

**STOMACH CONTENTS OF A
NORTH ISLAND KIWI**
(*Apteryx australis mantelli*)
FROM THE RAETIHI DISTRICT
By P. C. BULL *

INTRODUCTION

The following details of the stomach contents of a kiwi from the Raetihi district supplement the information supplied by Gurr (1952) who reported on the stomach contents of a kiwi from near Waihi and also summarised the limited information then available on the food of the North Island kiwi.

The present bird, an adult female weighing 2450g., was killed by dogs on 24th November, 1956; the body was sent to the Dominion Museum. Being unsuitable for mounting, the specimen was made available to Dr. F. B. Shorland (Fats Research Laboratory, D.S.I.R.), who was studying the nature of fat deposits in various animals. The stomach of the bird was supplied to the writer and the skeleton returned to the Dominion Museum.

In the laboratory, the stomach was cut open, the contents scraped into a petri dish, and the volume of the main constituents measured by displacement. Food items that seemed sufficiently complete to be identified were sorted into tubes and sent to specialists. The remaining material was examined under a binocular microscope for the presence of earthworm chaetae.



RESULTS AND DISCUSSION

The stomach contained about 70 cc. of material of which about 40 cc. was identifiable insect remains (Table 1). The balance consisted of small fragments of rock and wood, shells from two large native slugs (*Schizoglossa novoseelandica*), remains of a spider (*Porrhothele antipodiana*), 2 hinau seeds (*Elaeocarpus dentatus*), a leaf of *Coprosma tenuifolia* and a considerable quantity of finely divided plant and animal remains among which were numerous earthworm chaetae. Cicada nymphs (70) formed the main food item, but the stomach also contained the remains of at least 51 beetles of various kinds (7 of them adult, the rest larvae), 10 moth caterpillars, 2 fly larvae and a weta.

Qualitatively, the stomach contents of the Raetihi kiwi resemble those of the bird reported on by Gurr but the slugs, the Tenebrionid beetles and the Tipulid larvae are new records. The Waihi material had been washed prior to examination so no earthworm chaetae were found, but Gurr quotes Buller as having found several earthworms in kiwis from the Pirongia Ranges. The Raetihi bird contained no large pieces of earthworm, but the presence of numerous chaetae, only visible with the microscope, indicated that earthworms had been eaten recently. The present bird also differs from Gurr's one in the great preponderance of cicada nymphs and scarabaeid larvae.

It is clear from the information now available that the North Island kiwi eats a wide range of animal and plant material, some of it, berries for instance, presumably being obtained from the surface of the ground rather than from under it. This probability should be taken into account by anyone planning to use poisoned baits for the control of noxious animals in areas where kiwis occur.

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ACKNOWLEDGEMENTS

The author's part in the present contribution was small. The stomach was supplied through the courtesy of Dr. R. A. Falla (Dominion Museum) and Dr. F. B. Shorland (Fats Research Laboratory, D.S.I.R.), and the main work, that of identifying the items found in the stomach, was undertaken by several specialists. The insect remains were identified by Messrs. B. B. Given, E. S. Gourlay, D. C. F. Perrott and Dr. J. S. Timlin (all of Entomology Division, D.S.I.R.), the slugs by Dr. R. K. Dell (Dominion Museum), the spider by Dr. R. R. Forster (Otago Museum), the leaf and seeds by Miss Ruth Mason (Botany Division, D.S.I.R.), the earthworm chaetae by Mr. K. E. Lee (Soil Bureau, D.S.I.R.) and wood and rock fragments by Dr. J. J. Reed (Geological Survey, D.S.I.R.). The author records his sincere thanks to all these people.

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REFERENCE

Gurr, L.: 1952. Some Food of the North Island Kiwi (*Apteryx australis*).
Notornis 4: 209-10

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OBITUARY — LADY GUNSON, O.B.E.

We regret to announce the death at the age of 82 of Lady Gunson. After a busy life of public service, Lady Gunson joined the Ornithological Society in 1946. Whenever she was able, she attended the annual meetings and enjoyed the excursions which followed them. Those who met her on such occasions will remember her especially for her enthusiasm. Despite her three score years and more than ten, she would climb the slippery tracks through the beech forests above Wellington's eastern bays and in 1953, when a tremendous southerly was blowing in the Wairarapa, she defied the atrocious weather and battled her way along the beach to see a huge sperm whale which was stranded there.

The appeal of birds to her was mainly aesthetic. When the Fiordland Wren was discovered and specimens reached the Dominion Museum, she asked in her gentle way that she might be allowed to make sketches of them. An ardent conservationist, she believed that all New Zealand children should receive instruction in the natural history of their native land and that such knowledge would make them better citizens.

In remembering her with affection, the Ornithological Society offers its sympathy to Sir James and his family.

— R.B.S.

TABLE 1
IDENTIFICATION OF STOMACH CONTENTS
INSECTS

Order and Family	Subfamily or Tribe	Genus	Stage	No. of Specimens	Identified by
ORTHOPTERA Tettigoniidæ	Stenopelmatinæ	Probably <i>Onosandrus</i>		1	E. S. Gourlay
HEMIPTERA Cicadidæ	Tibicininæ	?	Nymphs	70	D. C. F. Perrott
COLEOPTERA Carabidæ	Pterostichini	<i>Megadromus</i>	Adult	1	E. S. Gourlay
"	Broscini	<i>Mecodema</i>	"	1	
"	Pterostichini	<i>Holcaspis</i>	"	1	
"	?	?	"	1	
Elatерidæ	?	?	"	1	
"	?	?	Larvæ	?*	
Tenebrionidæ	?	?	Adult	1	B. B. Given
"	?	?	Larvæ	?*	
Scarabæidæ	Melolonthinæ	<i>Costelytra</i>	Adult	1	
"	"	"	Larvæ	31	
Lucanidæ(?)	?	?	"	6	
LEPIDOPTERA Hepialidæ	?	?	"	4	J. S. Timlin
Agrotidæ	?	?	"	6	
DIPTERA Tipulidæ	?	?	"	2	D. C. F. Perrott

* Some of the Elaterid and Tenebrionid larvæ could not be separated; the total for these two groups together was 7.

OTHER MATERIAL

MOLLUSCA	<i>Schizoglossa novoseelandica</i>	—	2	R. K. Dell
ARACHNIDA	<i>Porrhothele antipodiana</i>	—	1	R. R. Forster
OLIGOCHÆTA		chætæ	many	X. E. Lee
PLANTS	<i>Elæocarpus dentatus</i>	seeds	2	R. Mason
	<i>Coprosma tenuifolia</i>	leaf	1	R. Mason
Wood fragments	—	—	12	J. J. Reed
Rock Fragments	Sandstone		2	J. J. Reed
	Pumice		1	
	Spherulitic rhyolite		1	