

Macdonald checked the identification of Little Bitterns in their collections. Dr Salim Ali gave information in the status of *I. minutus* and *I. sinensis* in India.

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## RECENT PAPUAN BREEDING RECORDS

### MEGAPODIUS FREYCINET Common Scrub Hen

On 3-4 January 1968 I found two active nest mounds off Port Moresby, on Vaugo Island a coral cay, 5 km long, about 1,000 m wide and 3 km from Napa Napa Peninsula which has the lowest rainfall in New Guinea (c. 70 mm), mainly from January to May. The rainfall on Vaugo Island is probably less. The island has no surface water and is covered with Kangaroo Grass *Themeda australis* where there is enough soil. Some coconuts and *Pisonia* trees grow on an old village site and some scraggy *Pandanus* elsewhere, but otherwise the only bushes and trees are some mangroves in the south-western corner in a brackish depression surrounded by 2 m high scrubby growth covering about 50,000 m<sup>2</sup>. The Scrub Hens nested here. The mounds contained no decaying vegetable matter and presumably the sand was heated only by the sun. The species has probably adapted itself to a wide range of habitat by using several different methods of incubation (solar and volcanic heat, and decaying vegetable matter). The owners of the nests were probably recent colonists because I failed to notice the species on previous visits to the island and because fishermen regularly visit the area for firewood and could be expected to interfere with the mounds so that continued successful breeding would be unlikely. The species is well able to cross water or unsuitable terrain for long distances because not only is it found on many islands, but it reappears in isolated patches of scrub or monsoon forest near and in Port Moresby after it has been exterminated there.

### BUTORIDES STRIATUS Mangrove Heron

The nest had not been found in New Guinea before 1965; this was not realized when nests were found at Port Moresby (Mackay 1968, *New Guinea Bird Soc. Newsletter* 30). On 8 April 1965 a nest was found on the ocean side of Taurama Head. It was 2.5 m above the water in an upright fork in the centre of an isolated *Rhizophora* tree, 5 m tall standing in water. It was a flat platform (Hindwood 1933, *Emu* 33: 27) and had one pale green egg. On 19 April there were three eggs and more sticks had been added to the nest. On 16 May both nest and eggs had disappeared, perhaps destroyed by fishermen. On 19 May another nest was found in a similar *Rhizophora* 50 m from the first nesting tree and

well out in open water. It also was 2.5 m above the water, in a dense tangle of branches. The platform was ridiculously frail, the eggs almost being tipped out by the wind. There were three eggs on that day and also on 13 June. The nest was empty when next visited on 2 July. Because only one pair of herons was seen in the area, the second nest was probably a replacement by these birds after destruction of the first.

#### PTILINOPUS PERLATUS Pink-spotted Fruit Dove

Rand and Gilliard (1967, *Handbook of New Guinea Birds*) do not describe the nest and eggs. The species is common in New Guinea forests up to 1,200 m, but less observed than others of the genus. It is abundant at the abandoned village of Moroka, 550 m in the Owen Stanley foothills behind Port Moresby, where on 4 June 1966 a nest was found over a much-used track, 3 m high in a thin sapling 5.5 tall. The sitting bird did not leave until closely approached. The nest contained one white egg which was not collected because mistakenly it was presumed that nest and eggs were known. For a few days afterwards the bird was flushed off the nest, but sometimes made no effort to move if we were reasonably quiet. On 22 June the nest was empty, but clean, suggesting predation. The nest was a typical *Ptilinopus* platform about 15 cm in diameter, constructed of 32 sticks 1.5 to 3 mm thick, through which the egg could easily be seen.

#### CENTROPUS PHASIANINUS Common Coucal

Breeding has not been fully established for New Guinea, though young birds are often seen and the species is abundant in the southern and eastern lowlands and in the lower mid-mountain grasslands. On 11 June 1967 at Eilogo on the Sogeri Plateau behind Port Moresby I found a nest in a paddock cleared from secondary rain forest. It was along a fence in a clump of grass 1.25 m high and 0.9 m wide, 60 cm from the ground, and was a large globular structure, loosely woven from grass stems and lined on the bottom of the cavity with large leaves. It held two black downy young with white filoplumes.

