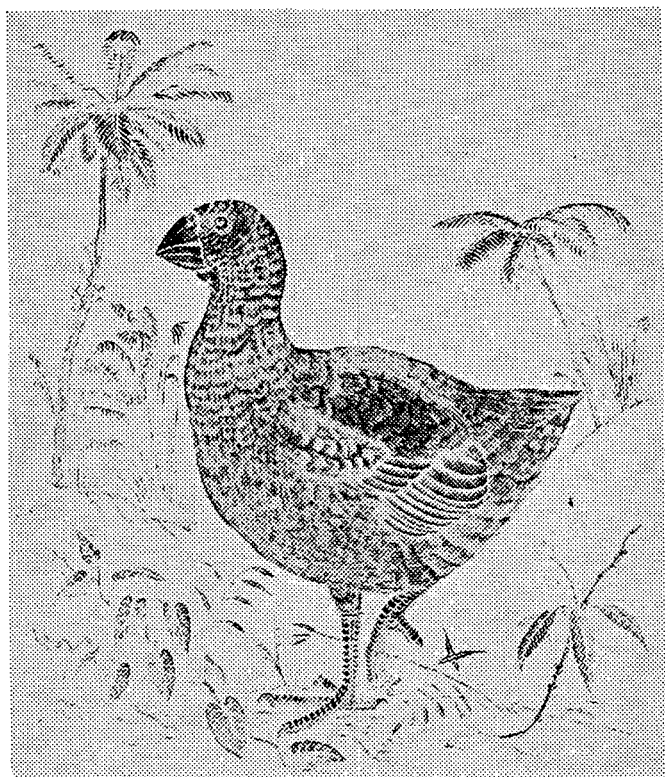


Vol. 3. No. 7.

October, 1949

New Zealand Bird Notes



Bulletin of the Ornithological Society of New Zealand.
Published Quarterly.

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Bulletin of the Ornithological Society of New Zealand.

Edited by R. H. D. STIDOLPH, 114 Cole Street, Masterton.

Annual Subscription, 5/-.

Life Membership, £5.

Price to non-members, 2/- per number.

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Vol. 3 No. 7 Published Quarterly. OCTOBER, 1949

CONTENTS.

Page

Winter Notes on N.Z. Birds, by A. T. Edgar	170
Long-tailed Cuckoo Victimising Silver-eye, by R. H. D. Stidolph	175
Rearing of Long-tailed Cuckoo, by J. M. Cunningham	176
A Wandering Tattler, by H. R. McKenzie	178
Visit to a Shaggy, by R. H. Michie	181
Photographic Studies of Birds in New Zealand	182
A Visit to Hen Island, by R. B. Sibson	183
Pied Fantails, by C. A. Fleming	188
Society's Ringing Scheme	191
Bird Life at Wairuna, South Otago	193
Review	195
New Members	196
PLATES.—VII., King Shag; VIII., Black-billed Gull	182
NOTES.—International Ornithological Congress, 169; Classified Notes, 169; Display of the Harrier, 174; Young Bellbirds and Tuis, 174; Pose of the Bittern, 174; Donations acknowledged, 196.	

INTERNATIONAL ORNITHOLOGICAL CONGRESS.—The Permanent Committee for International Ornithological congresses has instructed the Ornithological Society of Sweden to organise the tenth international congress. It is to be held at Uppsala on June 10 to 17, 1950. According to the preliminary programme, the opening of the congress will take place on Saturday, June 10, at 2 p.m. Sunday, June 11, will be devoted to a whole-day excursion; June 12-17 to congress discussions as well as another whole-day excursion and an afternoon tour. Before and after the congress, excursions will be arranged to various parts of Sweden. Ornithologists from all countries are cordially invited to attend. The congress fee is 25 Swedish crowns, and applications should be sent in before the end of February, 1950. Applicants will be furnished with a detailed programme. At the congress a few survey lectures will be held by lecturers specially invited. Other members may also lecture or give short announcements. A preliminary invitation to the congress will be distributed very soon through representatives in every country, and can also be obtained from the following address: 10th International Ornithological Congress, Uppsala, Sweden. (A number of copies of the preliminary programme are being sent to the society and members who wish for further information should write to the hon. secretary, 39 Renall Street, Masterton, for a copy.)

CLASSIFIED NOTES IN NEXT ISSUE.—Members are reminded that classified notes will be published in the January issue. Notes should be sent immediately to the district organisers so that they can be in the hands of the editor not later than October 16.

WINTER NOTES ON NEW ZEALAND BIRDS.

By A. T. Edgar, Kuala Lumpur, Malaya.

During the months of May and June, 1949, while on furlough from Malaya, I have had some opportunities of observing New Zealand birds. Neither the weather nor the season particularly favoured field ornithology, but in the course of short visits to the North Island Lake district, the coast of Bay of Plenty and Poverty Bay, Picton and Christchurch, my wife and I have had many hours of enjoyment and considerable good luck in our bird watchings. Some extracts from my notes may be worth recording as confirmation, or possibly in some cases slight extension of the observations of resident ornithologists.

Dabchick (*Polioccephalus rufopectus*).—This species seems quite common on lakes in the central plateau. From May 9 to 19, I have a daily record of seven birds in Otaramarae Bay, Lake Rotoiti. On May 15 we saw six birds together near the south shore of Lake Rotoiti, in the evening; during the day pairs had been noted on Lake Rotoehu and Rotoma. On May 19, a single bird on Lake Okareka, and three on Lake Tarawera near the landing stage; and on May 20, four birds near Sulphur Point, Lake Rotorua.

Giant Petrel or Nelly (*Macronectes giganteus*).—From the time when the launch entered Tory Channel from Queen Charlotte Sound until it reached the whaling station at Te Awaite, ("Tar White"), 40 or 50 nellies were seen flying low over the water, or sometimes rising and circling at a fair height above the sound. At the whaling station itself were something over 200 nellies feeding on the paunches and other refuse cast into the sea after the whales had been dealt with on the station. In the air, nellies are fine big petrels, and their gliding, purposeful flight is a pleasure to watch; but when a large number are collected and feeding on whale refuse, neither their habit nor their behaviour is calculated to arouse admiration. They are greedy feeders, repulsive in their eager guzzling and constant squabbling, and singularly unattractive when, temporarily sated, they sit with wings spread like a shag and bills blooded by the feast, on their floating food supply.

For some days previous to my visit to the station there had been a considerable amount of wind and rain, and I was told that during this period there was a very much larger concentration of nellies. On June 27, when we arrived at the whaling station about 11 a.m., there was an enormous collection of black-backed gulls, a smaller number of red-billed gulls, a flock of Cape pigeons, and, as stated, some 200 nellies, plus those further up the channel. By 4 p.m. there were no nellies on the station, none to be seen over the channel south of the station, and from the hill-top I could see only a few individuals near the mouth of the channel, where it joins Cook Strait.

Cape Pigeon (*Daption capensis*).—When we reached the whaling station at 11 a.m. on June 27, the flock numbered 100 birds. During the early afternoon all the Cape pigeons left the area. I was told that during the wilder weather of previous days the concentration had been much larger, at times up to 800 birds. I did not see the Cape pigeons make any attempt to feed on flesh or solid whale refuse. While I had them under observation they remained as a flock, sitting on the oily, bloodstained water, moving a little only when disturbed by the scramble of nellies or black-backed gulls.

Mutton Bird (*Puffinus griseus*).—On June 8 a stranded specimen was found on the shell bank at Miranda, Firth of Thames. It was reasonably fresh, plumage being still complete, and the only sign of decay being a few maggots under one wing. This would appear to be a fairly late record for New Zealand coasts. Identification was carefully checked.

Little Black Shag (*Phalacrocorax sulcirostris*).—On June 16, at Matata Lagoon, Bay of Plenty, my wife and I watched at very close range a party of seven little black shags. They sat in a row, first on a

footbridge and later on a row of stakes, along with two little pied shags, four adult white-throated shags and one young white-throated shag—an excellent opportunity for comparing field characteristics.

White Heron (*Casmerodius albus*).—We did not even know of the existence of Matata Lagoon Sanctuary until, driving along the coast road between Whakatane and Te Puke, on June 16, we spotted a white heron on the far side of the lagoon. This was the beginning of a three-hour spell of extremely interesting bird-watching.

The plumage of the heron was pure white, with yellow bill and black feet. Seen at long range through binoculars as it stood in a patch of shade, it looked a very pale grey, but this was only an illusion, and as soon as it moved into a patch of sunlight, the dazzling white plumage was again conspicuous. The bird was rather shy. I worked round the seaward side of the lagoon and watched it for a short time through the bushes at close range, but it soon became suspicious, and after stretching its neck and eyeing me with disapproval for a few minutes it took wing and flew slowly across to the western end of the lagoon. A Caspian tern which was in the air at the time, took exception to the heron's presence and made a number of dives at the larger bird as it flew. The heron flapped vigorously, turning in the air to make upward strikes with its bill in the direction of the tern; when the heron landed on the edge of the lagoon, the tern continued to dive, but the heron, from a crouch, jabbed its bill upwards in so menacing a manner that the tern decided to give it up, and after a short spell of standing near the heron, swearing, flew away. There was another Caspian tern on the lagoon which did not take part in the attack on the heron, but which later on joined the first tern in mobbing a passing harrier.

The heron spent most of its time in the shallow water, sometimes wading to the depth of its tarsal joint; it was a little restive and changed ground several times. I noticed that the ducks (large numbers of grey, a few shoveller and an odd mallard) seemed rather unhappy when the heron flew over them, and tended to swim outwards or to fly a little way and settle again; and a flock of stilts rose too as the heron's shadow fell across them, but soon landed again.

Bittern (*Botaurus poiciloptilus*).—In May, a number of bittern were seen in the lakeside swamps around Lake Rototi and elsewhere, and the behaviour of one bird at Lake Rotoma may be worth recording. It was spotted in the raupo on the water's edge at the narrow end of the lake, sitting in the normal hunched position. We stopped the car, and as we watched the bittern "froze" into the regulation posture, bill pointing upwards. My daughter left the road and approached the bird to watch it at closer range, and as she did so it rose and flew across the narrow arm of the lake to perch on a branch of teatree about 20 feet up. Here it remained for twenty minutes, watching us across the water. It must have been feeling rather uncomfortable, for it adopted every possible attitude, from a normal crouching perch to an upright posture with neck fully extended and bill horizontal; and sometimes it bunched its body, neck, head and bill pointing upwards, as it had done in the first place when disturbed in the raupo. Elsewhere I have seen bittern perch for a moment or two on a low bush, but had not seen one use a tree perch for so long a period, nor at such a height above water level.

Paradise Duck (*Tadorna variegata*).—On June 12 a pair flew across Lake Waikaremoana, landed, and spent some time cropping the grass on the lakeside flats. After a while they rose again and flew in a wide sweep along the hillside before again settling near the mouth of the Aniwanuiwa Stream.

New Zealand Scaup or Black Teal (*Aythya novaeseelandiae*).—At Otaramarae Bay, Lake Rototi, black teal were seen daily from May 12 to 20, numbers varying from 22 on the 12th to 168 in one flock on the 14th. On the 15th there were over 100 in Otaramarae Bay and another flock of 94 in Huaparū Bay on the south shore of the lake. From then

until the 20th, the Otaramarae birds were still present daily, but broke up into smaller parties.

Other records are: May 17, Lake Okataina, near the Lake House, 22 and 12; May 19, a solitary bird on Lake Tarawera and 13 on Lake Okareka; June 10, 4 black teal along with, but apart from, a flock of 65 grey duck, near Lake House at Lake Waikaremoana; and June 16, Matata Lagoon, Bay of Plenty, a drake and two duck.

