Robin Report

prepared for

Moira Shire Council



17–23 October 2022 #aussiebirdcount aussiebirdcount.org.au

AUSSIE BIRD COUNT



BirdLife Australia

BirdLife Australia was founded in 1901 and has been at the forefront of Australian bird conservation for over 120 years. We work with a vast network of volunteers and stakeholders to conserve native birds and biological diversity, and educate and engage communities across Australia. Our 2023-2032 Bird Conservation Strategy is available <u>here</u>.

BirdLife Australia also produces a range of publications, including *Australian Birdlife*, a quarterly magazine; *Australian Field Ornithology* and *Emu: Austral Ornithology*, peer-reviewed scientific journals; and the *Handbook of Australian*, *New Zealand and Antarctic Birds*. We maintain a comprehensive ornithological library and several scientific databases covering bird distribution and biology. Data shared by everyday bird lovers to our Birdata platform regularly features in scientific publications and government decision-making – and this includes bird surveys submitted by your own constituents.

Membership of BirdLife Australia is open to anyone interested in birds and their habitats and concerned about their future. For further information about membership, to enquire about community fundraising initiatives, or to donate to our crucial conservation work, please contact the Supporter Care Team at **support@birdlife.org.au**. You can also phone us at (03) 9347 0757 (dial 4).

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The Aussie Bird Count

In 2014, as part of BirdLife Australia's National Bird Week celebrations, BirdLife Australia ran the first ever **Aussie Bird Count** – now one of the largest citizen science events in Australia. The Aussie Bird Count provides an opportunity for everyone – from schoolkids to senior citizens, families, and community groups – to become citizen scientists for one week every October. With over 85% of Australians living in urban environments, and birds to be found in even the deepest reaches of the concrete jungle, the Aussie Bird Count is a great way to get outside and connect with nature. Birdwatching is a fantastic hobby to keep local communities active, healthy, and attuned to the world around them.

Why do counts count?

Data collected by citizen scientists – like the participants in the Aussie Bird Count – play a vital role in informing councils, scientists, and organisations like BirdLife Australia of the health of Australia's ecosystems. Surveys submitted to BirdLife Australia's national monitoring platform, Birdata, have helped us fill important knowledge gaps and increased our understanding of Australian bird species.

Many Aussie Bird Count participants catch the birdwatching bug and continue to survey their local birds across the year, helping our Urban Birds program to track the fate of bird species that live where people live. The Aussie Bird Count also helps raise the profile of Australia's most iconic and familiar bird species, highlighting their social and environmental importance and promoting a nationally shared passion for Australian birdlife. Each year this natural passion is confirmed, with the Aussie Bird Count attracting significant interest from members of the general public who are keen to dip their toe in and help contribute to our growing knowledge of Australian birds.

Public involvement has skyrocketed since 2014 – even the record-breaking rains that plagued the eastern seaboard for the duration of the 2022 Aussie Bird Count did not deter people from taking part, while participation in sunny Western Australia continued its upward climb. Counters tallied almost four million birds in 2022, from urban backyards to sub-Antarctic territories.

Each year, more and more local councils hold bird-themed events during Bird Week, and birdthemed lesson plans from BirdLife Australia encourage local schools to get involved and engage with their natural environment.



This national focus on birds is extremely important, with studies showing that populations of many of our familiar urban birds – from Laughing Kookaburras to Willie Wagtails -are in decline (Campbell *et al.* 2022). Despite this, results from the Aussie Bird Count show that an incredible array of Australian birds continue to visit people's backyards, balconies, and bush blocks, and that local communities care deeply for our iconic birdlife. With concern for the state of Australia's birds growing every day, citizen science projects like the Aussie Bird Count help provide an insight into how key species are faring and give regular people the passion and skills they need to share crucial survey data all year round. This movement is empowering citizens to make a meaningful contribution to the future of conservation, without having to venture beyond a local park or their very own garden fences.

