

## ***CANADA 35: MATCHEDASH BAY, ONTARIO***

### ***Information Sheet on Ramsar Wetlands***

**Effective Date of Information:** The information provided was developed in January 1996 updated by the Canadian Wildlife Service – Ontario Region in October 2001.

**Reference:** 35th Ramsar site designated in Canada.

**Name and address of compiler:** Ontario Steering Committee, Eastern Habitat Joint Venture, North American Waterfowl Management Plan

**Name of Wetland:** Matchedash Bay, Provincial Wildlife Area

**Date of Ramsar Designation:** October 31, 1996

**Geographical Coordinates:** Longitude: 79° 40'W., Latitude: 40° 44' N.

**General Location:** 240 km North of Toronto, in the Township of Severn (formerly Tay and Matchedash Townships), County of Simcoe. Province of Ontario (Figure 1).

**Area:** 1 840 ha (upland and wetland)

**Wetland Type (Ramsar Classification System):** *Inland wetlands:* Type O - permanent freshwater lakes; Type P - emergent floodplain wetlands occur within the Bay.

**Altitude:** Average 177 meters above sea level

**Overview:** This wetland area has high potential for the production of waterfowl and other wetland life. Other principal characteristics of this wetland area include a diverse variety of habitat types which are dominated by dense cattail marsh. The identification of 568 species of vascular plants reflects the natural diversity of Matchedash Bay, at the interface between the St. Lawrence Lowlands and the Canadian Shield.

**Physical Features:** The site is particularly unique with respect to its geology. Matchedash Bay is located in the contact zone of the granitic bedrock of the Canadian Shield and the Southern Ontario limestone. The regional geology of the area is reflected in the geomorphological features. Weathering processes have exposed outcrops of granite in a rolling landscape, allowing for only a thin soil cover. At the same time, erosion from the surrounding uplands has deposited abundant soil material on the poorly drained flat limestone floodplain, giving rise to the rich wetlands and waters of the Bay. This natural area lies within the Temperate Climate Zone of Ontario.

The water levels of Matchedash Bay fluctuate seasonally with lake Huron and the north and Coldwater Rivers. Along with natural processes, these fluctuations contribute to the existing productivity of the wetland marshes, and no active management is planned for the wetland habitat. The issue of water quality is currently being addressed. The Severn Sound Remedial Action Plan (RAP), under the direction of the Ontario Ministry of the Environment and Environment Canada, identifies implementation measures to improve water quality in the area.

**Ecological Features:** Matchedash Bay is characterized by a variety of habitats including swamps, fens, marshes, beaver ponds, upland hardwood forest, agricultural lands and native grass meadows. The dominant habitat type of the Bay is dense cattail marsh. In the south-west portion of the area, a unique coniferous wetland forest containing larch, white and black spruce and balsam fir exists along side a small fen.

The varied terrain of Matchedash Bay provides the substrate for diverse vegetation communities to thrive. Open water represents 442 ha of the area, which supports lush beds of submerged aquatic plants including wild celery, wild rice and Eurasian water milfoil. Floating and emergent aquatic plants (i.e. cattails, sedges) are found at the northern and southern parts of the Bay. The upland vegetation consists mainly of mixed forest and farmlands.

**Land tenure/Ownership:**

- (a) Site: Government of Ontario
- (b) Surrounding Area: Private Holdings

**Conservation Measures Taken:** The Matchedash Bay area is officially titled a Provincial Wildlife Area. Recreational activities which are permitted or deemed "acceptable" in the "Management Zone" include fishing, hunting, boating, nature appreciation, cross-country skiing, and snowmobiling. Within the "Natural Zone" the only prohibited activity is snowmobiling, and within the "Development Zone", fishing is the single, permitted activity.

**Conservation measures proposed but not yet implemented:** Provincial Wildlife Area. All activities are to be controlled under legislation, which is now in the process of being implemented.

**Current Land Use/Principal human activities in:**

- (a) Site: Recreation Activities including nature appreciation, angling, hunting (non-toxic shot), boating, and cross-country skiing.
- (b) Surroundings/Catchment: Principal land use in the surrounding area is for agriculture, and rural development.

