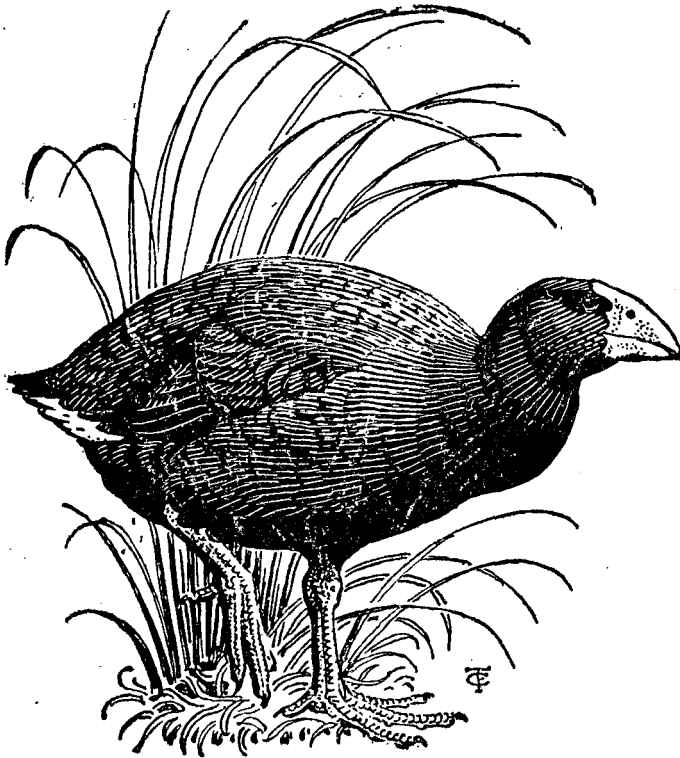


NOTORNIS



QUARTERLY BULLETIN

of the

Ornithological Society of New Zealand



Volume Eight, Number Two: October, 1958

NOTORNIS

In continuation of New Zealand Bird Notes

BULLETIN OF THE ORNITHOLOGICAL SOCIETY OF NEW ZEALAND
(Incorporated)

Registered with the G.P.O., Wellington, as a Magazine

Edited by R. B. SIBSON, King's College, Auckland S.E.7

Annual Subscription, 10/-; Endowment Membership, £1;

Life Membership, £10 (for members over thirty years of age)

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NOTORNIS

VOLUME EIGHT NUMBER TWO : OCTOBER NINETEEN FIFTY-EIGHT

SOME RECORDS OF AUSTRALIAN BIRDS IN NEW ZEALAND, 1957

By *Dr. R. A. FALLA*

The frequency of vagrant records has been remarked often and in an earlier paper (Falla 1953 p. 37-8) I discussed its relationship to the eventual establishment of new breeders. There are very few years in which some stray Australian birds are not recorded in New Zealand, but some periods are remarkable for the numbers of individuals and of species involved. The early months of 1957 appear to have been one such period, and this paper is concerned with a description of specimens and reports received at the Dominion Museum. Mrs. O. Sansom, Director of the Southland Museum, Invercargill, has been indefatigable in securing specimens and reports, and I am indebted to her for most of the material on which the paper is based. Mr. K. Miers of the Wildlife Division, Department of Internal Affairs, has generously provided some records of field observation from data which he has assembled.

AUSTRALIAN LITTLE EGRET. *Egretta garzetta nigripes* (Temminck)

Mrs. Sansom forwarded two specimens which had been shot in Southland early in the shooting season. The first was an adult female found on the Mataura Lagoon on 8th May, 1957. It is in good plumage with straight dorsal plumes extending just beyond the tail and the long plumes of the foreneck well developed. The bird's bill was black, yellowish on the basal half of the lower mandible. The legs and toes were completely black viewed from the front but were light olive on the back of the tibio-tarsal joint and the soles of the toes. Lores and eyelids were greenish yellow, irides bright yellow. Dimensions — Wing 255 mm.; tail 86; tarsus 96; middle toe and claw 62; culmen 84. (Dominion Museum registered number 8967).

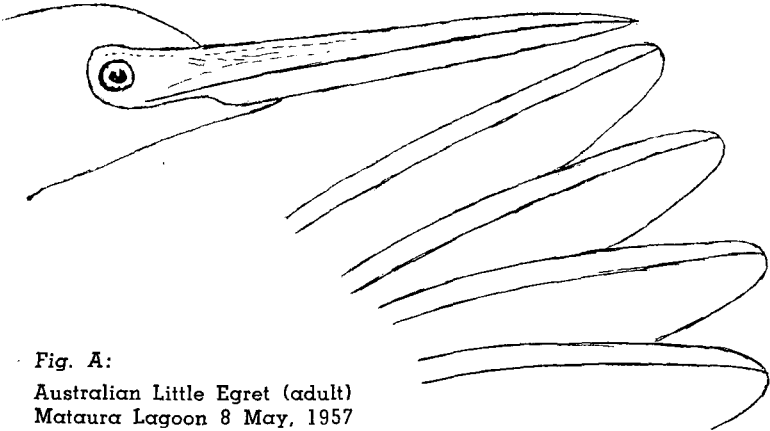


Fig. A:

Australian Little Egret (adult)
Mataura Lagoon 8 May, 1957

The second specimen, although fresh, was unfortunately in fragments as the body had been plucked and torn by a harrier before it was found, near Invercargill, at the same time (8th May) as the last. It was a young female bird and appears to be a Little Egret but differs in several respects from the adult bird described above. As the line diagram (Fig. B) shows, it has a shorter stouter bill and the four outer primaries are quite different in shape. The white plumage is suffused with salmon buff along the outer scapulars and strongly on the tail and under tail coverts. The bill was deep yellow, blackish only on the terminal half of the upper beak. The facial skin was red, but this may have been indelible blood stain on original yellow. Irides were light yellow and feet light olive green, stained blackish in front and on top of toes. Dimensions — Wing 241 mm.; tail 73; tarsus 102; toe 61; culmen 75.

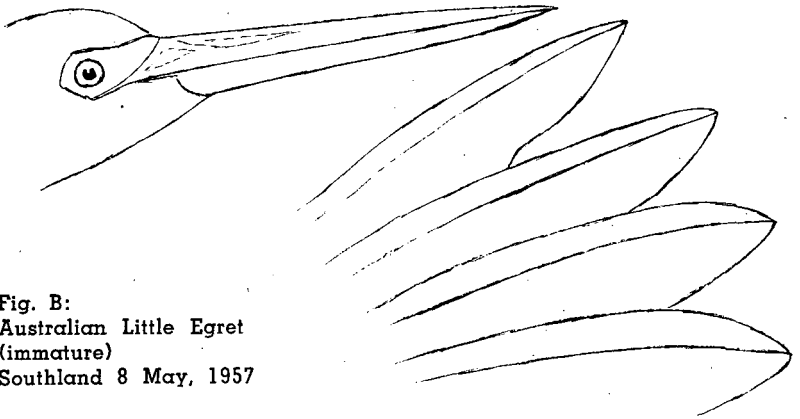


Fig. B:
Australian Little Egret
(immature)
Southland 8 May, 1957

AUSTRALIAN WHITE IBIS. *Threskiornis aethiopica strictipennis*
(Gould)

Some interesting sight records, photographs, and one specimen confirm a scattered invasion by the White Ibis. Mrs. O. Sansom describes the first Southland record as follows: "May 23rd, 1957, Mr. F. F. Allan, Otautau, rang the Museum to report a strange bird, 'a big heavy bird, greyish body, black head, long black curved beak, long neck, poking about water then flew up into a tree. Something like a bittern.'" After inspecting it and deciding that the bird was a White Ibis, Mrs. Sansom on 27th May received a dead specimen from Tuatapere. It had been shot on 24th May, and was therefore not the bird seen on 25th at Otautau. It was sent to the Dominion Museum and is described below. On 29th May came a further sight record at Te Tua, Te Wae Wae Bay, and an interesting account from Mr. R. Paulin, Doubtful Sound, who confirmed that a White Ibis had appeared there on 12th April and remained till 18th May, on which date it was seen to fly to a considerable altitude and head east. It was possibly one of the birds seen a week later in Central Southland.

Early in June Mrs. Sansom received a report from Mr. R. Phillips who recorded four birds answering the description of ibis at the mouth of the Rangitikei, North Island, and about the same time Mr. J. Prickett

of Auckland photographed one at Kinohaku, Kawhia, and published the photograph. From the dates of record these northern birds could have been the same individuals as the Southland records, but it is more likely that they were different, for there was still an ibis on Nicholson's Farm, Royal Bush, Southland, observed regularly between mid-August and 14th September, when it was photographed. It, or another one, was reported by Officer Bros. of Drummond to have been scavenging for after-birth at lambing time on 17th September. A further report received by Mrs. Sansom was from Mr. Beachman, who saw two at close range four miles from Hokitika, Westland, on 30th September.

