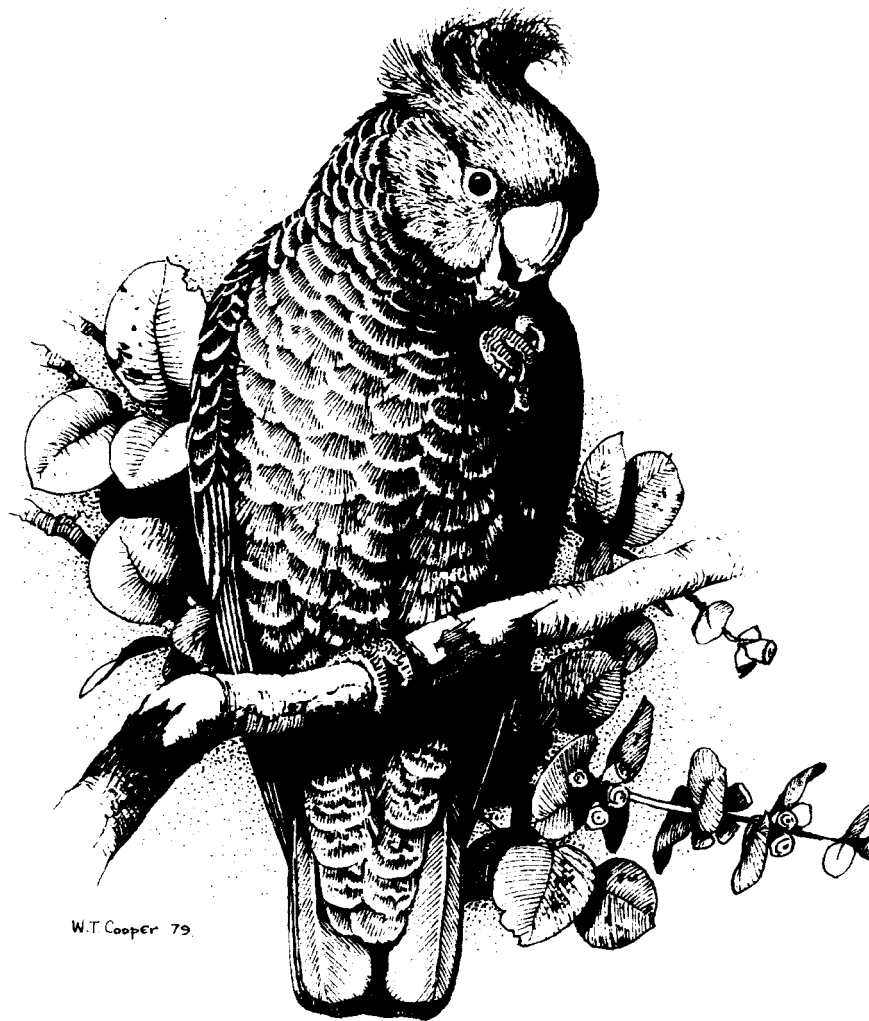


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A FOUR-YEAR SURVEY OF BIRDS AT THE AUSTRALIAN NATIONAL UNIVERSITY

Harvey Perkins
42 Summerland Circuit, Kambah, ACT 2902

Introduction

My association with The Australian National University (ANU) and its campus began in 1979 when I moved back to Australia from overseas to begin my university degree. This association has now accounted for a total of 18 of the past 24 years.

Over that time there have been many changes to the physical environment of the university. Building in-fill has been marked, landscape and watering regimes have changed, and the bird fauna has changed along with them. For example, in the 1980s there was a great deal more open space, much of it occupied by dry grassland, and I clearly recall that Red-rumped Parrots were common. These days buildings occupy a much larger proportion of the area, green spaces are generally well watered, and Red-rumped Parrots are essentially absent. These changing environmental conditions have no doubt been detrimental to certain species, while benefiting and encouraging others, and it is likely that many species have not been significantly affected—the Purple Swamphens around Sullivans Creek in the vicinity of the residential Colleges are certainly as prominent now as they were in 1979.

This survey documents the birds I recorded over a four-year period from March 1999 to February 2003 and provides detailed information on the species and numbers of birds present, at

least for that part of the campus covered. It therefore might provide a benchmark against which any future surveys could be compared, and changes to the avifauna monitored.

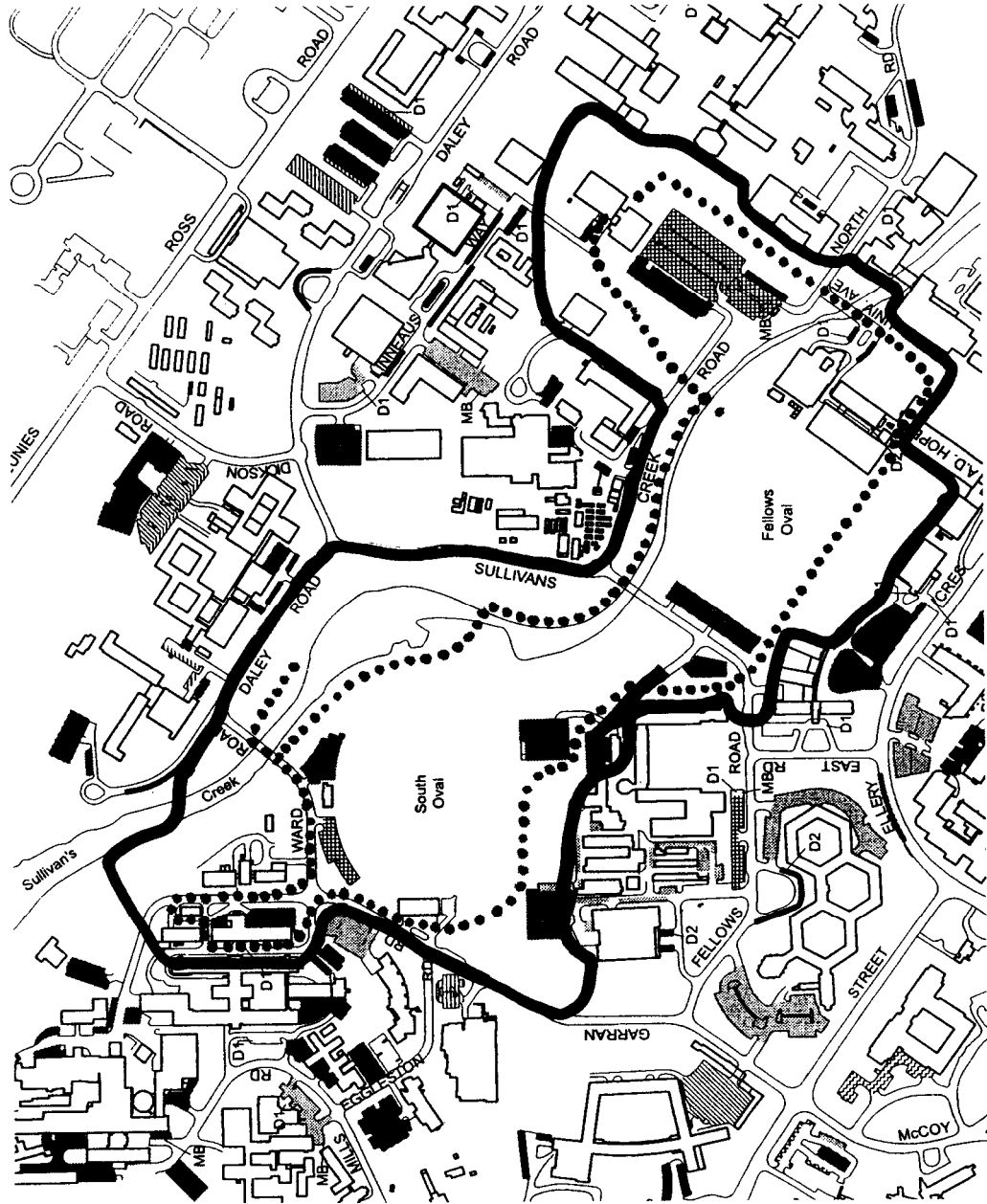
Methodology

These surveys came about as a result of my need to move biological samples between the Department of Biochemistry and Molecular Biology and the John Curtin School of Medical Research. This cross-campus walk would normally take about 10 minutes, slightly longer if a little birdwatching was indulged along the way, but I soon realised it provided an excellent opportunity to conduct a somewhat more formalised survey. The route taken changed slightly as a consequence and is shown in Figure 1. The total area covered by the surveys is approximately 26 ha and is indicated by the outlined area in Figure 1. The entire surveyed area just fits within a radius of 500 m, centred on the stepping-stones that cross Sullivans Creek near South Oval (35°16'50" S 149°06'50" E) and all surveys were submitted to COG as Atlas Area Searches within a 500-m radius.

In total, 100 surveys were conducted over the four-year period. Though not strictly scheduled, surveys were spread fairly evenly across all years and seasons (see Figure 2.), with, ultimately, 25 surveys for each season.

Figure 1. Map of the survey area.

The map below shows the part of the Australian National University Acton campus where the survey site was located. The actual area covered by the surveys, approximately 26 ha, is outlined with a solid line, the route walked while surveying is shown as a dotted line. The direction of walking was anti-clockwise on all occasions. The area covered by the surveys is approximately 25% of the total campus area. North is towards the top of the page.



The mean duration of the individual surveys was 57.2 minutes (median 57 min, SD 11.11 min). Ninety-eight of the surveys were done during the week (14 on Mondays, 24 on Tuesdays, 28 on Wednesdays, 21 on Thursdays, 11 on Fridays) the remaining two being conducted on Sundays. The majority (46) were done in the afternoon (essentially between 14:30 and 17:30h) with 38 in the middle of the day (between 11:30 and 14:30 h), 15 in the

morning (between 8:30 and 11:30 h), and one in the evening (between 17:30 and 20:30 h). These timings were not optimal for bird activity, rather, they were determined by work activities.

Surveys were done predominantly without binoculars, and despite the circuitous nature of the survey route, every effort was made to avoid double-counting of birds.

Figure 2. Spread of surveys across years and seasons.

season	Summer			Autumn				Winter				Spring			
month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec			
week	11211	41516178	9161	12171451617	8192	122242	6222334	5132456	65134		12134	52			
1999			1723		17	S-15		91	11229	814	18	813			
2000		241	14		275	714		29	13	2118	26				
2001	11	3014	15	1824	91	6273	2823	626	16318			1			
2002	4	1M	738	1928	152S8	22	2111	301.1128	16	11F	613	25111S			
2003	1342	6	126												

Results

A total of 79 species was recorded over the four years of the survey, of which 33 (42%) showed indications of breeding (see Table 1.). One additional species, a raptor glimpsed very briefly before disappearing behind trees, possibly a Whistling Kite *Haliastur sphenurus* or Little Eagle *Hieraaetus morphnoides*, is not included in this total. Half of the species were recorded by the tenth survey (after three and a half months), and 52 of the species (66%) were recorded by the end of the first year of surveying, after which the total continued to climb more slowly until the end of the fourth year. This incremental increase is graphed in Figure 3.

Over the 100 surveys, a combined total of 22,364 individual bird observations was made of a combined total of 2,480 species. This gives an average of 223 individual birds and 24.8 species per survey. The highest bird count for any given survey was 460 (which included 211 Sulphur-crested Cockatoos on 3 July 2001) and the highest species count was 35 (on Sunday 2 June 2002). The overall average ratio of individuals per species was 9.02. These values are also given at the bottom of Table 2 which lists various statistical information for all individual species, ranked by commonness, recorded during the surveys.

Table 1. Species recorded during surveys

Species are arranged taxonomically. Where indications of breeding were recorded during the surveys, the appropriate code is given (di - display, co - copulation, ih - inspecting hollow, nb - nest building, cf - carrying food, on - seen on, entering, or leaving nest, ne —nest with eggs, ny — nest with young, dy- dependent young). Parentheses are used where the breeding activity was observed but not specifically during a survey. The final column indicates the number of the survey in which the species was first recorded.

Brown Quail	<i>Coturnix ypsilophora</i>		17
Black Swan	<i>Cygnus atratus</i>	dy	30
Australian Wood Duck	<i>Chenonetta jubata</i>	ih, dy	1
Mallard	<i>Anas platyrhynchos</i>		99
Pacific Black Duck	<i>Anas superciliosa</i>	dy	1
Grey Teal	<i>Anas gracilis</i>		10
Chestnut Teal	<i>Anas castanea</i>		67
Hardhead	<i>Aythya australis</i>		83
Australasian Grebe	<i>Tachybaptus novaehollandiae</i>		5
Hoary-headed Grebe	<i>Poliocephalus poliocephalus</i>		98
Darter	<i>Anhinga melanogaster</i>		65
Little Pied Cormorant	<i>Phalacrocorax melanoleucos</i>		3
Little Black Cormorant	<i>Phalacrocorax sulcirostris</i>		15
Great Cormorant	<i>Phalacrocorax carbo</i>		16
Australian Pelican	<i>Pelecanus conspicillatus</i>		80
White-faced Heron	<i>Egretta novaehollandiae</i>		2
Great Egret	<i>Ardea alba</i>		87
Nankeen Night Heron	<i>Nycticorax caledonicus</i>		64
Straw-necked ibis	<i>Threskiornis spinicollis</i>		2
Australian Spotted Crake	<i>Porzana fluminea</i>		91
Spotless Crake	<i>Porzana tabuensis</i>		79
Purple Swamphen	<i>Porphyrio porphyrio</i>	co, dy	1
Dusky Moorhen	<i>Gallinula tenebrosa</i>	dy	1
Eurasian Coot	<i>Fulica atra</i>	nb, on	1
Masked Lapwing	<i>Vanellus miles</i>		33
Rock Dove	<i>Columba livia</i>	di, co, nb	1
Common Bronzewing	<i>Phaps chalcoptera</i>		66
Crested Pigeon	<i>Ocyphaps lophotes</i>		11
Yellow-tailed Black-Cockatoo	<i>Calyptorhynchus funereus</i>		99
Gang-gang Cockatoo	<i>Callocephalon fimbriatum</i>		17
Galah	<i>Cacatua roseicapilla</i>	ih, (dy)	8
Sulphur-crested Cockatoo	<i>Cacatua galerita</i>		1
Australian King-Parrot	<i>Alisterus scapularis</i>	(dy)	5
Crimson Rosella	<i>Platycercus elegans</i>	ih, on	1
Eastern Rosella	<i>Platycercus eximius</i>	dy	1
Red-rumped Parrot	<i>Psephotus haematonotus</i>		17
Pallid Cuckoo	<i>Cuculus pallidus</i>		37
Laughing Kookaburra	<i>Dacelo novaeguineae</i>	dy	13
Sacred Kingfisher	<i>Todiramphus sanctus</i>		15
Dollarbird	<i>Eurystomus orientalis</i>		22

Table 1. (continued)

