

Key Site 48: Avalon Peninsula, Cape Spear to St. Shotts, Newfoundland

Location: 46°59'46"N, 52°51'17"W

Size: 791 km²

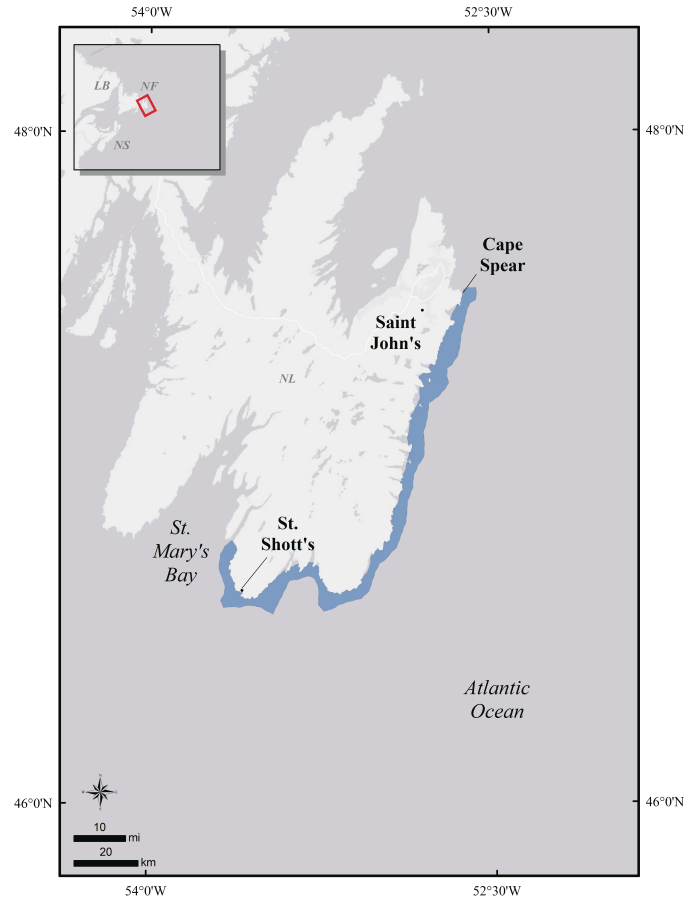
Description: This key area is located along the south and east coast of the Avalon Peninsula in southeastern Newfoundland. The southern boundary begins near the town of St. Vincent's-St. Stephen's-Peter's River, encompasses the southern end of the Avalon Peninsula around the towns of St. Shott's and Cape Race, then continues north to the town of Cape Spear. The coastal area has numerous coves, inlets, islands, and harbors with adjacent rocky shores and open ocean. Land cover on the islands ranges from coniferous forest to grassy meadows to rocky shores and barrens. The area is part of the Northern Grand Banks marine ecoregion, where cold waters of the Labrador Current mix with warm waters of the Gulf Stream. The Grand Banks are one of the richest fishing grounds in the world (Park and Mercier 2014).

Precision and Correction of Abundance Estimates

Presented: Abundance estimates presented for this key habitat site have been adjusted to account for observer error in flock size estimation following methods developed by Bordage et al. (1998).

Biological Value: This key area is primarily important for migrating and wintering Common Eiders (*Somateria mollissima*). Winter surveys conducted in this area by the Canadian Wildlife Service (CWS) produced estimates ranging from 13,047 individuals in 2012 to 43,840 individuals in 2015 (Canadian Wildlife Service Waterfowl Committee 2020). Over six years of winter survey data (surveys were conducted in 2003, 2006, 2009, 2012, 2015, and 2018), an average of 20,430 individuals were estimated in this area (Canadian Wildlife Service Waterfowl Committee 2020).

Historical data suggest about 75% of the eiders wintering in this area are the northern subspecies (*Somateria mollissima borealis*) with the remainder being the American subspecies (*Somateria mollissima dresseri*) and small numbers of King Eiders (*Somateria spectabilis*; Gilliland and Robertson 2009). This represents about 6% of the continental population of Northern Common Eiders (NAWMP 2012). During the winter of 1987, a large flock of



12,000 *borealis* eiders was observed at the edge of pack ice around Mistaken Point, although counts in the 1990s estimated fewer than 1000 eiders (NF024; IBA Canada Website). Up to 1000 King Eiders winter in the area of Witless Bay (Government of Newfoundland and Labrador 1994). Harlequin Ducks (*Histrionicus histrionicus*) overwinter along the coast at Cape Spear, Cape Race, St. Shott's, and Black Rocks near Chance Cove (eBird 2020).

