Figure 1) were carried out by Joseph Mailliard (1932) and James A. Munro (1950, 1958). Neither recorded, nor mentioned, the Sandhill Crane. Nearly three decades later Butler et al. (1986) updated information on birds in the Creston valley. The authors listed the Sandhill Crane as "Rare" with the following notes: "Earliest sighting is 17 April. Seen in May, July, September, and October. No nest records." In 1981, Ducks Unlimited Canada surveyed the Lower Kootenay Indian Band lands for waterfowl and there was no mention of the Sandhill Crane (Wildlife Data Centre).

The first Sandhill Crane, a single bird, was recorded on 29 August 1962 at Duck Lake, in the Creston Valley Wildlife Management Area (CVWMA), by R.W. Noble during waterfowl



Figure 1. Aerial view of Sandhill Crane wetland breeding habitat in Corn Creek Marsh (bottom) and Leach Lake (top) with adjacent agricultural foraging habitat. Both sites occur within the Creston Valley Wildlife Management Area in the Creston valley, BC. 13 August 2005 (Cyril Colonel). BC Photo 3438.

surveys by the Canadian Wildlife Service. Dwight Moore, manager of the CVWMA, documented the next occurrence, also a single bird at Duck Lake, in October 1969. Over the next 14 years, from 1969 to 1983, only eight sightings of Sandhill Cranes were noted (Figure 2). All of these records were of single birds with the exceptions of 12 September 1978 when six cranes were seen on farmlands near Lister at the south end of the Creston valley (E. McMackin, pers. comm.), and 31 May 1982 when a group of 100 cranes were sighted in the Creston valley (Campbell et al. 1990).

From 1984 through 1995 the species remained elusive and was recorded only once, in 1991. Commencing in 1996, and continuing through 2006, Sandhill Cranes appeared regularly each year (Figure 2). Its current status in the Creston valley is listed as

“a rare summer visitant and a rare spring and autumn migrant” (Van Damme 2002). During this period most Sandhill Crane sightings were of one to five birds with the following two exceptions: 16 cranes were seen foraging in an agricultural field at the south end of the Creston valley on 7 October 1997 (M-A. Beaucher, pers. comm.), and a flock of about 50 birds was seen flying north over Wynndel on 25 March 2002 (R. Gerein, pers. comm.)

Cyril Colonel, who has farmed in the Creston valley for the past 32 years, first noticed Sandhill Cranes on 14 October 2001. In a letter to L.M. Van Damme he wrote:

“When I first saw them in the distance I thought them to be herons, but as I got closer they appeared to be light in color and didn’t fly like herons. Set the

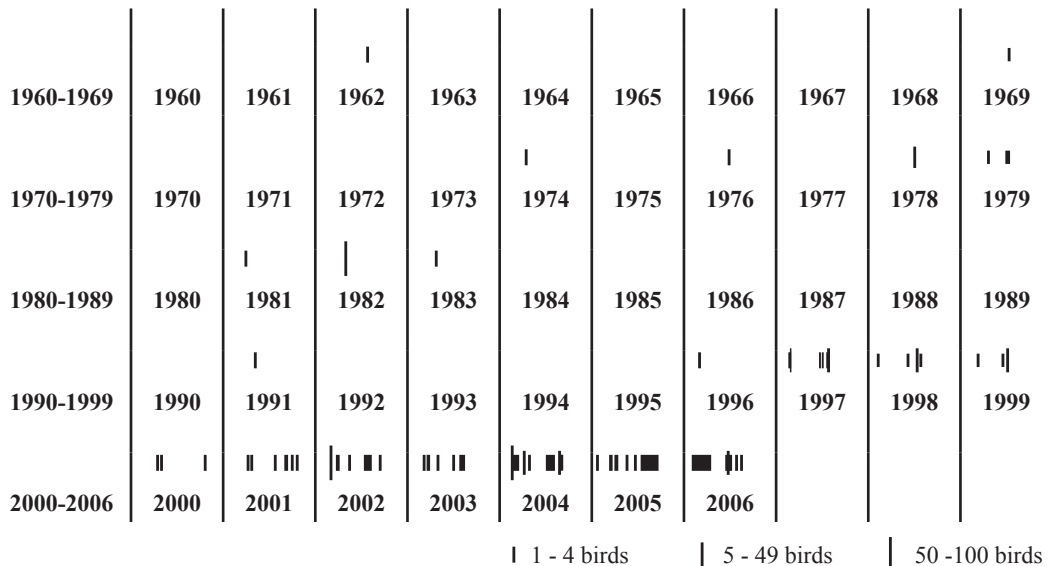


Figure 2. Occurrence of the Sandhill Crane in the Creston valley by decade and year (1960-2006).

