

N.Z. BIRD NOTES

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EDITORIAL.

After some delay, the next issue completes Volume I of the magazine. The editorial work through a number of difficult years has fallen mainly on the Editor, who has also carried the secretarial burden. With the cessation of hostilities it is hoped that a new era of activity may commence. It may even be possible to hold a representative Annual Meeting. The steady increase in membership has been encouraging and it should now be possible to relieve the original officers of the main duties. An enlargement of the magazine, inclusion of illustrations, and more regular issue is planned, and further suggestions from members would be welcomed.

Inclusion of a named list of the birds of New Zealand, compiled by Professor Marples, and issued as a supplement with this number, should prove useful to members.

R. A. F.

REVIEWS.

Jean Delacour and Ernst Mayr: "The Family Anatidae." *The Wilson Bulletin*, Vol. LVII, No. 1, March, 1945, pp. 3-55.

This important review by an experienced aviculturist and a leading systematist sets a new and high standard in taxonomy. The swans, geese and ducks of the world are reviewed and the old classification, with its many small genera, is replaced by more natural grouping. The most revolutionary change is the grouping of some 36 species of river ducks into the genus *Anas*. Thus, the various teal, widgeon, pintail and mallard are recorded as sub-divisions of one comprehensive genus. As far as New Zealand ducks are concerned the effect is to simplify the list, and this simplification is reflected in the new list provided by Professor Marples as a supplement to this issue of *New Zealand Bird Notes*. Much attention is given by the authors to factors

in classification such as downy plumage, courtship and display; nesting habits and voice. Thus the work of field naturalists and aviculturists has been called on as an aid to classification, supplementing the older bias in favour of structure and plumage.

The work is undoubtedly one of the most important reviews in recent ornithological literature.

R. A. F.

"*Emu*," Vol. XLV, pt. 2, October, 1945.

This number contains an article by R. T. Littlejohns—"Some Random Observations Regarding Incubation"—describing variation in the habits of birds, mainly dottrels, under different weather conditions.

A paper of similar general interest by Angus Robinson discusses the theories of territory as they apply to some Australian birds, including magpies and ducks.

The second and concluding part of Dr. W. R. B. Oliver's long paper on "Avian Evolution in New Zealand and Australia," appears and calls for a fuller review than can be attempted here.

Still another general paper, "The Nature of Bird Activities," by G. R. Gannon, helps to make this number unusually full of theoretical discussions, which are, however, of great interest.

Additional papers are: "The Wood-Sandpiper in Western Australia," by D. L. Serventy; "The Banded Stilt," by Jack Jones, and the usual "Stray Feathers," including photographs of golden plover and bar-rumped godwit.

R. A. F.

Michael Sharland: "Tasmanian Birds—A Field Guide to the Birds Inhabiting Tasmania and Adjacent Islands, including the Sea Birds." Oldham, Beddome and Meredith, Ltd., Hobart, 1945, I-VI and 120 pages.

The Tasmanian avifauna differs largely from that of New Zealand, but the members of the O.S.N.Z. will be surprised to find how many New Zealand birds are to be found in Tasmania.

As stressed in the introduction, this little book contains all the information necessary to identify Tasmanian birds in the field. After the scientific and vernacular names follows the description of the most important features with a concise description of the habitat, nesting and general field notes of each species. Excellent photographs of several more important and characteristic species will be of great assistance to any bird student.

Let us hope that this excellent little book will not only find its way to the bookshelves of New Zealand ornithologists but also will serve as an incentive for the publication of a similar field guide to New Zealand birds.

K. A. W.

R. A. Falla and G. Stokell, "Investigation of the Stomach Contents of N.Z. Fresh Water Shags." *Trans. R.S. of N.Z.*, Vol. LXXIV, Part 4, pp. 320-331.

Although the authors of this first paper on the stomach contents of New Zealand Shags could not, for several reasons, comply with all the requirements of such an investigation, the paper should be widely perused by the members of the O.S.N.Z. It is actually the first paper to deal with the important subject of the cormorant's place in the ecology of New Zealand fresh waters; it also brings valuable data with regard to the distribution and biology of the shags. It is sincerely hoped that the authors will soon be able to complete their work in the way shown by Wetmore and Serventy on American and Australian cormorants respectively.—K. A. W.

"*The South Australian Ornithologist*," Vol. XVII, Parts 1-8.

"*The Elepaio*," Journal of the Honolulu Audubon Society, Vol. XIII, Nos. 8-12; Vol. IV, Nos. 1-9.

"Birds of Hawaii," by G. C. Munro, Honolulu, 1944; 189 pages, 20 plates. It is interesting, in view of the situation in New Zealand, to see that 94 species are included in the section dealing with introduced birds, though many of these did not establish themselves.