White-throated Treecreeper	<i>Cormobates leucophaeus</i>		46
Superb Fairy-wren	<i>Malurus cyaneus</i>	co, dy	1
Spotted Pardalote	<i>Pardalotus punctatus</i>		6
Striated Pardalote	<i>Pardalotus striatus</i>	ih	6
White-browed Scrubwren	<i>Sericornis frontalis</i>		3
Weebill	<i>Smicronis brevirostris</i>		40
White-throated Gerygone	<i>Gerygone olivacea</i>		88
Brown Thornbill	<i>Acanthiza pusilla</i>		48
Yellow-rumped Thornbill	<i>Acanthiza chrysorrhoa</i>	dy	3
Red Wattlebird	<i>Anthochaera carunculata</i>	dy	1
Noisy Friarbird	<i>Philemon corniculatus</i>	nb, on, ny, dy	5
Noisy Miner	<i>Manorina melanocephala</i>	cf, on, ny, dy	1
Yellow-faced Honeyeater	<i>Lichenostomus chrysops</i>		26
White-plumed Honeyeater	<i>Lichenostomus penicillatus</i>		1
White-naped Honeyeater	<i>Melithreptus lunatus</i>		26
Eastern Spinebill	<i>Acanthorhynchus tenuirostris</i>		7
Golden Whistler	<i>Pachycephala pectoralis</i>		32
Grey Shrike-thrush	<i>Colluricincla harmonica</i>		93
Magpie-lark	<i>Grallina cyanoleuca</i>	nb, on, cf, ny, dy	1
Grey Fantail	<i>Rhipidura fuliginosa</i>	nb, on	39
Willie Wagtail	<i>Rhipidura leucophrys</i>	nb, on, ne	1
Black-faced Cuckoo-shrike	<i>Coracina novaehollandiae</i>	on, dy	11
Olive-backed Oriole	<i>Oriolus sagittatus</i>		20
Dusky Woodswallow	<i>Artamus cyanopterus</i>		1
Australian Magpie	<i>Gymnorhina tibicen</i>	nb, cf, on, ny, dy	1
Pied Currawong	<i>Strepera graculina</i>	nb, on, ny, dy	2
Grey Currawong	<i>Strepera versicolor</i>	(dy)	10
Australian Raven	<i>Corvus coronoides</i>	dy	1
White-winged Chough	<i>Corcorax melanorhamphos</i>	nb, on, cf, ny, dy	10
House Sparrow	<i>Passer domesticus</i>	co, nb	6
Red-browed Finch	<i>Neochmia temporalis</i>		32
European Goldfinch	<i>Carduelis carduelis</i>		31
Welcome Swallow	<i>Hirundo neoxena</i>	nb	2
Clamorous Reed Warbler	<i>Acrocephalus stentoreus</i>	ny, dy	1
Little Grassbird	<i>Megalurus gramineus</i>		64
Silvereye	<i>Zosterops lateralis</i>		21
Common Blackbird	<i>Turdus merula</i>	(nb)	15
Common Starling	<i>Sturnus vulgaris</i>	nb, cf, ny	6
Common Myna	<i>Acridotheres tristis</i>	nb	9

Table 2. Statistical overview of species occurrence

Species are ranked by commonness ('mean over all surveys' as primary rank determinant and '% surveys with counts' secondarily). The value for 'mean only when present' gives some indication of average group size or total individuals per survey and is more meaningful for low frequency species. Values for seasonality of species are provided as percentage of surveys for the given season in which the species was recorded. SD = standard deviation.

species	sum total birds all surveys	mean over all surveys	mean only when present	% surveys with counts	SD	MAX no. of birds	Spring	Summer	Autumn	Winter
Australian Wood Duck	5351	53.51	53.51	100	32.63	187	100	100	100	100
Pacific Black Duck	1840	18.40	18.59	99	9.80	54	100	100	96	100
Magpie-lark	1574	15.74	15.74	100	5.59	36	100	100	100	100
Superb Fairy-wren	1479	14.79	14.94	99	5.81	29	100	100	100	96
Sulphur-crest cockatoo	1121	11.21	15.15	74	36.05	211	60	56	92	88
Common Starling	1031	10.31	17.78	58	14.81	59	100	48	28	56
Dusky Moorhen	906	9.06	9.06	100	4.43	20	100	100	100	100
Crimson Rosella	900	9.00	9.68	93	6.64	30	96	80	100	96
Purple Swamphen	812	8.12	8.29	98	5.03	23	92	100	100	100
Welcome Swallow	729	7.29	9.23	79	7.04	32	96	84	88	48
Australian Magpie	690	6.90	6.97	99	3.75	18	100	100	96	100
Rock Dove	648	6.48	7.45	87	6.31	41	80	92	80	96
Eurasian Coot	634	6.34	6.54	97	5.44	32	100	96	96	96
Noisy Miner	632	6.32	6.38	99	3.28	15	100	100	100	96
Red Wattlebird	512	5.12	5.45	94	4.17	25	88	96	100	92
Pied Currawong	507	5.07	5.63	90	4.76	26	92	76	92	100
Eastern Rosella	359	3.59	4.79	75	4.08	24	76	76	60	88
Australian King-Parrot	207	2.07	5.75	36	6.23	24	28	12	56	48
Yellow-face Honeyeater	204	2.04	29.14	7	64.87	176	0	0	24	4
Clam Reed Warbler	179	1.79	3.51	51	2.13	10	92	88	24	0
Galah	167	1.67	3.27	51	2.41	10	64	44	48	48
Straw-necked ibis	164	1.64	12.62	13	21.36	73	0	12	36	4
Australian Raven	161	1.61	2.27	71	1.75	12	76	64	72	72
Silvereye	161	1.61	5.55	29	7.33	30	52	28	20	16
Crested Pigeon	123	1.23	3.24	38	2.44	10	40	36	28	48
Gang-gang Cockatoo	115	1.15	4.26	27	4.13	14	20	16	28	44
White-winged Chough	113	1.13	4.52	25	2.65	12	24	32	16	28
Grey Teal	106	1.06	3.31	32	1.55	6	28	44	4	52
Willie Wagtail	91	0.91	1.57	58	0.98	5	76	64	56	36
Wh-plumed Honeyeater	91	0.91	2.02	45	1.50	7	48	40	40	52
House Sparrow	88	0.88	3.03	29	2.87	14	40	48	16	12
Common Myna	83	0.83	2.86	29	2.52	12	64	40	4	8
Black Swan	75	0.75	2.50	30	1.80	9	36	24	20	40
Noisy Friarbird	68	0.68	2.27	30	2.12	9	48	56	16	0
Spotted Pardalote	59	0.59	2.11	28	1.47	8	24	8	36	44
Striated Pardalote	56	0.56	1.70	33	0.95	5	44	20	16	52
White-brow Scrubwren	47	0.47	1.81	26	0.80	3	28	16	36	24
Blk-face Cuckoo-shrike	44	0.44	1.47	30	0.94	5	4 4	3 6	2 0	2 0

Table 2. Statistical overview of species occurrence

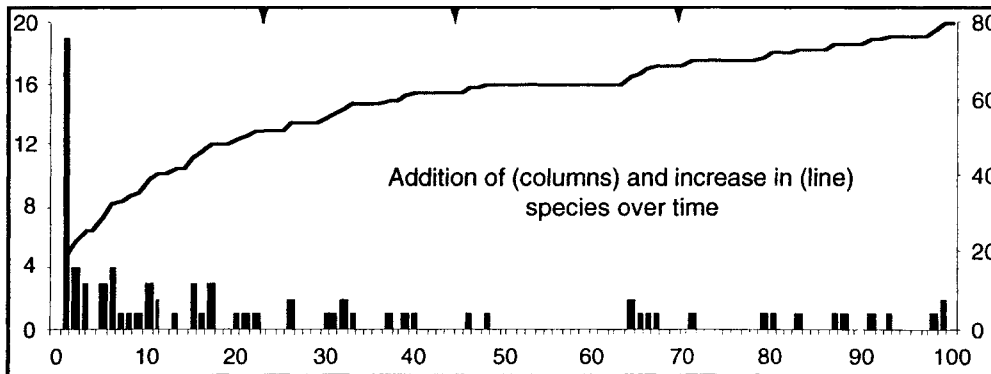
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Clam Reed Warbler	179	1.79	3.51	51	2.13	10	92	88	24	0
Galah	167	1.67	3.27	51	2.41	10	64	44	48	48
Straw-necked ibis	164	1.64	12.62	13	21.36	73	0	12	36	4
Australian Raven	161	1.61	2.27	71	1.75	12	76	64	72	72
Silvereye	161	1.61	5.55	29	7.33	30	52	28	20	16
Crested Pigeon	123	1.23	3.24	38	2.44	10	40	36	28	48
Gang-gang Cockatoo	115	1.15	4.26	27	4.13	14	20	16	28	44
White-winged Chough	113	1.13	4.52	25	2.65	12	24	32	16	28
Grey Teal	106	1.06	3.31	32	1.55	6	28	44	4	52
Willie Wagtail	91	0.91	1.57	58	0.98	5	76	64	56	36
Wh-plumed Honeyeater	91	0.91	2.02	45	1.50	7	48	40	40	52
House Sparrow	88	0.88	3.03	29	2.87	14	40	48	16	12
Common Myna	83	0.83	2.86	29	2.52	12	64	40	4	8
Black Swan	75	0.75	2.50	30	1.80	9	36	24	20	40
Noisy Friarbird	68	0.68	2.27	30	2.12	9	48	56	16	0
Spotted Pardalote	59	0.59	2.11	28	1.47	8	24	8	36	44
Striated Pardalote	56	0.56	1.70	33	0.95	5	44	20	16	52
White-brow Scrubwren	47	0.47	1.81	26	0.80	3	28	16	36	24
Blk-face Cuckoo-shrike	44	0.44	1.47	30	0.94	5	44	36	20	20

species	sum all surveys	mean all surveys	mean when present	% with counts	SD	MAX no. birds	Spr	Sum	Aut	Win
Yellow-rumped Thornbill	32	0.32	3.56	9	3.32	12	4	12	16	4
Little Pied Cormorant	27	0.27	1.08	25	0.28	2	32	20	32	16
Little Black Cormorant	25	0.25	1.67	15	0.72	3	16	24	16	4
Laughing Kookaburra	21	0.21	1.31	16	0.60	3	20	16	12	16
Eastern Spinebill	17	0.17	1.06	16	0.25	2	8	0	16	40
Common Blackbird	17	0.17	1.21	14	0.43	2	28	24	4	0
Grey Fantail	16	0.16	1.23	13	0.44	2	12	24	12	4
White-faced Heron	15	0.15	1.07	14	0.27	2	12	20	16	8
Dusky Woodswallow	14	0.14	2.33	6	1.03	4	12	8	4	0
Australasian Grebe	12	0.12	1.20	10	0.42	2	4	20	12	4
Grey Currawong	11	0.11	1.38	8	0.74	3	8	0	0	24
Yellow-tail B-Cockatoo	11	0.11	11.00	1		11	0	4	0	0
Red-browed Finch	10	0.10	2.50	4	0.58	3	0	12	0	4
Brown Thornbill	9	0.09	1.80	5	0.84	3	4	4	8	4
Golden Whistler	8	0.08	1.33	6	0.52	2	0	0	4	20
Wh-throat Treecreeper	7	0.07	1.00	7	0.00	1	0	4	16	8
Common Bronzewing	5	0.05	1.25	4	0.50	2	0	12	4	0
Red-rumped Parrot	5	0.05	2.50	2	2.12	4	4	0	4	0
Great Cormorant	4	0.04	1.00	4	0.00	1	12	4	0	0
Australian Pelican	4	0.04	1.00	4	0.00	1	4	4	0	8
Sacred Kingfisher	4	0.04	1.00	4	0.00	1	12	0	4	0
Chestnut Teal	4	0.04	2.00	2	0.00	2	0	8	0	0
European Goldfinch	4	0.04	4.00	1		4	0	0	0	4
Olive-backed Oriole	3	0.03	1.00	3	0.00	1	8	4	0	0
Little Grassbird	3	0.03	1.00	3	0.00	1	8	4	0	0
Dollarbird	3	0.03	1.50	2	0.71	2	0	8	0	0
White-nape Honeyeater	3	0.03	1.50	2	0.71	2	0	0	8	0
Mallard	2	0.02	1.00	2	0.00	1	0	8	0	0
Hardhead	2	0.02	1.00	2	0.00	1	0	4	0	4
Grey Shrike-thrush	2	0.02	1.00	2	0.00	1	0	8	0	0
Weebill	2	0.02	2.00	1		2	4	0	0	0
Brown Quail	1	0.01	1.00	1		1	4	0	0	0
Hoary-headed Grebe	1	0.01	1.00	1		1	0	4	0	0
Darter	1	0.01	1.00	1		1	0	4	0	0
Great Egret	1	0.01	1.00	1		1	4	0	0	0
Nankeen Night Heron	1	0.01	1.00	1		1	0	4	0	0
Aust Spotted Crake	1	0.01	1.00	1		1	4	0	0	0
Spotless Crake	1	0.01	1.00	1		1	0	0	0	4
Masked Lapwing	1	0.01	1.00	1		1	0	0	0	4
Pallid Cuckoo	1	0.01	1.00	1		1	4	0	0	0
White-throat Gerygone	1	0.01	1.00	1		1	4	0	0	0
total species (79)	2480	24.80		100	3.96	35				
total individual birds	22364	223.64		100	68.49	460				
ratio	9.02	9.02			2.51	18.40				

Figure 3. Increase in number of species recorded over time

Survey number is on x axis; number of species added per individual survey, and cumulative species total is on left and right y axes respectively. An indication of the end of each year of surveying is provided by tabs on the upper border.



Perhaps not unexpectedly, species tended to be either common and regular or recorded only occasionally, with relatively few species being recorded semi-regularly. A breakdown into number of species per decile of recording frequency is shown below.

91-100 %	11
81-90 %	2
71-80%	4
61-70%	0
51-60%	4
41-50%	1
31-40%	4
21-30%	11
11-20%	7
1-10%	35

Only three species from the top decile, Australian Wood Duck, Dusky Moorhen and Magpie-lark, were recorded on every survey, though this no doubt reflects survey effort and design limitations rather than actual absence of many common species.

Pacific Black Duck, Purple Swamphen, Eurasian Coot, Crimson Rosella, Superb Fairy-wren, Red Wattlebird, Noisy Miner and Australian Magpie were all recorded on more than 90% of surveys.

Thirteen of the 35 species in the lowest recording frequency decile were recorded once only, including Brown Quail, Hoary-headed Grebe, Darter, Great Egret, Nankeen Night Heron, Australian Spotted Crake, Spotless Crake, Masked Lapwing, Yellow-tailed Black Cockatoo, Pallid Cuckoo, Weebill, White-throated Gerygone, and European Goldfinch.

An indication of the seasonality of individual species is provided in the last four columns of table 2. Overall there was little difference in species presence between seasons with average species counts per survey of 26.9 for Autumn, 25.0 for Winter, 23.4 for Spring and 24.0 for Summer.

Discussion

The Australian National University's Acton campus is nestled between Canberra City and the suburb of Turner to the east and north, Lake Burley Griffin to the south, and Black Mountain Reserve and the Australian National Botanic Gardens to the west. Sullivans Creek, which drains Canberra's northern suburbs, flows through the campus immediately prior to emptying into the lake. Thus, apart from the campus itself being large with much open green space, its location adjacent to other diverse habitats should help ensure a large and varied avifauna for the university. The results of this survey tend to bear this out.

