COGNASHENE LAKE/LONGUISSA BAY UTM Ref. 17TNV860795

Gibson Township, Georgian Bay Area: 421 ha
Status: Recommend Heritage Area

Site Characteristics

This site consists of the upper end of Longuissa Bay which terminates in an extensive lowland and wetland complex, and an arc of beaver-controlled wetlands and dry Oak barren upland areas joining the top end of Cognashene Lake. Longuissa Bay can be divided into two sections. The southern half of the bay is typical of the Georgian Bay shore with thin soils on Precambrian bedrock. The northern half of the bay is characterized by exposed gneiss sloping directly into the water and small bays with sandy-peaty soils. Shallow, fluctuating water levels support a continuous band of emergent vegetation along this shoreline, including Atlantic Coastal Plain Flora, plus a large Wild Rice stand and a rich variety of floating and submerged aquatic plants.

Deeper, sandy soils along the shoreline of the wetland at the top of Longuissa Bay support rich Sugar Maple-Beech-Ironwood-Basswood deciduous forests and mixed Pine-Oak-Aspen forests.

Flora and Fauna

Total numbers of species recorded were:

Vascular Plants	218 native ; 5 introduced
	12 A.C.P.F. with a score of 59 (High)
Birds	26 observed during breeding season
Mammals	5
Herpetofauna	7

Significant Natural Values and Selection Criteria Met

1. **Quality and Disturbance** - (B3) Climax deciduous forest of this quality is rare in the Georgian Bay region due to the predominance of shallow soils and exposed bedrock. The wetland at the top of Longuissa Bay has a high species richness of aquatic plants. Twenty species of aquatic plants characteristic of open water habitats were recorded, including five species of Bladderworts, six species of Pond Weeds and two Naiads.

2. **Rare Species** - (B4) The Longuissa Bay area provides habitat for the following rare species:

Wildlife
Phalacrocorax auritus Double-crested Cormorant [RR]
Vascular Plants
Elatine minima Water Wort [PR]
Najas gracillima Naiad [NR PR RR]
Panicum ovale American Panic Grass [RR]

Pedicularis canadensis Wood Betony [RR]
Platanthera blephariglottis White Fringed Orchis [PR]
Polygonum careyi Carey's Knotweed [PR]
Polygonum scandens Climbing False Buckwheat [RR]
Potamogeton bicupulatus Two-cupped Pondweed [NR PR]
Potamogeton vaseyi Vasey's Pondweed [RR]
Triadenum virginicum Marsh St. John's Wort [PR]
Xyris difformis Slender Yellow-eyed Grass [PR]

In addition, thirteen species of vascular plants were recorded as regionally uncommon.

3. **Fish and Wildlife Concentrations** - (B5) The large wetland at the top of Longuissa Bay, composed of floating macrophytes and Wild Rice, provides an important fish spawning area and waterfowl staging area.

4. **Biogeographic Significance** - (B7) The Longuissa bay shoreline contains a high significance of representation for Atlantic Coastal Plain Flora, supporting twelve species with a score of 59. It ranked number six of ten sites with high significance.

Ownership and Disturbance

The area is largely Crown land ownership, with approximately 24% privately owned. The privately owned section includes the Longuissa Bay area, where the most significant natural features are located.

Previous disturbances include logging and aggregate extraction in the area of deciduous forest. The area was selectively logged and therefore has retained most of its original character. The area of aggregate extraction was localized, leaving a small highly visible disturbed area. The rest of the inland areas remain relatively undisturbed.

Sensitivity

The sensitivity of this site is related to the coastal plain shoreline and Wild Rice and aquatic macrophyte shallow water communities of the large wetland complex at the top of Longuissa Bay. Suitable policies related to the protection of shorelines for A.C.P.F. and other wetland species, including fish habitat protection should be followed. The quality of the climax deciduous forests should not be compromised by inappropriate development or resource extraction.

Major Sources of Information

Bajc, & Paterson, 1992 b; Geomatics International, 1992; District Municipality of Muskoka 1985 Sensitive Areas Schedules; Keddy, & Sharp, 1989.