

BEAUMONT BAY CARBONATES

UTM Ref. 17TPA 215095

Watt Township, Muskoka Lakes
Status: Recommend Heritage Area

Area: 220 ha

Site Characteristics

This site, situated south of Skeleton Lake, contains erratics of Ordovician limestone found by Waddington and Dence (1979) and later confirmed by Bajc (1990). The greatest concentration and exposure of carbonate fragments was located in a gravel pit adjacent to Nutt Lake. Most of the limestone fragments are small, but some range up to 30 cm across. The area south of Highway 141 is a kame moraine which is affected in part by the presence of two gravel pits. Rich, sub-mature Sugar Maple-Beech-Eastern Hemlock forests dominate the area. A small stream flowing toward Skeleton Lake through a low-lying depression supports an Eastern Hemlock-Yellow Birch-Cedar and Black Ash rich bottomland forest, tall thicket swamp and forb-rich wet meadow. The three areas north of Highway 141 consist of shallow till over bedrock, sections of steep topography with bedrock exposures, a large area underlain by swamp and organic deposits, and an inland bog pond.

The Beaumont Bay peninsula which extends out into Skeleton Lake is defined by steep cliffs supporting White Birch and Trembling Aspen, with White Pine and Eastern Hemlock on the bedrock exposed ridge tops and White Pine-Red Maple forest on the drier leeward slopes. The interior slopes contain very mature deciduous and mixed forests on deep, mesic soils with Sugar Maple and Yellow Birch dominants.

A large bog pond occupying a central depression supports Leatherleaf and Tamarack floating fen mat and graminoid mat with dead trees, surrounded by open water with emergent aquatic vegetation.

The forests to the west of Beaumont Bay are largely deciduous Sugar Maple-White Birch-Red Maple on deep rich soils. A central depression is occupied by a mixed conifer-broadleaf forest swamp. The large wetland area is confined by deciduous and mixed forested slopes. Adjacent to Hwy 141 where numerous stream sources converge, is a section of reedswamp (Cattail marsh) with dead standing conifers in deep standing water. The stream follows a primary channel through mixed and conifer swamp forests with large components of Eastern White Cedar plus Black Spruce, White Birch, Black Ash and Red Maple. Where two stream channels meet, the vegetation canopy opens to low shrub fen with Meadowsweet, Leatherleaf and sedge tussocks. As the channel deepens, in part due to a beaver dam, the community structure changes to shrub rich marsh with abundant aquatic vegetation.

Past the beaver dam, the channel narrows, and a shallow, cold water stream dominated by aquatic vegetation empties into Skeleton Lake. The first known station of Mare's-tail (*Hippuris vulgaris*) and regionally uncommon Marsh Marigold were located along this section of stream.

Flora and Fauna

Total number of species recorded were:

Vascular plants	304 native; 40 introduced
Birds	47 observed during breeding season
Mammals	7
Herpetofauna	10
Butterflies	6
Dragonflies	4
Mushrooms	10

Significant Natural Values and Selection Criteria Met

- 1. Distinctive Landform** - (A1) The presence of strands of high carbonate glacial debris is an unusual landform feature that contributes to the richness of the site's vegetation communities. An earth science assessment of the Nutt Lake limestone erratics by the MNR concluded that the outlier covered by Skeleton Lake was regionally significant and the erratics and pebbles of Ordovician limestone in the outwash and till were at least locally significant (Spek, 1981a). Their contributions can be used to confirm the direction of past glacial ice movement. No other source of Ordovician limestone exists between Skeleton Lake and Lake Nipissing (Hewitt, 1967).
- 2. Diversity** - (B2) The total number of native plant species related to the size of the area is higher than expected for Muskoka, as shown in Figure 1. The area also supports a diversity of landform features supporting a variety of upland, wetland and steep slope vegetation communities.
- 3. Quality and Disturbance** - (B3) The presence of mature, late successional forests on rich soils supporting a diverse understory, many species of woodland amphibians, a diversity of warblers and thrushes and mammal species requiring large areas of mature forest (Fisher, Bear) attest to the quality of this site.
- 4. Rare Species** - (B4) The Beaumont Bay area provides habitat for the following rare species:

Wildlife

Buteo lineatus Red-shouldered hawk [NR PR]

Vascular plants

Carex interior Inland sedge [RR]

Chenopodium simplex Maple-leaved Goosefoot [RR]

Gnaphalium sylvaticum Wood cudweed [RR]

Hippurus vulgaris Mare's-tail [RR]

Poa languida Blue grass [RR]

Sanguinaria canadensis Bloodroot [RR]

In addition, two salamanders, one bird, and 12 species of vascular plants were recorded as regionally uncommon.

5. **Fish and Wildlife Concentrations** - (B5) The coldwater stream has been identified as supporting Rainbow Smelt. The Peninsula east of Beaumont Bay supports a deer wintering area. Red-shouldered Hawk may nest in the area, although a nest site is yet to be confirmed.

6. **Biogeographic Significance** - (B7) Among the plant species found in the study area, two species, Blue Grass (*Poa languida*), and Glaucous Honeysuckle are considered calciphiles. Many other species reflect the presence of a rich woods, such as Basswood, Ironwood, Wild Leek, White Baneberry, Bloodroot, Downy Yellow Violet, Herb Robert, Rattlesnake Grape Fern, Smith's Melic Grass, Long Awned Wood Grass, Black Grass (*Oryzopsis racemosa*), White Grass (*O. asperifolia*), Tall Millet Grass (*Milium effusum*), Drooping Wood Sedge (*Carex arctata*) and Rough Sedge (*Carex scabrata*). Still others have a more southern distribution and thus would be approaching their northern limit, such as Silver Maple, Prickly Gooseberry, Maple-leaf Viburnum, Poison Ivy, Enchanter's Nightshade, White Baneberry.

Ownership and Disturbance

This area is all privately owned and has a high degree of disturbance associated with gravel pits, a cemetery, a large campground and golf course by Nutt Lake, a marina, and scattered rural homes within the study area. A highway cuts through the middle of the area and local access roads are present in many parts. Snowmobile trails and logging of the deciduous forests for firewood have disturbed other areas. Nevertheless, there are sections of very mature forest throughout the area. The wetland area is disturbed only to the extent that beaver dams are regularly dismantled and the channel kept open in order to reduce the incidence of flooding onto Highway 141. Areas of greatest disturbance were eliminated from the study area with the final boundaries including areas of relatively minor disturbance.

Sensitivity

The sensitivity of this site is related to the combination of geological features which support rich mature forest stands of high quality, and a diversity of flora and woodland fauna, including many regionally rare and uncommon species representative of rich woods.

The woodlots are large enough to support larger mammals and birds requiring areas of relatively undisturbed mature forest. Management guidelines should be directed at protection and enhancement of forestry and wetland values by minimizing disturbances which would remove large areas of prime forest and cause further fragmentation of the area. Development on steep slopes must consider the impacts of erosion and increased sedimentation potential. Alterations to the stream on the large wetland should address impacts on water quality and quantity and reflect the Implementation Guidelines for the Wetlands Policy Statement.

Major Sources of Information

Bajc, 1990; Bergsma et al, 1993; District Municipality of Muskoka, Sensitive Areas Schedules, 1985 ; Hewitt, 1967; Reid et al, 1992; Spek, 1981; Waddington and Dence, 1979.