



# Boatswain bay biodiversity reserve

**Conservation plan**



March 2003

# 1. Plan and description

## 1.1. Geographic location, boundaries and dimensions

The plan of the proposed Boatswain bay biodiversity reserve and its location are shown on the maps in Schedules A.1 and A.2.

The proposed Boatswain bay biodiversity reserve is located in the Nord-du-Québec administrative region, between 51°42' and 51°56' latitude north and 78°47' and 79°03' longitude west. It is situated roughly 30 km north of the Cree village of Waskaganish. To the west, the boundary runs along the shore of the bay, and then runs between 1 and 5 km inland.

It lies within the territory of municipalité de Baie-James.

The protected zone covers an area of 108.7 km<sup>2</sup>.

## 1.2. Ecological overview

The area is in the natural province of the Abitibi and James Bay Lowlands. It protects peat bogs, representative of the natural region of the James Bay Coastal Plain.

### 1.2.1. Representative elements

***Climate:*** The land is characterized by a subpolar, subhumid continental climate, with a middle growing season. It belongs to the bioclimatic field of mossy spruce stands.

***Geology and geomorphology:*** The land is part of the Superior geologic province, whose bedrock is archaic (> 2.5 billion years). The substratum is formed by paragneissic rock covered by organic deposits on the lakeshore plain. The geologic base rises to the surface in places, and is covered by glaciofluvial deposits, especially blocks, pebbles, sand and clay. The average altitude is 13.5 m, varying between 0 and 160 m.

***Hydrography:*** The protected area is a peaty wetland belonging to the James Bay and Hudson Bay watershed. It is crossed by the Maquet river and several smaller watercourses, such as the Mistusipan and Uspiseukan Kawimeikach streams, which feed into James Bay. One small lake is found in the southwestern part of the area.

***Vegetation:*** Two-thirds of the land is covered by oligotrophic, minerotrophic peat bogs. The higher land, covered by mineral deposits, is home to low-density stands of black spruce (*Picea mariana*) and dry heaths. These vegetation groups cover respectively one-quarter and one-tenth of the land area. In terms of natural disturbances, the protected area has been only slightly affected by forest fires (3%).

### **1.2.2. Outstanding elements**

The proposed biodiversity reserve is home to a threatened plant species, Macoun's Fringed Gentian (*Gentianopsis procera* subsp. *macounii* var. *macounii*), a herbaceous plant of limited distribution found in fresh and brackish water environments. The reserve is also home to Whiteberry (*Elaeagnus commutata*), a shrub likely to be designated as a threatened or vulnerable species.

The proposed biodiversity reserve is a migration stop for many aquatic birds (Snow Goose, Canada Goose, Brant, American Black Duck and various species of scoter and duck), and shorebirds (White-Rumped Sandpiper and Hudsonian Godwit).

The Boatswain bay is one of the few nesting sites in Québec for the Sandhill Crane (*Grus canadensis*).

### **1.3. Land occupation and use**

The land occupations and uses in the proposed Boatswain bay biodiversity reserve are shown on the map in Schedule A.3.

Almost 70% of the proposed reserve has been classified as a "migratory bird sanctuary".

The proposed biodiversity reserve is classified as Category III land under the James Bay and Northern Québec Agreement signed in 1975 and the Act respecting the land regime in the James Bay and New Québec territories (R.S.Q., c. R-13.1). In addition, the whole area is part of the Rupert beaver reserve. The Cree community of Waskaganish has special rights regarding the hunting, fishing and trapping in the area, in particular as regards fur-bearing animals.

## **2. Protection status**

The proposed biodiversity reserve safeguards a wetland of great ornithological interest. It is a migration and nesting site for many different species of aquatic birdlife. The land also contains a landscape mosaic of high quality.

Biodiversity reserve status would allow the pursuit of the following conservation objectives:

- ✓ the protection of migratory bird habitats;
- ✓ the preservation of biodiversity in aquatic and peat-based ecosystems;
- ✓ the ongoing sustainable management of fur-bearing animal;
- ✓ the acquisition of new knowledge concerning natural heritage.

