

## Key Site 55: Baie de la Trinité–Magpie Bay, Quebec

**Location:** 50°14'8"N, 65°56'27"W

**Size:** 2603 km<sup>2</sup>

**Description:** This key site is a 270 km coastal stretch along the north shore of the Gulf of St. Lawrence in Quebec, from Baie de la Trinité to Magpie Bay. The key site includes Baie des Sept Îles and the seven nearby islands that form a natural barrier at its entrance. Several large rivers (Sainte-Marguerite, Moisie, Sheldrake, and Magpie) empty into the gulf within the key site. The sea bottom is sandy in most of the key site and supports high densities of invertebrates. There is also a mix of supralittoral flats, salt marshes, mud flats, and eelgrass beds.

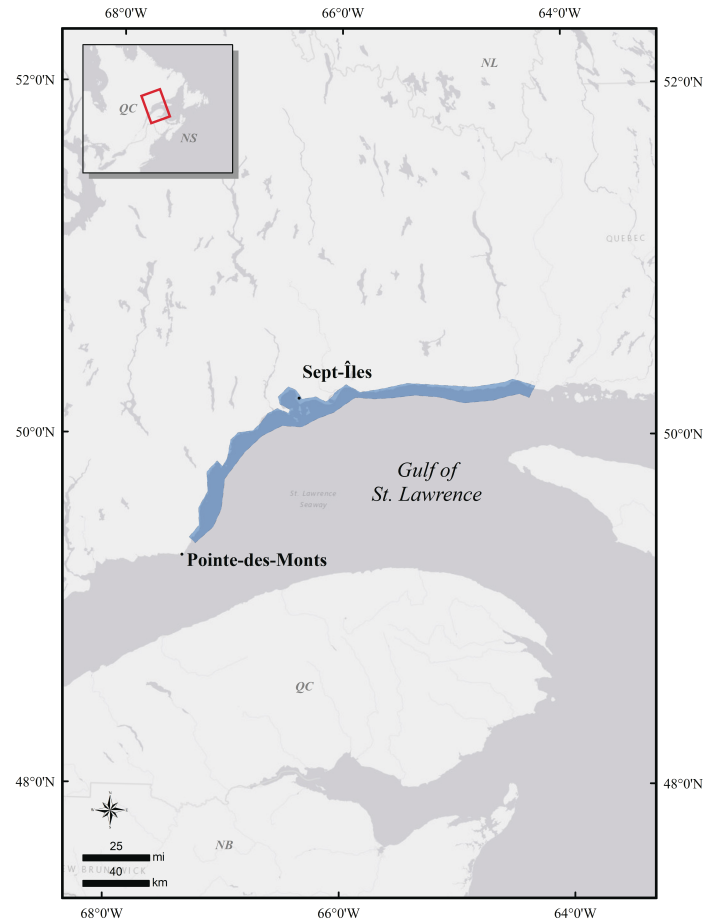
Depending on coast orientation, wind exposure, and winter severity, coastal waters generally freeze in late January and February, but small polynyas usually remain around some of the seven islands.

Several villages and towns are spread out along this coast; the largest town is Sept-Îles, with approximately 22,000 inhabitants.

### Precision and Correction of Abundance

**Estimates Presented:** Visual estimates of scoters and eiders from spring and molting surveys have been photo-corrected (Rail and Savard 2003; Bolduc and Savard 2011). Otherwise, abundance estimates presented for this key habitat site have not been adjusted to account for incomplete detection or other biases. Abundance estimates are thus minimum estimates.

