

ORNITHOLOGICAL OBSERVATIONS AT BRABANT ISLAND, ANTARCTICA

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ABSTRACT. As part of a contribution to the International Survey of Antarctic Seabirds, a cruise was undertaken by R/V *Hero* to locate seabird breeding sites on little-known Brabant Island near the Antarctic Peninsula. Location, nest count, and species composition were recorded in 1983 during December 28 and 29, the time required to circumnavigate the island. Predictably, Brabant Island proved to be mostly ice covered, but several notable breeding sites were found on its northwestern coast.

INTRODUCTION

The part of the Antarctic Peninsula lying between 64° and 64° 40' S and 62° and 63° W, of which Brabant Island (Fig. 1) is the principal feature, has seldom been investigated by ornithologists and little is recorded about seabirds that may breed there (see Croxall and Kirkwood, 1979; Wilson 1983). As part of a contribution to the International Survey of Antarctic Seabirds, the senior author organized a short cruise in the 1983/84 austral season to record seabird breeding sites while circumnavigating Brabant Island. The results are reported here.

The observations were conducted from R/V *Hero*, a small vessel capable of sailing close to Brabant Island, which often enabled us to examine small breeding colonies from aboard ship. We visited those colonies that were large, complex, or remote by means of small inflatable boats. Rough estimates were made when nest counts were not possible; only occupied nests were tallied. We followed the method of Croxall and Kirkwood (1979) in recording the degree of accuracy in our counts, and used the following categories: N_1 = individual nest counts accurate to $\pm 5\%$; N_3 = nest counts accurate to $\pm 10-15\%$; N_5 = guesstimate to nearest order of magnitude (few, hundreds, thousands).

On 29 December 1983, R/V *Hero* began the survey at 0800 hours on the south coast at 64° 30' S, 62° 38' W and travelled northward along the west coast to Metchnikoff Point (64° 03' S, 62° 34' W) where, at 2000 hours, thick falling snow ended observation. At that point R/V *Hero* sailed south to the Melchior Islands for anchorage. On 30 December, R/V *Hero* left there at 0530 hours and, at 64° 31' S, 62° 35' W, proceeded along the southern coast, thence northward along the east coast, through the narrow and shallow straits on the north coast, and southward along the west coast to Metchnikoff Point, completing the circumnavigation at 1630 hours. Once again R/V *Hero* anchored at Melchior Islands before sailing to the Antarctic Peninsula the following day.

RESULTS

First impressions of Brabant Island are that, with its rugged topography and few areas free of snow and ice, it can support few seabird colonies. This proved largely correct. The southern half of the island is indeed barren with few colonies. The first notable colonies were found on the well-vegetated sea cliffs near Astrolabe Needle (64° 08' S, 62° 36' W), and spectacular bird habitats were observed at Metchnikoff

