CANADA 28: BEAVERHILL LAKE, ALBERTA

Information Sheet on Ramsar Wetlands

Effective Date of Information: The information provided is taken from text supplied at the time of designation to the List of Wetlands of International Importance, May 1987 and revised by the Canadian Wildlife Service – Prairie and Northern Region in October 2001.

Reference: 28th Ramsar site designated in Canada.

Name and Address of Compiler: Environmental Conservation Branch, Environment Canada, Twin Atria Bldg., Room 200, 4999 - 98th Avenue, Edmonton, Alberta, T6B 2X3.

Date of Ramsar Designation: 27 May 1987.

Geographical Coordinates: 53°30'N., 113°30'W.

General Location: The lake is situated 71 km east of Edmonton, Alberta.

Area: 18 050 ha.

Wetland Type (Ramsar Classification System): *Inland wetlands:* Type O - permanent freshwater lakes; Type Sp - permanent freshwater ponds; Type Ss - seasonal freshwater ponds, marshes, swamps including sloughs, potholes, seasonally flooded meadows and sedge marshes.

Altitude: 668 - 670 m.

Overview (Principal Characteristics): The site comprises 6 070 ha of land and 11 980 ha of water. The lake is located in central Alberta, at the northern edge of the aspen parkland zone.

Physical Features (Geology, Geomorphology, Hydrology, Soils, Water, Climate): The Lake lies in a broad, shallow glacial basin covering approximately 13 000 ha, with an average depth of 1.5-1.8 m. The lake levels fluctuate on a long-term basis over a decade or more. This long-term decrease in water levels has exposed more than 6 070 ha of previous lake bed. The area is flat to gently-rolling and includes an abundance of depression, sloughs, and several artificial drainages.

Ecological Features (Habitats, Vegetation): Vegetation is composed of aspen and willow, dry grassland, wetland, shoreline vegetation and cultivated farmland. The upland and wetland vegetation provides important nesting, brood rearing, moulting and staging habitat for waterfowl.

Land Tenure:

(a) Site: Exposed areas of the lake bed are owned and controlled by the Government of Alberta.

(b) Surrounding Area: Mainly private land holdings.

Conservation Measures Taken: Designated in 1996 as a Regional Western Hemisphere Shorebird Reserve Network (WHSRN) site. Designated as an IBA (Important Bird Area) by the Canadian Nature Federation and Bird Studies Canada..

Conservation Measures Proposed: None currently.

Current Land Use/Activities in:

(a) Site: Since the 1930s, much of this Crown land has been leased under a form of agricultural disposition of farmers owning adjacent patented lands. At present, over 90% (5 463 ha) of the land used is under agricultural dispositions, primarily for grazing with haying and cropping and cultivation secondary. The remaining land is disposed to resource development reservations (wildlife habitat, a recreation lease, and natural gas well sites), or is undisposed. Habitat enhancement projects were initiated in 1972 by Ducks Unlimited Canada and Alberta Fish and Wildlife. A dam was constructed to provide optimum water levels for resident waterfowl, and nesting islands were constructed.

In 1973, the lake became a habitat improvement project under the Alberta Fish and Wildlife "Buck for Wildlife" Program. During 1973 meetings were held with local groups and landowners to determine their response to potential habitat protection activities. From 1975 to 1981 a variety of habitat development activities were completed. These included tree planting, food and nest cover plots, pothole blasting, further construction of nesting islands, and fencing to control cattle grazing.

(b) Surrounding Area: Provincial Crown land.

Threats to Integrity of:

(a) Site: Changes in lake level affect the size of the lake. Agricultural runoff may affect water quality; some limited impact by oil and gas wells activities.

(b) Surrounding Area: Agricultural activity.

Hydrological/Physical Values:

Social/Cultural Values: Birding.

Noteworthy Fauna: The number of ducks, geese and swans staging on the lake during fall migration can exceed 200 000. An island in the lake provides breeding habitat for White Pelican *Pelecanus erythrorhynchos* and Double-crested Cormorant *Phalacrocorax auritus*, Great Blue Heron *Ardea herodias* and Night Heron *Nycticorax nycticorax*. Terns *Sterna* sp., Avocet *Recurvirostra americana* and Godwit *Limosa fedoa* inhabit the shorelands. Upland areas adjacent to the lake provide locally important habit for white-tailed deer *Odocoileus virginianus* and mule deer *Odocoileus hemionus*, Sharp-tailed Grouse *Pediocetes phasianellus* and Ruffed Grouse *Bonasa umbellus* and other resident or transient species of wildlife.

There are notable concentrations for the Prairie region of several species of shorebirds during migration including *Calidris fuscicollis*, *Calidris melanotus*, *Tryngites subruficollis*, and *Lobipes lobatus*.

Noteworthy Flora:

Current Scientific Research and Facilities: Beaverhill Bird Observatory.

Current Conservation Education: Annual Snow Goose Festival during spring migration of Arctic nesting geese at Town of Tofield. This supports the Beaverhill Lake Nature Centre to promote awareness of the lake and surrounding landscape.

Current Recreation and Tourism: A public trail winds through the area.

Management Authority:

Fish and Wildlife Division
Alberta Sustainable Resource Development
South Tower, Petroleum Plaza
9915 - 108th Street
Edmonton, Alberta
T5K 2G8

Jurisdiction: Provincial - Alberta Sustainable Resource Development

Selected Bibliography:

Reasons for Ramsar Designation: The lake has provincial, national and international importance as a staging, production and migratory area for waterfowl and shorebirds. The number of ducks, geese and swans staging on the lake during fall migration can exceed 200 000 birds.

Status of Management Plan: In 1981, the *Beaverhill Lake Integrated Resource Plan* was prepared by the province. It provides a policy that will guide the preparation and implementation of the local development plan on a disposition unit basis.