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## IN MY OPINION

## RAPTORS AND CONSPICUOUS PREY

## JERRY OLSEN

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Raptors are known to select out conspicuous prey, such as birds that look or behave abnormally. For example, they catch a white pigeon from a flock of dark birds. Charles Darwin in The Origin of Species counselled pigeon fanciers that "hawks are guided by eyesight to their prey - so much so that on parts of the continent people are warned not to keep white pigeons, as being most liable to destruction". It may not be colour itself but individuality in the flock which draws a hunting falcon to the "odd bird out". Derek Ratcliffe, the eminent British Peregrine expert, believed that this "odd bird out" notion showed how Peregrines, as agents of natural selection, weed out sub-standard individuals in the prey population.

Each eye of a hawk or falcon has two foveas, acute focal points where receptors are especially numerous: a central fovea picks out movement, the temporal (side) fovea picks out detail. Raptors are experts at picking out newness (to the area) or defects in prey from a great distance, defects that make prey easier to catch. This is done with the temporal (side) foveas of both eyes.

Raptors constantly audit the landscape for an easy meal, for example, weak or disabled prey, a limping rabbit, birds with missing feathers, young prey, or prey new to the environment, that is, prey that does not know the location of the raptor, or the local cover, the best ways to escape. In Canberra we commonly see raptors take conspicuous or odd prey. Australian Hobbies Falco longipennis commonly take Budgerigars Melopsittacus undulatus at a much higher rate than Canberra bird-watchers see them. These aviary escapees call, do not know hiding places, do not know where the Hobbies live and hunt, and they don't last long when a Hobby is around. Peregrines at Bendora Dam in Namadgi caught a Long-tailed Jaeger Stercorarius longicauda, an arctic bird never seen in the ACT. Peregrines at the same site took a Black Falcon Falco subniger, a bird never reported in the Brindabella's. ACT Little Eagles Hieraaetus morphnoides, Southern Boobooks Ninox novaeseelandiae, and Collared Sparrowhawks Accipiter cirrhocephalus all took White-browed Babblers Pomatostomus superciliosus, said to be extinct in the ACT, and Wedge-tailed Eagles Aquila audax caused a stir when they took Long-nosed Bandicoots Perameles nasuta at two ACT eagle nests, marsupials believed to be extinct in the ACT.

Saunders (1988) suggested that patagial tags on Carnaby's Black-Cockatoo *Calyptorhynchus latirostris* may increase their mortality. The Wedge-tailed Eagle was the only natural predator of Carnaby's Black-Cockatoo in the study area. When a tagged individual was flying, the tags reflected the sun and were obvious with the naked eye over 100 m. The glinting of the tags may have attracted the attention of Wedge-tailed Eagles and allowed them to single out tagged birds when making an attack. Wedge-tailed Eagles accounted for 70% (26/37) of all known deaths and, during 1973, and took 14% of the tagged females breeding in the area and 9% of all females tagged at Coomallo Creek.

Zuberogoitia et al. (2012) found an increase in predation of Hen Harriers *Circus cyaneus* and Monagu's Harriers *Circus pygargus* by Peregrines in northern Spain related to the increasing use of wing tags on these harriers. They discussed whether wing tags had potential negative effects because raptors such as Peregrines singled out harriers wearing them.

There are three messages here: 1- raptors are better at finding rare animals than we are, 2-raptors will take animals newly released in an environment, 3- prey with 'odd' markings such as wing markings or radio-tags may be singled out by predators. On paper, the Brown Treecreepers *Climacteris picumnus* and Southern Bettongs *Bettongia gaimardi* released at the fenced area at Mulligan's Flat are safe from raptors. We have no evidence that ACT raptors have ever taken resident Brown Treecreepers from the remaining ACT populations, that is, in the 5,000 or so prey items we have collected from ACT raptors, we have never found Brown Treecreepers, and so they probably don't take many of them. Furthermore, Wedge-tailed Eagles do not seem to take Bettongs in eastern Tasmania (Nick Mooney personal communication), the region where Bettongs will be sourced for the ACT, and Wedge-tailed Eagles are diurnal while bettongs are nocturnal. However, Richards and Short (1998) showed that Wedge-tailed Eagles on Bernier Island in Western Australia took largely nocturnal prey, including Burrowing Bettongs Bettongia lesueur.

'Odd prey' theory trumps 'normal' foraging theory. Released Brown Treecreepers and Bettongs could meet heavy predation from ACT predators, because they are new to the area, and 'odd'.

## Acknowledgments

Thanks go to Stephen Debus, Susan Trost, Chris Davey, Michael Lenz, Nick Mooney, Iñigo Zuberogoitia, Adrian Manning and Don Fletcher for helpful discussion.

#### References

- Darwin, C. 1859. The Origin of Species, by Means of Natural Selection or the Preservation of favoured Races in the Struggle for Life, John Murray, London, UK.
- Olsen, J. & S. Debus 2011. Conspicuous prey taken by raptors and butcherbirds. *Boobook* 29 (1): 9.
- Olsen, J., A.B. Rose and W.E Boles 2011. Black Falcon taken by Peregrine Falcon. *Australian Field Ornithology* 28: 133-135.
- Olsen, J., D. Judge, E. Fuentes, A.B. Rose & S. Debus 2010. 'Diets of Wedge-tailed Eagles (*Aquila audax*) and Little Eagles (*Hieraaetus morphnoides*) breeding near Canberra, Australia'. *J. Raptor Research* 44: 50-61.
- Olsen, J., E. Fuentes, D.M. Bird, A.B. Rose & D. Judge 2008. 'Dietary shifts based on prey availability in Peregrine Falcons and Australian Hobbies near Canberra, Australia. *J. Raptor Research* 42: 125-137.
- Richards, J.D and J. Short (1998) Wedge-tailed Eagle *Aquila audax* predation on endangered mammals and rabbits at Shark Bay, Western Australia. *Emu* 98: 23-31.
- Saunders, D. A. 1988. Patagial tags: Do benefits outweigh risks to the animal? *Australian Wildlife Research* 15: 565-9

Trost, S., Olsen, J. and Rose, A.B. 2008 Winter diet of Southern Boobooks *Ninox novaeseelandiae* in Canberra 1993-2004. *Corella* 32: 66-70.

Zuberogoitia, I., Arroyo, B. O'Donoghue, B., . Zabala, J., Martinez, J.A., Martinez, J. E., Murphy, S. G. 2012. Standing out from the crowd: are patagial wing tags a potential predator attraction for harriers (*Circus* spp.)? *J. Ornithology*. DOI 10.1007/s10336-012-0842-2

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**Australian Hobby** (Julian Robinson))

# AUTUMN BREEDING OF THE SPECKLED WARBLER IN THE ACT

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#### 1. Observations

Autumn breeding for the Speckled Warbler (*Chthonicola sagittata*) is rarely recorded in the ACT. On 6 March 2012, a nest under construction was located in Woodstock Nature Reserve in the ACT, on the track to Shepherds Lookout. By the next visit on 26 March, the nest was complete but not inspected. At the following visit on 12 April, the nest contained young (unknown number as the nest was not approached), with adults of both sexes bringing food. The young were still in the nest on 24 April. They had left the nest by 26 April but could not be located. Two adults were feeding a single dependent young bird within 50 meters of the nest on 27 April. The three birds were observed several times up to the 28 May with the young bird begging but feeding was not seen again. These times align fairly well with the 17-20 day incubation period and the 15-19 day nestling period reported by Gardner (2002) from the observation of 160 nests in the ACT. Using the longest of Gardner's times as an estimate and working back from 27 April, incubation would have started around 19-26 March. This is well outside the latest egg lay time of February recorded by Gardner.

The COG database of observations contains only 7 other breeding records for the period March to May. One of these was a nest with young recorded on 10 April 1987 at CSIRO Black Mountain (Lepschi 1987). The other 6 records are of dependent young on 10 March 1993 at Bluett's Forest Drive, 16 April 2008 at O'Connor Ridge and 19 March 2010 at Jerrabomberra, birds carrying food on 24 March 2002 and 11 April 2011 at Red Hill and nest building on 6 May 2007 at The Pinnacle Nature Reserve.

The COG chatline contains a couple of other references to Speckled Warbler breeding in autumn. Tobias Hayashi recorded a bird being fed on 18 March 2009 at Cooleman Ridge Nature Reserve, Con Boekel recorded a bird being fed on 20 May 2007 (location not stated) and Margaret Leggoe reported a bird carrying nesting material on 2 April 2010 at Callum Brae.

There are no autumn breeding records on Eremaea or in the COG Garden Bird Survey. No autumn breeding records could be extracted from Atlas of Living Australia.

While there are not many autumn breeding records for the Speckled Warbler in the ACT, what there is indicates that autumn breeding has been recorded each year from 2007 to 2012 and in widely separated areas. Breeding has occurred during the recent drought (records in 2002, 2007, 2008, 2009 and 2010).

## 2. Impact of rainfall on autumn breeding

There was a comment made on the COG chatline by Margaret Leggoe (6 March 2012) that autumn breeding may be prompted by high rainfall events. While 2001 to October 2010 were considered drought years, some months recorded above average rainfall. Using data from the Bureau of Meteorology from Bindaga St, Aranda (a site reasonably central to the locations where autumn breeding has been reported), well above average rainfall (at least 20% above) occurred in February 1987 (71.4mm), January (101.6mm) and March 1993 (81.8mm),

February 2002 (219.2mm), February 2007 (71.6mm), April 2009 (86.6mm), February (160.8mm) and March 2010 (85.4mm), February 2011 (139.6mm) and February (162.6mm) and March 2012 (251mm). There was no above average rainfall for January to March in 2008. However, December 2007 was higher than the average (112mm). In 2008 there was also above average rainfall in November (84.4mm) and December (102.8) which could influence 2009.

Table 1. Monthly average rainfall for Bindaga St, Aranda (Bureau of Meteorology).

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
59.1	58.7	57.0	46.6	42.8	44.5	50.8	53.6	59.4	61.4	70.2	56.4	662.5

The distribution of days with high rainfall is not even; February and November have the highest number, June has the lowest. Table 2 below shows the distribution.

Table 2. Number of days with high rainfall in each month (from over 41 years of records) for Bindaga St, Aranda (Bureau of Meteorology).

Rainfall in one day (mm)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
25-<50	16	18	17	17	13	10	14	13	20	18	21	15
50-<75	2	6	5	2		1		1			4	3
75-<100	3	1	1	1								
100-<125	1											
125-<150			1									
Total	22	25	23	20	13	11	14	14	20	18	25	18

As the young are dependent for about 5 weeks and incubation starts 32 to 39 days before fledging (Gardner 2002) it is possible to estimate the time incubation started and compare this to months with well above average rainfall (Table 3). These data are not precise enough to draw firm conclusions about the relationship with higher than average rainfall. While there are some significant rainfall events which could be aligned with breeding, this is not consistent. Some breeding events have been recorded in very dry years such as the one with an estimated start of incubation between 4 January and 8 February 2010. These data also show that some of the breeding recorded in autumn would have started in summer: 1993, 2009 and the 2010 record of dependent young.

# Table 3. Breeding events matched to high rainfall months.

In the graphs below, the vertical bars are rainfall, the solid line is the estimate of incubation commencing (incubation could have started anywhere within this period and still match the breeding event recorded in the COG database) and the dotted line the total rainfall for the month (plotted against the right axis).

Breeding Event	Estimate of incubation commencing (using Gardner 2002)	Graph of daily and monthly rainfall with estimate of incubation commencing
10 April 1987 Nest with young	2-24 Mar 1987 (17-39 days earlier)	60 40 20 0 Dec-86 Jan-87 Feb-87 Mar-87
10 March 1993 Dependent young	26 Dec 1992 to 30 Jan 1993 (39-74 days earlier)	60 40 100 20 0 Nov-92 Dec-92 Jan-93
24 March 2002 Carrying food	9 Jan-7 Mar 2002 (17-74 days earlier)	100 50 100 0 Nov-01 Dec-01 Jan-02 Feb-02Mar-02
6 May 2007 Nest building	May 2007	40 30 20 10 0 Feb-07 Mar-07 Apr-07 May-07
20 May 2007 Young being fed	7 Mar to 11 Apr 2007 (39-74 days earlier)	See graph above.
16 April 2008 Dependent young	1 Feb to 8 Mar 2008 (39-74 days earlier)	40 150 100 20 50 0 Dec-07 Jan-08 Feb-08 Mar-08

Table 3 continued

Table 3 continued		
Breeding Event	Estimate of incubation commencing (using Gardner 2002)	Graph of daily and monthly rainfall with estimate of incubation commencing
18 March 2009 Dependent young	3 Jan to 7 Feb 2009 (39-74 days earlier)	100 50 100 50 0 Nov-08 Dec-08 Jan-09 Feb-09
19 March 2010 Dependent young	4 Jan to 8 Feb 2010 (39-74 days earlier)	60 40 20 100 0 Dec-09 Jan-10 Feb-10 Mar-10 Apr-10
2 April 2010 Nest building	April 2010	See graph above
11 April 2011 Carrying food	27 Jan to 25 Mar 2011 (17-74 days earlier)	100 200
		0 Dec-10 Jan-11 Feb-11 Mar-11
March-May 2012 Nest building to dependent	16-26 March	100 300 200
young		0 Jan-12 Feb-12 Mar-12

## 3. Comparison with breeding at other times of the year

Tabulating the breeding data from the COG database clearly shows two breeding peaks: the first in August to December and the second from March to May (see Table 4). However, nest building recorded in December and May points to breeding occurring throughout the year even though there are no records in June, July or February on the COG database. Gardner (2002) recorded nests with eggs from July through to February, with 87% being in August to November. Gardner's data combined with the COG records for March to May creates a picture of nesting occurring throughout the year. Active nests have been recorded from July to April and the nest building recorded in May should result in an active nest in May to June.



Figure 1. Male Speckled Warbler feeds young, 27 April 2012 Shepherds Lookout



Figure 2. Dependent young Speckled Warbler (line points to gape), 27 April 2012 Shepherds Lookout.

Table 4. Number of breeding records by type and month

Breeding activity	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Total
Nest Building		4	3	3	1	1			1		1		14
Bird on or seen													
leaving nest					1				1				2
Nest with eggs						1							1
Nest with young			5	1		1				2			9
Carrying food			2	4	1	1			1	1			10
<b>Dependent</b> young			2	14	2	4	1		2	3			28
Total breeding		I	1	I	I	1	I	I	I	I	I	1	
records	0	4	12	22	5	8	1	0	5	6	1	0	64

## 4. Conclusion

Autumn breeding of the Speckled Warbler may be a regular occurrence in the ACT and may not necessarily be related to above average rainfall. The records of Speckled Warbler breeding indicate that breeding may actually occur throughout the year but with two peaks, the largest in spring and a smaller peak in autumn. More breeding records are required to complete the picture of Speckled Warbler breeding in the ACT.

## References

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

Bureau of Meteorology – http://www.bom.gov.au/

COG Chatline - http://bioacoustics.cse.unsw.edu.au/archives/html/canberrabirds/

Eremaea – http://www.eremaea.com./

Gardner, J.L. (2002) Breeding biology of the Speckled Warbler, *Chthonicola sagittata*. *Australian Journal of Zoology* 50(2) 169 – 181.

Lepschi, B.J. 1987. Autumn breeding of the Speckled Warbler. Canberra Birds Notes 12: 98.

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# TIME BUDGET AND BEHAVIOURS OF WHITE-WINGED CHOUGHS (CORCORAX MELANORHAMPHOS) IN WESTON PARK, CANBERRA, IN WINTER

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Abstract. White-winged Choughs were studied in an urban park in Canberra during the non-breeding, winter period of 2011. White-winged Choughs preferred to forage in the shade of exotic trees that offered protection from attacks by the Australian Magpie (Gymnorhina tibicen) and that harboured a better food supply. They spent most of the day foraging in various substrates that influenced their pecking rates. Encounters between conspecifics and other species caused varying reactions. Preening included dust-bathing and allopreening.

**Key Words**: Time Budget, Behaviour, White-winged Chough

## 1. Introduction

White-winged Choughs (*Corcorax melanorhamphos*) ["choughs" thereafter] are medium sized birds, averaging 44cm in length, a wing span of 65 cm and a weight of 360g. (Higgins *et al.* 2006; Heinsohn 2009). Heinsohn (2009) describes them as "comical and endearing birds".

Choughs are obligate co-operative breeders and build mud nests. The only other member of the Corcoracidae family is the Apostlebird (*Struthidea cinerea*) (Higgins *et al.* 2006). Their distribution overlaps to a large degree but in the Australian Capital Territory (ACT) the Apostlebird is only a rare vagrant (Wilson1999).

Choughs are sedentary and form larger flocks in common territories during the non-breeding months (Cox and Bauer 1997; McComas Taylor and COG 1992). They return to their breeding territories by the end of August. Breeding groups defend their territory of approximately 20 hectares until February (Beck and Heinsohn 2006). A breeding group requires from 4-20 birds to raise chicks successfully (Higgins *et al.* 2006) and is headed by a dominant male and female adult pair with juvenile and adult helpers or both, which are more than likely related (Beck and Heinsohn 2006).

It was suggested by Heinsohn (1987) that the large flocks have the advantage of individuals spending less time being vigilant and more time feeding. Given that there are fewer insects in winter months this would be in their favour. Juveniles mature slowly, learn from other members and share raising young (Heinsohn 2009).

Choughs are black with short and wide wings which enables them to make fast take offs but their flight is not strong for any length of time (Appendix 2).

Their narrow beak is curved downward slightly to push aside litter and probe the ground when foraging. Choughs forage inefficiently (Boland *et al.* 1997) and spend most daylight hours foraging for beetle larvae, earthworms, other invertebrates and seeds. (Heinsohn 2009; Morecombe 2000), fruit, shoots and plant tubers (Higgins et al. 2006). Those living in urban

areas can be opportunistic feeders and raid rubbish bins (Beck and Heinsohn 2006) or visit bird feeders. It takes at least four years, until sexual maturity, to develop full foraging skills (Heinsohn 2009; Heinsohn and Legge 1999).

Adults have red eyes. Juveniles have dark eyes that become successively redder over the four years of maturation. When excited or startled the conjunctiva of the eyes engorge with blood and they appear bright red and bulbous (Heinsohn 2009). This is not limited to adults; younger birds were also seen with bulbous, red eyes when startled (personal observation) (Appendix 2).

Choughs occupy eucalypt woodlands of south-eastern Australia (Beck and Heinsohn 2006) and modified habitats such as agricultural land, "exotic pine plantations and urban areas" (Higgins *et al.* 2006). They take advantage of habitat modification with the creation of more permanent, sometimes year-round, food and water supplies (Beck and Heinsohn 2006).

In this paper I report on three behaviours of the White-winged Chough in the non-breeding season: foraging modes on different substrates, preening and interaction with conspecifics and other species. In addition I comment on locomotion and vocalisations.

### 2. Methods

The study area was Weston Park, Canberra ACT. Situated at 35°17'S 149°05'E at an elevation of 557m the park is a peninsula surrounded by the waters of Lake Burley Griffin which was set up for the purpose of a recreational park and a Government wholesale nursery and arboretum. There are picnic facilities, a children's train ride area, playgrounds, a nursery and a restaurant. This park has an area of approximately 39.8 hectares (TAMS website). Adjacent are the Royal Canberra Golf Course (Westbourne Woods), Government House and the residential suburb of Yarralumla.

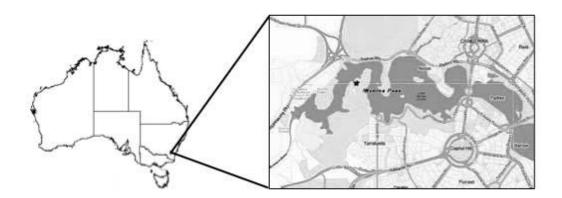


Figure 1. Location map of the Weston Park study site.

The park was well maintained. Grassed areas were mown and the exotic trees have formed areas of tan bark out to their drip line. The trees (Fig. 2) are deciduous Green English Elms (*Ulmus procera*), non-deciduous Atlas Cedars (*Cedra atlantica*), oak trees (*Quercus* spp.) and various pine species with the most common one being Radiata Pine (*Pinus radiata*). Identified eucalypt species were Blue Gum (*Eucalyptus globulus*) and Sydney Blue Gum (*Eucalyptus saligna*) (Pryor and Banks 1991).

The study site was visited on 16 occasions between 20<sup>th</sup> July and 4<sup>th</sup> September 2011. The choughs were followed to ascertain which behaviours to study and on 12 subsequent, random visits these were annotated onto 'cash register' strips of paper divided into minute segments

within five-minute blocks. Noted also was the prevailing weather conditions including temperature and wind speed.

The last two visits were to confirm the group age makeup, map dust-bathing trees and to identify trees. Choughs were not in the park before 10:00 h on the first two visits so the decision was made to start observations after 11:00 h.

The main flock contained a maximum of 28 birds but it differed daily. Each day I chose a small group of 2 to 12 (average 6) birds within this flock to study). 11 of 19 groups studied contained 5 birds.

Most observations ended with the choughs flying off because they were disturbed by the wind or other species or it became too cold for me to stay. Diurnal temperatures were between -2 and 13°C and dusk commenced around 1700 hrs.

The routes the choughs took each day were mapped on a Google Earth printed map and three main areas were identified (Fig. 2).

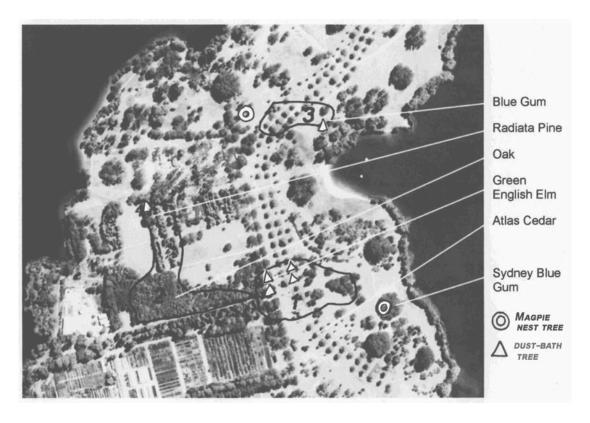


Figure 2. Weston Park study area showing the areas frequented by White-winged Choughs, some tree species and known occupied magpie nests. Trees marked with " $\Delta$ " are trees regularly chosen to dust bathe around the base of the trunk.

For analysis I laid the paper strips side by side with the time of day correlated to look for patterns in behaviours and entered data into an Excel spreadsheet.

Foraging, preening and inter- and intra-species interactions were expressed as single occurrences (because most were so brief), assigned a time value, added, then divided by the number of birds being observed in each half hour segment and expressed as a percentage.

In order to quantify pecking and calling rates I took video recordings for later analysis.

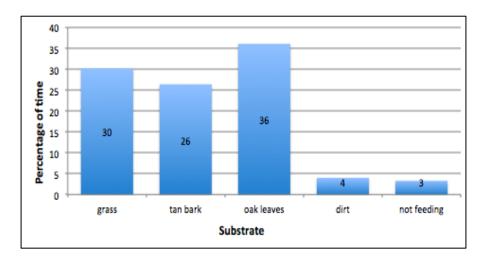
All birds and mammals living and using the park were accustomed to the presence of people but were still wild and very cautious. The choughs were not intimidated by my presence. On several occasions they foraged at my feet and walked past without reacting.

### 3. Results

The choughs frequented three main areas within the park (Fig. 2). One was a large area with a combination of Atlas Cedars, Green English Elms, oaks and Sydney Blue Gum plus several other exotic and native species (with tan bark and grass substrates). The second area had predominately oak trees, grass and Radiata Pine (grass and oak leaf substrates). The third had grass, Himalayan Cedars, Atlas Cedars and Blue Gums (grass, dirt and tan bark substrates).

## 3.1 Foraging

The mode of feeding was different for each substrate. On grass the birds moved more quickly and pecked the ground approximately 97 times a minute (10 samples). Grass was short offering very little obstruction to finding food. On tan bark and oak leaf substrates choughs raked their beaks from side to side, picking up, turning over and removing bark and leaves to expose the ground underneath. Often they spent some time (10-30 seconds) delving deeper into the ground under the substrate. It was easier to forage in oak leaf litter and leaves were thrown aside. Four samples gave an average of 75 pecks per minute. Tan bark litter was more dense and difficult to trawl through. The pecking rate was 66 pecks per minute (11 samples). This 'trawling' action was constant except when there was a disturbance or birds regrouped (coming back into a tighter group). Because choughs spent only 4% of time on dirt this was not videoed but the pecking rate seemed to be the same as for foraging on grass.