A number of species not recorded during the limited time frame of these surveys should also be noted. Listed in Table 3 below are those I have recorded on the ANU campus, either within or outside of the actual survey

area at various times, as well as a further four species that I am personally aware of other people reporting.

There are a number of species which are surprisingly absent from the ANU campus, or occur only in unexpectedly low numbers. For example, given the proximity of the lake, I find it surprising that I have never recorded a Silver Gull *Larus novaehollandiae* on campus. Masked Lapwings are notably uncommon given the amount of seemingly suitable habitat and their general lack of concern for the presence of people. Apart from the single bird recorded from this survey on 20 July 2000, my only other records of Masked Lapwings on campus are of a single bird on 16 March 1992 near the stepping stones at South Oval (the same location as the bird recorded during this survey); and on Willows Oval, a single bird on 17 and 26 July 2002 and a pair on 21 Feb 2003.

Table 3. Other ANU birds recorded outside of survey times

In or out refers to whether the species was recorded within or outside of the defined survey area. Observers other than the author were: Phil Hansbro (PH), David McDonald (DM), Kim Sterelny (KS), Michael Lenz (ML).

White-bellied Sea-Eagle	<i>Haliaeetus leucogaster</i>	09.07.1997		in
Australian Hobby	<i>Falco longipennis</i>	20.11.2001	20.10.2002	in
Little Corella	<i>Cacatua sanguinea</i>	22.08.1997		in
Buff-rumped Thornbill	<i>Acanthiza reguloides</i>	22.05.2003	14.07.2003	out
Yellow Thornbill	<i>Acanthiza nana</i>	30.06.1991	24.07.1992	in
White-eared Honeyeater	<i>Lichenostomus leucotis</i>	27.07.2003		out
New Holland Honeyeater	<i>Phylidonyris novaehollandiae</i>	23.03.1992	24.10.2002	in
Eastern Yellow Robin	<i>Eopsaltria australis</i>	27.07.2003		out
Varied Sittella	<i>Daphoenositta chrysoptera</i>	27.06.1991	30.06.1991	in
White-winged Triller	<i>Lalage sueurii</i>	30.06.1991		out
Painted Button-quail (PH)	<i>Turnix varia</i>	20.10.1995		out
Southern Boobook (DM)	<i>Ninox novaeseelandiae</i>	09.05.2003		in
Barn Owl (KS, ML)	<i>Tyto alba</i>	2001	31.03.2003	out
White-throated Needletail	<i>Hirundapus caudacutus</i>	March 2003		?

Other birds which seem to be under-represented, given the habitat potential, are various small bush birds. Both Brown Thornbills and Yellow-rumped Thornbills strike me as being present in much smaller numbers than I would have expected, and Weebills I recorded only once during the survey and not at any other time. However, Superb Fairy-wrens which are abundant, and White-browed Scrubwrens which are common, clearly have no problem making use of the available habitat,

The status of several species has changed fairly dramatically over the past decade. Red-rumped parrots, for example, were recorded only twice during the four-year survey, however in the latter half of 1991, when I made records during a number of similar walks in the same area, they were recorded on seven out of fourteen occasions. White-plumed Honeyeaters and Red-browed Finches also appear to have decreased significantly in that time, and I suspect several other species have declined to a lesser degree though I don't have data robust enough to support these feelings.

On the other hand, Common Mynas and Crested Pigeons are on the increase. My first record for mynas at ANU is from 19 October 1991, but I suspect they were not regular until the mid 1990s. They are still not particularly common at ANU and also show a strong seasonal effect, being present predominantly in Spring and Summer. I first recorded Crested Pigeons at ANU on 9 August 1999 during one of these surveys. Since then they have progressively become more and more frequently encountered, though usually still in relatively small numbers.

The increase in Common Mynas and Crested Pigeons is no doubt related to their current generalised spread in the Canberra region rather than due to any change at the ANU specifically. However, the decrease in Red-rumped Parrot prevalence, and probably of some of the other declining species, is almost certainly due to loss of appropriate habitat as more and more open space is taken up by new buildings and car-parks, and the remaining open grassed areas seem to be increasingly well watered and are regularly manicured. In the current climate of Government and University policy and direction there is certainly no reason to expect this rapid development to change in the near future.

Towards the end of this four-year survey period, a new, large and very ambitious project, the Lower Sullivan's Creek Catchment Ecological Survey, was set up to assess and monitor the biodiversity of the area. (Further information can be found on the web at www.anu.edu.au/facilities/anugreen/biodiversity/survey/). The ANU lies at the heart of this area, which also covers the western half of Canberra City, much of Turner, the lower south-eastern slopes of Black Mountain including CSIRO and the Australian National Botanic Gardens, and the Acton and Black Mountain Peninsulas. Thirty-three of the 90 2-ha sites used for avifaunal assessments in this large survey are within the ANU, of which eight fall within the area of my own survey outlined in Figure 1. The baseline bird surveys for this study were completed between winter 2002 and winter 2003. It will be very interesting to compare the results of these two surveys when they become available.

A FURTHER UPDATE ON SATIN BOWERBIRD BEHAVIOUR AND DISPERSAL IN THE ACT

Jack Holland

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The spread of the Satin Bowerbird *Ptilonorhynchus violaceus* into ACT suburbs since the early 1980s has been well documented (Holland 1999, Holland and Veerman 2000, Holland 2000). This article updates several aspects of its behaviour and dispersal, including the possible effects of the 18 January 2003 bushfires, which devastated much of the species' favoured suburban habitat in the ACT.

Activity related to bowers and the roost site in Chauvel Circle, Chapman

From the beginning of April 2001, the bower in my neighbour's backyard at 10 Chauvel Circle (Holland 2001) continued to be active and attended by an adult blue male throughout the year. While activity was variable, the male was present every day and had a very similar behaviour pattern to that described previously. The bower was usually complete and well-maintained, but for short periods occasionally looked rather worn. I saw an immature male nearly destroy it one afternoon by tugging at the base and removing large portions, but before dark it had been rebuilt by the resident male. Unfortunately the fires of 18 January 2003 completely burnt out both the bower and the surrounding garden, after nearly three years of year-round activity. Though some birds visited the area the following day, by the end of August 2003 they had not returned and the

bower had not been restored (John Powys, pers. comm.).

Likewise, the roost site in Chauvel Circle (Holland 2000) was utilised over the winters of both 2001 and 2002. It was very active in 2001 with, at its peak, up to 85 birds moving at about sunrise through the big tree at 54 Darwinia Terrace and visiting the feeding table beneath it, with a maximum of 45 there at the one time. For reasons that are unclear, numbers were consistently lower in the winter of 2002, with a maximum of 35 birds recorded moving through. The roost site itself also seemed much more spread out. There was some evidence of birds dispersing in different directions, but this proved difficult to quantify, despite several attempts. In both winters, numbers built up fairly slowly from early May with, again, a rapid decline in mid September.

Unfortunately the whole of the roost site was also completely destroyed in the 18 January 2003 fires, and with the current bare blocks there now is insufficient cover for it to be utilised. This is expected to remain so for some years. The big gum and the associated feeding table at 54 Darwinia Terrace which were visited every day while the roost was active are also now gone, and it is unlikely that the morning dispersal will occur again at this site in the foreseeable future.

The nearby bower was not utilised much during 2001 and 2002, unlike the bower at 14 Burgan Place Rivett, which was mostly complete both winters over the period April to October, with birds still present until Christmas 2001. I checked the Burgan Place bower again on 7 August 2003, finding only a bower mat which, while indicating some activity this season, had clearly not been visited recently. A few minutes earlier I had heard a bird giving its typical top of the tree 'I'm above the bower' call from further down (east) in Darwinia Terrace, but was not able to follow this up. On subsequent visits during August I failed to hear or locate any bird, and detected no further activity at the nearby bower.

After the fires, Satin Bowerbirds continued to be seen around Chapman, including at Margaret West's place at 34 Monkman Street where the fences and part of the back yard were burnt. A green bird was first seen there on 16 February 2003, followed by a blue male and one or two green birds on 6 March. These were seen every day until at least 9 March, but since then only the occasional green bird has been observed. This garden had contained a bower site that had been inactive for some years (Holland 2000), but a new bower was discovered about five metres away, again roughly aligned NE/SW and was active during the winters of 2001 and 2002. This bower was not rebuilt during the winter of 2003, presumably because of the lack of cover following the fire.

A blue male and up to nine green birds were active in the Bertel Crescent area at the other end of Chapman from March to May 2003, with a bower built in a public reserve close to a walkway, and within a

few hundred metres of the fire front (Jeff Rabbidge, pers. comm). Birds have remained in the area through to the time of writing, but in much lower numbers. On the COG email discussion list, Marnix Zwankhuisen reported the observations by a work colleague living in Beaumont Close (where the houses and gardens were largely saved) of many green birds and one or two blue males, and also noted the commencement of the building of a bower in the back corner of his garden during the week of 16 June 2003. Les Davies (pers. comm.) confirmed much bowerbird activity in his garden in this street during August.

Further dispersal of the Satin Bowerbird into Woden and South Canberra, both pre- and post-fires

The spread of the Satin Bowerbird into the Canberra suburbs (Holland and Veerman 2000) has continued, with some interesting post-fire observations. Below is a summary, generally taken from postings on the COG email discussion list, or from personal communications.

The earliest formal record of bowerbirds in Curtin is from September 2000 by Martyn Moffat, who recorded a green bird with material in its bill in his Storey Street garden in the fifth week of September of COG's Garden Bird Survey (GBS) calendar (that is, the week starting 26 September). Martyn assumed the material was nesting material [and the record is listed as 'nest building' in the 2000-01 ABR (COG 2001)1, but it may instead have been bower material, particularly since the timing is at least a week before the earliest known start to nest building. Martyn has not seen any

similar birds in his garden since, but did record a male bird on 27 April 2003.

In contrast, soon after the fires Judy Corp reported a green bird coming to the bird bath each day in her garden in Munro Street, Curtin, close to the edge of the burnt area, with a 'singed' male also visiting on 28 January. Bowerbirds continued to be seen passing through her garden over the following months; they included males in late February, and a maximum of six green birds on 29 May, typically picking up vegetable scraps.

Earlier that month (3 May) Richard Allen had reported five green birds flying due north over his garden in Peacock Place, Curtin, towards Yarralumla; a new species for his GBS site. Interestingly, on 27 June, Judy Corp reported seeing 20 Satin Bowerbirds, including at least one male, flying from the Governor General's garden into the Royal Canberra Golf Course, close to the little bridge on the walk to Yarralumla Nursery; this is less than 2 km due north of Richard's house.

I moved temporarily to the western part of Yarralumla on 11 July 2003. While a neighbour indicated that he occasionally had bowerbirds in his garden, and in spite of numerous walks around the area, I did not see a Satin Bowerbird there until the morning of 3 August, when a male flew over the western end of Weston Street, heading south-west. Shortly after, I saw a green bird in the trees in front of the CSIRO Forestry building, where COG meetings used to be held. Thereafter I neither saw nor heard them frequently; nor did I record any in my GBS site until a male visited a neighbour's compost bin on 28 August.

On 31 August close observation of a female green bird led me to a bower site under a bush on the eastern side of the CSIRO Forestry Oval. This consisted of a bower platform with only a few upright sticks and about six blue ornaments, but it was clearly active as the blue objects had been moved around on subsequent visits. On 4 September the bower was 75 per cent complete, and about 90 per cent complete on 6 September, with a male bird calling in the trees above each time. The bower was typically aligned in a NNE direction and, interestingly, had at its northern end some yellow crest feathers from a Sulphur-Crested Cockatoo *Cacatua galerita*. There was quite a bit of activity over the next month each time the bower was visited, with the male often calling and up to two green birds present and, by 11 October, there were about 15 crest feathers and more than 40 blue objects. Activity seemed lower in the second half of October, though the bower and its feathers and objects remained complete. This lull coincided with green birds suddenly becoming more conspicuous in my GBS site about 0.5 km away, with birds seen flying towards the bower, or more frequently away from it in a westerly direction.

Despite these Curtin and Yarralumla observations, and some of the earliest records coming from this suburb (Holland and Veerman 2000), as well as a confirmed nesting event, the Satin Bowerbird is much less numerous and/or conspicuous, at least on the western side, than it used to be in parts of Chapman and Duffy.

On the opposite (eastern) side of Yarralumla, Alastair Smith reported

seeing three green birds in Stirling Park near new Parliament House round 17:00 h on 7 August 2003. This observation was the first time he had seen bowerbirds while running or riding to work along this route in his seven years in Canberra.

During 2002 Joan and Vince Taylor reported a bower off Downes Place, Hughes, close to the Federal Golf Course. Michael Wright informed me that it had been active for some time, and that the first time he noticed it would have been April or May 2001. Indeed, he had a photo of one entrance to the bower with a collection of Sulphur-crested Cockatoo crest feathers. It was a discrete area of crest feathers like a yellow doormat against the rest of the blue items. I had often seen light yellow leaves or straws being used at bower entrances, particularly when the bower was at its most active, but not feathers such as these until I discovered the Yarralumla bower described above. However, during his talk at the August 2003 COG meeting, James Nicholls also showed a photo of a Tidbinbilla bower similarly decorated with these feathers. It appears this is not uncommon, at least in the ACT. How these feathers are collected is anyone's guess.

Michael noted that, although a lot of weed removal was undertaken in the vicinity last year by both the Department of Urban Services and Federal Golf Course grounds staff, the particular area of cotoneaster where the bower is located remains and thus the bower survived. He has seen both the blue male and green birds in the area but never more than two birds (one blue and one green) together until recently.

They were very impressive on the weekend of 5-6 July. A mature male in the bower was displaying simultaneously to three green birds, although one of them seemed to think itself the leader of the pack and chased off the 'observers' while the leading man kept on with the job! There was much displaying with what must be a bowerbird's favourite ornament - a blue clothes peg held in the bill! Joan and Vince Taylor informed me that the bower was also very active at the end of July and the beginning of August, with the male displaying very vigorously to a female. Rob Griffiths reported similar activity towards the end of August. Ian Anderson indicated that bowerbirds had become much more common in his garden in Wylly Place, Hughes (about 0.5 km away) this winter. A blue male was often seen or heard calling, and Ian suspected there was a bower close by.

Surprisingly there are very few records of bowerbirds from the neighbouring suburbs of Deakin and Garran. David Rosalky noted that a green bird had visited the water feature in his garden in Northcote Crescent, Deakin, on Sunday 22 June 2003; the first he had seen for about a year, and with only a few sightings previously. Sue Edgar reported a green bird at her back garden feeder in the week of 8 June 2003, where the parrots soon saw it off. She has been living in Garran since 1966, and this was her first sighting of this species in the suburb. She quite often saw it over the next month, including one occasion when it harassed a Tawny Frogmouth *Podargus strigoides* roosting in her garden. Alastair Smith confirmed that he had never seen the species in Garran since moving there in 1996.

