

FAMILIES AND POPULATIONS
OR
RECORDS OF TWO SPECIES OF ORTHOPTERA

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Modicogryllus lepidus (Walker, 1869) Family Gryllidae

In 1977, Mr F.H. Smith of Rotorua provided a specimen of this species collected at Maraenui, about 30 km east of Opotiki in Opotiki County on the Bay of Plenty coast. He and his family had seen the common cricket (*Teleogryllus commodus*) there in large numbers but had also heard a different cricket for some time and had at last caught one. They continued to collect and there is no doubt that a population of *M. lepidus* was established in that area.

Specimens caught there by the Smith family are: Jan. 1977, 1 ♂; 30 Jan. 1977, ♂; 24 Apr. 1977, 1 nymph; Jan. 1978, 1 ♂ 1 ♀; 5 Feb. 1980, 3 ♀♀.

This Australian species was originally recorded in New Zealand from one specimen taken in Feb. 1966 near Auckland (Wise, 1969). The Museum also has a male specimen from Kawau Island (undated) and R.A. Hitchmough took one nymph in Auckland on 10 June 1980.

More recently, a female specimen was swept on 4 Jan. 1987 at Whanarua Bay, Te Kaha, in Opotiki Co., about 26 km north-east of Maraenui, by Rosemary Gilbert of Auckland Museum.

Hemiandrus monstrosus Salmon, 1950 Family Stenopelmatidae

This species has long been known from males as they have an elongate tusk on each mandible and, for this reason, are readily identified.

In 1970, Mr Wes Sanderson and family began to find specimens of this small weta on the back porch and inside their home on a mixed-cover holding near Okaihau in western Bay of Islands County. Despite searches by myself and the Sandersons over several years, both during the day and at night, no colony could be found on the property. It was generally thought (from knowledge of other wetas) that this could

be a ground weta but tree, bush, scrub and open land areas were examined without success. Only one specimen was found away from the house, in debris on a tree beside the main farm path some 50 m from the back porch, and was thought to be a stray occurrence. This individual was, in fact, a missed clue.

Specimens taken on the property are: Oct. 1970, 1 ♂; 28 May 1973, 1 ♂; in debris on tree 13 Sept. 1973, 1 ♂; 23 Apr. 1974, 1 ♂; 22 May 1974, 1 ♀; alive in house, 6 June 1974, 1 ♀, K.A.J.W.; 10 June 1975, 1 ♂, 2 ♀♀; Mar. 1977, 2 ♂♂.

Females were determined by association with males and their similar appearance. They do not have tusks on the mandibles.

An earlier male specimen in the Museum was taken at Orokawa Bay, Bay of Islands (on the North Auckland east coast) on 17 Oct. 1948 by H.C. Abraham. A good sketch of a male, found by his children in their garden near Herekino in Mangonui County, north of Hokianga Harbour, was received from Mr Roger Gale in Oct. 1982 (see figure). He made the interesting comment that "Instead of defending itself with the rear legs (as related wetas do - K.A.J.W.) it raises its head up and uses its horns...".

Later, a colony was recorded (in a newspaper article) at Pakanae, near Opononi close to the south-eastern shore of Hokianga Harbour in Hokianga County. Subsequent ground searches in the area by the author were without result. It was not until 6 Feb. 1988 that K.A.J.W. and Rosemary Gilbert, on a Museum field trip, contacted Mr Christopher Butler who had earlier found the species at Pakanae. He supplied the unexpected information that all the horned wetas occurred in holes in red wood manuka (*Leptospermum scoparium*), but not in white wood kanuka (*Kunzea ericoides*). Many individuals had been seen while the family was cutting a small area of manuka/kanuka for firewood. Further, within an hour, this statement was proved when we found a large immature individual, with short tusks on the mandibles, inside a hole ca. 60 cm above the ground in a young manuka trunk, near his home.

It now appears that some occurrences of *H. monstrosus* may not indicate the actual distribution of the species but only the distribution of infested manuka firewood! It is worth noting that all the dates given above (except the nymph taken in February) are during or prior to winter - the firewood season.

However, in the three localities discussed, Okaihau, Pakanae and Herekino, the properties were small rural holdings with manuka present locally. The firewood being used was probably cut by the families concerned and, in the case of the

Sandersons, stored on the back porch before use. Thus this tree-living species does occur naturally at least in the wide basin area centred on the Hokianga Hbr. on the western side of North Auckland.

References

Wise, K.A.J. 1969: Three new insect records for the Auckland area, New Zealand. *Rec. Auckland Inst. Mus.* 6 (4-6) : 423-426.



Sketch of Herekino male *Hemiandrus monstrosus*
by Roger Gale, 18 Oct. 1982