

The statement that the Chatham Island birds are crested, while the New Zealand birds are not, must be taken with caution. I have certainly never seen a crested bird from New Zealand myself, but they are very rare, and I have not seen many; and *P. cirrhatus* appears to have been founded on a crested bird from New Zealand. The bird also appears to be scarce in the Chatham Islands, for although Dr. Buller quotes Mr. H. Travers as saying that "he met with *P. carunculatus* in large numbers in the Chatham Islands" (l.c., IX., p. 339), Mr. Travers himself states that it is "not common" (l.c., V., p. 221), and the specimen sent to Dr. Finsch from the Chatham Islands was not crested. Consequently the question as to the crest must be considered as unsettled. However, it appears that the Chatham Island birds are decidedly smaller than those from New Zealand; but if Dr. Buller decides on considering this difference as of specific value, it is to the Chatham Island bird that he must apply the new name, and not as he supposes to the New Zealand bird.

DIMENSIONS OF THE THREE SPECIMENS IN THE OTAGO MUSEUM.

	Kerguelen's Land. Crested.	Chatham Islands. Crested.	Otago. Not crested.
Wing	11·5	11·5	12·5
Tail	5·5	5·5	6·0
Bill (culmen)	2·25	2·5	2·8
Tarsus	2·0	2·0	2·4
Outer toe and claw	4·25	4·3	5·0

ART. XXXVIII.—*Notes on a Collection from the Auckland Islands and Campbell Island.* By Prof. F. W. HUTTON.

[Read before the Otago Institute, 10th September, 1878.]

LAST June, Captain Townsend, R.N., was kind enough to agree to take Mr. E. Jennings, taxidermist to the Museum, to the Auckland and Campbell Islands in H.M.S. *Nymphe*, in order that he might collect specimens of natural history for the Museum. The *Nymphe* arrived at Port Ross on 13th June, 1878, and left again on the 17th, but as the 16th was Sunday, Mr. Jennings only had two days and a half for collecting. On the 19th they arrived at Campbell Island and left again the same day, Mr. Jennings going on shore for an hour and a half only. It was during these short times that the collections referred to in these notes were made.

No seals were seen during the trip.

BIRDS.

Anthornis melanura, Sparrm.

A single male individual from the Auckland Islands, which in colour quite resembles specimens from New Zealand. The following are its dimensions in inches:—Length 8·5, wing 3·6, tail 3·5, culmen ·57, tarsus 1·3, outer toe (without claw) ·55, middle toe ·7, inner toe ·45, hind toe ·47.

Phalacrocorax magellanicus, Gml.

Head, neck, back, rump, thighs and upper tail-coverts blue-black; shoulders, scapulars and wing-coverts green-black, except a very narrow bar of white formed by some of the upper wing-coverts; chin, throat, and whole under surface of body, except the neck, white, wings and tail brownish-black. Head crested, a few linear white feathers above the eye and on the upper part of the neck. Irides brown. Skin in front of the eyes dark blue, the minute papillæ crimson, sparingly clothed with small feathers. Bill dark brown passing into orange at the base of both mandibles, gular skin bright orange. Legs and feet flesh-colour, with the soles and the joints on the upper surface black; webs flesh-colour shading into black towards the margin. A narrow strip of white feathers runs along the centre of the chin pouch.

Immature.—The whole of the upper surface, neck, wings and tail dark brown, in places glossed with greenish, no white alar bar; chin, throat and belly white. Skin before the eye dull orange with crimson spots; bill brown passing into orange at the base of the mandibles, gular pouch orange. Feet as in the adult, but not so pink.

Length 28 inches, extent 39, wing 10·5, tail 6, culmen 2·2, bill to gape 3·1, depth at nostrils ·52, breadth ·43, tarsus 2·4; outer toe (without claw) 3·8, middle toe 2·85, inner toe 1·85, hind toe 1·25.

Two individuals, both females, from Campbell Island.

This species is allied to *P. carunculatus*, but is at once recognised by its black neck. The white alar band is also much smaller.

Stercorarius antarcticus, Lesson.

A single female from Campbell Island.

Larus dominicanus, Licht.

A young female from Campbell Island.

Larus scopulinus, Forster.

