## NOTES OF THE FERN BIRD.

The call of the fern bird (Bowdleria punctata) in all the records available to the writer is described as a double note generally vocalised as "u-tick." Some writers give "u-tick" as one of the names by which the bird is sometimes known. A good many years ago it was suggested to me by a surveyor acquaintance that the double call is actually two calls made by two separate birds—one answering the other with great rapidity. The surveyor happened during the course of his work in the field, to occupy a position between two fern birds while they were calling and was surprised to learn the double call was being made by two birds. Under similar conditions I have on several occasions since had the same experience. On one occasion I could actually see both birds and watched them as they drew together, calling as they came. I would be interested to hear the views of other observers.—A. H. Watt, Paua.

One of the notes of the fern-bird, a short double whistle, is made by two birds. Near Rotorua, 20/11/47, I watched two birds making this call, one answering the other from a distance of about twelve feet. I was standing between the birds, but from a few yards further away the call sounded as if from one bird. Each half of the call was heard by itself, though rarely. At this time all birds heard near Rotorua and the Waikato were giving this call, the first of the two notes being accented, but in November, 1946, all birds heard in at least one of the same swamps accented the second note of the call. The difference was particularly marked.—J. M. Cunningham, Masterton.

On 18/11/47 I discovered a pair of fern-birds in a swamp near To Kuiti. From them I heard four distinct notes: (a) "Kip" from both birds; (b) "piup" from first bird; (c) what sounded to me like "tropip" but could very likely be the "utick" of the literature on the subject; (d) a very gentle "tititititi," which may possibly have been young. The swamp was very deep at that particular point and as I advanced the bird nearest to me started to "piup," which I think might possibly be an alarm note, as on several other occasions I heard it when I disturbed them. I have since discovered that there are at least three pairs of fern-birds in this swamp.—W. F. I. Hunt, Te Kuiti.

Recent observations of the fern-bird in the Wellington province enabled me to personally record some of its notes. At Waimarino, 9/10/47, where the bird occurs at an altitude of over 2,600 feet, the following notes were recorded: (a) "tick," not preceded by the "u", uttered when the bird was well hidden in low manuka; (b) a loud penetrating double note like "sto-pit," the latter portion having a remarkable ventriloquial effect, so much so that although the bird was seen uttering this note, in full view, perched on top of a flax stalk, I instinctively looked in the opposite direction to locate what sounded like a second bird giving the latter portion of this double note; (c) a very feeble note, like the whisk of a comb or winding of a watch spring, of two or three seconds duration and only discernible at a distance of a few feet. At Wairarapa Lake, where, on 1/2/48 I saw two in the same area where I had recorded it 25 years previously, though I had not seen or heard it in the interim, the following notes were apparent: the b note above, "sto-pit," first heard at least six chains away; and the following additional ones: (d) "u-tick," a much quieter note of no great carrying power; this was uttered by a bird in full view while it was perched in a willow; (e) an ear-splitting "tak," uttered while my wife and I tried to dislodge it from a clump of cutty grass into which it had flown and evidently a note of anger; (f) a loud note of almost bell-like quality uttered by a bird perched in a willow. The sequence of these notes was: In distance, b; bird then seen in willow, where it gave f; second bird located in another willow calling d; this bird in cutty grass uttered when disturbed e. One bird flew from willow to willow, the longest distance being about 100ft.; the other also flew distances of 50 feet or more; their flight gave no suggestion of weakness .-R. H. D. Stidolph, Masterton.

Last week (February, 1949) while blackberrying at Otatara, in the vicinity of Invercargill (4 to 5 miles distant) I followed a grass track into a swampy place near the estuary, when the twang of what I thought to be a fern bird made me twice-alive. I hav seen and heard the fern bird on several occasions while at Stewart Island, on tracks near the Freshwater River, so when I saw the bird sliding through manuka scrub and rush in a mouse-like manner and uttering its constant cry, I was delighted. So near to the town! Before I left the swamp I had seen three of these birds and found a disused nest. The nest was not a recent one. Two of the birds appeared to be a pair, as it was clear that one uttered a single note which the other caught up and answered. The feeling of this double note was as if it came from one bird. Very curious it was; and as the one bird was within a yard of me some of the time and many times slid very much closer, I had an unimpeded view. The other bird was over the other side of a ditch, seeking food low down among rush, under scrubby manuka. About 100 yards along the track and nearer the estuary, I heard again the metallic twang and saw another bird, the third. In January a friend of mine saw one at her camp at Golden Bay, Stewart Island.—(Mrs.) Olga Sansom, Invercargill.

## SUB-FOSSIL BIRD REMAINS FROM LAKE GRASSMERE.

By Elliot Dawson, Christchurch.

Although the society is concerned mainly with living birds, a few notes regarding bones of birds, some of which are now extinct, found in sand dunes near Lake Grassmere, may be of interest to members.

In certain parts of the sand dunes near the south end of Grassmere Spit, Marlborough, are found deposits of bird bones and Maori middens. The middens are scattered over a wide area of loose wind-blown sand. The wind has blown away large hollows, leaving miniature plateaux and valleys in the midden areas, in which are found moa bones, egg shell and other bird remains. Thus we can see that the bird bones from this area may be refuse from the midden, or, as in the case of several other sites, merely natural accumulations of bones. If the latter case is correct, how are we to explain this large conglomeration of material? Judging by various geological evidence, there is every likelihood that this site was once a swamp area, like Pyramid Valley, which in time dried out and became covered by sand dunes.

Some of the bones have definitely been blown out from the midden layer but there are only two species from there about which I have any definite proof: Spotted shag (Stictocarbo punctatus punctatus) and blue penguin (Eudyptula minor). Many of the others, such as Gallirallus, Megadyptes, Anas, Hemiphaga, several petrels, etc., probably are also midden debris but I lack sufficient proof.

We can therefore see that this site presents a most interesting problem in many ways. A list of species I have collected and identified from there appears below. I have to thank Mr. R. S. Duff, Director of the Canterbury Museum, for information and assistance, and also Drs. R. A. Falla and W. R. B. Oliver.

Kiwi (Apteryx australis and A. oweni); yellow-eyed penguin (Megadyptes antipodes); blue penguin (Eudyptula minor); mutton bird (Puffinus griseus); about four other species of petrels (Procellariiformes); Marlborough shag (Leucocarbo carunculatus carunculatus); spotted shag (stictocarbo punctatus punctatus); grey duck (Anas poicilorhyncha); paradise duck (Tadorna variegata); brown duck (Anas aucklandica chlorotis); two or three other species of ducks (Anas); extinct swan (Chenopis sumnerensis); harrier (Circus approximans); extinct eagle (Harpagornis moorei); extinct crow (Corvus moriorum); wekas (Galirallus sp. and G. australis); rail (Rallus sp.); extinct coot (Fulica prisca); black-backed gull (Larus dominicanus); red-billed gull (Larus novaehollandiae); pigeon (Hemiphaga novaeseelandia); kaka (Nestor meridionalis); kakapo (Strigops habroptilus); at least three Passeri-