SEABIRD ISLANDS

Chalky Island, Furneaux Group, Tasmania

Location: $40^{\circ}06'$ S., $147^{\circ}53'$ E.; 10.4 km westnorth-west of Whitemark, Flinders Island, Furneaux Group, Tasmania.

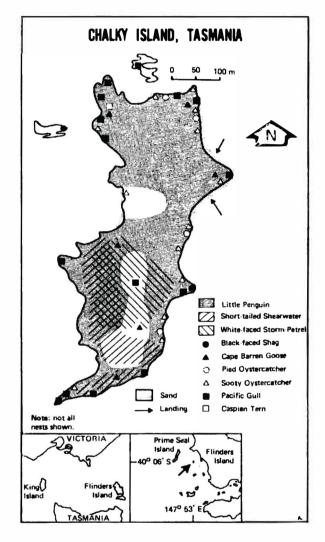
Status: Wildlife Sanctuary; written authority from National Parks and Wildlife Service, Tasmania, is required to work on the island.

Other Name: Big Chalky Island.

Description: 38.5 ha; 800 m long and 300 m at the widest point. tapering at the southern end; 24.1 m high. The vegetation is of two major types: The northern sandy part of the island is a low coastal shrub-land of *Olearia axillaris*. Leucopogon parviflorus and Rhagodia baccata, and the southern part carries a tussock grassland of *Stipa teretifolia*, Poa australis and *P. bulbosa* with areas of *Tetragonia implexicoma* and granite outcrops. The foreshores comprise mostly granite boulders of varying size except for a large sandspit and mudflat on the northeast coast and a sandy bay on the mid-western side. A cairn marks the highest point.

Landing: It is possible to land on the sandspit in almost any weather.

Ornithological History: T. Scott** described Chalky Island as "always frequented by numerous birds; principally gulls, and cormorants (or shags) who build their nests almost covering the surface." On 27 November 1893, J. Gabriel² recorded "one clutch of Caspian Tern's eggs only" and A. J. Campbell¹ recorded a flock of 20 Cape Barren Geese. E. R. Guiler³ recorded Chalky Island as being fully utilised for breeding by Cape Barren Geese with 8 (?) pairs. J. Whinray made seven visits in 1972, a visit in January 1975 and another on 10 April 1977; he recorded — Little Penguin (breeding 1972 and 1975; two calling in colony 1977); Shorttailed Shearwater (about 120 birds noted to have been processed illegally 1977); Whitefaced Storm-Petrel (breeding 1972 and 1975;



four burrows noted empty 1977); Australian Pelican (ten on sandspit 1977); Black-faced Shag (seen 1972; 40 + 60 seen 1977); Cape Barren Goose (breeding 1972 and 1975; eight on sandspit 1977); Pied Oystercatcher (seen 1972 and 1975); Sooty Oystercatcher (one pair

^{*} Thomas Scott (1800-1855) — Assistant Surveyor, Tasmania, 1821-c.1835.

breeding 1972); Silver Gull (one pair breeding 1972; 13 on sandspit 1977); Pacific Gull (18 adult and four immature birds on sandspit 1977); Caspian Tern (one pair breeding 1972); Fairy Tern (29 pairs breeding 1972); Crested Tern (five seen 1977).

B. I. Robertson has visited and camped on the island regularly since January 1976, most visits being in November-December.

Breeding Seabirds and Status

Eudyptula minor Little Penguin — Recorded breeding from January 1976 to December 1980. The majority of eggs hatch in December, although two small chicks were found in a burrow on 9 September 1977. No birds were found breeding 13-15 May 1980. Burrows were located between and under rocks around the perimeter of the island. A large colony is located in sand under the vegetation over the northern half of the island. Isolated burrows are present in rocky outcrops in the southern grassland community. The highest mean burrow density recorded in a 10 m² quadrat in December 1976 was 0.08/ m². The total estimate of burrows was 3 500. A study area incorporating 26 burrows was established in November 1980.

