SEA-BIRD COLONIES OF PRINCE LEOPOLD ISLAND AND VICINITY

THOMAS W. BARRY Canadian Wildlife Service, Edmonton, Alberta

DURING part of July and August 1958 I was at Somerset Island, Northwest Territories, in company with the J. Brian Bird expedition. Using a Beaver aircraft I was able to conduct aerial reconnaissance of wildlife on Somerset and adjacent islands. On July 28 and 29 I visited Limestone Island off the northwest coast of Somerset and Prince Leopold Island (74° N 90°W), eight miles northeast of Cape Clarence, Somerset Island.

On these flights concentrations of the following birds were noted at various points: Fulmar (Fulmarus glacialis), Glaucous Gull (Larus hyperboreus), Thayer's Gull (Larus argentatus thayeri), Black-legged Kittiwake (Rissa tridactyla), Thick-billed Murre (Uria lomvia), and Black Guillemot (Cepphus grylle). I returned to Prince Leopold on August 13, remaining until August 19, when we continued flights along part of the south coast of Devon Island, and up Admiralty Inlet on Baffin Island before returning to base camp near Bellot Strait on Somerset.

The shores of Prince Leopold are sheer limestone cliffs rising to about 1,200 feet at the highest point and having talus slopes on the south and west sides. The nesting cliffs were for the most part inaccessible without the use of climbing ropes. Chips of the friable limestone continually rattled down the face of the cliffs. An occasional large rockfall frightened flocks of birds from its path. On a narrow beach below the south end of the east cliff I found remains of about 50 murres and kittiwakes undoubtedly killed by a recent rockfall. While on this beach I witnessed a fall that killed six murres and a kittiwake.

Strong currents flowing eastward from Barrow Strait and westward from Lancaster Sound converge at Leopold Island before sweeping down Prince Regent Inlet. These currents, ice, and high tides prevent beach formation and talus accumulation under the north and east cliffs, where most of the sea birds nested. In fact, the northeast cliff, highest on the island, is noticeably undercut. Apparently, the converging currents also carry a concentration of food for the seabirds in the vicinity.

Limestone Island is similar to Leopold, although it is only about 500 feet high and the currents and tides seem to be less strong.

Since most of the nesting cliffs were inaccessible, except for glimpses from the rim, across fluting, or from the airplane, population figures are at best rough estimates or guesses.

OBSERVATION NOTES

FULMAR. Nested on upper reaches of the cliffs almost continuously around Leopold Island. Many were seen near the Cape Clarence cliffs, and they probably nest there also. Fulmars were also scattered along the north coast of Somerset Island and around Limestone Island where possibly they nest. There was another concentration of Fulmars in Lancaster Sound and in Admiralty Inlet, probably from the nearest known Fulmar colony at Baillarge Bay. I estimate the population at Leopold Island and Cape Clarence at about 150,000. Light-phase birds were more abundant than dark-phase.

PARASITIC JAEGER (Stercorarius parasiticus). Two nests of mixed darkphase and light-phase pairs were on Leopold's southeast spit. About 40 or 50 others, probably mostly transients, were in the area. I did not see jaegers preying upon other birds, but noticed that they picked over remains of accident victims along the shore.

GLAUCOUS GULL. At Leopold about 2,000 nested on the wider ledges and along the ravines; most were scattered along the rim and chimneys above the murre and kittiwake colonies. They took eggs and young of other birds, but more commonly fed on carcasses on the beach.

THAYER'S GULL. None were seen on Leopold, but nesting groups were found on Somerset Island at Bellot Strait; north of Fury Beach; north of Batty Bay, south of Limestone Island; and at Fitz Roy Inlet. They totaled 600 to 1,000.

BLACK-LEGGED KITTIWAKE. At Leopold these nested in close association with murres but usually in patches dominated by one or the other species. In a few areas where suitable ledges were available near the rim, murres and kittiwakes were found with fulmars. At very regular intervals flocks of 200 to 300 kittiwakes flew from the cliffs, crossed the base of the spit to the outlet of the south-flowing ravine. There they would feed and splash, then move together onto the beach to preen before returning to the cliffs as another group arrived. Their traditional flight path is marked by an abundance of orange lichens fertilized by their droppings. (Murres seldom crossed the spit, but flew around it instead.) I noted a similar routine at the stream outlet on the north point and at a fresh-water pool on top near the east cliffs. Kittiwakes, and murres to some extent, crowded onto ice chunks floating past the gravel spit in the 5-knot current.

About 100,000 to 180,000 kittiwakes nested on Leopold Island. Mr. L. M. Tuck reports that about 50,000 kittiwakes nested at Cape Hay, Bylot Island, but in early June 1957 at least 200,000 appeared in that vicinity for a few days; it is possible that many of those kittiwakes continued on to Leopold Island to nest. Some may also nest on Limestone Island and perhaps at Cape Clarence.

THICK-BILLED MURRE. Probably more than 350,000 nest at Leopold Island on the east and north cliffs. Numbers of murres in the water near Limestone Island indicate that they nest there also. First young were seen leaving the cliffs at Leopold Aug. 15.

BLACK GUILLEMOT. About 4,000 nested among the talus and fractured chimneys and columns at Leopold. A considerable number were also seen in the vicinity of Limestone Island where they probably nest.

Received for publication 21 March 1960



Barry, Thomas W. 1961. "Sea-bird Colonies of Prince Leopold Island and Vicinity." *The Canadian field-naturalist* 75(2), 72–73. <u>https://doi.org/10.5962/p.341928</u>.

View This Item Online: https://doi.org/10.5962/p.341928 Permalink: https://www.biodiversitylibrary.org/partpdf/341928

Holding Institution Harvard University, Museum of Comparative Zoology, Ernst Mayr Library

Sponsored by Harvard University, Museum of Comparative Zoology, Ernst Mayr Library

Copyright & Reuse Copyright Status: In copyright. Digitized with the permission of the rights holder. Rights Holder: Ottawa Field-Naturalists' Club License: <u>http://creativecommons.org/licenses/by-nc-sa/3.0/</u> Rights: <u>https://biodiversitylibrary.org/permissions</u>

This document was created from content at the **Biodiversity Heritage Library**, the world's largest open access digital library for biodiversity literature and archives. Visit BHL at https://www.biodiversitylibrary.org.