

# PRELIMINARY INVESTIGATION OF THE BIRDS OF PAKOWKI LAKE, ALBERTA

W. W. SMITH and C. A. WALLIS, 8220 Elbow Drive, Calgary, Alberta

Pakowki Lake is a large, shallow body of water located 45 miles south of Medicine Hat in southeastern Alberta. It is 15 miles long and covers approximately 30 square miles, making it one of the largest lakes in the Mixed Grassland region of Alberta. In the broad northern portion of the lake there are numerous islands, ranging from a few acres to 3 square miles in area. The extensive marshes and numerous nesting islands present at Pakowki Lake are scarce habitats elsewhere in southeastern Alberta. It is, therefore, surprising that the lake has received very little attention from biological researchers.

During 1975, we visited Pakowki Lake on July 1 and 24. Our observations were confined mainly to the northwestern arm of the lake. This portion and the couleee which drains into it contain an extensive marsh (Fig. 1) dominated by bulrushes (*Scirpus* spp.) in the deeper waters and by sedges (*Carex* spp.) and rushes (*Juncus* spp.) in shallower water. The submerged vegetation of the open water surrounding the islands is comprised largely of pondweeds (*Potamogeton* spp.). Some of the more common breeding birds include: Eared Grebe, Blue-winged Teal, Pintail, Mallard, Lesser Scaup, Northern Shoveler, American Coot, Wilson's Phalarope, Common Yellowthroat, Red-winged Blackbird and Yellow-headed Blackbird. A large portion of the land surrounding this part of the lake is uncultivated and is used for grazing cattle.

Of the 57 bird species observed at Pakowki Lake, the following records are the most noteworthy, all representing range extensions of the ranges



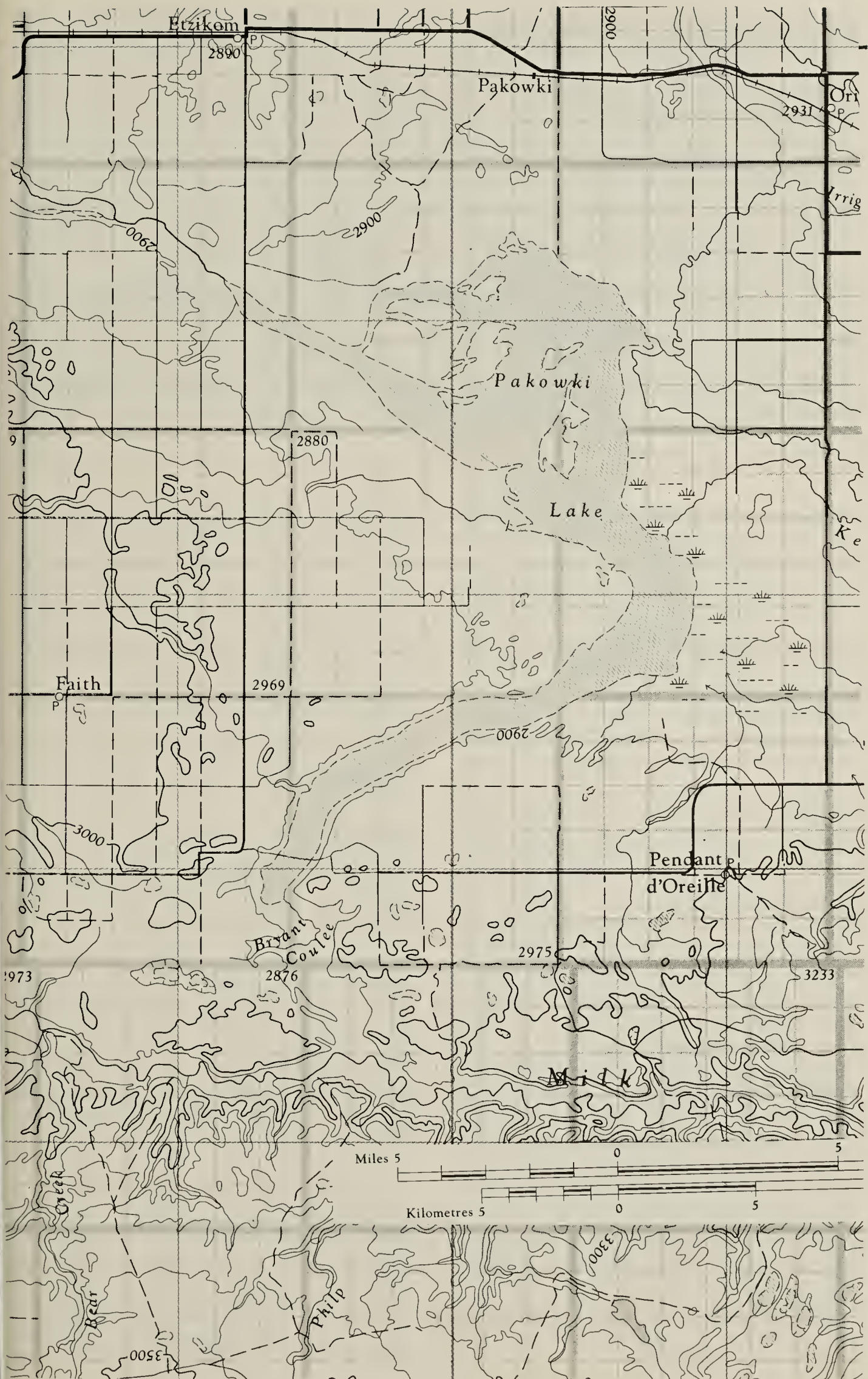
Double-crested Cormorant.

