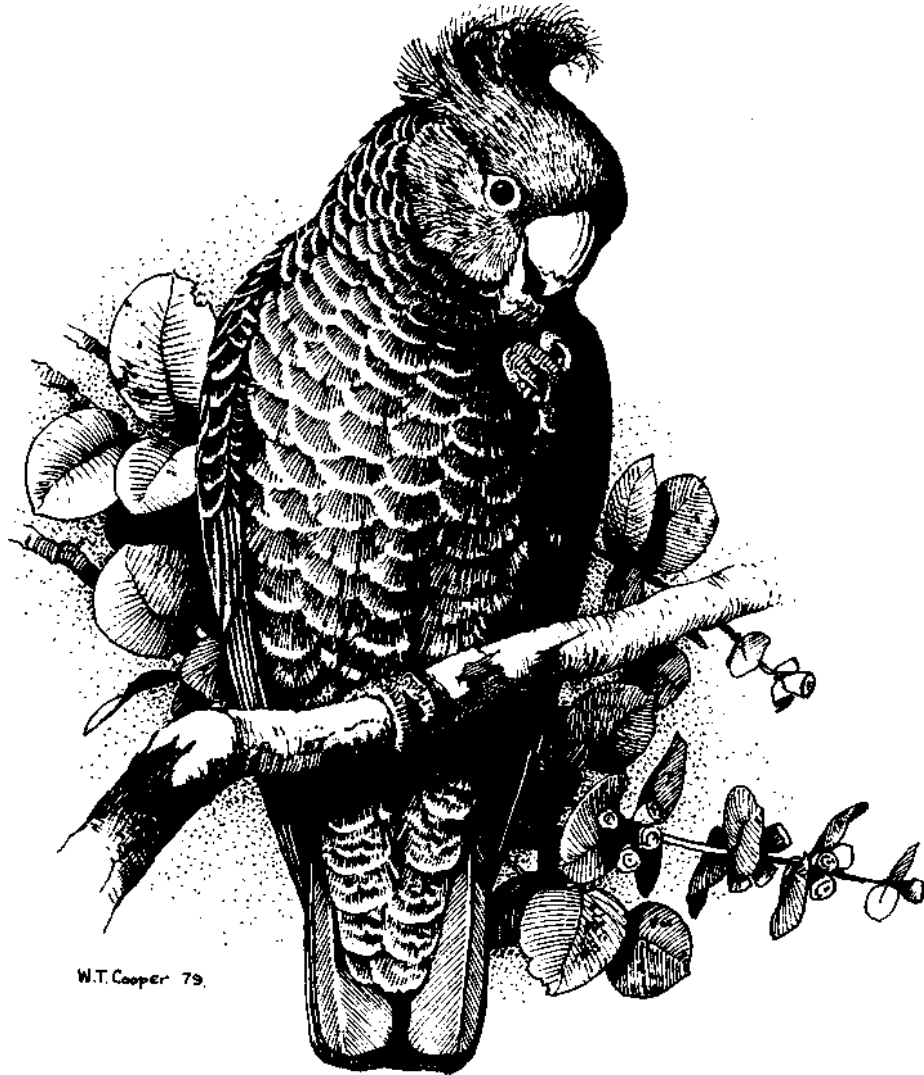


CANBERRA BIRD NOTES

Volume 12
Number 1
March 1987

Registered by Australia Post - publication No NBH 0255



LOCAL WATERBIRD BREEDING RECORDS 1974 TO 1985

Chris Davey, 24 Bardsley Place, HOLT ACT 2615

Received: 27 August 1985, updated 1986

INTRODUCTION

The first "Bird Report" to be published in *Canberra Bird Notes* (COY Vol 3, No 3) covered the period 1 July 1974 to 30 June 1975. Since then CBN has featured an Annual Bird Report (ABR). The 1984/85 ABR therefore provides continuous records for a period of eleven years. During this time, it has grown from nine pages, covering 79 species (as then classified) to 63 pages covering 298 species. This record provides valuable information on the status and distribution of birds within the Canberra region. For the first four ABR's (covering July 1974 to June 1978), breeding of these birds was recorded only if noted outside accepted parameters as defined in early editions of both '*A Field List of the Birds of Canberra and District*' and '*Birds in the Australian High Country*'. From then on, all breeding records were included in the ABR.

In an attempt to gather information on the breeding of waterbirds within the local region over this 11 year period, I eagerly scanned the pages of CBN. I was disappointed. To highlight the inadequacy of the breeding records and allow me to atone for not having provided the Records Officer with my own observations, I have compiled the following summary of waterbird breeding records from July 1974 to June 1985.

EXPLANATION OF LIST

I have collated observations as published in CBN and elsewhere over the past 11 years, adding my own observations, where appropriate. These are compared first with the status as given in the latest ABR (CBN 11(2), immediately following the species name), then the breeding status, as given in Frith (1984) (quoted as first text for each species). Records comprise: a note on breeding, location, month and year, reference ;. Records from CBN are followed, singly or grouped, by a (Vol:No) reference. Likewise, records followed by an asterisk (*) are my observations not reported previously.

Species listed here are only those which have been recorded and published as breeding in the area, since 1974. Some others, not included, are regarded as breeding in the area, according to the latest ABR but definitive records are lacking. 'Waterbirds' here, are local members of the following orders; Podicipediformes (Grebes); Pelecaniformes (Pelican, Darter, Cormorants); Ciconiiformes (Hérons, Ibis, Spoonbills); Anseriformes (Swan, Geese and Ducks); (aquatic members of the) Gruiformes (Crane, Rails, Crakes, Moorhens etc); and Charadriiformes (Waders, Gull, Terns).

For an explanation of abbreviations of localities see Appendix 1, (page 7) and for status (for this and the following papers) see Appendix 4, (page 13).

ANNOTATED LIST

Great Crested Grebe *Podiceps cristatus* U.BR.

"The breeding season near Canberra is in November to January and up to 200 pairs have bred on L. Bathurst": Copulation, L. Bath, Nov 79, (Fjeldsa 1983); building nest, L. Gin, Oct 83; nest with one old egg and young, LBG, Feb 84, (10:2); bred along Yarramundi Reach, LBG (11:2).

Hoaryheaded Grebe *Poliocephalus poliocephalus* C.BN.

"Present information suggests that it breeds in the period November to January ... up to 400 nests in one part of L. Bathurst (1969)": Nests, L. Bath, Nov 79, (Fjeldsa 1983); young, Sullivans Creek, May 80, (6:1); chicks, Bidges Road, Jan 82, (8:1); single nest, L. Bath, Dec 83, (10:2); well grown chicks, Lake Road Bungendore, Dec 84, (11:2).

Australasian Grebe *Tachybaptus novaehollandiae* VC.BR.

"The breeding season in Canberra begins in early October and concludes in mid January": Two pairs on nests, Crematorium, Nov 81; eggs and chicks, Gung, Jan, Nov 82; chicks, Crematorium, Dec 82; eggs and chicks, Gung, Aug, Oct, Nov 83; nest, Crematorium, Nov 83 (*); eggs and chicks, Gung, Dec 84, (11:2).

Darter *Anhinga melanogaster* C.BR.

"In (the Canberra) area they nest at Lake Burley Griffin": Nesting, LBGE, Dec 75, Mar, Apr 76, (3:8); nests and young, LBGE, Feb, Mar, May 79, (5:1); nests and young, LBGE, Apr 80, (6:1); bred, LBGE, (7:1); nests and young, LBGE, Apr, May 82, (8:1); breeding, LBGE, Oct 82, (9:1).

Great Cormorant *Phalacrocorax carbo* C.BV.

"On lakes near Canberra, most breeding is in the period November to April": Courtship and carrying nesting material, LBGE, Feb, Mar 79, (5:1); nests, L. Geo, Apr, May 80, (6:1); juveniles, LBGE, (7:1).

Little Black Cormorant *Phalacrocorax sulcirostris*
VC.BR.

"Is not known to breed locally": Nests and juveniles, LBGE, Feb, Mar, May 79, (5:1); nests, LBGE, Dec 79, Apr 80, (6:1); nests, LBGE, (7:1); breeding activity, LBGE, Mar, Apr (9:1).

Little Pied Cormorant *Phalacrocorax melanoleucos*
VC.BR.

"Breeds on the lakes around Canberra": Breeding, LBGE, (7:1).

White-faced Heron *Ardea novaehollandiae* VC.BR.

"The breeding season around Canberra is in the spring and early summer, mid October to January": Chicks, Birrigai, Oct 82, (8:1); breeding, Queanbeyan, Feb 84, (10:2); nest and young, Acacia Inlet, LBG, Oct 84, (11:2).

Little Bittern *Ixobrychus minutus* R.BV.

"It has not been recorded as breeding in our region but this is probably due to lack of observations": Chick skeleton, Acacia Inlet, Feb 84, (10:2); single chick, Warrina Inlet, LBG, Nov 84 (11:2).

Black Swan *Cygnus atratus* C.BR.

(No relevant quote in Frith 1984): Non flying young, Kellys Swamp, Aug 74, (3:3); cygnets, LBGE, Sep 76, Jan 77, (3:12); cygnets, LBGE, May 78, (4:4); cygnets, LBGE, July, Nov 78, May 79; juveniles, Uriarra Homestead, Jan 79, (5:1); cygnets, LBGE, Jan, Mar 80, (6:1); cygnets, TNR, Aug 80; cygnets, LBGE, Oct 80, (7:1); cygnets, Scrivener Dam, Aug 82; cygnets, Kellys Swamp, Oct 82; cygnets, LBGE, Oct 82, (8:2); nests, L. Bath, Aug 82; nests and young, L. Bath, Sep 82, (*); cygnets, LBGE, Aug, Sep 82, Jun 83, (9:1); cygnets, LBGE, Sep, Oct, Dec 83, May, Jun 84, (10:2); Scrivener Dam, Feb 84, (*); cygnets, L. Bath, Jul, Aug, Oct 83-Feb 84, (*); breeding, LBG, Aug 84-Feb 85; breeding, Jerr W, July 84-March 85; breeding, L. Bath, July-Dec 84, (11:2).