Puffinus tenuirostris Short-tailed Shearwater — Recorded breeding annually 1976 to 1980. Burrows are found only over the southern half of the island in areas where *Tetragonia* affords a break in the dense *Poa* sward. In December 1976 three 10 m² quadrats were chosen in representative areas of differing burrow density $(0.17/m^2, 0.08/m^2$ and $0.05/m^2$). The total burrow estimate was 2 300.

Pelagodroma marina White-faced Storm-Petrel — Whinray⁶ believed this to be the largest colony of this species in the Furneaux Group, being ". . . at least a hectare in size and has been known locally since at least the 1920s." They have been recorded breeding every season since November 1976, when the colony covered an area of at least 2.1 ha. Burrows are located in soil between *Poa* tussocks or under superficial vegetation over the southern half of the island. A few burrows extend into the southern edge of the scrub-land area. In November 1976, a 10 m² quadrat had a burrow entrance density of $0.8/m^2$, giving an estimated 16 800 burrows.



Corella 5 (3)

• Chalky Island from the air (looking south).

This is possibly an over-estimate as some burrows have two or three entrances. A 10 m² study area was established in November 1979. This area had an average burrow entrance density of $1.5/m^2$; some burrows were unoccupied. Preliminary banding and retrap data indicate that the population could comprise at least 35 000 birds including non-breeding ones.

On 9 September 1979 numerous fresh scrapings were evident. Three burrows were checked; two were empty and one contained two birds. Between 22 and 28 November 1979, incubation was occurring and eggs were still being laid. Chicks of bandable size were found on 27 December 1979. Eggs were found in two burrows examined on 11 December 1978. A dead chick was found outside a burrow and two burrows each contained a live chick on 17 December 1976. Both eggs and small chicks were found on 21 December 1977.

Leucocarbo fuscescens Black-faced Shag — Whinray⁶ recorded empty nests on the tip of the eastern point in 1972 and 1975. In November 1976 there was a breeding colony at the eastern point, with over 50 adult and immature birds. Two colonies were present on the island in November 1978, one on the tip of the eastern point (131 adult and immature birds) and another on a reef off the north-west point (48 nests with numerous adult and immature birds). The eastern colony was disused and littered with carcases from the previous season when examined in November 1979. Breeding was in progress in the western colony on 9 September

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• View of the sandspit from the north-eastern point

1979; there were 68 nests and 111 birds (adult and immature) on 28 November 1979. The only birds breeding in 1980 were in the western colony, and 65 nests were recorded on 3 December 1980.

Cereopsis novaehollandiae Cape Barren Goose - Geese have been recorded breeding successfully since 1976. Most goslings are half to threequarter grown and well feathered by late November. Breeding was later in 1980 than in previous years, with many chicks in down and some still with the egg tooth present on 18 November 1980. Geese nest solitarily in open grassy areas over most of the island. The largest flock of geese seen on Chalky Island was 14 on 18 November 1980. At least eight pairs bred in 1979-80. On 9 September 1979 two nests (4 eggs and 5 eggs) and three small chicks were found. Another six nests were located in November-December 1979. At least six pairs bred in 1980-81: Three nests were found and at least three other clutches of goslings were recorded.

Haematopus longirostris Pied Oystercatcher — Recorded breeding annually since 1977. Four pairs were present in 1979-80 and 1980-81. All bred successfully in 1979-80 and at least three pairs bred successfully in 1980-81. Most clutches had hatched by early November. The only nest found was a clutch of one egg located in a depression in the sand above the spring tide level. This egg hatched successfully late in November 1979. Haematopus fuliginosus Sooty Oystercatcher — In 1979-80, 18 pairs nested, with three being unsuccessful and renesting. A total of 17 nests was found in November-December 1980 while two more pairs had not nested but were occupying territory. One pair nested at the same site in 1979 and 1980 and laid two erythristic eggs each time. Nests are solitary and usually located among rocky outcrops; some were found under bushes and even in the springtide seaweed. Sooty Oystercatcher have been recorded on the island since November 1977.

Larus pacificus Pacific Gull — Recorded breeding since January 1976. Between 15 (1976-77 and 1980-81) and 21 (1979-80) pairs nested annually. Nests are solitary and located on rocky outcrops. Most nests were around the perimeter of the island although some were found inland or on offshore reefs. Most eggs hatched in late November-early December. On 2 January 1980 no chicks had fledged. A fledgling was noted begging for food from adults on 18 January 1976.

