UTM Ref. 17TPV268655

#### **ELLISON BAY WETLAND**

Morrison Township, Gravenhurst Status: Recommend Heritage Area Area: 75 ha

### Site Characteristics:

Ellison Bay is located along the Severn River, in the northwest corner of Sparrow Lake. The shallow bay, which is from 2 - 5 metres deep, has a sandy bottom and shorelines, interspersed with several small precambrian bedrock islands. The relatively alkaline waters in the bay support an unusually high diversity of aquatic plants, with extensive stands of Wild Rice, Pickerelweed and Slender Bulrush, and beds of dense submergent vegetation.

The sandy shorelines of the site support a band of herbaceous grasses and shrub thickets. This is backed by a band of Silver Maple-Red Maple swamp, which grades into mature deciduous forests of Red Oak, Sugar Maple, and White Pine, with pockets of Pine and Eastern Hemlock. On the arid bedrock ridges which characterize the easterly section of the site, open oak woodlands and rock barrens with scattered Common Juniper and Red Cedar are found.

## Flora and Fauna

Total number of species recorded were:

Vascular Plants 167 native; 20 introduced

1 A.C.P.F. with score of 5 (Insignificant)

Significant Natural Values and Selection Criteria Met

1. Representation - (B1) The submerged aquatic communities of Ellison Bay Wetland provide an excellent example of a Neutral Mesotrophic Shallow Open Water community (warmer/sand/open water), found elsewhere in Muskoka only in the adjacent McLean Bay site. As well, the Wild Rice community here, while one of three known in Muskoka, is assessed by Brunton (1991b) as "the best and largest example of Wild Rice marsh vegetation in Site District 5E-8".

The upland Red Cedar-Common juniper rock barren community (warmer/rock/very dry) is an additional vegetation type not well represented elsewhere in Muskoka.

- 2. Diversity (B2) Sparrow Lake is known to harbour an unusually rich complement of aquatic plant species. Ellison Bay Wetland is one of the best areas of the lake displaying this diversity, with at least 15 species of pondweeds (*Potamogeton* spp.) known from the bay.
- 3. Quality and Disturbance (B3) The Wild Rice beds of Ellison Bay Wetland are exceptional for their extent and intactness. They may be the same populations described by pioneer field naturalist John Macoun in the 1880's, which would be historically significant as well.

As well, the mainland portion of the site contains very mature deciduous forest, with Red Oaks from 0.6 - 1.2 metres in diameter, perhaps the largest individual specimens in Muskoka.

4. Rare Species - (B4) The area provides habitat for the following rare species:

Vascular Plants

Bidens discoidea Small Beggar-Ticks [NR PR]
Carex conoidea Field Sedge [PR RR]
Cyperus squarrosus Umbrella Sedge [RR]
Juglans cinerea Butternut [RR]
Panicum tuckermanii Grass [RR]
Panicum virgatum Switch Grass [RR]
Penstemon hirsutus Hairy Beard Tongue [RR]
Scirpus heterochaetus Slender Bulrush [NR PR RR]
Sporobolus heterolepis Northern Dropseed [PR RR]

As well, 12 species of regionally-uncommon plants have been identified within this site.

- 5. Fish and Wildlife Concentrations (B5) Ellison Bay Wetland is recognized as a regionally significant staging area for waterfowl, and as an important spawning and nursery habitat for sport fish.
- 6. Biogeographic Interest (B7) The area includes several communities and species more typical of richer more southerly regions. Of note is a rich Buttonbush Silky Dogwood thicket along the edge of the marsh, which includes such southern species as Sweet-flag, Stiff Arrowhead, and Greenbrier. In the Silver Maple swamp, the presence of Climbing Poison Ivy is also more typical of less acidic substrates to the south. Red Cedar trees are also more southern calcicoles, which are uncommon in Muskoka. According to Brunton (1991 b), nowhere else in Site District 5E-8 does Red Cedar form a significant element of the forest cover.
- 7. Scenic Landscapes (C7) Ellison Bay Wetland is part of the Severn River system, which has been identified as a corridor of high scenic value.

# Ownership and Disturbance

The land-based sections of the Ellison Bay area are entirely privately owned, with cottages along several sections of the adjacent upland. Boat channels used by local cottagers cross the Wild Rice beds, and shoreline protection works in front of some cottages have eliminated shoreline habitats. Sparrow Lake and the main channel of the Trent-Severn Waterway abut the area, with heavy summer boat traffic. In some sections of the upland forests within the site, selective cutting of hardwoods has created recent disturbance.

# Sensitivity

The natural values of this area could be seriously disrupted by dredging or filling within the wetland areas. The aquatic and shoreline sections are included within the Sparrow Lake Marsh class 1 wetland (Ferguson and Boyd, 1986), and most of the area has also been recommended as a provincially significant ANSI (Brunton, 1991 b). These designations, together with ongoing landowner contact in adjacent upland areas, should help to assure its future. Logging of the mature upland forests should be discouraged, and powerboats discouraged from entering the Wild Rice beds.

Major Sources of Information

Kamstra, 1992; Ferguson and Boyd, 1986; Brunton, 1991 b; Berney and Reid, 1993.