

South Island bird they are shorter and softer. As I do not consider this slight difference important enough I can regard the kiwi of the North Island only as a race or local form,—*A. australis* var. *mantelli*, Bartl.

I shall give an extensive treatise of the known species of *Apteryx* in my revised list of the birds of New Zealand.

*Apteryx haastii*, Potts.

Judging from the communications on this species sent me by Dr. Haast and Capt. Hutton I take it for a good species. I cannot agree with Mr. Potts as to a hybridism between *A. australis* and *oweni*, because I am sure a hybrid of those species would stand in size intermediate between the two, as is the case in our *Tetrao medius*.

Mr. Potts' name ought to be preserved for this species, for from *A. maxima*, Verr., there exists no other source than the simple name, noticed first by Bonaparte, without any reference to the Roa-roa.

The following species are in my opinion worthy no longer to stand amongst the list of the birds of New Zealand:—

*Strix parvissima*, *Ellm., Potts, Trans. N.Z. Inst., III., p. 68.*

*Haleyon cinnamominus*, *Sws.*

*Anthochaera carunculata*, *Lath. (Mimus carunculatus, Bull.)*

*Anthus grayi*, *Bp., Hutton's Cat., p. 13.*

*Rhipidura motacilloides*, *Vig., Hutton's Cat., p. 14.*

*Aplonis obscurus*, *Du Bus.—caledonicus, Hutt.*

*Crex pratensis*.—(*Rallus featherstoni, Bull.*)

*Anous stolidus*, *L.*

*Procellaria æquinoctialis*, *L.*

*Puffinus brevicaudatus*, *Br.*

*Dysporus piscator*, *L.*

*Graculus carunculatus*, *Gml.*

*Aptenodytes pennantii*, *Gray.*

---

ART. XXII.—*On the Birds of the Chatham Islands, by H. H. TRAVERS, with Introductory Remarks on the Avi-fauna and Flora of the Islands in their relation to those of New Zealand.* By W. T. L. TRAVERS, F.L.S.

[Read before the Wellington Philosophical Society, 11th September, 1872.]

I HAVE compiled, from memoranda furnished to me by my son, Mr. H. H. Travers, and have written in his name, the following notes of the distribution and habits of the birds known to belong to the Chatham Islands, specimens of the major part of which he obtained during a recent visit to that group. The total number of birds mentioned in Capt Hutton's "Catalogue

of the Birds of New Zealand" as belonging to the Chatham Islands is 47, but my son has now reason for believing that the weka (*Ocydromus australis*), the kakapo (*Stringops habroptilus*), and the kiwi (*Apteryx australis*), which were all inserted in the catalogue in question on the authority of a former notice of the fauna of the Islands, published in the fourth volume of the Linnæan Society's Journal—Botany—were erroneously assigned to them. Of the total number in the catalogue which have now been ascertained to belong to the Islands, my son obtained specimens of thirty-eight species, but was unable to procure species of *Ardea sacra*, *Ardea poiciloptera*, *Limosa uropygialis*, *Rallus dieffenbachii*, and *Anas chlorotis*, whilst the memoranda are silent as to others which he did obtain, and notably as to *Diomedea exulans*, *Thalassidroma nereis*, and *Haladroma berardii*.

He obtained two species entirely new to science, which have been named by Capt. Hutton *Petroica traversii* and *Rallus modestus*, whilst, besides these, he has added five other species to the avi-fauna of the Chatham Islands, namely, *Chrysococcyx plagosus*, *Haladroma berardii*, *Graculus africanus*, *Eudyptes pachyrhynchus*, and *Eudyptula minor*, of which the three former were not even previously known to the avi-fauna of New Zealand.