Australian Shelduck *Tadorna tadornoides* C/MC.BR.

"Breeds throughout the Southern Tablelands in fresh water lakes": Juveniles, L. Geo, Oct 78, (5:1); single brood, L. Bath, Sep 83, (10:2); non flying young, L. Bath, Nov 84, (11:2).

Pacific Black Duck *Anas superciliosa* VC.BR.

"Breeding occurs in the period July to January but most clutches have been begun by the end of November": Young, LBG, Nov 76, (3:11); young, LBG, Nov 77, (4:4); young, L. Gin, Feb, Mar, Nov 78, (5:2); young, LBG, Nov 78-Jan 79, (5:1); young, LBG, Sep 79, (6:1); young, L. Gin, Nov 79-Jan 80, (6:2); young, LBG, Nov,

DATA ON BLACK DUCK BREEDING SUCCESS RATE AT GUNGAHLIN (*)

Period of egg laying	No. of Clutches	No. of eggs	Approx No. fledged
July 81-Dec 81	12	110	27
July 82-Mar 83	11	98	0
June 83-Feb 84	37	320	44
July 84-Dec 84	22	221	11

Grey Teal *Anas gibberifrons* C.BN.

"The breeding population around Canberra is not large ... The breeding season can occur at any time but in our reasonably reliable climate occurs in the late winter and spring": Young, FSP, Nov 77, (4:4); young, LBGE, Nov 78, Mar 79, (5:1); young, L. Bath, Aug 83, Feb, Apr 84, (10:2); non flying young, L. Bath, Oct-Dec 84 (11:2).

DATA ON GREY TEAL BREEDING SUCCESS RATE AT GUNGAHLIN (*)

Period of egg laying	No. of clutches	No. of eggs	Approx No. fledged
Aug 81-Dec 81	11	96	30
Jan 83	1	7	2
Aug 83-Feb 84	11	105	20
Jul 84-Oct 84	9	71	37

Chestnut Teal *Anas castanea* U.V (urban), MC.BR (other)

"Nests are begun in September and October and occasionally as late as mid December": Young, L. Bath, Aug, Oct, Nov 83, (10:2); young, Gung, Sep-Nov 83, (*); non flying young, L. Bath, Sep-Dec 84 (11:2).

Australasian Shoveler *Anas rhynchos* C.V (urban), C.BV (other).

"It is occasionally seen and breeds in the large lakes. Few nests have been seen here": Young, FSP, Dec 78, (5:1).

Hardhead *Aythya australis* MC.BV.

"A few are found in the large lakes in this district each summer and one nest has been found at Lake Bathurst": Young, L. Bath, Apr 84, (10:2); non flying young, L. Bath, Dec 84, (11:2).

Maned Duck *Chenonetta jubata* VC.BR.

"On the Southern Tablelands the breeding season is August, September and October": Young, L. Gin, Oct 78, (5:2); young, L. Gin, Nov, Dec 79, (6:2); young, LBG, Dec 79, (6:1); young, LBG and L. Gin, Oct 80; young, L. Gin, Apr 81, (7:1); young, Yowani Golf Course, Sep 82, (9:3); ducklings, Gung, Oct 82; ducklings, Crematorium, July 83; eggs and ducklings, Gung, Sep 83, (*); young, Pine Island, Dec 83; young, LBG, Dec 83; young, L. Tug, Feb 84; young, L. Bath, Oct, Dec 83, (10:2); ducklings, Gung, Apr 84, (*); non flying young, LBG, Oct, Dec 84; non flying young, L. Gin, Oct 84, (11:2).

Blue-billed Duck *Oxyura australis* R.BV.

"Breeding has been recorded at Lake Bathurst": 3-4 nests and eggs, L. Bath, Nov 79, (D. Rushton pers comm); young, L. Bath, May 84, (10:2); chicks, L. Bath, Dec 84, (11:2).

Musk Duck *Biziura lobata* C.BR.

"They have been recorded breeding on Lake Burley Griffin": Young, LBG, Dec 74, (3:3); young, LBG, Jan 84, (10:2). The breeding record at Museum site (11:2) was incorrect.

Dusky Moorhen *Gallinula tenebrosa* VC.BR.

"The breeding season is from November to February": Young, Sullivans Creek, 74/75, 75/76, (Garnett 1978); young, Sullivans Creek (5:1); young, L. Gin, Jan 79, (5:2); young, Sullivans Creek, L. Gin, Dec 79, (6:1); young, LBGE, Sullivans Creek, (7:1); chicks, L. Gin, Jan 82, (8:1); broods, LBGE, Nov-Dec 82, (9:1); breeding, LBGE, Dec 83-Feb 84; young, L. Tug, Feb, Mar 84, (10:2); eggs and chicks, Gung, Oct, Nov 81, Jan, Oct 82, Sep 83; downy chicks, Gung, Jan 84, (*); young, LBG, Ginninderra Ck, Dec 84; eggs and young, Gung, Oct-Dec 84 (11:2).

'Purple Swamphen *Porphyrio porphyrio* C.BR.

"Breeding season is from August to December": Young, Sullivans Creek, (5:1); young, Sullivans Creek, (6:1); eggs and chicks, Gung, Sep 81, (*); young, L. Gin, Dec 81, (8:1); young, LBGE, Oct-Dec 82, (9:1); young, LBGE, Sep 83-Feb 84; young, L. Gin, Dec 83, (10:2); eggs and chicks. Gung, Dec 83 (*); young, LBG, Feb 85; young Jerr W, Nov 84-Feb 85; young, Gung, Sep 84, (11:2).

Eurasian Coot *Fulica atra* VC.BV.

"The breeding season is usually August to February": Young, TNR, Dec 80, Jan 81, (7:1); young, Yowani Golf Course, Dec 83, Jan 84; young, Dairy Flat Road, Nov 83, Jan 84, (9:2); young, L. Tug, Mar 84, (10:2); chicks, Jerr W, Dec 84-Jan 85 (11:2).

Masked Lapwing *Vanellus miles* VC.BR.

"In and around the Australian Capital Territory nests with eggs have been found from August to November": Breeding behind New Zealand High Commission, Sep 74, (3:3); young, Parliament House, Sep 77; nest and eggs, New Zealand High Commission, Oct 77; chicks, Cameron Offices, Aug, Oct 78 (occurring since at least Sep 76), (4:4); young, L. Gin, Mar 78 and Jan 79, (5:2); chicks, Jerrabomberra Av/Hindmarsh Dr, Oct 79; nest with eggs, Mugga Lane, Nov 79, Jan 80; young, Cook; young, ANU; young, L. Geo, Oct 79, (6:1); eggs and chicks, Gung, Aug, Sep 81, (*); breeding, L. Gin, Aug 81; immature, Wallaroo Rd, Aug 81; young, TNR, Dec 81, (8:1); eggs and chicks, Gung, Aug 82, (*); broods, LBGE, Sep 82, (9:1); eggs and chicks, Gung, July, Oct 83, (*); young, L. Bath, Aug, Oct 83, (10:2); breeding Jerr W, Oct-Dec 84; eggs and young, Gung, Nov 84; young, L. Bath, Nov 84 (11:2). (See also the following paper, page 9).

Banded Lapwing *Vanellus tricolor* VU.BR.

"In and around the Australian Capital Territory nests with eggs have been found from August to November": nest and eggs, Gung, Nov 82, (*); eggs, Sep 83, young, Nov 83, L. Bath, (10:2).

Red-capped Plover *Charadrius ruficapillus* R.V (urban), C.BR.

"The species is regularly seen on L. George and Bathurst where it breeds": Juv, L. Bath, Dec 79, (6:1); juv, L. Bath, Dec 80; juv, L. Geo, Jan, Feb 81, (6:4); young, L. Bath, Nov 83, (10:2); young, L. Bath, Nov 84 (11:2).

Black-fronted Plover *Charadrius melanops* C.BR.

(No relevant quote in Frith 1984): Chicks, LBGE, Oct 79, (6:1); juvs, L. Bath, Dec 80; juvs, LBGE, Dec 80, (7:1).

Silver Gull *Larus novaehollandiae* VC.BR.

"In our area there is a large breeding colony at Lake Bathurst, where the main breeding season is from August to November. It is likely that a breeding colony may start in the near future on islands in Lake Burley Griffin": many birds fledging, L. Bath, Oct 84 (11:2).

REFERENCES

- Frith, H.J. (1984), *Birds in the Australian High Country*, Angus and Robertson, Sydney.
- Fjeldsa, J. (1983), 'Social behaviour and displays of the Hoary-headed Grebe *Poliiocephalus poliocephalus*', *Emu* 83,129-140.
- Garnett, S.T. (1978) 'The behaviour patterns of the Dusky Moorhen, *Gallinula tenebrosa*. Gould (Aves: Rallidae)', *Aust. Wild. Res.* 5, 363-384.