Without exception the descriptions and photographs are all of immature birds, and so is the specimen. In adults the head and neck are naked and black, in all races of *T. aethiopica*, but are feathered in the first plumage. In the Tuatapere specimen, a young female (D.M. 8932), the forehead, lores, space round eye and gular area are black and naked, the rest of the head and neck fully feathered, blackish on crown and hindneck and clothed with white-based dark feathers on cheeks and sides of the neck, giving these areas a speckled appearance. The feathers of the rest of the neck are white like the breast. Bill black, pale at tip; iris dark brown, feet dark iron grey. The plumage pattern appears to be the same in immature *T. a. aethiopica* and is concisely described by Meinertzhagen (1930, p. 437). Gould (1848) made a loose and incomplete description of the young of the Australian bird as having the neck partially clothed with "white feathers" (presumably on an otherwise naked neck) and this has been frequently repeated (Sharpe 1898, p. 10, Oliver 1955, p. 399). The dimensions of the Tuatapere specimen are wing 335; tail 100; tarsus 98; toe 85; culmen (arc) 150; or 155 (curve) all in millimetres. The weight of the bird was 3 lbs. 4 ozs.

Earlier New Zealand records, when described, appear also to have been young birds. The description of one held in captivity in Nelson (Moncrieff 1925, p. 371) resembles the more recent records.

GLOSSY IBIS. *Plegadis falcinellus*

Records of this ibis in flocks of a dozen or more have been regular for some years, concerning mainly Blenheim and Foxton districts. The 1957 records have been more scattered geographically and have been of pairs or single birds. On 26th June Mr. Arthur Simmonds of South Featherston saw two on the shores of Lake Wairarapa at close range. One was slightly larger than the other.

AUSTRALIAN COOT. *Fulica atra australis*

Coots can now be regarded as established in considerable numbers in Southland. The annual shooting season usually produces a few specimens shot in error. In 1957 Mrs. Sansom reported nine dead birds from Southland in the first week of May and others were seen alive by shooters. Others were shot near Blenheim and on Lake Wairarapa. It is not imperative to postulate a fresh invasion of coots in this year. Indeed if the report given to Mrs. Sansom by the late Mrs. W. Printz of Pahia is to be relied on they were not uncommon in Southland in 1890. However the number of North Island locality records expanded in 1957, and there was a noteworthy southerly movement from Australia into Tasmania recorded by Sharland (1958, 43).

It is perhaps significant that the R.A.O.U. Branch Report by M. Sharland (*loc. cit.*) recording an influx into Tasmania in 1957 of new arrivals from the north lists 40 or 50 White Ibis, Royal Spoonbills, Little Egret, and Pacific Heron, in addition to a substantial increase in the numbers of Coots.

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FOOD OF YOUNG BLACK-BILLED GULLS (*LARUS BULLERI*) IN A BREEDING COLONY, NORTH CANTERBURY

By ELLIOTT W. DAWSON

During the years in which Acclimatisation Societies and so-called sportsmen have held sway in the management of New Zealand wild life, one or another species of bird, whether native or introduced, has been given a "black mark," and, without giving it much of a chance to justify its existence, has been summarily dealt with. This happened, for example, some years ago in the case of the Black Shag (*Phalacrocorax carbo novaehollandiae*) with the result that, even in these more enlightened days, one can easily see that to many "trigger-happy" individuals it makes no difference that there are eight or so different species of shag frequenting our lakes, rivers, and shores. They are all just "shags" to these people. The work of Falla and Stokell (1937; 1945), and of Dickinson (1951), on the stomach contents of a number of shags at least gave some more conclusive idea of what might compose the diet of these birds in various places and at various times. At the moment the bird with the black mark seems to be the Rook (*Corvus frugilegus*), but, if one is to judge by the comments and letters in various newspapers (*cf.*, for example, 'Christchurch Star Sun,' Oct. 23, 1956), opinion is not entirely uniform as to whether this bird, in New Zealand, deserves the black mark with which it has been branded. It is interesting, in this connection, to read Nicholson's remark on this species and its habits in England (Nicholson, 1951: 42-44).

In a similar way, about 1930, even the Black-billed Gull, for a short time, had a black mark put on it. E. F. Stead (1932: 56) tells us how this took place in Christchurch. To use his words, "They do not come into Christchurch on foraging expeditions as does the Red-billed Gull in Auckland, and perhaps this is not greatly to be wondered at, for on one occasion, when a small flock came to Hagley Park, they were shot under orders from the local Acclimatisation Society, because they

were eating some of the trout fry which had been put into Victoria Lake."

The Black-billed Gull, the Red-billed Gull (*Larus novaehollandiae scopulinus*), and almost constantly the Black-backed Gull (*L. dominicanus*), have not been immune from further verbal or physical attacks during the passing years, but, at least, it is now possible to see the Black-billed Gulls, together with a lesser number of Black-backed Gulls and an occasional Red-billed Gull, feeding in considerable numbers throughout the year on the banks of the river in the very centre of the city of Christchurch. This advent of the gulls to central Christchurch illustrates the corollary to Nicholson's maxim (1951: 172): "A town which is inhospitable to birds must be strongly suspected of being inhospitable also to people."

The measures that can be taken by land-owners to reduce the damage done by Black-backed Gulls to ewes and lambs seem to be fully covered under Section 5 of the Wildlife Act although, no doubt, these regulations will be construed by some people as applying to any kind of gull just as happened in the case of the Black Shag. One still sees, for example, that Red-billed Gulls are threatened by such people as groundsmen who find them puddling on playing fields. I have been concerned to see that newspaper accounts reporting such incidents rarely trouble to explain that, in fact, the vast majority of New Zealand birds, including the small gulls, are absolutely protected and may not be killed without a permit. Such permits are rarely given even for serious scientific investigations, and then sometimes inadequately, so that the greatest caution must be shown when an "informed" layman suspects that his pleasure is being disturbed by the birds. Particularly is this so with regard to complaints about the food of birds. Collinge (1913) made a notable contribution to ornithology when much of his data on the food of British birds was published. From his work we now know quite well the likely food of the British gull species in various places and at various times, and many papers adding to the sum of knowledge on this topic have since been written. Such a state of affairs does not yet exist in New Zealand, and we will only achieve this if those of us who have the opportunity to report on food taken by our birds do so. We will then be in a position to know with some certainty which species deserve a black mark, and hence may have their protection lifted for the benefit of those who desire it, and which deserve all our efforts in conservation and protection. It is with this in mind that I have put forward this somewhat incidental note on material eaten by some members of a species I have come to know well, the Black-billed Gull.

From time to time, during ringing operations in a colony of Black-billed Gulls in the Ashley River, North Canterbury, fledging gulls have regurgitated recently-taken meals in the manner recorded earlier by Gurr (1954: 209). In contrast to Gurr's observations of the food of young Red-billed Gulls, close to the sea, on the Boulder Bank, Nelson, where "Small fish seem to constitute the principal food of the nestlings," the food of the young Black-billed Gulls in an inland situation on the Ashley has been found, over the period 1950 to 1954, to consist chiefly of insects, larvae, pupae and adults, and of small red worms. Marine food or freshwater fish appear to have been only exceptionally taken as food for the gull chicks.

Recently, Mr. B. B. Given, of the Entomological Research Station,

Cawthron Institute, Nelson, very kindly identified the insect remains from some regurgitated meals which I had collected, and I am indebted to him for this favour. Mr. Given wrote: "In a number of cases, identification is possible only as far as family, and in others as far as genus or even species. All species are probably native except the ladybird *Adalia bipunctata*. The *Oxycanus* larvae are probably all *O. cervinatus* (Walk.), but this is not certain. The elaterids (unidentified) in samples 2, 8 and 19 are different species."

Twenty-three samples of food, regurgitated by chicks or dropped by parent birds at the nests, and collected mainly in the 1951 season, may be taken to illustrate the variety and relative abundance of the food of the fledging gulls on the Ashley from 1950 to 1954.

1. Regurgitated by chick, 25/11/51: 3 small fish; 2 beetles and 1 'grass grub' (larva of the 'Brown Beetle,' *Costelytra zealandica*); 1 earthworm.
2. Regurgitated, 25/11/51: 8 insect larvae (Coleoptera, Elateridae; Lepidoptera, Agrotidae); 4 small red earthworms.
3. Dropped at nest, Nov., 1950: 1 small crab (*Hymenosoma* sp., Crustacea, Brachyura).
4. Regurgitated, 9/11/51: 3 small flatfish (*Rhombosolea* sp., Pisces, Heterosomata).
5. Regurgitated, 2/12/51: large mass of partly-digested fish remains.
6. Dropped at nest, 17/11/51: 3 'grass grubs' (larvae of *Costelytra zealandica*).
7. Regurgitated, 20/11/51: 1 insect larva (*Oxycanus* sp., Lepidoptera, Hepialidae).
8. Dropped at nest, 25/11/51: 3 insect larvae (Coleoptera, Elateridae. 'Wire worms').
9. Dropped at nest, Nov., 1953: 9 'Brown Beetles' (*Costelytra zealandica*); 2 large insect larvae (*Oxycanus* sp.).
10. Dropped at nest, Nov., 1951: 2 insect larvae (*Heliothis armigera*, Lepidoptera, Agrotidae); 1 insect pupa (*Oxycanus* sp.).
11. Dropped at nest, Nov., 1951: 1 'sand-hopper' (*Talorchestia* sp., Crustacea, Amphipoda); 1 ladybird (*Adalia bipunctata*, Coleoptera, Coccinellidae).
12. Regurgitated, Nov., 1951: 6 insect larvae (*Oxycanus* sp.; and *Monocrepidius exsul*, Coleoptera, Elateridae).
13. Regurgitated, 9/12/51: 8 small flatfish (*Rhombosolea* sp.).
14. Regurgitated, 2/12/51: unidentified plant tissues; remains of earthworm.
15. Dropped at nest, 20/11/51: 11 beetles, 5 pupae, 1 larva (*Costelytra zealandica*); 3 small red worms.
16. Dropped at nest, 20/11/51: 8 small red worms.
17. Regurgitated, 2/12/51: 6 Whitebait (*Galaxias attenuatus*, Pisces).
18. Dropped at nest, 25/11/51: 27 small red worms.
19. Regurgitated by 3-day-old chick, Nov., 1951: 1 insect larva (Elateridae); 2 small red worms.
20. Dropped at nest, 6/12/54: 1 'Pipi' (*Amphidesma* aff. "*forsterianum*," Mollusca, Pelecypoda).
21. Regurgitated, 6/12/54: mass of partly-digested Whitebait (*Galaxias* sp.).