I need hardly say that the Chatham Islands are situated about 450 miles to the eastward of New Zealand, in lat. 42° South, and consist of one large island called Chatham Island, seventy miles long, and which is almost in the shape of an isosceles triangle, the north-western side, about thirty miles in length, forming the base,—of Pitt Island, which is about ten miles in circumference, and of several small rocky islets, of which the principal are named Mangare and South-east Island. The surface of the main land is undulating, and generally covered with grass, whilst all round it is a fringe of bush, more or less broad, containing a considerable number of small trees. Upon this island there are several lagoons; the largest of which is twenty miles in length, by from three to eight in breadth, the waters of which are separated from the sea by a sand beach from half-a-mile to a mile wide. The surface of Pitt Island is completely covered with bush of the same class as that on the main island. South-east Island contains the highest land in the group. Mangare is very small, and the surface stony, but nearly covered with low rigid scrub. Owing to the constant swell from the south-eastward it is extremely difficult to land on these smaller islets, as the sea rises and falls many feet with each wave, rendering it dangerous for boats to approach too closely; indeed, it is only by patiently watching an opportunity that a landing can be effected, and re-embarkation is equally difficult and dangerous, whilst the treacherous nature of the weather increases both the danger and the difficulty. It will be seen, in the course of these notes, that my son succeeded in obtaining a considerable number of birds from these smaller islands, where

they have no doubt been preserved from destruction by the very inaccessibility of their habitats, both to man and to other animals. It is interesting to observe that, except the two new species added to science, nearly the whole of the birds occupying these islands are identical with New Zealand species. It is not at all improbable that *Haladroma berardii* and *Graculus africanus* will also be found on our coasts, leaving only *Petroica traversii*, *Rallus modestus*, *Chrysococcyx plagosus*, and *Anthornis melanocephala* as absolutely peculiar to the Chathams. Of these again *Petroica traversii* possesses exactly the habits, and even the common note, of *Petroica albifrons* and *P. longipes*, whilst *Anthornis melanocephala* is too closely allied to *Anthornis melanura* to render their common descent at all doubtful. The differences between the *Petroicæ* are not so great as those between the two species of New Zealand *Orthonix*, one of which only inhabits each of the two larger islands of New Zealand. This almost identity of the avi-fauna of the Chatham Islands with that of New Zealand is observable also in the flora, of which my son, during his late visit, made almost exhaustive collections. These are now in the hands of Baron von Mueller, of Melbourne, for examination. I am led to believe that the identity which was found to exist between the great majority of the species obtained by him in 1867 and species inhabiting New Zealand, is maintained in connection with the much larger number of species which he collected during his recent visit, but upon this point I have no doubt Baron von Mueller will fully remark when he publishes the results of his investigations.

I have had no opportunity of ascertaining how far this resemblance extends in the case of the other forms of life found in the Chathams, but I think it extremely probable that the greater number of the few insects, etc., which my son obtained will be found to be identical with species also occupying New Zealand. This almost identity of the organic productions of the two groups suggests forcibly a former, and (speaking geologically as regards time) not long past, connection between them, or, in other words, extension of the lower lands of New Zealand so as to embrace the Chatham Islands since the great mass of the existing living productions of both have assumed their present forms. Interesting fields of speculation are opened out as to whether it is the Chatham Island or the New Zealand species now presenting differences of a specific nature which have undergone variation; as for instance in the case of the birds, the two species of *Anthornis*, and in the case of the ferns, the two different forms of *Lomaria discolor*; but I must leave more speculative and more competent minds to deal with this question. I may add that my son made diligent search and inquiry for moa bones, but did not obtain any, nor any information respecting them.

In the following notes, which are to be assumed to have been written by

my son, the numbers opposite the species thus distinguished have reference to those in Captain Hutton's Catalogue.

2. *Circus assimilis.*

This bird is rare in the islands, and I was unable to obtain any specimens for skinning. I found one which had been dead for some days, but which so far as I could judge from the then condition of the plumage, etc., was identical with the New Zealand bird.

11. *Prothemadera novæ-zealandiæ.*

I found this bird on the Main and on Pitt Island, where it is not uncommon, but I saw no specimen on Mangare. I could detect no differences between it and the birds found in New Zealand.