Bush Wren (*Xenicus longipes*).—Waikareiti Track, June 13, was one of our most interesting excursions, in spite of (or perhaps because of) the high winds and showery weather, which at 2,900 feet on the shores of Lake Waikareiti, turned for a time into hail and a little snow. At an altitude of about 2,800 feet above sea level, in the dripping forest alongside the track, our attention was caught by a small bird working on the bole of a large tree; later it, and another, came down to some low bushes on the edge of the path, and for a short period my wife and I watched them at close range and from different angles. Our combined notes leave no doubt as to the identification, and this has been checked by reference to skins in Canterbury Museum. The comparatively long, straight bill was noticeable, as was the white line over the eye, whitish throat, warm brown colour on the top of the head and hind neck, and the grey breast. The bird was considerably bigger than a rifleman, with which I am acquainted, having observed the species at Te Whaiti.

Pipit (*Anthus novaeseelandiae*).—About ten miles from Taupo, on the South Road, there is a corner on the hillside with a good view down a valley and over part of the lake. On May 22 we stopped the car at this point, as probably many other travellers have done. I was standing on the side of the road looking down the valley when I noticed a pipit running under the car. It paid no heed as I approached, and was shortly joined by a second pipit, which came up the bank, within a few feet of the other side of the car, and uttered a few rather loud cheeps. These two birds must be well used to the habits of travellers; they did everything except sit up and beg. They took a few crumbs which we threw to them, but would not eat grated coconut, though one of them picked up a piece and held it in its bill for a while before discarding it. When we moved on, all they did was to move out of the way with a flirt of wings and tail, and land again on the edge of the fern beyond the grass verge. The pipit is everywhere a familiar, friendly little bird, but it must, I think, be unusual to find a pair which have so completely accepted the presence and potential usefulness of humankind.

North Island Robin (*Miro australis*).—The bush near Lake Okataina, on both sides of the approach road, is full of bell birds and tuis, fantails, white eyes, some pied tits, and numbers of exotic finches; I was sitting on a log when a single robin came up through the scrub from behind me, attracted my attention by a clear single note, and remained for a few minutes at close range before moving off into the thicket (May 17).

White-eye (*Zosterops lateralis*).—I have been greatly struck by the abundance of white-eyes, in every sort of situation from gardens, coastal scrub, fernland and farm to the bush and the hills. My impression has been that in the more cultivated areas the flocks may be smaller, and in the forested areas larger; this may be a sign of the season. In forest clearings near Lake Okataina, May flocks were associating with goldfinches and chaffinches; in the Waikaremoana bush, June flocks of 30 to 50 white-eyes were frequently accompanied by much smaller parties of whiteheads, sometimes with a pair or two of fantails in attendance.

Insects and small fruit seem to be taken quite impartially, depending upon what is conveniently available, and flocks which have been sweeping the leaves and twigs in their passage will pause to eat some berries before passing on in their hunt for insects. In the forest around Picton reservoirs, where white-eyes were exceedingly numerous in June, flocks were seen not only in low trees, bushes and scrub, but often in tall trees,

sometimes in company with chaffinches. We watched one party of white-eyes which were working on the boles of trees, flicking off flakes of dry bark with their bills and searching the crevices for insects.

Bellbird (*Anthornis melanura*).—I have no yardstick by which to measure the increase or decrease of native birds, but have been delighted to see how well the tui, bellbird, and native pigeon are holding their own in such suitable areas as I have been able to visit. Tuia are familiar birds in Titirangi, within a few miles of the centre of Auckland city, and I watched them on the gum trees on the waterfront at Picton; but in the high lands in the centre of the North Island, my impression is that tuia, though numerous, give place to bellbirds as the commoner species. It has not been my fortune as yet to hear the spring song of the bellbirds, but in these two months I have been charmed by their profusion, and such song as the season will allow, in the bush areas around the lakes; and their presence, in the harer parts of the central plateau, wherever a few trees, a hedge or a patch of scrub will give them a living. At this season of the year, although tuia may be seen on low trees or bushes on the forest edge, in the more heavily tree-clad areas they seem to keep mainly to the tree tops. One hears them, but they are often hidden among the leaves, and it is not usually until they fly that one may enjoy the brilliant sheen of their sunlit plumage; but the bellbird frequents lower trees, bushes, and more open country, and is therefore much more conspicuous; it is not at all shy, and at the eastern end of Lake Rotoma three of us stood within a few feet of a berry bush in which six bellbirds were busy feeding, singing, coughing and chiding.

INTRODUCED BIRDS.

I have noted hedge sparrows (*Prunella modularis*) in various fairly open localities, farm land, etc., and was interested to see a bird in the closer country near Lake House, Waikaremoana, and a pair moving about among the brushwood in a small forest clearing near Lake Okataina, frequented also by goldfinches and chaffinches.

Yellow Hammers (*Emberiza citrinella*) are common enough in most settled districts which I have visited, particularly so in winter flocks in Poverty Bay and Bay of Plenty. Quite a number were seen (not flocked) during the second week in June, on the roadside in the more open patches of bush around Lake Waikaremoana.

In the hill bush on the track between Lake Waikaremoana and Lake Waikareiti, on June 13, a day of high wind and rain, with some hail and snow on the higher lake, I was interested to watch what appeared to be a mass movement of greenfinches (*Chloris chloris*) with a few chaffinches. The birds were seen at an elevation of about 2700 feet above sea level, and the general direction of movement was from the small to the larger lake (that is, roughly south). There were a number of flocks, one flock which I attempted to count being well over 100 birds. For the most part they moved through the tree tops, and seemed to be searching the leaves and twigs to some extent during their hurried passage; a few smaller parties were encountered on the low bushes and on the track itself, but did not linger, and the whole vast assemblage of birds appeared to be moving on a definite line.

At Picton, in the valley which leads to the forest area around the reservoirs, exotic finches were present in very large numbers in late June. In the rough open country there were large flocks of chaffinches, and almost equally large flocks of goldfinches (one party, bathing in a clear stream in the afternoon sunlight, reminded me yet again of that most appropriate term, a charm of goldfinches); smaller flocks of greenfinches and yellow hammers, parties of redpolls; and in the forest, flocks of chaffinches, and smaller numbers of goldfinches and redpolls. This great profusion of exotic species is unfortunately balanced, in the forest, by a paucity of native species. Pigeon are not uncommon, black and pied fantails, grey warblers, and a few yellow-breasted tits were seen, but the only species found in really considerable numbers was the white-eye

—in two days spent in the area we were hardly out of sight of a white-eye at any time.

With the exception of the very interesting record of the occurrence of bush wren near Lake Waikareiti, there is little of importance in these extracts from my notes; but I have been glad to put them on record, for what they are worth, in gratitude for many pleasant hours spent in bird-watching, and many kind people who have helped me. Their offers of further help when I can visit New Zealand again at a more kindly season, have given me great encouragement and good cause for pleasant anticipation. The way of the bird-watcher in New Zealand is hard; he has to look for his birds (except the common and the introduced species) with a patience and a tenacity not called for elsewhere; but the result is worth the effort.

DISPLAY OF THE HARRIER (*Circus approximans*).—A congregation of about one hundred harriers was observed by D. Brathwaite, Peter C. Bull and the writer on June 23, 1949, at 14.30 p.m. about half a mile east from the Tikokino-Kereru Road (Hawke's Bay). The birds were hovering at about twice the normal flying altitude of harriers over pastoral land adjoining the Gwavas State Forest. Harriers' calls were frequently heard. This congregation was spread over a hundred acres, and the largest width of the area was about one mile. After about 20 to 30 minutes the majority of the birds dispersed while the remainder were hovering as before. Other work prevented us from continuing our observations but about half an hour later seventy harriers were counted hovering over the same area. A few of the birds lowered themselves down, while others dispersed. It should be added that the writer, travelling through the same area at dawn on the same morning counted six harriers flying towards the place of the congregation. It would be of interest to know whether similar displays of the harrier were observed at this time of the year by other members of our society.—(Kazimierz Wodzicki, Wellington.)

YOUNG BELLBIRDS AND TUIS.—*It was mid-January and both tuis (*Prosthemadera novaeseelandiae*) and bell birds (*Anthornis melanura*) were numerous around our tent. To encourage the youngsters we made an improvised bird table. Tins of diluted condensed milk and soaked figs were conveniently attached to nearby twigs and branches. A young tui took possession of one tin and milk, and never seemed to leave it. It remained there day after day, sipping the contents every few minutes or when it was so full that not a single drop more could be taken it sat close to the tin and only moved to chase off any other bird that ventured near. On the other hand, three young bellbirds preferred the figs and ate them every day. They were astonishingly tame and would allow me to caress them lightly with a finger as they fed. Now and then their mother would appear and immediately the youngsters saw her they yelled lustily for food. She at once attacked the nearest fig and pulling off pieces popped them into the wide-open mouths around her. But what misplaced energy, for the moment she went the youngsters continued to calmly help themselves.—S. D. Potter, Auckland.*

POSE OF THE BITTERN.—Many people know the protective pose of the bittern (*Botaurus poiciloptilus*) and the majority of illustrations show it in an upright position with upraised bill, but it was on February 8 that I was shown that this is not always the pose adopted and that surroundings may make a difference. I was making my way along a swamp edge where most of the vegetation was short and in any case somewhat sparse. Rounding a sloping piece of country I suddenly confronted a bittern not more than five yards from me. Slowly the bird settled down to a crouching position but with its bill gradually moving upwards. For three or four minutes I watched and realised how very much more obvious the bird would have been had it stood upright. No movement was made until I moved away, when it turned its head slightly to follow my departure.—S. D. Potter, Auckland.

LONG-TAILED CUCKOO VICTIMISING SILVER-EYE.

By R. H. D. Stidolph, Masterton.

Surprisingly little of a concrete nature has been recorded of the breeding habits in New Zealand of the long-tailed cuckoo (*Eudynamis taitensis*); some of the statements that have been published are couched in loose and general terms and lack corroboration, so much so that they have to be rejected. There is good evidence, however, that the usual foster parent of this cuckoo in the North Island is the whitehead (*Mohoua albicilla*) and in the South Island the brown creeper (*Finschia novaeseelandiae*). One thing is certain, the grey warbler (*Pseudogerygone igata*) is not the foster parent of this species of cuckoo, but of the shining cuckoo (*Chalcites lucidus*).

Following on the discovery by J. M. Cunningham of a long-tailed cuckoo's egg in the deserted nest of a silver-eye (*Zosterops lateralis*) in the Tararua foothills on January 5, 1946, at Kiriwhakapapa, in company with my wife I visited the area on January 20, when a silver-eye's nest was found by my wife in an introduced redwood which had been planted in the forest area, milled some years previously, by the State Forest Service. The nest was on a branch about nine feet above the ground, right alongside a track that marks the route of a former tramline. The nest had a distinct bulge or pimple in the bottom and contained a large chick, with the eyes just opening, of a long-tailed cuckoo. The chick had a yellow gape, dark feathers were appearing on the back and yellowish ones on the sides of the underparts. It clung tenaciously to the bottom of the nest and it was quite a task to get it out. The adult silver-eyes were in attendance and the alarm note was uttered.

It was quite obvious to me at this stage that the chick, before many days passed, would drop through the bottom of the nest, the structure of which was quite unequal to the strain imposed on it by accommodating such an oversize chick. I refrained from interfering in any way with the nest to see if my supposition was correct and revisited it seven days later. Sure enough, there was the nest with the bottom out of it and there was no sign of the chick. It could not possibly have reached maturity in the interim.