Save the date - the next Aussie Bird Count will take place from 16-22 October 2023.





Aussie Bird Count results - 2022

Count summary

The following statistics summarise the results of the 2022 Aussie Bird Count for the **Moira Shire Council**. The count ran from **17–23 October 2022**.

- 64 observers participated in the Bird Count, submitting 188 counts.
- Participants recorded a total of **9,471** individual birds during Bird Week.
- 113 bird species were recorded (Table 1).

Table 1: Total counts of all 113 bird species observed within the Moira Shire Council boundaries during the 2022 Aussie Bird Count. This list is based on BirdLife Australia's Working List of Australian Birds (Version 4), available <u>here</u>.

* = introduced species; RA = Rare; NT = Near Threatened; VU = Vulnerable; En = Endangered; CE = Critically Endangered; PR4 = Priority Four (WA) (based on IUCN listings; BirdLife Australia, 2020).

Bird species	Count	Bird species	Count
Sulphur-crested Cockatoo	695	White-winged Chough	17
Welcome Swallow	638	Yellow-billed Spoonbill	16
Superb Fairy-wren	477	Black-faced Cuckoo-shrike	15
Australian Magpie	398	Fuscous Honeyeater	14
Galah	397	White-faced Heron	14
House Sparrow*	382	Grey Fantail	12
Australian White Ibis	255	White-breasted Woodswallow	12
Australian Raven	240	Australian King-Parrot	11
Noisy Miner	240	Oriental Dollarbird	10
Willie Wagtail	222	Rufous Songlark	10
Little Corella	216	Tree Martin	10
Crested Pigeon	188	Eastern Spinebill	9
Magpie-lark	188	Peaceful Dove	9
White-plumed Honeyeater	173	Yellow Thornbill	9
Red Wattlebird	165	Chestnut Teal	8
Pacific Black Duck	157	Little Friarbird	8
Australian Wood Duck	154	White-browed Scrubwren	8
Common Blackbird*	146	White-necked Heron	8
Red-rumped Parrot	143	Grey Butcherbird	7
Common Starling*	137	Whistling Kite	7
Little Raven	132	Black-tailed Native-hen	6
Dusky Woodswallow	125	Royal Spoonbill (NT)	6
Eastern Rosella	112	Great Egret	5



Superb Parrot (En)	89	Restless Flycatcher	5
Laughing Kookaburra	70	Straw-necked Ibis	5
Black Swan	67	Wedge-tailed Eagle	5
Crimson Rosella	67	Common Bronzewing	4
Plumed Whistling-Duck	63	Noisy Friarbird	4
Diamond Firetail (NT)	61	Olive-backed Oriole	4
Striated Pardalote	58	Yellow-rumped Thornbill	4
Common Myna*	56	Black-shouldered Kite	3
Grey Shrike-thrush	54	Brown Goshawk	3
Blue-faced Honeyeater	52	Fan-tailed Cuckoo	3
Purple Swamphen	50	Brown Falcon	2
Red-browed Finch	46	Bush Stone-curlew (En)	2
Brown-headed Honeyeater	44	Great Cormorant	2
Silvereye	42	Hoary-headed Grebe	2
Australian Pelican	41	Jacky Winter	2
Fairy Martin	41	Little Pied Cormorant	2
Australasian Pipit	40	Nankeen Kestrel	2
Black Duck-Mallard hybrid*	39	Pied Butcherbird	2
Masked Lapwing	38	Rainbow Lorikeet	2
Australian Shelduck	37	Red-necked Stint	2
Yellow-faced Honeyeater	37	Spotted Dove*	2
Sacred Kingfisher	33	Spotted Pardalote	2
Rainbow Bee-eater	28	Black-chinned Honeyeater	1
Long-billed Corella	27	Blue-billed Duck (En)	1
Grey Teal	25	Collared Sparrowhawk	1
Brown Thornbill	23	Freckled Duck (En)	1
Silver Gull	23	Little Black Cormorant	1
Australian Reed-Warbler	22	Mistletoebird	1
Pied Currawong	22	Nankeen Night-Heron (NT)	1
Zebra Finch	21	Peregrine Falcon	1
Brown Treecreeper (NT)	18	Southern Boobook	1
Dusky Moorhen	17	Tawny Frogmouth	1
Grey-crowned Babbler (En)	17	White-throated Treecreeper	1
Rufous Whistler	17	Restless Flycatcher	5