scope up on my window and drove closer like about 200 yards and was afraid they would fly but they didn't. Watched them for about 15 minutes. They were near a large flock of Canada Geese out in a meadow. Tried to call you to see if I was seeing things but no answer. Large and grey and quite heavily feathered had a red forehead. Really an elegant looking bird. Didn't know they were around here. In the middle 50's I used to see them at the airport in Fort Nelson where I worked"

During the five years since 2002, the Sandhill Crane has become a rare and local, but regular, summer visitor in the Creston valley (Figure 2). Most records are of one to six birds with the exceptions of 50 cranes flying northward over Wynndel on 27 March 2004 (G. Thompson, pers. comm.), and 25 cranes flying in a northerly direction over Arrow Mountain on 16 May 2004 (G. Brown, pers. comm.). The Sandhill Crane, now a breeding species, has been recorded in the Creston valley from 6 March to 15 November.

Breeding

The isolated and extensive wetlands of the Creston Valley Wildlife Management Area (see Figure 1) and the Lower Kootenay Indian Band Lands offer ideal breeding habitat for nesting Sandhill Cranes. According to Tacha et al. (1992), this includes a nest site over water, a variety of roosting sites, nearby foraging areas, and some isolation from human disturbance.

Prior to the 21st Century, the Sandhill Crane was considered a rare spring and autumn transient, and casual in summer, in the Creston valley. In 2002, its status changed to a "possible" breeding species on the basis of reports received by CVWMA staff from visitors that Sandhill Cranes had been sighted in the Corn Creek Marsh and Leach Lake units. In addition, Don Bjarnason (CVWMA) reported four adult cranes in late August, two of which were engaged in "agitated" calls and behaviour patterns (The Wetlander 2002). On 9 September 2002, Marc-André Beaucher (CVWMA) observed two adult cranes with one juvenile in Corn Creek Marsh. It seems likely that the Sandhill Cranes nested locally in the summer of 2002.

In April 2003, Bruce Lawrence, whose property

borders Corn Creek Marsh, contacted the L.M. Van Damme to report the presence of cranes. The loud trumpet-like calls were not a sound he was familiar with, even though he had grown up in the Creston valley. The cranes were present in the Corn Creek Marsh area throughout April and May (L. Van Damme, pers. obs.). On 28 May, two adult Sandhill Cranes were observed foraging in a wet meadow adjacent to a lure crop hayfield in the Corn Creek Marsh Unit (Figure 3). They were observed picking



Figure 3. Adult Sandhill Cranes foraging in a wet meadow in Corn Creek Marsh in the Creston Valley Wildlife Management Area, Creston, BC. 29 May 2003 (Linda M. Van Damme). BC Photo 3437.

up billfuls of dry grasses, walking a short distance, then dropping the grasses, and loudly calling on several occasions.

On 29 May, the cranes were located in the same area striding about and foraging, when a Coyote (*Canis latrans*) trotted up to the edge of the meadow and started barking as it walked toward them. Both cranes sounded alarm calls while slowly moving further west through the meadow. After about five minutes, the Coyote trotted off along the edge of the hayfield and the cranes quieted down and resumed foraging. On 30 May, the two adult Sandhill Cranes were easily sighted in the meadow as was the Coyote that stood at the edge of the hayfield. The Coyote abruptly walked toward the cranes, then retreated

back to a stand of willows. Moments later the cranes were extremely agitated, repeatedly sounding alarm calls and jumping into the air with their wings outstretched. The Coyote had sneaked up on them and was observed with its head down in the vegetation as though it was eating something. One of the agitated and calling adult cranes walked in close proximity to the hunkered Coyote. After about two minutes the Coyote departed across the hayfield and the agitated cranes took flight. No young had been observed with the adults on the two previous visits, but small chicks would have been concealed by the height of the vegetation. The “distress” calls and behaviour of the adult Sandhill Cranes strongly suggest that chick(s) were present. No cranes or Coyotes were seen on a final visit on 2 June.

Coyotes are the primary predators of Sandhill Crane eggs, and pre-fledged young, at Malheur National Wildlife Refuge in southeastern Oregon, where the highest densities of Sandhill Cranes breed (Littlefield 2003).