In contrast, Carol and Ken Macleay reported that they saw three birds in their garden in Shepherdson Place, Isaacs, on 4 February 2003, two of them females or young males, and one a partially blue male. They again saw a female or young male on 5 March, and heard bowerbirds on many other days around these dates.

Geoffrey Dabb reported seeing a green bird at nearby East O'Malley on 29 March 2003. In the previous 18 months he had seen single birds at the north side of Mt Mugga, as well as near his home in Narrabundah, including on one occasion an adult with dependent young in his Brockman Street garden in late summer/early winter of 2002. It is tempting to speculate the latter were from the 46 Mugga Way nest, about 1.5 km distant WNW.

Interestingly, I lived in lower Griffith close to St Edmunds from 29 January to 11 July 2003, but never saw or heard a bowerbird there during that time, despite a lot of walking or jogging through the suburb, mainly in the area bounded by the triangle formed by Canberra and Sturt Avenues and Captain Cook Crescent.

Satin Bowerbirds in Kambah and Tuggeranong Valley

After Weston Creek, the most common place to see Satin Bowerbirds in Canberra before the fires was Kambah, particularly west of Drakeford Drive (Holland and Veerman 2000).

On 26 February 2003 David McDonald noted on the COG email discussion list that he had six green birds in his garden

in Morant Circuit, Kambah, that day; in his opinion, an unusually large number for his area. On 15 April he posted that he had three birds in his garden that morning, one blue and two green, with the former holding a blue plastic bottle cap in his bill and displaying to one of the green birds for about five minutes. David has indicated that male Satin Bowerbirds have been exceedingly uncommon in his garden, despite previously having had a bower (Holland and Veerman 2000). Also of interest is that in the calendar years 2002 and 2003 all his records have been in the months of January to April, rather than during the winter period, when the species would be most expected. Apart from the several records of higher numbers noted above, there has been nothing to suggest any noticeable effect of the January 18 fires.

Philip Veerman noted on the COG email discussion list on 15 April 2003 that he had had Satin Bowerbirds in his garden in Castley Circuit, Kambah, about 1.5 km south of David's place, for the past six winters (and occasionally before that), and had seen birds displaying though not with accessories, and had never seen a blue male. However, only five days later he reported that he had two fully blue males in his garden, one of which was displaying holding a leaf in its bill and fanning its tail. There was at least one green bird present. Apparently they have not been seen there again. Julie McGuinness noted that she had her first green bird in her nearby Seymour Place, Kambah, garden on 14 April 2003, about five weeks earlier than usual. She too had only ever seen green birds.

In contrast Mary and Laurie Virr regularly have had male Satin Bowerbirds in their Meredith Circuit garden (about 1 km SW and W of Philip's and Julie's places respectively) for about seven to eight years, and there has been an active bower in three different spots over this time. The first green bird was seen in 1995, and the first bower was built in May 1996. Unfortunately the wattle above it died and was removed over the summer of 1996-97, whereupon all of the bower, decorations and nearly all of the mat/platform was taken to a new spot in the south-east corner of the garden, close to a footpath edging the street from where it could readily be seen. It fell into disrepair over the summer of 1997-98 and was repaired on 3 May 1998. Activity at this spot then varied over a number of years, though Mary recalls it was intact over long periods and probably through some summer periods, until all the bower material was again removed to a third spot in the opposite corner of the garden in the spring of 2001.

The construction of the bower at this spot was initially quite rough, typical of those built by young or immature males. I inspected this bower on 10 August 2003 and found it quite well formed, though not quite coming together at the top, and aligned almost exactly N/S in a typically mature largely native garden about 100 m from where the fire front had passed. About 15 blue items were scattered relatively close by. Mary told me that the numbers of blue objects varied and that yellow dahlias or straws were also favoured decorations. There were often three to four birds disputing or feeding in the compost bin, with a

maximum of nine green birds seen together, but never more than one blue male. The vegetable garden was also often raided, with lettuce seedlings a favourite food. She noted that the birds often took decorations off in a north-easterly direction, where she suspected another bower existed.

Shortly afterwards, Mary put me in contact with a neighbour, Philippa Elvy, who had noticed Satin Bowerbirds in her garden several houses further down Meredith Circuit soon after moving in during 1988. Several years later 35 green birds were seen feeding on some cooked rice that had been discarded. This large number is a very significant record so close to the first formal record in Kambah of a single bird in Philip Veerman's garden in the first GBS week of April 1990 (Holland and Veerman 2000). When her neighbour removed a large hedge several years ago it contained a nest that they thought may have been a bowerbird's as they had often been seen hopping in and out of the hedge. Given the known secretiveness of the female during breeding this appears unlikely.

Philippa reports that bowerbirds often gather in the afternoons, and that another hedge is a favoured spot, particularly of the single male in the area, who often displays to green birds there. She also believes the birds roost there. After visiting the area and also comparing them on the maps, I noted a distinct similarity with the former roost site in Chapman. Both sites are bushy gardens at the south-western edges of the developed area, and a roost site seems a distinct possibility.

Harvey Perkins reported that Satin Bowerbirds showed up at his place in Kambah on the mornings of 8 July 2003 (one green bird) and 9 July (two green birds). This is a couple of weeks earlier than when he recorded up to four of them last year, though he noted they are far from predictable at his place in Summerland Circuit in the north-eastern part of Kambah as yet (about 1.5 km ESE of David McDonald's garden). He has also only seen green birds.

In contrast Peter Roberts has been recording the Satin Bowerbird in his garden in Appel Crescent, Fadden, (about 4 km to the ESE of Harvey's garden) for over two years. The first record there was of two green birds on 8 March 2001, with a record on the nearby Mt Wanniasa a couple of months earlier. Green birds have been seen in his garden at regular intervals since that time, with a maximum of four birds seen in the third GBS week of September 2002. He also has some summer records including regular sightings of single birds during January-February 2003, but these were mostly pre-fires, again with no noticeable increase post-fires. He also has never seen a male bird, but reports that a friend saw one, accompanied by five to six green birds, lower down in Farrer in May-June 2003.

These observations indicate a considerable gap in existing records as there are no known sightings of the Satin Bowerbird in Wanniasa, but this possibly simply represents a gap in recorders rather than a complete absence of the species from this suburb. I urge readers who may live in the area or have colleagues or friends in this area to report any bowerbird sightings.

Observations from other suburbs

One very interesting report was the observation by a Holder resident of three blue male Satin Bowerbirds building two bowers in her backyard in De Graaff Street, Holder, in June 2002. Two males built one bower, while the third built the second, which lasted about a week before it was dismantled. Unfortunately the further outcome is unclear, as the person moved away shortly thereafter. However, such behaviour on the part of bowerbirds is very unusual. I have often seen two blue males together, but never more, and generally this results in a territorial dispute with one bird seeing the other off.

As noted in Holland and Veerman (2000) there have been very few reports of Satin Bowerbirds north of the lake. Nicki Taws saw a green bird for the first time in her Cook garden in May and June 2002; it was sufficiently unfamiliar to the resident Noisy Miners *Manorina melanocephala* for them to mob it. Interestingly Susan Robertson reported a single bird in her Aranda garden in the third GB S week of January 2002 (COG 2002). Brendan Lepschi reported on the COG email discussion list that a work colleague had reported a single male Satin Bowerbird in his North Melba backyard on 10 March 2003. This is reasonably close (<1 km) from Fraser where they have been reported before (Holland & Veerman 2000) and, from subsequent reports on the COG email discussion list, they are still seen from time to time.

Steve Holliday reported a young male bird in his Ainslie garden on 8 February 2003. It was dancing around displaying

with leaves or a stick in its bill and making a variety of noises, completely baffling the local Pied Currawongs *Strepera graculina*. When the latter approached, the bowerbird charged them and chased them off. He saw another bird about a month later. There have been very few reported sightings in this suburb (Holland and Veerman 2000).

Conclusions

The Satin Bowerbird has continued to expand its range into the Canberra suburbs, and this article summarises the first formal sightings in Fadden (March 2000), Curtin (September 2000), Aranda (January 2002), Narrabundah (February 2002), Cook (May 2002), Isaacs (February 2003), North Melba (March 2003), East O'Malley (March 2003), and Garran (June 2003). Despite its traditional strongholds of Duffy and Chapman suffering a devastating blow in the 18 January 2003 bushfires, only a few of these first records seem to be fire-related, notably Isaacs and possibly Garran. In contrast to my expectations when I started to draft this article, the fires seem have been responsible for some increased activity only in some suburbs, notably in Curtin (particularly in Judy Corp's garden) and possibly in Kambah and Hughes.

The species continues to be present in both Chapman and Duffy/Holder, including around the fringes of the burnt areas, though probably at lower numbers than pre-fire. While the spread into other Canberra suburbs will continue, it does not seem that the fires have had such a major effect on bowerbirds compared with, for example, that on the raucous Yellow-tailed Black-Cockatoo

Calyptorhynchus funereus, which has become far more common in parts of Canberra since the pine forests of Mt Stromlo and Narrabundah Hill were burnt out.

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I would like to thank all those persons, usually identified by name above, who have provided the information which has allowed the preparation of this paper, in particular those who responded to my email requests or published observations on the COG email discussion list.

This paper is expected to represent closure for me in respect of the Satin Bowerbird, as events which have kept me fascinated as they unfolded round my former home in Chapman for over ten years are unlikely to be repeated when, hopefully, we return there after rebuilding. However, I would strongly encourage all of you to keep reporting your observations on this very interesting species on your garden bird charts or COG incidental records sheets, by noting them on the COG email discussion list, and by submitting Odd Obs to the editors of *Canberra Bird Notes*. Despite my rather extensive publishing on the Satin Bowerbird I feel there is much more still to learn and tell about this fascinating species.

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ADDENDA AND CORRIGENDA TO PREVIOUS ISSUES OF
CANBERRA BIRD NOTES

1. Apologies to Malcolm Fyfe, whose Little Raven *Corvus mellori* during the Kosciuszko blitz inadvertently became Little Crows *Corvus bennetti*. Now that would have been remarkable! See: Fyfe M (2003). A survey of birds from Thredbo to the summit: a second visit. CBN 28(1): 18.
2. Apologies to 'Steve' Stephinson, whose photograph of the leucistic Yellow-tailed Black-Cockatoo, CBN 28: 66, went unacknowledged. In our defence, it was also unacknowledged on the web site from which it was drawn.
3. Bounds J (2003). Painted Honeyeater reports in the Canberra region during the 2002-03 influx. *Canberra Bird Notes* 28(2), June 2003: 56-62. Since writing this article consolidating reported sightings of this species in the spring and summer of 2002-03, an additional report to the COG database has been identified. This sighting was at Mt Taylor on 18 January 2003 by David McDonald. This is the latest reported sighting of the species in January 2003.

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A FURTHER UPDATE ON SATIN BOWERBIRD BREEDING IN CANBERRA

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The spread of the Satin Bowerbird *Ptilonorhynchus violaceus* into ACT suburbs since the early 1980s has been well documented (Holland 1999, Holland and Veerman 2000, Holland 2000). Despite a considerable increase in numbers and the presence of many bowers in suburban gardens, especially in Weston Creek, there are few records of suburban breeding (Griffiths and Holland 2001). This article provides details of further successful breeding in the suburbs. The accompanying paper (Holland 2003) updates several other aspects of the species' behaviour and dispersal in the ACT, and includes an assessment of the effects of the 18 January 2003 bushfires on the species.

Further successful breeding in Red Hill

Griffiths and Holland (2001) reported a successful Satin Bowerbird breeding event at 46 Mugga Way, Red Hill, over the period mid-November 2000 to mid-January 2001.

In 2001 a female Satin Bowerbird built in the same cypress tree as before. The nest was never actually sighted, but it was situated more to the north, perhaps slightly higher in the tree and more protected from the westerly sun, being sheltered by the neighbouring birch. I (RG) remember seeing the fledgling and adult female around the garden about the middle of January 2002. Unfortunately details have been lost, but the timing was very similar to that of 2000-01.

Over the winter of 2002, five Satin Bowerbirds appeared to be living around 57 Mugga Way, with an adult male infrequently sighted. A bower was constructed but was destroyed by the resident poodle.

From 24 October 2002, a female Satin Bowerbird was resident at 46 Mugga Way, and on 3 November was observed carrying nest building material to the same large cypress in the front of the garden. From 8 November the female was rarely seen, but by mid-December she was actively feeding young. The nest site appeared to be located slightly

above and inside the location of the 2000-01 nest. I (RG) was not able to see it for quite some time, but saw the female bowerbird returning to the site from many directions around the garden.

The nest was finally located on 20 December, and confirmed as about 30 cm higher up than the 2000-01 site, and further away from the trunk, on a secondary branch. It contained a downy chick, which was seen being fed by the adult female. The nest was a small untidy structure, with the chick looking almost too big for it. Nesting was completed during the Christmas week, with one chick successfully fledged, about three weeks earlier than the previous two years.

Before Christmas 2002, the green birds were around again at 57 Mugga Way, but no bower was found. Interestingly a couple of green birds were also seen just prior to Christmas in Richard and Rose Mason's garden at 26 Jansz Crescent Griffith, about 700 m on the other side of the Canberra Grammar School (Richard Mason, pers. comm.). There had been very few previous sightings in this garden (Holland and Veerman 2000). While they were absent from 30 December 2002 to 3 January 2003, a bower was built, and a male and one to two green birds were in attendance when they returned. I (JH) inspected the bower on 10 January and found it close to the house (from which it could be seen through a window) and aligned roughly NE/SW. Activity stopped after a few weeks, much to the relief of Rose as the birds had caused havoc in her vegetable garden, though a green bird visited the bower site briefly in March.

At the end of June 2003 I (RG) was in contact with the people at 57 Mugga Way and they told me there had been a lot of activity there with up to seven green birds visiting, plus a blue male. I have not seen the male at 46 Mugga Way, but the adult female seemed to be resident amongst the thicket at the rear of the property, and I used to see her every other day.

A nesting site located in Chapman

Holland (2001) reported the feeding of dependent Satin Bowerbird young around an active bower located in the garden of 10 Chauvel Circle, Chapman, on at least six occasions between 20 January and 18 February 2001, but was unable to determine the nest site.

In mid-January 2002 two of us (MG & BG) noticed a female Satin Bowerbird moving through and then feeding a chick in a nest high in a *Melaleuca armillaris* hedge which runs very close alongside our house at 57 Percy Crescent, Chapman, adjacent to Coleman Ridge, Canberra Nature Park. Unfortunately, the nest, a substantial one built of relatively fine twigs, rather like a magpie's in appearance, was empty by the time I (JH) came to check.

On 2 October 2002 a female Satin Bowerbird was observed (MG & BG) pulling fine twigs from the same *Melaleuca annillaris* hedge — a line of mature plants with lower branches pruned - and by 30 October a nest was obvious. It was at a new and more open site about 2 m distant and slightly higher than the previous one (about 5 m above the ground). By 2 November the bird appeared to be on the nest, but this was

not confirmed until 5 November when a definite sighting was made, the main problem being the excellent camouflage provided by the dense canopy of the paperbark.