**Figure 3.** The percentage of time spent feeding on each substrate. *Grass* is mown park grassland; *tan bark* is areas formed around Elms and some smaller trees; *oak leaves* consists of a thick layer of dried oak leaves and tan bark; *dirt* is formed car park with small gravel. *Not feeding* is time taken with preening, intra- and interspecies interactions and flying.

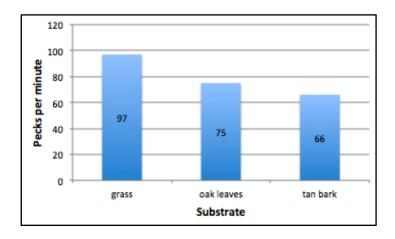


Figure 4. Pecking rates in relation to substrate.

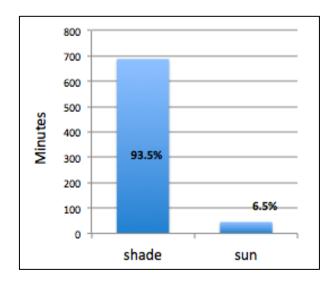


Figure 5. Amount of time spent in sun and shade during foraging.

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It was difficult to observe the rate of prey capture, or seed eating, because the birds moved so quickly. However, it was apparent that only a small percentage of pecks achieved success.

Choughs foraged around the Blue Gums in area 3 but avoided other areas with planted eucalypts because of territorial magpies. Choughs were swooped as soon as they entered the magpie territories.

Of the time 93.5% was spent in full shade or patchy shade of evergreen or deciduous trees and on grass on cloudy days. Only 6.5% of time was spent in sun feeding on grass substrate. The reason for this is not clear but perhaps the substrate under the trees (shade or part shade) harboured more insects as well as giving more protection from swooping magpies when in the magpie territories. When the choughs were foraging in the sun they moved more quickly than when it was overcast.

## 3.2 Inter-species Interactions

There are many different species of birds in Weston Park (Appendix 2). Choughs appeared not to take much note of the presence of most species because of the minimal threat and the concentration given to foraging. Choughs foraged alongside Purple Swamphens (*Porphyrio porphyrio*), Crested Pigeons (*Ocyphaps lophotes*), Magpie-larks (*Grallina cyanoleuca*) and Red-rumped Parrots (*Psephotus haematonotus*).

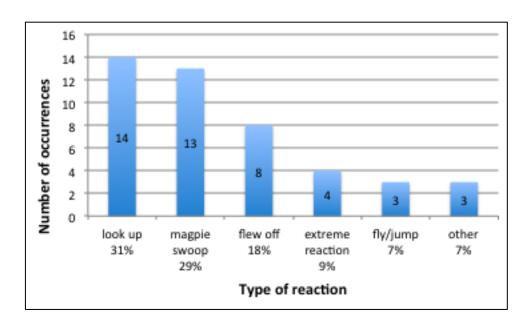


Figure 6. Number of occurrences of inter-species interaction and the type of reaction.

**look up** – alarmed and stand erect and look up momentarily when other bird species call or fly past or there is an unexpected noise;  $magpie\ swoop$  – 1 or 2 magpies fly in low and fast and land near choughs which were sometimes frightened and flew into trees and proceeded to preen and allopreen. Usually came down to the ground within a minute;  $flew\ off$  – as a result of disturbance or for no apparent reason;  $extreme\ reaction$  – fluff up and postulate and/or gape and eye engorgement; fly/jump – startled and jump, sometimes spreading wings and gaining small elevation; other – increased alertness when a dog being walked past and vehicular traffic.

Inter-species interactions caused minor alarm in 31% of cases, making the choughs stand straight and look up, sometimes with reddened eyes. A flock of over 100 Sulphur-crested cockatoos (*Cacatua galerita*) appeared regularly screeching loudly as they flew, particularly mid to late afternoon. The choughs looked up on most occasions. Two times a child made a noise in the distance that caused a 'look-up' reaction.

By far the most aggressive interactions were from swooping magpies. In the ACT magpies start nest building at the beginning of July whereas choughs do not begin until a month later (McComas Taylor and COG 1992). Two magpie territories were identified (Fig. 2) in the study area. Choughs were swooped in both these areas. A swoop consisted of a strong downward flight, by one or two magpies, ending very close to the chough group. The magpies either stayed extremely close to the choughs in an intimidating pose for up to 30 seconds or took flight after only seconds. The chough reactions were varied: from taking no notice, to all birds of the group fluffing up, wings spread and running towards the magpies in defence, or flying onto low branches of the closest tree.

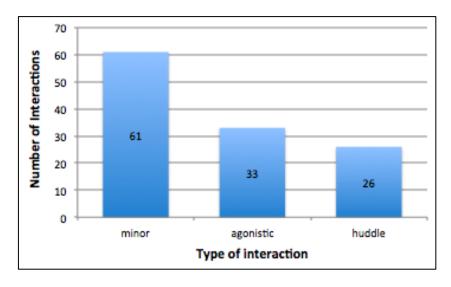
Extreme reactions (9%) involved fluffing up, posturing with wings spread, eye engorgement and gaping. This happened when choughs were startled by magpies, kangaroos or, on one occasion, an Australian Raven.

A 'fly-jump' reaction occurred when at different times an Australian King Parrot, a Magpielark and an Eastern Grey Kangaroo (*Macropus giganteus*) startled a feeding chough. The bird flapped wings and jumped up about one metre. Fly/jump reactions made up 7% of the total interactions.

'Other reactions' was an increased level of alertness when a dog was being walked nearby and twice when vehicles drove past. This also made up 7% of the occurrences.

## 3.3 Intra-species Interactions

Minor and agonistic responses and huddles were momentary intra-species interactions, never lasting more than 5-15 seconds.



**Figure 7.** Number of observed intra-species interactions. *minor reactions* – an unintentional interaction; *agonistic behaviour* – an intentional interaction; *huddle* - several birds grouped closely together.

I classed a minor interaction as normal activities whilst foraging and engaged with other daily activities. These were by far the most numerous and unintentional. Foraging choughs kept close to each other but moved in random directions. At no time were group members more than three metres apart. Occasionally two choughs would bump into one another completely

by accident causing a minor alarm call and each continued on its way. Occasionally when a chough found something interesting other choughs close by would rush in to investigate. At other times there would be a noisy reaction when a different group of birds flew into the same area. Minor interactions made up 51% of all intraspecific reactions.

Agonistic behaviour consisted of intentional contact. 28% of total interactions were agonistic between two choughs and sometimes several birds. Mostly there was a combination of gaping, tail bobbing, fluffing up, screeches and wing posturing. Sometimes eyes engorged.

The third behaviour was a "huddle" where three or more birds rushed in and fluffed up, squawking and pushing into the centre. Sometimes one bird lay on the ground while others stood on it. This counted for 26% of intra-specific interactions.

# 3.4 Preening

Choughs spent very little time preening. In 19 hours of observation I noted only 48 incidences of preening. During foraging there was the very occasional stretching of wings and scratching. On two occasions a pair of birds preened each other at the base of a tree. This lasted for several minutes. All other preening was done in trees after the birds had been disturbed from foraging and flown into trees. These preening sessions lasted from seconds to several minutes and on several occasions they preened each other, to the extent that one lifted a wing for another to preen beneath. Dust bathing occurred when the birds passed the trees with obvious dust 'holes' around the trunk. It seemed that they randomly 'bumped' into these trees. One episode of dust bathing lasted 35 minutes with birds coming into the dirt area, bathing and moving off, but being replaced by other birds. It was a communal activity with birds giving loud contact calls to advertise they were there and small squawks when a new bird joined the group.

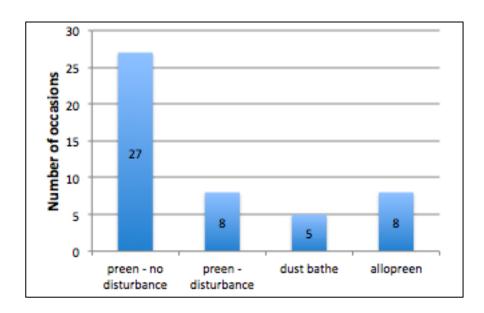


Figure 8. Preening occurrences.

Dust bathing consisted of picking up dirt in the beak and dropping the dirt between fluffed-up feathers and performing 'normal' preening activities.

I identified six trees within the three foraging areas that were dust-bathing trees (Fig. 1). All were elms, cedars and pines except one, which was a Blue Gum, the only bathing tree in that foraging area.

## 3.5 Activity Time Budget

Two time brackets (10:00-10:30, 12:30-13:00 h) had only one sample and 10:30-11:00 h had two samples. 13:00-13:30 h did not have a complete sample and could not be used. All other time slots had three or more samples.

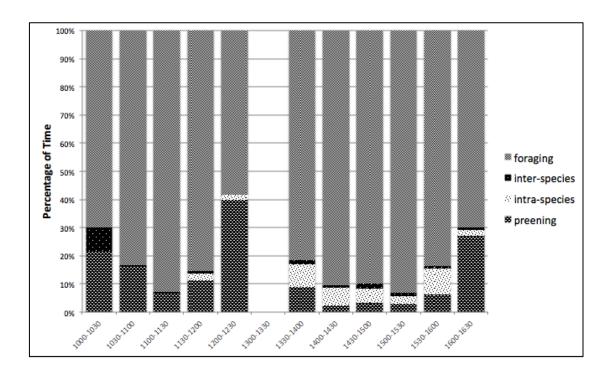


Figure 9. Time budget for White-winged choughs at Weston Park.

Foraging, inter- and intra-species interactions and preening time expressed as a percentage of total time.

The activity budget shows that by far the most time is spent foraging. Other species encounters were few and the time taken for dust-bathing elevated the preening figures.

## 4. Discussion

Large winter flocks of 40-50 birds have been reported in Weston Park (Holland 2004). The study flock of 28 birds was assumed to be a winter aggregation (July and August) as towards the end of my study (late August) it was harder to find more than one or two groups of 5 individuals.

The youngest birds were 10 months old and had almost full adult plumage. Juveniles were identified by their darker eye colour. Because individual birds were hard to recognize I had to assume that in early September the small group I observed consisted of the same birds.

It is possible that, in this urban park, five birds make a successful breeding group. My finding concurs with Beck and Heinsohn (2006) who found that in urban areas of the ACT the average group size was  $6.5 \pm 0.5$ . Heinsohn *et al.* (2000) noted that in surrounding non-urban

areas cooperative breeding groups consisted of 4-14 birds with an average of 9. Urban parkland may have more food with which to raise chicks requiring a smaller number of birds.

All activities are carried out in the company of the group. When the flock was large the birds were more spread out. Foraging choughs seemed to be acting independently and totally absorbed in their task. However, this is deceptive because there was constant calling thus keeping group members in touch with each other. These calls averaged from between two and five seconds apart but generally were every four seconds (personal observation). According to Baldwin (1972) the male is giving those calls; but I could not identify which birds were uttering these sounds or even if it was the same bird in the group. In one short video I observed a juvenile calling three times.

It was difficult to follow individual birds as they were so alike but it seemed as if birds were occasionally moving between groups and back again. Sometimes one group member would realize that its group had moved too far away and it ran back to join them. Small groups would come back together every now and then. I did not find any time pattern in this behaviour, it just seemed to happen. My last observation was of a single remaining group of 5 birds after the main flock had dissipated. These birds stayed within a metre of each other and regularly called to each other.

Choughs only flew when startled or when relocating over some distance. They walked while foraging and, if they needed speed, they ran instead of flying.

There were never any malicious interactions towards other species initiated by choughs. When they were startled or swooped by magpies the characteristic eye engorgement occurred in adults and juveniles alike. Noises and other birds flying above and magpie swoops startled them. Cockatoo screeching provoked the largest number of 'look-up' reactions (Fig. 6). When startled or being swooped choughs made harsh calls.

There were several chough/chough encounters where two birds postured, squawked, and gaped. One bird always backed down so I assume this were hierarchical 'battles'.

Foraging was at a fast pace all day and varied on different substrates. The pecking rates indicated the degree of difficulty of foraging in different substrates. The denser the substrate the slower was the rate of pecking. Their preference was to forage in shade and under cover of exotic trees. They spent most time (93.5%) beneath the Atlas Cedars and oak trees where it was more difficult for magpies to swoop and where there was more food. Heinsohn *et al* (1988; cited in Higgins et al. 2006) stated that White-winged Choughs had a systematic foraging route within their territory. I did not observe this in my time-limited study.

The only extended time choughs spent foraging on grass was when it was overcast or the sun temporarily hidden by cloud. They moved from one shaded area to another quickly but still pecking. Cox and Bauer (1997) suggested that grassland contained high quality biomass for food and that feeding on grass was worth being harassed by magpies. My findings did not agree with Cox and Bauer as only 6.5% of foraging time was spent in open grass areas. However, the habitat is quite different, Cox and Bauer studied (retired) agricultural grasslands and dry sclerophyll eucalypt forest which cannot be compared to the grassed areas of Weston Park with small areas of deciduous trees and, added tan bark under and around the English Elm trees.

Clearly choughs spent most of their time foraging indicating that they are inefficient feeders. There was no obvious rest period in the middle of the day. However, my observations

occurred in winter when food supplies were not as abundant and the choughs foraged over the same areas every day.

In windy weather choughs were restless and spent less time at each foraging spot.

Preening and allopreening was seldom done except when choughs were disturbed and they flew to trees (and very quickly flew back to the ground). Dust-bathing was a very social and prolonged activity but never involved allopreening.

It was unfortunate there were not more observations from 12:30–13:30 h. More observations were not possible because the group dynamics had changed from non-breeding to breeding mode.

This study has raised questions for further investigation, such as to determine the percentage of successful pecks and examine more systematically the foraging patterns of White-winged Choughs especially in different seasons.

## Acknowledgements

Thanks must be given to Dr. Iain Taylor (Charles Sturt University) for introducing this subject and guidance in writing a scientific paper. Many thanks go to my family for giving me support and Gail Neumann who was a wonderful sounding board.

#### References

- Baldwin, M., 1972. The nesting of the White-winged Chough. *Aust. Bird Watcher* 4: 182-200.
- Beck, N.R. and Heinsohn, R. (2006) Group composition and reproductive success of cooperatively breeding White-winged Choughs (*Corcorax melanorhamphos*) in urban and non-urban habitat. *Austral Ecology* 31(5): 588-596.
- Boland, C., Heinsohn, R. and Cockburn, A. (1997) Deception by helpers in cooperatively breeding White-winged Choughs and its experimental manipulation. *Behavioral Ecology and Sociobiology* 41(4): 251-256.
- Cox, S. and Bauer, J. (1997) Species interactions between the White-winged Chough and Australian Magpie in a fragmented landscape. *Pacific Conservation Biology* 3: 289-294.
- Higgins, P.J., Peter J.M. and Cowling, S. J. (Eds.) 2006 *Handbook of Australian, New Zealand and Antarctic Birds*. Vol. 7. Oxford University Press: Melbourne, Australia.
- Heinsohn, R. (1987) Age-dependent vigilance in winter aggregations of co-operatively breeding White-winged choughs. *Behavioural Ecology and Sociobiology* 20(4): 303-306.
- Heinsohn, R. (2009) White-winged Choughs: the social consequences of Boom and Bust. In 'Boom & Bust. Bird stories for a dry country.' (Eds. Robin, L. Heinsohn, R. and Joseph, L.). CSIRO Publishing, Collingwood.
- Heinsohn, R., Dunn, P., Legge, S. and Double, M. (2000) Coalitions of relatives and reproductive skew in cooperatively breeding White-winged Choughs. *Proc. R. Soc. Lond. B.* 267: 243-249.
- Heinsohn, R., and Legge, S. (1999) The cost of helping. *Trends in Ecology & Evolution* 14(2): 53-57.
- Holland, J. (2004) Large flocks of White-winged Choughs in western Yarralumla. *Canberra Bird Notes* 29(3): 109-110.

McComas Taylor, I., and COG (1992) *Birds of the Australian Capital Territory: An Atlas'* Canberra Ornithologists Group Inc and the National Capital Planning Authority: Canberra.

Morecombe, M. (2000) *Field Guide to Australian Birds*. Steve Parish Publishing: Archerfield, Queensland.

Pryor, L., and Banks, J. (1991) Trees and shrubs in Canberra. Little Hills Press, Canberra.

Wilson, S. (1999) Birds of the ACT: two centuries of change. COG, Canberra.

## Websites:

http://www.lib.unimelb.edu.au/collections/maps/digital/outline-maps/index.html - Map of Australia

http://www.whereis.com/act/canberra#session=MTE - Map of Canberra

http://www.tams.act.gov.au/\_\_data/assets/pdf\_file/0018/12672/pominnercanberradistrictparks pdf.pdf - Area of Weston Park

Accepted 11 September 2012

## Appendix 1.

## Bird species seen in Weston Park July to September 2011

Smaniag	
Species	
Black Swan	Cygnus atratus
Australian Wood Duck	Chenonetta jubata
Pacific Black Duck	Anas superciliosa
Crested Pigeon	Ocyphaps lophotes
Purple Swamphen	Porphyrio porphyrio
Masked Lapwing r	Vanellus miles
Silver Gull	Chroicocephalus novaehollandiae
Galah	Cacatua roseicapilla
Sulphur-crested Cockatoo	Cacatua galerita
Australian King Parrot	Alisterus scapularis
Crimson Rosella	Platycercus elegans
Eastern Rosella	Platycercus eximius
Red-rumped Parrot	Psephotus haematonotus
Laughing Kookaburra	Dacela novaeguineae
White-throated Treecreeper	Cormobates leucophaeus
Satin Bower Bird	Ptilonorhynchus violaceus
Superb Fairy-wren	Malurus cyaneus
Noisy Miner	Manorina melanocephala
Red Wattlebird	Anthochaera carunculata
Australian Magpie	Gymnorhina tibicen
Pied Currawong	Strepera graculina
Australian Raven	Corvus coronoides
Magpie-lark	Grallina cyanoleuca
White-winged Chough	Corcorax melanorhamphos

# Appendix 2

# Illustrations of some behaviours of the White-winged Chough.

(All photos by author; the drawing from Morecombe 2000)

Wing markings: White primary feathers











Alert "look-up" behaviour: showing gaping and engorged eye

# **Posturing:**

# **Locomotion:**

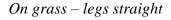




Choughs prefer to run rather than fly

# **Foraging:**







On tan bark – more of a squatting pose



Slower rates of foraging were observed in deeper leaf litter

# SILVER GULLS BREEDING ON SPINNAKER ISLAND, LAKE BURLEY GRIFFIN, SPRING 2011

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# 1. Background

Holland (2004a and b) was the first to report the breeding of Silver Gulls (Chroicephalus novaehollandiae) on Lake Burley Griffin. During the 2003-04 breeding season Holland described nesting on moored boats on the lake though the yachting fraternity were aware of the breeding for at least ten years previously.

In late 2008 Julian Robinson reported breeding on Spinnaker Island and Davey and Fullagar (2011) provided the results of three visits to the island during the 2010 breeding season. With approval from the National Capital Authority it was agreed that a survey during the 2011 breeding season using the same protocol but at more frequent intervals would allow a better understanding of the breeding success and would determine whether the colony continued to increase in size.

### 2. Observations in 2011

On 18 August 2011 a few Silver Gulls were noticed perched or flying over Spinnaker Island with 40-50 gulls around the island the following day. Between then and mid-September birds were noticed irregularly around the island with a permanent presence from 17 September onwards and laying must have commenced not long after that date. The first visit to the island was on 26 September with subsequent visits at approximately 2 week intervals on 13 October, 27 October, 15 November, 23 November, 7 December, 21 December and 4 January. By the time of the first visit on 26 September 15 nests containing 20 eggs were noted (see Table 1).



Silver Gulls flying around Spinnaker Island (Peter Fullagar)

Table 1. Nest content, number of nests and of adult Silver Gulls and colony area (m<sup>2</sup>) on Spinnaker Island, Lake Burley Griffin between 26. September 2011 and 4. January 2012.

Nest content	26. Sep	13. Oct	27. Oct	15. Nov	23. Nov	7. Dec	21. Dec	4. Jan
4 eggs		1						
3 eggs		25	47	6	12	5	3	1
2 eggs	5	45	68	6	16	9	4	1
1 egg	10	15	10	11	8		4	1
3 eggs + 1 chick					1			
2 eggs + 1 chick			1					
1 egg + 2 chicks			1					
1 egg + 1 chick			1	1	1			
3 chicks				2				
2 chicks			2	8	7			
1 chick			5	12	12	6		
Total nests	15	86	135	46	57	20	11	3
Total eggs	20	184	291	42	80	33	21	6
Total small chicks			13	35	28	6		
Total large chicks				3	11	13	6	
Flying young on						52	105	40
water								
Flying young at Club							40	
<b>Estimated no. adults</b>	150	250	400	350	350	300	200	100
Colony area (m <sup>2</sup> )	350	580	843	445	462			

The number of active nests and total number of eggs increased after the first visit to a maximum of 135 nests and 291 eggs by 27 October. By that time the first-laid eggs were starting to hatch and 13 small chicks were recorded. From the visit of 15 November onwards there was a large reduction in the number of active nests until at the final visit on 4 January there were 3 active nests only. There was a corresponding reduction in the total number of eggs on the island. A slight increase in the number of active nests on 23 November visit suggests that there was a second bout of laying either brought about by birds laying a second clutch, birds re-laying after an initial failure or additional birds starting to lay.

The maximum number of small chicks was recorded on 15 November. On that date a few additional young regarded as chicks capable of leaving the nest were first observed. From 7 December onwards young were mature enough to be found away from the island creched on the water amongst adult birds. Many of the young were capable of flight. On 21 December there were 105 fledged young grouped on the water near the island with an additional 40 seen near the Canberra Yacht Club giving a minimum of 145 young fledged. By 4 January the breeding season had virtually ceased with 3 active nests and no young on the island.

The area covered by active nests increased as the number of nests increased and reached a maximum of 843 m<sup>2</sup> on 27 October (see Table 1)

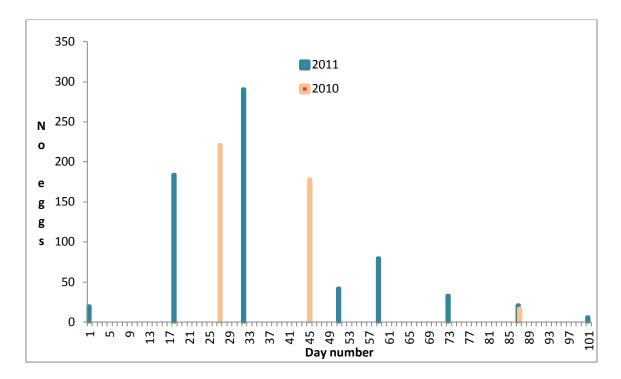
The number of adult birds in the area increased from 150 on 26 September to a maximum of 400 on 27 October and numbers declined after that (see Table 1). The maximum number is similar to that reported in early November 2010 (Davey and Fullagar, 2011).

Between 27 October and 15 November there was a large decrease in the number of eggs, active nests and area of colony yet there was not an expected large increase in the number of small chicks on 15 November. Had all 291 eggs hatched the day after 27 October visit the chicks would be 23 days old on 15 November yet feathering appears by the 3<sup>rd</sup> week after hatching (Wheeler and Watson, 1963) and it is unlikely that chicks will leave the nest before then. Although data are limited it would appear that 50-60% of eggs hatch and young leave the nest (see Higgins and Davies, 1996). This would mean that by 15 October there should have been around 150 chicks, yet only 35 were recorded. No signs of predation or a large number of dead chicks could be found, and yet under normal conditions the chicks would have been too young to leave the nest. The nesting area on 15 November resembled a breeding site at the end of the season with many old nests and many faeces but unusually there was still a large number of adult birds on and around the island. Between 27 October and 15 November there had been a great deal of grass and thistle growth on the island.