Three specimens from the Auckland Islands and three from Campbell Island.

Five of these birds are adult (four males and one female) and all have the breast beautifully tinged with rose colour, as is often the case with *Sterna frontalis*. I have never seen this colouring in the New Zealand gulls.

FISHES.

Notothenia angustata, Hutton, T.N.Z.I., 1875, p. 213.

Five specimens of this fish were brought from the Auckland Islands. It may be identical with *N. maoriensis* Haast, T.N.Z.I., 1872, p. 276; but that species is said to have only three spines in the first dorsal, and to have scales below the eyes. It is no doubt the same as *N. coriiceps* of the "Fishes of New Zealand" (1872), and most probably Sir J. Richardson confused it with his *N. coriiceps* in the Ichthyology of the Voyage of the "Erebus" and "Terror." The type of *N. coriiceps*, according to Dr. Günther, comes from Kerguelen's Land.

Notothenia arguta, sp. nov.

B. 5; D. 4 | 30; A. 24; L. lat. 52.

Height of the body goes $4\frac{1}{2}$ times into the total length; length of the head four times; posterior limb of the preoperculum perpendicular; top of the head flat, not concave, scaleless, roughened with small rounded papillæ; above purplish black, lighter and pinkish below; gill membrane marked with orange. A single specimen $7\frac{1}{4}$ inches in length from Campbell Island. In general shape it approaches *N. microlepidota*, but is easily distinguished by the fin formula.

Notothenia microlepidota, Hutton, T.N.Z.I., 1875, p. 213.

D. 7 | 27; A. 22.

Two specimens from the Auckland Islands.

Notothenia parva, sp. nov.

B. 6; D. 6 | 28-29; A. 23-25; L. lat. 62.

Height of the body goes $5\frac{1}{2}$ times into the total length; length of the head five times; top of the head scaleless, flat, with scattered papillæ. Colour, greenish-black, belly white, vertical fins black.

Four specimens from the Auckland Islands; 3 to $3\frac{1}{2}$ inches in length.

This species approaches *N. sima*, but has no scales on the top of the head, and differs in its fin formula.

Triptyerygium jenningsi. sp. nov.

D. 6 | 20-21 | 15-16; A. 28.

A simple tentacle above the orbit, and another at the nostril; teeth on the vomer, none on the palate. Colour, very variable; greenish-brown, reddish-brown, or black, marbled with darker.

Sixteen specimens from the Auckland Islands, the largest $3\frac{1}{2}$ inches in length.

The lateral line is as in *T. nigripenne*, to which species it is closely allied, but differs in having constantly 28 rays in the anal fin.

NOTE.—*Notothenia arguta*, *N. parva* and *Triptyerygium jenningsi* were taken

in rock pools, *N. angustata* and *N. microlepidota* in a net. Not a single fish was caught with a hook. Most of the fish at the Auckland Islands are attacked by parasites in a most remarkable way; in some cases the whole of the lateral muscles being full of a round worm about an inch in length. So bad are they that nothing but sheer necessity would induce any one to eat fish at these islands.

CRUSTACEA.

Prionorhynchus edwardsii, Jacq. and Lucas.

Six specimens from the Auckland Islands, all male.

Nectocarcinus antarcticus, Jacq. and Lucas.

Six specimens from the Auckland Islands, of which five were obtained from the stomach of a large specimen of *Notothenia microlepidota*.

Haliscarcinus planatus, Fabr.

A great many specimens from both the Auckland and Campbell Islands.

Munidia subrugosa, List.

Three specimens from the Auckland Islands; two adult and one young. The young specimen is quite as small or smaller than *Grimothea gregaria*, so abundant round the South Island in March, and yet it does not show the slightest approach to the foliaceous maxillipeds of *Grimothea*. The habits of the two species are also quite different. *Grimothea* is pelagic and floats on the surface of the sea, while *Munidia* lives at the bottom. Mr Jennings caught these specimens in a baited net.

Squilla lævis, sp. nov.

