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Editor's Note

The Annual Bird Report (ABR) – A good time to thank all those involved in its production

COG has produced Annual Bird Reports (ABR) since 1977, now 43 in total. The first document with the title 'Annual Bird Report'¹, prepared by Grahame Clark, comprised five pages. Reports of recent years have grown to 100 pages and more, reflecting increased birding activity, large amounts of data from various surveys [COG Atlas, Garden Bird Survey (GBS), Waterbird Survey (WBS), Woodland Survey (WOO) and others] and an extension in area coverage [from the ACT to the wider COG Area of Interest (AoI)].

Views differ widely about the ABR, as reflected in a quote from Paul Fennell (2014):

Is the COG Annual Bird Report the most boring publication ever written? To some people it must go close to, but to others (one wonders how many?) it is a valuable reference eagerly sought after to provide detailed information of the abundance and distribution of birds in our area.

But whichever side of the fence you sit on, the annual review of available data has benefited the Canberra birding community greatly. It has enabled us to get a better understanding of the status of our birds and aided conservation efforts for species and landscapes.

Preparing these summaries for each species observed in COG's AoI involves considerable effort by many people every year. Technical difficulties with COG's data base, some amenable to resolution, others less so, have resulted in a temporary pause in the production of ABRs. The last one covered the bird-year 2018/2019 [CBN 45 (2020)]. It is very opportune now to thank all those so far involved in preparing them.

The Table below lists all 36 contributors who have written species accounts for the ABR and (the number of reports to which they have contributed).

Allan, Barbara (19)	Fennell, Paul (11)	Mantle, David (2)
Baird, Ian (4)	Frawley, Matthew (1)	McCaskill, Duncan (3)
Bissett, John (1)	Fyfe, Malcolm (17)	McDonald, David (15)
Boekel, Con (12)	Gibson, John (1)	McMahon, Ian (30)
Bounds, Jenny (2)	Goldie, John (2)	Perkins, Harvey (15)
Browning, Graham (13)	Graham, Bill (11)	Possingham, Hugh (1)
Butterfield, Martin (2)	Hermes, Neil (4)	Purchase, David (21)
Clark, Grahame (19)	Holliday, Steve (3)	Taws, Nicki (15)
Davey, Chris (25)	Lenz, Michael (11)	Taylor, McComas (5)
Digan, Bob (15)	Lepschi, Brendan (16)	Veerman, Philip (2)
Elliot, Grahame (1)	Lindenmayer, Bruce (2)	Wallace, Steve (2)
Farley, Kim (1)	Lipscombe, Joan (3)	Walter, Kathy (1)

¹ Steve Wilson published a predecessor as "Systematic Notes" in Annual Reports of the Royal Australasian Ornithologists' Union – A.C.T. Branch, from 1965 onwards (see also Fennell 2014).

Ian McMahon, Chris Davey and David Purchase have had the longest involvement, each contributing to more than 20 reports, followed by six others who have written accounts for 15 or more reports (see Table).

But first you have to get the material to the writers. Originally the ABRs were based on collections of handwritten records. Later, extracts from data bases (COG's general data base, the GBS and WOO data sets etc.) for each observation year became available. A number of statistics for the GBS became a regular feature, the key GBS managers being McComas Taylor, Philip Veerman, Martin Butterfield, and Duncan McCaskill (see Hermes and Veerman (2014) for more details). Since 1990 the task of pulling the individual write-ups together into a coherent document rested with several CBN editors (Malcolm Fyfe, Harvey Perkins, Barbara Allan), but from 2008 Paul Fennell became special editor of the ABR, a role he has maintained to the latest ABR (CBN 45, 2020), a remarkable achievement!

In 2013 Steve Wallace generated summary statistics for the entire COG data set/year, which were incorporated into the ABR. These statistics (abundance, reporting rates, breeding, distribution) form a key component of the species information on COG's website (Bird Info; <http://canberrabirds.org.au/birds/>), and are regularly referenced, for example, by Jack Holland in his monthly column 'Summary/analysis of the past month...' in COG's Gang-gang newsletter.

In 2016 Jaron Bailey took over the management of COG databases and generated similar statistics, following on from Steve Wallace's work.

The COG community owes a big THANK YOU to all involved in preparing the Annual Bird Reports.

I acknowledge the information provided by Paul Fennell. At the same time, I apologise, if I have inadvertently omitted some names I should have mentioned.

References

- Fennell, P. (2014) The Annual Bird Report: a brief history. *Canberra Bird Notes* 39, COG 50th Anniversary Issue: 77-79.
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The Editor

ARTICLES

Canberra Bird Notes 47(1) (2022): 3-21

LONG-TERM TRENDS IN ACT WOODLAND BIRDS

1998 – 2019

A SUMMARY

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1. Introduction

In the ACT the vegetation community defined as Yellow Box/Red Gum grassy woodland is classified as Endangered (*Nature Conservation Act*, 1980). The ACT holds some of the largest intact woodlands so there is a special responsibility to ensure the community is adequately protected and managed. A major aim of the Canberra Ornithologists Group is to promote the conservation of birds and their habitat, so in 1998 COG initiated a project to aid management through bird surveys aimed to record changes in the distribution and abundance of birds within the woodland community.

We summarise the results of the surveys from a report titled ‘Long-term trends in ACT Woodland Birds 1998-2019’ (Bounds *et al.* 2021) which details the results of observations from 15 woodland locations. The full report can be found at [COG Woodland Bird Monitoring Project - Canberra Birds](#)

2. Background

2.1. The Woodland Bird Monitoring Project

The primary aim of the Woodland Bird Monitoring Project was to develop a statistically robust monitoring program to measure the abundance of birds through time at grassy woodland locations in the ACT (see Cunningham 2003 and Bounds *et al.* 2010). A priority feature of the sampling design was to establish survey sites on-reserve and off-reserve to assess the effectiveness of the ACT reserve network for conserving woodland birds (see Rayner *et al.* 2014).

A core purpose of the Woodland Bird Monitoring Project is to provide recommendations for land management based on monitoring results. Survey data from the Woodland Bird Monitoring Project have been analysed on several occasions previously, examining trends in reporting rate for a range of bird species. Previous reports published on the [COG website](#), including Bounds *et al.* 2010 and Taws *et al.* 2012, provide additional background information and site details. A Ten-year Analysis of bird survey data (1998 to 2008) was undertaken in

2009 (Bounds *et al.* 2010) and multiple project reports have been published in COG's journal *Canberra Bird Notes*, available on the [COG website](#).

This report presents major results from the analysis of survey data collected over the period March 1998 to September 2019, a period of twenty-one years and six months. The intention was to undertake an analysis once the majority of survey locations had at least 20 years of monitoring data.

2.2. Scope of the Analysis

Questions for the analysis focussed on long-term trends in woodland bird detections. This investigated:

- **changes in species richness** to broadly assess community condition
- **individual species trends** to assess the conservation status of woodland birds, and
- **composite trends for bird groups of special interest** to inform targeted conservation work.

3. Methods

3.1. Bird Surveys

Bird survey data are collected on sites of 50-metre radius (c 0.8 hectares) within grassy woodlands. Ten of the 15 survey locations have 9 sites each, one has 8 sites, and 3 locations have 6 to 7 sites. All survey locations are categorised into low, medium, and high habitat structure (*sensu* Bounds *et al.* 2010) to allow for an overall representation of the location. Mulligans Flat Nature Reserve surveys commenced in 1995 with 24 sites; these sites were selected to represent three habitat types: grassy woodland on flats, dry forest on low ridges, and areas at the ecotone of these communities. See Appendix A for site locations.

3.2. Survey Sites

Survey locations and their management histories are described in detail in the Ten-year Analysis Report (Bounds *et al.* 2010) whilst the number of sites and survey period for the report are described in Bounds *et al.* 2021.

3.3. Bird Groups

Twelve bird groups of conservation interest were analysed for long-term change. The groups included 125 species, and their allocation (including method used for allocation) is shown in Bounds *et al.* 2021, 2.3 and Appendix C. All bird species are allocated to at least one bird group, and bird species can be allocated to more than one bird group.

- ACT woodland-dependent species: 48 species
- South-east woodland-dependent species: 49 species
- Degraded woodland community: 10 species
- ACT threatened species: 11 species
- Species of conservation concern: 14 species
- Canopy feeding species: 24 species
- Mid-storey feeding species: 3 species

- Ground feeding species: 17 species
- Woody-weed frequenting species: 16 species
- Small woody-weed frequenting species: 10 species
- Small-bodied species (<70 g): 74 species, and
- Large-bodied species (>70 g): 52 species.

3.4. Data Analysis

For the analysis, trends in *Species Richness* are derived from the number of species detected at each bird survey, whilst trends in *Individual Species Reporting Rate* (hereafter *Individual Species*) are derived from the detection (presence/absence) of an individual species at each bird survey thereby adjusting for any differences in survey effort between years. The reporting rate is the number of surveys in which a species was recorded out of the total number of surveys for that season. The effect on *Species Richness* and *Individual Species* of the following factors was modelled:

- **Time** – the effect of each year spanning 1998 to 2019 (21 years)
- **Location** – representing the 15 locations at which bird surveys took place, and
- **Site** – representing the 142 survey sites, nested within *Location*.

3.4.1. Individual Species Trends

Detections for individual species were used to model the trends of birds through time. Both generalised additive models (GAM), and generalised additive mixed models (GAMM), were fitted to individual species detections data, providing a smoothed (non-linear) trend line. To test whether there was an overall increase or decrease in detections of individual species from 1998 to 2019, generalised linear models (GLM), and generalised linear mixed models (GLMM), were fitted to individual species detections, providing a straight (linear) trend line. For further details see Bounds *et al.* 2021.

3.4.2. Composite Trends for Bird Groups

To test whether birds of a particular grouping ($n = 12$, described above) showed common linear trends from 1998 to 2019, a guilds analysis was conducted on linear trend results from the individual species analysis described above. To do this, a new variable representing the time-effect (*i. e.* trend) for each species was fitted against the two-level factor (included or not) for each bird group.

4. Results and Discussion

The analysis incorporated 10,728 surveys undertaken at 142 sites between 1998 and 2019. The number of bird surveys completed per site ranged from 52 to 92 over the observation period. Bird data for 129 land-based woodland bird species (water-based birds excluded) were analysed.

4.1. Species Richness

The analysis showed no significant change in species richness from 1998 to 2019 across woodland bird monitoring sites. There were significant (but small: average 1-2 species) decreases in species richness from 1999 to 2001 and from 2015 to 2019, possibly reflecting significantly drier than average years.

4.2. Individual Species

Long-term trends in reporting rate were calculated for 129 land-based woodland species, of which 73 species showed no significant trend pattern, and are not individually discussed. In some cases, non-significant trend results may be due to limitations of the project sampling design. For example, no raptors showed statistically significant trends, likely because the within-site (50 m) survey methodology is not effective for measuring the abundance of raptors (a more targeted sampling design is needed).

Significant trends – either an increase or decrease – were observed for 56 species (for individual species trend plots see Appendix E in Bounds *et al.* 2021). Table 1 provides an overview of significant trend patterns.

4.2.1. Decreasers

Thirty-two species showed a statistically significant decrease in reporting rate over the analysis period. Twenty-eight are native species, and include seasonal migrants,² residents, and a range of sizes of birds (21 small-bodied: < 70 g, and 7 large-bodied: > 70 g). Some of these birds are thought by observers to have declined at some woodland sites or occur in very low numbers at sites (*e. g.* **White-plumed Honeyeater**, **Southern Whiteface**, **Crested Shrike-tit**). However, the long-term decline of some species was unexpected, including the following 16 species generally regarded as common:

- Tree Martin
- Fuscous Honeyeater
- Pallid Cuckoo
- Dollarbird
- Superb Fairy-wren
- Mistletoebird
- Striated Thornbill
- Weebill
- Yellow-rumped Thornbill
- Rufous Whistler
- Willie Wagtail
- Western Gerygone
- Striated Pardalote
- Leaden Flycatcher
- Buff-rumped Thornbill
- Grey Fantail.

4.2.2. Increasers

Of the 24 species that showed increasing trends most are common, large-bodied birds, adapted to urban environments (*i. e.* habitat generalists). However, the list of increasers does include 5 small-bodied birds that occur in ACT lowland and mountain forests, as well as woodland habitats (*i.e.* not strictly woodland-dependent); for example, **Golden Whistler**, **White-eared Honeyeater**, and **Brown Thornbill**.

4.2.3. Consistent linear changes

Species that showed steady, consistent decreases over every year in the analysis period were:

- Hooded Robin
- Tree Martin
- Restless Flycatcher
- Pallid Cuckoo
- Dollarbird
- Rufous Whistler
- Grey Currawong
- Western Gerygone.

² *Seasonal migrant* refers to a species that has constant and regular movements, moves into the ACT over the spring and summer months (for breeding), and moves out of the ACT for the cooler months to other locations, *e. g.* north, coastal. This is distinct from an *altitudinal migrant*, which moves within the local area, breeds in upland forests, and moves to lower and milder altitudes in autumn/winter (including to lowland woodlands).

Species that showed steady, consistent increases over every year in the analysis period were:

- Rainbow Lorikeet • Gang-gang Cockatoo • White-winged Chough
- Satin Bowerbird • Australian King-Parrot • Crimson Rosella
- Little Corella • Australian Raven.

Table 1. Trend summary for individual species that showed significant change over the analysis period (1998-2019). Species marked with an asterisk (*) show consistent significant inter-annual trend effects, i.e. significant annual decrease or increase in every year of the analysis period. Mean site-level reporting rate (RR) is presented for the first year (1998) and last year (2019) of the analysis to provide indication of linear change through time.

Species name	No. records	1998 RR (%)	2019 RR (%)	P value	Trend description
DECREASERS <i>Greatest to least</i>					
Little Friarbird	7	0.25	0.00	0.008	Seasonal. Very low RR, most years with no records. Significant decline over the analysis period.
House Sparrow	89	0.23	0.01	< 0.001	Low RR. Significant decline over the analysis period, few records in the last 10 years.
Hooded Robin*	74	0.62	0.02	< 0.001	Low RR declining to very low. Significant steady decline 1998-2014 after which there were no records.
Crested Shrike-tit	44	0.66	0.02	< 0.001	Low RR. Slight peak in 2006, then significant decline 2007-2013 after which there were no records.
Tree Martin*	1,439	2.8	0.20	< 0.001	Seasonal. Medium RR declining to low. Significant decline 1998-2011. Still declining after this but at a less significant rate.
Common Myna	1,171	3.10	0.24	< 0.001	Medium RR declining to low. Significant decline 1999-2002, then increase to a slight peak in 2006, followed by significant decline to 2012. Small increase 2014-2016, then another decline from 2018. Overall downward trend.
Restless Flycatcher*	17	0.36	0.03	0.016	Low RR, more than half the years with no records. Significant decline over the analysis period.
Fuscous Honeyeater	265	1.12	0.11	< 0.001	Seasonal. Low RR. Significant decline 1999-2002. Small increase 2004-2006 followed by significant decline 2009-2010 and ongoing slow decline since.

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Species name	No. records	1998 RR (%)	2019 RR (%)	P value	Trend description
DECREASERS <i>Greatest to least</i>					
White-plumed Honeyeater	1,723	5.48	0.71	< 0.001	Medium RR declining to low. Significant decline 1998-2002 then slight increase from 2003-2005. Further significant declines 2007-2009 and 2012-2015. Still declining after this but at a less significant rate.
Pallid Cuckoo*	77	1.44	0.19	< 0.001	Seasonal. Low RR. Significant steady decline over the analysis period.
Brown Treecreeper	222	0.36	0.05	< 0.001	Low RR declining to very low. Significant decline from 2011 onwards.
European Goldfinch	59	0.29	0.05	0.048	Sparse observations. Slow, marginally significant decrease over the analysis period.
Dollarbird*	127	1.20	0.25	< 0.001	Seasonal. Low RR declining to very low. Significant steady decline over the analysis period.
Southern Whiteface	178	0.46	0.10	0.003	Low RR. Significant decline from 2009-2014.
White-winged Triller	241	2.44	0.56	< 0.001	Seasonal. Medium-low RR. Significant decline 1998-2000. Small but significant increase in 2010-2011 followed by decline in 2013-2014.
Grey Currawong*	201	1.12	0.37	< 0.001	Low RR declining to very low. Significant steady decline over the analysis period.
Superb Fairy-wren	6,535	14.28	5.57	< 0.001	Medium RR. Significant decline 2000-2006, significant increase from 2008-2011 followed by significant decline 2013-2019 to give an overall declining trend.
Common Starling	9,547	12.15	4.91	< 0.001	Medium RR. Two periods of significant declines; 1999-2002 and 2010-2012, each followed by 2 years of significant increase; 2003-2005 and 2013-2015. Overall downward trend.
Mistletoebird	900	6.53	2.81	< 0.001	Seasonal. Medium RR. Significant declines in 2000-2001 and 2014-2019 give an overall declining trend.
Striated Thornbill	3,519	6.24	3.00	< 0.001	Medium RR declining to low. Significant decline in 2005-2008 followed by a small but significant increase 2010-2012 then another decline 2014-2017.
Weebill	8,949	40.58	24.49	< 0.001	High RR with large fluctuations. A significant increase in 2002-2005 followed by two periods of significant decline 2006-2009 and 2012-2016, then a significant increase 2017-2019. Overall declining trend.

