

LAST MOUNTAIN LAKE
MIGRATORY BIRD SANCTUARY, SASKATCHEWAN
Information Sheet on Ramsar Wetlands

Effective Date of Information: The information provided is taken from the List of Canadian Wetlands Designated as of International Importance, May 1982 and updated by the Canadian Wildlife Service in March 1993.

Reference: 4CA005

Name and Address of Compiler: Environmental Conservation Branch, Environment Canada, Twin Atria, 2nd Floor, 4999 - 98th Avenue, Edmonton, Alberta, T6B 2X3.

Date of Ramsar Designation: 24 May 1982.

Geographical Coordinates: 51°20'N., 105°15'W.

General Location: Last Mountain Lake is part of the Upper Qu'Appelle River system in south-central Saskatchewan, 150 km south-east of Saskatoon and 100 km north-west of Regina.

Area: 15 602 ha.

Wetland Type (Ramsar Classification System): *Inland wetlands:* Type 7 - permanent and seasonal brackish, saline or alkaline flats and marshes; Type 9 - seasonal freshwater ponds and marshes.

Altitude: About 425 m.

Overview (Principal Characteristics): The Sanctuary is situated at the northern end of Last Mountain Lake and comprises shallow marshy bays and inlets separated by points and numerous islands. The surrounding uplands contain potholes and other fresh and saline wetlands, some with water levels held artificially high by low dams.

Physical Features (Geology, Geomorphology, Hydrology, Soils, Water, Climate): The lake within the Sanctuary has a maximum depth of 6.3 m and an average depth of 0.5-4 m depending on seasonal variations. Soils are light in texture with sandy saline loams near the lake.

Ecological Features (Habitats, Vegetation): A wide variety of native grasses *Agropyron*, *Distichlis*, *Stipa* and *Hordeum*, forbs *Astragalus*, *Aster*, *Thermopsis* and *Solidago* and shrubs *Rosa*, *Symphoricarpos* and *Elaeagnus* occur in complex patterns in the Aspen parkland transition zone between grassland and forest. The wetland plant communities are dominated by emergent *Typha* and *Scirpus* spp. which fringe the shoreline.

Land Tenure:

(a) **Site:** The area is owned by the Government of Canada.

(b) **Surrounding Area:** Private land and provincial Crown land.

Conservation Measures Taken: The area was first set aside in 1887 and has been administered cooperatively as a migratory bird sanctuary since 1968. The area is protected under the Migratory Bird Sanctuary Regulations which stem from the *Migratory Birds Convention Act* and the National Wildlife Area Regulations under the *Canada Wildlife Act*. Last Mountain Lake was recognized as a key site under the International Biological Program in the 1970s; a Ramsar site in 1982; a National Historic Site in 1990; and a Western Hemisphere Shorebird Reserve in 1994.

Conservation Measures Proposed: None currently.

Current Land Use/Activities in:

(a) **Site:** The area is managed for the conservation of migratory birds, their habitats, and for other wildlife species, and to help reduce crop damage of cereal grain by influencing the local distribution of waterfowl. The site serves as a refuge for waterbirds in drought years. Boating and recreational fishing are permitted with public access restricted in August and September to minimize disturbance of birds feeding on lure crops.

(b) **Surrounding Area:** Economic activities such as hay cutting and grazing are normally restricted to lands outside the sanctuary.

Threats to Integrity of:

(a) **Site:** A steady rise in public use in the surrounding area and on Last Mountain Lake is causing increasing disturbance to wildlife, particularly colonial nesting birds, throughout the year. Breeding success of Double-crested Cormorant *Phalacrocorax auritus*, and perhaps other birds, has declined, and American White Pelican *Pelecanus erythrorhynchos* now breeds here regularly. Natural fluctuations of the lake level have been controlled, thereby reducing the return of nutrients to some marshlands.

Several species of exotic plants (smooth brome grass, toadflax, and nodding thistle) have increased their occurrence in this area in recent years. Carp, first detected in 1968, have also increased, perhaps at the expense of native fish species such as the vulnerable bigmouth buffalo fish. Management actions to control the spread of these exotic species are underway.

(b) Surrounding Area: Increasing amounts of fertilizers and toxic chemicals from surrounding agricultural land are carried into the area by runoff water.

Hydrological/Physical Values: The site is particularly critical to waterbirds during years of drought when small, shallow prairie wetlands dry up.

Social/Cultural Values:

Noteworthy Fauna: The area is an important breeding and staging area for waterfowl and large numbers of other migratory birds. More than 220 species have been recorded including 90 breeding ducks, geese and Sandhill Crane *Grus canadensis*. Waterfowl concentrations are greatest from mid-August to November when up to 75 000 Sandhill Crane and 400 000 geese (*Anser c. caerulescens*, *Anser rossii*, *Anser albifrons*, and *Branta canadensis*) are present. The endangered Whooping Crane *Grus americana* occurs in the area during spring and fall migration. There are occasional large concentrations of *Calidris canutus* and *Arenaria interpres*. The islands within the lake support nesting colonies of pelicans, cormorants, gulls, and terns. Other breeding birds include the endangered Piping Plover *Charadrius melodus*, species of grebe, and a variety of shorebirds such as *Recurvirostra americana*, *Limosa fedoa*, *Catoptrophorus semipalmatus*, and *Phalaropus tricolor*.

The area also supports populations of prairie mammals such as *Taxidea taxus*, and *Canis latrans*. It is especially important as a wintering habitat for deer such as *Odocoileus virginianus*. The lakes, shallow bays and inlets are among the richest fish spawning and nursery grounds in Saskatchewan, supporting some 18 fish species including the vulnerable *Ictiobus cyprinellus*, rare over much of its range.

Noteworthy Flora:

Current Scientific Research and Facilities: Intensive research programs have been conducted since 1959 by the Canadian Wildlife Service in cooperation with the Universities of Saskatchewan and Regina and the Province of Saskatchewan. The Saskatchewan Wildlife and Fisheries Division has conducted studies since the 1950s. Extensive research programs continue in this area.

Current Conservation Education: A self-guiding interpretation program assists visitors learn about conservation efforts and wildlife at this site.

Current Recreation and Tourism: The site has an information kiosk, trails, viewing tower, videotape presentation, and picnic facilities.

Management Authority:

Canadian Wildlife Service
Environmental Conservation Branch
Prairie and Northern Region
Environment Canada
4999 - 98th Avenue
Edmonton, Alberta
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Jurisdiction: Federal - Environment Canada.

Selected Bibliography:

- Fawson, D.S. and J.E. Moore. 1944. The saline lakes of Saskatchewan. Canadian Journal of Research D.22: 141-201.
- Johnson, R.P. 1963. Studies on the life history and ecology of the bigmouth buffalo *Ictiobus cyprinellus*. Journal of the Fisheries Research Board of Canada 20(b): 1397-1429.
- Stephen, W.J.D. 1967. Bionomics of the sandhill crane. Canadian Wildlife Service Report Series, No 2. Ottawa, Ontario. 46 p.

Reasons for Ramsar Designation: Last Mountain Lake was recognized as a key site under the International Biological Program in the 1970s. The area is an important breeding and staging area for waterfowl and large numbers of other migratory birds.

Status of Management Plan: A *Draft Resource Management Plan for the Last Mountain Lake National Wildlife Area and Migratory Bird Sanctuary* was released for review and consultation by Environment Canada in January 1994.