

PRELIMINARY NOTES ON NOTECHIS SCUTATUS NIGER KINGHORN, ON CAT ISLAND, FURNEAUX GROUP, TASMANIA

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ABSTRACT

The occurrence of *Notechis scutatus niger* on Cat Island is recorded and its feeding habits and comparisons with the common mainland species discussed.

Details of examinations of fifteen specimens of *Notechis scutatus niger* collected on the island are given.

INTRODUCTION

The following observations are based on a stay of some nine weeks on Cat Island between January 14th and March 18th, 1957.

Cat Island is well known for its gannet colony, and my wife and I, on behalf of the Tasmanian Animals and Birds Protection Board, visited the island to protect the gannets during their breeding period.

The stay gave us good opportunity to observe and compile notes on other aspects of the island's fauna.

The present paper is on the occurrence of *Notechis scutatus niger* on Cat Island. (For an account of the bird life of the island see Cashion, *The Emu*, Vol. 58, p. 327.)

THE ISLAND

Cat Island (lat 39° 57' S., long. 148° 21' E.) lies three or four miles off the exposed east coast of Flinders Island in Bass Strait. It is flanked by two closely adjacent islands; the much larger Babel Island off the west shore, and the slightly smaller Storehouse Island off the south-east shore.

Cat Island, generally, is low lying, irregular in shape, and is approximately a mile long and nearly as broad at its widest point.

The shoreline is almost entirely rocky, the east shore particularly so. There are two small sandy beaches of about equal size, one on the south side of the island, and the other opposite on the north shore. The island is honeycombed with shearwater and penguin burrows and for the main part is covered with tall dense tussocky grass (*Poa*). Other plant species occur as well. A creeping native spinach (*Tetragonia*) is particularly concentrated near the hut, which is located in a slight hollow between the two beaches. Low shrub and thickets flourish, particularly on and about the slopes of a low sandy knoll just east of the hut. Pig-face (*Disphyma*) is also found in profusion, noticeably more so along the western shore.

OBSERVATIONS

Notechis scutatus niger is very common on Cat Island. Originally described from Kangaroo Island and commonly known as the Black Island Tiger

Snake, this variety is generally accepted as a melanistic form of the mainland species. The predominant colour is black, but several specimens of olive-brown colouration were met with which showed faint traces of transverse banding. Some authorities suggest that this insular form is lethargic as compared with the mainland species. I did not always find this so. On a number of occasions disturbed individuals made off into the tussocks or down burrows with an agility and speed very comparable with tiger snakes I have observed on the Tasmanian mainland.

If *Notechis scutatus niger* does at times show a tendency towards torpidity it could be influenced by either one of two factors or a combination of both. An overindulgent food supply could induce torpidity as could bleak weather conditions which often prevail in their island homes.

Compared with the common tiger snake, the island variety is also regarded as averaging greater size, individuals exceeding six feet in length having been recorded. This would indicate an abundant food supply as it is certain size and rate of growth in snakes is influenced greatly by the amount of food available. On Cat Island it would seem there is a definite food cycle which would fluctuate, and, due to the availability of young birds, would reach its peak at or about the time of my visit.

It would make an interesting study to follow this food cycle as it would then be possible to obtain a more complete picture of the diet of the snakes at the various stages of the cycle, but such an analysis would, of course, entail an examination of a large number of stomach contents.

A cursory examination of stomach contents of *Notechis scutatus niger* on Cat Island would suggest a tendency for the larger individuals to feed principally on the small young of the Short-tailed Shearwater (*Puffinus tenuirostris*) when these were available, whilst the smaller specimens would concentrate more generally on small skink lizards (*Leirolapisma*) which are very plentiful on the island.

It would appear therefore, that there would be an element of competition in these island snakes, in as much as the more mature individuals would compete with those less well developed for smaller prey, prior to and following the breeding period of the Shearwaters.

The tiger snake, it is said, is largely nocturnal and this it would seem may be true as on three occasions *Notechis scutatus niger* was observed after nightfall close by the hut.

It seems certain they are most active during cooler conditions, especially before and after a rainstorm. On one occasion under such circumstances five snakes were encountered within a few minutes in a small area near the hut. Throughout hot spells their absence was most noticeable, apparently preferring the relative coolness of a burrow or the shade of the dense tussocks.