22. Regurgitated, 8/12/54: large mass of 'Brown Beetles' (*Costelytra zealandica*).
23. Regurgitated, 8/12/54: mass of 'grass grubs' (*Costelytra zealandica*).

Although Hartley (1956: 202) has once more drawn attention to "how misleading combined results can be when the contents of each individual bird are recorded on a percentage basis only," it may be said that the organisms making up these 23 samples occur in the following frequencies: insects, 43 per cent.; earthworms, 23 per cent.; fish, 20 per cent.; crustaceans, 7 per cent.; molluscs, 3 per cent.; plant materials, 3 per cent.

Despite the fact that only a very small number of food samples is being considered here, and that the breeding sites of *Larus bulleri* vary, within certain limits (cf. Sibson, 1942; Stidolph, 1949, and Black, 1955), a study of the nature of the food taken may be helpful towards an understanding of the ecological relationships of the three New Zealand gulls, and of the part that each of them plays in our agricultural economy. Hartley (1956: 201) has said also that, in studies of this kind, "it remains to present the data in such a form that their significance in the ecology of the species may be at once apparent." At the moment, with the lack of samples from other localities for comparison, the best that can be said is that the relatively large amounts of remains of destructive insects, for example the 'Grass Grubs' and the 'Brown Beetles' (cf. Hoy & Given, 1952), indicate that the Black-billed Gull is performing a useful service to the farmer, at least in the Ashley district at this time of the year. Dumbleton (1942: 307) has recorded two kinds of insect larvae occurring in food samples. The quantities of subterranean grass caterpillar, *Oxycanus* sp., also show that these gulls are worthy of their place among us. Dumbleton (1942) has indicated something of the seriousness of the depredations of *Oxycanus* and *Costelytra* as pasture pests. Later (1945: 124) he recorded how, during the month of January, starlings and dotterels were seen feeding on young *Oxycanus* larvae, and the way in which "seagulls" gathered the larvae as they emerge from the tunnels in flooded or water-logged pasture.

Stead, as well as giving us the anecdote of the Black-billed Gulls and the trout fry in Christchurch, has provided quite a number of observations on the food and feeding of this species of gull. He has said that: "The food . . . consists mainly of fish and insects . . ." and has commented on the adoption of night feeding by the gulls in Lyttelton Inner Harbour under the electric lights, a sight now familiar to users of the inter-island ferry. After finding that inland Black-billed Gulls "feed extensively on insects," his conclusions were that: "In this way there is no doubt that they do a great deal of good, and the protection that is afforded them by law is fully justified . . . even if in some isolated instances Black-billed Gulls should be inimical to the particular interests of the angler, there is no doubt that they are beneficial to the community as a whole."

Black (1955: 169), discussing the breeding biology of the Black-billed Gulls at Lake Rotorua, remarked: "The first food of the fledgling appears to be the partly digested larval forms of the smelt. Lake Rotorua teems with this small fry." Gurr's findings for the Red-billed Gull, already mentioned, indicate, similarly, that the principal source of food was that closest to the breeding colony, namely from the sea, just as Black's gulls at Rotorua used their nearest source.

Although Stead has said that Black-billed Gulls follow the plough only to a limited extent, they have frequently been seen so doing in the fields adjoining the Ashley colonies, and this habit is reflected in the food supplied to the growing chicks. The birds frequenting the banks of the river in central Christchurch by day seem to feed largely on the bread and lunch-time scraps thrown to them, although it may be that in winter, when not so many office workers take their lunches out of doors, they supplement their diet from more natural sources.

It appears, then, that the Black-billed Gull, like the Black-headed Gull (*Larus ridibundus*) of Britain with which it is often compared, is an opportunist, taking its food from whatever source of supply happens to be closest, whether it be near the breeding colony in the summer where insects, freshwater fish and earthworms may be available, or from river mouths where marine food can be found, or whether it be amongst the lunches of the city's office workers at another time (cf. Collinge, 1920, 1926, 1927). In a similar way Oliver (1955: 212) has concluded from a review of the feeding habits of the Black Shag that the differing accounts of stomach contents, one showing trout and eels in equal proportion and the other with trout far outweighing eels, reflected the fact that "the shags take the kind of fish that is locally dominant," so that, in the latter investigation, the "habitats of the birds killed were mainly rivers where obviously trout were predominant over eels." Beal, in 1897, had already pointed to this situation when he said: "Within certain limits birds feed upon the kind of food that is most accessible. . . . It is not probable that a bird habitually passes by one kind of insect to look for another which is more appetizing. . . . It is thus apparent that a bird's diet is likely to be quite varied, and to differ at different seasons of the year." (Beal, 1904: 3-4).

Incidentally, with regard to the comparative roles and relationships of the three New Zealand gulls, the interesting discussion which Sparck (1951) has provided of the role played in the economics of agriculture and fisheries by the various species of gull in northern Europe may be noted. Over 7,500 stomach contents were examined in this survey, giving quite a comprehensive view of the situation. The species considered by Sparck are interesting to compare with their New Zealand counterparts. *Larus canus* and *L. ridibundus* "are not marine or shorebirds in their food habits but land birds relying on a diet consisting of insects, earthworms, plants, etc." *Larus marinus* and *Rissa tridactyla* are "shore birds, feeding on fish and marine invertebrates." *Larus argentatus* is "a shore bird. . . more associated with civilisation, often playing a great part in its diet, and this may explain the terrific increase in this species during the last decades." *Larus fuscus*, on the other hand, is "partly an insect feeder, partly a fish eater. . . breeding on the shore, but migrating in many cases through the Continent." From our present knowledge we can place *L. bulleri* in the same ecological group as *L. canus* and *L. ridibundus*, while *L. novaehollandiae scopulinus* appears to belong to the group represented in Europe by *L. marinus* and *R. tridactyla*. *Larus dominicanus*, then, approximates both *L. argentatus* and *L. fuscus* in habits, although perhaps not closely. However, in the New Zealand gulls, the striking features are the close association of the Black-backed and Red-billed Gull's with man's establishment of freezing works, harbours, and whaling stations, and the great increase in their numbers due to these assured sources of food.

The increase of the numbers of Black-billed Gulls and their spread into towns and settlements is also due to their association with man, but, in this case, due rather to man's generosity than to his industry.

Even at this stage we know very little about the food and feeding habits of the New Zealand gulls, and it is certainly not possible to condemn any of them out of hand, not even the Black-backed Gull, as menaces to the progress or pleasure of man. With the unrealistic and unappreciative attitude to their flora and fauna which it is evident that a good number of New Zealanders possess, the sort of happening which Stead related could take place again very easily indeed. Black (1955: 168, 170) has reported on the "ruthless," or, perhaps better, thoughtless, destruction of gulls' nests and eggs at Lake Rotorua, and I have experienced this situation in my Ashley colonies quite often enough to be well aware of this element in the human population frequenting such areas, and to be able to echo Black's concluding remarks: "*Larus* is not a game bird, to be protected, nurtured and duly slaughtered in season, so is of little account — or so it would seem!" There are, apparently, some "sportsmen" who entirely agree with these sentiments, though whether their actions are motivated by the feeling that their livelihood is being threatened by these birds or whether they are due to mere vandalism is another matter.

I make no apology for using these somewhat inadequate localised findings from a study of the Black-billed Gull as an excuse to appear in the role of a "bird-lover" or of a sentimental defender of the doings of "our little feathered friends"; but, I have seen enough during my association with nesting gulls and terns in various colonies close to the public path to feel a little qualified to express some opinions on the need for a "scientific" basis for providing evidence when some body or individual demands that a particular species of bird should justify its existence by human standards. Assisting in the education of the public to put a stop to the unwarranted destruction of nesting birds and their eggs is a matter that we, as individual ornithologists, can well combine with our field work, and it is to be hoped, at any rate, that with more concrete facts about food and feeding in our birds, native and introduced, those who are concerned with birds as rivals in business or pleasure will be able to be advised on the proper course of procedure without resorting to unrestricted, and unlawful, violence.

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* Since these notes were prepared an important paper on "foods and feeding-habits as subjects for amateur research" by Gibb and Hartley (1957) has appeared. This contains a great many comments and suggestions which should be seriously considered by those concerned with this field.—E.W.D.

