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# CORRIGENDUM Crane migration in northern New Mexico

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## CORRIGENDUM

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These tables were not included in the above article. They are published here so that interested readers will have access to them while reading the results and discussion presented in that paper. It is now well documented that sandhill cranes (*Grus canadensis*) from outside the Rocky Mountain

Population stage in spring and autumn in the San Luis Valley of southern Colorado (Benning et al. 1997). Therefore, the high autumn counts reported in the 1988 paper and discussed in relation to Table 3 could also have included cranes from other populations.

Table 1. Weather data and crane counts from days of major flights of cranes (> 500 cranes) in northern New Mexico during autumns, 1984-87.

Date	No. of cranes counted				Weather <sup>a</sup>					
	Jemez River	Rio Grande	Afternoon flight	Totals	Winds (hr) <sup>b</sup>			Sun <sup>c</sup>		Frontal position <sup>d</sup>
					1100	1400	1700	AM	PM	
<b>Roosting</b>										
11 Nov 1984	340		220	560	-1	-2	-1	1	2	-1
12 Nov 1984	320	1,045	282	1,657	-1	-2	-2	1	3	-1
15 Nov 1984	820		117	937	-2	-2	-1	2	3	-1
18 Nov 1984	420		250	670	-1	1	1	3	3	-1
12 Oct 1985	350	180	0	530	1	-1	-1	3	3	-1
26 Oct 1985	950	5	405	1,360	2	-1	1	0	2	-1
16 Nov 1985	2,140	303	10	2,453	0	-1	-1	1	3	-1
23 Oct 1986	750	40	790	1,580	0	-2	-1	3	0	1
4 Nov 1986	750	330	50	1,130	2	-1	-1	0	0	-1
7 Nov 1986	106	1683	27	1,816	3	2	-2	2	2	-1
9 Nov 1986	2,380	5,027	150	7,557	1	-2	1	3	3	-1
16 Nov 1986	225	298	15	538	-1	1	2	2	0	-1
17 Nov 1986	152	542	798	1,492	-1	-1	-2	2	0	-1
20 Nov 1986	1,122	62	54	1,238	-1	-1	-2	3	3	-1
17 Oct 1987	363		300	663	0	-2	2	3	3	0
26 Oct 1987	1,846	998	410	3,254	2	-2	0	1	3	-1
31 Oct 1987	420	407	827	1,654	-1	-1	-2	1	3	-1
3 Nov 1987	2,131	671	131	2,933	1	1	1	0	3	-1
<b>Overflights</b>										
10 Oct 1984 <sup>e</sup>	400	50	2,865	3,315	0	-2	0	3	1	-1
14 Oct 1985 <sup>f</sup>	0		395+	395+	2	1	2	3	3	1
28 Oct 1985	107		861+	968+	1	-1	-1	3	3	-1
2 Nov 1985	348		396	744	0	-1	2	0	1	1
6 Nov 1985	0		40+	40+	2	1	3	3	3	1
19 Nov 1985	0		1,014+	1,014+	2	2	2	3	1	1
25 Oct 1986	1		3,600	3,601	1	2	-1	3	3	0
10 Nov 1986	1,776	592	2,782	5,115	1	-2	2	3	3	1
23 Nov 1986	42		4,454	4,496	1	1	-1	2	0	1
4 Nov 1987	1,730	227	3,957	5,914	1	1	-2	3	2	1
8 Nov 1987	125		7,270	7,395	-1	2	2	0	2	1
9 Nov 1987	300	15	586	901	1	-1	-2	3	3	0
16 Nov 1987	0		1,055	1,055	0	-1	2	3	3	1
18 Nov 1987	37		1,078	1,115	0	1	1	3	3	1

<sup>a</sup> Weather: - = Unfavorable migration conditions.

<sup>b</sup> Winds: (1100) at Alamosa, Colorado; (1400) at White Rock, New Mexico; (1700) at Albuquerque, New Mexico. Wind speed and direction data were categorized as follows: 0 = calm; 1 = 0.5-2.6 m/sec; 2 = 3.1-7.7 m/sec; 3 = >7.7 m/sec; - = unfavorable direction (100-260°).

<sup>c</sup> Sun (percent cloud cover): 0 = 90-100%; 1 = 60-80%; 2 = 30-50%; 3 = 0-20%. AM = average of 0800 and 1100 readings for Alamosa, Colorado; PM = average of 1400 and 1700 readings for Albuquerque, New Mexico.

<sup>d</sup> Frontal Position: -1 = approaching or stationary front, northwest of Alamosa, Colorado; 0 = no frontal activity; 1 = cold front that had passed Albuquerque, New Mexico.

<sup>e</sup> 1984 afternoon flight total was the count at White Rock, New Mexico, minus known roost counts (usually just Jemez River). Only on 11 Nov 1984 was coverage of roosts complete.

<sup>f</sup> + = a 1985 afternoon overflight of cranes where count was not complete.

Table 2. Stepwise regression analysis of the effect of weather on crane migration in northern New Mexico, 1984-87. A variable had to exceed the 0.15 significance level for entry into the model.

	No. of cranes	n	$r^2$ attributable to variables									
			Wind				Sun				Front	TOTAL
			1100	1400	1700	$\bar{x}$	AM	PM	$\bar{x}$			
<b>Roosting</b>	> 100	49			4.3					5.7	10.0	
	> 500	32								10.0	10.0	
	> 1,000	18								16.4	15.4	
	> 2,000	10		30.7				20.3			51.0	
<b>Overflight</b>	> 100	49		4.7						14.2	18.9	
	> 500	32								20.3	20.3	
	> 1,000	18	8.0					8.6		40.3	56.9	
	> 2,000	10	56.6							27.5	84.1	
<b>Ratio</b>	> 100	49		4.3						17.9	22.2	
	> 500	32								28.0	28.0	
	> 1,000	18								64.4	64.4	
	> 2,000	10								37.4	37.4	

Table 3. Downgraded estimates of the autumn 1986 sandhill crane migration over northcentral New Mexico with several potential rates of estimation error.

Estimates	Count type	Count	Estimate	Cooperator reports	Total	Grand total
Reported	Roost	9,992	5,770	1,485	17,247	29,053
	Overflight	3,399	4,124	4,283	11,806	
Assume estimate 25% high	Roost	9,992	4,328	1,114	15,433	25,137
	Overflight	3,399	3,093	3,212	9,704	
Assume estimate 33% high	Roost	9,992	3,866	995	14,853	23,884
	Overflight	3,399	2,763	2,869	9,031	
Assume estimate 50% high	Roost	9,992	2,885	743	13,620	21,223
	Overflight	3,399	2,062	2,142	7,603	
Assume estimate 75% high	Roost	9,992	1,442	371	11,805	17,306
	Overflight	3,399	1,031	1,071	5,501	

## LITERATURE CITED

BENNING, D. S., R. C. DREWIEN, D. H. JOHNSON, W. M.

BROWN, and E. L. BOEKER. 1997. Spring population estimates of Rocky Mountain greater sandhill cranes in Colorado. Proc. North Am. Crane Workshop 7:165-172.