# THE SUNBIRD



Journal of the QUEENSLAND ORNITHOLOGICAL SOCIETY

Volume 29

Number 1

**April 1999** 

# CONTENTS

IAN GYNTHER and STUART PELL	
Report of the Queensland Ornithological Society Inc. Records Appraisal Committee, 1995-1997.	1
PETER F. WOODALL	
The birds of Peel Island, Moreton Bay eighty - five years on1	3
IAN McMAHON and ANDREW THELANDER An observation of a feeding association between the Platypus and the Dusky Moorhen 2	4
S.J.S. DEBUS, A.B. ROSE and J. HARRIE.  Diet of the Barn Owl Tyto alba at the Diamantina Lakes, western  Queensland	6

# OFFICERS AND COUNCIL FOR 1999

President DAWN MUIR

Vice President CARLA CATTERALL

Past President JULIAN BIELEWICZ

Country Vice Presidents

Treasurer

Secretary

DAWN ALLEN, LLOYD NIELSEN LYAL GRUNDY

SHEENA GILLMAN

Outings Officer DAWN MUIR

Campouts Officers NEIL STRODE

Sightings Officer STUART PELL

Sunbird Editor PETER BRITTON

Assistant Editor JEREMY THOMPSON

Librarian ROSLYN LAUNDON

Audiovisual Librarian ERNA BRAZIER

Projects Officer IAN VENABLES Conservation Officer DAVID MILTON

Membership Secretary GARTH INNES

Newsletter Editor GARY FISHER

Property Officer JAN BELL

Council Members LINDSAY AGNEW, FRED ARMBRUST PHIL BATTLEY, LYNDA LITZ-TYNE, ROY SONNENBURG

The objectives of the Society are to promote the scientific study and conservation of birds by all means possible, with particuler reference to the birds of Queensland.

Annual subscription rates to the Society are:

Ordinary Member	\$35.00
Family Member	\$40.00
Student Member	\$20.00
Country Member	\$30.00
Sunbird subscription only	\$25.00
Libraries, Universities	\$30.00
Overseas	\$30.00(Aust.)

All members receive a monthly newsletter and a copy of the quarterly journal, The Sunbird. The price of The Sunbird to non-members is \$6.00 per issue. The Society holds a general meeting and a field excursion each month.

General correspondence, including membership fees, should be addressed to the Secretary. The Society's address is:

P.O. Box 97, St. Lucia, Queensland, 4067.

# THE SUNBIRD

Volume 29 No. 1

April 1999

# REPORT OF THE QUEENSLAND ORNITHOLOGICAL SOCIETY INC. RECORDS APPRAISAL COMMITTEE, 1995-1997

#### IAN GYNTHER and STUART PELL

This is the first report of the Queensland Ornithological Society Inc. Records Appraisal Committee (QOSI RAC), a body established early in 1995 to appraise claims of rare, vagrant or unusual Queensland bird sightings that have been published, or are being considered for publication, in the Society's monthly Newsletter or journal, Sunbird. The formation of a sightings appraisal body and the establishment of formalised appraisal procedures within QOSI were sparked by the need to ensure the Society publishes accurate sighting information, in view of the fact that our records were increasingly being cited in scientific literature elsewhere. Hand in hand with these steps was the creation of a Records Officer position on QOSI's Management Committee. This report briefly outlines the membership, functions and mechanisms of QOSI RAC and summarises the results of the Committee's deliberations on submissions received during the period 1995 to 1997.

The structure and procedures of QOSI RAC are modelled on those used by the parallel national body, the Birds Australia Rarities Committee (BARC), and those of the New South Wales Ornithological Records Appraisal Committee (NSWORAC). Membership of the inaugural QOSI RAC was Ian Gynther (Chair, as Records Officer, QOSI), Greg Czechura, Rod Hobson, Glenn Holmes, Chris Pavey, Anita Smyth and David Stewart (Snr). In December 1996, Stuart Pell became QOSI Records Officer and subsequently, in May 1997, assumed the role of Chair of the Committee. The composition of the remainder of QOSI RAC has not changed. The main objectives of QOSI RAC are:

a) to provide informed, discerning and impartial appraisal of rare, vagrant and unusual bird sightings;

b) to make decisions on sightings by either accepting or not accepting records;

c) to maintain a 'List of Rare Queensland Birds'; and

d) to publish its decisions on a regular basis.

The Committee appraises reported sightings of rare and vagrant species in Queensland, including pelagic species observed within the Australian 200 nautical mile fishing zone, beach-washed specimens, and any species new to the State. Species considered are generally those included on the 'List of Rare Queensland Birds', which is given as an Appendix to this report. In this context, 'rare' is defined as a reporting rate of twenty records or fewer in Queensland over the last decade. The List is reviewed, and, where necessary, amended periodically (see below). The Committee also appraises reported sightings of other species where circumstances appear to warrant this, e.g. birds outside their usual range or habitat, or threatened species at new localities.

Reports of any species on the 'List of Rare Queensland Birds' that are also on the BARC Review List (published regularly in Wingspan) are forwarded to that Committee for consideration, as are all reports of species new to Australia. During the first year of operation, such cases were initially appraised by QOSI RAC before being passed on to the national Committee. This resulted in unnecessary double handling of submissions and, consequently, the practice was ceased. From then on, all relevant cases were forwarded directly to BARC. Submissions to QOSI RAC are made on a 'Rare Bird Report Form', available from the QOSI Records Officer. This form can also be found in past issues of the QOSI Newsletter (Vol. 26(5), June 1995; Vol. 27(7), August 1996). Submissions should comprise a completed Report Form together with field notes, which should be as comprehensive as possible. If available, photographs, video footage and taped calls are valuable evidence. Details of the operational guidelines of QOSI RAC, including how records are assessed as 'accepted' or 'not accepted' based on voting by Committee members, are available from the current QOSI RAC Chair.

# Review of 'List of Rare Queensland Birds', 1995-1997

During the period in question, Spotted Whistling-Duck Dendrocygna guttata and Singing Starling Aplonis cantoroides were added to the Queensland List. Based on reporting frequency, the Committee voted to remove Asian Dowitcher Limnodromus semipalmatus and Carpentarian Grasswren Amytornis dorotheae from the List. Red Goshawk Erythrotriorchis radiatus has been retained on the List despite being reported at a frequency greater than the stipulated guidelines for inclusion. The Committee felt that confirmed sightings will assist in defining locations and population size of this endangered species.

# QOSI RAC Deliberations, 1995-1997

From 1995 to 1997, thirty-five submissions were considered by the Committee, although two of these related to the same reported sighting. Of this total, five submissions concerned species on the national Review List, which, after our

initial appraisal, were forwarded to BARC for independent consideration. The outcome of these deliberations will not be provided here. Rather, these five cases, together with a further seven submissions sent directly to BARC without our prior consideration, are simply listed towards the end of the report. They will be detailed separately by the national Committee at a future date. Of the remaining thirty submissions appraised by QOSI RAC, eighteen were accepted and twelve were not accepted. Here, a brief summary of each accepted submission is provided, followed by a list of those records the Committee voted not to accept. The one exception to this format is a record that, although initially not accepted, was considered favourably following a subsequent submission by a second observer. Both submissions are discussed in the relevant case summary in the section describing accepted records. Cases in each section are ordered phylogenetically according to Christidis & Boles (1994).

#### ACKNOWLEDGEMENTS

We would like to express our sincere thanks and appreciation to members of QOSI RAC for their sustained hard work and diligence in reviewing each of the cases submitted to them. Only due to their expertise and willing contributions of time and energy has the Committee been able to operate so smoothly since its inception three years ago. The helpful advice provided by David Stewart (Jnr) on the proposed structure and operation of this appraisal body, and on the composition of the first 'List of Rare Queensland Birds', is gratefully acknowledged. The past and present Chairs of BARC, Bob Patterson and Tony Palliser, are also to be thanked for their valued assistance and for encouraging such open communication between our two committees. Finally, QOSI RAC would like to thank the many people who submitted their records to us for consideration and who have exhibited tremendous patience while awaiting a result. Without the support and understanding of the appraisal process by the Society's general membership, QOSI RAC simply could not function.