12. *Anthornis melanocéphala.*

This bird occurred in the greatest numbers on Mangare, though I also found it frequently on the main island, but more rarely on Pitt Island. Its note is much richer and fuller than that of its New Zealand congener. It begins to breed in October, the nest being composed of grass and feathers, large and coarsely constructed. As a rule the female lays three eggs. The egg has a brownish pink tinge, and is spotted with a darker colour.

Length, 1.05 in. ; diameter, .75 in.

14. *Zosterops lateralis.*

This bird has become very numerous, and is especially destructive to the smaller fruits. During severe winters large numbers are said to die from cold and hunger. During my stay at Pitt Island many were found drowned in the pig tub, and I observed in New Zealand that these birds frequent the pits in which house refuse is thrown in search of food. They appear to be carnivorous. They are said to have first appeared in the Chatham Islands after the great fire in Australia on Black Thursday.

21. *Spheneacus rufescens.*

I only found this bird on Mangare, where it is not uncommon. Its peculiar habit of hopping rapidly from one point of concealment to another renders it difficult to secure. It has a peculiar whistle, very like that which a man would use in order to attract the attention of another at some distance, and although I knew that I was alone on the island, I frequently stopped mechanically on hearing the note of this bird, under the momentary impression that some other person was whistling to me. It also uses the same cry as *Spheneacus punctatus*. It is solitary in its habits and appears to live exclusively on insects.

26. *Gerygone albofrontata*.

Not common, but found in all the islands. It has very much the habits of the New Zealand species.

29. *Petroica dieffenbachii*.

Not common, but found in all the islands, but I doubt the propriety of separating this bird from *Petroica macrocephala*.

— *Petroica traversii*, sp. n., Hutton.

I only found this bird at Mangare, where it is not uncommon. It is very fearless, possessing in other respects the habits of *Petroica albifrons* and *P. longipes*. Its ordinary note is also the same, but I did not hear it sing. It appears to be specially obnoxious to *Anthornis melanocephala*, which always attacks it most savagely when they meet. There is no apparent difference in the plumage of the sexes.

33. *Anthus novæ-zealandiæ*.38. *Rhipidura flabellifera*.48. *Platycercus novæ-zealandiæ*.

These birds are not uncommon in all the islands, and exhibit precisely the same habits as in New Zealand.

49. *Platycercus auriceps*.

I never found this bird on the main island, but it is numerous on the other islands. I was often for some time surprised at finding the bodies of dead birds which I had thrown away partially eaten, and could not account for the fact until I found this bird feeding on them. This is also a habit of *Nestor meridionalis*. In other respects the habits of this bird are the same as in New Zealand. I obtained a specimen on Mangare, with a faint yellow tinge on the head.

— *Chrysococcyx plagosus*.

This bird is nearly, if not absolutely, identical with the Australian species. It appears on the islands in the month of September, and leaves towards the end of January. If this bird visits the Chathams from Australia it is remarkable (as Capt. Hutton has observed) that it must pass over the large islands of New Zealand and extend its flight an additional 450 miles.

56. *Carpophaga novæ-zealandiæ*.

Now common on all the islands, and abundant on Mangare, where it breeds. It is said to have made its first appearance on the islands about 1855. Eggs whitish, spotted with brownish-pink on the larger end. Length 1.47 in., diameter 1.07 in.

64. *Charadrius bicinctus.*

Not common, and found chiefly in open grassy country.

65. *Thinornis novæ-zealandiæ.*

I only found this bird on Mangare and on parts of the coast of Pitt Island. It has been called the "bowing-bird" by the settlers, from its habit of bowing its body when approached.

68. *Hæmatopus longirostris.*

Not common and usually found on sandy beaches.

74. *Ardea poiciloptera.*

I did not obtain a specimen of this bird, which has become very rare on the Islands, but I was informed by persons who had seen it, and who knew the New Zealand bird, that it was precisely similar.

76. *Limosa uropygialis.*

I did not obtain a specimen of this bird, but was informed that it visited the islands in spring, leaving them in the autumn.