BIRDS OF THE COOK STRAIT ISLANDS,
COLLECTED BY
PROFESSOR HUGO SCHAUINSLAND
IN 1896 AND 1897

By G. E. and E. W. DAWSON

Recently, while examining collections of New Zealand birds, particularly those of the genus *Nestor*, in various European museums, we were able to spend some time at the Uebersee Museum at Bremen, Germany. The Bremen Museum has a close association with New Zealand natural history since two of its Directors, Otto Finsch and H. H. Schauinsland, visited New Zealand in the course of their careers. Otto Finsch's writings on New Zealand birds, based on material in the Leiden and Bremen museums as well as on other material sent on loan from New Zealand, are well known, and he, himself, has been commemorated in the names of several New Zealand birds. The name and work of Hugo Schauinsland is not, however, so well known to New Zealand naturalists, despite the fact that his name also lives in the same way as Finsch's in the names of many species of the animals of New Zealand. Schauinsland's voyages in the Pacific, and the collections he made during them, have been reported on in a number of places, chiefly in various issues of the *Zoologische Jahrbucher*, in which papers describing New Zealand animals occur. Some of these records have apparently been overlooked by later workers, as, for example, in a recent bulletin on New Zealand lizards (McCann, 1955), which makes no mention of the report on Schauinsland's collections of lizards from the Cook Strait islands and from the Chatham Islands. K. P. Schmidt (1952: 2), also, has commented on the fact that the extent of Schauinsland's work has not been fully realised by later workers.

As far as we can ascertain no report, apart from that of Duncker (1953), has appeared on the collections of birds in New Zealand and the Chatham Islands by Schauinsland, and it is proposed to list here the specimens still existing in the Bremen Museum collections and to remark upon them where necessary. This account may be useful, then, as a record of the distribution of these species in this particular area in 1896 and 1897, especially since an increasing amount of interest is being taken in the ecology of the islands and waters of Cook Strait (Brodie, *et al.*, 1957). Schauinsland's collections from the Chatham Islands have proved to be particularly useful now, since some of the birds, such as the Chatham Island Petrel (*Pterodroma hypoleuca axillaris*) and the Pukeko (*Porphyrio melanotus chathamensis*) not well represented in museum collections, are included in the Bremen material.

In addition to this, much other valuable New Zealand and Chatham Island material, ranging from Moriori artifacts to Tuataras, also collected by Schauinsland, has been examined in the Bremen collections, and this includes many hundreds of bones of extinct birds of the Chatham Islands about which more will be said in another place.

The Uebersee-Museum at Bremen is to be particularly noted for its rapid and successful recovery, from severe war damage, and further

details of this may be found in the account given by Abel (1950). Several fine cases of New Zealand birds, illustrating extinct or rare species are exhibited, but, perhaps, the most impressive exhibit to a visiting New Zealander is the large habitat group of Tuataras or *Sphenodon* made up from the abundant material brought back by Schauinsland from Stephens and the Trio Islands. This, and other diverse habitat groups, reflect the high standard of display which has been achieved and maintained by the Uberssec-Museum at Bremen. Although small by comparison with such great museums as the British Museum (Natural History), London, it ranks amongst the finest of natural history museums in quality of material, utilisation of space, and novelty of display, and it was our very great privilege to be made welcome there.

The birds from Cook Strait collected by Schauinsland are as follows, although it must be mentioned, with regard to the accompanying comments, that our time was too short in some cases to check all the details of certain birds mounted in display and habitat groups; however, it is hoped that an opportunity will be available in the near future for another visit to the Bremen collections.

Pachyptila turtur.

There is one female Fairy Prion on display, collected by Schauinsland on January 3, 1897, on Stephens Island. As is well known, this species is one of the most abundant breeding birds of the Cook Strait islands, but we were unable to examine the possible subspecific bill and head characters of this specimen.

Puffinus carneipes hullianus.

The Flesh-footed Shearwater is represented by two specimens; one is a female, collected at French Pass, January 3, 1897, and the other is a male from Trio Island, collected December 24, 1896. Large numbers of this species are present in Cook Strait during the breeding season, but its possible breeding place on the Chetwode Islands near French Pass is apparently as yet unconfirmed (cf. Fleming *et al.*, 1953: 20; and, discussion between Yaldwyn and Falla (Brodie *et al.*, 1957: 36)).

Puffinus griseus.

In the collection are a number of skulls and other skeletal remains of Sooty Shearwaters from French Pass, as well as two male skins from Trio Island, collected on December 27, 1896. The *Checklist* (1953: 21) records this species as "Breeding in small numbers . . . on shores and islands of Cook Strait."

Puffinus gavia gavia.

The Tuatara habitat group contains six Fluttering Shearwaters, collected from the Trio Islands by Schauinsland, while there are skins of two males from Stephens Island and of three juveniles from the Trio Islands in the collections. It may be mentioned here that, according to Schmidt (1952: 4), Schauinsland apparently visited only the Middle Trios, the largest member of the islet and two rocks comprising the "Trio Islands." The *Checklist* (1953: 21) records this species as "Breeding . . . islands in Queen Charlotte Sound, The Trios and formerly Stephen Island (Cook Strait)." According to Mr. J. C. Yaldwyn (*in litt.*, 1957), there are "Small numbers on Stephens, very large numbers on Trios . . . not on Brothers."

Pterodroma cooki cooki.

There are eight specimens of Cook's Petrel mounted in the Tuatara habitat group, but the collecting locality is no more precisely recorded than "Neu Seeland. Schauinsland 1896/97." There appear to be no records of this species breeding on the Cook Strait islands, although occasionally it has been seen in these waters. Sutherland (1952: 26) has recorded the finding of a dead petrel on December 22, 1951, on the Brothers Island, considered by Mr. R. H. D. Stidolph "almost certainly to have been a Cook's petrel." Hence the origin of Schauinsland's specimens and their association with the Tuatara seem questionable. Schauinsland (1898: 701; 1899: 310) has given a surprising list of species of petrel which he found on Stephens and Trio Islands associated with the Tuatara: "*Oestrelata Cookii* . . . *Puffinus gavius* . . . *Majaqueus Parkensoni* und *Gouldi*." Falla (1934: 254) has pointed out something of the difficulty of identification of certain petrels, with special reference to *Puffinus carneipes*, *Pterodroma macroptera* and *Procellaria parkinsoni*, and, with this in mind, the list given by Schauinsland may not be so surprising if we consider that he was visiting the Cook Strait islands primarily as a herpetologist and not as an ornithologist. Again, since Buller (1899: 32) has recorded having received a pair of Tasmanian Muttonbirds (*Puffinus tenuirostris*) from Stephens Island, it appears likely that there have been a number of misidentifications including some of those on display in Bremen, but such skins as are available will have to be fully reported on before the possibility can be ruled out of the previous existence of these species as breeding birds on the Cook Strait islands.

Pterodroma hypoleuca nigripennis.

There is a specimen of the Black-winged Petrel on display, reputedly collected on Stephens Island in "1896/97." Only one record exists of its occurrence on the New Zealand mainland, that of a "sand-dried body" picked up at Waikanae on March 20, 1954, which "had probably been on the beach a week or more before it was found." (Fleming, 1954: 20). It is possible that this record from Stephens Island is a case of muddling of labels in the vast amount of material collected during Schauinsland's Pacific voyage. The only other skin in the Bremen Museum is from the Kermadecs, acquired in 1904. Hence, if not from Stephens Island, this specimen of a petrel from the Kermadecs is still of interest if it came from anywhere in the New Zealand region south of the Three Kings' Islands.

Pelecanoides urinatrix.

There is a female Diving Petrel, labelled as *P. u. urinatrix*, from Stephens Island, as well as two other specimens labelled as *P. u. exsul* also from Stephens Island. The *Checklist* (1953: 27) lists the former subspecies as "Breeding . . . The Brothers and Trio Islands (Cook Strait) . . ." and the latter as "Breeding Auckland and Antipodes Islands . . ." Oliver (1955: 95) includes Stephens Island also as a breeding place of *P. u. urinatrix*, but Mr. J. C. Yaldwyn (*in litt.*) has noted ". . . not on Stephens, immensely common on Trios and abundant on Brothers." It was not possible, in the time at our disposal, to be sure that *P. u. exsul* was, in fact, certainly represented, but it may be said that, at the time of Schauinsland's visit, one form, at least, of Diving

Petrel was sufficiently common on Stephens Island for specimens to be taken.

Phalacrocorax carunculatus carunculatus.

In the collection are skins of a juvenile male and an adult female King Shag collected on the Trio Islands on December 24, 1896. Rocks near Trio Island are one of the few breeding places of this rare and impressive shag at the present day.

Egretta sacra sacra.

A skin of a male Blue Heron from French Pass, collected on December 3, 1896, is in the collection. This species still seems to occur commonly in this region.

Anas superciliosa superciliosa.

A skin of a Grey Duck from D'Urville Island is mounted in the collection.

Aythya novaeseelandiae.

There are three skins of the Black Teal from D'Urville Islands; more recent records do not seem to exist.

Circus approximans gouldi.

The Australasian Harrier is represented by a skin of a juvenile male from Trio Island collected on December 24, 1896. This is still a common bird in the Cook Strait area.

Falco novaeseelandiae.

There is a skin of the New Zealand Falcon from Stephens Island in the collection. Oliver (1955: 425) gave "D'Urville Island" as a locality for this species, but there appear to be no records recently from the other adjacent islands.

Rallus philippensis assimilis.

Two male skins of the New Zealand Banded Rail, from Stephens Island, collected on January 1, 1897, are in the collection. These skins, like that of the Falcon, are a reminder of the former widespread distribution of the species since no records appear to be known from this locality.

Gallirallus australis australis.