#### REFERENCES

- BERULDSEN, G.R. 1992. Another Queensland locality for the Carpentarian Grasswren. Sunbird 22: 49-50.
- BRITTON, P.L. 1996. The status of the Garganey in Queensland. Sunbird 26: 16-18.
- CHRISTIDIS, L. & BOLES, W.E. 1994. The Taxonomy and Species of Birds of Australia and Its Territories. Royal Australasian Ornithologists Union Monograph 2. Melbourne: RAOU.
- GARNETT, S. & SMITH, R. 1997. A second record of a Papuan species of paradise-kingfisher in Torres Strait and its relevance to the dissemination of Japanese Encephalitis. Sunbird 27: 83-84.
- HARRIS, P.L. 1992. A further Queensland record of the Carpentarian Grasswren. Sunbird 22: 23-24.

HIGGINS, P.J. & DAVIES, S.J.J.F. (Eds). 1996. Handbook of Australian, New Zealand & Antarctic Birds. Volume 3: Snipe to Pigeons. Melbourne: Oxford University Press.

MARCHANT, S. & HIGGINS, P.J. (Eds). 1990. Handbook of Australian, New Zealand & Antarctic Birds. Volume 1: Ratites to Ducks. Melbourne: Oxford University Press.

McLEAN, J.A. 1998. A North Queensland specimen of Long-tailed Jaeger Stercorarius longicaudus. Sunbird 28: 16-17.

NILAND, D.C. 1996. First record of Spotted Whistling-Duck in Australia. Sunbird 26: 39-41.

ROBERTS, G. 1996. A sight record of the Singing Starling Aplonis cantoroides in Australia. Sunbird 26: 42.

IAN GYNTHER, 10 Strathspey St, Kenmore, Q 4069. STUART PELL, 23 Henry St, Chapel Hill, Q 4069.

#### SYSTEMATIC LIST OF CASES ACCEPTED

Garganey Anas querquedula

Case No. 9 involved three separate records of Garganeys by different observers presented in manuscript form for publication in Sunbird. It constituted an unusual submission in that the Committee would have preferred to consider each observation individually. Primarily this was because many of the details of each sighting normally provided on a 'Rare Bird Report Form' were lacking, thus making a proper assessment difficult. The manuscript included information on two observations at Blakey's Crossing, Townsville, NEQ (4-5 birds on 17-18 March 1988; 1 male from 15-18 February 1992) and a flock of 28 birds at Inverleigh Station near Burketown, NWQ on 2 April 1990. Male birds were involved in each observation and diagnostic characters used for their identification in either breeding or eclipse plumage were described, as were features used to exclude Northern Shoveler A. clypeata, Australasian Shoveler A. rhynchotis and Blue-winged Teal A. discors. These details were considered sufficient for the submission to be accepted. This account has been published (Britton 1996).

Case No. 34 detailed a single bird at Awonga Point Sewage Works, Weipa, NEQ on 25 December 1995. The description was of a small, brownish teal, with double facial stripe and pale throat. The bird swam low in the water, with back profile sloping upward towards the tail. In flight, the bird showed bright grey in the upper forewing extending to the base of the primaries, with a greenish speculum in the secondaries, bordered white at front and rear. The underwing had a brown leading edge and, contrasting sharply with this, a longitudinal central white patch. The time of the year was appropriate for Australian records of this species.

# Soft-plumaged Petrel Pterodroma mollis

Case No. 40 concerned a single bird seen on the Continental Slope about 45 km  $\,$ 

off Southport, SEQ on 26 October 1996. The bird was viewed for ca. 10 minutes, in excellent visibility, and was approached to within 10 m. Photographs were submitted with this record. The bird was noticeably smaller than Great-winged Petrel P. macroptera (also present), and had a more erratic flight pattern, with wing-beats flatter and quicker. The head was grey overall, with a dark area through the eye and eye coverts. The forehead was noticeably mottled with white. The underparts were white, except for a continuous grey band across the foreneck. The underwing was mostly dark, apart from a pale wedge at the base of the forewing. In flight, the bird did not describe the wheeling arcs nor reach the elevation of the larger Pterodroma spp.; the flight pattern was 'flatter' overall. The species was distinguished from the pale phase of Herald Petrel P. arminjoniana, which is of larger size, has a white leading edge to the inner forewing and shows a white base to the primaries.

# Mottled Petrel Pterodroma inexpectata

Case No. 39 described a total of thirty-seven birds observed mostly as singles, but also in very loose groups of up to five birds, heading south between 14 and 48 km offshore from Southport, SEQ on 26 October 1996. The birds were on both the Continental Shelf and Continental Slope. Observation distances ranged down to ca. 25 m, and from just above sea-level to ca. 10 m elevation. Flight was swift, on long, narrow wings, and at times described an arc. The head was pale grey, with a dark area around the eye and eye coverts. The chin, breast and undertail coverts were white and a pale grey semi-collar was present. There was a distinct black area around the carpal, extending onto the underwing coverts; the leading edge of the secondaries was also black. The upperparts were predominantly grey, apart from a distinct 'M' extending from the lower back across the greater coverts to the carpal and into the primaries. The most likely other possibility, Collared Petrel P. leucoptera brevipes (sometimes treated as a full species -Marchant & Higgins 1990), was discussed and logically discounted. The darker forms of Collared Petrel also have grey underparts, but the grey area is not as clear-cut and extends onto the undertail. Furthermore, these forms have a darker head.

# White-chinned Petrel Procellaria aequinoctialis

Case No. 13 referred to a large, dark petrel seen at distances of as little as 10-15 m and for up to a minute as it flew towards, alongside and behind the boat during a pelagic trip on 1 July 1995. The observation, by at least seven people, occurred in open offshore water about 51 km east of Southport, SEQ. The weather was fine and sunny, with good visibility and the seas were slight. Detailed notes accompanied the submission which described all diagnostic features. The greater size in comparison with Providence Petrels Pterodroma solandri, seen simultaneously, and a description of the bird's flight style provided extra detail. Finally, the straw-coloured bill which lacked a conspicuous dark tip to the maxillary unguis ruled out its congeners, Black Petrel P. parkinsoni and Westland Petrel P. westlandica.

#### Wandering Albatross Diomedea exulans

Case No. 41 detailed a single bird seen on the Continental Slope about 34 km offshore from Southport, SEQ on 26 October 1996. The bird was approached to within ca. 40 m. A photograph was submitted with this record. Legs, feet and massive bill were pink. Head, underparts and mantle were wholly white. The underwing was predominantly white, apart from the wing-tips and trailing edge, which were black. On the upperwing, the primaries and secondaries were blackish, with some mottling in the greater coverts. The Royal Albatross D. epomophora, the only species likely to be confused with the Wandering Albatross, has a flatter, more streamlined head profile, and a black cutting edge to the bill.

## Black-bellied Storm-Petrel Fregetta tropica

Case No. 11 concerned a storm-petrel observed in open, offshore water about 61 km east of Southport, SEQ during the same pelagic trip and under the same conditions referred to in Case No. 13. At least seven people observed the bird, which was seen at ranges down to 5-10 m for a total period of 3-4 minutes during a 10 minute period. The submission was well supported by notes and sketches made shortly after the observation. It included key features such as the black pattern on the centre of the underparts and the projection of the toes beyond the tail. The Committee had no hesitation in accepting the record.

#### Red Goshawk Erythrotriorchis radiatus

Case No. 6 involved a large raptor observed flapping and gliding near tree top height along the banks of the Gregory River at Gregory Downs, NWQ on 21 January 1995. The bird was watched for 2-3 minutes at distances ranging from 20 to 100 m under fine, sunny conditions. A good description of plumage and behaviour was supplied and these were entirely consistent with the species. In addition, the habitat was suitable and the location well within the Red Goshawk's known range.

# Asian Dowitcher Limnodromus semipalmatus

Case No. 8 concerned an individual observed and photographed over a 20-30 minute period on 23 December 1994 on mudflats at the Cairns Esplanade, NEQ. The description of the bird, although brief, included salient bill and plumage features, as well as a size comparison with nearby Bar-tailed Godwits Limosa lapponica. No attempt was made to discount the North American species of dowitcher, although three 35 mm colour transparencies provided with the submission demonstrated the identification was correct.

