

Key Site 62: Eastern Shore, Nova Scotia

Location: 44°53'26"N, 62°11'55"W

Size: 45 km²

Description: Nova Scotia is the easternmost province in Canada's Maritime Provinces, bordered by the Gulf of Maine to the southwest and the Atlantic Ocean to the south and east. The Eastern Shore key habitat site is located along the eastern shore of Nova Scotia and includes offshore islands and ledges from Southern Island and Pumpkin Island off Beaver Harbour northeast to Seal Ledges off Barren Island near Liscomb. The site includes several additional islands and ledges, including Harbour Islands, Bird Islands, Gunning Rocks, Halibut Islands, Dogfish Ledge, White Islands, Bowens Ledge, Little White Island, The Nightcap, and Gull Rock.

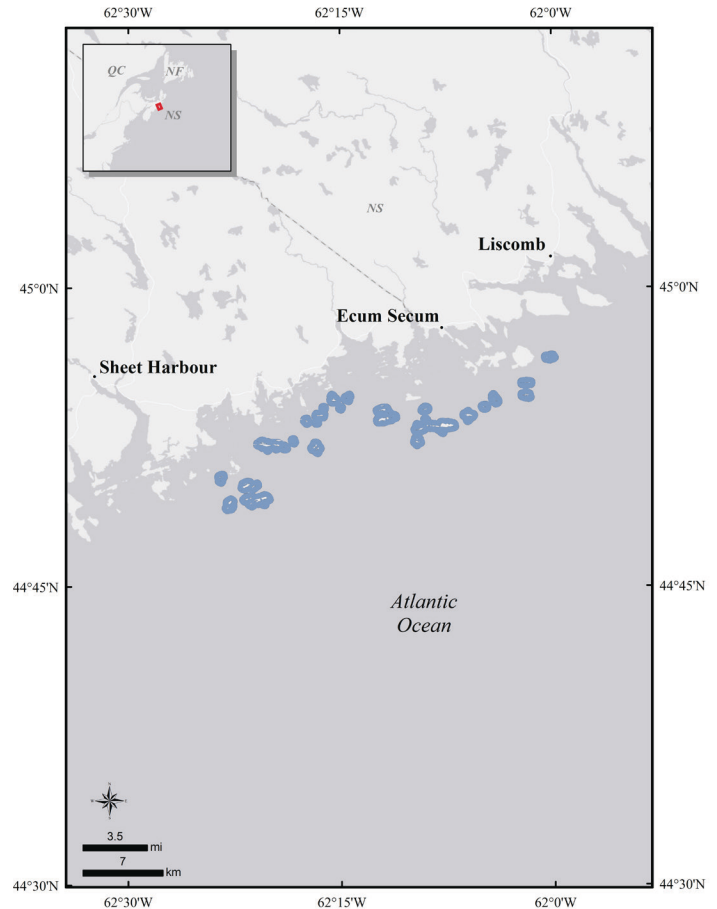
Precision and Correction of Abundance

Estimates Presented: Abundance estimates presented for this key habitat site have not been adjusted to account for incomplete detection or other biases. Abundance estimates should, therefore, be treated as minimum estimates.

Biological Value: This site is predominantly important to overwintering Eastern Harlequin Ducks (*Histrionicus histrionicus*) but also supports wintering and breeding American Common Eider (*Somateria mollissima dresseri*) and other sea duck species.

Harlequin Ducks breed in only a very small number of rivers in the Maritime Provinces (Stewart et al. 2015) and no molting sites have been found here (Boyne 2008). However, a third of the eastern North American population winters in Nova Scotia and New Brunswick (Boyne 2008). During winter, Harlequin Ducks use shallow, coastal rocky shorelines at exposed headlands and over subtidal ledges where suitable prey (primarily marine invertebrates including crabs, amphipods, and gastropods) is found and may use boulders, rocks, and shorelines as haul outs (Robertson and Goudie 1999, Gutowsky et al. 2019). Birds primarily stay very close to shorelines but can roost on open water farther from shore at night (Robertson and Goudie 1999).

