CANADA 31: TABUSINTAC LAGOON AND RIVER ESTUARY, NEW BRUNSWICK

Information Sheet on Ramsar Wetlands

Effective Date of Information: The information provided is taken from text supplied at the time of designation to the List of Wetlands of International Importance in February 1993 and updated by the Canadian Wildlife Service – Atlantic Region in October 2001.

Reference: 31st Ramsar site designated in Canada.

Name and Address of Compiler: Fish and Wildlife Branch, New Brunswick Department of Natural Resources and Energy, P.O. Box 6000, Fredericton, New Brunswick, E3B 5H1.

Date of Ramsar Designation: June 10 1993.

Geographical Coordinates: 47°20'N., 64°56'W.

General Location: The area is situated on the east coast of New Brunswick, about 50 km northeast of the city of Chatham in Northumberland County.

Area: 4 997 ha (this is a corrected figure as of 1998, as some parcels designated in 1993 were omitted in error in the original calculated area).

Wetland Type (Ramsar Classification System): *Marine and coastal wetlands:* Type A - marine waters; Type E - sand, shingle, or pebble beaches; Type F - estuarine waters and brackish to saline lagoons; Type G - intertidal mud, sand, or salt flats; Type H - subtidal aquatic beds and intertidal marshes; *Inland wetlands:* Type U - peatlands.

Altitude: Range is from - 3 m to 8 m.

Overview (Principal Characteristics): The area comprises 200 ha of salt marsh, 3 400 ha of subtidal estuarine water and flats, 400 ha of intertidal estuarine flats, 10 ha of saline ponds, 30 ha of sand dunes, 60 ha of sand beach, 2 ha of islands, and 295 ha of black spruce - jack pine forest. The estuarine flats support some 3 350 ha of eel grass (*Zostera marina*). Approximately 600 ha of peatlands also occur within the Ramsar site boundaries. These peatlands harbour many small, freshwater ponds.

Physical Features (Geology, Geomorphology, Hydrology, Soils, Water, Climate): Tabusintac Bay is a coastal lagoon system protected from the Gulf of St. Lawrence by the Tabusintac Beach barrier beach and dune system, a 15 km-long system comprised of shoals, beaches, islands, and dunes. Tidal waters enter the Bay through Tabusintac Gully, Old Seal Gully, and Bass Fishing Channel. One large river, the Tabusintac, empties into the Bay and is the main source of fresh water for the estuarine system. Water depths are a maximum of 2-3 m, averaging 1-2 m, with flats exposed at low tide. Peatlands and forested areas are located on the mainland adjacent to the lagoon.

Ecological Features (Habitats, Vegetation): Many small salt marshes (average size 4 ha) are found along the shoreline of the Tabusintac Bay and River. Extensive shoals are found on the landward side of the Tabusintac Beach system, covering approximately one third of

the Bay. the productivity of the system can be attributed to the extensive distribution of eel grass *Zostera marina* flats within the Bay, consisting of over 80% of the total area. There are three small islands, totalling 2 ha in area, within the Bay, two with grass vegetation and one tree-covered. Small remnants of old sand dunes also provide some isolation from the main sand dune system. Sizeable peatlands called "The Blacklands" here and at Brantville are also contained with this Ramsar site. The Blacklands have many small ponds that provide an important source of freshwater for waterfowl.

Land Tenure:

(a) Site: The site consists primarily of subtidal and intertidal flats which are undeeded. The Tabusintac Black Lands are partly provincial Crown land. The Nature Conservancy of Canada owns 205 ha of peatland and upland habitat that, it is proposed, will eventually be transferred to, and managed by, the Province.

(b) Surrounding Area: Private holdings and provincial Crown land.

Conservation Measures Taken: The portion of the wetland extending from TAbusintac Bridge east to the edge of the Lagoon at Wishart's Point wharf and including theClovedale Brook and north of Covedale Road is closed to hunting of migratory birds. Trapping is permitted. There have been amendments recently to the hunting regulations for the Tabusintac Lagoon, resulting in closure of hunting after 13:00 each day during the hunting season. Land acquisition has been pursued by the Nature Conservancy of Canada. The Conservancy now owns 205 ha including properties protecting peatland habitat, and critical nesting habitat for Great Blue Heron (200 nests) and Osprey (15 to 20 pairs). Part of the Blacklands (about 108 ha) was designated as a provincial Ecological Reserve in 1995.

Conservation Measures Proposed: There may be a need to manage gull populations and human use of the area for the benefit of nesting Terns in the area.

There exists a proposal for securing the entire barrier beach. This would be undertaken through a proposed project of the Eastern Habitat Joint Venture of the North American Waterfowl Management Plan. In addition to land acquisition, this proposal outlines the promotion of stewardship among shoreline owners to secure these habitats through landowner agreements.

There is a need to determine the clear title and ownership for many proprties within the Ramsarsite. Additionally, illegal occupants of land parcels could be evicted from sensitive dune habitats areas. The construction of additional cottages could be prohibited unless clear title to these properties can be established.