Case No. 21 detailed two Asian Dowitchers observed over more than 3 hours on 26 February 1995 at Inskip Point, SEQ during a Queensland Wader Study Group shorebird census of the Great Sandy Strait. All diagnostic characters were described, including the shorter leg length compared to accompanying Bar-tailed Godwits. Adescription of the characteristic 'stitching' feeding behaviour

supported the identification. Although not specifically addressed by the observer, the birds' 'black' legs ruled out either of the North American dowitchers.

Case No. 28 referred to two birds observed at the high tide wader roost site at Manly Boat Harbour, Brisbane on 23 September 1995 under good viewing conditions. The submission involved a very thorough description of overall shape, plumage, bill length and appearance, size (reported to be intermediate between the Great Knots Calidristenuirostris and Bar-tailed Godwits also present at the roost), and the typical vertical probing action used by the species when feeding. The possibilities of Short-billed Dowitcher L. griseus or Long-billed Dowitcher L. scolopaceus were considered but eliminated due to the larger size of the Manly birds. The attention to detail in this case was welcomed by the Committee and the submission was unanimously accepted.

#### Great Skua Catharacta skua

Case No. 38 described a single bird observed on the Continental Shelf about 11 km off the northern end of South Stradbroke Island, SEQ on 3 August 1996. Observation range was ca. 75 m at a height of 30 m. The bird was very dark brown overall, with large white primary panels. The head was heavy and uniformly dark, with no paleness around the lores. The bill was very heavy. The possibility of South Polar Skua *C. maccormicki*, which has a dark phase, was discounted partly on the basis of its smaller size and finer head and bill, but also because of seasonality. Previous Australian sightings of Great Skua have been in August, whereas the South Polar Skua generally returns from the Northern Hemisphere from October onwards.

# Long-tailed Jaeger Stercorarius longicaudus

Case No. 32 was a manuscript describing a freshly dead specimen of a Long-tailed Jaeger discovered at Finch Bay, Cooktown, NEQ on 17 February 1996. The specimen is lodged in the Queensland Museum as QMO30583 and registered as a subadult female. The manuscript was forwarded to the Committee for consideration because of its intended publication in Sunbird. The omission of any plumage description, and some irregularities between the stated measurements and those previously published for the species (Higgins & Davies 1996), made assessment of the record difficult and necessitated that the specimen be accessed directly prior to voting. Additional morphological details gathered from an examination of QMO30583 in March 1997 were circulated and satisfied Committee members that the individual concerned, in this case a light phase bird, was indeed S. longicaudus. The record has subsequently been published (McLean 1998).

# Blue-winged Parrot Neophema chrysostoma

Case Nos. 22 & 37 related to the same sighting of seven Blue-winged Parrots on 25-26 April 1995 at Caryapundy Swamp/Lake Bulloo, 9 km north of Wompah

Gate on Pyampa Station, SWQ. The initial submission, by an observer who was confident of his identification but who had concentrated on obtaining sound recordings of the parrots rather than making field notes, contained insufficient details of plumage and behaviour to enable the Committee to assess the record favourably. It was subsequently resubmitted by another observer present at the time who described the circumstances of the sighting more fully. The parrots were feeding quietly on the ground in dense clumps of lignum among open grassland and chenopod shrubland, adjacent to the muddy shores of Lake Bulloo. They were observed for a total of ca. 90 minutes. When disturbed, they would rise, often high, with a high-pitched tinkling call, before returning to forage on the ground or to perch on available shrubs or dead trees. Detailed plumage descriptions were provided and clear separation from Elegant Parrot N. elegans was established. Similarly, the extremely unlikely Rock Parrot N. petrophila and Orange-bellied Parrot N. chrysogaster were discounted. This record highlights the inherent bias in the appraisal process towards submissions which emphasise visual features used in bird identification when, for the majority of species, call characteristics from high quality recordings should be equally diagnostic.

#### Black-eared Cuckoo Chrysococcyx osculans

Case No. 25 concerned a ca. 5 minute sighting of a Black-eared Cuckoo perched on overhead wires in an area comprising a mix of gardens and undeveloped coastal forest at Kinka Beach, MEQ on 26 August 1995. A submission was requested because this species, while certainly not rare in Queensland, was judged to be beyond its normal range and in atypical habitat at this locality. The description provided, although brief, included characters consistent with the species such as the dark line though the eye, grey upperparts, whitish underparts and white tail tip. Furthermore, possible confusion with juvenile Horsfield's Bronze-Cuckoo C. basalis was eliminated by the observer due to the lack of rufous in the tail. The record was unanimously accepted.

# Carpentarian Grasswren Amytornis dorotheae

Case No. 7 referred to two birds observed for ca. 5 minutes as they moved across a rocky, spinifex-covered hillside approximately 80 km north of Cloncurry, WCQ on 26 January 1995. Recorded features such as the white throat and underparts, and the black line beneath the eye, were sufficient to rule out Dusky Grasswren A. purnelli or Striated Grasswren A. striatus. The habitat description was consistent with known information and the identification was further supported by the birds' vigorous responses to the playing of taped calls of Carpentarian Grasswren. Although the species' known distribution has been extended eastward recently (Beruldsen 1992, Harris 1992), this record represents a further easterly extension to the range.

Case No. 27 involved three birds observed over a 3 hour period on 20 September 1995 on the Lady Loretta Mine Project Road, about 64 km west of Mt Isa, WCQ.

The site is a rocky gully with open woodland and spinifex cover. The descriptions of plumage features, call and habitat were sufficient to rule out all other grasswrens. Furthermore, the location is well known for this particular species.

Regent Honeyeater Xanthomyza phrygia

Case No. 23 related to two medium-sized, black and yellow honeyeaters observed briefly in a remnant patch of box-gum woodland at 'Spring Creek', about 16 km NNW of Pikedale, SEQ on 31 May 1995. The birds were seen for only 10-20 seconds as they flew past at a level above tree top height (10 m) before landing in a flowering box-gum and being lost from sight among numerous other honeyeaters. Despite the brevity of the observation, the submission included good detail on overall appearance (almost the size of a Noisy Miner Manorina melanocephala, but shaped like a small wattlebird Anthochaera sp.), flight style (direct and undulating) and morphological characters (in particular the yellow flashes in both outer primary tips and outer edges of tail). This, together with the birds' presence in habitat considered typical for this species, more than satisfied all Committee members.

# SYSTEMATIC LIST OF CASES NOT ACCEPTED

- Radjah Shelduck Tadorna radjah: One bird at Burpengary Creek, Burpengary, SEQ on 12 August 1995 (Case No. 24).
- Garganey Anas querquedula: One female at Coombabah Sewage Treatment Works, Coombabah, SEQ on 16 November 1995 (Case No. 33).
- Mottled Petrel Pterodroma inexpectata: At least eighty birds off the southern headland at Point Lookout, North Stradbroke Island, SEQ on 2 November 1996 (Case No. 42).
- Red Goshawk Erythrotriorchis radiatus: One bird near Burketown, NWQ on 22 September 1995 (Case No. 26).
- Black-breasted Button-quail Turnix melanogaster: One female at Ravenshoe, NEQ on 25 May 1995 (Case No. 36).
- Double-eyed Fig-Parrot Cyclopsitta diophthalma coxeni: Four birds at Dalrymple Creek, Goomburra State Forest, SEQ on 27 December 1994 (Case No. 2).
- White-rumped Swiftlet Collocalia spodiopygius: At least six birds at Buckley's Hole, Bribie Island, SEQ on 30 October 1995 (Case No. 35).
- Carpentarian Grasswren Amytornis dorotheae: Several individuals on Lady Loretta Mine Project Road, about 64 km west of Mt Isa, WCQ on 31 August 1995 (Case No. 29).
- Red-browed Pardalote Pardalotus rubricatus: Two birds at Banksia Beach, Bribie Island, SEQ on 12 December 1995 and one bird heard at the same locality on 16 December 1995 (Case No. 31).
- Grey Honeyeater Conopophila whitei: One juvenile at North Delta Station, 32 km east of Barcaldine, SCQ on 7 May 1995 (Case No. 10).

Cinnamon Quail-thrush Cinclosoma cinnamomeum: Single birds 71 km and 153 km south of Quilpie on Toompine Road, SWQ on 9 September 1995 (Case No. 30).