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Species name	No. records	1998 RR (%)	2019 RR (%)	P value	Trend description
DECREASERS <i>Greatest to least</i>					
Noisy Friarbird	1,786	11.70	6.03	< 0.001	Seasonal. Medium RR. Significant decline 1998-2002, followed by significant increase 2004-2006, then ongoing declines, significant in 2009-2011 and 2016-2019.
Yellow-rumped Thornbill	3,941	10.23	5.94	< 0.001	Medium RR. Significant increase 2006-2008 followed by significant declines 2010-2012 and 2016-2019, with an overall declining trend.
Rufous Whistler*	1,631	10.14	5.91	< 0.001	Seasonal. Medium RR. Significant steady decline over the analysis period.
Willie Wagtail	730	3.66	2.15	0.003	Medium to low RR. Significant decline 1998-2002. Non-significant downward trend since.
Western Gerygone*	440	2.33	1.39	0.009	Seasonal. Low RR. Significant steady decline over analysis period.
Striated Pardalote	8,866	42.15	30.45	< 0.001	High RR. A significant increase 1998-2000, followed by a short but significant decline 2001-2002. Another increase 2003-2005 then a significant decline 2010-2013. Overall declining trend.
Leaden Flycatcher	386	2.34	1.52	0.048	Seasonal. Low RR. Significant decline 1998-2002.
Red-rumped Parrot	2,143	1.74	1.13	0.019	Low RR. Significant decline 1998-2006.
Black-faced Cuckoo-shrike	1,657	12.42	8.66	< 0.001	Seasonal. Medium RR. Two periods of significant decline; 1998-2002 and 2015-2019.
Buff-rumped Thornbill	7,199	12.14	8.64	< 0.001	Medium RR. Two periods of significant decline; 2000-2002 and 2014-2019.
Grey Fantail	5,088	26.35	20.11	< 0.001	Seasonal. High RR. Significant decline 1998-2000, significant increase 2009-2012, followed by another decline 2013-2016.
INCREASERS <i>Greatest to least</i>					
Rainbow Lorikeet*	285	0.00	0.64	< 0.001	Low RR. First records not until 2008 but significant increase since then.
Tawny Frogmouth	7	0.00	0.24	0.034	Very low RR. First records in 2013. Significant increase since then.
Superb Parrot	168	0.02	0.30	< 0.001	Seasonal. Low RR. First records in 2005 and a significant increase from then until 2012.
Satin Bowerbird*	44	0.01	0.14	0.001	Low RR. First records in 2000 then sporadic until 2011. Significant increase over the period 2000-2019.

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Species name	No. records	1998 RR (%)	2019 RR (%)	P value	Trend description
INCREASERS <i>Greatest to least</i>					
Little Corella*	376	0.12	1.24	< 0.001	Low RR. Significant steady increase from first records in 1999 to 2019.
Noisy Miner	7,985	2.97	24.49	< 0.001	Low RR increasing to high. Two periods of significant increase 2002-2008 and 2012-2016 giving a strong upward trend.
Masked Lapwing	250	0.00	0.02	0.001	Very low RR. Significant increase 2007-2010.
Gang-gang Cockatoo*	342	0.07	0.30	< 0.001	Low RR. Slight but significant increase in RR over the analysis period.
Grey Butcherbird	443	1.07	4.51	< 0.001	Low RR increasing to medium. Significant steady increase from 2004-2019.
Australian King-Parrot*	1,036	0.39	1.60	< 0.001	Low RR. Significant steady increase over the analysis period.
Australian Raven*	2,528	6.12	16.26	< 0.001	Medium RR. Significant steep increase over the analysis period.
Sulphur-crested Cockatoo	4,576	7.08	18.39	< 0.001	Medium RR. Significant steady increase 1998-2013. Still increasing to 2019 but non-significant.
Crested Pigeon	1,259	1.93	5.20	< 0.001	Low RR increasing to medium. Significant increases 2002-2005 and 2006-2009 to a peak, then significant decrease 2010-2013 before another significant increase 2014-2018.
Welcome Swallow	569	0.56	1.30	0.004	Low RR. Significant increase 2009-2013 then significant decline 2015-2019. Overall subtle, significant increase over the analysis period, most likely due to rainfall response.
White-winged Chough*	3,613	2.26	5.01	< 0.001	Low RR increasing to medium. Significant steady increase over the analysis period.
Brown Thornbill	760	1.58	3.52	< 0.001	Low RR. Steady until small but significant increase 2008-2012.
Pied Currawong	2,319	4.74	9.48	< 0.001	Low to medium RR. Steady until a small but significant increase 2012-2015, then small but significant decrease 2017-2018.
Australian Magpie	6,884	23.96	36.79	< 0.001	Medium RR increasing to high. Steady then significant increases in 2006-2010 and 2014 followed by significant decline 2016-2019. Overall significant linear increase over the analysis period.
White-eared Honeyeater	429	1.81	2.96	0.010	Mostly seasonal. Low to medium RR. Small but significant increase 2006-2009, small but significant decrease 2014-2017. Overall slightly increasing trend.

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Species name	No. records	1998 RR (%)	2019 RR (%)	P value	Trend description
INCREASERS <i>Greatest to least</i>					
Brown-headed Honeyeater	1,251	1.49	2.38	0.013	Low RR. Slight increase, (significant only in 2012) through to a peak in 2014, significant decrease from 2016-2019. Overall subtle, significant linear increase over the analysis period.
Golden Whistler	484	2.43	3.68	0.024	Mostly seasonal. Low to medium RR with two peaks, 2003 and 2013. Significant changes before and after these peaks, but an overall increasing trend.
Galah	6,453	17.16	23.90	< 0.001	Medium RR increasing to high. An initial significant decline in 1998-2000, followed by significant increases 2002-2008 and an ongoing upward trend.
Magpie-lark	1,411	3.39	4.98	0.008	Low RR increasing to medium. Slightly increasing trend overall with two peaks in 2008 and 2016 with significant changes before and after these peaks.
Crimson Rosella*	14,130	43.16	51.62	< 0.001	High RR. Significant steady increase over the analysis period.

4.2.4. Increasers of interest

Increases in these species are of ecological relevance: a substantial increase in the resident **Noisy Miner**, and colonisation in recent decades by **Rainbow Lorikeet** and **Little Corella**.

4.2.4.1. Noisy Miner

Noisy Miners showed a significant six-fold increase in reporting rate over the analysis period. This species is an aggressive, medium-sized, colonial honeyeater known to exclude or suppress small birds. There is widespread concern about these impacts, with culling programs implemented across many areas of the Australian temperate zone. Further research is needed to inform **Noisy Miner** management programs in the ACT.

4.2.4.2. Rainbow Lorikeet

Rainbow Lorikeets showed a significant increase in the analysis. This is a nectar-feeding parrot typically associated with coastal habitats, and first observed in the ACT around 1986 (Canberra Ornithologists Group). In many parts of Australia, **Rainbow Lorikeets** are considered an invasive species and, while their reporting rate is low in the ACT, its increase is consistent and statistically reliable.

4.2.4.3. Little Corella

Little Corellas showed a slight but steady and significant increase in reporting rate over the analysis period. This is a ground-feeding, flock species of cockatoo that is very common in open, inland habitats, and has been increasing in the ACT since around 1990 (Canberra Ornithologists Group).

4.2.5. Decreasers of interest

Two small, canopy-feeding honeyeaters which have a wide distribution/range outside the ACT are highlighted. The **White-plumed Honeyeater** is a resident breeder in ACT lowland woodland, and the **Fuscous Honeyeater** a breeder in mid-altitude woodland.

4.2.5.1. White-plumed Honeyeater

White-plumed Honeyeater showed an overall decrease of concern. Before 2002, there is a strong decline, and a more gradual decline in the trend since then, to a low level of abundance. This is a widely distributed honeyeater, common along inland river systems. In the ACT, they have been considered a fairly common species, largely sedentary, resident in woodlands as well as parklands with mature eucalypts. The species has been thought by observers to have reduced in numbers or disappeared from some woodland sites, and the analysis result confirms this.

4.2.5.2. Fuscous Honeyeater

Fuscous Honeyeater showed an overall decrease, with a very low reporting rate since 2011. The decline is of concern, particularly as the species' core ACT habitat is in the southern half of the ACT, where it breeds, at mid-altitude open woodlands in valleys and on footslopes. This area was impacted by bushfires in 2003 and 2020. Some seasonal movement is known in cooler months to ACT peri-urban woodlands where there are nectar sources.

For further examples of species with significant decreases see Bounds *et al.* 2021, Table 4.

4.3. Seasonal migrants

The only seasonal (or partial) migrants that showed a significant increase are **Welcome Swallow** and **Superb Parrot**. Twelve seasonal migrants (see below) showed decreases; of those, 11 are common species that breed in ACT woodlands (excludes Little Friarbird). Trends in seasonal migrants are variable and not clearly explained by local weather.

- | | | |
|---------------------|--------------------|-----------------------------|
| • Rufous Whistler | • Tree Martin | • Black-faced Cuckoo-shrike |
| • Leaden Flycatcher | • Pallid Cuckoo | • White-winged Triller |
| • Dollarbird | • Noisy Friarbird | • Western Gerygone |
| • Mistletoebird | • Little Friarbird | • Grey Fantail. |

4.4. Resident species

Of the 22 resident species that showed a significant increase, 18 are large-bodied species. Of the small-bodied species, two are altitudinal migrants in the ACT (**Golden Whistler**, **White-eared Honeyeater**). **Weebill** and **Buff-rumped Thornbill** are examples of small, resident species that showed a significant variation, but an overall decrease, in their reporting rates. Significant drops in the reporting rate of **Buff-rumped Thornbill** appeared to coincide with drier than average periods (e.g. 2000-2003 and 2014-2019), whereas changes in the reporting rate for **Weebill** do not appear weather-related. The large-bodied **Grey Currawong** showed a decreasing trend. This species is resident in woodlands. They are at some woodland sites in fairly low numbers, as breeding pairs.

4.5. Non-native species

No non-native species were found to have increasing trends. Of the seven non-native species, four showed significant decreases: **House Sparrow**, **Common Myna**, **European Goldfinch** and **Common Starling**. The remaining 3 are marginal woodland species. Although records are few, the **Common Blackbird** showed a decline but a positive response to the breaking of the Millennium Drought.

4.6. Bird Groups

Seven bird groups showed significant trends over the analysis period (Figure 1). These included:

an increase in large-bodied birds and birds associated with degraded woodland communities, and a decrease in small-bodied birds, canopy feeders, south-east Australian woodland birds, ACT woodland-dependent birds and ACT species of conservation concern.

There was no collective trend in threatened species, ground feeders, or birds associated with woody weeds (all species or small-bodied species). Models did not converge for mid-storey feeders due to sparse data. Additional information showing the magnitude of (significant) change for individual species in a bird group is provided in Bounds *et al.* 2021, Appendix G.

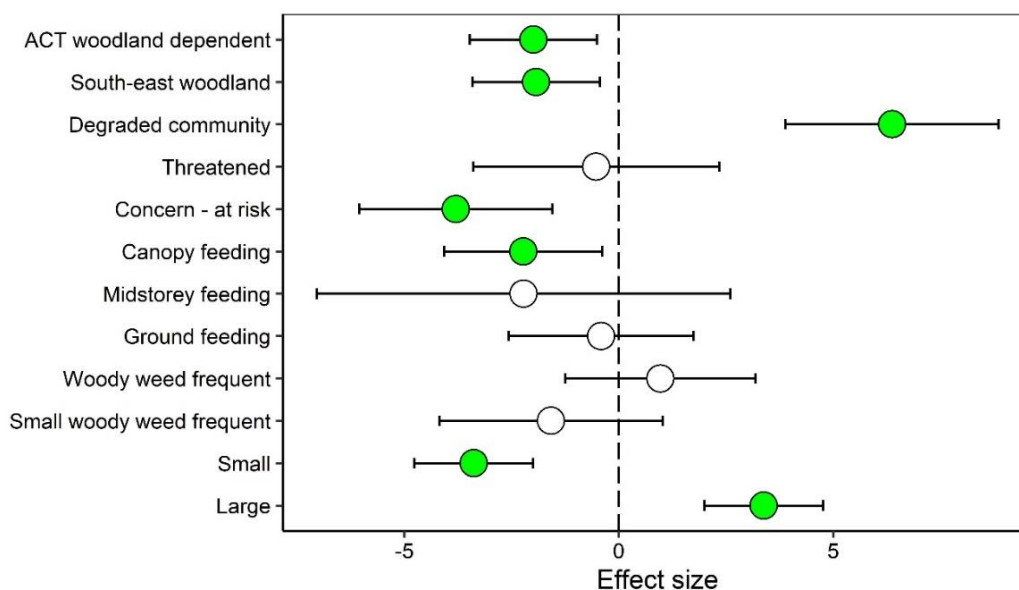


Figure 1. Effect size plot for bird groups of interest. Points to the right of the zero line represent that species in that group have collectively increased over time (1998 to 2019), and points to the left of the zero line represent that species in that group have collectively decreased over the time. Bird group trends that are statistically significant are shaded.

4.7. Conservation Priority Species

The Project Team has compiled a list of Conservation Priority Species in ACT woodlands and assigned a management **priority ranking** (high or low) to each, based on an assessment of significant statistical results collectively. The purpose of this list is to support land managers in conservation and restoration planning for woodland birds. To be considered a Conservation Priority Species, a species had to meet ALL THREE (3) of the following criteria:

- a significant decliner, and
- an ACT woodland-dependent bird species, and

- (i) a consistent, every-year decliner, (ii) a canopy feeder, and/or (iii) a small-bodied bird.

The **priority ranking** takes account of these criteria and the local knowledge and expertise of the Project Team, and relates to the ACT region only.

Table 2. Species prioritised for conservation attention in the ACT due to concerning long-term status and trait-based vulnerability (i.e. small-bodied and/or canopy feeder). Reminder: Canopy feeders feed primarily, but not exclusively, in the canopy.

Species	RR trend	Consistent decline	Canopy feeder	Small-bodied	Priority ranking	Notes on ecology and trend pattern
Brown Treecreeper	Low-very low			✓	High	Mainly ground feeder of insects, also taken from crevices/bark in trees. Reliant on dead and fallen timber. Hollow nester. Requires well connected habitats/patches. No longer resident breeding groups at woodland sites. Rare/uncommon in rural areas.
Buff-rumped Thornbill	Medium			✓	Low	Abundant flock species in good quality woodland structures/habitats. Insect feeder, utilises lower/mid-storey and ground, including eucalypt re-growth.
Dollarbird	Low-very low	✓			High	Seasonal, long-distance migrant from areas in Asia and PNG. Canopy and aerial feeder/hawker of insects. Nests in tree hollows, often dead trees.
Fuscous Honeyeater	Low		✓	✓	High	Moves seasonally between mid-altitude and lowland woodlands in ACT. Widely distributed in SE Aust. woodlands. Nectar feeder in eucalypts, shrubs. Takes insects in absence of nectar. Core ACT habitat impacted by bushfires 2003 and 2020.
Grey Currawong	Low-very low	✓			High	Widespread species. In ACT occurs in low numbers/pairs, in woodlands. Takes insects, fruits/berries, probes bark/litter. Records in COG Area of Interest (AOI) show slow decline from 1991 (Canberra Ornithologists Group).
Grey Fantail	High		✓	✓	Low	Mostly migratory/seasonal. Occurs in habitats of varying structures/quality. Insect feeder, taken in flight.
Hooded Robin	Low-very low	✓		✓	High	Mainly ground feeder of insects. Requires large, undisturbed, well connected patches/habitats. No longer resident breeding groups at woodland sites. Rare/uncommon in rural areas.

Table 2 continued on next page

Table 2 continued from previous page

Species	RR trend	Consistent decline	Canopy feeder	Small-bodied	Priority ranking	Notes on ecology and trend pattern
Leaden Flycatcher	Low		√	√	Low	Seasonal species. Occurs in good quality woodland habitats with large eucalypts, open forest. Insect feeder, in trees and in flight amongst treetops.
Little Friarbird	Very low		√		Low	Very sparse data, marginal ACT species, core range outside ACT.
Mistletoebird	Medium		√	√	Low	Seasonal species, some overwinter. Feeds largely on mistletoe fruits, and insects. Tree health decline is possible factor (loss of/reduced mistletoes, herbivores/possums).
Noisy Friarbird	Medium		√		Low	Seasonal, migratory species. Insects and nectar feeder.
Restless Flycatcher	Low	√		√	High	Widely distributed species. Mainly hawks insects on or from the ground. Tolerates open treed habitats, farmlands and riverine.
Rufous Whistler	Medium	√	√	√	Low	Seasonal migratory species. Occurs in good quality woodland habitats with large eucalypts. Insect feeder in trees and shrubs layer.
Southern Whiteface	Low			√	Low	Ground feeder, on insects and seeds. Some disturbance tolerance, occurs in modified habitats and farmlands. Prefers areas of short grass, patchy ground layer.
Striated Pardalote	High		√	√	Low	Widely distributed species. Feeds on tree-frequenting insects, including lerps. Disturbance tolerant, occurs in degraded, treed habitats, and fragmented patches.
Tree Martin	Medium - low	√		√	High	Seasonal migrant, some overwinter. Hawks insects from or between trees and aerial. Tolerates open treed habitats. Nests in small hollows in eucalypts.
Weebill	High		√	√	Low	Lerp and insect feeder, mostly taken from outer foliage of eucalypts. Abundant at woodland sites of varying quality/structure. Utilises eucalypt re-growth.
Western Gerygone	Low	√	√	√	Low	Seasonal migratory species. Small insect feeder, usually in outer foliage. Occurs in better-quality woodland habitats. Widespread species, more common further inland.

Table 2 continued on next page

Table 2 continued from previous page

Species	RR trend	Consistent decline	Canopy feeder	Small-bodied	Priority ranking	Notes on ecology and trend pattern
White-plumed Honeyeater	Medium - low		√	√	Low	Widely distributed species in woodland structures and riverine habitats. In ACT, occurs in woodlands, in treed urban/reserve edge green strips, and parklands with mature eucalypts. Insects and nectar feeder.
White-winged Triller	Medium - low		√	√	Low	Widespread, mobile, irruptive species, numbers vary seasonally. Insect feeder, including on or close to the ground.