**Disturbances/Threats, including changes in land use and major development projects:**

- (a) At the site: Misuse or abuse of recreational privileges.
- (b) In the surroundings/catchment: Development of cottages, marinas, and urban growth.

**Hydrological and physical values:** Water quality has been a serious public concern in Severn Sound where the Provincial Wildlife Area is located. Matchedash Bay has complemented the Severn Sound Remedial Action Plan which has identified measures to improve water quality in the area. The improvement of water quality and wetland productivity will be accomplished by diverting the flow of effluent (for tertiary treatment) from the Coldwater Sewage Treatment Plant in the town of Coldwater, through Cell B (as noted in Figure 3 of the site Management Plan).

**Social and cultural values:** In recent history, the Matchedash Bay area was the trading post and home of Mr. George Cowan. prior to Cowan's settlement in the area, he was

active in the American Revolution until his capture. During his time in captivity, he gained exposure to several native tribes, learning their languages and customs. In 1778, Cowan came to Matchedash as a fur trader, trading mainly with local native trappers. Cowan was quite popular with the local Ojibwa and spoke various languages such as English, French, Wea, Ojibwa, Ottawa and Kikapoo, which made him at ease within various native cultures. Eventually, he was recruited by Upper Canada authorities as a native interpreter and negotiator. He was asked to stop trading with native groups to avoid any conflicts of interest, but refused to comply. The authorities valued him greatly, as he was allowed to keep trading, and was given 1200 acres at Matchedash as payment for his services. The "Chimneys" which was Cowan's trading post, is now an important historic site within the area. Cowan was considered a notable figure in the development of eastern Canada.

**Noteworthy Fauna:** Waterfowl that breed in the area are dominated by dabbling ducks (i.e. Mallards, Wood Ducks and Blue-Winged Teal) and Canada Geese. The area is a provincially significant spring and fall staging area. In total, over 170 species of birds have been recorded, over half of which are represented by upland species that inhabit forest, field and edge habitats. Provincially rare species including Black and Caspian Terns as well as Eastern Bluebirds are found in this area, and this species is provincially rare.

Matchedash Bay also supports one of the greatest diversities of herpetiles in Canada (17 species). Noteworthy species include the map turtle, Blanding's turtle, and the five-lined skink. Furthermore, Matchedash Bay supports a diverse warmwater fishery, offering excellent spawning and rearing habitat for several species including walleye, gar and northern pike, largemouth bass, black crappie, pumpkinseed, bowfin and yellow perch.

**Noteworthy Flora:** The entire area is characterized by a rich diversity of flora. Of the 568 identified species of vascular plants, twenty of these species are of provincial or regional significance. Oak (*Quercus* spp.) are prevalent throughout this landscape and notably, in the south-west portion of the area, exists a unique coniferous wetland forest community containing larch (*Larix* spp.), white and black spruce (*Picea glauca* and *Picea mariana*) and balsam fir (*Picea rubens*).

**Current Scientific Research and Facilities:** None to date.

**Current Conservation Education:** Conservation education at Matchedash has been structured based on self-guided interpretation using signs, brochures, fixed displays and special landowner Contact Agreements.

**Current Recreation and Tourism:** Recreational activities include angling, canoeing, hunting, cross-country skiing, picnicking and nature appreciation i.e. bird watching, hiking. the intensity of activity varies throughout the seasons.

**Management Authority:** The Ontario Ministry of Natural Resources, together with a Management Committee.

**Jurisdiction:** Provincial - Wildlife Management Area, Government of Ontario.

**Bibliographical References:**

- Ministry of Natural Resources. 1991. *Matchedash Bay Provincial Wildlife Area: Management Plan*. An Eastern Habitat Joint Venture Project under the North American Waterfowl Management Plan.

**Reasons for Designation:** Matchedash Bay supports diverse floral and faunal communities as well as migratory waterfowl. Within the area, three of the four wetland types are represented including their natural associated upland habitats. The conservation of Matchedash Bay provides natural recreational enjoyment for present and future generations as well as protecting an important example of Ontario's biodiversity.