2008 WHOOPING CRANE NESTING SEASON SUMMARY
WOOD BUFFALO NATIONAL PARK

PHENOLOGY AND HABITAT CONDITIONS

Temperatures recorded at Fort Smith over the last 60 years indicate that the mean annual temperature has increased 3^{o} C, with winter temperatures increasing by 5^{o} C (Figure 1). Annual precipitation from May 2007 to April 2008 was near normal resulting in the nesting area being fairly wet in spring 2008 (Figure 2). April was 2^{o} C colder than normal resulting in the spring melt of 2008 being about 7 days later than usual in the Whooping Crane nesting area. Spring and summer temperatures were slightly warmer than normal and there were no severe rain events accompanied by cold temperatures during chick hatching and the first 3 weeks after hatching in June. However, there was twice the normal amount of rainfall for the month.

BREEDING PAIR SURVEYS

Twenty hours of Whooping Crane breeding pair surveys were carried out by the Canadian Wildlife Service (CWS) between May 16 and May 24. These aerial surveys were conducted in Cessna 185 and 210 aircraft, owned by Northwestern Air Lease of Fort Smith and piloted by I. Bourke and C. Eisan. B. Johns (CWS) directed the surveys and K. St. Laurent (CWS) and B. Johns conducted the observations. During the 8 surveys, 66 Whooping Crane nests were discovered. All but 5 nests (0801, 0802, 0851, 0852 and 0853) were discovered in Wood Buffalo National Park (Table 1) (Figure 3). Six pairs of cranes that had bred in previous years were also observed, for a total of 72 occupied territories.

Due to reductions in the regional Whooping Crane budget, we were not able to determine clutch size.

HATCHING SUCCESS AND SUMMER RANGE SURVEYS

The Canadian Wildlife Service with the assistance of the United States Fish and Wildlife Service (USFWS) conducted 20 hours of hatching success surveys between June 16 and June 22, 2008. B. Johns directed all surveys which were conducted in a USFWS Partenavia PN68 piloted by J. Bredy (USFWS) with B. Johns and T. Stehn (USFWS) as observers. The June surveys were conducted after most nests had hatched. Pairs with either zero or one chick may have hatched one or two chicks but had already lost one or more young by the time the surveys were conducted.

The chick counts are to be used as a minimum number hatched. Sixty-four young were discovered during the surveys, including 12 pairs with two young each (Table 1).

FLEDGING SUCCESS SURVEYS

Eighteen hours of Whooping Crane fledging success surveys were carried out by the Canadian Wildlife Service from August 14 to August 19, 2008. All surveys were directed by B. Johns and conducted in Northwestern Air Lease's Cessna 185 or 210 aircraft, piloted by C. Hoyle, P. Clairet and C Eisan. Observations were conducted by K. St. Laurent and B. Johns. A total of 41 young were discovered in 39 family groups (Table 1) (Figure 3).

UNISON CALL RECORDING

Due to reductions in the regional Whooping Crane budget there were no recordings made during the summer of 2008.

CRANE PHOTOGRAPHY

National Geographic photographer Klaus Nigge photographed events at one nest over a period of eight days from May 29 - June 5. He documented one egg hatching and the second being taken by a common raven along with mate incubation exchange frequency.

WHOOPING CRANE MIGRATION

In the spring of 2008, there were 41 confirmed sightings in prairie Canada, totaling 134 birds (Table 2). The earliest recorded sighting was on April 5, 2008 and the latest recorded spring sighting was on May 10, 2008. At least three sub-adult Whooping Cranes spent at least part of the summer south of the breeding area in Saskatchewan (Table 3)(The sightings at Perdue and Bents may be of the same bird).

OVERALL BREEDING GROUNDS SUMMARY

Sixty-six pairs nested during the 2008 breeding season. Habitat conditions in the park and surrounding area were better than average during the nesting season. Summer rains were near normal resulting in average habitat conditions during the summer. At least 64 chicks successfully hatched in and adjacent to Wood Buffalo National Park and at least 41 of those survived to fledging age.

The total number of territorial pairs (72) matches the number of territories occupied on the cranes' wintering grounds during the winter of 2007/08 (T. Stehn pers. com.). Another 17 pairs of sub-adult or non-territorial cranes were also observed scattered throughout the breeding area.

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Canadian Wildlife Service
September 17, 2008

Table 1. Whooping Crane nesting pairs identified in and near Wood Buffalo National Park - summer 2008. CNA – Composite Nesting Area, inc – incubating.

