# Pocock Lake Ecological Reserve

# Backgrounder

## **Land Designation**

Ecological reserves play a key role in Manitoba's Protected Areas Initiative by protecting unique, rare and representative examples of plants, animals, geological features and ecosystems. They are the most protected of the provincially designated sites within Manitoba's network of protected areas.

### **Landscape Description**

The 205 hectare Pocock Lake Ecological Reserve is located within the Sandilands Provincial Forest and is approximately 30 kilometres southeast of Steinbach; situated in the Lake of the Woods subregion of the Manitoba Lowlands Natural Region.

### **Outstanding Features**

The east side of the reserve consists of a raised ancient beach ridge, which then slopes noticeably in the west towards Pocock Lake. Along this slope there is a clear east to west gradient in the vegetation, ranging from drought tolerant to moisture tolerant species. From east to west the vegetation changes from Jack pine through white birch to trembling aspen, balsam poplar, black spruce, willow, eastern white cedar, and tamarack, and then to bog-lake fringe communities. This great variation in plant communities is an outstanding feature of the reserve requiring special attention.









Pocock Lake itself is confined by rising land to the east and by a sand beach ridge to the west, an incline difference of about 2.5 metres above the existing lake level. The beach ridge is remnant from Lake Agassiz. Pocock Lake has a peat shoreline and is surrounded by an extensive fen. A dense cedar bog borders the fen to the east. Species of vegetation that are representatives of the St Lawrence-Great Lakes forest region, and thus rare in Manitoba, include bellwort, yellow birch and iron wood. The yellow birch recorded in the ecological reserve in 1987, was the first record of such in Manitoba.

This ecological reserve is a great example of primary hydrarch succession, which is a type of succession defined by the wet environment in which it occurs. Simply, it is plant succession starting on relatively shallow water, such as ponds and lakes, and culminating in a mature forest. The four stages of hydrarch succession are:

- 1. Submersed aquatic plants in the deeper water;
- 2. Emergent cattails and bulrushes rooted in the mud of shallow water;
- 3. Willow thickets along the banks of distant shoreline;
- 4. Conifer forest in drier well drained soil above the willow thickets.

The pine forest at Pocock represents the climax state, while the lake itself is in the primary stage.

The Pocock Lake Ecological Reserve will be maintained for the preservation and protection of a bog lake, raised ancient beach ridge and the gradient of vegetation between moisture tolerant to drought tolerant species. Passive non-consumptive recreation on foot is permitted. Indigenous people are permitted to carry out their treaty and aboriginal rights within the ecological reserve. All other activities will require prior ministerial approval.

This area is categorized by the International Union for the Conservation of Nature (IUCN) as a protected area under the management category Ia – a protected area managed for strict nature protection available primarily for scientific research and/or environmental monitoring. These protected lands are free from logging, mining, hydroelectric development, oil and gas development, and any other activities that could harm habitat.