John M. Cooper, while conducting fieldwork in 2003 within the CVWMA, reported the behaviour of a pair of Sandhill Cranes that seemed to indicate courtship. Other sightings of two and three individuals over the summer and into September had CVWMA staff questioning whether a pair had nested in 2003 (The Wetlander 2003).

In 2004 and 2005, one to four Sandhill Cranes were observed by the authors, and others, from March to October in various locations throughout the Creston valley. The cranes were frequently seen in flight to and from wetland habitats at Leach Lake, and in foraging sites such as agricultural fields and cattle pastures. They also foraged in a wetland “drawdown” area of Corn Creek Marsh (M-A. Beaucher, pers. comm.), but breeding remained unconfirmed.

In the spring of 2006, a pair of Sandhill Cranes, observed by Lorne Ostendorf and Kevin Blackmore, were foraging in hayfields, which are an important habitat for cranes (Sparling and Krapu 1994), as well as in a cattle pasture located on north Nick’s Island. The cranes arrived on the 24 March and remained in the general area until the first week of April, then departed. Breeding by a pair of Sandhill Cranes was confirmed on 21 May 2006 by Peter McIver, Bob Stubbs, and Pauline Dupas.

At 1030 hr Peter observed two adults with two

young in the triangular northeast corner of Leach Lake Unit #1 where it meets the east-west dyke, a distance of only 2.5 to 4 km northwest of where the cranes had earlier been observed on Nick's Island. His notes read:

“The heads of the young were at the leg joint of the adults, and the heads were very tiny with fluff on them and bills very tiny also. The bodies were obscured by the grass, and I probably would not have been able to see them 10 days later on my next visit as the grass was then much taller-I wonder does grass grow faster than cranes? Probably a few days old.”

At noon on the same day, Bob and Pauline, on their regular jaunt in the Leach Lake Unit #1, also sighted the family of cranes walking in the grass close to the dyke and noted that the downy heads of both young could be seen moving through the grasses.

Having observed cranes in the Leach Lake area for the past three seasons, this was the first sign of young cranes and a very thrilling moment for the observers. Two days later, Marc-André Beaucher re-located the Leach Lake crane family, but only a single chick was observed (Figure 4). A Coyote was lurking nearby and it was feared the second chick had become a victim of predation (M-A. Beaucher, pers. comm.). Although Sandhill Cranes were heard calling a few times in the Leach Lake Unit (M-A. Beaucher, pers. comm.), there were no further sightings of the crane family. On 10 August, L.M. Van Damme spotted three cranes flying west towards Leach Lake. The sighting was brief and it could not be determined if a juvenile was present. However, on 19 August, three cranes were observed foraging in a swathed timothy seed field at 1000 hr south along Duck Lake Road. Two adults and one juvenile were identified as they took flight and headed in a northerly direction. Almost daily, from 19 August to 4 September, two



Figure 4. Sandhill Crane chick at Leach Lake Unit in the Creston Valley Wildlife Management Area, Creston, BC. 23 May 2006 (Marc-André Beaucher). BC Photo 3440.

adults and a juvenile were observed foraging in the swathed barley and timothy seed fields, departing most days by 0900 hr and flying west to Leach Lake (Figure 5). But, something different occurred on the 24 August, when one pair of Sandhill Cranes was heard calling from the field between 0630 and 0730 hr (C. Colonel pers. obs.). This pair, along with a single juvenile, flew to an unharvested barley field and joined a second pair of Sandhill Cranes also with one juvenile. There was a lot of commotion as the adults strode near each other tossing their heads into the air uttering loud trumpeting calls. After this “greeting” session ended, one pair of cranes departed with their offspring, flying southeast over a stand of black cottonwood trees and out of sight.

The presence and behaviour of Sandhill Cranes during the spring and summers from 2002 to 2005 strongly suggest that breeding occurred. However, breeding was not confirmed until 21 May 2006 when one pair of Sandhill Cranes was observed with two chicks. With the extensive wetland habitats available to Sandhill Cranes it now appears that two pairs successfully nested in the Creston valley in 2006, each pair raising a single young capable of flight. The Sandhill Crane is a most welcomed addition to the breeding avifauna of the Creston valley.