I cannot imagine any circumstances in which a silver-eye's nest could hold a long-tailed cuckoo chick until it reached the flying stage. As is well-known, the nest of the silver-eye is a cradle-like structure, usually suspended from the rim of the cup between two branchlets. In other words, if the long-tailed cuckoo persistently and exclusively selected the nest of the silver-eye for its egg, there could hardly be any other result than the extinction of the cuckoo. On February 27, 1949, when again visiting the area, my wife found an old nest of a silver-eye, quite close to the one described above, 6½ feet up, in a juvenile kaikomako. This nest was filled with leaves but when these were removed there was another long-tailed cuckoo's egg, measuring 23.7 by 18 m.m.; judging from its appearance it could well have been laid in the 1946 season.

Thus we have three recorded instances, all apparently in one season, in which the nests of the silver-eye were used by this cuckoo; no doubt there would be others. The silver-eye during this season was quite numerous in the area; the whitehead somewhat scarce. There is some reason to suspect that the selection of the silver-eye's nest might have been that of a particular individual long-tailed cuckoo and that it was not the practice of all cuckoos in the area; the three nests concerned were within a few chains of each other. It is the accepted view that each hen (of the European cuckoo) shows a decided preference to a particular fosterer—in this case a pseudo-fosterer—and limits her operations to a restricted area. That view fits the facts of the present case.

REARING OF LONG-TAILED CUCKOO.

By J. M. Cunningham, Masterton.

As so little is known of the egg and early life history of the long-tailed cuckoo (*Eudynamis taitensis*) an examination of published literature and certain unpublished material seems desirable. In view of the still widespread belief that the grey warbler (*Pseudogerygone igata*) is one of the foster-parents of this cuckoo, it is advisable first to point out that references in Oliver ("New Zealand Birds," 1930) and Hutton and Drummond ("The Animals of New Zealand," 1923) have apparently been taken from earlier publications. Their authenticity is thus no greater than the original references. As a case in point, Hutton and Drummond, in speaking of the long-tailed cuckoo egg, give a valid description of the well-known shining (or bronze) cuckoo (*Chalcites lucidus*) egg, of which there is no confusion.

The first doubts were raised by Robert Fulton, who, in an exhaustive article (Trans. N.Z. Inst., vol. xxvi, 1903) states that he is "convinced that the warbler rarely, if ever, hatches the egg of *Urodynamis*." Later he states that he can find "no instance of a young one being found in the nest of that bird (i.e., the warbler) and but a single occurrence of a supposed egg." This "supposed" egg was sent to Sir Walter Buller ("A History of the Birds of New Zealand," 2nd Ed., 1888) by the Rev. Taylor, of Wanganui, but it is not stated from what nest it had been removed, nor is the reason for believing it to be a long-tailed cuckoo's given. (See on.) Its description was "almost spherical in shape, with a slightly rough or granulate surface, of a pale buff or yellowish-brown colour; length, 1.25in., breadth 1.15in." (31.8 x 29.2 m.m.) Buller continues: "A specimen in the Canterbury Museum taken by Mr. Smith from a warbler's nest at Oamaru in November, 1885, corresponds exactly with mine (which is now in the Colonial Museum at Wellington) except that it is slightly narrower." A third egg is also considered by Buller, who stated that Mr. W. W. Smith found an egg "almost round in shape with a deeper shade of colour than the specimen in the Canterbury Museum" (unfortunately no size is given) in the nest of a wood robin. This egg was stated to have hatched into a long-tailed cuckoo.

These three rather dubious records appear to be the only ones on which was based the early description of the long-tailed cuckoo egg. In addition, it is noteworthy that the second egg described is, in all the extensive literature, the only egg claimed to be a long-tailed cuckoo's, taken from a warbler's nest, and from the quotation we are left with the impression that this egg was believed to be a long-tailed cuckoo's only because of its similarity with the first egg. That this egg was itself not necessarily a long-tailed cuckoo's at all is pointed out by Edgar Stead (The Egg of the Long-tailed Cuckoo, Trans. Roy. Soc. N.Z., vol. 66, 1936). He quotes Buller (I am unable to trace the original reference) as saying "I ought to state, however, that it (presumably the egg sent by the Rev. Taylor) was obtained from a native and that its authenticity cannot be considered to be quite certain." Thus, upon this questionable egg has arisen the whole legend of the hatching of the long-tailed cuckoo by the grey warbler!

The quotations above are not accepted as beyond question by either Fulton or Stead, and the descriptions of the eggs are strangely at variance with what Fulton believed to be a true long-tailed cuckoo egg. He is, however, not greatly perturbed by this difference, pointing out that much variability takes place in parasitic birds' eggs in other parts of the world, but he does describe an egg which he thinks is "undoubtedly" that of the long-tailed cuckoo. It was found in a tomtit's (*Petroica macrocephala*) nest and was "white with purplish-brown speckles, becoming thicker and darker at the larger end. It is something like that of the native canary (*Mohoua ochrocephala*) but is more elliptical in shape—I should call it ovoido-elliptical—and its length is 0.94in., and its breadth 0.7in." (23.9 x 17.8 mm.)

Stead also described eggs taken from nests of the whitehead (*Mohoua o. albicilla*), brown creeper (*Finschia novaeseelandiae*), song thrush (*Turdus ericetorum*) and greenfinch (*Chloris chloris*). All these eggs correspond in size and shape with that described by Fulton, and there can be little doubt that this is the normal egg of the long-tailed cuckoo. (A fuller description is given by Stead.) Proof that the creeper is victimised by this cuckoo is given by Stead, who found a young long-tailed cuckoo in a brown creeper's nest. He also pointed out that Buller (Supplement to the Birds of New Zealand, vol. 2, 1905) had scouted the idea that the creeper might be a foster parent.

The only other recent reference to an egg of the long-tailed cuckoo is that of Mr. A. S. Wilkinson (Emu, xxvi, 1936) whose description of an egg found in a whitehead's nest on Kapiti Island also agrees with the last-mentioned examples in every respect.

In addition, I found an egg at Kiriwhakapapa, Tararua Ranges, on January 5, 1946, in a deserted silver-eye (*Zosterops lateralis*) nest. I described it at the time as "very pale pink in ground colour, slightly darker at the larger end, thickly blotched at that end and more sparingly at the smaller end, with purplish brown; size, 24 x 17.8 mm." A few days later I examined eggs in Stead's collection, and these, stated by him to be long-tailed cuckoo eggs, corresponded exactly with mine. Since that time a similar egg has been found in a deserted silver-eye nest, and evidence that this species is victimised in that district is presented (see this issue page 175) by Mr R. H. D. Stidolph, who found a young long-tailed cuckoo in a silver-eye nest.

As Fulton recognised, cuckoo eggs sometimes show amazing variation in size and colouring in the nests of various species (see Gronvold's plate in British Birds, Kirkman and Jourdain, 1944 ed., plate 184), but in view of the similarity of the eggs described by Fulton, Stead, Wilkinson and myself in nests of so many different species, it seems unlikely that there is in fact such great variation in the New Zealand species.

It is difficult to understand such instances at Johannes Andersen (New Zealand Song Birds, 1926) quotes, when he says that a Mr. Overton, of Otago, actually saw a long-tailed cuckoo lay its egg on the ground, carry it in its beak and deposit it in a warbler's nest. Although similar procedure used to be widely attributed to the English cuckoo, it is now generally discredited. In "British Birds" (Witherby et al., vol 2, 1945) appears the following: "All reliable evidence goes to show that the cuckoo (*Cuculus c. cuculus*) either lays directly into the nest, or when the entrance is too small, raises herself with outspread wing and tail against the opening and ejects her egg into the nest, though not invariably successfully. It is very significant that in those cases where the egg falls to the ground or rests on the edge of the nest without rolling into it, it is left lying there. . . . It was formerly believed that eggs found in nests in covered sites or with small entrances must necessarily have been inserted by the bill, and all credit is due to Chance for being the first to realise that the method is approximately the same in all cases."

Regarding feeding of young long-tailed cuckoos by warblers, Fulton seems to take it for granted that Buller is correct in assuming this to be the case. Buller's only evidence, however, is his casual remark in brackets, "as many witnesses can testify" and (in the Supplement) "innumerable well-authenticated cases all over the country." It is significant that since these "innumerable" cases were reported by Buller, no competent ornithologist has ever witnessed the event, although the feeding of the young shining cuckoo by warblers is of common occurrence, and I entirely share Stidolph's belief (Emu, vol. xxxix, 1939) that these reported instances are cases of mistaken identity, and offer the following as examples of how such mistakes can arise. Early this year a friend of mine, for whose observations I have the highest regard, told me he had seen a warbler feeding a young long-tailed cuckoo. The bird, however, proved to be a shining cuckoo. Again, on February 10,

1949, Mrs. R. H. D. Stidolph watched a young shining cuckoo investigate a deserted and damaged sparrow's nest, which it entered. The bird snuggled down in the nest and was fed there by a warbler. One can easily imagine how an inexperienced observer would readily assume, quite wrongly, that this cuckoo was being reared in a sparrow's nest. In such a manner has the legend of the relationship between the long-tailed cuckoo and grey warbler arisen. Buller himself said that the illustration by Keulemans of a young long-tailed cuckoo being fed by a warbler had the appearance of an exaggeration, and I believe he was misled by similar reports to those quoted above. In addition Keulemans had himself seen a species of young cuckoo fed by a variety of birds in West Africa, and would be only too ready to believe that such would take place with our cuckoos. It is well-known that young shining cuckoos (and probably young long-tailed cuckoos also) are often surrounded by excited birds of many species, and the close approach of one may give the impression of feeding. It must be admitted, of course, that on odd occasions a morsel of food might be offered without this necessarily becoming an habitual occurrence. Even if satisfactory proof were offering that such occasions were numerous that is no justification for assuming that the bird fed had actually been reared by the warbler.

SUMMARY.

(1) The egg of the long-tailed cuckoo (*Eudynamis taitensis*) is as described by Fulton and in more detail by Stead, and shows little variation in size or colouring in nests of various species.

(2) There is no reliable evidence to show that the egg is ever laid in the nest of the grey warbler (*Pseudogerygone igata*).

(3) Suggestions that this cuckoo is fed either regularly or fortuitously by the warbler are probably based on cases of mistaken identity for the shining or bronze cuckoo (*Chalcites lucidus*).

A WANDERING TATTLER.

By H. R. McKenzie, Clevedon.

At Kawa Kawa Bay, Clevedon, a wandering tattler has been present from mid-August, 1948, up to the present, July, 1949. It is undoubtedly *Heteroscelus incanus incanus*, and is the third recorded occurrence in the New Zealand area. Oliver, in "New Zealand Birds," states that two were shot on Portland Island, Hawke's Bay, in 1883, and one was shot at Sunday Island in the Kermadec group, in 1913. There is no record of the grey-tailed tattler, *H. i. brevipes*, having been known in this country though it is fairly common in North Australia.

The bird was first noticed as an unusual shore bird in mid-August, 1948, by Mr. W. Pratt, a resident, who told me of it when we met at Clevedon two weeks later. Petrol was scarce, the distance was eleven miles, and I did not expect that it would have stayed; so I did not go to look for it. On November 8, I saw Mr. Pratt again, and he told me that the bird was still there. He gave an excellent description of its appearance and its call. I lost no further time, went to the Bay the next day, November 9, and saw the bird quite closely with a good telescope. I did not know it, so got in touch by telephone with Mr. E. G. Turbott, ornithologist at the War Memorial Museum, at Auckland. Mr. Turbott suggested from my description, that it should be a tattler. Book references soon proved that he was correct. From this time it has been seen frequently by many observers. Since May, 1949, however, it has not been seen so regularly, having evidently found another spot where it spends part of its time. Mr. W. P. Mead, of Castlecliff, Wanganui, on November 30, obtained good photographs, using a telephoto lens.

