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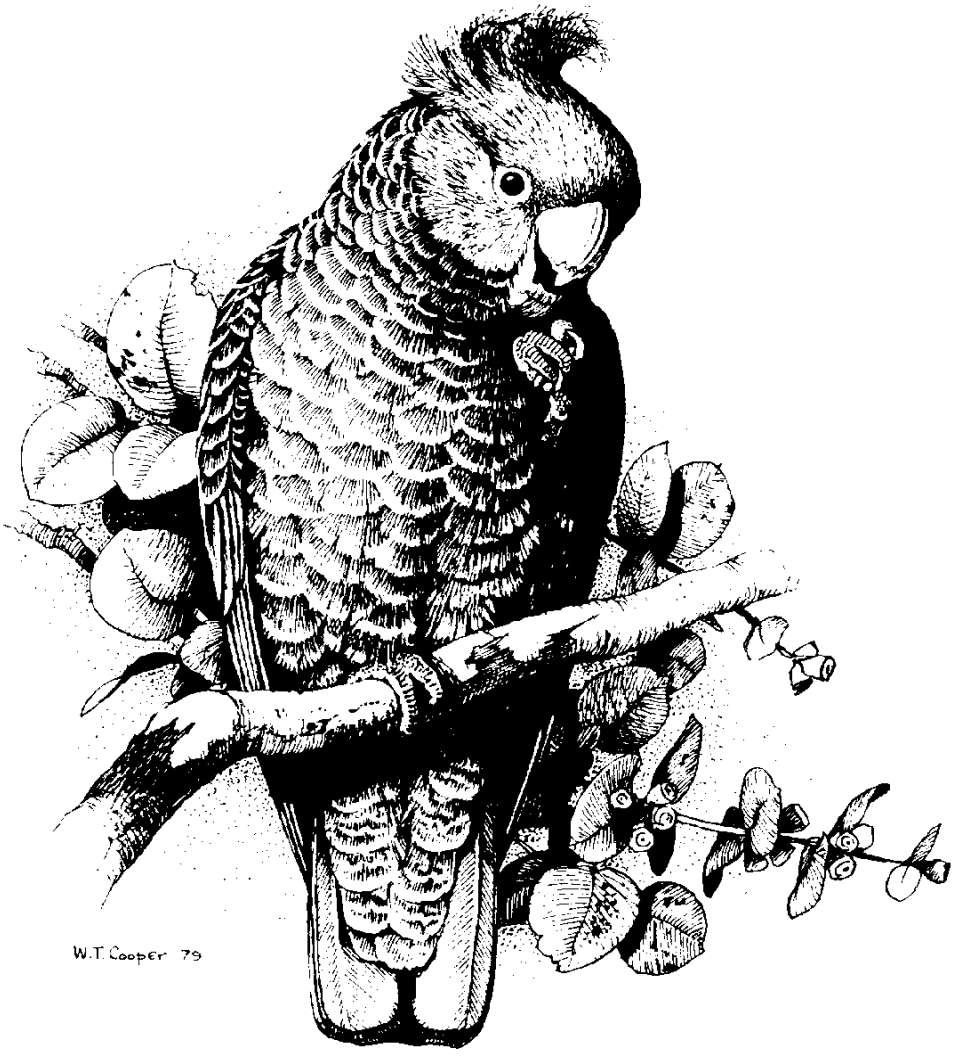

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EDITOR'S NOTE

Note to *Canberra Bird Notes* authors and potential authors *re* dissemination of contents

The Committee of the Canberra Ornithologists Group (COG), in consultation with the Editor of *Canberra Bird Notes* (CBN), has decided to modify aspects of the dissemination of CBN's contents.

COG has entered into an agreement with the firm EBSCO for them to include *CBN* in their new international online journals database Academic Search Ultimate. Information on this database is available online at https://www.ebscohost.com/academic/academic-search-ultimate .

EBSCO, a USA-based company, is one of the world's leading providers of access to academic journals, magazines, e-books, etc., to libraries and other organisations around the world.

Entering into a partnership agreement with EBSCO means that the contents of *CBN* will be indexed by EBSCO and included in the databases that they make available to libraries and others, providing increased exposure of its contents to Australian and international readers.

This has implications for copyright. Copyright in the contents of *CBN* is retained by the individual authors, not by COG. This means that COG cannot authorize EBSCO (or anyone else) to reproduce or distribute its contents. Consequently, with effect from the next volume of *CBN*, the editor will invite authors to provide their written permission for COG to provide their articles to EBSCO for dissemination through its Academic Search Ultimate database. Please note that this arrangement is not retrospective. Previously published issues of *CBN* will not be provided to EBSCO. Of course, if any author declines permission for COG to provide their articles to EBSCO, their wishes will be complied with.

The new permission form will also include authors' agreement that COG can disseminate the contents of *CBN* in digital formats, including as pdf files at COG's website as is current practice, as well as in the bound, printed issues.

COG has decided to take this innovative approach as it will result in *CBN*'s contents becoming more widely and readily available to national and international audiences.

…and on another matter:

Two of the articles in this issue of the Canberra Bird Notes (Vol. 41, no. 3), by Geoffrey Dabb (pp. 207-217) and Julie Clark (pp. 226-232) respectively, include a large number of colour photographs by the authors. These photos form an essential part for the understanding of the respective articles. In the black and white print copy of *CBN* the full information contained in the photos cannot be properly appreciated. I therefore urge readers that they also consult the online version of *CBN* at http://canberrabirds.org.au/publications/canberra-bird-notes and view all the photos in colour there, allowing full appreciation of the two articles.

Michael Lenz, editor

ARTICLES

Canberra Bird Notes 41(3) (2016): 194-196

TURNER'S POWERFUL OWL *(NINOX STRENUA)*

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On Thursday 27 Nov 2014 Terry Bird (Terry Bell) posted on the Canberra Ornithologists Group chatline: "At Haig Park next to Canberra North Bowling Club on McCaughey St. Well hidden in high exotic tree over green keepers shed. Well spotted by Terry Munro from guano on path and photographed and confirmed by Terry Bell." So began Canberra's love affair with a Powerful Owl.

Terry Munro and Terry Bell are long-term bowlers at Canberra North Bowling Club and veteran birdwatchers. Newer to birdwatching, John Bundock is a veteran patron of ACT drinking establishments and uses the club as a regular watering hole. This article combines the observations of the three of us over a 20-month period.

The Powerful Owl at Haig Park (*John Bundock*)

Canberra Times columnist Ian Warden became a devoted follower, with pictures of the owl in several of his columns. He described it as: "*…the most famous and most-photographed individual bird in the history of our bird-blessed and bird-appreciative city",* and *"The second most famous Canberran after Nick Kyrgios".* Warden chose the owl as his column's 2015 Canberran of the Year, stating*: "During 2015, haunting the neighbourhood of a Turner bowling club, the Powl became a famous and photogenic object of pilgrimage for hundreds of Canberrans".* Photos and artworks of it (the best of them by Geoffrey Dabb) decorated this world-famous column (Canberra Times 23 Sep 2015, 31 Dec 2015, and 24 Jan 2016)

Terry Bell was inspired to write a verse. Warden used part of it in a column thus making Bell a published poet (Canberra Times 7 Oct 2015):

Hidden deep in third drain tree
Raptor Turner is hard to see.
Clutched by talons, lying still
For last night's possum another kill

From Summer' perch in oaks so green
To Winter's blasts in pines he's been
And now in Spring new leaves appear
makes us glad that he's still here.

Our owl, well known, makes one wonder
Why anyone should steal our thunder.
We wish him well to find a mate
A dynasty, perhaps he could create.

The owl enhanced its celebrity status when it was featured on Canberra ABC Television (http://www.abc.net.au/news/2015-03-03/powerful-owl-spotted-in-suburban-canberra-park/6277744).

It seemed unperturbed by the attention that the item had attracted but disappeared, and was not located for two weeks, after some misguided people searched for it at night by torchlight. To the relief of its fans, it returned to its former roosts. Before setting off at dusk on its nightly hunts, the owl preened itself and gave a series of hoots. From his recording of those hoots, John Bundock believes that the owl was a male.

Olsen (2014) has observed that Powerful Owls often roost on prey for the day. This is consistent with our observations of this owl. John Bundock tried to monitor the bird daily for all but two days in the period 17 Sep to 8 Nov 2015. On six days its observed prey was a Brushtail Possum (*Trichosurus vulpecula*), on five days Ringtail Possum (*Pseudocheirus peregrinus*) and on one day a Sugar Glider (*Petaurus breviceps*). On three days it was not located. On the other days no prey was present. This was a period of the year when young Brushtail Possums would have been plentiful. At other times of the year its observed mammalian prey has consisted of Sugar Gliders and Ringtail Possums, with only an occasional Brushtail Possum.

On one occasion a whole Sugar Glider, and on another occasion the hindquarters of a Sugar Glider, was found below its tree; suggesting a reluctance on its part to descend to the ground to recover its dropped prey. Generally its prey has been eaten from the head down. It has been seen at dusk taking off, still clutching prey remains.

There are three Pin Oaks (*Quercus palustris*) along the edge of Haig Park bordering the Rugby Union Club/Canberra North Bowling Club, McCaughey Street, Turner, ACT. First seen in the Pin Oak nearest the street, on some occasions the owl would occupy the 2nd Pin Oak. When the trees lost their leaves, the owl retreated to the adjacent pines, selecting a Monterey Pine (*Pinus radiata*), the 5th tree from the street in the middle row of pines between the club and the drain on the Civic side of the club. At times it would occupy a Himalayan Cedar (*Cedrus deodara*), the third tree from the street along the drain, on the club side of the drain. Rarely was it seen in other trees. When the Pin Oaks regained their leaves, the owl took up residence in them but showed a preference for the second Pin Oak, with occasional forays to the first Pin Oak. This was the opposite of its habits in the previous year.

On 28 Jul 2016 the owl was seen with a Sugar Glider. The following day it had another. After that, searches in the surrounding trees and listening at dusk for its hoots proved fruitless. Perhaps drawn by the urges of the mating season, or finding it more difficult to locate prey but doubtless to the relief of the local possum population, the bird that had intrigued and entertained us for 20 months was gone.

Susan Trost assiduously collected Powl's pellets and has kindly provided to us, and given us permission to publish (Email Trost to Bundock, 1 Aug 2016) a table of the results (see below) of the examination of the pellets. Sugar gliders were the prey most frequently observed with the owl during the day but the numbers recorded from the pellets are far higher than we would have expected from our daytime observations of the bird. It appears that many of the sugar gliders caught by the owl were totally consumed overnight.

Table. Prey species and numbers identified from pellets of the Powerful Owl, Turner 2015 (Susan Trost).

Prey species	**Number**
Ringtail Possum	26
Brushtail Possum	8
Sugar Glider	98
Unknown mammals	37
Crested Pigeon (*Ocyphaps lophotes*)	1
Gang-gang Cockatoo (*Callocephalon fimbriatum*)	2
Galah (*Elophus rosiecappila*)	2
Sulphur-crested Cockatoo (*Cacatua galerita*)	1
Crimson Rosella (*Platycerus elegans*)	5
Noisy Miner (*Manorina melanochephala*)	2
Australian Magpie (*Gymnorhina tibicen*)	1
Unknown Birds	11
Total	**194**

Reference

Olsen, J (2014) *Australian High Country Raptors*, CSIRO Publishing, Collingwood.

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Canberra Bird Notes 41(3) (2016): 197-205

SILVER GULLS BREEDING ON SPINNAKER ISLAND, LAKE BURLEY GRIFFIN, SPRING 2013 AND 2015

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Abstract. *The breeding activity of the Silver Gull* (Chroicocephalus novaehollandiae) *on Spinnaker Island, Lake Burley Griffin, ACT was monitored during the 2013 and the 2015 breeding seasons. When compared with previous years the seasons started earlier and the colony area, number of adults and the number of nests continue to increase. In 2013 there was a four-fold increase in the maximum number of eggs on a visit compared to 2010. A major predation event in late August 2015 caused desertion of the colony with relaying approximately four weeks later.*

Background

For information on previous surveys of Silver Gull (*Chroicocephalus novaehollandiae*) breeding on Spinnaker Island see Davey and Fullagar (2011, 2012, 2013).

Spring 2013 observations

Silver Gulls were first noted near Spinnaker Island on 8 August when over 250 were seen from Black Mountain Peninsula sitting in groups on the water north of the Island. By 17 August approximately 300 were observed on the island but none appeared to be sitting on nest sites. Two days later birds were sitting or standing near nest sites. The first visit to the Island was on 23 August, with subsequent visits at approximately two-week intervals on 5 September, 19 September, 2 October, 18 October, 1 November, 14 November and 26 November and 12 December.

On the first visit 139 active nests with 191 eggs were found; 64% of nests contained a single egg and only two nests had three eggs (see Table 1), indicating that egg laying must have started around 19 August.

On our second visit, 13 days later, the number of nests had increased considerably, to 411. None of the clutches had hatched, with the majority of nests containing two eggs, suggesting that many clutches were still being completed. By 19 September the number of nests had increased to 463, with a reduction in the number of eggs because 100 nests now contained at least some chicks. Subsequent visits recorded a reduction in the number of nests until, by the visit of 26 November, only two nests remained which may have been deserted. By the time of the final visit no active nests were found.

Young large enough to leave the nest were first found on 18 October and many were moving freely around the colony. At the next visit, on 1 November, flying young were first observed. As we had found in the 2012 breeding season, there was no obvious attempt at a second breeding event and so by 26 November the breeding season had virtually finished.

The number of adults on the island was estimated by counts taken from a sweep of photos taken across an undisturbed colony. Where more than one sweep was photographed an average of these counts was taken. Excluding any young of the year, the number of birds counted was around 600 individuals, an increase from an estimated 450 individuals the previous year.

Table 1. Nest content and number of Silver Gull nests and adults on Spinnaker Island, Lake Burley Griffin, 23 Aug – 12 Dec 2013.

Nest contents	23 Aug 13	5 Sep 13	19 Sep 13	2 Oct 13	18 Oct 13	1 Nov 13	14 Nov 13	26 Nov 13	12 Dec 13
3 eggs	2	123	101	19	6	3			
2 eggs	48	210	194	57	43	27	4	2	
1 egg	89	78	68	63	33	20	7		
1 egg not on nest				6	1		1		
2 eggs + 1 chick			7	5					
1 egg + 2 chicks			14	4					
1 egg + 1 chick			22	12	3	1	1		
4 chicks				2					
3 chicks			7	5		1			
3 chick not on nest				2					
1 chick + 2 dead				1					
2 chicks			32	21	6	3	3		
2 chick not on nest				1	3		1		
2 chicks dead				2					
1 chick + 1 dead				1	1	1	1		
1 chick			13	17	3	8	1		
1 chick not on nest				7	1		2		
1 chick dead			5	4					
1 chick dead not on nest				27	40	40	22		
Total active nests	139	411	463	218	95	64	17	2	
Total eggs	191	867	809	266	141	84	16	4	
Total small chicks			155	124	32	19	11		
Total small chicks dead			5	38	41	41	23		
Total large chicks					67	no count	3	3	
Total large dead chicks					13	48	58	48	
Flying young on water						80	200	90	
Estimate no adults	600	504	626	483	500-550	650*	330*	200*	70*
Dead adults	2		10	6	16	25	25	22	
Comatose adults					2		3		
Colony area (m2)	962	913							

* included flying young

The area covered by active nests can be difficult to assess because new nests are started in area not already used by breeding birds and other areas are vacated (see Davey and Fullagar, 2013). Even so, on 23 August when birds were first observed laying and incubating, the area covered was 962 m^2 (see Table 1), an area similar to 855 m^2 the previous year.

Dead birds on the island were not removed and in the case of adults a count was made for each visit. The count is therefore cumulative over the breeding season. Twenty-five adult carcases were counted on 1 November and again on 14 November. Five comatose adults were recorded (see Davey and Fullagar 2012, 2013 for explanation of comatose).

To determine hatching success without a permanent marker on each nest, a line of string was laid out across the middle of the colony. The line was marked with a permanent peg at the start, middle and end and the string was removed at the end of each count. Nests and their contents were recorded to each side of the line up to a distance of 1 m. To ensure the same nest was counted each time, the distance from the start of the line and the position (left or right of the line) was also recorded.

On 5 September the contents of 73 nests were recorded. By 19 September, 25 of these nests contained at least one chick. There was no sign of 17 nests, and the eggs in 31 nests had not hatched. By 2 October, of the 31 nests previously unhatched, nine contained chicks with the remaining 22 nests empty. Up to 2 October from a total of 73 nests 34 were known to successfully hatch, producing at least one chick and so giving a minimum hatching success of 46%. At the next visit, on 18 October, there was no sign of the original 73 nests. It was not possible to determine hatching success beyond that date, largely because of movement of recently hatched chicks around the colony.

While on the island and when watching from the shoreline it was obvious that the direction of movement of adult birds to and from the island was not random. On 15 October, at which time the majority of young were still being fed, two 20-minute surveys from Blue Gum Point on Lake Burley Griffin indicated that virtually all the birds left the island in an easterly direction, returning in a westerly direction (see Table 2). Movement was therefore up and down the length of the lake and over Parliament House, most likely on the way to Mugga Lane Tip (see Davey and Fullagar, 2013).

Table 2. Number of Silver Gulls heading in different directions from and to Spinnaker Island.

Heading	10:20 to 10:40		12:00 to 12:20	
	From	To	From	To
N	0	0	0	0
NE	3	3	5	1
E	32	0	12	0
SE	0	0	0	0
SE	0	0	0	0
SW	2	0	0	0
W	0	25	0	18
NW	0	0	0	0
Total	**37**	**28**	**17**	**19**

Spring 2015 observations

Silver Gulls were first noted around Spinnaker Island in early August. Our first visit was on 31 August when laying had just begun, with 68% of the 159 nests containing a single egg (see Fig. 1a and Table 3). Three nests contained three eggs which would have been laid about a week earlier. Of interest was a Swamp Wallaby *Wallabia bicolor* on the island, and it was noted that gulls were nesting on at least one moored boat in Lotus Bay. An estimated 850 adults were on the island.

The next visit was 10 days later. On approaching the island it became obvious that there was very little gull activity. An inspection of the colony indicated that the area had been deserted and only eight adults were seen in the general area of the island (see Fig. 1b). All eggs had been destroyed with no sign of any chicks. Eggs were lying cracked open and all the contents removed (see Fig. 2). Of the 213 eggs present on 31 August we were able to account for 197 destroyed eggs.

Figure 1a (top) and 1b (below). Panorama of Silver Gull breeding site on 31 Aug 2015 (1a) and 10 Sep 2015 (1b).

The following day a check of the island was made from Black Mountain peninsula; many gulls were flying around the island but none landed. No gulls were seen on or around the

island on 19 September. Throughout the rest of September an occasional visit to the Black Mountain peninsula indicated that no gulls were present.

Figure 2. Silver Gull egg damage, 15 Sep 2015, Spinnaker Island, Lake Burley Griffin.

Surprisingly, on 11 October our attention was drawn to about 200 gulls back on the island. A visit the next day showed that re-laying had begun, with a count of 97 nests of which 56% containing two eggs, indicating that laying must have recommenced at the beginning of October after a gap of about 3–4 weeks.

By 21 October the number of nests had increased to 278 but none had hatched, with the majority of nests containing two eggs. A week later, on 28 October, the number of nests had increased to 328 and the first chicks of the season had appeared. From then on the number of nests decreased, with the maximum number of chicks recorded on 4 November. By mid-January the season was virtually over, six weeks later than 2013.

The area covered by the nesting birds was larger in 2015 than in 2013. On similar dates in early September, at which time adults would be visiting the island to incubate, the area covered was 913 m^2 in 2013 compared with 1515 m^2 in 2015. Although difficult to compare due to predation, the estimated number of adults on the island at the start of the breeding season was 850 in 2015 compared with 600 in 2013.

The accumulated number of dead adults was 71, with only five comatose birds recorded.

Table 3. Nest contents and no. of Silver Gull nests and adults on Spinnaker Island, Lake Burley Griffin, 31 Aug 2015 – 1 Jan 2016.

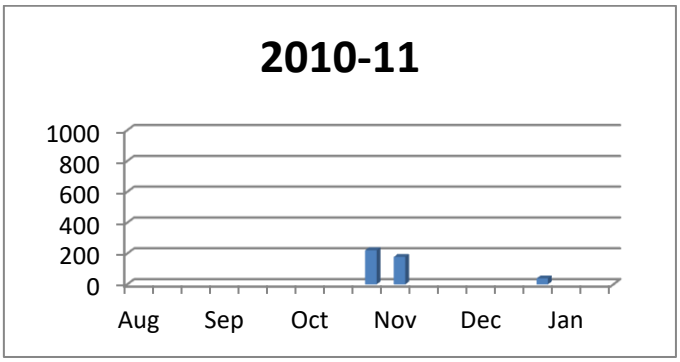
Nest contents	31 Aug 15	10 Sep 15	19 Sep 15	12 Oct 15	21 Oct 15	28 Oct 15	4 Nov 15	15 Nov 15	14 Dec 15	11 Jan 16
4 eggs					1	1	1	1		
3 eggs	3	0	0	16	51	59	28	27	38	2
2 eggs	48	0	0	55	180	186	122	68	37	1
1 egg	108	0	0	26	46	52	55	29	13	4
1 egg not on nest		0	0					1		
2 eggs + 1 chick							6	3	2	
1 egg + 2 chicks						5	3	1	1	
1 egg + 1 chick						7	21	10	2	
3 chicks							2	1	1	
2 chicks						10	31	21	3	
2 chicks not on nest								3		
1 chick + 1 dead							2		1	
1 chick						8	18	16	1	
1 chick not on nest								18		
1 chick dead							3		9	
1 chick dead, not on nest							2			
Total active nests	159	0	0	97	278	328	292	177	108	7
Total eggs	213	197 (des-troyed)		184	563	617	423	268	208	12
Total small chicks		0				45	121			
Total small chicks dead		0					7			
Total large chicks		0					0		22	7
Total large dead chicks		0					0		26	nc
Flying young on water		0					0	0	?	?
Flying young at club							0	0		9
Estim. no birds	846	8		550	383	516*	492*		900*	150*
Dead adults					1	2	4	12	54	71
Comatose adults								5		
Colony area (m2)		1515			891		1025			

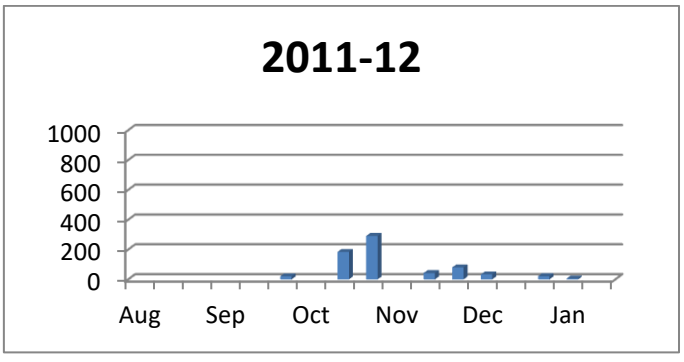
* included flying young

Discussion

Over five breeding seasons the colony size and number of Silver Gull nests, eggs and chicks has been monitored on Spinnaker Island, Lake Burley Griffin (see Figure 4). Between 2010 and 2015 the number of adults on the island at the start of the breeding season has increased from 150 to 250 in 2011 to 850 in 2015, while the area covered by the colony has almost doubled (an increase from 0.8 ha to 1.5 ha). No measurement of the number of adults or the area of the breeding colony was taken in the 2010–11 season. In addition, not only has the season started earlier – a full two months earlier in 2015 compared with 2010 – but also the maximum number of eggs on a visit has increased nearly fourfold – from 221 in 2010 to 867 in 2013 (see Figure 4). Had it not been for the predation event in 2015, the number of adults on the island at the start of the breeding season suggests that the number of nests and eggs would have been considerably larger than in 2013.

