## LOON LAKE WETLAND

UTM Ref. 17TPV235745

Area: 550 ha

Muskoka Township, Gravenhurst
Status: Recommend Heritage Area

*Site Characteristics*

This wetland occupies several bedrock depressions situated between northwest / southeast trending bedrock ridges. Loon and Turtle Lakes border the wetland on the northern edge and North Muldrew Lake borders on the south.

The wetland extends for several kilometres with drainage flowing west into Loon-Turtle Creek, and thence south into the Severn River system. Two small beaver controlled tributary streams drain into Loon-Turtle Creek from the west.

A diversity of wetland types are present, including wet sedge-grass meadows, Alder - Buttonbush - Water Willow thicket swamps along the drier edges, treed tall shrub thickets, and Black Spruce - Tamarack - Leatherleaf - Sphagnum swamps, in more consolidated areas. Extensive open graninoid and heath poor fens, herb-rich fens dominated by Virginia Chain Fern and floating sphagnum mats support a diversity of representative and unusual peatland flora such as Few-flowered sedge, Arrow-grass, and Mud Sedge.

The bordering bedrock barrens consist of thinly scattered stands of White Pine with Red and White Oak. Small pockets with more mineral soils support early successional White Birch - White Pine - Red Maple - Aspen mixed forests. A number of uncommon flora are found in these barren areas including Plantain-leaved Pussytoe, several species of tick trefoils, Macoun's Cudweed, Snowberry and Broad-leaved Grass.

*Flora and Fauna*

Total numbers of species recorded were:

| | |
|---|---|
| Vascular Plants | 303 native; 38 introduced |
| | 5 A.C.P.F. with a score of 23 (LOW) |
| Birds | 60 observed during the breeding season |
| Mammals | 14 |
| Herpetofauna | 14 |
| Butterflies | 20 |

*Significant Natural Values and Selection Criteria Met*

1. **Hydrology** - (A3) This wetland has been evaluated as a provincially significant wetland (MNR, 1992) which provides water storage and water quality enhancement functions.

2. **Representation** - (B1) The Pine-Oak Barrens (warmer/rock/dry-mesic) is a community type of limited distribution within the Muskoka due to the presence of White Oak. While White Oak occurs sporadically in other rock barren habitats in the southern portion of

Muskoka, it is usually not a dominant species. The Loon Lake Bog (Wetland) was evaluated as a regionally significant peatland and recommended as a candidate ANSI (Brunton, 1991a).

3. **Diversity** - (B2) The total number of native plant species related to the size of the area is higher than expected for Muskoka as shown in Figure 1. In addition, the diversity of bird species was relatively high.

4. **Quality and Disturbance** - (B3) The fen communities present within this area are of unusually high quality as evidenced by the diversity of orchids (6 species) and other vascular plants, and the presence of a good diversity of reptiles, including Spotted Turtle, Four-toed Salamanders and five species of snakes.

5. **Rare Species** - (B4) The Loon Lake Bog provides habitat for the following rare species:

Wildlife
*Feniseca tarquinius* Harvester Butterfly [RR]
*Clemmys guttata* Spotted Turtle [NR PR RR]*
*Sistrurus c. catenatus* Eastern Massassauga [NR PR]
*Vireo philadelphicus* Philadelphia Vireo [RR]
Vascular Plants
*Bartonia paniculata* Screwstem [NR PR RR]**
*Epilobium palustre* Marsh Willow-Herb [RR]
*Listera australis* Southern Twayblade [NR PR]***
*Platanthera blephariglottis* White Fringed Orchis [PR]

* Found during MNR 1992 Wetland Evaluation
** Reznicek and Whiting, 1976
*** Whiting and Bobbette 1974

In addition, two species of snake, one salamander, three bird species and twenty-one species of vascular plants were recorded as regionally uncommon.

*Ownership and Disturbance*

The wetland is approximately 75% Crown land with the private land located adjacent to the lakes. The wetland area has been bisected by a cottage road which crosses to the northern ridge to service Loon and Turtle Lakes. The proximity of cottage communities means some disturbance by noise and traffic during the summer season, but the presence of large mammals suggests that its effect is minimal on most of this site. The wetland itself is in good condition, and has long been known by local naturalists as an excellent spot for botanizing.

*Sensitivity*

The sensitivity of this site is related to the function of the wetland, in particular as habitat for a number of nationally and provincially significant flora and herpetofauna. The adjacent lands support a community type of limited representation. Both the fen and barren communities are sensitive to disturbances such as trampling. Any future upgrading or additions to roads in the vicinity of the wetland and adjacent lands should be carefully designed to avoid changes to the hydrological regime and should be assessed accordingly to the Implementation Policy Guidelines for Wetlands.

*Major Sources of Information*

Brunton, 1991a; OMNR, 1992 Wetland Evaluation; Reid, et al., 1991; Reznicek and Whiting, 1976; Whiting and Bobbette, 1974.