STRAY FEATHERS

The Melville Island Friar-bird resident in the Northern Territory.—In 1962 Michael Sharland expressed to me the opinion that there was a Friar-bird in the Northern Territory with a culmen free of any protuberance.

To the best of my knowledge, however, he did not follow the idea further.

In 1965 I heard that the Melville Island Friar-bird, *Philemon gordoni,* had been identified in Darwin in some numbers but I was given no details about the find.

However, on October 22, 1966, Billie Gill, Fred Smith and Eric Zillman identified Melville Island Friar-birds in the Darwin Botanical Gardens.

When the R.A.O.U. Field Outing was in the Northern Territory, in July, 1967, efforts were made to find this bird without success.

I passed through Darwin again on September 11, 1967 and, with Bob Goodfellow, made another effort to find the bird and was successful in finding a party of them alongside the Nightcliff shopping centre.

This was followed by Billie Gill, Archie Blackburn and Norman Chaffer seeing the birds on September 23 on the Darwin Golf Course and, again, on September 28, at Middle Arm.

That the Melville Island Friar-bird is to be seen in and around Darwin is therefore certain, but further observation is needed before it is accepted that the bird is resident throughout the year.

In my experience this Friar-bird is less shy than either the Helmeted Friar-bird, *P. yorki,* or the Silver-crowned Friar-bird, *P. argenticeps.*

The call was a four-note one approximating to "arrh-won-taw-thraw."—H. R. OFFICER, "Duneira," Monbulk Road, Olinda, Victoria.

Notes on an influx of Oriental Pratincoles at Mount Isa.—There was a notable influx of Oriental Pratincoles, *Glareola pratincola,* into the Mount Isa district in December, 1967. To my knowledge this is the only recent record, if not the only record, of the species from this area. However, this influx apparently was only part of a widespread influx into north western Queensland. Mr. S. Wharton of Oorindi Park, 50 miles east of Cloncurry, recorded them on his property at the same time. He, incidentally, had not seen the species before though he has lived in the North West for over thirty years.

At Mount Isa the Pratincoles arrived in mid-December. They congregated in small and large flocks (up to 500 birds) on the open flats around Lake Moondarra. I estimated that there were upward of 5,000 birds in the area in late December.

On most days they were observed in small flocks roosting on the grassy flats back from the water. Occasionally the flocks would be seen on the bare mud at the water's edge. The small flocks normally contained some birds of other species, particularly Australian Pratincoles, Australian Dotterels, and Oriental Dotterels, *Charadrius veredus.* One mixed flock of about 50 birds that contained approximately equal numbers of Oriental Pratincoles, Australian Pratincoles, Oriental Dotterels, and Australian Dotterels, *Peltohyas australis,* was observed. Small flocks near the water's edge were normally joined by some of the smaller waders such as the Sharp-tailed Sandpiper, *Erolia acuminata.*

On the afternoon of December 28 several large storms were building up and the Oriental Pratincoles started to segregate from the other species and gathered into large flocks. In the late afternoon these flocks repeatedly flew in massed formation out over the lake. This behaviour continued until at least 9.30 p.m. when we left the area as it had started to rain. Two and a half inches of rain fell during the night.

No trace of the Oriental Pratincoles was seen during the following weeks so it is assumed that the massed flights were a prelude to a continuation of migratory movement. The Oriental Dotterels disappeared at the same time and the numbers of Australian Pratincoles and Australian Dotterels were greatly reduced. Mr. Wharton reported that they disappeared from Oorindi Park at about the same time.

The massed flights of the Oriental Dotterels on the evening of December 28 were most spectacular. The flight on this occasion differed markedly from the normally daytime feeding flight. During the day the Oriental Pratincoles flew singly or in small flocks in a similar manner to Australian Pratincoles and Oriental Dotterels. At these times flocks were open and almost unco-ordinated. During the massed flights the flocks were densely packed and highly co-ordinated, the flock behaviour being very similar to that of the Flock Pigeon, *Histriophaps histrionica.*

It will be of interest to determine whether observations of the species were made in other areas of Eastern Australia during the Summer of 1967/68 and, if so, where and on what dates they were recorded.—R. K. CARRUTHERS, Mount Isa, Queensland.

Feeding Habits of the Spine-tailed Swift.—The Spined-tailed Swift, *Hirundapus caudacutus,* and Fork-tailed Swift, *Apus pacificus,* appear regularly over the western Darling Downs area of Queensland from mid-October onwards, the former species being comparatively much more common. During October, 1966, a 100-acre stubble paddock was being ploughed 24 miles south-west of Chinchilla. It carried a heavy population of grasshoppers, which became progressively more concentrated on the central, unworked area as work progressed. When only about eight acres remained

in the centre of the paddock this density suddenly became critical, and a spectacular explosion of flying grasshoppers commenced. Assisted by a very light north-east breeze most of them travelled south-west at heights up to four feet above ground. The ploughed, bare strip which they had to cross now measured some fifteen chains wide. The time was 1630 hours.

