

1991 WHITE PELICAN AND DOUBLE-CRESTED CORMORANT NEST CENSUS IN SASKATCHEWAN

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During the summer of 1991 the Saskatchewan Museum of Natural History and Saskatchewan Parks and Renewable Resources (SPRR) jointly conducted a census of American White Pelican and Double-crested Cormorant colonies in the province. A total of 14 pelican and 35 cormorant colonies was censused from 6-14 June. The last time the colonies were surveyed was in 1985.² Survey methods included flying over traditional and newly reported nesting sites and taking aerial photographs at this peak incubation period. Incubating adults were counted from the photos to determine the number of nests.

In 1991, a total of 17,459 White Pelican and 19,547 Double-crested Cormorant nests were counted (see Tables 1 and 2). This represents a decrease of 472 pelican nests (2.6%) and an increase of 2,921 cormorant nests (17.6%). The number of active colonies increased by one for the pelican and by nine for the cormorant. Four pelican and 15 cormorant colonies were new since the 1985 survey. However, three pelican and six cormorant colonies had been abandoned since the last survey.

All the abandoned colonies occurred in the southern part of the province. Pelicans abandoned colonies at Cypress, Basin and Lenore

lakes while cormorants abandoned colonies at Cypress, Basin, Lenore, Mud, Old Wives and Reed lakes. Drought conditions and low water levels since the 1985 survey appear to be the main cause for the abandonment of all but the Cypress Lake colony. The cause for abandonment there is not readily apparent. Not only did both species abandon the nesting island at Cypress Lake, but so did the Ring-billed and California gulls. In 1969, the cormorant colony there was the largest in the province.³ Old Wives Lake dried up in 1987 and has remained virtually dry, up to and including 1991. However, even though the cormorants have abandoned this site, the pelicans continue to nest in reduced numbers. The pelican colony has declined from 2,184 nests in 1985 to 582 in 1991. In 1988, there were reported to be approximately 60 young produced at this colony (E. Wiltse, SPRR, pers. comm.).

There were four new pelican colonies since the 1985 survey. These included one at Last Mountain Lake, two at Dore Lake, and one at Primrose Lake. The 15 new active cormorant colonies consisted of 1 each at Suggi, Primrose and Preston lakes, 3 at Wasekamio Lake, 4 at Last Mountain Lake and 5 at Churchill Lake. The colonies at Wasekamio were first reported in 1990.¹ At that

Table 1. 1991 NEST CENSUS OF AMERICAN WHITE PELICAN IN SASKATCHEWAN

Location	Date June 1991	Census time	Pelican Nests ^a			% change
			1991	1985	change	
Basin Lake ^b	6	1315	—	227	-227	-100
Cypress Lake ^b	6	1655	—	90	-90	-100
Dore Lake	11	1030	742(2)	—	new	—
Iroquois Lake ^c	6	1345	—	—	—	—
Kazan Lake	11	1750	1004	1145	-141	-12.3
Last Mountain Lake	6	0750	804	—	new	—
Lavallee Lake	11	0945	4890	4897	-7	n.s.
Lenore Lake ^b	6	1300	—	162	-162	-100
Mud Lake	6	0900	210	462	-252	-54.5
Old Wives Lake	6	1830	582	2184	-1602	-73.4
Preston Lake	13	1330	70	157	-87	-55.4
Primrose Lake	13	1900	5247(3)	6652(2)	-1405	-21.1
Redberry Lake	6	1410	524	347	+177	51.0
Suggi Lake	11	0830	3386(2)	1608(2)	+1778	110.6
Total no. nests			17459	17931	-472	-2.6
No. of islands			(14)	(13)	(+1)	
Average nests/island			1247	1379	-132	-9.6

^a Number of nesting islands, if more than one, in parentheses

^b Abandoned since 1985 survey

^c Reported in 1991 that pelicans were nesting in 1989

n.s. not significant

time, a cormorant colony was reported for Peter Pond Lake; however, due to higher water levels flooding the small island, the colony was not active in 1991. A pelican colony was reported to be active at Iroquois Lake in 1989 (P. Parsons, pers. comm.), but was not found in the 1991 survey.

Pelicans experienced nest declines at Kazan, Mud, Old Wives, Preston and Primrose lakes while enjoying increases at Redberry and Suggi lakes. The most significant increase was at Suggi Lake where the nest count rose from 1,608 in 1985 to 3,386 in 1991. The Lavallee Lake colony remained stable. Aside from the abandoned colonies, cormorants increased at all colonies except at

Churchill Lake where the number of nests remained stable in spite of an increase in nesting islands from 7 to 12. The most significant nest increases occurred at Kazan (+742), Last Mountain (+1,090), Lavallee (+648), Primrose (+1,119) and Suggi (+811) lakes.

In summary, the number of pelican nests remained relatively stable since the 1985 survey, experiencing only a slight decline (2.6%). Cormorant nests increased by 17.6% since 1985. Generally, the southern colonies experienced the more significant losses due in large part to the lower water levels while the northern colonies suffered fewer losses and appear to be doing quite well. It is good to see that pelicans are

Table 2. 1991 NEST CENSUS OF DOUBLE-CRESTED CORMORANT COLONIES IN SASKATCHEWAN

Location	Date June 1991	Census time	Cormorant Nests ^a			% change
			1991	1985	change	
Basin Lake ^b	6	1315	—	745	-745	-100
Churchill Lake	13	0900	2506(12)	2508(7)	-2	n.s.
Cypress Lake ^b	6	1655	—	553	-553	-100
Dore Lake	11	1030	2497(3)	2204(3)	+293	13.3
Kazan Lake	11	1750	3862	3120	+742	23.8
Last Mountain Lake	6	0750	2854(7)	1764(3)	+1090	61.8
Lavallee Lake	11	0945	2263	1615	+648	40.1
Lenore Lake ^b	6	1300	—	853	-853	-100
Mud Lake	6	0900	—	26	-26	-100
Old Wives Lake	6	1830	—	96	-96	-100
Peter Pond Lake. ^c	13	1000	—	—	—	—
Preston Lake	13	1330	85	—	new	—
Primrose Lake	13	1900	2336(3)	1217(2)	+1119	91.9
Redberry Lake	6	1410	102	43	+59	137.2
Reed Lake ^b	6	1800	—	45	-45	-100
Suggi Lake	11	0830	2648(3)	1837(2)	+811	44.1
Wasekamio Lake ^d	13	1020	394(3)	—	new	—
Total no. nests			19547	16626	+2921	17.6
No. of islands			(35)	(26)	(+9)	
Average nests/island			558	639	-81	-12.7

^a Number of nesting islands, if more than one, in parentheses

^b Abandoned since 1985 survey

^c First reported active in 1990: 30 nests

^d First reported active in 1990: 191 nests

n.s. not significant

establishing themselves once again on Last Mountain Lake.

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2. RONEY, K. and M. HLADY. 1986. 1985 Census of pelican and cormorant colonies in Saskatchewan. *Blue Jay* 44:177-179.
3. VERMEER, K. 1970. Some aspects of the nesting of Double-crested Cormorants at Cypress Lake, Saskatchewan, in 1969: a plea for protection. *Blue Jay* 28:11-13.