

PLATYCERCUS ALPINUS, Buller.

Mr. Reischek met with this little parakeet in the scrub on the summit of Mount Alexander (above Lake Brunner on the West Coast); and he met with the species again on the Hen, where he shot two, and on the Little Barrier, where he observed another pair, and killed the male.

While on this subject I may be permitted to refer to a passage in the paper read by Mr. Travers last year, "On the Distribution of New Zealand Birds."* He explains that, in making his analysis of genera and species, he has "assumed that Dr. Buller has seen good reasons for reaffirming *Platycercus alpinus* as a species in the Manual, notwithstanding the remarks on the subject in his larger work."

It is true that I yielded to the arguments of Dr. Finsch and agreed to sink my *Platycercus alpinus*, as a species, and treated it in the text of my work as the young of *Platycercus auriceps*. In the Introduction, however, to the book, I gave my reasons for reinstating this form. I there explained that more than twenty living examples of this bird had recently been brought to England; that it was to be seen alive in the Gardens of the Zoological Society of London; and that the validity of the species had thus been established beyond all doubt.

CHARADRIUS FULVUS.

In April, 1881, Mr. T. F. Cheeseman, the Curator of the Auckland Museum, wrote informing me that he had obtained two specimens (male and female) of the Golden Plover, both shot on the Manukau Harbour; and he afterwards made an interesting communication on the subject to the Auckland Institute (Trans. N.Z. Inst., vol. xiv., p. 264).

Of this rare visitant, Mr. C. H. Robson, with his usual activity in the cause of science, has obtained and forwarded to me a fine pair from Portland Island. I take this opportunity of exhibiting them, and also of communicating to the society some notes on this bird by my correspondent who was fortunate enough to discover its breeding place and to obtain its eggs.

ART. XXIV.—On *Hieracidea novæ-zealandiæ*, and *H. brunnea*. By W. W. SMITH. Communicated by Dr. Buller, C.M.G., F.R.S.

[Read before the Wellington Philosophical Society, 31st October, 1883]

In the summer and autumn of 1876 I shot several specimens of "Sparrow Hawk," varying so much in size that I was often surprised at the extraordinary difference in the specimens I obtained. Taking as I did at the time

* See Trans. N.Z. Inst., xv., art. xiv.

a great delight in the study of birds, but only a beginner, and knowing practically nothing of the birds of New Zealand—I had heard of Dr. Buller's work, but had not seen it—and being particularly anxious to see the article on the "Sparrow Hawk" (as I called it then in common with others), I went the following June to Christchurch where I spent two days with this work in the Public Library. After studying the articles well, I was of course a little surprised to find that two species of Falcon nearly alike in plumage, but differing considerably in size, existed in New Zealand. I also at this time read the critical notes by Professor Hutton, published in the *Ibis*, and those by Mr. Potts in the *Trans. N.Z. Inst.* My mind being thus set at rest, or partly so, I determined when I returned home to procure as many specimens as possible and work out the subject for myself; and my experience since that time is decidedly in favour of the existence of two species.

HIERACIDEA NOVÆ-ZEALANDIÆ.

The first specimen I will mention (a female) was one I shot in September 1876 on the Rangitata River. Being then in the employment of the Hon. J. B. A. Acland, and it being a busy season of the year with me, I was unable to stuff and mount the specimen. I sent it to a friend in Christchurch, who was well acquainted with the late Mr. Fuller, taxidermist at the Canterbury Museum, who stuffed the bird. When Mr. Fuller had finished it he remarked that it was one of the finest he had seen. When I visited the Canterbury Museum I examined all the specimens, but none, as near as I could judge on looking into the case, are equal in size or so distinctly or beautifully marked. On the 28th October, 1874, Dr. Buller read a paper on the two species before the Philosophical Institute of Canterbury. The measurements he then gave are as near as I can make out a few lines short of mine. I copied the whole of the article in pencil, and am therefore able to compare his measurements with mine. I am not an expert at describing the different parts of a bird's plumage, but this bird has what I have never seen in any other individual, namely, nine distinct bars on the tail.

One of the shepherds at Mount Peel brought me in from the back country a very handsome pair of eggs of this species. They also are larger and much darker in colour than those in the Canterbury Museum.

On the 23rd October, 1879, I found a nest of this species in the rocks at the Rangitata Gorge. The nest contained three young ones, one female and two males. They were covered with a light bluish wool. They must have been about three weeks old, but were very quiet. I brought them home and prepared a large box for them. I fed them on birds, rats, mice, mutton, &c., which they devoured in large quantities. On the 16th

November following they had cast off all their woolly covering, and were of a uniform dark brown colour. In two months they assumed a lighter shade, but by this time they were so noisy and fought so savagely that I was obliged to kill them, not having a proper place to keep them in. I have the skins still in my possession, and intend the first opportunity I have to present them, with several others, to the Colonial Museum at Wellington. I have found several other nests, but all containing eggs, some of which are really beautiful specimens. I was careful every season in searching for nests to carry a gun, and was always certain when I found one to procure both parents. The rocks around the Rangitata Gorge are a favourite nesting place of the quail-hawk, and a locality I can confidently recommend to any one who wishes to procure the eggs, young, or adult specimens of this bird. I found the nests every year in October and November.

