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SOME NOTES ON MELANESIAN SEA BIRDS

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SUMMARY

I spent the summer of 1974-75 in the Melanesian Islands commencing in New Guinea in October and reaching the New Hebrides in February. This paper reports sightings of 27 species from the following genera: *Pterodroma* (3), *Calonectris* (1), *Puffinus* (3), *Oceanites* (1), *Phaethon* (1), *Sula* (2), *Fregata* (2), *Lobipes* (1), *Stercorarius* (3), *Chlidonias* (1), *Sterna* (7) and *Anous* (2). My records provide additional information on species rare in the area such as the Tahiti Petrel and White-necked Petrel, the Sooty Shearwater, Wilson's Storm-petrel, White-tailed Tropic-bird Masked Booby, Greater Frigate-bird, Long-tailed Skua and Spectacled Tern, as well as notes on relative abundance and distribution of the more common species. Sightings were made in several areas with no previous records.

INTRODUCTION

Information on the distribution and relative abundance of the sea birds of the Melanesian region is very scanty. King (1967) lists observations for the Bismarck Archipelago, the Solomon Islands and the New Hebrides, and Rand and Gilliard (1967) for the seas around New Guinea. Members of the New Guinea Bird Society have sighted several new species of sea birds in recent years (see New Guinea Bird Society Newsletters (NGBS), 1970-74). Norris (1967) also observed sea birds in the south-west Pacific, including the New Hebrides.

During the period 15 October 1974 to 7 February 1975, I made several trips by sea in the Melanesian region. My journeys are shown on the accompanying map (Fig. 1). The dates of the various visits were:-

Papua New Guinea:

- 15 October Madang to Karkar Island.
 21 October Karkar Island to Madang.
 23-24 October Madang to Wewak.
 14 November Wewak to Los Negros Island, Manus District.
 5-6 December Lorengau, Manus Island to Rabaul, New Britain.
 4-5 January Rabaul to Kieta, Bougainville, then to the Solomon Islands.

British Solomon Islands and New Hebrides:

- 21 January Shortland Islands to Gizo.
 28-30 January Gizo to Honiara, Guadalcanal.
 5-7 February Honiara to Port Vila, Efate, New Hebrides.

Duration of observations varied, but on the longer trips usually at least four hours were spent in the morning and two hours in the evening, with at most ten hours observation a day.

Identifications were based on Mayr (1965), King (1967), Slater (1970), Serventy, Serventy and Warham (1971) and my field experience of several of the species in the seas around Australia and Europe.

My observations are presented in the form of a systematic list of all species observed with location for the more notable records. Additional information was also obtained while staying in the different island groups and this is also incorporated in the systematic list. The taxonomic sequence follows Peters (1962).

LIST OF SPECIES

Tahiti Petrel *Pterodroma rostrata*

One was seen at approximately $3^{\circ}25'S, 144^{\circ}05'E$, off Wewak, on 14 November. It was a medium sized petrel with long, narrow wings and a wedge-shaped tail. The flight, in the moderate wind conditions, was leisurely with much flapping and gliding. The bird was dark brown including the underwing, throat and breast, except for the striking white of the abdomen and undertail coverts. There are only four records of this species in the New Guinea area (Coates, Layton and Filewood, NGBS, January 1970; Coates and Filewood, NGBS, June 1970 and Coates, NGBS, November 1972). The species breeds in the Society Islands, the Marquesas Islands and New Caledonia (King, 1967). After breeding, the birds disperse west into the Coral Sea, where small numbers were recorded by Norris (1967) north north-east of Swain Reefs and south-east of Marion Reef. There are two records for Queensland, both beach-washed specimens, one from Fraser Island in May 1969 (McKean and Vernon, 1971) and one from North Stradbroke Island in March 1974 (Vernon and Martin 1975).

A much smaller race *P. rostrata becki*, known from only a few specimens taken at sea in the Bismarck Archipelago and near the Solomon Islands (Mayr 1945), may breed in one or other group (King 1967).

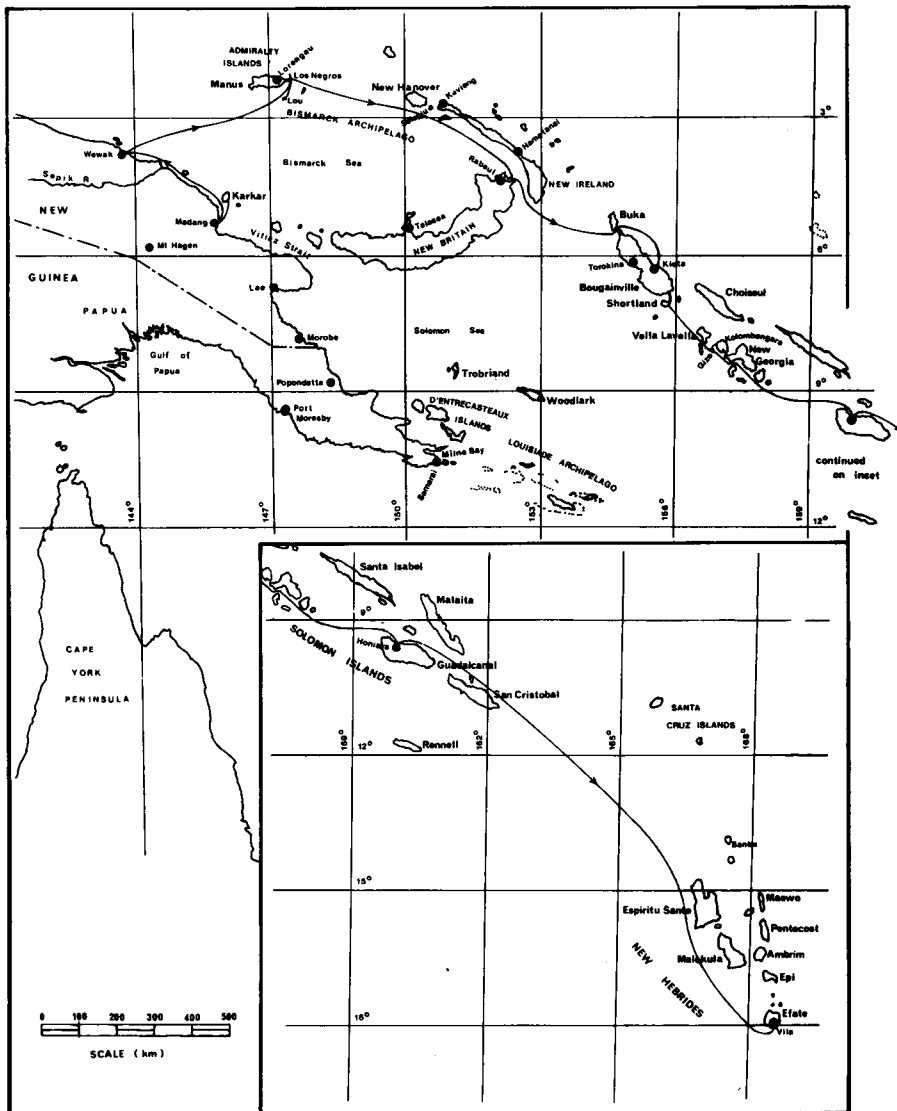


Figure 1. The Melanesian Islands, showing my route and places mentioned in the text.