"The Problem of Partial Migration," by D. Lack. "*British Birds*," Vol. XXXVII.

"Report On the Bird Song Inquiry," by H. G. Alexander. "*British Birds*," Vol. XXXVI.

"The Migration of the Sandwich Tern," by A. L. Thomson. "*British Birds*," Vol. XXXVII.

"The Index of Heron Population, 1942," by W. B. Alexander. "*British Birds*," Vol. XXXVI.

"The Age of the Blackbird," by D. Lack. "*British Birds*," Vol. XXXVI.

"The Age of Some More British Birds," by D. Lack. "*British Birds*," Vol. XXXVI.

"Birds Collected During the Whitney South Sea Expedition. Fifty-three Northern Shore Birds in the Pacific," by E. H. Stickney. *American Museum Novitates*, No. 1248, 1943.

"Results of the Archbold Expeditions, No. 50: A Preliminary Life History Study of the Florida Jay," by D. Amadon. *American Museum Novitates*, No. 1252, 1944.

"Bird Weights As An Aid In Taxonomy," by D. Amadon. *Wilson Bulletin*, Vol. LV, 1943.

WHITE PHASE OF THE REEF HERON OR MATUKU-MOANA *Demigretta sacra* (Gmelin) AT WAIRAU BAR.

By K. A. WODZICKI and JAS. R. EYLES.

The first occurrence of the white phase of the reef heron at Wairau Bar, in April, 1944, was one of the highlights of bird observation in New Zealand during the last year. A detailed description of the Wairau bird and a record of observations made up to the end of November, 1944, have been given elsewhere (Wodzicki and Eyles, 1945), as well as a discussion on the origin of the white phase bird. As stated by Oliver (1930) the New Zealand population of the reef heron consists

of individuals of the grey phase, while according to Mayr and Amadon (1941) the white phase is common in the Islands north of New Zealand, where it forms up to 50 per cent. of the reef heron population. There are two possibilities: the appearance of a white mutant among the normal grey phase of the New Zealand population or that the Wairau bird was blown south by favourable northerly winds to the eastern shores of New Zealand. The fact that never before has such a mutant been observed, though it seems very unlikely that it could be unnoticed, even by the casual observers, speaks for the second alternative, which is supported by some meteorological evidence which, for security reasons, cannot be published. The question must remain unanswered for the time being, but according to Mayr and other students of Pacific ornithology several species of birds have been spread almost all over the Pacific by favourable winds. A recent instance of this—almost overlooked—is the establishment and spreading throughout the South Island of New Zealand of the Australian white faced heron (*Notophox novae-hollandiae*).

Nevertheless it seemed of considerable interest to follow the activities of the white phase heron at Wairau Bar as closely as possible. The white colour and relative tameness of the Wairau bird have helped considerably in allowing observation of its habits and behaviour. During late September, 1945, it moulted; subsequently on the head and breast slightly longer lancet-shaped feathers appeared.

From the beginning of December up to the time of writing—i.e., the end of October, 1945, the bird has been observed nearly every week, in different parts of the Wairau River estuary and surrounding lagoons, which extend five to six miles south of the mouth. Some of the recent observations as compiled by one of us (J. R. E.) are tabled below; they give an interesting account of our bird's activities. It seems likely that the Wairau bird has not left that area for more than a year, though it has changed its place of abode every few weeks; once it disappeared for nearly two weeks but was observed visiting the Opawa River a few miles inland. It is also interesting to note that unlike the normal New Zealand variety it has never been sighted on the Boulder Bank nor on the beach.

TABLE.

Date.	Place Where Observed.	Date.	Place Where Observed.
1945.		1945.	
1/5	4 p.m., Breakwater.	23/5	Flying from Breakwater to Te Aropipi.
2/5	12 a.m., Breakwater.		
3/5	Big Lagoon.	24/5	Feeding in Big Lagoon.
4/5	Flying to Breakwater.	29/5	Opawa River estuary.
6/5	"Peel's Point."	8/6	Big Lagoon.
7/5	7 a.m., Breakwater; 1 p.m., Te Aropipi.	18/6	"Wahanga Atangaroa" Lagoon.
8/5	"Wahanga Atangaroa" Lagoon.	29/6	Flying over Te Aropipi.
10/5	Te Aropipi.	3/7 and 4/7	Motucka Island.
12/5	Motucka Island; feeding.	10/7	Berg's Lagoon and Breakwater.
13/5	South-east corner of Big Lagoon.		
14/5	3 p.m., Te Aropipi.	11/7	Te Aropipi.
22/5	North-east corner of Big Lagoon.	16/7 and 18/7	Breakwater.