We can conclude that the colony continues to grow and that egg laying now commences in early August rather than late October as occurred in the early days when this colony started. It is possible that over 1000 gulls will be breeding on the Island in the near future. Serious predation events may not significantly slow this growth if they occur early in the egg-laying period. Although incomplete clutches may be vulnerable before a majority of birds in the colony begin incubation, it is also clear that the colony can recover when there is time for a major re-laying after a catastrophic early predation of all clutches.





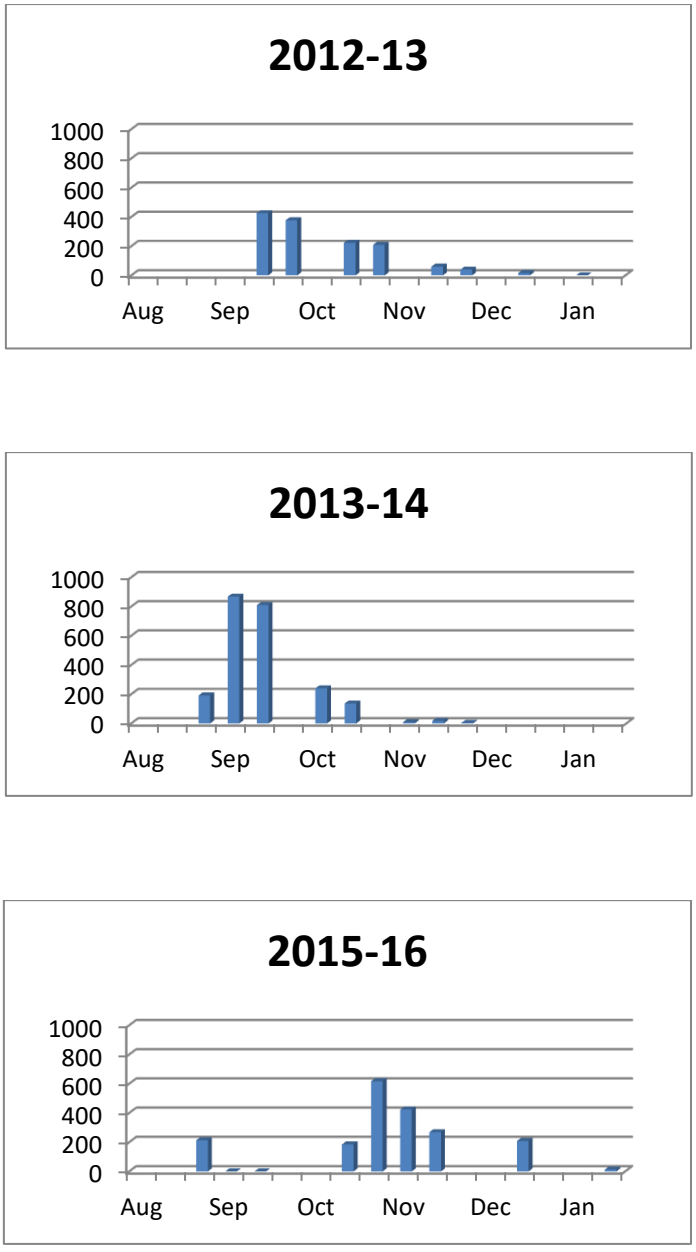


Figure 4. Number of eggs laid from August to January during five breeding seasons on Spinnaker Island, Lake Burley Griffin. Note: Gaps indicate no data except in 2015 when predators removed all eggs in September (see Discussion, para 1).

The predation event in 2015 was unexpected. In previous years the only predator observed had been a Little Eagle (*Hieraaetus morphnoides*) on two visits in October 2013. The only other birds seen on the island have been a pair of Masked Lapwing (*Vanellus miles*), an occasional nesting Pacific Black Duck (*Anas superciliosa*), an Australian White Ibis (*Threskiornis molucca*), a Straw-necked Ibis (*Threskiornis spinicollis*) an occasional Australian Raven (*Corvus coronoides*), Purple Swamphen *Porphyrio porphyrio* or small passerine. From the pattern of damage to the eggshell it was obvious that the eggs had not been smashed but rather pecked, with the V-shaped pattern similar to the bill of a raven or Purple Swamphen. A possible predator would be one of the two species of Ibis but the marks on the shell did not fit the shape of an Ibis bill. Despite the predation event at the start of the breeding season the birds laid again within a month and, although the breeding output was

reduced, many birds were still successfully raised on the island. It is interesting that the re-laying in early October did not initiate a second predation event. Unfortunately, it is unknown whether a predation event occurred on the island in 2014.

Fewer dead Silver Gulls were found on the island in 2013 than in 2015 although the same number of comatose birds was found. Comatose birds have been observed each season since the first survey in 2010. The largest number recorded was during the 2012–13 season when 10 birds were observed. The largest number of dead birds was also recorded that year.

Acknowledgements

We wish to thank the National Capital Authority for permission to visit the island, Matthew Owen (CEO, Canberra Yacht Club) for arranging boat transport to and from the island, and the Canberra Birds Conservation Fund for a grant to offset transport costs.

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THE OBSERVING OF A FIRST GENERATION HYBRID HONEYEATER, AND THE APPEARANCE OF SECOND GENERATION HYBRIDS

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Abstract. *This article reports on and discusses the appearance and continued presence, during 2016, of an unusual small honeyeater at a Canberra nature reserve. The bird in question is a cross between a New Holland Honeyeater and a White-cheeked Honeyeater. In spring 2016, the hybrid mated successfully with a New Holland Honeyeater, producing a second generation of natural hybrids. The author's own detailed observations began in mid-October 2016, but the observational story began several months earlier.*

The Two Species

The New Holland Honeyeater *Phylidonyris novaehollandiae* ('NHH') has a distribution in eastern Australia from south-east Queensland to South Australia, the ranges west of Canberra being about the inland limit at that latitude. The species is also found in south-western Australia. For the Canberra area, it is described as an 'uncommon breeding resident, often nomadic'. Its distribution is largely influenced by a strong preference for nectar-rich trees and shrubs, particularly banksias (*Banksia* spp.) and grevilleas (*Grevillea* spp.).

Around Canberra it particularly favours out-of-area plantings of such vegetation, and can be found year-round at the Australian National Botanical Gardens (ANBG) and in suitable pockets at Jerrabomberra Wetlands Nature Reserve (JWNR).

The White-cheeked Honeyeater *P. nigra* ('WCH') is also found in eastern and south-western Australia, the eastern coastal range being a narrow strip, generally not extending far inland of the Great Dividing Range. While nominal distribution needs to be treated flexibly in relation to nomadic honeyeaters, the WCH had not previously been regarded as occurring within 100km of Canberra.

The two species are closely related, having been treated as forming an 'infra-genus': *Phylidonyris (Meliornis)'* (Schodde and Mason 1999). They have a similar appearance in the field. Where both occur together they can be separated readily by the conspicuously large white cheek patch of the WCH or the conspicuously white iris of the NHH –"the bird with the 'life-saver' eyes" (Hoskins 1991).

There are some differences between the two species in foraging behaviour, song, display flight, and habitat and nest site preference (Recher 1977).

An early but misconceived association of the two species may be found in the published journal of Surgeon-General White of the First Fleet. In that, the naturalist Dr George Shaw described the WCH as the female of the NHH (then called the 'New Holland Creeper') (Chisholm 1962).

For the WCH, across its range breeding has been recorded in all months with a peak for egg records in July, coinciding with winter flowering of banksia species in the main areas of

[1] With the exception of Figures 1 and 2, all photos in this article are by the author.

occurrence. The peak of grevillea flowering at JWNR, on which the NHH seems to rely, is in spring, early summer. Along the Murrumbidgee loose breeding colonies use the flowering *Grevillea juniperina*, again in spring, early summer (Frith 1969). COG data suggest the nesting season extends from August to March, with most breeding records from August to October. At JWNR dependant young were noticed October to December 2016.

The earlier reporting

Reports of sightings of 'a WCH' at JWNR may be found at the eBird listing site (maintained by the Cornell Lab of Ornithology) and in the archives of the Canberra Ornithologists Group discussion list. The first report was by Brian Deans, a visiting observer, on 10 Dec 2015. Subsequent reports and photographs confirmed the continuing presence of a typical adult WCH, that being endorsed formally by the COG Rarities Panel.

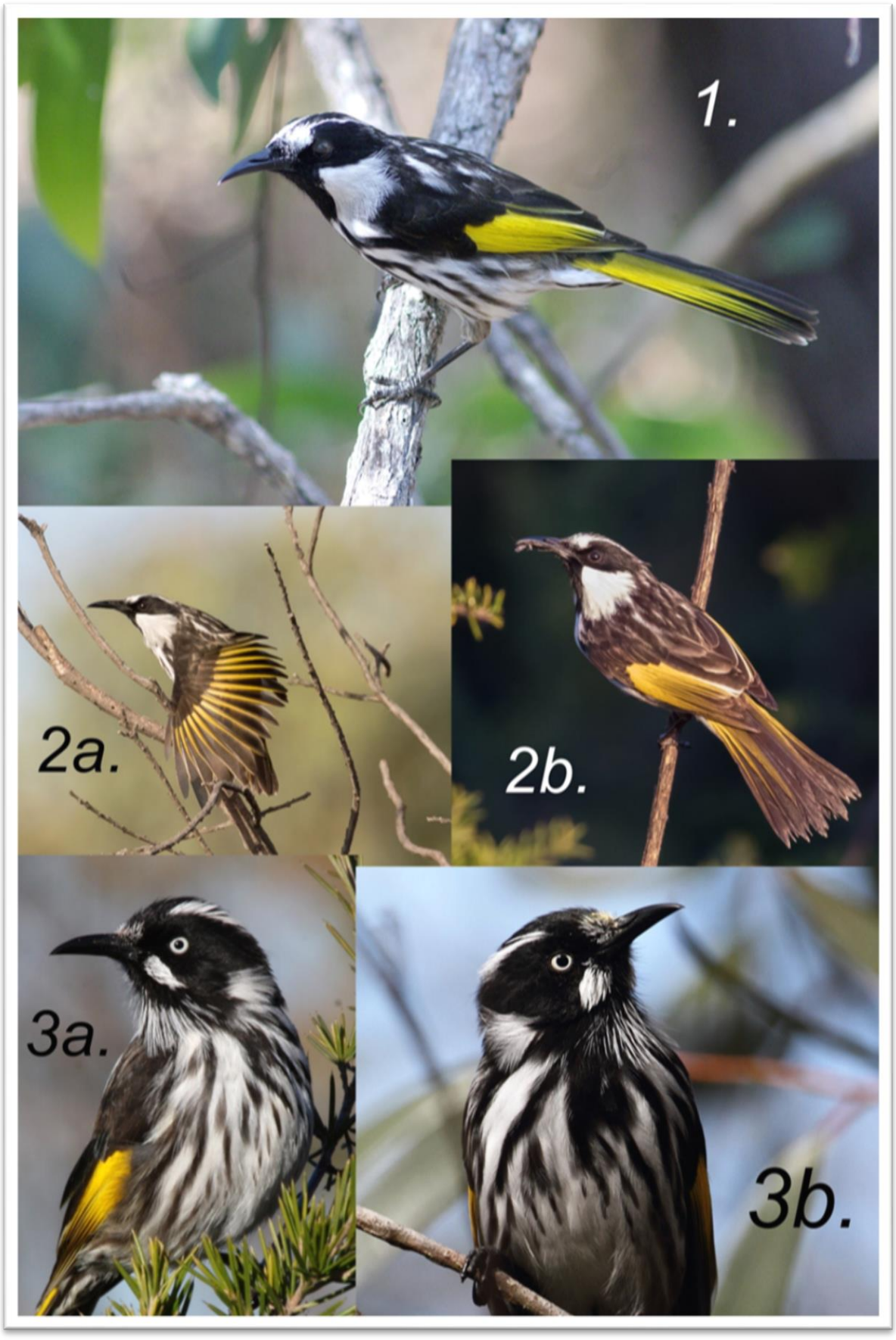
On 24 Sep 2016 Shorty Westlin took a photo, presumably of that WCH, and also obtained a photo of a similar but different bird of unusual appearance, suggested to be a possible young bird. On 30 September he obtained another photo of the unusual bird which he had observed being fed by a NHH. He suggested the possibility of a hybrid, WCH x NHH.

As shown under Characters below, the possible hybrid is of sufficiently distinctive appearance to justify the belief that local sightings and photographs of a bird of hybrid appearance during 2016 are probably all of the same bird. The bird in question is referred to here as the 'hybrid'.

In February 2016 photos were obtained by two separate observers of 'the WCH' which reveal, with the advantage of the September photos, the distinctive head features of the hybrid, so as to exclude the possibility it was the typical WCH that was being reported around the same time. Moreover the February photos suggested a sub-adult bird perhaps in post-juvenile moult, with a part-grown tail and some residual down. Photos accompanying some later reports are of the hybrid rather than the typical WCH. It seems likely that the hybrid is a bird from a local nesting in or around spring 2015, being the result of a mating between the single WCH reported in December and a NHH. A less likely hypothesis is that a very unusual individual of hybrid appearance occurred independently of, but at the same time and place as, a very rare WCH.

The possibility that two or more 'hybrids' were present at JWNR cannot be completely ruled out. Shorty Westlin has photos of a bird from March 2016 of slightly different appearance (depending on how the development of the facial plumage is interpreted), raising the issue of existence of a sibling of the hybrid. In a possibly related observation, Peter Milburn reported a White-cheeked Honeyeater at ANBG on 20 June 2016.

At the time of writing (December 2016) the hybrid can still be observed in its usual haunt at JWNR. However there has been no confirmed report of the typical WCH since late September.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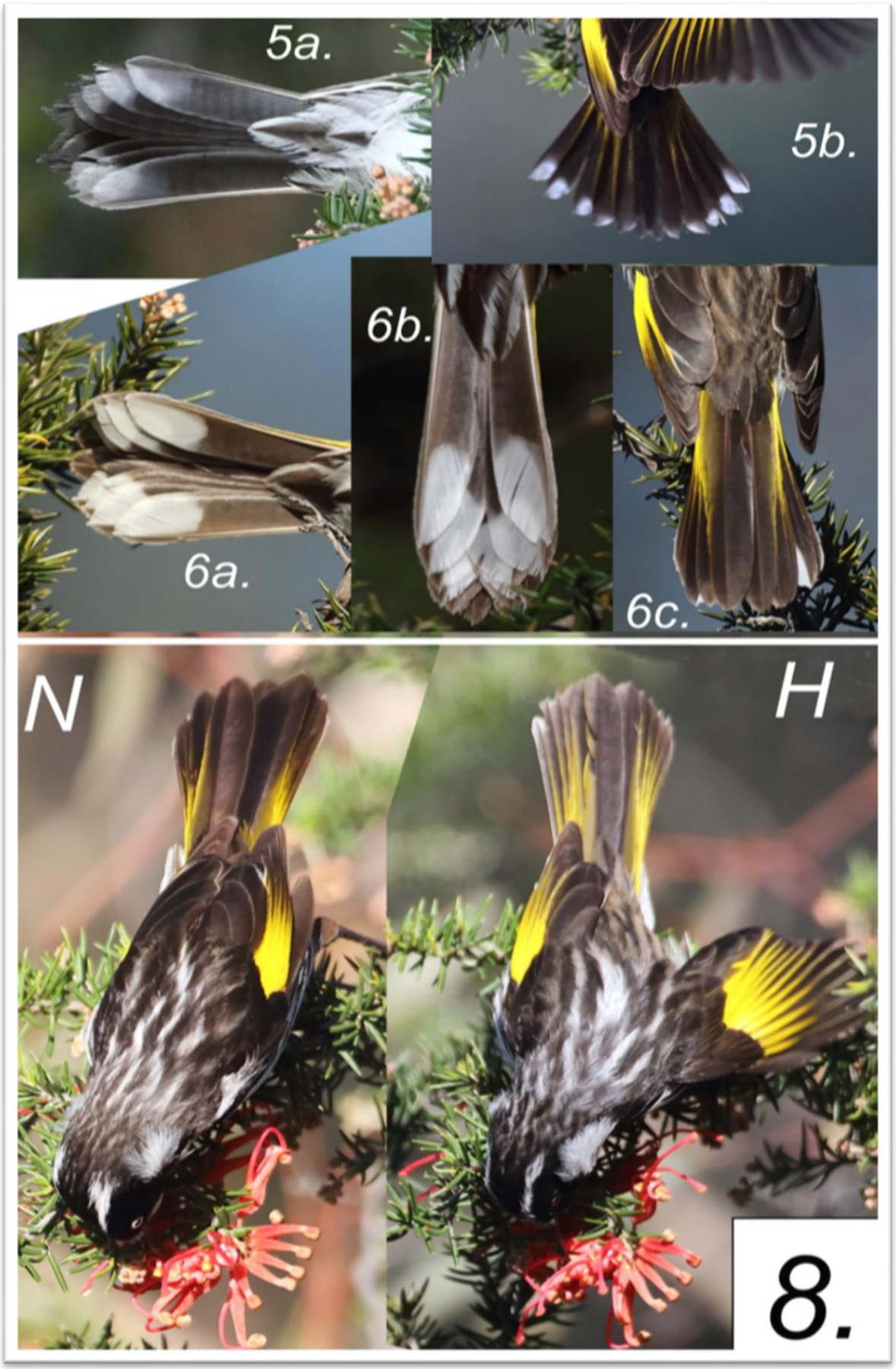
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Breeding, October-November 2016

The following observations are by the author. The hybrid was seen at JWNR carrying nest material on 19 October. This is evidence that it is a female, as in both parent species the female builds the nest (HANZAB). The probable nest site was within a metre of the ground in a dense tangle of Blackberry (*Rubus fruticosus*) and other low vegetation, about 20m from Jerrabomberra Creek. Both parents, the hybrid and a NHH, were seen carrying food to that site, and defending it. The marshy location recalls the comment that in the Sydney area the WCH 'inhabits thick vegetation bordering creeks, swampy situations with a rank growth of Sword-grass …' (Hoskins 1991).

On 18 November the hybrid was seen carrying food (many tiny arthropods) after foraging at the top of a small eucalypt. (Fig. 9).

On 20 November a speculative photo of the hybrid deep in the Blackberry revealed a begging nestling nearby. The next morning two fledglings were seen fluttering to a semi-obscured perch on dead African Boxthorn twigs (*Lycium ferocissimum*) in rank Blackberry growth. They remained in that thorny refuge for at least 40 minutes, being fed by both parents. (Fig. 10 – the NHH parent is shown with chicks in one frame, the hybrid in the other three.)

To monitor progress of the fledglings, visits to the site were then made about every second day up to 9 December. Initially the fledglings tended to remain out of view, their presumed locations being indicated by begging calls and repeated visits by the parents into dense shrubby vegetation. The pair including the hybrid continued to feed out-of-sight young until 6 December. At least one other brood of (NHH) dependant young was in the same area and the young seen could not be attributed to particular parents. What unusual plumage characters might have been transmitted to the new generation will only become evident when the young acquire their basic plumage.

Characters of the hybrid

Fig. 1 shows a typical WCH (photo: Graeme Chapman). Figs. 2a and 2b show the WCH observed at JNWR (photos: Shorty Westlin). Figs. 3a and 3b show a typical NHH. Fig. 4 shows the hybrid from various angles. All photos in Fig. 4 are of the same bird, some apparent differences being caused by varying light. The bird at top left shows reduced white head plumage due to matting following heavy rain. Attention is drawn to the following:

The lateral crown stripe of the NHH does not meet the white forehead patch. By contrast the relatively broad crown stripes of the hybrid, like those of a typical WCH, join at the forehead to create a white 'V' when seen from above.

(a) In its natural position the prominent white cheek patch (better described as a plume) of the WCH resembles a rough triangle with the apex coming within 3mm of the eye. The corresponding patch of the hybrid, while unlike the ear patch of the NHH, is a different, irregular shape and further from the eye with a concave upper margin tapering to a scattering of small white feathers among the black, in the malar area.

(b) The hybrid lacks the white malar tuft of the NHH.

(c) The hybrid has short black bristles at the throat with which are interspersed a few white bristles. In that area all of the NHH specimens in the CSIRO collection at Gungahlin ('ANWC') have longer white hair-like bristles, forming the prominent beard. No WCH specimens have bristles like the hybrid.

The hybrid has terminal white spots on the eight outer tail feathers (Fig. 5). Similar spots can be seen on NHHs foraging at the same location (Fig. 6). All the NHH specimens in the ANWC, of all ages, show such spots. None of the WCH specimens show such spots.

An unusual feature of the hybrid is the iris colour (Fig. 4), which might be described as 'pale chestnut' or 'reddish-brown'. The iris ring is darker adjacent to the pupil and pale and diffuse at the outer rim. The iris of an adult WCH is usually described as 'dark brown'; that of an adult NHH is a conspicuous white. Photographs and reports of the hybrid in February 2016 suggest (but not very clearly) a dark iris at that time, possibly an indication of a young bird. One would expect the eye colour of the hybrid to have stabilised by now, at the end of at least the first year.

In the absence of better guidance from the literature, Fig. 7 is intended to convey, for the NHH, some idea of age characteristics. Fig. 7a shows a relatively brown-backed bird, adult or near-adult, with well-developed white facial patches and a fully white iris. Fig. 7b shows an obviously younger bird (from ANBG), very brown with an undeveloped ear patch, but with a white or whitish iris. Fig. 7c is a bird perhaps 3 weeks after fledging, with a dark iris – 'muddy brown' in strong light – at JNWR on 17 October. Fig. 7d is a bird a few weeks older, in December, still with a dark iris. Figs. 7e and 7f are from the same location and show an older bird again, but still a 'dependant young', being fed by a parent in dense shrubbery. That bird shows a whitish iris.

The back of the hybrid, from nape to tail including the wings, is quite brown by comparison with most NHHs at the same site. Study skins of both species show back plumage of a range of brownish colours from very dark to pale. It is difficult to give, as attempted in HANZAB, a generalised description of the variable shades and textures. Stages of moult vary between individuals in the first year (HANZAB). However, examination of ANWC study skins of both species indicates younger birds are generally paler, with plumage wear being a possible additional factor contributing to brownness.

As an illustration of appearance in the field, Fig. 8 shows the hybrid (H) alongside a NHH (N) which, according to back colour, might be presumed to be younger than other NHHs at the site and possibly the same age as the hybrid. The two individual birds are remarkably similar.

Apart from the head and throat, the appearance of the hybrid is much closer to a typical NHH than to a typical WCH, but the possibility that it is an aberrant NHH is difficult to accept. (See Comments below.)