Notes on some declining species in Table 1 list, not included as Conservation Priority Species in Table 2:

Crested Shrike-tit (RR low, never a common woodland species, uncommon/rare in ACT forest habitats).

Striated Thornbill (RR medium declining to low, flock and canopy feeding species, not woodland-dependent, also forest species).

Pallid Cuckoo (RR low, a consistent decliner, not woodland-dependent, a widespread species more common inland in open habitats).

5. Conclusions and Recommendations

This report provides a timely update on the conservation status of ACT woodland birds. Here, long-term woodland bird population trends have been elicited from the Woodland Bird Monitoring Project database and interpreted with expert knowledge, to provide an overview of desirable and undesirable changes to woodland avifauna. Further, this report serves as a support tool for conservation land managers through the identification of Conservation Priority Species that arguably require immediate protection and conservation attention. In some cases, strategic restoration planning to improve woodland condition and arrest current rates of decline may be necessary to avoid future local extirpation events. Below, the authors call attention to some key conclusions from the analysis.

The increase in large-bodied bird species, and the strong, unabated increase in aggressive species like **Noisy Miner** and **Rainbow Lorikeet**, are important considerations for the management of woodland-dependent birds. This is particularly relevant in the consideration and planning of conservation buffers – including their size and nature – at the interface of new urban and greenfield developments. It is likely that high-functioning conservation buffers will be needed to minimise the intrusion and dominance of large and/or aggressive, urban-tolerant bird species in nature reserves and rural woodland habitats.

There were three important new findings from the analysis:

1. Observed declines were expected for some species (*e.g.* **White-plumed Honeyeater**, **Southern Whiteface**, **Crested Shrike-tit**), but there were a number of additional species showing declines that were unexpected to the Project Team (*e.g.* **Fuscous**

Honeyeater, Mistletoebird). Similarly, some species regarded as fairly common or abundant showed long-term downward trends, (e.g. **Rufous Whistler, Weebill, Yellow-rumped Thornbill, Superb Fairy-wren**), albeit only small declines in some cases (e.g. **Leaden Flycatcher, Red-rumped Parrot**). Declining groups were not restricted to native species: 4 of the 7 introduced species showed a decrease (the other 3 showed no trend).

2. A significant collective decline in canopy feeders was unexpected and warrants further investigation. Possible drivers of decline in this bird group include eucalypt dieback and crown condition, climate-related habitat effects (e.g. nectar availability), and over-abundant canopy browsers such as possums.
3. Before the analysis, it was thought by the Project Team that ground feeders may be the group of most concern, given previous analyses and factors such as increasing periods of drought, variable rainfall, overgrazing by native herbivores, deterioration of ground-layer habitat condition and plant diversity, and invasive weeds. However, the ground-feeding group did not show a collective trend.

Drought and rainfall are generally considered important determinants of bird distribution and abundance, especially for small passerines. From this analysis, it appears some species (e.g. **Scarlet Robin**) responded positively to increased rainfall, while others (e.g. **Hooded Robin**) showed no response at all. Without a more tailored analysis, it is unclear if (or how) weather affects woodland bird reporting rates. It is plausible, however, that species occurring only at low densities, or in fragmented populations, lack the means to exploit favourable weather to recover their numbers.

The analysis confirms that a focus on small birds as a conservation priority is valid. There may be a need to consider the nomination of some species as *Threatened* (Vulnerable status) under the ACT *Nature Conservation Act 2014*, such as those considered ‘High’ priority in Table 2 (e.g. **Tree Martin, Fuscous Honeyeater**), or the upgrading of some species already listed as *Threatened* (e.g. **Hooded Robin**). Additional supporting data, or further analysis, may be needed to underpin a strong case for new threatened species nominations. In the interim, all species named as ‘Conservation Priority Species’ (Table 2) should form part of a formalised ‘Watching Brief’ that implies ongoing species assessment in terms of their population status and their habitat extent and condition.

5.1. Future work

Further exploration of results presented here could be undertaken, as well as new projects, with questions arising from, or based on, this report. Future work using COG’s Woodland Bird Monitoring Project database, dependent on available funding, resources and priorities, could include:

- Targeted analysis of species of interest, including species of concern, which may warrant nomination for listing as *Threatened*. This should be driven by clear questions (e.g. *What do we need to know about species X?*). Action Plans produced by the ACT Government may provide some guidance.
- Analysis of landscape-scale woodland change and associated bird responses. This could include:

- Assessing whether habitats critical to the maintenance of woodland bird diversity are being maintained.
- Analysing how woodland birds are responding to ongoing urbanisation and reservation (an update of Rayner *et al.* 2014).
- Investigating the relationship between dieback and woodland bird abundance, density and distribution.
- Examination of the impacts of dominant avian competitors on vulnerable woodland birds that would include a description of **Noisy Miner** colonisation dynamics across the ACT.
- An analysis of site-based species occurrence and community composition, which may be influenced by site-related attributes such as patch size, patch connectivity, habitat structure, land tenure, grazing regimes, the urban context, or other geographical factors.
- A case study of Mulligans Flat and Goorooyarroo Nature Reserves where survey data are available from 1995, before/after and within/outside the predator-proof Sanctuary.
- Identification of climate-sensitive species, based on research on how woodland birds are responding to weather variability and broad-scale climate signals.

Readers are encouraged to explore reports from other woodland bird monitoring projects in the region to position the results of this project in the broader context of temperate woodland bird conservation. For example, the Cowra Woodland Birds Program (CWBP) conducts regular bird surveys in woodlands in the Cowra area north of Canberra, and 17 years of data have recently been analysed (Reid & Nicholls 2020).

Finally, this report has been prepared to enable COG to publish key results, and for the consideration of a journal article for peer-reviewed publication.

5.2. Actions Recommended

1. Continue the survey program and consider a future trend analysis.
 - Most suitable at the 30-year milestone (1998 to 2028).
 - With an emerging pattern of drier years since 2015, there is great interest and, in some cases, concern for what trends will emerge in the next decade and whether some unexpected decliners might recover. Monitoring should continue to determine when/if populations will plateau and how this influences the conservation status of species.
2. Consider publishing results presented in this report in a peer-reviewed journal to enhance the dissemination of key findings and reach a wider scientific audience.
3. Seek funding/resources to undertake further analysis or research projects with a focus on Conservation Priority Species and their primary threatening processes.

Acknowledgement

Over many years of this Program there have been many COG members who have undertaken the bird surveys contributing to the long-term dataset. COG thanks all who have undertaken a bird survey in the Program. Some people have made a substantial contribution to surveys/data collection over many years, some of the current site coordinators have undertaken surveys since

their sites were originally established. The list does not include names of those who may have done occasional surveys.

Current site/location coordinators:

Lia Battisson (Tuggeranong Hill NR)
 Jenny Bounds (Mulligans Flat NR, Jerrabomberra West NR)
 Chris Davey (Kama NR)
 Steve Holliday (Goorooyarroo NR south)
 Paul Fennell (Majura Field Range)
 Sandra Henderson (Symonston - Callum Brae NR, Isaccs Ridge NR)
 Sue Lashko (Newline Quarry)
 Michael Lenz (Campbell Park)
 David McDonald (Castle Hill)
 Julie McGuinness (Naas)
 Harvey Perkins (Red Hill NR)
 Alison Rowell (Hall/Gold Creek)
 Nicki Taws (Goorooyarroo NR north)
 Kathy Walter & John Goldie (Mt Majura NR)

Significant survey contributors:

Martyn Moffat (Mulligans Flat 1995 to date); Jack Holland (Mulligans Flat 1997 to date); Bruce Lindenmayer (Mulligans Flat 1995-2015); Stuart Harris (Red Hill); Jenny Bounds (multiple sites/locations since 1995).

Other survey contributors: (past site coordinators and/or survey helpers at one or more sites/locations – in alphabetical order; most of the list at Mulligans Flat):

Barbara Allan, John Avery, Shaun Bagley, Alistair Bestow, Con Boekel, Suzi Bond, John Brannan, David & Kathy Cook, Muriel Brookfield, Prue Buckley, Mark Clayton, Geoffrey Dabb, Alan Ford, Malcolm Fyfe, Bill Graham, Bill Handke, Kay & Horst Hahne, Steve Holliday, Robin Hide, Sue Lashko, Tony Lawson, Isobel Crawford, Noel Luff, Joan & Trevor Lipscombe, Jonette McDonnell, Duncan McCaskill, Julie McGuinness, Carol Neumann, Gail Neumann/Daryl Beaumont, Anthony Overs, Peter Roberts, Alison Russell-French, Nicki Taws.

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The authors thank all the individuals who undertake the woodland surveys, and the landholders/land managers who allow access to sites.

The authors thank Thea O'Loughlin (Ecologist, Offsets Team, ACT Parks & Conservation Service) who reviewed the document.

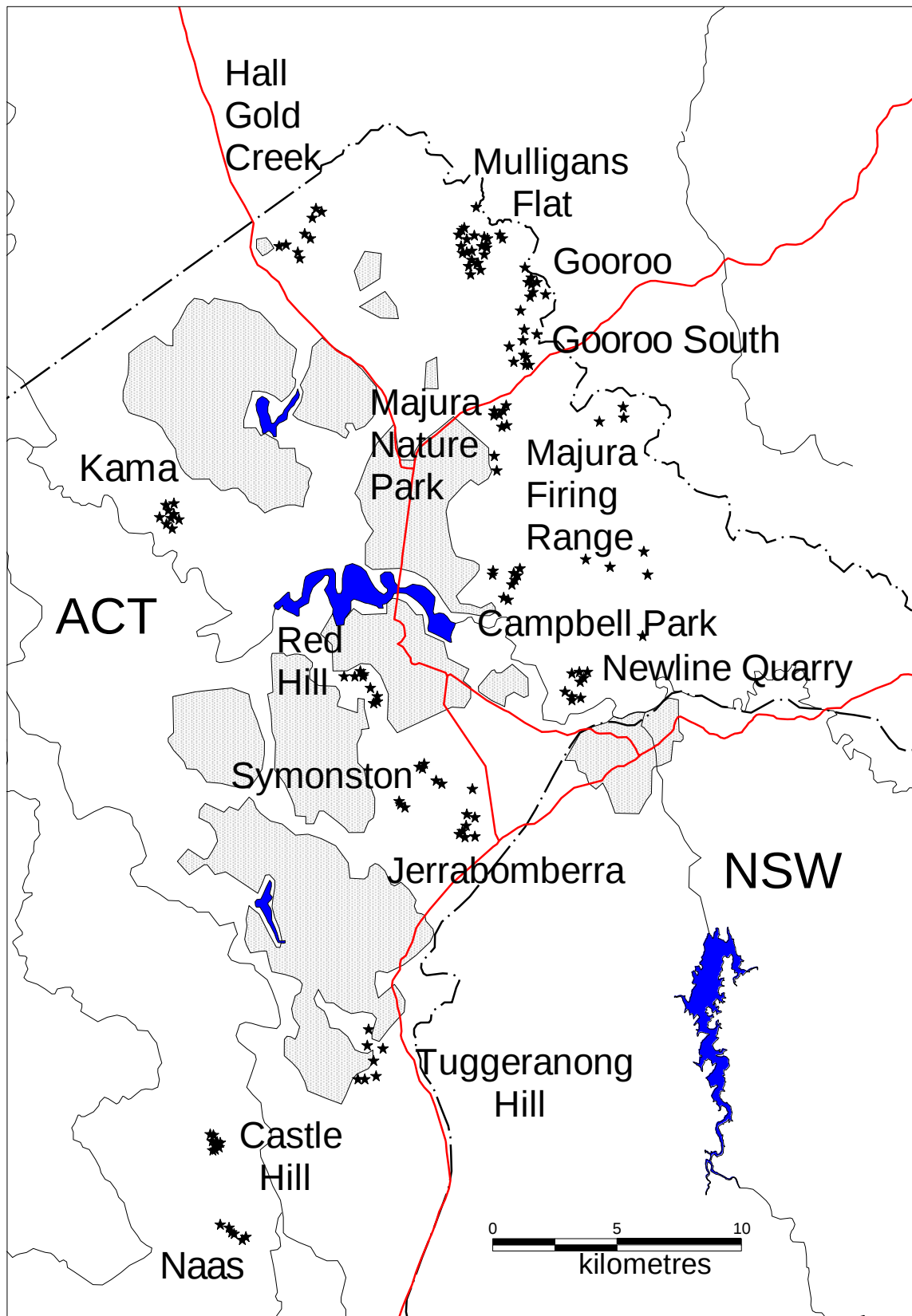
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APPENDIX A. Map of survey locations



A TRIO OF WHITE-NECKED HERONS (*ARDEA PACIFICA*) BREEDING IN WAMBOIN, NSW

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Abstract. *The White-necked Heron (Ardea pacifica) is classified as an uncommon breeding resident in the ACT, and this status also applies to the immediately surrounding area. Few breeding records exist in the Canberra Ornithologists Group's Area of Interest. We report on a successful White-necked Heron breeding event that occurred in Wamboin, NSW (7 km east of the ACT border) over the period September 2021 to January 2022. The species is assumed to be monogamous, but at Wamboin two broods were raised by three birds. The male assisted both females in the construction of their nests; in addition, it built a nest for its own use over the course of several weeks, starting around the time the first chicks had hatched.*

Introduction and background

The White-necked Heron (*Ardea pacifica*) is classified as an uncommon breeding resident in the ACT, and this status also applies to the immediately surrounding area. Few breeding records exist in the Canberra Ornithologists Group's Area of Interest (COG's AoI).

Reviewing the historical records, Wilson (1999, p. 20) advised that, 'Breeding here [i.e. in the ACT] is rare but McNaughton (1969) reported 'One recently fledged in small swamp near [Dairy] road on 16 November 1968.'

Successful breeding events were reported from 1995 and 1996. The first report was of birds seen on nests at Mulligans Flat's large dam from 18 Sep 1995 to 5 Nov 1995, and there was a report of a 'dependent young' bird there on 3 Dec. Canberra Ornithologists Group (1999a) stated that, 'It was not recorded how many actually nested.' Bounds (1995) reported that two birds were seen on nests at the large dam on 5 Nov. These are the first nesting records of White-necked Herons from the Canberra region ...' (Canberra Ornithologists Group 1999a, p. 66). The same source (*loc. cit.*) advises that 'In 1969 a nest was built in a tree near the Federal Hwy close to Canberra (no further details were provided) but the breeding attempt failed ... Is the breeding of the species in the Canberra region being overlooked?'

One breeding event of the species exists for the following year: on 1 Nov 1996, also at Mulligans Flat, a nest with eggs and one adult present and, on 3 Nov, a nest with young and one adult bird also present; presumably the same nest as reported two days previously, hence a single breeding event (Canberra Ornithologists Group 1999b), p. 104).

¹ All photos by Kathy Handel.

The Canberra Ornithologists Group's database includes one record of 'on/leaving nest' in the 2013-14 year, and one of 'Breeding (BLA code)'. Location details were not available at the time of writing; these records did not find their way into the *Annual Bird Report* for that year, possibly because they were submitted late.

There is also a record of a White-necked Heron displaying on 3 Jan 2019 at Isabella Pond, ACT, but this cannot be treated as a confirmed breeding record (Canberra Ornithologists Group 2020, p. 29).

Hermes (2017, p. 63) points out that this species 'Nests as solitary pairs or scattered through colonies of other nesting waterbirds, with most nesting from September to February. Nest is a stick platform in a tree near or over water. Both male and female incubate and attend young. Regular clutch is four eggs.

2021-2022 breeding observations: rare excitement in Wamboin²

In 2021-22, three White-necked Herons chose a Yellow Box (*Eucalyptus melliodora*) next to a dam at 841 Norton Road, Wamboin NSW, as their breeding tree. The property owners, Kathy Handel (KH) and her husband Keith France, had recorded sightings of White-necked Herons only four times in the last 23 years. David McDonald (DM) recommended keeping a diary as breeding by this species is a very rare event in this part of the state.

Early in September 2021, two herons were present and started building a nest on 5 Sep in a branch that overhangs the dam. On 25 Sep a third bird was noticed for the first time. It turned out to be a female. KH did not notice any aggression between the birds. The species is known to aggressively defend feeding territories against conspecifics (Marchant and Higgins 1990).

For the next few weeks, the herons were seen flying around the site, often being chased by nesting magpies. The site is open woodland with several large trees which allowed the birds to be observed from 50 -100 metres away without disturbing them. Attempts to go closer than this distressed the birds and initially they would fly away. By the end of September, one heron sat on the nest constantly while the other two came and went. KH was confident that that she could identify the male. His head looked yellower than the other two birds (too much foraging in dirty dam water?) and he had a darker line down the middle of his chest.

On 1 Oct, while one heron was sitting on her nest, the other two herons started to build another nest higher up in the same tree. One had taken twigs from the ground up to the branch; then they appeared to be courting, with necks moving back and forth, while building the nest together. A week later KH watched as they flew to the ground around the dam and back up to the tree frequently, gathering more nesting material. This lasted for an hour, then ceased. Over the next few weeks, the bird on the top nest spent some time sitting on it but seemed to spend far more time away from the nest than the bird on the bottom nest.

² This section headed '2021-2022 breeding observations: rare excitement in Wamboin' is an edited version of that published as Handel, K. (2022), 'Rare excitement in Wamboin', *The Whisper*, (Wamboin Community Association, Inc.), February 2022, p. 19.