#### LONCHURA CANICEPS Grey-headed Mannikin

The nest and eggs are presumably unknown, because Rand & Gilliard (*op. cit.*) mention only extralimital data which doubtless apply to *L. flaviprymna* in Australia. The species is abundant in the Port Moresby area and must breed commonly, but in three years I found only one nest—on 26 February 1967 at Brown River forestry camp 45 km from Port Moresby, in a large grassy clearing surrounded by rain-forest. The nest was in 2 m high ornamental Klinki tree *Araucaria klinkii* on the lawn of the head forester's house, 1.5 m above the ground and well inside the prickly foliage. It was a typical flask-shaped nest of the genus, but the site did

not conform with that preferred by the Australian *L. flaviprymna* which builds in grass or low bushes. The nest was made of strips of grass blades closely interwoven with thin grass and pieces of whitish down. There was no lining. The entrance faced north and was covered with a prickly branch of the pine. An adult was incubating five white eggs.

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### THE TANAMI THORNBILL *ACANTHIZA TANAMI* MATHEWS—A NEW EXAMINATION OF THE TYPE

The opportunity was taken when visiting the American Museum of Natural History, New York, in 1966 to compare the type of *Acanthiza tanami* Mathews with specimens collected by Disney and Slater in April 1965. Condon *et al.* (1966, *Emu* 66: 117-120), reporting on these two specimens (Nos. 0.41381 and 0.41382), showed that they belong to the *whitlocki-albiventris-apicalis* series of *Acanthiza* and confirmed the view of Mayr & Serventy (1938, *Emu* 38: 259) that *tanami* is an 'extremely pale, sand-coloured form or subspecies of *Acanthiza pusilla*'. Mathews (1912, *Novit. Zool.* 18: 349) originally described this race as a full species from a single specimen, but, as shown below, later correctly synonymized it (1931, *A list of the birds of Australasia*) with *Acanthiza pusilla whitlocki* North. Later still he raised it to full specific rank without justification (1946, *A working list of Australian birds*).

Condon *et al.* are wrong to say that Mayr & Serventy give the tail-wing index as 80. From Mathews' figures (1921-1922, *The birds of Australia* 9: 414) the index is 84 (tail 42 mm). Mayr & Serventy give the tail as 44, making the index 88. I measured the wing to be 49 and tail 44, making the index 89.3. I do not consider that this index is significant unless it is related to the age of the birds and the degree of wear. The figures given by Mayr & Serventy overlap markedly and the series is small. The type is a pale sand-coloured female with feathers very abraded on the wings, which explains its paler colour, and with moult just starting on the mantle and wings. It had probably finished breeding and was taken a month earlier than the fresh specimens taken in April 1965. Its pale sandy colour is similar, particularly on the rump, to that of specimen 0.41381, which is regarded as the same as the type before the latter became worn.

The type of *A. p. whitlocki* North from Lake Way, Western Australia, is in the Australian Museum and has the upper parts the same as those of specimen 0.41381, but differs slightly in having the throat and breast more heavily marked, in this respect however, agreeing with specimen 0.41382. Specimen 0.41382 is the same as a co-type of *whitlocki* North (AMNH 600597). There-

fore, because *tanami* also agrees with 0.41381, it is clear that it is merely an old worn specimen of *whitlocki*. *A. p. tanami* Mathews must therefore remain a synonym of *A. p. whitlocki* North as Mathews himself indicated and as Mack (1936, *Mem. natn. Mus. Vic.* 10: 93) confirmed.

Three fresh specimens in the Australian Museum, collected in May 1965 in Palm Valley, Macdonnell Ranges, NT, agree with specimens of *whitlocki* in the American Museum of Natural History, collected in the Everard Ranges. They are darker and more heavily marked on the breast and throat than the Tanami birds and the type of *whitlocki*. This confirms the comment by Condon *et al.* (p. 119).