Current Land Use/Activities in:

(a) Site: Hunting of migratory birds is presently permitted; however, restrictions prohibit hunting after 13:00 local time. Peat harvesting is currently conducted on leased provincial Crown land in the Blaclands and in the Brantville area. The peat company involved has indicated they are committed to conservation activities including a 50 metrte buffer from the coast on new harvesting areas with the lease. They also support a proposed long-term management plan, including after harvesting restoration and leaving freshwater ponds intactfor migratory waterfowl.

(b) Surrounding Area: Peat harvesting and agricultural lands abut the site.

Threats to Integrity of:

(a) Site: The sand bars are highly disturbed by clam diggers, picnickers, fishermen, and users of all-terrain vehicles. Several seasonal-use cabins have been erected, for the most part illegally, on the barrier beach islands.

(b) Surrounding Area: Adjacent parts of the Crown-owned Black Lands are currently harvested for peat.

Hydrological/Physical Values:

Social/Cultural Values: Parts of the lagoon and Black Lands have been used traditionaly for hunting. Clam digging and recreational boating are carried out in portions of the site.

Noteworthy Fauna: Wildlife use of the Bay is considerable. The site is a major waterfowl concentration area. The Bay is particularly important during spring migration for as many as 4 500 Scoter *Melanitta* sp., 1 200 Common Eider *Somateria mollissima*, 700 Brant *Branta bernicla*, and 500 Scaup *Athya* sp. Smaller numbers of other species such as Common Goldeneye *Bucephala clangua* and Merganser *Mergus* sp. also frequent the area. The Bay is also important during the fall migration for up to 1 400 Black Duck *Anas rubripes*, 1 200 Canada Goose *Branta canadensis*, 1 000 Old Squaw *Clangula hyemalis*, 700 Green-winged Teal *Anas crecca carolinensis*, 500 Blue-winged Teal *Anas discors*, and 500 American Wigeon *Anas americana*. Freshwater ponds located in the Tabusintac Black Lands are used in the Fall by approximately 500 Canada Geese.

The Tabusintac Beach system supports 3 700 nesting Common Tern *Syerna hirundo*, the second largest Tern colony in New Brunswick. The site has been considered as a Tern "core colony", of importance due to its high rate of reproductive success.

Piping Plover *Charadrius melodus*, an endangered shorebird species, nest in the Tabusintac Beach system. Seven pairs and 21 adults were recorded at this site in an international census in 1991. Other shorebirds occur during the late summer migration. None of the species occur in great numbers (less than 200); however, a variety of species are reported in the area: White-rumped Sandpiper *Callidris fuscicollis*, Ruddy Turnstone *Arenaria interpres*, Lesser Yellowlegs *Tringa flavipes*, Greater Yellowlegs *Tringa melanoleuca*, Short-billed Dowitcher *Limnodromus griseus*, Semipalmated Plover *Charadrius semipalmatus*, Black-bellied Plover *Pluvialis squatarola*, Semipalmated Sandpiper *Calidris pusilla*, Sanderling *Calidris alba*, Red Knots *Calidris canutus*, Whimbrel *Numenius phaeopus*, Dunlin *Calidris alpina*, and Least Sandpiper *Calidris macularia* have been reported nesting in the area (R. Chiasson, unpublished data).

A Great Blue Heron *Ardea herodias* colony (about 200 nests) is present in the Covedell Peninsula area. There are approximately 20 Osprey *Pandion haliaetus* nests in the uplands of the Tabusintac Black Lands.

Noteworthy Flora:

Current Scientific Research and Facilities: Waterfowl use has been documented by aerial surveys conducted by the Canadian Wildlife Service of Environment Canada and the New Brunswick Department of the Natural Resources and Energy.

Current Conservation Education: The Piper Project, a special initiative of the New Brunswick Federation of Naturalists, each year coordinates an effort to increase public awareness of the Piping Plover and to educate beach users about appropriate recreation and other behaviour in nesting areas. The Piping Project promotes a "share the beach" approach so that the needs of the birds and the public can be met.

Current Recreation and Tourism:

Management Authority:

Fish and Wildlife Branch New Brunswick Department of Natural Resources and Energy P.O. Box 6000 Fredericton, New Brunswick E3B 5H1

Jurisdiction: Provincial - New Brunswick Department of Natural Resources and Energy.

Selected Bibliography:

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- Environment Canada. no date. *Wetland Atlas of New Brunswick*. Files and data base. Canadian Wildlife Service. Sackville, New Brunswick.
- Wein, R.W. and D.M. Jones. 1975. Ecological Reserves in New Brunswick.
- University of New Brunswick. Fredericton, New Brunswick. 230 p.
- Gauteau-Daigle, H. 1990. Evaluation of ecological constraints on peat mining. I. Waterfowl population survey; II. Moose population survey. New Brunswick Department of Natural Resources and Energy, Minerals and Energy Division. Open File Report No. 90-6. Bathurst, New Brunswick. 71 p.

Reasons for Ramsar Designation: The area has high levels of waterfowl use during spring and fall migration periods and is critical habitat for thousands of geese and shorebirds. It is an excellent example of a coastal barrier beach and lagoon wetland ecosystem.

Status of Management Plan: The Government of New Brunswick has drafted a preliminary management plan for the region which encompasses the Ramsar site. However, no specific plan for the site has been developed.