On 23 Oct the bird on the bottom nest seemed to be riding high on the nest, not moving and keeping her head down, while the male stayed nearby (Fig. 1). Later in the day two chicks were seen. Their heads were up and the female was standing over them and a little later she was feeding one chick. Then she settled down on the nest. Later on the same day, the male started building a nest platform for himself two metres away on a nearby branch (Figs. 1 and 2). He started doing a special manoeuvre—he stretched his head and neck up and brought them down quickly (Fig. 3), apparently forcing air from his throat to make an ‘oomph’ sound, a call noted for males at the nest (Marchant and Higgins 1990). The bird on the top nest flew down to join the male and then flew back up to her own nest. Later, KH thought he fed the two chicks in the bottom nest and settled on it while the two females flew off together.

Notably, the male kept adding nest material to its platform over the course of the breeding season, rendering it into a small nest as shown in Figs. 1 and 2. The two photos were taken a month apart.

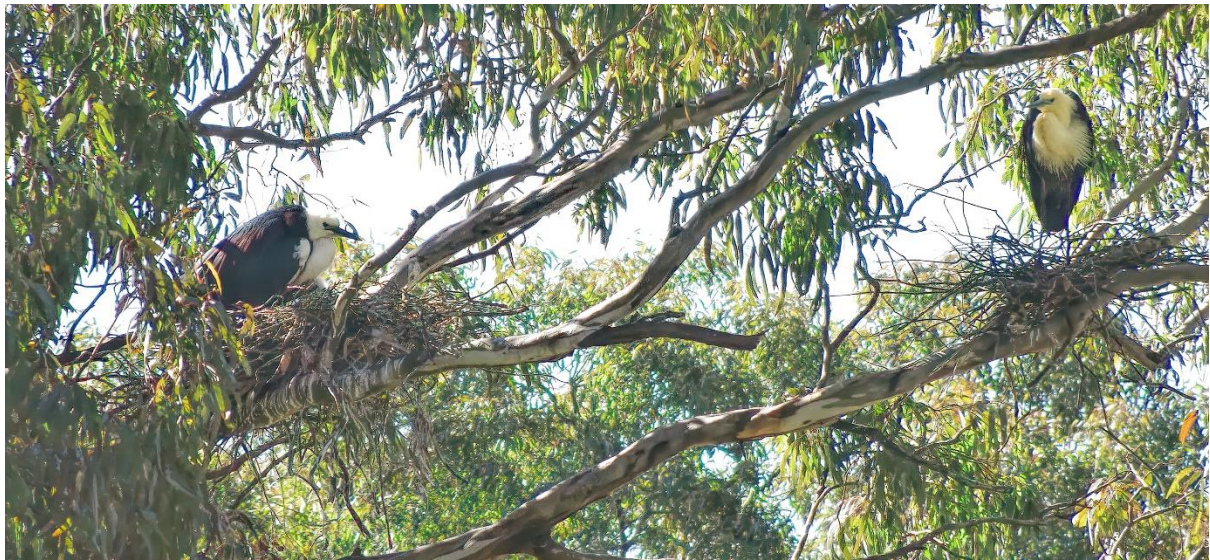


Figure 1. Female 1 on its nest (left) and the male on its own nest platform, 6.10.2021.



Figure 2. The two chicks of Female 1, close to leaving the nest (left) and the male on its nest, 24.11.2021. Note that the male has added much more nest material to its own nest in the course of a month between the two photos (compare with Fig. 1).



Figure 3. Male displaying on its nest platform, 24.10.2021.

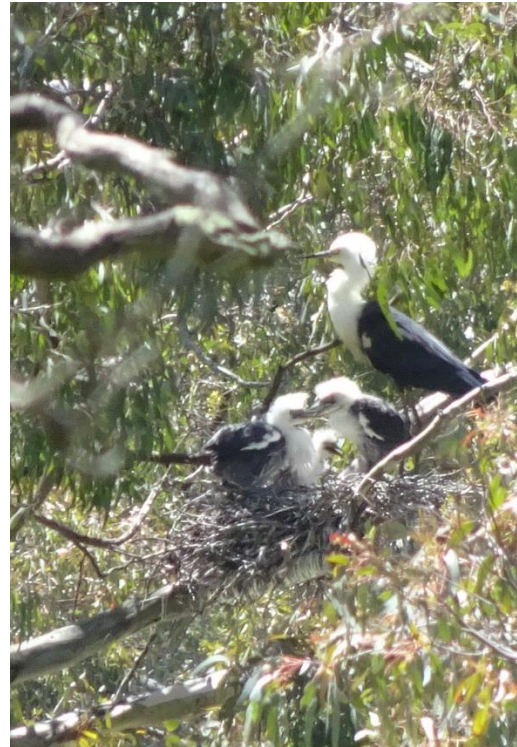


Figure 4. Female 1 with its 3 chicks, 9.11.2021.



Figure 5. The two older chicks of Female 1, 17.11.2021.



Figure 6. Female 2 with its chick 12.12.2021.

On 28 Oct the chicks were left unattended for some time. When an adult arrived and fed them three chicks could be seen (Fig. 4). Then when another adult arrived, the first flew off and the second adult fed them. They appeared to feed them by regurgitating food and allowing one chick at a time to stick its beak up into their own beaks. From 3 Nov onwards

only two chicks could be seen (Fig. 5). The third chick had perished, a frequent fate of the youngest bird (Marchant and Higgins 1990; Martínez-Vilalta *et al.* 2020). When KH brought friends to see the chicks, the mother would get nervous and sit on them. It seemed they were alarmed by noise (*e. g.* talking). When the adults were away, the chicks moved around on the nest, but when people came closer, they crouched low.

The property includes five holes of the Wamboin golf course. One of the greens was so close to the nests that it was feared that golfers might scare the herons away. A temporary barrier was erected and golfers were asked not to go close to the nests. The property owners also mowed a fairly large area around the green but not close to the herons. Balls lost in the unmown area had to stay there (replacement balls were provided).

On 24 Nov KH saw a chick in the top nest with the female standing over it (Fig. 6). The two chicks in the bottom nest were standing on their nest and the male was standing nearby on his nest (Fig. 2). A few days later, there were times when there were no adults around. When an adult flew in, the chicks would cackle loudly until the parent finished feeding them. As the chicks grew, the parents were seen foraging in several neighbours' dams as they fed the chicks in relays.



Figure 7. The oldest fledgling sunning itself, 11.12.2021.

On 5 Dec the biggest chick flew for the first time. It was on the ground and flew into a tree on the other side of the dam. One day it was seen standing on a branch in a very ungainly position, with its wings hanging down like straight arms (Fig. 7): it was sunning itself. It kept practising, and would only fly back to the nest to be fed. The chicks were all so big by this time that they had to stand on their nests. On 11 Dec the chick on the top nest was seen flapping its wings. On 12 Dec the older two chicks were foraging in reeds at the edge of the dam and a few days later they were at another dam (further away and out of sight of their nest).

The two older chicks were last seen on 22 Dec (by DM). They were two months old. When the owners returned from their holidays on 31 Dec, the older chicks were gone and did not return. The chick on the top nest was last seen on 4 Jan 2022, when it was less than six weeks old.

Final Comments

The observations at Wamboin are of great interest for two reasons. First, breeding by White-necked Herons is a rare event in COG's AoI. Second, the species is considered monogamous (Marchant and Higgins 1990), but at Wamboin a trio of one male and two females raised two broods. Polygyny is rarely reported among herons, but is not unknown (*e. g.* Nedjah *et al.* 2010). It is very fortunate that KH could witness the breeding events daily without disturbing the birds.

Interestingly, the literature does not report males constructing another platform or nest, albeit smaller, for themselves (Marchant and Higgins 1990; Martínez-Vilalta *et al.* 2020), as the Wamboin male did.

A summary of the key observations and dates is provided in Table 1.

Table 1. Time line of the White-necked Heron breeding events at Wamboin, based on the diary entries of Kathy Handel. The observed time line corresponds broadly to an incubation period of 28-30 days and young fledging after six to seven weeks (Martínez-Vilalta 2020).

Observations	Nest 1	Nest 2
Pair arrived at the breeding site	5 Sep	
2 nd female arrived		25 Sep
Nest building	5 Sep	1 Oct
Start of incubation (bird sitting on nest)	25 Sep	17 Oct? ^A
First time young visible	23 Oct	24 Nov
Male builds its own small nest in same tree	24 Oct	
Max. number of young seen	3	1
Number of young leaving the nest	2	1
Young leaving nest	5 Dec-12 Dec	1 Jan
Young last seen at site	22 Dec ^B	4 Jan

A: Question mark on start of incubation on Nest 2 is because the bird began sitting on the nest on 9 Oct but was often not on the nest until 17 Oct, when she started sitting more consistently (although not nearly as consistently as the bird on Nest 1).

B: Gap in observations from 23 Dec to 30 Dec.

After two years of high rainfall in the region all dams in the area were full and were providing ample food for the herons, most likely also the reason for the lack of aggression when the second female arrived at the nest site and proceeded to nest as well.

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ASSESSING THE NUMBER OF RARE BIRDS IN AN AREA

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Abstract. *The recorded occurrences of Spectacled Monarch (*Symposiachrus trivirgatus*) in the extreme southern part of its range are summarised and considered in an attempt to interpret the number of birds represented by several sightings in the Mallacoota area. Sightings of some other uncommon species are also reviewed to assess the extent to which rare birds could be 'missed' due to limited observer numbers.*

While this article is focussed on sightings of a Spectacled Monarch (*Symposiachrus trivirgatus*) in East Gippsland, the approach used to consider the number of birds in a series of sighting could be useful in similar situations in the COG AoI.

On 5 Oct 2021 two observers identified a Spectacled Monarch at the mouth of the Narrows in Mallacoota, Victoria. This is approximately 400 km (straight line) South of the usual range of the species. Fig. 1 shows an overall distribution map for South-Eastern Australia, extracted from eBird.

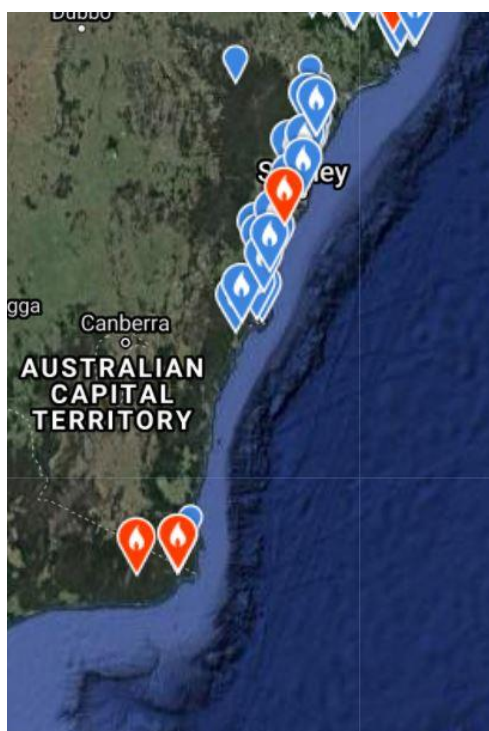


Figure 1 Distribution of Spectacled Monarch: SE Australia, eBird.



Figure 2 Distribution of Spectacled Monarch: SE Australia, Birddata.

The records (of any species, in Australia) in eBird only become significant in number after 2014. A longer temporal view is given by the records compiled in Birddata. The locations of those records of Spectacled Monarch in the extreme South of the range are shown in Fig. 2. Note that at this scale the dots indicate a grid cell, rather than a precise location: this

explains why some dots are offshore. The points labelled in the image¹ are those referred to below.

After the initial sighting, the bird was resighted in Mallacoota over 6 to 8 Oct and reported to eBird by 11 observers, with some photographs taken. (Although not central to this article, a number of observers commented how strongly the white belly stood out in the field (Fig. 3), as an ‘easy to see’ difference from the Black-faced Monarch (*Monarcha melanopsis*), which is normal in the area in summer.)

Several other very experienced observers – the author is aware of at least 10 - who searched for the bird on the 9 and 10 Oct were unsuccessful. It was considered that the bird had moved on.



Figure 3. Image of Mallacoota Spectacled Monarch (Alex Holmes).

On 31 Oct another observer observed a Spectacled Monarch at the Drummer Walk. The Narrows and Drummer locations are shown in Fig. 4.

Note that there are multiple sites in the area of The Narrows as some eBird observers set up personal locations (refer to Footnote 1 about naming) and others used a separate hotspot for the car park and surrounds. In a straight line it is ~42 km² from the Narrows to Drummer Walk.



Figure 3. Position of Drummer Walk and The Narrows Hotspots, eBird.

¹ The naming of locations in both eBird and Birddata is far from standardised - due to the exercise of personal choice by observers and the massive workload that would be imposed on reviewers to attempt to enforce standard names (the phrase ‘herding cats’ may be applicable). The locations of the Spectacled Monarch sightings close to Eden have a range of names referring to either or both of ‘Wonboyn’ or ‘Nadgee’. I have used Wonboyn in this article as all sightings of the species are in that locality, including at least one outside the Nadgee Nature Reserve.

² All distances cited in this article were measured on Google Earth. As it is possible I did not get the exact end points, the cited distances are approximate, but probably within +/- 5 km. Of course, it is unlikely that birds travel in a straight line but the exact route is unknown and ‘straight line’ gives a consistent measure of distance.

On 7 Nov a visiting group searched for the bird at Drummer without success. A bird was relocated by that group near the Narrows (approximately 250m upstream from the original sighting) on 10 and 12 Nov but was not found when the author searched the area on 13 Nov. The species has not been re-sighted since (at either Drummer or the Narrows).

Discussion

How many Spectacled Monarchs were in Far East Gippsland in October 2021³?

The simple answer is that as none of the images show a band (nor did any of the observers comment on seeing a band) we will never know with certainty whether this was:

- a single bird that went from the Narrows to Drummer before returning to the Narrows; or
- two birds;
- one that hung around the Narrows, seen on 3 days then not reported (despite a lot of looking) for over 4 weeks before reappearing briefly; and
- another that independently turned up at Drummer, was seen on a single day and then not relocated; or
- three birds:
- one that hung around the Narrows, seen on 3 days in October then not reported, despite a lot of looking) for over 4 weeks;
- a second bird that independently turned up at Drummer, was seen on a single day and then not relocated; and
- a third bird that independently turned up at The Narrows in November.

An example of how bands can resolve such issues has been given by Michael Lenz (pers. comm.) referring to a case in Germany:

A group has been banding migrating waders at an inland site on a regular basis. They caught a rare species, banded and released it. Next day the banded bird was gone, but a new individual of the same rare species was present!

In the case of the Spectacled Monarch in East Gippsland, referring to the historic records gives some insights into the likelihood of the various possibilities occurring. I have looked at all the records on eBird (8 records additional to the Narrows sightings) and Birddata (11 records) from Kiama Southwards. All eBird records and - nine of the Birddata records are for one bird. One of the Birddata records at Yatteyattah (near Lake Conjola) is for three birds and one at Wonboyn (just across the NSW border from Mallacoota) is for two birds. That suggests that when they wander far to the South of their usual range it is most frequently a single bird.

Very few of the records are from similar times. Exceptions are two records, each of one bird from Tanja (10 Nov and 1 Dec 2009 – almost certainly a single bird seen twice) and a single record ('P') from Yatteyattah on 9 Dec. These points are 150 km (straight line) apart:

³ It is tempting to follow the ABC sports commentators, H G Nelson and Roy Slaven, and say that "Too many Spectacled Monarchs are never enough."

not an impossible flight if the later bird was that seen at Tanja heading back North in a hurry, but could be two different birds, as Lake Conjola is much closer to the usual range.

There are records from the Wonboyn area on 28 Oct – 2 birds - and 29 Oct 2011 – one bird - from sites 6 km apart. Either there were three birds (very unlikely) or this suggests that they continue to wander about when in the area.

It would be very easy, based on the evidence from Wonboyn, for a single bird to have ‘wandered’ from The Narrows to Drummer and back again over a period of 5 weeks. Again, the records from Tanja and Yatteyattah in combination suggest – with somewhat less certainty – that the birds which have visited these southern extremes may return northwards fairly promptly.

In the following section the intention is to focus on whether isolated, wandering/vagrant birds will be picked up by thinly spread observers. It is not intended to imply, or even suggest, any common behaviour or other biological link between the very different species covered below.

A Devil’s Advocate argument has been made, based on records of Rose-crowned Fruit-Dove (*Ptilinopus regina*). A representative was seen and reported to eBird at Devonport Tasmania in September 2016. Other records of the species for earlier that year terminate at (approximately) Newcastle NSW, some 1,000 km North. It is noted that there are other, very occasional, records of this species in Tasmania and Victoria cited in Higgins and Davies (1996). How have these birds, and especially the 2016 bird, made it across some of the most densely populated areas of the country without being recorded *en route*? An explanation might be that even in areas such as Sydney or Southern Victoria birders are simply too widely spread to pick up such isolated events. The argument is then extended to suggest that if one bird can be missed in this manner, it is possible that if one bird is seen there could well be others, ‘inspired to wander’ by the same circumstances, that are not seen.

Michael Lenz (pers comm) has pointed out that birds may “wander”, stopping here or there, or cover greater distance with fewer stops in between before their end point. The Monarch most likely among the former, the Pigeon among the latter. But certainly, an important point to consider. The potential ‘exposure’ to birders can vary widely.

Perhaps the two cases can be resolved by other examples:

The first is that of a Grey-headed Lapwing (*Vanellus cinereus*) first recorded in Australia in September 2006 at Burren Junction NSW. This is described in Menkhorst *et al.* 2017 as ‘One of the most unexpected vagrants ever to turn up in Aus.’ Following that sighting the species was detected in a further three locations over 11 years⁴ and then not seen since.