83. *Gallinago pusilla.*

I only found this bird on Mangare, where it is not common. I never saw it on the wing except when disturbed, and, being very tame, it then only flies a short distance. It lives in holes in the rocks, coming out towards evening to feed. Its chief food is worms and grubs, for which it scratches the ground much in the manner of a fowl; from this habit the settlers have given it the name of the "chicken-bird." Its cry is peculiar, something like the note which is produced by blowing into a hollow reed at one end of which a finger is placed and frequently and suddenly removed. This note is repeated rapidly six or seven times. The holes it inhabits are about eighteen inches deep, and evidently artificial. In the two instances in which I obtained young birds in the nests there was only one bird in each case. I could not detect any difference in plumage between the sexes.

— *Rallus modestus*, sp. n. Hutton.

Matirakahu of the Morioris. Of this bird, which I only found on Mangare, I obtained two specimens, one a full grown female, and the other a young one. It is not known on any of the other islands, and although I was on Mangare for twelve days these were the only specimens I saw. The birds in question were found in a very rocky place, and when disturbed sought to hide themselves amongst the stones. I had no opportunity of studying its habits, and having unfortunately failed in obtaining the male parent bird, I am unable to say whether its plumage is different from that of the female. It appears to be a nocturnal bird, as those I obtained came out of the rocks at dusk, evidently to feed. Both the parent birds had escaped in the first.

instance, but the female was attracted by the plaintive cry of the young one which I had caught. I caught sight of the male bird also, but it was too dark to pursue it amongst the scrub.

90. *Ortygometra affinis*.

I obtained this bird on Chatham Island. It inhabits wet swamps, and is very rare and difficult to obtain. When hunted with dogs it takes wing, but only for a short distance, and, after dropping, it runs with great rapidity through the long sedges and swamp grasses. Many of the oldest white inhabitants had never seen it, and the Maoris but seldom. In the only specimen I obtained was an egg, which was unfortunately broken during the dissection of the bird for ascertaining the sex. The egg was about the size of an ordinary walnut, of a brownish-olive colour, spotted with darker brown.

92. *Ortygometra tabuensis*.

This bird is extremely rare, and occupies grassy spots in swampy places. I only obtained one young specimen.

94. *Porphyrio melanotus*.

Common on the banks of the lagoon on Chatham Island, but rare on Pitt Island, and not found on the smaller ones.

99. *Anas superciliosa*.

Common throughout the islands.

100. *Rhynchaspis variegata*.

Not common, and chiefly found in small lagoons.

106. *Lestris catarractes*.

The common name of this bird amongst sailors is the "sea-hen." I only found it in certain places on Pitt Island, and on a small islet about two miles from that island. It commences breeding in the beginning of December. The eggs, two in number, are laid on a nest roughly made of grass, and placed on rocky spots near the shore. The egg and nest are scarcely distinguishable from those of *Larus dominicanus*, except that the former are a little larger. One egg only is usually hatched. Whilst attempting to take the eggs of these birds both parents attacked me most savagely, and I had some trouble in obtaining them. Both parents take part in the work of incubation. Round the nests I found remains of several small sea birds, chiefly *Prion turtur*. During the day time I saw this bird usually sitting in sunny places on the higher cliffs, only now and then taking short flights. I never saw it hunting for food during the day time, but whilst I was on Mangare I heard it constantly during the night, swooping at the small birds which come on shore to roost. I examined the stomachs of a good many, always finding the

contents to be *Prion turtur*, usually swallowed whole. This bird also attacks the young of the domestic fowl, frequently clearing off whole broods, where they breed in the bush. It attacks the albatros very savagely, and generally succeeds in driving it from its prey. Its flight is somewhat the same as that of *Larus dominicanus*, but it flaps the wing more rapidly than that bird. There is very little distinction in plumage between the male and female.

108. *Larus dominicanus*.

109. *Larus scopulinus*.

Both these birds are common, the former breeding on the banks of the big lagoon, and the latter in the same locality, and on the banks of smaller lakes.

113. *Sterna frontalis*.