### 3. Activities within the reserve

All activities carried on within the proposed Boatswain bay biodiversity reserve are governed by the provisions of the *Natural Heritage Conservation Act* (S.Q. 2002, c. 74).

This conservation plan does not specify any prohibited activity other than those prohibited in biodiversity reserves by the Act; nor does it authorize any other activities, or set any additional constraints on the activities permitted by the Act.

#### 3.1. Prohibited activities

For reference purposes, it is important to note that under the *Natural Heritage Conservation Act*, the main activities prohibited in an area designated as a proposed biodiversity reserve are:

- mining, and gas or petroleum development;
- mining, gas or petroleum exploration, brine and underground reservoir exploration, prospecting, and digging or boring, where such activities necessitate stripping, the digging of trenches, excavation or deforestation;
- forest management activities within the meaning of section 3 of the *Forest Act* (R.S.Q., c. F-4.1);
- the development of hydraulic resources and any production of energy on a commercial or industrial basis;
- any new allocation of a right to occupy land for vacation resort purposes;
- earthwork, backfilling or construction work.

#### 3.2. Activities governed by other Acts

All activities carried on within the boundaries of the proposed Boatswain bay biodiversity reserve remain governed by the other applicable legislative and regulatory provisions, including those that require the issue of a permit or authorization or the payment of fees. The carrying on of certain activities may also be prohibited or limited by other Acts or regulations applicable within the boundaries of the proposed biodiversity reserve.

In particular, within the boundaries of the proposed biodiversity reserve, special legal rules may govern permitted and prohibited activities in connection with:

- **Archaeological research** (especially the measures contained in the *Cultural Property Act* [R.S.Q., c. B-4]);
- **Utilisation of wildlife resources** (especially the measures contained in the *Act respecting the conservation and development of wildlife* [R.S.Q., c. C-61.1], the regulation on beaver

reserves, and the *Act respecting hunting and fishing rights in the James Bay and New Québec territories* [R.S.Q., c. D-13.1]); activities relating to the management of the migratory bird sanctuary at Boatswain bay are authorized on the conditions prescribed by the federal regulations on migratory bird sanctuaries;

- **Access** (especially the measures contained in the *Act respecting the lands in the domain of the State* [R.S.Q., c. T-8.1]);
- **Land rights** (especially the measures contained in the *Act respecting the lands in the domain of the State* [R.S.Q., c. T-8.1] and, where applicable, in leases issued by the Minister of Natural Resources).

### 3.3. Supervision of activities

The Minister of the Environment is responsible for the application of the *Natural Heritage Conservation Act*, and is also responsible for the proposed biodiversity reserves established under that Act. The Minister will supervise and monitor the measures contained in the Act with regard to permitted activities in protected areas.

All other government departments and bodies will retain their responsibilities as set out in all the legislative and regulatory texts that apply within a proposed biodiversity reserve.

The Minister of Natural Resources will supervise all activities subject to the Minister's authority within the territory of the proposed Boatswain bay biodiversity reserve, in particular as regards permitted forms of land occupation.

The Société de la faune et des parcs du Québec (FAPAQ) remains responsible for supervising the activities relating to wildlife protection and management that are under its responsibility.

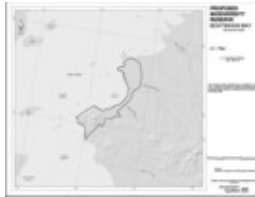
Environment Canada will remain responsible for the migratory bird sanctuary at Boatswain bay and will oversee the application of the federal wildlife legislation under its authority.

## 4. Permanent protection status

The permanent protection status envisaged for the reserve is "biodiversity reserve" status under the *Natural Heritage Conservation Act*.

## Schedules

### A.1. Plan of the proposed Boatswain bay biodiversity reserve (provisional name)



[Click to enlarge](#)

### A.2. Map showing the location of the proposed Boatswain bay biodiversity reserve (provisional name)



[Click to enlarge](#)

### A.3. Map showing land occupation and use in the proposed Boatswain bay biodiversity reserve (provisional name)



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