During the breeding season it is expected that the area is littered with the remains of dead chicks and dead adults but it is unusual to find apparently sick adults around the colony. During the season a few adults were found sitting on the island in a comatose state. On 27 October a bird was found sitting on a nest and it offered no resistance when picked up and replaced. On 15 November a weak bird was picked up off the ground. It offered no resistance and was unable to fly yet there was breast muscle present and so did not appear to be starving. A second bird was found in a similar state on a nest. On 21 December a bird was found sitting on the ground with its bill pointing slightly upwards and appeared to have trouble breathing. Again this bird offered no resistance when picked up. On the final visit to the Island on 4 January the bird was found dead in the same position as on the previous visit. A couple of birds had been observed showing similar symptoms in 2010. The authors have had experience with the Silver Gull breeding colony on Montagu Island, NSW and there no birds have been found in a similar state.

### 3. Discussion

The breeding colony on Spinnaker Island was visited on eight occasions during 2011 in contrast to three occasions in 2010. Unfortunately on only one occasion (21 December) did visits occur on the same date. By combining the two data sets it would appear that the two seasons were similar with no indication of any large increase in the number of eggs produced in 2011 (see Figure 1) and the colony has not continued to expand as had occurred in previous years.



**Figure 1. Number of Silver Gull eggs recorded during visits to Spinnaker Island, Lake Burley Griffin in 2010** (bars light grey/red in web version) **and in 2011** (bars dark grey/ blue in web version). Day number and date of visit in brackets are as follows: 1- (26/9/11), 18-(13/10/11), 27- (22/10/10), 32- (27/10/11), 45- (9/11/10), 51- (15/11/11), 59- (23/11/11), 73-(7/12/11), 87- (21/12/10 and 21/12/11), 101- (4/1/12).

The breeding colony was in the same location as in previous years and the maximum size of 843 m<sup>2</sup> was only slightly larger than the 700 m<sup>2</sup> recorded the previous year. In 2010 it was estimated that the first eggs were laid around the end of September and the same appears to have been the case in 2011.

The reduction in the number of nests counted between 27 October and 15 November could have been due to some unknown mortality factor such as disturbance to the colony, excessive rainfall, food shortage or due to nests not being found. It is unlikely that rainfall had a significant impact. Very little rain fell over the period although 14.6 mm fell on 9 November and 9.0 mm a day later. A minimum of 145 fledged young were seen on 21 December and given a 50-60% survival between hatching and fledging suggests around 300 eggs, a number not inconsistent with the maximum number of eggs seen on 27 October. This suggests that the reduction in the number of recorded nests on 15 November was possibly not due to mortality but rather to nests not found because of the long grass and thistles. As it appears that the colony size has not increased since 2010 it is possible that breeding success of Silver Gulls on Spinnaker Island is resource-limited not by nesting area but by food availability.

The lowering of Lake Burley Griffin by 0.5 m sometime between 23 November and 7 December did not appear to have had any direct impact on the Silver Gull breeding colony. It is recommended that the survey be repeated in 2012 to confirm the potentially important observation that the size of the breeding colony of Silver Gulls on Spinnaker Island is limited by food availability. In addition, it is recommended that any birds observed in a comatose state be removed for pathological investigations.

## Acknowledgements

We wish to thanks Matthew Owen (CEO, Canberra Yacht Club) for arranging boat transport to and from the island on each occasion.

### References

- Davey, C. and P. Fullagar. (2011). Silver Gulls breeding on Spinnaker Island, Lake Burley Griffin, Spring 2010. *Canberra Bird Notes* 36: 81-83.
- Holland, J. (2004a). Silver Gulls breeding on moored boats on Lake Burley Griffin. *Canberra Bird Notes* 29: 9-15.
- Holland, J. (2004b). Confirmation of the start of the Silver Gull breeding season on moored boats on Lake Burley Griffin. Canberra Bird Notes 29: 108.
- Higgins, P.J. and S.J.J. Davies (Eds) 1996. Handbook of Australian, New Zealand and Antarctic Birds. Volume 3: Snipe and Pigeons. Oxford University Press, Melbourne.
- Wheeler, W.R. and I. Watson. (1963). The Silver Gull *Larus novaehollandiae*. *Emu* 63: 99-173.

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Partial view of Silver Gull colony on Spinnaker Island in 2011 (Peter Fullagar).

## THE CANBERRA BIRD BLITZ 2011

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**Abstract.** This paper describes the conduct of Canberra's seventh 'bird blitz' held on 29-30 October 2011, outlines some findings and provides comparisons with the blitzes of the six previous years.

### 1. Introduction

On Saturday 29 and Sunday 30 October 2011, the Canberra Ornithologists Group (COG) conducted its seventh 'bird blitz', a now-annual event held on the last weekend in October.

Our main aims are to record all species of bird present in the ACT over that weekend in all major habitats, to obtain a broad indication of their abundance, and to record breeding status. To achieve this, we set out to conduct a minimum of one 20-minute 2-hectare survey within each of the 165 grid cells covering the ACT (a 2.5-minute grid on lines of latitude and longitude, so each cell measures approximately 3.5 km by 4.5 km). By this exercise, we also hope to encourage more of our members to get out, survey and submit datasheets.

The data collected are entered in the COG Atlas database, and subsequently contributed to the BirdLife Australia Atlas database. They are available for scientific purposes and as an input to Canberra land use planning.

## 2. Conduct of the blitz

Participants register for their preferred locations or grid cells, on a first-in, best-dressed basis. In the allocation process, some site preference is given to members who survey given sites on a regular basis. More tardy volunteers are cajoled by the organiser into surveying the remaining sites. Less experienced birders may accompany more experienced birders who indicate a willingness to take them along. And as a modest inducement to participants, a variety of prizes are on offer, courtesy of our members.

Participants are allowed to choose their preferred methodology from the three BirdLife Australia Atlas options: a 20-minute/2-ha survey; within 500 m of a central point, for >20 mins; or within 5 km of a central point, for >20 mins. Incidental records are also welcomed.

## 3. Results and discussion

## 3.1 Operational issues

The weather was reasonably cooperative for the weekend and access to all Namadgi National Park trails was possible, thanks to assistance from Park management. However Kowen Forest was closed one day for a car rally.

## 3.2 Level of participation

At least 74 COG members and friends took part in the blitz, plus a number of unnamed 'extras' (a list of known participants is at Table 1). This compares with the 84 participants in both 2010 and 2009, 86 in 2008, 83 in 2007, 62 in 2006 and 75 in 2005. The relatively stable participation level shows that COG members have not as yet grown weary of this spring event. As usual, if information gleaned from the 'number surveying' box on the datasheet is taken into consideration, we would have achieved a participation level of well above 100.

Despite the modest level of uncertainty about the numbers participating, we achieved our aim of encouraging a few more of our members to survey. There were seven named individuals who participated in the blitz for the first time in 2011. And 31 hardy souls warmed to the task and blitzed for part or all of the two days.

## 3.3 Coverage

We achieved a reasonable coverage of the ACT in this seventh blitz, with surveys conducted in 102 of the 165 possible grid cells (62%), compared with 95 (58%) in 2010, 112 (68%) in 2009, 118 (72%) in 2008, 132 (80%) in 2007, 99 (60%) in 2006 and 109 (61%) in 2005. Total coverage will never be possible as many grid cells in Namadgi National Park are too remote to access readily over a single weekend. However, virtually all major habitat types were covered. It was good on this occasion to manage surveys at Majura Firing Range, thanks to a birder with access.

The number of datasheets received per grid cell is shown in Map 1. As usual, the more popular birding spots and/or easily accessed locations attracted greater coverage, with 13 datasheets being received for J13, covering Aranda Bushland, Mt Painter and the eastern portion of the Pinnacle Nature Reserves; and 10 for L14, including Jerrabomberra Wetlands, Molonglo Reach and the Fyshwick sewage ponds. These and other nature parks and reserves proved yet again to be the richest bird areas, notwithstanding the experience of the observers or the time spent surveying. It is possible, and even likely, that this effect is magnified by the familiarity of many participants with the areas they chose to survey.

The possible total of 165 grid cells in the ACT includes cells which are only partly in the ACT. It has been argued that we could legitimately base our grid cell total on those cells totally within the ACT. Many surveys, however, were conducted in the ACT portion of cells only partly in the ACT, and it would have been unfortunate to discount them on a technicality.

# 3.4 Datasheets received in time for analysis

Participants returned 277 eligible datasheets for the 2011 blitz weekend, compared with 255 datasheets in 2010, 270 in 2009, 338 in 2008, 316 in 2007, 242 in 2006 and 254 in 2005. The percentage contribution of the blitz datasheets to the overall number of datasheets for the COG area of interest will not be known until the full-year figures for datasheets are in for 2011-12. However, it is likely to once again be in the order of 10%.

## 3.5 Type of survey

Participants were given the option of choosing their survey type to best fit the grid cell or location they were surveying, and to allow for personal preference and time or other constraints. Contrary to the experience of the early blitz years (see Fig. 1), more blitzers adopted the BirdLife Australia Atlas 'within 500 m of a central point' option. Of the eligible datasheets 34% were for 2-ha surveys, 52% were for surveys within 500 m of a central point, 7% were for surveys within 5 km of a central point (though in effect they had to be within a smaller area, to remain within a COG grid cell), and 7% were for incidental records. A similar pattern was recorded in the previous two years and the explanation for it is likely to be the organiser's stressing that if blitzers felt they needed more than 20 minutes to cover their site comprehensively, then the better option would be to choose the 'within 500 m' with a minimum of 20 minutes but no maximum time limit. And some elected to spend hours at their special spot. This almost certainly explained the reduced number of datasheets received, as the total time spent surveying was similar in both years.

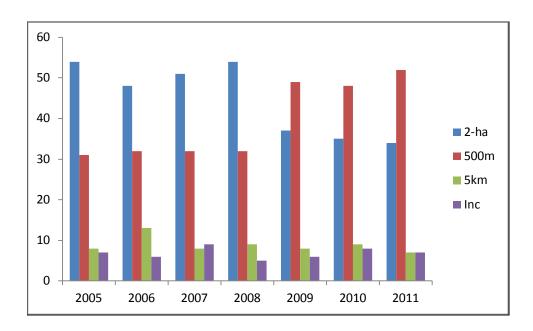


Figure 1. Survey type (percentages)

## 3.6 Species recorded

As Fig. 2 and Table 2 show, 174 species of bird were recorded in the ACT over the two blitz days. This compares with 155 in 2010, 176 in 2009, 173 in 2008, 164 in 2007, 161 in 2006, and 157 in 2005. When the seven blitz years are considered, 200 species have been recorded, while 132 species have been recorded every year. By way of comparison, the species total for all of the financial year 2010-11 and for the whole of COG's area of concern, as recorded in COG's annual bird report, was 226 species from 283 grid cells (COG 2012).

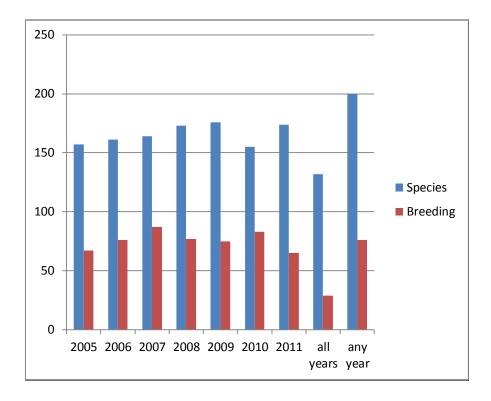


Figure 2. Numbers of species recorded, and recorded breeding.

As Table 2 shows, 22 species not recorded in 2010 were recorded in 2011. Some of these, such as quails and the Musk Duck, were almost certainly inadvertent omissions in 2010, as they are known to be resident and, in the case of the duck, one of its known locations was not surveyed. The welcome representation of White-necked Herons, Cattle and Little Egrets, Glossy Ibis and Masked and White-browed Woodswallows in 2011cannot always be relied upon. Similarly the Black-shouldered Kite and the White-bellied Sea-Eagle may not always be present.

Twenty-four species which had been recorded in previous blitzes were not recorded in 2011. Some of these misses were arid zone specialists such as the Red-backed Kingfisher; their absence was not surprising, given more clement conditions in the inland of Australia. Others such as the Great Crested Grebe, the Channel-billed Cuckoo and many of the waders cannot be relied on to appear in the ACT on a regular basis. Based on previous experience, we might have expected to find Buff-banded Rail. We again missed out on recording nightbirds such as the relatively common Southern Boobook; and the Powerful Owl again proved elusive. The Eastern Koel made a relatively late return in 2011 and, while it had been recorded in the ACT prior to the blitz, was not recorded. The now common Indian Peafowl population in and around Narrabundah was simply overlooked. Of more concern was the absence of Brush Bronzewing, Wonga Pigeon, Red-browed Treecreeper and Glossy Black-Cockatoo.

Four species new to the blitz were recorded in 2011: Eastern Barn Owl; Australian Painted Snipe; Yellow-tufted Honeyeater; and Olive Whistler. The first-named was not a surprise as the species had been widely recorded in the ACT during the year. It was a thrill to find that the snipe, a vulnerable species listed under the Commonwealth *Environment Protection and Biodiversity Act* 1999 and which had been much viewed and photographed at Jerrabomberra Wetlands in the period leading up to the blitz, had stayed around just long enough to be counted. The honeyeater is recorded most years in the ACT but not previously on the last

weekend in October. And it was good finally to register Olive Whistler, which are thought to be resident but which are increasingly difficult to find, even in their known stronghold of the Brindabella Range.

It was encouraging to see the continued resurgence of several species badly affected by, and in the aftermath of, the 2003 fires: Superb Lyrebird, Eastern Whipbird, Spotted Quail-thrush and Pilotbird.

The expected cuckoo species were mostly recorded, and in all cases in increasing numbers: Pallid Cuckoo (18 records), Brush Cuckoo (14), Fan-tailed Cuckoo (49), Horsfield's Bronze-Cuckoo (6) and Shining Bronze-Cuckoo (18). By contrast, while most expected raptors were recorded, numbers were relatively low. Only the Nankeen Kestrel, with 33 records, and the Wedge-tailed Eagle (17) could be deemed 'common'.

During the 2011 blitz, 65 species (37% of the 174 species recorded) were recorded as breeding, when the broadest possible indicators of breeding were used. As shown in Table 2, this compares with 83 breeding species (54%) in 2010, 75 (43%) in 2009, 77 (45%) in 2008, 87 (53%) in 2007, 76 (47%) in 2006 and 67 (43%) in 2005. This is a disappointingly low figure, and the lowest recorded in any blitz. It is perhaps attributable to the wetter-than average conditions prior to the blitz.

The species most commonly recorded as breeding was once again the Australian Magpie, with 37 breeding records. This is no surprise, as the maggie is common, easily recognisable, breeds early and the dependent young are particularly vocal. The only other species to reach double figures were the Crimson Rosella and the White-winged Chough.

## 3.7 Most frequently recorded species

The ten most frequently recorded species overall in the 2011 blitz, in rank order (with the 2010 blitz ranking in parentheses) were:

```
Australian Magpie – 172 records (1)
Superb Fairy-wren – 164 records (2)
Grey Fantail – 146 records (5)
Crimson Rosella – 141 records (3)
Pied Currawong – 140 records (4)
Australian Raven – 133 records (8)
Red Wattlebird – 131 (7)
Yellow-faced Honeyeater – 129 records (outside top 10)
Sulphur-crested Cockatoo – 123 records (6)
Rufous Whistler – 117 records (outside top 10)
```

Eight of the above species made the top ten last year as well, with only the Galah and the Striated Pardalote just dropping out, to be replaced by the Yellow-faced Honeyeater and the Rufous Whistler. The modest jockeying for rank is probably more a reflection of the proportion of habitats surveyed than of relative abundance. Comparing the blitz top ten with the Annual Bird Report top ten for 2010-11, we find that eight of the species overlap.

## 3.8 Species recorded only once in 2011 blitz

Twenty-four species were recorded only once in the 2011 blitz, and usually in low numbers. While some are relatively uncommon species and one record is in itself an achievement, the low number of records of others is more puzzling, and potentially worrying. One can but hope that in some cases, these species may be present in greater numbers but were simply not picked up on the survey days.

Stubble Quail Spotted Dove

Peaceful Dove Australian Owlet-nightjar

Whistling Kite Australian Hobby

Baillon's Crake Australian Spotted Crake
Black-tailed Native-hen Australian Painted Snipe

Sharp-tailed Sandpiper Long-billed Corella

Eastern Barn Owl Pilotbird

Yellow-tufted Honeyeater
Spotted Quail-thrush
Clive Whistler
Jacky Winter
Rose Robin
Crescent Honeyeater
Eastern Whipbird
Masked Woodswallow
Red-capped Robin
Brown Songlark

## 3.9 Species not recorded

As indicated above, some of the 2011 omissions included species known to be present in the ACT at the time and which simply proved elusive on the blitz weekend. Others, such as the Glossy Black-Cockatoo and Banded Lapwing, are species whose presence cannot be relied on in the ACT. Species unrecorded in all six blitzes include bitterns and Zebra Finch. Nocturnal birds are particularly likely to be under-recorded.

# 3.10 Vulnerable and endangered species

One nationally vulnerable species was recorded in the 2011 blitz, the Australian Painted Snipe – although disappointingly it eluded the specialist snipe survey team. A small party of the snipe had been present at Kellys Swamp from late September and obligingly remained to be counted for the blitz. Six species regarded as vulnerable in the ACT were recorded: Little Eagle, Hooded Robin, Superb Parrot, Brown Treecreeper, Varied Sittella and White-winged Triller. One newly listed vulnerable species, the Glossy Black-Cockatoo, was not recorded.

There were three records of the Hooded Robin, of 1-3 birds, from two distinct locations. A dependent young was recorded at Tidbinbilla. This compares with a single blitz record in 2010 and 27 for the overall COG area of concern in the year 2010-11 (COG 2012).

Superb Parrots (5 records, of 1-17 birds) were seen in five grid cells in their now-usual haunts in the north and north-west of the ACT. No breeding was recorded. While this result is fewer than the numbers recorded in recent blitzes, these well-named parrots are becoming a reassuringly regular sight each year in Canberra's north.

Brown Treecreepers were recorded 6 times, 1-5 birds, from known locations such as Mulligans Flat NR (presumably one of the reintroduced birds), Kama NR, Newline Quarry and the Old Boboyan Rd. There were no breeding records, however.

There were only four records of Varied Sittella, from four distinct grid cells, with abundances ranging from 1-3 birds. No breeding was recorded.

The White-winged Trillers bounced back, however, with 13 records of 1-4 birds, from nine grid cells, compared with only three records last year. No breeding was recorded, but as the species usually only returns in October, perhaps this is to be expected.

Little Eagles, all single birds, were recorded five times, from Jerrabomberra Wetlands, Campbell Park, Newline Quarry, Shepherds Lookout and West Macgregor. This probably represents only two breeding pairs, however.

### 4. Conclusions and lessons for the future

In terms of our aims, the blitz has increased significantly the amount of available data about Canberra's birds. It is likely that several of the grid cells surveyed would not have been covered other than through the targeted efforts of the blitz. The blitz data will be made available to the managers of the Canberra nature reserves and Namadgi National Park. Over time, we anticipate that the annual blitz will help to establish trends. A major lesson to be drawn from the blitzes to date is that, when prompted, more of our members will get out, survey, and submit datasheets. And as in previous years, many blitzers took the opportunity to spend longer than their regular 20 minutes surveying their special spots.

As for the results, there was, inevitably, an element of 'luck of the day' and the final species total is not of huge significance. The blitz breeding observations, however, contribute disproportionately to our overall knowledge of bird breeding in Canberra. Given the tendency of our vulnerable species to have a patchy distribution, any information about their distribution, numbers and breeding status is valuable, particularly in those areas which are due to have significant land use decisions made in the near future. The blitz results reinforce the critical importance of the contribution of Canberra's nature parks and reserves to bird conservation.

### Acknowledgments

First and foremost, thanks must go to all COG members who participated in the blitz, and particularly to those who put in two full days in sometimes challenging areas in sometimes less than ideal weather conditions. The assistance of staff at Namadgi National Park in providing advice, and access to areas behind locked gates, is greatly appreciated. Paul Fennell's assistance with data extraction and Nicki Taws' expertise with mapping software is greatly appreciated, as always. And sincere thanks go to all those COG members who donated prizes.

#### References

COG (2012). Annual Bird Report: 1 July 2010 to 30 June 2011. *Canberra Bird Notes* 37: 1-88. Allan B (2005). The Canberra bird blitz 2005. *Canberra Bird Notes* 30:148-158.

Allan B (2007). The Canberra bird blitz 2006. Canberra Bird Notes 31:187-197.

Allan B (2008). The Canberra bird blitz 2007. Canberra Bird Notes 32: 96-108.

Allan B (2009). The Canberra bird blitz 2008. Canberra Bird Notes 34: 111-125.

Allan B (2010). The Canberra bird blitz 2009. Canberra Bird Notes 35: 121-134.

Allan B (2011). The Canberra bird blitz 2010. Canberra Bird Notes 36: 84-96.

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# Table 1. Known blitz participants 2011

Barbara Allan Mark Allen

Ian Anderson Frank Antram Joe Barr

Sue Beatty

Darryl Beaumont

Rosemary Blemings Con Boekel John Brannan

Muriel Brookfield Erin Brown John Buckley Martin Butterfield Brian Chauncy Ray Comer

Elizabeth Compston Roger Curnow Chris Davey Paul Fennell Matthew Frawley Malcolm Fyfe Susanne Gardiner

Bill Graham Jim Graham Jeannie Gray Jane Green Horst Hahne Kay Hahne Bill Handke

Stuart Harris Roy Harvey

Sandra Henderson Jack Holland Anne Holmes Judith Hopwood Julienne Kamprad

Michael Kingsford

Shirley Kral David Landon Sue Lashko Margaret Leggoe

Michael Lenz Bruce Lindenmayer

Rod Mackay Alison Mackerras Paul Mackerras Sue Mathews Duncan McCaskill

Duncan McCaski.
David McDonald
Noela McDonald
Julie McGinniss
Gail Neumann
Peter Ormay
Harvey Perkins
Vivien Pinder
Lucy Randall
David Rees
Bill Robertson

Margaret Robertson Susan Robertson Julian Robinson David Rosalky Alastair Smith Tim Smith Nicki Taws Alan Thomas

Mieke van den Bergh Philip Veerman Ben Walcott Ros Walcott John Waldron Louise Wangerer Jennie Widdowson

Tony Willis Kevin Windle

Table 2. Species recorded during the 2005 - 2011 blitzes.