Acknowledgements

We wish to thank the following people for sharing their sightings of cranes, which greatly assisted in preparing this article: Peter McIver, Marc-André Beaucher, Cyril Colonel, Marcia Long,



Figure 5. Fledged young (bird on left) with adult Sandhill Cranes flying from a barley field towards Leach Lake, BC. 28 August 2006 (Linda M. Van Damme). BC Photo 3441.

Bruce Lawrence, Lorne Ostendorf, Ralph Gerein, Gerry Thompson, George Brown, Lorraine Scott, Sharon Laughlin, John Margetan, Grant Goddard, Kevin Blackmore, Kate Lansley, Sheila Reynolds, Norm and Rose Simmons, Ed McMackin, Dorothy Beetstra, Gwen Nicol, Bob and Linda Lively, Rita Wege, and members of the Creston Valley Field Naturalists.

A heartfelt thank you to Robert Louie and members of the Lower Kootenay Indian Band for allowing L.M. Van Damme access to private lands where cranes were observed.

Cyril Colonel and Marc-André Beaucher kindly allowed us to use their photos. Special thanks to Michael Preston of the Wildlife Data Centre for searching the databases for historical records and developing the occurrence graph.

Literature Cited

- Butler, R.W., B.G. Stushnoff, and E. McMackin.** 1986. The birds of the Creston Valley and southeastern British Columbia. Canadian Wildlife Service Occasional Paper No. 58, Ottawa, ON. 37 pp.
- Campbell, R.W., N.K. Dawe, I. McTaggart-Cowan, J.M. Cooper, G.W. Kaiser, and M.C.E. McNall.** 1990b. The birds of British Columbia: Volume 2 – nonpasserines (diurnal birds of prey through woodpeckers). Royal British Columbia Museum, Victoria, BC. 636 pp.
- Creston Valley Wildlife Management Area.** 2002. The Wetlander (December):1-8.
- Creston Valley Wildlife Management Area.** 2003. The Wetlander (November):1-8.
- Leighton, D.** 2005. Recent range expansion of Sandhill Cranes (*Grus canadensis tabida*) in southeastern British Columbia. Wildlife Afield 2:64-73.
- Littlefield, C.D.** 2003. Sandhill Crane nesting success and productivity in relation to predator removal in southeastern Oregon. Wilson Bulletin 115: 263-269.
- Malliard, J.** 1932. Birds and mammals from the Kootenay valley, southeastern British Columbia. Proceedings of the California Academy of Science 20:269-290.
- Munro, J.A.** 1950. The birds and mammals of the Creston region, British Columbia. British

Columbia Provincial Museum Occasional Paper No. 8, Victoria, BC. 90 pp.

_____. 1958. The birds and mammals of the Creston region, British Columbia: a supplement. Pages C65-C82 in British Columbia Provincial Museum of Natural History and Anthropology Report for the year 1957. Victoria, BC.

Sparling, D.W. and G.L. Krapu. 1994. Communal Roosting and Foraging Behaviour of Staging Sandhill Cranes. *Wilson Bulletin* 106:62-77.

Tacha, T.C., S.A. Nesbitt, and P.A. Vohs. 1992. Sandhill Crane (*Grus canadensis*). In *The birds of North America*, No. 31 (A. Poole, P. Stettenheim, and F. Gills, eds.). Philadelphia: The Academy of Natural Sciences; Washington, DC. 24 pp.

Van Damme, L.M. 2002. Creston Valley - checklist of birds. Wild Bird Trust of British Columbia Special Publication No. 7, North Vancouver, BC. Booklet.

Wilson, S.F. 1992. Creston Valley wildlife management area: habitat management and wildlife responses, 1968-1991. Canadian Wildlife Service Technical Report Series No. 162, Delta, BC. 41 pp.

Wilson, S.F., and B.G. Stushnoff. 1992. Surveys conducted on the Creston Valley wildlife management area, 1969-1991. Canadian Wildlife Service Technical Report Series No. 161, Delta, BC. 70 pp.

About the Authors

Linda has spent close to 30 years “birding” and studying birds in the Creston valley and contributes her annual collection of breeding records to the British Columbia Nest Record Scheme.

Bob and Pauline have been birdwatching for at least 20 years, enjoying the hobby during their yearly hiking holidays and weekly visits to the George C. Reifel bird sanctuary on Reifel Island in Delta. Since moving to the Kootenays 10 years ago they spend as many Sundays as they can, from March to July and September in the Creston valley. It is their “favourite” place in the Kootenays.