On bibliography

TAPUTERANGA ISLAND : REPORT

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Wildlife Research.
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This report includes observations made on 24th and 26th January, and 1st February 1979.

Introduction

Taputeranga Island is situated in Wellington's Island Bay and is 200-300 metres from the shore. As it was believed to have a population of Norway rats, we felt it warranted an investigation to ascertain its value as a convenient study island.

Investigation has confirmed the presence of Norway rats, I found several possum droppings but saw no animals, I suspect they spend the day in the dense flax on the south slope.

Topography

The island is in two parts totalling approx. 2.0 ha. in area. A sharp central ridge runs east-west on the main island and rises to a height of approx. 40 metres above sea level. A few associated rock outcrops occur generally to the south of this ridge.

To the north-west, and separated by a narrow channel, is a flat islet of no more than a few metres above sea level and approx 300 m. long by 100 m. wide. The shingle beaches at either end provide roosting areas for black-backed gulls.

Vegetation (Table 1)

Small trees and large shrubs were confined entirely to the north facing slope of the main island, dominant plants being pohutukawa and karo. A few exotic species also occur on the north slope. The dominant plant on the south slope was flax, giving way to silver tussock on the south-east corner of the ridge. Spaniard was also abundant on the southern slopes.

Dense, prostrate shrubs on the flatter ground away from the slopes, comprised mainly of *Hymenanthera crassifolia*, *Muehlenbeckia complexa*, *Coprosma propinqua* and *C. repens*, the last of which was common throughout.

In order of abundance, plants found in salt-exposed localities were glass-wort, *Salicornia australis*; ice-plant, *Disphyma australe*; and seablite, *Sueda nova zealandia*.

Fauna

1. Skinks were frequently seen amongst rocks, taupata and drift-wood washed well inshore. Until a few specimens are caught for positive identification, I can only suggest at this stage it is likely to be Leiolopisma nigriplantare macanni. Considerable pattern variation in the individuals observed, is apparently a feature of this species.

2. Black-backed gulls appear to have an established colony on the island and islet. There were many fledged and partly-fledged juveniles. Of the five nests with eggs, at least three were definitely being brooded.

A pair of black oystercatchers were present on a small outcrop on the north-east corner of the island. They became restless when approached but were reluctant to fly very far. A thorough search for eggs or chicks was unsuccessful.

Other birds observed were; starlings (a flock of ca. 15); rock-pigeons (6) at the south end of the islet; and a solitary reef heron by rock-pools at the southern edge of the main island.

3. Mammals observed consisted solely of Norway rats which were not actually seen until the third visit when one was found partly eaten, partly decomposed in a trap set on the first visit. Four live individuals were seen during this visit. Droppings and several burrows suggested the presence of several more individuals.

The rats appeared to confine their activities to the more level parts of the island. Most of the burrows found were at the bottom of the slope, although two were found on a short slope at the bottom of an outcrop on the south-west corner. Runways through grass and taupata were common, as were tunnels through the dense mats of C. Propinqua and Muehlenbeckia complexa.

Fresh water was found in only one rock-pool on the first and second visits. This pool also contained many mosquito larvae and Notonectid beetles, Anisops wakefieldi. Rat droppings around this and other dried up pools indicated regular use of these pools as a source of fresh water. The third visit was made shortly after a heavy fall of rain and many more pools in the same area were found. Fresh water was not found anywhere else on the island.

Carcasses of two black-back gull chicks were found beside nests but neither showed any signs of predation or scavenging. At two other localities however, dead adult black-back gulls showed signs of extensive rat-scavenging, the feathers of one bird being spread over an area of about one sq. metre.

No droppings or signs of scavenging were found on the flat islet but burrows and runways through the vegetation were common. Also found was a recently excavated burrow with a pile of freshly turned-up gravel and soil at the entrance.

Comments

In view of the present status of the rat research on the Noises Islands, I feel it is desirable to have near at hand, a known, thriving population of Norway rats. On Taputeranga Island we can carry out investigations which may further knowledge already gained from work on the Noises group.

These investigations may be extensions of ideas already tried; they may be pilot studies to test the feasibility of techniques; or they may simply be sampling for gut contents, ageing, reproductive status, etc.

A working arrangement has already been established with the technician-in-charge at the Victoria University of Wellington marine laboratory in Island bay, who will provide us with a dinghy and vehicle.

I feel the island has great potential for small-scale projects which will hopefully assist in increasing our understanding of island rat populations.