(X=present;\*=breeding)

Common name	Scientific name	2005	2006	2007	2008	2009	2010	2011
Emu	Dromaius	X		X	X			X
	novaehollandiae							
Stubble Quail	Coturnix		X			X		X
	pectoralis							
Brown Quail	Coturnix		X	X	X	X		X
	ypsilophora							
Indian Peafowl	Pavo cristatus	X			X		X	
Magpie Goose	Anseranas				X	X		
	semipalmata							
Musk Duck	Biziura lobata	X	X*		X*	X*		X
Black Swan	Cygnus atratus	X*	X*	X*	X*	X*	X*	X*
Australian	Chenonetta jubata	X*	X*	X*	X*	X*	X*	X*
Wood Duck	16.1		***	***		**		
Pink-eared	Malacorhynchus		X	X		X		
Duck	membranaceus	37	<b>T</b> 7 11	***	<b>T</b> 7 de	<b>T</b> 7	<b>T</b> 7 de	<b>T</b> 7.0
Australasian	Anas rhynchotis	X	X*	X	X*	X	X*	X*
Shoveler		TT.1.	**	<b>T</b> T.1.	<b>T T</b> . 1.	**	<b>T T</b> . 1.	**
Grey Teal	Anas gracilis	X*	X	X*	X*	X	X*	X
Chestnut Teal	Anas castanea	X	X	X*	X	X	X	X
Pacific Black	Anas superciliosa	X*	X*	X*	X*	X*	X*	X*
Duck	A .1 . 1:	37	37	<b>T</b> 7 ste	37	37	37	37
Hardhead	Aythya australis	X	X	X*	X	X	X	X
Blue-billed	Oxyura australis	X	X		X	X		X
Duck	T 1 1	V*	V	V*	V*	v	V*	V*
Australasian Grebe	Tachybaptus novaehollandiae	X*	X	X*	X*	X	X*	X*
Hoary-headed	Poliocephalus	X	X	X	X	X	X	X
Grebe	poliocephalus	Λ	Λ	Λ	Λ	Λ	Λ	Λ
Great Crested	Podiceps cristatus	X						
Grebe	Touiceps crisiaius	Λ						
Rock Dove	Columba livia	X	X	X	X	X	X	X
Spotted Dove	Streptopelia	1	71	71	X	X	X	X
Spotted Bove	chinensis				71	71	71	71
Common	Phaps chalcoptera	X	X	X	X*	X	X*	X
Bronzewing	Thups entire opticities	11	11		11	11	11	11
Brush	Phaps elegans					X		
Bronzewing								
Crested Pigeon	Ocyphaps	X*	X*	X*	X*	X*	X*	X*
8	lophotes							
Peaceful Dove	Geopelia striata	X	X		X	X		X
Wonga Pigeon	Leucosarcia	X			X			
	picata							
Tawny	Podargus	X*	X*	X*	X*	X*	X*	X*
Frogmouth	strigoides							

Table 2 continued

Australian	Common name	Scientific name	2005	2006	2007	2008	2009	2010	2011
Owlet-nightjar         cristatus         X         X*         X			2003	2000	2007		2009	2010	
Australasian		-				71			71
Darter			Y	<b>Y</b> *					
Little Pied			71	71	21	71	21	21	71
Cormorant			X	X	X*	X*	X*	X*	X*
Great			71	71	21	71	21	21	71
Cormorant			X	X	X	X	X	X	X
Little Black Cormorant Pied Cormorant Platacrocorax sulcirostris Pied Cormorant Phalacrocorax varius  Australian Pelecanus Conspicillatus White-necked Heron Cattle Egret Cattle Egret Ardea intermedia Heron Clittle Egret Egret Egret Egret Egret Egret Egret Cattle Egret Cattle Egret Ardea ibis White-faced Heron Clittle Egret Egretta garzetta Nycticorax Australian Plegadis falcinellus Australian Threskiornis Straw-necked Threskiornis Straw-necked Elanus axillaris Sea-Eagle Whistling Kite Brown Accipiter fasciatus Eyang Conspicillatus  X X X X X X X X X X X X X X X X X X X			21	21	71	71	71	71	71
Cormorant   Pied Cormorant   Phalacrocorax   Varius   X			X	X	X	X	X	X*	X
Pied Cormorant Varius  Pelecanus Pelecanus Pelican  Pelecanus Varius  Nontic-necked Heron  Eastern Great Egret Intermediate Egret Cattle Egret Ardea intermedia Egretta Ardea ibis White-faced Heron  Little Egret Egretta parzetta Nankeen Night Heron  Glossy Ibis Plegadis falcinellus  Australian Threskiornis Straw-necked Ibis Royal Spoonbill Platalea regia Black- shouldered Kite White-bellied Sea-Eagle Whistling Kite Brown Goshawk Collared Swang Ardia andax  Av X X X X X X X X  X X X X X X X  X			11	71	11	71	11	11	71
Australian Pelecanus conspicillatus White-necked Heron Eastern Great Egret Intermediate Egret Cattle Egret Cattle Egret Ardea ibis White-faced Heron Little Egret Egretta Branchen Night Heron Caledonicus Glossy Ibis Plegadis falcinellus Straw-necked Threskiornis Straw-necked Threskiornis Royal Sponbill Platalea regia Noval Septenta Straw-necked White-bellied Sea-Eagle Whistling Kite Whistling Kite Swamp Harrier Circus Gonawis Wandeen Royal Aquila audax  X X X X X X X X X X X X X X X X X X					X	X	X		X
Australian Pelecanus conspicillatus White-necked Heron Eastern Great Egret Intermediate Egret Subject of the conspicit of the conspicult of the consp	Tica Colmolant				71	71	71		71
Pelican conspicillatus White-necked Heron Eastern Great Egret Intermediate Ardea modesta Egret Intermediate Egret Cattle Egret Ardea ibis White-faced Egretta a X*	Australian		X	X		X	X	X	X
White-necked Heron  Eastern Great Egret  Intermediate Ardea intermedia  Egret  Cattle Egret Ardea ibis  White-faced Egretta novaehollandiae  Little Egret Egretta garzetta  Nankeen Night Heron  Glossy Ibis  Plegadis falcinellus  Australian  Threskiornis X X X X X X X X X X X X X X X X X X X			21	21		71	71	71	71
Heron Eastern Great Egret Intermediate Egret Cattle		-		Y	X		X		Y
Eastern Great Egret Intermediate Egret Intermediate Egret Intermediate Egret Cattle Egret Ardea intermedia Egret  Cattle Egret Ardea ibis  X X X X X X X X X X X X X X X X X X		maca pacifica		71	21		21		71
Egret		Ardea modesta		X	X	X	X	X	X
Intermediate Egret		muca modesia		71	21	71	21	21	71
Egret		Ardea intermedia				X		X	Y
Cattle Egret       Ardea ibis       X       X       X       X       X       X       X       X       X*       X<		maca memeata				71		21	71
White-faced   Egretta   X*   X*   X*   X   X   X*   X*   X*		Ardea ihis		X					X
Heron			<b>Y</b> *		<b>Y</b> *	Y	X	<b>Y</b> *	
Little Egret Egretta garzetta X X X X X X X X X X X X X X X X X X			71	71	21	71	21	21	71
Nankeen Night						X			X
Heron caledonicus  Glossy Ibis Plegadis falcinellus  Australian Threskiornis X X X X*			X	X	X		X	X	
Glossy Ibis      Plegadis	_		1.	71	11	7.	7.	11	71
Australian Threskiornis Notice Ibis Threskiornis Straw-necked Threskiornis Straw-necked Threskiornis Royal Spoonbill Platalea regia Royal Spoonbill Platalea regia XXXXXX X  Black- Shouldered Kite White-bellied White-bellied White-bellied Faciatus				X	X				X
Australian White Ibis molucca  Straw-necked Ibis Royal Spoonbill Platalea regia Black- shouldered Kite White-bellied White-bellied Sea-Eagle Whistling Kite Haliastur sphenurus Brown Goshawk Collared Collared Syamp Harrier Circus Syamp Harrier Wedge-tailed  Threskiornis X X X X X X X X X X X X X X X X X X X	Glossy Tols			71	11				71
White Ibis       molucca       X	Australian	· ·	X	X	X*	X*	X*	X*	X
Straw-necked   Threskiornis   Spinicollis   Straw			11	11	11	11	11	11	11
Bis   Spinicollis   Spinicol				X	X	X	X		X
Royal Spoonbill Platalea regia X X X X X X X Shouldered Kite  White-bellied Haliaeetus Ieucogaster  Whistling Kite Haliastur X X X X X X X X X X X X X X X X X X X				7.1	11	71	11		71
Black-shouldered Kite  White-bellied Haliaeetus Sea-Eagle leucogaster  Whistling Kite Haliastur X X X X X X X X X X X X X X X X X X X		*		X	X	X	X	X	
Shouldered Kite  White-bellied Sea-Eagle  Whistling Kite  Haliastur sphenurus  Brown Goshawk  Collared Sparrowhawk  Swamp Harrier  Circus approximans  Wedge-tailed  Haliaeetus X X X X X X X X X X X X X X X X X X X	,		X					11	X
White-bellied Bea-Eagle leucogaster  Whistling Kite Haliastur X X X X*		Zienius enumanus	11	11	11	11	11		11
Sea-Eagle       leucogaster       X       X       X       X       X       X       X       X*       X		Haliaeetus			X	X			X
Whistling Kite  Haliastur sphenurus  Brown Accipiter fasciatus Collared Sparrowhawk Sparrowhawk Cirrhocephalus  Swamp Harrier Circus approximans Wedge-tailed  Haliastur X X X X X X X X X X X X X X X X X X X					11	11			11
Brown Accipiter fasciatus X*		·	X	X	X*	X	X		X*
Brown Goshawk Collared Sparrowhawk Cirrhocephalus Swamp Harrier Wedge-tailed  Accipiter fasciatus X* X* X* X* X* X X* X X X X X X X X X X	,,, msumg 1200								
Goshawk  Collared Accipiter X X X X X X X X X X X X X X X X X X X	Brown	^	X*	X*	X*	X*	X*	X*	X
Collared Accipiter X X X X* X X X X X X Sparrowhawk cirrhocephalus  Swamp Harrier Circus X X X X X X X X X X X X X X X X X X X		James	_	_		_			_
Sparrowhawk cirrhocephalus  Swamp Harrier Circus X X X X X X X X X X X X X X X X X X X		Accipiter	X	X	X*	X	X	X	X
Swamp Harrier       Circus approximans       X       X       X       X       X       X         Wedge-tailed       Aquila audax       X       X       X       X       X       X       X		•		_ = =					
approximans     Wedge-tailed   Aquila audax     X   X     X   X     X   X     X   X     X   X     X   X     X   X     X   X     X   X     X   X     X  X     X   X <td></td> <td>•</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td></td> <td>X</td> <td>X</td>		•	X	X	X	X		X	X
Wedge-tailed Aquila audax X X X X X* X* X									
	Wedge-tailed		X	X	X	X	X*	X*	X
	Eagle	1	_	_		_			_

Table 2 continued

Common name	Scientific name	2005	2006	2007	2008	2009	2010	2011
		X	X	X	X*	X*	X*	X
Little Eagle	Hieraaetus	Λ	Λ	Λ	X*	X*	X*	Λ
N 1	morphnoides	<b>3</b> 74	<b>1</b> 7.4	<b>3</b> 74	<b>1</b> 74	V	37	<b>3</b> 7.4
Nankeen Kestrel	Falco cenchroides	X*	X*	X*	X*	X	X	X*
Brown Falcon	Falco berigora	X	X	X*	X	X	X	X
Australian	Falco longipennis	X	X	X*	X*	X*	X*	X
Hobby								
Peregrine	Falco peregrinus	X	X	X	X	X	X*	X*
Falcon								
Purple	Porphyrio	X*	X*	X*	X*	X*	X*	X*
Swamphen	porphyrio							
Buff-banded	Gallirallus		X		X	X		
Rail	philippensis							
Baillon's Crake	Porzana pusilla				X	X		X
Australian	Porzana fluminia			X		X	X	X
Spotted Crake	, v							
Black-tailed	Gallinula ventralis					X		X
Native-hen								
Dusky Moorhen	Gallinula	X*	X*	X*	X*	X*	X*	X*
Busky Woornen	tenebrosa	71	71	21	71	71	71	71
Eurasian Coot	Fulica atra	X*	X	X*	X*	X*	X*	X*
		Λ	Λ	X	Λ'	X	Λ'	Λ
Black-winged	Himantopus			Λ		Λ		
Stilt	himantopus	V	V	V	V	V	X*	v
Black-fronted	Elseyornis	X	X	X	X	X	A*	X
Dotterel	melanops		37	37	37	37		
Red-kneed	Erythrogonys		X	X	X	X		
Dotterel	cinctus					**		
Banded	Vanellus tricolor					X		
Lapwing								
Masked	Vanellus miles	X*	X*	X*	X*	X*	X*	X*
Lapwing								
Austrralian	Rostratula							X
Painted Snipe	benghalensis							
Latham's Snipe	Gallinago	X	X	X	X	X	X	X
	hardwickii							
Bar-tailed	Limosa lapponica			X				
Godwit								
Sharp-tailed	Calidris	X		X		X		X
Sandpiper	acuminata							
Painted Button-	Turnix varius	X			X	X	X	X
quail								
Whiskered Tern	Chlidonias				X	X		
	hybrida							
Silver Gull	Chroicocephalus	X*	X*	X*	X	X	X	X
Sirvi Guii	novaehollandiae	1.	11	11	1.	1.	1	1.
Glossy Black-	Calyptorhynchus	X	X		X			
Cockatoo	lathami	1	<b>A</b>		<b>1</b>			
COCKAIOO	iamami							

Table 2 continued

Common name	Scientific name	2005	2006	2007	2008	2009	2010	2011
Yellow-tailed	Calyptorhynchus	X	X	X	X*	X	X	X
Black-Cockatoo	funereus							
Gang-gang	Callocephalon	X	X	X	X	X*	X	X*
Cockatoo	fimbriatum							
Major	Cacatua			X				
Mitchell's	leadbeateri							
Cockatoo								
Galah	Eolophus	X*	X*	X*	X*	X*	X*	X
	roseicapillus							
Long-billed	Cacatua				X		X	X
Corella	tenuirostris							
Little Corella	Cacatua	X*	X*	X*	X*	X	X	X
	sanguinea							
Sulphur-crested	Cacatua galerita	X*						
Cockatoo	Cucuma garerna							
Cockatiel	Nymphicus					X		
Cochairei	hollandicus					11		
Rainbow	Trichoglossus	X	X	X	X*	X	X	X
Lorikeet	haematodus	11	11	11	11	11	11	11
Australian	Alisterus	X	X	X	X*	X	X*	X*
King-Parrot	scapularis	11	71	7.1	71	7.	71	21
Superb Parrot	Polytelis	X	X*	X*	X	X*	X*	X
Supero Tarrot	swainsonii	71	71	71	71	71	71	71
Crimson Rosella	Platycercus	X*						
Cimison Rosena	elegans	71	71	71	71	71	71	71
Eastern Rosella	Platycercus	X*						
Lastern Rosena	eximius	71	71	71	71	71	71	71
Red-rumped	Psephotus	X*						
Parrot	haematonotus	1	71	71	71	71	71	1
Turquoise	Neophema					X		
Parrot	pulchella					Λ		
Eastern Koel	Eudynamys			X	X		X*	
Lasterii Koei	orientalis			Λ	Λ		Λ	
Channel-billed	Scythrops						X	
Cuckoo	novaehollandiae						Λ	
Horsfield's	Chalcites basalis	X	X*	X	X	X*	X	X
Bronze-Cuckoo	Chaiciles basaiis	Λ	Λ	Λ	Λ	Λ	Λ	Λ
Shining Bronze-	Chalcites lucidus	X*	X*	X	X	X	X	X
Cuckoo	Chaiciles inclaus	Α	Λ	Λ	Λ	Λ	Λ	Λ
Pallid Cuckoo	Cacomantis	X	X	X	X	X	X	X
Failld Cuckoo		Λ	Λ	Λ	Λ	Λ	Λ	Λ
For toiled	pallidus Cacomantis	v	v	X*	v	v	v	v
Fan-tailed	Cacomantis	X	X	Λ	X	X	X	X
Cuckoo	flabelliformis	v	v	v	v	v	v	v
Brush Cuckoo	Cacomantis	X	X	X	X	X	X	X
Darmarfy1 O1	variolosus					v		
Powerful Owl	Ninox strenua					X		

Table 2 continued

Common name	Soiontifia nomo	2005	2006	2007	2008	2009	2010	2011
Common name	Scientific name	X	2000	2007	X	2009	X	2011
Southern	Ninox	Λ			Λ		Λ	
Boobook	novaeseelandiae							V
Eastern Barn	Tyto javanica							X
Owl	D 1	<b>1</b> 7.4	<b>1</b> 74	37	37	<b>3</b> 74	37	37
Laughing	Dacelo .	X*	X*	X	X	X*	X	X
Kookaburra	novaeguineae			37	37			
Red-backed	Todiramphus			X	X			
Kingfisher	pyrrhopygius	T. 7.1.	<b>T</b> T.1.	<b>*</b> * * . ! .	**	<b>T T</b> . 1.	<b>T T</b> . 1.	**
Sacred	Todiramphus	X*	X*	X*	X	X*	X*	X
Kingfisher	sanctus							
Rainbow Bee-	Merops ornatus	X	X	X*	X*	X	X*	X*
eater								
Dollarbird	Eurystomus	X	X	X*	X	X*	X*	X
	orientalis							
Superb Lyrebird	Menura	X	X	X	X	X	X	X
	novaehollandiae							
White-throated	Cormobates	X	X*	X*	X*	X*	X*	X*
Treecreeper	leucophaea							
Red-browed	Climacteris	X	X	X		X	X	
Treecreeper	erythrops							
Brown	Climacteris	X	X	X*	X*	X*	X	X
Treecreeper	picumnus							
Satin Bowerbird	Ptilonorhynchus	X	X	X	X*	X*	X	X
	violaceus							
Superb Fairy-	Malurus cyaneus	X*	X*	X*	X*	X*	X*	X*
wren								
Pilotbird	Pycnoptilus	X				X	X	X
	floccosus							
White-browed	Sericornis	X*	X*	X*	X*	X*	X	X*
Scrubwren	frontalis							
Chestnut-	Hylacola						X	
rumped	pyrrhopygia						11	
Heathwren	pyopy8							
Speckled	Chthonicola	X*	X	X*	X*	X*	X*	X*
Warbler	sagittata	11	71	7.	11	7.	71	71
Weebill	Smicrornis	X*	X	X*	X*	X	X*	X*
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	brevirostris	11	11	11	11	11	11	11
Western	Gerygone fusca	X	X	X	X	X	X	X
Gerygone	Joing Justin	1.			**			1.
White-throated	Gerygone	X*	X	X*	X	X	X*	X
Gerygone	albogularis	11	11	11	11	11	11	11
Striated	Acanthiza lineata	X*	X*	X*	X	X*	X*	X*
Thornbill	manual and	1	<b>11</b>	<b>4</b>	1	1	1	/ <b>X</b>
Yellow	Acanthiza nana	X	X	X	X	X*	X*	X
Thornbill	лсиница папа	Λ	Λ	Λ	Λ	Α.	Α.	Λ
	Acanthiza	X*	X*	X*	X*	X*	X*	X*
Yellow-rumped	Acanthiza	Λ.	Λ.	Λ.	Λ.	Λ.	Λ.	Λ.
Thornbill	chrysorrhoa							

Table 2 continued

Buff-rumped   Acanthiza   X*   X*   X*   X*   X*   X*   X*   X	Common name	Scientific name	2005	2006	2007	2008	2009	2010	2011
Thornbill									
Brown	_		11	71	7.	21	71	71	21
Thornbill			X	X*	X*	X	X*	X*	X*
Southern White-face leucopsis   X		Treatmitza pustita	11	71	7.	21	71	71	21
Whiteface		Anhelocenhala	X	X*	X	X	X	X	X
Spotted Pardalotus punctatus  Striated pardalotus punctatus  Striated Pardalotus striatus  Eastern Acanthorhynchus tenuirostris  Yellow-faced Lichenostomus tenuirostris  White-eared Lichenostomus Ax X X X X X X X X X X X X X X X X X X			71	71	71	71	71	71	71
Pardalote		_	<b>X</b> *	X*	<b>Y</b> *				
Striated   Pardalotus   Striatus   Striatu	_		71	71	71	21	21	71	21
Pardalote		*	<b>X</b> *	X*	<b>Y</b> *				
Eastern Spinebill tenuirostris Yellow-faced Lichenostomus X X X X X X X X X X X X X X X X X X X			71	71	71	21	21	71	21
Spinebill   tenuirostris			X*	X*	X	X	X	X	X
Yellow-faced		-	71	71	71	71	71	71	71
Honeyeater			X	X*	Y	<b>Y</b> *	<b>Y</b> *	Y	Y
White-eared   Lichenostomus			71	71	71	21	21	71	21
Honeyeater   Lichenostomus   X*   X   X*   X*   X   X*   X   X*   X   X	•		<b>X</b> *	Y	<b>Y</b> *	<b>Y</b> *	<b>Y</b> *	Y	Y
Fuscous Lichenostomus fuscus  White-plumed Lichenostomus penicillatus  Noisy Miner Manorina melanocephala  Red Wattlebird Anthochaera carunculata  White-fronted Epthianura albifrons  Crescent Phylidonyris pyrrhopterus  New Holland Phylidonyris novaehollandiae  Brown-headed Melithreptus Noisy Friarbird Philemon corniculatus  Noisy Friarbird Divaceus  Varied Sittella  Black-faced Coracina Noisy Miner Manorina Manorina Melonoyeater Novaehollandiae  Tesscent Phylidonyris Noisy Friace Noisy Friace  Prophodes Noisy Friace Noisy Friace  Lichenostomus X*			71	71	71	71	71	71	71
Honeyeater			<b>X</b> *	Y	<b>Y</b> *	<b>Y</b> *	Y	<b>Y</b> *	Y
White-plumed Honeyeater penicillatus Noisy Miner Manorina melanocephala  Red Wattlebird Anthochaera carunculata  White-fronted Epthianura albifrons Crescent Phylidonyris pyrrhopterus New Holland Phylidonyris Nitheraped Melithreptus Noisy Friarbird Philemon corniculatus  Noisy Friarbird Prophedes Noisy Friarbird Planch Quail-thrush Eastern Psophodes Whipbird Olivaceus  Varied Sittella  Black-faced Coracina Noisy Miner  Manorina X* X* X* X* X* X* X* X*  X* X* X* X* X* X* X* X* X*  X* X* X* X* X* X* X* X* X*  X* X* X* X* X* X* X*  X* X* X* X* X*  X* X* X* X* X*  X* X* X* X*  X* X* X* X*  X* X* X* X*  X			1	71	71	1	71	71	1
Honeyeater penicillatus  Noisy Miner Manorina X* X* X* X* X* X* X* X* X*  Red Wattlebird Anthochaera carunculata  White-fronted Epthianura albifrons  Crescent Phylidonyris pyrrhopterus  New Holland Honeyeater novaehollandiae  Brown-headed Melithreptus X X X X X X X X X X X X X X X X X X X	•		<b>Y</b> *	Y					
Noisy Miner    Manorina   Manorina   Manorina   Manorina   Manocephala	•		1	71	71	1	71	71	1
Red Wattlebird Anthochaera		*	<b>Y</b> *	<b>Y</b> *	<b>Y</b> *	<b>Y</b> *	<b>Y</b> *	<b>Y</b> *	<b>Y</b> *
Red Wattlebird Anthochaera carunculata  White-fronted Epthianura albifrons  Crescent Phylidonyris pyrrhopterus  New Holland Phylidonyris novaehollandiae  Brown-headed Melithreptus X X X X X X X X X X X X X X X X X X X	Troisy Triner		71	71	71	71	71	71	71
Carunculata       Carunculata       X	Red Wattlebird	_	<b>X</b> *	<b>X</b> *	<b>Y</b> *				
White-fronted albifrons  Crescent Phylidonyris X X X X X X X X X X X X X X X X X X X	Rea watticona		71	71	71	71	71	71	71
Chat albifrons Crescent Phylidonyris X X X X X X X X X X X X X X X X X X X	White-fronted						X	X	X
Crescent Phylidonyris pyrrhopterus  New Holland Phylidonyris X X X X X X X X X X X X X X X X X X X							21	21	21
Honeyeater pyrrhopterus  New Holland Phylidonyris X X* X* X* X X X Honeyeater novaehollandiae  Brown-headed Melithreptus X X X X X* X* X X Honeyeater brevirostris  White-naped Melithreptus X X X X X* X* X* X Honeyeater lunatus  Noisy Friarbird Philemon X* X* X* X* X* X* X* X*  Spotted Quail- Cinclosoma X X X X X X X X X X thrush punctatum  Eastern Psophodes olivaceus  Varied Sittella Daphoenositta chrysoptera  Black-faced Coracina X X* X* X* X* X* X* X*  Black-faced Coracina X X* X* X* X* X* X*  Cicadabird Coracina X X X* X* X* X*  Cicadabird Coracina X X X* X* X* X*  NX X X X X X X X X X X X X X X X X X X						X	X	X	X
New Holland Phylidonyris novaehollandiae  Brown-headed Melithreptus X X X X X X X X X X X X X X X X X X X						21	71	7.1	21
Honeyeater novaehollandiae Brown-headed Melithreptus X X X X X* X* X X* Honeyeater brevirostris  White-naped Melithreptus X X X X X* X* X* X* Honeyeater lunatus  Noisy Friarbird Philemon X* X* X* X* X* X* X*  Spotted Quail- Cinclosoma X X X X X X X X X X X X X X X X X X X			X	X*	X*	X	X	X	X
Brown-headed brevirostris  White-naped Melithreptus X X X X X* X* X X  Honeyeater lunatus  Noisy Friarbird Philemon X* X* X X X* X* X* X* X*  corniculatus  Spotted Quail-trush punctatum  Eastern Psophodes olivaceus  Varied Sittella Daphoenositta chrysoptera  Black-faced Coracina novaehollandiae  Cicadabird Coracina  Coracina X X X X X X X X X X X X X X X X X X X									
Honeyeater brevirostris  White-naped Melithreptus X X X X X* X	•		X	X	X	X*	X	X	X*
White-naped Melithreptus X X X X X* X* X* X X Honeyeater lunatus  Noisy Friarbird Philemon X* X* X* X* X* X* X* X*  Spotted Quail- Cinclosoma punctatum  Eastern Psophodes X X X X X X X X X X X Whipbird olivaceus  Varied Sittella Daphoenositta chrysoptera  Black-faced Coracina novaehollandiae  Cicadabird Coracina X X X X X X X X*  X* X* X* X* X* X*  X* X* X* X* X* X*  X* X* X* X* X*  X* X* X* X* X*  X* X* X* X*  X* X* X* X*  X* X* X*  X* X* X*  X* X* X*  X* X* X*  X* X* X*  X* X* X*  X* X* X*  X* X* X*  X* X* X*  X* X* X*  X* X*  X* X* X*  X*									
Honeyeater lunatus  Noisy Friarbird Philemon X*	•		X	X	X	X*	X*	X	X
Noisy Friarbird Philemon X*	-	-							
Spotted Quail- thrush Eastern Varied Sittella Black-faced Cuckoo-shrike Cicadabird  Corniculatus  X X X X X X X X X X X X X X X X X X	•		X*						
Spotted Quail- Cinclosoma X X X X X X X X X X X X X X X X X X X									
thrush punctatum  Eastern Psophodes VX X X X X X X X X X X X X X X X X X X	Spotted Quail-		X	X	X	X	X	X	X
Eastern Psophodes	-								
Whipbird       olivaceus       X*       X* </td <td></td> <td>•</td> <td></td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td>		•		X	X	X	X	X	X
Varied SittellaDaphoenositta chrysopteraX*X*X*X*X*X*Black-faced Cuckoo-shrike CicadabirdCoracina novaehollandiaeXX*X*X*X*X*X*CicadabirdCoracinaXXXX		-							
chrysopteraSecondary of the control of th	•		X*	X*	X*	X	X*	X*	X
Black-faced Coracina X X* X* X* X* X* X* X* Cuckoo-shrike novaehollandiae Cicadabird Coracina X X* X* X* X* X*		-							
Cuckoo-shrikenovaehollandiaeXXCicadabirdCoracinaXX	Black-faced		X	X*	X*	X*	X*	X*	X*
Cicadabird Coracina X X X									
						X	X	X	