It was, of course, necessary at the outset to determine whether the bird was a wandering tattler (*H. i. incanum*) or a grey-tailed tattler (*H. i. brevipes*). Mr. H. S. Munro, of Papakura, lent me a skin of *H. i. incanum* from a collection owned by him jointly with his brother, Mr. Geo. C. Munro, of Honolulu, who had collected this skin on 20/1/94 in Hawaii. The skin and the bird appeared to match. Each was in winter plumage, dark grey on the upper surface, a little less dark on the upper front and the sides of the breast, grey to white underneath with regular patches of broad indefinite darker bars towards the under tail. There was no fine barring except a little on the upper flanks. The legs were yellow and the bill dark brown. The skin specimen showed some fine white barring on the under side and outer edge of the angle of the wing. This could not be detected on the living bird. Mayr, in "Birds of the South-west Pacific," gives a good illustration of a flying bird showing the all-dark upper surface, unbroken from head to tail. Munro, in "Birds of Hawaii," states that the colour of the upper parts does not change throughout the year. His illustration of a bird in summer plumage is rather too light. Cayley, in "What Bird is That?" shows the winter (our summer) plumage but it does not show the correct colour of the legs, underparts and head. The stance is not good according to what I have seen. Allen, in "The Shore Birds, Cranes and Rails," the "National Geographic Magazine," Aug., 1937, vol. lxxii, No. 2, illustrates a bird in breeding plumage. The colour, marking, stance and shape of bill are excellent. Indeed, the picture is most life-like. Serventy, in an article, "Notes on Some Rarer Waders," the Emu, vol. xliii, April, 1944, makes a special comparison of the groove on the upper mandible, showing by illustration how it runs along two-thirds of the bill in *H. i. incanum*, and half of the bill in *H. i. brevipes*. Here was the means of proving the sub-species more definitely than it could be done by colour, in which respect there is so little difference.

Three Clevedon members, F. Murray, L. H. Munro and W. W. Renouf, cleared up the matter of the groove on the bill on 5/12/48. By excellent stalking they crept to 15 yards distance from the standing bird, where they rested a telescope on a fence and had ample leisure to examine the bill. All agreed that the groove, which was plainly visible, ran two-thirds of the way towards the tip of the upper mandible. I was directing operations but had not told them how far the groove should go in either species, so the result was very satisfactory. I was able to confirm it on 9/12/48 when I clearly saw the groove myself. This left no doubt as to its being a wandering tattler.

The haunt of the tattler at Clevedon is a rocky point in the centre of a wide shallow bay. It sometimes feeds on the sandy mud but more often among the rounded dark-grey stones of some ridged shingle spits at the point and a round shingle bed close by. Among these stones it is practically invisible at twenty yards when it is not moving. Geo. C. Munro describes its habitat in the Hawaiian group: "A winter visitant to Hawaii, according to Henshaw, it straggles in, probably accompanying flights of plover. It frequents rocky shores of all islands of the group, generally singly or in pairs, but occasionally small flocks are seen. It has a fairly wide distribution over the Pacific in the winter. In Hawaii it frequents rocky shores and rocky beds of streams even into the mountains. It is almost never seen on sandy beaches, but frequents inshore lagoons. Henshaw records seeing them feeding on grassland. It rises when disturbed with a quick flight and cheery whistle and flies along the shore to another station. Its food is principally crabs, molluscs and other denizens of rocky shores." Bull, "Field Notes on Waders in the South-west Pacific with Special Reference to the Russell Islands," The Emu, vol. 47, January, 1948, found tattlers frequenting mangrove swamps, salty stagnant pools, open beach and reef, all of which were in close proximity, so that the birds apparently moved from one to another. Those which were collected were all *H. i. brevipes*, but *H. i. incanum* has also been collected in the Russell Islands. Hindwood, "Birds of Lord

Howe Island," states that *H. i. incanus* has been found once and *H. i. brevipes* twice on Lord Howe Island.

This little bird of eleven inches has a quick, graceful flight. Most of the writers quoted mention this, but Witherby, "The Handbook of British Birds," mentions also the intermittent strokes of the down-curved wings. This is very noticeable. Witherby also gives an important point for identification in mentioning the tip-up motion of the after part of the body. This occurs whenever the bird is moving and sometimes when it is standing.

The only call heard here has been a sweet clear whistle of four even notes closely run together, uttered almost every time it rises. Geo. C. Munro states that the Hawaiian name is ulili. The ulili was a bamboo flute or whistle and the bird's cheery silvery call may have caused it to be named after the instrument. Witherby describes the call of *H. i. brevipes* as an irregular screech not of the same intensity or pitch.

The association with other birds, or lack of association mostly, is interesting. It was alone when seen the first time and also the next, but on 25/11/48 Mr. R. B. Sibson found it in close association with a whimbrel (*Numenius phaeopus variegatus*) which had not been seen there before. The two birds not only fed near each other but kept together in flight. This continued until 20/2/49 when a second whimbrel arrived. The two larger birds then left the little one by itself. They left the bay soon after this, but the tattler stayed on alone. Stilts are usually present and sometimes godwit, but it does not keep close to these. Its friendship with the first whimbrel was so close that on a day of strong cold wind the tattler was seen sheltering close in the lee of the larger bird.

Oliver states that the first nest was found in 1912 by Sir F. Lambert, near the Alaska-Canadian boundary, 25 miles south of the Arctic Ocean, and that eggs hatched on July 9. The four eggs were in a nest in gravel. He also records the finding by Dr. Olaus J. Murie of a nest on a gravel bar on the Savage River in Alaska, on July 1, 1924 (this should be July 1, 1923) at 4,000 feet. The four eggs were collected for scientific purposes. Arthur A. Allen describes the finding of the nest by Olaus J. Murie, and gives the correct date, July 1, 1923. Matthews, "Birds of Norfolk and Lord Howe Islands and the Australasian South Polar Quadrant, with Additions to 'The Birds of Australia,'" p.p. 119-121, quotes an account by Olaus J. Murie in the Auk, vol. xli, No. 2, April, 1924, p.p. 231-235, pls. xvi-xviii. of the finding of several birds on the beds of rivers in the Alaska Range in 1922 and 1923. A downy chick and its male parent were collected in 1922. The following year the nest was found and several young of other broods observed. Dr. Olaus J. Murie attended the Science Congress at Auckland in February, 1949, and it was a great pleasure to show him this bird, whose kind he had seen at the opposite end of its range. He was very pleased and was keenly interested in the fact that it had over-stayed the migration time.

The appearance of this bird in mid-August, 1948, is puzzling. The date seems too early for migration from Alaska or eastern Asia. It is my opinion that it had stayed over from the spring (our spring) of 1947. It could have been here without being detected, or may have been at another part of the coast. Its staying over in 1948 seems the more likely since it did not depart in the autumn of 1949 and is still present in July in splendid breeding plumage. On February 20, 1949, it was seen to be a little darker on the breast and flanks, but had no lines. On March 3 it was in practically full colour. The finely pencilled wavy lines on its whole front, flanks and underparts, except a little of the after belly, give it a striking appearance. Probably the lack of numbers of its kind is the reason for its failure to feel the migration urge sufficiently to make it leave our shores. For the present it is closely guarded by Mr. W. Pratt and is providing a most interesting and pleasant study.

VISIT TO A SHAGGERY.

By R. H. Michie, Kaitaia.

On September 27th, 1948, I made a three days' trip to the far North visiting the area between Scott's Point, Cape Maria, and Te Paki stream and the outlet of Te Werahi Stream. On October 24th I made another three days' trip, visiting Pandora, Scott's Point, and revisiting small lakes which I had visited on the previous trip, together with other interesting nooks and corners.

The little blue penguin (*Eudyptula minor*) was nesting in burrows in rushes on slopes above Twilight Bay; one pair only of oystercatchers (*Haematopus* sp.) was seen here (one black and one pied). At Cape Maria four pairs of banded dotterels (*Charadrius bicinctus*) were racing around as though they were nesting.

I stumbled right on to a shag colony on September 25th. The colony consisted of large pied (*Phalacrocorax varius*), small pied and white-throated shags (*P. melanoleucos*). There were 23 nests in all stages of construction, two containing three eggs in each, and one nest containing one egg. On October 23 I revisited this colony to find that its numbers had about doubled: there now being 38 nests, 21 containing eggs, one containing three chicks apparently just hatched, and one nest with one chick and two eggs. All three shags mentioned were occupying nests. There were three small black shags present also; they had their heads under their wings having a doze.

The colony is situated in a beautifully sheltered corner of the lake at the western end against a patch of high manuka. The outlet of the lake is apparently gradually building up as the lake level is rising, killing the manuka. It is in these dead manuka trees that the shags have taken up their abode. They presented a beautiful spectacle in the afternoon sun, with the water as calm as glass. In the colony were two small pied shags with much more white on them than usual, having white along the top front portion of the wings and white on the back of the neck down to the shoulders. One had a black spot at the back of the head.

We visited the locality of the largest colony on the Ninety-Mile Beach of the black-backed gulls (*Larus dominicanus*). I had not expected to find many there, as since the toheroas have completely disappeared from the beach and the tua tuas are not much in evidence either, the gulls have almost deserted the beach where they used to be literally in thousands. However, I was pleased to find about 100 of them there getting things in order; they had nests about ready to lay in; we found about 30 in all stages of construction.

Along one 18-mile stretch of beach between Scott's Point and the Bluff we passed nine pairs of oystercatchers. In nearly every case one was black and one pied. Three pied in flight passed us going up the beach.

On December 19, 1948, accompanied by Mr. F. Brent, of Kaitaia, we travelled on horseback and made a further search for shag colonies (in particular the small black shag) in the lakes and lagoons in the vicinity of Te Kao. We visited approximately a dozen lakes and lagoons but were not successful in locating any new shag colony. We did, however, make a very interesting find in discovering a tiny lake (or lagoon) containing three dabchicks (*Poliiocephalus rufopectus*). I have searched in vain for these little birds for several years on every lake, etc., that I could find, and had about given up hope of ever finding them in these parts. I think the last one recorded was by Mr. Watts, of Paua (Parengarenga) about 10 years ago. It had been shot on one of the lakes on the Te Paki station.

On December 29 I visited a tiny colony of red-billed gulls (*Larus novaehollandiae*) at Scott's Point. There were only about a dozen nests in the colony, some containing fresh eggs, others with freshly-hatched chicks and others with chicks almost half grown. The birds in this colony had nests in various stages of completion on October 24.

PHOTOGRAPHIC STUDIES OF BIRDS IN N.Z.

It is intended to publish as opportunity offers a series of photographic studies of birds in New Zealand, accompanied by suitable text. The first two photographs appear in this issue. In this regard, the society is indebted to the generous offer of Mr. K. V. Bigwood, of Christchurch, to supply a series of photographs, gratis, from his collection, for reproduction in Bird Notes.

KING SHAG.

Plate VII.

Inhabiting a restricted area at the northern end of the South Island, the king, Marlborough, or carunculated shag (*Leucocarbo carunculatus*) is the rarest species of shag in New Zealand, its numerical strength probably being under 100 individuals. It is a protected bird and every effort is being made by the authorities to ensure its survival, though a reported decrease in its numbers in recent years is not reassuring.

A study of the photograph, a bird standing beside its nest on its breeding rock at the entrance to Queen Charlotte Sound, shows clearly the distinctive colouration of this species, which is not to be confused with the large pied shag (*Phalacrocorax varius*) also of black and white plumage. It will be noticed that the black on the head of the king shag extends to below the bill, whereas in the large pied shag only the top of the head is black, the sides of the face and neck being white, as well as the underparts. In addition, the king shag has a white bar on the wing and a white patch on the back.

