Brokenhead Wetland Ecological Reserve

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 Brokenhead Wetland Ecological Reserve, 1240 hectares in size, is located along Highway 59 north and east of the Brokenhead Ojibway Nation Reserve. The area is unique in that it contains a rich, calcareous fen, and calcareous springs within a white cedar forest community that feed the fen. This wetland also contains a very high diversity of plant species including 23 provincially rare and uncommon plants.

Outstanding Features

The Brokenhead Wetland complex consists of several different wetland habitats. The habitats include relatively dry black spruce stands and Sphagnum patches, wet swamp, forested fingers, spring-fed forest stands composed of eastern white cedar, black spruce, and tamarack, saturated spring-fed channels, as well as fens, strings, and flarks dominated by a variety of graminoid species. The ecological and floristic diversity of the complex may make it unique in Manitoba.
The most significant wetland in this complex is the calcareous fen, a wetland type considered rare in North America. A calcareous fen is a kind of wetland characterized by a fluctuating water table. Groundwater and surface water movement is a common characteristic of fens and can be observed in the channels and pools in the Brokenhead Wetland. The water is rich in calcium carbonate. Fens are more mineral rich and less acidic than bogs.

The reserve contains 23 species of provincially rare and uncommon plants. Twenty-eight of Manitoba’s 36 native orchid species, including the rare ram’s head lady’s-slipper, are found in the wetland along with eight of Manitoba’s 10 species of carnivorous (insect-eating) plants. A rare white cedar community also forms part of the wetland area.

People have been attracted to this wetland for many years. The local Indigenous communities have used it for collecting medicinal plants, for cultural activities and for hunting, and continue to do so to this day. Orchid lovers and eco-tourists visit it to see the many beautiful and rare species found there. Although this area is wonderfully attractive, for safety reasons and because it is easily disturbed, individuals are not encouraged to visit. There are only very rudimentary trails at present and it is important to stay on them in order not to damage the rare plants and their habitat.

Manitoba Conservation and Water Stewardship has partnered with Debwendon Inc. to create an interpretive trail and boardwalk on the Crown land adjacent to the ecological reserve. This was also made possible through funding support from the Eugene Reimer Environment Fund at The Winnipeg Foundation. The installation of the boardwalks and interpretive signage allows the public to safely visit the area for aesthetic, educational and cultural reasons without causing further damage to the native plants and their habitat.