Three mounted Wekas from D'Urville Island are in the collection. These birds, a juvenile unsexed, a juvenile female and an adult female, are all the usual chestnut phase of the South Island Weka. The adult female is almost identical in colouring and size, except for a slightly greyer abdomen, with a Weka from Canterbury sent, as *G. australis*, by Von Haast to Finsch at Bremen in 1871, and with a specimen from Mt. Cook, obtained in 1852.

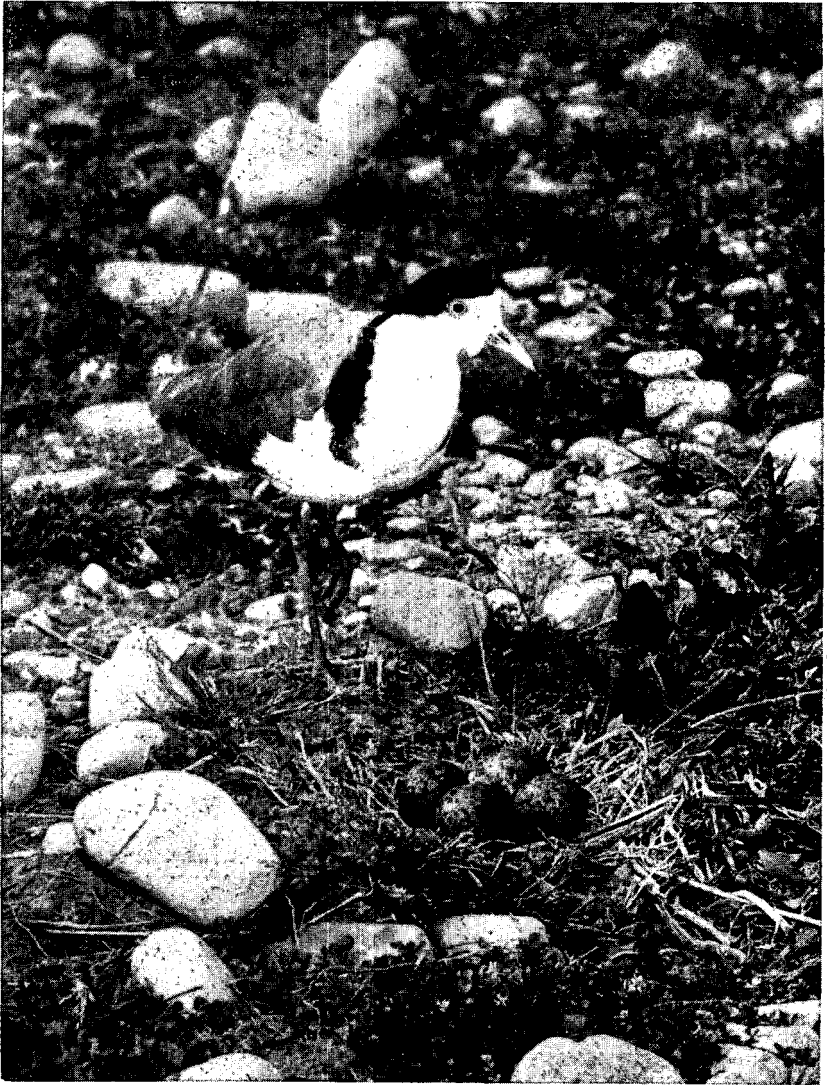
Haematopus unicolor unicolor.

Four specimens of the Black Oystercatcher, including an adult male from French Pass, December 26, 1896, two adult female from French Pass, December 20, 1896, and one juvenile from Stephens Island, are in the collection.



[Photograph by Dr. W. F. Soper

V. SPUR-WINGED PLOVER on nest near Lumsden. The spur is clearly visible. For an account see page 55.



[Photograph by Dr. W. F. Soper

VI. SPUR-WINGED PLOVER AT NEST. These plovers are now firmly established in Southland between the lower Matakura and Colac Bay. They seem to be a sedentary species; but as they have increased, they have spread northwards up the valleys of the Aparima and Oreti and a few have reached the lakes Manapouri, Te Anau and Wanaka.

VII. BITTERN SETTLING ON ITS EGGS. For an account of the nest, see pages 50 and 51.

Photograph by Dr. W. F. Soper





[Photograph by Dr. W. F. Soper

VIII. BITTERN AND YOUNG. Dr. Soper is to be congratulated on the quality of these outstanding photographs. The N.Z. Bittern is a notoriously difficult subject. Where such great names in N.Z. bird photography as Guthrie-Smith, Stead and Buddle failed, Dr. Soper has succeeded. We believe these are the first photographs obtained of the adult at the nest.

Larus novaehollandiae scopulinus.

There are skins of two males and two females of the Red-billed Gull from Stephens Island in the collection.

Sterna striata.

One skin of the White-fronted Tern from Stephens Island is present.

Hemiphaga novaeseelandiae novaeseelandiae.

There is present one mounted Bush Pigeon from D'Urville Island. Oliver (1955: 441) listed the species from the Chetwode Islands in Cook Strait, but no other recent records seem to be available for this region.

Nestor meridionalis meridionalis.

Two mounted birds, male and female, from Stephens Island are present. These are "typical" South Island Kakas. This species, like the Bush Pigeon, has not been recently recorded from the Cook Strait islands, apart from Oliver's (1955: 550) record of the Chetwode Islands.

Cyanoramphus auriceps auriceps.

One mounted skin of the Yellow-crowned Parakeet, from Stephens Island, collected on January 1, 1897, is in the collection. There seem to be no recent records of this now very restricted species from the Cook Strait islands.

Chalcites lucidus lucidus.

Schauinsland collected two specimens of the Shining Cuckoo, one in Wellington and the other on Stephens Island. Recent records are not available, except for an isolated occurrence at the Brothers Island (Sutherland, 1952: 26).

Eudynamis taitensis.

Two specimens of the Long-tailed Cuckoo, from Stephens Island, are in the collection. There seem to be no recent records from the Cook Strait islands. Apart from the probable lack of observers, this may perhaps be correlated with a lack of small passerines which this species, as well as the Shining Cuckoo, would be likely to parasitize.

Ninox novaeseelandiae novaeseelandiae.

Two specimens of the Morepork from French Pass, and one from Stephens Island, are present. This owl still appears to frequent this region.

Halcyon sancta vagans.

There are two Kingfishers from Stephens Island, and two from Wellington, collected by Schauinsland.

Finschia novaeseelandiae.

According to Duncker (1953: 236), two specimens collected by Schauinsland on D'Urville Island on February 23, 1896, formerly existed in the Bremen collection. No recent records seem to be known.

Anthornis melanura melanura.

One male Bellbird from French Pass, collected on December 20, 1896, is present.

Prothemadera novaeseelandiae novaeseelandiae.

The Tui is represented by four females collected on December 28, 1896, and one male, collected on December 31, 1896, on D'Urville Island. Another male is catalogued, but it seems to have been destroyed during the war.

Zosterops lateralis.

One skin of a male White-eye from French Pass is catalogued, but this, and some other White-eyes presented by Finsch in 1878, could not be found and were perhaps destroyed during the bombing of the museum.

C. A. Fleming (1957: 34) has recently summarised the significance of the distribution of the species of sea birds breeding on the Cook Strait islands, and further studies along these lines are in progress. However, the present interest of the Cook Strait birds represented in the Schauinsland Collection lies in their relation to the ecological changes which have taken place in this area during the past 60 years.

Two years after Schauinsland's visit, another German museum director, Dr. G. Thilenius, from Hamburg, visited Stephens Island to collect Tuatara material. K. P. Schmidt (1925: 5) has given a free translation of the remarks made by Thilenius (1899: 248), after his stay of about a month on Stephens Island, concerning the vegetation there at that time, sixty years ago. Thilenius found a ten-foot cover over the island of "Nikau palms, a creeping *Pandanus*, and various species of *Coprosma*, which last make up the greater part of the 'Bush.'" As Schmidt has pointed out, from his own visits in 1949, "The interest of this description lies in the radical contrast of the present-day vegetation of the island, in which the *Coprosma* thicket has all but disappeared evidently as a result of grazing by sheep." The American herpetologist, the late Professor Frank N. Blanchard, visited the Cook Strait Islands, with his family, in 1927 during his sabbatical leave from the University of Michigan. An entertaining and well-illustrated account of their experiences was later given by his wife, Dr. F. C. Blanchard, now of the University of Michigan Botanic Gardens; and her photographs of Stephens island, particularly those on pages 654 and 659 of her article, give some idea of the vegetation present then. She said of "this brush-grown island": "The upper part . . . is mostly covered with coarse grass and boulders. . . A few patches of the original bush, consisting of small stunted trees shaped by the wind, still are left." (Blanchard, 1935: 657). The late Dr. W. R. B. Oliver (1944) also remarked on the state of the vegetation of D'Urville and of Stephens Island, at a time five years before the visit of the Blanchards and only about 25 years after the visits of the German scientists. Of Stephens Island Oliver (1944: 206) said: "Only small patches of the original forest and scrub were left . . . when I visited it in January, 1922, and except for a fenced-off area near the lighthouse, these were over-run by cattle and sheep."

While information for a more detailed comparison of past and present aspects of this region is not, at the moment, available, it can be

said that, at least, the Schauinsland Collection provides a vivid reminder of the former condition of Stephens Island by the presence in it of such skins as those of Falcon, Banded Rail, Yellow-crowned Parrakeet, Kaka, and Morepork, birds which were no doubt a common feature of the bush there sixty-odd years ago.