At once a flock of about twenty Spine-tailed Swifts appeared and started feeding. Method of attack was to dive very swiftly, with wings swept right back, from fifty feet to ground level, flatten out and weave an erratic course through the swarm of grasshoppers, sometimes less than twelve inches above the ground. Speed decreased during this stage, and several attacks would be made, not all of them successful. Individual insects did not appear to be pursued; rather, those on or very near to the flight path would be snapped up.

Emerging from the swarm, flying speed was much reduced, with wings fully extended. The birds would then regain their original height before making another attack. More swifts kept arriving, until by 1730 hours about 1,000 were present. By watching individual birds, it was estimated that each run occupied some thirty seconds, during which an average of five grasshoppers was attacked, and perhaps three caught. No second attempt was made when a grasshopper was missed; another target was selected, more or less on the bird's line of flight.

Periodically all attacks were broken off, and all the swifts rose to a height of about 300 feet, where they circled in a loose flock. Some then drifted away, the rest diving again to feed further. It seemed that the full-fed birds would be the instigators of this manoeuvre; whether those who joined in from time to time were these birds returning or completely new arrivals could not be ascertained. Numbers gradually decreased until by 1900 hours, when it became too dark to see, only 150 birds were left. The total number involved may well have been more than 2000. Speed at which the insects were swallowed (and presumably digested) was almost incredible.

Further work was done on the paddock on successive days, but there were no grasshoppers. Several times a small flock of ten to twenty swifts would appear and make a thorough reconnaissance, consisting of several leisurely circuits at an altitude of a few feet. When fully satisfied that there were no grasshoppers they left.

This bird often drinks by diving at a shallow angle, with reduced speed, at the surface of a waterhole, and scooping up water with the lower mandible. On January 2, 1968, one of them miscalculated and crashed into the water in a dam. It remained floating with wings outspread on the surface of the water. Several attempts to take off were only partly successful, usually only the short tail remaining submerged. It was then rescued, photographed and released by tossing it about twenty feet vertically

upwards. It remained airborne with great difficulty, and after 100 yards had only inches to spare. From then on it commenced to gain height, and was flying strongly when last seen.—

A. C. CAMERON, "Rockwood," Chinchilla, Queensland.

Unusual nesting site of Glossy Swiftlets.—While on a short trip to Kavieng, New Ireland, in June, 1967, an unusually placed nesting colony of the Glossy Swiftlet, *Collocalia esculenta,* was located. The remnant of a Japanese Zero fighter plane is mounted over an old concrete bunker at the western end of Kavieng airstrip, about 20 feet above sea level. Glossy Swiftlets and one Tree Martin, *Hylochelidon nigricans,* were hawking over the airstrip when a few of the swiftlets were seen to dive headlong into one end of the bunker. Examination disclosed a hole, just big enough to allow a man to squeeze through, leading into the underground bunker. Inside were eight nests. One was empty, one contained two eggs, another contained two eggs and a newly hatched young, and another nest contained two young. The other nests contained young birds in varying stages up to one pair capable of flight.

The nests were shallow and cup-shaped, made of dried grasses, coconut fibre and leaf skeletons with a little feather lining. They were fixed to the corners of the ceiling with dried saliva. Saliva had been used only to attach the nests and not in the body of the nests. In size the nests averaged 85 mm x 50 mm x 30 mm.

Twenty-four adult birds were seen in and around the bunker. Just on dusk they would dive into the bunker for the night. Another bunker nearby was unoccupied; the depth of soil in that did not allow sufficient room for the birds to fly about.—ROY D. MACKAY, Papua and New Guinea Public Museum, Port Moresby, Papua.

A cluster of the nests of the Glossy Swiftlet *Collocalia esculenta*
Photo Roy D. Mackay

Threat reactions of the Red-capped Dotterel.—Eight pairs of the Red-capped Dotterel, *Charadrius alexandrinus*, were studied over two breeding seasons at the mouth of the Merricks Creek at Somers in Victoria. Certain of the study pairs were marked with C.S.I.R.O. metal and coloured plastic leg bands.

Groups of children were used to simulate threats at varying distances from the nest-site, and the reactions of the birds to these groups and other beach-frequenters were noted. There appeared to be a definite order to the displays performed, with variations attributable to the intensity, proximity and nature of the threat.

Distraction display has been interpreted by E. A. Armstrong in his paper, "Distraction Display and the Human Predator"; *Ibis* **98**: 641-654, as the outcome of conflicting motivations, that of defence of the nest or chicks on the one hand and the impulse to escape on the other. It is compromise behaviour that has become ritualized. Practically all forms of these displays, claims Armstrong, may be classified into two types—injury simulation and mammal simulation.

