

## ANNELIDA.

Several specimens of Chætopod worms from both the Auckland Islands and Campbell Island are in the collection, but they cannot be determined until the New Zealand Chætopods have been examined.

## ECHINODERMATA.

*Asterias rupicola*, Verrill, Bull. U.S. National Museum, No. 3, p. 71.

var. *lævigatus*, Hutton.

Spines of the back obsolete.

Several specimens from the Auckland Islands.

I should have regarded this as a new species if one of the specimens had not shown a row of spines along the back and traces of a lateral row on each side, thus connecting the two forms.

ART. XXXIX.—*Note accompanying Specimens of the Black Rat (Mus rattus, L.)*

By TAYLOR WHITE, Esq., of Glengarrie, Napier.

Communicated by Prof. HUTTON.

[Read before the Otago Institute, 26th November, 1878.]

Two of the rats were caught in 1876 in a field of oats which I was cutting, eighteen miles from the shipping, and so might be called country rats. I think I killed four. The two kept were an old male and a young female not quite full grown. I have found no others since. The skin I picked up at Napier port, alongside the shipping.

It may be of some interest for me to state that the rats on the Canterbury plains in 1855 had regular warrens, and lived in communities. I have taken six and eight from one warren. The warren was not raised above the surface of the ground, but could be detected by the unusual greenness of the grass. There were a number of bolt holes within a circular radius of about four feet. At the time I was under the impression that they were ordinary rats; but not having seen this habit since or elsewhere, I now think that they must have been peculiar. In colour, I think, they resembled the common rat (*Mus decumanus*). We used to dig them up for the fun of seeing the dogs catch them.

I was witness to the first migrations of the common mouse (*Mus musculus*) on three separate occasions. First, from about Christchurch to the plains at Oxford; second, from Oxford onwards over the first range of hills to country through which the Hokitika road now passes; and third, to the country bordering Lake Wakatipu. In all three places I lived a considerable time, and never saw such a thing as a mouse, but the rats were legion.

After a time the sight of the first mouse was reported as seen in the grass. In the course of a week the grass country and the houses were plentifully supplied. It is most remarkable that the rats immediately cleared out before them, and from that time were much scarcer.

In Otago, formerly, I used to kill a great number of rats living singly under plants of the Spaniard, the old leaves of which made them a nice thatched roof, and the root was eaten if nothing better offered. Once in the early days of settlement in Otago, when I was snowed in, and could get nothing to feed my fowls on, I caught large numbers of rats near the house (getting them from under the Spaniard bushes) and roasted them for the fowls. I noticed that the stomach of these rats was generally full of a white wire-like worm, about two inches long, which I considered a parasite, as they were always perfect; but, if I remember right, there was no appearance of other food in the stomach, and very little room for it, as the worms were knotted together into a mass that about filled the cavity.

NOTE BY PROF. HUTTON.

The skin from Napier belongs to *Mus rattus*. It agrees perfectly with the description of the specimen in the Colonial Museum, from Wellington, (Trans. N.Z. Inst., IV., p. 183), and with Dr. Buller's description of his *Mus novæ-zealandiæ* (Trans. N.Z. Inst., III., p. 1). The two specimens caught in the oat-field had been put into kerosene, and were not fit for stuffing. They both presented, externally, the same characters as the skin from Napier. I have examined these two skulls, and find that they agree with Mr. Salter's description of the skull of *M. rattus*, except in being smaller and more elongated. Consequently, they differ from the Maori rat skulls, from Shag Point, in the particulars that I have already pointed out.

There can, I think, be no doubt that these rats belong to the Polynesian variety of *Mus rattus*, and consequently the Maori rat must be regarded as a distinct species, for which I propose the name of *Mus maorium*.

The following are the measurements of the skull of the adult male specimen. I have added measurements of *M. rattus* from England (from Mr. Salter's drawings), and of *M. decumanus* from New Zealand:—

	<i>M. rattus</i> , Napier.	<i>M. rattus</i> , England.	<i>M. decumanus</i> , Dunedin.
Length .. .. .	1.43	1.64	1.78
Width at zygomatic arch*	.59	.82	.75
Foramen magnum, height	.19	.14	.20
"    "    width	.25	.28	.28

\* In the measurements of the skulls from Shag Point, the width at the zygomatic arch should be '35, and not '85 as printed.