

MORRISON LAKE WETLAND

UTM Ref. 17TPV215686

Wood Township, Gravenhurst
Status: Recommend Heritage Area

Area: 425 ha

Site Characteristics

This site includes a shallow channel of Morrison Lake between Mile Island and the west shore, together with its immediate watershed and most of Morrison Creek as it drains the lake south into the Severn River. The upland areas of the site are gently rolling gneissic bedrock ridges, with a shallow, discontinuous mantle of sandy glacial till. Where the bedrock is most exposed, a dry open rock barren community of White Oak, White Pine, and White Ash occurs. Where some soil is present, a mixed woodland has developed with White Birch, White Pine, and Red Maple. On deeper soils in the north end of the site, the woods are mostly deciduous with Red Maple, Red Oak, White Pine, White Oak, and Basswood.

This site includes a number of shoreline and interior wetlands, including an extensive Red Maple-Black Ash swamp, partially disrupted by beaver activity, in the northern section. Closed to partially open conifer swamps, dominated by Black Spruce and Tamarack, occur in several locations. Wet low shrub swamps are common along the shorelines, with dense stands of Sweet Gale, Winterberry, Mountain Holly, Buttonbush and Swamp Loosestrife or Water Willow. In a few places, low shrubs such as Leatherleaf, Sweet Gale, and Cranberry occur on floating Sphagnum mats.

Within the lake and creek, rich aquatic communities include emergent-submergent marshes dominated by Spikerush, Purple Bladderwort, and Floating Hearts. Other sheltered bays have floating leaved aquatic communities with Pondweed, Water Shield, and Waterlily.

Flora and Fauna

Total numbers of species recorded were:

Vascular Plants	455 native; 58 introduced
	18 A.C.P.F. with a score of 89 (High)
Birds	65 observed during breeding season
Mammals	19
Herpetofauna	18
Butterflies	24
Dragonflies	7
Mushrooms	25

Significant Natural Values and Selection Criteria Met

1. **Representation** - (B1) A major portion of this site has been recommended by Brunton (1991 a) as a provincially-significant wetland and shore complex, fulfilling representation needs in Site District 5E-7. As well, the Fragrant Sumac-Downy Arrowhead shrub thicket community (warmer/rock/dry-mesic) found on Mile Island is a community type not well represented elsewhere in Muskoka.

2. **Diversity** - (B2) The diversity of native plants within this site, plotted against area, is significantly higher than expected for Muskoka, as shown on Figure 1. As well, the site shows strong diversity in the numbers of species of mammals, herptiles, and butterflies.

3. **Rare Species** - (B4) Morrison Lake Wetland provides habitat for the following rare species:

Wildlife

Buteo lineatus Red-shouldered Hawk [NR PR]
Empidonax flaviventris Yellow-bellied Flycatcher [RR]
Synaptomys cooperi Southern Bog Lemming [PR] *
Sistrurus c. catenatus Eastern Massasauga [NR PR]
Hesperia leonardus Leonardus Skipper [PR]

Vascular Plants

Bartonia paniculata Screwstem [NR PR RR] *
Bidens discoidea Small Beggar-ticks [NR PR]
Carex backii Sedge [RR]
Carex muhlenbergii Muhlenberg's Sedge [RR]
Carex novae-angliae New England Sedge [PR]
Elatine minima Water Wort [PR]
Myriophyllum heterophyllum Various-leaved Water Mil-foil [RR]
Panicum spretum Eaton's Grass [PR]
Panicum virgatum Switch Grass [RR]
Pedicularis canadensis Wood Betony [RR]
Platanthera blephariglottis White Fringed Orchis [PR]
Polygonum careyi Carey's Knotweed [PR]
Rhexia virginica Virginia Meadow Beauty [NR PR]
Rhus aromatica Fragrant Sumac [RR]
Scrophularia lanceolata Figwort [RR]
Triadenum virginicum Marsh St. John's Wort [PR]
Xyris difformis Slender Yellow-eyed Grass [PR]
* Brunton, August 22, 1990.

In addition, regionally uncommon species found within the site include 30 vascular plants, two birds, and four snakes.

4. **Fish and Wildlife Concentrations** - (B5) Records provided by the Ministry of Natural Resources show a heronry, a deer wintering yard, and several fish spawning sites within the Heritage Area.

5. **Biogeographic Significance** - (B7) The Morrison Lake area is an exceptional site in both richness and quantity of Atlantic Coastal Plain species. Scoring of this site with a ranking system developed by Keddy and Sharp (1989) shows it to have both the highest score and the highest diversity of A.C.P.F. species known in the province.

Other communities within the site show strong southern influences, particularly the open bedrock communities on Mile Island which include Fragrant Sumac, Ebony Spleenwort, Panicled Tick-trefoil, and other southern species.

The occurrence of Yellow-bellied Flycatcher on this site, south of its normal Muskoka range, is also of biogeographical interest.

Ownership and Disturbance

Approximately 60% of this site is privately owned, including a number of small cottage properties along the lakeshore and on Mile Island. Disturbance associated with shoreline development has fragmented many of the Atlantic Coastal Plain communities, although those located along and at the mouth of Morrison Creek are relatively intact. Motor boat use through the area has also disturbed some of the aquatic plant associations. Backshore areas within the site are largely undisturbed.

Sensitivity

The Atlantic Coastal Plain communities of Morrison Lake are especially vulnerable to additional or more intensive shoreline development, and to changes in the natural fluctuations in lake water levels. Disruptions to the hydrology of the lake watersheds and of Morrison Creek should be avoided. Making private landowners aware of the significance of this site, and of ways they can help in its protection, is especially important in this circumstance.

Major Sources of Information

Reid et al, 1991; Brunton, 1991 a; Keddy and Sharp, 1989.