

- LESSER REDPOLL. Redpolls were seen in small flocks at a number of places on Chatham Island, e.g. above the Te Awatapu slip, on the south coast; and in open country between Tuku Stream and The Horns, at the south-west part of the island.
- CHAFFINCH. The Chaffinch was recorded on 4/5/57, when a solitary bird was seen flying at the mouth of Takatika Creek, on the north coast of Chatham Island. Another was seen on Pitt Island at the north end near the Hunt homestead 2/2/57.
- YELLOWHAMMER. A single bird was seen at Waipaua, Pitt Island, on 1/3/57. None was seen on Chatham Island.
- HOUSE SPARROW. Small numbers seen around homesteads and at Waitangi. Sparrows were first introduced to Pitt Island by Frederick Hunt. Walter Hood introduced these sparrows to the main island, intending to introduce Skylarks!
- STARLING. This is the most common land bird. It is widely distributed in both islands. Flocks of 500 were often seen. On Mr. A. Weisner's station, Kaingaroa, in an introduced Pinus plantation, up to 4,000 roosting birds were recorded on 8/4/57.
- GEESE. On Lake Marakapia on the west coast of the main island a flock of twenty to thirty geese (*Anser anser*) exist in a wild state. Residents state that the birds are increasing.



## THE SUPPOSED OCCURRENCE OF KAKAPO, KAKA AND KEA IN THE CHATHAM ISLANDS

By ELLIOT W. DAWSON

In the course of the preparation of a work on the extinct birds of the Chatham Islands, comments have been noted on the former existence there of Kakapo, Kaka, and Kea, and the purpose of the present account is to offer a review of some of these reports. The osteological aspect of identification, variation, and distribution of Kaka and Kea amongst bird remains from Quaternary deposits at the Chathams will be considered on another occasion.

### THE KAKAPO (*Strigops habroptilus*)

Some years ago attention was drawn to the identification, among bird bones in collections of the Dominion Museum, Wellington, of a tibiotarsus of a Kakapo, reputed to have been collected in the Chatham Islands (Dawson, 1952: 259), and now forming part of the Travers collection. At the time no further comment was offered on the finding of such a relic of the flightless ground-parrot which might be considered evidence of its former existence on this isolated group of islands, some 500 miles to the east of New Zealand.

G. R. Williams (1956: 39), in his excellent and timely review of the past and present status of the Kakapo, has made a brief investigation into the evidence for the former existence of this bird at the Chathams, and from this he concluded: "In my opinion judgment

should be reserved until more information is obtained." While making it clear, at this stage, that I agree with Williams' sentiments, I feel that an expansion of some of the evidence for and against the former existence of the Kakapo on the Chathams might prove of interest.

The earliest record of the supposed former occurrence of this parrot is, doubtless, that given by H. H. Travers, who spent eight months on the Chathams, in a letter to his father, dated May 18, 1864, which was reprinted on a number of occasions (Travers, 1866, 1867, 1868; Newton, 1866). Travers stated (1866: 358): "There are, at present, but few land birds either on this or on Pell's Island. Formerly, the white crane (*Herodas flavirostris*), the bittern (*Botaurus melanotus*), an apterix, said by the Maoris to have been identical with a New Zealand species, and also, according to their accounts, a smaller species of the same bird, the Weka (*Ocydromus Australis*), and the Kakapo (*Rhigops habroptelus*), were found on both islands, but have become extinct since their invasion by the New Zealanders [*sic.*]. As Skinner (1932: 136) has already noted, this account is "full of typographical errors, even the author's initials being wrongly given." Travers' comments were reprinted in other journals, generally without typographical errors, and they seem to be the basis for subsequent statements that the Kakapo did once inhabit the Chathams.