APPENDIX 1. ABBREVIATIONS OF LOCALITIES

FSP	Fyshwick Sewerage Ponds
Gung	CSIRO Division of Wildlife and Rangelands
Research,	Gungahlin
Jerr W	Jerrabomberra Wetlands
L. Bath	Lake Bathurst
LBG	Lake Burley Griffin
LBGE	Lake Burley Griffin East end
L. Geo	Lake George
L. Gin	Lake Ginninderra
L. Tug	Tuggeranong Weir/Village Dam
TNR	Tidbinbilla Nature Reserve

..***

BREEDING DATA FROM SUBURBAN GARDENS, CANBERRA, 1981 TO 1984

*Ian Taylor, 69 Tyson Street, AINSLIE ACT
2602 Received: 27 July 1986*

INTRODUCTION

The Garden Bird Survey (GBS), in addition to collecting data about the numbers of individual birds of each species present, for each week of the year, also collects breeding data on the same chart. A summary of this breeding data from Garden Bird Survey charts submitted to Canberra Ornithologists Group for the three years between July 1981 and June 1984 is presented below. More up-to-date information is available in the relevant annual reports.

Although breeding data from GBS charts is rather patchy and incomplete, a number of interesting features are evident. For example, Australian Magpies first laid eggs between the fourth week of July and the second week of August in all three years and the first young left the nest between the first and third week of October. Similar consistency is found for the Yellow-rumped Thornbill.

The number of breeding records for the Black-faced Cuckoo-shrike, Noisy Friarbird, House Sparrow, Common Starling, and Australian Magpie are all lower in 1982-83 than in the other two years. It is interesting to note that the opposite is true for the Blackbird.

In view of the haphazard and incomplete nature of the data, further interpretation is possibly unwise. It is hoped that GBS breeding data will be collected more thoroughly in future, and that the information gathered on GBS charts will be incorporated into the next edition of the Field List.

EXPLANATION OF LIST

Species listed here are only those which have been recorded as breeding, on Garden Bird Charts over these three years. Some others, not included, are regarded as breeding in the area, according to the latest ABR but GBS breeding records were lacking.

In the following list, the dates of only the first and last records of both nests with eggs or young, and of records of dependent fledglings are given in tabular form for each species. In some cases, only a single record of a nest or fledgling was made. In these cases, the record is listed as both the earliest and the latest record.

Records are given in the form:

w/m (s)

where w is the week, m is the month and s is the location and observer as given in Appendix 2. For example, 4/8 (1) refers to the fourth week of August and the GBS chart from Kambah, by R.Bennett. The date of commencement

of each week is given in Appendix 3 - the fourth week of August, for example, is from 28 August to 3 September.

The fifth column indicates the total number of sites at which either nests, fledglings or both were recorded. When comparing the number of sites where breeding was recorded in different years, it should be noted that the total number of sites surveyed also varied. In 1981-82, 55 sites were surveyed; in 1982-83, 60; and in 1983-84, 72. The percentage of sites in which breeding records of that species were made is shown in brackets.

The original breeding data, from which this paper is derived, are recorded by a simple two letter code. Nests are recorded as 'N' on GBS charts and fledglings as 'F'.

The data is compared with the status as given in the latest Annual Bird Report (CBN 11(2)), immediately following the species name. For an explanation of abbreviations of status, see Appendix 4 (page 13).

Year	ANNOTATED LIST -		'Non Passerines'		Total sites No. (7.)
	First nest record	Last nest record	First fledgling record	Last fledgling record	
	Australian Hobby <i>Falco longipennis</i> C.BR.				
1981-82	1/1 (1)	4/1 (1)	-	-	1 (1.8)
	Australian Kestrel <i>Falco cenchroides</i> C.BR.				
1981-82	-	-	4/1 (2)	4/1 (2)	1 (1.8)
	Masked Lapwing <i>Vanellus miles</i> VC.BR.				
1983-84	1/8 (3)	2/8 (3)	-	-	1 (1.4)
	Feral Pigeon <i>Columba livia</i> C.BR.				
1983-84	2/9 (4)	2/9 (4)	-	-	1 (1.4)
	Galah <i>Cacatua roseicapilla</i> VC.BR.				
1981-82	1/10 (5)	2/10 (5)	1/12 (5)	1/2 (5)	3 (5.5)
1982-83	-	-	1/2 (6)	1/2 (6)	1 (1.7)
1983-84	3/8 (4)	3/8 (4)	4/11 (7)	3/2 (8)	6 (8.3)
	Sulphur-crested Cockatoo <i>Cacatua galerita</i> MC.BR.				
1981-82	-	-	4/12 (5)	5/1 (5)	1 (1.8)
1983-84	3/10 (4)	2/11 (4)	3/12 (5)	3/1 (5)	2 (2.8)
	Australian King-Parrot <i>Alisterus scapularis</i> C.BR.				
1982-83	-	-	2/2 (9)	2/2 (9)	1 (1.7)
	Crimson Rosella <i>Platycercus elegans</i> VC.BR.				
1981-82	-	-	1/12 (7)	1/12 (7)	1 (1.8)
1982-83	-	-	4/10 (10)	5/1 (7)	4 (6.7)
1983-84	-	-	2/12 (11)	2/2 (8)	5 (6.9)
	Eastern Rosella <i>Platycercus eximius</i> VC.BR.				
1981-82	4/11 (12)	4/11 (12)	3/10 (13)	1/1 (13)	4 (7.3)
1982-83	-	-	2/10 (14)	4/12 (7)	2 (3.3)
1983-84	2/9 (4)	3/9 (4)	3/11 (11)	4/3 (3)	6 (8.3)
	Red-rumped Parrot <i>Psephotus haematonotus</i> C.BR.				
1981-82	1/10 (12)	4/10 (12)	1/2 (5)	1/2 (5)	2 (3.6)
1983-84	2/9 (4)	4/1 (15)	-	-	2 (2.8)
	Pallid Cuckoo <i>Cuculus pallidus</i> C.BSM.				
1981-82	-	-	5/1 (5)	1/2 (5)	1 (1.8)
1982-83	-	-	4/11 (16)	4/11 (16)	1 (1.7)
	Shining Bronze-Cuckoo <i>Chrysococcyx lucidus</i> C.BSM.				
1983-84	-	-	5/1 (17)	1/2 (17)	1 (1.4)
	Dollarbird <i>Eurystomus orientalis</i> C.BSM.				
1982-83	-	-	4/1 (18)	1/2 (19)	2 (3.3)

ANNOTATED LIST -

Passerines

Year	First nest record	Last nest record	First fledgling record	Last fledgling record	Total sites No. (%)
Welcome Swallow <i>Hirundo neoxena</i> VC.BSM.					
1981-82	1/12 (5)	2/2 (5)	-	-	1 (1.8)
1982-83	4/11 (5)	1/12 (5)	2/12 (5)	3/21 (5)	1 (1.7)
Richard's Pipit <i>Anthus novaeseelandiae</i> C.BR.					
1983-84	-	-	1/1 (20)	1/1 (20)	1 (1.4)
Black-faced Cuckoo-shrike <i>Coracina novaehollandiae</i> C.BSM.					
1981-82	2/12 (21)	3/1 (15)	5/10 (22)	3/3 (15)	6 (10.9)
1982-83	-	-	4/9 (23)	4/11 (24)	2 (3.3)
1983-84	1/11 (25)	1/11 (25)	1/12 (26)	4/2 (8)	7 (9.7)
White-winged Triller <i>Lalage sueurii</i> BSM.					
1981-82	5/10 (27)	3/12 (24)	3/11 (27)	2/2 (5)	3 (5.5)
1983-84	-	-	4/1 (4)	4/1 (4)	1 (1.4)
Blackbird <i>Turdus merula</i> C.BR.					
1981-82	1/10 (15)	4/10(15,28)	2/11 (20)	1/1 (29)	6 (10.9)
1982-83	3/8 (30)	4/1 (31)	3/10(10,32,13)	5/1 (31,20)	12(20.0)
1983-84	2/9 (28,24)	4/12 (30)	1/1 (16,20)	1/3 (11)	7 (9.7)
Rufous Whistler <i>Pachycephala rufiventris</i> MC.BSM.					
1981-82	-	-	3/1 (24)	3/1 (24)	1 (1.8)
1983-84	-	-	2/2 (17)	2/2 (17)	1 (1.4)
Leaden Flycatcher <i>Myiagra rubecula</i> C.BSM.					
1981-82	1/12 (24)	3/12 (24)	2/1 (24)	3/2 (24)	1 (1.8)
Grey Fantail <i>Rhipidura fuliginosa</i> VC.BSM (ranges), OW (city).					
1981-82	-	-	1/1 (29)	2/2 (13)	2 (3.6)
Willie Wagtail <i>Rhipidura leucophrys</i> C.BR/PM.					
1981-82	3/10 (24)	3/1(24,29)	1/11 (24)	5/1 (24)	3 (5.5)
1982-83	1/12 (24)	1/12 (24)	-	-	1 (1.7)
1983-84	-	-	1/12 (26)	3/2 (4)	2 (2.8)
Superb Fairy-wren <i>Malurus cyaneus</i> C.BR.					
1982-83	-	-	5/10 (4)	2/3 (24)	2 (3.3)
1983-84	-	-	4/3 (4)	1/4 (4)	1 (1.4)
Speckled Warbler <i>Sericornis sagittatus</i> MC.BR.					
1982-83	-	-	5/10 (17)	5/10 (17)	1 (1.7)
White-throated Gerygone <i>Gerygone olivacea</i> C.BSM.					
1981-82	-	-	3/3 (33)	3/3 (33)	1 (1.8)
1982-83	-	-	5.1 (21)	5/1 (21)	1 (1.7)
Brown Thornbill <i>Acanthiza pusilla</i> MC.BR.					
1982-83	-	-	4/9 (24)	1/10 (24)	1 (1.7)
1983-84	3/10 (17)	4/10 (17)	-	-	1 (1.4)
Buff-rumped Thornbill <i>Acanthiza reguloides</i> MC.BR.					
1983-84	-	-	5/1 (17)	5/1 (17)	1 (1.4)
Yellow-rumped Thornbill <i>Acanthiza chrysorrhoa</i> C.BR.					
1981-82	4/8(34,13)	5/10 (13)	1/9 (13)	3/1 (24)	5 (9.1)
1982-83	2/9 (13)	3/11 (13)	3/9 (13)	3/1 (24)	6 (10.0)
1983-84	349 (35)	2/10 (35)	4/9 (11,3)	3/1 (36)	9 (12.5)
Striated Thornbill <i>Acanthiza lineata</i> C.BR/N.					
1981-82	-	-	4/10 (15)	1/1 (15)	1 (1.8)
1982-83	-	-	2/10 (15)	2/11 (15)	1 (1.7)