Other sea duck species that use this area include Surf Scoter (*Melanitta perspicillata*), Black Scoter (*Melanitta americana*), White-winged Scoter (*Melanitta deglandi*), Long-tailed Duck (*Clangula hyemalis*), Common Goldeneye (*Bucephala clangula*), Common Merganser (*Mergus merganser*), and Red-breasted Merganser (*Mergus serrator*) (eBird 2020).

Sensitivities: Waterfowl can be sensitive to small vessel and ship traffic. Wintering eiders aggregate in dense flocks and, depending on sea-ice conditions, hunting pressure can be intense in this area (Gilliland and Robertson 2009, Gilliland et al. 2009). Unintentional introduction of invasive species in this

area could influence food resource availability and quality. Oil spills, both catastrophic and chronic, can have severe impacts on sea ducks. There is historical documentation of oil spills affecting Common Eiders and other waterbird species in the inshore waters of southeastern Newfoundland (Wiese and Ryan 2003, Robertson et al. 2014). Sea ducks can be susceptible to vessel strikes, particularly in poor weather conditions.

Potential Conflicts: Oil spills from large ships and oil production facilities are a threat in the eastern part of this key area due to its proximity to busy shipping routes and the offshore production areas on the Grand Banks. Any future raising of commercial fishing quotas may increase boat traffic in the area.

Status: There are three Important Bird Areas (IBAs) in this key area: Cape Pine and St. Shotts Barren IBA, Mistaken Point IBA, and Witless Bay Islands IBA. Witless Bay is also a Provincial Ecological Reserve that is closed to shooting and protects the largest colony of Atlantic Puffins in eastern North America (NF002; IBA Canada Website).

Literature Cited

Bordage, D., N. Plante, A. Bourget, and S. Paradis. 1998. Use of ratio estimators to estimate the size of common eider populations in winter. *Journal of Wildlife Management* 62:185–192.

Canadian Wildlife Service Waterfowl Committee. 2020. Population Status of Migratory Game Birds in Canada. November 2019 CWS Migratory Birds Regulatory Report Number 52.

eBird. 2020. eBird: An online database of bird distribution and abundance [web application]. eBird, Ithaca, New York. <http://www.ebird.org>. (Accessed April 20, 2020).

Gilliland, S. G., H. G. Gilchrist, R. F. Rockwell, G. J. Robertson, J.-P. L. Savard, F. Merkel, and A. Mosbech. 2009. Evaluating the sustainability of harvest among Northern Common Eiders in Greenland and Canada. *Wildlife Biology* 15:24–36.

Gilliland, S., and G. Robertson. 2009. Composition of Eiders Harvested in Newfoundland. *Northeastern Naturalist* 16:501–518. <https://doi.org/10.1656/045.016.n402>.

Government of Newfoundland and Labrador: Parks and Natural Areas Division and Department of Environment and Conservation. 1994. Witless Bay Ecological Reserve Management Plan. <https://www.gov.nl.ca/ecc/files/natural-areas-pdf-witless-bay-ecological-reserve.pdf>.

Important Bird Areas (IBA) Canada Website. Witless Bay Islands, Mobile, Newfoundland. Downloaded October 28, 2019. <https://www.ibacanada.ca/site.jsp?siteID=NF002>.

Important Bird Areas (IBA) Canada Website. Mistaken Point, Long Beach, Newfoundland. Downloaded October 23, 2019. <https://www.ibacanada.ca/site.jsp?siteID=NF024>.

North American Waterfowl Management Plan (NAWMP). 2012. North American Waterfowl Management Plan: People conserving waterfowl and wetlands. U.S. Fish and Wildlife Service, Arlington, VA. <https://nawmp.org/content/north-american-waterfowl-management-plan>.

Park, L. E., and F. Mercier. 2014. Incorporating Representativity into Marine Protected Area Network Design in the Newfoundland–Labrador Shelves Bioregion Ecosystems Management Publication Series, Newfoundland and Labrador Region. <https://waves-vagues.dfo-mpo.gc.ca/Library/356945.pdf>.

Robertson, G. J., S. G. Gilliland, P. C. Ryan, J. Dussureault, K. Power, and B. C. Turner. 2014. Mortality of Common Eider, *Somateria mollissima* (Linnaeus, 1758), and other water birds during two inshore oiling events in southeastern Newfoundland, 2005 and 2006. *Canadian Field-Naturalist* 128:235–242.

Wiese, F. K., and P. C. Ryan. 2003. The extent of chronic marine oil pollution in southeastern Newfoundland waters assessed through beached bird surveys 1984–1999. *Marine Pollution Bulletin* 46:1090–1101.