Otto Finsch (1867: 245) has used the account given by Travers in this way: "Wie aus den neuesten Nachrichten von Travers . . . hervorgeht, bewohnte *Stringops* fruher auch die ostlich von Neu-Seeland gelegenen Warekauri-oder Chatam-Inseln, wo er erst sit Invasion der Maoris (1832 oder 1835) ausgerottet worden ist . . ." and, further on, he noted " . . . fand sich aber fruher auch auf den Chatam-Inseln." And again, "bewohnte fruher auch die Chatam-Inseln" (Finsch, 1867b: 324). Hutton (1871: 18), in his 'Catalogue,' recorded *Stringops*. Gray . . . New Zealand and Chatham Islands . . . *Stringops habroptilus*. Gray. Both Islands and Chatham Islands? However, W. T. L. Travers noted later (1873: 213):

"of birds mentioned in Capt. Hutton's 'Catalogue of the Birds of New Zealand' as belonging to the Chatham Islands . . . 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." Hutton (1872: 245), at the same time, remarked that: "Mr. Travers never saw a specimen of this bird; but from the descriptions of others he can hardly doubt but it once existed on these islands; at the same time he remarks that there is no country in the Chatham Islands at all similar to the haunts its loves to frequent in New Zealand."

Finsch (1874: 178) has incorporated Hutton's comments in a later paper in his series: "Von Travers nicht auf der Chatam-Inseln gefunden, wo die Art indess fruher bestimmt existirt hat."

Others, concerned with monographing the parrots or cataloguing their distribution, have apparently used these earlier comments as a basis for their work, as, for example, does Wallace (1876: 454, 483) in his treatment of 'The Geographical Distribution of Animals' where he has said of the Chathams fauna: "The natives further declare, that both the *Stringops* and *Apteryx* once inhabited the islands, but were exterminated about the year 1835." Similarly, Reichenow (1881: 15) stated in his 'Conspectus': "Vorkommen: Neuseelandische Subregion (Westseite der Alpen des sudlichen Neu-Seeland, Chatam Inseln)." In this way the "legend" of the Kakapo on the Chathams persisted, although some

writers either denied its former presence for one reason or another or, generally, omitted any mention of the bird (e.g., Dendy, 1902: 11). Buller (1882: 33), in his 'Manual,' noted: "*Stringops habroptilus*. Gray. Both Islands, and Chatham Islands." He does not appear to have supported the Kakapo "legend" in 'History of the Birds of New Zealand' (1872-3; 1988), or in its 'Supplement' (1905).

H. O. Forbes, whose explorations in New Zealand are currently being studied (Dawson, 1958), has offered some comments of interest on the supposed former existence of the Kakapo on the Chathams:

"Mr. Alexander Shand . . . told me that the Kakapo (according to the Morioris) was very abundant in the islands prior to 1836. He himself in the early days had seen their burrows often. I had observed, while collecting, several Psittacine bones, and on learning this fact I felt sure that those I had picked up . . . must belong to *Stringops*. On my arrival here, however, I find so far that there are no Kakapo bones in the collections, the Psittacine bones being the heads and beaks of *Nestor notabilis*, the Kca."

(Forbes, 1892b: 580).

Later, Forbes again remarked on this topic:

"Mr. A. Shand, a gentleman who was born in Wharekauri, and a good observer and Tapu, an aged Moriori, informed me that the Kakapo, *Stringops habroptilus*, occupied, in the early days of the Settlement, various parts of Wharekauri in considerable numbers, and both remember their burrows, though the former cannot recall having seen the birds. I did not, however, succeed in finding any of their remains, nor has my correspondent, Mr. Hawkins, been more successful."

(Forbes, 1893c: 544).

In his 'Catalogue of Parrots,' compiled after he became Director of the Liverpool Public Museums, Forbes (1897: 22) noted: "*Stringops*, in former times, lived also in the Chatham Islands." Oliver (1930) made no mention of this "myth," but, in his second edition (1955: 553), he remarked of *Strigops*: "Said at one time to have been common in the Chatham Islands."

During the 'Chatham Islands 1954 Expedition' (Dawson, 1955), watch was kept, while examining deposits of subfossil bird bones in Petre Bay, Kaingaroa, Okawa, and Owenga, for bones of *Strigops*, particularly the characteristic metatarsi, but, like Henry O. Forbes, the only "Psittacine bones" which I found belonged to a species of *Nestor*.