The New Guinea records, particularly the 1972 record, and the bird I saw may belong to this race.

White-necked Petrel *Pterodroma externa*

A single bird was seen at 08:30 hours on 6 February off San Cristobal Island at 12°24'S, 163°06'E. The bird, flying close to two Wedge-tailed Shearwaters *Puffinus pacificus* was similar in size and showed a black cap and white neck. Characteristics of the flight were high, sweeping arcs, interspersed with slow and loose wing beats. The bird was larger and the flight much more leisurely with slower wing beats than the White-winged Petrel *P. leucoptera* seen the next day. This is possibly the furthest north this species has been recorded in this part of the Pacific, although it has been recorded a little to the south, in the New Hebrides, where it may breed (King, 1967).

The subspecies *P. externa cervicalis*, with a black cap and white nape, is only known to breed on one of the Kermadec Islands, where it is considered rare. The nominate race, with a grey nape, breeds on Mas Afuera in the Juan Fernandez Islands off the Chilean coast. Both forms are abundant in the Central Pacific, between the Equator and the Hawaiian Islands, from May to November, but some individuals are present throughout the year (King, 1967). There may be another breeding station within the Pacific area and possibly in the New Hebrides, for the rarity of the species on its known breeding grounds contrasts with its abundance in the wintering grounds.

White-winged (Gould) Petrel *Pterodroma leucoptera*

Two birds were seen west of the New Hebrides (at approximately 17°S, 168°E) on 7 February. The collared form, *P. l. brevipes*, sometimes given specific rank and called the Collared Petrel, breeds in the New Hebrides from March to August, and this is the form I saw. The birds are much darker on the underparts than the nominate Gould Petrel *P. l. leucoptera* of Australia. King (1967) pointed out all gradations between the two forms have been collected, for example Murphy (1929) collected one white-breasted, one intermediate and five grey-breasted adults at sea off the New Hebrides in January 1927.

Streaked Shearwater *Calonectris leucomelas*

The main wintering grounds of this Japanese nesting species are generally accepted to be in the seas north of New Guinea where I found it quite common. I also found it common in the Bismarck Archipelago and south-east to the east coast of Bougainville. This is presumably a range extension for this part of the Pacific and the first record for the Solomon Islands. Thirty to forty in December 1969, increasing to 400 in January 1970, were recorded much further south, as a visitor to the south New Guinea coast (Coates *et al.*, NGBS, January and February 1970). Others were sighted recently in West New Britain, (Coates, NGBS, June 1970), New Ireland (Filewood, NGBS, April 1970) and Kairiri Island (Mackay, NGBS, July 1970).

The species is a vagrant in southern Queensland, where three beach-washed birds were found on North Stradbroke Island in March 1974 (Vernon and Martin 1975). The Cockerells' specimen from "Northeast Australia", mentioned in Serventy *et al.* (1971), may have been collected off the north-east coast of Queensland.

My observations were:

21 October	Off Karkar Island (4°40'S, 145°50'E).	1
14 November	Off Wewak (between approx. 3°30'S, 144°E and 3°00'S, 145°20'E)	210, scattered in small flocks.
6 December	Off Rabaul (approx. 4°S, 152°E).	230 (approx.)
4 January	Between Rabaul and south New Ireland (between approx. 4°15'S, 152°30'E and 5°S, 152°50'E).	350, (approx.), in small flocks.
4 January	Between Buka passage and Kieta (between approx. 5°30'S, 154°50'E and 6°S, 155°40'E).	57, in small flocks.

The combination of large size, heavy horn coloured bill, light and graceful flight with wings bent at the carpal and bowed below the plane of the body, white head streaked dark on the rear crown and nape, variegated brown upper-parts and white under-parts allows this species to be easily distinguished. Many birds showed an irregular, off-white patch in the wing at the base of the primaries and a patch of off-white on the upper tail coverts. The underwings were mainly white, narrowly edged with dusky and with a dark patch at the carpal. Their general appearance and flight reminded me of the Cory's Shearwater *Puffinus diomedea* (*Caloneotris diomedea*) of the North Atlantic and Mediterranean. The Streaked Shearwater, which is also called the White-fronted Shearwater, is sometimes placed in the genus *Puffinus* (Storr 1973).

Sooty Shearwater *Puffinus griseus*

Rand and Gilliard (1967) have no records of the Sooty Shearwater for New Guinea, neither has King (1967) for the Bismarck Archipelago or the Solomon Islands. Recently Coates (NGBS, November 1972) reported several dark brown shearwaters with pale underwings, which he considered to be this species, near New Britain. The species was recorded from the Western Isles, which are situated west of Manus Island, in 1934 (Coults, NGBS, August 1970). My records were:

21 October	Between Karkar Island (4°40'S, 145°50'S) and the mainland.	1
5 December	South of Selapiu Island (2°50'S, 150°35'E).	1, feeding with White-capped Noddy.
4 January	Off Station Point, New Ireland (approx. 4°25'S, 152°40'E).	1
	Off Condor Point, New Ireland (approx. 4°35'S, 152°40'E).	1

5 January	Off east coast of Bougainville south to Kieta (between approx. $5^{\circ}30'S$, $154^{\circ}50'E$ and $6^{\circ}S$, $155^{\circ}40'E$).	31, in small groups.
21 January	Off Nila, Shortland Island ($7^{\circ}10'S$, $156^{\circ}E$).	7
29 January	Off Gizo ($8^{\circ}15'S$, $156^{\circ}55'E$).	9

On all birds the whitish underwings were clearly seen and I have no doubt about their correct identification.

Wedge-tailed Shearwater *Puffinus pacificus*

Rand and Gilliard (1967) list a single record for New Guinea, but others since have recorded numbers on the south coast. In the Bismarck Archipelago it is a migrant and not known to breed. Recent records include over 200 birds with at least one light phase off Port Moresby (Coates *et al.*, NGBS, January and February 1970). Other sightings are reported by Mackay (NGBS, July 1970), Bell (NGBS, August 1970) and Fowler (NGBS, June 1971). This species is known to breed further south in the Solomons and the New Hebrides (King 1967).

I recorded the species on six dates, four of which refer to the Bismarck Archipelago:

21 October	Off Karkar Island ($4^{\circ}40'S$, $145^{\circ}50'E$).	1
14 November	Off Wewak (between approx. $3^{\circ}30'S$, $144^{\circ}E$ and $3^{\circ}0'S$, $145^{\circ}20'E$).	24
5 December	South of New Hanover (approx. $2^{\circ}40'S$, $150^{\circ}10'E$).	4
6 December	Off Rabaul (approx. $4^{\circ}S$, $152^{\circ}E$).	100 (approx.)
27 December	Off Samo, east New Ireland ($3^{\circ}55'S$, $152^{\circ}50'E$).	15
4 January	South of Rabaul and west of New Ireland (between approx. $4^{\circ}15'S$, $152^{\circ}30'E$ and $5^{\circ}S$, $152^{\circ}50'E$).	25, scattered individuals and pairs.