Fred Lahrman

documented by Salt and Wilk.<sup>1</sup> For the most part, these do not reflect recent movements of these species into the area but indicate a lack of published data.

**Western Grebe:** More than 12 birds were observed in the extensive beds of sedges along the northwestern shore. It is quite possible that more intensive searching will reveal that this species nests here. This lake is one of few such places in southern Alberta where Western Grebes occur in summer.

**Pied-billed Grebe:** At least eight were sighted or heard throughout the marshes. It is likely that this grebe also nests here. Pakowki Lake is one of a limited number of southern Alberta localities where Pied-billed Grebes occur during the nesting season.





Five White-faced Ibis in silhouette.

C. Wallis

**Double-crested Cormorant:** Six were observed on July 1, while over 20 were seen July 24. There are several large islands towards the center of the lake that may support a nesting colony.

**Black-crowned Night Heron:** More than 75 (both adults and immatures) were observed in the extensive bulrush marshes, and many nests were located. This appears to be one of the larger nesting colonies of night herons in Alberta.

**American Bittern:** At least six were sighted or heard, indicating a substantial population in the marsh system.

**White-faced Ibis:** On July 1, 7 adults of this species were observed in the bulrush marshes. From the behavior of 5 birds, (Fig. 2), it appears probable that this species was nesting. On July 24 a total of 11 adults was observed. The first authentic record of this species in Alberta is of a single bird seen by D. Stirling in the same area on June 11, 1974 (W. R. Salt, personal communication). Further documentation of this species at Pakowki Lake will be forthcoming at the end of the 1976 nesting season.

**Redhead and Canvasback:** Moderate numbers of both species were sighted, indicating that Pakowki Lake is a breeding area. This would be the southernmost in Alberta. It may also be used for moulting.

**California and Ring-billed Gulls:** A small colony containing nests of both species was found on a small, rocky island in the lake. As the young were out of the nest on July 1, it was impossible to determine the number of nests; however, it appears to be somewhere between 40 and 80.

**Franklin's Gull:** Numerous birds of this species were seen, including young of the year. The nesting colony is in the bulrush marsh and is the southernmost in Alberta.

**Forster's Tern:** On July 1, two birds were sighted, one of which was an immature. It seems likely that nesting occurred at Pakowki Lake; one of few such areas in the province.

**Common Tern:** A small colony was located at the edge of an island where California and Ring-billed Gulls were also nesting.

**Long-billed Marsh Wren:** This species was fairly common in the bulrush marsh, where nesting was confirmed. This is one of few nesting localities in southern Alberta.

Pakowki Lake was established as a Migratory Bird Sanctuary in June, 1920. As early as 1925 it was recommended that its sanctuary status be removed, but fortunately this never occurred. However, as recently as 1973, the Canadian Wildlife Service has stated that Pakowki and other

water bodies in Alberta, are no longer valuable as bird sanctuaries. *This view is based on sketchy data and, in our opinion, reflects a lack of understanding and research into the dynamics or aquatic habitats in the grassland region.*

From published information and conversations with local residents, it appears that Pakowki Lake dries up completely perhaps as much as 50% of the time.<sup>2</sup> However, there are usually some remnants of aquatic habitats even in the driest years. The high capability of the lake during periods of high water levels appears to offset the non-productive dry years. It seems likely that the bird life of this and similar areas has adapted to the dramatic fluctuations in the water levels.

