

McCRAE LAKE

UTM Ref. 17TNV942745

Baxter Township, Georgian Bay
Status: Recommend Heritage Area

Area: 1170 ha

Site Characteristics

The McCrae Lake area is set in a weakly broken Precambrian bedrock plain that has been washed bare of much of its surficial materials. Most of the upland area consists of warmer than normal bare rock knolls with Common Juniper and clumps of stunted Red Oak, White Oak, and White Pine. Where pockets of dry sandy till occur, a young forest of Red Oak, White Pine, Eastern Hemlock, Red Maple and Large tooth Aspen can be found.

Small depressions in the bedrock have fostered the development of Virginia Chain Fern poor fens and Tamarack-Black Spruce swamps on organic soils. The frequent beaver ponds through the area typically have floating-leaved aquatics, including Waterlilies. The shallow shoreline waters of McCrae Lake itself have dense beds of Eurasian Water Milfoil on a sandy bottom.

McCrae Lake passes waters from Six Mile Lake westwards into Georgian Bay, while the smaller Bear's Head Lake receives water only from local tributaries and wetlands.

Flora and Fauna

Total numbers of species recorded were:

Vascular plants	190 native; 7 introduced 9 A.C.P.F. with a score of 44 (Moderate)
Birds	25 recorded during breeding season
Mammals	6
Herpetofauna	9
Butterflies	6

Significant Natural Values and Selection Criteria Met

1. **Landform Representation** - (A2) An earth science survey of the site (Spek, 1978) revealed biotite gneisses that are "very representative of the type of metasedimentary gneiss encountered in this part of the Ontario Gneiss Segment". These rocks have not been severely deformed and therefore display good compositional layering. As well, one outcrop displays excellent tight metamorphic folding and a pegmatite dike.

2. **Quality and Disturbance** - (B3) The biotic communities present represent the full range of communities typical of the southern Georgian Bay coastal zone, and show little disturbance from their natural state. The relatively low ratio of non-native plants, at 3.6%, is evidence of this quality.

3. **Rare Species** - (B4) The McCrae Lake area provides habitat for the following rare species:

Wildlife

- Dendroica discolor* Prairie Warbler [NR PR] *
Elaphe vulpina gloydi Eastern Fox Snake [PR RR] **
Sistrurus c. catenatus Eastern Massasauga [NR PR] **

Vascular Plants

- Asplenium trichomanes* Maidenhair Spleenwort [RR] ***
Carex folliculata Long Sedge [PR]
Panicum rigidulum Panic Grass [NR PR]
Petasites frigidus Sweet Coltsfoot [RR]
Platanthera blephariglottis White Fringed Orchis [PR]
Pterospora andromedea Pinedrops [PR RR]
Sagittaria graminea var. *cristata* Grass-leaved Arrowhead [NR PR]
Sisyrinchium angustifolium Stout Blue-eyed Grass [RR]
Streptopus amplexifolius Clasping-leaved Rose Twisted Stalk [RR]
Triadenum virginicum Marsh St. John's Wort [PR]
Xyris difformis Slender Yellow-eyed Grass [PR]

* from Hanna, 1979

** from MacDonald, 1985

*** from Simpson, 1977

In addition, field investigations and past records identify a number of regionally-uncommon species, including 21 plants, one bird, and two herptiles. Caspian Terns, a nationally and provincially rare species, were seen feeding within the area, but are not known to breed there. There are historic records of a Peregrine Falcon nest on McCrae Lake as well (Simpson, 1977).

4. **Size and Linkage** - (B6) At 1170 ha, the McCrae Lake area provides a relatively large natural complex. Its shape and geographic location make it largely self-buffering from edge effects, providing suitable habitat for species requiring large undisturbed conditions.

5. **Biogeographic Significance** - (B7) McCrae Lake includes a significant number of southern species close to the northern edge of their range, including White Oak, Buttonbush, Downy Arrowwood, Woodland Sunflower, Red Cedar, Ebony Spleenwort, and Squawroot.

A number of species with eastern affinities are also found within the site, including nine Atlantic Coastal Plain species.

Ownership and Disturbance

Almost the entire site is Crown land. Parts are included in the McCrae Lake Wilderness Area established in 1960; the former McDonald Bay Park Reserve designated in 1965; and the Bearshead-Buckshoof Lakes Regional ANSI identified in 1985. A recent life science study of Site District 5E-7 has again recommended part of the area as a Regional ANSI (Brunton, 1991 a). The area has been disturbed in the past by logging and by the construction of a dam

just upstream on MacDonald Lake. The only recent disturbances arise from intensive use of shoreline campsites associated with a canoe route through the area.

Sensitivity

The natural values of this area could be compromised by construction of cottage roads, shoreline developments, or utility corridors. Because of the harsh conditions on the bedrock ridges, any future logging should be carefully regulated. Increasing unregulated campsite use is having a negative impact on parts of the area, pointing out a need for better controls and maintenance for this recreational use.

Major Sources of Information

Geomatics, 1992; Brunton, 1991 a; MacDonald, 1986; Keddy and Sharp, 1989; Hanna, 1979; Simpson, 1977.