Hydroprogne caspia Caspian Tern — A pair of adults has been seen every summer since January 1976. They have been recorded breeding on three occasions — 18 January 1976 when two large runners were found, 23 November 1976 when one small runner was found, and November 1979 when one egg was crushed and the other taken by a predator.

Sterna nereis Fairy Tern — A variable number of these birds has been recorded since 1976. Breeding was recorded once, in 1978, when one nest (2 eggs) on 25 November expanded to a colony of nine nests (5 eggs) on 5 December, when a high tide washed away four nests (7 eggs). Two more nests (2 eggs) were found on 7 December. The most birds recorded was 40 on 5 December 1978.

Factors Affecting Status

Prior to 1945, Chalky Island was leased by residents on Flinders Island for grazing sheep. Whinray⁶ noted that the island was fired by quail shooters in 1968, and recorded illegal muttonbirding on 10 April 1977. There are reports of Little Penguins perishing in fishermen's nets, and of various seabirds being used for crayfish bait. White-faced Storm-Petrels are frequently found in Pacific Gull pellets. Pacific Gulls take Sooty Oystercatcher eggs and chicks, surfaced Shorttailed Shearwater eggs, and other gull eggs. Forest Ravens Corvus tasmanicus and snakes presumably pose a threat to all ground-nesting seabirds. Freshly killed and stripped Short-tailed Shearwater carcases have been found, presumably killed by a Marsh Harrier Circus aeruginosus or Brown Falcon Falco berigora which visit the island. No cats or rabbits are recorded.

OTHER VERTEBRATES

White's Skink Egernia whitii, Metallic Skink Leiolopisma metallica, White-lipped Snake Drysdalia coronoides and Black Tiger Snake Notechis ater have been recorded.

Other Seabirds Recorded

Pachyptila turtur	Fairy Prion (derelict and in Pacific Gull pellets).
Pelecanus conspicillatus	Australian Pelican
Phalacrocorax melanoleucos	Little Pied Cormorant
Larus novaekollandiae	Silver Gull (recorded copulating 22.11.76 and 28.11.78).
Sterna bergii	Crested Tern (recorded copulating 6.12.77 and 22.11.79).

Banding

E. minor — 356 chicks (since Nov. 76); 19 dead recoveries, mostly at Victorian beaches.

P. marina — 2 893 adults, 11 chicks (since Nov. 79); one recovery at banding place — in Pacific Gull pellet three day after banding.

H. longirostris — 13 runners (since Nov. 77); no recoveries reported.

H. fuliginosus — 10 runners, 1 adult (since Nov. 77); no recoveries reported away from the island.

L. pacificus — 116 runners, 1 immature, 9 adults (since Jan. 76); dead recoveries reported from Whitemark (Flinders Island) and Tamar Estuary, Launceston, Tas. Most birds were colour-banded and numerous sightings have been made on Chalky Island and Flinders Island.

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Acknowledgements

I wish to thank the National Parks and Wildlife Service, Tasmania, particularly Mr I. Skira, for assistance; and the M.A. Ingram Trust and CSIRO Science and Industry Endowment Fund for financial assistance. Plants were identified by Dr D. H. Ashton, University of Melbourne. Reptiles were identified by Messrs P. Robertson and M. Turner. Mr S. Murray-Smith provided historical information. Mr D. Purchase, Secretary, Australian Bird-banding Scheme gave helpful advice. Mrs P. Reilly assisted with work on the Little Penguin. S. Chidgey, A. McDonald, P. Dann, V. Brown, G. Hill, R. Gordon, Wm and A. Wakefield, K. Lowe, R. Lorenzon and M. Turner assisted in the field. Derek Smith and his family, especially Margaret, provided hospitality and invaluable assistance whilst on Chalky and Flinders Islands. Dr A. A. Martin, University of Melbourne, assisted throughout the study and commented on the manuscript.

Date compiled: 6 March 1981.

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