# CASES FORWARDED TO BIRDS AUSTRALIA RARITIES COMMITTEE

- Spotted Whistling-Duck Dendrocygna guttata: Up to twelve birds at Comalco Waste Water Treatment Plant, Weipa, NEQ during March and April 1995 (QOSI RAC Case No. 3; Niland 1996).
- White-bellied Storm-Petrel Fregetta grallaria: Two birds about 61 km off Southport, SEQ on 1 July 1995 (QOSI RAC Case No. 12; BARC Case No. 202).
- Temminck's Stint Calidris temminckii: One bird at Leslie Creek near Malanda, NEQ on 24 September 1995 (QOSI RAC Case No. 15; BARC Case No. 212).
- Variable Oystercatcher Himantopus unicolor: One bird at Amity Point, North Stradbroke Island, SEQ on 16 March 1996 (QOSI RAC Case No. 19; BARC Case No. 210).
- Ringed Plover Charadrius hiaticula: A single individual at Fisherman Islands, Brisbane on 23 September 1995 (QOSI RAC Case No. 14; BARC Case No. 205).
- Caspian Plover Charadrius asiaticus: One bird near the mouth of Alligator Creek, Cleveland Bay, NEQ on 23 November 1995 (QOSI RAC Case No. 16; BARC Case No. 207).
- **Franklin's Gull** Larus pipixcan: A single individual in breeding plumage at Margate, SEQ on 8 November 1994 (QOSI RAC Case No. 1; BARC Case No. 201).
- **Grey Ternlet** Procelsterna cerulea: One bird at Deadmans Beach, Point Lookout, North Stradbroke Island, SEQ on 15 February 1996 (QOSI RAC Case No. 17; BARC Case No. 209).
- **Grey Ternlet** Procelsterna cerulea: One bird at Burleigh Heads National Park, Burleigh Heads, SEQ on 3 May 1996 (QOSI RAC Case No. 20; BARC Case No. 211).
- Common Paradise-Kingfisher Tanysiptera galatea: A single individual at Stephens Island, Torres Strait, NEQ on 15 March 1993 (QOSI RAC Case No. 4; BARC Case No. 203; Garnett & Smith 1997).
- Red-rumped Swallow Hirundo daurica: Five birds about 4 km north of Newell Beach, Mossman, NEQ on 19 February 1996 (QOSI RAC Case No. 18; BARC Case No. 208).
- Singing Starling Aplonis cantoroides: Two adults and four juveniles on Boigu Island, Torres Strait, NEQ on 22 December 1987 (QOSI RAC Case No. 5; BARC Case No. 204; Roberts 1996).

## LIST OF RARE QUEENSLAND BIRDS - 1998

Revision date: 3 May 1998

#### **Common Name**

\*Spotted Whistling-Duck

\*Northern Shoveler

Garganey

Little Penguin

Common Diving-Petrel

Southern Fulmar

Kerguelen Petrel

White-headed Petrel

\*Kermadec Petrel

\*Herald Petrel

Soft-plumaged Petrel

Mottled Petrel

White-necked Petrel

Black-winged Petrel

\*Cook's Petrel

\*Broad-billed Prion

Salvin's Prion

Antarctic Prion

Slender-billed Prion White-chinned Petrel

\*Westland Petrel

Little Shearwater

Wandering Albatross

Grev-headed Albatross

Buller's Albatross

Sooty Albatross

Light-mantled Sooty Albatross

Black-bellied Storm-Petrel

\*White-bellied Storm-Petrel

Red Goshawk

\*Gurney's Eagle

\*Buff-breasted Button-quail

Plains-wanderer

Swinhoe's Snipe

Common Redshank
\*Lesser Yellowlegs

Long-toed Stint

\*Dunlin

Ruff

#### Scientific Name

Dendrocygna guttata Anas clypeata

Anas ciypeata Anas querquedula

Eudyptula minor

Pelecanoides urinatrix

Fulmarus glacialoides

Lugensa brevirostris

Pterodroma lessonii

Pterodroma neglecta

Pterodroma arminjoniana

Pterodroma mollis

Pterodroma inexpectata

Pterodroma cervicalis

Pterodroma nigripennis

Pterodroma cookii

Pachyptila vittata

Pachyptila salvini

Pachyptila desolata Pachyptila belcheri

Procellaria aequinoctialis

Procellaria westlandica

Puffinis assimilis

Diomedea exulans

Diomedea chrysostoma

Diomedea bulleri

Phoebetria fusca

Phoebetria palpebrata

Fregetta tropica

Fregetta grallaria

Erythrotriorchis radiatus

Aquila gurneyi

Turnix olivii

Pedionomus torquatus

Gallinago megala

Tringa totanus

Tringa flavipes

 $Calidris\ subminuta$ 

Calidris alpina
Philomachus pugnax

Red-necked Phalarope

**Banded Stilt** 

\*Ringed Plover

\*Little Ringed Plover

Great Skua

\*South Polar Skua

Long-tailed Jaeger

Pacific Gull Kelp Gull

\*Laughing Gull

\*Franklin's Gull

Arctic Tern Fairy Tern

Grey Ternlet

White Tern

\*Collared Imperial-Pigeon

Purple-crowned Lorikeet

Double-eyed (Coxen's) Fig-Parrot

Princess Parrot Paradise Parrot Blue-winged Parrot

Scarlet-chested Parrot
\*Night Parrot
Long-tailed Cuckoo

\*Glossy Swiftlet \*Uniform Swiftlet

\*House Swift

Slaty-backed Thornbill Banded Whiteface Regent Honeyeater

\*Grey Wagtail

\*Black-backed Wagtail Star Finch (eastern form) \*Red-rumped Swallow

Pacific Swallow

\*Oriental Reed-Warbler

\*Blue Rock Thrush

\*Singing Starling

Phalaropus lobatus

Cladorhynchus leucocephalus

Charadrius hiaticula Charadrius dubius

Catharacta skua

Catharacta maccormicki

Stercorarius longicaudus

Larus pacificus Larus dominicanus

Larus atricilla

Larus pipixcan

Sterna paradisaea Sterna nereis

Procelsterna cerulea

Gygis alba

Ducula mullerii

Glossopsitta porphyrocephala Cyclopsitta diophthalma coxeni

Cyclopsitia diopninaima o Polytelis alexandrae Psephotus pulcherrimus Neophema chrysostoma Neophema splendida

Pezoporus occidentalis
Eudynamys taitensis
Collocalia esculenta

Collocalia vanikorensis

Apus affinis

Acanthiza robustirostris Aphelocephala nigricincta Xanthomyza phrygia

Motacilla cinerea Motacilla lugens

Neochmia ruficauda ruficauda

Hirundo daurica Hirundo tahitica

Acrocephalus orientalis Monticola solitarius Aplonis cantoroides

<sup>\*</sup> Entries in bold text are on the BARC Review List for Australia

## THE BIRDS OF PEEL ISLAND, MORETON BAY: EIGHTY-FIVE YEARS ON

#### PETER F. WOODALL

#### ABSTRACT

Peel Island, in central Moreton Bay between Cleveland Point and North Stradbroke Island, has considerable historical and ornithological significance. The latter stems from the bird lists of an early resident, Noel Agnew, compiled between 1912 and 1920. In the current survey, twenty-three visits were made to the island between 1991and 1998, covering all months, and ninety-five species were recorded, which is forty-one fewer than were listed by Agnew (1913, 1915, 1921). Many of the differences between these two lists are the result of habitat changes on Peel Island (reduced wetlands and grasslands) and the omission of rare and vagrant species. Comparisons with the avifauna of other islands are drawn and the significance of winter visitors is also discussed.

#### INTRODUCTION

Peel Island is historically important in the early European settlement of Moreton Bay since it was a Quarantine Station from 1867 to 1910, an Inebriates Asylum from 1910 to 1916 and a Lazaret for leper patients from 1907 to 1959 (Ludlow 1989). It also has considerable importance in the ornithological history of Queensland because it was the home of Noel Agnew who made some of the earliest bird reports for this region (Agnew 1913, 1915, 1921). He was the longest resident at Peel Island, first going there in 1907, having contracted leprosy at Dunwich as a young boy. In his later years he became blinded and crippled by the disease and finally died in 1937. Ludlow (1994) relates this tragic story in more detail.

