

## Key Site 33: Buchan Gulf, Nunavut

**Location:** 71°47'50"N, 74°7'25"W

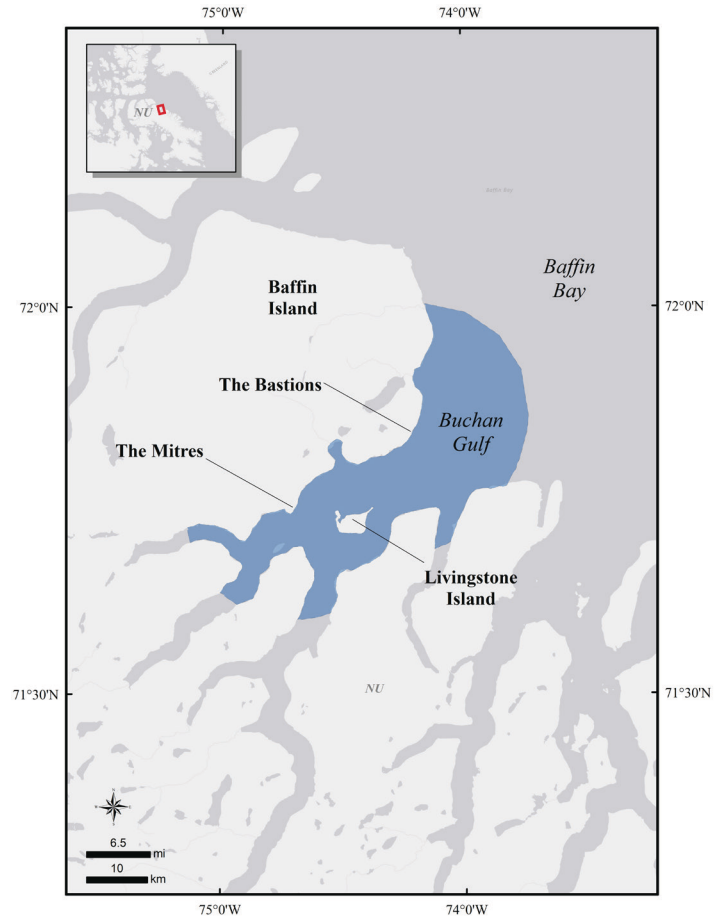
**Size:** 715 km<sup>2</sup>

**Description:** Buchan Gulf is on the eastern coast of north Baffin Island, about 200 km southeast of the community of Pond Inlet (Mittimatalik). The northern coast of the gulf is notable for two promontories, the Bastions and the Mitres. A description of this habitat is found in Alexander et al. (1991) and Latour et al. (2008). Buchan Gulf lies in the High Arctic oceanographic zone (Nettleship and Evans 1985). Over winter, open water develops parallel to the eastern and southeastern coast of Bylot Island (Smith and Rigby 1981). Recurring offshore leads form in sea ice off Buchan Gulf, with a relatively narrow band of landfast ice (although this may vary greatly between years; McLaren 1982); the floe edge is usually not far from shore. However, landfast ice forms in the gulf and along the eastern Baffin Island shore. Shore leads open as early as February but may close again in April or May (Smith and Rigby 1981). Ice breakup may not occur until July, and freeze-up begins in late October.

### 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:** King Eiders (*Somateria spectabilis*) and Common Eiders (*S. mollissima borealis*) may congregate along the ice edge during migration, usually in May (McLaren and McLaren 1982). King Eiders arrive by May, and Common Eiders return by mid-May. Numbers of both species increase throughout May, with a notable movement of King Eiders along the landfast ice edge bordering east Baffin Island. Numbers decline in late June as individuals move to terrestrial breeding areas. During July and August, numbers again increase along coasts, particularly south Lancaster Sound and the east coasts of Bylot and Baffin islands, as a series of migratory movements occur (McLaren and McLaren 1982). Up to 25,000 migrating eiders have been observed in the eastern Bylot Island/north Baffin Island region during migration (McLaren and Renaud 1979).



**Sensitivities:** Sea ducks are sensitive to pollution of offshore waters.

**Potential Conflicts:** Baffin Bay and Davis Strait have potential to become marine shipping routes and areas of hydrocarbon exploration and development (Imperial Oil Ltd. 1978; Petro-Canada Ltd. 1979; DIAND 1982; Arctic Council 2009). In 2016 Canada designated the Arctic waters indefinitely off limits to new offshore oil and gas activities and in 2019 suspended the terms of all active oil and gas licenses in the western and eastern Arctic offshore areas. This area is also of increasing importance as a tourist destination for cruise ships (Hall and Johnston 1995; Wakelyn 2001). Oil spills associated with drilling or shipping activities could endanger large numbers of sea ducks and pollute their feeding areas.

**Status:** Buchan Gulf is an Important Bird Area in Canada (NU069; CEC 1999), part of a Key Marine Habitat Site (Site 17; Mallory and Fontaine 2004), and will be part of Tallurutiup Imanga National Marine

Conservation Area, a future marine protected area. The marine waters of this key site are under federal jurisdiction.

### Literature Cited

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