Between 6 and 17 November, the bird was observed on the nest a number of times, and also flying to a relatively low landing point and then hopping in a zigzag pattern up to the nest. An apparent change in behaviour was seen on 20 November when the bird was standing on the edge of the nest with its head lowered into it, before settling on to it. This was observed a number of times over the next couple of days. On both 23 and 24 November one of us (BG) observed the bird directing its beak to two or three places in the nest and then settling on it. A day later an open beak was seen in the nest for the first time.

During this period I (JH) visited the site several times, noting a female Satin Bowerbird first sitting and then feeding young in the nest, which was in a surprisingly open position in the paperbark tree and easily seen when approached from the corner of Kathner Street and Percy Crescent (the public access to Cooleman Ridge being within 10 m of the nest site). On 29 November one of us (BG) noted that the female was 'still feeding two fluffy birds; with a fluttering of tiny wings heard', but seemed to be spending less time on the nest. On 6 December the 'mother bird was still feeding a fluffy-headed chick'.

On 7 December a blue Satin Bowerbird was seen in the vicinity of the nest, but flew off when a Common Blackbird *Turdus merula* gave its alarm calls. The next day two full-sized green birds

(female and juvenile or another adult female?) were seen hopping near the nest. The one nearer the nest was tentatively pulling at fine twigs of melaleuca. Later we (MG & BG) saw the nestling with the mother bird in attendance. Over the period 10-12 December the female was seen at the nest a number of times, with another female adult or juvenile nearby (this bird had fewer markings).

On 13 December a young bird with a downy head was seen hesitatingly hopping, with clumsy and uncertain movements, in the melaleuca and on the paling fence adjacent to the nest tree. One to two metre 'flights' were observed. We (MG & BG) suspect this was the first day out of the nest. The young one then flew into a nearby paperbark with the mother feeding and watching nearby. It roosted in this paperbark and on 14 December the mother was seen flying in and out of this shrub to feed and watch the awkward fledgling, which was still moving tentatively (both were typically quiet). It was observed to sleep overnight in the same paperbark tree.

Two 'adult' birds (mother plus helper?) were seen flying about the vicinity together on 15 December. The baby and mum later moved to another paperbark about 20 to 30 m away from the nest tree, and then moved again, perhaps another 15 m away from the previous spot but further away from the nest — again in a paperbark with dense cover. The mother was also seen feeding its baby in a nearby silk tree *Albizia julibrissin*. A few further undocumented sightings were made up to 30 December. The hedge largely survived the 18 January fires, but it remains to be seen

whether further nesting will take place in 2003-04.

A nest in the Botanic Gardens

On 12 November 2002 I (MD) saw a green female Satin Bowerbird for the first time in the Australian National Botanic Gardens, in the vicinity of the toilet block near the back gate which leads to the walk to the Black Mountain tower. It was building a nest in the highest part of an unlabelled stringybark, approximately 15-18 m off the ground. At that time it was only a basic framework, and was not in a fork but nestled among the finer branches. By 25 November the female was still building, but the nest looked close to completion.

On 2 December the bowerbird was sitting on the nest, presumably incubating. It was observed sitting on several occasions until 24 December when it was off the nest, possibly taking food back to chicks. A couple of visits from 30 December to 10 January 2003 indicated feeding was in full swing. The mother was typically very watchful and the chick or chicks very quiet. However, I (MD) was then unable to return until 22 January when, despite waiting for about an hour, I saw no sign of the mother or the fledgling. As I didn't manage to see them together, I have no idea how many chicks were in the nest.

A nest in Yarralumla

While watching progress of a nest of an Olive-backed Oriole *Oriolus sagittatus* near the corner of Schlich and Irwin Streets, Yarralumla, on Sunday morning 28 November 1999, I (RC) spotted a large bird in another planted pin oak

Quercus palustris, two up from the oriole's tree. When the bird came down to the ground to feed, it was obviously a Satin Bowerbird. There was a rough twiggy nest about 10 m up the tree, against the trunk — it looked more like a platform.

Thereafter, I frequently observed the single green adult bird. Soon after we saw the fledglings flying in mid-December, one flew into the kitchen window in the early morning. It survived. I (CC) later rescued it from aggressive Australian Magpies *Gymnorhina tibicen* by carrying it to the other side of the house. The mother eventually found it, and continued to feed her groggy offspring for the rest of the day before it finally flew again. The family stayed around for several months and had a pleasant February 2000 leaping for raspberries.

We (RC & CC) first saw Satin Bowerbirds in the garden in 1991, occasionally at first, but now quite regularly. We first saw a coloured male in spring 1999 and have occasionally seen others since then. No further nesting activity has been seen. Pieces of blue plastic put out with the phone number on them have been moved, but generally not very far. In 2003, a bird seemed busy in one corner of the block and, for a few days, there were a couple of blue feathers and a hydrangea flower that were changed around occasionally. We thought it might be a juvenile male practising. Neighbours have also seen a blue male but have not seen any bowers. However, one neighbour (whose blue glass pebbles were occasionally moved around) mentioned that the person building her brush fence had seen a

bower at another job nearby in Schlich Street.

Discussion of breeding activity

As more information is gathered, a pattern is starting to emerge of the breeding behaviour of the Satin Bowerbird in Canberra suburbs. Breeding does not necessarily take place in the areas where the species is most active or where bowers are most dense. This is even the case for the nest found in Chapman. It is of interest that there appear to be no breeding records in the suburbs of Duffy and Holder, where the species has been most common, except for the report of dependent young in Holder in the third GBS week of February 2000 by Margaret Aston (COG 2001).

While nesting activity is generally quiet, and is often discovered accidentally quite some way into the breeding cycle, the area chosen is often surprisingly busy and close to public areas such as roads and public foot or access paths. There is evidence that the species is faithful to the nest site, but it seems a slightly different position may be used each year. A variety of trees of different shapes, sizes and habit are used, both native and exotic (but interestingly in all cases planted rather than natural), as well as a variety of heights and positions (close to trunk, in an upright fork or suspended in the outer leaves). James Nicholls (pers. comm.) has indicated that the nest he observed in LaTrobe Park, Deakin, in November 1996 was high in fine branches in a planted casuarina. Nests also seem to range from small (Red Hill, Yarralumla) to fairly substantial (Chapman).

In no case is the location of the bower where mating took place known for certain, and in several cases there was no known active bower nearby. This is particularly true for the Botanic Gardens nest. There are very few records indeed north of the lake, and even though there were some historic breeding attempts there in the late 1970s (Griffiths and Holland 2000) the species does not appear on the now outdated (May 1997) Botanic Gardens bird list. The only recent record I (JH) am aware of is a posting on the COG email discussion list by Yarden Oren, who reported a single green bird along the eastern fence of the Botanic Gardens on 16 June 2003. It is tempting to speculate that the bower was in Yarralumla several kilometres away across the lake, but even there bower activity is not well documented. Even in Chapman, there was no known bower within about 0.5 km of the nest site.

These nesting events represent the best set of breeding observations in Canberra so far. The timing of breeding appears to be about three weeks earlier than usual, perhaps due to the drought, as it was in Red Hill for the 2002-03 breeding season. Otherwise, with the exception of the Yarralumla nest, the typical cycle appears to be one of nest building in November, incubating during December, feeding nestlings during late December/early January and fledging mid-January. The possible helper, which appeared at the late stages of the Chapman nesting, is also interesting. The group of four green birds associated with the active Chapman bower early in 2001 may have been two adults and two fledglings (Holland 2001).

Acknowledgments

Thanks go to my co-authors for providing me with the text that allowed me to draft this paper, and for reading and providing comments on the draft.

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ONE SWALLOW (WELCOME) WOULD FORTY SUMMERS MAKE!

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My wife and I have lived in the same house in Griffith for over forty years. The year before last, I took down my 'garden-plus' bird chart, which records fairly faithfully the species of birds seen or heard around our residence during the two decades since garden bird charts were first made available in Canberra.

The house, I should briefly explain, backs onto Flinders Park in the west; beyond that are the grounds of Canberra Grammar School. My very local area of interest extends a few houses away to Quiros Street in the south, and a couple of streets away to La Perouse Street to the east and north. In addition to the old cumulative chart, relevant data can be found in an earlier issue of *Canberra Bird Notes* (Vol. 8, No.4 Oct 1983); and, of course, there have been on-going, less formal observations.

How have the birds fared, then, in this particular part of Griffith ACT, over what is getting on for half a century? By far the most significant conclusion to be drawn from the data cited is the remarkable stability of the home-range avian population, both in terms of the number and variety of species and in terms of the numbers of individual birds. This is to speak generally; comment on the effect of the January 2003 bushfires will be made later. As things stand, though, the list remains substantially the same as that published twenty years ago, subject to the few variations noted in what follows.

Red-rumped Parrots *Psephotus haematonotus*, for some reason, are not to be seen of late, though they are usually in evidence at Castle Hill and around the National Library. Crested Pigeons *Ocyphaps lophotes* were unheard of at the time of the earlier report; and it must be fifteen years since Common Mynas *Acridotheres tristis* began turning up in our garden. The latter are still present from time to time, but I think that their numbers are down. [Richard Gregory-Smith, in an article in *Canberra Bird Notes* Vol 10 No.3 July 1995, predicted that the Common Myna 'will attain a state of equilibrium'.]

Superb Fairy-wrens *Malurus cyaneus* have been a great rarity until the time of writing (winter 2003), when a party of them suddenly started to consort with the Silvereyes *Zosterops lateralis* that frequent (I nearly wrote 'infest') the shrubs along our front terrace. How long they will be with us is anybody's guess. On the other hand, what was probably an extended family of White-browed Scrubwrens *Sericornis frontalis* arrived on a prolonged visit to ours and neighbouring gardens about eighteen months ago. They were virtual newcomers to the area, having been observed only once before, in 1986. One of the new arrivals was unwise enough to get itself trapped in the basement, and great was the excitement and rejoicing among the rest of the clan when it was released to rejoin them.

There are still scrubwrens about the place. So there are two species of small birds - fairy-wrens and scrubwrens - which seem to have expanded locally, despite the presence throughout the year of (nesting) Pied Currawongs *Strepera graculina*. The breeding of the latter every year for the past few years, and actually in the garden, is in itself a new development.

For the rest, Striated Pardalotes *Pardalotus striatus* call from time to time, in addition to their long-established and very common spotted cousins *Pardalotus punctatus*, and this is a species which I have noticed to be definitely increasing in urban areas; and the same may be true, but to a much lesser extent, of Grey Butcherbirds *Cracticus torquatus*. Two earlier visits by solitary Satin Bowerbirds *Ptilonorhynchus violaceus* (in January 1996 and April 2002) were totally eclipsed by the daily presence of a foraging party in the vegetable garden in the summer just past (2002/03). They are thought to have come from Mugga Way in Red Hill. They included an adult male, and he built a beautiful bower in the top of the shrubbery, very close to the house, between Christmas and New Year. Once again, we shall have to wait to see if they come back next summer.

Finally, I may yet live to record Noisy Miners *Manorina melanocephala* and Weebills *Sericornis brevirostris* on a regular basis, as these two species are also on the increase, both locally and across Canberra.

In fact, Noisy Miners were within a hundred metres of our garden on a couple of occasions after the mid-January fires this year, but I do not think that their presence had anything to do with that. However, two other species that have probably been refugees from the fires are Yellow-tailed Black-cockatoos *Calyptorhynchus funereus*, which are totally new for us and are still being seen or heard fairly frequently, and White-winged Choughs *Corcorax melanorhamphos*, which were very seldom noted in pre-fire times. For a week or two after the disaster, there was also a notable but transient increase in ravens and Pied Currawongs.

The most perplexing outcome of these observations is the complete, and I mean complete, absence of Welcome Swallows *Hirundo neoxena*. All that space and arching sky behind us, and nary a one! I hardly ever spot them at Manuka either; yet they are plentiful along the East Basin (Bowen and Mundaring Drives) of Lake Burley Griffin, and positively swarm around the National Library in summer, with some birds lingering there in winter.

DARTER BREEDING IN THE ACT

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The occurrence of Darters in the ACT

This diving species was first recorded in the ACT on 5 May 1965 by Steve Wilson. In his *Birds of the ACT: two centuries of change*, he added that the Darter *Anhinga melanogaster* had been reported occasionally since that date from the major lakes and farm dams, and that the Molonglo River above Lake Burley Griffin (the site of the original observation) and the mouth of Jerrabomberra Creek were favoured locations. Darters were usually seen in small numbers and were not always present in the ACT (Wilson 1999).

From the combined evidence of the COG databases and Annual Bird Reports, it appears that Darters have been recorded in the ACT in small numbers almost every year since 1965, the apparent exceptions being 1965-66, 1969-71, 1973-74 and 1976-77. Until this year, the greatest number of individuals recorded was 22, on 1 January 1998, on Molonglo Reach. Darters are reported slightly more frequently in autumn, though they have been recorded in every month of the year. Records peaked in 1991-92, with 34 reports of the species; that year also saw abundances of up to 19 birds, which may provide some support for the theory that Darters move here in times of inland drought. In its partial and unpublished 2002 revision of the status of birds in the COG area of interest, the COG Rarities Panel confirmed the status of the Darter as an 'uncommon, breeding visitor'.

While Darters have been recorded in 44 grids in COG's area of interest, they are most frequently found in in Grid L 14, encompassing the east end of Lake Burley Griffin, Jerrabomberra Wetlands, and the Molonglo River opposite Duntroon.

Darter breeding in the ACT to end June 2002

While Darters have been recorded in the ACT every year for the last 25 years, they have only been reported as breeding in 12 of those years. A chronology of those nesting events is provided in Table 1, along with what additional information was published at the time. The breeding event of 1978-79 was described in detail by Nix (1980). On 4 February 1979, four nests were seen in the willows along Molonglo Reach, each nest containing two or three fully-fledged juveniles. On 17 March, one nest was occupied and nine adults and seven juveniles were seen nearby. On 19 May, one nest was occupied by a bird 'sitting close'. All nests were observed in a single large Weeping Willow *Salix babylonica*, which was also home to eight nests of Little Black Cormorant *Phalacrocorax sulcirostris*. In the following year, Nix recorded five nests over three willows, with, on 12 April 1980, three nests with three young almost fully fledged. Of the six pairs which bred successfully in 1981-82, two bred late and had young in the nest in late April and early May (CBN 1981, p. 36).