Peel Island provides a unique opportunity to investigate changes in the avifauna of one part of south-east Queensland over a period of 85 years. Being an island it has a clearly defined boundary and there has been little development on the island since the establishment of the Lazaret at the beginning of the century. Agnew's records provide one of the best descriptions of Brisbane's birds at the start of the twentieth century. Peel Island also provides a good opportunity to investigate seasonal changes in coastal bird populations.

#### STUDY AREA AND METHODS

Peel Island (centred on 27°30'S, 153°21'E) lies in central Moreton Bay, 5 km east of Cleveland Point on the mainland and 2.5 km west of Dunwich on North Stradbroke Island. The island is about 3 km long and 1-2 km wide, with a total

area of ca. 400 ha (Fig. 1). Horseshoe Bay in the south has a long sandy beach backed with coastal she-oak Casuarina equisetifolia, while the northern and western margins of the island consist of mangrove forest, with Avicennia marina and Rhizophora stylosa. The centre of the island has a tea-tree swamp dominated by Melaleuca quinquenervia and Lophostemon suaveolens. Most of the island is covered with low to tall open forest, having Corymbia intermedia, Eucalyptus tereticornis, Lophostemon confertus, L. suaveolens, Allocasuarina littoralis and Callitris columellaris as the dominant trees. There is a small patch of banksia woodland (Banksia aemula, B. serrata) between the swamp and Horseshoe Bay. Around the buildings of the Lazaret, a number of large old Mango Mangifera indica and Fig Ficus sp. trees grow.

The current survey started in 1991 and, for the following two years, monthly surveys were made over the winter months. In 1997 and 1998 surveys were conducted over the summer months and in June to complete the monthly coverage. In all, twenty-three surveys have been made, and, with the exception of May (3), August (1) and December (1), each month has two surveys. On each of the surveys, the major roads of the island (Fig. 1) were walked. The 1997/98 surveys started from the Stone Jetty, continued around the Bluff, and on the central road to the Lazaret, where a circuit of the buildings and the cemetery was made; followed by a visit to the wells, then on the track to the Western Jetty, and finally on the PMG line to the beach road and back to the Stone Jetty. The 1991/ 93 surveys started at the Western Jetty and continued to the Lazaret, cemetery and wells, then down the central road to the Bluff, and then back on the beach road and PMG line to the Western Jetty. Frequent diversions were made from these main roads to follow up bird sightings, calls, etc. Most observations were made with binoculars but a telescope was used occasionally to identify birds on the mudflats and surrounding seas. Spotlighting was undertaken on two nights spent on the island in May 1991 and October 1992. On both of these weekends, considerable time was also spent off the roads, investigating minor habitats such as the eastern Melaleuca swamp and the mangroves extending out to Cucumber Point. Apart from these two overnight stays, approximately 7 hours were spent on the island for each survey, starting at 0800-0900 h. Bird names and sequence follow Christidis & Boles (1994) and this reference should be consulted for scientific names, which have been omitted here to conserve space.

#### RESULTS

During the present survey, ninety-five species of birds were recorded from Peel Island (Appendix 1). Over one-quarter of these (twenty-five species) were considered vagrants (or rare residents) as they were recorded on only one or two occasions (<10%). Many species (forty-three) were considered residents with records during all seasons of the year. This category included some migrant waders that had individuals overwintering (Bar-tailed Godwit, Whimbrel,

Eastern Curlew) and some species that were present most of the year but were overlooked or absent in certain months.

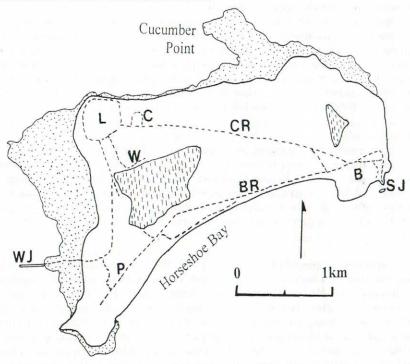


Fig. 1. Map of Peel Island. Roads and tracks covered on each survey are shown in broken lines. Stippled area = mangroves, dashed area = Melaleuca swamp; B=Bluff; BR=beach road; C=cemetery; CR=central road; L=Lazaret; P=former PMG line; SJ=Stone Jetty; WJ=Western Jetty; W=wells.

Summer visitors included waders (Grey-tailed Tattler, Ruddy Turnstone), Common Koel and White-cheeked Honeyeater. The winter visitors were more numerous, including two seabirds (Eastern Reef Egret, Gull-billed Tern) and eleven open forest or woodland birds (Brown Cuckoo-Dove, Little Lorikeet, Noisy Pitta, Spotted and Striated Pardalotes, Scarlet Honeyeater, Rose Robin, Golden Whistler, Willie Wagtail, Olive-backed Oriole, Varied Triller). Finally three species appeared to be passage migrants, being recorded in spring and autumn only (Rainbow Bee-eater, Black-faced Monarch, Rufous Fantail).

#### DISCUSSION

#### Comparisons with Agnew's Results

It is not clear from his writings exactly when Agnew started or concluded his observations. The only date given in his 1913 paper is for December 1912 and the last date in his 1921 paper is for January 1920. This means that he had at least seven years of observations on the island, with much greater opportunity to record vagrant or rare species, compared with the twenty-five days for my surveys. It is not surprising, therefore, that he has a considerably larger total species list for the island than I did (136[161] species vs. 95).

Of the ninety-five species that I recorded from Peel Island (Appendix I), thirty-one were not recorded by Agnew (1913, 1921). Some of these were uncommon species (recorded only once or twice from the island) that he could have missed, such as Brown Goshawk, Collared Sparrowhawk, Peregrine Falcon, and White-eared and Spectacled Monarchs. Others could have been easily confused by Agnew with other similar species (Little Black Cormorant, Little and Intermediate Egrets, waders, terns, White-cheeked Honeyeater (see Table 1)).

Some species not recorded by Agnew (1913, 1921) were regularly seen on the island during this survey (Striated Heron, Royal and Yellow-billed Spoonbills, Brahminy Kite, Brown Cuckoo-Dove, Scaly-breasted and Little Lorikeets, Rainbow Bee-eater, Black-faced Monarch, Lewin's, Mangrove and Brown Honeyeaters, Spangled Drongo). Many of these are distinctive and common species and their absence from Agnew's records is hard to explain. It seems unlikely that they were all absent from the island eighty years ago and a more likely explanation is that they were somehow overlooked in the compilation of Agnew's lists. This suggestion is further strengthened by the statement in Agnew's 1921 paper "...which makes the total 161 species to date". However, the total number of species listed in his 1913, 1915 and 1921 papers was only 136.

Many of the species listed by Agnew (1913, 1921), but not recorded in the present survey, were described by him as "rare" or "stray migrants", etc. (e.g. White-faced Storm-Petrel, Pacific Golden Plover, Grey Plover, Common Sandpiper, Pacific Gull, Sooty Tern, Australian Hobby, Rose-crowned Fruit-Dove, Common Bronzewing, Yellow-tailed Black-Cockatoo, Galah, Sulphur-crested Cockatoo, Pallid Cuckoo, Horsfield's Bronze-Cuckoo, Tawny Frogmouth, White-throated Needletail, Fork-tailed Swift, Dollarbird, White-throated Treecreeper, Superb Fairy-wren, White-naped Honeyeater, Eastern Spinebill, Red-capped Robin, Varied Sittella, Barred Cuckoo-shrike, White-bellied Cuckoo-shrike, Masked and Dusky Woodswallows, Grey and Pied Butcherbirds, Satin Bowerbird, Russet-tailed Thrush). Apart from the White-faced Storm-Petrel and the Pacific Gull, these are still recorded in this region (Roberts 1979, I. Gynther pers.

comm.) and might well still visit the island infrequently; for example a Galah was reported to have visited the island for a short time before the start of this survey (R. Cowie, pers. comm.). Similarly, Agnew (1921) described the Black Swan as "seldom seen, although common in other parts of the bay", and although I did not record it from Peel Island during this survey, it was seen at Cleveland Point. Other species on Agnew's lists are now considered mis-identifications (Table 1) on the basis of being far out of range, the lack of suitable habitat or the apparent confusion with another common species.