Table 2 continued

Common name	Scientific name	2005	2006	2007	2008	2009	2010	2011
		X*	X*	X*				
White-winged	Lalage sueurii	A*	$\Lambda^*$	A*	X	X	X	X
Triller	T 1 1	37	<b>1</b> 74	37	37	37	37	37
Crested Shrike-	Falcunculus	X	X*	X	X	X	X	X
tit	frontatus							
Olive Whistler	Pachycephala							X
	olivacea							
Golden Whistler	Pachycephala	X	X	X	X	X	X	X
	pectoralis							
Rufous Whistler	Pachycephala	X*	X*	X*	X*	X	X*	X
	rufiventris							
Grey Shrike-	Colluricincla	X	X*	X*	X*	X	X*	X
thrush	harmonica							
Olive-backed	Oriolus sagittatus	X	X	X*	X*	X	X*	X
Oriole								
Masked	Artamus		X	X	X	X		X
Woodswallow	personatus							
White-browed	Artamus		X*	X*	X	X		X
Woodswallow	superciliosus		71	7.	7.	21		21
Dusky	Artamus	X*						
Woodswallow	cyanopterus	<b>A</b>	71	71	71	71	71	71
	Cracticus	X*	X*	X	X	X*	X*	X*
Grey Butcherbird		Λ.	Λ.	Λ	Λ	Λ.	Λ.	$\Lambda$ .
	torquatus	X*						
Australian	Cracticus tibicen	A*	$\Lambda^*$	A*	$\Lambda^*$	$\Lambda^*$	$\Lambda^*$	$\Lambda^*$
Magpie	G. 1.	<b>3</b> 74	<b>1</b> 74	<b>3</b> 74	<b>3</b> 74	<b>1</b> 74	<b>1</b> 74	<b>3</b> 74
Pied Currawong	Strepera graculina	X*						
Grey	Strepera	X	X	X*	X*	X*	X*	X
Currawong	versicolor							
Rufous Fantail	Rhipidura	X		X	X	X	X	X
	rufifrons							
Grey Fantail	Rhipidura	X*	X*	X	X*	X*	X*	$X^*$
	albiscapa							
Willie Wagtail	Rhipidura	X*	X*	X*	X*	X*	X*	$X^*$
	leucophrys							
Australian	Corvus coronoides	X*	X*	X*	X*	X*	X*	$X^*$
Raven								
Little Raven	Corvus mellori	X*	X	X*	X*	X*	X*	X*
Leaden	Myiagra rubecula	X*	X*	X*	X*	X	X*	X*
Flycatcher	, 0							
Satin Flycatcher	Myiagra	X	X	X	X	X	X	X
= = J = M001131	cyanoleuca	_	_	_	-	_	_	-
Restless	Myiagra inquieta	X	X	X		X		X
Flycatcher								
Magpie-lark	Grallina	X*						
mapre mix	cyanoleuca	11	11	41	4.	41	11	<b>4 k</b>
White-winged	Corcorax	X*						
_		Α.	Α.	Α.	Α.	Α.	Α.	$\mathbf{A}$
Chough	melanorhamphos							

Table 2 continued

Common name	Scientific name	2005	2006	2007	2008	2009	2010	2011
Jacky Winter	Microeca	X	X*	X	X	X	X	X
outly (ville)	fascinans	1-						
Scarlet Robin	Petroica boodang	X*	X*	X	X*	X*	X	X*
Red-capped	Petroica	X	X*	X*	X	X	X*	X
Robin	goodenovii	11	11	11	11	11	11	11
Flame Robin	Petroica	X	X*	X*	X*	X*	X*	X*
Tiume Room	phoenicea	11	71	21	21	71	2.	2.
Rose Robin	Petroica rosea	X	X	X	X	X	X	X
Hooded Robin	Melanodryas	X*	X*	X*	X	X*	X	X*
1100ded 1(00iii	cucullata	21	71	21	21	21	21	21
Eastern Yellow	Eopsaltria	X*	X*		X	X	X	X
Robin	australis	21	71		21	21	21	21
Eurasian	Alauda arvensis	X	X	X	X*	X	X	X
Skylark	Thursday ar verisis	11	71	21	21	71	2.	2.
Golden-headed	Cisticola exilis	X	X	X	X	X	X*	X
Cisticola	Cisticota extitis	11	71	21	21	71	21	7.
Australian	Acrocephalus	X*	X	X	X	X*	X*	X*
Reed-Warbler	australis	11	71	21	21	71	21	21
Little Grassbird	Megalurus	X	X	X	X	X*	X	X
Little Glassona	gramineus	11	71	21	21	71	21	21
Rufous	Cincloramphus	X	X	X	X	X	X	X*
Songlark	mathewsi	11	11	11	11	11	11	11
Brown Songlark	Cincloramphus	X*	X	X*	X	X		X
210 Wil Sollgran	cruralis	1-						
Silvereye	Zosterops lateralis	X	X	X*	X	X	X*	X
Welcome	Hirundo neoxena	X*						
Swallow		1-						
Fairy Martin	Petrochelidon	X	X	X*	X*	X*	X*	X*
	ariel							
Tree Martin	Petrochelidon	X*	X*	X*	X*	X*	X*	X
	nigricans							
Bassian Thrush	Zoothera lunulata	X	X		X	X		
Common	Turdus merula	X*	X	X*	X	X	X	X*
Blackbird								
Common	Sturnus vulgaris	X*						
Starling								
Common Myna	Sternus tristis	X*						
Mistletoebird	Dicaeum	X*	X	X	X	X*	X*	X
	hirundinaceum							
Double-barred	Taeniopygia	X	X*	X*	X*	X	X	X*
Finch	bichenovii							
Red-browed	Neochmia	X*						
Finch	temporalis							
Diamond	Stagonopleura	X	X	X	X	X	X	X
Firetail	guttata							
House Sparrow	Passer domesticus	X*						

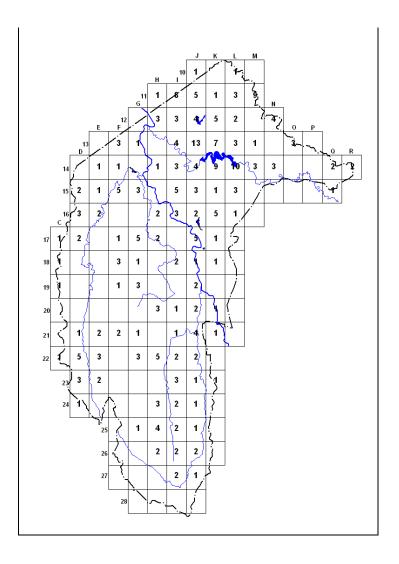
Table 2 continued

Common name	Scientific name	2005	2006	2007	2008	2009	2010	2011
Australasian	Anthus	X	X	X*	X*	X*	X*	X*
Pipit	novaeseelandiae							
European	Carduelis	X	X*	X	X	X	X	X
Goldfinch	carduelis							
Common	Chloris chloris	X				X	X	X
Greenfinch								
Mallards, Black		X	X	X	X	X	X	X
Duck-Mallard								
hybrids and								
variants								

#### **Notes**

Domestic ducks and geese, which frequent the lakes, have been excluded, as have domestic chickens even when recorded far from civilisation. The peafowl have been included as they appear to be a naturally reproducing "wild" population, in suburbia. The "mallard" group has been lumped as their exact identity cannot be assured — it probably includes crosses with domestic birds. The Emu and Magpie Geese are probably part of the semi-captive population at Tidbinbilla Nature Reserve.

Map 1. Number of datasheets per grid cell, 2011 blitz



# EARLY BREEDING RECORD FOR COMMON BRONZEWING (CHAPS CHALCOPTERA) IN FRASER ACT, AUGUST 2012

#### **DENNIS AYLIFFE**

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# 1. Background

Common Bronzewings were first noticed in 2005 when I tracked a calling male issuing the distinctive "ooming" from a eucalypt on the northwestern side of Mt Rogers in the outer northern ACT suburb of Fraser. My residence is one house back from the northwestern boundary of the Mt Rogers Reserve.

Since 2005 they have become more numerous and more or less full time residents of my native garden. There are always a few scuttling along the paths during daylight probably feeding on acacia seeds left over from the last seeding season. I have not seen a breeding event previously.

# 2. Breeding observations

On 8 July 2012 a male bronzewing carrying a short, small diameter stick in its beak settled on my clothesline. After deciding I posed no threat, it flew into a nearby mature bottlebrush (*Callistemon* sp) and proceeded to add the material to an already largely built nest that was about three metres from the ground and where a female was already present. They both flew off after the material was placed in the nest. It was comprised largely of small diameter sticks and was about 15 cm in diameter when viewed from below.



Figure 1. Female Common Bronzewing with nestling's head just visible in front of wing (12 August 2012).

The next day (9 July 2012) a male was sitting on the nest in the morning and replaced by the female in the afternoon. The male returned to do the night shift.

I monitored the nest at least twice each day until 12 August when I noticed a chick peering out from under the female's chest feathers (Fig. 1).

The nestling was rarely seen over the next four days with the parents covering it on my approach. On 16 August, the nestling had developed markedly and had taken to sitting in the sun alongside its parent (Fig. 2).



Figure 2: Common Bronzewing nestling and male parent (16 August 2012).

## 2.1 Currawong hazard

There is a longstanding and boisterous Pied Currawong (*Strepera graculina*) population comprising about 20 individuals in my part of Fraser. The birds are year round residents. In past years I have seen them take nestlings from other nests (*e.g.* Common Blackbirds). Initially they appeared to take no interest in the bronzewing's nest. However this changed on 15 August when I observed concerted efforts by up to five individuals operating collectively to harass the sitting bird. The harassment continued sporadically until 17 August (Fig. 3.)

During the currawong harrassment the male bronzewing defended the nestling by raising a wing in what can best be described as a "fending off" position close to the body and covering his head. Curiously, on its last day in the nest (18 August) there were no approaches from the currawongs, perhaps because they judged the nestling too big to deal with (?).



Figure 3. The male Common Bronzewing has covered the nestling as a Pied Currawong approached (16 August 2012).

# 2.1 The last two days of nest occupation

On 17 August, with the male on the nest sitting beside the young bird as in Fig. 2, I observed the young bird briefly arise from a sitting position and flap its wings, to the annoyance of the male bird.

At 17:05h on 18 August I observed and photographed the female standing off to one side of the nest (Fig. 4) with the young bird in the background. Sunset was at 17:35h. At 18:30h I observed the nest by torchlight and found that both the female and the youngster had left. They did not return.

I am not sure whether the young become independent after leaving the nest, but I have noticed a young bronzewing in my garden on its own three times since the nest was vacated. Whether it was being visited and being fed by its parents has not been observed

# 3. Some thoughts

Nests of the Common Bronzewing can be found in every month in the inland. The situation is no doubt similar in our region as breeding has been recorded in summer and winter (Frith 1982, 1969). Only one previous record of a winter brood in Canberra exists: 21.09.1999 2 birds on or leaving nest Mt Majura (Patrick Wyllie) (COG database).

According to Higgins and Davies (1996) incubation takes 14 to 16 days, and the hatching-to-fledging period lasts 14-17 days, giving 28 to 33 days from the start of incubation to the young leaving the nest. These two adults occupied the nest for a total of 41 days.

Weather conditions over the July-August 2012 period were cold in the mornings and evenings with some mornings down to -5 °C. Daytime temperatures rarely extended above

 $12\,^{\circ}$ C. There were several rain events, the largest being 15 mm overnight on 16 August. There was also light snow falling for 40 minutes on 18 August.

It possible that due to the cold conditions incubation or nestling period, or both, had to last longer than is typical for broods at warmer times of the year.



Figure 4: 18 August 2012: 17:05 h female Common Bronzewing sitting away from nest at dusk. At 18:30 h female and young had left the nest.

# Acknowledgements

My thanks to those COG members who provided comment on my email postings about this nesting event, and to Steve Wallace for information from the COG database.

### References

Canberra Ornithologists Group (2009) *Birds of Canberra Gardens*. 2<sup>nd</sup> edition, Canberra Ornithologists Group, Canberra.

Frith, H.J. (1982) Pigeons and Doves of Australia. Rigby Publ., Adelaide.

Frith, H.J. (1969) *Birds in the Australian High Country*. 2<sup>nd</sup> ed., Angus & Robertson Publ., Sydney.

Higgins, P.J. and Davies, S.J.J.F. (Eds) (1996) *Handbook of Australian, New Zealand and Antarctic Birds*. Vol. 3. Oxford University Press, Melbourne.

#### Addendum

For those interested in such things, the camera and lens combination used to photograph the bronzewings was a Nikon D70 body attached to a Sigma 170-500mm APO telephoto lens.

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# LITTLE EAGLES, WHISTLING KITES AND SWAMP HARRIERS IN THE AUSTRALIAN CAPITAL TERRITORY 2011

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Abstract. In 2011 we surveyed Little Eagle, Whistling Kite and Swamp Harrier territories in the Australian Capital Territory by searching former territories and soliciting reports from COG members and ACT Parks and Conservation Service personnel. We found one successful Little Eagle nest at Land's End that fledged one young. We found no Whistling Kites or Swamp Harriers breeding. We recommend that the Whistling Kite and Swamp Harrier be listed as Vulnerable in the ACT. We also recommend that Pindone and other chemicals used to control rabbits in the ACT be investigated as possible causes of declines in these raptor species.

#### 1. Introduction

In previous reports (Olsen & Fuentes 2005, Olsen & Osgood 2006, Olsen et al. 2007, 2010 Debus and Ley 2009) the collapse of breeding Little Eagles (*Hieraaetus morphnoides*) in the ACT was discussed. Since then we have also noted a decline in breeding pairs of Wedge-tailed Eagles (*Aquila audax*), Whistling Kites (*Haliastur sphenurus*) and Swamp Harriers (*Circus approximans*). Our aims in the current study were the same is in Olsen et al. 2010.

#### 2. Methods

See Olsen et al. 2010.

#### 3. Results

#### 3.1 Little Eagle

The nests at Dunlop (Roger Curnow) and on Black Mountain (Con Boekel) were not used. We found no other used nests in these areas. The nest at Uriarra East (Felicity Hatton), believed to be an alternative nest of the Pegasus pair, was not used but an adult female was present. The pair at Lions Youth Haven in Kambah was not present (Nick Webb). There was a pair inspecting nests on Mount Ainslie but we found no successful nesting (Felicity Hatton and Joan Real). The Uriarra East/Pegasus pair had moved to the private property of Land's End and fledged one young (Chris Davey). The total then, for 2011, was one young fledged from two territories, lower than the productivity for 11 territories in the early 1990's (see Olsen 1992 and Figures 1 & 2), and lower than the four young from three territories in 2009.

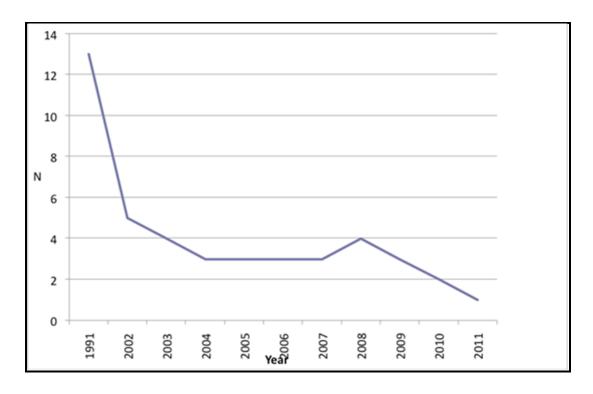
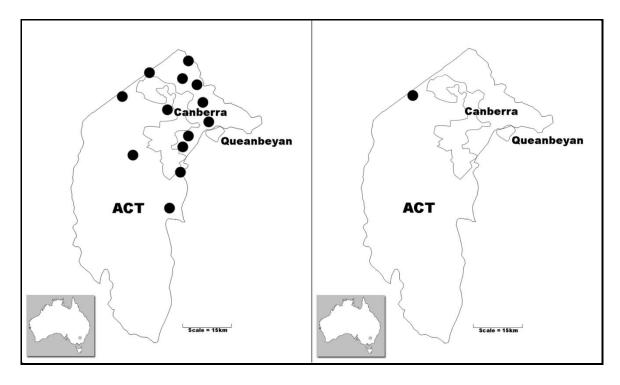


Figure 1 – Successful ACT Little Eagle nests 1992-2011



**Figure 2. Left: Successful ACT Little Eagle territories 1992** (each dot represents one territory with 1 to 6 nests used by a given pair in different years). **Right: Successful ACT Little Eagle territories 2011** (the black dot includes a cluster of 6 alternative nests used by the pair in this territory, after Debus *et al.* in press).

#### 3.2 Whistling Kite

Previously at least three pairs of Whistling Kite bred in the ACT, around Pialligo and Duntroon. We found no active nests in 2011 though there was a least one individual at Jerrabomberra Wetlands in early 2012 (Maconachie).

# 3.3 Swamp Harrier

One pair of Swamp Harriers bred and fledged young at Gudgenby in 2009 (Oliver Orgill). We found none breeding in 2010 or 2011.

# 4. Is Pindone implicated in the decline of the Little Eagle?

Rabbit Haemorrhagic Disease Virus (RHDV) escaped from Wardang Island, off South Australia, in October 1995, and may have been widespread in the ACT by late 1996 (B. Cooke pers. comm.). Henzell et al. (2002) described a cline in the effectiveness of RHDV along a hot-dry to cool-humid gradient, and Saunders et al. (1999) showed that the impact of RHDV in the New South Wales Central Tablelands was patchy. Antibodies against RHDV were found in sera of rabbits sampled before the introduction of RHDV. These two observations, combined, led to the hypothesis that a similar benign virus had already been present in Australian wild rabbits, giving them partial immunity (Strive et al. 2010). To counter the decreased effects of biological control in the ACT, the chemicals Pindone (2-pivalyl, 3-indandione) and 1080 (sodium fluoroacetate) are now used to control rabbits. At high doses, Pindone is fatal to raptors, or disables them temporarily (Martin et al. 1994), which can be fatal if the raptor is incapacitated and cannot forage or evade predators. Pindone is used mainly in peri-urban areas (G. Saunders pers. comm.), because it is much less toxic to dogs than is 1080, and an antidote exists for Pindone, whereas there is no antidote for 1080.

The prevailing pattern found in the ACT is that Little Eagle pairs are disappearing from government peri-urban lands where Pindone is used, but successfully breeding pairs persisted on outlying private farms where 1080 or no rabbit baits were used. An example of the latter is the Pegasus/Land's End pair where there has been virtually no rabbit control except for some warren-ripping three years ago (landholder information). In 2011 that is the only place we found a successfully breeding pair.

# **5. Discussion and Conclusions**

Whistling Kites and Swamp Harriers should be listed as Vulnerable in the ACT. We also recommend that Pindone and other chemicals used to control rabbits in the ACT be investigated as possible causes of declines in ACT raptors. Data on Pindone use in the ACT, e.g. application rates 1990–2010 and where it was used will help clarify any temporal or spatial pattern between the decline of Little Eagle and Whistling Kite and Pindone use. We will continue this survey in the 2012 season.

#### Acknowledgements

Thanks to COG members, especially Con Boekel, Steve Holliday, Chris Davey, Barbara Allan, Michael Lenz, Roger Curnow, Rod Mackay and Graeme Clifton. Thanks also to Oliver Orgill, Felicity Hatton, Nick Webb, and John McRae who passed along Little Eagle and Swamp Harrier sightings for the survey and Christie Gould, David Shorthouse, Don Fletcher, Murray Evans, Bernard Morris, Brett McNamara, Darren Roso, and Greg Hayes.

Sue Trost gave invaluable assistance in the field; Stephen Debus and McComas Taylor gave much appreciated advice.

#### References

- Debus, S.J.S., Olsen, J., Judge, D. and Butterfield, M. (in press) Numbers of breeding Little Eagles Hieraaetus morphnoides near Canberra in relation to atlas counts. *Corella*
- Debus, S.J.S., and Ley. A.J. (2009) Aspects of the breeding cycle of the Little Eagle Hieraaetus morphnoides. *Australian Field Ornithology* 26:76–99.
- Henzell, R. P., Cunningham, R. B. and Neave, H. M. (2002) Factors affecting the survival of Australian wild rabbits exposed to rabbit haemorrhagic disease. Wildlife Research: 523–542.
- Martin, G.R., Kirkpatrick, W.E., King, D.K., Robertson, I.D., Hood, P.J., and Sutherland, J.R. (1994).. Assessment of the potential toxicity of an anticoagulant, Pindone (2-pivalyl, 3-indandione), to some Australian birds. *Wildlife Research* 21: 85-93.
- Olsen, J. (1992) Raptors in Namadgi, Canberra Nature Parks, the Murrumbidgee River Corridor and on the Googong Foreshore, ACT with special emphasis on the Peregrine Falcon. Report to the ACT Parks & Conservation Service.
- Olsen, J. and Fuentes, E. (2005) Collapse in numbers of breeding Little Eagles in the Australian Capital Territory. *Canberra Bird Notes* 30: 141-145.
- Olsen, J. and Osgood, M. (2006) Numbers of breeding Little Eagles Hieraaetus morphnoides in the Australian Capital Territory in 2006. *Canberra Bird Notes* 31: 178-182.
- Olsen, J., Osgood, M., Maconachie, M. and Dabb, G. (2007) Numbers of breeding Little Eagles Hieraaetus morphnoides in the Australian Capital Territory in 2007. *Canberra Bird Notes* 32: 77 -80.
- Olsen, J., Osgood, M., Maconachie, M., Dabb, G. and Butterfield, M. (2010) Little Eagles, Whistling Kites and Swamp Harriers in the Australian Capital Territory 2009. *Canberra Bird Notes* 35: 81-84.
- Saunders, G., Choquenot, D., McIlroy, J. and Packwood, R. (1999) Initial effects of rabbit haemorrhagic disease on free-living rabbit (Oryctolagus cuniculus) populations in central-western New South Wales. *Wildlife Research* 26: 69–74.
- Strive, T., Wright, J., Kovaliski, J., Botti, G. and Capucci, L. (2010) The non-pathogenic Australian lagovirus RCV-A1 causes a prolonged infection and elicits partial cross-protection to rabbit haemorrhagic disease virus. *Virology* 398: 125–134.