Year	First nest record	Last nest record	First fledgling record	Last fledgling record	Total sites 11 (15.3) Nb.11 (15.3)
	Red Wattlebird		<i>Anthochaera carunculata</i>		C.BR.
1981-82	4/10 (15)	4/1 (5)	4/10 (37)	2/2 (5)	5 (9.1)
1982-83	3/8 (4)	3/8 (4)	4/10 (4)	3/1 (21)	6 (10.0)
1983-84	2/8 (4)	1/12 (4)	4/9 (36)	2/2 (38)	(12.7)
	Noisy Friarbird		<i>Philemon corniculatus</i>		C.BSM.
1982-82	3/10 (15,13)	3/12 (24)	4/10 (28)	1/3 (5)	7 (3.3)
1982-83	2/10 (15)	4/10 (15)	1/1 (6)	1/1 (6)	2 (2.8)
1983-84	2/11 (14)	3/11 (25)	3/11 (14)	2/3 (24)	
	White-plumed Honeyeater		<i>Lichenostomus penicillatus</i>		MC.BR.
1983-84	-	-	3/10 (39)	2/1 (5)	2
	Brown-headed Honeyeater		<i>Melithreptus brevirostris</i>		MC.BR.
1981-82	-	-	4/2 (5)	4/2 (5)	1 (1.8)
	Spotted Pardalote		<i>Pardalotus punctatus</i>		C.BR.
1981-82	2/8 (15)	2/12 (20)	1/1 (20)	2/1 (20,29)	5 (9.1)
1982-83	-	-	4/11 (24)	1/12 (24)	1 (1.7)
1983-84	-	-	2/11 (40)	2/11 (40)	1 (1.4)
	Striated Pardalote		<i>Pardalotus striatus</i>		C.BR.
1981-82	4/10 (20)	4/10 (20)	-	-	1 (1.8)
1982-83	-	-	4/1 (28)	4/1 (28)	1 (1.7)
1983-84	4/10 (4)	4/10 (4)	1/11 (22)	1/11 (22)	2 (2.8)
	Silvereye		<i>Zosterops lateralis</i>		VC.BR.
1981-82	4/10 (41)	2/2 (8)	3/10 (13)	1/3 (24,28)	7 (12.7)
1982-83	2/11 (31)	2/11 (31)	4/9 (13)	2/2 (33)	10 (16.7)
1983-84	2/9 (28)	3/11 (42)	1/10 (43)	3/3 (36)	14 (19.4)
	Goldfinch		<i>Carduelis carduelis</i>		C.BR.
1981-82	2/11 (5)	1/12 (5)	1/11 (28)	3/12 (5)	2 (3.6)
1983-84	4/11 (40)	4/11 (40)	-	-	1 (1.4)
	House Sparrow		<i>Passer domesticus</i>		VC.BR.
1981-82	2/9 (44)	2/12 (44)	5/10 (13)	3/2 (28)	6 (10.9)
1982-83	5/10 (45)	4/12 (45)	1/1 (36)	5/1 (33)	3 (5.0)
1983-84	2/10 (38)	2/1 (45)	2/10 (15)	4/2 (46)	12 (16.7)
	Red-browed Firetail		<i>Emblema temporalis</i>		MC.BR.
1982-83	-	-	3/12 (17)	3/12 (17)	1
1983-84	-	-	2/7 (15)	5/7 (15)	1
	Double-barred Finch		<i>Poephila bichenovii</i>		MC L.BR.
1982-83	-	-	5/10 (17)	4/12 (17)	1 12(21.8) 16(22.2)
	Common Starling		<i>Sturnus vulgaris</i>		VC.BR.
1981-82	4/7 (15)	4/12 (5)	2/9 (15)	5/1 (5)	9 (1.7)
1982-83	4/7 (15)	2/11 (24,47)	4/10 (14)	3/12 (5)	(1.4)
1983-84	2/7 (15)	3/12 (40)	3/10 (15)	4/2 (7)	(1.7)
	Common Myna		<i>Acridotheres tristis</i>		C L.BF
1982-83	-	-	5/1 (28)	5/1 (28)	1 (15.0)
1983-84	1/11 (28)	1/11 (28)	1/11 (22)	4/2 (40)	4 (1.7)
	Olive-backed Oriole		<i>Oriolus sagittatus</i>		MC.BSM.
				1/2 (36,3)	2 (2.8)
				MC L. BR.	(1.4)
1983-84	-	-	1/2 (36,3)	2/4 (4)	1 (16.4)
	White-winged Chough		<i>Corcorax melanorhan</i>		VC.BR.
1983-84	-	-	3/3 (4)	3/3 (48)	9 (13.3)
	Australian Magpie-lark		<i>Grallina cyanole</i>		
1981-82	1/9 (27)	3/2 (27)	5/10 (34,4)	4/1 (28,33)	8
1982-83	3/10 (4)	2/12 (49)	1/12 (36)	3/3 (5)	
1983-84	4/8 (50)	2/2 (4)	2/10 (50)		

Year	First nest record	Last nest record	First fledgling record	Last fledgling record	Total sites No. (%)
Australian Magpie <i>Gymnorhina tibicen</i> VC.BR.					
1981-82	4/7 (15)	2/12 (24)	1/10 (27)	2/1 (34,13)	16(29.1)
1982-83	2/8 (5)	5/10 (45)	3/10 (36)	1/2 (33)	14(23.3)
1983-84	1/8 (49)	5/10 (24)	1/10 (53,19,3)	2/4 (35)	27(37.5)
Pied Currawong <i>Strepera graculina</i> VC.BR.					
1981-82	1/10 (15)	1/11 (24)	3/11 (51)	2/2 (5)	6 (10.9)
1982-83	4/9 (15)	3/12 (24)	4/10 (15)	4/1 (52,36)	9 (15.0)
1983-84	2/8 (4)	3/12 (38)	3/9 (4)	3/1 (40)	10(13.9)
Australian Raven <i>Corvus coronoides</i> C.BR.					
1982-83	5/10 (45)	3/11 (45)	4/12 (5)	4/12 (5)	2 (3.3)
1983-84	3/7 (49)	1/8 (49)	-	-	1 (1.4)

(APPENDIX 1. Waterbird breeding localities is on page 7)

APPENDIX 2. REFERENCES - LOCATION AND OBSERVER

(Presented in the sequence in which they occur in the list)

1. Kambah (R. Bennett)
2. CCAE (K. Hahne)
3. Hughes (M. & E. Wright)
4. ANU (I. Taylor)
5. Kambah (S. Wilson)
6. Aranda (K. Hahne and R. Kennemore)
7. Ainslie (J. Barr)
8. Giralang (B. Weston)
9. Curtin (P. & P. Ferrar)
10. Yarralumla (R. Cannon)
11. Ainslie (M. Lenz)
12. Acton (C. Westwood)
13. Torrens (W. & H. Brooke)
14. Chapman (G. Browning)
15. O'Connor (H. & K. Nix)
16. Weetangera (D. Wood)
17. Ainslie (B. FitzGerald)
18. Hughes (J. Garran)
19. Campbell (C. Rowell)
20. O'Connor (C. Westwood and R. Metcalf)
21. Ainslie (C. Zanetti and A. Drake)
22. Hughes (D. Johnson)
23. Rivett (D. Judge)
24. Chapman (J. & A. Holland)
25. Chapman (J. Whatman)
26. Kambah (K. Goodridge)
27. Macquarie (B. & D. Lindenmayer)
28. Farrer (D. Rentz)
29. Hall (S. Chittick)
30. Waramanga (J. Hardwick)
31. Hughes (I. Anderson)
32. Duffy (P. Roberts)
33. Ainslie (I. Taylor)
34. Reid (I. Taylor)
35. Cook (J. Stein)
36. Scullin (G. Clark)
37. Ainslie (K. Masters and P. Bayliss)
38. Cook (C. McKenny)
39. Fyshwick (J. Holland)
40. Farrer (J. Redmond)
41. Yarralumla (I. Crawford)
42. Kambah (R. Bell)
43. Waramanga (L. Thorburn)
44. Farrer (M. Larkin)
45. Turner (J. Barr)
46. Kaleen (M. Clayton)
47. Scullin (B. Staples)
48. Wanniasa (B. & D. Baker)
49. O'Connor (ACT Parks & Conservation Service)
50. Barton (E. Andrew)
51. O'Connor (T. Woodburn)
52. Narrabundah (D. Ross)
53. Fraser (D. Ayliffe)

APPENDIX 3. DATE OF COMMENCEMENT OF EACH WEEK

GBS week	Date commenced	GBS week	Date commenced	GBS week	Date commenced
Jul		Nov		Mar	
1	3	1	6	1	5
2	10	2	13	2	12
3	17	3	20	3	19
4	24	4	27	4	26
5	31				
Aug		Dec		Apr	
1	7	1	4	1	2
2	14	2	11	2	9
3	21	3	18	3	16
4	28	4	25	4	23
				5	30
Sep		Jan		May	
1	4	1	1	1	7
2	11	2	8	2	14
3	18	3	15	3	21
4	25	4	22	4	28
		5	29		
Oct		Feb		Jun	
1	2	1	5	1	4
2	9	2	12	2	11
3	16	3	19	3	18
4	23	4	26	4	25
5	30				

APPENDIX 4. ABBREVIATIONS OF STATUS VALUES

(for 'Local Waterbird Breeding Records 1974 to 1985' pages 2-1, 'Breeding Data from Suburban Gardens, Canberra, 1981 to 1984' and 'Status of Birds in the Warrigal Area (NSW)' pages 14-18).

