A census of American White Pelican and Double-crested Cormorant colonies in Saskatchewan was jointly conducted by Saskatchewan Parks and Renewable Resources and the Saskatchewan Museum of Natural History in 1985. Thirteen pelican and 26 cormorant colonies were censused between 3 and 8 June 1985. Aerial photographs of the colonies were taken during this peak incubation period, and incubating adults were counted from the photos to determine the number of nests.

Totals of 17,931 pelican nests and 16,626 cormorant nests were counted. This is an increase of 15.8% (2451) in pelican and 51.5% (5655) in cormorant nests over the 1982 census.

There was also an increase in the number of active colonies; there were three pelican and two cormorant nesting colonies censused which were not active in 1982.

The Cypress Lake pelican colony which was last recorded active in 1969, was reestablished in 1985. The new colony at Basin Lake was reported by the Conservation officer at Humboldt to be active in 1984 (Harvey Janke, pers. comm.). The third additional pelican colony was at Suggi Lake. This nesting site has been used before, but the pelicans have tended to fluctuate between the two nesting islands in Suggi Lake from year to year. However, in 1985, the pelicans occupied both nesting islands. No pelican colonies were abandoned since the 1982 census.

Two pelican colonies, those at Old Wives and Primrose lakes, experienced a decline in the number of nests. Of the seven colonies that increased in numbers the largest increases in numbers of nests occurred at the Lavallee, Suggi, and Kazan lakes’ colonies. The greatest percentage increase in the size of the colonies occurred at Lenore, Kazan, Preston and Suggi lakes. All increased by more than 50%, with the Lenore Lake colony almost tripling in size. Comparing the 10 colonies in 1982 with the same 10 colonies in 1985, there was an increase of 560 nests or an average increase of 56 nests per colony.

A new cormorant colony was censused at Basin Lake. It was first reported in 1984 at the same time as the new pelican colony found there.

A new nesting site was established at Dore Lake, bringing the total to three nesting islands occupied at this lake. Three additional nesting islands were used at Churchill Lake, bringing the total there to seven. Since the 1982 census, one nesting site at Last Mountain Lake has been abandoned by cormorants, as have the colonies at Alkali Lake and on the South Saskatchewan River, resulting in a reduction of one in the number of known cormorant colonies in the province.

The three cormorant colonies at Old Wives, Reed and Redberry lakes showed decreases since the 1982 census. The most significant increases in the numbers of nests in a colony occurred at Churchill, Dore, Lavallee, Kazan and Last Mountain.
Table 1. 1985 NESt CENSUS OF AMERICAN WHITE PELICAN AND DOUBLE-CRESTED CORMORANT COLONIES IN SASKATCHEWAN

| Location                        | Date 1985 | Time 1985 | Census 1985 | Pelican Nests 1982 | Change 1982 | % Change 1985 | Cormorant Nests 1982 | Change 1982 | % Change 1985 |
|---------------------------------|-----------|-----------|-------------|-------------------|-------------|---------------|---------------------|-------------|---------------|
| Alkali Lake<sup>a</sup>         | June 4    | 0800      | -           | -                 | new         | -             | 15                  | -15         | -100          |
| Basin Lake<sup>b</sup>          | June 3    | 1810      | 227         | -                 | new         | -             | 745                 | -           | -             |
| Churchill Lake                  | June 6    | 0910      | -           | -                 | new         | -             | 2508<sup>7</sup>  | 790<sup>4</sup> | 1718          |
| Cypress Lake<sup>d</sup>        | June 4    | 1240      | 90          | -                 | new         | -             | 553                 | 329         | 224           |
| Dore' Lake                      | June 6    | 1030      | -           | -                 | new         | -             | 2204<sup>3</sup>  | 1464<sup>2</sup> | 740           |
| Kazan Lake                      | June 7    | 0900      | 1145        | 609               | +536        | 88.0          | 3124<sup>4</sup>  | 2544        | 576           |
| Last Mountain Lake              | June 3    | 1835      | -           | -                 | -           | -             | 1764<sup>3</sup>a | 1202<sup>4</sup> | 562           |
| Lavallée Lake                   | June 6    | 1545      | 4897        | 3569              | +1328       | 37.2          | 1615                | 899         | 716           |
| Lenore Lake                     | June 3    | 1740      | 162         | 42                | +120        | 285.7         | 853                 | 651         | 202           |
| Mud Lake                        | June 3    | 1710      | 462         | 437               | +25         | 5.7           | 26                  | 27          | -1            |
| Old Wives Lake                  | June 4    | 0930      | 2184        | 2617              | -433        | -16.5         | 96                  | 147         | -51           |
| Preston Lake                    | June 5    | 1510      | 137         | 95                | +62         | 65.3          | -                   | -           | -             |
| Primrose Lake                   | June 8    | 1445      | 6652<sup>2</sup> | 6822<sup>2</sup> | -170        | -2.5          | 1217<sup>2</sup>  | 1041<sup>2</sup> | 176           |
| Redberry Lake                   | June 4    | 1625      | 347         | 240               | +107        | 44.6          | 43                  | 53          | -10           |
| Reed Lake                       | June 4    | 1000      | -           | -                 | -           | -             | 45                  | 141         | -96           |
| South Saskatchewan River        | June 4    | 1300      | -           | -                 | -           | -             | 2                   | -2          | -100          |
| Suggi Lake                      | June 5    | 1020      | 1608<sup>2</sup> | 1049            | +559        | 53.3          | 1837<sup>2</sup>  | 1666<sup>2</sup> | 171           |

TOTAL NUMBER NESTS
- Number of islands: 17,931
- Average nests/island: 15,480

<sup>a</sup> Abandoned since 1982 census.
<sup>b</sup> First reported active in 1984.
<sup>c</sup> Number of nesting islands, if more than one.
<sup>d</sup> Last reported active in 1969.
lakes. Highest percentage increases in colony size occurred at Churchill, Lavallee, Cypress and Dore lakes, with all increasing by more than 50%. The Churchill Lake colony more than doubled in size. Comparing the 24 colonies common to the two surveys, there was an increase of 2739 nests or an average increase of 114 nests per colony.

In conclusion, the pelican and cormorant picture is an optimistic one. Both species experienced an increase in the total number of nests as well as an increase in the average number of nests for the same established colonies between the 1982 and the 1985 counts. Also of great importance is the establishment of new nest sites for both species. This factor speaks well for assuring the continuance of these species. Continued protective legislation and public awareness is also essential in maintaining the present population levels of these two species.

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1 RONEY, K., and M. HLADY. 1984. 1982 Census of Saskatchewan White Pelican and Double-crested Cormorant Colonies. Blue Jay 42:77-82.

2 VERMEER, K. 1970. Colonies of Double-crested Cormorants and White Pelicans in Saskatchewan. Canadian Field - Naturalist 84:39-42.