

PORT CUNNINGTON INTRUSIVE

UTM Ref. 17TPA558138

Franklin Township, Lake of Bays
Status: Recommend Heritage Site

Area: 5 ha

Site Characteristics

The Port Cunnington Intrusive is a small, late Precambrian intrusion of ultramafic rock, exposed in a small borrow pit along Elder Drive. Three rocks have been intensely weathered, resulting in their fragmented texture. This weathering probably took place during the Cretaceous period (65 million years ago) when the climate in this region was tropical. Drilling undertaken several decades ago suggest that the weathering may extend several hundred feet into the subsurface. Large, unweathered blocks of ultramafic rock float within the weathered matrix at several exposures within the pit. Similar incomplete weathering along joints and fractures have been described from sites in Minnesota.

The weathered rock, called saprolite, is overlain by up to 4 metres of subglacial meltout and flow till, a deposit common to Muskoka. However, the sharp and undulating contact between the rock and till is significant in that it attests to the passive mode in which the till was deposited. Since there are few opportunities in Muskoka to observe the contact between soft, incompetent bedrock and overlying till, this site helps in understanding the style of deglaciation in this region (Bajc, 1992).

Significant Natural Values and Selection Criteria Met

1. **Distinctive Landform** - (A1) This site is one of only two known examples of late Precambrian intrusions of ultramafic rocks in Muskoka (Hewitt, 1967).

Ownership, Disturbance and Sensitivity

This site is privately owned. Protection of the values of this site does not preclude further moderate removal of aggregates, but an exposure at the northwest corner of the pit should be preserved to show both weathered bedrock and a substantial thickness of the overlying till.