In conclusion, we would like to take this opportunity of thanking Dr. Helmuth O. Wagner, Director of the Ubersee-Museum at Bremen, for his very kind hospitality during our time in Bremen and for putting all the facilities of the Museum at our disposal, as well as for giving us copies of the relevant Schauinsland literature. We are indebted also to Dr. Hans Duncker, who made us very welcome at Bremen and greatly assisted our search for Schauinsland's material. We must thank, also, Dr. K.P. Schmidt, of Chicago, and Mr. J. C. Yaldwyn, of Wellington, for their comments on the Cook Strait islands.

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A BITTERN'S NEST

By M. F. SOPER

The nest was found on 8/12/57 in a small three-quarter-acre patch of rushes and nigger heads about half a mile distant from a large 100-acre raupo lagoon. The nest lagoon was one of four or five similar swampy patches all in the same area; was about mid-thigh deep in water and composed entirely of rushes and niggerheads with an occasional flax bush but no raupo.

The nest was a flat platform four inches above water line moulded into the base of a niggerhead and made of rushes. The four eggs were completely covered from above by the overhanging grass. 8th, 9th, and 11th December — short visits erecting a hide. Four eggs each trip. 13/12/57, final touches to the 'hide' and we watched the mode of return to the nest. The bird had only moved a few feet from the nest when flushed. About seven minutes after our leaving the bird started a slow, careful examination of the hide. This was followed by a complete reconnaissance of the whole lagoon, done with infinite slowness and stealth and lasting an hour and a-half; then again a close look at the hide. Finally back on to the nest.

15/12/57, in the hide. The same careful approach. She makes a bubbling noise rather like blowing air through water with a straw. This noise is made at every approach to the nest and is a sign that her suspicions are allayed. If she is not too sure of things there is complete concentrating silence. The Bittern is like other birds that make a long stealthy approach to the nest — Canada goose and pheasant, for example. Once at the nest it relaxes its vigilance considerably and does not notice noises and movements which would normally cause instant alarm.

On reaching the nest a great foot is placed directly on top of the eggs, very gently. The eggs are then stroked — the only word for it — six or eight times. One gets a vivid mental picture of a blindfold man counting with his fingers. I presume she is making quite sure of their exact position so that they are not trodden on, as, despite binocular vision, the bird apparently does not look where she is putting her feet; it is all done by feel. The eggs are then raked in with the bill before the great brood-patch swings down.

17/12/57 one egg just chipping.

18/12/57 one chick, three eggs.

19/12/57 one chick, 3 eggs, one obviously chipped.

20/12/57 two chicks, 2 eggs.

21/12/57 three chicks, one egg. The bird is now returning much more quickly after flushing. Feeding is by regurgitation, a most refined process when compared with the heaving, struggling, retching, revolting procedure gone through by shags. It is completely silent, done in slow motion and apparently quite effortless. There is a contraction of the throat muscles and then very quietly a shining green frog appears at the gape which is slid slowly down the bill and deposited on the nest. This is followed by a white dull lustre frog, then a more digested frog and finally a putty-like lump, still recognisable as a frog, but only because of what has passed before. This last is picked up by a chick

and, with much gulping, swallowed. The undigested frogs are then picked up and reswallowed by the parent.

22/12/57, four chicks. The biggest are beginning to grasp the parent's beak to induce regurgitation. They make a junior edition of the bubbling noise and when hungry their beaks vibrate with an incessant rapid tremor.

25/12/57. Eldest chick growing rapidly. One reason for the staggered hatchings is now plain. The largest chick is now very demanding, cross-billing with the parent as soon as she appears at the edge of the nest and swallowing the first and undigested frog without difficulty. The next biggest gets the next frog and so on down the line to the putty-like lump for junior. The bigger chicks are now grasping the parent at the gape and following the frog down her bill to catch it at the point.

29/12/57. Parent feeding much more seldom now. Youngest chick weak and looks likely to succumb. Parent bruised and bleeding round the gape and obviously tender as she pulls back when the chicks cross-bill. She is attempting to feed the smallest but the others are too demanding, too strong, and are getting all the food.

1/1/58. Three chicks only. Smallest has died. This was the last visit I was able to make for some time. When I next visited the nest about two weeks later, all three chicks were dead; two lying on the nest, the third on the wooden platform inside the hide. They appeared to have been killed. I am sure the person responsible for this wanton destruction considered the throwing of one inside the hide his master stroke.

★

SHORT NOTES

PARADISE DRAKE WITH A WHITE HEAD

A male Paradise Duck (*Tadorna variegata*) with a white head has been recorded at intervals since the winter of 1954 in the vicinity of Ball's Clearing Bush Reserve, Puketitiri, Hawkes Bay. This bird has as much white on its head as an ordinary female of the species. From some angles the head appears to be an off-white shade merging to gray at the base of the neck. In other characteristics the plumage is normal, and it is obvious from its behaviour that the bird is a male.

When first seen during the first week of July, 1954, it was accompanied by a normal female; and presumably the same pair were present again on 26/9/56. Then on 16/1/57, the pair with the white-headed drake, appeared with five youngsters estimated to be two or three months old. On 19/7/57 and nearly a year later on 8/7/58, it was seen flying about alone. Finally on 14/8/58, it landed in a paddock near a mated pair of Paradise Ducks, the male of which flew up and chased the white-headed intruder. Later it was sitting on a tree stump, near the pair which continued to show signs of agitation till it flew away alone.

PAM. M. LEWIS

NANKEEN NIGHT-HERONS AT BLENHEIM

On 4/5/58 I was asked to identify a pair of unusual birds which had been living in some trees on the property of Mrs. C. E. Eyles, Budge Street, Blenheim, for some months. One bird had been present from at least March, but it was only recently that it was discovered that two were present. However, it is likely that the pair was present throughout. It was about midday when I called and we located the birds in some large trees at the back of the property on the banks of the Opawa River. One was in a tall walnut and was perched almost at the top but inside the leaf canopy. The other was lower down in an elm. Neither tree was actually overhanging the water. I took a description of the birds and confirmed their identity by reference to Oliver (1930). Both were immature Nankeen Night Herons (*Nycticorax caledonicus*).

The bird was obviously a heron and appeared to be approximately the same size as the White-faced Heron but the neck looked shorter in relation to the body than in that species. The crown of the head and nape were black. The bill was black on the upper mandible and horn coloured on the lower. There was a patch of lime green at the base of the bill and in front of the eye, which appeared to be bare. The iris was pale yellow. The upper surface was a rich fawn-brown and the feathers of the wings were tipped with a buff spot which extended in a thin line up the shaft of the feather. This was seen on a feather picked up under the trees. This gave the folded wings a mottled appearance. The under surface was a pale buffish shade and the fawn of the upper surface blended into this on the neck. In one of the birds this was more prominent and the sides of the neck were distinctly fawnish. The under surface of the wings was also buff in the one bird seen in flight. The legs were pale lemon yellow.

The following description of behaviour was obtained by conversation with Mrs. Eyles and her daughter. The birds spent the day roosting and dozing with the bill but not the head tucked under the wing. They kept an alert watch on anyone below the trees but would not move unless approached closely, when they would fly to another perch not far away. At dusk they were heard to make a croaking noise similar to that of the White-faced Heron, but not so consistently. The birds have been seen to fly down to the river edge at dusk and to return on the wing from down stream in the morning.

I called again on Mrs. Eyles on 3/6/58 to find that the herons had moved from their property on the night of 28/5/58, which had been a boisterous night with a strong wind from the north-west. This had stripped all the leaves off the trees used for roosting and thus rendered them unsuitable for the birds. On 2/6/58 the birds had been relocated in some evergreen trees a few hundred yards down stream. Mrs. Eyles had received a letter from a boy (David Mudge) in Wellington who claimed to have seen one of these herons in January on the Taylor River at the Percy Street foot bridge (Blenheim) during his holiday. I took his address to check this on my return to Wellington.

I called on David Mudge and he told me that on January 26th he had seen a heron with rich plumage and with two large plumes trailing from the back of its head fly past downstream in a very purposeful manner. He said that the colour was much brighter than that given in the newspaper description. He had recognised the heron

as a stranger and had checked his description with Oliver and other books. He had not said much about it as he thought he would not be believed. After the article had appeared in the paper he had written to Mrs. Eyles on his own initiative. I found he had a good knowledge of birds and I think his observation was correct, as he is familiar with the other herons. His record throws quite a different slant on what may have been the position. It is now possible that the two herons recorded are not two vagrants from across the Tasman but the progeny of a successful New Zealand mating.

B. D. BELL

★

A NEST OF THE BLACK STILT

In a season which has been characterised by the repeated flooding of nesting-sites of the sea- and shore-birds which migrate to the riverbeds of Otago and Canterbury, it is satisfying to be able to report the successful hatching of a clutch of the somewhat rare Black Stilt (*Himantopus novaezealandiae*).

On 17/11/57 a pair was seen on the Orari riverbed, near Geraldine, South Canterbury, i.e. about 14 miles, in a direct line, from the seacoast. Several pairs of Black-billed Gulls, Pied Oystercatchers, Pied Stilts, and Banded Dotterels were also in the area; and, judging by the agitated calling, many were nesting or preparing to nest.