**Biological Value:** This key site supports large concentrations of scoters, eiders, Long-tailed Ducks, goldeneyes, and mergansers that stage at this site during spring migration. For example, about 80,000 Surf Scoters (*Melanitta perspicillata*) and 35,000 Black Scoters (*Melanitta americana*) have been recorded in the key site in spring (Rail and Savard 2003). These counts do not account for turnover rates thus the number of sea ducks that use the site is much greater. Most of the Atlantic population of the three scoter species funnels through the St. Lawrence Gulf and Estuary (Lamb et al. 2020, Lamb et al. 2021, Lepage et al. 2020) during spring, and 50% of scoters counted in the St. Lawrence Gulf and Estuary are found in the key site (Rail and



Savard 2003); hundreds of thousands of scoters likely transit through this site. Daily estimates of 3500 to 4000 Common Eiders, 1000 Long-tailed Ducks, 500 Red-breasted and Common mergansers (*Mergus serrator* and *M. merganser*), and 200 Common Goldeneyes (*Bucephala clangula*) are typical for this section of the Gulf of St. Lawrence in spring (Canadian Wildlife Service unpublished data). White-winged Scoters (*Melanitta deglandi*) are less abundant. Hundreds of individuals of two populations of special concern, eastern Barrow's Goldeneye (*Bucephala islandica*) and eastern Harlequin Duck (*Histrionicus histrionicus*), are also present during spring migration and may represent a substantial proportion of their relatively small populations.

This key site includes two known Common Eider breeding colonies, representing about 3% of the total *dresseri* population. There are approximately 4120 nests on Île aux Œufs, 2 km offshore southeast of Pointe-aux-Anglais, and 380 nests on Corossol Island Bird Sanctuary, one of the seven islands in the Baie des Sept Îles (2019 counts; Duvetnor unpublished data).

During the molting period, this section of the St. Lawrence hosts more than 12,000 Common Eiders (Bolduc and Savard 2011). Scoters, goldeneyes, and mergansers likely molt in this key site too.

Sea ducks transit through this key site during fall migration, and some spend one or two months there (September and/or October; SDJV 2015, Lepage et al. 2020, Lamb et al. 2020, Lamb et al. 2001) before migrating to more southerly wintering grounds. Groups of 1000 birds have been estimated at some localities in the key site for each of Surf and White-winged scoters, Red-breasted Mergansers, and Common Eiders (RQO et al. 2018). Long-tailed Ducks, goldeneyes, and Common Mergansers have also been reported during occasional fall aerial surveys in the area (Canadian Wildlife Service unpublished data).

Sea ducks regularly overwinter in the polynyas of the key site, including 11,800 Common Eiders (CWS Waterfowl Committee 2022), Long-tailed Ducks, and goldeneyes.

**Sensitivities:** Pollution and climate change could affect the availability and quality of food resources. For example, warming waters are projected to reduce the extent of ice and the length of the ice-free season for shoreline between Sept-Îles and Moisie and may accelerate coastal erosion (Bernatchez et al. 2008). The littoral erosion, paired with the lesser extent of ice in winter, could affect benthic communities, particularly clam beds that attract sea ducks (DFO 2017). Birds are also subject to disturbance from industrial and marine activities in the Baie des Sept Îles.

**Potential Conflicts:** Large industrial ports are located at Port-Cartier and Sept-Îles. The deepwater port in Sept Îles is the most important iron ore handling port in North America and has two important nearby mining facilities. These sites are potential sources of industrial contamination and oil spills. In 2013, 450,000 liters of bunker oil were spilled in the Port of Sept-Îles during a transfer between tanks. An estimated 5000 to 8000 liters reached the bay, covering about 5 km of coastline. Eelgrass beds and salt marshes were partially covered in oil, and about 100 birds were oiled and died. Maritime traffic will increase in the St. Lawrence Seaway given the Quebec maritime strategy for 2020–2025 (MTQ 2021), leading to a higher risk of pollution (e.g.,

chemical or oil spills), disturbance, and bird collisions with vessels.

**Status:** The Corossol Island Migratory Bird Sanctuary lies within this key site. Almost the entire coastline of the key site has been designated as Aquatic Birds Concentration Areas by the Quebec government (*Aires de concentration d'oiseaux aquatiques*; MELCC 2021). Baie des Sept-Îles and the seven islands also constitute an Important Bird Area, due to their importance to seabird colonies and for migrating Surf and Black scoters (QC162; IBA Canada 2021).

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