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First Canadian Breeding Record of the Dovekie *(Alle alle)*

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The Dovekie (*Alle alle*) is the smallest and one of the most abundant alcids inhabiting the North Atlantic Ocean (Salomonsen, 1950; Brown *et al.*, 1975; Roby *et al.*, 1981). Until now there have been no documented breeding records of the Dovekie in the Canadian Arctic, though they are known to gather by the millions in northwest Baffin Bay during spring migration to breeding colonies in Northwest Greenland (Renaud *et al.*, 1982). The Dovekie is well known to the Inuit of Baffin Island; it is called *akpaliapik*, in contradistinction to its larger relative, the *akpa* or Thick-billed Murre (*Uria lomvia*).

In August 1983, during a bowhead whale (*Balaena mysticetus*) study on the east coast of Baffin Island, Apak Qaqqasiq mentioned that Dovekies nested in at least two locations in Home Bay. With him and Josepi Tigullaraq, N.W.T. Wildlife Officer from Clyde, we visited one of these colonies by boat on 20 August. The colony was located on a small island (1 km long) called Abbajalik in Inuktitut (unnamed on maps), in northern Home Bay (69°02'N, 67°23'W) about 800 km south of the closest known Dovekie nesting locations in Northwest Greenland. "Abbajalik" means two parts or halves of one thing, and possibly refers to the island's centrally-constricted shape and the notable difference in the terrain on either end. The eastern portion of the island, where Qaqqasiq indicated the colony, consisted of boulder moraine — probably a terminal or lateral deposit of Pleistocene glaciers emanating from adjacent Tingin and Pitchforth fiords.

Only a few small flocks of Dovekies were seen flying around the island when we arrived and we saw none among the boulder moraine where Qaqqasiq had seen many in June. However, the typical pungent smell of a seabird colony and the enhanced growth of vegetation and nitrophilous lichens throughout the boulder moraine indicated an established colony. A colony of about 500 Arctic Terns (*Sterna paradisea*) also occupied the island; we found two nests with single eggs (one hatching), one with a pair of eggs (one hatching), and a pair of newly-hatched chicks (one dead). The terns were unusually non-aggressive towards the intruders. Many old eider nests were scattered throughout the tern colony, and a female Common Eider (*Somateria mollissima*) was flushed from a nest containing two eggs that were just hatching. Ice conditions in the eastern Canadian Arctic were unusually severe in the summer of 1983 (Ice Forecasting Central, Ottawa) and might have contributed to the apparent poor breeding success of the terns.

The Dovekie colony appeared to be vacated and we were about to leave when Qaqqasiq detected a faint call from the moraine. After carefully moving a few boulders, we found two Dovekie eggs, and nearby an adult Dovekie. The eggs (47.6 x 32.3 mm and 46.9 x 32.6 mm) were addled. Tigullaraq then located a chick (Fig. 1), and in the same crevice, an ancient Dovekie snare of baleen fibres (Fig. 2). The snare gives a clue to the age of the Dovekie colony: the baleen is undoubtedly that of a bowhead whale, a species that was brought to near-extinction in the area at the turn of the century. Qaqqasiq indicated that the snare was very old, dating long before his lifetime. Ancient tent circles and cache sites indicate that the island has a long history of use by the Inuit, possibly as a place to gather eider eggs and snare Dovekies as Northwest Greenland Inuit still do. (Eider eggs are still occassionally collected in spring on Abbajalik and other nearby small islands — Qaqqasiq, pers. comm. 1983.) The island is located close to the spring floe edge in Home Bay, and currently serves as a cache site for various marine mammal products such as narwhal (*Monodon monoceros*) muktuk.

