

LIZARDS OF RAKITU (ARID) ISLAND

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SUMMARY

Five species of lizards have been recorded from Rakitu Island. These are the geckos *Hoplodactylus maculatus* and *H. pacificus* and the skinks *Cyclodina aenea*, *C. ornata* and *Leiolopisma moco*.

INTRODUCTION

Rakitu (Arid) Island lies 2.5 kilometres north-east of Great Barrier Island, rises to 220 metres and is approximately 350 hectares in area. About half of the island is covered in forest, although most of this is disturbed by stock; the remainder is pasture. Steep cliffs surround much of the coast, but there are several boulder and sand beaches.

The island was visited from 30 December 1980 to 8 January 1981, during which the lizard fauna was studied. Two offlying islets, "Gannet Rock" and "Close Island", were also searched, while the habitat preferences for different species were noted. Nomenclature follows Hardy (1977) for the Scincidae and Robb and Rowlands (1977) for the Gekkonidae.

SPECIES PRESENT

Hoplodactylus maculatus

Two individuals were captured, one on a boulder beach and the other under rocks in coastal vegetation.

H. pacificus

A specimen was collected in July 1980 by E.K. Cameron and was deposited in the Auckland Institute and Museum. A gravid female was located on a pohutukawa branch by spotlight.

Cyclodina aenea

Common in forest, coastal vegetation, open ground and shore habitats.

C. ornata

Four specimens were seen among litter in forested areas. One was caught in an insect pit-fall trap.

Leiolopisma moco

Common in areas of coastal vegetation (e.g. karo, kawakawa, pohutukawa, *Coprosma* spp., flax and *Leptospermum* spp.) and at the

backshore of one small boulder beach, where stones and taupata mats have afforded suitable protection from predators.

DISCUSSION

Although five lizard species have been recorded from Rakitu Island their population densities were generally low. This may be attributable to the presence of ship rats (*Rattus rattus*), North Island weka (*Gallirallus australis*) and the impoverishment of much of the available habitat by browsing stock. The combination of the two predators on an island whose flora has been extensively modified could result in this depauperate fauna. Another contributing factor could be feral cats which have been reported occasionally in the past.

Notable was the absence of the skinks *L. smithi* and *L. suteri*, despite suitable habitat. It is unlikely that they were overlooked, and both species can persist in the presence of predators, being widespread on similar islands throughout the north Auckland eastern coast.

C. aenea was found on several boulder beaches, although it is not common in this habitat in some other parts of its range. It may be partly utilising a niche left vacant by the absence of *L. smithi* and *L. suteri*.

No lizards were located on the two offshore islets examined although "Gannet Rock" provided habitat apparently suitable for *L. smithi* while *H. maculatus*, *H. pacificus* and *L. smithi* occur on stacks very similar to "Close Island" in other island groups.

REFERENCES

- Hardy, G.S. 1977: The New Zealand Scincidae (Reptilia: Lacertilia); a taxonomic and zoogeographic study. *New Zealand Journal of Zoology* 4: 221 - 325.
- Robb, J. & Rowlands, R.P.V. 1977: Reinstatement of *Hoplodactylus maculatus* (Boulenger) with redescription of *H. pacificus* (Gray). (Reptilia: Squamata: Gekkonidae). *Records of the Auckland Institute and Museum* 14: 133 - 142.