

Key Site 63: Prospect, Nova Scotia

Location: 44°28'53"N; 63°52'19"W

Size: 20 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 Prospect key habitat site is located along the south shore of Nova Scotia and includes coastal and island shorelines extending from Gravel Island near Aspotogan to Marrs Island near Terrence Bay. The site includes several islands such as Betty Island, Duck Island, Hopson Island, and Dover Island.

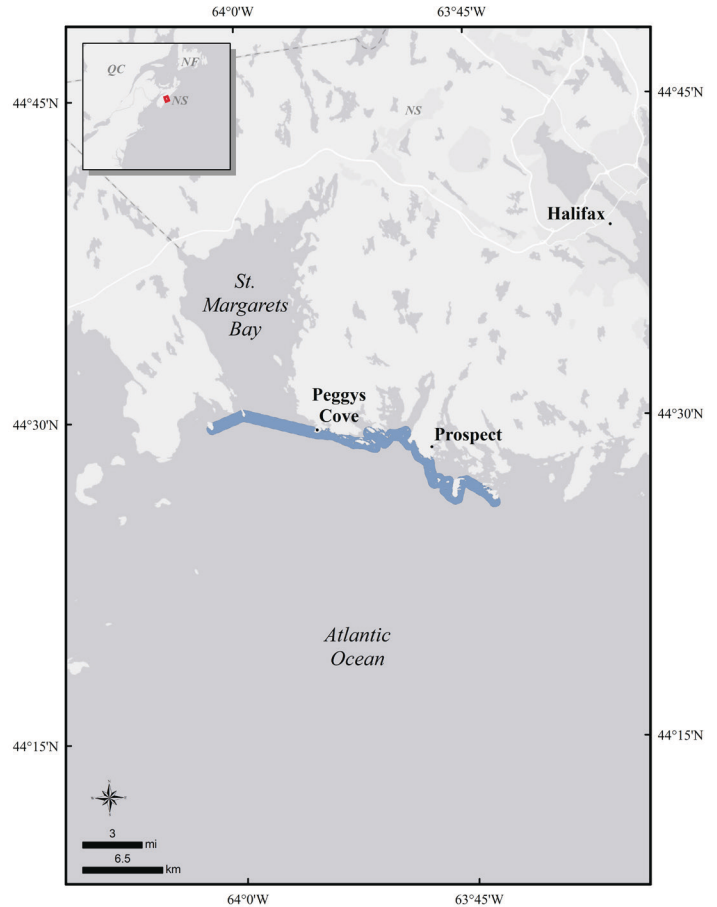
Precision and Correction of Abundance

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 Duck (*Histrionicus histrionicus*) but also supports wintering 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 this period, birds 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. Harlequin Ducks may use boulders, rocks, and shorelines as haul outs (Robertson and Goudie 1999, Gutowsky et al. 2019). Birds stay very close to shorelines but can roost on open water farther from shore at night (Robertson and Goudie 1999).

Winter occupation by Harlequin Ducks 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 at which birds regularly congregate between December and April (Bird Studies Canada 2015, Canadian



Wildlife Service unpublished data, Gutowsky et al. 2019, Nova Scotia Lands and Forestry [NSLAF] unpublished midwinter survey data).

Surveys of the Prospect site by boat and helicopter in February and March between 2002 and 2015 have detected at least 57 birds per survey, comprising an approximately equal number of males and females. A maximum of 182 birds was detected on an aerial survey on March 6, 2013. Waterfowl often flush or dive in response to disturbance caused by the aircraft, resulting in relatively low detection rates relative to ground-based surveys and therefore underestimates of abundance (P. Thomas unpublished data). Hence the actual abundance at this site is likely at least 200 birds, representing approximately 5% of the continental population (NAWMP 2012). The highest concentrations of birds occur between Peggy's Cove and Marr's Island.

Other sea duck species found here in winter include American Common Eider (400 to 600 birds; Canadian Wildlife Service unpublished data; NSLAF unpublished midwinter survey data), Surf Scoter

(*Melanitta perspicillata*), Black Scoter (*Melanitta americana*), White-winged Scoter (*Melanitta deglandi*), Long-tailed Duck (*Clangula hyemalis*), Bufflehead (*Bucephala albeola*), Common Goldeneye (*Bucephala clangula*), Common Merganser (*Mergus merganser*), Red-breasted Merganser (*Mergus serrator*), Hooded Merganser (*Lophodytes cucullatus*) and, rarely, Barrow's Goldeneye (*Bucephala islandica*) (Bird Studies Canada 2015, eBird 2019).

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

Potential Conflicts: Disturbance, collisions, and contamination 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. Presence of a shipping route to Halifax could increase the risk of oil pollution and spills. Despite a ban on hunting of Harlequin Ducks, some are still shot by hunters that misidentify birds as other species or lack vigilance when hunting. Coastal development can disturb birds or their habitat as shoreline development can occur very near coastlines and where birds haul out (Boyne 2008).

Status: The west end of the site intersects the St. Margaret's Bay Ecologically or Biologically Significant Area (Hastings et al. 2014). Three protected areas lie onshore, immediately adjacent to the site, including West Dover Provincial Park, the Dr. Bill Freedman Nature Reserve, and Rogue's Roost Wilderness Area. This area is part of Bird Conservation Region 14 (Atlantic Northern Forests) and Marine Biogeographic Unit 11 (Scotian Shelf and Bay of Fundy of Nova Scotia) (Environment Canada 2013).

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