Approximately half of those off Wewak, one off south New Hanover, and the 25 birds south of Rabaul were of the light phase. This phase is generally from further north, being the more common phase south to $10^{\circ}N$. Either these birds were migrants from further north, or they may represent an unknown breeding population somewhere in this region. Further south, 39 were recorded on 6 February just south of San Cristobal Island between $12^{\circ}24'S$, $163^{\circ}06'E$ and $14^{\circ}20'S$, $164^{\circ}50'E$, and 273 on 7 February approaching the New Hebrides between $16^{\circ}30'S$, $167^{\circ}02'E$ and $17^{\circ}45'S$, $168^{\circ}19'E$. All were dark phase.

Audubon's Shearwater *Puffinus lherminieri*

Forty seen just north of Honiara ($9^{\circ}15'S$, $159^{\circ}55'E$) on 30 January and one seen just east of Honiara ($9^{\circ}25'S$, $160^{\circ}28'E$) on 5 February

are probably the first recorded for the Solomon Islands.

Two individuals were seen off the west New Hebrides at 16°44'S, 167°09'E and 17°40'S, 168°10'E on 7 February. Norris (1967) did not see this species around the New Hebrides in the southern winter. King (1967) recorded it as a breeding species for the New Hebrides between November and April, but perhaps the species disperses after breeding.

The Solomon Island birds appeared no darker than those seen off the New Hebrides, so presumably they are closer to this form, rather than Heinroth's Shearwater *P. heinrothi* of the Bismarck Archipelago which is now usually regarded as a form of *P. herminieri* King (1967).

Heinroth's Shearwater is a little known form which has been reported and collected along the coast of New Britain and the Bismarck Archipelago. In August 1974 King (NGBS, October 1974) searched Watom Island for the nesting site of this species but was unsuccessful. The nesting site remains unknown although there is little doubt that it must breed in the vicinity of New Britain. Three specimens at the American Museum of Natural History are labelled Watom Island, which lies just westward of the port of Rabaul (Murphy 1930). I failed to see this form.

In the literature, the colour of the upperparts of Audubon's Shearwater has been variously described as sooty (Mayr, 1945), dark greyish-brown (King, 1967) and black (or dark blue) and brownish (Slater, 1970). In the field, in bright sunlight, the upperparts appeared dark brown with slightly darker primaries. In duller conditions the upperparts appeared sooty brown and an old specimen examined in Port Vila Library, Efate, New Hebrides had sooty upperparts.

The flight was fast and close to the surface, with short glides between rapid wing beats which were not as fast as those of the Little Shearwater *P. assimilis* but faster than those of the Fluttering Shearwater *P. gavia*. In size it was also intermediate between these two species, but in proportions it was closer to the Fluttering Shearwater and did not appear dumpy, short-winged and short-billed like the Little Shearwater. With close views Audubon's Shearwater can be identified in the field by its larger size, less dumpy form, browner upperparts and less white on the side of the head than the Little Shearwater and from the Fluttering Shearwater by its slightly smaller size, faster wing beats and whiter underwings.

Wilson's Storm-petrel *Oceanites oceanicus*

One bird, thought to be of this species, came close to the ship before heading off north at 12:20 hours on 6 February between the Solomon Islands and the New Hebrides (13°38'S, 164°12'E). It was a small, dark brown Storm-petrel with a noticeable pale buff bar

across each wing. It had a pure white rump patch, extending just onto the sides of the flanks, and the tail appeared to be square, but the feet projection was not seen. The flight consisted of deeply flapping wing beats on long wings with frequent stiff-winged (wings angled from the carpal) down wind glides and with sharp banking. The bird generally kept within 1 m of the surface and at no time were the legs seen dangled.

White-tailed Tropic-bird *Phaethon lepturus*

I saw a single adult off Port Sulphur, west New Ireland (approx. $4^{\circ}45'S, 152^{\circ}40'E$) on 4 January. King (1967) gives the status of this species in the Bismarck Archipelago as vagrant. Two other recent records for the New Guinea region are those of Eginton (NGBS, January 1970 and September 1973).

Masked Booby *Sula dactylatra*

A single immature was seen on 22 and 27 January in the straits between Gizo and Kulambangra Islands in the Western Solomons (approx. $8^{\circ}05'S, 156^{\circ}55'E$). This is presumably the first record for the Solomons as King (1967) fails to mention it. This species breeds on most island groups in the tropical Pacific but only occurs as a vagrant, or is entirely absent, from the extreme south-west Pacific (New Caledonia, New Hebrides, Solomon Islands and the Bismarck Archipelago). Immatures and sub-adults show the greatest tendency to wander.

Other records in this area have been compiled from the log of the HMS Challenger (Macdonald and Lawford, 1954). Eleven birds were recorded on six days, two days in June and four days in September, and were all within the area $11^{\circ}45'S$, to $25^{\circ}30'S, 165^{\circ}30'E$ to $179^{\circ}45'E$. The most northern of these positions would be south-east of the Solomons and north of the New Hebrides.

Brown Booby *Sula leucogaster*

This is the most common booby in Melanesia and the south-west Pacific region. I recorded it on seven occasions, including three times in the Bismarck Archipelago, possibly the first records for the area as King (1967) knew of only a doubtful record.

Records were:

8 August	Off Port Moresby (approx. $9^{\circ}30'S, 147^{\circ}10'E$).	2
15 October	Between Madang and Karkar Island (approx. $4^{\circ}40'S, 145^{\circ}50'E$).	1
24 October	Off the mouth of the Sepik River (approx. $3^{\circ}50'S, 144^{\circ}40'E$).	1
14 November	Off Wewak (between $3^{\circ}30'S, 144^{\circ}E$ and $3^{\circ}S, 145^{\circ}20'E$).	11
4 December	East of Manus Island (approx. $2^{\circ}S, 147^{\circ}30'E$).	11

5 December	South of New Hanover (approx. $2^{\circ}40'S$, $150^{\circ}50'E$).	4
4 January	South of Rabaul and west of New Ireland (between approx. $4^{\circ}15'S$, $152^{\circ}30'E$ and $5^{\circ}S$, $152^{\circ}50'E$).	15

For the Solomons, where it is considered a visitor, I have three records:

5 January	Off the east coast of Bougainville (between approx. $5^{\circ}30'S$, $154^{\circ}50'E$ and $6^{\circ}S$, $155^{\circ}40'E$).	6
30 January	Off Honiara ($9^{\circ}15'S$, $159^{\circ}55'E$).	1
5 February	Off Guadalcanal and San Cristobal (between $9^{\circ}25'S$, $159^{\circ}59'E$ and $10^{\circ}30'S$, $161^{\circ}27'E$).	37

Greater Frigate-bird *Fregata minor*

Only two sightings were made. A female was chasing a Lesser Frigate-bird successfully for possession of a fish, off Karkar Island ($4^{\circ}40'S$, $145^{\circ}50'E$) on 15 October. The second sighting was of another female with Lesser Frigate-birds off Lou Island, Manus District ($2^{\circ}20'S$, $147^{\circ}20'E$) on 27 November.

Lesser Frigate-bird *Fregata ariel*

This was by far the most common of the two *Fregata* species. Along the north coast, it was seen from Lae to Wewak, with over 400 birds off Karkar Island in October. In November, in the Manus District, it was seen daily in fair numbers, and south of New Hanover ($2^{\circ}40'S$, $150^{\circ}50'E$) on the evening of 5 December an estimated 850 birds were seen in flocks. The next day, en route to Rabaul, at least another 300 were seen, while south of Rabaul and west of New Ireland on 4 January there were at least 600.

