

FAWN LAKE WETLAND

UTM Ref. 17TPA365012

Macaulay Township, Bracebridge
Status: Recommend Heritage Area

Area: 400 ha

Site Characteristics

This palustrine wetland occupies an extensive low-lying area of peat and muck soils between Bonnie Lake and Fawn Lake. It is dominated by fairly mature Black Spruce, Eastern White Cedar and Tamarack rich conifer swamp forest on sphagnum and Speckled Alder thickets along the intermittent stream channel. The drainage is northwards with one source from Bonnie Lake, a second from a small creek and beaver pond in the southwestern corner, and the major source from a complex of open beaver-controlled ponds supporting marsh and fen vegetation. These ponds, situated 25 metres above the larger wetland basin, are connected through a narrow steep rocky gorge into the southeastern end of the wetland.

The wetland is enclosed by Red Maple - Trembling Aspen - White Birch successional forest and Sugar Maple - Red Maple - Eastern Hemlock mixed forest on gentle slopes. White Pine - White Spruce conifer forest dominates the steeper slopes. The forests are on fairly deep till over bedrock. Pockets of exceptionally mature, rich forest with a cool microclimate support boreal species such as Yellow Clintonia, Hobblebush and Balsam Fir. The canopy is occupied by trees requiring cooler, moist sites, particularly Black Cherry, Yellow Birch and White Spruce.

The swamp forests within the wetland are generally herb-rich with boreal species like Bunchberry, Yellow Clintonia, Wintergreen, Three-leaved False Solomon's Seal, Goldthread, Twin Flower, Dewberry, Two-seeded and Three-seeded sedges; as well as containing a prominent low shrub layer of Labrador Tea, American Mountain Ash and Velvetleaf Blueberry. All are on a sphagnum base on hummock and hollow topography. Where the canopy is more open toward Fawn Lake, the community structure has intermediate to rich fens and thicket swamps.

Flora and Fauna

Total numbers of species recorded were:

Vascular plants	161 native; 2 introduced
Birds	50
Mammals	5
Herpetofauna	9
Butterflies	5
Dragonflies	10

Significant Natural Values and Selection Criteria Met

1. **Hydrology** - (A3) The Fawn Lake wetland complex contributes to regional hydrological systems through water quality enhancement and water storage. The area was evaluated as a provincially significant wetland by MNR (1992).

2. **Representation** - (B1) The area is one of the largest and most mature conifer swamp forests in the District. It was evaluated as a provincially significant wetland with recommended candidate ANSI status for site District 5E-8 (Brunton, 1991b). The wetland area also supports an intermediate-rich fen (normal/organic/wet-mesic) which is of limited representation in other Heritage Areas.

3. **Quality and Disturbance** - (B3) The area has very little disturbance to disrupt the natural functioning of the wetland. The quality of the conifer swamp forest is high in terms of maturity and size. A maximum diameter breast height of 26.2 cm was recorded for Eastern White Cedar. The quality of the upland forests is also good, with examples of undisturbed successional and mature, rich woods. Maximum dbh of Black Cherry is 21.8 cm and Yellow Birch 29.4 cm. The number of amphibians and dragonflies observed reflects the high quality of the area, as does the low ratio of 1.2% introduced plant species.

Ownership and Disturbance

The area is 100% private and virtually undisturbed. The forested edges show some signs of human activity relating to logging, recreational trails from the nearby campground, hunting camps and snowmobile trails. A cut between the 12th and 13th Concession line is the only disturbance to the central wetland area.

Sensitivity

The sensitivity of this site is related to the hydrological functioning of the wetland ecology. Management of the wetland should follow the OMNR Manual of Implementation Guidelines for the Wetland Policy Statement. A buffer area should be established following MNR Area of Concern Guidelines to avoid erosion and encroachment, taking into account slope and other features of interest.

Major Sources of Information

Bajc, & Henry, 1991; Bajc, 1992; Bergsma et al, 1993; Brunton, 1991b; OMNR Wetland Evaluation, 1992.