Brooding appeared to intensify as incubation progressed but habituation may have accounted for the reducing threat-distances. As each threat was made, the children were asked to remain still and silent. The dotterel then accepted them after a period which varied with the length of brooding. After each acceptance, during the tests, the threat distance was halved. Any new threat brought immediate reaction as tabulated below, except that the dotterel avoided close approach to the children during its display and its return to the nest.

Certainly, reactions to humans, dogs, gulls, other dotterels and encroaching waves were essentially the same as the shorter threat-distances after the second week. During the first week of incubation, the neighbouring dotterels alone elicited defence activities (of a territorial defence type only), the birds preferring to desert their nest at threat-distances of 120 feet and over against threat by other agencies.

When double threats were posed, the male bird, if present, came in towards the nest to deal with the secondary threat. When the male bird was incubating, his reactions were similar in all detail to that of the female.

Reactions at various threat distances during the second week are tabulated below:

Threat distance	Reaction to Crawling Observer
120 ft.	Rose from nest, stood above eggs.
60 ft.	Ran from the nest to the side, stood 30 ft. away, then returned.
30 ft.	As for 60 ft.

15 ft.	Ran 2 ft. to the side, wings slightly out, returned soon.
15 ft. (Observer standing)	Ran 15 ft., wings out but folded, crouched low, trembling.
8 ft.	Ran 9 ft. with tail spread, very close to the sand, zig-zagging motion, returned soon.
4 ft.	As for 8 ft., but added broken-wing simulation for short periods when there was no response from the observer, returned later.
2 ft.	Very agitated, squawking continuously, wings flashing vertically up at intervals. Stood above eggs with wings out, but folded, at any movement. Would not resume sitting until threat withdrawn.
1 ft.	Moved away 6 inches from nest, wings flashing up, squawking continuously, trembling.
2 ins. (fourth week)	Pecked at fingers, jumped back, squawking continually, wings out but folded when over eggs, wings spread horizontally when attacking, trembling.

Reaction distances varied according to the posture, height and speed of action of the observer, but the essential order of reaction was as follows:

Reaction	Interpretation
1. Running to the side, standing	"I have no real interest in this area".
2. Running away, wings drooping	"Look at me, follow me!"
3. Tail dragging, slow zig-zagging	Simulation of escaping mammal.
4. One wing dragging, limping	Injury simulation.
5. Both wings flapping, low on sand	Intensified injury, bird appears trapped.
6. Wings flashing up, squawking, wings out at any movement	Distraction—aggression—flight readiness.
7. Wings out, pecking, jumping back, trembling	Aggression, fear.

A. J. Reid, 2 Pear Court, East Burwood, Victoria.

A further note on the feeding of Lorikeets.—Since a previous note of September 1965 (*Emu* **66**: 71) concerning the feeding habits of Rainbow Lorikeets, *Trichoglossus haematodus ? micropteryx* at Port Moresby, Papua, some further information has come to hand. The *Casuarina* groves still remain, but under imminent threat of destruction, and the pattern shown by the birds in 1965 was repeated in the following year.

Each year in Port Moresby, at the start of the dry season the extensive plantings of *Poinciana* Trees are ravaged by the caterpillar of the Poinciana Moth, *Pericyma cruegeri*, which spin their cocoons on the branches. At this time many birds, in particular the Leatherhead species, *Philemon novae-guineae*, break open the cocoons and feed on the insect therein. Joining this assembly were several individual Rainbow Lorikeets, which were seen to rip open the cocoons on May 10, and on several other dates later.

Lea and Grey (*Emu* **34**: 291) record a grub taken from the stomach of an Australian Rainbow Lorikeet. It would seem that in addition to the seed which forms an apparently large part of this "nectar-feeding" species diet, insects must be added.—H. L. BELL, 1st Battalion, Pacific Islands Regiment, Taurama Barracks, Port Moresby, T.P.N.G.

An instance of apparent sympatry between the Great Bowerbird and the Spotted Bowerbird.—The Great Grey Bowerbird, *Chlamydera nuchalis*, and the Spotted Bowerbird, *C. maculatus*, appear to be geographical representatives; no mention of range-overlap is to be found in Marshall (1954: 72-99).

At Glendower (a homestead on the Flinders River, near Hughenden, central Queensland), during March and early April 1964, while collecting for the British Museum-Harold Hall Australian Expedition, I found the Spotted Bowerbird moderately common, in the riverine forest bordering the then dry Flinders, and to a lesser extent in the semi-arid woodland further back from the river. Sometimes the bird was seen singly, sometimes in groups of up to six.

On April 4, 1964, our last day at this camp, I approached to within 10 feet of a Great Grey Bowerbird as it sat drinking at a cattle trough supplied by a nearby bore. The identity of the bird was unmistakeable; I had seen it in large numbers a month previously at Charters Towers. Unfortunately the guns were packed and I was thus unable to verify this record in a material fashion. It appears, however, to be the first recorded case of sympatry between these two species.—S. A. PARKER, Bird Room, British Museum, London.

REFERENCE

Marshall, A.J. 1954. *Bowerbirds*. Oxford.