File: SAV 0142

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Additional information from field notes

FAUNA

1. Reptiles

Geckos, Hoplodactylus maculatus, found under rocks, on 10/12/79, by DMC and I A E Atkinson, Botany Div'n, DSIR.

Several skinks, Leiolopisma nigriplantare macanni found and identified by D G Newman, Dept of Conservation.

2. Birds

About 200 black-backed gull nests were counted by students working for Wellington Harbour Maritime Planning Authority on 8/12/80.

Black oystercatcher nests have been found in three different parts of the island, including two on the detached islet.

Other birds seen on the island are:

Black shags - roosting on north end of islet
Little shags - " " " " " "
Starlings - seen regularly
Mallards - seen occasionally
Hedge sparrow - heard singing

3. Mammals

3/4/88

A mouse, Mus domestics was seen for the first time in ~~December~~ 1988 by J M Llewellyn. Searches for droppings revealed presence all over island, even on first rock-stack at southern tip of island (normally only accessible at very low tide).

Possum droppings continue to be found (as recently as March 1990), mostly on the southern part of the island.

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26 April 1990

Attached:

1. Taputeranga Island: Report. D M Cunningham, 7 March 1979.
2. Plant species list, July 1980
3. Sketch map drawn from aerial photographs. D M Cunningham, 1980.

TAPUTERANGA ISLAND

Plant species list, July 1980 (* native)

FILICALES

Asplenium terrestre maritimum*

Microsorium diversifolium*

Polystichum richardii*
Pyrrosia serpens*

GYMNOSPERMAE

Pinus radiata

ANGIOSPERMAE

Monocotyledones:

Agropyron scabrum
Allium triquetrum

Bromus unioloides
Bromus spp (diandrus/sterilis)
Bromus mollis

Carex flagellifera*
Cordyline australis*
Cyperus ustulatus*

Dactylis glomerata

Ehrharta erecta

Hordeum murinum

Lagurus ovatus
Luzula banksiana*
Lolium perenne

Parapholis incurva
Phormium cookianum*
Poa laevis*
Poa pratensis
Puccinellia stricta

Scirpus cernuus*
Scirpus nodosus*

Triglochin striata*
Trisetum antarctica*

Dicotyledones:

Aciphylla squarrosa*
Achillea millefolium
Anagallis arvensis
Apium australe*
Aptenia cordifolia
Atriplex novae-zelandiae*

Barbarea spp
Brassica fruticulosa mauritanica

Callendula officinalis
Calystegia soldanella*
Carduus tenuiflorus
Cassinia leptophylla*
Centranthus ruber
Cheiranthus cheiri

Cirsium vulgare
Colobanthus muelleri*
Coprosma propinqua*
Coprosma repens*
Coronopus didymus
Cotula coronopifolia
Craspedia uniflora maritima*
Crassula moschata*
Crassula sieberiana*
Crepis capillaris

Dichondra repens*
Disphyma australis*

Euonymus japonica

Freesia spp
Fumaria muralis

Geranium molle
Glaucium flavum
Gnaphalium luteo-album*
Griselinia littoralis*

Haloragis erecta*

Lavatera arborea
Linum monogynum*
Lupinus arboreus

Medicago arabica
Medicago lupulina
Medicago polymorpha
Melicytus crassifolia*
Melicytus spp (cf obovata)*
Melilotus indica
Metrosideros excelsa*
Muehlenbeckia complexa*
Myoporum insulare

Myoporum laetum*

Orobanche minor

Parietaria diffusa
Pimelea prostrata*
Pittosporum crassifolium*
Pittosporum ralphii*
Plagianthus divaricatus*
Plantago coronopus
Plantago lanceolata
Plantago major
Polycarpon tetraphyllum
Pseudopanax lessonii*

Raphanus raphanistrum
Rhagodia triandra*
Rumex crispus

Salicornia australis*
Sambucus nigra
Samolus repens*
Selliera radicans*
Senecio glastifolius*
Senecio jacobea
Senecio lautus*
Silene gallica
Sonchus asper
Spergularia rubra
Sueda nova zelandica*

Tetragonia trigyna*
Trifolium arvense
Trifolium dubium

Ulex europeus

Vicia hirsuta
Vicia sativa

Wahlenbergia gracilis*

Additions to 1980 species list:

Arctotheca calendula
Chrysanthemoides monolifera

Crassulaceae: large-leaved spp, not yet identified.

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26 April 1990