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SIXTY-FIVE YEARS OF WHOOPING CRANE RECORDS IN NEBRASKA

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INTRODUCTION

In 1933, Myron Swenk determined the status of the Whooping Crane in Nebraska by summarizing all of the records then available to him, and established the general pattern of timing and geographic distribution of Whooping Crane occurrence in this state. Although the population of this species has remained very low since that time, a sufficient number of observations have been made to warrant updating his analysis and comparing the more recent records with these earlier ones. During the summer of 1977 the junior author undertook such a summary as a class project, by extracting such records from all of the issues of *Nebraka Bird Review* from the fall of 1933 through the spring of 1977. No other sources such as newspapers were utilized, although it is possible that some acceptable records may have been overlooked as a result. The materials were prepared for publication by the senior author.

RESULTS

Yearly Variations. Although there are obvious dangers in tallying the total number of birds seen in a selected time period, such as variables in the numbers of active observers and the possibilities of the same birds being reported more than once, such a summary provides some suggestive variations in the magnitude of Whooping Crane migrations through the state. Thus, if the 65-year period is subdivided into five-year periods, the following total minimum numbers of cranes were reported during spring and fall:

	Spring	Fall
1912-1917	56	12
1918-1922	56*	41
1923-1927	203	31
1928-1932	413**	65
1933-1937	488**	. 81
1938-1942	97	3
1943-1947	46	17
1948-1952	2	7
1953-1957	2	10**
1958-1962	5***	1
1963-1967	6***	*
1968-1972	2***	*
1973-1977	11	8

^{*}One or more "small flocks" also reported.

Interestingly, both the spring and fall observations indicate a peak of crane sightings in the early 1930's, when the crane population was lower than in recent years and during a major drouth period. It would be of interest to examine variations in the levels of the Platte River during that time, as well as to learn of possible corresponding variations in use of the river by Sandhill Cranes.

^{**}One or more "large flocks" also reported.

^{***}Sightings reported but flock size not indicated.

Seasonal Variations. Of equal interest to these long-term changes in crane occurrences are the seasonal variations associated with migrational timing in this species. Thus, the records for the entire 65-year period were analyzed as to spring and fall occurrences in five-day intervals. Total numbers of birds reported per five-day period in spring and fall as well as total sightings for each such period may be summarized as follows:

	Total Sightings Reported	Total Cranes Reported
March 6-10	2	1
11-15	3	6
16-20	3	7
21-25	7	26
26-31	7	130
April 1-5	28	424
6-10	23	339
11-15	21	319
16-20	12	161
21-25	3	18
26-30	3	24
May 1-5	4	7
6-10	2	1
11-15	0	0
16-20	1	?
21-25	• 0	0
26-31	1	1
September 11-15	1	41
16-20	0	0
21-25	3	63
26-30	0	0
October 1-5	0	0
6-10	6	21
11-15	9	17
16-20	11	34
21-25	8	48
26-31	3	22
November 1-5	3	27
6-10	2	3
	10 11 0 1 1	

^{*}Excludes records of indefinite flock sizes.

It may be readily seen that the spring migration averages about two weeks later than that of the Sandhill Crane, which peaks in Nebraska during the last two weeks in March. The peaks of Nebraska's Whooping Crane migration occurs during the first half of April, since 60 percent of all the spring sightings and 74 percent of the total cranes counted during spring were reported between April 1 and April 15. In contrast, 48 percent of the fall sightings and 38 percent of the total cranes counted during fall were seen between October 16 and October 31, suggesting that the fall migration is less predictable than the spring movement.

Regional Distribution. As Swenk (1933) established, the distribution of Whooping Crane sightings in Nebraska is closely associated with the Platte River, particularly in the area between Lexington and Grand Island. Since 1912, cranes have been reported from 26 Nebraska counties, but of the total 162 sightings that can be localized as to county, over half (58 percent) were from Buffalo and Kearney counties. The total number of sightings by counties may be summarized as follows: Buffalo, 74; Kearney, 20; Dawson, 13; Hall, 11; Lincoln, 10; Adams, 9; two each in Garden, Logan, Morrill, and McPherson counties, and one each in Blaine, Brown, Cass, Cherry, Clay, Custer, Franklin, Hamilton, Howard, Keith, Keya Paha, Merrick, Phelps, Platte, Sarpy,

Sheridan and Webster counties. The importance of the Platte River may be indicated by the fact that over 90 percent of these sightings occurred within 30 miles of the Platte River, and about 80 percent occurred between Lexington and Grand Island, an 80-mile distance.

CONCLUSIONS

This review of published Whooping Crane sightings indicates that over half of the total spring occurrences in Nebraska occur during the first half of April, and are closely associated with the Platte River, particularly the section between Lexington and Grand Island. Fall occurrences are less predictable, but occur from early October to early November. The role of the Platte River as a major stopover for Whooping Cranes between their wintering and breeding grounds is clearly evident, and the maintenance of an adequate flow to provide suitable habitat during migration periods of this endangered species should be a matter of concern to state and federal conservation agencies. Additionally, the presence of a federal wildiife refuge on the Platte River between Lexington and Grand Island would be of obvious significance in the preservation of this species.

LITERATURE CITED

Swenk, M. H. 1933. The present status of the Whooping Crane. Nebr. Bird Rev., 1:111-129.