The Black Stilts were particularly ferocious, swooping at a visitor continually and, when this failed to have the desired effect, feigning injury near the water's edge. In their anger they chased off other birds. After a search for an hour or so, the nest was found on a shingle-bar about five yards from the nearest water. It was merely a shallow depression of the river-sand between two largish stones, and lined with a few pieces of dry grass and twigs. The four eggs were neatly arranged with their narrower ends to the centre. In colour the background was pale fawnish, with dark brown blotches superimposed on pale purplish spots and blotches. Sizes were 43.5 x 31.9, 42.6 x 31.5, 44.5 x 31.6, 45.2 x 32.3 mm.

The appearance of the adults agreed with the description given in Oliver, the bill being noticeably longer than that of the Pied; also the legs appeared to be a paler pink than those of the Pied while the call seemed to be louder and deeper in pitch than that of the Pied.

The 25th to 28th November were very wet days, after which the river was in flood; the bed considerably altered and many nests of other birds were washed out. However, the four eggs of the Black Stilt were apparently on high enough shingle not to be affected and on 1/12/57 the four young had appeared, and seemed to be three to four days old. They were squatting on a sandy patch at the nest site beside some flood debris (dead gorse) and were particularly well camouflaged. On the dorsal side they were mottled fawns with darker brownish-black markings on the crown, nape and back, more or less in two lines on the back. The ventral surface was pale greyish-white, the bill slaty-black, iris hazel brown, legs fawnish-pink; three pink toes, slightly webbed at their bases.

On the following day, and on subsequent visits, the young were not seen, and were probably hiding among the shingle, for the parents continued yapping noisy threats from overhead.

P. CHILD

NOTES ON THE HEIGHTS REACHED BY SOME BIRDS IN THE
EASTERN RANGES OF THE NORTH ISLAND

I was most interested to read in the April issue of *Notornis*, 1958 'Notes on the height reached by some species of birds on the mountains of the North Island,' and I am forwarding some comments of my own from the region between the Napier-Taupo Road and the East Cape and westward to the Rangitaiki River. As I have spent over fifty nights in bush-camps and bivouacs and have climbed thirty-eight points and trigs over 3000 ft., I hope that these notes may be of some interest and value. I am grateful to Mr. A. Blackburn for his help and encouragement.

BLACK SHAG. Waipunga R. (trib. of Mohaka) 1 bird seen alt. 1600'. Motu River — alt. 900-1400', common.

WHITE THROATED SHAG. Odd birds on Waikaremoana.

PARADISE DUCK. Lagoons round Waikaremoana and Waikareiti-Kaipo Lagoon (N.E. of Waikareiti — alt. 3200'). Auini Str. (trib. of Ruakituri alt. 2000', and Pukekaho — 2600').

BLUE DUCK. Most mountain streams, alt. 1500' to 3500', 3500' being in the gorge of the Waitotukupuna near Manu-o-ha mt. and Raparaparikiki stream, Raukumara.

BUSH HAWK. Summit of Arowhana mt. 4700' — burnt-over scrub — 1 bird on 4/1/56.

N.I. KAKA. Some higher levels noted by myself: Lower slopes (west) of Pohokura mt. alt. 3000-3500' (in 1958), N.E. of Tarawera and west of Mohaka river; on Moanui trig alt. 3500', beech forest, on 16/5/54: Maungawaru range — alt. 3000-3800'; on three different dates; Puketaro and Manuoha trigs, alt. 4000', on 20/1/56 in red beech forest — not as plentiful as I noted thirty years ago.

N.Z. PIGEON. I seen on Moanui at c. 3000' in a gully in May, 1954.

PARAKEET (Sp.?) A few along upper reaches of the Motu River, alt. 1000-1500'. Tarapounamu ridge, alt. 2500' (sth. of Rotorua — Waikaremoana road): Huiarau range (Whakataka) alt. 3000', on 29/1/54. Several seen on Manuoha mt. on 20/1/56; appeared to be eating the seed of *Nothofagus menziesii*, alt. 4600'. Two seen on Oharuru ridge, 4000 to 3880', on 23/2/56. One seen on Ngamoko trig on 30/1/36.

LONG-TAILED CUCKOO. Highest I heard on the Maungawaru range on 10/10/45, alt 3100'. Pohokura range, alt. 3000-3600', on 7/1/58.

KINGFISHER. On Waikareiti, alt. 2940', on 22/1/58.

RIFLEMAN. Pohokura, alt. 4000'; Moanui, alt. 3500'; Kapua, alt. 4100'; Honokawa, alt 4250'; Raukumara, alt. 3900-4200', in alpine scrub, 27/12/57. Riflemen were in numbers on Aniwaniwa track, alt. 2600', on 21/1/58.

PIED TIT. Highest I have heard on Motauhora mt., alt. 3200', west of Motu village, on 4/7/53. These birds seem less common than they were thirty years ago.

N.I. ROBIN. Manganui-o-hau stream (S.W. of Waikaremoana). Three were seen and heard, alt. 1800'. Maungawaru range — Two

heard, alt. 2500', 2700'. Tarndale ridge, one seen, alt. 2850', beside road; S.W. of Arowhana mt. on 1/2/57. Kopua ridge, alt. 4200', ? feeding on seed of *Olearia colensoi*, 23/2/57, five or six seen and watched for some time. Ridge S.E. of Hikurangi trig 2121 - Galatea S.D., one observed, alt. c. 2000', confirmed by A. Blackburn and I. A. D. Faulkner.

WHITEHEAD. Five seen on slopes near summit of Honokawa mt., alt. 4300', in scrub — cold S.W. gale and mist, on 16/4/58. There was a flock of Chaffinches with these five Whiteheads.

GREY WARBLER. Often seen in sheltered places up to 4000' — especially where there is scrub or second growth. Manuoha mt., alt. 4600', being the highest.

BELL BIRD. Seldom seen in beech forest — highest I noted on Whakapunake mt., alt. 3100', April, 1957.

INTRODUCED BIRDS. I have not kept notes of these — except that I found a nest of Dunnock with 4 eggs in *Nothofagus menziesii* scrub on Maungatapere, alt. 3600', on 24/11/34.

R. A. CRESWELL



TWO NESTS OF THE SPUR-WINGED PLOVER

(a) On 18/9/57 a nest was found near Lumsden in an area of bare stones on dry flat ground. It contained four eggs and a few bits of dried grass lined the nest cup. It was fifty yards from a river. Both birds incubated, changing over about every two hours. Next day, when a third bird appeared on the scene, I saw an interesting display. The sitting bird flew off the nest and joined its mate; then two birds (which two I do not know) stood in line abreast, almost touching, squared off and at attention, with the third bird directly in front and about five yards distant. Then the two birds together gave a long crackling call in a descending scale, bowing forward at the waist as they did so, till their beaks were almost parallel to and touching the ground. Then the party broke up.

They pretend to feed when not quite sure of the hide and crouch with fluttering wings as a distraction display. The eggs were chipping on 19/9/57; on the next day three eggs hatched; the fourth was added; on 21/9/57 the nest was empty.

When the bird is standing, the spur is not seen (plates v and vi).

(b) On 16/12/57, another nest containing four eggs was found in the same area as the earlier nest. As there is only one known pair in this district this season, it is quite possible that the owners are the same pair as before. The nest was on dry flat ground amongst stones, thirty yards from a small area of swampy clay, the site being almost identical in type with that of nest number one, though half a mile distant. From the hide the birds appear from small mannerisms to be the same pair as previously watched, but this is pretty thin evidence. This nest is of interest, not only for its lateness, mid-December, but also for the fact that it raises the question as to whether the Spur-winged Plover may not raise two broods in a season.

W. F. SOPER

WHITE IBISES AT KAWHIA, KAIPARA AND TE AWAMUTU
IN 1957

On 26/5/57 an Australian White Ibis (*Threskiornis aethiopicus strictipennis*) arrived very tired at Kinohaku, Kawhia, where it was reported by Mr. C. C. H. Palmer and by Mr. R. G. Fisher, the local schoolmaster. During its stay it lived and fed on a little wet flat just above the tidal rushes and associated to some extent with domestic ducks. Its roost was a bare poplar tree. Mr. and Mrs. Fisher and Mrs. J. E. Scott guarded it closely. On 22/6/57 we went to see it and J.P. was able to photograph it in colour through the sitting-room window of the home of Mr. and Mrs. Scott. A few days later Mrs. Scott saw it leave. It flew round a few times calling and then headed north until out of sight.

A White Ibis at Te Kopuru in Kaipara Harbour was reported by Mr. Robert Kidd. It arrived in May and left about 12/6/57, after living in a swampy gully-head near the house of a neighbour and often associating with poultry. On 15/6/57 we went and confirmed the identification by description. An ibis, perhaps the same, was seen a few days later at Port Albert, but did not stay.

H. M. & H. R. MCKENZIE, A & J. PRICKETT

★

A White Ibis was present at Ngaroto Lake, about four miles from Te Awamutu, from about the first week of November to mid-December, 1957; and I myself was able to observe it on several occasions between 14/11/57 and 8/12/57. It arrived only a few days after the departure of a Kotuku (*E. alba*) which had frequented the same area; and at first it was mistaken by local residents for the Kotuku.

I had no difficulty in identifying the ibis, as I had previously seen a bird of the same species at Kinohaku on 22/6/57. The two were very similar in all characteristics; and it is indeed possible that they were one and the same bird.