Hybridism

The following comments are drawn from McCarthy 2006. The traits of different parent species are expressed in hybrids in two typical ways. The size, shape or colour of a characteristic (e.g. a wing, bill or crest) might be intermediate between those of the two parent species, or the hybrid might combine a trait of one parent with respect to one characteristic (e.g. wing pattern) with a trait of the other parent with respect to another characteristic (e.g. breast colour). (Here the hybrid appears to reflect both genetic possibilities in different body parts.)

McCarthy's hybrid category of a natural (i.e. non-captive) hybridisation that is neither 'ongoing' nor 'extensive' is (not surprisingly) the least reported category. Many single instances of hybridising in the wild are unlikely to be detected and reported. There are only two instances listed in relation to Australian honeyeaters, and neither involves either of the species considered here. There is no information about how frequently the cross presumed here might have occurred, or about its likely fertility. Some hybrids are fertile, some not, and some fertile but reproductively disadvantaged (McCarthy 2006; Gill 1995).

On the other hand, in McCarthy's list several instances of 'ongoing' hybridisation are mentioned among honeyeaters. Those usually involve a hybrid zone between two species or subspecies where the hybrid population might be, but need not be, treated as a *separate* species or subspecies. There is also a category of 'extensive' natural hybridisation, where there are many reports of the cross occurring in a natural setting. (Locally, Little Corella X Long-billed Corella might be in that category, although the question arises whether the original cross or crosses occurred in a captive setting.)

Comments

Some might not be convinced of the hybrid status of the 'hybrid' by the evidence of plumage and eye colour anomalies alone. However, if hybridising has not occurred here, the 'hybrid' must be a very unusual NHH. That would raise the question of what other genetic factors could have led to such striking plumage and eye colour anomalies in a non-hybrid individual.

The issue seems to be one calling for resolution by trapping, sampling, and molecular analysis.

Acknowledgements

But for Shorty Westlin's observations and photos of September 2016 the presence of the hybrid might have gone unnoticed for a long time. Photos or observations by the following were also useful: Brian Deans, Alastair Smith, Kym Bradley, Christine Darwood, Roger Williams, and Steve Wallace. Graeme Chapman gave comments and provided photos from other locations. Harry Recher, who has worked extensively on both the species in question, made helpful comments and suggestions. Leo Joseph gave helpful advice and enabled access to the ANWC material. Dick Schodde gave informative comments. Barbara Allan provided information about relevant deliberations of the COG Rarities Panel. The ornithologists consulted are thanked for their interest and encouragement, although their individual views do not necessarily coincide with all the conclusions expressed in this article.

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A TEN-YEAR REVIEW OF CANBERRA INDIAN MYNA ACTION GROUP (CIMAG) AND DEVELOPMENTS IN RESEARCH ON, AND PRACTICAL CONTROL MEASURES FOR THE COMMON MYNA (*ACRIDOTHERES TRISTIS)*

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Abstract: *In just over 10 years since its formation in 2006, group membership of CIMAG has grown to more than 2000 (mostly in the Canberra region). CIMAG members have humanely removed more than 58,000 mynas from the Canberra environment, leading to the decline in the Common Myna from 3rd most common to 18th in COG's Garden Bird Survey. Thus, CIMAG has shown that an innovative, low cost community-based program can have a major impact in tackling a highly successful, omnivorous, invasive pest species. The success of CIMAG's programs and methodology has influenced the formation of more than 40 like-minded groups throughout Australia and established the group as a recognised point of reference, internationally.*

CIMAG has maintained a vigorous public relations campaign both locally and with like-minded groups and agencies in Australia and overseas, including through radio, TV, and print media. CIMAG sponsored myna conferences in 2009 and 2013.

Through discussions with the Australian National University and the Invasive Animals Co-operative Research Centre, CIMAG was successful in initiating the PhD project of Ms Kate Grarock, whose research has provided a deeper insight into the ecology of the species and its impact on native birds. CIMAG has liaised and co-operated with other myna researchers based in Canberra, Sydney, Brisbane and Newcastle.

CIMAG maintains a web site: http://www.indianmynaaction.org.au. This covers a comprehensive history of CIMAG, events, wide-ranging news about mynas and policies. It provides access to many scientific and practical papers referred to below. In particular, the 'Myna Matters Bulletins' provide news on current issues.

CIMAG is aware of increasing trap-shyness of mynas, is developing strategies for nest removal, and is acting to increase the acceptance by governments of the long-term environmental threats mynas pose to native species, their habitats and to human amenities.

Introduction

Canberra Indian Myna Action Group Inc. (http://www.indianmynaaction.org.au) was formed in April 2006, by a group of local citizens (mostly COG members) concerned at the growing numbers, spread and impact of the introduced Common Myna (*Acridotheres tristis*) on native species (particularly hollow-nesting birds), small-bodied birds, arboreal mammals, reptiles and some threatened insects.

The International Union for the Conservation of Nature has long classified the Common Myna (along with the Common Starling (*Sturnus vulgaris*) and only one other bird species) among the world's 100 most invasive plants and animals, whilst in an ABC Wild

Watch program in 2005, the myna 'won' the Pest of Australia Award, 'beating' the Cane Toad (*Rhinella marina*) and the Feral Cat (*Felis catus*) in the process. As a species closely associated with humans in urban, peri-urban and farming areas, mynas are widely disliked due to their scavenging of pet-food, impact on soft fruit crops, fouling outdoor dining areas, nesting in ceilings and roosting overnight in large noisy flocks.

Initial discussions in 2006 were convened by Bill Handke. On formation of CIMAG, Bill was elected President, a position he has held continuously since. Other COG members supporting the initiative and forming the inaugural committee were Jenny Bounds, Alison Russell-French, Ian Fraser, Peter Ormay, Marg Peachey and the author.

Mynas were deliberately introduced to Canberra in the 1960s, when 110 birds were released in Forrest (Taylor and Canberra Ornithologists Group 1956). The population increased and dispersed rapidly as reported in COG's Annual Bird Reports. So much so, that the urban population was estimated at 250 birds per sq.km and a mid-range population of 93,000 in 2005 (http://www.indianmynaaction.org.au) by Martin Butterfield, based on transect surveys of Canberra suburban areas.

The concern about the impact on native birds had been demonstrated by studies (especially see Pell and Tidemann (1997); http://www.indianmynaaction.org.au) in Canberra Nature Parks in the 1990s that reported mynas and starlings evicting and displacing native birds from tree hollows, killing chicks and destroying eggs. When mynas competed with Crimson Rosellas (*Platycercus elegans*) for nest-hollows they won out around 50% of the time, but with Eastern Rosellas (*P.eximius*) and Red-rumped Parrots (*Psephotus haematonotus*), mynas won nearly 100% of the time.

CIMAG - the name

Whilst acknowledging that the accepted English name for *Acridotheres tristis* is 'Common Myna', it was recognised from the time of formation of the group, that the general public throughout Australia, know the bird as 'Indian Myna', and that use of the name 'Common Myna' could lead to confusion with the native Noisy Miner. Thus, the name: '*Canberra Indian Myna Action Group* 'was adopted, resulting also in a pronounceable acronym! Virtually all of the more than 40 similar groups throughout Australia that have followed the Canberra initiative also use the name 'Indian Myna'.

Strategy and actions

On formation, CIMAG embarked on development of strategies to achieve broad-scale public participation in a myna control program, recognising that governments (at that time) had little interest in myna control.

CIMAG strategies included: building an informed and concerned public, through preparation and distribution of brochures, media interviews, creation of a highly informative website (hosted by COG), discussions with community groups and the media, building a network of support with prominent groups such as the RSPCA, the ANU Fenner School of Environment and Society, the Invasive Animals Co-operative Research Centre (CRC), relevant Commonwealth and ACT Government agencies, COG, landcare and catchment management groups and with ANU myna researcher Dr Chris Tidemann (CIMAG's first patron).

Another early initiative was the manufacture of non-lethal foraging traps ('PG Traps' based on a design by CIMAG member, Peter Green). Trap design & construction details are on the website (http://www.indianmynaaction.org.au).

An animal welfare protocol was adopted (following consultation with the RSPCA) covering the ethics of trapping, handling, care and disposal of mynas, which all CIMAG members are required to sign before trapping (http://www.indianmynaaction.org.au). In addition, CIMAG embarked on a program of support for interstate communities and local governments to establish their own programs. CIMAG supported research into myna ecology, behaviour and impacts. CIMAG has remained active in promoting the concept of myna control and in supporting communities and local governments in their own programs, through its website (http://www.indianmynaaction.org.au), the Myna Matters Bulletins, (which routinely go to all east-coast councils) presentations at national pest conferences, by organising two myna control conferences, providing education and promotional materials and running trap-building workshops in NSW and Queensland. Following CIMAG's success, over 40 other groups have now been established throughout Australia.

In addition to numerous email enquiries and telephone calls from councils and the public around Australia, the President is also regularly approached by overseas officials and citizens (to date, from Saudi Arabia, Oman, Israel, South Africa, Singapore, Fiji, the Solomon and Cook Islands) about myna control.

Locally, CIMAG members own and manage their simple to operate traps and use carbon monoxide from a cold petrol-engine car for humane disposal.

Once the program had started to show positive results in reducing myna numbers, CIMAG was successful in obtaining small Commonwealth and ACT Government grants for publicity and the purchase of materials for trap-making.

Traps are issued free to members on joining, with a request for a donation of $50. Generally, these donations have provided a sound financial basis for CIMAG, which does not levy annual membership fees.

Membership growth, trap demand and on-going activities

The response from the Canberra community to CIMAG publicity over the whole period of CIMAG's existence has been remarkable. Whilst initially, traps were made at group working-bees, the demand for them has always been greater than supply capacity. Subsequently, CIMAG arranged with ACT Corrective Services for traps to be produced by prisoners at the Alexander Machonochie Centre (AMC), using materials supplied by CIMAG. The AMC has produced more than 1000 traps. However, in recent months, trap construction has been transferred to the Community Service area of ACT Corrective Services due to construction work in the AMC trap-making area.

CIMAG membership has now grown to more than 2000. Members are kept up to date by Myna Matters Bulletins (http://www.indianmynaaction.org.au) issued roughly twice annually, presentations and discussions with community groups, the media and at the AGM.

CIMAG and Canberra-based myna research and monitoring

In 2007, CIMAG initiated discussions with the ANU Fenner School and the CRC, resulting in the PhD project undertaken subsequently by Kate Grarock. Work by Grarock between 2008 and 2012, involved the location and monitoring of 225 nest boxes in areas of Canberra Nature Park (CNP) immediately adjacent to 15 long-established 'leafy' Canberra suburbs. Skilled bird observers carried out 20 minute, 1km long marked transect surveys, recording all bird species in each CNP and the adjacent suburb, at intervals of two months over three years. Other variables studied by Grarock were the effects of habitat modification and variation in density of vegetation between sites and myna dispersal rates.

Grarock also analysed 29 years of COG data (from 1981 to 2010) especially the results of Garden Bird Surveys (GBS) to establish the long term impacts of mynas on native bird species. She found significant adverse impacts on populations of native Sulphur-crested Cockatoo (*Cacatua galerita*), Crimson Rosella, Laughing Kookaburra (*Dacelo novaeguineae*), Superb Fairy-wren (*Malurus cyaneus*), Striated Pardalote (*Pardalotus striatus*), Willie Wagtail (*Rhipidura leucophrys*), Silvereye (*Zosterops lateralis*), Magpie-lark and also the introduced Common Blackbird (*Turdus merula*). Impacts on Eastern Rosella were noted but did not reach statistical significance levels, whilst there were insufficient observations of impacts on species of conservation concern such as the Superb Parrot (*Polytelis swainsonii*) (Grarock et al. 2012).

Impacts confirmed by Grarock's work were aggressive competition for food and nest sites and myna domination of nesting site areas including the exclusion of native species and the contamination of other nest boxes with rubbish. Two summary reports of Grarock's work prepared by the CRC are: "World first scientific evidence that Indian mynas harm native Australian bird populations" and "Case Study – Common myna impacts". More detailed papers are also available through the website: http://www.indianmynaaction.org.au.

Trapping and its impact in the Canberra Region

Since 2006, CIMAG members have been requested to report monthly, the number of mynas and Common Starlings trapped and removed from the environment. These numbers are collated on a suburb-by-suburb basis by CIMAG member Graham Gliddon and reported at the AGM and in Myna Matters Bulletins (http://www.indianmynaaction.org.au). By October 2016, more than 58,000 mynas and almost 9000 starlings had been removed and reported by CIMAG members in the Canberra region, with almost 4000 mynas removed in the previous year.

The CIMAG trapping program has had a profound effect. Successive COG Annual Bird Reports (ABR) have shown declines since 2006 in the Garden Bird Study in both reporting rate and abundance. When the program started, the GBS indicated that on average, each surveyor saw 4.9 mynas per week, making the myna the third most common bird in the survey. After ten years of trapping the number was down to 1.4 birds per week, making the myna the 18th most common bird. However, the general area records for July 2014 to June 2015 (COG 2016) show an almost doubling in recording rate from the previous year. Whilst the ABR notes this may reflect an upsurge in digital recording, it may also reflect a change in the behaviour of mynas in moving from suburban gardens (many of which have traps) to trap free areas. This view is completely consistent with the conclusions of King (2010; http://www.indianmynaaction.org.au).

Other relevant myna research in Australia

During 2014 and 2015, CIMAG provided myna carcases to Dr Richard Major at the National Museum in Sydney, who is studying DNA from mynas samples collected throughout the range of the species in Australia. Results from this work are yet to be published. This project is focussed on establishing the origin and invasiveness of myna populations, their migration and evolution.

Research by John Yim at Sydney University (2008) and Clark *et al.* (2015) at Griffith University indicates that mynas pose an environmental threat to native birdlife because they carry avian blood parasites with potential for transmission of fatal diseases to native birds. Clark's work was funded by BirdLife Australia, and is reviewed in Australian Birdlife Magazine 5 (1), March 2016, in an article which includes Clark's comments on the potential risk the malaria parasites pose to native species.

Dr Andrea Griffin and her students at Newcastle University have been studying myna behaviour since 2005, including movement and behaviour patterns, particularly birds teaching others about threats in their environment (see Peneaux and Griffin 2015).

Publicity and interaction in and beyond Canberra

CIMAG's promotional brochures and fact sheets (http://www.indianmynaaction.org.au) have been distributed at appropriate venues such as environment and landcare fairs, Floriade, and to interested government and non-government groups in Canberra and interstate. Rosemary Blemings has made a major contribution to CIMAG's publicity work over many years, whilst Bill Handke has made numerous presentations to like-minded groups interstate.

CIMAG organised and funded two National Indian Myna conferences in Nowra (2009) and Canberra (2013) which included papers and presentations from scientists, pest-control experts, local government representatives and volunteers. Both conferences attracted around 100 delegates each. The 2013 conference was addressed by Ms Susana Saavedra Cruz from the Spanish Canary Islands, a globally recognised expert in the control (and in a few cases, extermination) of mynas on islands in the Atlantic, Indian and Pacific Oceans. Ms Saavedra spoke to a COG meeting in 2013, and slides from her presentation are on the website (http://www.indianmynaaction.org.au). A DVD was produced of presentations to the 2013 conference and widely circulated to councils along the east coast. This is available on YouTube under 2013 Myna Conference.

CIMAG activities in reducing the population of mynas in Canberra were featured in 2014 in an episode of ABC TV's series *Hello Birdy* on Australian birds, presented by well-known actor William McGuiness. CIMAG is regularly approached for radio and TV interviews including *A Current Affair, 7.30 Report, Channel Ten Morning Show,* and UK media (both newspapers and TV).

MynaScan

Following detailed discussions with CIMAG several years ago, the Co-operative Research Centre for Invasive Animals (CRC) along with NSW Government Agencies and several commercial organisations has developed MynaScan, a website set up as information and mapping tool. This allows individuals and groups to register, record and

report information on the presence and breeding of mynas and the impact of control activities.

Challenges and initiatives

The removal of 58,000 mynas and more than 9000 starlings from the Canberra environment and the myna's decline from 3rd to 18th rank in the GBS over 10 years are notable outcomes. Several thousands are still being trapped annually. However, there are many anecdotal reports of groups of mynas in public areas such as school grounds, horse paddocks, walkways, nature parks, around food outlets and carparks where trapping is not feasible. This is consistent with the work (separately) of Daryl King and Andrea Griffin referred to above, and is a possible explanation as to why the number of general area observations (as opposed to the GBS) in the 2016 ABR increased over the last reporting year.

Since 2014, CIMAG members Daryl King, Greg Flowers and Adrian Gallman have been monitoring and logging myna breeding sites (mainly in and around Canberra Nature Park areas adjacent to northern suburbs). Adrian Gallman (a skilled and well-equipped tree-climber) has been removing nests and their contents. This work has a particular priority in the areas around Mulligans Flat and Goorooyarroo Nature Parks, where mynas potentially threaten Superb Parrot breeding sites. The ACT Government is currently funding aspects of the program. New suburbs are prime sites for myna invasion and their proximity to nesting sites in the above nature parks is disturbing. Part of this nest removal project includes the placement of durable, and easily accessible, nest-boxes in the same general area.

CIMAG has also made a submission to the ACT Government for the myna to be declared a "prohibited pest animal" in the ACT due to its environmental threats (competition for breeding hollows, impact on small birds, as a vector for the spread of avian malaria, human amenity and economic impact). This submission highlights the risks posed to native species from avian malaria, as detailed by Nicholas Clark's work. Also, initial discussions have been held with Commonwealth environment officials aimed at the myna being declared a "threatening process" under federal legislation.

Awards and acknowledgements

In 2013, CIMAG, having won three separate Keep Australia Beautiful awards in the ACT, was declared the overall ACT winner. In the subsequent national KAB finals south of Perth, CIMAG won an award for 'Environmental Innovation and Protection'.

In 2014, CIMAG President and founder, Bill Handke, won the Canberra Region Conservation Council's '2014 Environmentalist of the Year' award. Bill has been an outstandingly multi-skilled & hard working leader of CIMAG.

COG support through hosting of the CIMAG website, members' participation in the GBS and other COG surveys, and also in Kate Grarock's PhD transect surveys have made a great contribution to CIMAG activities and success over the years, as has support from Commonwealth and ACT Government Grants, assistance with the nest removal project and trap-making by AMC prisoners and Community Service personnel.

Summary

CIMAG's ten-year history is an impressive one. Not only has it had a profound impact on the numbers of an invasive pest in the Canberra region, but it has inspired people, triggered myna control movements in many communities throughout Eastern Australia, and established a reference point internationally.

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BREEDING OF RAILS, GALLINULES AND COOTS IN GUNGAHLIN IN THE 2015/2016 SEASON

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As a relative newcomer to the world of birding, it was with great fascination that I was able to observe Australian Spotted Crake (*Porzana fluminea*) and Buff-banded Rail (*Gallirallus philippensis*) breeding in the Forde Creek area during the 2014/2015 breeding season.

I visited the Hibberd Cres. footbridge area for the first time on 14 November 2014, after Bill Graham had reported the presence of Spotted Crakes with three black downy chicks. I was able to view this family quite regularly and then on 21 December Alison Turner and I were very excited to see a pair of Buff-banded Rails, and a few minutes later, three very small black downy chicks emerge from the reed bed and 'bolt' after their parents for nearby cover.

During the remainder of the breeding season I had the pleasure and good fortune to observe and photograph a second brood of Spotted Crakes (one chick) and two more broods of Buff-banded Rails (4 and 6 chicks respectively). While the first Buff-banded Rail brood was never again sighted, I was able to observe Broods 2 and 3 fairly regularly, noting their physical development and being fascinated by their behaviour (see Clark and Harris 2016).

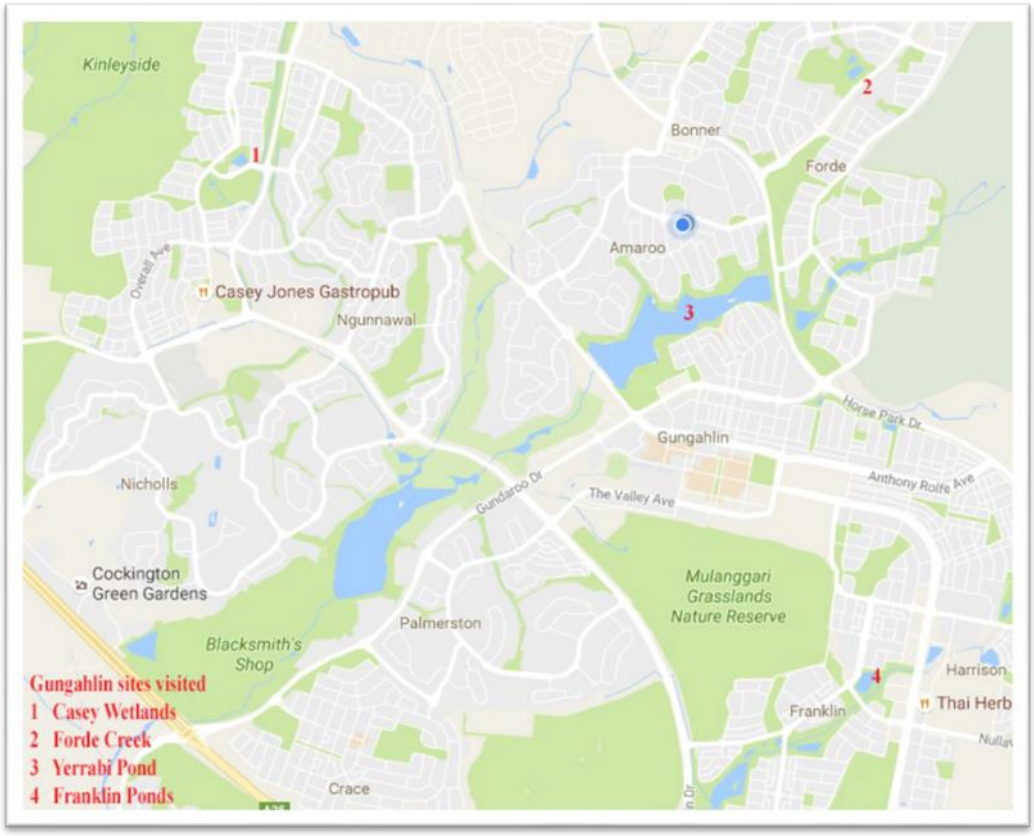
It was with a deal of interest that I waited to see if similar breeding would occur in 2015/2016. Observation this season has been far more difficult due to the overgrowth of reeds and vegetation along the Forde Creek. Even vision from the footbridge and overpass was far less effective this season.

My first sighting of real interest was in the late afternoon of 16 October when I had a very brief view of a juvenile Lewin's Rail (*Lewinia pectoralis*). It was a very young bird (Fig. 1), still with some down present (less than two weeks old). The following day I glimpsed an adult bird but didn't manage any photos. I had seen a juvenile Lewin's Rail in the previous December in the footbridge area, so I think they must have bred last season too.