A second case is that of the Common Sandpiper (*Actitis hypoleucos*). The ACT is reasonably distant from its usual coastal haunts (as shown in eBird) but when the bird turns up it has tended to be recorded regularly, in summer, with a high degree of site fidelity. This applies particularly to one recorded around 2003-08 near Urriara Crossing and the

⁴ The species map for Grey-headed Lapwing available through eBird (as at 31 March 2022) lists sightings at: Burren Junction (2006); Amata Waste Water Treatment Plant (2014); Penrith Lakes (2015) and Halls Creek Wastewater Treatment Plant (2017).

current bird seen regularly at Isabella Pond since 2019 (Perkins 2005; Annual Bird Reports in *Canberra Bird Notes*; ebird). Other water bodies between these sites and areas on the NSW Coast from which the species is more frequently reported are regularly birded, but the species is not recorded.

Considering the range of evidence cited above the author considers that it is reasonable to believe that in most cases what is recorded is, in most cases at least, a reflection of reality. If a single bird is seen it is because there is only a single bird in the area. Further if a rare bird is in an area for more than a trivial period of time it is likely to be detected.

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BLUE-BILLED DUCKS BREEDING AT WEST BELCONNEN PONDCHRISTINE DARWOOD^A AND ROGER CURNOW^{B1}^A christine.d9933@gmail.com^B rcurnow@bigpond.net.au

Blue-billed ducks (*Oxyura australis*) are generally considered a rare visitor to the ACT, so when, in the summer of 2020-2021, Blue-billed Ducks successfully raised a brood at Upper Stranger Pond (Henderson 2021), this was a very notable event.

Prior to the 2021-2022 summer Blue-billed Ducks had only been recorded twice at West Belconnen Pond, one female in February 2020, and a male in November 2020. So, it was a great surprise when a male and a female were seen there together on 21 Nov 2021. The male was observed displaying to the female (Figs. 1-5), who seemed quite receptive.



Over the next 7 to 10 days a number of observers saw the male and female at the same location, and often the male was displaying to the female.

However, during the following five weeks usually only one duck (more often the male) was seen at a time, when it would come out to forage on the pond. But both male and female were seen on a relatively regular basis.

¹ All photos by the authors.



Fig. 3



Fig. 4



Fig. 5

The nest was in a small, narrow strip of reeds, perhaps 2 m x 60 m, along the edge of the pond adjacent to a very well used footpath. A number of other water birds were

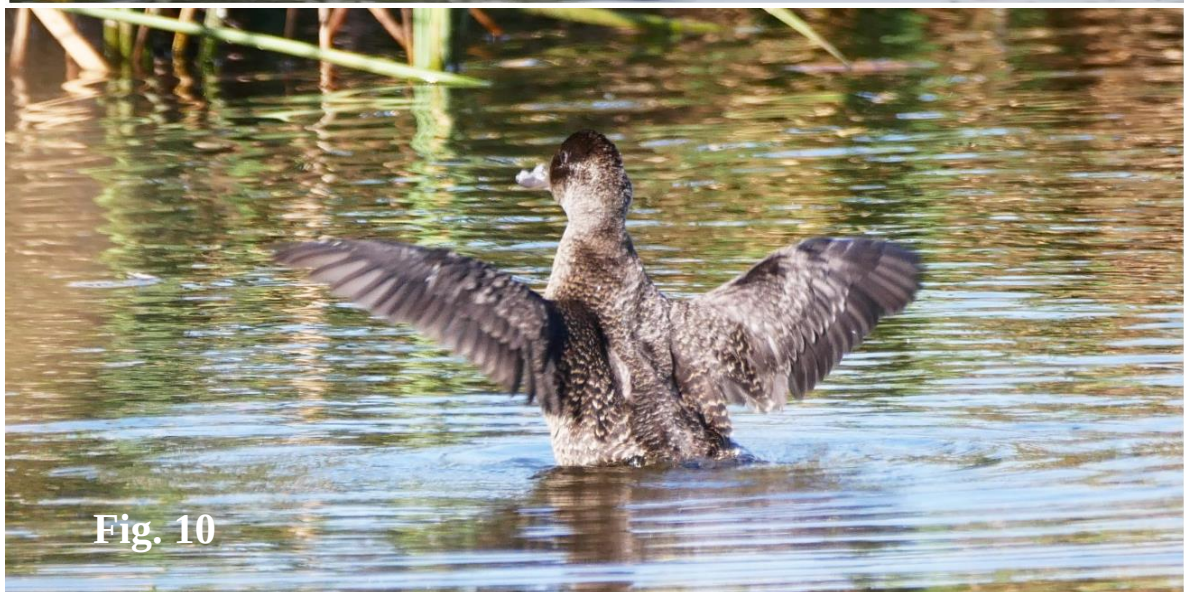
simultaneously nesting in these reeds, and even more species swam through it to feed, including Black Swans (*Cygnus atratus*) and cormorants. It did not seem a particularly peaceful spot to have a nest, but we regularly monitored the site with hopes high.

Then, on 3 Jan 2022, there appeared six ducklings, accompanied by the male and female (Figs. 6-8). During the next few weeks, they were seen often on the water beyond the reeds where the nest was, but they would not stay out for long periods, scurrying back to the safety of the reeds. The ducklings were diving and feeding themselves from day one. The female seemed to shepherd the ducklings around, and the male just hung around the group, without serving any apparent role (Fig. 8). On one occasion the female chased off a Eurasian Coot (*Fulica atra*) which came too close to the ducklings.



After three weeks the female was not so attentive to the young ducklings any more, and soon after that they were often seen together but without mother nearby (Figs. 9, 10).

By then there were only five ducklings, and the parents were now usually seen on their own, and the male often displaying again to the female. He maintained his lovely blue bill throughout the time he was at the pond.



By the end of the seventh week all of the ducklings had flown away. The two adults were still seen on occasion up until 24 Mar 2022 (female only). Interestingly, courtship activity apparently continued up until 2 Mar 2022. Blue-billed ducks are known to breed continuously as opportunities arise (Marchant and Higgins 1990; Carboneras and Kirwan 2020).

Acknowledgement

We would like to thank Michael Lenz for his excellent suggestions and assistance with this note.

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A SECOND YEAR OF BREEDING ATTEMPTS BY SINGING HONEYEATERS IN CANBERRA

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Abstract: In 2022 Singing Honeyeaters made a further two nesting attempts at Franklin Pond in Gungahlin, after four in 2020/2021. The location of the second 2022 nest in a *Casuarina* was known and could be monitored. The nest contained two infertile eggs. It is very likely that all nest failure can be attributed to the eggs not being fertilised. It is possible that the females attending the two nests in 2022 were different.

1. Introduction

The Singing Honeyeater (*Gavicalis virescens*) is a rare visitor to our area. Only single birds have been recorded in the past. However, in the breeding season of 2020/2021 a pair settled in Canberra and made four unsuccessful nesting attempts at Franklin Pond in Franklin, Gungahlin (Darwood and Lenz 2021). Birds were again recorded at Franklin Pond from early January 2022 onwards and new breeding attempts followed. This article describes our observations.

2. Results

2.1. Observations between the two breeding seasons

A single Singing Honeyeater was last seen in the breeding area on 13 Feb 2021 (Darwood and Lenz 2021). Surveys of the Franklin Pond area on 2 and 16 Mar, 25 May, 16 Jul and 2 November 2021 found no signs of Singing Honeyeaters (the site was not visited in December 2021). However, the species was still present in the wider surroundings as the three observations of single birds between March and August 2021 indicate (all reported on eBird). It is likely that one or other of the Franklin birds was involved. These three observations were:

26 Mar 2021 Ginninderra Creek, Melba (King 2021);

18 Jul 2021 Bonner shops (Bonnet 2021a);

28 Aug 2021 West Bonner Pond (Bonnet 2021b).

2.2. The 2022 breeding season

2.2.1. First breeding attempt

On 4 Jan 2022 ML observed a single bird in the western part of the Franklin Pond and reported it on eBird (<https://ebird.org/ebird/view/checklist/S100072480>). In the following days several observers visited the site and again recorded the species. On 8 Jan two birds were seen by at least five observers, including ML. Of great interest was the fact that one of the birds was identifiable as the female of the previous season (hereafter referred to as F20/21) by a plumage anomaly: one of the undertail coverts protruded through its tail feathers (see Fig. 3;

and Figs. 2 and 4 in Darwood and Lenz 2021). Ward (2022) included a photo of this bird in his eBird account.

Between 10 Jan and 8 Feb 2022, a single bird, assumed to be the male, kept foraging over a well-defined area in the NW part of the pond (schematically presented by the yellow ellipsoid in Fig. 1, lighter grey in b/w print), although the bird would move occasionally beyond the marked area when *e. g.*, chasing White-plumed Honeyeaters (*Ptilotula penicillata*) away.



Figure 1. Franklin Pond: Location of the assumed site of the first nest and the foraging area occupied by the male (yellow ellipsoid, lighter grey in b/w) and the known site of the second nest and the foraging area occupied by the male (green ellipsoid, darker grey in b/w).

After a foraging bout, the male flew usually very low via trees and shrubs to a large bush complex, composed of *Grevillea* and *Westringia*, in the NW corner of the pond and entered it at a particular spot. He usually called a few times before taking flight and sometimes called from a nearby tree after leaving the bushes. No doubt, the bush complex held the nest and the male was provisioning the incubating female. It is possible that in this nesting attempt the female was again F20/21. However, we did not observe a female at the site after F20/21 was sighted on 8 Jan 2022.

2.2.2. Second nesting attempt

On 11 Feb one bird was still foraging near the first nest area, although it was not recorded entering it, and also foraged a little further south on the western side of the pond than on previous days. On 15 Feb one bird was observed collecting spiderwebs and carrying them to the end section of a branch of a casuarina tree (*Casuarina cunninghamiana*), about 2 m above ground (see Fig. 2). The nest site was just above a stand of Cumbungi (*Typha* sp.) at the edge of the pond. The bird made repeated visits to the new nest site and could be seen, although

largely obscured by foliage, incorporating the new material and shaping the nest. It clearly had already started building prior to the 15th.

From this new nest site, it became obvious that the foraging area had moved a little further south along the western side of the pond, as indicated by the green ellipsoid (darker grey in b/w print) in Fig.1.

On 17 and 18 Feb two birds were noted around the nest site. One bird appeared to be a little smaller than the other, possibly a smaller female and a larger male (see measurements in Higgins *et al.* 2001). This was noticeable only when both birds were seen in close sequence. But importantly, the female was not F20/21, last season's breeding female with the plumage anomaly, which was also seen in early January 2022. It was a different female (hereafter F22) with no distinguishing features. This means that in the 2022 season, three Singing Honeyeaters were present at Franklin Pond.



Figure 2. Site of the second nest (arrow).

Sometime between 18 and 22 Feb incubation had commenced. The female on the nest could be monitored from a little distance when the wind moved the foliage around the nest to allow glimpses of the sitting bird. From a lower angle it was sometimes possible to see part of the nest and the protruding tail of the sitting bird.

The male visited the nest at intervals of 10 to 25 minutes, calling well in advance and close to the nest, then moving up the branch to feed the female on the nest. On a few occasions the female was also seen off the nest. Once, while preening in a nearby tree, she made several 'whieb, whieb' calls, a type of call not heard before [most likely the mewing call (Anderson 2021)]. Otherwise, she stayed quiet on and off the nest.

On 11 Mar F22 was seen on the nest around midday (JC) but by the afternoon the nest was abandoned and only one bird, probably the male, was seen and heard (CD). On 13 Mar the nest was still unoccupied and only the male was recorded (CD) (Fig. 3A). On 15 Mar neither member of the breeding pair could be found, but surprisingly, F20/21 had returned and

foraged along the western side of the pond (Fig. 3B). On the following day F20/21 (JC, ML) and another bird (CD), presumably the male, were recorded on the western side of the pond, although not at the same time. The male was recorded on the NW/W side of the pond over the following days (last time monitored 26 Mar 2021).



Figure 3 A (left) and B (right). (A) The (presumed) male staying behind for a few days after the second nest was abandoned (11 Mar 2022). (B) The female of the 2020/21 season (with the undertail covert protruding through its tail feathers, see arrow) re-appearing on site (15 Mar 2021) (Julie Clark).

On 15 Mar F20/21 gave a series of ‘whieb’ call similar to that of F22. It may be a warning call. On one occasion when White-plumed Honeyeaters and Noisy Miners (*Manorina melanocephala*) were giving repeated warning calls some distance away, F20/21 gave the ‘whieb’ call at intervals for five minutes. It is possible that this call is specific to females.

On 16 Mar ML retrieved the nest. It contained two eggs. Unfortunately, securing the nest did not go quite as planned. The branch with the nest could be bent down easily to cut off the end section (Fig. 2), but the ground was unstable, and as ML missed his footing the branch slipped out of his hand and the eggs were catapulted out. One most likely fell into the water among the Cumbungi; the other landed at the edge of the water but soon slipped in and disappeared. It had broken but contained a full yolk with no embryonic development at all. In other words, the female had been incubating unfertilised eggs!

The incubation period for the Singing Honeyeater is given as >14 days, based on the Nest Record Scheme (Higgins *et al.* 2001). At the second nest it commenced between 18 and 22 Feb. If we take 20 Feb as the start date, the female incubated the eggs for 19 days (minimum and maximum of 17 and 21 days, respectively). Higgins *et al* (2001) report that a female incubated a clutch of sterile eggs for 19 days.

The nest was built chiefly with casuarina needles, mainly dry ones, but also some fresher ones, grass blades, and the odd eucalypt leaf. Cobwebs held the nest material together and anchored the nest firmly to a fork. There was just a thin layer of soft lining, consisting of some white fluffy material of short curved fibres, possibly a synthetic material (Fig. 4).

The nest measurements were approximately: inner cup 5.8 cm in diameter and 4.6 cm deep outer diameter of the nest 9.3 cm and height 6.4 cm. The nest has been deposited with the CSIRO Australian National Wildlife Collection as ANWC N 00367.



Figure 4. Singing Honeyeater nest from Franklin Pond, 16. Mar 2022: view from top (left) and underside (right).

3. Discussion

The Singing Honeyeater is an irregular visitor to the Canberra area. However, in the last two years a pair has made several breeding attempts at Franklin and birds were sighted three times between the two breeding seasons. Over the 2022 breeding season as many as three birds were present at some point. In this context it is of great interest that Singing Honeyeaters were present from 2019 to 2021 and attempted twice to nest in the Goulburn area (Antram 2022).

Darwood and Lenz (2021) thought it likely that the repeated failures of the 2020/2021 breeding attempts could be largely attributed to the very wet weather (see also Lenz 2021). However, in the 2022 season with more favourable weather conditions the nest failure pattern repeated itself: one unsuccessful breeding attempt followed by another. Fortunately, the location of the second nest was known. It could be monitored, and when it was deserted, we could establish the cause of the failure: infertile eggs. Hence, in hindsight, it is far more likely that the nest failures of both breeding seasons were due to the same cause: the eggs were not fertilised. Further, it is reasonable to assume that the presumably sterile male was the same in the two breeding seasons.

The female would incubate the clutch for some days beyond the normal incubation period of >14 days, and then abandon the nest, but re-nest again if the season was still favourable.

In the 2021/2022 breeding season, the pair arrived late at Franklin Pond, only in early January 2022, compared to the previous season, when breeding started in October. It is possible that the pair had an earlier nest elsewhere and settled at Franklin Pond only in the latter part of the breeding season. There is some possibility that in the two breeding attempts in 2022 the

females were different. Further, F20/21 was again sighted very shortly after F22 deserted the nest.

It seems the Singing Honeyeater's breeding history at Franklin Pond is a rather dynamic one. We conclude that a successful brood can only be expected if a fertile male moves into the area.

Acknowledgments

Comments from Kevin Windle, Kim Farley and Leo Joseph have notably improved the manuscript.

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LONG-STAYING SINGING HONEYEATER AND ATTEMPTED BREEDING NEAR GOULBURN, NSW

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Abstract: For a period of well over two years (2019-2021), one, sometimes two, Singing Honeyeaters were present on a rural property near Goulburn. One and almost certainly two breeding attempts were made. This is the first documented record of the species for Goulburn Mulwaree.

Background

I was prompted to write this note following publication of details of unsuccessful nesting by a pair of Singing Honeyeater (*Gavicalis virescens*) in Canberra (Darwood and Lenz, 2021) in 2020/21. One, at times two, Singing Honeyeaters were present on a 40 ha rural property near Goulburn for well over two years from 2019-2021 and made one confirmed breeding attempt in spring 2019 and a probable attempt in spring 2021.

The area around the property is primarily cleared agricultural land, and plantings of largely native plant species around the house have created a 'bush oasis'. There were no native plants on the property prior to 1986, and most of the native plantings were done around 1996.

As documented by Darwood and Lenz (2021), the species occurs throughout much of Australia, apart from the east coast and ranges. However, the species is prone to wandering eastwards occasionally (usually single birds) as evidenced by documented records in eBird (www.ebird.org). In south eastern New South Wales (south of Sydney), there are documented records of single birds sighted at Thirroul, Wollongong, on 21 Feb 2021; Stanwell Creek, Wollongong, on 14 Mar 2021; Green Cape (Ben Boyd National Park), Bega Valley, on 29 Jan 2018; again at Green Cape on 30 Jan 2016; Windang, Wollongong, on 6 Mar 2016; Booderee National Park, Shoalhaven, on 29 Mar 2013; and Baroona Road, Cooma-Monaro, on 12 May 2013. Finally, there is an historic record of one at Green Cape on 24 Sep 1977.

The Goulburn birds

In September 2019, John Reynolds (JR) told me that he had an unusual honeyeater nesting at his property on Mountain Ash Road, Gundary (-34.797573, 149.765115), approximately 8 km south-east of Goulburn. He advised that one or two of these birds had been present for up to six months and he was not sure of their identity.