Shand (1894: 80), discussing Moriori traditions, has provided an account of the appearance and habits of what he has called the "mehonui, a species of the New Zealand kakapo (*Strigops habroptilus*) larger than a goose" which, he said, was "usually captured on its sleeping-place or nest, where six or eight might be found huddled together, as the Morioris declare, like pigs in a bed." Shand recorded also that this bird "had a powerful strident call, which could be heard at a great distance. Its neck was said to have been about as long as a man's arm." Taylor White (1897: 166) has analysed Shand's remarks on the mehonui and the other traditional birds of the Moriori in the light of some of Forbes' comments (1893d: 682) and in accordance with known Maori traditions and etymology. He concluded, among other things, that "the mehonui could not be related to the parrots, but was probably allied to the *Notornis*" and that it was possibly the large rail of the Chatham Islands, known only from bones described by H. O. Forbes as belonging to the genus *Aphanapteryx* of the Mascarene islands, but which were later recognised as the distinct genus *Diaphorapteryx*.

In a similar way, it is interesting to see possible correlations between the former presence of birds now known only from bones in the Chathams deposits and the "zoomorphic glyphs" with their "swan . . .

duck . . . pigeon . . . skua . . . penguin . . . hawk forms" listed recently by Miss C. Jefferson (1955) in her study of the Moriori bark carvings on trees in the Chatham Islands. Perhaps such dendroglyphs hold the key to the Kakapo myth.

Judging by his later comments the elder Travers seems to have forgotten all about his own contribution to this topic some ten years before. He has said:

"I do not know upon what authority Dr. Buller . . . has given the Chatham Islands as a habitat of *Stringops habroptilus* . . . He probably follows Mr. Wallace in making the statement, but without giving the reasons assigned for it by that writer. Mr. Wallace says (speaking of the Chatham Islands) 'that the Natives—I presume the Morioris—declare that both the *Stringops* and *Apteryx* once inhabited the islands, but were exterminated about the year 1835.'" (Travers, 1883: 182).

Travers pointed out that "the Morioris had no knowledge whatever of either *Stringops* or *Apteryx*" and that "the date fixed for their extirpation is singular" in regard to the coincidence of the Maori invasion of the same date. He concluded:

"Until the statement referred to had appeared in Mr. Wallace's work, my son, who was the first to collect systematically the fauna and flora of the Chatham Islands, and who spent upwards of a year there for that purpose, and who was diligent in his enquiries, had never heard it even suggested that either *Stringops* or *Apteryx* had existed there. . . . At all events I am not disposed to accept statements as to the occurrence either of *Stringops* or *Apteryx* in this habitat until something more satisfactory than the alleged 'declaration of the Natives' is brought forward in support of it."

Whether or not the existence of the bone in the Travers Collection in Wellington is "something more satisfactory" is a matter for conjecture. It seems rather ironical to have to state that the only piece of material evidence of the former presence of the Kakapo in the Chathams should exist in Travers' own collection, and it appears that Travers' own writings were the source of Wallace's information according to his list of references (1867: 467). The authenticity of this bone is still very much open to doubt if the conclusions reached by W. T. L. Travers (1873, 1883) are sound, and particularly so since at least two subsequent investigators, both examining several thousand subfossil bird bones at the Chathams, failed to find any trace of *Stringops*. As well as the extensive Rothschild collection, and the Forbes collection now in the British Museum (Natural History), the large Kinsey and Fougere collections of the Canterbury Museum, and the more recent collections made for the Museum by Miss C. Jefferson and by Mr. J. R. Eyles, have so far revealed no Kakapo remains. Williams (1956: 39) has sided with Travers' conclusions of 1872 and has dismissed the bone in the Travers Collection somewhat axiomatically: "Carelessness in labelling specimens was a notoriously common fault among naturalists last century."

While expressing my belief that this habit of carelessness is by no means confined to naturalists of an earlier time, I feel that two other points are worth bearing in mind. In the first place, there is similar documentary evidence for the former presence of the Weka (*Gallirallus australis*) on the Chathams. The present Weka population is said to be descended from birds introduced from Canterbury in 1905, but the former presence of a *Gallirallus* of some kind is fully supported by the finding of subfossil bones there both by H. O. Forbes and by the 1954 expedition. There also exists a skin of *Gallirallus*, part of Temminck's own collection, reputed to have been collected on the Chathams some time before 1823, which I have recently had the privilege of examining in the Rijksmuseum van Natuurlijke Historie at Leide. This skin, of course, may be of a status similar to the Travers bone, but the subfossil bones indicate that, although Travers found no evidence of the birds

in 1864, an early population of Wekas existed at the Chathams, and is doubtful whether this could be dismissed as being solely the result of introductions by the Maori invaders of 1835.