The species was also common in the Solomons, and was recorded on 16 dates from Buka in the north to San Cristobal in the south, including several hundred seen on the journey from Gizo to Honiara between 28 and 30 January. A pair and a single individual were seen on 7 February west of the New Hebrides.

Red-necked Phalarope *Lobipes lobatus*

Three were seen approximately 8 km south of Karkar Island ($4^{\circ}40'S$, $145^{\circ}50'E$) on 15 October and 10 off Condor Point, New Ireland ($4^{\circ}35'S$, $152^{\circ}40'E$) on 4 January. Both flocks were feeding on the water, well away from the nearest land. According to Mayr (1945) the seas north of New Guinea, from New Britain westward, are a favourite wintering ground. Rand and Gilliard (1967) give its status as common off the north New Guinea coast.

Pomarine Skua *Stercorarius pomarinus*

An adult light phase seen just off Rabaul (approx. $4^{\circ}S$, $152^{\circ}E$) on

6 December may possibly be the first observation for the Bismarck Archipelago. The only other bird seen, an adult dark phase west of the New Hebrides ($17^{\circ}10'S, 167^{\circ}34'E$) is probably the first record for the area. Mayr (1945) fails to mention this species from the south-west Pacific, and King (1967) has no record for Melanesia. Rand and Gilliard (1967) have no records for New Guinea, but Coates (NGBS, May 1970) reported five sightings in 1970. Its occurrence in the south-west Pacific is probably more regular than these few records suggest. It is a regular summer visitor to southern Australia and it is common on the coast of Japan in spring, probably as a migrant from the south-west Pacific (King, 1967).

Arctic Skua *Stercorarius parasiticus*

This species was recorded on four dates in New Guinea. Four light phase birds were seen between Madang and Karkar Island (approx. $4^{\circ}40'S, 145^{\circ}50'E$) on 21 October and an immature nearby on 23 October. Two were off the mouth of the Sepik River (approx. $3^{\circ}50'S, 144^{\circ}40'E$) on 24 October and an adult light phase was south of Rabaul (approx. $4^{\circ}35'S, 152^{\circ}40'E$) on 4 January. Rand and Gilliard (1967) do not mention the species from the seas around mainland New Guinea. King (1967) lists it as a migrant for the Bismarck Archipelago. Neither King (1967) nor Mayr (1945) list it for elsewhere in Melanesia. In the New Hebrides, north of Espirita Santo, I saw three of the light phase chasing terns on 6 February: one adult and one immature at $14^{\circ}05'S, 164^{\circ}35'E$, and one adult at $14^{\circ}08'S, 164^{\circ}40'E$. Next day, west of Malekula Island, I saw one immature at $16^{\circ}30'S, 167^{\circ}02'E$, one adult light phase at $16^{\circ}39'S, 167^{\circ}06'E$ and another at approximately $17^{\circ}S$.

Long-tailed Skua *Stercorarius longicaudus*

An immature flushed from driftwood close to the ship north of San Cristobal Island at $10^{\circ}41'S, 161^{\circ}28'E$ on 5 February is probably the first recorded in this part of the Pacific. It was a small, slim, gracefully built bird with slim pointed wings. The flight was bouyant and tern-like, with very light and deep wing beats. The general tone of the bird was greyish-brown and showed much less white in the wing than other immature skua species.

White-winged Black Tern *Chlidonias leucoptera*

Four adults in winter plumage flew close to the boat midway between Madang and Karkar Island (approx. $5^{\circ}S, 145^{\circ}50'E$) on 21 October. Another adult bird in winter plumage was seen off Cape Girgir between the Sepik mouth and Wewak (approx. $3^{\circ}50'S, 144^{\circ}40'E$) on 24 October.

Common Tern *Sterna hirundo*

This was a common bird off the north New Guinea coast, in the Bismarck Archipelago and in the Solomon Islands. The largest concentrations were 600 off Karkar Island on 23 October, 1,500 off the mouth of the Sepik River on 24 October, 800 south of New Hanover on 5 December, 300 off Nila, Shortland Islands on 18 January and 600 between Giza and Honiara on 29 and 30 January. Presumably

this is a regular wintering area. All birds seen closely showed the black bill of the eastern asiatic race *S. hirundo longipennis*.

Black-naped Tern *Sterna sumatrana*

This species was only seen once off the north New Guinea coast, five being seen well off Wewak on 14 November. In the Bismarck Archipelago it was more abundant with at least 150 breeding individuals on the volcanic island of Tuliman to the south east of Lou Island, Manus District ($2^{\circ}30'S, 147^{\circ}20'E$) on 21 November. Small numbers were seen at sea, off Manus Island, south of New Hanover and south of Rabaul.

In the Solomons it was recorded on at least seven dates south to $9^{\circ}25'S$, with 600 between Gizo and Kulambangra on 21 January and at least 1,000 between Gizo and southern New Georgia on 28 January.

Bridled Tern *Sterna anaetheta*

Recorded at several localities in New Guinea, the Bismarck Archipelago and the Solomon Islands:

15 October	One hour off Madang (approx. $5^{\circ}S, 145^{\circ}50'E$).	15
24 October	Off the mouth of the Sepik River (approx. $3^{\circ}50'S, 144^{\circ}40'E$).	3

Small numbers of this species were seen off Lou Island, Manus District, daily between 19 and 30 November with at least 500 breeding birds on the volcanic island, Tuliman, just to the south-east of Lou ($2^{\circ}30'S, 147^{\circ}20'E$), on 21 November.

5 December	South of New Hanover (approx. $2^{\circ}40'S, 150^{\circ}10'E$).	80
4 January	South of Rabaul (approx. $4^{\circ}15'S, 152^{\circ}30'E$).	25
5 January	Off Buka Passage, Bougainville (approx. $5^{\circ}30'S, 154^{\circ}50'E$).	15
21 January	Off Alu, Shortlands (approx. $7^{\circ}10'S, 156^{\circ}E$).	6
30 January	Off Savo (approx. $9^{\circ}10'S, 159^{\circ}45'E$).	20
5 February	East of Honiara (approx. $10^{\circ}40'S, 161^{\circ}27'E$).	3

Spectacled Tern *Sterna lunata*

Only two birds were positively identified: one off Condor Point, New Ireland (approx. $4^{\circ}45'S, 152^{\circ}40'E$) on 4 January and another off Buka Passage ($5^{\circ}30'S, 154^{\circ}50'E$) the next day. The Spectacled or Grey-backed Tern is a tropical Pacific counterpart of the Bridled Tern. According to King (1967) the Bridled Tern probably breeds regularly in the tropical Pacific only in the Solomon Islands and Bismarck Archipelago. The Spectacled Tern is the most common breeding species further west, where the Bridled Tern is

uncommon. In the Solomon Islands and the Bismarck Archipelago both species may breed, but the Spectacled Tern is rarer. The two birds I saw were close to the ship and were identified by their greyer, paler, backs than the more common Bridled Tern, which when seen at a close range has a brown back. The flight, and size, of the two species appeared no different in the field.