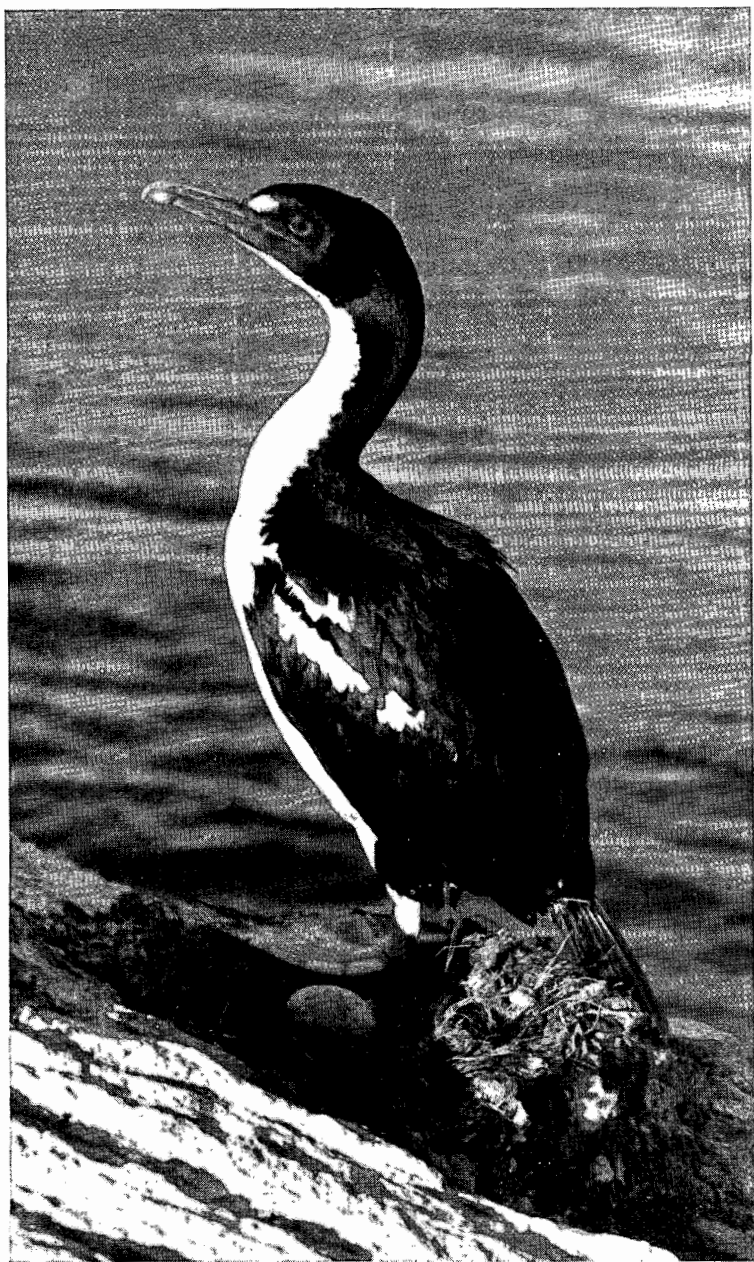
The king shag is essentially a marine-feeding bird and appears to be sedentary in its habits. I visited its breeding rock on November 26, 1939, when a persistent sickening swell had its maximum effect. Only two nests were then in occupation, each containing a single egg. A juvenile, with a little down on its neck, remained on the rock and the rest of the birds, about 25, flew into the water. Before reaching the rock, king shags in ones or twos flew past the launch towards Cooper's Island, as often as not circling the launch en route. At least a dozen birds headed in that direction. On the rock itself was a dead adult and a dead half-grown young, the remains matted on to the slippery surface. White-fronted terns (*Sterna striata*) had nests, in some cases with young just hatched, all over the highest parts of the rock. Two red-billed gulls (*Larus novaehollandiae*) were the only other birds seen on the rocks.

BLACK BILLED GULL.

Plate VIII.

More familiar in the South Island than it is in the North, the black-billed gull (*Larus bulleri*) closely resembles the red-billed gull (*L. novaehollandiae*). In the fully adult bird the colour of the bill, together with the distinctive wing markings, distinguish the two species, but care must be taken not to confuse the juveniles, in which the above characters do not hold good. In the adult black-billed gull, the black markings on the primaries, on the upper surface, run along the ends; in the red-billed gull, there is a distinctive black bar across the wing, near the tip—the black markings being along the wing edge in *bulleri* and across the wing in *novaehollandiae*, but these markings only show up when the birds are in flight. The photograph in this issue shows a black-billed gull standing besides its nest in the Lake Ellesmere area, Canterbury.

The black-billed gull has been recorded as breeding inland on riverbeds in Canterbury, Otago and Southland. In the North Island, the only two known breeding places are at Rotorua, in the Auckland district, and at Porangahau, on the Hawke's Bay coast. It has been recorded, however, in the North Island as a visitor to estuaries and harbours, but much more information is required of its distribution and breeding range, especially in the North Island.—R.H.D.S.



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KING SHAG AND NEST.



Copyright photo K. V. Bigwood.

BLACK-BILLED GULL AT NEST.

A VISIT TO HEN ISLAND.

By R. B. Sibson, Auckland.

On the first two island-trips of the King's College Bird Club in December, 1946, and December 1947-January, 1948, thirteen members had an opportunity of visiting Little Barrier. For the third trip it was decided to spend a week as soon as possible after Christmas, 1948, on Taranga, the main and southernmost island of the Hen and Chicken archipelago, which lies on the outer fringe of the Hauraki Gulf. Permission to land and camp was readily given by the Department of Lands and Survey. In the party were six schoolboys: J. V. Allison, D. E. Caughey, G. W. Gummer, B. D. Heather, J. B. Morris, J. B. Morrison; Mr. D. A. Urquhart, Dr. O. F. Lamb and the writer.

By arrangement with Mr. N. Warren by whose helpful co-operation our travelling to and from the island was made easy, we left Leigh in the Gunner on the morning of December 29 and headed north over a calm stretch of sea, where petrels and shearwaters of one kind or another were in view all the time, although our course took us near only the stragglers from the main body which was dimly discernible away to the east. A curious absentee was the diving petrel (*P. urinatrix*); and despite a sharp look-out no sooty shearwaters (*P. griseus*) could be identified among the numerous flesh-footed (*P. carneipes*).

Eleven miles east of Waipu and 22 miles north of Cape Rodney, Taranga rises steeply to a height of 1,353 feet. Much of its 1175 acres is still covered with the original bush; but there are areas of modified vegetation, where many years ago the island was occupied by Maoris. Despite the abundance of a species of rat which were easily caught and of which several specimens were brought back for study, the island is an ideal sanctuary. In this respect there is a notable difference between Hen Island and Little Barrier, where wild cats survive from an earlier occupation and constitute both a menace and a problem. On Little Barrier the remains of cat-eaten petrels, especially of *Pterodroma cookii*, are all too common. On Hen Island it was difficult to find a dead petrel at all.

In almost windless weather a landing was expeditiously effected halfway along the west coast of the island; the bulky stores were hauled up a steep slope to the traditional camp-site; and by evening a comfortable camp had been made. Whilst the tents were being pitched the first saddlebacks appeared. They are the crowning glory of Hen Island. Yet it is a sad thought that after a few days we were to become blasé, even about such a debonair aristocrat as *Creadion carunculatus*. Perhaps, however, our becoming blasé was really something to be desired. It could only arise from the fact that saddlebacks were in such numbers that we could see them easily. After dusk there came the excitement of hearing the incoming petrels, a new experience for some who had not been on a "petrel" island before. Overhead, numerous "titi" calls told us that Pycroft's petrels, surely one of the daintiest and most exquisite of all the procellariiformes, were active over their nesting ground. Other wild cries, which at times sounded like a sick person retching excruciatingly, were attributed to the less elegant fluttering shearwaters.

At one time or another most of New Zealand's leading ornithologists have visited Taranga, so that we could not expect to make any important contribution to the knowledge of the birds of this country. Although we had youth and energy in our favour, we were far from satisfied with the amount of ground covered in our exploration of this rugged island. Steep boulder-strewn slopes, sheer inland cliffs and a plethora of ridges which end in abrupt sea-cliffs, make the going tough, and we soon discovered that it took a long time to go a little way. On January 2, Caughey, Heather and Urquhart set off eastwards and camped above Old Woman Cove. The incoming of petrels during that night was most disappointing. The northern heavily-bushed slopes remained terra incognita.

We got no nearer than to gaze hopefully down upon them from the summit.

Nor were we as successful in the finding of nests as we had hoped. For most of the passerines the nesting season was all but over; and a conscientious examination of accessible holes in trees produced only meagre results, with the notable exception of one nest of saddlebacks. Following the lead given by Turbott (*Emu*, xl, pp. 158-161) we intended to do some census work; but the obvious cessation of territorial instinct in many of the passerines and most of the parrakeets made it doubtful if any reliable results would have been achieved. After almost exactly a week the Gunner arrived to take us off in the calmest of weather on the morning of January 5.

Accounts of the birds on Hen Island are not easily come by. As the island has scarcely been mentioned in Bird Notes of the O.S.N.Z., it is hoped that the following list may serve as a guide to future visiting ornithologists. Certain papers, namely Falla (*Rec. Auck. Inst. Mus.* I. 5), Fleming (*Emu*, xli, pp. 76-80) and Turbott (*Emu*, xl, pp. 158-161) have proved most helpful. I am especially grateful to Mr. E. G. Turbott, of the Auckland War Memorial Museum, not only for supplying me with a list of pertinent literature but also for much useful advice about camping on the island. A quotation from Shakespeare's "Tempest" is not inappropriate—

"The isle is full of noises, sounds and sweet airs, that give
delight and hurt not."

LIST OF SPECIES.

Little Blue Penguin (*Eudyptula minor*).—Although the breeding season was nearly over, several birds were found in burrows, and on January 2 one was brooding a newly-hatched youngster and a chipping egg. Some burrows were on the steep inland slopes at an estimated height of 500 feet. There must often be competition for nesting holes between penguins and petrels. There was little noise at dusk of penguins coming ashore.

White-faced Storm Petrel (*Pelagodroma marina*).—Common on both crossings, especially near Sail Rock.

Flesh-footed Shearwater (*Puffinus carneipes*).—Plentiful at sea. Towards dusk every day a few dark shearwaters which seemed to be mainly of this species would be sweeping up and down gradually closing on the island. A small colony was located on a headland on the west coast. Some were watched and caught as they came in after dusk.

Sooty Shearwater (*P. griseus*).—Although none could be certainly identified at sea it was very gratifying to find one sitting on an egg in the middle of a small colony of flesh-footed shearwaters. I have been told that Stead found a small colony of *P. griseus* on the slopes about the bay to the north of the light. Among the shearwaters which we scanned as they gathered offshore in the evening none could be identified as *griseus*.

Buller's Shearwater (*P. bulleri*).—Quite numerous at sea, but no big concentrations were seen. In the evening odd birds regularly joined the few *carneipes* which were gathering offshore.

Fluttering Shearwater (*P. gavia*).—Plentiful at sea. A few came in noisily on our first few nights, but none was heard after that. There seemed to be two possible explanations: (a) That there was a new moon on December 30 and increasing moonlight during our last nights on the island. (b) That the nesting season was nearly over. After a long painstaking search, Urquhart found two occupied burrows, one containing an adult, the other a large youngster still in down. According to Fleming *P. gavia* almost monopolises the higher ridges.