In the second place, it may be mentioned that, since evidence for the former presence of the New Zealand Falcon (*Falco novaeseelandiae*) in the Chatham Islands consists of only five bones (Scarlett, 1955; Dawson, 1957) sorted out from many hundreds from subfossil deposits, the possibility that the Travers bone is, in fact, an authentic record from the Chathams cannot be entirely ruled out, however unlikely it might appear at first sight.

THE KAKA (*Nestor meridionalis*) and the KEA (*Nestor notabilis*)

It is remarkable that no tradition appears to exist of the former presence of any parrot of the Kaka variety in the Chatham Islands. The Kakapo legend may indeed be no more than a myth, but, in the case of the Kaka, many bones of large and small forms of *Nestor* have been collected and show that considerable numbers of these birds must, at some time, have lived on the Chathams. The abundance of their remains, and their presence in subfossil deposits, probably afford adequate evidence to show that they do not owe their presence to any sort of human introduction.

Oliver (1955: 542) has remarked, in his discussion of the Kea, common in the mountains of the South Island: "In pre-European times in the North Island and on the Chatham Islands." A recent reviewer (C.A.F., 1956: 152) of Oliver's second edition asked: "Who is the authority for Kea bones in North and Chatham Islands?" As far as the Chathams is concerned, the credit appears due to Henry O. Forbes, for what seems to be the first mention of the possibility of the former occurrence of the Kea on the Chathams is to be found in his list of February 25, 1892 (Forbes 1892: 189). Later (1892a; 1892d; 1893c), he seems to have regarded the *Nestor* bones as belonging to both Kea and Kaka. In his '*List of the Birds inhabiting the Chatham Islands*' (1893c: 544), Forbes remarked: "*Nestor notabilis*, Gould. Portions of the skeleton sufficient to identify the occurrence of this species have been found . . . *Nestor meridionalis*, Gm. The same remark applies here."

*Nestor* bones from the Chathams in the Forbes collection in the British Museum (Natural History), together with bones in the Canterbury Museum collections, and others examined during the 1954 expedition, show that representatives of both large and small forms, similar to those already discussed by Dawson (1952), were present on the Chathams. As mentioned before, many of the upper mandibles of the Chathams *Nestor* are more than usually elongated, and are, in fact, reminiscent of the condition in *Nestor notabilis*, although remains appear indistinguishable from the present-day *N. meridionalis*. Considering size differences and present-day ecological differences between Kea and Kaka, it appears unlikely that the Kea, as we now recognise it, ever inhabited the Chathams. The Chatham Island *Nestor* is probably the result of an evolutionary change from a widely distributed form, resembling, in size the present-day Kaka of the North Island (*Nestor meridionalis septentrionalis*), along similar lines of rapid genetic spread in small populations as previously proposed to account for the existence of the large present-day Kaka of the South Island.