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# **BUFF-BANDED RAIL IN GILMORE**

# **BILL GRAHAM**

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#### 1. Introduction

An unfamiliar bird appeared in our former garden on the 15<sup>th</sup> September 2011. It was a Buff-banded Rail (*Gallirallus philippensis*) and was sighted on 6 six days over the next four weeks. It is described as a rare summer breeding migrant for the ACT. (Taylor and COG 1992). Why did it visit? Where was it on the other 22 days? What significance does it have for other records in the ACT and region?

The garden is on the corner of Hain Place and May Maxwell Crescent, Gilmore. The rail was seen most times on a raised earth bank in Hain Pl. The bank was built in 2006 and is 11 x 4m and 1m high. It was covered by a thicket of groundcovers and shrubs. There were sheltered clearings under branches at each end, with seeding Brome Grass *Bromus* spp. and other weeds. A good season in 2011 meant a high level of moisture was in the soil resulting in a flush of spring growth.

# 2. Sightings

Week 1: 15/9/11, 09:45h. I heard scrabbling in the dry leaves and thought it was the Common Blackbird (Turdus merula) that was usually there. Instead, a bird the size and shape of a large mango, moved away. I walked round an acacia to head it off. It turned back into the garden and I saw it again before it hid in the undergrowth. There was a bold white slash over the eye and black and white stripes underneath. The tail was stumpy and erect. After going inside for a camera and returning, it had gone.

17/9/11 16:00h. Disturbed the rail by the side of the driveway near neighbour's hedge. Bird flew over road to a thicket. Wings spread out wide, light bronze sheen in the afternoon sun and body darker brown, with legs dangling.

Week 2: 21/9/11 two sightings at 06:45h and 08:45h near the street corner, under a callistemon.

Week 3: I removed seeding Brome grass and other weeds from both clearings. About 4/10/11 a neighbour reversed in her driveway and saw a bird, matching its description, "run not fly" across her driveway". (Rebecca Becke, pers. comm..)

Week 4: 10/10/11 12:05h. My wife drove out of the garage while I sat in the passenger's seat and looked across to the bank 6 m away. The rail was in the clearing. It stepped behind the trunk of an acacia, partly obscured. It had a few pecks at the ground, foraging. We had to go and ceased observing.

11/10/11 15:00h. Rail disturbed at the northern end and it scooted out of sight. At 15:05h observed it from an inside window, 3m away. It returned to the site and pecked at the ground, alert and looked in my direction. The long white eyebrow was prominent in the shade. It spent a few seconds moving about then left.

12/10/11 10:30h. Flushed from the front corner of the house under a hedge. Dashed across the open space to the bank. This was the last sighting.

#### 3. Discussion

A likely reason the rail visited was that our garden offered the right habitat for food and shelter. The diet of the Buff-banded Rail consists mostly of crustaceans, molluscs, worms, insects, sometimes young plants, seeds and other vegetable matter. (Marchant & Higgins 1993). The other houses in Hain Pl. had well developed gardens that had grown over 25 years. They would have provided good approaches to and escape routes from our garden. Hain Pl. backs onto a reserve and horse paddocks that extend to the Monaro Hwy. The most likely roosting site was a small dam 700m NNE by the power station. The dam with extensive reedbeds and shrubs around it is fenced off. For the 22 days the rail was not seen it may have used this as a base to forage along creeks and small dams running north and south.

No Buff-banded Rails were recorded in Canberra garden bird surveys before 2009. (Birds of Canberra Gardens Canberra Ornithologists Group 2009). The first was an incidental record, of one on 2<sup>nd</sup> Nov. 2009 from Grid K16 in Fadden (Julian Reid COG Database). The rail was silent when seen in our garden. Adding to the difficulty of detection is that the majority of ACT sightings are of single birds. Unpaired birds usually forage solitarily (Marchant and Higgins 1993).

Although the visit of a Buff-banded Rail to a suburban garden seems unusual, it should not be unexpected. The species is secretive and easily overlooked. (Taylor and COG 1992). It is found in a variety of wetlands but also regularly... in non-wetland habitats, especially in grasslands and other grassed areas; pasture crops; occasionally in heathland, woodland forests etc. Also they roost, loaf or shelter among thick tall clumps of concealing vegetation such as grass reeds, rushes or shrubs. (Marchant and Higgins 1993).

#### 3.1 Records

It was recorded in 5 of the previous 11 years prior to 30 June 2001 (Canberra Ornithologists Group 2001) and 10 of past 11 years to June 2010 (COG 2011). This suggests numbers are increasing.

# 3.2 Breeding Records

The ACT has four breeding records: three before 1989, all from Gungahlin homestead (Taylor and COG 1992) and one of dependent young 6 Jan 2006 Jerrabombera. Outside the ACT breeding has been recorded twice: On 27 Dec 1995 dependent young Gr L14, at Jerrowa Crk," Yellangalo" 12 km SW of Gunning (James Nicholls NiJ2); 20 Dec 2000 an adult pair with four hatchlings on the Upper Molonglo Floodplain ,56 km south south-east of the centre of Canberra (Bourne 2002).

#### 4. Conclusion

A significant change in urban planning in the ACT could result in increasing numbers of Buff-banded Rails occurring and being recorded. From its inception in 1913, watercourses and wetlands were "improved" by the installation of storm water drains with some silt traps. The result has been increased turbidity in urban lakes and outbreaks of blue green algae. In an effort to counteract this, wetlands have been created in more recent times for slowing water flow and preventing silt and nutrients entering urban lakes. The clear waters of Yerrabi Pond in Gungahlin suggest this has worked. It is very likely that due to the elusive behaviour of Buff-banded Rails and the dense habitat they use there is under

reporting. The increase in wetlands in urban areas suggests more sightings in the future - so keep a look out!

#### References

Bourne, D. (2002) Birds of the Upper Molonglo Floodplain, NSW: The importance of remnant grasslands and wetlands. Canberra Bird Notes 27:60-63.

Canberra Ornithologists Group (2001) Annual Bird Report: 1 July 2000 to 30 June 2001 Canberra Bird Notes 26(4): 145-199

Canberra Ornithologists Group (2011) Annual Bird Report: 1 July 2009 to 30 June 2010 Canberra Bird Notes 36(1): 1-80.

Canberra Ornithologists Group (2009) *Birds of Canberra Gardens*. 2<sup>nd</sup> ed., Canberra Ornithologists Group, Canberra.

Marchant, S. and Higgins, P.J. (Eds) (1993). Handbook of Australian, New Zealand and Antarctic Birds, Vol. 2. Raptors to Lapwings, Oxford University Press, Melbourne.

Taylor, M. and COG (1992) Birds of the ACT: an atlas COG and NCPA, Canberra

Accepted 29 July 2012



**Buff-banded Rail** (Noel Luff)

# **ODD OBS**

#### GREY BUTCHERBIRD'S NEST IN ARANDA BUSHLAND 2012

On 4 August 2012 my husband, Alan, found a pair of Grey Butcherbirds building a nest in Aranda Bushland about 5 metres from the ground in a eucalypt. The nest was composed of twigs and was placed on a horizontal forked branch. The building continued at intervals until 25/8/12." and 25 August 2012 we observed Grey Butcherbirds (*Cracticus torquatus*) building a nest in Aranda Bushland, about 5 metres from the ground in a eucalypt. It was composed of twigs and was placed on a horizontal forked branch.

From 26 August the female was sitting on the nest most of the time until the 21. September 2012 when the nestlings hatched. That appears to be a longer incubation period (about 26 days) than the examples given in HANZAB (19 and 21 days).

After the nestlings hatched, the male brought food to the nest and fed the female who then fed the three nestlings. She mostly remained at the nest. When she did leave it was only for a few minutes. Once I saw her extracting insects from under bark in a eucalypt. Another time she flew to the ground and picked up a worm. She never flew far from the nest while the male flew quite long distances in comparison and was away for much longer periods. Both parents removed droppings from the nest.

By the 27 September, the male was feeding the nestlings himself and the insects the parents brought were visible in their beaks. The food included cicadas and beetles and I saw the male catching a moth in mid-air and the female catch a little skink on the ground.

That day (27 September) the male, which had tolerated me watching not far from the nest, swooped me twice and, when I left the vicinity of the nest, followed me for some 50 or 60 metres. Possibly he became more anxious as the young ones became noisier. He had been chasing off some birds *e.g.* cuckoo-shrikes and friarbirds. He tolerated the regular birds in the area, small birds, cockatoos and rosellas. When the parents were at the nest at the same time, they always flew away from it in different directions. I wondered if that was to distract predators. By this date the female was flying further away to collect food.

On 13 October I could see that the three nestlings were at different stages of development. The biggest was almost fully fledged. It still had downy eyebrows and throat feathers. It was very active - preening, flapping its wings and standing on the edge of the nest. The second was preening a little but mostly lay low in the nest until food arrived. The third one was doing nothing except gaping for food. By 15 October, the oldest nestling was hopping hesitantly on to the branch next to the nest while the other two had increased their activity. By 17 October, No 1 nestling was frequently hopping out of the nest, No 2 was leaving the nest briefly and No 3 was preening and taking an interest in its surroundings. In the morning of 19 October, No 1 had left the nest and was about 10 metres away and about 3 metres up in a eucalypt. The other two were still at the nest but were very active on or beside it. By the afternoon they had also left the nest. The period from hatching to fledging was therefore about 29 days.

On 20 October No 1 was about 4 metres up in a tree near the nest tree while Nos 2 and 3 were together near the ground close by.

The fledglings continued to remain fairly near the nest site. No 1 was always separate from the other two which stayed together. On 28 October, a Crimson Rosella flew to the branch that No 1 was perched on and persistently pushed at it even though the fledgling nervously backed away from it. Interestingly, neither parent was perturbed by the rosella's behaviour and just moved around it to feed the fledgling and then flew off. Eventually the young one became so anxious that it flew to another tree which meant that the parents could not find it when they came back.

On 14 November I saw the butcherbirds close to the nest tree. There were at least two of the young ones which were spending their time flying between fallen trees looking for insects in the bark and on the ground. The parents were still feeding them.

#### Reference

Higgins, P.J., peter, J.M. and Cowling, S.J. (Senior Eds.) (2006) *Handbook of Australian, New Zealand & Antarctic Birds*. Vol. 7, Oxford University Press, Melbourne.

Accepted 9 November 2012

SUSAN ROBERTSON, PO Box 228, Jamison Centre, ACT 2614

# CHESTNUT-RUMPED HEATHWREN (CALAMANTHUS PYRRHOPYGIA) BREEDING IN YANUNUNBEYAN STATE CONSERVATION AREA.

On 3 November 20012 a COG Field Trip visited Yanununbeyan State Conservation Area. The first walk undertaken was towards Corner Hill. We entered some eucalypt woodland (mainly *Eucalyptus rossii* and *E. macrorhyncha* with an understorey dominated by *Joycea pallida*.)

At one point I stepped off the track to inspect an orchid (Diuris sulphurea) and flushed a small darkish brown bird with a bright chestnut rump. It flew quite swiftly about 20m and dived to the ground. The 9 members of the group spent some time getting occasional glimpses of the bird but none clear enough to identify it.

In view of the colour of the rump my first thought was Chestnut-rumped Heathwren (*Calamanthus pyrrhophagia*) which was supported by the bird's tendency to cock its tail vertically. However the image of the species shown in a field guide<sup>1</sup> and a smartphone application showed a white breast with dark streaking. The bird seen had a brown breast. As alternatives we considered White-browed Scrubwren (*Sericornis frontalis*) and Pilotbird (*Pycnoptilus floccosus*). However, based on plumage features, size or habitat those species did not match the bird under observation.

Attempts were made to photograph the bird, but the best result was of the log on which it had been perching! We moved on, returning to the area after about 10 minutes.

1

<sup>&</sup>lt;sup>1</sup> Subsequently found to apply to a number of field guides so this one is not singled out and named.

On this occasion a member of the group saw the bird in question fly into a jumble of vegetation under a fallen log and noticed 'baby bird noises' coming from the site. We spread out a little so as not to stress a breeding bird and the bird soon re-appeared. On this occasion I got a reasonable look for about 2 seconds noting: the bright chestnut colouring extending under the rump; a faint 'off-white' eyebrow; some white on the tail; and faint, but clear, darker streaking on the brown breast.

On returning home and consulting HANZAB v6 it was clear that the bird was very similar to the illustration of a female Chestnut-rumped Heathwren. The breast colour was possibly a little browner – more like the illustrated juvenile – perhaps indicating a young bird. The location of the nest (inferred from the calls when the bird entered, and the repeated visits to, the location) was typical of the sites described in HANZAB.

While the adult bird was not heard to sing, which was unlike previous experience with this species at Pierces Creek, the description of Voice in HANZAB suggests that singing is more common earlier in the year. The calls by the young as the adult approached the nest was as described in HANZAB.

I have concluded this was a record of a Chestnut-rumped Heathwren and that a nest with young (NY) was present. This is the third breeding record for the species in the COG AOI and the first non-DY breeding record.

#### Reference

Higgins P. J. and J. M. Peter (Eds) 2002 "Handbook of Australian, New Zealand and Antarctic Birds, volume 6"

Accepted: 8. November 2012

MARTIN BUTTERFIELD, 101 Whiskers Creek Road, Carwoola, NSW 2620

# WILLIE WAGTAIL CONGREGATIONS AT LAKE BATHURST or ARE WE UNDER-REPORTING VALUABLE INFORMATION?

Willie Wagtails (*Rhipidura leucophrys*) are usually encountered as single birds, pairs and family parties: at times a few more birds may congregate around good sources of food. This is also the situation in the rural landscape and remnant woodlands around Lake Bathurst to the NE of Canberra.

In autumn and winter the species may also appear along the lake shores and adjoining open plain in small and at times even larger numbers. For example, on 20 May 1985, over several hours a total of 19 Willie Wagtails were moving (some taking short breaks) along the lake shores and beyond in a northerly direction. The largest group consisted of 8 birds. On 30 June 1996 the situation was similar and 23 birds were recorded moving through singly or in small groups. I am not implying that these birds were migrating, but these observations support the notion that the species is capable of local movement (Higgins *et al.* 2006), and that the extent of such movements may be more pronounced than we often think. Since the birds had to traverse a very open landscape at Lake Bathurst, it was

possible to detect such movement. Further indications that the Willie Wagtail is not as sedentary as we tend to believe come from sites that are monitored throughout the year. Numbers decline after the breeding season to a low over winter, only to be replenished come spring (for suburbia: Chris Davey, pers. commun.; for open woodland: own obs.).

Most times though, birds are more stationary. Insects stirred up by grazing sheep and notably swarms of midges emerging from the lake can attract larger numbers of Willie Wagtails as my following two observations indicate:

3 April 2011 12 birds in a paddock milling around a flock of sheep, often using fences and the sheep themselves as vantage points to catch insects.

28 May 2012 18 birds along a 30m stretch of shore line with large numbers of low-flying midges. The Willie Wagtails took frequent turns between feeding on the shore and resting on a nearby fence.

Higgins et al (2006) in HANZAB state that the species occurs "mainly singly or in twos. Also recorded in small family groups or occasionally in small parties of up to 12, or exceptionally, up to 40 or so birds; larger groups more often reported outside breeding season, in autumn and winter."

To my surprise, the COG data base contains many records of more than 10 Willie Wagtails, with a maximum of 30 birds. I extracted 121 such observations. Clearly something is amiss! Fortunately, the answer is very simple: these high numbers reported to COG do not indicate actual group sizes, but they are the sums of all encounters with the species during a survey, or walk in a given area. None of these records give any indication that large groups of Willie Wagtails were actually involved, although in some cases they may well have been. Further proof that this conclusion is correct comes from the fact that 75% of these records fall across the breeding season of the species (August to February, see COG 1993), a time when one usually encounters only small numbers of birds, i.e. pairs or family parties at any one spot.

This means that we cannot deduce at all average or maximum group sizes or seasonal changes in the extent of flocking from these records. What applies to the Willie Wagtail records may most likely also apply to the records of many other species:

Now, we may not care too much about group size in birds, and hence may not be particularly concerned that we cannot find them from the COG database. However, there is another more important part of the information associated with these records which we are actually collecting in the first place, but then discard completely. In order to report the sum of sightings of a given species during a survey, we first have to note all the individual encounters and then add them up to get to the sum of birds recorded. Only the sum of all observations for a given species is then noted on the data sheet or entered electronically into the system. Yet, how often we encounter a species during a survey provides a rough indication of the distribution pattern, i.e. how widespread it is or how restricted its occurrence may be. During the breeding season the number of encounters may also give a rough indication of the number of potential breeding territories. Yet all this valuable information which we carefully record in our notes as we walk through an area is ignored and discarded!

We can easily remedy this situation, salvage this information and incorporate it into our record of the observed totals. For example, instead of just reporting, let's say, "15 Willie

Wagtails in a 500m survey", which could mean either a group of 15 wagtails were recorded or the species was seen several times but in smaller numbers adding up to a total of 15 birds. The two scenarios could be annotated for example like this:

15 (1x), meaning: 1 encounter, 15 birds together

15 (6x, max. 5), meaning: 6 encounters, with the largest group 5 birds;

15 (12x, max. 2), meaning: 12 encounters, with the largest group 2 birds (species far more wide-spread than in the previous examples).

Another real example: At a site near Gundaroo I regularly note the number of Rufous Songlarks over the spring/summer period: the total number at the end of a 500m survey on 5 January 2012 was 20. But much more information is hidden in that total. The annotation was: 20 (7x pair; 3x male; 3x dy)

The number of pairs and males corresponds to figures from the previous breeding season. Thus at this site the species has maintained a stable population, and in some territories was already breeding success. All this information would be lost if I were to report just the total number of birds seen.

For many years I admit I was not so consistent, however, in recent years I use this approach more regularly during my surveys for many of the birds I encounter. This extra information is easily added under "Comments" into the database. As with all our records, the true value of this information will only become apparent with time.

I am grateful to Steve Wallace for making the Willie Wagtail records from the COG database available, and to Steve and Chris Davey for comments on an earlier draft.

#### References

COG (1993) Birds of the Canberra Region. Field List. Canberra Ornithologists Group, Canberra.

Higgins, P.J., Peter, J.M. and Cowling, S.J. (Sen. Eds.) (2006) *Handbook of Australian*, *New Zealand & Antarctic Birds*. Vol. 5, Oxford University Press, Melbourne.

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# AN "OUTBREAK" OF BANDED LAPWINGS ON (AND NEAR) THE HOSKINSTOWN PLAIN

The species account for Banded Lapwing *Vanellus tricolor* in "Birds of the ACT: Two Centuries of change" (Wilson 1999) concludes "There have been no recent sightings. The species is presumed to be extinct in the ACT." This is, as would be expected, consistent with the views expressed in the ACT Bird Atlas (Taylor and COG 1992) reporting a few records in the ACT scattered through the 1980s. More recently Boekel has reported (Boekel 2010) on the reappearance of the species in Throsby, and in 2012 a pair were observed on the Canberra airport.

The locations referred to in this note are shown in this snip from Google Earth (see following page). From Lake Bathurst to Plains Rd is approximately 43km in a straight line while Lake Bathurst-Throsby is 50km.

In the wider COG Area Of Interest (AOI), sightings have been made in the Lake Bathurst/Morass area of NSW most years since 1981, mainly through the Waterbird Surveys. Recent sightings have included 158 birds in January 2012 (the highest number ever recorded in the Water Bird Surveys) and 84 birds in September 2012. As Lake George has rehydrated since 2010 there have been a few reports from that area including 37 birds in October 2010 (M Lenz pers comm).



Against that background I was surprised to find that the Atlas of Living Australia contained a record for Banded Lapwing from the Hoskinstown Plain. Other than noting that the coordinates for the record gave a position close to the Molonglo River I have not been able to gain further information about the circumstances of the observation. This led me to wonder if this was a case of mistaken identity of Masked Lapwing *Vanellus miles*, commonly seen in the area.

Following the appearance of the birds at Canberra airport mentioned above I advised several residents of the Carwoola area that there was a prospect of the Banded Lapwing being observed in suitable habitat in the area. In response to that, on 7 October 2012 a local landowner (not a member of COG) advised that he had seen 5 Banded Lapwings in a recently sown paddock on the Hoskinstown Plain. When I visited the area the next day 25 Banded Lapwings were observed in a paddock on which forage brassica was germinating.

The landowner monitored the birds closely and on occasions when I visited the area COG data sheets were lodged. These summarise the presence of the species in the location, with the highest number of birds recorded (on 7 November 2012) standing at the time of writing at 46. It is possible that this is an undercount since by that time the crop had grown somewhat and the Lapwings disappeared from view when they sat or walked through a particularly tall section of crop.

I was advised by email (D Wilson pers comm) that on 19 October 2012 at least 6 Banded Lapwings had been seen beside the Kings Highway in a ploughed paddock. This is

approximately 15km from the site on Hoskinstown Plain. Wilson also advised that Banded Lapwings were common in that area 50 years ago when passing through with his father while returning from banding expeditions on Lake Rd Bungendore.

On 24 October I saw 7 Banded Lapwings in that location. In response to this sighting David McDonald visited the site a little later in that day and recorded 12 Banded Lapwings (D McDonald pers comm). On my way home from blitzing on 27 October I also recorded at least 12 Banded Lapwings in the same paddock. On 28 October passing by at 6am – in rather cool weather - I could only identify 6 birds of this species, clustered around the edge of the paddock as though they had sheltered in the rank grass overnight. On 5 November I passed the site at 1330 and observed 4 Banded Lapwings in two pairs, one at each end of the paddock. Some of the crop was growing well, making it difficult to spot the birds.

In summary it would appear that the Banded Lapwing is regaining its former territory. Whether this reflects changes in the weather; changes in land management in the area; or simply chance is a topic for speculation. However the species is known to be nomadic and the recent resurgence in the AOI may be a reflection of seasons which suit the requirements of the species.

#### References

Boekel, C. (2010). Status of the Banded Lapwing *Vanellus tricolor* in the Australian Capital Territory. *Canberra Bird Notes* 35: 192-196.

Taylor M. and COG (1992) *Birds of the Australian Capital Territory: An Atlas*. COG and NCPA, Canberra.

Wilson S. (1999) Birds of the ACT Two Centuries of Change. COG, Canberra.

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**Banded Lapwing** (*Rhonda Hansch*)

# **COLUMNIST'S CORNER**

# BIRDING IN CYBERSPACE, CANBERRA-STYLE

**Citizen science** seems to be increasingly in the news. While many definitions of the term exist, this one from Wikipedia is helpful:

Citizen science is scientific research conducted by crowdsourcing, in whole or in part, by amateur or nonprofessional scientists. Formally, citizen science has been defined as 'the systematic collection and analysis of data; development of technology; testing of natural phenomena; and the dissemination of these activities by researchers on a primarily avocational basis'...Citizen science is sometimes called 'public participation in scientific research'.(http://en.wikipedia.org/w/index.php?title=Citizen\_science&oldid=518935531):

Setting aside any comment one may care to make about the abuse of the poor semicolon in this definition (why are people so scared of the delightful comma?) this year a consortium of organisations described as 'A landholder, community, industry, government and business collaboration' has established a website dedicated to **citizen science activities concerned with feral animals: FeralScan** <a href="http://www.feralscan.org.au">http://www.feralscan.org.au</a>. Visiting the home page reveals an invitation to 'Help map feral animal sightings in your area—get involved!'. There it provides links to MynaScan and StarlingScan, along with RabbitScan, CamelScan, FoxScan, FeralPigsScan, ToadScan, FeralGoat Scan, FeralFish Scan, WilddogScan, DeerScan.

Clicking on MynaScan, for example, takes us to the area dedicated to the much-disliked Common Myna. There we find a national map of sites from which this species has been recorded in this database. It shows the number of sites by state with the ACT having 2,598 sites out of a national total of 3,942 sites at the time of writing, highlighting the considerable interest in the management of the species in our area. Other items covered include

- What is MynaScan?
- How to get involved?
- Create your own Myna map.
- Success stories
- The 2012 Ferals Photo competition

Well worth checking out if you are interested in this aspect of citizen science.