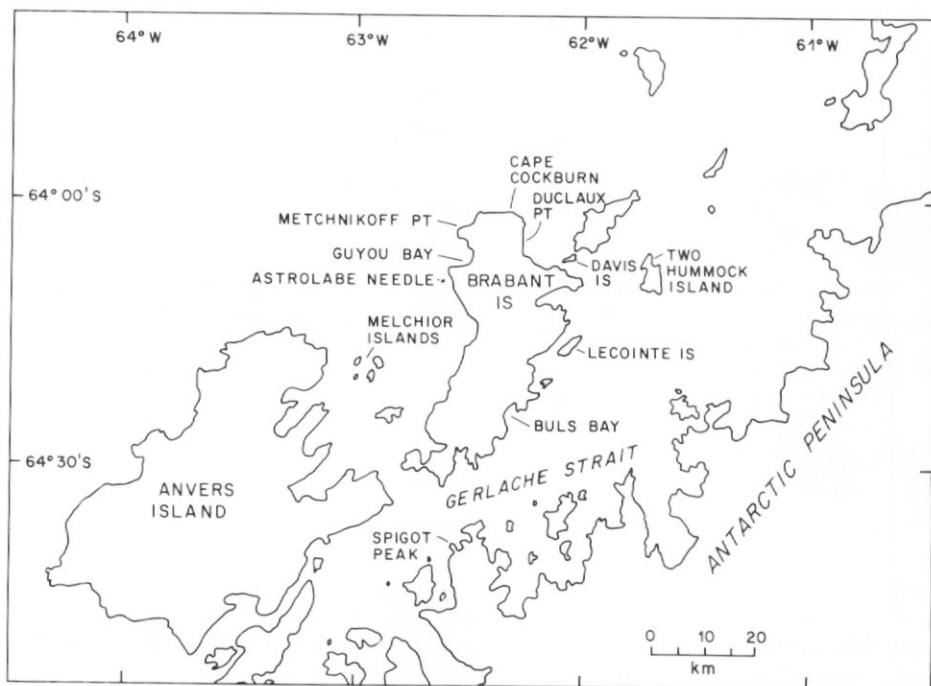


Fig. 1. Map showing location of Brabant Island near the Antarctic Peninsula (after Croxall and Kirkwood, 1979).

Point. Along the northern and northwestern coasts we were often in sight of seabirds at cliffs or nearby at sea. This part of the island needs further investigation, since almost certainly we did not find every small colony among its many inlets and cliff sites.

Adélie penguin (*Pygoscelis adeliae*)

Only one bird, with two chinstrap penguins at $64^{\circ} 14' S$, $62^{\circ} 36' W$ on 29 December, was observed during the entire cruise around Brabant Island.

Chinstrap penguin (*Pygoscelis antarctica*)

Although chinstraps were thinly scattered all along the west coast, they were decidedly scarce on the east coast. Only two colonies were found, both on 29 December: 16 nests (N_1) and 275 adults at Guyou Bay ($64^{\circ} 06' S$, $62^{\circ} 35' W$); at Metchnikoff Point, 2243 nests were tallied, but many more went uncounted before a snowfall precluded further observation (Fig. 2). Including all the subcolonies, we estimate a minimum of 5000 nests (N_5) for the area. Many of the chinstraps' occupied nests were empty, or had but one egg, while relatively few had two eggs despite the late date. At Spigot Peak ($64^{\circ} 38' S$, $62^{\circ} 34' W$) on the Antarctic Peninsula, some chinstraps already had pipped eggs and small chicks by 31 December.

Gentoo penguin (*Pygoscelis papua*)

No breeding records and only five sightings (all but one of single birds) altogether.

Black-browed albatross (*Diomedea melanophris*)

Observed at sea off the northwest coast of Brabant Island: two at $64^{\circ} 07' S$, $62^{\circ} 39' W$ on 29 December; two between $64^{\circ} 01' S$, $62^{\circ} 11' W$ and $64^{\circ} 00' S$, $62^{\circ} 21' W$ on 30 December.



Fig. 2. Part of the large chinstrap penguin colony at Metchnikoff Point, Brabant Island. Photographed 29 December 1983.

Southern giant petrel (*Macronectes giganteus*)

No nesting records and only five sightings of birds at sea, which is surprising considering the large numbers of giant petrels that breed nearby on Anvers Island.

Cape pigeon (*Daption capense*)

On 29 December, Cape pigeons were seen only sparingly along the west coast until we approached Astrolabe Needle where at least 35 birds nested on cliffs near by (Fig. 3). Hundreds were noted at sea between the Needle and Metchnikoff Point where some appeared to be nesting on cliffs near the large chinstrap colony. On 30 December none was recorded along the entire east coast, but the birds were at once conspicuous along the rugged north and northwest coasts where quite a few probably breed.