On 13 December, again in the late afternoon, I observed another juvenile Lewin's Rail (Fig. 2) in a similar area to the previous one. I was able to watch this one feeding, weaving in and out of the reed beds for 16 minutes. It was clearly not the same bird as seen in October as this one, while slightly older than the first, was certainly not two months older. The following day I had a brief view of an adult Lewin's Rail nearby – possibly a parent of the juvenile (Fig.3).

Meanwhile, at the Franklin Ponds on 3 December, Jill Duncan first observed a Spotless Crake (*Porzana tabuensis*) with a tiny black downy chick. While I saw the adult bird (Fig. 10) on the same day, I did not manage a view of the chick until 7 December. It appeared very young – still black, downy (Fig.9). I had further brief sightings of the chick on 10 and 11 December, but nothing after that.

[2] All photos by the author.



Map of Gungahlin breeding sites visited – 2015 - 2016

Back in the Forde Creek area the first Buff-banded Rail brood for the season was sighted by Steve Wallace on 15 December. I visited in the afternoon and also saw one adult and three chicks/juveniles (Figs. 4-7) in the footbridge area. I managed three more sightings in the following week.

On 21 Dec 2015 I observed the second brood of Buff-banded Rails for the season in Forde Creek – two adults and four young chicks were seen (Fig. 8, only 3 chicks visible in photo). I had further views of the juveniles on 28 Feb 2016.

Sightings of adult Spotless Crakes occurred in mid-October and my first sighting of a juvenile Spotless Crake was on 6 Dec 2015 in the Hibberd Cres footbridge area. Numerous sightings of adult and juvenile birds were photographed and reported over the next couple of weeks. On 30 Dec 2015 a juvenile was seen in the Jessie St underpass area and 15 minutes later another juvenile was seen in the Hibberd Cres footbridge vicinity. The next report of a juvenile was in mid-February, indicating that there were multiple breeding events for the Spotless Crakes in this area.

I did not observe any evidence of Australian Spotted Crake breeding for this season, even though I saw adult crakes in Forde Creek, Casey Wetlands and Franklin ponds. Baillon's Crakes (*Porzana pusilla*) were also present at both Casey and Franklin, but again no juveniles were seen.

Having been a regular visitor to Yerrabi Pond over the past three years, I have naturally seen hundreds of Eurasian Coots (*Fulica atra*) during most visits. In spite of that I have never seen coot chicks there. The Swamphens and Moorhens are visible in the reed beds during the

breeding season and their chicks can be seen from earliest days. However, the same is not the case with the Coots.

Despite Eurasian Coots being very common in Canberra, reports of breeding are very low in comparison. There was only one breeding record for 2013! I saw my first very young coot chicks in November 2014 at the Crace Wetlands, thanks to the reporting by John Harris. It was with much delight that my first visit to the Casey Wetlands in early December 2015 revealed several broods of Coot juveniles in various stages of development, including dependent chicks.

Casey Pond has been an excellent site for viewing the breeding of all three common rails – Eurasian Coot, Dusky Moorhen (*Gallinula tenebrosa*) and Purple Swamphen (*Porphyrio porphyrio*) during the 2015/16 breeding season. Based on eBird reports from December 2015 – February 2016, Coot numbers have regularly been recorded at 30 or higher and this number has included many young birds. Numbers of Moorhen are significantly lower – usually noted between 6 and 14 (again with significant young) while Swamphens number between 2 and 6, with only one brood to my knowledge.

The Coot nests have been highly visible, in the middle of the pond (Fig. 17), and very young chicks have been present from December (my first visit to the pond) until late February. At various times during the summer there have been two or more active coot nests simultaneously and on occasions the adult was apparently sitting on eggs while at least two other broods were still occupying or returning to the nest (Figs. 18 and 20). As late as 13 February two nests were occupied, with 4 chicks appearing the following day at one site.

Dusky Moorhens have also been seen with multiple broods present simultaneously. On 15 January Michael Lenz observed five large dependent young and one of those was feeding a very small chick. A second family of six dependent young was also present. On the smaller pond two adults were observed with a dependent young.

Franklin pond was also a site used by breeding Coots. EBird records show that almost fully grown immatures were seen in mid-December and I observed 3 chicks being fed as late as 25 Mar 2016 (Fig. 24). A COG outing on 20 Jan 2016 also reported 3 juvenile Coots and 1 adult on one of the Forde Creek ponds.

It is interesting that evidence of Eurasian Coot breeding is easily found on these smaller Gungahlin ponds, but not on the much larger Yerrabi Pond where hundreds of the birds are seen on a daily basis all through the year.

Construction of urban ponds and wetland areas, notably in Gungahlin, appears to have been very successful in providing suitable environments for the Rail family of birds to breed and thrive.

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Lewin's Rail

Figure 1. Juvenile, 16 Oct 2015.

Figure 2. Juvenile, 13 Dec 2015.

Figure 3. Adult, 14 Dec 2015.

Buff-banded Rail: Brood 1

Figure 4. Adult and juvenile, 15 Dec 2015.

Figure 5. Juvenile, 15 Dec 2015.

Figure 6. Juveniles, 18 Dec 2015.

Buff-banded Rail: Brood 2

Figure 7. Adult and 3 chicks, 21 Feb 2016.

Spotless Crake

Figure 8. Juvenile, 15 Dec 2015.

Figure 9. Juvenile, 30 Dec 2015.

Spotless Crake Breeding - Franklin

Figure 10. Chick, 07 Dec 2015.

Figure 11. Adult, 07 Dec 2015.

Dusky Moorhen Breeding – Casey Wetlands

Figure 12. Adult and chicks, 17 Jan 17 Jan 2016.

Figure 13. Chicks, 17 Jan 2016.

Figure 14. Adult, immature and chick, 10 Jan 2016.

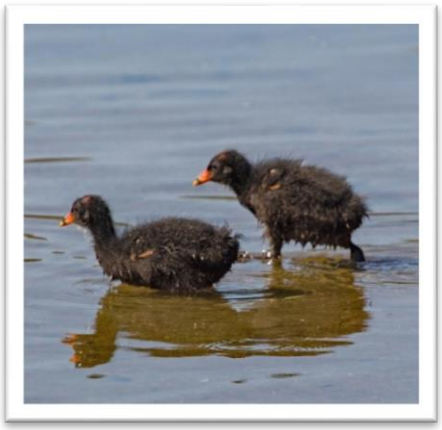

Figure 15. Chicks, 10 Jan 2016.

Purple Swamphen Breeding – Yerrabi Pond

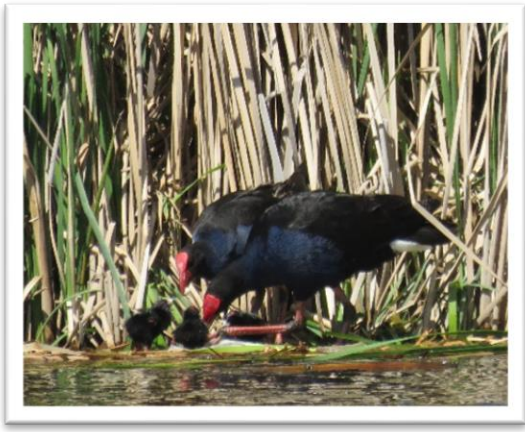

Figure 17. Adults and chicks, 3 Oct 2015.

Figure 18. Adult and chick, 27 Dec 2015.

Eurasian Coot Breeding – Casey Wetlands

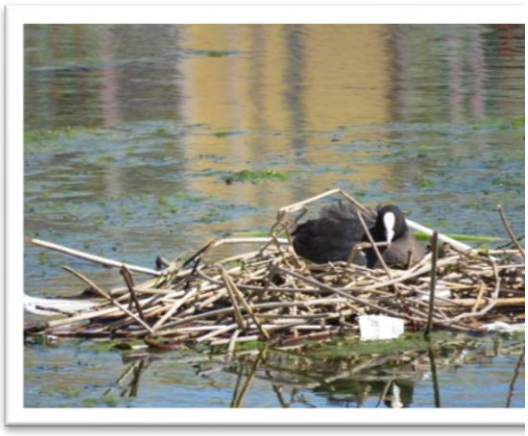

Figure. 19. Eurasian Coot on nest, 02 2 Dec 2015.

Figure 20. Adults, chick & juvenile on nest, 20 Dec 2015.

Figure 21. Chicks on nest, 24 Dec 2015.

Figure 22. Juveniles and chick on nest, 29 Dec 2015.

Figure 23. Adult feeding chick, 27 Feb 2016.

Figure 24. Adult and chick, 04 Feb 2016.

Figure 25. Chick, 04 Mar 2016.

Figure 26. Adult and chick, 25 Mar 2016.

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THE AUSTRALIAN BRUSH-TURKEY (*ALECTURA LATHAMI*) IN THE CANBERRA REGION

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Abstract. *Both journal articles and ornithological databases contain references to historical and recent records of the Australian Brush-turkey* Alectura lathami *in the Canberra region. In 2012 a brush-turkey was observed, and photographed, at Bywong, just 21 km NE of the centre of Canberra. This article seeks to answer the question 'Is the Canberra region—COG's Area of Interest—within the historic range of the Australian Brush-turkey?' The bird at Bywong in 2012 does not assist in answering this question as it was probably an escaped aviary bird. At least three documents on the history of the Canberra region refer unequivocally to brush-turkeys there. Some reports of brush-turkeys in the region's hills and high country may refer to the Superb Lyrebird* Menura novaehollandiae, *and other inland NSW records probably refer to the Australian Bustard* Ardeotis australis. *In 1877 12 eggs of the Australian Brush-turkey were collected from 'Lakes George/Bathurst' and lodged in the collection of the Australian Museum in Sydney. Three other records from Canberra, found in publicly-accessible databases, are considered to be invalid, and the status of one from Krawarree, near the Deua National Park, is unresolved.*

We do not have a definitive answer to the question 'Is the Canberra region—the Canberra Ornithologists Group's Area of Interest—within the historic range of the Australian Brush-turkey'. The record of the eggs suggests that the answer is 'yes', but a single record from the Canberra area, without other records filling the gap between there and the species' coastal strongholds, is unconvincing. Perhaps someone with skills in identifying the historical vegetation patterns of the country connecting COG's Area of Interest and the Illawarra will be able to provide extra information about the possible earlier existence of contiguous dense vegetation, suitable for the Australian Brush-turkey, across that area?

Background

On 12 Oct 2016 members of the Canberra Ornithologists Group (COG) heard an excellent presentation by Dr Ann Göth, the co-author (with Professor Darryl Jones) of the authoritative book *Mound-builders* (Jones and Göth 2008), titled 'Australian Brush-turkeys: unique behaviour, life cycle and adaptions'. The speaker showed a slide of the distribution of the Australian Brush-turkey *Alectura lathami* in NSW, using data from the Atlas of Living Australia. It included some record apparently from COG's Area of Interest (AoI), a rectangle bounded by the 34° 45' and 36° 00' parallels of latitude and the 148° 40' and 149° 45' meridians of longitude, an area of 13,675 sq. km. This is roughly Goulburn in the NE, west of Yass in the NW, with the southern boundary being a little south of Bredbo (Canberra Ornithologists Group 2016).

My interest in this topic was piqued by my recollection of an undisputed observation of an Australian Brush-turkey at Bywong, NSW, well inside COG's AoI, 21 km NE of Black Mountain. This is a rural residential area with a combination of Brittle Gum *Eucalyptus mannifera*-dominated dry sclerophyll forest (shrubby subformation), and agricultural

pursuits. This occurred in January 2012. The bird was photographed, and documentation has been placed in the records of COG's Rarities Panel. Details are available in an article that I co-authored with one of the observers (McDonald & Favre 2012). The record has also been incorporated into the Canberra Nature Map: http://canberranaturemap.org/Community/Sighting/3363019 .

Historical reports and records of the brush-turkey within COG's AoI

The first published report of the brush-turkey within COG's AoI of which I am aware is that of John Gale (1831-1929). Gale is well-known as the founder and long-time proprietor of the *Queanbeyan Age* newspaper. In 1927, at the age of 96 years (two years before he died) Gale published a book titled *Canberra: history of and legends relating to the Federal Capital Territory of the Commonwealth of Australia*. There he wrote (my emphases):

> *The genesis of Canberra*
> *Prior to the eighteenth century the nine hundred miles of territory acquired by the Australian Commonwealth within New South Wales, for a Federal Capital State, formed part of a stretch of magnificent country thickly peopled by an aboriginal tribe, because of its abundance of natural food supply. Its perennial streams, large and small, teemed with fine fish; the surface of their deep pools swarmed with duck, teal and widgeon; over its plains roamed the emu and bustard (the plains turkey of the later European settlers)* ***and the tallegalla (the shy brush turkey*** *of the same later oncomers) ; its forests were the habitat of bronze-wing and other pigeons, the curlew and other food-supplying birds; over its mountain ranges and granitic uplands roamed the great kangaroo and smaller kinds of that marsupial, together with their cousins, the wallaroo and wallaby; west of the Murrumbidgee River the high spurs of the Australian Alps were the breeding-grounds of the boogong moth, whose larvae, roasted on heated stones, formed delicious repasts in the season of their prevalence (p. 3).*
>
> ***Beside the bustard, such elevations as Black Mountain, Tidbinbilla, and others of even higher altitude, were the habitat of another fine specimen of game. I allude to the tallagella or brush turkey****, which laid its eggs, layer upon layer, in a conical heap of decaying vegetable matter, the heat generated therefrom being the agency which hatched out its young. Not only have these big birds disappeared from settled districts, but even the black duck, widgeon, teal, together with the beautiful-plumaged tree-goose (wood-duck as more popularly but erroneously called), and the bronzewing pigeon, once so numerous hereabouts, are hard nowadays to be seen. So also is it with quail, and birds of that genus (p. 128).*

In the same year, the lead article in the *Sydney Morning Herald Canberra Supplement*, published on 9 May 1927, the date upon which the Federal Parliament first sat in Canberra, was published under the by-line of Walter Gale. Its text is remarkably similar to that found in John Gale's book. (I cannot explain the similarities in the text and the authors' surnames):

> *Till the commencement of the eighteenth century the nine hundred miles of territory acquired by the Commonwealth of Australia for a Federal capital State formed part of a magnificent stretch of country thickly peopled by an aboriginal tribe, because of the abundance of its natural supplies of food. Its perennial streams large and small, teemed with edible fish, and on their deep pools sported black duck, teal, and widgeon;* ***over its downs and plains roamed the emu and bustard (plains turkey); its***

> ***forests were the habitat of bronze wing and other pigeons, curlew tallegalla (brush turkey), and other food-supplying birds****;… (p. 6, my emphasis).*

Prominent Canberra historian Lyall Gillespie (1978) wrote on the history of the Ginninderra Creek area, identifying the Australian Brush-turkey as being present there in the early days of European settlement:

> *The section of the creek in this area, on what was originally a grant to absentee landowner Captain James Morrisett, was a habitat of some larger birds which are no longer seen in these parts, for example the wild turkey or bustard and the brolga. Other large birds which were in the Ginninderra district in the early days were the* ***brush turkey****, the emu and the wedge-tailed eagle (p. 22, my emphasis).*

I draw attention to the fact that both of the Gales (if indeed there were two), and Gillespie, differentiated explicitly between the Australian Brush-turkey, on the one hand, and the Australian Bustard *Ardeotis australis*, on the other. Both species were referred to as 'turkeys' in the colonial era, and subsequently.

In his landmark 1999 publication, *Birds of the ACT: two centuries of change* , and a fuller exposition in *Canberra Bird Notes* (1999a), the late Steve Wilson discussed John Gale's report which was the only one from the ACT that he had located. Wilson judged John Gale's report to be invalid:

> *There has been a single reference to this species, that of Gale (1927). He used the English name Tallegella, and inferred that it occurred at 'such elevations as Black Mountain, Tidbinbilla and others of higher altitude'. He gave a detailed description of its habitat and nesting routine…The local forests are unsuitable for this fruit-eating rain forest species…No other report in or near the ACT has been traced so this record is not regarded as valid (p. 14).*

In response, an article by Tony Howard and Isobel Crawford (1999) provided evidence supporting the argument that the bird may have been in the Canberra region prior to intensive European settlement. This is because it is likely that our area then had far more tree and ground cover than it does now, they argued, providing suitable habitat for this species. They concluded:

> *…that the territory now occupied by the ACT may well have provided suitable habitat for the Australian Brush-turkey, particularly where there was a suitably dense shrub layer such as on south-and east-facing slopes. and (sic) that there is a high likelihood that Gale's observations were accurate (p. 175).*

The historical and contemporary ranges of the Australian Brush-turkey

The normal range of this species is eastern Australia from the tip of Cape York to the Illawarra, mainly east of the Great Dividing Range. Three records in Birdlife Australia's Birdata from the Tathra/Eden area of NSW (the far south coast), one of which is well out in the South Pacific Ocean, may be erroneous. Brush-turkeys are mainly terrestrial: 'Flight laboured; move from branch to branch, rarely flying across open spaces', to quote HANZAB (Marchant & Higgins 1993, p. 342). They are sedentary, with 'individuals remaining in same area throughout the year' (*op. cit.*, p. 343).

The historical distribution of brush-turkeys in NSW is disputed. Göth *et al*. (2006) reported that

> *…we collated 1 564 reports on Australian Brush-turkey distribution [in NSW], from 1788 to April 2004. We show that the birds have disappeared from areas in the south, such as near Jindabyne, and from areas in the west, such as the Pilliga. The most obvious reasons for such a contraction are habitat destruction, hunting and predation by foxes and cats. At the same time, Brush-turkeys have recently been reported in the east, in coastal areas and the periphery of cities where the birds were previously absent or extirpated. However, we argue that such an apparent expansion should be viewed with caution, as this could partly also be explained by an increase in reporting activity, reduction in hunting pressure, and feeding by members of the public. Our analysis suggests that although the species has increased in numbers in coastal areas, it has withdrawn from regions in the southern and western part of its distribution.*

Göth *et al*. go on to describe the most southerly and westerly historical records that they consider to be valid. 'The two southernmost records for the species date from the 1800s: Gould (1865…) mentions Cape Howe…as the southernmost point of the species' distribution in NSW…One record exists from near Jindabyne…and dates back to Carter (1933)…Further north, the species was recorded along the Wollondilly River, east of Goulburn…in 1834…' (p. 24).

Cape Howe is, of course, the eastern end of the NSW/Victorian border. Did Göth *et al*. represent accurately Gould's understanding of the southernmost distribution of the species in the mid-1800s? Gould (1972, p. 151) wrote, using the contemporary common name of the species Wattled Talegallus:

> *How far the range of the Wattled Talegallus may extend aver Australia is not yet satisfactorily ascertained ; it is known to inhabit various parts of New South Wales, from Cape Howe to Moreton Bay, and Mr. Macgillivray informed me that he had killed it as far up the east coast as Port Molle ; the assaults of the cedar-cutters and others, who frequently hunt through the brushes of Illawarra and Maitland, had, however, nearly extirpated it from those localities when I visited the colony in 1838, and it probably does not now exist there ; but I believe it is still plentiful in the dense and little-trodden brushes of the Manning and Clarence. I was at first led to believe that the country between the mountain-ranges and the coast constituted its sole habitat ; but I was agreeably surprised when I found it in the Liverpool brushes and in the scrubby gullies and sides of the lower hills that branch off towards the interior.*

The New South Wales Atlassers (Cooper, McAllan & Curtis 2014, pp. 39-40) disagree with Göth *et al*.'s conclusion that Gould's words indicate 'records for the species' from as far south as Cape Howe:

> *Despite claims the species has had a reduction in range, both in the south and near Canberra (Goth* et al*. 2006), again there is no conclusive proof…Goth* et al*. (2006) claimed that Gould saw the Australian Brush-turkey at Cape Howe, but he did not. He passed Cape Howe while returning to Hobart in 1839 and collected several seabirds offshore…, but did not step on land. Nor did he have any correspondent from the South Coast of NSW or eastern Victoria. Thus, when he wrote that it inhabited 'from Cape Howe to Moreton Bay' he was merely referring to the fact he had some records from between these two places, not that these were actual locations of sightings. This was normal practice in Gould's publications.*

They are similarly sceptical about the Jindabyne record accepted by Göth *et al*.

The most westerly historical record considered valid by Göth *et al*. is from Nyngan where, they advise, Brush-turkeys were last recorded in 1898 and 1900. In northern NSW, the most westerly observation was from Pilliga were the population is now extinct. Historical records also exist from Narrabri and Moree. 'The present westernmost occurrences of Brush-turkeys in Southern NSW are in Coricudgy State Forest [in the ranges east of Kandos]…, the Wollemi National Park…, and Emu Creek Valley [in the ranges east of Mudgee]' (p. 26).

Göth *et al*. (2006, p. 27) took an interesting position with respect to John Gale writing that the brush-turkey was common in the Canberra region in the early days of European settlement, quoted above. They considered it

> *…likely that a record for the Australian Capital Territory (Gale 1927) was reliable. Later publications regarded this record is either inaccurate (Wilson 1999) or as reliable (Howard and Crawford 1999), and thus we did not include it in the database*.

The authors of the *Atlas of the birds of New South Wales and the Australian Capital Territory* (Cooper, McAllan & Curtis 2014) also consider that John Gale's report is invalid. They and Wilson suspect that John Gale confused the brush-turkey with the Superb Lyrebird *Menura novaehollandiae*, particularly because of the locations of the species that John Gale mentioned: 'such elevations as Black Mountain, Tidbinbilla and others of higher altitude'. Similarly, it is thought that the reports of brush-turkeys from Jindabyne were probably those of the Australian Bustard.

Data bases and records

I searched the key ornithological records databases for information on the brush-turkey in COG's AoI, with the following results.

Birdlife Australia's Birdata
COG's databases contain one record of the Australian Brush-turkey. It was supplied by Birdlife Australia, and is found today in that organisation's online database Birdata http://birdata.birdlife.org.au/ and in the Atlas of Living Australia http://www.ala.org.au/ . It is a record from Krawarree in the south-eastern part of COG's AoI at 35.8472° S, 149.6355° E, date of observation November 2003 (day in that month not recorded). The number of brush-turkeys observed was not recorded. This location is just west of the edge of Deua National Park. The records closest to this location (other than the Canberra region records discussed below) are from the Tathra and Nowra areas, along with a 1997 report of a bird in Monga State Forest.

eBird Australia http://ebird.org/ebird/australia/map/ : no records from COG's AoI.

BioNet: Atlas of NSW Wildlife http://www.bionet.nsw.gov.au/ : no records from COG's AoI.

Canberra Nature Map http://canberranaturemap.org/ : As mentioned above, I have submitted the 2012 Bywong record to this database and it has been accepted there. I assume that bird was an aviary escapee. No other brush-turkey records in the Canberra Nature Map from COG's AoI.

