

OLD WIVES LAKE, SASKATCHEWAN BIRD COLONY PERSISTS THROUGH DROUGHT

ALE HJERTAAS, Saskatchewan Parks, Recreation & Culture, 3211 Albert Street,
 Regina, Saskatchewan. S4S 5W6

Isle of Bays, Old Wives Lake, in south-
western Saskatchewan has one of the
province's larger bird colonies. This is-
land is a major nesting area for White
Pelicans with 1000 nests in 1957, 746 in
1968, 1420 in 1976, 3084 in 1978, 3075
in 1980, 2617 in 1982 and 2184 in 1985.
Double-crested Cormorant also nest here
with 350 nests in 1957, 88 in 1968, 319
in 1976, 658 in 1978, 693 in 1980, 147
in 1982 and 96 in 1985.^{7 3 4} In addition,
the island is home to a Great Blue Heron
colony which had only 3 nests in 1957,³
in 1970,⁶ but had 64 nests in 1976.⁴ In
1957, 2000 Ring-billed Gull pairs nested
here along with 50 pairs of California
Gulls and 1000 pairs of Common Terns.³
The abundance of gulls and terns has not
been reported in more recent surveys.

Water levels in Old Wives Lake have
been declining for several years. In 1987
the lake went completely dry during the
summer. In 1988, as there was almost no
snow in the spring, Old Wives Lake
remained dry.

On 19 July 1988 Earl Wiltse and the
author flew over Isle of Bays to determine
whether any colonial birds were nesting.
I observed both White Pelicans and
Great Blue Herons nesting but no gulls,
gulls or cormorants.

Approximately 60 young White
Pelicans were on the island. They stayed
in a very tight creche beside a tree clump
and reacted to our flights past them by
flying in a tight group to the opposite
side of the tree clump. No adult pelicans
were observed, but as the young ap-

peared too small to fly, adults must have
been returning to feed them.

Production of 60 young pelicans is
small for a colony which held 2000-3000
breeding pairs in recent years. Nonethe-
less, any level of production is surprising
in light of the fact that the lake was dry for
2 years, as were many of the smaller
wetlands in the Missouri Coteau.

There were seven active Great Blue
Heron nests (one or more herons on the
nest) in trees at the west side of the island's
north point and four in willows on the east
side of the point. The number of young
present was not counted. By 19 July
young herons should be large and ready
to leave the nest. My assumption that
each nest with a heron in it represents an
active nest could be in error if some
young had dispersed to adjacent nests.

Dunbar summarized reports of travel
distances to foraging sites from White
Pelican colonies as follows: Stum Lake,
B.C. - 3-142 km; Great Salt Lake, Utah -
48-160 km; Birch Lake, Alberta - 30-69
km; Chase Lake, North Dakota 50 to 307
km, with 90% of foraging within 127 km
of the colony.²

Great Blue Herons have been reported
to fly an average of 3.7 km and a maxi-
mum of 20-24 km to feeding sites.^{5 1}

Isle of Bays is 3.5 - 5 kms from the
nearest points on the north, east and south
sides of Old Wives Lake, and 22 kms from
the mouth of the Wood River on the lake's
west side. The nearest lakes likely to pro-

vide fishing opportunity are Last Mountain Lake, the south end of which is 100 km from Isle of Bays, Buffalo Pound Lake and Thompson Lake which are 55 km from the colony and Avonlea Reservoir 60 km away. These lakes are all within the reported feeding ranges for White Pelicans, but well beyond the 20-24 km maximum one way travel for Great Blue Herons. The most likely feeding area for the herons would be small ponds and marshes in the Missouri Coteau, with perhaps an average flight of 10-15 kilometres. While many of the smaller ponds in the Coteau were dry in 1988, I did not determine how many basins retained water.

Nesting on islands in dry lakes is unusual. Islands are preferred as nest sites because they offer protection from terrestrial predators. The bare salt flats of the dry lake bottom may still be a significant predator barrier. Whether the decline in pelican numbers is due to predation, lack of food, or whether the dry lake simply did not provide the proper stimulus for most former colony members to breed is unknown.

¹ DOWD, E. M. & L. D. FLAKE 1985. Foraging habitats and movements of nest-

ing Great Blue Herons in a prairie ecosystem South Dakota. *J. Field Ornithology* 56:379-87.

² DUNBAR, D.L. 1984. The breeding ecology and management of white pelicans at Stum Lake, British Columbia. Fish and Wildlife Report No. R-6, B.C. Ministry of Environment, Surrey, B.C.

³ LAHRMAN, FRED 1957. Birds of the Isle of Bays, 1957. *Blue Jay* 15:106-10

⁴ RONEY, KEITH 1978. Pelicans, cormorants, and Great Blue Heron in Saskatchewan in 1976. *Blue Jay* 36:28-35.

⁵ THOMPSON, D. H. 1978. Feeding areas of Great Blue Heron and Egrets nesting within the floodplain of the Upper Mississippi River. *Proc. Colonial Waterfowl Group* 2:202-213 (cited in Dowd and Flake, 1985).

⁶ VERMEER, KEES and G. G. ANWEILER 1970. Great Blue Heron colonies in Saskatchewan in 1970. *Blue Jay* 28:158-160

⁷ WEINS, T. W. 1987. White Pelican and Double-crested Cormorant nest survey 1985. SPRC Wildlife Population Management Information Base Report #87-W-11.



Nesting Pelicans at Old Wives Lake

Keith Roney, Sask. Museum H.