Further diking of fields which keeps spring melt water from entering the normal drainage channels that feed the lake, and the diversion of the inflowing water for irrigation are real dangers to the water regime of Pakowki Lake. It is our wish that this preliminary report will draw attention to the significance of Pakowki Lake and to ensure its further protection as a sanctuary. In addition, it is hoped that this will stimulate other investigations into the bird life of other large water bodies in the grassland region, especially those which are threatened with loss of sanctuary status or facing disruption through recreational or agricultural activities.

Pakowki Lake is an area that contains a great deal of interest for naturalists, and is well worth a visit. The authors would greatly appreciate and duly acknowledge, any observations concerning the natural history of Pakowki Lake. This, along with more intensive field study, will enable us to present a more complete picture of the natural history of the area.

<sup>1</sup>SALT, W. R. and A. L. WILK 1966. *The Birds of Alberta* (second edition). Queen's Printer, Edmonton.

<sup>2</sup>SOPER, J. D. 1939. *Report on Pakowki Lake Bird Sanctuary, Alberta* (unpublished). Dept. of Mines and Res., National Parks Bureau, Ottawa.

## A JULY DAY AT LAST MOUNTAIN LAKE

KEN LUMBIS, 1008 - 3rd Street, Saskatoon, Saskatchewan and BOB GODWIN, 2237 Broadway Avenue, Saskatoon, Saskatchewan.

This is a list of 82 species of birds observed in 7 hours on July 2, 1976, at the north end and northwest side of Last Mountain Lake, east of Simpson, Saskatchewan. Kathy Meeres, Kim Godwin and the authors visited the fingers, Etter's Beach, the Headquarters area, Basin A, Sailor's Bay and several farmyards between 11:30 a.m. and 6:30 p.m. It rained in the morning, there was scattered cloud in the afternoon, a light breeze and it was about 15°C.

Two Red-necked Grebes, 2 Horned Grebes, 5 Pied-billed Grebes, 2 pairs with 1 young each of Western Grebes, 4 White Pelicans, 4 Double-crested Cormorants, 1 Great Blue Heron, 1 Black-crowned Night Heron, 6 American Bitterns, many Mallards, several Gadwalls, many Pintails, several Green-winged Teal, many Blue-winged Teal, many American Wigeon, many Northern Shovelers, several, mostly male, Redheads, 1 Ring-necked Duck, several, mostly male, Canvasbacks, many Lesser Scaup, 3 Buffleheads, several White-winged Scoters, many Ruddy Ducks, 2 Swainson's Hawks, 1 Marsh Hawk, several Soras, many American Coots, many Killdeer, 3 Upland Plovers, 2 Solitary Sandpipers, many Willets, several Greater Yellowlegs, many Lesser Yellowlegs, 1 Least Sandpiper, 12 Dowitchers, several Marbled Godwits, 2 American Avocets, 2 male Wilson's Phalaropes, 1 California Gull, 2 Ring-billed Gulls, 5 Franklin's Gulls, many Forster's Terns, many Common Terns, many Black Terns, many Rock Doves, several Mourning Doves, 1 Black-billed Cuckoo, 1 Short-eared Owl, 1 Common Flicker.

Many Eastern Kingbirds, 3 plus 1 pair nesting Western Kingbirds, many Horned Larks, 2 Tree Swallows, 4 Bank Swallows, at least 2 pairs nesting Barn Swallows, many Black-billed Magpies, many Crows, 3 plus 1 pair of nesting House Wrens, 1 Short-billed Marsh Wren, 3 Brown Thrashers, 1 Sprague's Pipit, several Loggerhead Shrikes, several Yellow Warblers, 3 Common Yellowthroats, many House Sparrows, 1 male Boblink, many Western Meadowlarks, many Yellow-headed Blackbirds, many Red-winged Blackbirds, many Brewer's Blackbirds, many Common Grackles, many Brown-headed Cowbirds, several American Goldfinches, many Savannah Sparrows, 1 Grasshopper Sparrow, several Baird's Sparrows, 3 Sharp-tailed Sparrows, many Vesper Sparrows, 2 Chipping Sparrows, many clay-coloured Sparrows, many Song Sparrows, 1 male Chestnut-collared Longspur.

