

## RILEY LAKE BARRENS

UTM Ref. 17TPV445445

Ryde Township, Gravenhurst  
Status: Recommend Heritage Area

Area: 384 ha

### *Site Characteristics*

The Riley Lake Barrens area consists of a series of almost bare Precambrian gneissic ridges, alternating with closely-spaced, narrow water-filled depressions. The ridges are dominated by scattered White Pine and Red Oak on thin soils or bedrock, with an understory of Common juniper, Northern Bush Honeysuckle, Bracken Fern, Juneberries, and associated herbs.

The wetland areas drain through several small streams, often interrupted by beaver dams, southwards into Riley Lake. A wide range of swamp and organic deposits and floating sphagnum mats are present in low-lying areas. Wetland communities include shrub thicket swamps, Black Ash swamps, Leatherleaf shrub bogs, sedge-rich meadow marshes, open water ponds with floating-leaved aquatics, and treed poor fen areas with submature Tamarack.

A steep-sided bedrock valley along Green's Creek at the easterly edge of the site has deeper deposits of alluvial sands and silts, supporting a successional Aspen-White Birch forest in parts, and sedge-rich marshy area and forb meadow in other sections.

### *Flora and Fauna*

Total numbers of species recorded were:

Vascular Plants	247 native; 26 introduced 1 A.C.P.F. with a score of 4 (Insignificant)
Birds	53 observed during breeding season
Mammals	10
Herpetofauna	15
Butterflies	10
Dragonflies	7

### *Significant Natural Values and Selection Criteria Met*

- 1. Representation - (B1)** The site includes an Oak-Maple-Black Cherry open forest community (warmer/sand/dry-mesic), which has limited representation elsewhere in Muskoka.
- 2. Diversity - (B2)** The total number of native plant species related to the size of the area is higher than average for Muskoka as shown in Figure 1.
- 3. Quality and Disturbance - (B3)** Riley Lake Barrens provides an excellent example of gneissic bedrock ridges separated by narrow linear wetlands. While the site is easily accessible for educational purposes, its interior is little disturbed, providing habitat for such intolerant species as Lynx. Five-lined Skink are common on the hot dry ridges. Green's Marsh provides a quality example of wetland succession from open marsh to low shrub-rich marsh to tall shrub thicket swamp to Red Maple lowland forest.

4. **Rare Species** - (B4) Riley Lake Barrens area provides habitat for the following rare species:

**Wildlife:**

*Sialia sialis* Eastern Bluebird [NR]

*Heterodon platirhinos* Eastern Hognose Snake [PR] \*

*Erynnis lucilius* Columbine Dusky Wing [PR]

*Euchloe olympia* Olympia Marblewing [PR RR] \*

**Vascular Plants:**

*Arabis laevigata* Smooth Rock Cress [RR]

*Panicum virgatum* Switch Grass [RR]

\* documented by R.L. Bowles, 1988-90

As well, regionally uncommon species on the site included nine plants, three birds, one mammal, and two herptiles.

*Ownership and Disturbance*

Approximately 85% of the Riley Lake Barrens site is Crown land. A cottage access road forms the southerly boundary and snowmobile routes traverse the area. Otherwise the site is largely undisturbed.

*Sensitivity*

Perhaps the greatest threat to this area is future fragmentation by new roads or utility corridors, which would disrupt its undisturbed nature. While the site has low forestry values, any future forest management activities should also respect the ecological values of this area.

*Major Sources of Information*

Bergsma et al, 1993.