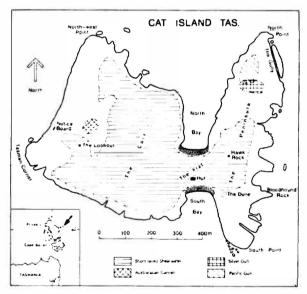
Cat Island. Tasmania

Location: 39° 57′ S., 148° 21′ E.; in Bass Strait about 7 km from the eastern coast of Flinders Island and separated from Babel Island by a passage about 200 m wide.

Status: Wildlife Sanctuary controlled by the National Parks and Wildlife Service (Tas.).

Description: A dumbell-shaped island of some 49 ha; about 0.8 km by 1 km. It is wholly granitic and rises to only about 32 m above sea level at "The Lookout". Nearby stands an unmanned lighthouse at 29 m (a.s.l). Most of the surface is covered with low vegetation growing in a sandy soil which is quite deep over much of the island. There is no permanent fresh water. Most of the coastline is rocky but not precipitous and there are two short sandy beaches. The steep cliffs of Babel Island tower over the eastern shoreline. A letter by James Campbell in 1828, in the Mitchell Library, suggests that The Calf and The Peninsula may have formerly been separate islands (Gannet Island being the name for the former), The Flat representing a later accumulation of sand, a tombolo (D. L. Serventy, pers. comm.). Nearby Storehouse Island is granitic like Cat Island, but of smaller area. These three islands comprise Flinders' "Babel Group" which in turn form part of the Furneaux Group. The main plant is *Poa poiformis* whose tussocks cover most of the centre of the island but over



 Breeding locations shown are those for the 1957-58 season.

smaller areas Bower-spinach Tetragonia implexicoma, the saltbushes Atriplex cinerea and Rhagodia baccata or Hollyhock Lavatera plebeja predominate.

Around the gannetry a rich growth of the Leek Lily Bulbine semibarbata forms a dark green



Cat Island from Babel Island (looking east).
 The rounded point nearest the camera is Tasman Corner, the most easterly part of The Calf. Mutton-birders' huts are in the foreground.

peripheral belt. On the northern end of The Peninsula (see map) and in the mainly peripheral areas where the soil is thin and subject to salt spray, there are mats of *Disphyma australe*. A near-complete sample of the flora collected by Pat Warham in 1957-58 is in the National Herbarium. Melbourne.

Landing: On either of the beaches, but South Bay is generally preferred, the other being a little more hazardous due to partly submerged rocks.

Ornithological History: This "small south-eastern island of the Furneaux Group" was referred to by Matthew Flinders, who named the Babel Isles and it must have been Cat Island on which Bass landed on 8 January 1799 to collect a boatload of seals and gannets. Early visits included that of the Victorian Field Naturalists' Club in 18933,8, of Le Souef in November 190111, and an Australasian Ornithologists' Union expedition in 1908^{2.21}. Another A.O.U. Camp-out on Flinders Island in November 1912 included a visit to Cat Island¹³. There followed a long gap in published accounts until the Andersons landed on 23 October 19351. The Tasmanian Animals and Birds Protection Board stationed wardens on Babel Island during parts of the summer from 1935 to 1939 primarily to guard the declining Cat Island gannetry, and on Cat Island itself from 1955 to the 1959-60 breeding season. One of the wardens, present from 14 January to 18 March 1957, gave a species list for the island⁵. Work undertaken by Warham and his wife during their stay from 14 November 1957 to 5 April 1958, dealt with aspects of the biology of the gannet¹⁷, Little Penguin¹⁸ and the Shorttailed Shearwater¹⁹. Dr Mary Gillham also worked on the island during 15-22 February 1958 examining plant-seabird associations⁹.

Breeding Seabirds and Status

Eudyptula minor Little Penguin — Nests in burrows, under rocks or beneath clumps of Bower-spinach. Most nests are around the coast or on The Flat (see map); few are on the centre of The Calf which is very heavily burrowed by shearwaters. No census was attempted during the 1957-58 visit, but during that visit the main influx of birds at dusk on the principal landing place of the North Beach never exceeded 25 birds. The main egg-laying probably occurs in September, though this may be protracted; most young would leave during December and January.

Puffinus tenuirostris Short-tailed Shearwater — Breeds abundantly on the island. Counts of burrows within quadrants set up in Poa and Tetragonia and estimates of the areas of these vegetation types available for burrowing gave a figure of 250 000 shearwater burrows at about one per square metre. Few burrows seemed to be unoccupied in 1957-58 and it was estimated that about 1 150 eggs were laid on the surface presumably by females without borrows¹⁹. Mutton-birding is not permitted on Cat Island. Birds are present to breed from late in September until the departure of the young by early May.

