

SHACK CREEK WETLAND

UTM Ref. 17TPV482942

McLean and Oakley Townships, Bracebridge
Status: Recommend Heritage Area

Area: 500 ha.

Site Characteristics

This wetland is situated in the Kawpakwakog Creek valley in a broad, shallow depression of organic peat and muck soils. It supports a diversity of wetland types, including swamp forests, fens, bogs, thicket swamps and marshes. Islands of glaciofluvial sand and till are present in the centre of the depression as kame hummocks and terraces (Bajc & Henry, 1991). These islands support boreal mixed forests with White Birch and a more northern Trembling Aspen conifer forest association.

The area surrounding the wetland is a relatively flat glaciofluvial outwash feature at an elevation above 300 metres. Rich Maple-Birch deciduous forests and White Pine northern mixed hardwood forests are present on sand and is largely drift-covered bedrock outcrops supporting mature mixed and coniferous forests with rich shrub and herbaceous layers. Two large ponds in this northern upland feed the intermittent stream which runs through the wetland. The stream is partially beaver controlled with several small flooded areas present.

Shack Creek is classified as a palustrine wetland. Where the stream empties into the Kawpakwakog River, the wetland becomes riverine.

A large portion of the wetland is covered by either early successional herb-rich mixed swamp forest or 70-90 year-old conifer swamp forest dominated by Black Spruce, Eastern White Cedar, Tamarack and Speckled Alder. An extensive area of heath and graminoid poor fen and a smaller area of breast-height Black Spruce treed bog occur in the north of the site.

Along the intermittent stream are flooded areas of forb, sedge and shrub-rich wet meadow and shallow emergent marshes. To the east is an isolated area of Black Spruce-Tamarack-Labrador Tea intermediate to rich fen. South toward the Kawpakwakog Creek the vegetation changes from a rich Tamarack and tall shrub swamp to Speckled Alder-Willow-Dogwood thicket swamp to low shrub-rich marsh and Cattail-Sedge deep emergent marsh.

Flora and Fauna

Total number of species recorded were:

Vascular Plants	170 native; 0 introduced
Birds	48 observed during the breeding season
Mammals	4
Herpetofauna	7
Butterflies	4
Dragonflies	7

Significant Natural Values and Selection Criteria Met

1. **Hydrology** - (A3) The Shack Creek Wetland contributes to regional hydrological systems through ground and surface water storage and recharge.
2. **Representation** - (B1) Based on the representational site type matrix, there are five vegetation associations here which are unique or of limited distribution in Muskoka. These are: the Trembling Aspen-Northern Conifer forest (cooler/sand/mesic), the Eastern White Cedar Swamp forest (normal/sand/wet-mesic), Graminoid Pool Fen (normal/organic/very wet), Black Spruce Treed Bog (cooler/organic/wet-mesic) and Black Spruce-Sphagnum-Labrador Tea Intermediate Fen (normal/organic/wet-mesic). The area was evaluated as a regionally significant wetland with recommendation for ANSI status by Brunton (1991b).
3. **Diversity** - (B2) The area exhibits a high diversity of vegetation community types, particularly wetlands.
4. **Quality** - (B3) The area is a high quality, pristine wetland with minimal disturbance, as evidenced by the absence of introduced plant species. The surrounding late successional forests contain some mature tree species with maximum diameter breast heights of: White Pine 39.2 cm, Red Oak 32.6 cm, White Spruce 30.0 cm, Tamarack 19.8 cm, Sugar Maple 35.2 cm. The latter three trees were the largest found during the 1992 field season.
5. **Rare Species** - (B4) Shack Creek Wetland provides habitat for the following rare species:

Wildlife

Picoides arcticus Black-backed Woodpecker [RR]

Vascular Plants

Carex folliculata Long Sedge [PR]

Castilleja coccinea Indian Paintbrush [RR]

Equisetum palustre Marsh Horsetail [RR]

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

6. **Biogeographic Significance** - (B7) The Shack Creek Wetland contains many species of flora and fauna plus vegetation community types with boreal affinities. Notable among these are the Black-backed Woodpecker. The forest understory vegetation is dominated by species found commonly in boreal regions such as Mountain Maple, Velvetleaf Blueberry, American Mountain Ash, Dalibarda, Snowberry and Wintergreen. Pure Black Spruce bogs are uncommon in Muskoka.

Ownership and Disturbance

The area is approximately 65% Crown land and 35% private, with little associated disturbances. Evidence of hunting activities, minor logging for private use and an artificially constructed dam on the upper pond were the only signs of disturbance.

Sensitivity

The sensitivity of this site is related to the hydrological functioning of the wetland and the representation of unique community types in Muskoka. If Provincial Wetland Policies are followed, including identification of an appropriate upland buffer within the adjacent land, protection of the representational community types, significant species, quality and diversity will also be achieved.

Major Sources of Information

Bajc, 1992; Bajc and Henry, 1991; Bergsma, et al., 1993; Brunton, 1991b.