Corella 3(3)

No. 72

SEABIRD ISLANDS

St Helens Island, Tasmania

Location: 41° 02' S., 148° 21' E., 2 km offshore and 8 km south-south-west from St Helens Point on Tasmania's east coast.

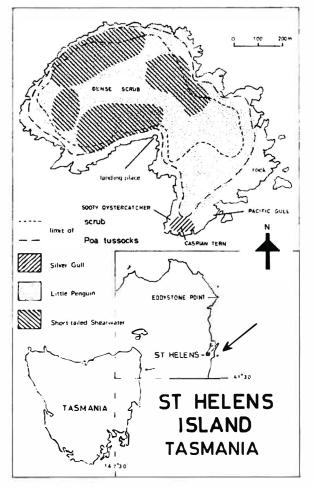
Status: Crown land. National Parks and Wildlife Services' regulations apply to the breeding seabirds and to the taking of "muttonbirds".

Description: 51 ha; roughly kidney-shaped, 1 130 m long and 610 m at its widest point. The concave curve of the "kidney" forms an obvious double gulch towards the south-west and the deeper of these two inlets provides a convenient anchorage. It is a granite island with a steeply sloping rocky shoreline and no beaches. The uneven terrain is covered by sandy loam and rises to two plateau-like summits each about 30 m above sea level.

Much of the larger north-west section is dominated by Acacia sophorae and Leucopogon parviflorus scrub, above a coastal periphery of thick Blue Tussock Grass Poa poiformis. Exposure and fires have markedly reduced scrub coverage on the smaller south-east portion where Poa tussocks predominate. There are no trees nor were any species of eucalypt noted. Other shrubs of lesser importance include Acacia botrycephala, Leptospermum scoparium and Eriostemon virgatus. An interesting herb present is Senecio capillifolius, which is common on islands in Bass Strait but hitherto not recorded so far south. Bracken Fern, Pteridium esculentum is common throughout and a thick covering (now) of Tetragonia implexicoma is present above the shoreline in the gulch area.

Annual rainfall can only be estimated but would approximate 500 mm in a typically irregular pattern. Freshwater occurs only in a few soakages around the coastline, the largest being near the gulch. St Helens Island is very exposed to winds which sweep it from all directions.

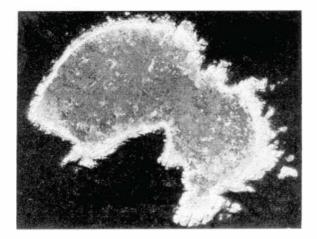
Landing: Can be difficult due to wind and swells. During calm weather, is best attempted at the gulch.



Oraithological History: Visited by T. J. Mc-Manus a number of times between 1 September 1977 and the end of April 1978. A search of the literature and The University of Tasmania records failed to reveal any previously published material or observations.

Breeding Seabirds and Status

Eudyptula minor Little Penguin — There are



• St Helens Island from the air (looking north).

thousands of burrows all around the island, extending up to 200 m inland. There was very little activity during the first week in September 1977 and many penguin burrows had been taken over by rabbits. Intense colony activity commenced in mid-September; by the first week in December 1977 all the rabbits had been evicted and nearly every nest contained two fully fledged chicks with an occasional egg in a few burrows. An inspection on 27 February 1978 indicated that most of the young penguins had departed but adults remained. Estimated 15 000 (+) breeding pairs.

Pufinus tenuirostris Short-tailed Shearwater — These birds appear to be equally as plentiful as the Little Penguins, their burrows being interspersed in many places with those of the latter. This probably causes considerable upset early in the breeding season as the penguins commence egg laying first. In December 1977, an egg was being incubated in every shearwater burrow examined. All had hatched by February 1978. The combined return of thousands of Short-tailed Shearwaters and Little Penguins to their crowded colonies at about 22:00 hours in December was an extremely noisy experience. Estimated 15 000 (+) breeding pairs.

