

NOTORNIS

VOLUME NINE, NUMBER THREE

DECEMBER, NINETEEN SIXTY

NEW EVIDENCE OF THE FORMER OCCURRENCE OF THE KAKAPO (*Strigops habroptilus*) IN THE CHATHAM ISLANDS

By ELLIOT W. DAWSON

Some years ago I found a leg bone of a large parrot, considered to be the Kakapo (*Strigops habroptilus*), among subfossil bones in the collections of the Dominion Museum, Wellington (2). The information accompanying the bone was that it was from the Chatham Islands, W. T. L. Travers Collection, Oct. 30, 1899.

Since there appeared to be no other material records of the Kakapo from the Chathams, doubt was cast on the authenticity of this bone (13, 14), although, from various allusions in the literature of the natural history of the Chatham Islands (5), the possibility of the former occurrence of the Kakapo there could not be absolutely dismissed.

An account of the rediscovery of H. O. Forbes's collections of subfossil birds from New Zealand and the Chatham Islands, which included many type specimens, has already been given (3), but, amongst all this material, no further bones of the Kakapo were found, thereby verifying Forbes's own conclusions (8).

Recently, however, another very large collection of subfossil bird bones, mainly from the Chatham Islands, forming part of the collection of Lord Rothschild which was stored in his museum at Tring until 1934, has been examined. A number of references have been made to the large size of this collection (1, 12) but it could no longer be found at Tring or elsewhere following Rothschild's death when much of his museum was moved to South Kensington in addition to that which had already been bought by the American Museum of Natural History. Despite nearly five years of personal search and correspondence no trace could be found of this "immense" collection until June, 1960, when it was discovered in large numbers of boxes of unsorted bones at South Kensington, where it had been stored following the death of Miss D. M. A. Bate, who was preparing to examine it.

I have recently examined and identified this entire collection of some 10,000 bones on behalf of the British Museum (Natural History) in which it is now housed and registered. Among the bones are a number of new records of some interest, particularly regarding material from Te Aute swamp and Te Rauparaha's pa at Paremata, and including the discovery of further type material of the large extinct harrier described by Forbes as *Circus hamiltoni* (7, 3), as well as new records of *Falco*, *Sceloglaux*, and *Strigops* from the Chatham Islands.

In this large collection I have found two bones of the Kakapo. They consist of a tibiotarsus and a premaxilla. They undoubtedly belong to a species of *Strigops* and, since they were amongst a large number of unsorted and unidentified bones collected by H. O. Forbes

in the Chatham Islands in January and February of 1892, there is little reason, in this case, to doubt their authenticity.

The former presence of the Kakapo in the Chathams would not necessarily be so surprising as some accounts might imply (13), and the distribution of flightless and near-flightless rails and coots (e.g., *Diaphorapteryx* and *Palaeolimnas*) on the Chatham Islands and on the New Zealand mainland indicates a close association between the avifauna of these two regions. A consideration of the former ecological requirements of fossil birds as shown by the distribution of their remains, particularly as applied to these New Zealand and Chatham Island birds (4), shows that a number of widespread and important changes have taken place in geologically recent times. The fact that certain of these birds (e.g., *Strigops*, *Notornis*, *Mergus*, *Eudypetes*, *Coenocorypha*) now have a rather narrowly restricted range of habitat or distribution should not be an obstacle to postulating either a wider ecological tolerance in the past or a wider range of the particular vegetational associations with which these birds are now found.

Hence, there need be no great surprise at the former occurrence of a large ground-living parrot (i.e., *Strigops*) in the Chatham Islands, despite Lowe's argument that "it would relegate the flightless condition of this primitive parrot to an immense antiquity, for obvious reasons which we need not stop to discuss" (9). There is ample scope for discussion of how and when the Kakapo reached the present site of the Chatham Islands with regard to Lowe's later statement that all the "flightless" birds were on the way to obtaining the power of flight and not losing it as generally supposed (10), and to Oliver's opinions on this question (11).

If the existence of such a small number of bones still demands caution, it might indicate that small numbers of the Kakapo had been introduced by Man into the Chathams. One must, however, consider that while there is apparently no native tradition of the presence of the Kaka or Kea on the Chathams, bones of a species of *Nestor* are sufficiently common to show that it once existed in appreciable numbers (5). On the other hand the numerous allusions to the former presence of the Kakapo are supported by only three bones, the two most authentic of which were sorted out of a collection of some 10,000 bones of subfossil birds from the Chatham Islands now in the British Museum (Nat. Hist.); and, in the several thousand bones in other collections from the Chathams which I have examined in the course of this work (6), there has been no further indication of the Kakapo.