Winter occupation has been documented in the region since at least 1966 (Boyne 2008), but surveys primarily since 1994 by boat, plane, and helicopter



have identified a number of locations where birds regularly congregate between December and April (Bird Studies Canada 2015, Gutowsky et al. 2019, Canadian Wildlife Service unpublished data).

February/March surveys of the Eastern Shore site by boat and helicopter between 2001 and 2015 have detected at least 156 Harlequin Ducks per survey, with an approximately equal number of males and females. A maximum of 647 birds was detected on March 18, 2005, representing approximately 16% of the eastern North American population of Harlequin Ducks (NAWMP 2012). Because aerial surveys can cause birds to flush early, stay close to shore, and flock in tight groups, they tend to underestimate bird abundance (Boyne 2008); therefore, maximum abundance at this site is likely higher. The highest concentrations of birds occur near ledges and islands south of Sutherland Island, around Big Harbour Island, and from around Big Halibut Island to Seal Ledges.

Other sea duck species found here in winter include American Common Eider (100 to 500

birds; Canadian Wildlife Service unpublished data), Surf Scoter (*Melanitta perspicillata*), Black Scoter (*Melanitta americana*), Long-tailed Duck (*Clangula hyemalis*), Bufflehead (*Bucephala albeola*), Common Goldeneye (*Bucephala clangula*), Common Merganser (*Mergus merganser*), Red-breasted Merganser (*Mergus serrator*), and rarely, Barrow's Goldeneye (*Bucephala islandica*) and Hooded Merganser (*Lophodytes cucullatus*) (Bird Studies Canada 2015, eBird 2019).

The numerous islands in this area provide nesting habitat to declining numbers of breeding American Common Eider. Within the Eastern Shore Island Wildlife Management Area, their numbers have declined from approximately 2000 breeding pairs in 1977 to about 1000 pairs in 2013–2016 (Province of Nova Scotia unpublished data).

Sensitivities: Waterfowl are sensitive to human disturbance, mostly small vessel or ship traffic, during winter. Food resource availability and quality could be influenced by industrial, urban, and agricultural pollution and by invasive species.

Potential Conflicts: Disturbance and collisions associated with small vessel and ship traffic remains a potential conflict. Chemical and oil spills and water contamination from several sources, including shipping, urban, industry, and agriculture might be of concern. Despite a ban on hunting of Harlequin Ducks, some are still shot by hunters who misidentify birds as other species or lack vigilance when hunting. Coastal development can disturb birds or their habitat as shoreline development can occur near coastlines where birds haul out (Boyne 2008). There is growing interest in eco-tourism which may disturb nesting and brood-rearing eiders (e.g., kayakers approaching nesting islands and broods).

Status: The majority of the site falls within the Eastern Shore Islands Wildlife Management Area which protects nesting habitat critical for various species of colonial nesting birds (Province of Nova Scotia 2018). The area is also part of Bird Conservation Region 14, Atlantic Northern Forest and Marine Biogeographic Unit 11, Scotian Shelf and Bay of Fundy (Environment Canada 2013). It also intersects the Eastern Shore Islands Important Bird Area—including inshore islands between Clam Harbour and Ecum Secum—an area that supports high numbers of Common Eider in spring migration,

breeding, and fall migration and thousands of scoters during spring migration (Bird Studies Canada 2015). The site also intersects the Eastern Shore Archipelago Ecologically or Biologically Significant Area (delineated based on uniqueness, aggregation, and fitness consequences criteria; Hastings et al. 2014).

Two protected areas intersect or lie adjacent to the site, including the Eastern Shore Islands Wilderness Area and Liscomb Point Provincial Park. In 2018, the region between Clam Bay and Barren Island was designated by Fisheries and Oceans Canada as the Eastern Shore Islands Area of Interest to conserve and protect habitat for marine species and nesting and foraging grounds for many colonial seabirds and shorebirds, including Harlequin Ducks.

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Harlequin Ducks. Photo: Tim Bowman.