Rostral-plate semi-lanceolate, acute; carapace smooth, without crests, slightly expanded and rounded behind; inner antennæ reaching nearly as far as the outer, second joint extending as far as the eye, third joint as long as the second. Prehensile finger with 12 teeth (exclusive of the extremity); penultimate finely toothed internally and with three spines at the base; externally quite smooth; abdomen smooth, without longitudinal ridges, scarcely broader than the carapace, without lateral spines except on the penultimate segment; last segment with about 10 spines alternately large and small, while on each side of the central line there are six very small spines; internal lateral caudal plates oval, not passing the marginal spine of the basal joint. Length, 1¼ inch.

A single specimen taken from the stomach of a specimen of *Notothenia microlepidota*, caught at the Auckland Islands.

Cirolana rossii, List.

Many specimens from the Auckland Islands.

Spharoma gigas, Leach.

Several specimens from the Auckland Islands.

Sphæroma obtusa, Dana.

A few specimens from Campbell Island, and two from the Auckland Islands.

Actæcia aucklandiæ, G. M. Thomson.

For a description of this species see Mr. Thomson's paper in the present volume of Transactions. (*Ante* p. 249.)

MOLLUSCA.

Euthria lineata, Chemnitz.

Many specimens from the Auckland Islands.

Euthria littorinoides, Reeve.

Two specimens from Campbell Island.

Polytropa striata, Martyn.

A single specimen from the Auckland Islands.

Diloma, sp.

Two specimens from the Auckland Islands. There are specimens of this species in the Museum from Campbell Island, presented by Dr. H. Filhol, who will doubtless describe it. It is something like *D. nigerrima*, but smaller, bluer, and not so depressed.

Cantharidus episcopus, Hombron and Jacquinot.

Several dead shells from the Auckland Islands. It is also in the Museum from Campbell Island.

Tectura pileopsis, Quoy and Gaimard.

Several specimens from the Auckland Islands.

Patella magellanica.

Several specimens from the Auckland Islands, and one or two from Campbell Island. I believe that *P. inconspicua*, Gray, is only a small variety of this species.

Patella redimiculum, Reeve.

Several specimens from the Auckland Islands.

Chiton circumvallatus, Reeve.

Several specimens from Campbell Island.

Chiton lineolatus, Frembly.

Several specimens from both the Auckland Islands and Campbell Island. It varies much from black to gaily painted. It is also found near Dunedin.

Chiton longicymba, Blainville.

A few specimens from the Auckland Islands. There are also in the Museum specimens from Campbell Island, presented by Dr. H. Filhol.

Plaxiphora biramosa, Quoy and Gaimard.

Two specimens from Campbell Island. When drying, this species often splits longitudinally.

Onchidium patelloides, Quoy and Gaimard.

Seven specimens from the Auckland Islands.

Siphonaria redimiculum, Reeve.

Four specimens from the Auckland Islands. This curious species will probably form the type of a new genus. It is of an olive brown outside and dark purple inside.

Mesodesma novæ-zealandiæ, Chemnitz.

A single specimen from the Auckland Islands.

Venus oblonga, Hanley.

A single specimen from the Auckland Islands.

Chione stutchburyi, Gray.

Eight specimens from the Auckland Islands.

Mytilus magellanicus, Lamarck.

A few specimens from both the Auckland Islands and Campbell Island.

Mytilus dunkeri, Reeve.

Several specimens from both the Auckland Islands and Campbell Island.

NOTE.—In addition to the foregoing there are in the Otago Museum the following shells from the Auckland and Campbell Islands:—

Euthria bicincta, Hutton, Auckland Islands.

Neptunæa, sp., Auckland Islands.

Cominella maculata, Martyn, Auckland Islands.

Turbo granosus, Martyn, Auckland Islands.

Diloma æthiops, Gml., Auckland Islands.

Diloma nigerrima, Chemnitz, Auckland Islands.

Haliotis iris, Martyn, Auckland Islands.

Haliotis rugoso-plicata, Chemnitz, Auckland Islands.

Haliotis gibba, Philippi, Campbell Island.

Patella radians, Gml., Auckland Islands.

Patella imbricata, Reeve, Campbell Island.

Patella rubiginosa, Hutton, Auckland Islands.

Tapes intermedia, Quoy and Gaimard, Campbell Island.

Modiola areolata, Gould, Auckland Islands.

Terebratella rubicunda, Sow.?, Auckland Islands.

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.