Snow petrel (*Pagodroma nivea*)

Small numbers (seven sightings involving 16 birds) were noted at sea along both west and east coasts. Probable breeding sites included a cliff near Astrolabe Needle where one snow petrel was seen entering a presumed nesting cavity near nesting Cape pigeons. Upwards of 40 snow petrels flew about and entered nesting sites on towering cliffs at both sides of the narrow strait between Brabant and Davis Island ($64^{\circ} 06' S$, $62^{\circ} 04' W$). Not far from there at least 10 other snow petrels entered presumed nesting sites on the cliffs of Duclaux Point. Although the sites were inaccessible to us, the birds gave every appearance of nesting. The only other colony (six birds, 31 December 1984) observed by us in the entire region was at Spigot Point on the Antarctic Peninsula, about eight nautical miles from Brabant Island.

Southern fulmar (*Fulmarus glacialisoides*)

The most abundant species observed at sea along the south coast between Anvers and Brabant Islands, and also in the vicinity of Lecointe and Two Hummock islands.

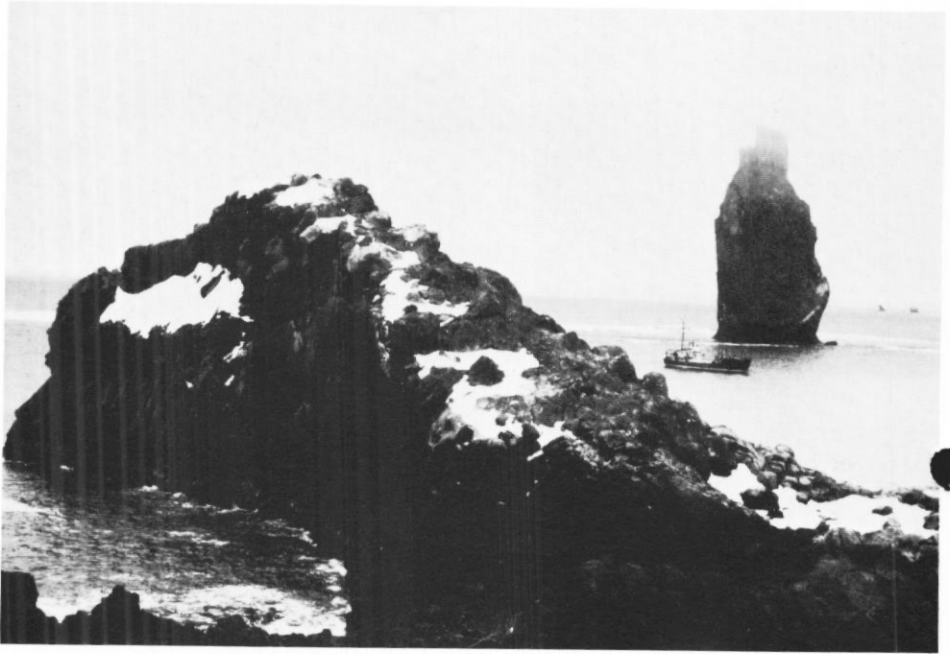


Fig. 3. R/V *Hero* between Brabant Island and Astrolabe Needle. Cape pigeons, Wilson's storm petrels, South Polar and brown skuas nested on the exposed sea cliff in the foreground. No nesting birds were observed on the austere needle close by. Photographed 29 December 1983.

Numbers dropped noticeably northward along Brabant Island. A few hovered about precipitous sea cliffs between Astrolabe Needle and Metchnikoff Point, and also at Cape Cockburn ($64^{\circ} 01' S$, $62^{\circ} 18' W$) but none was observed landing on a ledge.

Wilson's storm petrel (*Oceanites oceanicus*)

Small numbers, mostly singles, noted at sea off the west coast, fewer still off the east coast. On 29 December, two nesting sites with one egg each were found beneath rocks high on a cliff near Astrolabe Needle (Fig. 3), and on the talus slopes of Metchnikoff Point one incubating bird was noted. B. Obst reported seeing several entering crevices in the rocks beneath nesting chinstrap penguins.