Its ways of feeding are similar to those of normal grey birds: wading knee-deep in shallow water, it has been observed agitating water with its legs. It may also be pointed out that the Wairau bird is much less shy than birds of the grey phase usually are: it can easily be approached and observed at a distance of 20 to 25 yards. At night it is accustomed to roost on the breakwater at the river mouth or on sticks or logs.

The Wairau Bar is not frequently visited by birds of the normal grey variety, though these birds are common at Port Underwood, some ten miles north from the bar. However, a normal reef heron was present in the Wairau Bar area during the whole month of December, 1944, but the two phases did not associate at any time during their joint presence at the bar. In May, 1945, a Kotuku, or white egret (*Egretta alba*) appeared for the first time in the last few years at the bar, and both birds have been observed feeding together in the same lagoons; it was then that the difference between the two species could be clearly noted.

To conclude, though the observations recorded so far do not allow any definite conclusions to be drawn, the behaviour of the Wairau bird seems to support its suggested overseas origin. It is needless for us to add that any further records of the pure white phase in New Zealand would be greatly appreciated.

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- OLIVER, W. R. B., "New Zealand Birds." Wellington, 1930.
- WODZICKI, K. A. and EYLES, JAS. R. "White Phase of the Reef Heron (*Demigretta sacra*) in New Zealand." *The Emu*, January, 1945.

THE NESTING ACTIVITIES OF A PAIR OF BLACKBIRDS.

By I. TILY.

Nest 1. On September 21, 1940, the first nest of this pair of blackbirds was found. All morning my husband had been working under an overhanging branch of a macrocarpa hedge, little thinking that on this branch, seven feet six inches from the ground and about two feet above his head a female blackbird was sitting on her nest incubating her eggs. Towards noon he accidentally struck the nest with a piece of timber. The startled bird flew off; two eggs fell from the nest and were broken at his feet. Four eggs remained, and the bird resumed her brooding. Eighteen days later, on October 9, the bird was no longer incubating, and the nest was found to contain an unhatched egg and a dead chick on which no apparent injury could be found.

Nest 2. Three days later, on October 12, the female was again carrying building material, and her nest was discovered well under

construction approximately 20 yards along the hedge from the first nest, and again on an overhanging branch, this time 9 feet from the ground. The site of this nest was conveniently in view from a window where a good deal of my work is done, a fact of which I took full advantage. The female, as has been the case with all blackbirds I have watched, did all the collecting of material and the building, making in a quarter of an hour four or five trips with mud or dry grass. On the morning of October 14, two days after the nest was discovered, it was completed, and that afternoon the first of a clutch of four eggs was laid. During the building of this nest, the female began to lose her long tail feathers and, a few days after the chicks were hatched, on November 3, the last of them had disappeared. No doubt this handicapped the busy bird, but it made identifying her at a glance a simpler matter. This losing of tail feathers during the nesting season is not uncommon. During the 1941-1942 season, I counted six different tailless female blackbirds, four of them being in the locality of our garden.

Both male and female fed the young, and, at first, the female always settled on the nest after the feeding, at times simply moving aside when the male came with food and returning to the nest on his departure. At other times, on his arrival she flew off to collect further food supplies. While sitting on the nest her head was constantly on the move, and she seemed alert to every sound and movement. On November 6, little downy tufts showed on the heads of the chicks, and their bodies were patterned with growing feathers. They now were able to stretch their heads high above the edge of the nest, one bird being decidedly stronger than the other three. A faint cheeping was heard in the morning, and by the afternoon, it was much stronger as, indeed, were all their movements. An observation made by standing quietly on the top of a ladder revealed that the chicks were fed on fat from the bird table, flies, moths, slaters, small unidentified insects, a large, glossy, orange-coloured chrysalis with a brown head, and twice a white butterfly was thrust whole down a gaping throat. It was interesting to note that the parents could both drink and give call notes, and in the case of the male sing, with their bills well filled with food.

On November 9, one chick was missing from the nest, and I connected its disappearance with the stormy weather prevailing at the time. Two of the remaining birds were stronger and more active than the third. During the absence of their parents these two now preened their feathers, scratched themselves, and stood up stretching themselves and fluttering their wings. On the morning of November 10, after an exceedingly windy night, a dead chick was found under the nest, bruised and bleeding from its fall. After two days' absence from Dunedin, I returned home on the morning of November 13, just in time to see the sole survivor of the brood leave the nest.

