

Brokenhead Wetlands Special Field Day - June 22,2012
Native Orchid Conservation Inc.

The Brokenhead Wetlands (50° 25' N 96° 31' W) are located near the southeast corner of Lake Winnipeg, Manitoba, just 70 kms north of Winnipeg. This area was formerly known as the Scanterbury Bog. Scanterbury was a tiny siding on the railroad between East Selkirk and Beaconsfield (where the railway turns east to Stead and then north to Pine Falls). The southern portion of the wetland is bisected by Highway 59; the main remaining wetlands are just west of Highway 59, north of the junction with secondary Highway 219 to Stead.

The Brokenhead Wetlands are a topographically confined raised bog, with some central ponds and marginal wet troughs (flarks) and a marginal fen. A fen is a kind of peatland characterized by a high water table with slow internal drainage by seepage down very gradual slopes. This slow-moving groundwater is enriched by nutrients from upslope materials and thus fens are more mineral rich and less acidic than bogs. The pH of the groundwater in this fen is approximately 7.0 to 7.5. Section 34 Township 16 Range 7E comprises the biggest part of the fen and is the most interesting from a botanical perspective. The vegetation has a high proportion of sedges along with many other rare and interesting plants. It is home to 23 species of rare and uncommon plants, and 28 of Manitoba's 37 native orchid species, including the globally rare Ram's-head lady's-slipper (*Cypripedium arietinum*). People have been attracted to this wetland for many years. The Brokenhead Ojibway Nation has been using it for approximately 300 years and they continue to regard it as a place of great cultural importance and for collecting medicinal plants, tea berries and cedar. The traditional use of the Brokenhead Wetland by the Brokenhead Ojibway is a way in which tradition permits a community to become intergenerational. A community is a form of cultural institution whose members uphold some central traditions over time even as values change (de Shalit 1995). Cultural heritage is important in maintaining a historical sense of community. Conserving the Brokenhead Wetland is an important step towards conserving Brokenhead Ojibway culture. To allow this valuable area to disappear would be to impoverish the descendants of the Brokenhead Ojibway of a part of their culture and deprive future generations of Manitobans a part of their natural heritage (Vadeboncoeur 2007).

Native Orchid Conservation Inc. conducted a plant survey of the wetland in 1998 and 1999 prior to nominating it as a candidate for an ecological reserve. The Brokenhead Wetland Ecological Reserve was established through a partnership between Native Orchid Conservation Inc. (NOCI), the Brokenhead Ojibway Nation (BON), Riverside Gravel, Manitoba Model Forest (MbMF) and Manitoba Conservation.

In 2005 a 563-hectare portion of the Brokenhead Wetland was declared the Brokenhead Wetlands Ecological Reserve. Three times the size of Assiniboine Park, it includes a calcareous fen, a wetland type considered rare worldwide. This fen is the keystone of the ecosystem. If compromised, the rare plants in it will surely die off.

In January 2007 a new not-for-profit organization, Debwendon Inc., was created to help preserve the ecosystem and the cultural practices that depend on it. Debwendon partners include NOCI, BON and MbMF. Work is continuing to develop an interpretive trail and boardwalks on Crown land adjacent to the ecological reserve so people can visit the wetlands safely without damaging it.

In October 2011 Premier Greg Selinger announced funding of \$1,000,000 in support of this project. At the same time Eugene Reimer donated \$600,000 to the Winnipeg Foundation to set up the Eugene Reimer Environmental Fund to provide an annual grant to Debwendon for maintenance of the trail and boardwalks in perpetuity. Eugene was a former board member of both NOCI and Debwendon and a dedicated naturalist. We are sad he is not here to celebrate this special day with us.

Phase 1 (the interpretive trail) of the project is anticipated to be completed in 2012 and Phase 2 (the boardwalks) in 2013.