Atlas of Living Australia http://www.ala.org.au/

The Atlas of Living Australia (ALA) has 15 records of this species for COG's AoI. Twelve of them are virtually identical. Those 12 were received by the ALA from the Australian Museum in Sydney via OZCAM, the Online Zoological Collections of Australian Museums http://ozcam.org.au/ , and are for 'preserved specimens' collected by 'Moorcroft' from 'Lakes George/Bathurst'. No date of collection is provided. I assume, though cannot be certain, that the Moorcroft referred to is Mr J. Benj. Moorcroft, 'Bird and General Collector', who was domiciled at Lismore, NSW in the 1870s. A column about birds and collecting that he wrote was published in the *Northern Star* newspaper (Lismore, NSW) on 21 April 1877, p. 3. The Sydney *Evening News* of 14 January 1878 has an article about him, advising that 'Mr J. B. Moorcroft, taxidermist, who has opened a show room at 346, Elizabeth-street [Sydney], brought to our office to-day, some very beautiful specimens of stuffed birds obtained at the Richmond River, which is noted for the beauty and variety of its feathered tribe' (p. 2). Brush-turkeys were not mentioned in the article. Moorcroft was mentioned in the Australian Museum's *Report from Trustees 1878* as being a donor to its collection. The 12 Moorcroft records are flagged in the ALA, as in OZCAM, as 'Outside expert range for species'.

I sought additional information from the Australian Museum as the ALA's 12 almost-identical records of preserved specimens from the Lake George/Lake Bathurst area seemed unlikely. One can readily imagine the logistical challenges involved in the 1870s in collecting, preserving and shipping 12 large birds from there to Sydney! The Australian Museum staff kindly clarified the situation. They confirmed that they have 12 Australian Brush-turkey specimens that were registered into the Museum's collection in December 1877, collected by Moorcroft from Lakes George/Bathurst. 'However, these specimens are egg specimens, as opposed to study skins', they explained (Leah R Tsang). HANZAB reports that female brush-turkeys lay 18-24 eggs (Marchant & Higgins 1993, p. 349) so it is likely that Moorcroft's 12 eggs were collected from a single mound in the Lake George/Lake Bathurst area.

The ALA also includes two Canberra records attributed to the New South Wales Bird Atlassers. Both have the location as 'Latitude -35.25 Longitude 149.08333' which is Fitzherbert Place, Bruce, a Canberra suburb (though one gives the location as Ginninderra and the other as Macquarie, both Canberra suburbs as well). The dates are odd: 1868 and 2007, and the observer numbers differ. The New South Wales Bird Atlassers advise that they flagged to the ALA that these records are invalid and should be ignored (Cooper).

The other ALA record was submitted directly to its online citizen science database: number of birds 1; date 28 May 2011; location 35.2833° S, 149.2167° E which is open grassland in the Majura Valley, 3 km NE of the Canberra International Airport. This location is 12 km SW of Bywong where the brush-turkey was observed in January 2012. Considering its location, it is probable that this record is also invalid. Perhaps the co-ordinates were entered incorrectly?[1]

Discussion

The threshold question remains: is the Canberra region—COG's Area of Interest—within the historic range of the Australian Brush-turkey? The bird at Bywong in 2012 does not assist in answering this question as it was probably an escaped aviary bird. Gale's 1927

[1] It is noted, in passing, that the ALA has a 2015 record for the Australian Brush-turkey from the western edge of the Simpson Desert in Central Australia, appropriately flagged as a 'range mismatch'!

reports of brush-turkeys in Canberra's hills may well refer to Superb Lyrebirds. Other inland records probably refer to the Bustard. The status and validity of the Krawarree record is unresolved at the time of writing, November 2016.

We are left, then, with the 12 brush-turkey eggs collected by Moorcroft from 'Lakes George/Bathurst' and registered into the collection of the Australian Museum in Sydney in December 1877. The Australian Museum has a well-earned reputation for excellence in ornithology so I have no reason to doubt the accuracy of their identification of Moorcroft's 12 eggs as being those of the Australian Brush-turkey. It is possible, however, that the place of collection of the eggs was incorrectly recorded in 1877, or subsequently.

The parts of the Lake George/Lake Bathurst area not inundated in wet periods are now almost entirely open grassland used for sheep and cattle grazing, and associated agricultural pursuits. Could the area have had, in the 1870s, vegetation dense enough for brush-turkeys to inhabit, and to build their immense breeding mounds? Could there have been sufficiently dense vegetation from that area towards the north-east into the wet sclerophyll and temperate rainforests that are the species' usual habitats? Clearly Howard and Crawford believed so, after studying the historical literature. The NSW Bird Atlassers are sceptical about, indeed rejecting of, most of the inland records. Upon investigation, it turns out that the records in the Atlas of Living Australia for the Canberra region are invalid, except for the eggs from the Lake George/Lake Bathurst area collected 139 years ago.

It is some 20 km from Lake Bathurst to the current western edge of the east coast forests, and about 60 km from there to the coast—the Berry area—from where we have at least one modern record of the brush-turkey. It is believed that the birds spread west, with the prickly-pear which is said to have provided suitable habitat for brush-turkeys, until the prickly-pear's reduction by a control agent in the 1920s, but most of that infestation was in northern NSW and Queensland, not the area in which we are interested.

A search of digitised colonial-era newspapers covering SE NSW in the National Library of Australia's Trove sheds no further light on the matter, other than Walter Gale's 1927 newspaper article quoted above.

We do not have a definitive answer to the question 'Is the Canberra region—COG's Area of Interest—within the historic range of the Australian Brush-turkey'. The existence of Moorcroft's eggs suggests that the answer is 'yes', were one to apply the Popperian approach of falsifying a hypothesis: a single exception is all that is needed to seal the matter. On the other hand, many would insist that a single record from the Canberra area, without other records filling the gap between there and the species' strongholds, is unconvincing. Perhaps someone with skills in identifying the historical vegetation patterns of the country connecting COG's Area of Interest and the Illawarra will be able to provide extra information about the possible existence of contiguous dense vegetation, suitable for the Australian Brush-turkey, across that area in the colonial or pre-colonial periods?

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EFFECTS OF WIDESPREAD RAINFALL IN 2016 ON BIRDS IN THE CANBERRA REGION – SOME OBSERVATIONS AND COMMENTS

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Abstract. *During the winter and spring of 2016 rainfall reached record levels in many areas of inland Australia. The Canberra region had its third wettest winter on record. Many local waterbirds, most notably Eurasian Coots, departed and moved to the re-flooded wetlands of inland Australia to breed. At the same time, the number of coots breeding in Canberra on small ponds is increasing. The changes in waterbird numbers and species composition in the second half of 2016 are discussed for urban wetlands, Lake George and Lake Bathurst. The lush conditions inland may have also influenced the movement patterns of a number of landbird species occurring in the Canberra region.*

1. Introduction

In 2016, large areas of Australia, including our region, had record breaking rainfalls in winter and into spring. Such wet conditions would seem to be ideal for our local waterbirds. But from early August to October 2016 observers commented on the Canberra Ornithologists Group (COG) chatline about a decline and often disappearance of Eurasian Coots (*Fulica atra*) from most of the waterbodies in the ACT. This seemed somewhat unexpected for many observers.

Mark Clayton (COG chatline, 20. Aug 2016) was the first to draw attention to this event. Later (COG chatline, 3 Oct 2016) he pointed out that "*Almost certainly the birds have moved into the flooded parts of the country to take advantage of the conditions there. Like many species of wetland birds they appear to know when flooding has taken place and know that conditions will be good for quite some time. When things dry out they will return to their local haunts."*

In this contribution I want to comment on the effect of the record rainfalls on some local waterbirds and landbirds based on personal observations, messages posted to COG's chat line, and other sources.

2. The extent of the 2016 rains

In 2016 the Canberra region experienced high rainfall from winter into spring (Fig. 1). We had the third wettest winter on record. The water reservoirs reached close to full capacity. Farm dams and ponds filled; for periods many drainage lines turned into creeks; and flat ground in reserves, on sports fields and parks became temporary swamps. Very noticeably, by late spring, Lake George, dry at the start of the year, was under water for 60 to 70% of its area (Fig.2). It was more than 20 years ago that the lake held so much water.

However, the good rainfalls were widespread. "*Rainfall during winter 2016 was above average to very much above average across most of Australia in each of the individual months"* (Bureau of Meteorology, 2016b).

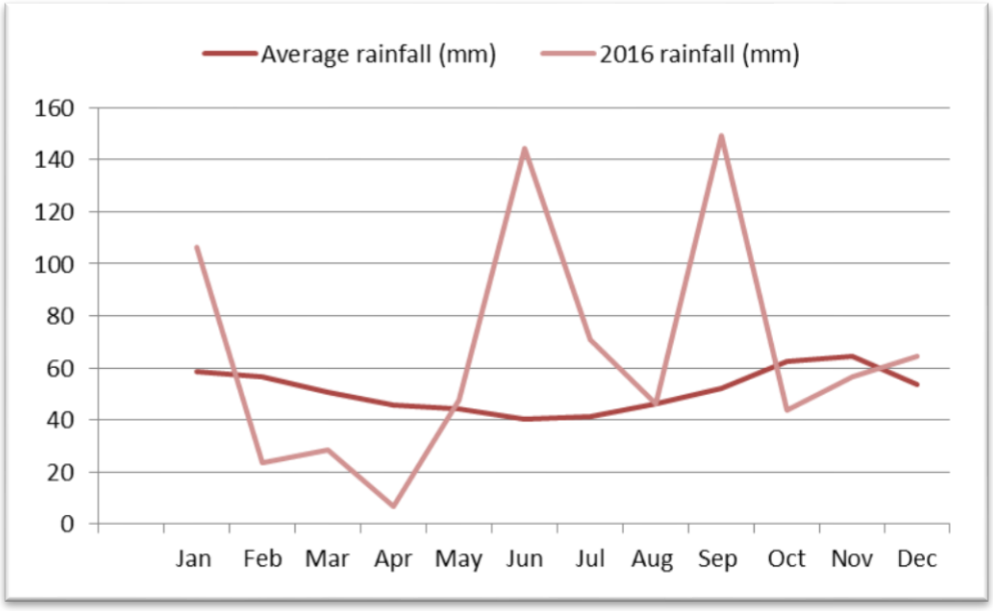

Figure 1. Rainfall for Canberra Airport in 2016 compared to the long-term average (Bureau of Meteorology 2016a).

Figure 2. Lake George, viewed from the SE (towards the NW), 13 Nov 2016 (*M. Lenz*).

In a 'Special Climate Statement', covering rainfall in September 2016, the Bureau of Meteorology (2016c) stated: *"The heavy rainfall during September continued a sequence of months which began in May as the 2015-16 El Niño broke down. The May to September period was Australia's wettest on record."* And further: *"Areas which had their wettest September on record include most of New South Wales west of the Great Dividing Range; a large area of eastern outback encompassing the southwest quarter of Queensland, the southeastern Northern Territory and parts of northern and eastern South Australia; the Darling Downs in Queensland and parts of western Victoria."*

3. Waterbirds

As a result of so much rain inland rivers flooded and ephemeral wetlands filled. Inundation of dried out sediments releases many nutrients which results in the rapid build-up of food resources for waterbirds (Crome 1988, Kingsford *et al.* 2008). Breeding outcomes are best

after such flooding of dry ground. Merely a simple rise in water levels of existing wetlands has only a limited positive effect (Crome 1988).

Many of our waterbird species are highly nomadic and thus well adapted to wet/dry cycles ("Boom and Bust"). They are able to track water over great distances (*e.g*. Roshier 2009). Waterbirds tend to survive inland droughts at refuge areas in coastal eastern Australia, including the urban waters in Canberra and the two major natural lakes in our region, Lake George and Lake Bathurst (if they hold water), but will move quickly inland again to make use of food resources and suitable habitat for breeding after major flooding events (see *e.g*. Kingsford *et al.* 1999; Wen *et al.* 2016).

In the context of this article when referring to events in and around Canberra, Eurasian Coots, and a few other species of waterbirds are discussed although many points may apply more widely to other groups as well.

3.1. The Eurasian Coot in the Canberra region

The Eurasian Coot (hereafter referred to as 'Coot') is a very common species in COG's Area of Interest (AoI) and present on all the major permanent water bodies and many smaller ponds. Observers tend not to show too much interest in this species compared to many other waterbirds. However, this changed when numbers of Coots dwindled. Several observers posted relevant messages to COG's chatline. However, Geoffrey Dabb (COG chatline, 3 Oct 2016) pointed out that there have been earlier times when Coots became very scarce on our waters.

3.1.1. The Coots that left Canberra in 2016

As mentioned in the Introduction, by early August 2016 Coot numbers had started to decline noticeably. The accounts on COG's chatline came from medium to smaller wetlands for which observers knew the 'pre-flooding' population size. For example, on Yerrabi Pond, the Coot was absent by early October. It normally supports 600 to 800 birds (Bill Graham, COG chatline, 2 Oct 2016). At Lake Jerrabomberra about 100 Coots were present in June; the last Coot was seen on 7 Aug 2016 (Lindsay Hansch, COG chatline, 2 Oct 2016). By early October 2016 only a single Coot could be found on Jerrabomberra Wetlands Nature Reserve (Shorty Westlin, COG chatline, 2 Oct 2016; Table 1, Chris Davey). On the West Belconnen Pond (see Fig. 3) up to 170 Coots were recorded in January 2016, 93 still in July 2016 (M. Lenz). By mid-September only a single Coot was left (COG outing, Martin Butterfield, COG chatline, 21 Sep 2016 and Fig. 3). The graph indicates that the decline probably already started in April/May, but accelerated in August.

In response to a request for information to the COG chatline, it was confirmed that also on our larger permanent urban lakes Coots had started to disappear around the same time as on smaller wetlands, with only very few to none left by October (based on observations of sections of these lakes): Lake Burley Griffin (Gail Neumann, Susan Robertson, pers. comm.); Lake Ginninderra (Barbara Allan, Suzi Bond, pers. comm.); Lake Tuggeranong (Matthew Frawley, pers. comm.).

Taylor and Canberra Ornithologists Group (1992) describe the status of the Coot as follows: *"They can be found at any time of the year, but numbers fluctuate dramatically from one season to the next. After heavy rain in breeding habitat outside our area, the number of Eurasian Coot in the ACT falls as they move out to take advantage of newly flooded areas. In*

times of drought, many appear on wetlands in the Canberra area." Events in 2016 are perfectly in line with this pattern.

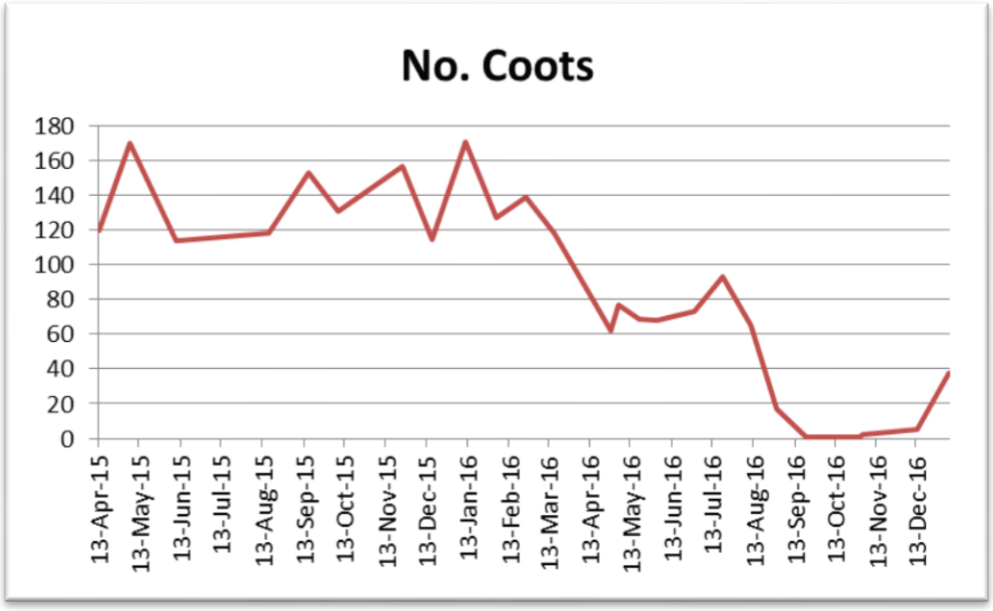

Figure 3. The population of Eurasian Coots at the West Belconnen Pond based on monthly counts from April 2015 to January 2017 (M. Lenz).

The long-term annual aerial survey of eastern Australian wetlands by Richard Kingsford and his team from the University of New South Wales was again conducted in October 2016. It confirmed that *"many of the major rivers are flooding in the Murray-Darling Basin with breeding by colonial waterbirds on major wetlands such as the Booligal system, Macquarie Marshes and Lowbidgee. These large areas of wetland have also been great for breeding coot. I have seen many broods on all of these which would explain where they* [the Canberra birds] *have all gone."* (Richard Kingsford, pers. comm., 7 Dec 2016).

In December 2016 a trickle of Coots was returning to some wetlands, *e.g.* Yerrabi Pond (Bill Graham), West Belconnen Pond (see Fig. 3), Norgrove Park (M. Lenz), and notably 30 birds at Foxlow Lagoon near Hoskintown (Martin Butterfield, COG chatline, 6 Dec 2016).

3.1.1.1. Lake George and Lake Bathurst

Lake George and Lake Bathurst were dry in the first half of the year and only filled up gradually over coming months. Between July and August a maximum of 180 Coots were present on the Southern Morass (part of the Lake Bathurst wetland system). But they had left by September. By the end of December 2016 no Coots had appeared on Lake George since it re-filled.

However, during periods of inland drought, large numbers of Coots can concentrate on both lakes. The highest numbers recorded were 20 000 (January 2013, Lake George) and 16 000 (December 2012, Lake Bathurst) (Lenz 2014). Both lakes act as drought refugia, but do not provide conditions for breeding.

3.1.2. The Coots that stayed in Canberra in 2016

Interestingly, some wetlands in Canberra have retained limited numbers of Coots. These are mostly relatively small ponds on which Coots find suitable conditions for breeding. Key features appear to be that at least sections of the ponds have reed and rush-beds to provide nest material and later shelter for the young. The ponds are, as a rule, not too deep and they have good underwater and floating vegetation, often including algal mats, to provide ample food for adults and young that is easy to get to. At least some ponds have quite clear water.

This spring and summer, Coots with young have been reported from North Canberra at Casey Pond (Julie Clark), Franklin Pond (Julie Clark), Forde Ponds (Julie Clark, Bill Graham)), Gungahlin Pond and the Valley Ponds (John Harris) Mitchell Pond (Sandra Henderson), Flemington Road Pond (M. Lenz), North Watson Wetland (Julie Clark, Megan Mears) and elsewhere from the Murrumbidgee Golf Club, Kambah (Harvey Perkins), Fadden Hills Pond, and an old farm dam at Hume (Sandra Henderson) and Jarramlee Pond (Roger Curnow) in Macgregor and West Belconnen Pond (M. Lenz) in Dunlop. This list may not be exhaustive. By Jack Holland's (2016) account and other sightings above, the breeding population for Canberra would amount to close to 20 pairs for 2016.

In recent years breeding was also noted at the Australian Institute of Sports campus in Bruce, Fassifern Pond in Dunlop and Norgrove Park, Mulligans Flat, Crace Wetlands, Yowani Golf Course (David Cook), Majura Firing Range, Uriarra Homestead and Yerrabi Pond. To date no relevant information is available to indicate whether Coots had again raised young in 2016 at these locations (except definitely not at Norgrove Park (M. Lenz) and Yowani Golf Course (David Cook)).

Figure 4. Casey Pond, an example of a breeding site for the Eurasian Coot (*Julie Clark*).

Coots were observed breeding in Canberra for the first time in 1980 at the Tidbinbilla Nature Reserve (Davey 1987), then in 1983 on a dam at the Yowani Golf Course (3 pairs). Breeding at this site was confirmed in 1984 (Nix 1984). In the same year a couple of pairs were also nesting at Dairy Flat Road (Ross 1984). Taylor and Canberra Ornithologists Group (1992) list a number of other breeding sites. However, it is only in more recent years after the construction of many ponds to capture stormwater, notably in Gungahlin, that Coots have

found more reliable breeding habitat and the size of the breeding population has grown. With similar stormwater management strategies now also implemented in new housing developments in southern Canberra, we can hope to see further growth in the breeding population of the Coot.

In summary, Canberra's managed wetlands are able to sustain significant numbers of Coots and act as drought refuges for this species (see also Con Boekel, COG chatline, 21 Sep 2016). But suitable breeding sites are only limited in number - perhaps more sites may become available in future developments.

3.2 Other waterbirds

3.2.1. Urban Canberra

At the time that Coots moved out of our area, many ducks had also left wetlands in Canberra. In fact ducks may have started the move earlier. One of my examples from an urban wetland illustrates this: at the Lyneham Wetlands 54 Grey Teals (*Anas gracilis*) and 63 Pacific Black Duck (*A. superciliosa*) were present on 28 May 2016; on 27 Jul 2016 only 4 Grey Teal were left. However, many Pacific Black Ducks may have just dispersed locally to breeding sites. This species remained in good numbers at *e.g.* at the Jerrabomberra Wetlands Reserve and Fyshwick Sewage Farm while other species of ducks declined noticeably as the counts from Chris Davey show (Table 1). Other observers have commented accordingly on the COG chatline (see *e.g.* Martin Butterfield, 21 Sep 2016).

Table 1. Combined counts of some waterbirds from the Jerrabomberra Wetlands Nature Reserve and the Fyshwick Sewage Farm in April, July and October 2016 (Chris Davey).

Species	Apr	Jul	Oct
Pink-eared Duck (*Malacorhynchus membranaceus*)	300	4	0
Australasian Shoveler (*Anas rhynchotis*)	72	8	0
Grey Teal	214	25	20
Pacific Black Duck	89	49	90
Hardhead (*Aythya australis*)	27	8	0
Eurasian Coot	159	250	1

3.2.2. Lake George

The lake started filling from June onwards. Well before major inland flooding had started, it initially attracted a good number of ducks (Table 2), notably a high number of Hardheads in July and August. This species is among the first to visit re-flooded wetlands (Roshier 2009). However, by September only very few ducks remained. By then the flooding of inland wetlands and river flats was fully under way. The October waterbird survey failed to locate any ducks at Lake George and in November only small numbers of Grey Teal could be found. but many more again by late December (Table 2).

Black Swans were present in small numbers through most of this period, increasing to over 300 birds only by the end of December.

But interestingly, with so much water in the lake since spring, it was again visited by Australian Shelducks (*Tadorna tadornoides*) for moulting, a function it has traditionally served (McKean and Braithwaite 1976) with over 400 birds on the lake in November and

over 1000 birds by the end of December (Table 2). Another 500 shelducks were also present at Lake Bathurst in November/December.

Table 2. Numbers of Australian Shelducks and ducks recorded during monthly surveys at Lake George from June to December 2016 (Julienne Kamprad, M. Lenz).

Species	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Australian Shelduck	0	0	0	3	20	433	1150
Pink-eared Duck	320	280	230	0	0	0	7*
Australasian Shoveler	10	3	10	2	0	0	0*
Grey Teal	4200	400	2000	10	0	157	2000
Chestnut Teal (*Anas castanea*)	250	0	310	30	0	6	10*
Hardhead	0	410	870	0	0	0	0

*Numbers could have been higher (poor viewing conditions).

3.2.3. Lake Bathurst and the Morass

Lake Bathurst filled at a slower rate than Lake George, and the total area of the lake bed under water by the end of spring was no more than 30% (compared to about 70% of Lake George). Lake George has six creeks running into it, adding water even after the rains have stopped. Lake Bathurst fills to a limited extent from runoff and more from rising groundwater (Abell 1995). The Morass, part of the Lake Bathurst wetland system (see Lenz 2014) receives a better runoff from its surrounds and a creek (Abell 1995), hence it tends to become inundated faster and more comprehensively than the main lake.