Sooty Tern *Sterna fuscata*

This species was most abundant in the New Guinea- Bismarck Archipelago region. It was seen in all areas south to Madang on the mainland with a concentration of approximately 1,200 between Madang and Karkar Island on 15 October in feeding flocks of two to three hundred. Approximately 600 were also seen off the mouth of the Sepik River on 24 October and 300 south of Rabaul on 4 January.

In the Solomon Islands and New Hebrides, where it has not been recorded before, I made the following records:

5 January	Off the east coast of Bougainville (between approx. 5°30'S, 154°50'E and 6°S, 155°40'E).	300, in two flocks.
21 January	Off Alu, Shortland Islands (approx. 7°10'S, 156°E).	10, including immatures.
30 January	North of Honiara (9°15'S, 159°55'E).	20
6 February	Between Solomon Islands and New Hebrides (14°05'S, 164°35'E).	39, feeding.
7 February	Off the west coast of New Hebrides (between 16°30'S, 167°02'E and 17°20'S, 167°44'E).	324

Little Tern *Sterna albifrons*

The Little Tern was recorded on four dates off the north coast of New Guinea, all of which were in the Madang District, in October with a maximum of 25 birds.

Crested Tern *Sterna bergii* (*Thalasseus bergii*)

This species was recorded on 25 dates on both north and south coasts of New Guinea and the Bismarck Archipelago. Maximum numbers included 350 off Karkar Island on 15 October, 200 off the mouth of the Sepik River on 24 October and 200 south of New Hanover on 5 December. It was also common in the Solomons, being recorded on 10 days, and was recorded south to 9°23'S.

Noddy *Anous stolidus*

This noddy was common off Karkar Island with up to 200 seen in October. In the Bismarck Archipelago it was only seen twice; one was with the White-capped Noddy south of New Hanover on 5 December and 20 were south of Rabaul on 4 January. This species was seen three times in the Solomons: 10 off Alu, Shortlands, on 21 January, 60 off New Georgia on 29 January and 95 between Honiara and San Cristobal Island on 5 February.

White-capped Noddy *Anous minutus*

A single bird was seen off the mouth of the Sepik River. Several hundred were seen daily offshore in November off Lou and Manus Islands in the Admiralty Group. The species was also abundant south of New Hanover on 5 December with a total of over 1000 seen feeding in flocks of several hundreds. At sea south of Rabaul, 120 were seen on 4 January. In the Solomon Islands, they were common and were recorded on eight days. A roosting island off Alu, in the Shortlands, had up to 800 birds in late January. This species was recorded south to near Honiara at 9°31'S, where a feeding flock of about 300 were seen.

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REFERENCES

- King, W.B. 1967. Seabirds of the Tropical Pacific Ocean. Washington D.C. : Smithsonian Institution.
- Macdonald, J.D. and P.A. Lawford. 1954. Sight record of birds in the Pacific : compiled from the Bird log kept during the recent cruises of HMS Challenger. *Emu* 54 : 7-28.
- Mayr, E. 1945. Birds of the Southwest Pacific. New York : Macmillan.
- McKean, J.L. and D.P. Vernon. 1971. New Records of tube-nosed birds (Order Procellariiformes) from Queensland. *Mem. Qld Mus.* 16 : 142.
- Murphy, R.C. 1929. Birds collected during the Whitney South Sea Expedition X, *Amer. Mus. Nov.* 370.
- Murphy, R.C. 1930. Birds collected during the Whitney South Sea Expedition XI, *Amer. Mus. Nov.* 419.
- New Guinea Bird Society Newsletters, 1970 - 1974, Konedobu, Papua New Guinea.
- Norris, A.Y. 1967. Seabird observations from the south west Pacific in the southern winter. *Emu* 67 : 33-35.
- Peters, J.L. 1962. Check-list of Birds of the World. Vol. I and II. Edited by E. Mayr and J.C. Greenway. Cambridge, Mass : Museum of Comparative Zoology.
- Rand, A.L. and E.T. Gilliard. 1967. Handbook of New Guinea Birds. London : Weidenfeld and Nicolson.
- Serventy, D.L., V. Serventy and J. Warham. 1971. The Handbook of Australian Sea-birds. Sydney : Reed.
- Slater, P. 1970. A Field Guide to Australian Birds : Non-Passerines. Adelaide : Rigby.
- Storr, G.M. 1973. List of Queensland Birds. *Spec. Publs West Aust. Mus.* No. 5 : 1-177.
- Vernon, D.P. and J.H.D. Martin. 1975. Birds of Stradbroke Island. *Proc. Royal Soc. Qld* 86 : 61-72.

ONE QUEENSLAND AND TWO NORTHERN NEW SOUTH WALES SPECIMEN RECORDS OF THE KERGUELEN PETREL

D.P. VERNON AND D.H. FLEAY

A live specimen of the Kerguelen Petrel *Pterodroma brevirostris* was found in a weakened and thin condition at Mermaid Beach, Gold Coast, Queensland (28°4'S, 153°26'E) by M. Mills on 13 September 1975. This is the first specimen record of this species for Queensland. Two other birds of the same species were washed up at about the same time, a live one at Tweed Heads (26°6'S, 153°32'E) on 9 September 1975 and a dead one at Belongil Creek, Byron Bay, New South Wales (28°36'S, 153°38'E) on 14 September 1975. For several days winds had been 25 to 35 km/h with moderate to rough seas in the vicinity of coastal northern New South Wales and south-eastern Queensland.

The two live specimens were taken to D.H. Fleay's Fauna Reserve at West Burleigh, Queensland, but each bird died overnight. Subsequently, D.H. Fleay donated the Mermaid Beach specimen (Q.M. 016158) to the Queensland Museum on 16 September 1975, and the Tweed Heads specimen (Q.M. 016162) on 8 October 1975. The dead bird from Belongil Creek (Q.M. 016160) was found by J. Willows and donated to the Queensland Museum on 17 September 1975.

This slaty-grey plumaged petrel of southern Indian, Atlantic and Pacific Ocean distribution is known to breed in the subantarctic zone on Kerguelen, Marion, Crozet and Gough Islands during late October and November. Like many other pelagic subantarctic breeding species, the Kerguelen Petrel occasionally ranges north in eastern Australia, at least during winter and early spring. The species was first recorded in Australia by Campbell (1926) from a specimen which is in the H.L. White collection at the National Museum of Victoria, Melbourne. The specimen was found beach-washed on Cottesloe Beach, Western Australia on 3 June 1926 by the late F.L. Whitlock. At intervals since, occasional specimens have been found from Western Australia around the south-eastern coast to New South Wales. Rogers (1974) lists specimens found in 1974 at Rushcutters Bay, Sydney on 25 August, at Collaroy on 27 August, at Woody Head near Iluka on 29 August and at Woolgoolga on 15 September. The first bird was found alive but later died, and is now Australian Museum no. 045083; the last was considered to be at least 10 days dead. These were the fifth to eighth New South Wales records, the first for this species since 1954, and were exceptional in that they occurred almost at the same time at widely spaced localities. Earlier specimens from New South Wales are discussed by Hindwood and McGill (1955). Oliver (1955, p.162) noticed a similar occurrence when he wrote "Two specimens reached

the Dominion Museum on the same day in July 1934. Possibly a small flock was in New Zealand waters at that time". The Checklist Committee, Ornithological Society of New Zealand (1970, p.23) records that the species is "possibly regular winter visitor to Tasman Sea, about twenty records, mainly from North Island west coast beaches."