Species List * native orchids

Showy lady's-slipper (*Cypripedium reginae*)*
Yellow lady's-slipper (*Cypripedium parviflorum* var.)*
Blunt-leaf orchid (*Platanthera obtusata*)*
Spotted coralroot (*Corallorhiza maculata* var *maculata*)*
Early coralroot (*Corallorhiza trifida*)*
Ram's head lady's-slipper (*Cypripedium arietinum*)*
Small round leaf orchid (*Amerorchis rotundifolia*)*
Tall green bog orchid (*Platanthera huronensis*)*
Large round leaf orchid (*Platanthera orbiculata*)*
Tall green bog orchid (*Platanthera huronensis*)*
Checkered rattlesnake orchid (*Goodyera tessellata*)*(not in bloom)
Grass pink (*Calopogon tuberosus*)*
Dragon's mouth (*Arethusa bulbosa*)*
Tall white bog-orchids (*Platanthera dilatata*)*
Pitcher plant (*Sarracenia purpurea*)
Giant Hyssop (*Agastache foeniculum*)
Harebell (*Campanula rotundifolia*)
Hoary puccoon (*Lithospermum canescens*)
Dewberry (*Rubus pubescens*)
Fleabane (*Erigeron* sp.)
Mountain maple (*Acer spicatum*)
Black snakeroot (*Sanicula marilandica*)
Bunchberry (*Cornus canadensis*)
Sarsaparilla (*Aralia nudicaulis*)
Rose twisted-stalk (*Streptopus roseus*)
Baneberry (*Actaea rubra*)
Seneca root (*Polygala senega*)
Wild columbine (*Aquilegia canadensis*)

Goatsbeard (*Tragopogon dubius*)
Peavine (*Lathyrus* sp)
Bearberry (*Arctostaphylos uva-ursi*)
Northern Starflower (*Trientalis borealis*)
Sedge (*Carex* sp)
Horsetail (*Equisetum* sp)
Dogbane (*Apocynum androsaemifolium*)
Dwarf milkweed (*Asclepias ovalifolia*)
Wormwood (*Artemisia* sp)
Long-fruited anemone (*Anemone cylindrica*)
Poison ivy (*Rhus radicans*)
Bracken fern (*Pteridium aquilinum*)
Blueberry (*Vaccinium* sp)
Bishop's cap (*Mitella nuda*)
Goldthread (*Coptis trifolia*)
Labrador tea (*Ledum groenlandicum*)
Marsh marigold (*Caltha palustris*)
Wild lily-of-the-valley (*Maianthemum canadensis*)
Pyrola (*Pyrola* sp)
Pink wintergreen (*Pyrola asarifolia*)
Indian pipe (*Monotropa unifolia*)
Clubmoss (*Lycopodium* sp)
Blunt-leaf orchid (*Platanthera obtusata*)
Bracket fungi (*Polyporus* sp) on birch
One-flowered wintergreen (*Pyrola secunda*)
Twinflower (*Linnea borealis*)
Green adder's mouth orchid (*Malaxis unifolia*)
Small bog cranberry (*Oxycoccus microcarpus*)
Twinflower (*Linnea borealis*)
Coltsfoot (*Petasites* sp)
Cotton grass (*Eriophorum* sp)
Butterwort (*Pinguicula vulgaris*)
Seaside arrowgrass (*Triglochin maritima*)
Sticky asphodel (*Tofieldia glutinosa*)
Sundew (*Drosera* sp)
Shrubby cinquefoil (*Potentilla fruticosa*)
Bog rosemary (*Andromeda polifolia*)
Butterwort (*Pinguicula vulgaris*)
Common Reed Grass (*Phragmites communis*)
Cattail (*Typha* sp)
Bog violet (*Viola palustris*)
Common bladderwort (*Utricularia vulgaris*)



Pitcher plant (*Sarracenia purpurea*) & its pitchers



Ram's head lady's-slipper (*Cypripedium arietinum*)



Butterwort (*Pinguicula vulgaris*)



Dragon's mouth (*Arethusa bulbosa*)



Labrador tea (*Ledum groenlandicum*)



Carl Smith at the ecological reserve announcement.



Eugene Reimer

Photos by Eugene Reimer, Doris Ames and Rose Kuzina.