From June to October 2016 (no survey in September) only small numbers of ducks were present on the main lake with a maximum of about 400 birds (5 species) in June and no more than 10 ducks from July to October. Only from late November did numbers increase to about 200 ducks (M. Lenz, Peter Milburn).

Table 3. Numbers of ducks and Hoary-headed Grebes recorded during monthly surveys at the (Southern) Morass from June to December 2016 (Julienne Kamprad, M. Lenz, Peter Milburn).

Species	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Pink-eared Duck	30	11	0	0	0	2	0
Australasian Shoveler	24	10	16	2	0	0	0
Grey Teal	895	28	185	0	4	25	25
Chestnut Teal	14	4	0	0	5	11	5
Pacific Black Duck	24	0	27	0	0	2	13
Hardhead	11	0	150	1	4	0	0
Hoary-headed Grebe (*Poliocephalus poliocephalus*)	4	68	215	160	70	6	0
H.-h. Grebe nests	0	0	3	70 +young	12 +young	0	0

Developments on the Morass were more interesting (Table 3). When it does not fill up completely, a number of small islands form which provide favoured daytime resting sites for waterbirds and allow breeding safe from land predators (especially foxes).

The overall pattern for ducks is similar to that at Lake George: an influx in June, smaller numbers in July and another increase for August (Table 3). These changes in numbers may represent two waves of waterbirds passing through our area on their way to inland sites, most likely reflecting the response to the pattern of rainfall in inland Australia. Very low numbers of ducks were present from September to December.

In a reverse trend, numbers of Hoary-headed Grebes increased from June to August. Julienne Kamprad recorded a maximum of at least 70 occupied nests alongside islands in September, with young birds seen in September and October. However, many clutches may have been lost; nests appeared to have been flooded during heavy rains in September/October. Only six grebes were recorded in November and none in December (Table 3).

This species often breeds in colonies which can number several hundred pairs, as has occurred in the past years on the main lake (Frith 1969, Lenz and Kamprad 2012; M. Lenz unpubl.).

A colony of Silver Gulls (*Chroicocephalus novaehollandiae*) established on one island in (late July?)/August 2016 with around 140 gulls 'sitting' on 21 Aug. Several young birds were visible on 28 Sep 2016. Additional pairs must have joined the colony over time since 200 gulls were 'sitting' on 14 Oct 2016. Some birds were still 'sitting' at the end of November. Downy young were still present in mid December 2016 (Julienne Kamprad, M. Lenz, Peter Milburn).

Black Swans (*Cygnus atratus*) also nested successfully on different islands with at least six sets of cygnets recorded in December.

On 28 Oct 2016 Peter Milburn noted a pair of Black-winged Stilts (*Himantopus himantopus*) with 3 chicks on one of the islands. By 6 Nov. 2016 only 2 chicks had survived. But a second pair was nesting on the same island. By late November no stilts could be sighted, but another adult with 2 chicks was present on 14 Dec 2016. By that date a fall in the water level had increased the size of two small flat islands with a short grass cover. Three and two stilts respectively were 'sitting' on these islands, with partners feeding close by (M. Lenz).

In past years stilts have nested on several occasions at the (Southern) Morass and the main lake, in most cases on islands. While well over 1000 Black-winged Stilts can congregate at Lake Bathurst, the number of breeding pairs rarely exceeds 10. It is always a special event.

While numbers of waterbirds clearly left for inland Australia, at the same time some interesting species are also visiting our area and exploit opportunities for breeding when and wherever they present themselves. The two separate sets of Black-winged Stilts and the Hoary-headed Grebes nesting at the Morass are but one example. Martin Butterfield (COG chatline, 9 and 10 Dec 2016) reported nesting Whiskered Terns (*Chlidonias hybrida*) on the Hoskintown Plain, a very rare event indeed for COG's AoI. At Lake Bathurst, a pair of Red-necked Avocets (*Recurvirostra novaehollandiae*) attempted to nest in November 2016, a first for our area (M. Lenz unpubl.).

4. Landbirds

The major rainfall in 2016 resulted in the recovery of wetlands, and it also gave reprieve to drought stricken lands. Anyone who travelled this spring to areas of inland Australia can attest not just to seeing water in many places, but also to the land looking lush and coloured by wildflowers as probably has not occurred to such an extent for the last 5 to 15 years, depending on the area. Many landbirds will also have found good conditions in inland Australia for breeding.

Interestingly, in October I received a comment that around Deniliquin, despite many areas still being flooded, some land sites were already in need of rain. According to press reports, drought conditions returned to northern New South Wales during October (Holland 2016). Southern Queensland also experienced early drought and waterbodies had only partially filled (Porter *et al.* 2016), although by December heavier flooding rains also reached Queensland.

While for waterbirds, the issues in 2016 may have been more clear-cut and much information is available, this is not the case for landbirds; hence any comments will inevitably have to be more general.

Several landbird species with a more westerly distribution reach our area in numbers that can vary greatly from year to year. These include White-winged Triller (*Lalage sueurii*), White-browed Woodswallow (*Artamus superciliosus*), Masked Woodswallow (*A. personatus*), Brown Songlark (*Cincloramphus cruralis*) and Rufous Songlark (*C. mathewsi*).

The delay in arriving or failure to arrive of those species in 2016 in COG's AoI (Holland 2016) indicates that there was no need (or one only developing later in the season) for those species to move eastward.

This raises interesting questions. Have the late arrivals already raised a brood inland and are now trying to raise another one in our area? Or did they only move eastward after failing to breed successfully in the West? In some years when White-browed Woodswallows come to our region to nest, they are accompanied still by young birds with remnants of juvenile plumage; in some cases the young are still fed by adults. Hence, for these highly nomadic woodswallows, raising two broods each in a different part of the country is possible. Since we can only speculate as to what White-winged Trillers and Rufous Songlarks may have achieved before coming here, the question is whether they are capable of breeding successfully in our area if they arrive here very late in the season?

For example, as my observations indicate, at the TSR 48 North of Gundaroo, White-winged Trillers and Rufous Songlarks arrive in a 'normal' year in early to late September. In 2016 the trillers were noted only in mid-November, the songlarks only in early December, although the latter may have arrived already by late November.

White-winged Triller clutches have been recorded in southern Australia over a long period between June and January with a peak in October/November (Higgins *et al*. 2006). But in our area most trillers get to our region only in October and numbers decline again in January and February (Taylor and Canberra Ornithologists Group 1992). However, Compston (2012) reported three very late breeding triller pairs from Canberra, with incubating noted in early February and the last fledgling in mid-March. This would indicate that for late arrivals in 2016 raising a brood this season may well be possible.

The Rufous Songlark leaves our area in 'normal' years already from December onwards, with only few records in March (Taylor and Canberra Ornithologists Group 1992). At the TSR 48 some birds with breeding behaviour (distraction display from a suspected nest area, feeding fledglings, males still with partial song etc.) are recorded until mid-February, although the impression is that breeding pairs and young depart progressively as the young become independent. Many birds arrived this year only close to their normal departure time. If they were to breed successfully this season, they would have to extend their stay towards the end of summer.

Figure 5. Fairy Martin nests at a communication installation near Deniliquin (left) and at the Wilcannia hospital (right), September 2016 (*M. Lenz*).

There may well be other species from our region of which at least some birds were attracted to move westward to make use of such favourable conditions as in 2016. For example, Dusky Woodswallow (*A. cyanopterus*), Australian Reed-Warbler (*Acrocephalus australia*) and Golden-headed Cisticola (*Cisticola exilis*), all present this year in lower numbers at various sites in our region (Peter Milburn, pers. comm., own observations) and Fairy Martin (*Petrochelidon ariel*) come to mind. The latter species has given up some nest sites in our area, but has sustained its presence at other colonies (Martin, Butterfield, Julie Clark, Mark Clayton, Roger Curnow, Chris Davey, Bill Graham, Jack Holland, Alison Mackerras, David McDonald, Philip Veerman, pers. comm.). Yet, during a September visit to parts of inland Australia which the author undertook, the Fairy Martin was voted by far the most common bird (Fig. 5). It is difficult to envisage that such large numbers of breeding birds could be sustained in a normal, let alone drier year. Immigration from eastern areas of the distribution range of Fairy Martins to the inland water ways and its abundance of nest building material and insects in 2016 appeared the most likely explanation.

One impact of repeated periods of rain on local species utilising open nests is the difficulty it can create for birds to keep eggs and young warm, and the adults' ability to retain their energy levels, *i.e.* still being able to feed themselves adequately at the same time. This season it may have especially affected early nesting birds.

One example comes to mind. As noted in other 'wet' years, Pied Currawongs (*Strepera graculina*) have low breeding success when conditions are wet, especially during incubation and at the early nestling stage. Either nests are given up completely, or the number of young in a nest is reduced. By the end of December 2016 in the wider Lyneham area I noted only a single fledgling, and all 4 to 5 pairs on Lyneham Ridge appear to have failed to raise any young to independence.

Other early nesting species may have been affected similarly, but no relevant information is available.

4. Final Comments

More than any previous season, the 2016 season has highlighted that many of our waterbirds are *guests* rather than *permanent residents* on our wetlands. Local sites often provide only limited conditions for breeding, or at the most for only few species and individuals such as Black Swan, Australian Wood Duck (*Chenonetta jubata*) and Pacific Black Duck, Dusky Moorhen (*Gallinula tenebrosa*), Purple Swamphen (*Porphyrio porphyrio*) and some cormorant species.

Significant rainfall and subsequent flooding and filling of wetlands in inland Australia trigger large-scale movement of waterbirds from eastern (coastal) Australia to these re-vitalised inland wetlands. There the birds find the conditions for breeding, allowing at least some population recovery.

The frequent cycle of "Boom and Bust" environmental conditions in Australia (further complicated by human influences on the landscapes) drives the distribution patterns and levels of local abundancy of many of our waterbird and a number of landbird species as well. We can mostly only guess to what extent the actual abundance of birds in any given year is determined by a combination of local environmental factors and those many hundreds of kilometres outside our area, and which of those influences is dominant at a given time. We can more readily comprehend events in years with extreme conditions (very wet/very dry) as in 2016. But in many years what we see happening in our avifauna is only a reflection of influences between local and more distant conditions playing out somewhere on a continuum between the extreme end points.

Acknowledgement

Many thanks go to Con Boekel for suggesting to me that someone ought to write something about the 'disappearing Coots', and to the COG chatline community for sharing their observations and for responding to my queries. Comments by Julie Clark, Geoffrey Dabb, and Chris Davey to an earlier version of the manuscript helped to improve it. Chris Davey and Julienne Kamprad kindly provided data from surveys at the Jerrabomberra Wetlands and the Morass respectively.

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Canberra Bird Notes 41(3) (2016): 253-256

OBSERVATIONS OF A SUPERB PARROT ROOST IN NORTH WATSON IN APRIL/MAY 2016

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Earlier this year I realised Superb Parrots (*Polytelis swainsonii*) were gathering and roosting in eucalypts not far from my North Watson home. I am familiar with this species from many visits to the Australian Institute of Sport in Bruce and often marveled that such a magnificent green and gold parrot should take up residence there. I was delighted to find them so near to home.

The North Watson site is close to a bus stop on Aspinall Street. The area has some attractive features for parrots. There are stands of well-established eucalypts and also runoff water, provided by *Icon Water,* whose roadside pump means regular puddles.

Superb Parrots have had a presence in North Watson over the last three summers, but it was not until late 2015 that I set out to look for them. In December I saw them high in gums and in January 2016 I saw groups up to 7 passing through in the middle of the day. In April I set up an e-bird profile to record sightings, as by then, I was noticing up to 10 and also seeing this species on Mount Majura where I had not been aware of them previously. On 23 April I saw 14 Superb Parrots drinking at the roadside puddles mentioned earlier (Fig. 1). The following day at dusk I counted 31, when the penny finally dropped that Superb Parrots were gathering and roosting close to home. If I were a regular bus user, I may have been aware much earlier.

Between 24 April and 20 May 2016, groups of over 20 Superb Parrot were regularly recorded in the area. These larger groups were recorded during the 30 minutes before sunset. The highest number of a single flock was 37 at 5.10 pm on 7 May. This group flew into gums on Aspinall Street from a westerly direction. My estimate was 40. Later counting from a photograph, taken by a fellow enthusiast, showed 37. The same photographer said the 37 were the second group to arrive that evening, though I did not witness the earlier group arriving. His photos showed 28 in the first group. I am not sure how much time passed between the two groups arriving. It is possible that some or even all the Superb Parrots circulated, and came in twice. However, if the two groups were distinct as the photographer thought, then more than 60 Superb Parrots were present that evening. On 20 May, Michael Lenz and I met to observe the roost. He began earlier than I was usually able to and he counted 48. I recorded another 5 after he left the area.

Observing the parrots was always interesting. A common pattern for late afternoon drinking involved a lot of waiting. This happened in a small tree adjacent to the puddles, before the opportune moment presented itself. If there were other birds around, the Superb Parrots usually waited for them to finish. Each time pedestrians passed, the parrots flushed. Sometimes the Superb Parrots would fly to the puddles directly from the tall gum trees, low across Aspinall St. Occasionally motorists would slow to avoid them.

[1] All photos by the author.

Figure 1. Evening drinking on Aspinall Street, Watson

Counting the Superbs was easiest when they flew as a group or else when they 'played follow the leader'. The latter happened only a small number of times when they crossed the street from one eucalypt to another in small groups in a steady stream, making counting straightforward.

Figure 2. Social flying on April 30. Arriving at WIN 9, Aspinall Street, Watson .

Social flying was the most spectacular behaviour I observed (Fig. 2) and photographs of the Superb Parrots as a flock enabled me to count the birds I saw with accuracy. It seemed this

usually happened in warmer, finer weather (though that could be coincidental with times I was more likely to be observing). The birds usually flew out from the Aspinall Street gathering area in an anticlockwise direction towards the Federal Highway. Sometimes they would disperse during this flight and roost in eucalypts on the fence line of 'Youth with a Mission', between Aspinall Street and the highway. Other times they continued the circle to come back to roost along Aspinall St. Sometimes additional birds, not involved in the social flying, arrived just a few minutes before sunset. Those birds flew in to roost directly.

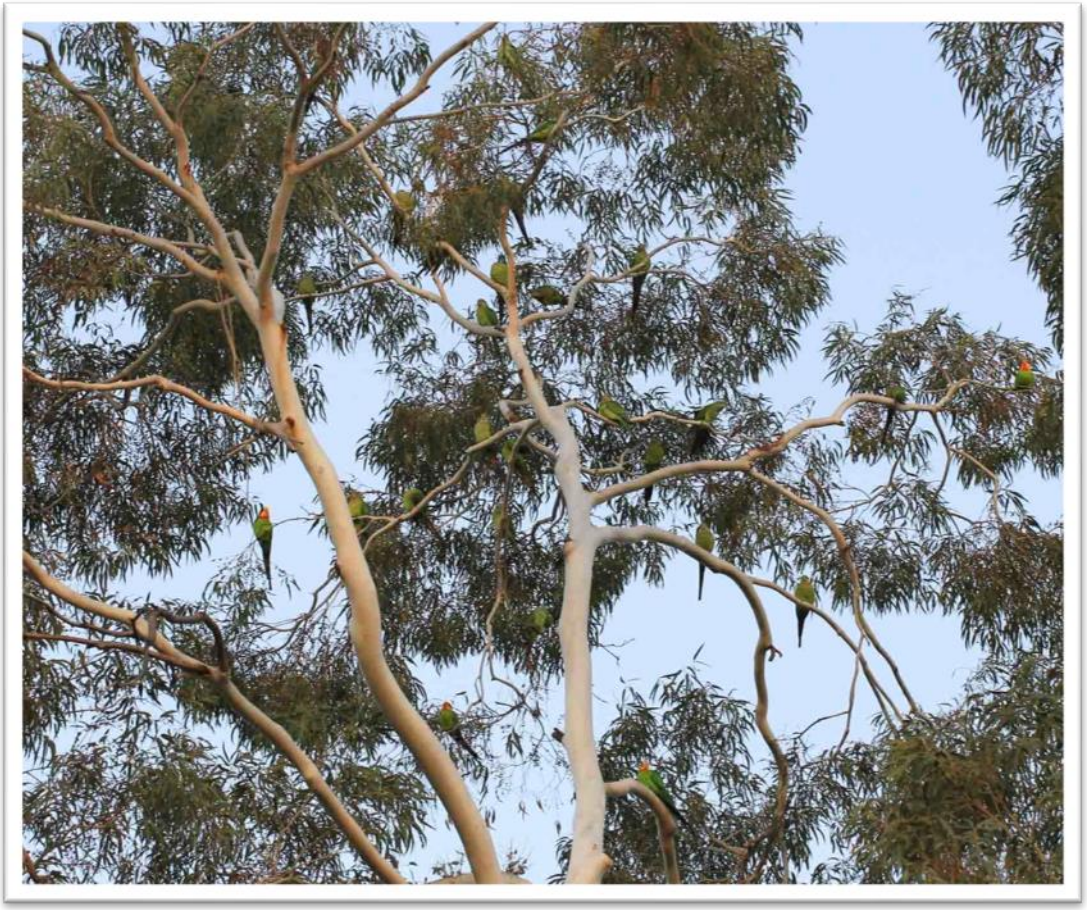

Figure 3. Gathering at 'WIN 9', Aspinall Street, Watson

One thing I was curious about was whether some Superb Parrots used the area as daytime territory and noted a pair was often present. I saw a pair eating the privet berries in the hedge of WIN 9 and also foraging in the grass along Aspinall Street during the day. Another aspect I wondered about, after looking through photographs was the make-up and purpose of the group. From what I can tell in the photograph below, the number of mature males is low (4 males: 21 females/immature).

Although I did not record Superb Parrot sightings before 7 April, I do not believe the high counts were typical for the area for the whole of summer. My reasons are anecdotal, based on conversations with people who were aware of these birds in the area well before I was. For instance, the driver of a water truck I chatted with one morning was surprised when I mentioned the high numbers. He said he had often seen the 'Superbs' at the puddles when he filled his truck early. He knew the species from western NSW, but had only ever seen around a dozen birds. (He also said he directed the overflow from the hose to the puddles rather than

the bitumen so the water was available for the birds.) Similarly, a resident of an adjoining street and local parrot aficionado, whose birdbath was often visited by Superb Parrots, had never seen the high numbers. Lastly, the photographer who observed the two groups fly in on the evening of 7 May, said that was the highest number of 'Superbs' he had seen in the area. It's possible the high counts in April/May indicate gathering before migrating or dispersing from the area. In any case, all the Superb Parrots had left the area by early June. Most were gone by 22 May. I did not note any back in North Watson until November 2016.

November update:
Small numbers of Superb Parrots have returned to use the eucalypts along Aspinall Street this month. The largest group I have seen is 8 (6 mature males and 2 juvenile or female). At least one young was being fed by one male.

In the interim period, I have learned about an upcoming private housing and retail development on the site of 'WIN 9', Aspinall Street that will see the loss of the eucalypts that were particularly significant for the Superb Parrots during the period I have described. A retail strip will surely mean that the road opposite will be paved for parking. Without intervention, the parrots will lose significant trees and access to water.

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Canberra Bird Notes 41(3) (2016): 257-260

ARRIVAL OF MIGRANTS IN CARWOOLA

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The author migrated to Carwoola in January 2007 and immediately commenced recording birds in the area. Shortly thereafter I began to compile a brief report published in the Stoney Creek Gazette about the birds seen in the area covered by the Gazette. Once I achieved a few years of data (albeit with variable observer effort) I have investigated the months in which migrant species have arrived – or at least first been reported - in the study area.
This note reports on the two most recent years.

Study area

The boundaries of the area approximate the dotted line in this sketch.

The area is a mixture of sclerophyll woodland and pasture with a few patches of relatively dense vegetation along gullies in the Reserves. A significant characteristic in the context of migration is that altitude varies approximately from 700m AMSL to 1000m AMSL. This could be expected to result in the arrival of migrants to be a week or two later than in the Canberra area, but that is not the objective of this paper, which reports on patterns over time in the area, rather than spatial distribution.

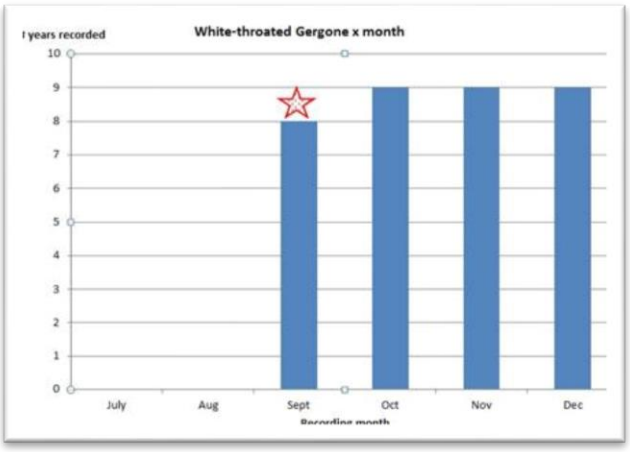
Definition of migrants

My starting point is the list of species noted as migrants in the Annual Bird Reports published by COG. I have then looked at my records for Carwoola to see when the species defined by COG as migrants to this area have been recorded in the second half of past years.

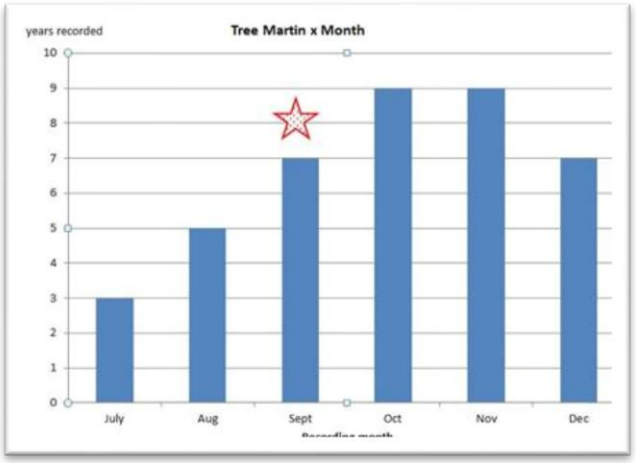
I have then slightly adjusted the list to exclude:

- 2 raptor species (Australian Hobby and Collared Sparrowhawk) since they seem to be recorded here more or less evenly through the second half of the year;
- Both local pardalotes as they are recorded nearly every month of the year;
- Australian Shelduck, since they migrate away in summer to breed in the higher country. and
- Black-eared Cuckoo and Pink Robin, since both are very unusual in the COG area and have both only been reported once in the Carwoola area.
- Rufous Fantail, Satin Flycatcher and Rose Robin have only been reported a few times and no pattern is visible so they have gone too!

I then estimated the average first month of arrival by eyeballing the number of years in which each species was first reported in a month. For some species, such as White-throated Gerygone (*Gerygone olivacea*) it is simple to choose the month (September).



In other cases, such as Tree Martin (*Petrochelidon nigricans*) where a few birds may over-winter it is a bit more of a 'Captains Call', but in this case I am the Captain!