I visited the property on 15 Sep 2019 in the morning. I was surprised to find a Singing Honeyeater - the first record, to my knowledge, of this species in the Goulburn area, with a nest in a large *Correa schlechtendalii* bush. At the time, I noted that this probably reflected the drought conditions inland, although conditions were not a lot better in Goulburn. My field notes state 'Grey-brown honeyeater with pale streaky underparts, broad black band through

¹ All photos by author.

eye and extending down the neck, a yellow stripe below the black band ending in a white spot on the neck. The bird was on eggs in a *Correa* shrub. The area around the house is planted up with *Acacia*, *Grevillea*, *Banksia*, *Hakea*, *Correa*, all in flower. The surrounding area is open grass paddocks with cattle. No second bird seen.'



Figure 1. Singing Honeyeater, 15 September 2019, Gundry NSW.

The nest was in the centre of the *Correa*, about 15 cm below the top of the bush and about 80 cm above the ground. The nest contained two, perhaps three, eggs. The number is uncertain because it was difficult to see into the nest without causing unnecessary disturbance.

On 22 Oct 2019, I visited the property again to be told that the nest had been predated or, at least, the eggs had disappeared. The nest itself was still intact. Possibly a heavy snowfall on 17 Sep 2019 had caused the demise of the eggs. JR told me that he was still seeing or hearing the bird/s almost daily, but he had not actually seen two birds together for some time.

Over the next two years, I kept in regular touch with JR about the presence or absence of the Singing Honeyeaters. I made a series of random visits to check on the birds as outlined in Table 1.

In September/October 2021, JR suspected nesting again. I visited on 23 Sep 2021 and saw and photographed one bird. On another visit on 9 Oct 2021, I saw two birds together (the only time I ever saw two birds) chasing each other around the garden, and appearing to take special interest in an *Acacia cultriformis*. It was not until the following month that JR found a nest in the *Acacia*. The nest looked similar to the one built in 2019 and was probably a Singing Honeyeater's nest. It was empty.



Figure 2. The 2019 nesting site in *Correa schlechtendalii*.

There have been no subsequent sightings of the birds since October 2021 by JR or myself (this note being written on 30 Mar 2022).



Figure 3. The suspected 2021 nesting site in *Acacia cultriformis*.

Table 1. Visits to check on the bird/s.

Date	Number of birds	Observation
15 Sep 2019	1	Seen and heard; nest with eggs
16 Sep 2019	1	Seen and heard; nest with eggs
22 Oct 2019	1	According to JR, the nest was predated - at least, the eggs had disappeared - the nest was still intact. Possibly the heavy snowfall on 17 Sep froze the eggs? JR told me that he sees/hears the bird/s almost daily, but had not seen two together for a while.
10 Feb 2020	1	Heard
6 Mar 2020	0	No sign
7 May 2020	0	No sign
14 May 2020	0	No sign
22 Oct 2020	0	No sign
12 Nov 2020	1	Heard
13 Nov 2020	1	Seen (photographed)
10 Jan 2021	1	Seen
6 Aug 2021	0	No sign but JR told me he had heard the bird both before and after my visit.
23 Sep 2021	1	Seen (photographed). JR thought there had been 2 birds around recently
9 Oct 2021	2	2 birds seen for the first time
23 Oct 2021	1	Seen

Acknowledgements

My particular thanks to John Reynolds for his assistance, ongoing monitoring of the honeyeaters, and comments on a draft of this note. My thanks also to Michael Lenz for encouraging me to document this event.

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CANBERRA'S HOUSING SHORTAGE

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Anyone living in Canberra would be aware of the increasing value attributed to real estate in and around the capital. It would appear that the same applies to nesting sites for our feathered friends. During a visit to Campbell Park Woodland in October 2021, I became aware of a tree which perfectly illustrates the nest site shortage in the ACT. The tree (Fig 1) had no fewer than seven nests in its hollows.

The tenants were:

Common Starlings *Sturnus vulgaris*
 Rainbow Lorikeets *Trichoglossus moluccanus*
 Galahs *Eolophus roseicapilla*
 Red Rumped Parrots *Psephotus haematonotus*
 Sulphur Crested Cockatoos *Cacatua galerita*
 Little Corellas *Cacatua sanguinea*
 Nankeen Kestrels *Falco cenchroides*

Although all available hollows were tenanted, the competition for nest sites was still underway. I observed a pair of Common Mynahs (*Achridotheres tristis*) trying to extract a Rainbow Lorikeet from its hollow. The struggle ended when a Galah from the neighbouring hollow intervened and knocked one of the Mynahs from the tree. The Galah then hung upside down above the Rainbow Lorikeet's nest and did a very noisy victory dance (Fig 2).

The Corella (Fig 3) was not able to venture far from the nest without being harassed by the neighbouring Sulphur Crested Cockatoo, if it too was outside its nest hollow. This resulted in the Corella making an occasional dash for the nearby dam, having a quick drink and returning straight to the nest site at speed.

On the other side of the tree more potential tenants were hoping to secure a spot in the popular apartment block. A pair of Red-rumped Parrots made several visits to the Kestrel nest, despite the fact that the three young Kestrels were sitting in the entrance (Fig 4). While the interaction between



¹ All photos by the author.





these birds were somewhat amusing it shows how desperate the birds were to secure a place to raise their young.

Regular visitors to Campbell Park will also be aware of the permanent residents occupying tree hollows, such as the Owlet Nightjar, *Aegotheles cristatus* (Fig 5) and European Bees. Add to this list occupants who are seldom seen during the day, such as Possums, Gliders and Antechinus and it is easy to see why tree hollows are required year-round, not just for breeding purposes.

Across town, in another sign of the housing shortage, I discovered a pair of Striated Pardalotes (*Pardalotus striatus*) had burrowed into bags of manure at Bunnings in Gungahlin (Fig 6). The bags were wrapped in plastic and were still on a pallet, which was high up on the top shelf in the garden section. I alerted staff about the situation and they decided, as they would not need the pallet for a while, to leave the birds be.

The lack of suitable nest sites is not unique to the Canberra region. It is an unfortunate outcome of years of poor practices across the country. The clearing of land for grazing and housing developments, the removal of dead and mature trees for firewood, or to 'tidy' public areas, and bushfires, all contribute to the situation.



Fig. 6

To address the apparent lack of suitable nest sites there are a number of solutions to be considered. This includes protecting the remaining areas of remnant bushland, the provision of nest boxes, the planting of suitable trees for future generations and control of introduced species to reduce competition.

Education about why we should not use mature trees for firewood can also have an effect. A social media campaign focusing on protecting hollows from firewood collectors, called 'don't burn my home', was run in South Australia a few years ago. Photos of tree hollows occupied by a variety of wildlife were regularly placed on social media sites. It prompted quite a bit of

discussion about habitat preservation. If the housing shortage is to be addressed, educating people about how important tree hollows are to the environment might be a good place to start.

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WHITE-BELLIED CUCKOOSHRIKES IN THE ACT – AUGUST – OCTOBER 2021

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White-bellied Cuckooshrikes (*Coracina papuensis robusta*) are not reported every year in the ACT and very rarely in the COG Area of Interest (AoI). When they are reported, it is usually one bird seen for a day or for up to a week or so, after which it is not seen again. 2021 was the exception, with two and up to four individual birds present at the same time at four sites in August, September and into early October. All the 2021 records (as reported in eBird) were of the dark form of the *robusta* subspecies of south eastern Australia. There was some early speculation among some birders that it was one bird moving from site to site over a period of months. However, a review of the dates the birds were reported at each site, combined with the geographic spread of the sites, indicates that more than one bird was present. This is also supported by a review of the available photographs by Shorty Westlin and the author.

A (very) brief review of the species in our area

In 1992 the key publication *Birds of the ACT – an Atlas* (Taylor and COG) classified the White-bellied Cuckooshrike as a ‘rare vagrant’, noting that ‘historical data indicate that the species may appear at any time of the year’. The *COG Annotated Checklist of Birds of the ACT* (2017) describes the species as a ‘rare non-breeding autumn migrant’, but COG’s latest *Annual Bird Report* (2019) and eBird data show that the species has been recorded in the ACT in all months of the year, with fewest records in summer. The species remains rare, in that it is usually single birds reported, the birds appear for short periods only, and both COG and eBird data show that they are not reported every year.

eBird data shows 60 confirmed sightings in 25 ACT locations from 2002 to the end of 2021. Seventeen of these locations have produced one bird reported just once or twice over a few days. Until 2021, Diddams Close Park at Lake Ginninderra was the exception with the species reported three times in nine days in June 2014. (Diddams Close Park is also exceptional in having records in four different years since 2013.)

There are six eBird records from widely separated sites in the COG AoI in NSW between 2011 and 2020, the last being at Tinkers Creek TSR in August 2020.

2021 sightings – where and when

In August, September and early October there were 21 sightings from **four** locations in the ACT:

- **Kama Nature Reserve.** One bird, first reported on 14 Aug by Michael F. A further eight sightings, some with photographs, were submitted to eBird during August and September. The last record was 17 Sep from Sue Lashko. There is also a photo record for Kama submitted to Canberra Nature Map for 10 Sep. This photo is shown at Fig 2.
- **Callum Brae Nature Reserve.** One bird, first reported on 25 Aug by Rob Geraghty. Another seven records, some with photographs, were submitted to eBird during

August and September. The last record was 2 Oct from David Dedenczuk. Fig. 1 shows a photograph of the Callum Brae bird.

- **Bruce Ridge Nature Reserve.** One bird, reported on 5 Sep by Rainer Rehwinkel. There were no further reports at this location.
- **Isaacs Ridge Nature Reserve.** One bird, reported on 8 Sep by Sue Beatty and Kim Farley. Fig. 3 shows this bird. There were no further reports at this location.

The birds probably departed the ACT in the first week of October, as there were no further records submitted. Callum Brae and Kama, in particular, are well birded sites with eBird checklists submitted from there very regularly. If the birds had still been present, it is likely someone would have reported them there.

One busy bird or multiple birds?

While there was some early speculation that one White-bellied Cuckooshrike was moving around the ACT, photos taken by multiple observers show that the Kama and Callum Brae birds were two different individuals. This can be seen in Figs. 1 and 2, which show differences in the pattern and amount of black in the markings on the breast of the two birds.

Further evidence of two different birds is provided by the dates: the Kama and Callum Brae birds were sometimes reported on the same day, and both were reported on and off for weeks.

The Bruce Ridge and Isaacs Ridge birds may have been a further two individuals or may have been the Kama and Callum Brae birds doing some travelling.

The Bruce Ridge bird was seen on 5 Sep, and the Kama bird on 27 and 28 Aug and then again on 6, 8, 9, 10 and 11 Sep. The seven-kilometre flying distance between Kama and Bruce Ridge Nature Reserve also suggests that the Bruce Ridge bird could potentially have been a separate bird though it is acknowledged that a seven-kilometre flight is easily possible for this species.

The Isaacs Ridge bird was seen on 8 Sep and may also have been a different bird from the Callum Brae bird. Fig. 3 shows the Isaacs Ridge bird, and while the photo is a little unfocussed due to a very foggy morning, the markings on the breast are possibly a little more prominent than the markings on the Callum Brae bird in Fig. 1. If the Isaacs Ridge bird and the Callum Brae bird were one and the same, a 2.5 kilometre flight between the two sites was required. It was reported at Callum Brae on both 6 and 7 Sep. before being seen at Isaacs Ridge on the 8th. It was reported again at Callum Brae later in September and into October.

Behaviour

The birds were reported in eBird as calling from bare branches on treetops, taking food (notably caterpillars) and in flight between perches. Of most interest, is that five of the sixty 2021 records from Callum Brae, Kama and Isaacs Ridge Nature Reserves reported White-bellied Cuckooshrike associating with up to three Black-faced Cuckooshrikes. Specifically, they were flying with, following or perching near Black-faced Cuckooshrikes. This behaviour has been recorded in eBird in the ACT on three other occasions, including an eBird record from Christine D in 2017 that noted a White-bellied Cuckooshrike following and being repeatedly chased off by Black-faced Cuckooshrikes. The author is not aware of how common the association between the two species may be, though Higgins *et al.* (2006) note that White-bellied Cuckooshrikes 'occasionally associate with other species, such as Black-faced Cuckooshrikes and Spangled Drongos, particularly when foraging.'



Figure 1. Bird with light breast markings. Callum Brae Nature Reserve, ACT. 10 Sep 2021 (*Julian Robinson*).



Figure 2. Bird with heavy breast markings. Kama Nature Reserve, ACT. 10 Sep 2021 (*Roger Williams*).



Figure 3. Breast markings different from the Callum Brae bird in Fig. 1? Isaacs Ridge Nature Reserve, ACT. 8 Sep 2021 (*Sue Beatty*).

Conclusion

The 2021 observations of White-bellied Cuckooshrikes in late winter and spring appear to be unprecedented in the ACT, both because at least two birds were present at the same time during August, September and into early October 2021 and because historically the longest

period a bird has been reported as present is nine days, whereas in 2021 the birds were reported over an eight-week period.

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NOTES

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FAILED BREEDING ATTEMPT OF AZURE KINGFISHER AT COTTER RESERVE

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On 25 Dec 2021 I went to the Cotter Reserve to try and find the Azure Kingfishers (*Ceyx azureus*). I ended up walking along the eastern shore and soon spotted two birds close together. After a while, I noted one bird flying from their perch to the steep bank and returning a few minutes later. Then the second bird flew to the bank and I did not see it return to the perch. I assumed they were nesting but I had to leave and I planned a visit on the next day.



On the 26 and 27 Dec 2021 I returned to the site but this time went to the eastern bank, to keep clear of the nest and to have a better view. I spent several hours both days observing both birds taking turns entering the hollow and spending about five minutes each time excavating it. After the third or fourth turn at excavating, they would dive into the river and return to the perch and preen. This was repeated up to four times, I guess it is dirty work excavating the hollow. On one occasion the male caught a fish and called to the nest. The female came out of the hollow and accepted the fish from the male.

My next visit was on the 29 Dec 2021. Both birds were present at the nest, occasionally leaving to hunt but returning soon and spending most of the time at the nest site. However, they did not enter the nest during this period, so I supposed that the nest was complete.



Visits on the 31 Dec 2021 and 2 Jan 2022 again showed both birds still spending most of the time at the nest site, but on both days the male was seen on several occasions flying into various bushes, collecting something and flying straight into the hollow. It all happened too fast for me to see what he was taking into the nest, but I could only conclude that it was nesting material,

¹ All photos by the author.

although some sources suggest that they do not line the nest?

On my next visits on the 4 and 6 Jan 2022, only the male was seen at the nest site. As before he spent most of the time at the nest but left on occasion and soon returned. He would land on the perch and call towards the nest on arrival and again before departing. Although I could not see into the nest, I concluded that it was likely that the female was in it. This is just speculation on my part, but I think that my observations are sound. Prey items seen being caught at the nest site include fish, dragonfly larvae and yabby.

After heavy rain in the Cotter catchment on the 6 and 7 Jan 2022, I made a visit late on the 8th. It was clear that the river was in flood and I could see that the water was just below the entrance to the nest. It had been about 36 hours since the rain had stopped and I thought that the level might well have been higher the day before and perhaps flooded the nest. Even if it was not flooded, given the birds' approach angle, the water level would have made it difficult to enter. I have to say I was devastated to see this, not just for me spending so much time observing this nesting attempt, but also for the birds, but I guess that is nature and part of the natural dangers they face.

During further visits up to the date of writing, I could see no indication that the kingfishers had made any further attempts at nesting. The only activity I have seen at the nest site is one bird at the location and a Water Dragon (*Intlagama lesueurii*) exiting the hollow. There have been sightings of two birds in February but I suspect it will be too late for them to try again.



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PEREGRINE FALCON PREDATION OF AUSTRALIAN WHITE IBISDUNCAN McCASKILL¹*duncan.mccaskill@gmail.com*

On Thursday 3 Mar 2022 I observed a Peregrine Falcon (*Falco peregrinus*) kill and eat an Australian White Ibis (*Threskiornis molucca*) in my backyard in the Canberra suburb of Giralang.

I was woken around 07:00 h by a raucous cacophony of alarmed birds, mostly Australian Ravens (*Corvus coronoides*) and Australian Magpies (*Gymnorhina tibicen*). There was something going on just outside. I went outside to investigate and saw an Australian White Ibis on my driveway with a Peregrine Falcon on top of it. The falcon immediately took fright and flew off leaving the ibis on the ground. The ibis was still alive and on its feet but it had an obviously injured wing that was hanging down. I went back inside to let nature take its course.



¹ All photos by author.

After about five minutes I could no longer hear the ibis flapping about, and on looking outside I saw that it was dead and the falcon was eating it. The falcon continued eating for 10 to 15 minutes before flying off, leaving most of the ibis uneaten.

As can be seen from the photos, the falcon was somewhat brownish, meaning it was most likely a young bird.

I did not observe the falcon taking the ibis. By the time I saw them they were both on the ground. Australian White Ibis often fly over my yard, but I have only once seen one on the ground there, although I often see them on the ground on nearby large open grassed areas.

An Australian White Ibis is an unusually large prey item for a Peregrine Falcon. Australian White Ibis (1.3–2.3kg) are roughly twice the weight of Peregrine Falcons (0.56–0.96kg) (Menkhorst *et al.* 2017). Marchant and Higgins (1993) mention just a few cases of Australian White Ibis as prey from studies across the country. The prey list of Peregrines at Namadgi included one case of an Australian White Ibis (Olsen *et al.* 2004).

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COURTSHIP BEHAVIOUR OF DOLLARBIRDS

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Stephen Wallace's video on eBird of two Dollarbirds (*Eurystomus orientalis*) on a branch calling and bobbing their heads at Uriarra Crossing, ACT, on 26 October 2016 reminded me that I needed to record an observation that I made in the mid 1980s.

I was in the habit of visiting Wongoola Close, O'Connor, ACT, for exercise. I witnessed two Dollarbirds making a racket. They were snuggling up to each other excitedly on a branch of a eucalypt 3-4 m above the ground. They then locked bills, fell backwards off the branch, twirled around twice, broke apart and flew off to different trees, all the while calling loudly.