Allied Shearwater (*P. assimilis*).—Hen Island is known to be one of the nesting places of the subspecies *haurakiensis*; but as they are winter breeders we could not expect to find them ashore. A corpse was found on

the face of one of the great boulders which jut out above the treetops. As we were leaving a single bird flew swiftly past the S.W. corner of the island.

Grey-faced Petrel (*Pterodroma macroptera*).—This is also a winter breeder but being a much larger bird than *P. assimilis* its incubation and nesting periods take longer; and so we were able to find considerable numbers of fully-fledged young in the burrows just ready to leave. Often at night they would crash near our camp, attracted perhaps by the glow of the fire. They must be the dominant petrels of the island, their only possible rivals being *P. gavia*, whose numbers owing to the time of the year, we could not assess. *Macroptera* seems to nest at any height from near sea level to the highest ridges where the soft ground was riddled with burrows, and where we searched hopefully, but in vain, for evidence of the black petrel (*Procellaria parkinsoni*) which is breeding on Little Barrier, 25 miles to the south-east.

Cook's Petrel (*P. cookii*).—On January 5 a few gadfly petrels, apparently of this species, were seen a few miles north of Leigh between our course and the mouth of the Pakiri River.

Pycroft's Petrel (*P. pycrofti*).—As we neared Taranga, we had glimpses of three gadfly petrels which seemed to be of this species. We have little to add to the admirable account of the behaviour of these petrels given by Fleming (Emu, xli, pp. 76-80). During our first four nights on the island the "titi" calls of several birds were heard as they flew about the island, but on our last three nights we only heard two, one and one calls respectively. A waxing moon is offered as a partial explanation for this decline, although Fleming discounts this theory.

The first calls were seldom heard before 8.30 p.m., and sometimes considerably later. This seems to indicate that the first Pycroft's petrels begin to come in to Hen Island fifteen to twenty minutes later than the first Cook's petrels on Little Barrier, where three of us had noted their incoming at exactly the same time of the year. On the evening of January 2, at 8.30 p.m., as some of us were sitting on one of the many huge boulders which protrude above the bush, a Pycroft's petrel nimbly scrambled up beside us, lightly took off and headed out to sea. There are many such boulders about the lower slopes. They offer obvious facilities for landing and taking off, and probably serve as homing beacons to many of the breeding petrels.

The three of us who were familiar with the calls of Cook's petrels on Little Barrier all agreed that the calls of Pycroft's petrel were similar but softer and rather less staccato; nor did we hear the variety of calls of which Cook's petrel is capable. It should, however, be remembered that we heard few Pycroft's compared with the great numbers of Cook's petrels which may be heard on Little Barrier. He would be a bold, not to say rash, ornithologist who would dare to separate the two species by ear. It might be possible after much experience.

Three birds, two of which were incubating eggs, were found in burrows. (a) In a short burrow beneath a huge rock. Egg, 46 x 36 mm. (b) In a derelict-looking burrow, situated on the top of the cliffs, only about 50ft. above sea level. The burrow was about five feet long and doubled back on itself. The entrance was filled with leaves. Egg, 46 x 36 mm. (c) Found by Urquhart above Old Woman Cove, in a shallow burrow, newly excavated. No egg.

Some significant measurements from two other birds were obtained. One (d) was caught while scrambling about the camp one night; the other (e) was found, some time dead, above the tideline.

	Wing.	Culmen.
(a)	219 mm.	24.5 mm.
(b)	219 mm.	24 mm.
(c)	214 mm.	24 mm.
(d)	220 mm.	25 mm.
(e)	214 mm.	23 mm.

Pied Shag (*Phalacrocorax varius*).—The many small offshore rocks were favourite resting places for both adults and juveniles. There is a breeding colony towards the eastern end of Old Woman Cove. Caughey and Morris visited it and reported that nesting was over, all young seen being full-winged.

White-throated Shag (*P. melanoleucos*).—At least one was frequenting Old Woman Cove.

Gannet (*Moris serrator*).—Quite numerous on both crossings; and often fishing in the shallower waters around the island.

Reef Heron (*Demigretta sacra*).—One was seen in Old Woman Cove.

Harrier (*Circus approximans*).—These were often playing in the wind currents around the summit cliffs. Up to three were seen at once, some being dark birds of the season. Probably a pair had bred. One was disturbed eating a penguin. On January 5 one was quartering the slopes of Sail Rock.

Caspian Tern (*Hydroprogne caspia*).—Only one or two birds frequented the island. They favoured Old Woman Cove; but gave no sign of nesting. There is a colony of some size on the mainland opposite among the Mangawai sandhills.

White-fronted Tern (*Sterna striata*).—None was seen on the way over; and only a few on the way back, near Cape Rodney. None was nesting on the south or west coasts of the island, to which they seemed to be only visitors, a small flock being seen once. In some years hundreds of pairs nest at Mangawai.

Black-backed Gull (*Larus dominicanus*).—Scarce. As we approached the island two flew out to meet us. A pair in Old Woman Cove did not seem to be nesting. An old nest was found on a beach near the camp.

Red-billed Gull (*L. novaehollandiae*).—These could often be seen in the wake of passing ships, but they seldom visited the island. Near Sail Rock two followed the Gunner for a while. On the evening of January 2, thirteen, including young birds of the season, came to the beach for fish scraps.

Pigeon (*Hemiphaga novaeseelandiae*).—The population must have been near saturation point. It has been reported that in lean years, pigeons from Hen Island fly across to the mainland, and many may arrive starving and moribund. The tumbling and diving of pigeons, evidently males displaying, about the steep cliffs of the summit, was a pleasure to watch. Several nests were found containing squabs. In a new nest close by the camp the egg was laid on January 2.

Kaka (*Nestor meridionalis*).—These noisy and conspicuous birds, often to be seen sporting around the summit, probably appeared more common than they actually were. The island evidently remains a stroughold for the species. No nests could be found.

Red-fronted Parrakeet (*Cyanoramphus novaeseelandiae*).—Along the coast where there was a strong growth of flax (*Phormium tenax*) which had had a good season for flowering, many family parties and small flocks were stripping the flax-pods to get at the seeds. The numbers must have run into many hundreds. One nest was found containing four young.

Yellow-fronted Parrakeet (*C. auriceps*).—A pair and probably a third bird were seen near the camp by Allison, Heather and Morrison; another pair was reported from one of the eastern ridges by Caughey, Heather and Urquhart.

Shining Cuckoo (*Chalcites lucidus*).—Near the camp one was heard daily and a grey warbler was seen feeding a youngster which had left the nest. None was recorded elsewhere. They are evidently scarce, as would be expected from the small population of grey warblers.

Morepork (*Ninox novaeseelandiae*).—Regularly heard at night and occasionally disturbed by day, but no nests could be found.

Kingfisher (*Halcyon sanctus*).—Not a conspicuous bird at all. There were a few pairs around the coast. One nest with young was found.

Pipit (*Anthus novaeseelandiae*).—The north-west corner of the island was the only suitable habitat that we saw; here a few pairs were breeding and a male in full song was heard.

Grey Warbler (*Pseudogerygone igata*).—Apparently thinly distributed; and the harder to locate in that they were scarcely singing at all. Their status on Taranga would seem to be much the same as on Little Barrier.

Pied Tit (*Petroica toitoi*).—At first we thought these were scarce, but as the days went by we found that they were fairly evenly distributed. They were spending most of their time in the treetops. The eastern party thought pied tits were more numerous on the eastern and central ranges. A nest copiously lined with feathers and containing three eggs were found on 31/12/48. Females were seldom seen. The typical "wheedle" song was not often heard.

Pied Fantail (*Rhipidura fuliginosa*).—Quite common. Some old nests and one with four young ready to fly were found.

Silver-eye (*Zosterops lateralis*).—Noticeably scarce. Early every morning one or two males were singing vigorously near the camp, and a small flock once passed through. Elsewhere they were encountered only near the light.

Tui (*Prothemadera novaeseelandiae*).—Though plentiful enough we gained the impression that the population was not so dense as suggested by Turbott (Emu, Vol. xl., pp. 158-161). The nesting season appeared to be over. No occupied nests could be found and there was little song. However, one which was watched for some considerable time while it attacked or menaced a somewhat unimpressed pigeon, may have still had some territorial interests. Tujs were making the most of the few remaining flowers on the stunted pohutukawas about the summit.

Bellbird (*Anthornis melanura*).—Certainly more abundant than tui; but hardly, it seemed, as numerous as suggested by Turbott. Song was at a low ebb; and no occupied nests were found. The success or failure of the flowering of the pohutukawa must be an important factor affecting the population of the honey-eaters, especially on the smaller islands of northern New Zealand.

Saddleback (*Creadion carunculatus*).—To judge by the frequency with which their calls rang out by day, saddlebacks must be distributed fairly evenly over the island. As we followed the shore they could be heard inland from every indentation of the coast; and were even in the gullies of the scrub-clad slopes of the north-west where the vegetation has been considerably modified. The island is probably supporting as many as it can. It was difficult to ascertain exactly what they were doing or to nail any pair down to any particular locality. Two or more often visited the trees where the camp was pitched, and could be seen, indifferent to our presence below, eating the ripening berries of the whauwhaupaku (*Nothopanax arboreum*). Dr Lamb once saw five together, and noted some feeding on kawakawa (*Macropiper excelsum*).

By sheer good luck one nest was found. I was climbing a steep slope and reached out with my left hand to a hole in a tree to help myself up. As my hand touched the rim of the hole, out flew a saddleback, which quietly made itself invisible amongst the tree tops. The neatly-made nest, about nine inches down the hole, held two beautiful eggs, mottled purplish-pink on a white background, one being much paler than the other. A few days later when we visited the nest again, the birds had not deserted. The clutch was still two.

As saddlebacks moved actively about the trees, I was struck by the similarity between their movement and those of the blue-wattled crow.

Australian Raven (?).—On January 3, as some of us were watching kakas, harriers, pigeons and tuis sporting in the upward currents or flying out from the steep faces around the summit, a large black bird of corvine appearance, passed along the line of high inland cliffs. Being familiar with ravens in Europe, I had no doubt that this was a large member of the *corvidae*. What may have been the same bird was reported in October, 1945, from Mokohinau by Major Buddle (O.S.N.Z., Vol. ii., p. 70) and from Little Barrier by Turbott (O.S.N.Z., Vol. ii, p. 106). This trans-Tasman straggler, if that is what it is, should not find it hard to survive on these islands.

INTRODUCED BIRDS.

Song Thrush (*Turdus ericetorum*).—Occasional snatches of song were heard from the few which have colonised the island. They were shy and elusive.

Blackbird (*T. merula*).—Rarely seen, but occasionally singing even as late as January 5. Around Auckland most blackbird song has ceased before Christmas. On Little Barrier and Hen Island the small blackbird populations continue singing about a fortnight later. A nest near the camp contained two eggs. It may have been our arrival that caused the birds to desert. Another nest (old) was found some way inland.

Hedge Sparrow (*Prunella modularis*).—This species had not previously been recorded from Hen Island. We found it among the scrub on the north-western slopes.

Starling (*Sturnus vulgaris*).—Though an alert lookout was kept, only one was seen.

PIED FANTAILS.

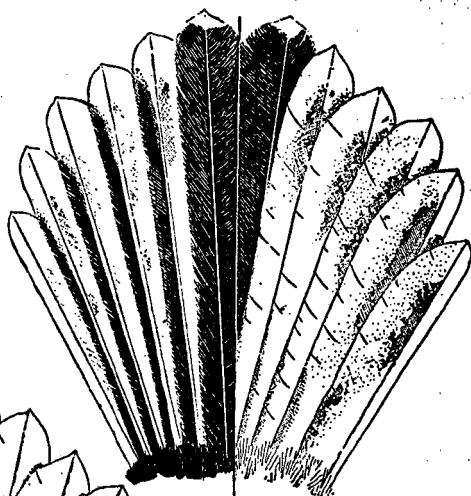
By C. A. Fleming, Wellington.