The following notes are details of examinations of fifteen specimens of *Notechis scutatus niger* collected on Cat Island.

- 14.1.1957:—
Length: 785 millimetres.
Weight: 90 grams.
Colour: Dark-brown; faint traverse bands.
(No other data recorded.)
- 25.1.1957:—
Length: 847 millimetres.
Weight: 120 grams.
Colour: Blackish-brown. (No other data recorded.)
- 28.1.1957:—
Length: 720 millimetres.
Weight: 80 grams.
Colour: Black.
Stomach contents: One small skink (*Leiolaps*) and two tails of the same genus.
- 31.1.1957:—
Length: 810 millimetres.
Weight: 115 grams.
Colour: Brownish-olive above; throat and underparts anteriorly yellow, graduating greenish-slate towards tail. ♀ ovaries not enlarged.
Stomach contents: Unidentified larvae and fragment of small dark feather.
- 31.1.1957:—
Length: 770 millimetres.
Weight: 110 grams.
Colour: Blackish-brown, underparts bluish; throat yellowish-white.
Stomach contents: One small skink (*Leiolaps*) and portion of one of the same genus.
- 31.1.1957:—
Length: 925 millimetres.
Weight: 150 grams.
Colour: Brownish-olive, faintly banded; underparts bluish; throat yellow.
Stomach contents: Nil.
- 31.1.1957:—
Length: 995 millimetres.
Weight: 260 grams.
Colour: Black; underparts, throat bluish-white, darkening posteriorly. ♀ ovaries not enlarged.
Stomach contents: Partly digested remains of a young Short-tailed Shearwater.
- 31.1.1957:—
Length: 1,115 millimetres.
Weight: 470 grams.
Colour: Black; throat bluish-white, darkening posteriorly. ♀ twelve young (approximately 50 millimetres in length) in bifurcate uterus.
Stomach contents: Nil.
- 1.2.1957:—
Length: 1,000 millimetres.
Weight: 385 grams.
Colour: Olive-brown, faintly indicated traverse bands yellowish-brown; underparts, throat pale-yellow, darkening towards tail. ♀ thirteen young (averaging 150-160 millimetres in length) in bifurcate uterus. The young, brownish-black in colour, were transversely banded.
Stomach contents: Two legs of a very young Shearwater.
- 1.2.1957:—
Length: 1,285 millimetres.
Weight: 575 grams.
Colour: Black; underparts dark-slate; throat yellowish-white. ♂ ?
Stomach contents: Partly digested remains of a young Shearwater.
- 7.2.1957:—
Length: 1,125 millimetres.
Weight: 420 grams.
Colour: Brownish-olive, faintly banded yellowish-brown; underparts greenish-slate darkening towards tail; throat yellow. ♂ testes not enlarged.
Stomach contents: Nil.
- 15.2.1957:—
Length: 1,125 millimetres.
Weight: 660 grams.
Colour: Black; underparts dark-slate; throat yellow. ♀ thirteen young (approximately 190 millimetres in length) in bifurcate uterus. The young were dark-coloured and transversely banded.
Stomach contents: Nil.
- 4.3.1957:—
Length: 785 millimetres.
Weight: 110 grams.
Colour: Dark-brown; underparts dark-slate; throat yellow.
Stomach contents: One small skink.
- 10.3.1957:—
Length: 1,240 millimetres.
Weight: 592 grams.
Colour: Black; underparts dark-slate; throat yellowish. ♂.
Stomach contents: Nil.
- 16.3.1957:—
Length: 1,095 millimetres.
Weight: 440 grams.
Colour: Dark-brown, faintly banded yellowish-brown; underparts slate; throat yellowish-green. ♂.
Stomach contents: Portion of a very young Blue-tongued Lizard (*Tiliqua*).

ACKNOWLEDGEMENTS.

My thanks are due to Dr. W. Bryden who read the script and made helpful suggestions; also the Tasmanian Animals and Birds Protection Board for their co-operation and for offering me the opportunity to visit Cat Island, and the Trustees of the Tasmanian Museum for their kindness in granting me leave of absence for my period of stay.