

## Key Site 40: Nain, Newfoundland and Labrador

**Location:** 56°20'7"N, 61°10'33"W

**Size:** 900 km<sup>2</sup>

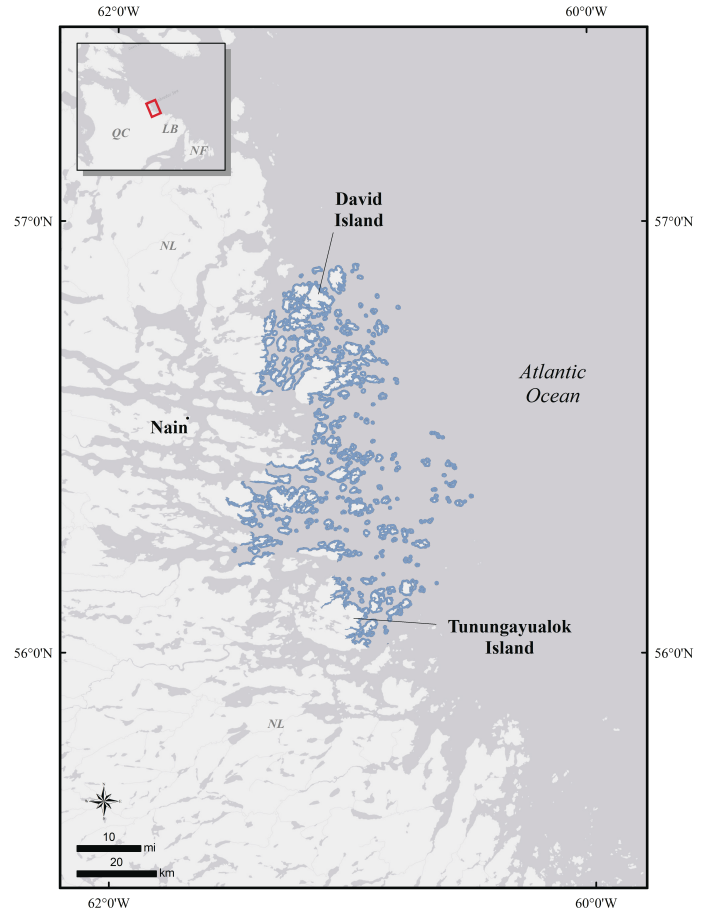
**Description:** The Nain key site is located along the Atlantic coast of Nunatsiavut, Labrador, in the province of Newfoundland and Labrador, Canada. The key site is along the northern coast of Labrador, which provides important habitat for several species of sea ducks, bird species at risk, and concentrations of colonial sea birds encompassing 15 Important Bird Areas (IBAs; Bird Studies Canada 2015).

The Nain key site encompasses coastal and off-shore areas within Labrador Inuit lands near the town of Nain, extending from David Island to Tunungayualok Island. It is fed by numerous rivers flowing eastward from the Torngat Mountains. The key site consists of an extensive network of islands that form a classical skerry coast along a deep fjord system that extends seaward for about 80 km (Gilbert et al. 1984). Protected coastlines consist of broad areas of intertidal flats strewn with large boulders, whereas more exposed outer coasts consist of mostly steeply sloped bedrock. Water temperatures are cold with maximum values of about 4.7°C in August (Gustajtis 1979) although they may reach as high as 6.5 to 7.0°C in shallow waters (Gilbert et al. 1984). The mean tidal amplitude is about 1.7 m.

### 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 most important to molting Surf Scoter (*Melanitta perspicillata*) and breeding Northern Common Eider (*Somateria mollissima borealis*), primarily between June and late August. Todd (1963) first reported large numbers of molting Surf Scoter and lesser numbers of White-winged Scoter (*Melanitta deglandi*) and Black Scoter (*Melanitta americana*) along the Labrador coast. Surveys by Lock (1986) in 1980 and by Gilliland in 1994, 1998, and 1999 (Canadian Wildlife Service unpublished data) estimated more than 20,000 and 41,000 scoters, respectively, and 14,000 and 27,000



Common Eider, respectively, along the Labrador coast in June. Abundance of scoters peaked in mid-August, with a maximum of 57,000 and 55,000 birds detected in August 1998 and 1999, respectively. Along the Labrador coast, there is remarkable consistency in the location of scoter flocks among years, with highest concentrations occurring around Nain and Backway key sites where molting birds coalesce into very large flocks.

Within the Nain key site, scoters begin arriving in late May. Numbers increase in June to between 3450 and 9164 birds and reach more than 19,000 birds by mid-August (with a maximum of 19,837 scoters detected in August 1999). Dispersal from molt sites begins in late August and the majority of birds leave by early September (664 birds detected at the Nain site in September 1980; S. Gilliland unpublished data).

Surf Scoter is the predominant species of scoter on the coast of Labrador during the molt period, comprising 80 to 90% of birds, with the remainder being Black Scoter and White-winged Scoter (Gilliland and Savard 2021). It is not known why scoters prefer

these areas over other areas of coastal Labrador. Scoters specialize on mollusks during molt (Bédard et al. 1997; Savard et al. 1998), and these areas likely have substrate and bathymetry favorable for mollusks (S. Gilliland unpublished data).

Common Eiders use the Nain site for breeding and nest on many of the islands in the key site (Lock 1986, Savard et al. 1999). A maximum of 3729 male Common Eider were detected in June 2006; accounting for undetected females, the total abundance of birds using the site at this time is closer to 7458. Numbers drop off rapidly by September (a total of 81 detected in September 1980), suggesting that this region is not an important molting area for Common Eider. Birds breeding here could molt along Anticosti Island where large numbers of molting eiders have been found (Rail and Savard 2003).

A total of 40 presumably premolt Eastern Harlequin Ducks (*Histrionicus histrionicus*) were detected in coastal areas around Nain in late June 1994. Subsequent surveys did not detect molting individuals, however, it is possible that a few birds do molt here (Gilliland et al. 2002).

**Sensitivities:** Sea ducks are sensitive to degradation of their staging, molting, and foraging areas. Human disturbance can have negative effects on birds, particularly while foraging or during the molting period when birds are flightless. Scoters are ranked second among Anatidae on the oil vulnerability index (King and Sanger 1979, Daigle and Darveau 1995). Scoters are also vulnerable to heavy metals contamination and hunting (Savard et al. 1998).

**Potential Conflicts:** The shipping route for the Voisey Bay nickel deposit passes near large molting aggregations of scoters, and preliminary observations suggest scoters may be sensitive to this type of disturbance during molt (O'Connor 2008). Also within the key site are the shipping lanes into Nain, which are used by the Labrador Coastal Service and increasingly by cruise ships. Chronic or major oil spills could have major impacts on birds and habitat here (Bird Studies Canada 2015). Oil spills are considered a growing threat with increased oil and gas exploration in Marine Geographic Unit 10 and there is also a continued risk of fishing gear entanglement (Environment Canada 2013). Inuit hunting and egg collecting in the islands southeast of Nain has an

unknown but likely minimal impact on birds and their habitat.

**Status:** This key site is part of Bird Conservation Region 7, Taiga Shield and Hudson Plains, as well as the Marine Geographic Unit 10, Newfoundland-Labrador Shelves. Two IBAs have been designated within this area, including the Nain Coastline IBA (located along the Labrador coastline from the western and northern edges of Paul Island, Humbys Island to the south, and Dog Island to the north) and the Offshore Islands Southeast of Nain IBA (southeast of Nain, including Pyramid, Barbican, the Castle, Negro, Ukallik, Kidlit, and Nunaksuk Islands) (Bird Studies Canada 2015).

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