In previous 'Birding in Cyberspace' columns I have referred to the excellent free magazine *Decision Point*, published monthly by the Environmental Decisions Group (EDG), see <a href="http://www.decision-point.com.au/">http://www.decision-point.com.au/</a>. The October 2012 issue (number 64) has a fascinating article 'Citizen scientist vs "professional" scientist: how reliable is this volunteer-collected information?', authored by Judit Szabo from Charles Darwin University and Hugh Possingham from the University of Queensland. I won't tell you the answer they provide to the question, but it is of great interest to all of us who provide data to the Canberra Ornithologists Group's and/or Birdlife Australia's birding atlas databases.

This one has been around for some time but, being aware that we have new readers of this journal with every issue, I thought it worthwhile reminding you about the YouTube video, mentioned in a recent post to the national birding email list, BirdingAus, of **Two Crows Incite EPIC Cat Street Fight! - Birds Gone Wrong!** 

http://www.youtube.com/watch?v=b07b7VLNbSA&feature=youtube\_gdata\_player . It has had been downloaded 132,344 times when I last visited it and, once you check it, out you will understand why. As the title suggests, it deals with aggressive interactions between cats and crows. Someone more knowledgeable than me about animal behaviour may care to write to our editor to explain just what is going on in this video.

Also of interest on BirdingAus towards the end of September was a message from **John Weigel about his Australian Big Year**. He is on a quest, following in the footsteps of others, to see how many bird species he is able to observe in Australia in the course of a calendar year. He reported to BirdingAus that, at 26 September, he reached the very important 700 species mark. His 700<sup>th</sup> was a Scarlet-chested Parrot at Gluepot Reserve. His blog at <a href="www.birdingfordevils.com.au">www.birdingfordevils.com.au</a> provides details on his escapades and progress, along with information on supporting efforts to save the Tasmanian Devil.

Many readers will be familiar with Sean Dooley's wonderful book *The big twitch: one man, one continent and a race against time - a true story about birdwatching*. Dooley cracked the national record when he observed a massive 703 species in 2002. Amazingly, Weigel reach that point on 7 October. John Weigel's blog is becoming increasingly interesting as he approaches the end of the year. How many species will he have ticked in Australia by midnight on 31 December?

As one would expect, someone doing an Australian Big Year has to first define just which bird species are on the Australian list. Why? As discussed in the previous column in this series, a number of official lists of Australian birds exists, each differing slightly from the others. Sean Dooley used the Birds Australia/Cristidis and Boles list current in his Big Year, but John Weigel uses the International Ornithologists' Union's IOC World Bird List <a href="http://www.worldbirdnames.org/">http://www.worldbirdnames.org/</a>. While the differences between the two are of little importance to most of us, for someone doing a national Big Year it can make a real difference owing to how particular species are split or lumped. But let's leave it to the people doing their Big Year!

Also of interest on BirdingAus during November, continuing the theme of twitching, was a discussion about the **Tasmanian endemic bird species**. Quite a few birders have taken on the task of seeing all 12 Tasmanian endemics (12 species, that is, based on the Christidis & Boles' taxonomy) in the shortest possible time period. A recent one was Paul Dodd who reported his experiences on BirdingAus on 17 September, commencing his email with the words 'For those of you not interested in competitive bird-watching, now is the time to close this email and ignore it'! He wrote that his task was '...from the perspective of an interstate birder visiting Tasmania, and [the birds] should be counted from stepping off the plane at Hobart airport'.

Paul went on: 'I had been told that the record for seeing these species from stepping off a plane at Hobart airport was five hours. Well, Ruth and I managed this feat in THREE hours last Saturday!' They started at the Peter Murrell Reserve near Kingston and things went on

from there. Although I'm not very familiar with birding in Tasmania, Paul seems to have quite an achievement here.

Of particular interest was the email thread that followed about the identification (or more accurately, the mis-identification) of Tasmanian and Browns Thornbills. It was pointed out that most of the records of Tasmanian Thornbills from the Peter Murrell Reserve, in particular, come from mainland birders who are very familiar with the Brown Thornbill but totally unfamiliar with the Tasmanian Thornbill, and that most (though probably not all) of the Peter Murrell Reserve observations of that species are wrong. Fortunately, Paul Dodd had a good record of the Tasmanian Thornbill from one of its acknowledged strongholds, so he did not need to rely on an observation (that some may think is a bit shonky) from the Peter Murrell Reserve site.

In previous columns I have discussed some of the bird listing software that is becoming available for smartphones and related digital devices such as iPads. Recent discussions on BirdingAus have drawn attention to two additional apps: the Birdwatcher's Diary http://www.stevenscreek.com/birdwatchersdiary.htm and BirdLog Australia and New Zealand http://www.birdseyebirding.com/. The arrival of the latter is particularly important as it enables one to digitally record data in the field and submitted to the outstanding international database eBird http://www.ebird.org . The editor of Canberra Bird Notes will welcome any reviews, or less formal information, about your experiences in using these or other digital field data collection tools that may be of interest to our readers. I wonder if anybody still uses the old-style pencil and notebook data capture technique and, if so, why?

If you have other ways of using the internet to keep up-to-date with what's happening in the experiences please share your email cbn@canberrabrds.org.au.

T. Javanica

This column is available online at http://cbn.canberrabirds.org.au/. There you can access the web sites mentioned in the column by clicking on the hyperlinks in the online version of CBN.

Details on how to subscribe to Birding-Aus, the Australian birding email discussion list, are on the web at <a href="http://www.birding-aus.org/">http://www.birding-aus.org/</a>. A comprehensive searchable archive of the messages that have been posted to the list is at http://bioacoustics.cse.unsw.edu.au/archives/html/birding-aus.

To join the CanberraBirds email discussion list, send an email message with the word 'subscribe' in the subject line to canberrabirds-subscribe@canberrabirds.org.au. The list's searchable archive is at <a href="http://bioacoustics.cse.unsw.edu.au/archives/html/canberrabirds">http://bioacoustics.cse.unsw.edu.au/archives/html/canberrabirds</a>

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# PRESIDENT'S REPORT 2011-12

It is with pleasure that I present my fifth President's Report covering the 12 month period October 2011 to September 2012.

#### Forward Plan

As in the past the Committee's activities have been guided by the COG Forward Plan which was revisited and then published in the May 2012 Gang-gang. Progress has occurred on various fronts. In particular I would like to mention the following:

# 1) Updating the COG website

As indicated in my last President's Report, we had some difficulties in sourcing a company that would take on the job of updating the website. I am glad to say that this problem was solved in December and after much activity by various members we are now at the stage of delivery of a 'Beta' version of the new site. This means that the structure and 'feel' of the site is in place but it is now up to a group of COG members to revise texts and set the words in place. At this stage I am not prepared to say when the site will go live but hopefully soon. One feature of the new site will be a Members Only area. I would particularly like to thank Julian Robinson for driving this project which has been complex, difficult and at time frustrating.

# 2) Developing the COG database

This project has been particularly frustrating but there has been progress. Presentations by Alastair Smith representing Eremaea, staff from the Atlas of Living Australia and Andrew Silcocks from Birdlife Australia have all been very useful in helping a group of members to determine options available to develop the COG system for collecting, recording and reporting bird observations. The complex situation with on-line and bulk reporting of observations from various survey types and the different requirements for data input and output has led to much discussion on whether to continue to develop and improve the present database or whether to put our faith in the hands of external groups. The project remains on-going but in the meantime the present database continues to serve us well

# 3) Recording local bird calls

To my knowledge there has been no activity in the area of bird sound recording. A couple of year ago COG was donated and then purchased additional equipment for the recording of bird calls but to date this activity has not been taken up by the COG membership. I would urge anyone with an interest in this area to contribute so that we can add further calls to the photo gallery located on the COG website.

# 4) Improving sets of display material

This is an on-going area of improvement. I am particularly pleased that we were able to finalise an update to the COG logo. The logo first appeared on the May 2012 Gang-gang and appears to have been widely accepted by the membership. I would again like to thank Julian Robinson for all his work in driving this project

After much activity on the part of Michael Robbins a revised COG Observation Record Sheet was recently finalised and is now available in both hard copy and on the web. Geoffrey Alves and Steve Wallace provided much input into improving the look of the new datasheet which with a larger font size and improved layout is now much easier to read.

#### **Committee**

I would like to take this opportunity to thank the 12 members of the 2011-12 Committee. The Executive consisted of Alison Russell-French as Vice-president, Sandra Henderson, who completed her sixth year as Secretary and Noel Luff as Treasurer. Jenny Bounds continued as Conservation Officer with help from Alison and me. Sue Lashko continued as editor of Gang-gang and meeting-room organiser. During the year Michael Robbins took on the role of Outings Officer but due to family commitments had to retire for this position in December and Sue kindly stepped in to replace him. As mentioned previously Michael Robbins has been busy with the redesign of the 'COG Observation Record' data sheets. Lia Battisson was able to stand in for the Treasurer whilst he was away for a number of months. Many thanks also to Bruce Lindenmayer, Peter Ormay, Mark Clayton and Stuart Rae for their contributions to the working of the 2011-12 Committee.

#### Conservation

The many items of conservation concern have this year been dealt with by a sub-committee consisting of Jenny Bounds, Alison Russell-French and myself with input from Bruce Lindenmayer. COG has had an input to various Federal, NSW and ACT government departments and other bodies including the following:

- Review of policy on EPBC environmental offsets
- Down-grading of IUCN status of Superb Parrot
- ACT Pest Animal Management Strategy
- Little Eagle Action Plan
- Throsby Denominational School Referral
- Developments of the future suburbs of Kenny and Throsby (EPBC referral)
- Development of the future areas of Jacka, Taylor and Kinlyside (EPBC referral)
- Solar Farm proposal: Drake-Brockman Drive
- Draft Jerrabomberra Wetlands Master Plan

I would like to take this opportunity to thanks Geoffrey Dabb for coordinating the COG response to the Wetlands Master Plan. Over 20 COG members contributed their thoughts on the subject and highlighted the importance of the area to members.

There have been further meetings with the Federal Department of Environment, Water, Heritage and the Arts concerning the proposed development of the suburb of Throsby and likely effects on the Mulligan's Flat/Goorooyarroo Nature Reserves with further discussions on the proposed Molonglo River Park and development within Molonglo in general.

As mentioned in my last President's Report, the Birds Australia Campout made a small profit and this went towards the purchase of *Allocasuarina* seedlings specifically for the threatened Glossy Black-Cockatoo. The seedlings were planted at the Bush Heritage property 'Scottsdale' where the Campout was held. We received a grant to pay for fencing and tree guards. The grant has been acquitted with a day of planting in October and again in May. I wish to thank Nicki Taws for her work in organising the grant and the plantings.

# **Outings**

Once again COG has been able to run a very comprehensive outings program. I would like to thank Michael Robbins and Sue Lashko who between them have been responsible for this very important task.

In addition to the scheduled outings, the *ad hoc* group of 'Wednesday and Thursday Walkers' have once again operated most successfully and have managed to attract a most enthusiastic group of followers with outings most months of the year. There were 16 midweek outings and many thanks to Martin Butterfield, Michael Robbins and others for organising these events.

Up to mid-September and including the mid-week walks, there have been 56 outings this last 12 month period; a very large increase from the previous 12 month period. In addition to visiting local hotspots in the ACT and surrounds, members paid visits to:

- Capertee Valley
- Pelagic trips out of Eden (2)
- Deniliquin area for Plains Wanderers
- Goulburn area with the Goulburn Field Naturalists
- Host the Illawarra Birders at Wee Jasper
- Various locations hosted by the Illawarra Birders
- Ben Boyd National Park
- Weddin Mountains and Yathong Nature Reserve
- Bendick Murrell National Park

I would like to thank the organisers and leaders and to those who wrote up the trip reports for Gang-gang.

#### **Communications and Publications**

### Education

- Innovating Australia Urban Bird Survey
- Birds of the Ginninderra Falls area- Presentation to Gininderra Falls Association
- Open day for Conservation Agreements- COG presentation on survey techniques
- Restorative Justice matter- Tharwa Sand Wash and Kambah Pools
- Presentation at Finnish Embassy on ACT birds

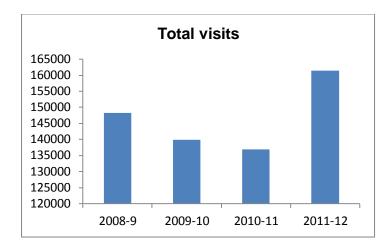
Gang-gang. Many thanks to Greg Ramsey and Sue Lashko, who have continued with the editing and publishing of our newsletter. I would like to take this opportunity to thank Greg who after six years, (67 newsletters), as Layout Editor decided to retire. In February Janette Lenz replaced Greg as Layout Editor. Also, I would like to thank Brian Fair and helpers for the mailing of newsletters and Canberra Bird Notes. I would particularly like to again thank Jack Holland- 'Where to Watch Birds', Ian Fraser who has now contributed 95 AvIAN Whimsy's, Martin Butterfield 'Garden Bird Survey Notes' and Julian Robinson 'Photo Ops' for their regular contributions.

<u>Canberra Bird Notes</u>. This year there has been three editions of CBN produced by Michael Lenz as Editor. I would again like to thank *Tyto javanica* and *Stentoreus* for their regular contributions over the past year.

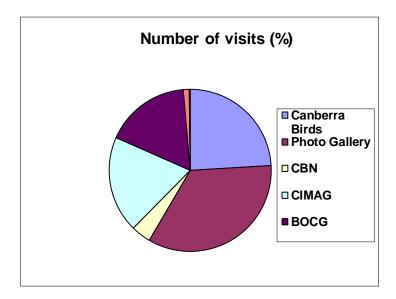
Annual Bird Report. Paul Fennell was responsible for the 2010-11 ABR published in Volume 37, March 2012 Canberra Bird Notes. Thanks to the ABR compilers Barbara Allan, Con Boekel, David McDonald, Ian McMahon, Harvey Perkins, John Goldie and Kathy Walter, John Bissett and Paul Fennell with each contributor, as usual, responsible for

a group or groups of species. Overviews were written by Martin Butterfield, Michael Lenz and Jenny Bounds; as you can see, a major collaborative effort.

<u>Website.</u> David Cook continues to provide an excellent website. Over the year there have been 161,467 visits to the site, an increase of 18% over the previous year.



Overall, there has been an increase in the number of visits to CanberraBirds and Birds of Canberra Gardens and a reduction in the number of visits to the Photo Gallery with other areas remaining similar to last year.



<u>Discussion list and email announcements.</u> COG's Email Discussion Forum 'Canberrabirds' continues to be managed by David McDonald. The membership to the list stands at 263, an increase of four from the previous year. The Discussion Forum or 'Chatline' is an excellent forum for the latest sightings, points of interest and provides an invaluable starting point for those wishing to discuss their unusual sightings.

# Surveys and record management

Surveys undertaken by COG members over the past year include the continuation of the woodland surveys at 15 sites across the ACT that documents species in the threatened Yellow-Box/Red Gum Grassy Woodlands. With funding from an ACT Government grant Dr Ross Cunningham completed his analysis of bird observations and habitat changes. A

report titled 'An analysis of bird occupancy and habitat changes at six woodland locations 2003-2010' and written by Nicki Taws, Jenny Bounds, Alison Rowell and Ross Cunningham has been completed and place on the COG website with a précis of the findings written up in CBN Vol 37 p 100-129. The project continues to be run by a management group comprising, Jenny Bounds, Nicki Taws Alison Rowell and myself with data entry by Helen Mason.

A third survey of possible breeding habitat for the threatened Superb Parrot in the ACT was completed with help from COG members. A report titled 'Distribution, abundance and breeding status of the Superb Parrot (*Polytelis swainsonii*) during the 2011-12 breeding season, central and lower Molonglo Valley, ACT' was compiled by Chris Davey and provided to the ACT Government. The Superb Lyrebird survey at Tidbinbilla Nature Reserve was run for the ninth year, as usual on the third weekend in June.

The Garden Bird Survey is now in its 32nd year. Martin Butterfield continued to manage the project providing feedback through regular items of interest in Gang-gang. After six years in the job Martin decided to retire at the end of the 2011-12 GBS year and I am delighted that Duncan McCaskill has taken over the reins. Kay Hahne and Anne Hall continue to enter the GBS data. Many thanks to all. Over the past 12 months there were six requests for data.

The Blitz was run again for the seventh year in late October. Many thanks to Barbara Allan for all the hard work she puts into this project and to the many surveyors.

COG members were again involved in the Kosciuszko to Coast (K2C) bird surveys in April and again in October covering 23 properties in the area between Williamsdale and Bredbo.

The COG database continues to expand with **583,958** observations from **38,171** datasheets in the General Observations database. There were **1,223** sheets added during the year slightly down from **1,320** the previous year with **63%** entered on-line. The databases continue to be managed by Paul Fennell and Duncan McCaskill.

Lia Battisson and Malcolm Fyfe are putting considerable effort into adding old observation records to the database. The earliest records in the database are from the early 1970s yet observations from notebooks, Canberra Bird Notes and Gang-gang go as far back at the early 1960s. To date over 5000 records have been identified which potentially could be submitted. The project is on-going and will greatly value-add to the database.

A small group of COG members has been looking at ways to extract summary data to improve information provided in the Annual Bird Report. I would like to acknowledge the work of Steve Wallace, who has been working closely with Paul Fennell and Michael Robbins, and who is now able to provide summary information for all bird species records. The reports are in no way intended as an analysis of species status within the COG area of interest but are a report of what is in the database for information and use by members. Many on the Chat-line may have had the opportunity to view some aspects of the species reports that can now be produced.

Essential support for the COG database is provided through the Records Management Team and the Rarities Panel. I would again 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.

#### Monthly meetings

Jack Holland has again been responsible for a most successful and varied program of speakers.

The COG policy covering costs for those speakers from interstate has again been worthwhile with very popular presentations on 'Why some birds love cities and most don't', (Assoc Prof. Darryl Jones), 'Floods, droughts and river regulation' (Prof Richard Kingsford), and 'Powerful Owls' (Dr David Bain). Other subjects have included habitat management and restoration, the future of Australian threatened birdlife, a project proposal on functional connectivity, woodland bird diversity, conserving city birds, the 2011 Blitz, bird use of plantings and birding in Ethopia. Species presentations have included talks on the Noisy Miner, Nankeen Kestrel, Horsfield's Bronze-Cuckoo, Painted Snipe, Superb Lyrebird, Brown Thornbill and Carnaby's Black-Cockatoo. My thanks to all of the speakers for giving of their time.

A continuing feature of the monthly meeting is the Sales Desk. The Desk this year has been managed by Roy Harvey, greatly assisted by Annie Holmes. Many thanks to them both for providing such a valuable service to COG members.

I would once again like to thank Julienne Kampad with occasional assistance from Lia Battisson who have worked quietly behind the scenes to provide the refreshments after the monthly meetings and to Sandra Henderson for taking on the responsibility of providing the raffle prizes and selling the tickets.

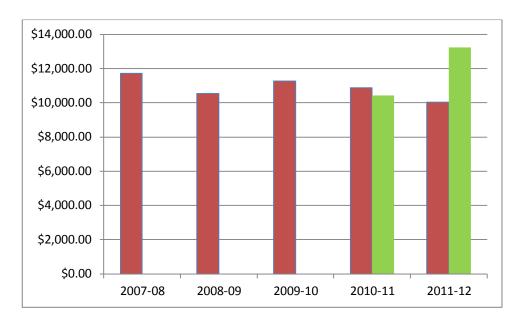
#### **Canberra Birds Conservation Fund (CBCF)**

There have been 323 visits to the CBCF web page this past 12 months. This is an 18% increase from the previous year. A grant was made to William Feeney of the Research School of Biology at The Australian National University to support his research to investigate the nature of coevolved reciprocal adaptations prior to egg insertion by the parasite in the host nest (the 'front-line'). The research focuses on these interactions between the Superb Fairy-wren and the Horsfield's Bronze-Cuckoo. The research site is Gungahlin Hill Nature Reserve in Canberra. This is the 10<sup>th</sup> grant provided by the CBCF. The Fund continues to be managed by David McDonald with a Committee of Management consisting of David, Geoffrey Dabb and Penny Olsen.

#### Summary

In summary, as in previous years, 2011-12 has been a busy year for COG. Outings and meetings continue to be the most popular activities although there appears to be a slight decrease in activities involving weekend campouts. The mid-week walks continue to be very popular.

The cost of membership to COG has remained the same for the past 11 years. Unfortunately our subscription income has decreased slightly but our costs for membership services have increased such that dues are no longer covering costs.



Although we are in a lucky position to be financially sound the Group cannot remain so if this state of affairs continues. We have been lucky in that we have been able to obtain some income through survey contracts but there is no guarantee that this will continue. The situation will need to be considered by the 2012-13 committee.

The design of the new COG website is progressing well. Two features to be implemented will be the on-line payment of subscriptions and an area for COG members only, the structure and contents of which are still to be decided.

With the merger of Birds Australia (BA) and the Bird Observer's Club (BOCA) to form BirdLife Australia (BLA) our affiliation with BOCA ceased and by default we became affiliated with the new organisation. The terms and responsibilities of affiliation are unclear and discussions will continue into 2012-13 on this issue. One issue that remains unclear is that of insurance. COG now has its own insurance for public liability and for professional indemnity and again an issue for the 2012-13 committee will be to determine whether to continue with present arrangements or to be covered under the umbrella of BLA.

After five years as President I will be standing down. I have thoroughly enjoyed working as your President over that time but it is now time for me to move on and start bird watching again!

Finally, I wish to again thank those many individuals who have worked so hard in various ways to provide services to members and who have helped me in my role as President over the past five years.

Chris Davey, 10<sup>th</sup> October 2012

#### **BOOK REVIEWS**

The action plan for Australian Birds 2010. By Stephen Garnett, Judit Szabo and Guy Dutson

CSIRO PUBLISHING, Collingwood, 2011, ISBN 9780643103689, 442 pp., Paperback, AU \$49.95.

Reviewed by TONY LAWSON, Holder, ACT

This is the third action plan for Australian birds, published at roughly ten-yearly intervals. Stephen Garnett has been the lead author for all three. This time he is joined by a colleague at Charles Darwin University, Judit Szabo, and an independent ornithological consultant, Guy Dutson. The important distribution maps were compiled by Glenn Ehmke.

Like its two predecessors, this is a depressingly thick document, but significantly smaller than the 2000 Plan – 442 pages compared to 673. The main reason for this is not a dramatic reduction in the number of threatened species, but rather that the 2000 plan included many species which after due consideration were judged to be of 'Least Concern'. This category was excluded for the published 2010 plan.

The stated aims of the action plans are to:

- provide a national overview of the conservation status of all birds occurring in Australian territory *against IUCN Red List* [International Union for Conservation of Nature] *categories and criteria*;
- identify threats and recommend actions to minimise those threats;
- identify habitats or areas of particular importance for birds; and
- identify information gaps, and recommend conservation research and management actions.

The action plan provides a picture of the status of Australia's birds as of 2010 against a single set of criteria, using a consistent methodology. It should be noted that the IUCN criteria are not the same as those used to determine EPBC [Environment Protection and Biodiversity Conservation] threat categories. The 2010 plan provides a valuable compendium of current information to draw on for all the species and sub-species found in Australia and its overseas territories that are considered to be under threat.

The action plan is not a book to read from cover to cover but rather to use as a reference document. It provides in a standard format information for around 240 taxa, which may be a species or sub-species, or a (sub-)species found in a particular region or island. For example, there are five entries for the Thick-billed Grasswren *Amytornis modestus*, representing sub-species found in five different regions. In all, by my count 193 species are listed, including some that are now extinct. Conservation summaries are presented for all Extinct, Threatened and Near Threatened taxa.

For each taxon a standard set of information is provided, namely: species name (common and scientific), family, conservation status in 2010, reasons for listing, status in 2000 and 1990, taxonomy, range (with a distribution map), abundance, ecology, threats, conservation objectives, information required, management actions required, bibliography, and names of those providing comments on the taxon accounts, which include several eminent Canberra ornithologists.

For this review, I have focussed on the birds that might be seen in COG's area of interest. But first a few remarks about the overall situation for Australia as a whole, including its overseas territories. The 2010 action plan lists 27 taxa as Extinct, 20 as Critically Endangered, 60 as Endangered, 68 as Vulnerable and 63 as Near Threatened as at 31 December, 2010. The remaining 1028 taxa are deemed to be of Least Concern. The Australian list also includes 31 introduced taxa and 151 vagrants. Of those taxa known to have been present or to have occurred regularly in Australia when Europeans settled in 1788, 2 per cent are Extinct and a further 12 per cent are considered Threatened. Some 5 per cent are Near Threatened.