C	common	BR	breeding resident
L	localised	BSM	breeding summer migrant
MC	moderately common	BN	breeding nomad
R	rare	BV	breeding visitor
U	uncommon	N	nomad
VC	very common	OW	over-wintering
VU	very uncommon	PM	partial migrant
		V	visitor

STATUS OF BIRDS IN THE WARRIGAL AREA (NSW)

R. Gregory-Smith, Australian High Commission, Port Moresby,

PO Box 9129, HOHOLA PNG

Received: (approx) 1 May 1986

INTRODUCTION

Warrigal is a property of some 450 hectares on the eastern slopes of the Great Dividing Range overlooking the Shoalhaven River. Lying midway between Bungendore and Braidwood, New South Wales (35°19'S, 149°43'E), the property is situated on a ridge which rises to 625 metres. The terrain is rocky, mainly granite, which has weathered and decomposed to form a thin soil cover. The steep hillsides fall away to ephemeral creeks. There are small cleared areas which afford a little grazing, but otherwise the area is forested.

When the land was divided and cleared in the first half of the 19th century, properties were established on good grazing land and their boundaries fenced. Warrigal resulted as a residual area beyond the fenced boundaries where the land was too difficult to clear.

Sheep were once run on the property, but now the land is left to Eastern Grey Kangaroos (*Macropus giganteus*), Swamp Wallabies (*Wallabia bicolor*) and Common Wombats (*Vombatus ursinus*) as the most conspicuous mammals. Latterly Feral Pigs (*Sus scrofa*) have been on the increase.

Open, dry sclerophyll forest covers most of the area, with closed, wet sclerophyll in the gullies. Eucalypts include Silvertop Ash (*Eucalyptus seiberi*), Brittle Gum (*E. mannifera*), Broad-leaved Peppermint (*E. dives*), and Manna Gum (*E. viminalis*), while the Wattles are mainly Black (*Acacia decurrens*), Broadleaf Hickory (*A. falciformis*), Sunshine (*A. terminalis*) and Late Black (*A. mearnsii*). There are some areas of Black SheOak (*Casuarina littoralis*) and of *Kunzea parvifolia*. Individuals of the Narrow-leaf Geebung (*Persoonia linearis*) are scattered over the rocky parts of the property.

EXPLANATION OF LIST

Visits were made frequently to the property over the period 1977-1985. The bird species observed were recorded (totalling 92), although the time available for observing during visits varied considerably. The majority of visits were during late autumn, winter and early spring.

The status is based on these observations. Breeding is noted only where positive evidence exists, but several species other than those indicated are likely to breed in the area.

For an explanation of abbreviations of status (given first for each species) see Appendix 4 (page 13).

ANNOTATED LIST

- Hoary-headed Grebe *Poliiocephalus poliocephalus*
U; nomadic; dams, ponds
- Australasian Grebe *Tachybaptus novaehollandiae*
U; nomadic; dams
- Great Cormorant *Phalacrocorax carbo*
V; dams
- Little Pied Cormorant *Phalacrocorax melanoleucos*
V; dams
- Pacific Heron *Ardea pacifica*
U; erratic; dams, ponds
- White-faced Heron *Ardea novaehollandiae*
U; erratic; dams, ponds, marshes
- Straw-necked Ibis *Threskiornis spinicollis*
R; nomadic; grassland, marshes
- Royal Spoonbill *Platalea regia*
R; winter visitor; dams
- Pacific Black Duck *Anas superciliosa*
VC; annual fluctuations; dams, ponds
- Grey Teal *Anas gibberifrons*
VC; annual fluctuations; dams, ponds
- Australasian Shoveler *Anas rhynchotis*
R; dams
- Maned Duck *Chenonetta jubata*
VC, particularly in winter; breeding resident; dams,
open forest
- Brown Goshawk *Accipiter fasciatus*
V; one in December 1981
- Wedge-tailed Eagle *Aquila audax*
C; resident
- Black Falcon *Falco subniger*
V; pair seen in March 1983; open forest
- Brown Falcon *Falco berigora*
V; one seen in September 1979
- Australian Kestrel *Falco cenchroides*
C; resident; grassland, woodland
- Masked Lapwing *Vanellus miles*
U; occasional visitor to dams
- Common Bronzewing *Phaps chalcoptera*
U; erratic; woodland
- Crested Pigeon *Ocyphaps lophotes*
R; party of three April and June 1985; grassland
near farm buildings
- Wonga Pigeon *Leucosarcia melanoleuca*
U; occasionally throughout year; closed and open forest
- Yellow-tailed Black Cockatoo *Calyptorhynchus funereus*
U; winter and occasionally spring visitor; closed and
open forest
- Gang-gang Cockatoo *Callocephalon fimbriatum*
VC; resident; open forest
- Galah *Cacatua roseicapilla*
U; occasionally during winter; woodland, grassland

Crimson Rosella *Platycercus elegans*
 VC; resident, maximum in winter; open forest, woodland
 Eastern Rosella *Platycercus eximius*
 VC; resident, maximum early winter; woodland
 Pallid Cuckoo *Cuculus pallidus*
 C; summer visitor SepJan; open forest, woodland
 Brush Cuckoo *Cuculus variolosus*
 C; summer visitor; open forest
 Fantailed Cuckoo *Cuculus pyrrhophanus*
 C; resident; open forest, woodland
 Horsfield's Bronze-Cuckoo *Chrysococcyx basalus*
 V; open forest
 Powerful Owl *Ninox strenua*
 V; open forest
 Southern Boobook *Ninox novaeseelandiae*
 C; summer; open forest
 Australian Owlet-nightjar *Aegotheles cristatus*
 U; Status of this bird is always hard to assess - Ed
 White-throated Needletail *Hirundapus caudacutus*
 R; seen only in March; aerial
 Laughing Kookaburra *Dacelo novaeguineae*
 VC; breeding resident; open forest, woodland
 Sacred Kingfisher *Halcyon sancta*
 U; breeding summer visitor; open forest
 Dollarbird *Eurystomus orientalis*
 R; summer visitor; woodland
 Superb Lyrebird *Menura novaehollandiae*
 C; resident; closed forest
 Welcome Swallow *Hirundo neoxena*
 C, more so in winter; dams, grassland
 Richard's Pipit *Anthus novaeseelandiae*
 C; resident; grassland
 Black-faced Cuckoo-shrike *Coracina novaehollandiae*
 C; summer visitor; open forest, woodland
 Flame Robin *Petroica phoenicea*
 C; winter visitor; woodland, grassland
 Scarlet Robin *Petroica multicolor*
 C; winter visitor; open forest, woodland
 Hooded Robin *Melanodryas cucullata*
 R; two in July 1980; woodland
 Eastern Yellow Robin *Eopsaltria australis*
 C; resident; closed and open forest
 Golden Whistler *Pachycephala pectoralis*
 C; winter visitor; closed and open forest
 Rufous Whistler *Pachycephala rufiventris*
 C; resident; open forest, woodland
 Grey Shrikethrush *Colluricincla harmonica*
 VC; breeding resident: open forest, woodland
 Leaden Flycatcher *Myiagra rubecula*
 C; summer visitor; open forest, woodland
 Satin Flycatcher *Myiagra cyanoleuca*
 R; summer visitor; open forest, woodland
 Rufous Fantail *Rhipidura rufifrons*
 U; summer visitor; closed forest

Grey Fantail *Rhipidura fuliginosa*
 C; mainly summer visitor, some over-winter; open forest, woodland

Willie Wagtail *Rhipidura leucophrys*
 C; breeding resident; woodland, grassland

Eastern Whipbird *Psophodes olivaceus*
 R; closed forest

Spotted Quail-thrush *Cinlosoma punctatum*
 U; resident; local; open forest

Superb Fairy-wren *Malurus cyaneus*
 C; resident; local; open forest, woodland

White-browed Scrubwren *Sericornis frontalis*
 U; resident; local; closed and open forest

Speckled Warbler *Sericornis sagittatus*
 V; one in May 1982; woodland

White-throated Gerygone *Gerygone olivacea*
 R; summer visitor; open forest

Brown Thornbill *Acanthiza pusilla*
 VC; resident; open forest, woodland

Buff-rumped Thornbill *Acanthiza reguloides*
 VC; resident; open forest, woodland

Yellow-rumped Thornbill *Acanthiza chrysorrhoa*
 VC; resident; woodland, grassland

Yellow Thornbill *Acanthiza nana*
 V; one in September 1981; woodland

Striated Thornbill *Acanthiza lineata*
 C; resident; open forest

Varied Sittella *Daphoenositta chrysoptera*
 U; resident; open forest, woodland

White-throated Treecreeper *Climacteris leucophaea*
 VC; resident; open forest, woodland