A spring and summer visitor to the islands, where it first appears in August, but I am unable to say at what time it leaves. It breeds in October on the banks of the small lakes, and on rocky places near the coast.

119. *Diomedea melanophrys*.

Found on Pitt Island, where it probably breeds.

123. *Ossifraga gigantea*.

Stink-pot of the American whalers. This bird is difficult to obtain, except where the carcase of a whale or seal is cast ashore. It usually flies at a great height, but when a whale carcase is afloat they settle on it in thousands. Their flight is generally like that of the albatros, but they flap the wings oftener than that bird. Their power of scent appears to be wonderful. By good fortune I obtained the carcase of a large seal, and after taking off the skin I placed it in a quiet pool amongst the rocks. It had not been there more than an hour when at least forty of these birds attacked it, although I only observed one within sight before the carcase was placed in the pool. They are very wary, and do not settle until they have carefully examined their prey, and then only settle in the water swimming up to the food. They gorge themselves to such an extent as to become incapable of flight. On first landing on Mangare I found a number of these birds, which had gorged themselves on a shoal of fish which had been driven ashore, and several that I picked up and threw into the air fell again like stones. In several that I opened I found remains of fish and of *Prion turtur*. They breed in November, laying only one egg at a time. Like the albatros they only breed on rocky islets destitute of vegetation, the nests being placed on the edges of the cliffs.

124. *Halodroma urinatrix*.

Common on Pitt Island, and occasionally found on Mangare.



127. *Puffinus tristis*.

Common all round the coasts of the Chatham group. It burrows a horizontal hole, from three to four feet deep, and turning slightly to the right or left, in peaty ground. At the extremity of this hole it forms a rude nest composed of twigs and dead leaves. Only one egg is laid, and the male bird assists in the work of incubation. They are very savage whilst on the nest, biting and scratching those who molest them. The young bird is singularly fat, and when taken from the hole disgorges a quantity of oily matter of most offensive smell. This, however, is esteemed a delicacy by the Morioris, who hold the young birds over their mouths allowing the substance to drain into them. The old birds roost on shore, the noise they make during the whole night being absolutely frightful, resembling an exaggerated chorus of squalling children and love-making cats, in which the performers were numbered by thousands. From the manner in which this noise was intensified on each fresh arrival I could only conclude that the whole lot were squalling out their adventures during the day. When taken out of their holes they flutter about on the ground for some time, tumbling over stumps in a confused manner, but ultimately make for the sea.

139. *Prion turtur*.

Right-whale bird of the whalers. This bird occurs in immense numbers on the islands. It breeds in holes in the ground, laying a single egg in a nest composed of a few dead leaves. Both parents assist in the incubation. When the bird is taken from the hole it disgorges a quantity of greenish oily matter, which appears to be used as food for the young birds. Whilst on Mangare I often found these birds caught in the branches of scrubby trees, and could only account for this by supposing that they got caught whilst attempting to escape from *Lestris catarractes*. Egg pure white; length 1 in., diameter, 1 in.

141. *Prion vittatus*.

Blue Billy of the settlers. Breeds in cavities of cliffs on the sea shore, or in holes burrowed in the soft peaty soil which covers the tops of most of the small islets. The hole dips slightly, is from eighteen to twenty-four inches deep, and quite straight. It breeds in September, and only one egg is laid. Where the egg is laid in holes in rocks it is placed on the bare rock, but in the peaty holes a few leaves are found, but whether placed there by this bird or by smaller sea birds which use the same holes for breeding I cannot say. Both birds take part in incubation. They are not easily disturbed when sitting, pecking at the hand whilst the egg is being taken, but remaining on the nest after its removal. When taken from the holes they fly away with a wavy uncertain flight as if blinded by the sudden light. One mode of getting this and other sea birds is by lighting a large fire at night at the foot of a high

cliff, against which they dash themselves or, becoming stupified, are easily knocked down. In a cave on Pitt Island, which I reached by the aid of a rope, I found a cat which had eaten the heads off nearly a hundred young birds without the bodies being touched. Many old birds had also been killed by this cat. How it got there I cannot imagine. The egg is pure white; length 1.95 in., diameter 1.47 in.