 $TABLE\,1. Species\,recorded\,by\,Agnew\,but\,considered\,mis-identifications.$ 

Agnew's (1913, 1915, 1921) Species	Suggested Correction
Inland Dotterel	? small waders
Hooded Plover	? small plovers
White-fronted Tern	? Crested Tern
Superb Parrot	? Scaly-breasted Lorikeet
Western Gerygone	Mangrove Gerygone
Red-headed Honeyeater	Scarlet Honeyeater
New Holland Honeyeater	White-cheeked Honeyeater
Flame Robin	Rose Robin
Hooded Robin	?
Crested Bellbird	?
Olive Whistler	Golden Whistler
Australian Raven	Torresian Crow
Beautiful Firetail	? or sole men arm are life.
Metallic Starling	Spangled Drongo

The absence of some species that were recorded by Agnew (1913, 1921) but not during the present survey can probably be explained by changes in habitat. Many are species associated with marshes and swamps (Plumed Whistling-Duck, Black Bittern, Glossy and Straw-necked Ibis, Brolga, Buff-banded Rail, Australian Spotted Crake, Purple Swamphen, Eurasian Coot, Latham's Snipe, Azure Kingfisher). This probably reflects both a local reduction of this habitat on Peel Island and a more general reduction in south-east Queensland as swamps have been drained and "re-claimed". Rainfall has been below average in south-east Queensland for most of the 1990s. As an example it is noteworthy that, during the present survey, the *Melaleuca* swamp has never been as wet as it was when first seen in May 1991, and in 1998 it was reduced to a few small ponds in its centre. Similar conditions have been reported from other Moreton Bay islands (Morland 1998).

The absence of other species listed by Agnew (1913, 1921), which are characteristic of more open grassland (Stubble Quail, Black-shouldered Kite, Spotted Harrier, Brown Falcon, Singing Bushlark, Richard's Pipit, Golden-headed Cisticola, Zebra and Double-barred Finches), suggests that this habitat has declined on Peel Island. The former occupants of Peel Island would have encouraged grassland and open woodland by cutting trees for firewood and by regular burning (P. Ludlow, pers. comm.). Agnew gave few descriptions of habitat, but he wrote for Stubble Quail (1921), " .. seldom seen, owing to the abundance of grass", for Richard's Pipit (1921), "...now resident on grassy flats on S.E.", and for Golden-headed Cisticola (1913), .. "inhabits mainly the grassy and swampy parts of the island... a fire demolished a nest and eggs". Nowhere on the island today is there an abundance of grass. A comparison of aerial photographs taken of Peel Island in 1958, 1969 and 1997 confirmed that there has been a considerable increase in tree cover during this forty-year period. Many of the tracks and roads that were clearly visible in the 1958 photograph are now partially or totally obscured by trees.

The Black-eared Cuckoo and White-fronted Chat, both recorded on Peel Island by Agnew (1913, 1921) but not subsequently, seem to have suffered general declines in south-east Queensland (Roberts 1979). Agnew recorded both the White-breasted and Masked Woodswallow breeding on Peel Island and, although the White-breasted Woodswallow was recorded once from Peel Island in this survey, the Masked Woodswallow is no longer common in Moreton Bay.

Agnew (1913) recorded the Peaceful Dove as "common" and the Bar-shouldered Dove as "rare", while in the present survey the situation was reversed: the Bar-shouldered Dove was recorded regularly and the Peaceful Dove was never seen. Spotted Turtle-Doves were seen around the Lazaret in the early 1990s, but, with the removal of the caretaker's domestic poultry, they have gone. In the late 1990s, the removal of Lantana thickets around the Lazaret and regular mowing to reduce the fire hazard has probably decreased suitable habitat for the Noisy Pitta, although they could still occur elsewhere on the island. This regular disturbance may have also caused Nankeen Night Herons and a small winter camp of flying-foxes Pteropus spp. to move from the immediate surrounds of the Lazaret.

# Comparisons with Nearby Islands

Barry & Vernon (1977) compared the avifauna of Fraser Island with that of major islands of Moreton Bay. They excluded sea birds and water birds from much of their analysis because many of these records were for vagrants, and thus were very dependent on the intensity of observation. However, they found similar numbers of land birds from Fraser Island (145), North and South Stradbroke Islands (138) and Bribie Island (124), with Moreton Island having a much lower total of 66. Both Peel Island (63, based on this survey) and Moreton

Island (66) have similar numbers of land birds, and the distribution of these birds among orders is very similar (number of species on Peel/number of species on Moreton: Galliformes 1/1; Falconiformes 7/8; Columbiformes 4/5; Psittaciformes 3/2; Cuculiformes 5/4; Strigiformes 1/1; Caprimulgiformes 0/2; Coraciiformes 5/5; Passeriformes 35/35, others 2/3). Barry & Vernon (1977) suggested that the lower numbers of land birds for Moreton Island were due to lack of observation. This may be partly true, but it is likely that the size of the island, the limited range of habitats and its relative isolation from the mainland are also important factors.

There are several species which Agnew (1913, 1921) recorded from Peel Island that have not been recently recorded in spite of the availability of apparently suitable habitat and their presence on nearby North Stradbroke Island. These include White-throated Treecreeper and Grey and Pied Butcherbirds. Their absence from Peel Island may be due to limited dispersion from the mainland or North Stradbroke Island. Four species recorded in the current survey on Peel Island have not been listed for North Stradbroke Island (Barry & Vernon 1977, Durbidge & Covacevich 1981) (Chestnut Teal, Nankeen Night Heron, Yellow-billed Spoonbill, Channel-billed Cuckoo), but it is likely that they will be recorded there in the future.

#### Seasonal Patterns

Agnew (1913) considered that "most birds" on Peel Island were winter migrants. This seems an over-generalization in terms of the numbers of species but may be true in terms of the numbers of individuals. The present survey has indicated that there are more species in the resident category, with records from all seasons of the year, than there are in the vagrant, summer visitor or winter visitor categories. A few species are summer migrants and there is a large group of winter migrants. In winter, some of the major trees on the island are flowering (Melaleuca, Banksia) and this food resource, with its associated insects, probably accounts for many of the winter visitors. The presence of several species probably reflects a movement from inland forests to coastal lowlands in winter (Brown Cuckoo-Dove, Noisy Pitta, Scarlet Honeyeater, Golden Whistler). The Noisy Pitta was recorded in some years (1991, 1993) but not others (1992, 1998) despite diligent searching.

It was surprising that the Yellow-faced Honeyeater was recorded only twice on the island, because at Wellington Point, only a few kilometres away on the mainland, there is a major migration route of this species with thousands passing each day at the height of the season (Robertson & Woodall 1983). Apparently these migrating birds stay close to the shoreline and do not venture out over Moreton Bay.

#### Conclusion

Some species recorded by Agnew (1913, 1915, 1921) seem to have been mis-identifications and, in some cases, alternative species, can be suggested (see Table 1). However, considering the limited availability of bird books at that time and his inability to visit libraries or the museum, Agnew's efforts at listing the avifauna of Peel Island are quite remarkable.

#### ACKNOWLEDGEMENTS

I am grateful to the Redland Shire Council and its former caretaker on Peel Island, Mr Ray Cowie, for initially granting me permission to conduct this survey. More recently, the Department of Environment and Heritage, and particularly Mr Neville Smith and Mr Shayne O'Sullivan, have granted me access to the island and assistance with transport.

#### REFERENCES

- AGNEW, N.V.I. 1913. The birds of Peel Island. Emu 13: 93-97.
- AGNEW, N.V.I. 1915. Extension of locality. Emu 15: 51.
- AGNEW, N.V.I. 1921. Further notes from Peel Island, Moreton Bay, Queensland. Emu~21:~131-137.
- BARRY, D.H. & VERNON, D.P. 1977. The birds of Fraser Island with comments on the Cooloola Peninsula, Stradbroke, Moreton and Bribie Islands. Occasional Papers in Anthropology (University of Queensland) 8: 179-205.
- CHRISTIDIS, L. & BOLES, W.E. 1994. The Taxonomy and Species of Birds of Australia and its Territories. Royal Australasian Ornithologists Union Monograph 2. Melbourne: RAOU.
- DURBIDGE, E. & COVACEVICH, J. 1981. North Stradbroke Island. Amity Point: Stradbroke Island Management Organisation.
- $LUDLOW, P.\,1989.\,Peel\,Island.\,Paradise\,or\,Prison.\,Stones\,Corner, Qld.\,P.\,Ludlow.$
- LUDLOW, P. 1994. The most solitary man. Moreton Bay People 2: 11-13. MORLAND, L. 1998. Women in the Man groves. The Growing Idea. Winter 1998.
- ROBERTS, G.J. 1979. The Birds of South-east Queensland. Brisbane: Queensland Conservation Council.
- ROBERTSON, J.S. & WOODALL, P.F. 1983. The status and movements of honeyeaters at Wellington Point, south-east Queensland. Sunbird 13: 1-14.
- DR. PETER F. WOODALL, School of Veterinary Science and Animal Production, The University of Queensland, Brisbane, Q 4072.