Red Wattlebird *Anthochaera carunculata*
 VC; resident; open forest, woodland

Noisy Friarbird *Philemon corniculatus*
 C; breeding summer visitor; open forest, woodland

Noisy Miner *Manorina melanocephala*
 C; local; resident; woodland, grassland

Yellow-faced Honeyeater *Lichenostomus chrysops*
 C; summer visitor, some over-winter; open forest, woodland

White-eared Honeyeater *Lichenostomus leucotis*
 U; open forest

White-plumed Honeyeater *Lichenostomus penicillatus*
 V; woodland

Brown-headed Honeyeater *Melithreptus brevirostris*
 V; woodland

White-naped Honeyeater *Melithreptus lunatus*
 R; summer visitor; open forest

Eastern Spinebill *Acanthorhynchus tenuirostris*
 R; open forest, woodland

Spotted Pardalote *Pardalotus punctatus*
 C; resident; open forest, woodland

Striated Pardalote *Pardalotus striatus*
 C; resident; open forest, woodland

European Goldfinch *Carduelis carduelis*
 U; woodland, grassland

House Sparrow *Passer domesticus*
 U; local; farm buildings

Diamond Firetail *Emblema guttata*
 V; one in May 1982; woodland

Common Starling *Sturnus vulgaris*
 VC; erratic; woodland, grassland

Olive-backed Oriole *Oriolus sagittatus*
 C; summer visitor; open forest; woodland

Satin Bowerbird *Ptilonorhynchus violaceus*
 C; winter visitor; open forest; woodland

Dusky Woodswallow *Artamus cyanopterus*
 U; winter visitor; woodland

White-winged Chough *Corcorax melanorhamphos*
 VC; breeding resident; open forest, woodland

Australian Magpie-lark *Grallina cyanoleuca*
 C; breeding resident

Grey Butcherbird *Cracticus torquatus*
 C; resident; open forest, woodland

Australian Magpie *Gymnorhina tibicen*
 VC; resident; open forest, woodland, grassland

Pied Currawong *Strepera graculina*
 VC; breeding resident; closed and open forest, woodland

Grey Currawong *Strepera versicolor*
 VC; breeding resident; open forest, woodland

Australian Raven *Corvus coronoides*
 VC; resident; open forest, woodland, grassland

Little Raven *Corvus mellori*
 R; erratic; 12 in January 1978

WINTER BIRDWATCHING IN THE ACT

Steve Wilson, 56 Harrington Cres, KAMBAH ACT 2902
 Received: 27 July 1986

It is strongly suspected that many a bird watcher tends to hang up the binoculars in winter, something which is a serious mistake. In spite of the weather, there is still plenty to see.

One feature of our cool season is the altitudinal migrants which come from the mountains to lower elevations about the city, probably in search of winter food sources. However, the chief feature of winter bird watching in Canberra is the frequent sightings of mixed flocks of several species of small birds. Today (9 July 1986), the temperature has reached a maximum of 7°C, snow is falling on Mount Tidbinbilla and a biting wind is rather unpleasant. However, the birds seem to be enjoying it hugely as the occasional flock sweeps through our garden and the plantation of native trees opposite. While we are close to two major roads, that plantation is virtually continuous with the lightly wooded southern slopes of Mount Taylor and the more open country towards Mount Arawang.

To the birds, this area seems to represent good foraging and bird watchers might describe it as "edge" country, ie a place where different habitats meet, in this case suburban gardens and lightly timbered savannah country.

Throughout the temperate regions of the world the phenomenon of mixed feeding flocks of small birds of many species is well known. Ornithologists have various explanations of this behaviour. It may be a protective mechanism; there is safety in numbers and with more eyes looking for predators, each individual can spend more time feeding. They may also find it easier to find insects flushed by other members of the mixed species flock or learn of new food sources from other species. Such flocks are to be seen frequently about the suburban edges of Canberra and in the scrubby areas nearby. They vary considerably in composition. Constant factors are that they are made up by small birds only and they move through an area, very actively seeking food. They are often very quiet with only a few of the species calling.

Around our home two species are usually to be found in these flocks, the Weebill (*Smicrornis brevirostris*) and the Yellow-rumped Thornbill (*Acanthiza chrysorrhoa*) and the calls of either are a signal for the bird-watcher to get busy. These flocks are not easily examined for species as the individuals are constantly on the move. Frequently, recently Striated (*A. lineata*) and Buff-rumped Thornbills (*A. reguloides*) have been with the other species.

Twice recently, Speckled Warblers (*Sericornis sagittatus*) were on the lawn with the Yellow-rumps, the first time they have been seen here. One was here on 27 June and two on 29 June 1986. These birds appear to be resident on the Sulwood Drive (southern) side of Mount Taylor, about 1km from here (*G. Guy pers comm Ed*).

While the birds mentioned usually feed on the ground, shrubs and lower branches of the trees, the flocks often contain other species that feed higher and today Spotted (*Pardalotus punctatus*) and Striated Pardalotes (*P. striatus*) were present along with Yellow-faced (*Lichenostomus chrysops*), White-eared (*L. leucotis*) and Fuscous Honeyeaters (*L. fuscus*), Eastern Spinebill (*Acanthorhynchus tenuirostris*) and numerous Silvereyes (*Zosterops lateralis*). Last week there were six Varied Sittellas (*Daphoenositta chrysoptera*) with one mixed group, though this species is seldom seen here. A pair of Scarlet Robins (*Petroica multicolor*) were also in the flocks on two occasions in the last week. Adding the usual larger species, plus the two introductions, House Sparrow (*Passer domesticus*) and Starling (*Sturnus vulgaris*), thirty-one species were recorded from our garden in the first ten days of the new Garden Bird Chart.

The message is simple. Get those binoculars out in winter and be prepared to follow those mixed flocks till you identify all the species; a most interesting exercise and not always an easy one. Remember to put it all on your Garden Bird Chart.

BIBLIOGRAPHY OF BIRDS OF THE CANBERRA REGION - PART II

Hew D.V. Prendergast, 17/25 Mackennal Street, LYNEHAM ACT 2602

Received: 24 January 1987

INTRODUCTION

This bibliography supplements part one, from 1984 (CBN 9,31-37); the same introduction and methods apply here. COG records back to 1964 and the full set of *Canberra Bird Notes* are available for reference from Ian Taylor (Records Officer) and Philip Veerman (Editor, CBN) respectively. 'ARA News' is the *Australasian Raptor Association News*.

BIBLIOGRAPHY

- Anon, (no date), Bird List. Gudgenby Nature Reserve. Department of the Capital Territory; ACT Conservation Service.
- Anon, (no date), Bird List. Tidbinbilla Nature Reserve. Department of the Capital Territory; ACT Conservation Service.
- Anon, (1984), 'Canberra and Kookaburra'. *RAOU Newsletter* 62,12. (Suggests the City's name is derived from the bird's name.)
- Anon, (1985), 'Canberra Ornithologists Group (COG)', *RAOU Newsletter* 65, 14.
- Aumann, T. (1982), 'The legal status of raptors in Australasia', *ARA News* 3(1), 3-9. (Includes ACT laws)
- Blackham, E. (1976), 'Canberra Trip 12-14 June 1976', *The Bird Observer* S37, 61. (Steve Wilson and others led 17 members of the Bird Observers Club.)
- Braithwaite, L.W. (1971), Daylength gonad cycle and flightless moult in Black Duck *Anas superciliosus* and Grey Teal *Anas gibberifrons*. PhD Thesis, ANU, Canberra. (Birds captured at, *inter alia*, Lakes Bathurst and George, studied at CSIRO, Gungahlin.)
- Braithwaite, L.W. (1981), 'Ecological studies of the Black Swan. II. Colour and plumage changes, growth rates, sexual maturation and timing and frequency of breeding', *Aust. Wild. Res.* 8, 121-133.
- Braithwaite, L.W. (1981), 'ibid. III. Behaviour and social organization', *Aust. Wild. Res.* 8, 135-146. (Study sites: Lakes Bathurst and George, and CSIRO, Gungahlin.)

- Canberra Ornithologists Group. (1985), The Birdlife of the Museum of Australia Site, unpublished reported held by NCDC and COG.
- Canberra Ornithologists Group. (1986a), Murrumbidgee River Corridor Bird Survey: Final Report - November 1986, unpublished report held by NCDC and COG.
- Canberra Ornithologists Group. (1986b), The significance of Mt Ainslie and Black Mountain as Habitat for Birds, unpublished report held by NCDC and COG.
- Courtney, J. and Marchant, S. (1971), 'Breeding details of some common birds in south-eastern Australia', *Emu* 71, 121-133. (Includes data from the ACT.)
- Davey, C.C. and Fullargar, P.J. (1986), 'Changes in the abundance and distribution of raptors during a House Mouse plague', *Corella* 10, 52-54. (Road counts on transect between Canberra and Booligal NSW.)
- Disney, H.J. de S. (1979), 'Royal Australasian Ornithologists' Union Pilot Atlas Scheme', *Corella* 2, 97-163. (Area surveyed had Lake George as the north-west boundary.)
- Eskell, R. and Garnett, S. (1979), 'Notes on the colours of the legs, wings and flanks of the Dusky Moorhen *Gallinula tenebrosa*', *Emu* 79, 143-146. (Study site: Sullivan's Creek, Australian National University).
- Fjeldsa, J. (1983). 'Social behaviour and displays of the Hoary-headed Grebe *Poliocephalus poliocephalus*', *Emu* 83, 129-140. (Study site: CSIRO, Gungahlin, using captive birds).
- Fjeldsa, J. (1985), 'Classification of waterbird communities in south-eastern Australia', *Emu* 85, 141-149. (Includes Lakes Bathurst, George and lakes "in Canberra".)
- Frith, H.J. (Ed) (1984), *Birds in the Australian High Country*, Angus & Robertson, Sydney and Melbourne. (Revised)
- Green, C. (1972), 'Use of tool by Orange-winged Sittella', *Emu* 72, 185-186. (Observation from National Botanic Gardens.)
- Haigh, C. (1984), *Wetlands in New South Wales*, New South Wales National Parks and Wildlife Service, Sydney. (Lake Bathurst and George included in survey.)
- Jones, L., Darroch, R.K., Gilding, J. and Bennett, D.H. (1980), 'A review of seasonal and ecological factors in Australian Magpie *Gymnorhina tibicen* attacks on people', *Bird Behaviour* 2, 113-117. (Study site: ACT perhaps see also Preece (1978) in references.)