Since the last Action Plan, research and surveys have shown that 61 taxa are less threatened than was previously thought, but a further 26 taxa should now be listed at a higher level. Other differences between the 2000 plan and the present volume can be accounted for by changes to taxonomy (7 taxa) or to more rigorous IUCN criteria that better define the different categories (58 taxa).

Based on current knowledge, taxonomy and IUCN criteria, there has been a change in the status of 66 taxa (5 per cent) since the previous action plan. For seven taxa the conservation status could be downgraded as a result of effective conservation management.

However, the status of 39 taxa has been upgraded. These include four that are now listed as Critically Endangered, including the Regent Honeyeater *Anthochaera phrygia*, the Greyheaded Albatross *Thalassarche chrysostoma*, the Western Ground Parrot *Pezoporus flaviventris* and one subspecies, the Norfolk Island Tasman Parakeet *Cyanoramphus cookii cookii*. Along with the Orange-bellied Parrot *Neophema chrysogaster*, the ground parrot and the honeyeater have the potential to be Extinct in the Wild by 2020; all have all suffered rapid declines in their already very small populations.

Most of the additions to the list in 2010 are migratory waders, whose numbers are plummeting, due largely to the reclamation or degradation of habitat along their migratory pathways. Furthermore most of the species listed are found in coastal regions or on islands

But what of the local situation? Sub-species of many of the species found in the ACT are listed in the action plan. This is not relevant to the local region if these sub-species do not occur locally. However, the following 16 species, that have sometimes been found in COG's area of interest (based on the annotated checklist of the birds of the ACT on COG's website - <a href="http://canberrabirds.org.au/CheckList.htm">http://canberrabirds.org.au/CheckList.htm</a> ), are listed as Near Threatened or worse in the 2010 plan:

Common name	IUCN Red List Status 2010	EPBC Act Status 2010
Blue-billed Duck	Near Threatened (Least	Not Listed
	Concern 2000)	
Australian Bittern	Endangered (Vulnerable	Endangered
	2000)	
Australian Painted Snipe	Endangered (Vulnerable	Vulnerable
	2000)	
Bar-tailed Godwit	Vulnerable (not listed 2000)	Not Listed
Eastern Curlew	Vulnerable (not listed 2000)	Not Listed
Ruddy Turnstone	Near Threatened (not listed	Not Listed
	2000)	

Table continued

Common name	IUCN Red List Status 2010	EPBC Act Status 2010
Red Knot	Vulnerable (not listed 2000)	Not Listed
Curlew Sandpiper	Vulnerable (not listed 2000)	Not Listed
Glossy Black-cockatoo	Near Threatened	Not Listed
(south-eastern)		
Swift Parrot	Endangered	Endangered
Barking Owl (southern)	Near Threatened	Not Listed
Brown Treecreeper	Near Threatened	Not Listed
(south-eastern)		
Regent Honeyeater	Critically Endangered	Endangered
	(Endangered 2000)	
Painted Honeyeater	Vulnerable (Near	Not Listed
	Threatened 2000)	
Flame Robin	Near Threatened (Least	Not Listed
	Concern 2000)	
Hooded Robin (south-	Near Threatened	Not Listed
eastern)		

The most disappointing feature of the table is the number of species whose status has declined since 2000, namely 11 out of 16.

An Appendix provides details of those 64 taxa which were listed as Near Threatened or worse in 2000 and the reasons why they were omitted from the 2010 action plan. The main reasons for this are changes in the IUCN Red List Guidelines about the criteria for 'Near Threatened', which are now more specific. These taxa include several species that we find locally, from time to time – see Table below.

Common name	Scientific name	Reasons why not listed in 2010
Little Bittern	Ixobrychus minutus dubius	Revised criteria; no evidence of decline
Lewin's Rail	Lewinia pectoralis pectoralis	New knowledge: range too large, decline too slow
Bush Stone Curlew (included in anticipation of reintroduction at Mulligans Flat Sanctuary)	Burhinus grallarius	Revised criteria
Superb Parrot	Polytelis swainsonii	New knowledge: re numbers and no evidence of continuing decline
Turquoise Parrot	Neophema pulchella	Revised criteria; population too large, no evidence of recent decline
Masked Owl	Tyto novaehollandiae novaehollandiae	Revised criteria; population probably stable
White-browed Treecreeper (eastern)	Climacteris affinis superciliosa	Revised criteria; declines in East, population above thresholds in West

Table continued

Common name	Scientific name	Reasons why not listed in 2010
Speckled Warbler	Chthonicola sagittata	New knowledge; population too large & decline too small
Common name	Scientific name	Reasons why not listed in 2010
Grey-crowned Babble	r Pomatostomus temporalis	Revised criteria; population
(eastern)	temporalis	too large & decline too small
Diamond Firetail	Stagonopleura guttata	Revised criteria; population
		too large & decline too small

The most significant change is that for the Superb Parrot which was listed as Vulnerable in 2000. The reasons for the change are given as: new knowledge; recent evidence that the population is well over 10,000 mature individuals and no evidence of continuing decline; projected decline in nest hollows, but there is not as yet a link established between the availability of hollows and parrot abundance.

The main reasons why few threatened species are found locally are that by definition they are not easy to find, and secondly they are predominantly found in coastal regions or on smaller islands. So the list is generally of more relevance to those who choose to spend their holidays by the sea.

No doubt the 2010 plan will also become available on the web in due course. In the meantime much of the information therein can be retrieved from the Birds in Danger website at <a href="http://www.birdsindanger.net/welcome">http://www.birdsindanger.net/welcome</a>. Incidentally, while there are no illustrations in the action plan, the Birds in Danger website acknowledges the use of images from David Cook Wildlife Photography.

Grassfinches in Australia. By Joseph M Forshaw and Mark Shephard, illustrated by Anthony Pridham. CSIRO PUBLISHING, Collingwood, 2012. ISBN 9780643096349. Quarto, dust jacket, 336 pages, colour illustrations, line drawings and maps. AU \$185.

Reviewed by MARK CLAYTON, Kaleen, ACT

Joe Forshaw is well known to many COG members through his well-written and illustrated books on various families of birds, most notably parrots. Mark Shephard appears to be well known in the avicultural scene. The two authors have combined perfectly in writing this excellent text on the Australian grassfinches.

Following the Foreword by Walter Boles (formerly) of the Australian Museum in Sydney is the Table of Contents. The Preface is next and with it comes a note by Forshaw on how he became interested in grassfinches. It then goes on to give a plan of the book. The Acknowledgement section is next. Here I found an unfortunate error relating to COG member Barbara Allan who has both her Christian and Surname spelt incorrectly.

The Introduction, written by Forshaw gives details of the Systematics of the Australian grassfinches and includes a "tree" giving the taxonomic arrangement used in the book.

Australian Grassfinches in Aviculture written by Mark Shephard is a comprehensive review of the history of aviculture in Australia dealing with everything from how he became involved with grassfinches, an interesting little story in itself, to details on housing, feeding, breeding and diseases.

There are some fascinating tables in this section of the book. For example Table 1 lists the number of each species trapped in the Kimberley region of Western Australia in the period 1974 to 1986. 79,553 Long-tailed Finches comprised 28 % of those trapped followed by Star 18%, Masked 12%, Pictorella and Chestnut-breasted both 10%. The Gouldian Finch comes in at seventh overall at 8% or 22,041 birds. These figures are quite startling to say the least! Table 5 "gives a quick reference guide to Australian grassfinches (if possible split into subspecies) in captivity". I was surprised to find that Blue-faced Parrot-finches are considered common in captivity. Other aspects such as cost or need for experience in dealing with the relevant species in captivity are included in this table. I will leave it to the reader to read the other tables and figures as they make for most interesting reading.

Following after this chapter are the species accounts. These cover all native and introduced species of mainland Australia and Tasmania as well as those that have been recorded on Australia's external Territories. I applaud this move as the Territories are covered by Australian legislation, but some may disagree saying that biologically the birds are more Asian in origin that Australian. The readers can make up their own mind.

Each account lists Family, Tribe and Genus. There is a list of alternative names, the main colour plate depicting races where applicable, and a map showing distribution. Under General Notes are details of habitat and status, movements, social behaviour, field notes, diet and feeding. Vocalisation covers calls and song followed by Courtship and Mating, and Nesting. Mark Shephard then covers the species under Aviary Notes, including mutations, colour variations and hybrids.

I like the inclusion of data from the Australian Bird and Bat Banding Schemes giving longevity and movement records of all species where available. Two records in particular stand out. The first, a Diamond Firetail that moved a distance of 238 kilometres, and the second, a Red-browed Finch that was recorded to have lived for 23 years and 5 months, an extraordinary time for a seed eating small passerine.

The illustrations by Anthony Pridham are, with one exception, superb. As an Honorary Fellow in the Australian National Wildlife Collection where Joe Forshaw presented a copy of the book, I have watched as many visiting researchers have picked up the copy and had to look twice before realising the dust cover was a painting, not a photograph. Pridham has captured the light beautifully in many of the main plates as well as the surrounding scenery. His plate of the Blue-faced Parrot-Finch depicts exactly how I saw my first birds on Mount Lewis in northern Queensland. My favourite plates are of the Red-eared Firetail, Plumheaded Finch and the Chestnut-breasted Mannikin, mainly because of the way they appear with such a realistic background.

There are quite a few small illustrations of the various species depicted undertaking their normal daily routine and copies of field sketches done by the artist, usually with a note on what the birds were doing. In the section on aviculture are illustrations of various mutations or colour morphs.

The one plate that I found disappointing is that of the Gouldian Finch. It does not have the vibrancy of all the other plates and seems to be "not finished". There are however smaller illustrations within the species account that compensate for this one failing.

After the species accounts is a very extensive bibliography, and a comprehensive Gazetteer. In the chapter on the Plum-headed Finch I found another spelling error – Bredbo is misspelt - but it is correct here. Before the Index is a map of Australia, excluding the overseas territories. I am a little puzzled by some of the shading on the map; perhaps I have missed something in the body of the text that explains what it is depicting.

Despite the high price I have been told that the book has been in great demand by those interested in finches in aviculture and it will also be extremely popular with anyone interested in Australia's grassfinches. With an initial print run of only 1000 copies this book will sell out very rapidly. I have no hesitation in recommending this book as a very worthy addition to the library of anyone interested in Australia's birds.

# Birds of Prey of Australia. By Stephen Debus

CSIRO Publishing, Collingwood, 2012, ISBN 9780643104365, 208 pp., Paperback, AU \$39.95.

Reviewed by PHILIP VEERMAN, Kambah, ACT

I have been field observing with Stephen Debus and appreciate his skill and major contribution in researching, writing and editing ornithological knowledge, especially in raptors. Well credentialed to produce this book, his information's currency and quality is as expected. It contains what is needed for identifying our mainland Australian raptors (plus two marginal northern vagrants). This is supplemented by good basic information on their biology and conservation. The style is easy, with information, accompanied with hints and commentary. It functions as two books: a field guide and a factual resource. The cover photos are of our two rarest species. The Introduction supplies current taxonomic views, delineating a split into three main orders: Falconiformes, Accipitriformes (and Cathartiformes - not in Australia). It then describes these birds "within their respective orders" but gives family names. The handbook section describes generic features and taxonomy. Especially interesting are the three odd Australian endemics.

The layout and cohesion are greatly improved from the first edition, now having a carefully formatted index. The text is updated and the bibliography (20 pages conveniently arranged by topic and species) only includes new material. The first edition's illustrations were small, crowded and scattered through the book. The illustrations for this edition were again taken from HANZAB, although all are printed in a slightly darker tone. They have been rearranged so that each species has a double page, with text facing the illustrations (the Sea-Eagle has four pages). The effectively constructed field guide section is clear and comprehensive. It features the differences from similar species of other raptors, (plus the Letter-winged Kite is compared to owls). The book takes the (optimistic) view that

observers are already competent in separating raptors from all other birds. Descriptions start with the bird's total length, including (for each except the Sea-Eagle) how much of this is tail. It gives weights to a single gram (perhaps not for the Sea-Eagle). Such precise data looks odd but the introduction reveals these as averages. Weight ranges, would be better in the handbook section. The oddity I found is that there is no mention that the Baza (Crested Hawk) has a crest (it is mentioned in the handbook section). The text restates the "longer / shorter" middle toe difference (myth) for the Collared Sparrowhawk / Brown Goshawk. This is not based on actual measurements, but relates to proportions, as described in the handbook section.

There are 20 pages of 40 photographs of all 24 resident species, shown in flight from below against the sky, chosen as being typical views. These repeat, contrast or support the images (arguably better) provided by the paintings showing that a posed painting is an idealised or stylised representation of what is perceived in the field. The Black-shouldered Kite with lighting through single and double layers of the primaries is particularly appealing.

The introduction says that many raptors are widespread and that distribution maps "are provided only for those few species with more circumscribed ranges." This few is just six, with shading used for three. I doubt that the Red Goshawk has equal status throughout. Achieving accuracy in maps can be difficult but it could reasonably be expected as there is ample space. The handbook part (on other pages) describes the distribution and general abundance of the birds. Status and location don't prove a bird's identity but are nice to know quickly to assess what is likely. Maybe the author did not wish observers to limit their identifications according to these factors.

There are 12 pages of 32 "difficult species pairs" in which the earlier plates' underwing flight paintings were bisected and juxtaposed with another species. Only the Baza is unmatched and the Little Eagle has the most matches. The result, although awkward, competently and compactly compares colours, patterns and shapes. The earlier caption details of age, sex or morph are repeated only when considered relevant to the colour pattern. The introduction to that section missed explaining whether there was any intent to illustrate size, although most are close enough. Matching was restricted by what source pictures were available. Size is a major feature in distinguishing, for example, a female Brown Goshawk with a male Collared Sparrowhawk and simple size outlines would help. Page 65 shows similar sized adults: I expect these are a male Goshawk and female Sparrowhawk. Source pictures are two females (not labelled as such here). The size of juveniles is different, but likely not enough difference to be same sex. Source pictures are from two males and they appear smaller than the adults. Any implication that size varies more by age than by gender would be unintentional. Note also the different position of the feet in some of them due to tail length differences when total length is made to match. The heads of the two small kites look odd until you realise that one is shown from behind and the other in side view. Close head pictures for the Little Eagle, Whistling Kite and Black Kite would also have been helpful.

There are minor aspects to be clarified. That the Collared Sparrowhawk has declined in SW Australia "where there are few exotic passerines" is mysterious. The extra (missing) information is that declines of native passerines may be causing Sparrowhawk decline (with few exotics as alternate prey). For each species there is a comparison of recording rates between the two national Atlas periods, nationally and for NSW. The prominence given to NSW results comes from using a prior publication. There are 14 pages of 12 topics of

conservation and research themes. These are so closely connected that they don't warrant each starting on a new page.

I did not find typing, grammar or similar errors but found some production outcomes disappointing. I suspect due to the publisher or designer more than the author. The book includes 13 blank pages! Better design would remove them or obvious fixes such as adding a diagram of a hawk to supplement the glossary, simple diagrams showing the head and feet shapes of several birds or retaining some of the photos or diagrams from the first edition could have been included. The book's official title does not include "a field guide". The front cover title is in uppercase with these words in different and much smaller font, yet the title pages (i & iii) highlight "A FIELD GUIDE" in upper case, bold and bigger font. There are several pages of text about the birds, before page one. Page ii summarises the author's work, irrelevantly followed in the same format by an advertisement for HANZAB, oddly implying (against the author's wishes) that HANZAB is also his work. Page xiv advertises the author's owl book, although this has already been given due prominence on page ii.

In summary, it is the best resource book on the subject we have so far.

A steady hand: Governor Hunter & his First Fleet sketchbook. By Linda Groom. Published by the National Library of Australia 2012 ISBN 9780642277077. vi, 229 p.: ill. (some col.), maps (some col.), ports. (some col.); 30 cm. \$49.95.

Reviewed by DAVID McDONALD, Wamboin, NSW

When first given the opportunity to review this book I demurred, pointing out that I know little of Australian colonial history and even less of natural history art. The response was something like 'Well you are the perfect reviewer for this one!'. What the person had in mind was that this book is not aimed just at the specialist. It is something that all of us can enjoy.

The book's author is Linda Groom who was Curator of Pictures at the National Library of Australia from 1998 to 2010. She is also the author of *First Fleet artist: George Raper's birds & plants of Australia* (2009).

The book is in two parts. The first half includes the acknowledgements, foreword, editor's note (I would have used the term 'author's note') and 11 chapters written by Groom, being a fascinating and beautifully-drafted biography of John Hunter, the second Governor of the Colony of New South Wales. Chapter 6 is not so much part of Hunter's biography but rather a description and discussion of his Sketchbook and its contents. The second half of the book is the 'Portfolio of images from the Hunter Sketchbook'.

On picking up this volume I thought that I would probably skim the biographical information on Hunter, expecting it to be a brief introduction or optional background reading, and that my main interest in it would be the contents of his Sketchbook. How wrong I was! I found the 119 pages of the first half absolutely fascinating. They start by telling us about Hunter's boyhood in Scotland and his early years in the Royal Navy, a period that was characterised by a 20 year gap between when he was qualified to receive a commission and when he attained it. His naval service in various parts of the world,

including the West Indies, India, North America and European waters, much of it being during time of warfare against various European nations and the American colonists, provides insights into the background that he brought to the governorship of the new Colony of New South Wales.

We are told about how John Hunter accompanied Arthur Phillip on the *Sirius*, as part of the First Fleet, to establish the settlement at Botany Bay. Hunter was Phillip's second-incommand. Subsequent chapters describe his experiences in New South Wales, the amazing dash in the *Sirius* to Cape Town in 1788-89 to obtain supplies to save the fledging colony from starvation, his return to Europe, his subsequent appointment as the second Governor of New South Wales, being dismissed from that role, and his final years as a senior naval officer and in retirement in Britain.

Of interest to colonial history buffs will be the comment prepared by the staff of Libraries Australia about how the author characterises Hunter's status and reputation:

Some biographers are critical of John Hunter's leadership style as the Governor of Port Jackson. Others say he was a failure at sea. Linda Groom disagrees and claims that Hunter was an outstanding seaman whose mere survival as governor was an achievement for his time. (Source: http://trove.nla.gov.au/work/152561992?versionId=166276273)

Throughout the first half of the book—indeed, on virtually every page—we find one or two illustrations beautifully complementing the text and, as one would expect from a book published by the National Library of Australia, all of these are fully captioned.

The second half of the book is a portfolio of images from Hunter's Sketchbook, all in full colour. Although I have not seen the Sketchbook itself, the colour printing appears to have been extremely skilfully done. (The author points out that some of the sketches have been '...lightly retouched in order to erase signs of wear and tear, and to even the edges', but are otherwise true to the Sketchbook.)

Hunter was an expert cartographer and, from an early age, had a gift for drawing. Throughout his early naval career he used this gift to good effect in preparing sketches of land masses and the like to accompany his charts. That said, this was always a personal sketchbook, clearly not something designed for reproduction and distribution. It is a small book, just 23 cm by 19 cm, smaller than Groom's book and far smaller than the sheets of paper on which Hunter drew his maps for the Admiralty.

The author points out that, for the first 59 paintings in Sketchbook, Hunter alternated bird and plant subjects, indicating how the size of the sketch relates to the natural size of the subject. The remaining sketches are not so formally arranged.

The sketches were made in the years 1788, 1789 and 1790. Most of them are of birds and plants from the area around the Port Jackson settlement. There are also a number of images from Norfolk Island and Lord Howe Island, along with a few ring-ins. The sketches include a number of species, such as the Brolga, no longer found in the Sydney region, and sketches of some of the now extinct birds from Lord Howe Island.

While the bird illustrations are of great interest, this is far from a modern bird field guide! Nonetheless, some of Hunter's illustrations are remarkably accurate, good enough to find a place in a modern field guide. An example is the Yellow-tufted Honeyeater (p. 217). In

contrast, some of the birds look absolutely weird. Examples include the Rufous Night Heron (now Nankeen Night Heron, p. 130) and the Emu (p. 207). But that is fine: we are seeing these birds through the eyes of an amateur artist making sketches largely for his own interest and enjoyment.

I have already mentioned how beautifully Hunter's sketches been reproduced in this book. The book has been delightfully designed and printed. It uses a font with which I am unfamiliar, and which is not identified on the reverse title page, but one that works really well. It was printed by the Melbourne-based company Australian Book Connection, presumably in Australia since it does not say otherwise. It contains an accurate, detailed index (essential for this type of book) prepared by COG member Sandra Henderson (a professional indexer who knows her birds) covering both the first half of the book (Hunter's biography) and the second half (the Sketchbook proper). The Gordon Darling Foundation generously supported its publication.

I highly recommend this book for both its text and the reproductions of Hunter's sketches.

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# **RARITIES PANEL NEWS**

Well, Trucking Yard Lane Bungendore was the place to be for unusual birds recently, with both **Banded Lapwing** and **Plumed Whistling-Ducks** putting in an appearance. The ducks also favoured that location on a previous visit to our area of interest, in December 2010; they were seen more recently at Kellys Swamp in January of this year. With their prominent plumes, they are unmistakable if seen well; they are usually seen in sizeable flocks. Quite what the attraction of Trucking Yard Lane is to them is a mystery – perhaps the dam has particularly palatable water? In any event the birds were admired by many COG members during their brief stay there.

The resurgence of the **Banded Lapwing** is pleasing to record. Many COG members availed themselves of the opportunity to watch the breeding progress of at least one pair adjacent to Mulligans Flat in the 2009-10 breeding season. They are fairly regular around Lakes Bathurst and George, as evidenced by the Water Bird Surveys. This season, there have been reports of the birds breeding adjacent to Canberra airport, followed by these Hoskinstown and Bungendore records. At the time of writing in early November, the Hoskinstown Banded Lapwing numbers had reached 37. The Bungendore birds, however, were not seen for long, although breeding was suspected. Banded Lapwings are particularly easy to recognise with their prominent broad black breast band, black crown and side of neck; in flight they exhibit a white wing-stripe. They do not appreciate urbanisation. Dr Schodde reminisced that when he first came to Canberra in 1960, he would hear them from the Hotel Acton, calling on the Molonglo Plain (before the lake).

The **Wood Sandpiper** is one of our more rarely recorded waders. One put in an appearance at Kellys Swamp in 1993; it is very occasionally recorded now during Water Bird Surveys at Lakes Bathurst and George, most recently in Nov 1994.

The most pleasing rarity for this list is undoubtedly the nationally listed vulnerable species, the **Australian Painted Snipe**. One or two birds were still being recorded at West Belconnen Pond into the first week of November, having been first detected in mid-October. This follows on from the widely publicised group of up to four birds which frequented Kellys Swamp last October and occasional sightings, mostly from Jerrabomberra Wetlands, from 1964 onwards. As one Rarities Panel member put it, "I had hoped that the last two good years would bring them back."

The **Spangled Drongo** is about due to be retired from the ACT unusual birds list, having been reported at least once per annum now since 2006. The male is a distinctive glossy black bird with a distinctive fish tail and a red eye. We had thought it to be a mainly summer visitor, however this August record and the previous record (June 2011 in Wanniassa) show otherwise. It has been said that unusual seasonal movement is characteristic of this species.

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# **ENDORSED LIST 81, November 2012**

# Plumed Whistling-Duck Dendrocygna eytoni

9; 24 Oct 2012; Martin Butterfield; Trucking Yard Lane Bungendore GrS13

# **Banded Lapwing** Vanellus tricolor

5; 8 Oct 2012; Martin Butterfield; Plains Rd, Hoskinstown GrR16 6-8; 19 Oct 2012; Denis Wilson; Trucking Yard Lane, Bungendore GrS13 (see also p. of this issue)

# **Wood Sandpiper** Tringa glareola

1; 27 Aug 2012; Michael Lenz; Lake Bathurst SW basin GrY8

# Australian Painted Snipe Rostratula australis

1-2; from 13 Oct to 5 Nov+, 2012; Roger Curnow; West Belconnen Pond GrI11

# **Spangled Drongo** Dicrurus bracteatus

1; 15 Aug 2012; Noel Luff; Eucumbene Drive GrI15



**Plumed Whistling Duck** (*Steve Stephinson*)

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# **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 distribution, identification or behaviour 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 cbn@canberrabirds.org.au.

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 editors.

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