Table 1. Darter breeding in the ACT

Year*	Details	Reference
1972-73	One male seen on nest in Molonglo River willows in Dec	CBN 2 (5): 11
1975-76	Nesting recorded Dec, Mar, Apr	CBN 3 (8): 4
1978-79	6 nests, Feb, Mar, May	CBN 5 (1): 17
1979-80	5 nests Feb, Mar, 5 nests with young Apr	CBN 6 (1): 36
1980-81	6 pairs breeding	CBN 7 (1): 29
1981-82	6 pairs bred successfully Apr/May Duntroon Reach	CBN 8 (1): 15
1982-83	1 pair Oct	CBN 9 (1): 6
1988-89	Dependent young, 2 Feb, Molonglo Reach	CBN 15 (4): 85
1993-94	Bird on nest, 4 Nov, Taemas Bridge	CBN 23 (suppl): 17
1997-98	Nest with young, 1 Jan, Molonglo Reach	CBN 24 (4): 206
1998-99	Bird on nest 18 Feb, Molonglo	CBN 25 (4): 133
2001-02	Dependent young, 5 Oct, Lake Tuggeranong; 'darters with young at various ages' Molonglo Reach in autumn; recently fledged Darter in February 02 east of National Museum, Lake Burley Griffin; Darter nest near Black Mtn peninsula 1 April 02, Lake Burley Griffin.	CBN 27 (4): 152; Mackay (cog-1 29 Sep 02); Rosalky (cog-1 2 Apr 02); Allen (cog-1 1 Apr 02)

*1 July 30 June.

Breeding was sporadic thereafter until the 1997-98 season, when nests with young were observed, again in the willows along Molonglo Reach (Nicki Taws, pers. comm).

The breeding event of 2002-03

Despite its record of breeding birds, the Molonglo Reach has not been surveyed as intensively as the more popular and easier to access Kellys Swamp in the nearby Jerrabomberra Wetlands Nature Park. From the cycle path on the northern side of the river, the foliage of the willows in summer obscures most nest sites on Molonglo Reach, except from canoeists or kayakers. Rod Mackay reported seeing two nests with two chicks in each on 26 March 2003 while

he was kayaking along the river. The chicks in the first nest were described as being white and very fluffy, while those in the second nest were showing the development of a brown tinge to their feathers, and were standing in the nest (Mackay 2003).

Early in 2003 a small and quiet electric boat, the 'E.L. Cygnet' began excursions along the river and very quickly, more reports reached the COG email discussion list of Darter breeding activity. The boat skipper, Jim Paterson, noted up to 15 active nests in January. Jack Holland took an excursion up the Molonglo on 19 April 2003, during which the skipper pointed out at least 25 Darter nests in the willows between the lake and the first bridge. About ten of

these nests still had adults sitting tightly and in one nest, three largish but still downy young were squatting. Recently fledged and immature birds were also seen. Jack estimated that there were between 50 and 100 Darters on that stretch of the river (Holland 2003a).

Boat trips along the Molonglo were quickly organised for COG members, the first two taking place on 31 May 2003 (McGuinness 2003). The weather was cold but sunny after the last vestiges of fog evaporated. The by now leafless willows disclosed both active and disused nests and good numbers of Darters, many sunning themselves with their wings hung out to dry. By my calculations, there were 17 adult male Darters, five of which retained strong traces of breeding plumage (a patch of rich rufous feathers at the mid-foreneck); 12 female or sub-adult Darters (those in the willows could be clearly identified but the birds further away on the bank were less distinctive); five active nests, including three with two chicks, one single chick and one female still sitting; and the remains of at least eight other nests. The two chicks in one nest were in the downy white stage, suggesting they were between one and two weeks of age; one appeared considerably bigger than the other. The other five chicks were considerably bigger, about half adult size, and were showing traces of primaries, secondaries and rectrices; they were scrambling about outside the nests. An adult Darter was in the vicinity of each active nest.

More recent Darter sightings

Another two trips along Molonglo Reach on the 'E.L. Cygnet' were organised for

COG members on 3 August and both parties recorded at least 15 Darters, the majority of which were male (Holland 2003b). By the end of September, Darters were again refurbishing old nests (Jim Paterson, pers. comm.).

On 26 July 2003 I observed two juvenile Darters perched low in willows on the shores of Lake Burley Griffin on the east side of the National Museum of Australia. While they could have dispersed from Molonglo Reach at the eastern end of the lake, it is interesting to note that in the previous year, David Rosalky reported a recently fledged Darter in the same location (cog-I, 2 Apr 02) and Richard Allen reported a Darter nest with begging young near Black Mountain peninsula (cog-I, 1 Apr 02).

Discussion

The *Handbook of Australian, New Zealand and Antarctic Birds* (HANZAB)

reports that the Darter is an 'apparently erratic and irregular breeder, disappearing from some areas for long periods and capable of nesting at any time of year, e.g. Lake Cowal, according to state of water and availability of food and shelter' (Marchant and Higgins 1990, p. 803). Certainly, the end of May for downy young and, presumably, eggs under the sitting female is later than normal in ACT experience but may have been influenced by the very heavy rain in late February after an abnormally long dry spell.

The Molonglo Reach accords well with the known habitat preference of Darters, being a permanent inland waterway, with an extensive sheet of open water at least 0.5 m deep. It is lined by willows,

standing in at least 0.3 m of water, a depth recorded by HANZAB as a breeding site requirement (Marchant and Higgins 1990, p. 804). The nests observed in May varied in height above the water from about 2 m to 5 m, again fitting with the HANZAB-recorded average of 3.5 m.

The HANZAB description of the Darter nest accords with what was seen along the Molonglo: cup-shaped; a flat base of c. 40 cm in length, built up with c. 150 dry sticks into a cup c. 40 cm across and 30 cm deep inside. By 31 May, some of the nests were somewhat the worse for wear despite relatively benign weather, suggesting that they may have been partly dismantled for reuse elsewhere, despite there being no apparent shortage of new building materials.

Given that the Darter breeding event along the Molonglo Reach in autumn 2003 was not studied closely, it is not possible to ascertain breeding success. A study at Lake Cowal, reported in HANZAB, showed that of 122 nests, 64 were successful with a range of two to five nestlings and average of three young fledging per nest (Marchant and Higgins 1990, p. 804). Canberra's success rate was certainly lower than that. All that can be said at this point is that the abundance of Darters in the ACT was markedly higher in 2002-03 than in previous years and that they bred with more success along Molonglo Reach in the autumn of 2003 than on any previously reported occasion in the ACT.

Conclusions

Darters are now being reported with far greater regularity in COG's area of

interest and from more locations. It would be of considerable interest to monitor abundance and breeding over the next few years to attempt to answer a few questions. Why is Molonglo Reach the apparently preferred breeding site in the ACT? How frequently are other sites along the shores of Lake Burley Griffin, or indeed the other ACT lakes, and other sites in COG's wider area of interest used for Darter breeding attempts? Was the 2002-03 Darter influx drought-induced, and will numbers and breeding attempts drop as conditions return to 'normal' out west?

Acknowledgments

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ODD OBS

Regent Honeyeater at Gunnary Travelling Stock Reserve

At 16:00 h on 6 September 2003 my father and I observed at least one and possibly two Regent Honeyeaters *Xanthomyza phrygia* feeding in a flowering white box at Gunnary Travelling Stock Reserve (TSR), approximately 13 km northeast of Boorowa.

A number of other honeyeaters were also feeding in the same tree and these included Red Wattlebirds *Anthochaera carunculata*, Fuscous Honeyeater *Lichenostomus fuscus* and White-plumed Honeyeater *Lichenostomus penicillatus*. The feeding and social behaviours of the different honeyeater species was apparent. The Regent Honeyeater was less mobile than the other three species, feeding in the one patch of flowers for a number of minutes before moving to another patch. At the same time the Red Wattlebirds and White-plumed Honeyeaters were observed to be constantly on the move and constantly harrying one another.

The Regent Honeyeaters displayed no agonistic behaviour toward the other three species, despite on at least two occasions a Fuscous Honeyeater feeding 'in its face'.

Gunnary TSR has proved to be a significant patch of box woodland with regular annual sightings of Swift Parrot *Lathamus discolor* during their northerly migration, and in 2002 Painted Honeyeaters *Grantiella picta* were also

observed at Gunnary before their influx into the ACT.

Alastair Smith

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A Eurasian Coot feeding on a Black Swan

It is a common observation that sometimes a bird will be able to obtain food by associating with an unrelated species. For example, Pilotbirds *Pycnoptilus floccosus* have apparently received their name by associating with Superb Lyrebirds *Menura novaehollandiae*: the larger lyrebirds scratch in the soil, turning up invertebrates that the accompanying Pilotbirds duck in and eat. I once saw Red-rumped Parrots *Psephotus haematonotus* feeding on the ground on oak tree seeds being inadvertently dropped by Sulphur-crested Cockatoos *Cacatua galerita* cracking the acorns above for their own meals.

On 30 September 2003 I was at the Yarralumla boat launching ramp, admiring the ever-present Black Swans *Cygnus atratus* and Eurasian Coots *Fulica atra*. It was lunchtime and the swans had apparently finished feeding, as they were simply loafing around. One was standing in shallow water, minding its own business, on the concrete boat launching ramp. A coot swam beneath it (yes, literally underneath it) and picked at something on the surface of the water. It then extended its neck upwards and proceeded to pick something - water-dwelling invertebrates? - from the

feathers of the underparts of the swan. It pecked there three times.

Interestingly, the swan did not seem to mind. In its usual haughty manner, it slowly brought its head down from its elevated heights to see what was going on; the coot slowly paddled away.

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Honeyeaters feeding on eucalyptus sap

To see is to believe! Most of us have read that some honeyeaters eat sap from some eucalypts. It was therefore very satisfying on 10 January 2003 to see a flurry of honeyeaters around an Apple Box *E. bridgesiana*. This was at about 840 m, in the eastern Tinderries, just above the Queanbeyan River.

The resident honeyeaters, Yellow-tufted *Lichenostomus melanops*, were in the majority (8) and were taking turns, mainly in pairs, to attack the red sap that

was oozing out of the tree about 4 m above the ground. In competition were five White-eared Honeyeaters *L. leucotis*, one Yellow-faced Honeyeater *L. chrysops* and two New Holland Honeyeaters *Phylidonyris novaehollandiae*. Two Fuscous Honeyeaters *L. fuscus* were also in the area. What had caused the tree to ooze sap was not obvious — insect, animal or other damage. The first observation of honeyeaters eating sap was apparently made two centuries ago by George Caley who spent some time in Parramatta between 1800 and 1810. In this case the bird was a Noisy Miner *Manorina melanocephala*. (See Alan Morris, 15 Jul 2003 on birds and melitose sugars, in Birding-Aus archives. He quotes from an article by P. Bourke 'Meliphagidae and Melitose' 1972 *Aust Birds* 6: 55-56).

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OBITUARY - STEPHEN MARCHANT, AM, 1912 -2003

What follows is very much a personal recollection of a very good friend and colleague; someone I knew for nearly 40 years and with whom I shared many good moments both at home, usually his, and in the field.

Stephen was born at Newport House in Weston-under-Lizard, Staffordshire on 11 August 1912. His father was the land-agent for Lord Bradford and as Stephen recalled a fine naturalist who imbued him with a sound basic knowledge of the countryside. He was educated at Shrewsbury School and following four years spent in London working for the Eastern Staff of the Anglo-Saxon Petroleum Co. he went up to Gonville & Caius College, Cambridge in 1935. He was offered a scholarship by Shell for his last year and this influenced him sufficiently to pursue a career in geology rather than zoology. He completed his tripos with a first in 1938. He was amused in later life to discover that he had in fact been present at the same *Pearce feast* as Dom Serventy at the end of Michaelmas Term that year. The incident is amusingly recounted by his good friend Derek Goodwin in a piece of doggerel verse (Garnett 1982). By September he was in Egypt, spending the next two years as a field geologist in Sinai, the Gulf of Suez and Red Sea. Following the outbreak of war he was transferred to Nigeria for four months before spending a couple of months in Cape Town and then a posting to Borneo. He contracted deadly tropical typhus but survived and was evacuated to Australia.

After serving with the AIF in New Guinea and New Britain 1943-45 he was repatriated to England and resumed his work with Shell. He married Mary McCauley, an Australian, in 1946 and spent the next three years back in Nigeria. Returning to England in 1950 he quit Shell and tried his hand at academic teaching at Birmingham University. Finding this life not to his liking he rejoined Shell and was sent first to Ecuador for a while and then to Baghdad for three years. He made good use of all of these opportunities to see ornithologically fascinating parts of the world. His time in Ecuador resulted in a significant contribution to the understanding of the lowland avifauna of that country. He published equally significant contributions on the birds of Nigeria and Iraq. During his time in the Persian Gulf, he formed a great admiration of the Kurds; lamented the loss of the magnificent Basra (Basrah) marshes; and enjoyed an acquaintance with Arabic languages. He retained a special affection for the Dyaks of Borneo. A steady flow of ornithological publications flowed from all of these overseas experiences (e.g. Marchant 1958; 1963a; 1963b). In 1971 he was awarded a BOU (British Ornithologists Union) Union Medal 'in recognition of eminent services to ornithology and to the Union'.

Although not a founder member, Stephen was a staunch supporter of the British Trust for Ornithology (BTO) and a long-time member. He had been a keen participant in the survey work promoted

by the Trust in the late 1930s, contributing for example, to the Gannet survey after a week benighted on the Bull Rock off the south-west of Ireland. He made the first acceptable colony count at this site. He was also enthused by the development of the BTO nest record scheme and became a keen ringer during his time at Cambridge. It was 1936 when he visited Skokholm Island for the first time and met and worked with Ronald Lockley. They became lifelong friends. In the difficult times of post-war Britain he gave Ronald support during a trailblazing but largely abortive effort in 1946 to establish a Bird Observatory and Field Study Centre in the derelict farmhouse buildings on Skomer Island in West Wales. Fortunately, other centres got off the ground and a network of Field Studies Centres and Bird Observatories eventually prospered across Britain. Lockley brought with him the daily routine of observation and procedures he had established in the pre-war years at his famous Bird Observatory on nearby Skokholm island. Stephen acted as Hon. Assistant Warden at Skomer, recorded the first Bluethroat for the island and devised a simple method to catch and ring (band) gulls at the nest (Buxton & Lockley 1950). Stephen never really thought that the network of bird observatories later set up in Australia under the auspices of the Royal Australasian Ornithologists Union (RAOU) quite met the same values of consistent local study he had learnt from Lockley. As I will refer to later, in part this drove him to show how it could be done during his retirement on the south coast of NSW at Moruya.

With Mary and his two children, Richard and Sarah, he finally settled in Australia in 1963, taking up a position as supervising geologist with the Bureau of Mineral Resources in Canberra. It was here that he began to take a more active role in coordinated bird-watching by the masses. He had an aversion to those who 'simply moon about with binoculars' and, leading by example, he worked industriously to find out about the local birds by promoting and encouraging field enquiries. He was a founder member and a key instigator of the ACT group of RAOU, when it was formed late in 1963, later to become the Canberra Ornithologists Group (Robin 2001). He was chairman of the group in 1968. At that time he set up the RAOU Nest Records Scheme, based on the successful scheme started by the BTO. He ran the Australian scheme single handedly until 1969, contributing many records from the Canberra area, in particular from his study plot at Caswell Drive at the foot of Black Mountain.

He was the instigator of the 1966 Canberra push to have the RAOU brought up to date and reinvigorated (Robin 2001). He became editor of *The Emu* in 1968 and reform was achieved in 1969. By 1974, at the time of the first southern hemisphere meeting of the International Ornithological Congress in Canberra, Stephen had changed the tone of *The Emu* such that it was now attractive and internationally acceptable (Robin 2001). I am reminded of the words of Tommy Garnett who wrote:

As editor, he seized the Emu, tied up its somewhat bedraggled feathers and lifted its head so that it could face the inspection of international ornithology

without apology — and made enemies on the way. ...Stephen was intent on compelling the professional scientist to write English and the amateur to write science. Both groups found the exercise ...painful.