- Marchant, S. and Wilson, S.J. (1965, 1966, 1968), 'RAOU ACT Branch Annual Reports 1964-1965, 1965-1966, 1966-1967', unpublished reports in various private collections.
- McCulloch, E. (1987), 'Capital Birds', *Your Garden*, 40(2), 58-59.
- McKean, J.L. and Braithwaite L.W. (1976), 'Moult, movements, age and sex composition of Mountain Duck, *Tadorna tadornoides*, banded at Lake George, NSW *Aust. Wild. Res.* 3, 173-180. ("Mountain Duck" is the Australian Shelduck.)
- Metcalf, E.C. (1982), 'Ravens and Hobbies', *ARA News* 3(1), 14-15. (Aggression at a Canberra nest site.)
- Metcalf, E.C. (1983), 'Australian Hobbies hunting bats', *ARA News* 4(4), 7-8. (Observations from Canberra.)
- Moore, B.P. (1978), *Life on Forty Acres*, E.W. Classey Ltd., Faringdon, Oxford. (Contains description of birdlife on a property near Sutton.)
- Morcombe, M. (1986), *The Great Australian Birdfinder*, Landsdowne, Sydney. (Page 123 covers ACT.)
- Olsen, J. (1981), 'Australian Hobby band return', *ARA News* 2(2), 11. (Nestling banded Canberra, recovered Brisbane 4 months later.)
- Olsen, J. (1986), 'ACT Area Coordinator's Report for 1985', *ARA News* 7, 42. (Activities of local raptor enthusiasts.)
- Olsen, J., Olsen, P. and Jolly, J. (1979). 'Observations on interspecific contact in the Peregrine *Falco peregrinus* and other Australian falcons', *Aust. Bird Watcher* 8, 51-57. (Includes observations in the Canberra area.)
- Olsen, P. and Olsen J. (1986a), 'Estimating the age of nestling raptors', *ARA News* 7, 48-49. (Includes ACT data. Corrigenda in *ARA News* 7, 72.)
- Olsen, P. and Olsen J. (1986b). 'Observations on Hack of a Peregrine Falcon', *ARA News* 7, 70-71. (Hacking is a rehabilitation/release method, which has been done locally.)
- O'Neill, M.G. and Taylor, R.J. (1984), 'Cooperative hunting by Pied Currawongs *Strepera* *Corella* 8, 95-96. (Observation made in south Canberra.)
- Pennefather, B. (1986), 'Birdwatching on Club Trips', *Southern Trails* 113 (Dec 1986). (Introduces the subject to members of the Southern Tablelands Four Wheel Drive Club. Supplementary note. about COG by P. Veerman (March 1987).)

- Prendergast, H.D.V. (1984), 'Feeding times of honeyeaters on *Banksia ericifolia* inflorescences', *Corella* 8, 83-88.
(Study site: National Botanic Gardens.)
- Purchase, D. (1985), 'Bird-banding and the migration of Yellow-faced and White-naped Honeyeaters through the Australian Capital Territory', *Corella* 9, 54-62.
- RAOU. (1986), 'Annual General Meeting 1986', *RAOU Newsletter* 68, 4-5. (Meeting held in Canberra.)
- Shaw, N.J. (Ed) (1979), *Birds of South-eastern Australia - The Ranges*, (Vol 2 revised), Gould League of Victoria.
- Shaw, N.J. (Ed) (1983), *Birds of South-eastern Australia - Farmlands*, (Vol 7), Gould League of Victoria.
- Stokes, T. (1982), 'Grass Owl near Canberra ACT', *ARA News* 3(4), 16. (Bird found emaciated at Murrumbateman 23/10/82; it subsequently died and is now with CSIRO.)
- Taylor, I.M. (1986), 'The song of the Superb Lyrebird in the Australian Capital Territory', *Corella* 10, 46-51.
- Veerman, P. (1985), 'Report of the Prey Record Scheme', *ARA News* 6, 44-50. (Includes ACT records.)
- Vestjens, W.J.M. (1979), 'Bathing behaviour of the White-faced Heron *Ardea novaehollandiae*', *Emu* 79, 142-143. (Observations on captive bird at CSIRO, Gungahlin.)
- White, F.W.G. (1985), 'Microgeographic variation in the songs of the Olive Whistler in Kosciusko National Park', *Emu* 85, 181-187.
- White, F.W.G. (1986), 'Summer-winter movements of Olive Whistlers *Pachycephala olivacea* in the Snowy Mountains', *Corella* 10, 125-126.
- Williams, J. (1976), *Nature Guide. Black Mountain Reserve. Ainslie-Majura Reserve*, Australian Government Publishing Services, Canberra. (Section on birds pp. 14-18.)

ACKNOWLEDGEMENTS

My thanks to Graham Barwell, Alistair Drake, Philip Veerman and Ian Taylor for their assistance.

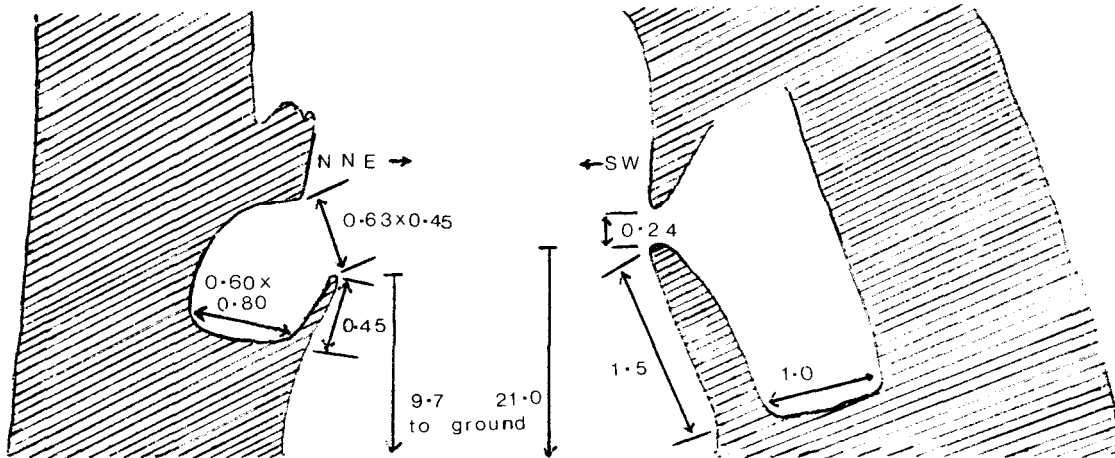
DESCRIPTION OF ANOTHER POWERFUL OWL NEST

Jerry Olsen, RMB 1705, Read Rd, SUTTON NSW 2620

Received: 10 February 1987

On 30 August 1986 I visited a nesting pair of Powerful Owls (*Ninox strenua*) near Wollongong. Two young had fledged two days before, according to John Kershaw and Ian Rowles. They were found roosting with the adults 60 metres south-east of the nest tree. There was a distinct size difference between the adults; the male was larger than the female. The Powerful Owl is one of the few raptors in which the male is larger than the female. Both adults flushed, leaving the fledged young, but the male returned and perched within 40 metres showing apparent concern as I climbed to the nest. The measurements on the two diagrams compare this nest to the much less accessible one found by Tony Ross in the Brindabellas (CBN 11(4), 121-122).

CROSS SECTION OF POWERFUL OWLS' NEST HOLLOW
THIS NEST (WOLLONGONG) BRINDABELLA NEST (FROM CBN 11,122)



Note: Both diagrams were drawn by the editor, who saw neither nest, on the basis of sketches and measurements provided by the authors. The diagrams are to the same scale (in metres).

There were no prey remains of any kind inside the hollow. A number of medium-small mammal stomachs, attached to intestines, hung from bushes below the nest. Tony's nest had several whole glider carcasses in it; others have found nests with only the remains of prey in them eg Beruldsen (1980) and Fleay (1968) (for refs: see CBN 11. 124).

The nest tree (an unidentified eucalypt) was in a gully on an east facing hillside in Hawksbury sandstone terrain. It was in a less dense forest of smaller trees than was the tree used by the Brindabella pair. Clearly, Powerful Owls live in a variety of forest habitats, probably dependent on food supply, and a "typical nest" will vary from one situation to another.

Thanks to John Kershaw, Ian Bowles and Penny Olsen.

