

February 27, 2001

To: Files

From: Ronald W. Schlorff

Subject: 2000-2001 Aerial survey data on wintering sandhill cranes in the Sacramento-San Joaquin Delta (delta).

During the 2000-2001 wintering season, 4 surveys (12-13-00 to 02-15-01) to count and estimate the total population of cranes using habitats of the delta were conducted with the aid of Department aircraft. An initial survey was conducted on 11-20-00 to identify concentration areas only; no counts were made at that time. Observers conducted the survey by counting flocks of birds on the ground and in flight. These surveys were conducted by myself and Department pilots in Cessna and Partnavia fixed-wing aircraft. The goals of the surveys were to estimate populations of all cranes (no subspecific determination can be made from aircraft), identify habitat associations, and document major winter concentration areas in the delta region. Below are the results (totals) of four surveys stratified by major winter concentration area within the delta.

Date/ Staten Is./ Tyler Is./ Bract Tract/ south of Hwy 12/ Cosumnes R. Preserve/delta+ CRP

12-13	2,095	945	2,245	641	228	6,154
12-28	2,767	1,060	7,641*	157	551	12,176
01-31	3,020	0	3,450	125	770	7,365
02-15	3,220	47	9,995*	50	745**	14,057

* Although the survey is not designed to detect subspecies, many of this group appeared to be lesser sandhill cranes based on their appearance and the areas where located (lessers typically seen there on ground surveys).

** Includes 220 cranes seen near the CRP on private land or recently acquired CRP lands.

The following are results of earlier aerial surveys conducted by me in the same areas as the current surveys were flown. Only the delta totals (w/o CRP- did not exist as such in earlier years) are presented for surveys from 12-02-83 to 01-24-89.

<u>Date</u>	<u>Total</u>
12-02-83:	8,450
12-10-85:	4,787
11-21-86:	6,821
01-23-86:	7,265
01-16-87:	8,290
01-24-89:	5,101

Surveys of the East Delta Aerial Survey were conducted primarily for waterfowl species but also included crane counts. The observers were Spezia and Collins. The following are the results of surveys conducted during the winter of 90-91. These counts include cranes observed at CRP.

<u>Date</u>	<u>Total</u>
12-13-90	4,520
12-27-90	6,048
01-10-91	13,400

Discussion of current and recent historical aerial survey results

Average for the 2000-01 surveys in December and January was 8,565, if CRP is excluded, subtract 516 from the total, if the survey in February is added, the average is 9,938 (including CRP); average for the counts during 1983-89 was 6,786; average for the 1990-91 winter was 7,989. The overall trend of population for all cranes is upward. However, since no subspecies can be identified from these aerial surveys, no conclusions as to the status of greater sandhill cranes can be made from these counts. What does remain relatively constant during the 17 year period is the areas cranes choose to concentrate their wintering activities. It remains as the area in and around Staten Island and Bract Tract. This is the most critically important area for wintering cranes in the delta. Impacts to this area are likely to severely disrupt current wintering activities for all cranes including the threatened greater subspecies.

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