The New Zealand fantails are an example of valid subspecies differing in quite minor details of plumage pattern. Recently, I have had occasion to re-examine the differences between fantails from North, South and Chatham Islands, and prepared the accompanying sketches to show the characteristic tail pattern of each of the three races, which are a good introduction to the phenomenon of geographic sub-species in a common bird which most observers know and recognise throughout the country as the pied fantail, without thought of the characters that distinguish birds on either side of Cook Strait.

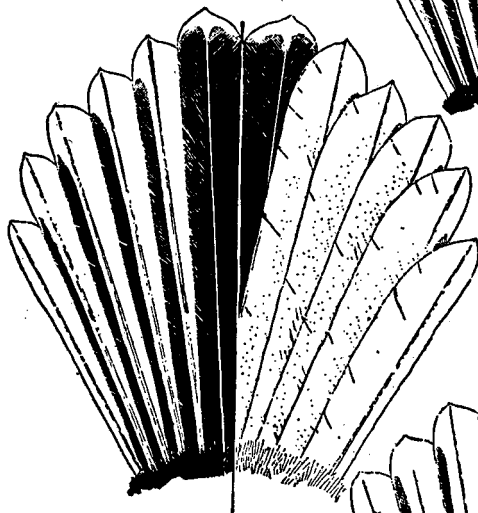
New Zealand fantails are races of a species which ranges throughout Australia and in Tasmania, Norfolk, Lord Howe, New Hebrides, New Caledonia, Banks and the Solomon Islands, and, although the species bears the name given by Sparrman to a black fantail collected in New Zealand during Cook's second voyage, it is probable that it had its origin in Australia and has spread outwards quite lately (but in pre-historic time) to its Pacific outposts (including New Zealand) where the separate races arose in isolation.

Black fantails are common in the South and rather rare in the North Island. For many years they were considered a different species from the pied fantail, but in both islands they interbreed freely with pied birds, so that modern students of bird classification consider the black birds to belong to the same species and sub-species as the pied fantails they live with, and no more worthy of a separate scientific name than are black rabbits or blue budgerigars. How the North and South Island

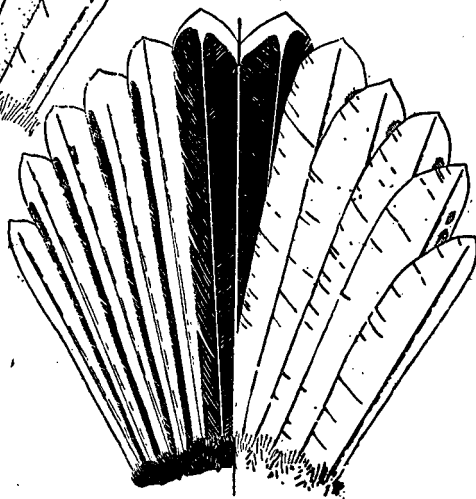
NORTH ISLAND FANTAIL



SOUTH ISLAND FANTAIL



CHATHAM ISLAND FANTAIL



NEW ZEALAND PIED FANTAILS.

Diagrams showing the pattern of upper (left) and lower (right) surfaces of tail in three subspecies: North Island (*Rhipidura fuliginosa placabilis*, Bangs), South Island (*Rhipidura fuliginosa fuliginosa* (Sparman)), and Chatham Island (*Rhipidura fuliginosa penitus*, Bangs).

fantails acquired and maintain their two plumage phases is a matter for speculation. "Polymorphism," or its special case "dimorphism," is not uncommon among birds, and although New Zealand has, perhaps, more than its share of dimorphic species (three species of shag, oystercatchers, stilt, fantail), such Northern Hemisphere birds as the guillimot, fulmar and Arctic skua remind us of its widespread occurrence.

The pied fantails of New Zealand show consistent geographic variation in tail pattern. The North Island fantail (*Rhipidura fuliginosa placabilis*, Bangs) has a restricted white tip to its central dark tail feathers, the outer vane of second to fifth feathers is black, almost or quite in to the shaft, and the inner vanes are washed with dusky grey, making the under surface of the tail much darker than that of other New Zealand sub-species.

The South Island fantail (*Rhipidura fuliginosa fuliginosa* (Sparman)) has larger white tips to its central tail feathers, a narrow white strip between shafts and black outer margins of the second to fifth feathers, and the under tail surface almost clear, being washed with a pale buff in freshly-moulted birds. The breast tends to be a darker and warmer rufous buff, the tail is about 5 millimeters longer, and the wing 3 to 4 millimeters longer than in North Island birds.

Many sub-specific differences cannot be seen in the field, but North Island observers can readily detect the whiter under-tails and darker breasts of South Island fantails, which also look a little larger than the North Island birds they know well. Keuleman's well-known figure in Buller's "Birds" clearly shows a South Island pied fantail (with the tail pattern rather carelessly and assymmetrically drawn) but Lily A. Daff's excellent plate in "New Zealand Forest-inhabiting Birds" is a faithful representation of North Island fantails.

The Chatham Island fantail (*Rhipidura fuliginosa penitus* Bangs) is essentially similar to the South Island sub-species, but has an even whiter under tail surface (judging, however, by worn specimens) and has narrower black margins to the side feathers of the tail, so that a broad strip of white margins the shaft. The whiter under-tail was conspicuous in the field, to me, familiar with the North Island bird, but I doubt if it would seem so to an observer brought up with South Island fantails.

Some of the fantails at the Three Kings Islands (Turbott and Buddle, Rec. Auck. Inst. Mus., vol 3, pp. 330-332, see N.Z. Bird Notes, vol. 3, p. 166) have a band of white-tipped foreneck feathers and paler underparts than mainland birds and may be a fourth sub-species in the making.

The differences between North and South Island pied fantails have a bearing on the status of black fantails in the North Island. If, as some have thought, black fantails which turn up on the north side of Cook Strait are waifs from the South Island, then South Island pied fantails should get blown across too, and if they breed in the North Island (as black fantails certainly do) they would presumably affect size and tail pattern of Wellington pied fantails, which, however, are as consistently grey-tailed as Auckland birds. Until a South Island pied fantail is recorded in the North Island, it is best to consider North Island black fantails members of the North Island sub-species, in which the black phase is rare, amounting to probably less than 2 per cent. of the population in Wellington, but to only a fraction of this percentage in other North Island districts (including East Cape, Auckland and Hokianga).

This note is based primarily on the study of a few skins, supplemented by examination of additional specimens in the Dominion Museum. The figure is based on individual specimens of each race, but variation is small and there is no complete overlap in the distinctive characters.

THE ORNITHOLOGICAL SOCIETY OF NEW ZEALAND RINGING SCHEME.

The Ringing Committee has approved the following rules for operation of the Ringing Scheme, and rings should be available for issue to members, free of charge, in the immediate future. The species at present approved for ringing are: Caspian tern, white-fronted tern, black-billed gull, red-billed gull, gannet and stilt, but anyone wishing to make ringing studies of other species should nevertheless apply to the convener. The rules as here published are only for guidance of members, and authorised operators will be given cards containing them and subsequent amendments.

It is emphasised that all ringing of protected birds is allowed by courtesy of the Hon. the Minister of Internal Affairs. Practically all native birds are protected and it is an offence to handle such species, for any purpose, without permission.

J. M. CUNNINGHAM, Convener.

GENERAL INFORMATION.

1. The Ringing Committee consists of four members who are appointed annually by the general committee of the society, and a recorder, all being members of the society.

2. The Ringing Committee may appoint as its recorder one of its own members or some other person or institution.

3. Permission, which may be cancelled at any time, to ring birds under the scheme may be granted in writing by the secretary of the society on the recommendation of the Ringing Committee. Such permission is granted under delegation of authority by the Hon. the Minister of Internal Affairs.

4. Application to ring birds under the scheme should be made to the Ringing Committee. Rings and permission to ring will be issued only to members of the society.

5. Applicants to ring must present in broad outline their plans of operation, species to be ringed, types of trap to be used, etc. Indiscriminate ringing of any and every species is not part of the scheme.

6. The Ringing Committee, before it recommends permission to ring, must be satisfied:—

- (1) That the operator will adhere to the rules and instructions as laid down from time to time by the Ringing Committee.
- (2) That the operator is competent to recognise all the species he desires to ring. (Wrong identification may lead to gross misunderstanding of results.)
- (3) That the operator has no interest in the trapping and ringing other than for study of the living bird.
- (4) That the operator will exercise due care in trapping, and in placing or replacing rings on birds.
- (5) That the type of trap used is not likely to harm the birds.

CONDITIONS OF ISSUE.

7. The issue of rings and permission to ring under the scheme is conditional on the operator's acceptance of the following rules and instructions, and others to be laid down from time to time by the Ringing Committee:—

- (1) The operator acts for himself in trapping birds under the scheme and no responsibility or liability can attach to the society or any other member through his failure to adhere to authorised instructions.
- (2) The operator is to trap and ring only those species as stipulated from time to time by the Ringing Committee.
- (3) Operators ringing birds must always first obtain permission for purposes of entry from the owner, occupier or controlling authority of the land on which the birds are to be ringed.

- (4) Birds are to be released immediately after ringing, and every care taken to prevent harm or injury.
- (5) Birds are to be trapped and rings used only by the authorised operator or under his direct supervision.
- (6) The operator is to keep and return proper records as stipulated on forms supplied by the Ringing Committee.
- (7) The operator using colour rings is to use only the colours and combinations of colours stipulated by the Ringing Committee.
- (8) Passerine fledglings are not to be ringed except in certain circumstances approved by the Ringing Committee.
- (9) Schedules and unused rings issued to the operator are to be returned immediately at the request of the Ringing Committee.
- (10) The ring sizes for various species of birds as stipulated by the Ringing Committee are to be strictly adhered to.
- (11) If a ring is for any reason taken off a bird, it is never to be used on another bird.
- (12) Rings are to be closed round the leg by means of a pair of pliers so the butt ends meet.

RECORDS AND TERMINOLOGY.

8. The following are the records to be kept and terms to be used:—
 - (1) The recorder of the Ringing Committee is to keep full record of the serial numbers of all rings issued to operators in an "Issues Index."
 - (2) Records in alphabetical order, known as the "Operator's Record" is also to be kept by the recorder.
 - (3) "Operator's Schedules," one for each species, are to be completed by the operator to show the date each ring was used, and other relevant data (including records of "Repeats," and "Recoveries" known to the operator). They are to be returned to the recorder when filled, 12 months after the date of first entry, or on request.
 - (4) "Recoveries Cards" are to be kept by the recorder, on which full particulars of all recoveries are to be entered.
 - (5) "Where Ringed" is the term used to describe the ringing site or within two miles of it.
 - (6) A "Record" may be of a bird trapped, re-trapped, seen (in the case of birds colour ringed), or found dead, and includes the terms "repeat" and "recovery." Full details of circumstances of records should always be given.
 - (7) A "Repeat" is the term used to describe a bird recorded "where ringed" within **three months** of ringing. The term also includes a "recovery" with "repeats" at the locality it is recovered at.
 - (8) A "Recovery" is a bird recorded as defined in clause 8 (section 6) above: (a) "where ringed" **more than three months** after the last record there (sometimes known as a "return"); (b) a bird recorded at any time more than **two miles** from "where ringed"; or (c) a dead bird (known as a "dead recovery").
 - (9) "Recoveries" should be reported to the recorder immediately, giving full particulars of date, time, place, circumstances of capture or death, etc.
 - (10) A summary of operations, including numbers of each species ringed (showing individual operator's totals), and full particulars of all "recoveries" is to be published in the bulletin of the society. The report is to cover, as far as possible, a period of 12 months up to 31st March each year. This report is to be independent of papers concerning individual studies by operators, who are requested to retain the terminology given above as far as possible in order to save future confusion.