APPENDIX 1

# BIRDS RECORDED FROM PEEL ISLAND, 1991-98

~					
$\mathbf{S}_{\mathbf{I}}$	)e	CI	e	S	

Month	J	F	M	A	M	J	J	A	S	O	N	D
Total Number of surveys	2	2	2	2	3	2	2	1	2	2	2	1
Brown Quail				J.					1			_
Pacific Black Duck			1									
Chestnut Teal		1	1	1			1	1	1	1	1	
Australasian Gannet								1				
Darter								1				
Little Pied Cormorant*	1	2	2	2	2	2	2	1	2	2	2	1
Pied Cormorant	2	2	2	2	2	2	2	1	1	1	2	1
Little Black Cormorant	1	1	1	1		2	2	1	1	2	1	
Great Cormorant		1	1			1						
Australian Pelican	1				2	2	1			1	1	1
White-faced Heron	1	1	2	2	3	2	2	1	2	1	2	
Little Egret*	2	2	2	2	3	1	1		2	1	1	1
Eastern Reef Egret	_		_	_	1	1	1		1	-	_	-
White-necked Heron				1	*	•	•		-			
Great Egret	1		1	_	1	2			1		1	
Intermediate Egret*	1		_		1	1			_		_	
Striated Heron		2	2	2	3	1	1	1	1	1	1	
Nankeen Night Heron	1	1	2	2	2	-	1	1	1	_	-	
Australian White Ibis	2	2	2	2	3	2	2	1	2	2	1	
Royal Spoonbill*	2	2	4	2	2	2		_		_	1	
Yellow-billed Spoonbill*					4		1					
Osprey	2	2	2	2	3	2	2	1	2	2	2	1
Whistling kite	2	2	2	2	3	2	2	1	2	2	2	1
Brahminy Kite*	2	1	2	2	2	1	1	1	1	2	2	1
White-bellied Sea-Eagle	2	1	4	2	2	2	1	1	2	4	1	
Brown Goshawk*	4	1		4	4	4	1		4		1	
Collared Sparrowhawk*		1				1						1
Peregrine Falcon*						1						1
Bar-tailed Godwit*			1	1		T	1			1	1	
Whimbrel*	0	0		1	4		1		2	1	1	
Eastern Curlew	2	2	1 2	0	1 2	0	2	1	2	1	1	
	2	2	2	2	2	2	Z	1		1	1	
Common Greenshank*	0	1	-				1		1	1	0	1
Grey-tailed Tattler*	2	2	1	1			1		1	1	2	1
Ruddy Turnstone	2	2	0	2	0	0			0	-		1
Bush Stone-curlew	2	2	2	0	2	2	0	1	2	2	2	
Pied Oystercatcher	2	2	2	2	2	2	2	1	2	2	2	1
Masked Lapwing	1		2	2	1	2	1	-	1	2	2	4
Silver Gull	2	2	2	1	3	2	1	1	2	2	2	1

Month	J	F	M	A	M	J	J	A	$\mathbf{s}$	0	N	D
Gull-billed Tern*					1			1	2			
Caspian Tern*		1	1	1	2	1	1		2		1	
Crested Tern*	2	2	1	1	1	1	1		1	1		
Common Tern*			1									
Spotted Turtle-Dove*		1		1			2			1		
Brown Cuckoo-Dove					1	1	1	1				
Emerald Dove		1	1	1			2	1		1	1	
Bar-shouldered Dove	2	2	2	2	3	2	2	1	2	2	2	1
Rainbow Lorikeet	1	2	2	2	3	2	2	1	2	1	2	1
Scaly-breasted Lorikeet*			1	1	2						2	
Little Lorikeet				2	1							
Fan-tailed Cuckoo							1	1				
Shining Bronze-Cuckoo				1			1					
Common Koel	2								1	2	2	1
Channel-billed Cuckoo										1		
Pheasant Coucal	2	2	1			1			2	2	2	1
Southern Boobook			1		1					1		
Laughing Kookaburra	2	2	2	2	2	2	2	1	2	2	2	1
Forest Kingfisher*	2		1		1		1		1			
Sacred Kingfisher	2	2	2	2	3	1		1	2	2	2	1
Collared Kingfisher	1	2	1	2	2		1		1	2	1	1
Rainbow Bee-eater*		1	2	2			2	1	1	1		
Noisy Pitta				1	2		1					
Spotted Pardalote				1		2	1		1			
Striated Pardalote		2	2	2	3	2	2	1	2	1		
Mangrove Gerygone	2	1	2	2	2	2	2	1	2	2	2	1
White-throated Gerygone								1				
Noisy Friarbird	2	2	2	2	1	2	2	1	2	2	2	1
Lewin's Honeyeater*			1							1		
Yellow-faced Honeyeater	1					1						
Mangrove Honeyeater*	1	2	2	2	3	2	2	1	2	2		1
Brown Honeyeater*	2	2	2	2	3	2	2	1	2	2	2	1
White-cheeked Honeyeater*	1	1							2	1	1	
Scarlet Honeyeater			1	1	1	2	2	1	1	1	1	
Rose Robin				1	3							
Golden Whistler			1	1	3	2	2		2			
Rufous Whistler	2	2	2	2	3	2	2	1	2	2	2	1
Black-faced Monarch*			2						1			
Spectacled Monarch*						1						
White-eared Monarch*					1							

Month	J	F	M	A	M	J	J	A	$\mathbf{s}$	o	N	D	
Leaden Flycatcher	2	2	2	2	1	2	1	1	2	2	2	1	
Restless Flycatcher					1								
Magpie-lark							1						
Rufous Fantail			2		1			1					
Grey Fantail	2	2	2	2	3	2	2	1	2	2	2	1	
Willie Wagtail			2	2	1	2	2			1			
Spangled Drongo*	1	2	1	1	3	2	1	1	1	1	1		
Black-faced Cuckoo-shrike	2	1	2	2	3	2	2	1	1	2	2	1	
Varied Triller			1		1	1	1						
Olive-backed Oriole			1		2	1	1						
White-breasted Woodswallow				1									
Australian Magpie	1	1				1	1		1	1	2	1	
Torresian Crow	2	2	2	2	3	2	2	1	2	2	2	1	
Mistletoebird	1	2	1	2	2	2	1	1	1	2	2	1	
Welcome Swallow	1	1	1	2	2		2	1	2	1			
Tree Martin		2	2	2	3	1	2	1	2	2	2		
Silvereve	2	2	2	2	3	2	2	1	2	2	2	1	

<sup>\*</sup> species not recorded by Agnew (1913, 1921)

# AN OBSERVATION OF A FEEDING ASSOCIATION BETWEEN THE PLATYPUS AND THE DUSKY MOORHEN

#### IAN McMAHON and ANDREW THELANDER

This note describes an observation of an interaction between a Dusky Moorhen Gallinula tenebrosa and a Platypus Ornithorynchus anatinus. At approximately 0740h EST on 17 July 1998, an adult Dusky Moorhen and two Platypuses were observed in a pool of Three Moon Creek adjacent to the Cania Gorge Tourist Park (24°38'S, 150°58'E). The creek had dried into a series of pools, the one in question measuring approximately 60 metres by 15 metres. One Platypus was feeding by making short, vigorous dives in quick succession, and in rapidly changing directions. The Moorhen was observed to proceed up to the feeding Platypus and to follow it closely, even occasionally brushing against it (when it surfaced). The shadowing behaviour by the Moorhen required speedy changes of direction which it maintained over a period of approximately 5 minutes. During this behaviour, the Moorhen was observed to peck at matter which came to the surface of the disturbed water. The Platypus appeared to take no notice of the bird.

