UTM Ref. 17TPV232710

Area: 140 ha.

MULDREW CREEK

Wood and Muskoka Townships, Gravenhurst

Status: Recommend Heritage Site

Site Characteristics

This site is situated in the vicinity of Muldrew Creek, which flows from South Muldrew Lake into the north end of Morrison Lake. Muldrew Creek flows through a sizable deposit of glaciolacustrine fine-grained silt and clay between Red Maple-Red Oak rock barren outcrops. Small, narrow pockets of wetlands underlain by organic deposits occur along the shoreline and backshore areas of South Muldrew Lake, supporting marsh, swamp, leatherleaf shrub and Virginia Chain Fern poor fens, and Atlantic Coastal Plain Flora communities. The creek and surrounding forest supports an assemblage of plants with southern affinities often found in clay soils such as Broad-leaved Grass, Ebony Spleenwort, Virginia Creeper, several species of Tick Trefoils, Bur Oak and Buttonbush - Silky Dogwood - Water Willow shrub thicket.

There were 186 species of vascular plants recorded including one nationally rare, five provincially rare, one regionally rare and 18 regionally uncommon species. Twelve coastal plain species were present along shorelines of south Muldrew Lake, obtaining a high significance score of 57. Thirty-eight bird species, four mammals, nine species of reptiles and amphibians including the Massassauga Rattlesnake (threatened COSEWIC) and an abundance of minnows, were also recorded.

Significant Natural Values and Selection Criteria Met

1. Biogeographic Significance / Rare Species / Diversity - (B4) The Muldrew Creek area provides habitat for the following rare species:

Wildlife

Sistrurus c. catenatus Eastern Massassauga [NR PR]

Vascular Plants

Desmodium nudiflorum Tick Trefoil [RR]

- *Elatine minima Water Wort [NR]
- *Panicum spretum Eaton's Grass [PR]
- *Rhexia virginica Virginia Meadow Beauty [NR PR]
- *Triadenum virginicum Marsh St. John's Wort [PR]
- *Xyris difformis Slender Yellow-eyed Grass [PR]
- *Atlantic Coastal Plain Flora

The twelve coastal plain species present in the area received a score of 57 making it the seventh of ten sites with high representation of this floristic element. The location of this site close to the Severn River Corridor and within an area underlain by clay deposits, provides uncommon habitat which supports species with a more southern distribution.

Most of these species are represented at the adjoining Morrison Lake wetland Heritage Area. the diversity of native plant species relative to the sites area was slightly higher than expected as shown in Figure 1.

Since this site shares representation with Morrison Lake wetland and the criteria were only weakly met, it was not recommended as a Heritage Area.

Ownership, Disturbance and Sensitivity

This area, which is privately owned, lies between two heavily populated lakes, Morrison and Muldrew. It thus has some disturbances associated with lakeshore development and recreational uses. A farmstead along the creek contains areas of old field with introduced plant species. An established canoe portage route around a small control dam at the Muldrew Lake exit minimizes impacts to the surrounding forest. South Muldrew Lake is the least developed part of Muldrew Lake, largely due to the presence of swamp land in this section.

The sensitivity of this site is related to the shoreline and wetland areas which support A.C.P.F. and uncommon vegetation associations. Policies related to protection of wetland values, and a suitable buffer incorporating adjacent mature forest should be established.