Results for 2015

The outcome is summarised in an Excel spreadsheet, sorted according to the month of expected arrival. I have then shaded the cells in which the species was first recorded in 2015 according to whether it was early, on time, late or unrecorded. Table 1 is the result for 2015. Note that the number in the table is the number of years in which the bird has been recorded in that month. For the 2015 table the maximum possible score is 8.

Table 2~~1~~. The month migrant species were first recorded in Carwoola in 2015

Key: 3 Early | 7 On time | 4 late | *text* unrecorded

species	July	August	September	October	November	December
Fan-tailed Cuckoo	3	5	8	8	6	6
Grey Fantail	5	6	8	8	8	8
Tree Martin	3	5	6	8	8	6
Horsfield's Bronze-Cuckoo	1	6	7	6	5	4
Yellow-faced Honeyeater	2	8	8	8	8	8
Dusky Woodswallow		5	7	8	8	8
Olive-backed Oriole		4	8	8	8	7
Rufous Whistler	2	3	7	8	8	8
Noisy Friarbird		2	7	7	7	7
Pallid Cuckoo		5	8	8	8	8
Shining Bronze-Cuckoo		1	7	7	6	7
White-naped Honeyeater	3	2	4	3		
White-throated Gerygone			7	8	8	8
Western Gerygone		2	5	5	5	4
Australian Reed-Warbler			1	4	4	5
Brown Songlark			2	3	4	3
Fairy Martin			3	5	7	5
Sacred Kingfisher			2	6	7	6
Leaden Flycatcher			3	7	8	8
Brush Cuckoo				3	6	6
Rufous Songlark			1	2	8	4
Channel-billed Cuckoo					2	2
Eastern Koel					3	4
Masked Woodswallow						*3*
White-browed Woodswallow			*1*	*3*	*1*	*1*
Dollarbird				*3*	*6*	*5*
Rainbow Bee-eater					*6*	*1*
White-winged Triller			*2*	*2*	*6*	*4*
White-throated Needletail					*1*	*2*

It is interesting, but in view of the shortness of the time series no more than that, to observe that 12 species were early, 9 on time and only 2 late.

Results for 2016 (to October)

A similar process was followed to that for 2015, with an additional year of data included (Table 2). I reviewed the expected months and only felt compelled to change one species, with Dusky Woodswallow (*Atramus cyanopterus*) moving from September to August as a result of scoring 6 Augusts out of 9.

Again, the number in the table is the number of years in which the bird has been recorded in that month. For the 2016 table the maximum possible score is 9.

Table 2. Month migrant species first recorded in Carwoola to October 2016.

Key: 3 Early 7 On time 4 late *text* unrecorded

species	July	Aug	Sept	Oct	Nov	Dec
Dusky Woodswallow		6	8	9	9	9
Yellow-faced Honeyeater	2	9	9	9	9	9
Fan-tailed Cuckoo	3	6	9	9	7	7
Pallid Cuckoo		5	9	9	9	9
Grey Fantail	5	7	9	9	9	9
Horsfield's Bronze-Cuckoo	1	6	8	7	6	5
Olive-backed Oriole		5	9	9	9	8
Tree Martin	3	5	7	9	9	7
Noisy Friarbird		2	8	9	9	9
Shining Bronze-cuckoo		1	8	8	7	8
Rufous Whistler	2	4	8	9	9	9
Western Gerygone		2	5	6	5	4
White-naped Honeyeater	3	2	5	4		
White-throated Gerygone			8	9	9	9
Fairy Martin			4	6	8	6
Masked Woodswallow				*3*		1
White-browed woodswallow			*1*	*3*	1	1
Leaden Flycatcher			3	8	9	9
Sacred Kingfisher			3	7	8	7
Australian Reed-Warbler			2	5	5	6
White-winged Triller			2	2	7	5
Brown Songlark			3	4	5	4
Brush Cuckoo				4	7	7
Channel-billed Cuckoo					*3*	2
Dollarbird				*4*	*7*	*6*
Rufous Songlark			*1*	*3*	*9*	*5*
Eastern Koel					*3*	*5*
Rainbow Bee-eater					*6*	*1*
White-throated Needletail					*1*	*2*

As noted above it is dangerous to make too much of these data from a relatively short series. However it is noticeable that fewer species have been recorded early this year, and only one, the Horsfield's Bronze-Cuckoo (*Chalcites basalis*), rated as late.

A comment on "Departures"

I have not performed the equivalent calculations for month of last recording for a year. When I have contemplated this the pattern has not been as clear cut as for arrivals. This may possibly reflect the fact that arrivals tend to announce themselves with loud vocalisation as they establish (or re-establish) territories and/or try to attract mate(s) whereas the birds are far less obvious in late Summer Autumn. This does flag an area for further investigation.

Accepted 7 November 2016

NOTES

Canberra Bird Notes 41(3) (2016): 261-262

THE GUM TREE OF GUNGAHLIN

CRAIG ROBERTSON

4 Stewart Street, Windsor, VIC 3181

Over the last four years I have visited Gungahlin regularly, usually in spring or early summer. I stay with family in the area abutting Horse Park Drive, a few minutes' walk from the southern boundary of the Mulligan's Flat Nature Reserve. When the neighbourhood was built, I think a bit less than ten years ago, the subdivision left a grassy lane running East-West, linking the North-South aligned streets. In each block in our area a large eucalypt was left standing in the lane, roughly aligned with the back fences of the adjoining houses. There is a line of four such trees (see photo), plus a dead one, and it ends to the East in a small park where a further three of the same trees still stand. They are Blakely's Red Gum (*Eucalyptus blakelyi*) and include some large and beautiful specimens.

With each visit I have been fascinated to observe the variety of birds that use the tree, and can report the following:

Only Pied Currawong (*Strepera graculina*) and Common Myna (*Acridotheres tristis*) are nesting in the tree. The mynas appear to have commandeered the prime hollow, in a fork near the top of the main branches.

All of these species have been observed feeding or looking for food in the tree: Crimson Rosella (*Platycercus elegans*), Red-rumped Parrot (*Psephotus haematonotus*), Superb Fairy-wren (*Maluruas cyaneus*), Striated Pardalote (*Pardalotus striatus*), Buff-rumped Thornbill (*Acanthiza reguloides*), Yellow-rumped Thornbill (*A. chrysorrhoa*), Red Wattlebird (*Anthochaera carunculata*) (adult with juvenile), Willie Wagtail (*Rhipidura leucophrys*), Pied Currawong, Australian Raven (*Corvus coronoides*) (observed robbing the myna nest late spring 2015), Silvereye (*Zosterops lateralis*), House Sparrow (*Passer domesticus*), Blackbird (*Turdus merula*), and the Common Mynas! A worry; one day I could see two birds foraging in the outer foliage right in the crown of the tree, crawling among the leaves. I thought 'at last some honeyeaters'. But no - it was the resident pair of mynas acting like honeyeaters or small parrots.

Other species have been observed using the tree, if only as a short term perch: Crested Pigeon (*Ocyphaps lophotes*), Galah (*Eolophus roseicapillus*), Sulphur-crested Cockatoo (*Cacatus galerita*), Eastern Rosella (*Platycercus eximius*), Noisy Friarbird (*Philemon corniculatus*), Magpie-lark (*Grallina cyanoleuca*), Australian Magpie (*Cracticus tibicen*), Common Starling (*Sturnus vulgaris*). All of these species are seen regularly in the area, including of course in Mulligan's Flat. Small ponds at the bottom of the street near Horse Park Drive yield Black Duck (*Anas superciliosa*), Australian Wood Duck (*Chenonetta jubata*), White-faced Heron (*Egretta novaehollandiae*), Purple Swamphen (*Porphyrio porphyrio*), Dusky Moorhen (*Gallinula tenebrosa*), Masked Plover (*Vanellus miles*), Australian Reed-Warbler (*Acrocephalus australis*). Noisy Miners (*Manorina melanocephala*) are in the area but so far seem to stay away from our tree. Numerous other species occur in the area if one takes in

Mulligan's Flat and Yerrabi Pond. It will be interesting to see if this situation lasts. I am not confident many of the residents appreciate those majestic relics of the former woodland they have occupied, perhaps more concerned about the leaves and bark raining into their guttering. But I usually find it busy for birds and always a pleasure to visit.

The line of eucalypts (*Craig Robertson*).

Canberra Bird Notes 41(3) (2016): 263

MAGPIE-LARKS VERSUS PELICANS – A REMARKABLE CASE OF MAGPIE LARK AGGRESSION

JOHN HARRIS
36 Kangaroo Close, Nicholls, ACT 2913

Magpie-lark (*Grallina cyanoleuca*) aggression is well known. Anyone with the slightest interest in observing birds must have seen their aggressive behaviour. You only have to google Magpie-lark or Mudlark or Peewee aggression and you will find numerous references, reports and anecdotes, including the occasional swooping of humans. The standard text books and field guides all relate this aggression to the breeding season although I for one have seen their aggressive behaviour at other times as well.

What we have all observed is Magpie-larks driving off much larger birds – ravens, currawongs, raptors and any large bird, including those of no threat to them such as cockatoos and pigeons. Their superior agility means they can safely attack even the largest of eagles which turn too slowly in the air to escape their harassment.

In October this year I observed an intriguing and prolonged interaction over Gungahlin Pond between Australian Pelicans (*Pelecanus conspicillatus*) and Magpie-larks. Three Pelicans were trying to take off from the water to fly south along the Ginninderra Creek waterbird corridor, presumably to Lake Ginninderra, the usual destination on this flight path. As soon as they gained any height above the surface, two Magpie-larks would attack. This always resulted in the group of three Pelicans splitting with one Magpie-lark harassing one Pelican and one harassing the other two. The Pelicans went back and landed on the water several times. Each time they tried to fly off they were driven apart and down. This lasted for about 20 minutes.

Eventually the Pelicans seemed to decide to put up with the initial attacks and seek height. With the Magpie-larks relentlessly swooping them, they gained considerable altitude until I could no longer see the little Magpie-larks with the naked eye. I could, of course, see the Pelicans and, by using binoculars, I could pick out the Magpie-larks and their aerobatics. The pelicans maintained that altitude but were still driven back several times. Whenever the Mudlarks split the group, they would turn back and try to regroup. It always appeared as if the two Pelicans were reluctant to abandon the other one. Perhaps it was a young one.

All this went on for a further 10 minutes. Eventually the three Pelicans determined to endure the persecution and try to escape anyway. They climbed to even greater height and, still pursued by the Magpie-larks, they winged off south towards the next lake. I do not know when the Magpie-larks gave up but they were still at it when they moved out of binocular range, very far from any territory they might have been defending.

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Canberra Bird Notes 41(3) (2016): 264

INTERACTION BETWEEN AUSTRALIAN MAGPIE AND A MICROBAT

JOHN LEONARD

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On 28 Feb 2016 I was exercising at the north-east end of Hughes Oval (35.331852, 149.088793) before sunrise.

I observed 6-8 small insectivorous bats circling around feeding near some deciduous trees (oaks, poplars). The species of bat was unidentified but they were all dark and the body length was 5-6 cm.

As it got lighter they all disappeared except one which was perhaps trying to get some last minute feeding in. An Australian Magpie (*Cracticus tibicen*) saw it and swooped at it and the bat made for the eucalyptus trees at the other side of the Oval (about 200m away) — presumably it would sleep in a hollow or under bark in those trees during the day. The Magpie took off after it and easily caught up with it, but when it did the bat simply circled the Magpie, which was spinning, trying not to lose height. When the Magpie was dizzy and had lost height the bat set off again in the same direction, but the same thing happened one more time before it made for the safety of the trees.

Interestingly, one of the bats I had observed previously, though not the one pursued by the Magpie on this occasion, had a damaged wing membrane with a hole in it. I assume this was from an encounter with a Magpie or other aggressive bird on another occasion.

Accepted 26 December 2016

COLUMNIST'S CORNER

Canberra Bird Notes 41(3) (2016): 265-266

A Japanese Bird Book

I have a little book, 'Japanese Birds', authored by Prince Nobusuke Takatukasa (1889-1959). One of the interesting things about it is the publication date: 1941. Bearing in mind that the attack on Pearl Harbour occurred before the end of that year, it is notable that the bird book is in English and is number 35 in a series forming a 'Tourist Library' published by the Board of Tourist Industry and the Japanese Government Railways. Other books in the series were the 'Tea Cult of Japan', 'Japanese Noh Plays' and 'Angling in Japan'.

Whatever else Prince Nobusuke Takatukasa achieved in his 70 years, in this digital world it is for 'Japanese Birds' that he is best remembered. Putting his name in your browser immediately brings to light more than 50 listings of his book in various institutions worldwide with very little more about the author himself. However, as with some pre-owned items it is the history of my copy (the immediate source of which I cannot remember) that is of particular interest. It contains a handwritten inscription that reads, in part, -

> 'Alec … Our fellow ornithologist F. M. Lord Alanbrooke was most anxious to let you have this souvenir of our local researches - …. Xmas 1945. Massey Stanley'

For years I had assumed that this was a reference to a spot of birdwatching by the three persons indicated (with little known about two of them), quite probably in Japan. Recently, I undertook more investigation. How did those three come together?

Alan Brooke (1883-1963), later Lord Alanbrooke, was famous for his role as Chief of the Imperial General Staff, and Churchill's military adviser, during World War 2. He was also known as a keen bird watcher and photographer, interests he pursued before, during and after the war. Indeed, he made no secret that watching birds gave him peace and comfort during troubled times. In Casablanca during a crucial summit on the future of the war (January 1943) he spent a 'delightful hour and a half during which I saw goldfinch, stonechat, warblers of all kinds, white wagtail and several kinds of waders on the seashore …'. A few days later at Marrakesh he 'spent a real peaceful afternoon looking for birds in the lovely garden of the hotel and found several very interesting specimens'.

After war's end, in November 1945, Alanbrooke visited Japan to confer with General MacArthur. A few days later his RAF aircraft flew on to Australia, landing at Darwin on 24 November and then to Melbourne. Alanbrooke's diary for the 26th records –

> 'visited a Bird Sanctuary and dined at Government House sitting up until midnight talking to the Duke of Gloucester'. [We know from a press report that the 'sanctuary' was the one at Healesville.]

After a short visit to New Zealand, he returned to Sydney, making a day trip to Canberra to meet the Prime Minister. He left Australia on 4 December. Perhaps there is no strong Canberra connection in that story, but a much stronger one is provided by Massey Stanley (1902-1979).

Having left his native New Zealand he came to Canberra in 1927, the year the old Parliament House was opened. He acquired legendary status as an old-style political journalist. One

story was about the time in 1930 that he caused a circus elephant to be photographed on the steps of Parliament House, the photo being published in the *Daily Telegraph* with the caption: 'Two elephants, one white'. (You can read more about that in an obituary note in the Canberra Times of 20 Aug 1979.)

Where was Massey Stanley in November 1945? From 1941 to 1946 he was based in Melbourne editing an army educational journal. He also made some overseas visits as a war correspondent. He was one of the first journalists to visit post-war Japan, reporting from Hiroshima in October 1945. No written confirmation can be found that he had a special interest in birds, but there is certainly evidence that he had an interest in the Australian bush among many other things.

Who then was 'Alec', the recipient of the Japanese bird book? In 1945 Alec Chisholm (1890-1977) was probably Australia's leading public ornithologist. (I use 'public' in the sense that it appears in the current phrase 'public intellectual'.) He was another journalist, who, as Libby Robin records, 'edited major dailies in the 1930s and early 1940s, became editor of *Who's Who* from the mid-1940s, and assembled the mammoth *Australian Encyclopedia* in the 1950s'. Along with Crosbie Morrison he was one of the 'high-profile journalists' who 'made ornithology's concerns mainstream'.

In the entry for Alec Chisholm in the *Australian Dictionary of Biography*, Tess Kloot (the librarian and archivist at RAOU) says: 'When dignitaries went birdwatching, he was called upon to act as guide: he would count among his acquaintances … Lord Alanbrooke …'.
When, before Christmas 1945, could Alanbrooke, Massey Stanley, and Chisholm have been birdwatching together? Most likely over those couple of days in Melbourne in November, perhaps on that visit to Healesville. It is just possible they were together in Japan earlier that month, although Chisholm might not have been a useful guide there, as Alanbrooke would have known more about northern hemisphere birds. Alanbrooke must have picked up one or more copies of 'Japanese Birds' when in Japan.

I can offer another Canberra connection. At the time, the Governor-General of Australia was the Duke of Gloucester, with whom Alanbrooke spent the evening of 26 November. In 1945 for three months Chisholm was press liaison officer for the HRH. In his book about his early life, *The Joy of the Earth*, Chisholm adds a footnote to a discussion of bird sounds:

> Reference to discordant bird-calls reminds me that when HRH the Duke of Gloucester was governor-General of Australia, in 1945, he sometimes had the misfortune, at Canberra, to be aroused at dawn by three very strident performances – the 'laughter' of kookaburras, the hallooing of currawongs, and the eerie wailing and growling of gang-gang cockatoos. It seemed to be an idea of HRH that I (his public relations officer) had some responsibility in this matter!

I should mention the Latham's (or Japanese) Snipe, the unofficial mascot of Canberra wetlands. In Prince Nobusuke Takatukasa's little book 51 species are given with 'Japanese' as the adjective in the English name translation - but not 'Latham's Snipe'. The snipe is not included in the pictures, but there is a reference to its habits: '*In summer it often soars and circles in the sky, drumming tremendously, with its tail-feathers spread out, and calling "zeep, zee*'.

Stentoreus

Canberra Bird Notes 41(3) (2016): 267-

Birding in Cyberspace, Canberra Style

We are all urged to **count the birds we see** and submit that count data to one of the key databases such as eBird Australia http://ebird.org/content/australia/ or Birdlife Australia's Birdata http://birdata.birdlife.org.au/ . Both organisations have excellent, free apps for our iOS and Android handheld digital devices that make recording count data in the field, and submitting it to the database when you have internet access, a breeze.

But counting birds is often not an easy task. How to avoid double-counting when birds are moving around us? How do we count them when in large flocks? How to count big numbers of moving birds? The ornithologists who are the brains behind eBird appreciate that counting is often a challenge, particularly to new birders and to those keen to increase the usefulness of their observations by moving from recording presence data to quantify what they have seen. Accordingly, they have produced two online tutorials on the topic 'How to count birds' http://help.ebird.org/customer/portal/articles/1006797?t=412380 . Highly recommended.

This topic came to your columnist's mind—yes, my attention was piqued—by an episode of my favourite podcast, the ABC's 'Off Track' with Ann Jones (also broadcast on Radio National on Saturday mornings). Titled **'In the cockpit for one of the planet's biggest wildlife surveys'**, it involves Ann flying with and interviewing Professor Richard Kingsford in a light aircraft, counting the waterbirds over much of SE Australia. Highly recommended listening: http://www.abc.net.au/radionational/programs/offtrack/coorong-fly-seg/8036618 .

'Drones for birders' was the title of alight-hearted contribution by Tony Russell to the national birding email discussion list Birding-Aus on 23 June 2016 http://bioacoustics.cse.unsw.edu.au/archives/html/birding-aus/2016-06/msg00093.html . Tony wrote:

> *I've never been much good at photography, much too fiddly. However, I've just been looking at drones as a way of obviating the need for scrambling over rough ground, slugging away through heavy sand or mangroves, or even going to sea on a pelagic trip. I'm getting too old for all that stuff. But with a drone one could go out to sea, go up cliff faces, get into or over all sorts of excellent places where birds go and get video pictures of them, almost without disturbing the birds at all. And when the batteries start running out the drones come home automatically. Just imagine, no more lugging tripods, telescopes, cameras, or any other heavy clutter into inaccessible places or getting sick on boats. Sounds like twitcher heaven to me.*

A fascinating discussion ensured. Some of it was frivolous, consistent with Tony's presentation, but Paul Dodd, a birder who operates a drone, provided a thoughtful response based upon his own experiences with this technology: http://bioacoustics.cse.unsw.edu.au/archives/html/birding-aus/2016-06/msg00099.html . He suggested that

> *Drones are interesting, but I would strongly suggest that they are NOT suitable for traditional birdwatching and there are quite a few reasons for this…the first reason is that they have very limited flight time, measured in minutes, so you wouldn't really have much time to find the bird(s) that you were looking for…Secondly, a drone is a line-of-sight radio-controlled aeroplane. Try flying a drone behind a large obstacle and you*

> *lose radio contact…Thirdly, most drones are either equipped with a wide-angle camera or are designed to accept an action cam like a GoPro...Most bird photography, no matter what the platform, requires a telephoto lens. Telephoto lenses are heavy and few if any drones on the market could carry one…Fourthly, drones are notoriously hard to fly and manoeuvre accurately…Lastly and definitely not least, drones are noisy and disruptive to wildlife.*

Valuable food for thought, methinks.

In late 2016/early 2017 across the globe people are referring to the USA President Barack Obama as a **'lame duck'** president. Wikipedia defines this: 'A lame duck, in politics, is an elected official whose successor has already been elected'. What is the etymology of the expression 'lame duck'? As usual, to answer this type of question one turns to Michael Quinion's *World Wide Words* website http://www.worldwidewords.org/qa/qa-lam2.htm . Quinion tells us that:

> *About 1760, some wit created the term for stock market traders who failed to pay up when bills became due, effectively bankrupting themselves and leading to their being barred from trading…It's easy enough to see how the lame part came about, a figurative reference to a person injured through inability to maintain his financial position. But no reference of the time that I can find makes clear why they were visualised as ducks. It might, at a stretch, be a rhyme with luck, I suppose.*
>
> *Almost every one of the many later references to these failed traders refers to them as waddling away, an early example being in the Leeds Intelligencer on 29 June 1762 (emphases in the original): 'Yesterday a lame duck or two made shift to waddle out of 'Change Alley'. Perhaps they were low-slung portly gentlemen, the eighteenth-century equivalent of today's fat cats, and the way they walked suggested a duck with a bad foot? More probably, having established that failures were to be called lame ducks, the derisive image of them struggling away limping was too good not to use.*

Facebook is replacing email. Well, that's what lots of people are saying. I have seen research indicating that young people—teenagers and young adults—are increasingly abandoning email and using Facebook and other social media applications as their main ways of communicating in cyberspace. It is reported, for example, that Facebook Messenger, released quite recently, already has over 600 million users.

I have referred above to email traffic on Birding-Aus, but what about the use of Facebook for birding in cyberspace? Here I draw attention to some of the key Facebook pages focusing on Australian birding. I understand, however, that this content will be grist for the mill for the many Facebook-phobes among *Canberra Bird Notes* readers. Not familiar with the expression Facebook phobia? The urban dictionary defines it as 'Feeling of disgust or contempt toward facebook' http://www.urbandictionary.com/define.php?term=facebook%20phobia .

