

Key Site 44: Wadham to Penguin Islands, Newfoundland

Location: 49°31'0"N, 53°48'12"W

Size: 658 km²

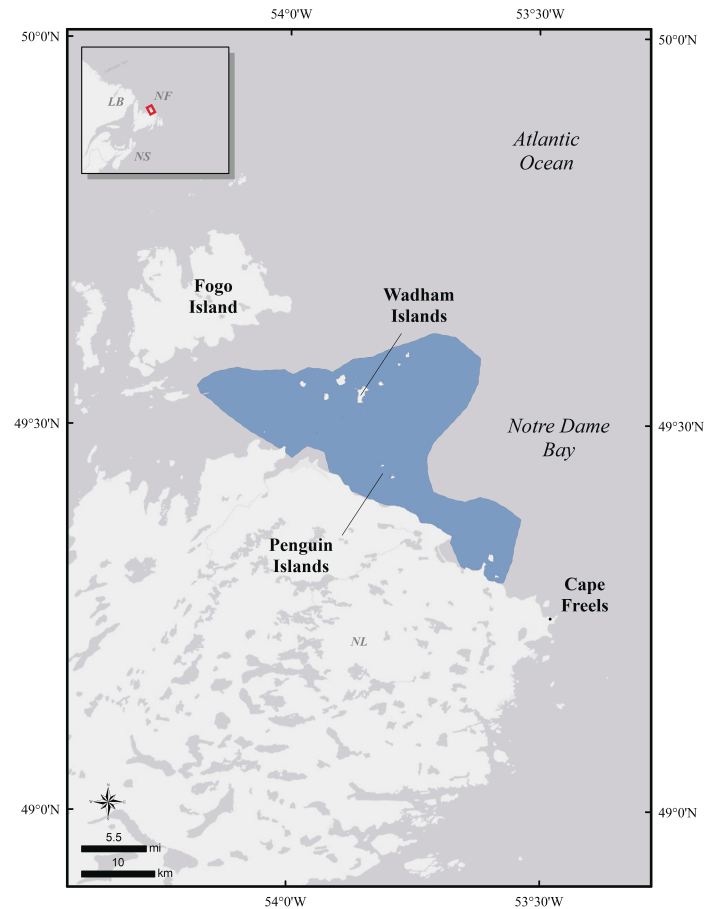
Description: This key site is located in Notre Dame Bay on the northeast coast of Newfoundland, between Fogo Island and the town of Cape Freels North. The Wadham Islands consist of seven islands (Peckford, Green, White, Copper, Duck, James, and Outer Wadham Islands) with numerous rocky shoals. The larger islands are vegetated with shrubs and grasses and the small islands are low with rocky terrain.

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 site is predominately important for wintering Common Eider (*Somateria mollissima*). Winter surveys conducted in this area by the Canadian Wildlife Service (CWS) produced estimates ranging from 7784 individuals in 2015 to 54,411 individuals in 2003. Over six years of winter survey data (2003, 2006, 2009, 2012, 2015, and 2018), an average of 27,800 individuals were estimated in this area (CWS Waterfowl Committee 2020). About 90% of the eiders that overwinter in this area are Northern Common Eiders (*Somateria mollissima borealis*), with the remaining being American Common Eiders (*Somateria mollissima dresseri*) and small numbers of King Eiders (*Somateria spectabilis*) (Gilliland and Robertson 2009). This represents about 9% of the continental population of Northern Common Eiders (NAWMP 2012). During winter, eiders congregate in areas of open water, which can change over space and time. Adults forage primarily on benthic invertebrates, including intertidal and subtidal mollusks (especially blue mussels, *Mytilus edulis*), crustaceans, and echinoderms (Goudie et al. 2000).

Other sea ducks species that use this area include 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).

Potential Conflicts: Nearby areas have a history of poaching, though in recent years it is believed that illegal hunting has decreased (NF013; IBA Canada 2021). Boat traffic in the area may cause disturbance and added risk of oil spill. Vessels operating at night in the sea ice in this area use high-intensity lighting, and operators have reported collisions with eiders that have damaged vessels and killed eiders. Any

future increase in commercial fishing quotas may increase boat traffic in the area. Future increases in water temperature due to climate change could threaten the biological diversity of prey species that are critical to wintering sea ducks.

Status: This key area contains one Important Bird Area (IBA), the Wadham Islands and Adjacent Marine Area IBA (IBA Canada 2021). This IBA is considered globally significant for congregatory species, including waterfowl and colonial waterbirds. This key site is part of the Fogo Shelf Ecologically and Biologically Significant Area (Wells et al. 2017) and considered a top priority Special Marine Area site for future conservation (CPAWS 2019). Most of the islands in the key site are under provincial ownership, with some private inholdings.

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 Parks and Wilderness Society (CPAWS). 2019. Special Marine Areas. Downloaded October 9, 2019. <https://cpawsnl.org/special-marine-areas/>.
- 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., and G. Robertson. 2009. Composition of eiders harvested in Newfoundland. *Northeastern Naturalist* 16:501–518. <https://doi.org/10.1656/045.016.n402>.
- Gilliland, S. G., H. G. Gilchrist, R. F. Rockwell, G. J. Robertson, J.-P. L. Savard, F. Merkel, F., and A. Mosbech. 2009. Evaluating the sustainability of harvest among Northern Common Eiders in Greenland and Canada. *Wildlife Biology* 15:24–36.
- Goudie, R. I., G. J. Robertson, and A. Reed. 2000. Common Eider (*Somateria mollissima*), version 2.0. In A. F. Poole and F. B. Gill (eds.), *The Birds of North America*. Cornell Lab of Ornithology, Ithaca, NY. <https://doi.org/10.2173/bna.546>.
- IBA Canada. 2021. <https://www.ibacanada.com/>.
- [NAWMP] North American Waterfowl Management Plan. 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>.
- 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.
- Wells, N. J., G. B. Stenson, P. Pepin, and M. Koen-Alonso. 2017. Identification and descriptions of ecologically and biologically significant areas in the Newfoundland and Labrador Shelves Bioregion. DFO Can. Sci. Advis. Sec. Res. Doc. 2017/013. v + 87 pp.
- 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.