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#### BLACK TERN NEAR NEWCASTLE, NSW

Bell (1959, *Emu* 59: 62-3) gave the first Australian record of the Black Tern *Chlidonias niger* and outlined the differences between it and the White-winged Black Tern *C. leucoptera* in breeding plumage.

On 13 January 1968 seven observers recorded a Black Tern in non-breeding plumage at Walsh Island in the estuary of the Hunter River at Newcastle, NSW. At the eastern end of the island there was a mixed party of Crested Terns *Sterna bergii*, Common/Arctic Terns *S. hirundo/macrura*, Little Terns *S. albifrons* and one White-winged Black Tern. Another small tern flew down to join the group and, as it landed, a dark mark on the side of the breast near the shoulder was seen briefly. This is probably the most useful field character for separating *C. niger* and *leucoptera* in non-breeding dress and the bird was studied closely. Weather conditions were poor with heavy clouds, intermittent rain and strong wind, and the birds were reluctant to fly so that close views were obtained at ranges down to about 15 m through 10 × 50 binoculars. After studying the bird for about five minutes the group of terns was put up and it was seen clearly by all observers that the dark marks on the Black Tern were of similar colour and extent on both sides of the breast. The bird slowly flew out to mid-channel and was watched from a distance of about 100 m for a few minutes before it departed.

The following field description was compiled from notes made at the time of observation:

Forehead and front of crown, white; crown, black extending down behind

each eye and towards the nape; upper-wing and mantle, uniformly dark grey, perhaps slightly darker along the leading edge of the wing and on the outer primaries; rump and tail, similar in colour to the wings but slightly paler; underparts, white except for a small dark patch on each side of the upper breast in front of the base of the wing; bill, legs and feet, very dark.

On 30 March 1968, G.H. and D.S. saw apparently the same bird at Stockton about 1 km from Walsh Island. The upperparts were then thought to be slightly darker, but otherwise the plumage was similar. The dark shoulder marks were again clearly seen. The bird gave a high-pitched 'kee, kee, kee' call.

It was most fortunate that on the first occasion a direct comparison with *leucoptera* could be made because this is the one species which causes difficulty in identification. The most striking difference between the two was the darker and more uniform grey wings and mantle of *niger*. The *leucoptera* had a panel of lighter grey in the middle of the wing which with the darker grey primaries gave the upper-wing a paler and less uniform appearance. The colour of the rump and tail was grey on *niger* and very pale, almost white, on *leucoptera*. The black on the head was similar in both birds but extended further forward on the crown of *niger*. The dark patches on the sides of the breast were entirely lacking on *leucoptera*. There was no noticeable difference in the colour of the soft parts or in size.

Although the dark patches on the sides of the breast are diagnostic of *niger* in all non-breeding plumages, these vary considerably in size and could lead to mis-identification of a bird with inconspicuous marks. Further caution is required because it is possible that a moulting *leucoptera* might retain a few dark feathers on the sides of the breast. However, Williamson (1960, *British Birds* 53: 243-252) states that 'such specimens in the British Museum always had a few other black feathers admixed with the white underparts and showed a good deal of black feathering in the underwing coverts'. Bourne comments (pers. comm.) 'in my experience the shoulder patch of the winter (northern hemisphere) Black Tern is quite characteristic; the pattern of moult of the White-winged Black Tern never producing an isolated patch of dark feathers in the shoulder region'. In both species the moult to non-breeding plumage is not completed until December or January. However, as the body feathers are usually moulted before migration, occurrences of *niger* in Australia are more likely to be of birds in the non-breeding phase.

The observers on 13 January 1968 were Messrs A. Colemane, M. Gregory, G. Holmes, W. Longmore, D. Sawyer, B. Speechley and A.E.F.R. I am grateful to Dr W. R. P. Bourne for his help and advice and to Messrs K. A. Hindwood and A. R. McGill for comments on an earlier draft.