## REFERENCES

- BULLER, W. L., 1882: "Manual of the Birds of New Zealand." Col. Mus. & Geol. Surv., Wellington xii + 1—107 pp.
- DAWSON, E. W., 1952: "Subfossil Nestor (Psittacidae) from New Zealand." *Emu*, 52 (4): 259—272.
- 1955: "The Birds of the Chatham Islands 1954 Expedition." *Notornis*, 6 (3): 78-82.
- 1957: "Falcon in Chatham Islands." *Notornis*, 7 (4): 113.
- 1958: "Re-discoveries of the New Zealand subfossil birds named by H. O. Forbes." *Ibis*, 100 (2).
- DENDY, A., 1902: "The Chatham Islands: a study in biology." *Mem. Manchr. lit. phil. Soc.*, 46 (12): 1-29.
- FLEMING, C. A., 1956: "Oliver's New Zealand Birds." *Emu*, 56 (2): 150-152.
- FINSCH, O., 186/a: "Die Papageien, Monographisch Bearbeit." Brill, Leiden, 1: xii + 1-561 pp.
- 186/b: Walther Buller's "Versuch über die Ornithologie Neu-Seelands," übersetzt und mit kritischen Anmerkungen versehen." *J.f. Orn.*, (89) 15 (5): 305-347.
- 1874: "Zusätze und Berichtigungen zur Revision der Vogel Neuseelands." *J. f. Orn.*, (126) 21 (2): 167-224.
- FORBES, H. O., 1892a: "Interview with H. O. Forbes: Mr. Forbes' discovery." *The Christchurch Press*, 49 (8132): 5-6.
- 1892b: "Aphanapteryx in the New Zealand region." *Nature*, 45 (1173): 580-581.
- 1892c: "Preliminary notice of additions to the extinct avifauna of New Zealand." *Trans. N.Z. Inst.*, 24: 185-189.
- 1892d: "Aphanapteryx and other remains in the Chatham Islands." *Nature*, 46 (1185): 252-253.
- 1893a: "The Chatham Islands and their story." *The Fortnightly Review*, 53 (317): 669-690.
- 1893b: "The Chatham Islands: their relation to a former southern continent." *Koy. geogr. Soc. Suppl. Pap.*, 3 (4): 607-637.
- 1893c: "A list of birds inhabiting the Chatham Islands." *Ibis*, (6) 5 (20): 521-546.
- 1897: "Catalogue of Parrots (Psittaci) in the Derby Museum." *Bull. Lpool Mus.*, 1 (1): 5-22.
- HUTTON, F. W., 1871: "Catalogue of the birds of New Zealand, with diagnoses of the species." *Geol. Surv. N.Z.*, Wellington, Publ. 17: x + 1-85 pp.
- 1872: "Notes on some birds from the Chatham Islands, collected by H. H. Travers, Esq.; with description of two new species." *Ibis*, (3) 2 (7): 243-250.
- JEFERSON, C., 1955: "The dendroglyphs of the Chatham Islands." *J. Polynes. Soc.*, 64 (4): 367-441.
- NEWTON, A., 1866: "Notices of recent ornithological publications" *Ibis* (2) 1 (5): 113-115.
- OLIVER, W. R. B., 1930: "New Zealand Birds." Fine Arts, Wellington. viii + 1-541 pp.
- 1955: "New Zealand Birds." Reeds, Wellington. 661 pp.
- REICHENOW, A., 1881-2: "Conspectus Psittacorum Systematisch Uebersicht aller bekannten Papageienarten." *J. f. Orn.*, 29 (153-6): 1-234.
- SCARLETT, R. J., 1955: "Falcon in Chatham Islands." *Notornis*, 6 (3): 57.
- SHAND, A., 1894: "The Moriori people of the Chatham Islands: their traditions and history." *J. Polynes. Soc.*, 3 (1): 76-92.
- SKINNER, H. D., 1923: "The Moricris of Chatham Islands." *Mem. B.P. Bishop Mus.*, 9 (1): 1-140.
- TRAVERS, H. H., 1866a: "On the destruction of the aborigines of Chatham Island." *Trans. Ethnol. Soc. Lond.*, n.s. 4: 352-360.
- 1866b: "Die Warekauri-oder Chatham-Inseln im südlicher Grossen Ocean." *Petermanns Mitt.*, 1866 (2): 61-66.
- 1867: "Notes on the Chatham Islands (lat. 40deg. 30min S., long 175deg. W.)" *J. Linn. Soc. (Bot.)*, 9 (35): 135-144.
- TRAVERS, W. T. L., 1873: "On the birds of the Chatham Islands, by H. H. Travers, with introductory remarks on the avifauna and flora of the islands in their relation to New Zealand." *Trans. N.Z. Inst.*, 5: 212-222.
- 1883: "Remarks on the distribution within the New Zealand Zoological Sub-region of the birds, of the orders Accipitres, Passeres, Scansores, Gallinae, Struthiones, and Grallae." *Trans. N.Z. Inst.*, 15: 178-187.
- WALLACE, A. R., 1876: "The Geographical Distribution of Animals." MacMillan, London I: xxiv + 1-503 pp.
- WHITE, T., 1897: "On the Poua and other extinct birds of the Chatham Islands." *Trans. N.Z. Inst.*, 29: 162-168.
- WILLIAMS, G. R., 1956: "The Kakapo (*Strigops habroptilus*, Gray) A review and re-appraisal of a near-extinct species." *Notornis*, 7 (2): 29-56.