The three specimens have been prepared as good study skins. They are of a similar general colour to the Wedge-tailed Shearwater, *Puffinus pacificus*, but greyer. In general morphology they are considerably like, although smaller than, the Great-winged Petrel, *Pterodroma macroptera*. Both specimens compare closely with Pl. 38 of Mathews (1928) and moderately close to Pl. 60 of Godman (1907-10). Three field identification criteria are the freckled pale grey leading edge to the wing, although this is not obvious from above, the very pale grey underside of both primary and secondary wing feathers, and the almost black lores area of the face. The three specimens handled had relatively broad heads in relation to body size and a characteristic of the species is the laterally compressed bill.

Details of the specimens are as follows. Measurements are in millimetres. Q.M. 016158, Mermaid Beach, Queensland, 13 September 1975, collected M. Mills, skin with one wing separate and spread and body preserved in alcohol, female, ovary not enlarged (9x4), oviduct straight, weight 191.5 g, total length 343, wingspan 820, wing 251, tail 108, culmen 26, width of bill at nostrils 6, tarsus 37, middle toe and claw 48. Gizzard empty, except for one beak of a cephalopod. Q.M. 016160, Belongil Creek, Byron Bay, New South Wales, 14 September 1975 collected J. Willows, skin with one wing half spread and body preserved in alcohol, female, ovary not enlarged (12x7), oviduct straight, weight 214 g, total length 346, wingspan 848, wing 258, tail 112, culmen 26, width of bill at nostrils 6, tarsus 38, middle toe and claw 49. Gizzard empty, except for four beaks of cephalopods. Q.M. 016162, Tweed Heads, New South Wales, 9 September 1975, skin and body preserved in alcohol, male, testes not enlarged (3x1.5), weight 206 g, total length 320, wingspan 850, wing 262, tail 112, culmen 27, width of bill at nostrils 6, tarsus 38, middle toe and claw 48. Gizzard empty except for three beaks of cephalopods. Notes of soft parts of the specimens are as follows: Iris dark brown, bill glossy black, tarsus (outer) benzo brown, (inner) light purple drab, Pl. 45 (Ridgway, 1912). Feet are brownish black, ridges of toes light purple drab, claws black.

We are not sure as to what extent the moderate to rough seas take their toll of pelagic birds off the eastern Australian coasts. Starvation is a likely cause of death, as the three birds examined were exceptionally thin. Their pectoral and wing muscles were emaciated and their gizzards were empty except for the beaks of a few small cephalopods.

REFERENCES

- Campbell, A.J. 1927. The Kerguelen Petrel, *Pterodroma brevirostris*.
Emu 26 : 153.
- Godman, F.D.C. 1907-10. A Monograph of the Petrels. Witherby : London.
- Hindwood, K.A. and A.R. McGill. 1955. Sea-bird mortality in coastal New South Wales during July, 1954. Emu 55 : 152-3.
- Oliver, W.R.B. 1955. New Zealand Birds. Wellington : Reed.
- Ornithological Society of New Zealand. 1970. Annotated Checklist of the Birds of New Zealand. Wellington : Reed.
- Mathews, G.M. 1928. The Birds of Norfolk and Lord Howe Islands and the South Polar Quadrant. London : Witherby.
- Ridgway, R. 1912. Color Standards and Nomenclature. Washington : The Author.
- Rogers, A.E.F. (Ed.) 1974. New South Wales Bird Report for 1974. Australian Birds 9 : 77-97.

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RECORDS OF THE GOULD PETREL AND THE BLACK-WINGED PETREL FROM SOUTH-EASTERN QUEENSLAND AND NORTH-EASTERN NEW SOUTH WALES

G.J. INGRAM

Cyclone Wanda produced winds up to 90 km per hour in the vicinity of south-eastern Queensland and north-eastern New South Wales during the period 23-27 January 1974. On 29 January I walked the ocean beach of the Southport Spit (27°57'S, 153°25'E) on the Gold Coast, south east Queensland. Amongst the beach-washed derelicts was a Gould Petrel *Pterodroma leucoptera leucoptera*. This specimen was donated to the Queensland Museum (Q.M. 015374). This find led to a trip to North Stradbroke Island on the 31 January, with C. Corben and G. Roberts. Two white bellied *Pterodroma* were found beach-washed on the ocean beach (27°35'S, 153°28'E); one was clearly identifiable as a Gould Petrel, while the other had a darker leading edge to the underwing, pink feet, and grey head feathers, which

suggested that it could be a Black-winged Petrel *P. hypoleuca nigripennis*. These were also donated to the Queensland Museum (Q.M. 015010 and Q.M. 015009 respectively). The identifications were confirmed by Dr P.A. Fullagar, Division of Wildlife Research, CSIRO (Vernon and Martin, 1975). The Black-winged Petrel would be the first specimen record for Queensland and the Gould Petrels the second and third for the state, according to Storr (1973).

During the same period three beach-washed derelicts of the Gould Petrel were recorded from northern New South Wales (W. Watson, pers. comm.). These were one found at Patch's Beach ($28^{\circ}58'S, 153^{\circ}31'E$) by Dr P. Mylrea on 27 January 1974, one at Flat Rock ($28^{\circ}51'S, 153^{\circ}36'E$) found by W. Watson on 28 January 1974, and one found at Lennox Head Beach ($28^{\circ}48'S, 153^{\circ}35'E$) by J. Benheim on 28 January 1974.

Since the above specimens were found, the following specimens and observations have been recorded. A beach-washed derelict of the Gould Petrel was picked up on the ocean beach of North Stradbroke Island ($27^{\circ}29'S, 153^{\circ}31'E$) by C. Corben on 23 February 1975 (Q.M. 016130). About ten Black-winged Petrels were observed on land at night by J. Kikkawa at Shark Bay, Heron Island ($23^{\circ}26'S, 151^{\circ}57'E$) during January 1975, one of which was captured, measured and released on 1 January. These were regularly observed visiting the dense vegetation bordering the beach at night (J. Kikkawa, pers. comm.). Holmes (1975) banded several Black-winged Petrels on Mutton Bird Island, Coff's Harbour, New South Wales in early 1975, and also reported their presence on Lady Musgrave Island in southern Queensland.

Measurements in millimetres for the above Gould Petrels, for the first known specimen of the Gould Petrel (Q.M. 05446) found in Queensland at Burleigh Heads (Robertson, 1956) and for a specimen collected from Cabbage Tree Island (Q.M. 054) by Dr Hamlyn Harris (Hull, 1911) are given in Table I, and those for the above Black-winged Petrels and one other caught alive at Heron Island (Reid, 1964) are given in Table 2.

Austin (1952) keys out the Gould Petrel as *Pterodroma leucoptera leucoptera* and the Black-winged Petrel as *P. cookii*, of which he regards *nigripennis* as a subspecies. Falla (1942) considered the latter as a subspecies of the Bonin Petrel *P. hypoleuca*. Both authors noted that the head and back of the Black-winged Petrel was grey (as with Q.M. 015009) though Serventy *et al.* (1971) described the head as slaty-black and the back as grey.