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## COMPOSITION OF FLAME ROBIN FLOCKS WINTERING IN TASMANIA

The Flame Robin *Petroica phoenicea* is regarded as a partial migrant in Tasmania with some birds crossing Bass Strait each year (Cooper 1967, *Wildl. in Aust.* 4: 2-5). Many stay in Tasmania where they spend the winter in loose flocks that frequent fields and paddocks (Sharland 1958, *Tasmanian Birds*). These flocks occur away from the breeding grounds, which are largely deserted, and therefore some kind of movement is involved. Regular observations were made, as part of the Victorian Ornithological Research Group's Flame Robin Surey, in areas frequented by Flame Robins each winter. The purpose of this note is to record variations in numbers of birds and in the composition of the flocks. Many single birds and pairs were recorded so that the term flock is a misnomer. However, it has been used for convenience in this note.

Adult males are readily identified by their red breasts. Adult females cannot be separated in the field from immature birds of both sexes and Reilly (1968, *Aust. Bird Bander* 6: 3) has reported males breeding in immature brown plumage. Birds in adult male plumage will be referred to as red birds and all others as brown birds. The total numbers of red and brown birds, including single individuals and pairs, seen each week-end are recorded in Table I. Flocks were small, the largest being of 14 birds. The largest number of red birds in a flock was five. The ratio of brown to red birds is also shown in Table I, for those weeks when at least 15 birds were seen. Three areas were searched regularly and the totals seen in these each week are given in the last column of Table I. These totals differ from the sum of the second and third columns which includes birds seen elsewhere.

The brown:red ratio was 4:9 on 20-21 May and fell to 1:0 by 24-25 June. Up to 3-4 June this was accompanied by a fall in the numbers present in the sample areas which suggests an exodus of brown birds, probably immatures. From 3-4 June the brown:red ratio continued to decrease until 24-25 June, although the number of birds remained constant (19, 22, 21). There is a slight indication that numbers in the sample areas increased from 24-25 June to a peak on 22-23 July. Because the brown:red ratio also tended to increase, reaching a peak one week later, there may have been a small ingress of brown birds, but because both trends are small they could have arisen through sampling errors. The dispersal of the winter flocks appears to start in late July and is virtually complete by mid-August. The only birds seen after 13 August were two pairs (one red and one brown bird) and two brown birds. The two brown birds were passing through an area that was censused daily and was not a wintering area.

TABLE I  
Numbers of red and brown birds, brown : red ratio  
and numbers seen in sample areas

Date 1967	Number of Birds		Ratio Brown : Red	Nos. in Sample Areas
	Red	Brown		
March 12	1	0	—	—
April 30	1	12	—	—
May 6	0	1	—	—
20/21	7	34	4.9	39
27/28	5	6	—	—
June 3/4	6	14	2.3	19
10/11	10	26	2.6	22
17/18	13	17	1.3	21
24/25	8	8	1.0	—
July 8/9	12	13	1.1	24
15/16	11	15	1.4	22
22/23	14	17	1.2	28
29/30	11	18	1.6	26
August 5/6	8	10	1.2	18
12/13	6	5	—	11
19/20	1	1	—	2

TABLE II  
Contingency Table showing the composition  
(red and brown birds) of the Flame Robin flocks

No. of Red Birds in Flock	Number of Occurrences												
	Number of Brown Birds in Flock												
	0	1	2	3	4	5	6	7	8	9	10	11	12
0	—	21	6	1	1	—	2	—	—	—	—	1	—
1	25	4	7	1	1	—	—	—	—	—	—	—	1
2	2	1	2	1	5	1	—	—	—	—	—	—	—
3	—	1	2	2	—	1	—	—	—	—	—	—	—
4	—	—	1	—	—	2	1	1	—	—	1	—	—
5	—	—	—	1	—	2	—	—	—	—	—	—	—

Table II shows the frequency with which flocks of each composition were seen. The commonest occurrences were of single birds, either red or brown, which were mainly transients. The larger flocks showed a tendency to remain in one area but, as indicated by Table II, both numbers and brown:red ratio were constantly changing.

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