Aug. Young	June Young	2008 Nest	CNA
1	1	0801	Lob
0	1	0802	Lob2
n/a	0	0803	A-1
0	1	0804	A-11
1	2	0805	A-
1	1	0806	A-5
n/a	0	0807	A-9
1	1	0808	A-8
n/a	0	0809	A-2
1	1	0810	A-6
n/a	0	0811	PC-
n/a	0	0812	US-
0	1	0813	US-2
1	1	0814	US-1
n/a	0	0815	S-2
1	1	0816	S-22
0	inc	0817	S-
1	1	0818	S-
0	1	0819	S-28
1	1	0820	S-29
1	1	0821	S-26
0	inc	0822	S-19
1	1	0823	SK-6
1	1	0824	S-12
1	1	0825	S-17
1	2	0826	S-15
1	1	0827	S-24
2	2	0828	K-17
n/a	inc	0829	K-5a
Not found	2	0830	K-16
0	1	0831	K-
1	1	0832	K-15
1	2	0833	K-21
1	1	0834	K-14
1	1	0835	K-23
1	2	0836	K-19
1	1	0837	K-10
1	1	0838	K-8b*
Not found	1	0839	K-24
n/a	0	0840	K-33
1	1	0841	K-2
1	1	0842	K-32
0	1	0843	K-3
1	1	0844	K-35
1	1	0845	K-11
2	2	0846	K-20

1	1	0847	K-
1	1	0848	K-28
0	2	0849	SK-3
0	2	0850	SK-4
1	1	0851	NY-10
1	2	0852	NY-6
Not found	1	0853	NY-11
1	2	0854	NY-7
n/a	0	0855	NY-4
1	1	0856	NY-1
0	2	0857	K-18
1	1	0858	SC-
0	1	0859	SK-10
n/a	0	0860	SK-9
n/a	0	0861	S-13
1	1	0862	US-
1	1	0863	S-32
1	1	0864	S-31
1	1	0865	K-8
n/a	0	0866	NY-

Table 2. Confirmed Whooping Crane sightings during the 2008 spring migration - Canada. All sightings in Saskatchewan unless otherwise noted.

First Observed	Last Observed	Adults	Young	Location
5-Apr-08	5-Apr-08	4		Saskatoon
10-Apr-08	10-Apr-08	2		Waseca
12-Apr-08	12-Apr-08	2		Delaronde Lake
15-Apr-08	15-Apr-08	3		St. Denis
18-Apr-08	18-Apr-08	3		McLean
18-Apr-08	18-Apr-08	3		Last Mountain Lake
18-Apr-08	23-Apr-08	3		Viscount
18-Apr-08	27-Apr-08	3		Meadow Lake
18-Apr-08	28-Apr-08	2		Leoville
19-Apr-08	19-Apr-08	2		St. Victor
19-Apr-08	19-Apr-08	8		Dummer
19-Apr-08	19-Apr-08	2		Debden
20-Apr-08	20-Apr-08	2		Moose Jaw
20-Apr-08	20-Apr-08	3		Lockwood
20-Apr-08	20-Apr-08	7		Colonsay
21-Apr-08	21-Apr-08	2		Tessier
21-Apr-08	21-Apr-08	2	1	Saskatoon
22-Apr-08	25-Apr-08	5		Creelman
23-Apr-08	23-Apr-08	3		Davidson
23-Apr-08	23-Apr-08	2		Macdowall
24-Apr-08	24-Apr-08	3		Simpson
24-Apr-08	24-Apr-08	3		Harris
25-Apr-08	25-Apr-08	2		Marcelin
25-Apr-08	25-Apr-08	2		Hague
25-Apr-08	25-Apr-08	5		Meacham
26-Apr-08	26-Apr-08	7		Avonlea
26-Apr-08	26-Apr-08	6		Speers
26-Apr-08	27-Apr-08		1	Indian Head
27-Apr-08	27-Apr-08	5		Biggar
27-Apr-08	29-Apr-08	4		Mayfair
28-Apr-08	28-Apr-08	3		Leoville
28-Apr-08	29-Apr-08	2		Weyburn
29-Apr-08	29-Apr-08	3		Mayfair
29-Apr-08	3-May-08	2	1	Kenaston
30-Apr-08	30-Apr-08	1		Lonesand, Manitoba
30-Apr-08	3-May-08	3		Elbow
1-May-08	1-May-08	6		Fort Carlton Provincial Park
2-May-08	4-May-08	1		Leoville
5-May-08	5-May-08	2		Royal Lake
8-May-08	8-May-08	5		Ponass Lake
10-May-08	10-May-08	3		Leoville

Table 3. Confirmed Whooping Crane sightings during summer 2008 - Canada (excluding the breeding grounds).

First Observed	Last Observed	Adults	Location
12-Jun-08	13-Jun-08	1	Perdue, Saskatchewan
26-Jun-08	12-Aug-08	2	Snipe Lake, Saskatchewan
19-Jul-08	23-Jul-08	1	Bents, Saskatchewan

Figure 1. Mean annual and winter temperatures at Fort Smith, NT – 1947 – 2007.