During its stay the Ngaroto ibis generally kept to a comparatively small area of four or five acres of swampy land at one end of the lake. It could usually be found feeding in a grassed paddock which lay under two or three inches of water, some cultivated peat-land, or amongst the rushes at the water's edge. It appeared fairly tame, and would have been easily approached but for the fact that it was upset by the warning cries of the many Stilts and Pukekos which were nesting in the area. It associated freely with them, especially with the Pukekos. This desire for company was also noticed in the Kinohaku ibis, which associated with domestic fowls, ducks and geese, even to the extent of flying into their enclosed runs. The Ngaroto ibis almost invariably roosted in the same tree every night, a dead or dying willow; the Kihohaku ibis resorted to a poplar.

The only utterance ever heard from the White Ibis was a short goose-like cry made just before and just after taking off in flight. The Ngaroto bird was a fairly strong flier; and in the evenings would sometimes spend several minutes flying back and forth along the shores and out over the lake.

W. R. COOPER

CARD COMMITTEE

PROFIT AND LOSS ACCOUNT FOR THE YEAR ENDED 31st MARCH, 1958

After deducting the cost of lines sold from the sales we have a GROSS PROFIT of ..	474 17 9
From this we deduct our overhead expenses—	
Advertising	158 11 11
General and Packing Expenses	68 16 1
Postages and Stationery	31 4 9
Depreciation	3 10 0
	262 2 9
So that we made a NET PROFIT of	£212 15 0

BALANCE SHEET AS AT 31st MARCH, 1958

We have the following **ASSETS**—

Cash at Australia & New Zealand Bank ..	152 0 11
Stocks on hand	493 0 0
Blocks	34 0 0
	679 0 11
Giving us a total of	679 0 11
From this we take LIABILITIES which are—	
Sundry Creditors	180 0 0
Loan	50 0 0
	230 0 0
Leaving the Society's Accumulated Funds at ..	£449 0 11
This balance is made up as follows—	
ACCUMULATED FUNDS: Balance 1/4/57 ..	322 11 6
Less Income Tax	4 8 9
" Extra Depreciation	81 16 10
	86 5 7
	236 5 11
Add Net Profit for this year ..	212 15 0
	£449 0 11

I report to the members of the Ornithological Society of New Zealand Incorporated that I have examined the books, accounts and vouchers of the Card Committee for the year ended 31st March, 1958, and certify that the above balance sheet is properly drawn up to show the true financial position of the Society at that date. I have accepted the values placed by your Committee on "stocks on hand."

D. N. CHAMBERS, Auditor

TREASURER'S REPORT ON PRESIDENTIAL APPEAL
as at 12/8/58

The thanks of the Society are due to those members who have given so generously that our financial future seems to be assured for some time. The result of the Appeal is not complete because 164 members have not paid their subscriptions to date. We hope it may not now be necessary to restrict the activities of the Society.

It is now the recognised policy of the Council to invest Life Members' subscriptions, so these are treated as capital contributions (non-revenue). Increases in annual subscriptions and donations are treated as revenue.

Life Members—

Changed from Endowment (2) and Ordinary (4)	6	£60 0 0
Members already at £10	4	— — —
Already at £10, donated for investment	1	25 0 0
Increased from £5 and £6/6- to £10	14	66 14 0
No increase so far	39	— — —

Total non-revenue		£151 14 0
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Donations from 3 of the 14 above		£13 15 0
Already at £10; donated £10 and £1	2	11 0 0
Donations from two of the 39 above		2 10 0

Endowment Members—

Already at £1, 123. Of these 28 donated (Including two of £10 each)		54 7 6
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Ordinary Members—

Remaining at 10/-, 178. Of these 42 donated		19 18 6
Increased from Ord., 10/-, to Endow., £1	100	50 0 0
Of this 100, 7 donated		13 4 6

Junior Members—

Remaining at 5/-, 10. Of these, 5 donated		1 10 0
Increased from 5/- to 10/-, 9. (2 to £1 each)		3 5 0

Bodies (Museums, Universities, Libraries, etc.)—

Already at £1	3	
Remaining at 10/-	22	
Increase from 10/- to £1	3	1 10 0

Total Revenue		£171 0 6
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BALANCE SHEET AS AT 31st MARCH, 1958

LIABILITIES		ASSETS	
Sundry Creditors	94 14 3	Cash Bank of New Zealand	152 7 0
Subscriptions in advance	37 10 0	Sundry Debtors	15 1 6
Provision for index - Vol. 7	24 0 0	Subscriptions in arrears	
	156 4 3	estimated to produce	18 0 0
Life Subscriptions:			185 8 6
Balance 1/4/57	199 3 6	Stocks on hand:	
Transfer from current subs.	16 6	Printing and stationery	28 19 3
Paid 1957-8	15 5 0	Ringing Scheme	37 7 3
Endowment 1957-8	25 0 0	Back Numbers	329 10 0
	240 5 0	Report and Bulletins	74 12 0
General Reserve:		Sundry Publications	35 3 6
Balance 1/4/57	485 15 0		505 12 0
Add further stock of back numbers	7 10 0	Plant: At cost less depreciation	
Add excess of income over expenditure	96 3 6	Addressograph Machine	11 4 6
	589 8 6	Addressograph Plates	11 17 1
			23 1 7
	£985 17 9	Library:	
		Purchases to 31st March, 1958	21 15 8
		Investments:	
		Life subscriptions and Endowments—	
		1969 A.E.P.B. stock	200 0 0
		Loan to Card Committee	50 0 0
			250 0 0
			£985 17 9

INCOME AND EXPENDITURE ACCOUNT FOR YEAR ENDED 31/3/58

60

EXPENDITURE	INCOME
Printing "Notornis" 352 5 7	Subscriptions for year .. 421 15 11
Less grant D.S.I.R. 50 0 0	Add arrears estimated to pro- duce 18 0 0
<hr style="width: 100%;"/>	<hr style="width: 100%;"/>
302 5 7	439 15 11
Postages 48 3 8	Donations 43 5 8
Printing and Stationery 22 13 10	Profit on sale of back numbers, etc. 9 6 10
General Expenses 8 14 2	Interest 5 8 1
Ringing Scheme	
Cost of Scheme 53 8 2	
Less Donations .. 14 10 6	
" Grant Inter- nal Affairs 25 0 0	
<hr style="width: 100%;"/>	
39 10 6	
13 17 8	
Depreciation 5 18 1	
Excess of income over expenditure 96 3 6	
<hr style="width: 100%;"/>	<hr style="width: 100%;"/>
£497 16 6	£497 16 6

NOTORNIS

I report to the members of the Ornithological Society of New Zealand Incorporated that I have examined the books, accounts and vouchers of the Society for the year ended 31st March, 1958, and certify that the above balance sheet is properly drawn up to show the true financial position of the Society at that date. I have accepted the values placed by your Treasurer on "stocks on hand."

D. N. CHAMBERS, Auditor

Vol. VIII

NOTICES

BACK NUMBERS OF "NOTORNIS"

Members are reminded that back numbers of *Notornis* and the earlier *N.Z. Bird Notes* are obtainable from the Society. Enquiries about costs and the parts still held in stock should be made to:— J. C. Davenport, 5 Belfast Street, Hillsborough, Auckland S.E.5.

Other publications available are: *Checklist of New Zealand Birds, 1953* (10/6); *The Takahe* (5/-); *Gannet Census* (5/-); *Measurements of Birds* (6d.); *Identification of Albatrosses* (1/-); *Reports and Bulletins, 1939-1942*, with Index (12/-), Index alone (1/6). These precede Vol. 1 of *N.Z. Bird Notes* and record the first three years of the Society's work.

CHRISTMAS CARDS

Four Christmas Cards have again been prepared. The artist is Avis Acres and the design is rather different from that of previous years. The birds depicted are: Pukeko, Kaka, Red-fronted Parakeet and Robin. It is confidently hoped that members will again support this project to aid the finances of the Society.

Order forms are being sent to all members of the Society in N.Z., giving details of the eight designs of cards, four of calendars and the set of twelve book-marks which are available. You are asked to order early. Correspondence should be addressed to P.O. Box 3496, Auckland.

REGIONAL ORGANISERS

If you are seeking information on the ornithology of your district, consult your Regional Organiser.



REGIONAL ORGANISERS, O.S.N.Z.

- Wellington:** Dr. K. E. Westerskov, Dept. of Internal Affairs
Bay of Plenty: Mrs. R. V. McLintock, 90 Edgecumbe Road, Tauranga
Dunedin: Mr. B. A. Ellis, 30 Middleton Road, S.W.1
Christchurch: Mr. J. R. Jackson, 153 Sparks Road, Christchurch
Auckland: Mr. J. C. Davenport, 5 Belfast Street, Hillsborough, S.3
West Coast: Mr. P. Grant, C/o Technical High School, P.O. Box 192, Greymouth
Taranaki: Mr. M. Breen, Newall School, Newall Road, Okato
Wairarapa: Mr. T. J. Packer, 93 Lincoln Road, Masterton
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Wanganui: Rev. H. W. Austin, C/o Collegiate School, Wanganui
Hawkes Bay: Mr. D. H. Braithwaite, 8 Alpers Terrace, Marewa, Napier
Gisborne: Mr. A. Blackburn, 10 Score Road, Gisborne
Rotorua-Taupo: Mr. M. J. S. Black, "Savernake," Tarewa Street, Rotorua
Waikato: Vacant
South Auckland: Vacant
North Auckland: Vacant
Far North: Mr. D. G. McMillan, C/o District High School, Kawakawa