His editorial responsibilities with *The Emu* necessitated resolution of many important issues often revealing opposition from traditionalists. An example was the matter of common names for birds and the need for standardization, at least for *The EMU*. Stephen was perceived as railroading others with his own ideas on the appropriate final choice of common names, notwithstanding his co-authorship with the five others on the committee charged with resolving an acceptable list and despite setting out a reasoned case (Schodde *et al.* 1978). It was thought that his intention was to stifle alternatives. To be honest this could not be further from the truth. He enjoyed his own special favourites, including some of his own making. To me the one example that stands out is his choice of Pilotbird for the Noisy Friarbird. In these troubled times it may seem somewhat indelicate to explain the origin of this name but remembering Stephen's affection for the Arabic language I will explain. This species was referred to as the 'PLO-bird' because of its obvious call 'Nick Arafat' and the equally distinctive 'hada minfadel' given by friarbirds in his part of the south coast of NSW.

The Marchants moved to Melbourne in 1969 when Stephen took up the position of exploration manager for Woodside. He retired in 1971 and the family moved to a house at Guerilla Bay near Moruya where Stephen enjoyed observing

seabirds from nearby Burrewarra Head. They might never have moved from this site but for uncertainty about the long term intentions of the owner for whom they were more or less permanently house minding. Finally, after locating a suitable rural block at Maulbrooks Road near Moruya they moved into a new house and Stephen began a retirement project that for years was often to consume his every waking hour.

My impression was that Stephen was not wholeheartedly in favour of the precipitate way the newly rejuvenated RAOU embarked on atlassing as a means of involving the masses in cooperative research. He felt it was too easy to do atlassing in the way proposed and he wished that more emphasis be directed towards collecting breeding information. This feeling no doubt stemmed from his passion for nest recording. In his opinion you needed to train the 'workforce' to conduct cooperative research properly, and to do this you should involve them with more specific projects such as those based on selected species or on the critical census work and routine documentation that the Nest Record Scheme required. Stephen could never be accused of complacency. Always he strove to improve the way bird study was conducted in Australia and he never gave up trying to persuade others of the merits of good field craft and the satisfaction of making advances in knowledge by attention to the simple documentation of new facts about the birds around you. He was elected a Fellow of the RAOU in 1975.

Until the 1960s there were no proper field guides to the birds of Australia. In this respect bird watching in this part of

the world was lagging behind developments elsewhere. The deficiency seriously impaired any sensible growth of field studies by amateurs. Graham Pizzey was slowly assembling a guide and Peter Slater and Eric Lindgren another. Harry Frith put his resources behind the then faltering Peter Slater project with rapid publication of the non- passerine part by 1970 (followed by the passerine volume in 1974). By this time Stephen was asked personally by the publishers (Collins) to help with 'getting across the line' the equally stalled Pizzey guide. He undertook the ruthless editing necessary to condense the text to acceptable proportions. When the book finally came out in 1980 Graham wrote of Stephen in his acknowledgments that 'his disciplined eye and incisive, condensing pen have been through the entire text at least three times. Unnerving at first, in time this pithy, consistent assessment became a valued restraint and regulator.' As recompense Stephen gladly accepted the offer from Collins of complimentary copies of each future volume published in their famous New Naturalist Library. His was the only complete set of this magnificent series that I have ever seen!

By the early 1980s with the completion of field work and imminent publication of the first *Atlas of Australian Birds* (Blakers *et al.* 1984) the attention of the Field Investigations Committee of RAOU turned to other major projects and the committee took the bold step of promoting the compilation of an up to date handbook of the birds of Australia. It was by that time painfully obvious that the continent lacked any such modern comprehensive work and the incentive was to match the work then being

compiled for western Europe by *Birds of the Western Palearctic*. At the time I recall visiting the Marchants on numerous occasions during which many a long evening was spent planning the details of such a work over a good whisky! The broad scope of the project was proposed in 1980 and accepted by council of RAOU in 1981.

Following his mandatory retirement from editorship of *The Emu* Stephen eagerly took on the job of editor for the Handbook of Australian, New Zealand and Antarctic Birds (HANZAB) so long as he had absolute final say as chief editor. He managed the project on his own with volunteer sub-editors and a large cohort of writers to work on individual species accounts (Robin 2001). As Stephen would remark, *noblesse oblige*. Volume one turned out to be much bigger than planned and, because of difficulties with binding a single large book, it appeared, somewhat absurdly, in two parts. The sensible solution, broached by Stephen, should have been publication in two volumes. The style of operations with HANZAB had of necessity to change. Volume one had taken far too long to bring to press. It was essential to meet strict deadlines and the work now became an enormous financial exercise. Stephen continued to edit the next volume by which time the compilation was largely done by paid contributors. Increasingly the work burden became too much for Stephen and reluctantly he relinquished editorship in 1993. He had in any case

Press, questioning how it could be that they appeared to have 'relinquished their custodianship of the English language'.

Settling at Maulbrooks road led him to embark on an intensive period of study of the avifauna of 'my lot' and the adjacent state forest. The whole area was gridded and Stephen literally knew every inch of the place. It was a delight to follow him around this area as he pointed out a Wonga Pigeon's flimsy nest here or the delicately constructed efforts of a Brown Gerygone there. He knew exactly where each Eastern Whipbird nested each year and as far as possible tried to follow the progress of every breeding event on the site. Only those that 'did not play fair with their public' by nesting in impossible places or far too high for his nesting mirror were able to escape attention. Michael Guppy, his son-in-law, has vividly captured the flavour of these perambulations (Guppy 1984). A steady flow of valuable short communications stemmed from this work including special attention to a detailed study of the Eastern Yellow Robin over more than 10 years (Marchant 1985). The result was a *tour de force* published privately in the end following many frustrations he and others had suffered at the time over the 'on again off again' attempts by RAOU to launch a monograph series for which it would have been most appropriate. His

A Bird Observatory at Moruya is consequently a rare document (Marchant 1992) and therefore, sadly, less well known than it should be.

Another enterprise for which Stephen should be rightfully credited is the establishment of a vigorous local natural history society and the publication of an

annual report recording significant local events of the year. The Eurobodalla Natural History Society was founded in 1986 (Whiter 1987) and began distributing a monthly newsletter with production of its first Annual Report within 6 months! A swift name change to *Nature in Eurobodalla* occurred with the second report and the series has continued uninterrupted to the present. Stephen had hoped that this model would encourage others to do the same 'for their own patch' but regrettably few have taken up the challenge. He remained immensely impressed by the network of county reporters in the UK and, in particular, the quality of annual Bird Reports they manage to assemble. He was awarded the John Hobbs medal in 1997 for his contributions to Australian Ornithology as an amateur. As a non-Australian resident he became an honorary Member of the General division of the Order of Australia (AM) in 1994 for his service to ornithology and conservation.

The Marchants' house was filled with a superb library of the classics and ornithological literature, together with an impressive collection of bird paintings. Stephen inherited some particularly fine examples of the work of George Edward Lodge, perhaps the finest painter of raptors. Another artist that Stephen passionately admired was Charles Tunnicliffe. He purchased from this artist several superb watercolours including the original picture used for the frontispiece to Ronald Lockley's classic book *Puffins*. He commissioned several other paintings of African birds from Chloe Talbot-Kelly another artist he knew well and continually praised.

Stephen was Stephen to his peers and closest friends, Mr Marchant to others and definitely not Steve. I miss his emphatic *Marchant* on answering the phone, his cheery greetings on arrival at his home ... in five minutes you will be late'. He was always a stickler for punctuality which he blamed on Mary but I was never convinced. There was *hoi polloi* and other gems from classical Greek and Latin. I miss his consummate skill at finding nests, his naturalist's curiosity and questioning mind when interpreting behaviour. I greatly admired his comprehension of the English language and his wonderful repertoire of quotations, many from Shakespeare but also from countless others, especially Thomas Hardy. It was from *Macbeth* that he took the word 'grimalkin' to refer to his ancient ginger cat (a ruthless killer of Feathertail Gliders). Tommy Garnett penned a wonderful poem about the Marchants' life at Maulbrooks Road entitled *Moruya Blues 1978*. The second verse runs:

The bloody cat climbs up the wire. It kills the gliders. I enquire

What next the bloody thing will bring. I *hate* the bloody awful thing:

But Mary likes it.

Mary died in 1994 and Stephen struggled on, alone, at Maulbrooks Road for some years. He tried to maintain, as best he could, an 'open house' to all of his friends and acquaintances, particularly those showing any interest with ornithology. For so many years this had been a hallmark of his family life. However, by the late 1990s he had begun to show the progressive deterioration associated with Parkinson's disease and he spent his last few years in Perth close to his daughter Sarah. In many ways it was good that he had only just returned to his beloved south coast of NSW before his death in September 2003 at the age of 91.

Peter Fullagar

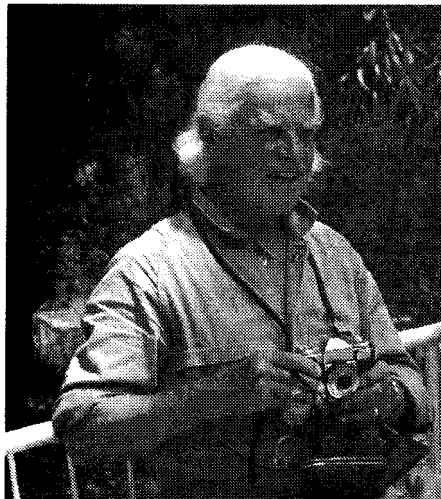


Photo courtesy of Peter Fullagar

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COLUMNISTS' CORNER

Canberra's birds 20 years hence: reflections on clearing up the backyard

During the recent winter, Stentoreus undertook one of those periodic ventures of the suburban dweller, the Clearing Up of the Backyard. This entailed removal of large tangles of honeysuckle, jasmine, cotoneaster, and periwinkle and uprooting the spiny skeletons of forgotten and unidentifiable native shrubs. The resulting barren tract is now shunned by that most reliable indicator of the truly tangled Canberra yard, the White-browed Scrubwren. Moreover, it will probably be some time before any sane fairy-wren uses the area other than as a transit route. However, a few trees remain.

In Graham Pizzey's *A Garden of Birds*, probably the best of our bird-gardening books, he says:

The aim of a good bird-garden should be to provide a diversity of levels and structures of vegetation, which will furnish feeding opportunities, shelter, refuge, roosting places and nest-sites. There should be, if possible, at least one tall leafy tree or high bare perch to attract the passing trade and give birds a safe lookout over the garden before they risk coming down.

Well, I've got the lookouts all right. Most Canberra backyards have, with the assorted wires that follow the line of the back fence, but what the birds see from them is unlikely to invite them down into my yard for the time being. Some of the growth will come back. I have rather

gone overboard with replantings of *Grevillea arenaria*, a proven honeyeater magnet, but the dense temperate yardforest is, I expect, gone forever, and with it the scrubwrens.

It occurs to me that, apart from my own modest garden renovation efforts, a number of factors are at work to create generational change in the backyards of inner Canberra.

(1) Areas of decking, paving, concrete and gravel are undeniably on the increase. These, I gather, are seen by many proud home-owners to be 'improvements', whether or not pursued with the specific aim of producing 'low-care' surroundings. The current restrictive water-use regime can only encourage this trend, while also eliminating the suburban lawn.

(2) Replacement (larger) houses and dual-residence developments are reducing overall garden space.

(3) The minimalist gardens associated with redevelopment shun tangly plantings in favour of neat lines of box, or of one of the pittosporum varieties (of the New Zealand kind), or photinia or the like.

(4) Purely (or predominately) native gardens are less fashionable than they were. According to current tastes, acacias and large hakeas and melaleucas are fads of the 50s and 60s, along with orange laminex, open fireplaces and art-deco kitchen furniture.

(5) Benefiting from the experience of the first wave of Canberra's garden-planters, today's suburban block-owners are warily tree-averse, no doubt with good reason given relative block and house sizes.

(6) Many exotics that are attractive to birds are regarded as undesirable for one reason or other. Cultivation of blackberries and thistles has long been discouraged, but now even pyracantha and cotoneaster are frowned on. Fruit trees are troublesome, and the end-product is superior, and less expensive, at a shop.

In the reserves and other woodlands beyond the suburban fence, the vegetation is also under challenge. Any dead tree invites, sooner or later, a surreptitious visit by a chain-saw wielder. This year, underbrush and regrowth are simply part of the 'fuel load' needing to be 'reduced'. Locally, exotics-eradication programs have as their targets not only box-thorn, bramble and briar, but a lot of other shrubs and trees that birds use.

Most people, certainly administrators of public spaces, dislike wild overgrown places unless, perhaps, they can be credibly labelled as 'heritage' of some kind. Neat and tidy is the preference, not only for backyards, but for almost anywhere else. Recently, while on a visit to find some of the much-touted birds of the Warialda-Barraba area (NSW), I was interested to read in the *Warialda Standard* about 'the creek beautification scheme which, all will agree, is certainly brightening up what had become something of a wilderness area'.

Alas, all those developments seem to me to point in only one direction. In Steve Wilson's description of the changing (Canberra) landscape in his *Birds of the ACT: two centuries of change* he discusses the effect of a native garden. He gives the example of David Purchase's garden in Spence, planted with mainly native species, started in 1973. The annual/daily record of observed bird species grew from 30/4.2 in 1976 to 55/14.6 in 1998.

Surely the reduction in the number and quality of 'good bird-gardens' now evident in inner Canberra will see a reversal of that trend. For my part, on reflection, I think I'll take another look out the back tomorrow to see if I can squeeze in a couple more specimens of *G. arenaria*.

A. stentoreus

Birding in cyberspace, Canberra style

This item could have been headlined 'how to stir up controversy' but was actually titled 'The Five Best Birding Sites in Australia'. Yup, that was the subject line of a message sent to the Australian national email-based discussion list Birding-Aus in August by Richard Nowotny of Port Melbourne. Richard pointed out that, as he lives close to the famous Werribee Sewage Farm/Western Treatment Plant, he visits it often and places it at the top of his national best sites list. (I wonder how many *CBN* readers would nominate Kellys Swamp/ Fyshwick Sewage Works, our local equivalent?) The rest of Richard's sites were, in sequence, the Cairns region, the Hawkesbury region,

the Lockyer Valley, the Capertee Valley, and the Murray Mallee. Interestingly, the Broome area was mentioned by a number of people who proffered their favourites, with one thoughtful contributor listing 'Atherton Tableland with Cairns, Mossman and the reef as add ons; Broome and surrounds; Werribee; a seabird site; and one of the three southern east coast sites you mentioned (the Hawkesbury region, the Lockyer Valley & the Capertee Valley)'. Now, if 'a seabird site' means the oceans surrounding Australia, then it's a large site—but we know what he means. What, I wonder, are your five top birding sites in the Canberra region?