BIRD LIFE AT WAIRUNA, SOUTH OTAGO.

(Compiled from reports received from Mr. H. Taylor, corresponding member of Dunedin Naturalists' Field Club; June, 1948—June, 1949.)

The country at Wairuna is gentle, undulating farm land, on the south side of which is a multiple range of hills rising from about 400 feet to 1,600 feet, and lying approximately east and west. These hills are in an almost natural tussocky state with plenty of scrubby coprosma, while in suitable places are several small patches of bush, increasing in size from tiny pieces of a scrubby nature in the west, to a few acres of good mixed bush, of perhaps 20 acres each, towards Clinton. Beyond the hills is the Clinton Gorge and district of Kaiwera. The nearest bush to the homestead is about a mile away.

In August, 1948, four Canada geese (*Branta canadensis*) were seen in an open paddock, and on December 24, again four—presumably the same birds—were seen in another paddock a mile or so from where they were present in August. They took to flight, disappearing over a low ridge in a west-north-west direction.

Grey ducks (*Anas poicilorhyncha*) frequent one or two water holes in the district, and one or two are known to nest in secluded scrub-covered creeks in the hills.

About 30 years ago a bittern (*Botaurus poiciloptilus*) was found dead on the hills by my father, and about 16 years ago we saw a live one a quarter of a mile or so from the homestead. These are our only records of this bird on the farm, and we do not know from what habitat these two had come.

Harriers (*Circus approximans*) are quite numerous, but, of course, are few in comparison with the gulls. They raid the nests of other birds, for I have seen one or two hover around the garden and then watched one dive in among the branches of the trees. Almost every season we come across at least one or more of their nests in swampy gullies. Hawks do not seem to attack farm stock. They help to get rid of rabbits living and dead, for they patrol the main highway and railway for rabbits and other small creatures killed on the traffic way.

Pukeko (*Porphyrio poliocephalus*) occur in a swampy area about a mile or so away. Odd ones occasionally stray nearer the homestead. Once when we had an oat stack, one lived near it for weeks.

I have not noted the banded dotterel (*Charadrius bicinctus*) but my father has seen some about in recent years.

Occasionally pied stilts (*Himantopus himantopus*) are seen on the farm. A pair was present at the beginning of August, 1948. Often a few are about a neighbour's farm a mile away. They seem to like wet cultivated land. On the way to Gore, about a mile before reaching Arthurton siding, we usually see a few about on a wet grassy flat.

An odd black-fronted tern (*Chlidonias albigularis*) is liable to be seen at any time, but may not be noted for weeks or months on end. It keeps close behind the plough, landing for an instant to snatch a worm, and then off again.

Black-backed gulls (*Larus dominicanus*) are about at all seasons. They sometimes attack lambs or cast sheep, but I think there are only certain individual criminals. On the Wairuna Peak, at a height of 1,400 to 1,500 feet, there is a colony of these gulls. The present owner of the land does not discourage them. He maintains that the birds keep the locality well manured (which is quite evident from the fact that the bright green patch stands out clearly on the slope), but he does not realise, however, that much of that green is formed at the expense of both his and his neighbours' sheep's eyes and new-born lambs. There

must be a heavy toll on these for some distance from such a colony. I have not visited the nesting site, but the birds can be seen circling, and their screeching heard for a half a mile or more away. The owner said that in the nesting season it is almost impossible to walk through the colony without treading on nests or eggs. He also said that at one time cattle were turned on to the hills to winter, and when they found the lush grass at the gull colony they stayed in that same small locality all the winter. In spite of the gulls' great value as soil fertilisers on poor ground it seems an expensive form of fertilising, and I do not think it wise to foster these birds in a sheep-farming district.

Black-billed gulls (*Larus bulleri*) come here only at ploughing time and then in comparatively small numbers.

One or two pigeons (*Hemiphaga novaeseelandiae*) are sometimes seen in the larger bush areas in the hills, but only rarely come near the homestead. On July 25, 1948, in a friend's garden near Kaiwera, in the Clinton Gorge, a wood pigeon was found to have taken up its residence. The owners of the garden consoled themselves with the thought that the bird compensated for the amount of fruit-blossom eaten by helping to keep broom in check by feeding on its flowers and buds.

The little grey owl (*Athene noctua*) is occasionally seen, but more often heard.

Riflemen (*Acanthisitta chloris*) and grey warblers (*Pseudogerygone igata*) are seen in small numbers. The yellow-breasted tit (*Petroica macrocephala macrocephala*) is noted in the bush but seldom comes to the garden.

Silver-eyes (*Zosterops lateralis*) which arrived in numbers about the beginning of May, 1949, by the beginning of June had dwindled greatly in numbers, possibly only temporarily. Perhaps the abundance of food in the bush this year has kept them well supplied. Besides taking the honeyed water provided for them, they help themselves to the milk in the dogs' dish on the lawn.

A pair of pied fantails (*Rhipidura fuliginosa*) and a pair of bellbirds (*Anthornis melanura*) have been seen about the garden for some time, and were still present in June, 1949. Bellbirds also help themselves to the milk in the dish on the lawn. Both these species of birds appear friendly and inquisitive. There are odd black fantails in the bush, and recently one was seen in a neighbour's garden.

The tui (*Prothemadera novaeseelandiae*) and the shining cuckoo (*Chalcites lucidus*) are two birds which so far have remained unrecorded in the vicinity of the homestead.

Introduced birds such as the blackbird (*Turdus merula*), the song-thrush (*T. ericetorum*) and the sparrow (*Passer domesticus*) are all too common.

Starlings (*Sturnus vulgaris*) are common. They probably do a good deal of good as, for instance, in ridding sheep of ticks, but are unwelcome, untidy tenants about farm buildings. A friend on the north side of Clinton says that at dusk starlings fly in to a large plantation in tremendous numbers.

Small flocks of goldfinches (*Carduelis carduelis*) and yellowhammers (*Emberiza citrinella*) rove here and there. I have seen these birds on the hills and noted the yellowhammers at 1600 feet. We sometimes see their sturdy relative the greenfinch (*Chloris chloris*) in the garden.

Redpolls (*Carduelis cabaret*) and chaffinches (*Fringilla coelebs*) are also noted in the district.

Hedge sparrows (*Prunella modularis*) are sometimes seen, and skylarks (*Alauda arvensis*) are common. The latter do not appear to be decreasing here, as has been reported from country district elsewhere.

REVIEW.

A Systematic List of the Birds of Western Australia, by H. M. Whittell, O.B.E., and D. L. Serventy, Ph.D.; Special Publication No. 1, Public Library, Museum and Art Gallery of Western Australia; Perth, 1948. 10/- (Aust.).

How many bird species are common to Western Australia and New Zealand? The reviewer intended to list the names adopted by Whittell and Serventy for birds occurring in New Zealand, but this proved impracticable when he found that 119 species are common to the two areas if the handful of Australian species introduced to New Zealand are included. This amounts to nearly half the species on the New Zealand list even when this is swelled by introduced birds not in Western Australia. So much for our vaunted highly endemic fauna! The comments that follow are an attempt to pick items of greatest interest to New Zealand students from a 126-page booklet that lists the 432 species of the Western Australian bird fauna.

The authors state that "where it is considered that further research is required before other geographic races can be accepted . . . , they have not been indicated . . ." which "does not imply that variation does not exist, only that, at present, evidence to that effect is not considered satisfactory." This accounts for the listing of many species without subspecies, including (to quote a few New Zealand species) *Oceanites oceanicus*, *Puffinus carneipes*, *Pterodroma macroptera*, *P. lessoni*, *Daption capensis*, the Prions, *Diomedea exulans* (and other albatrosses), *Phalacrocorax sulcirostris*, *Microcarbo melanoleucos*, *Sula serrator*, *Sterna nereis*, many Arctic migrant waders, *Botaurus poiciloptilus*, *Anas rhynchotis* and *Halcyon sanctus*. (In this review, the scientific names follow Whittell and Serventy and vernacular names are mostly omitted, for brevity.)

The following items are to be noted as innovations to New Zealand literature; some follow Mayr's recent works: *Porzana tabuensis plumbea* is used for southern Australian and Tasmanian as well as for New Zealand birds; our pukeko becomes a subspecies of *Porphyrio porphyrio*; N.Z. and Australian great crested grebes are grouped as *Podiceps cristatus australis*, *Pelagodroma marina marina* is used for the Tristan and Australian populations of white-faced storm-petrel, with the name *dulciae* as a synonym. *Puffinus assimilis assimilis* is used to include Western Australian birds previously called *tunneyi*. *Pachyptila turtur* includes *crassirostris* (by implication) and *P. belcheri* is recorded as breeding on Kerguelen and Bouvet Islands, the latter a new locality quoted without reference to its authority. *Phalacrocorax carbo novae-hollandiae* (which escaped being written *novae hollandiae* by accident) includes New Zealand black shags (*steadii*). The darter becomes *Anhinga rufa novae hollandiae*. (This strict adherence to original orthography may be correct but becomes clumsy when it leads to such combinations as *Anthus novae seelandiae novae seelandiae* for the N.Z. pipit.) New Zealand Caspian terns are included in *Hydroprogne caspia strenua*, the Australian subspecies, but Australian and Tasmanian little bitterns and grey teal take the subspecific names given by Potts and Buller to New Zealand birds (*novae seelandiae* and *gracilis* respectively). The grey-backed and western silvereyes of previous classifications are combined as subspecies of *Zosterops australasiae* Vieillot, which will include our New Zealand silvereyes if this arrangement is accepted.

The authors have made many decisions which the compilers of the proposed new check-list of New Zealand birds will have to face up to. For this and other purposes, the Western Australian list will be an invaluable reference book.—C.A.F.

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Donations Acknowledged.—Donations received since the last list was published, October, 1948, and up to 30/6/49 are:—Anonymous 15/-, 10/-; A. R. Annabell, £1; D. A. Bathgate, 10/-; A. A. Boulton, 5/-; A. E. Brooks, £1; P. M. Burden, 5/-; W. M. Burroughs, 5/-; F. D. Chambers, 2/6; Miss N. H. Clark, 10/-; W. H. Dawbin, 5/-; E. W. Dawson, 2/6; Sir Patrick and Lady Duff, 22/-; C. A. Fleming, 30/-; Mrs. M. Hansen, 5/-; S. Hills, 6/3; Mrs. R. F. Lenz, 25/-; R. H. Michie, 10/-; J. Moreland, 5/-; Miss B. McDougall, 5/-; D. McMillan, 5/-; W. W. Renouf, 7/6; Miss O. Seymour, 25/-; A. Shirlcliffe, 5/-; R. B. Sibson, 5/-; Mrs. H. M. Simpson, 10/-; Mrs. I. Tily, 2/6; J. A. Tubbs, £2, £1; D. A. Urquhart, 10/-; Waimarino Acclimatisation Society, 10/6; A. H. Watson, 10/-; W. A. Watters, 10/-; Mrs. K. O. White, 5/-; F. E. Wilkin, 10/-; C. K. Williams, 10/-; D. G. Williams, 2/6; R. A. Wilson, £2, £2.

Date of Publication—October 1st, 1949.

The Masterton Printing Co., Ltd., Lincoln Road, Masterton.