Key Site 45: Western Bonavista Bay, Newfoundland

Location: 48°55'19"N, 53°33'32"W

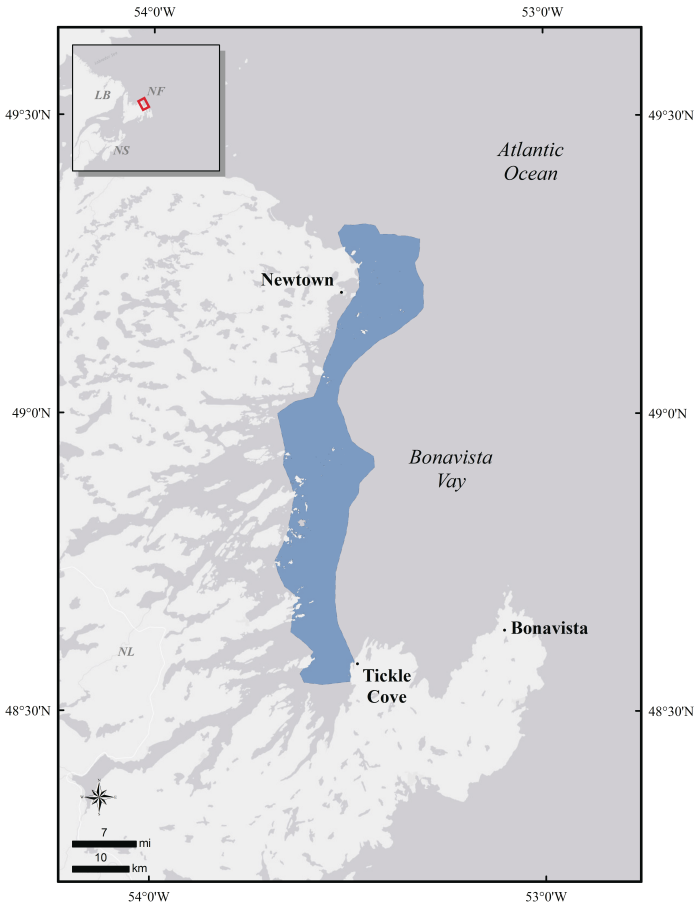
Size: 879 km^2

Description: This key site is located along the western side of Bonavista Bay on the northeast coast of Newfoundland, an area that provides important habitat for numerous congregatory bird species, including colonial birds and waterfowl, and bird species at risk. It includes several Important Bird Areas. This key site begins near the town of Tickle Cove and continues north to Cape Freels North near Newtown. The area contains open sea, coastal cliffs, rocky shores, coves, shoals, and islands.

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 primarily important for migrating and wintering Common Eider (*Somateria mollissima*) from late fall through April. In this region, fall migration occurs in October and November and waterfowl numbers reach peak abundance by mid-December (Goudie et al. 2000). Winter surveys conducted in this area by the Canadian Wildlife Service (CWS) produced estimates ranging from 8700 individuals in 2009 to 49,000 birds in 2012. Over six years of winter survey data (2003, 2006, 2009, 2012, 2015, and 2018), an average of 18,282 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*), along with a few King Eiders (*Somateria spectabilis)* (Gilliland and Robertson 2009). This represents about 6% 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 duck 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.

Potential Conflicts: Nearby areas have a history of poaching, although in recent years it is believed that illegal hunting has decreased (NF013; IBA Canada 2021). Boat traffic in the area may disturb birds and increase the risk of oil spills. 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.

Status: The site intersects the Cape Freels Coastline and Cabot Island IBA, which is considered globally significant for waterfowl concentrations and continentally significant for congregatory species. It is adjacent to the Terra Nova National Park IBA, which is nationally significant for two restricted-range terrestrial species (IBA Canada 2021). The site also intersects the Eastport Marine Protected Area established for protection of American Lobster and species at risk (e.g., Atlantic wolffish; *Anarhichas lupus*). 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 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.

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.