GREY GOSHAWK RAINBATHING AT MERIMBULA

Mrs Jule Higgins, PO Box 290, MERIMBULA NSW 2548
Received: 3 March 1 1986

Needing respite care, I found it as "Bimbimbie" (meaning aptly, I thought, 'place of many birds'), a South Coast retirement complex on the lake at Merimbula. The highlight of my sojourn (in February 1986) was the birds, the 7 hectare site, is virtually a sanctuary, with much of it retaining natural bush cover. My list of native birds lengthened, but the highlight was the frequent sightings of a White Goshawk (white morph of the Grey or Varied Goshawk (*Accipiter novaehollandiae*) -Ed). Its haunt was a stand of Paperbarks (*Melaleuca*) bordering the lake. At first I did not recognise its predator's skills and mistook it for a Sulphur-crested Cockatoo (it is very likely that its prey may make the same mistake). When there was a summer shower, I watched the perched Goshawk take a rain bath, followed by a lengthy preening session.

FURTHER COMMENT ON GREY GOSHAWK RAINBATHING

Philip Veerman, February 1987

I suggest that rain bathing is a conspicuously cockatoo type behaviour. In contrast to the antics all members must have seen cockatoos and galahs perform, I've only seen raptors shelter or look miserable in the rain. The only other report of a raptor rain-bathing I've found, also involves a 'White Goshawk'. It also was observed "spreading wings, bathing and preening in a rain shower" (P. Knight, *The Bird Observer*, Oct 1976, 539, 78). In my sixteen books on birds of prey I've only found one reference to them bathing (Brown and Amadon 1968, *Eagles, Hawks and Falcons of the World*) which states that "bathing is probably more common than drinking". Their only example (a Peregrine Falcon) and others I'm aware of eg. a Collared Sparrowhawk (*A. cirrhocephalus*) bathing for ten minutes (M. Watts, *The Bird Observer*, July 1979, 572, 44), involve the usual bird method of bathing by immersion (ie. standing in water and doing stereotype splashing and fluttering). Bathing behaviour is unlikely to be highlighted in indexes and would appear to be seldom reported. Jerry Olsen advises that captive goshawks are enthusiastic immersion bathers. Dare I suggest that by rain bathing, White Goshawks further mimic cockatoos?

Any discussion of the white plumage form of this bird is hampered by having to use the official name "Grey Goshawk". I believe this name is one of the very few poor choices elected in the 1978 RAOU recommended names list. The species occurs in many colour forms throughout its wide range. As well as the grey and the white morphs, in Australia, others are rufous below and various shades of grey or brown above. The species has been called "Variable Goshawk". This variation is a striking feature of the species (if indeed they are all one species), so I suggest the obvious name is "Varied Goshawk". White morph of

the Varied is easier than White of the Grey. "Morph" rather than "phase", because phases are temporary.

Any further comments on either matter from anyone?

FURTHER NOTE ON MAGPIES AS PREDATORS

Philip Veerman, February 1987

When preparing the four page feature on Currawongs and Magpies (CBN 11(4), 132-135) I searched in vain for the article I remembered, about an Australian Magpie killing and eating an Eastern Rosella (*Platycercus eximius*). A space was left for this note at the base of page 133. The search continued and now I've found it. George W. Bedgood (*The Bird Observer*, Oct 1976, 539, 78), reports a magpie attacking a group of rosellas in flight, killing one, then plucking and beginning to eat the chest. A magpie returned to continue feeding, after the dead rosella was examined. Also, Colin Ashton (*The Bird Observer*, Sep 1986, 656, 96) reports on a magpie observed taking one and suspected of taking all four Rainbow Bee-eaters (*Merops ornatus*) chicks at nest leaving stage from one nest.

OCCURRENCE OF THE LITTLE FRIARBIRD IN THE CANBERRA DISTRICT

Brendan Lepschi, 24 Fullwood Street, WESTON ACT 2611
Received: 28 January 1987

On 10 December 1986, L observed a single Little Friarbird (*Philemon citreogularis*) in a stand of profusely flowering eucalypts (mainly Yellow Box *Eucalyptus melliodora*), opposite the Norwood Park Crematorium, Gungahlin. The bird was distinguished from the Noisy Friarbird (*Philemon corniculatus*), by its lesser size, feathered head, no Knob on the bill, blue facial skin, softer grey-brown plumage, and call. It was very active, flying from tree to tree feeding on nectar and aggressively pursuing the smaller White-plumed Honeyeater (*Lichenostomus penicillatus*) which was also present.

CBN contains eleven published records for Canberra and district since the first sightings were made in January 1969 (CBN 1(3),14). COG records also contain two unpublished observations, these being a single bird seen at Gungahlin on 19 October 1971 (M. Clayton), which may have been the same bird that was later recorded at Garran during October-November 1971 (CBN 2(1)18), and one bird observed in casuarinas along Sullivans Creek, ANU on 17 October 1984 (D. McCorquodale).

Little Friar birds seen in our area are probably; vagrants from migratory groups moving from western New South Wales and Victoria to northern New South Wales and southern Queensland. Those observed in Autumn would be going northwards, whilst returning birds account for Spring and Summer records.

ACT RECORDS OF THE SINGING HONEYEATER

Brendan J. Lepschi, Received: 26 February 1987

The Singing Honeyeater (*Lichenostomus virescens*), was supposedly recorded by G.M. Mathews in the 1940's (Veerman 1986, CBN 11,125-127) but this record was not referred to by later workers and is best left as unconfirmed. The 1982/83 Annual Bird Report (CBN 9, 50-139), includes this species but it is not included in the two subsequent ABRs (CBN 10, 26-85 and 11, 26-88). The most recent record, by Bell, appears to have been overlooked altogether.

There are three published records of this species for the ACT. These are as follows (all are of single birds only):

DATE	LOCATION	OBSERVER	AUTHOR AND	REFERENCE
Aug 62	"Canberra"	Unstated)	(Wilson 1972	CBN 2(4), 8-9
and)	(Anon 1976	CBN 3(6), 9
Sep 64	"Canberra"	Unstated)	(Frith 1976	(see below)
Black Mtn. Reserve	H.L. Bell	Bell 1980	Corella 4,	8-19

ACT RECORDS OF THE TAWNY-CROWNED HONEYEATER

Brendan J. Lepschi, Received: 22 December 1986

The 1983/84 and 1984/85 Annual Bird Reports (CBN 10(2),79 and CBN 11(2),81) incorrectly record the original 1965 report as the only record of the Tawny-crowned Honeyeater (*Phylidonyris melanops*) for the ACT. Actually there are now six published records. These are as follows (all are single birds only):

DATE	LOCATION	OBSERVER	REFERENCE
31 Jul 1965	Narrabundah	S.J. Wilson	Frith 1976
(The same bird (?) was previously seen in O'Connor on 30 Jul 1965 by W. Merilees and later banded at the same location in the company of four other honeyeaters by P. van Tets on 31 Jul 1965. Frith (1976) and COG Records Book 1964-1967 band no. 020-84809).			
6 & 7 Sept 1968	Narrabundah	S.J. Wilson	CBN 1(2),12
1-23 Nov 1971	Narrabundah	S.J. Wilson	CBN 2(3),15
23 Aug 1973	Torrens	S. Bennet	CBN 2(9),Z2
and COG Record Book 1971-1974			
20 Oct 1985	Chapman	J. Holland	Gang-gang Jul 86
1 Nov 1986	Lake Ginninderra	B.M. Allen	Gang-gang Feb 87

REFERENCE: Frith, H.J. (1976), *Birds in the Australian High Country*, Angus and Robertson, Sydney.

Canberra Bird Notes is published quarterly by the Canberra Ornithologists Group. The membership and subscription rates are: Student (Under 18) \$5.00; Single \$10.00; Family \$13.00 all with one copy of CBN; Institutions \$13.00.

Editor: Philip Veerman, PO Box 301, CIVIC SQUARE, ACT, 2608
or, 24 Castley Circuit, KAMBAH, ACT, 2902

Rarities Panel: B. FitzGerald (Secretary - Ph 485140),
G. Clark, B. Baker, R. Schodde, N. Hermes, A. Drake.

CANBERRA ORNITHOLOGISTS GROUP COMMITTEE

		Work	Home
President	Peter Roberts	726903	880325
Vice-President	Neil Hermes	851931	-
Secretary	Jack Holland	467401	887840
Assistant Secretary	Anna Wiedermann	493794	883793
Treasurer	Doug Ross		956041
Editor	Philip Veerman	896052	314041
Outings	Malcolm Fyfe	724649	543310
Newsletter	Joan Lipscombe		733948
Records	Ian Taylor		476315
Conservation			
Librarian	Coral Dow	726208	470059
Exhibitions	Peta Roberts	719111	825006
Exhibitions	Sandy Collett	687465	572263
Publications	Tony Lawson	643125	889430
Education	Annie Etheridge		861064
Member	Richard Mason	493176	952086
Member	Graeme Chapman	411211	583726
Member	Alan & Julia Landford	897213	313289
Member	Warren Martin		511001
Member	Jenny Fisk	465363	411791
Member	Grahame Elliot	653565	545700
Member	Murray Dow	469512	470059

CONTENTS	PAGE
Local Waterbird Breeding Records 1974 to 1985	2
Breeding Data from Suburban Gardens, Canberra 1981-84	8
Status of Birds in the Warrigal Area (NSW)	14
Winter Birdwatching in the ACT	18
Bibliography of Birds in the Canberra Region - Part II	20
Description of Another, Powerful Owl Nest	24
Grey Goshawk Rainbathing at Merimbula	25
Further Comment on Grey Goshawk Rainbathing	25
Further Note on Magpies as Predators	26
Occurrence of the Little Friarbird in the Canb. District	26
ACT Records of the Singing Honeyeater	27
ACT Records of the Tawny-crowned Honeyeater	27