The nominate subspecies of the Gould Petrel is known to breed only at Cabbage Tree Island, Port Stephens, New South Wales, (Serventy *et al.*, 1971). In Queensland, the Black-winged Petrel has been recorded alive from Heron Island (Reid, 1964; J. Kikkawa, pers. comm.) and Tryon Island (R. Elks pers. comm.) in the Capricorn Group, and Lady Musgrave Island (Holmes, 1975) and Fairfax Island (R. Elks pers. comm.) in the Bunker Group. Although it has not

been noted breeding in Australian waters, it has been recorded in association with burrows on Heron, Fairfax and Mutton Bird Islands. Holmes (1975) felt that the development of brood patches, and the preparation of burrows by this species on the latter island, were undoubtedly prerequisites for future breeding, and that it was attempting to colonize. It will be interesting to discover with further investigation whether this applies to the Queensland islands mentioned above.

TABLE I

Measurements of the Gould Petrel (mm).

Specimen	Culmen	Tarsus	Mid-toe and claw	Wing	Tail
Q.M. 054 (female)	25	30	38	230	96
Q.M. 05446 (female)	26	30	39	231	100
Q.M. 015010	25	30	38	226	88
Q.M. 015374 (male)	26	29	36	220	94
Q.M. 016130	27	31	40	236	93
Patch's Beach, N.S.W.	26	29	37	231	101
Flat Rock, N.S.W.	25	29	37	215	-
Lennox Head, N.S.W.	26	29	35	219	100

Measurements for Q.M. specimens from skins, those for N.S.W. specimens from Watson's dead birds.

TABLE 2

Measurements of the Black-winged Petrel (mm).

Specimen	Culmen	Tarsus	Mid-toe and claw	Wing	Tail
Q.M. 015009	24	33	40	217	95
Heron Island (Reid)	24	-	40	232	-
Heron Island (Kikkawa)	28	35	-	217	114

Measurements for Q.M. specimens from skins, those for Heron Island from live birds.

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REFERENCES

- Austin, O.L. 1952. Notes on some petrels of the North Pacific. Bull. Mus. Comp. Zool. 107 : 392-403.
 Falla, R.A. 1942. Review of the smaller Pacific forms of *Pterodroma* and *Cookilaria*. Emu 42 : 111-118.

- Holmes, G. 1975. Black-winged Petrel on Mutton Bird Island, New South Wales. Australian Bird Bander 13 : 51-55.
- Hull, A.F.B. 1911. Further remarks on the finding of the nest and egg of *Oestrelata leucoptera*. Emu 10 : 253-258.
- Reid, A.J. 1964. An Australian record of *Pterodroma hypoleuca*. Emu 64 : 98-100.
- Robertson, J.S. 1956. Interesting south Queensland sea bird derelicts. Emu 56 : 225-226.
- Serventy, D.L., V. Serventy and J. Warham. 1971. The Handbook of Australian Sea-birds. Reed : Sydney.
- Storr, G.M. 1973. List of Queensland Birds. Spec. Publs West. Aust. Mus. No. 5.
- Vernon, D.P. and J.H.D. Martin. 1975. Birds of Stradbroke Island. Proc. R. Soc. Qd 86 : 61-72.

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A NOTE ON BREEDING IN BANDED LANDRAILS

R.R. DUNLOP

My earlier paper on the Banded Landrail *Rallus philippensis* (Dunlop, 1970) gave an outline description of its breeding behaviour. Subsequently I have been able to make additional observations at my home on Little Goat Island in the Pumicestone Channel (27°01'S, 153°05'E).

At the end of September 1973, I observed the nearest I have ever seen to courtship behaviour between two Banded Landrails. For three or four days they were rarely more than half a metre apart, mostly feeding shoulder to shoulder. On 30 September, whilst feeding on the lawn only a few metres from the door of the house, the male, with no preliminary signs, quietly stepped onto the back of the female, who stood stiff-legged with her head bent down till her beak almost touched the ground. The male did not hold on, but during the mating act maintained his balance by vigorous wing-flapping. After a few seconds, they resumed feeding without even a shake to settle any ruffled feathers. Shortly after this, they ceased to appear together, and within about four or five days, had dropped into what appears to be the usual nesting routine - coming to feed alternately.

I believe the nesting site was close to the house, but the blady grass and scrub was so thick that investigation was impractical. On the 23 October, and again on the 24 October, the birds seemed rather excited, whichever bird happened to be feeding appearing to be in quite a hurry, frequently pausing to listen and finally dashing away as if in answer to a sudden call. On the 25 October I glimpsed two chicks at the edge of the long grass. There was no sign afterwards for several days, when one chick began to come out into the open.

Banded Landrails were very scarce in the late summer and autumn of 1974, and there was only one in residence throughout the winter. A second bird appeared in the spring, and by September they were both "settled in". On 26 September, when mowing close to a thick clump of half metre high couch grass, a bird dashed out, and started to give an "injured parent" display. On going back later to investigate, the bird ran along a tunnel in the grass for about two metres, then proceeded to give a very realistic imitation of a bird caught in a snare. This was repeated whenever I approached the nest on future occasions. The nest was merely a flattened dent in the grass, so well concealed that it was invisible until one actually parted the grass above it. The eggs were very clean and fresh-looking.

On 4 November, at 11:00, the first egg had hatched and the chick was lying over the top of the other eggs, with wings and legs outstretched, obviously not yet strong enough to stand. At 16:00 two chicks were on their feet, and both parents were close by. Next morning, the nest was deserted, one obviously dead egg remaining for two days.

REFERENCE

Dunlop, R.R. 1970. Behaviour of the Banded Rail (Landrail) *Rallus philippensis*. Sunbird 1 : 1-15.

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GLOSSY SWIFTLET AT EUNGELLA NATIONAL PARK, QLD.

W.E. BOLES AND D.H. BARRY

H.T. Condon (1975) cites two reliable records of the Glossy Swiftlet (White-bellied Swiftlet, *op. cit.*) *Collocalia esculenta* in Australia: a single specimen taken from Cape York, Northern Queensland, by M. Flood before June 1929 (Mathews 1936) and a sight record of about 40 birds from the Claudie River, Iron Range, Queensland (McKean 1967).

On 12 April 1975, the authors observed five Glossy Swiftlets at the Finch Hatton Gorge campground, Eungella National Park, Queensland ($21^{\circ}04'S, 148^{\circ}38'E$). The following information is taken from notes made at the time (WB). The birds were all dark (including throat, rump and tail), except for the belly which was white, and had a short, slightly forked tail. A flock of 10 - 20 Grey Swiftlets *C. spodiopygia* was observed over the campground later in the day and served as a source of comparison. The day was clear with a few clouds. These notes, and an accompanying sketch, were later compared with New Guinea skins of Glossy Swiftlets in the collection of The Australian Museum. No adult swiftlet in Australia (Macdonald 1973) or New Guinea (Rand and Gilliard 1967), other than the Glossy Swiftlets, fits this description. Very little information is available concerning immature plumages of this genus, although in the Grey Swiftlet birds about to leave the nest are garbed in a dull grey plumage (Seton 1965), and Medway (1962a) reports for three species of *Collocalia*, including the Glossy Swiftlet, that "Down does not grow, but the adult plumage develops directly".