Blue-eyed shag (*Phalacrocorax atriceps*)

Small numbers of shags were seen fairly often on all sides of Brabant Island. Along the west coast the following colonies were observed on 29 December:

- (1) $64^{\circ} 28' S$, $62^{\circ} 34' W$: 21 nests (N_1)
- (2) $64^{\circ} 19' S$, $62^{\circ} 34' W$: at least six nests (N_5)
- (3) $64^{\circ} 14' S$, $62^{\circ} 36' W$: at least six nests on two islets (N_5)
- (4) $64^{\circ} 06' S$, $62^{\circ} 39' W$: 24 nests (N_1).

Along the south, east and north coasts the following colonies were seen on 30 December:

- (5) $64^{\circ} 29' S$, $62^{\circ} 35' W$: 23 nests (N_1); 56 adults
- (6) $64^{\circ} 27' S$, $62^{\circ} 23' W$: 7 nests (N_1); 15 adults
- (7) $64^{\circ} 25' S$, $62^{\circ} 18' W$: 22 nests (N_1); 46 adults
- (8) Lecoointe Island: 52 nests (N_3)
- (9) $64^{\circ} 13' S$, $62^{\circ} 03' W$: at least two nests (N_5)
- (10) $64^{\circ} 08' S$, $62^{\circ} 01' W$: 22 nests on Bernard Rocks (N_1).

The majority of nests had young.

Greater sheathbill (*Chionis alba*)

Sheathbills were noted at several shag colonies: on 29 December, one pair at 64° 28' S, 62° 34' W, one bird at 64° 29' S, 62° 35' W, one bird at 64° 25' S, 62° 18' W; on 30 December one bird at a shag colony on the Brabant side of Lecointe Island. Sheathbills were conspicuous at the chinstrap colony on Metchnikoff Point where on 29 December the following occupied nesting cavities were found: two without eggs, one with single egg, one with two eggs (small embryos).

South Polar skua (*Catharacta macconnicki*)

Noted occasionally along the west coast on 29 December: three birds feeding at sea near 64° 44' S, 64° 23' W; two pairs evidently on territory on the summit of an inaccessible sea cliff, and a third pair at a nest (two eggs) on a small island nearby at approximately 64° 15' S, 62° 32' W; three pairs at nests (single egg, two heavily incubated eggs, and empty scrape respectively) on the summit of a sea cliff near Astrolabe Needle (Fig. 3). At the empty scrape the male regurgitated a fish before the begging mate who, while crouching and crying, moved slowly in a tight circle with head lowered and body feathers puffed out. Only one *C. macconnicki* was seen (perched on an iceberg at 64° 20' S, 62° 17' W) along the east and north coasts.

Brown skua (*Catharacta lonnbergi*)

Seen only once during the entire cruise around Brabant: a single pair with one egg on the summit of a sea cliff near Astrolabe Needle on 29 December (Fig. 3). Since penguins did not nest in the area, the birds presumably depended on seabirds nearby and the remains of a Cape pigeon egg was in the skua's nest. This species may also breed near the chinstrap colony at Metchnikoff Point where an unidentified skua was seen during a heavy snowfall.

Southern black-backed gull (*Larus dominicanus*)

Gulls were noted sporadically along the west coast of Brabant, most commonly in the vicinity of other nesting species. On 29 December seven nests were seen on an inaccessible cliff near a shag colony at 64° 28' S, 62° 34' W. The species probably breeds near the chinstrap colony at Metchnikoff Point where adults but no nests were observed. On the east coast, gulls were decidedly scarce between 64° 31' S, 62° 35' W and 64° 27' S, 62° 23' W, but noted regularly at appropriate places along the coast thereafter, two single nests being seen at Buls Bay (64° 23' S, 62° 15' W). At least 17 nests were on cliffs on the Brabant side of Lecointe Island.

Antarctic tern (*Sterna vittata*)

Small numbers of terns were noted along the coasts of Brabant Island where only a few colonies were observed. On 29 December, about 100 terns, half subadult, occupied a cliff colony at 64° 15' S, 62° 32' W; three readily accessible nests had one egg each. Terns seen milling near the chinstrap colony at Metchnikoff Point appeared to be nesting. On 30 December, at Buls Bay, we found 11 nests, six with one egg and five with two eggs each.

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