I mentioned this to Dick Schodde some years later when he gave a presentation to COG on the Dollarbird. He said that he had not heard of this behaviour in Dollarbirds. I recall he said that there were two subspecies of Dollarbird in the Owen Stanley ranges of Papua New Guinea. One was sedentary and the other migrated to Australia. It was the latter that he gave his talk on.

In October 2012, I was fortunate to join the Papua Bird Club in looking for Birds of Paradise in Batanta and the Arfak Mountains and other locations. This led to an interest in the 44 Birds of Paradise. I was reminded of the Dollarbird's courtship behaviour when I read the following in Laman and Scholes (2012):

...Huon Astrapia... When the brief copulation ends, the male often repositions himself to grasp the back of the female and then leans forward, wings flapping, until the female lets go of the perch. Both tumble in a downward spiral, locked together, for some distance until the male releases her and they both fly away...

This leads me to ask: are there other species that exhibit this mating behaviour? I also recommend that birders photographing Dollarbirds early in the breeding season be ready to take videos in case the birds exhibit any excited behaviour.

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COLUMNIST'S CORNER

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So, exactly where did that song begin? What books say about songbird evolution.

There is a theory that says that the very large group of birds known as ‘songbirds’ originated in Australia. The theory was brought to the attention of the general public by Tim Low in a chatty book published in 2014. The songbird theory was only a small part of the book which had a broader theme about what was unusual about Australian birds, and related aspects of the Australian environment. The book had the title *Where Song Began: Australia's birds and how they changed the world*.

The book devoted some space to the unusual birds and environment of New Guinea, which Tim Low regarded for his purposes, setting aside political boundaries, as part of Australia. ‘New Guinea is central to this story: the island is not so much a neighbour of Australia as a core part of it biologically speaking.’ Whether or not seen as part of Australia, the birds of New Guinea have been something of a puzzle for naturalists.¹ They raise quite a few ‘knotty points’, to borrow the James Fisher phrase quoted in the next paragraph. To illustrate, and lend a little colour to this essay, some interesting New Guinea songbirds are given as examples in the attachment below.

When it emerged, the songbird-origin theory was a challenge to the long-held views of many northern hemisphere biologists. It was largely founded on the use of molecular analysis to help determine the ancestry of bird families. I must now mention another popular book. This is a larger one, although not all that big by recent standards. Now outdated, and available for a few dollars, is the first edition (1964) of *The World of Birds* by Roger Tory Peterson and James Fisher. It has a graphic family tree showing the evolution of bird families as understood at the time. In the text, James Fisher acknowledged other things that were going on by giving examples from ‘a host of researches devoted to the solution of knotty points by methods other than pure anatomy’. One example was ‘a novel biochemical investigation’ by Professor Charles Sibley that, by 1964, had produced some unexpected results.

In his obituary for Charles Sibley,² Dick Schodde referred to his later, and ‘greatest’, discovery, the endemic radiation of Australia’s songbirds which ‘changed forever the global context in which we see our bird fauna’. In 1990 Sibley, in reorganizing the evolutionary tree with John Ahlquist, had recognized a clustering of Australian lineages at the base of the songbirds. At an event in 2009 to mark 200 years from Darwin’s birth,³ the global context could be summarized as follows by Les Christidis and Janette Norman:

DNA analyses have revolutionized our understanding of the origin and evolution of the world’s avifauna, and have identified a central role for the Australian region in the

¹ The state of knowledge 50 years ago is summarized in the ‘Birds’ article (Schodde, R. and Hitchcock, W.B.) in Ryan, P. (ed.) (1972) *Encyclopaedia of Papua and New Guinea*. MUP, Melbourne.

² Richard Schodde (2000) ‘Charles G. Sibley 1911-1998’. *Emu* 100:1, 75-76.

³ Christidis, L. and Norman, J. A. (2010) ‘Evolution of the Australasian Songbird fauna’. *Emu* 110:1 21-31.

evolutionary history of the Aves. The Australasian region has been conclusively shown to be the centre of origin for the songbirds or oscines.

I turn now to another book, published in 2020. Its title is *The Largest Avian Radiation: The Evolution of Perching Birds, or the Order Passeriformes* (for convenience referred to hereafter as '*Radiation*'). The editors are Jon Fjeldså, Les Christidis and Per Ericson. I won't attempt a general review of it here, as there are several available, links to a few being given below.⁴ The book is from Lynx Edicions, Barcelona, whose remarkable output of bird books extended to the publishing in the same year of another comprehensive volume, edited by Josep del Hoyo, and twice as heavy as *Radiation*. This is *All the Birds of the World*, which does indeed cover every bird species, with an informative illustration, a range map and a reference to further information. The two books make an interesting comparison, given that *All the Birds* has its own handsomely illustrated 'phylogenetic tree' of passerine species. Lynx is rather like an owner of thoroughbreds who has two well-credentialled entries as rivals in the same race.

Radiation is limited to passerine species, and shows a location in a family tree (a 'phylogeny') for most of them. It has many pleasing bird illustrations although, perhaps fortunately, not one for every bird. These are the work of the lead editor. Jon Fjeldså, as well as being a distinguished ornithologist, is an accomplished artist. According to Wikipedia, before becoming a serious biologist he worked as a Norwegian intelligence agent on the Russian border, bringing back a sketch of a new Russian infantry weapon, the Kalashnikov AK-47.

The 'tree' illustration on the cover is looser and less detailed than the counterpart on the dust-jacket of the del Hoyo/Collar *Illustrated Checklist*.⁵ It shows birds of different families in flight, so, I suppose, in the process of radiating. The five corvoid species do not include any recognizable Australian species. However, a Scarlet Robin hovers ambiguously near the take-off point for the higher songbirds.

In *Radiation* there is a large amount of condensed information. For the non-expert, like this columnist, there is some risk of getting lost in the terminology. (There may also be some risk in the following simplification.) The book recognizes three separate brigades of songbirds:

- (a) Basal oscine (songbird) families – e.g. honeyeaters, thornbills, fairy-wrens, bowerbirds, treecreepers, lyrebirds.
- (b) Corvides or 'core Corvoidea' – e.g. 'Corvidae' (crows, jays), monarchs, cuckoo-shrikes, whistlers, fantails, butcherbirds, birds of paradise.

4

http://www.birderslibrary.com/reviews/books/biology_behavior/largest_avian_radiation.htm ; <https://www.journals.uchicago.edu/doi/epdf/10.1086/717382> ; https://snm.ku.dk/english/news/all_news/2020/2020.12/pioneering-work-on-birds-was-20-years-in-the-making/ ; <https://britishbirds.co.uk/content/largest-avian-radiation-evolution-perching-birds-or-order-passeriformes> ; <https://www.nhbs.com/the-largest-avian-radiation-book>

⁵ del Hoyo, J. & Collar, N. J. (2016) *HBW and Birdlife International Illustrated Checklist of the Birds of the World: Vol. 2, Passerines*. Lynx Edicions, Barcelona.

- (c) Passerides – mainly the Passerida (3843 species including *e.g.* old world warblers, old world flycatchers, finches, and new world sparrows, blackbirds and tanagers) but also includes a few ‘Australasian passerides’ (*e.g.* Australasian robins).

There are references at several points in *Radiation* to the importance of New Guinea rather than Australia in the development and dispersal of bird species. The remainder of this contribution will look at that issue. Here is the conclusion that appears in an introductory chapter by two of the editors: ‘Australia had the oldest oscine groups but exported few of them, while New Guinea was a cradle of two slightly younger radiations that successfully colonized other parts of the world.’

It is helpful to keep in mind the time-scale used in these studies. In its Appendix 2, *Radiation* gives graphic chronologies enabling the timing of the important divergences to be seen with some precision. A scale of millions of years ago (Mya) is given. Most of the relevant action occurred 50 to 10 Mya. The significant Oligocene period is given as 34 to 23 Mya. An alternative time-scale refers to a period known as ‘the Tertiary’, which is said elsewhere to extend from 66 to 2.6 Mya. The Pleistocene epoch extended from 2.6 Mya to 11,700 years ago.

There is a very large journal literature behind all this, with contributions coming thick and fast after 2000, as shown by the long list in *Radiation*. One of the book’s writers, Knud Jonsson, was responsible for 20 of the cited works, and was the lead author of a paper in 2011 that is given as a main authority for the central role of New Guinea.⁶ That paper drew a response from Dick Schodde and Les Christidis in 2014.⁷ They regarded as established the slightly earlier theory that ‘corvoids’ first arose and radiated in the widespread rainforests of ‘early-mid Tertiary Australia’, before leaving a drying Australia to take refuge in montane New Guinea in the Later Tertiary.

By contrast, the opposing theory was that corvoids radiated mainly in New Guinea after ‘Australian proto-corvoids reached an emerging proto-Papuan archipelago’ in the early-mid Tertiary. That theory is questioned by comparing the time-frames for corvoid radiation and for emergence of suitable land areas north of Australia. Moreover, relatively small islands in the region (unlike the present large island of New Guinea) are poor in ‘relictual species’ (typically niche-restricted endemics that might be evidence of an old centre of radiation).

Radiation continues the debate. An illuminating side-show is a presentation by Jon Fjeldså in November 2020, recorded on Youtube,⁸ in which he introduced the book to a joint meeting of the Linnean Society of London and the British Ornithologists’ Club. In relation to early corvoids, he refers to ‘the eleven families that survive as relictual lineages only in Australasia, mostly in New Guinea. That is why we can say this is the area of origin of the group.’

The complexity of the time-and-place-of-origin issue is brought out by the discussion concerning the Passerides at pp.169-178 of the book, where different sets of authors make a contribution. ‘The 3,800 species that constitute the Passerida group apparently originated after

⁶ Jonsson, K. A., Fabre, P-H., Ricklefs, R. E. and Fjeldså, J. (2011) Major global radiation of corvoid birds originated in the proto-Papuan archipelago. *Proceedings National Academy of Sciences USA* 108: 2328-2333.

⁷ Schodde, R. & Christidis, L. (2014) Relicts from Tertiary Australasia: undescribed families and subfamilies of songbirds and their zoogeographic signal. *Zootaxa* 3786 (5):501-522.

⁸ https://www.youtube.com/watch?v=pibVjfPLjwM&ab_channel=LinneanSociety

a single dispersal from the Australasian area (or, most likely, New Guinea) to the Old World (as argued in Chapter1)’. That ‘could have taken place already in the early Oligocene’. With respect to the Australasian robins, the same set of authors notes (p.177) that the centre of diversity is New Guinea but ‘it would be hard to postulate a New Guinea origin for the family as, at the time of its origin in the early Oligocene, New Guinea had not yet emerged as a definite land mass’ (the Schodde and Christidis argument). On the same page, another set of authors speculates that ‘the Passerida radiation may have involved a flock of birds related to the Australasian robins crossing the 1,500 km of ocean between the western New Guinea area and southeastern Asia’.

In the November 2020 talk, a slide is presented which annotates the phylogeny of the Passerides at Figure 9.2 of the book. This indicates a ‘new breeding strategy’ emerging at the point of divergence of the Passerides, and ‘dispersal to the Old World’ occurring at the point of divergence of the Passerida from the other Passerides. The accompanying text on the slide reads: ‘A new breeding strategy (with female promiscuity) emerged in New Guinea 34 mill. years ago.’

The difference in the two points of view is quite stark. In the early Oligocene (say 34-30 Mya) either the land-form and climate conditions in New Guinea were such as to promote corvoid radiation and to set the conditions for emergence of the Passerida, or they were not. As matters stand, we have a choice between two theories of songbird radiation, an Australian one and a Danish one.

Some people might wonder whether the participation of Les Christidis as joint editor of *Radiation* means that he has thrown his support behind the Danish camp. However, Les has told me that this is not so.

Stentoreus

Attachment - A pictorial cast of songbird characters on the New Guinea stage.

Images are from the William Hart and Gould/Hart lithographs published in Gould/Sharpe, except for L, M and N, which are from Lilian Medland drawings in the Iredale volumes. Family-level taxonomy follows 'Radiation'. English names as in Beehler & Pratt.

A to D: representatives of 'basal oscines'. A – Goldenface *Pachycare flavogriseum* (An 'Australasian warbler', Acanthizidae); B – Papuan Logrunner *Orthonyx novaeguineae* (One of three species in its family. It is suggested in *Radiation* that this one is most closely related to (Australian) Chowchilla); C – Masked Bowerbird *Sericulus aureus* (Once regarded as a bird of paradise); D – Giant Wattled Honeyeater *Macgregoria pulchra* (Until 2000 classified as a bird of paradise).

E to L: representatives of the Corvides. E – Lesser Melampitta *Melampitta lugubris* (Scientific name is as used by Gould. The two melampitta species have been in their own family since 2014); F – Lowland Peltops *Peltops blainvillii* (Member of Cracticidae, butcherbird family); G – Tit Berrypecker *Oreocharis arfaki* (The two berrypecker species are now in their own family, having previously been classified as tits, pardalotes etc.); H – Black Sickbill *Epimachus fastosus* (Known to Gould as the 'Great Promerops'); I – Chestnut-backed Jewel-babbler *Ptilorrhoa castanonata* (Four species of jewel-babbler are now placed with the quail-thrushes in the one family); J – Torrentlark *Grallina bruijnii* (Now classified, along with the (Australian) Magpie-lark, as a monarch flycatcher); K – Southern Variable Pitohui *Pitohui uropygialis* (In *Radiation*, the pitohuis are regarded as an ancient lineage within the orioles); L – Wattled Ploughbill *Eulacestoma nigropectus* (Now in its own family, 'clearly distant from other corvoid families'); M - Blue-capped Ifrit *Ifrita kowaldi* (Another species now in a family of its own, having previously been a flycatcher, a logrunner, babbler etc.)

N - male Yellow-breasted Satinbird *Loboparadisea sericea*. The three species of satinbird had been classified as birds of paradise. They are now placed in their own family (Cnemophilidae). According to *Radiation*, this family has 'a basal position within the Passerides'.

O to R: four examples of the 26 species of Australasian robins in the New Guinea region. O – White-rumped Robin *Peneothello bimaculata* (According to Beehler & Pratt, in the same genus as (Australian and NG) Mangrove Robin); P – *Heteromyias* species. (Gould, and *Radiation*, use the name '*cinereifrons*', indicating this is the species reaching northern Australia as 'Grey-headed Robin'); Q – Banded Yellow Robin *Gennaedryas placens*; R – Torrent Flycatcher *Monachella muelleriana* ('a noisy riparian specialist', which reaches New Britain).

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Birding in Cyberspace, Canberra Style

New birder: 'I am sorry but I cannot identify those birds by their calls. I simply cannot remember which calls belong to which species.'

Old hand: 'Can you tell the difference between the calls of a kookaburra and a magpie?'

New birder: 'Of course I can, their calls are really distinct.'

Old hand: 'See, you *can* identify species by the calls. What you need to do now is learn more of them as time goes on.'

A not unfamiliar conversation, perhaps? But how realistic is the old hand's advice? Many of us find it very difficult to remember bird calls and use them for identification purposes. Conscious of these challenges, the Cornell Lab of Ornithology has recently released its online **Bird Song Hero** game <https://academy.allaboutbirds.org/features/bird-song-hero/bird-song-hero-challenge>. In the Introduction to the game, it is pointed out that seeing a spectrogram of a bird call, at the same time as hearing the call, helps to fix the call in the human brain more effectively than simply hearing it. (Cornell's *Handbook of Bird Biology*, 3e, 2016, defines a spectrogram as 'a graphic representation of a recorded sound (like bird song) that includes information on both frequency and loudness, usually by plotting frequency against time and indicating intensity by shading or colours'.) In the Bird Song Hero game we are presented with a bird call and a number of spectrograms, and select the spectrogram that best matches the call. We move through call by call, building up our scores, and eventually have the opportunity to move to a higher level of challenge. An intriguing and, I suspect, enjoyable for many people, desktop birding tool.

Still on bird calls, did you catch Robyn Williams' 22 March 2022 ABC Radio National Science Show interview with David Stewart: '**David Stewart—40 years recording bird calls**' <https://www.abc.net.au/radionational/programs/scienceshow/david-stewart-%E2%80%9340-years-recording-bird-calls/13812996>? David Stewart will be known to many readers for the amazing work that he has done in recording and publishing the calls of Australian birds and frogs. His calls feature on the popular Morcombe & Stewart Guide to Birds of Australia app <https://apps.apple.com/au/app/the-michael-morcombe-eguide/id397979505>. In January this year, the app producer, MyDigitalEarth <https://www.mydigitalearth.com/>, released Stewart's latest app: the '**David Stewart Australian Bird Calls**', <https://apps.apple.com/au/app/stewart-australian-bird-calls/id1531101873>, \$34.99, also available in android.

The introduction to the app points out that, 'This electronic guide is new for Australia as it concentrates on birdcalls alone, as its main feature'. Over the decades, Stewart has been maintaining databases of birdcalls and presents, on this app, '... almost 4000 calls of 725 species and subspecies of Australian birds. The problem with songbirds is they very often have quite a range of calls. This collection is a good start for scientists of the present and future, providing a comprehensive database for reference.'

The bird species can be displayed in either the IOC or Clements/eBird taxonomy, and for each listed either in taxonomical or alphabetical order. It uses Australian spelling for species names. Each species has a photograph of the bird, and brief notes about its distribution and habitat. For many species, multiple recordings are provided, reflecting differences in sub-

species' and regional calls. Each call is briefly described, for example 'Australian Raven (*Corvus coronoides*) Adult drawn out "aah" (coronoides) Pulletop NR SE NSW'. A sonogram is also provided for each call, reflecting the approach used in the Bird Song Hero game discussed above.