Nest 3. On November 14 I knew by mud dropped from the roof gutter that the female was again building, and the next day her nest

was located 12 feet from the ground in an aristotelia tree at the end of the macrocarpa hedge. The male continued to feed the young bird, while the female gave her attention to the construction of the new nest. On November 15, I noted a conflict between the urge to feed her young and the urge to build. She collected a bill full of food, and then stood hesitating with it for the space of approximately one to two minutes. Finally she dropped the food, ate it all except one piece, and turned her attention to collecting nesting material. Again a clutch of four eggs was laid, but on November 30 the nest was discovered to be empty and deserted. I suspected the nest to have been robbed by a rat or a stoat, both of which undesirables had been seen in the garden.

Nest 4. From December 1 to 3, the pair of blackbirds seemed restless and undecided, the male changing his song perches to include a wider territory. By December 4 the new nesting site was decided upon, and unfortunately for my observational work, they chose another garden where I did not know the owners. The birds continued to feed, and the female also to collect most of her nesting material from our garden, so I was able to keep some check on their movements. Finally, I visited the neighbour, who promised to make a note of the birds and report to me. On December 9 I was informed that there were three eggs in the nest, which was built in a pear tree, but, as the bird did not start incubation until the next day, I am convinced another egg was laid after the nest had been inspected. On December 16, I knew that again the nesting arrangements of this pair had met with misfortune, for they were back in our garden looking for another nesting site.

Nest 5. By 8 a.m. on December 16, the blackbirds had decided on the jasmine at our back door for their fifth nest. It was a place that had been considered by the male but rejected by the female earlier in the season. Their choice delighted me, for not only was it convenient for observation, but I now lost my concern as to whether it had been my interest in their nesting activities that had driven them out of our garden. The nest, which was $7\frac{1}{2}$ feet from the ground, was very scantily built; in fact the bird made the wall of the house serve as part of the wall of her nest, just a lining of roots being placed against the bricks. It was interesting to note the gradual deterioration in the construction of each nest as the season advanced. On the second day of nest construction, when the female was carrying mud from the roof gutter of a neighbour's house about 180 yards away, she was making a flight every two minutes, which showed a decided speeding up on her labours on Nest 2. On the last three or four trips she showed signs of tiring, for she paused each time on a tree on the line of flight before flying upwards to the roof.

Again the clutch was four eggs, the first egg being laid on December 19. The female was noted on the nest at 10.20 a.m., was still there at 11.45 a.m., but gone at 12.15 p.m. While she was on the nest, the male, who kept well away from the nesting area, appeared restless,

moving about from perch to perch, and was seen near the sites of former nests, gazing at them. On December 20, the female was on the nest at 9.25 a.m., still there at 11.45 a.m., but gone at 12.15 p.m. The clutch was four eggs, and incubation commenced on December 22, when the last egg was laid. At no time did I see the male feed the brooding female, indeed, on the whole, he seemed to keep at a distance from the nest, his favourite perch being on a tree approximately 100 yards away, but overlooking the site. When the female left the nest for a short time for exercise and food, he was several times seen at the nest mounting guard, and on a few occasions brooding the eggs, but he did not crouch so closely on the nest as the female.

On the evening of January 11, the female was still sitting on her four eggs. Next morning at 9 a.m. one egg was gone, the broken shell being found under the nest, but the bird was still incubating the remaining eggs. However, as the day advanced, she began to stay away from the nest for periods of increasing length. During the day there were several heavy showers, and at the approach of each shower she hastened back to the nest and covered her eggs until the rain ceased. Next day the nest was definitely abandoned. There were some very hot days in December and January, and I am inclined to think that the eggs may have been overheated by their close contact with the brick wall.

To summarise, the nesting activities of this pair of blackbirds over a period of four months five nests were built, 21 (probably 22) eggs were laid, at least 14 of these eggs were not hatched, and only one young bird was reared.

In the 1941-1942 season, aided by an adjustable mirror on a long rod, I was able to follow even more closely the nesting activities of this pair. The female was definitely the same bird, and again lost her tail, but I had not the same positive proof of the male though I felt convinced he was the same bird. This time three and a half nests were built, one nest being abandoned when half built owing to the fierce attacks of another pair whose territory they were invading, six clutches of eggs were laid, 22 eggs in all, seven young were hatched, six left the nest, but only one reached maturity. It is interesting to note that though these nests were inspected daily, the bird used one nest three consecutive times, and when the half finished nest was abandoned, this nest was again repaired and used a fourth time. Though this pair have continued to nest about the garden area, I have not again succeeded in obtaining a full record of their nesting activities. During the past two seasons, 1942-1944, I have come to the conclusion that starlings may be responsible for the broken eggs and dead young found in numbers of deserted nests.