

NOVAR CONIFER PEAT FOREST

UTM Ref. 17TPA374335

Chaffey Township, Huntsville
Status: Recommend Heritage Area

Area: 347 ha

Site Characteristics

Novar Conifer Peat Forest is an extensive area of northern peatland, straddling Highway 11 along the Little East River. Deep organic soils support sections of conifer swamp forests of almost exclusively closed-canopy Black Spruce, partially open Black Spruce-Tamarack, and partially open Black Spruce, Tamarack, and Balsam Fir with Sphagnum dominating the understory. An open White Spruce-Tamarack-Eastern White Cedar swamp occupies the southeastern section of the wetland.

The river course is low-gradient and meandering, with frequent beaver dams. Water quality is sufficiently high to support Brook Trout, likely in large part due to the groundwater release of the wetland and the esker complex just to the north. The stream course supports a dense shrub swamp of Speckled Alder, Winterberry, and Mountain Holly. At the lower end of Fish Lake, an aquatic community of Waterlilies, Horsetails, Pickerelweed and Arrowhead occupies the shallow bay. On shallow peats overlying coarse-grained sand deposits just to the north, a sedge meadow provides further diversity of wetland types.

Flora and Fauna

Total numbers of species recorded were:

Vascular Plants	286 native; 23 introduced 8 A.C.P.F. with a score of 34 (Moderate)
Birds	77 observed during breeding season
Mammals	18
Herpetofauna	8
Butterflies	4
Dragonflies	7
Mushrooms	25

Significant Natural Values and Selection Criteria Met

1. **Hydrology** - (A3) The extensive organic soils and the associated source areas along the edges of the esker complex contribute to maintaining the base flow and high water quality of the Little East River.
2. **Representation** - (B1) The area contributes to the full range of biotic representation in Muskoka by including a Black Ash-American Elm-Red Maple swamp (normal/sand/wet), a community type of limited distribution.

3. **Diversity** - (B2) Despite the homogeneity of its vegetation communities, Novar Conifer Peat Forest has a higher than expected diversity of native plants related to area, as shown in Figure 1. Diversity is also high for breeding birds and mammals. This diversity is especially notable in the northern communities represented in this wetland, since these typically have lower species richness than their southern counterparts.

4. **Rare Species** - (B4) Novar Conifer Peat Forest provides habitat for the following rare species:

Wildlife

Cistothorus platensis Sedge Wren [RR]
Dendragapus canadensis Spruce Grouse [RR]
Empidonax flaviventris Yellow-bellied Flycatcher [RR]
Parus hudsonicus Boreal Chickadee [RR]
Picoides arcticus Black-backed Woodpecker [RR]
Rana palustris Pickerel Frog [RR]
Polygonia faunus Green Comma [RR]

Vascular Plants

Carex novae-angliae New England Sedge [PR] *
Dryopteris Xboottii Bootts Wood Fern [RR]
Triadenum virginicum Marsh St. John's Wort [PR]

* species recorded by W. Crins

In addition, regionally uncommon species found within this site include 15 plants, seven birds, and one mammal.

5. **Fish and Wildlife Concentrations** - (B5) The wetland provides winter habitat for White-tailed Deer and Moose. The presence of Brook Trout in the stream and an exceptional number of northern bird species attests to the quality of habitat within this site.

6. **Biogeographical Significance** - (B7) Both the vegetation communities and the wildlife of Novar Conifer Peat Forest have a distinct northern flavour. Species which are approaching the southern limit of their range at this site include Southern Red-backed Vole, Spruce Grouse, Boreal Chickadee, Black-backed Woodpecker, Gray Jay, and Yellow-bellied Flycatcher.

Ownership and Disturbance

Approximately 98% of Novar Conifer Peat Forest is privately owned. Highway 11 and a rail corridor bisect the site, and several gravel roads have been recently constructed in the northeastern section of the wetland. Small areas of fill and old roadbeds are present in several isolated parts of the site. In spite of these disturbances, the remaining treed areas of this conifer wetland are remarkably undisturbed.

Sensitivity

Major development proposals affecting Novar Conifer Peat Forest, including twinning of the highway, housing expansion and Hydro lines, are likely to fragment its habitats and significantly reduce its current diversity and natural significance. While the limits of tolerance of most species is unknown, the survival of many of the significant northern wildlife species is likely to be in serious jeopardy. Future fragmentation and disturbance should be minimized within the wetland area, and the short and long-term effects should be monitored to evaluate and document impacts on species composition and functioning of the hydrological system.

Major Sources of Information - Reid et al, 1992; Brunton, 1991 b; OMNR 1985 deer surveys.