It should be added here that the statement of Williams (14), that the "rather fragmentary subfossil material" of the Kakapo "seems to be lodged in New Zealand museums only" requires modification owing to the presence of *Strigops* bones in the Owen, Rothschild and Forbes collections in the British Museum (Natural History), the bones from Te Rauparaha's pa at Paremata being of special interest.

LITERATURE CITED

- (1) ANDREWS, C. W., 1896 — *Geol. Mag.*, 3: 337-8; *Novit. Zool.*, 3: 73-84; 260-71.
- (2) DAWSON, E. W., 1952 — *Emu*, 52: 259-72.
- (3) ——— 1958 — *Ibis*, 100: 232-7.
- (4) ——— 1959 — *Proc. XV Int. Congr. Zool.* 1958: 450-2.
- (5) ——— 1959 — *Notornis*, 8: 106; 111-5.
- (6) ——— Mss. — *The Extinct Birds of the Chatham Islands.*

- (7) FORBES, H.O., 1892 — *Trans. N.Z. Inst.*, 24: 185-9.
 (8) ———, 1892 — *Nature*, 45: 580-1.
 (9) LOWE, P. R., 1928 — *Proc. Zool. Soc. Lond.*, 1928: 185-247.
 (10) ———, 1942 — *Ibid.*, 112B: 1-20.
 (11) OLIVER, W. R. B., 1945 — *Emu*, 45: 55-77.
 (12) ROTHSCHILD, W., 1907 — *Extinct Birds*; *Proc. 4th Int. Orn. Congr.* 1905: 191-217.
 (13) WILLIAMS, G. R., 1956 — *Notornis*, 7: 29-56.
 (14) ———, 1960 — *Rec. Dom. Mus.*, 3: 219-27.



FIELD STUDY WEEK-END, BAY OF PLENTY 1960

A pleasant Field Study Week-end began on Friday, October 21, when twenty-six members from Whangarei, Auckland, Clevedon, Cambridge, Gisborne, Minginui, Tauranga, assembled at Whakatane at the Philatelic Hall. Mr. W. T. Parham had arranged a display of photographs, gannet rings, reports of the gannet-ringing scheme, cartoons by R. H. Haeusler, and as a side-line, photographs of bats. Mr. H. R. McKenzie welcomed those present and outlined the excursions planned and the bird-life which could be expected. Mr. and Mrs. Parham had given a great amount of time and thought to planning and arranging excursions and meetings. Interesting local films were shown by Mr. Parham and supper concluded the evening.

Next morning a visit was made to Mr. Farnworth's aviary, where birds admired and photographed included Golden and Lady Amherst pheasants, King Parrots, Rainbow Lorikeets, Indian Ring-necks, and African Crimson Finches. Studies of hybridisation were explained by Mr. Farnworth, e.g. crossing of Greenfinch and Goldfinch with Canary. N.Z. Red-fronted Parakeet were compared with Yellow-crowned Parakeet, a valuable study.

At a small lake at the foot of Mt. Edgecumbe, some new members had their first sight of the Dabchick. Beyond Kawerau, the party climbed a hill to view from above a small lake known to ornithologists as "Prickett Lake," where the highlight was five Bittern in the air together. Also seen were six Dabchick, four Scaup, and inevitably the odd shag.

At the edge of the Rotoma Hill bush the party had lunch with noises off:— the calls of Long-tailed and Shining Cuckoo, Kingfisher, Grey Warbler, Fantail and Pied Tit. Whiteheads were heard but only the McKenzies were privileged to see a party of four. R. St. Paul's party counted forty Bellbirds, twenty Tui, two Pied Tits, and eight Fantails. Dr. Elsie Gibbons saw a native Pigeon, and W. H. Way a Pied Tit feeding its mate. All saw a Long-tailed Cuckoo flying.

The next stop was at the Rangitaiki River mouth for a tantalising view of Whale Island and Rurimu Rocks, which unfortunately could not be visited. W. T. Parham gave some information about them and showed films at one of the evening meetings. Offshore a Giant Petrel was sighted. Along the beach was a pair of Banded Dotterel. On the river were some gulls and two Little Black Shags.

On Saturday evening, members were guests of the Whakatane