Using the internet for discussions, as above regarding top birding spots, is just one of its attractions. Another is as a repository of information that can be updated quickly and cheaply as circumstances warrant. Some time ago your columnist mentioned the Birds Australia 'Draft working list of birds of Australia and Australian Territories' which it produced as an interim list between the official Australian bird list (Christidis L & Boles WE 1994, *The Taxonomy and Species of Birds of Australia and its Territories*, Royal Australasian Ornithologists Union monograph 2, RAOU, Melbourne, Vic.) and its long-awaited revision. In September, Birds Australia made available at its web site <http://www.birdsaustralia.com.au/checklist/index.html> another update of its draft list, perhaps a pointer to what Dr Christidis is planning for his revision?

Have you ever lain awake at night in your swag, far out in the bush, cringing at the awful cries of Bunyips and their victims? Well, correspondents on

Birding-Aus reckon that the Bunyip is, in reality, a mythical creature. They claim that what we believe to be Bunyip calls are actually made by birds! Apparently on a TV program called 'Totally Wild' it was alleged that Barking Owls are actually the source of Bunyip shrieks. Someone suggested that the Musk Duck calling at night is the culprit, but Mick Todd from Griffith had an even better suggestion:

I read a few years ago a theory suggesting that the bunyips may have been lost seals that headed up the Murray and Darling Rivers and weren't able to find their way back. I liked it! I suppose that the chance of a seal getting lost up the Darling River wouldn't be too high these days. After all, it would probably get stranded somewhere on high ground! If the Murray isn't flowing at its mouth it might have a bit of work to do to get into the river proper!

The Australian Bird Image Database (ABID), maintained by Tom & Marie Tarrant, may be found online at <http://www.aviceda.org/abid>. They explain that, 'With the advent of the Internet and digital cameras, more and more birders are using their equipment to "Digiscope" birds. I have therefore initiated this project to exhibit these images, as well as conventional photos.' (Digiscoping is taking digital images—photos—through telescopes.) When I last visited the site, it had 1,149 images in the database. At the front page one can search for the image of a particular bird using the drop-down menus 'Select bird group' then 'Select bird family' and then 'Select bird name'. Alternatively, you can enter the desired species' name into a search box. The latest images to be included are accessible from the front

page, as is a list of the photographers, 93 to date including a couple of well-known Canberrans. So, if you wish to view the images or submit yours for inclusion in this fine resource, just visit the Australian Bird Image Database.

We turn now to the curiously-named phenomenon of Urban Legends, specifically the one titled 'Thieving birds stole hundreds of quarters from a car wash', available online at [http://www.snopes.com/photos/carwash](http://www.snopes.com/photos/carwash.asp),asp>. We are advised that:

Bill owns a company that manufactures and installs car wash systems... Bill's company installed a car wash system in Frederick, Md. for a gentleman.

Now understand that these are a complete system including the money changer and money taking machines.

The problem started when the new owner complained to Bill that he was losing significant amounts of money from his coin machines each week. He went as far as to accuse Bill's employees of having a key to the boxes and ripping him off. Bill just couldn't believe that his people would do that. So they set up a trap for the thief.

Well they caught the thief in the act!

A videotape was used; it revealed that the thief was a Common Starling; two of them, in fact. They found their way into the change machine and came out with coins in their bills.

Starlings ... are often attracted to bright, shiny objects and will collect them for nesting or mate-attraction purposes whenever the opportunity presents itself. Most likely one or more starlings was

attracted by the glint of overlooked quarters in the change cup and made off with them; other starlings saw where the quarters were coming from and imitated the behavior, learning in the process how to work as teams to retrieve coins from inside the machine itself.

The claim that an accumulated \$4,000 in change was retrieved from the roof of the car wash is an embellishment. The car wash operator did not report finding any such rooftop stash, although his discovering a few hundred quarters on the ground around the machine some mornings was not uncommon.

The photos taken from the security camera are just great! Apparently they are genuine, unlike the digital montage of birds-in-a-pie published in a recent issue of *Gang-gang!*

Your columnist normally tries to steer clear of matters controversial, but the affixing of bands and leg flags to our avian friends is a domain where passions run high. To declare a position, I reckon that this is one of the most important things that ornithologists do to advance our knowledge of wild birds and their conservation. It was interesting, then, to follow the discussion thread on BirdingAus recently in which a correspondent wondered about the well-being of two Red-necked Stints he observed in Botany Bay, Sydney. (Since COG went shorebirding recently, and saw many of these delightful mouse-like shorebirds, this discussion is particularly timely.) He noted that the birds—and they are really tiny—both had two flags on their legs, one above the other, and seemed to be 'tugging at the flags trying to remove them'. He went on to observe that 'I guess these are new arrivals this season, and were therefore flagged with the new

system last season. This would at least indicate the birds have successfully made the return journey to Siberia in spite of the impediment.' Quite an achievement, I'd say! (The 'new system' is that a new international leg flagging protocol has been adopted that comprises two leg flags to identify where the bird was banded. The old system of just one flag was OK when few banding sites used leg flags, but with the expansion of sites the double flag system is needed.)

Phil Straw from the Australasian Wader Studies Group (AWSG) responded, pointing out the value to shorebird conservation of such banding and leg flagging activities:

It might interest you to know that studies of the Endangered Spoon-billed Sandpiper have been boosted since flagging of these small birds commenced in Siberia by our Russian colleagues. We are now finding out where these birds stop on migration and spend their overwintering period. We now have to work hard with our international colleagues in order to protect these areas. Some of their findings will be highlighted at the Australasian Shorebird Conference being held in Canberra on 14/15 December (immediately after the Australasian Ornithological Conference). We will also have specialists talking about shorebird conservation from South Korea (including the recently threatened tidal flats at Saemanguem which are important for the long term survival of a large proportion of the Spoon-billed Sandpiper as well as many of the migratory waders visiting Australia and most of our Great Knot). Taiwan, Japan, Hong Kong, India, Philippines etc. I urge anyone interested in the welfare of our migratory shorebirds (as well as

non-migratory) attend this conference and take part in the workshops to look at future research and conservation throughout the migration range of 'our' birds.

Phil's reference to the Australasian Wader Studies Group reminds me of a theme touched upon in the previous column in this series: on-line birding journals and newsletters. The Australasian Wader Studies Group has links to its regular publications at its fine web site <<http://tasweb.com.au/awsg>>, They are the quarterly newsletter *The Tattler: Newsletter for the East Asian-Australasian Flyway* available there in full text, and the Group's twice-yearly bulletin, *The Stilt*, for which the abstracts of the articles in the current issue may be read on-line. A fine service from this important volunteer organization.

Have you heard or seen any cuckoos yet this Spring? Wondering which species your favourite cuckoo parasitises? Care to check out an online data base on Australian cuckoos? If so, why don't you visit <<http://www.users.bigpond.com/LesMikeBrooker/cuckoos.htm>>, the Australian Cuckoo-Host Database. There L and M Brooker provide a wealth of information on cuckoo hosts, much of it post-dating HANZAB's coverage of this group of birds. The site covers cuckoos' and their hosts' eggs and nestlings, and includes 'over 5300 records of parasitism of nearly 200 passerine host species gleaned from the literature, museum and private egg collections, RAOU Nest Record Scheme, Australian Bird and Bat Banding Scheme and the personal communications of others. These data are continually updated as new records

of parasitism come to our notice.' A wonderful resource, highly recommended.

We now segue, dear reader, from science to the extreme of twitching. You may care in an idle moment to visit <<http://www.10000birds.com>>, the 10,000 Birds Blog. What is a blog, you ask? One definition is 'A web site...where users can post a chronological, up-to-date e-journal entry of their thoughts.' At this blog web site the American authors advise us that:

There are approximately 10,000 bird species on this beautiful planet. Welcome to the 10,000 Birds blog, wherein I describe the Core Team's ongoing effort to see every one of them. We are new to birding and have a great deal to learn. Join us on our (near) daily exploration of this fascinating activity. We'll do our best to make the journey interesting for experts and novices alike!

The last time I checked their progress they had ticked 238 species, all in the US of A. They have a long way to go!

Reg Clarke from St Ives, in Sydney, recently shared with other Birding-Aus members an amazing observation which could have been titled 'the cocky and the currawong' but was (more aptly) titled 'Bird Breakthrough'. The story is longer than our editor normally permits in this column, but this is such a great observation I just had to share it with you. Reg wrote:

It was a sparkling Spring morning but little did I know that I was shortly to be privileged to witness a giant step up the ladder of avian evolution which in human terms is comparable to the use of fire or the wheel. In this instance it was

not the use of simple natural objects as tools; no, it was the use of a sophisticated, manufactured device, used as a weapon of attack, with devastating effect.

As I stood at the large window in our bedroom taking in the beautiful morning, a large Sulphur-crested Cockatoo (*Cacatua galerita*) swept in past the window to land with a raucous squawk and much fanning of its bright yellow crest, on the pathway around the edge of the swimming pool below. This bird and its mate share a secret with my wife and myself, namely, that the blue china bowl on the pool walkway, its wooden lid held in place by a small rock, contains a handful of sunflower seed.

The bird then went through the appropriate procedures to get its reward. One of these involved removing the lid and depositing it on the path about a metre away. Whilst this was being done, an intruder in the form of a Pied Currawong (*Strepera graculina*) that had been skulking in the tree above, spotted the bounty now exposed, flew down and commenced eating from the bowl. The Sulphur-crested hurriedly returning confronted the interloper who attempted to defend his prize. He was finally forced to give way in the face of that crushing beak and the terrible language.

During the tussle some of the seed was spilt onto the ground, which at this point was about a metre below the walkway. The cockatoo returned to the bowl and commenced feeding. Presently it raised its head and appeared to be listening, apparently realising that, instead of flying off, the Currawong had jumped to the ground and was industriously pecking at the spilled grain. The Sulphur-crested turned its head from side to side in that rather characteristic

manner they have and waddled off down the walkway to where the focus of this epoch marking event lay: a pink plastic banister brush about 30 cm long. This brush is used to sweep up any extraneous bits left by messy feeders. The bird tugged tentatively the handle then took a more satisfactory grip at about the point of balance. Turning around, it made the return journey of about four metres carrying this avian atomic bomb in its beak.

In a very purposeful manner it waddled over to the edge of the walkway, shuffled sideways until it was precisely over the hapless Currawong feeding below. The cocky, refining its aim, then stretched forward and released the pink plastic banister brush, scoring a direct hit on the unsuspecting bird beneath.

This bird—more shocked than hurt by the unexpected attack and the hi-tech nature of the weapon used—flew off shrieking, whilst the innovative Sulphur-crested returned to its bowl triumphant, raising and lowering its crest and making grumbling noises which probably translated to 'Tomorrow the Stars'. (Source: Clark,

<regclark@dodo.com.au> 2003, 'Bird breakthrough', Birding-Aus list server, 06

September

,
<<http://menura.cse.unsw.edu.au:64800/2003/09/msg00083.html>>, © Reg Clark 2003; reproduced with permission)

So, for those Canberra region birders who (for reasons I'll never understand) have a set agin Pied Currawongs, perhaps you should spend some time cultivating your local cockies. Then you, too, might have a Bird Breakthrough!

T. alba

Details on how to subscribe to *Birding-Aus*, the Australian birding email discussion list, are on the web at <http://www.shc.melb.catholic.edu.au/home/birding/index.html>. A comprehensive searchable archive of the messages that have been posted to the list is maintained by Andrew Taylor at <http://www.cse.unsw.edu.au/birding-aus>. To join the *Canberra Birding* email discussion list, send a blank email message to canberrabirds-subscribe@topica.com, or join online at <http://www.topica.com/lists/canberrabirds>. At this site can also be found a searchable archive of messages posted to the Canberra Birding list.

RARITIES PANEL NEWS

The most 'unusual' of the species reported below is undoubtedly the Caspian Tern, which has not been recorded in the ACT since 1998. Again, its presence on this occasion may be a result of the continuing drought in parts of inland Australia.

The Panel notes that the Freckled Duck is being reported fairly regularly now from Molonglo Reach, the sewage ponds and Jerrabomberra Wetlands. It may be

that the status of this species needs revision, so the Panel particularly encourages reports for this species from Grid L14 and from other areas, if the birds are observed.

The Pied Butcherbird records continue to show an extension of range. While the species has been seen not infrequently in recent years to the north of the city, the record from the south of Canberra may be a case of young birds dispersing.

ENDORSED LIST 59

Freckled Duck *Stictonetta naevosa*

- 1; 3 Aug 2003; Steve Holliday; Jerrabomberra Wetlands, GrL14
- 2; 16 Aug 2003; Sue Lashko; Fyshwick Sewage Ponds, GrL14

Spotted Harrier *Circus assimilis*

- 1; 26 Jun 2003; Philip Veerman; Kellys Swamp, GrL14

Caspian Tern *Sterna caspia*

- 2; 27 Sep 2003; Mat Gilfedder & Cathy Robinson; turf farm nr Fyshwick, GrL14
- 2; 8 Oct 2003; Alastair Smith; Fyshwick Sewage Ponds, GrL14

Long-billed Corella *Cacatua tenuirostris*

- 2; 12 Oct 2003; Alastair Smith; Aranda Bushland, GrJ13
- 2; 12 Oct 2003; Mat Gilfedder & Cathy Robinson; Aranda Bushland, GrJ13
- 2; 12 Oct 2003; Martin Butterfield; Aranda Bushland, GrJ13

Major Mitchell's Cockatoo *Cacatua leadbeateri* Probable escapee.

- 1; 26 Sep, 3 Oct 2003; David McDonald; Kambah & Mt Taylor, GrJ15

Channel-billed Cuckoo *Scythrops novaehollandiae*

- 1; 22 Sep 2003; Richard Allen; Curtin, GrJ14

White-bellied Cuckoo-shrike *Coracina papuensis*

- 1 (pale morph); 4 Sep 2003; Erik Meijaard & Rona Dennis; Bruce, GrK13

Pied Butcherbird *Cracticus nigrogularis*

- 1; 29 Jul 03; Steve Holliday; Nanima Rd, Hall, GrJ9
- 2; 31 Jul 03; Steve Wilson; Tharwa sandwash, GrJ19

The COG office is located at Room 5, Griffin Centre, Bunda Street, Civic, Opening hours are Tuesdays from approximately 10:00 - 12:30; at other times they depend on the availability of volunteers. Please call the office on 6247 4996 to confirm that it is open or to leave a message.

Canberra Bird Notes is published by the Canberra Ornithologists Group Inc and is edited by Harvey Perkins and Barbara Allan, Major articles of up to 5000 words are welcome on matters of the distribution, identification or behaviour of birds occurring in the Australian Capital Territory and surrounding area. Contributions on these topics should be sent to Harvey Perkins, 42 Summerland Circuit, Kambah ACT 2902, or via email to harvey.perkins@anu.edu.au. Short notes, book reviews and other contributions should be sent to Barbara Allan, 47 Hannaford Street, Page ACT 2614 or via email to allanbm@ozemail.com.au, If you would like to discuss your proposed article in advance, please feel free to contact Harvey on 6231 8209 or Barbara on 6254 6520.

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