Here are some Facebook pages on birding topics that you may find of interest:

- Australian Bird Identification (ABID), 12,230 members at the time of writing, November 2016: https://www.facebook.com/groups/209677085864957/
- Birds of Oz, 11,321 members at the time of writing: https://www.facebook.com/groups/432434936815131/

- Bird Photography Australia, 10,624 members of the time of writing: https://www.facebook.com/groups/birdphotographyaustralia/
- Crap bird photography 4,289 members at the time of writing: https://www.facebook.com/groups/1516554791932973/
- Seabirds and Pelagics Australia, 997 members of the time of writing: https://www.facebook.com/groups/957199944320635/ .
- Birding-Aus 913 members at the time of writing: https://www.facebook.com/groups/35835604880/

Over the years this column has mentioned **the use of digital technology for identifying birds by recording their calls on our smart phones**. To date, this has been available in some parts of Europe and North America. Earlier this year, however, an iPhone/iPad app was released by a European company. The app is described as follows:

> *Identify birds of Australia by their Songs and Calls with this stunning guide!*
> *Record a bird singing and use Automatic Recognition to help identify it.*
> *Includes high quality images and audio. No internet connection is needed!*

It is the app **Bird Song ID Australia Automatic** http://sunbird.tv/sunbird-apps-ebooks/app-bird-song-id-australia/available at https://itunes.apple.com/au/app/bird-song-id-australia-automatic/id1079325343?mt=8 for $5.99. The publishers are Mullen & Pohland GbR. At the time of writing, November 2016, their Australian app was available for iPhones and iPads, not for the Android platform. It covers '110 Australian bird species and over 200 songs and calls. All the most common garden birds are included.'

Your columnist admits, however, that he has not tested this app for you. It is not because he is reluctant to spend $5.99 to do so. Rather, one of the features of the app—a positive one—is that it can be used offline, i.e. when no internet connection is available. This means that the library of bird calls must be downloaded to our smart phones. At present, with the 200-odd bird calls, the download is 260 MB which is a bit too much for my iPhone at present.

It is easy to dismiss this type of technology as a gimmick, something that will rapidly fade away. In my view, however, it is more likely that this technology will turn out to be at the cutting edge of digital tools for birding. I suspect that, before long, bird identification using apps on our mobile digital devices will be as familiar as using binoculars is today and may, for many birders, replace that 17th century technology.

T. Javanica

PRESIDENT'S REPORT 2015-16

The period from November 2015 to October 2016 has been has been a relatively quiet one for COG in comparison to our 50th Anniversary in 2014 and awards last year recognizing COG's significant contribution to education about and conservation of our birds.

This is also the year that I will hand over to a new President, having had the privilege of being the President of COG for four years. I count myself fortunate to have been in the position for our 50th Anniversary and for COG's recognition through the 2015 Keep Australia Beautiful Sustainable Cities Award for Education in November 2015 and the ACT Conservation Council Award in October 2015. These are strong testimony to the effective and well-respected role that COG has in the ACT community and beyond.

The year has seen GOG maintain and enhance its very effective collaboration with the ACT Conservation Council, strengthen its partnership with the Woodlands and Wetlands Trust, and work actively with the BIGnet group of NSW birding clubs on matters of mutual interest and concern.

COG Committee

In 2015-16, COG has been very well-served by a dedicated and enthusiastic Committee and I would like to take this opportunity to thank the10 members of the 2015-16 Committee for their contribution to COG. The Executive consisted of Neil Hermes (Vice-president), Bill Graham (Secretary), Lia Battisson (Treasurer), Jenny Bounds (Conservation Officer), Chris Davey (Records Management and Survey), Sue Lashko (Editor of Gang-gang, meeting-room organizer and Outings Officer), Julie McGuiness (management of COG storage), Paul Fennell (management and oversight of the COG Database), David McDonald (advice on COG Constitution and policy issues) and Bruce Lindenmayer (connecting COG with CIMAG). Matthew Frawley was co-opted to the Committee in 2016 and Julian Robinson continued as Website manager in an ex-officio role.

On behalf of the Committee I would like to extend our thanks to those Committee members who are standing down: Bruce Lindenmayer, a long-standing Committee member and Julie McGuiness. They have been stalwart supporters of and contributors to the Committee and to COG.

As well as Committee members, we have been well served by a number of other members who have provided invaluable service to COG: Jack Holland is responsible for the members' meetings speakers program which has been both fascinating and broadly focused over the

year; Sandra Henderson manages COG membership and the monthly raffles; Michael Lenz produces the Canberra Bird Notes; Duncan McCaskill manages the Garden Bird Survey; Barbara Allan for the Bird Blitz and the Rarities Panel; Nicki Taws who is the COG Records Officer; and Kathy Walter and John Goldie for managing the sales desk. Bruce Lindenmayor generously volunteered to assist with the tea and coffee we have after meetings. All of these people have generously given their time to help COG members and the organisation.

COG Membership

There are currently 447 individual members and 7 organisational members of COG with 56 new members joining during the year. We have a loss of members each year including those who can no longer participate in COG activities, those who move away from Canberra, those who pursue other priorities, and some new members who find COG is not what they were looking for. However to all our continuing members you are a vital part of our organisation and your support for COG is very much appreciated.

Steve Wilson Award

The Steve Wilson Award was inaugurated in 2014 on the occasion of COG's 50th Anniversary. In its second year, in recognition of their meritorious service and significant contribution to COG over a long period the Steve Wilson award was presented to Chris Davey and Barbara Allen.

Conservation

This year conservation has been a significant part of COG's focus across a wide range of ACT and related issues. Jenny Bounds continued as COG's Conservation Officer, with input on some matters by other Committee members. Matthew Frawley joined the Committee in the second half of the year with an interest in working on some conservation issues. COG has continued its long standing collaboration with the Conservation Council ACT Region in relation to planning and development matters which impact on bird habitats and movement corridors, including sensitive river corridors, with the main areas of interest this year on:

- Gungahlin new suburbs, including Throsby next to Mulligans Flat,
- Ginninderra Station (CSIRO land on the Barton Hwy)
- The proposed new suburb (Thompson/Western Greenway) next to the Murrumbidgee River west of the Tuggeranong Town Centre (if this goes ahead, the development will take housing into the current corridor reserve, with minimal buffer and significant environmental impacts
- West Belconnen/Riverview, and
- Most recently, the Western Edge Planning Study (a future development front west of Molonglo suburbs and west of the Murrumbidgee River at Point Hut Crossing; this will have significant environmental implications for the river corridor.

The main conservation achievements/issues this year were:

- A submission with comments on the ACT Government's Draft Action Plan for the Scarlet Robin (declared a threatened species last year). The final Action Plan has been released and some of COG comments were taken up, important issues such as more detail on critical habitat needs and strengthening the objective on research and

monitoring. There is still significant reliance in the Plan on the community's monitoring and COG data; resourcing the actions in the Plan will be important.

- A letter from COG to the Planning Minister, Mick Gentleman, regarding his approval using ministerial call-in powers, of the Williamsdale Solar Farm, on land which will mean the destruction of many mature eucalypts on the site. The Minister's response was very disappointing; more appropriate sites on already cleared and degraded land with minimal environmental impact should have been considered.
- Input from COG to a draft nomination to have clearance of hollow bearing trees (mature eucalypts, including paddock trees) declared a threatening process in the ACT. COG will be a signatory to the nomination with several other groups including ANPS and FOG. The decision to nominate this has arisen because of concerns about the various urban and infrastructure developments, (including the Williamsdale Solar Farm decision) which continue to clear mature habitat eucalypts across the landscape.
- Submission to the EPBC Act referral for the West Belconnen/Riverview development, commenting on the loss of Little Eagle foraging habitat and the need for surveys for Superb Parrots over the life of the development (given the increase of the parrots' distribution in the ACT in the last decade).
- Submission to the NSW Government about new biodiversity legislation which would significantly lessen the protections for native vegetation in NSW. This issue has been a major conservation focus this year for the groups of BIGnet, the NSW network of bird clubs and bird interest groups which COG is a part of.

COG provided input to the ongoing management of some environmental offsets sites including:

- Throsby Offsets management plan (expanded reserve area adjacent to Mulligans Flat), and
- Jaramlee in West Macgregor, regarding possible impacts on small birds by management for woody weeds and advice on a bird monitoring program

COG accepted an invitation to join the K2C project group as a supporting partner on their Committee. Jenny Bounds represents COG and has attended several meetings and a strategic planning day. The group has recently received funding to undertake engagement with the farming community in the surrounding region and habitat enhancements, under the project banner "Save our Scarlet Robin". COG has facilitated volunteers for the K2C twice yearly bird surveys on the Monaro for a number of years.

COG (Jenny Bounds and I) attended a meeting with the ACT Commissioner for the Environment and Sustainability to discuss their 2015 State of the Environment report and related birds issues. COG data is used to inform this report. A particular problem discussed was the need to rely significantly on, for the SoE report, environmental related information gleaned from Government reports commissioned for planning purposes (and limited primary research data availability).

Woodland Bird Monitoring Project

COG's long running survey at 15 locations (142 monitoring points) continues. Jenny Bounds coordinates the project with input from Alison Rowell, Nicki Taws and Chris Davey. The project would not be possible without the commitment of the team of site coordinators and their helpers who do the surveys four times a year, so thanks to all involved.

Surveys

Under the guidance of Chris Davey, COG has again been very active over the past 12 months in the recording of bird observations. Observations are now increasingly being recorded with the help of eBird and then downloaded to the COG database. In addition to the general observations, on-going surveys continue to inform us of the status of birds within the ACT and local region.

The surveys include collecting observations for a long-term study at Mulligans Flat/Goorooyarro Nature Reserves by the ANU. This study is now in its 9th year. Also, quarterly surveys at Jerrabomberra Wetlands/Fyshwick Sewage Ponds, the annual 'Blitz'- now in its 11th year, monthly waterbird surveys at Lake George and Lake Bathurst and the Superb Lyrebird survey at Tidbinbilla Nature Reserve- conducted since June 2004, have been completed.

COG continues to provide volunteers twice a year to the Greening Australia 'K2C' project, now in its 7th year. Observations on the expanding Silver Gull colony on Spinnaker Island, LBG, continues with information supplied to the National Capital Authority and, after a postponement of 12 months, the annual bird survey on Lord Howe Island, associated with the rodent eradication program, was recommenced in September 2016.

COG members continue to supply observations to the Latham's Snipe survey, run by the Woodlands and Wetlands Trust. The survey will run from August 2016 to March 2017, whilst the on-going long-term data set collected from Lake Bathurst and Lake George continues.

Over 1 million bird records covering the past 10 years were submitted to the Canberra Nature Map. These General Observation records and Garden Bird Survey records now provide a new avenue for the general public to find out about the birds of our local region.

The COG website

During the year the COG website was visited by an average of 200 different people each day, similar to last year. Newly available statistics reveal some possibly surprising patterns of usage.

16% of pages were accessed from the USA, 17% from other countries and the remainder (obviously) from Australia. The most-viewed pages are Our Birds/Bird Info (660 views a month), the Photo Gallery (350), Trip Information (275), Birds of Canberra Gardens (270), Membership page (230), a page describing the Email Discussion List (170), Popular Birding Spots (145) and Meeting information (145).

The website is also a much-used resource by people who download specific files, including, in order of most used:

- By far the most popular download is bird calls, around 160 each day. Given that only a minority of our birds have calls on the website this possibly indicates an area we should explore further. The most popular are King Parrot, Gang-gang, Eastern Spinebill, Australian Raven, Brown Goshawk, Brown Thornbill, Red-rumped Parrot and Flame Robin – all played more than 3 times every day.
- Bird data sheets showing distribution of each of our species are downloaded 16 times a day. Crimson Rosella and White-browed Scrubwren top the list.

- An average 12 issues of Canberra Bird Notes are downloaded each day, evenly split between the latest issue and older archived issues. Each recent issue is read (downloaded) by 90 to 600 people.
- An average 11 issues of Gang-gang magazine are downloaded each day, mostly the most recent issue but also a significant number or older issues. Each recent issue is read (downloaded) by about 250 people.
- Other downloadable items that are regularly accessed include President's Reports (29/month), Bird Routes brochures (22/month), and a fact sheet about birds of Callum Brae (20/month).

I would like to thank Julian Robinson for his ongoing efforts in managing and maintaining the COG Website.

The COG Database

For decades COG has built up a very valuable set of historic bird databases for the birds in our Area of Interest (AOI). This database has been added to every year by members on organised COG activities, COG members on independent activities, non-COG members and by visiting bird watchers from outside our AOI and outside Australia.

The nature of how bird data is now collected and reported has changed dramatically in the past 3-5 years. Many observers now submit data to third party databases. This data is variously included in the COG databases.

At the end of last year a group of COG members with a particular interest in COG's database, convened a workshop which examined a range of options for COG's future database options.

These options include;

a. have no database,

b. have a closed database which only contains data up to a certain date e.g. 31 Dec 2016,

c. have a continuing and updated COG managed database that attempts to be comprehensive for all AOI data,

d. have a continuing and updated database of all records for AOI provided mainly by COG members and through COG managed systems,

e. have a continuing but new database recognising it will never again be comprehensive and will mainly have inputs through known and unknown future non COG sources but still (hopefully) be the best data set for AOI or

f. have some other model.

It was agreed that COG should continue to have a Database which would enable COG to maintain its role as a provider of reliable moderated (but not all) info about birds in AOI.

It is now agreed that COG's database will;

- cover the COG Area of Interest (AOI)
- maintain all existing historic Garden Bird Survey and General Observations data,
- allow for the input of data from COG's own surveys into the future,

- allow input of approved other data sets
- allow data entry by third party systems both existing (e.g. Ebird) and future (e.g. Birdlife)

COG will moderate all data held in its database and COG can continue provide its data to others on terms to be determined

I would like to thank Neil Hermes, Steve Wallace, Michael Robbins, Chris Davey, Paul Fennell, and all those who have assisted in progressing this challenging task.

Records Management

Essential support for the COG database is provided through the Records Management Team and the Rarities Panel. I would like to acknowledge the contributions provided by Nicki Taws as Records Officer, Tony Harding, Helen Mason and many others for data entry and to the members of the Rarities Panel consisting of Richard Allen, Jenny Bounds, Grahame Clark, Dick Schodde, Nicki Taws and Barbara Allan (Secretary), all who have offered to continue in their various roles.

Outings

Once again COG has been able to run a very comprehensive outings program in 2015-16 and our special thanks to Sue Lashko for all her efforts in making this a great success for COG members. This is a vital part of COG's activities for members and that the planned outings for the year are mostly fully attended is testimony to their popularity.

In addition to the scheduled outings, the ad hoc group that has organised the Wednesday walks have once again operated most successfully and have managed to attract a most enthusiastic and intrepid group of followers with outings taking place each month of the year, notwithstanding some very testing weather conditions this year. On behalf of COG members our thanks to Martin Butterfield and others for organising these events.

Gang-gang

Our particular thanks go to Sue Lashko and Gail Neumann for their excellent efforts in the editing, layout and publishing of our newsletter. The wonderful photos provided by COG photographers are a most welcome part of Gang-gang and out thanks to those who have generously provided their photos to enhance the Newsletter.Gang-gang is a great source of information and news and members may not be aware of the work that goes into producing the newsletter every month. I would also like to thank Dianne and Chris Davey and helpers for all their efforts with the distribution of the newsletter and Canberra Bird Notes.

Communications and Publications

Canberra Bird Notes

I would like to thank Michael Lenz for his great work as Editor of the Canberra Bird Notes and all those who have contributed to CBN over the past year. CBN is a well-respected and valued source of information about the birds of the Canberra region. Particular appreciation is also due to Paul Fennell and Steve Wallace for their work on the Annual Bird Report.

CanberraBirds email announcement and discussion list

At the end of the year the CanberraBirds email announcement and discussion list had 310 subscribers, an increase of 14% on last year's figure. Most years the number remains fairly stable, with only a small proportion of subscribers dropping off and new ones joining. The list, managed by David McDonald, continues to provide a useful forum for people to discuss the birds of the Canberra region, their environments, and COG's activities. New subscribers, including people new to birding who seek support from more experienced birders, are welcome to subscribe. During the year there were approximately 2,200 emails distributed over the list, an average of about six per day.

Monthly meetings

Jack Holland has arranged yet another most interesting year of both local and interstate speakers at the COG monthly meetings in 2015-16. I would like to thank Jack for his sterling efforts in bringing to the members engaging and informative presentations each month. I also give sincere thanks to the twenty two people, three of them twice, who generously gave up their time and spent considerable effort to prepare and deliver presentations on a varied range of topics, including on ACT Raptors and **t**he national Malleefowl monitoring effort**.** A special thanks also to the six speakers who contributed to a very interesting and successful Members' Night, sadly likely to be the last for some time due to the unavailability of the meeting venue over December and January.

Our appreciation to all those who have assisted with the provision of the refreshments that follow the monthly meetings, and to Sandra Henderson for taking on the responsibility of providing the raffle prizes and selling the tickets. All of these add to the enjoyment of the occasions and provide opportunity for members to socialise.

Canberra Birds Conservation Fund (CBCF)

The Canberra Birds Conservation Fund has been established for the purpose of supporting COG's environmental objects by receiving donations that are tax deductible by the donor, and allocating those funds as grants. COG's environmental objects are 'to promote the conservation of native birds and their habitats', with particular reference to the native birds and their habitats in the Canberra region. During the year to 30 June 2016, the Fund received a number of donations for which COG and the Fund's Committee of Management are most appreciative. The first 2015-16 grant was to Ms Constanza Leon from the ANU's Fenner School of Environment and Society to support her research on 'Complex cooperation and the effect of climate change on white-winged choughs'. Close to the end of the year the Fund's Committee of Management resolved to provide a grant to Dr Kate Grarock of the Woodlands and Wetlands Trust to support research on 'Bringing back Bush Stone-curlews'. I express my thanks to the members of the Fund's Committee of Management, Dr Penny Olsen, Geoffrey Dabb and David McDonald (convenor), for their stewardship of the Fund.

Summary

I would like to thank all the COG members who have actively contributed over the year to COG and our many and varied activities. COG is well recognised for its effectiveness as an organisation dedicated to the conservation and enjoyment of birds. As outgoing President I would like to extend my sincere thanks to all those who have helped make my time as President rewarding and enjoyable. I look forward to continuing my association with COG

through other avenues particularly through the Woodlands and Wetlands Trust where both organisations have strong mutual interests in conservation of our birds.

I extend my congratulations to the new President of COG and look forward to seeing COG continue its work in conserving our birds as well as providing a great organisation for those who love birds.

Alison Russell-French
President
11 October 2016

THE 2016 RECIPIENTS OF THE STEVE WILSON MEDAL

At the 2016 AGM, Jack Holland and David McDonald, (two outstanding and long-serving COG members) were awarded Steve Wilson Medals following assessment by the Steve Wilson Medal Committee (Alison Russell-French, Neil Hermes and Bruce Lindenmayer).

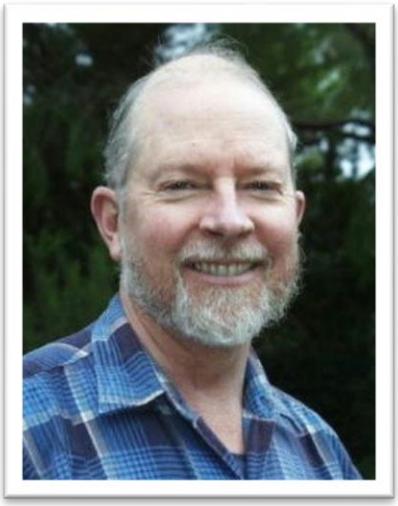
JACK HOLLAND

Jack was Secretary of COG for several years from the late 1980s and President for 3 years from 2003. He did a marvellous job for COG in both positions, and remained as President through a difficult few years after the 2003 Canberra Bushfire destroyed his Chapman family home and car; moving to rented accommodation and then rebuilding again on the old site.

For the last decade, Jack has done his expert monthly column for *Gang-gang*, reporting new and unusual bird sightings and pointing out what to look out for over coming months.

Over the same decade, Jack has organised speakers for the short and long talks at monthly meetings and the annual members night, having developed a wide range of contacts with birders, researchers and students locally and interstate. Jack leads popular COG outings, including the annual boat trip on Lake Burley Griffin, a winter 'surprise' bus tour (with Jenny Bounds) and the springtime nest workshop.

DAVID McDONALD



David was Secretary of COG for some years in the early 1990s where he was noted for the precision of his work.

David has run the COG E-mail Discussion List ('chat line') since its inception and as a bird records expert has been involved with the often difficult task of records storage and compatibility and translation to Annual Bird Reports.

Perhaps David's most notable contribution was the setting up and management over the years of the Canberra Birds Conservation Fund as a tax-deductible charity to support students and researchers working on approved projects.

David has also made significant contributions to updating COG's constitution and the website.

Like Jack, David is an excellent and popular outings leader, and has influenced and is well respected by his neighbours in leafy Wamboin.

Congratulations to both Jack and David for their great contributions to COG over many years.

After the presentation of the Steve Wilson Medals on 12 October 2016:
(*left to right*)
Alison Russel-French, Jack Holland, David McDonald and Bruce Lindenmayer.

RARITIES PANEL NEWS

The record to note in this group is that of the North Watson Apostlebird, a second record of the species for the ACT. The previous record predates the Rarities Panel and was recorded in 1948, when a flock of six was reported from Hall by Lamm and White (Wilson 1999). As Steve Wilson noted, we are near the edge of the distribution of this species. They are now regularly seen in parks in Cowra and even Booroowa so Canberra is not too far out of range. However the mystery surrounding this bird is its lack of companions and its apparent tameness. The species is not known for solitary behaviour. One Panellist noted that the bird had very old primary feathers and was perhaps a first-year bird.

The other records are catch-ups, one of which (the Australian Brush-turkey at Bywong in 2011) only came to light recently. The Bar-shouldered Dove has now been recorded a few times, while the White-cheeked Honeyeater, a common coastal species, took up residence at the Jerrabomberra Wetlands and was recorded widely there last summer. Its distinguishing feature is a large white cheek-patch on the side of an otherwise black head. It now appears to have hybridised with a closely-related New Holland Honeyeater (see Dabb, this issue).

ENDORSED LIST 89, NOVEMBER 2016

Australian Brush-turkey *Alectura lathami*
1; Dec 2011; John-Pierre Favre; Bywong.

Bar-shouldered Dove *Geopelia humeralis*
1; 13 Jan 2016, Alastair Smith; Bibaringa

White-cheeked Honeyeater *Philidonyris nigra*
1; 13 Dec 2015; Peter Milburn; Jerrabomberra Wetlands NR

Apostlebird *Struthidea cinerea*
1, 28 Sep 2016; Tony Nairn; North Watson

Apostlebird, North Watson (*Julie Clark*)

Contents continued from outside back cover

Columnist's Corner

Canberra Bird Notes

Canberra Bird Notes is published three times a year by the Canberra Ornithologists Group Inc. and is edited by Michael Lenz. Major articles of up to 5000 words are welcome on matters relating to the status, distribution, behaviour or identification of birds in the Australian Capital Territory and surrounding region. Please discuss any proposed major contribution in advance. Shorter notes, book reviews and other contributions are also encouraged. All contributions should be sent to one of those email addresses:

CBN@canberrabirds.org.au or michael.lenz.birds@gmail.com

Please submit contributions in *Times New Romans, with 12 points Font Size and 'No Spacing'*.

Please note that the views expressed in the articles published in *Canberra Bird Notes* are those of the authors. They do not necessarily represent the views of the Canberra Ornithologists Group. Responses to the views expressed in CBN articles are always welcome and will be considered for publication as letters to the editor.

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