Marchant & Higgins (1993) identify the diet of Dusky Moorhens to include vegetable matter, seeds, fruits, molluscs, insects, spiders, carrion and faeces. Given that the Moorhen was feeding on floating matter disturbed by the Platypus, it is possible that this bird was feeding on aquatic vegetable matter and invertebrates that floated to the surface of the pool as a result of disturbance by the Platypus.

The Moorhen's behaviour is somewhat similar to the behaviour of Azure Kingfishers Alcedo azurea reported by Troughton & Wray (1994) and Burnett (1996). It appears to have been co-ordinating its feeding behaviour with that of the Platypus to take advantage of the disturbance caused by the Platypus's diving and the consequent rising to the surface of food matter. Such commensal feeding associations, in which one species takes advantage of another species' movement or activity which is stirring up food, have been reported for other bird species. Some examples include the Cattle Egret Ardea ibis feeding on insects disturbed by cattle (Thompson et al. 1982, Welty 1982), Willie Wagtail Rhipidura leucophrys, likewise with cattle (Harrison 1976), and a variety of raptors feeding in association with humans, machinery, fires and other animals (Marchant & Higgins 1993 in Burnett 1996).

#### REFERENCES

BURNETT, S. 1996 A further observation of a feeding association between the Platypus and the Azure Kingfisher and a discussion of feeding

associations between birds and mammals. Sunbird 26: 76-78.

HARRISON, C. J. O. 1976. Some aspects of adaptation and evolution in Australian Fan-tailed Flycatchers. *Emu* 76:115-119

MARCHANT, S. & HIGGINS, P. J. 1993. Handbook of Australian, New Zealand & Antarctic Birds 2: 600-608. Melbourne: Oxford University Press.

THOMPSON, C. F., LANYON, S. M. & THOMPSON, K. M. 1982. The influence of foraging benefits on association of Cattle Egrets (*Bubulcus ibis*) with Cattle. *Oecologia* 52: 167-170.

TROUGHTON, G. J. & WRAY, S. 1994. An apparent feeding association between the Azure Kingfisher *Ceyx azurea* and the Platypus *Ornithorynchus anatinus*. *Sunbird* 24: 45.

WELTY, J. C. 1982. The Life of Birds. New York: Saunders College Publishing.

IAN McMAHON, P. O. Box 783, Civic Square, ACT 2608. ANDREW THELANDER, P. O. Box 302, Pomona, Q 4568.

# DIET OF THE BARN OWL TYTO ALBA AT THE DIAMANTINA LAKES, WESTERN QUEENSLAND

S.J.S. DEBUS, A.B. ROSE and J. HARRIS

The diet of the Barn Owl Tyto alba is well known in Australia, particularly in the arid inland. The owl specialises on small mammals, particularly rodents and, in the eastern arid zone, commonly preys on the Long-haired Rat Rattus villosissimus (Schodde & Mason 1980 and references therein; Valente 1981). This note reports on the diet of the Barn Owl from collections of pellets at two sites in Diamantina National Park (23° 46'S, 141°08'E), arid south-western Queensland, in June and July 1998.

Seven fresh and recent pellets were collected by JH from beneath a foliage roost, from which a Barn Owl was flushed, in Coolibahs Eucalyptus microtheca at Green Tank on 25 June. Eight or nine fresh pellets (including fragments) were collected by JH from foliage roosts of a Barn Owl (sighted) at a site near the road from Gum Hole to Dingo Tank, in late June. On 3 July the site was revisited by SJSD who found an active Barn Owl nest, with three large nestlings close to fledging, in the hollow trunk of a dead Western Bloodwood Eucalyptus terminalis. By that stage the female was not roosting in the hollow with the nestlings, and an adult Barn Owl was observed roosting amid dense foliage of the shrub stratum in the nearby wooded gully. The habitat in the drainage line was Coolibah woodland with Bauhinia trees and prickly Acacia shrubs. A further 3-4 fresh pellets and debris were collected from beneath the foliage roosts. Pellet material from this site dated from the period of the owls' nesting event (autumn-winter 1998). The twenty pellets were analysed by ABR, by microscopic examination of the external structure of hair and by comparison of skulls, dentition, hair and other remains with reference material and literature (Watts & Aslin 1981). The minimum number of prey individuals in each sample was determined by counting skeletal parts.

Eighteen intact pellets measured 27-71 x 16-40 mm (mean  $45 \times 29$  mm). All seven pellets from Green Tank contained fur of the Long-haired Rat, although there were few bones or skulls and only two individuals were represented by skeletal parts. The other prey items from this site were small birds and acridid grasshoppers (Table 1). All thirteen pellets from near Dingo Tank contained fur and bones of the Long-haired Rat, representing at least thirteen individuals. The other prey items from this site were a small bird, a skink and House Mice Mus domesticus (Table 1). Adult and juvenile rats were represented in the samples from both sites. Overall, from the pooled samples, rodents contributed 74% (Long-haired Rat 65%), birds 13%, lizards 4% and insects 9% of prey items by number. By percentage frequency of occurrence in pellets, rodents also predominated (100% of pellets), followed by birds (25%), insects (10%) and

lizards (5%). Given that the rats would have weighed about 100 g, birds <30 g (mostly <10 g), lizard <10 g and insects 1 g, rodents contributed at least 95% of the owls' diet by biomass.

The diet of the owls at the Diamantina Lakes is consistent with other studies of the Barn Owl's diet in the eastern arid zone (Schodde & Mason 1980, Valente 1981). The absence of other small native mammals in the diet, such as other rodents and dasyurid marsupials, may reflect the habitat condition at the time. Seasonal conditions had been relatively poor although they were improving, and cattle had not yet been removed from the park. The recovery of the native mammal diversity, as the habitat recovers, could be monitored by further collections of Barn Owl pellets.

#### ACKNOWLEDGEMENTS

We gratefully acknowledge that the work in Diamantina National Park was part of an organised survey expedition run jointly by Birds Australia (Northern NSW Group) and the NSW Field Ornithologists Club, under the leadership of Andrew Ley and Peter Davie. We also thank the Park staff for their co-operation and assistance, Ursula Bahlmann for helping to collect some of the pellets, and Norm Harris and other drivers for transporting us around the Park. SJSD's participation was facilitated by Philip Brook, who provided transport to and from the Diamantina. We thank Graham Harrington and a referee for comments on a draft.

#### REFERENCES

- SCHODDE, R. & MASON, I.J. 1980. Nocturnal Birds of Australia. Melbourne: Lansdowne.
- VALENTE, A. 1981. Vertebrate prey remains in pellets of the Barn Owl from Planet Downs Station, south-western Queensland. *Aust. Wildl. Res.* 8: 181-185.
- WATTS, C.H.S. & ASLIN, H.J. 1981. *The Rodents of Australia*. Sydney: Angus & Robertson.
- S.J.S. DEBUS, Division of Zoology, University of New England, Armidale, NSW 2351.
- A.B. ROSE, Associate, The Australian Museum, College Street, Sydney, NSW 2000 (present address: 61 Boundary St, Forster, NSW 2428).
- J. HARRIS, PO Box 54, Lismore, NSW 2480.

TABLE 1. Diet of the Barn Owl at Diamantina Lakes, western Queensland, June-July 1998: minimum number of prey individuals in pellet samples from Green Tank (GT) and near Dingo Tank (DT). Numbers in parentheses, under the site codes, are the number of pellets in each sample; numbers in parentheses in the data field are the number of pellets containing that species.

Species	GT	DT	Total			
	(7)	(13)	(20)			
Long-haired Rat Rattus villosissimus	2(7)	13(13)	15(20)	_		
House Mouse Mus domesticus		2(2)	2(2)			
Budgerigar Melopsittacus undulatus		1(1)	1(1)			
Variegated Fairy-wren Malurus lamberti	1(1)		1(1)			
Zebra Finch Taeniopygia guttata	1(1)		1(1)			
Skink (Scincidae)		1(1)	1(1)			
Grasshopper (Orthoptera, Acrididae)	2(2)		2(2)			
Total	6	17	23			