Haematopus fuliginosus Sooty Oystercatcher — One pair was nesting at the southern extremity of the island during the first week in December, 1977. The birds were not present on 15 September 1978. Larus novaehollandiae Silver Gull — A well established breeding colony is located among the rocks on the south-east corner of the island. None of the nests was occupied during any of the visits in September but on 6 December 1977, breeding was almost completed with only about 6 nests containing eggs or small chicks; several hundred immature and adult birds were present. Estimated 250 breeding pairs.

Larus pacificus Pacific Gull — One pair of adult birds displayed territorial behaviour about 100 m north-east of the Silver Gull colony in early December 1977. No nest was located but three juvenile birds were seen on a nearby offshore rock.

Hydroprogne caspia Caspian Tern — On 7 December 1977, a pair was at their nest containing two eggs, almost in the centre of the Silver Gull colony.

Factors Affecting Status

Formerly the breeding seabirds were relatively undisturbed except for periodic harvesting of about 50 muttonbirds annually. In 1920 Swamp Quail Coturnix ypsilophora were released by a local resident for "future sport". Shortly afterwards fishermen introduced Rabbits Orvctolagus cuniculus apparently to provide a readily available source of crayfish bait. These rabbits bred up quickly and by 1925 had caused severe damage to vegetation with consequent wind erosion. St Helens townspeople, anxious about the breeding colonies, organised a door-to-door campaign to collect as many domestic cats as possible to "clean up the rabbits". Their venture proved successful and by 1930 all the rabbits had disappeared. Shortly aftewards an infectious feline virus disease eliminated the cats and the seabird colonies remained undisturbed until 1935. From then until 1965 the island was used intermittently by two lessees for grazing sheep. Shearwater numbers have increased steadily since the 1920's and the annual harvest is now about 4 000 birds.

In 1975 irresponsible people again released rabbits on the island. Complaints to the Tasmanian Departure of Agriculture emanating from this second introduction resulted in the 1977-78 series of visits during which data for these notes were collected.



• Typical shoreline looking west towards the Tasmanian mainland.

The first visit on 1 September 1977 revealed extensive damage to vegetation throughout and the beginning of wind erosion on colonies where rabbits had usurped burows and cropped nearby *Poa* tussocks to ground level.

During an extended visit in early December 1977, live rabbits were captured, injected with the virulent Lausanne strain of Myxoma virus and infested with rabbit fleas *Spilopsyllus cuniculi* before being released back into their respective territories. Rabbit fleas were also distributed at suitable sites throughout the island.

A check in late February revealed that the programme was progressing as anticipated. Many carcasses were seen and only eight live rabbits observed. No live rabbits have been seen on the island since April 1978.

On 15 September 1978 the difference in appearance of the island subsequent to what seems to be the total elimination of the rabbits, was amazing. Much of the foreshore was covered with green grass up to 10 cm high; the formerly heavily grazed *Tetragonia implexicoma* had spread extensively over colonies, particularly on the western side of the island and plants of *Pelargonium australe*, previously unrecorded, were everywhere. None of the vegetation, including milk thistles, had been grazed nor were there any droppings on the four dungsites, where originally up to 600 pellets were removed from each. Bushes and shrubs were also recovering well.



• A view of the vegetation (looking north-west).

OTHER VERTEBRATES

There is no evidence of rats or any other furred vertebrate. Nor are there any snakes, the only reptiles being skinks — *Leiolopisma* spp. — which are plentiful among the rocks and tussocks.

Two pairs of Marsh Harriers Circus aeruginosus regularly nest on the island. In the absence of the rabbits these may prey on young Silver Gulls.

Other Seabirds Recorded

Leucocarbo fuscescens Black-faced Shag

Banding

Acknowledgements

I am grateful to the St. Helens-based Fisheries Patrol Officers of the Tasmanian Department of Sea Fisheries for providing transport to the island and to local Tasmanian Police Officers for their assistance with radio communications.

Date compiled: 25 October 1978.

Nil.

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