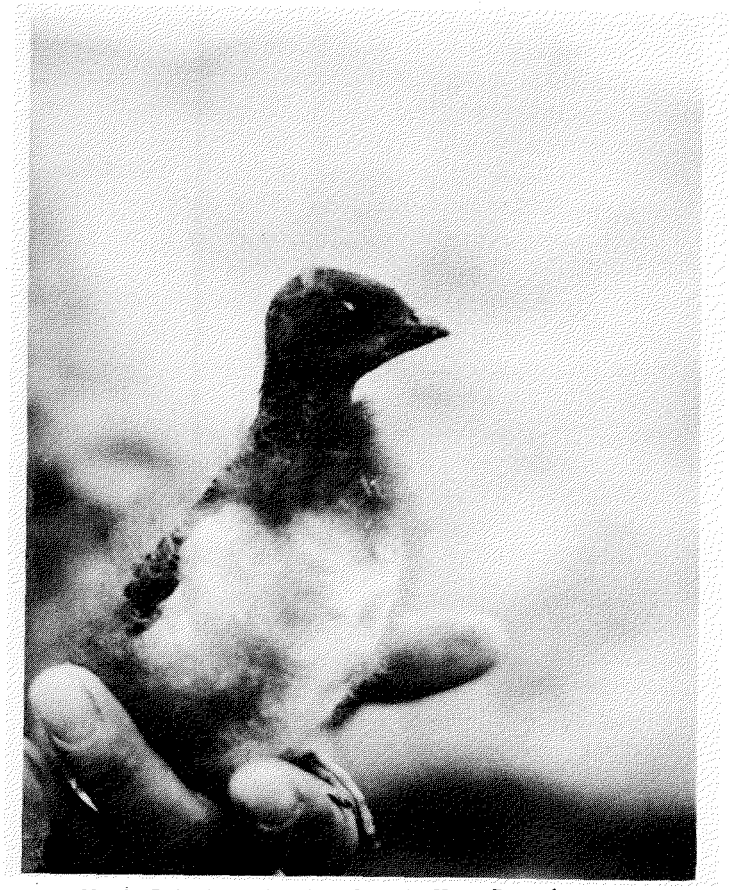

FIG. 1. Nearly-fledged Dovekie chick from the Home Bay colony.

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We found another Dovekie chick attended by an adult before departing at about 2200 local time. It was becoming darker and other adult Dovekies may have roosted for the night; though flocks of 15, 12, 4, and 2 were seen flying around the island, none were seen returning to the colony. Qaqqasiq indicated that Dovekies had covered the boulder moraine in large numbers in the spring. Possibly many adults and chicks had already departed from the colony; the peak of fledging occurs in mid-August in Northwest Greenland (Roby *et al.*, 1981). In any case, it was apparent that the colony was not large, being restricted to the boulder moraine on the eastern tip of the island. Judging by patterns of excrement deposition, the present colony was restricted to an area of ~0.5 ha. It appeared from the distribution of vegetation and the availability of suitable moraine habitat that the colony once covered a larger area (roughly 3-5 ha). We were unable to visit another reported Dovekie colony on a small island called Ijutuq, located further south in Home Bay. Qaqqasiq indicated that the colony was considerably larger than the one on Abbajalik, but was able only tentatively to identify its location on a map (Fig. 2).

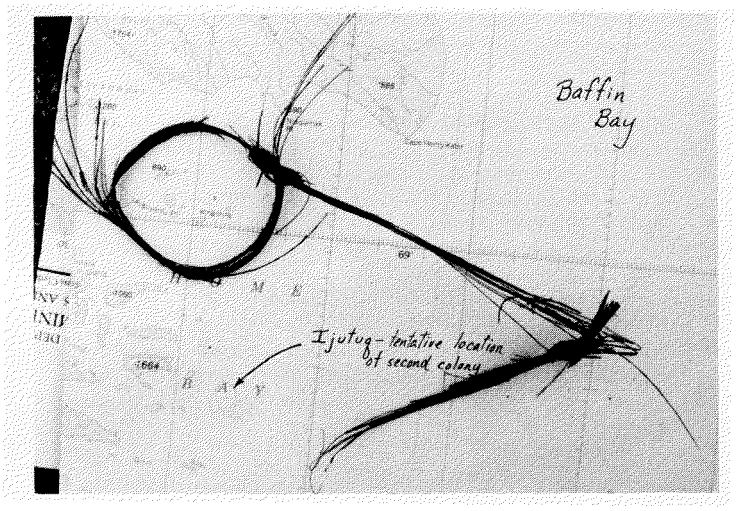

FIG. 2. Baleen snare encircles the location of the island referred to in text.

The extralimital situation of the Home Bay colonies may be explained in part by their proximity to a major flaw lead that enlarges early in spring (LANDSAT imagery). This open-water flaw zone between the fast ice and the Baffin Bay pack ice is created by the southward-drifting Baffin Current, and is the only major and predictable area of open water to occur during the spring along the east Baffin coast between Davis Strait and Lancaster Sound (~ 1000 km). According to local Inuit, the Home Bay flaw lead is an important staging and migration area for many seabirds, although to our knowledge this has not received attention by biologists. The limited distribution of the Dovekie colonies in Home Bay could also be explained by their specific nesting habitat of talus slopes or moraine, though this habitat seems abundant along this heavily-glaciated coast. Predation by land-based predators might also influence the locations and survival of the colonies, and may be indicated by the small, insular situation of the nesting sites.

Our enthusiasm at the "discovery" of breeding Dovekies was treated with tolerant humour by Qaqqasiq, for the existence of the Home Bay colonies was well known to hunters who knew the area. We had only to ask.

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