

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.

Reference: 4CA031

Name and Address of Compiler: Fish and Wildlife Branch, New Brunswick Department of Natural Resources, 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: 4 382 ha.

Wetland Type (Ramsar Classification System): *Marine and coastal wetlands:* Type 1 - marine waters; Type 4 - rocky marine shores and offshore islands; Type 5 - sand, shingle, or pebble beaches; Type 6 - estuarine waters; Type 7 - intertidal mud, sand, or salt flats; Type 8 - intertidal marshes; Type 11 - freshwater lagoons and marshes.

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, 385 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* sp.

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.

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.

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.

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

Conservation Measures Taken: Part of the site at the mouth of the Tabusintac River is posted as a protected area (to be closed to hunting of migratory birds, although trapping will be permitted).

Conservation Measures Proposed: Part of the Black Lands (about 124 ha) are currently being considered for designation as a provincial Ecological Reserve. There may be a need to manage gull populations for the benefit of nesting terns on Tabusintac Bar.

There exists a proposal for securing the entire barrier beach and additional habitat for the nearby Great Blue Heron colony and Osprey nesting areas. 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.

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Current Land Use/Activities in:

(a) Site: Hunting of migratory birds is presently permitted; however, restrictions prohibit hunting after 1:00 p.m. local time.

(b) Surrounding Area: Peat harvesting and agricultural lands about 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 on the barrier beach islands.

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

Hydrological/Physical Values:**Social/Cultural Values:**

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 *Sterna 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 minutilla*. Small numbers of Killdeer *Charadrius vociferus* and Spotted Sandpiper *Actitis macularia* have been reported nesting in the area (R. Chiasson, unpublished data).

A Great Blue Heron *Ardea herodias* colony 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 Environmental Conservation Branch of Environment Canada and the New Brunswick Department of the Natural Resources and Energy.

Current Conservation Education:**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:

- Dionne, L.A., D.M. Farmer, and C.M. Young. 1988. *Critical Natural Areas in New Brunswick*. New Horizons Critical Natural Areas Committee. Fredericton, New Brunswick. 313 p.
- 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.

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 is developing a management plan for this Ramsar site.