A farmer living near Peel Forest shot three specimens, and sent them to me. They proved on dissection to be two females and one male: one of the females was a young bird, but very large, and heavily made; it had the thickest tarsus and talons I have seen in any bird of its kind. I afterwards gave the three birds to C. G. Tripp, Esq., Orari Gorge Station, who sent them to his son at the University of Cambridge.

Besides the nest mentioned above I have kept other young ones of this species; one in particular (a male) I had very tame, but one day he accidentally got away from me, much to my sorrow.

I may here remark that I have had several other specimens but all in my opinion easily distinguishable from *Hieracidea brunnea*.

HIERACIDEA BRUNNEA.

This "spirited little hunter" has been an object of great interest to me for several years, not only because I have studied the bird closely for the purpose of determining the two species, but likewise on account of its bold and intrepid habits, particularly during the breeding season.

On November 9, 1876, I found a nest of this species in a bush of "Wild Irishman" (*Discaria toumatou*). The nest was nearly on the ground among the dead leaves in a wooded gully four miles from the Rangitata Gorge. When I approached the nest the parent birds were extremely fierce and assailed me all the time. When looking for the nest it was rather difficult to find, being almost out of sight under the bush; but I succeeded. The nest contained two young birds and one egg. The young were only hatched the previous day, and were exceedingly small. When I lifted the egg the young bird chirped within the shell. Being the first nest of the species I had found, I was reluctant to leave it, thinking some of the shepherds might come along and destroy the nest. I shot the two parent birds and brought home the two young ones in the hope of rearing them by

hand, but they died next day, notwithstanding all the care I bestowed on them in keeping them warm, giving them good food, etc. The female was very plain in plumage. Her measurements agree nearly with those given in Dr. Buller's paper already alluded to. Since I first read Dr. Buller's fine work in June, 1876, I have always adopted his mode of measuring a bird; and am also very exact in doing so with this bird, as the measurements and "sexing" alone must determine the species. I should have stated that the male of the above-mentioned nest was a very small bird. It had the smallest head of any specimen I have seen, very little larger than the *Falco asalon* of Europe and North America.

I will speak of one more nest and I have done, as I do not desire to trespass too far. On 3rd November, 1878, I found a nest in Chapman's Gully, a mile from the homestead, Mount Peel. The nest was situated under a large plant of snow-grass (*Danthonia*), and contained three beautiful young birds. I arrived at the nest as the male came with a native pipit in his talons. When he saw me lying on the ground near the nest, he dropped the bird and dashed at me, knocking off my hat. I rose and approached the nest, when the female likewise assailed me; but it would have been almost impossible for me to remove the young, as the parent birds were so violent. I then secured the two birds and brought the three young ones home, reared them, and kept them six months; but I need not here give their history for that time, the rearing of the young of this species being ably described in the work already referred to.

The measurements of the parent birds are as near as possible the same as those of the first-mentioned pair, except that the male was a little larger.

I have possessed, from time to time, nearly thirty specimens of this bird, some varying a little in their markings and measurements.

I have one beautiful female, the smallest that I have seen, and the most distinctly marked.

Such is a little of my experience with the two species. I could relate many other facts proving or tending to prove that the species are distinct. The habits and general colouring of the plumage are almost indistinguishable; but in all the specimens of *H. novæ-zealandiæ* I have seen the plumage was much brighter, more glossy, and certainly more beautifully marked than in *H. brunnea*.

Comparing the nestlings of *H. novæ-zealandiæ* with nestlings of *H. brunnea*, the latter never attained near the size of the former, although I kept them four months longer. They were more lively, fiercer, and appeared to me more untameable than *H. novæ-zealandiæ*. I, however, never tried much to tame them.

With regard to the food of the species, in all my experience I have found *H. nova-zealandia* to subsist on larger game than *H. brunnea*. When the three young birds of *H. nova-zealandia* were two months old, I put a living weka into the cage. They were kept without food for one day to try their courage. The weka walked around the cage twice, when the female sprang upon it and seized it by the neck. I noticed that the hawk tried to bear down the weka by keeping on its back, but the weka succeeded in getting clear. This was repeated several times, and being then evening I left the four birds together in the cage. In the morning I found the weka killed, and the female and one male feeding on its remains.

I tried the same experiment with the smaller species but they never made any attempt to kill the weka.

I should have liked to add a few more experiments I made with the two species. I should also have liked to make a few remarks on the eggs, etc.; but I may have an opportunity of doing so on some other occasion.

ART. XXV.—Notes on New Zealand Ichthyology. By Dr. НЕСТОР.

[Read before the Wellington Philosophical Society, 13th February, 1884.]

Lampris luna, Risso.

Gunth., ii., 415.

A SPECIMEN, measuring 3 feet 6 inches in length, of this superb fish was cast on the beach near the Manawatu River in December, 1882, and presented to the Museum by Mr. James Jones, of Foxton.

Unfortunately it had been partly eviscerated so that the chief characters which are relied on by the Rev. Mr. Lowe (Fishes of Madeira, p. 27), for his species *L. lauta* could not be observed, viz., the absence of lingual teeth, having six instead of seven branchiostegal rays.

Thyrssites prometheus, Webb and Berthel.

vel *T. prometheoides*, Bleeker.

Gunth., ii., 351.

A single specimen of this fish was captured in September, 1883, along with the commoner species of barracoota, at Nelson, and presented to the Museum by Mr. J. H. Thomas.

The specimen was slightly mutilated, so that there is a doubt as to which of the above species it should be referred to.