This app is, in your columnist's view, an excellent addition to support Australian birders in the field, in the laboratory, and in learning environments. Highly recommended.

T. alba

This column is available online at <http://canberrabirds.org.au/publications/canberra-bird-notes/>. There you can access the web sites mentioned here by clicking on the hyperlinks. To join (subscribe to) the CanberraBirds email discussion list, send an empty email message to canberrabirds-subscribe@lists.canberrabirds.org.au. To unsubscribe, either permanently or temporarily, send an email message to canberrabirds-unsubscribe@lists.canberrabirds.org.au. If you wish to re-subscribe after being unsubscribed temporarily, simply follow the 'subscribe' instructions above. The CanberraBirds list's searchable archive is at <http://bioacoustics.cse.unsw.edu.au/archives/html/canberrabirds/>

THE 2021 RECIPIENTS OF THE STEVE WILSON MEDAL

At the 2021 AGM Bruce Lindenmayer and Joan Lipscombe were awarded the Steve Wilson Medal following assessment by the Steve Wilson Committee (Neil Hermes, Sue Lashko and Jack Holland).



BRUCE LINDENMAYER

(left) Bruce Lindenmayer; (right) Jack Holland, Sue Lashko, Bruce Lindenmayer, Neil Hermes.

Bruce Lindenmayer OAM was raised in regional Queensland. He moved to Melbourne and then to Canberra in 1969. Bruce has been an active member of COG for over 30 years. He names COG as the organisation that has been the most important to him in his 50 years in Canberra. Bruce was President of COG from 1990 to 1992. At this time Gungahlin was sheep paddocks but destined to be a new town. Community groups including COG were active in a campaign to save Mulligans Flat from future housing development. Bruce, as COG's representative on the Conservation Council Executive, compiled and edited the submission to the ACT Government proposing Mulligans Flat for a reserve, which brought together data, including important data about threatened woodland birds from COG's ACT Bird Atlas. In December 1992 Bruce wrote an article in CBN on the campaign in which COG played a major role, to preserve the woodlands at Mulligans Flat. With Jenny Bounds, visits were organised to the area with appropriate politicians and ACT government officials including Bill Wood the ACT Environment Minister, Michael Moore MLA and John Langmore MP (the local Federal Member and member of COG). Jenny took over from Bruce as President of COG and they both then represented COG on the Conservation Council and kept the pressure on for a reserve to be formed. Mulligans Flat Nature Reserve was formed in 1995.

Bruce's other COG interests include woodland management, cat containment and exotic bird control. Bruce has been active in the Common Myna Action Group (CMAG).

Bruce served on the COG Committee again from 2011-12 to 2015-2016 and served on Steve Wilson Medal Committee for six years from its inception in 2014 until 2021 when he stood down in his 85th year. Bruce has sometimes been heard to say, that after 30 years in many roles in COG, he finally reached his zenith by being appointed "tea person" for COG Meeting Nights, a role he has filled for many years.

JOAN LIPSCOMBE

(left) Joan Lipscombe; (right) Jack Holland, Joan Lipscombe, Sue Lashko, Heil Hermes.

Joan joined COG soon after arriving in Australia from Papua New Guinea in 1982. There she had been Secretary of the PNG Bird Society.

The then President of COG, Brian Fitzgerald, keen to increase the female presence on the COG committee, twisted her arm. At her first committee meeting, knowing nothing about COG or the birds of ACT, Joan found herself appointed editor of COG's monthly newsletter, a mere shadow of the current Gang Gang.

For 7 years until her work job become all encompassing, Joan remained on the committee, - editing the newsletter and helping with many other of COG activities including:

- Bird surveys, regular and limited including: Yarramundi Reach re potential impact on avifauna on proposed location for National Museum;
- long-term surveys of Lake Burley Griffin;
- Murrumbidgee River near planned sight for Tuggeranong;
- COG Atlas;
- Assistance with data entry for McComas Taylor for his projects for COG;
- Assistance at COG publicity activities eg street stalls at various events;
- Garden Bird Survey which she and Trevor have continued to 2022.

In 1997, having, left the public service, Joan volunteered to be Treasurer of COG, which she did until returning to the UK in 2005. In addition to the Treasurer's responsibilities, her other contribution included:

- Successfully establishing the Canberra Birds Conservation Fund and being its inaugural chair;
- Managing the COG Shop, part time employee and volunteers;
- Surveys of Mulligans Flat;
- Working with husband Trevor to establish and organise the COG February Campouts;
- Participant in COGs first Blitz and subsequent ones on return to Australia, often covering upper Cotter locations.

In 2014, Joan returned to Canberra and reengaged with COG. Her contributions include:

- Data entry for the Garden Bird Survey;
- Surveys including Mulligans Flat to 2021;
- Snipe survey;
- One of the authors of COG's Annual Bird Report.

Vale Emeritus Professor Henry Nix AO (1937-2022)



Henry Nix, past President of COG, at the COG 50th year anniversary celebrations in 2014.

The membership of COG was saddened to hear of the passing earlier this year of Henry Nix. Henry was a previous COG President, a big-picture researcher, conservationist and passionate advocate for birds.

Henry was COG President in 1979 and 1980 and Vice President in 1982. He also served on the Birds Australia Council from 1999 and was elected President in 2001. He was awarded a Birds Australia Council Fellowship in 2006.

In COG, Henry was active from the 1960s and led walks, wrote articles and participated in panel discussions on a variety of major conservation and bird distribution subjects. For example in 1969 he presented a talk on “*Bird Distribution in Relation to Habitat in Central Queensland*”. He was still contributing to COG surveys in his 70s and writing COG articles in 2010.

Henry was very keen to establish good long-term bird records for the ACT. In the 1970s, in his garden he developed a garden bird recording system. His recording method was developed with the author into the Canberra-wide garden survey in 1981. This project, COG’s Garden Bird Survey, is now in its 42nd year. It is one of the longest continuously run bird citizen science projects in the world.

Born in Queensland in 1937, Henry became a member of the RAOU in 1951 at the age of 13. His childhood studies led to university and a successful research career. He was a Senior Principal Research Scientist in CSIRO from 1983 to 1986. He was made Director of what is now the Fenner School of Environment and Society at the ANU, and subsequently became Visiting Fellow and Emeritus Professor.

Rather than being bogged down in details and minutiae, Henry was always one to look at the ‘big picture’, believing that ‘***A continental perspective on our birds and their habitats is a necessary condition for effective conservation.***’

Henry’s ground-breaking work on birds on a landscape scale saw him publish numerous papers, including several in *Emu -- Austral Ornithology*. The breadth of his work has provided not only a basis, but an inspiration to several generations of ornithologists and other ecologists, both in Australia and around the world.

While Henry could see the big picture, he could also still focus on the local and small scale. He continued recording his garden birds most of his life. He also liked to share his knowledge

and enthusiasm. As a boy, the author and his friend Michael Fleming, both aged 15, were taken birding the Gold Coast hinterland by Henry in 1969. Henry shared his knowledge generously and the highlight of our expeditions together was to see Ground Parrots in a low coastal heathland. These observations were life-changing and inspired both the young boys in their future studies and careers.

Henry passed away on 2 February. His contribution to COG and bird study generally is acknowledged and he will be missed. Condolences to his family and friends.

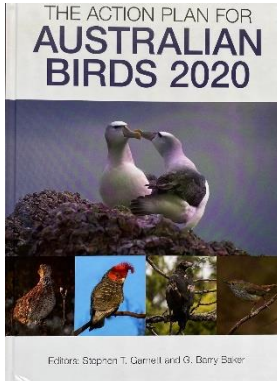
Neil Hermes, 1 May 2022
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BOOK REVIEW

Canberra Bird Notes 47(1) (2022): 75-

***The Action Plan for Australian Birds 2020*. Editors: Stephen T. Garnett and G. Barry Baker.** CSIRO Publishing. December 2021. ISBN: 9781486311903, Hardback, 816pp. Au\$150. eBook - December 2021 - [eRetailers](#)

Reviewed by *PETER FULLAGAR, Belconnen ACT 2617 (peter.fullagar@gmail.com)*



This book is an up-to-date review of the status of endangered Australian birds – a decade after the previous Action Plan and continuing the effort to review conservation issues for Australian birds based on the latest available information. It is a massive tome, measuring 30.5cm x 22cm x 5cm and weighing in at just over 3.2kg!

Starting with a forward by Paul Sullivan (CEO Birdlife Australia), there follows a page about the editors, extensive acknowledgements to those who made the compilation of this review possible, and then after an Introduction explaining the layout of the text there follows the main part of the book. The treatment of taxa follows the IUCN (International Union for the Conservation of Nature) Red List guidelines faithfully. Where possible the data used have been published, but rarely has this been possible and data have been assembled from whatever sources available.

Importantly, the Introduction explains how this work differs in five ways from its three predecessors (Garnett, 1992; Garnett & Crowley, 2000 and Garnett *et al.* 2011). First, each chapter (species account) is the product of multiple authors; in all this has involved more than 300 experts. Second, each taxon text provides more detail than did previous Action Plans. Third, the work was guided on which information to collect by the government agencies responsible for threatened species conservation in the Commonwealth and in each of Australia's states and territories. Fourth, the Plan includes the names of Indigenous Peoples on whose lands the birds occur, pointing out that in the last decade Indigenous Protected Areas and Indigenous ranger groups have flourished. Connecting to Country persists in many areas regardless of tenure, and Indigenous people have grasped enthusiastically any opportunities to become involved in management of Country. The final difference is the extent of review of each compilation. Each text has been subject to review not only by multiple authors, but also by the Threatened Species Committee of Birdlife Australia.

To start with, there is an excellent summary table, covering 12 pages. It is based on the IUCN Red list. It gives the present National conservation status of Australian bird taxa. This section provides a useful quick access to the appropriate pages for each of the treatments that comprise the bulk of the book (771 pages). However, there is, in addition, a comprehensive index of 14 pages.

Each listed taxon is treated systematically, with a justification of status along with a retrospective assessment of IUCN status trends covering the decades from 1990 to 2010. Global IUCN Red List status is given along with Australian EPBC (Environment Protection and Biodiversity Conservation) Act status; Legal status in range states within Australia, and a statement on the status certainty. There follows a review of 2010 Action Plan status and

current eligibility against IUCN Red List criteria and assessment data. Intraspecific taxa are reviewed along with range and abundance information and several additional headings covering Ecology, Monitoring, Threats and threat assessment, Conservation objectives, Conservation actions underway, Research and Management actions now required. A bibliography for the text of each taxon is added and a suggested citation which gives due credit to the compiling authors.

It is good to see that the 38 artists who contributed the vignettes that accompany each taxon entry are acknowledged on page 793. Many of these illustrations appeared in the ground-breaking RAOU *Atlas of Australian Birds* of long ago (Blakers *et al.* 1984).

Just over 350 taxa are treated, covering full species and subspecies. A further 141 are mentioned in the summary table (pages 8-19) but do not appear in the main review. Almost all of these taxa are vagrants or they are listed as least concern.

A brief review of a dozen or so taxa in which I have some personal interest gave me confidence that the accounts are well collated and up to date. After so much excellent work on greatly improving the welfare of Gould's Petrel on Cabbage Tree Island, it is alarming to find an unexplained decrease in breeding numbers and decreasing chick recruitment at this critical site in recent years. I doubt that climate change is to blame because this is a species with closely similar taxa breeding widely in more equatorial waters. However, it is good to know that it is now breeding in small numbers on a number of additional offshore islands along the NSW coast. Petrels have a significant number of taxa reviewed (76) but waterfowl, with, admittedly, many fewer species occurring in Australia, only rate two entries, the Blue-billed Duck and Cape Barren Goose; the latter by acknowledging a small population occurring on the Recherche Islands in Western Australia. Of the twenty species of waterfowl breeding in Australia, 13 are endemic. Many of the endemics are fortunately still abundant, though trends for most waterfowl populations have been declining for decades (see Kear 2005). My evaluation of their status, based on Kear, would have judged all of the following taxa as needing an entry: Cotton Pygmy-goose (an isolated endemic population), Green Pygmy-goose, Musk Duck (a west and an east population), Freckled Duck and the recently colonising and now breeding Spotted Whistling-Duck. All of these species have populations that may not exceed 10,000 and may at times be considerably fewer. This number was my cut-off figure for Blue-billed Duck (listed as 11,000 to 19,000 in the Action Plan). The Woodhen and other important Lord Howe Island endemics are well covered and the entries up to date, with the hope that the island will be declared rodent free in the near future. Strangely, the Eastern Ground Parrot, though given a lengthy and very informative text lacks any mention of the Tasmanian populations of this taxon.

In a sense this Action Plan is like a dictionary. It is very unlikely to be read from cover to cover but will be an absolute essential reference to dip into for details. It will provide critical answers to the main issues that define the present status of endangered Australian Birds.

I suspect this book will not be an essential purchase for most COG members, largely because of its high price. However, it will be a most important reference for the next 5-10 years. For those in any way involved with taking action on the conservation of Australian Birds it will be a highly valuable and authoritative source.

Maybe if it was made available as a web site, perhaps in a similar way to that used in presenting the Threatened Species Index (TSX), a project aiming at a worldwide coverage,

The Action Plan for Australian Birds 2020 might then reach a much wider audience. I suspect in its present form it will be hard for many environmental agencies to have a copy. Access to the essential information it holds will be limited and this is a shame. Notwithstanding these reservations I can highly recommend this book for those who are concerned with taking action on endangered birds in Australia – if they can lay their hands on a copy!

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RARITIES PANEL NEWS

2022 so far has been a surprising period for unusual birds in the ACT and surrounds, COVID notwithstanding. Perhaps most noteworthy was the finding of a Red-backed Button-quail in Lake Burley Griffin on 17 March. The saga of this poor bird is now well-known. It was discovered by a kayaker, wet and exhausted, 100 metres from shore between Hospital Point and Black Mountain Peninsula. He left the bird on one of the islands in the lake but returned later, found the bird alive, so took it to ACT Wildlife Rescue. It rallied, and by 19 March was actively feeding but suddenly died on 21 March. As far as we are aware, this is the first record of a Red-backed Button-quail in the ACT. The species is normally found in grasslands and grassy woodlands, often near waterways, in tropical and warm temperate parts of the country – and it can be dispersive. It is quite tiny (12-15 cm), with distinctive yellow legs, a buff breast, bold black spots and bars on the wing coverts and a rufous-brown collar, brighter in the male. What our bird was doing in Lake Burley Griffin is a mystery. Given the rarity of the species in the ACT, it is a pity the body was not offered to the Australian National Wildlife Collection for scientific purposes.

The Tawny Grassbird at the West Belconnen Ponds was found by Peter Christian then subsequently observed and filmed by many. It was only the second record of the species in the ACT, the first being the bird (or birds) which spent the summer of 2017-2018 at Jerrabomberra Wetlands.

The Lake Bathurst Little Curlew was, according to the observer, his seventh record of this species during waterbird surveys in COG's AoI.

Autumn saw the arrival of Swift Parrots again, in sites they had visited in previous seasons in Kambah and Hackett, and then from the start of May in a park near Campbell shops. This species is not on our list of "unusuals", despite its classification as a vulnerable species in the ACT and endangered in NSW and under the EPBC ACT. The Panel selected as the basis for inclusion on our unusuals list "fewer than 10 occurrences in distinctly separate locations or times of an individual or a group of the species in the previous 10 years". Hence the Swift Parrot does not qualify as it turns up in the ACT quite regularly on its migratory path. This is not to say that the Panel is not interested in records of the species, and particularly welcomes reports of observations that are not corroborated by photographs or other observers.

Similarly, the Panel has noted that since the most recent revision of its list of unusual species in the ACT in 2020, at least some of the previous incumbents of that list such as the Blue-faced Honeyeater would no longer qualify.

Finally, the Panel received a report of another "first" for the ACT. It assessed the report as probable though inconclusive, but as the species is on the review list for Birds Australia's Rarities Committee, we referred it to them and await a response.

ENDORSED LIST 100, MAY 2022

Diamond Dove (*Geopelia cuneate*)

1; 3 Nov; Stuart Rae; north Canberra

Black-eared Cuckoo (*Chalcites osculans*)

1; 18 Oct; unknown observer; Florey

Little Curlew (*Numenius minutus*)

1; 20 Oct; Michael Lenz; Lake Bathurst

Red-backed Button-quail (*Turnix maculosus*)

1; 17-21 Mar; Kim Farley and Manuela Benson, ACT Wildlife Rescue

Tawny Grassbird (*Megalurus timoriensis*)

1; 13 Jan; Steve Wallace; West Belconnen Ponds

Barbara Allan allanbm@bigpond.net.au



Red-backed Buttonquail, 19 Mar 2022 (Manuela Benson)

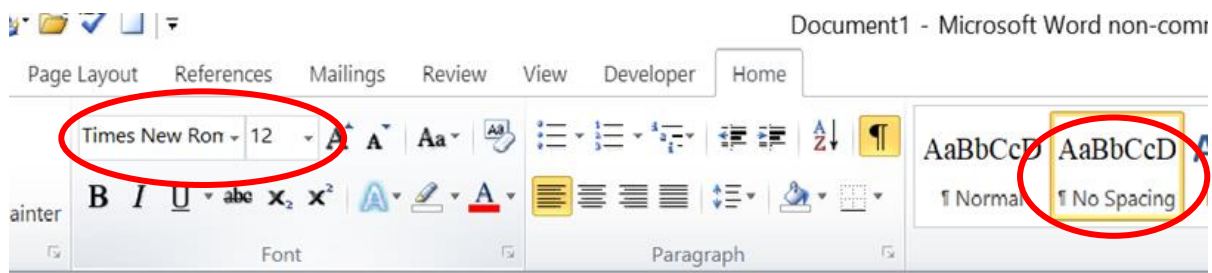


Canberra Bird Notes

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