

TEMPORAL AND SPATIAL DISTRIBUTION OF WATERBIRDS ON UTIKUMA LAKE, NORTHCENTRAL ALBERTA, IN 2000.



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WESTERN BOREAL FOREST INITIATIVE

BACKGROUND

Utikuma Lake is a large (288 km²), shallow eutrophic lake located in north-central Alberta (Fig 1). It is an important basin for breeding, moulting and staging use for several waterfowl and colonial nesting species. Identified as a Key Moulting and Staging Lake in the Alberta 1989 NAWMP Implementation Plan. Regionally important for migratory bird habitat and nesting species and nationally important for moulting and staging ducks (Poston et al. 1990).



Figure 1. Utikuma Lake in North central Alberta



Four aerial fixed-wing shoreline and transect surveys were conducted between late June to mid-September, 2000 to document spatial and temporal use by moulting and staging waterbirds on Utikuma Lake.

MAJOR FINDINGS

The waterbird community on Utikuma Lake was very diverse. At least 29 waterbird species were recorded during each survey.

Relative species abundance in the waterbird community varied between surveys (Fig. 2).

Abundance peaked in late July with >112,000 estimated waterbirds.

>8.5 million waterbird use-days from June 26 to September 20 (86 days).

Ducks and coots, in particular divers, were most abundant for all surveys, ranging from 77% to 96% of total waterbirds (Fig. 2). Dabbling ducks and coots were mostly associated with shorelines whereas diving ducks were observed along shorelines and on open water (Fig. 3).

High use areas for most surveys include the northwest region, the south shore, Sandy Bay and the East Island region. Open water was less used during the last survey.

Over 4,500 western grebes were estimated in late June, which is 5.3% of continental population (B. Eichorst, pers. comm. Wetlands International). Western grebes were typically observed in small groups (< 5 birds), distributed across the lake (Fig. 3).

Over 1,800 nests in a cormorant colony on the South Island were observed, in addition to >5,000 birds estimated in late June.

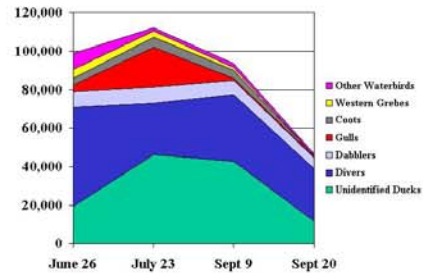


Figure 2. Species abundance recorded on four surveys at Utikuma Lake, AB, 2000.



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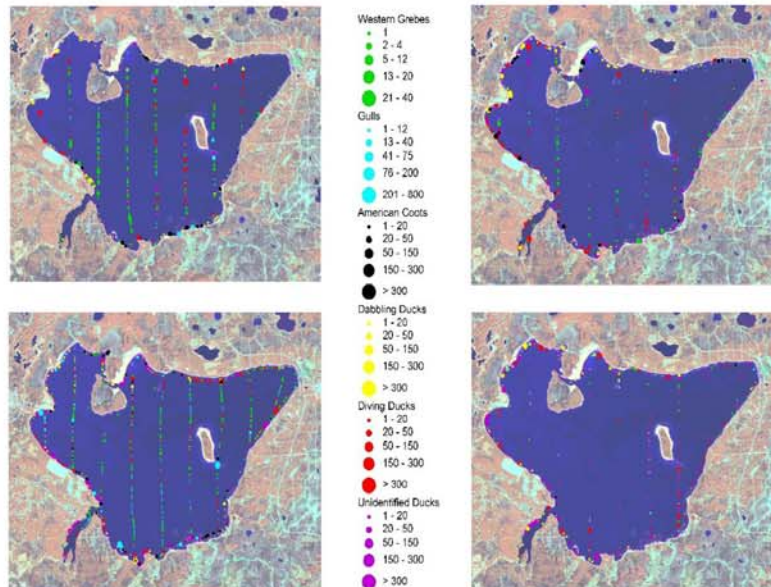


Figure 3. Spatial distribution of common waterbirds over four surveys: June 26 - upper left; July 23 - lower left; Sept 9 - upper right; and Sept 20 lower right.