The following information is provided in retrospect, not having been included in notes written at the time. Glossy Swiftlets were observed at about 16:30 and Grey Swiftlets at about 17:30. Both observations were made with 7 x 35 and 8 x 30 binoculars. When first sighted, the Glossy Swiftlets were approximately 10 metres above the trees in the campground and, over the five minute period in which they were observed, gradually moved to a height of some 30 metres above the trees.

W.R. Wheeler (1959) and J.S. Robertson (1962) reported that there is a nesting colony of Grey Swiftlets up the Mountain Views Trail, about an hour's walk from the campground, although in neither case did they make an extensive search of the site. The colony was later visited by D.H.C. Seton (*op. cit.*) and A.H. Chisholm (1966). Due to inclement weather and time restrictions, the authors were unable to visit the colony. McKean (1967) reported that the

Glossy Swiftlet was in the company of the Grey Swiftlet. This raises the possibility that a small number of Glossy Swiftlets could be found in the vicinity of the breeding colony and this should be investigated. Macdonald (1973) states that the non echo-locating Glossy Swiftlet is not likely to nest in dark caves and Medway (1962a,b) in his Sarawak studies reports nesting "only in the peripheral grottoes around the cave mouth or away from it altogether ...". It is also possible that the Glossy Swiftlet is associated with other breeding colonies of the Grey Swiftlet. Pecotich (1974) lists these, but makes no mention of Glossy Swiftlet sightings.

REFERENCES

- Chisholm, A.H. 1966. Bird notes from Eungella. *Emu* 65 : 164.
 Condon, H.T. 1975. Checklist of the Birds of Australia I. Non-passerines Melbourne : RAOU.
 Macdonald, J.D. 1973. Birds of Australia. Sydney : Reed.
 McKean, J.L. 1967. A sight observation of the Glossy Swiftlet at Cape York, Queensland. *Emu* 67 : 94.
 Mathews, G.M. 1936. A Supplement to the Birds of Norfolk and Lord Howe Islands. London : Witherby.
 Medway, Lord. 1962a. The Swiftlets *Collocalia* of Niah Cave, Sarawak Part 1. Breeding biology. *Ibis* 104 : 45-66.
 Medway, Lord. 1962b. The Swiftlets *Collocalia* of Niah Cave, Sarawak Part 2. Ecology and the regulation of breeding. *Ibis* 104 : 228-245.
 Pecotich, L. 1974. Grey Swiftlets in the Tully River Gorge and Chillagoe Caves. *Sunbird* 5 : 16-21.
 Rand, A.L. and E.T. Gilliard. 1967. Handbook of New Guinea Birds. London : Weidenfield and Nicolson.
 Robertson, J.S. 1962. Mackay Report. *Emu* 61 : 270-274.
 Seton, D.H.C. 1965. The Grey Swiftlet nesting colony at Finch Hatton, Queensland. *Aust. Bird Watcher* 2 : 168-171.
 Wheeler, W.R. 1959. Mainland nesting of the Grey Swiftlet. *Aust. Bird Watcher* 1 : 5-6.

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EASTERN GRASS OWL AT COOLOOLA

P.D. DWYER AND J.B. WILLMER

On 18 August 1975 at 08:35 hours, while clearing mammal traps on the Noosa Plain, Cooloola (26°10'S, 153°3'E), we flushed an Eastern Grass Owl *Tyto longimembris* from low dense vegetation. The bird rose from beside a clump of *Gahnia* about 10 m away from us. It flew in a wide arc, two to three metres above the vegetation, and dropped quickly to ground after travelling about 150 m. We were without binoculars but with the sun behind us and fairly low our view was good though our interpretations of colour could have been distorted. Flight was slow and the long, essentially naked, legs trailed conspicuously. The facial disc and underparts were whitish with small dark patches around the eyes and some dark flecks beneath. The back appeared greyish and the upper surfaces of the wings were strongly marked with light tan. In May 1975 we found a wing feather of an Eastern Grass Owl less than 200 m from the owl squat. We have heard *Tyto* screeches on three occasions at Cooloola but without identifying the species concerned: in August 1975 from woodland near the locality of the sighting described here and near Lake Cooloola, and in May 1975 from rain forest along Kin Kin Creek.

Our sighting was made toward the northern end of Cooloola Fauna Reserve and 300 m south-east of the Noosa River. Here a narrow belt of riverside woodland (maximum width 50 m) dominated by scribbly gum *Eucalyptus signata* and *Banksia aemula* gives way abruptly to low dry heath (e.g. *Banksia*, *Hakea*, *Xanthorrhoea*) that grades to swamp. Vegetation near the owl squat was mostly less than 1 m high and grew in water. It comprised a mixture of sedge and restiad species with *Lepyrodia* predominant and with scattered *Gahnia* and *Banksia robur*.

On the late afternoon of 17 August we found a weathered and much fragmented owl pellet 35 m from where we subsequently flushed the Eastern Grass Owl, and on the morning of 18 August we obtained a fresh pellet 60 m distant. The first pellet was at a regularly used trap site where the vegetation was pressed down to raise the trap above water. It contained mammalian fur and skeletal remains of a single large swamp rat *Rattus lutreolus*. The fresh pellet was on our walking track between two trap stations. It was elongate and cylindrical, 84 mm long, bluntly rounded at one end and tapering at the other with a 4 mm terminal twist of mammal hairs and had maximum and minimum diameters of 28.0 mm and 25.5 mm respectively. It was coated with slimy mucous and contained a mass of mammalian fur and the skeletal remains of one grassland melomys *Melomys littoralis* and seven house mice *Mus musculus*. The disproportionate representation of house mice in this admittedly small sample hints that Eastern Grass Owls and mammal-trappers differ notably in the selectivity or efficiency with which they catch small mammals.

From February to August 1975 we have trapped a 6.25 ha grid (which includes the owl squat) on the Noosa Plain using 100 traps baited with sweet potato and bacon on each of 15 nights. We have made 304 captures of *M. littoralis* (57 individuals), 13 captures of *R. lutreolus* (6 individuals) and only six captures of *M. musculus* (6 individuals). Thus a single Eastern Grass Owl pellet contained remnants of more house mice than we have caught in 1,500 trap nights. Trapping in adjoining woodland has not suggested that house mice are more abundant off the plain.

We are grateful to the Queensland National Parks and Wildlife Service for permission to work in Cooloola Fauna Reserve, and to Mr D. Fleay for confirming identification of the owl feather. Our research is supported by a grant from the Australian Biological Resources Study.

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EDITOR'S NOTE ON THE BIRDS OF GROOTE EYLANDT, N.T.

Addendum to the article by P. Haselgrove - 'Notes on the Birds of Groote Eylandt, N.T.' (pp 32-41).

Mr Peter Haselgrove has recently had Mr Laurie Amiet's notes on birds seen during a visit to Groote Eylandt on 28 November 1956 (The Bird Observer, No. 304, March 1957) drawn to his attention by Mr Roy Wheeler. Mr Amiet's list included the following species not seen either during the earlier 1921 and 1948 visits, nor during the visits by Mr Haselgrove between 1971 and 1974: Mongolian Sand-dotterel, Eastern Golden Plover, Whimbrel, Dusky Honeyeater, Melville Island Friar-bird, Yellow Oriole and Black Butcher-bird. Mr Wheeler also points out that, with a list of this size, Groote Eylandt follows Stradbroke, Phillip, French, Fraser, Kangaroo and Bribie Islands in its number of bird species.