Morus serrator Australasian Gannet — Breeds on the island from October (egg laying) to April or early May when successful fledglings leave. The gannetry has declined alarmingly during the past 70 years²⁰. Between 5 000 and 10 000 birds were recorded breeding in 1908^{2,12}. In February 1977, 14 adults and 6 young were present²⁰.

Haematopus fuliginosus Sooty Oystercatcher — At least 7 nests in 1957-58 season; nesting was over and the birds were moulting primaries by 11 March.

Larus novaehollandiae Silver Gull — These birds appeared to have been more successful in 1957 than in 1958. In the latter year up to 100 birds occupied an area of flat rocks on The Peninsula and about a dozen clutches appeared. On 24 February some 300 birds roosted thereabouts but on 5 March virtually all the nests were found to be abandoned, cause unknown. Very few chicks must have been reared that year.

Larus pacificus Pacific Gull — Recorded breeding "in numbers" in December 1908²¹. Apparently breeds regularly on the island. In 1957-58, most bred in a fairly compact colony on The Peninsula (see map) with single pairs elsewhere e.g. at North West Point (also on nearby Storehouse Island). Up to 100 were seen in the air at one time when alarmed by a sea-eagle. Probably between 20 and 30 clutches were laid.

Sterna bergii Crested Tern — Probably breeds irregularly on the island. Early reports did not record breeding. However, they nested on the north coast of the island in 1954-55; the nesting sites were identified by the characteristic vegetation associated with manuring by terns. Although often present on and off-shore in 1957 and 1958, they did not nest.

Factors Affecting Status

The main predator has been man. His depredations on the gannets were highlighted in 1949¹⁵ and a summary in 1978²⁰ covered the period up to 1977. The birds have been used for crayfish bait, being clubbed to death on the rookery and shot at sea nearby. Short-tailed Shearwaters and Little Penguins have been treated similarly, the latter being said to make the best bait. The lighthouse is only about 30 m from the gannetry, hence helicopter-servicing of this navigation aid means another man-made source of disturbance when that operation takes place during the breeding season. Natural enemies are few. White-bellied Sea-Eagles Haliueetus leucogaster, Peregrine Falcons Falco peregrinus, Brown Falcons F. berigora, Australian Kestrels F. cenchroides and Marsh Harriers

Circus aeruginosus all fly over the island quite frequently and have been seen either feeding on carrion or on recently dead gannets and shearwaters; they may well kill some birds, but it seems unlikely that they have any serious effect on the populations. Forest Ravens Corvus tasmanicus are also plentiful in late February to April feeding on dead shearwaters and they take some live chicks from shallow nests. Tiger Snakes Notechis scutatus, which are abundant, and Blue-tongued Lizards Tiliqua nigrolutea, which are common, take eggs and small chicks of the shearwaters and probably of the penguins. Pacific Gulls devour most of the surface shearwater eggs and kill shearwaters and their chicks in exposed shallow burrows, but attacks on penguins are not recorded. These gulls also take gannet eggs and chicks when adults are disturbed by people¹.

OTHER VERTEBRATES

White's Skink Egernia whitii (common); Eastern White-tailed Water-rat Hydromys chrysogaster (common); Australian Fur Seal Arctocephalus pusillus (rare).

Other Seabirds Recorded

Pachyptila turtur
Pelecanus conspicillatus
Leucocarbo Juscescens
Phalacrocorax carbo
Phalacrocorax sulcirostris
Phalacrocorax
melanoleucos
Haematopus longirostris

Fairy Prion (derelict) Australian Pelican Black-faced Shag Little Pied Cormorant Great Cormorant Little Black Cormorant

Pied Oystercatcher

Banding

Period 1951 to 1977.

E. minor — 6 adults flipper-banded with sheep ear tags in 1957-58: No recoveries reported.

P. tenuirostris — 18 adults banded in 1957-58; 2 453 nestlings banded 1951-1969, with Tasmanian Animal and Birds' Protection Board bands. Two of these birds were resighted on the island 11 years later and one was found dead there 10 years after banding.

M. serrator — 15 chicks and 1 adult banded in 1952 with New Zealand Banding Scheme bands; 40 adults and 105 chicks were banded from 1954 onwards with Australian Bird-Banding

Scheme (CSIRO) bands: 19 nestlings and 13 adults have been found dead on the island, up to 13 years after banding. One chick (130-13115) banded in the 1957-58 season, was resighted there in 1968-69 and again in 1974-75, on this occasion 17 years after banding. Recoveries away from the island include one 3-year old at Eddystone Point, Tas. and one 4-year old at Bindley, Tas. (110 km and 140 km respectively).

L. novaehollandiae — 13 nestlings banded in 1956-57 season.

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I. Warham, Zoology Department, University of Canterbury, Christchurch, New Zealand.