142. *Thalassidroma marina.*

Common all round the islands. They are attracted by a fire at night, numbers throwing themselves into it. I have often felt them strike my tent, attracted by the light of the lamp. This bird walks with great difficulty owing to the length of the tarsus. I was informed that it breeds in the end of January.

147. *Graculus carbo.*

Not uncommon on the lagoons, but very shy.

148. *Graculus carunculatus.*

Not common. It breeds on a small islet near Pitt Island in November, but as I was then absent from Pitt Island I did not get the egg. It only comes on shore to roost on trees, generally fishing all day at some distance from the land.

— *Graculus africanus?*

Like *G. carunculatus* this bird is only found in certain parts of Pitt Island. It breeds in November on the most inaccessible cliffs. I had much difficulty in obtaining specimens.

158. *Eudypetes pachyrhynchus.*

I obtained and brought to New Zealand a live specimen of this bird, which had come on shore to moult. I believe it to have been a young bird. It remained for nearly three weeks without food, but on reaching New Zealand it was fed partly on fish and partly on raw meat. It became very tame, following like a dog any one who fed it. It was unable to take its own food, which had to be placed in the gullet. It became very fat and appeared to thrive, but, unfortunately, I was unable to get fish for several days, owing to stormy weather, during which it was fed on meat. It died somewhat suddenly, which I attribute to the nature of the food, as, on being opened, it presented no appearance of disease. It used its flippers in climbing, and by their aid was able to travel up very steep places if at all rough. Nothing could be more quaint than the habits and appearance of this bird as it wandered about the garden, or followed those it knew. Though generally considered stupid, no doubt from its appearance, it was extremely cunning. When placed at night in an inclosure with some poultry it became master of

the situation, its harsh cry and powerful beak striking terror into the other occupants.

159. *Eudiptula minor*.

Very common in rocky places about Pitt Island, where they live in holes and fissures. They usually come on shore about ten at night in the summer, and it was very amusing to see the ingenious manner in which they used their flippers in climbing.

---

ART. XXIII.—Notes on some of the Birds brought by Mr. Henry Travers from the Chatham Islands, with Descriptions of the New Species.

By Capt. F. W. HUTTON, C.M.Z.S.

[Read before the Wellington Philosophical Society, 23rd October, 1872.]

IN the following notes I have alluded only to those birds which are either new to our fauna or which have some special point of interest. A complete list of the birds known to inhabit the Chatham Islands will be given by Mr. H. Travers (see Art. xxii.) as well as descriptions of all the eggs that he collected.

*Gerygone albofrontata*, Gray.

*G. albofrontata*, Gray, "Voy. Ereb. and Terr.," Birds, p. 5, Pl. IV., fig. 2.

Two specimens of this species were obtained on Pitt Island, but neither are in good condition; they differ considerably from the measurements given by Mr. G. Gray, but as Dr. Buller says in his "Birds of New Zealand" that the original specimen in the British Museum is labelled as coming from the Chatham Islands, there can be no doubt as to their identity.

Above olivaceous brown; forehead, over the eye, region of the ears, and all the under surface, white; tinged with yellow on the flanks, abdomen, and vent; quills brown, narrowly edged on the outside with olivaceous; secondaries the same but with a broader edging; tail brownish rufous, with a brownish black band near the tip, followed on the three outer feathers with a pale rufous band; tips brown; irides light red.

Length 4.5 in.; wing from flexure, 2.25; bill from gape, .65; tarsus, .87.

In the "Ibis" for last July, Mr. Potts describes a specimen of *Gerygone* procured by him on the west coast of the South Island (see Art. xix), which specimen Dr. Buller refers, from Mr. Potts' description, to *G. albofrontata*; but in this opinion I cannot agree, for Mr. Potts' specimen, as he describes it, differs from *G. albofrontata* not only in the absence of the white forehead but also in the dark colour of the wings, in having the two centre tail feathers