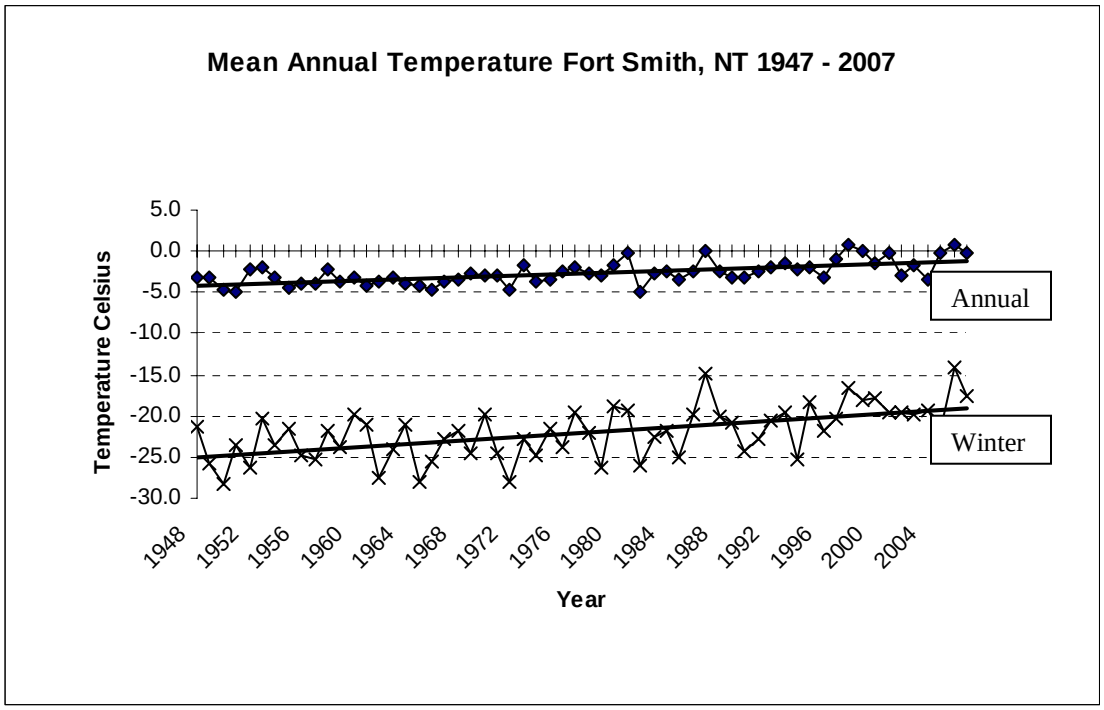

Figure 2. Mean annual precipitation at Fort Smith, NT – 1950 – 2007.

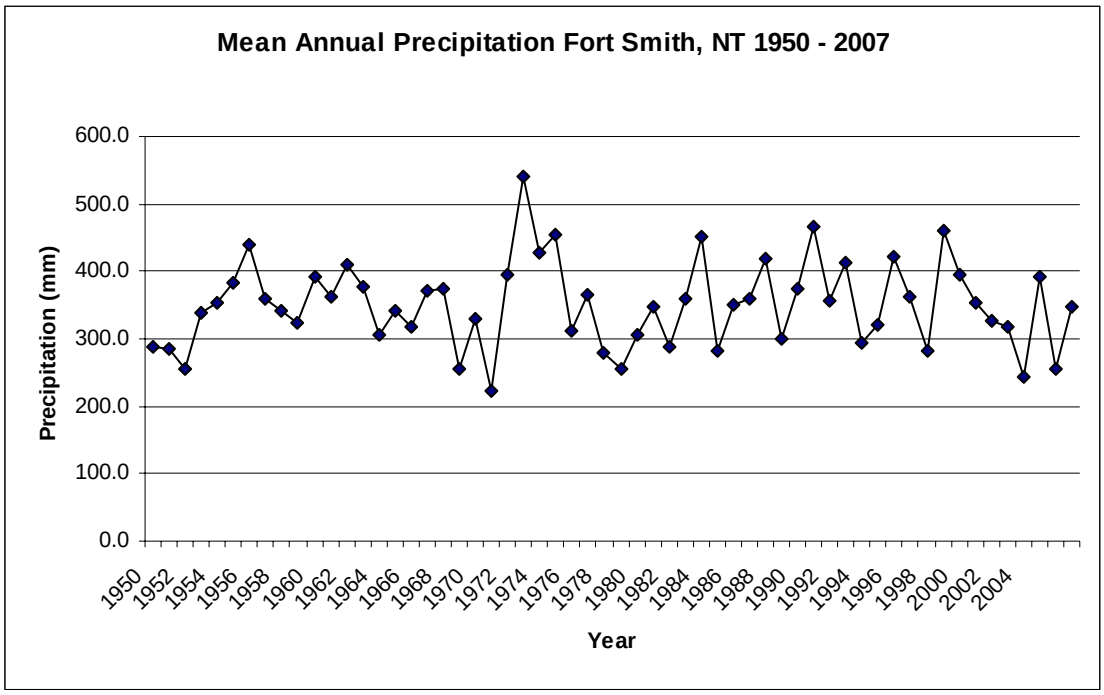

Figure 3. Whooping Crane nests - Wood Buffalo National Park summer 2008.