The Moira Shire Council is a regional Local Government Area with remnant areas of native habitat which support the complex ecosystems that many of our threatened bird species depend on. However, urbanisation and expansion for development and agriculture threaten the biodiversity of many regional councils.

Initiatives such as restoration of native habitat and promoting bird-friendly gardens may boost the number of birds, and number of bird species, reported by Aussie Bird Count participants in future years. Keen participants may like to get involved with the **Birds in Backyards** or **Birds in Schools** programs.

If you'd like to enquire about ways for your council to get constituents involved in bird conservation, you can contact the **Urban Birds** team <u>here</u>. Additional information about Birds in Backyards and Birds in Schools is also included further into this report.

There are countless ways for communities to get involved in protecting your local birds – which is why you're invited to participate in some of our key programs.



Birds in Backyards



With over 90% of Australians living in urban and regional centres, their own backyards, balconies or streets are often the only places to connect with the natural world. In Australia, we are fortunate to have such a charismatic and colourful array of native birds inhabiting the urban landscape – from raucous flocks of cockatoos to tiny bejewelled pardalotes.

Urban birds provide an easy way for people to engage with their natural environment, and research shows a clear link between biodiversity and quality of life (Malshe *et al.* 2021). In Britain, the presence of birdlife is so valued by communities that the UK Government uses information about their wild birds as a measure of large-scale environmental health. This environmental indicator is published alongside more traditional socioeconomic metrics, reinforcing the point that maintaining biodiversity is a key aspect of social sustainability.

However, urban bird communities are changing (Campbell *et al.* 2022). The size of Australian gardens – and the number of people who have them – are shrinking, and small birds are being displaced from parks and backyards by large, aggressive species such as Noisy Miners, Pied Currawongs and Red Wattlebirds.







Working together with councils and communities

The loss of urban bird diversity has both ecological and human consequences (Campbell *et al.* 2022). The Birds in Backyards Program empowers everyday citizens to build the knowledge and practical skills they need to lead action-oriented responses to the decline in urban bird diversity. For example, changes to our gardening practices – such as planting a diverse array of shrubs and local natives – can reduce the dominance of large birds and create islands of valuable habitat for smaller and shyer species birds in the urban landscape.

Underpinned by bird monitoring and habitat assessments, the Birds in Backyards Program encourages people to take conservation action for birds wherever they enjoy them – home, school, work, or local parks and reserves. We want people acting for birds, informed by their own data.

The ultimate goal of Birds in Backyards is to establish and nurture diverse native bird communities across urban Australia. Achieving this requires large-scale behavioural change and habitat restoration. Education underpins behavioural change – our programs can teach people about sustainability, advocacy, and how they can contribute to the datasets that drive critical research.

Local councils can partner with the Birds in Backyards Program to achieve both education and quality-oflife outcomes for your constituents and conservation outcomes for our urban birds – let's get our communities taking action together!



What Birds in Backyards can offer

Birds in Backyards has designed our programs around increasing community capacity for land stewardship, through long-term habitat restoration and monitoring. Ongoing engagement with local landscapes not only benefits the wildlife in an area, but can improve individual satisfaction and foster creation of and connection to community (Spurr 2012). Please reach out to us via the webform on <u>this</u> <u>page</u> to enquire about programs we can tailor to your community and Local Government Area.

On an individual level, Birds in Backyards encourages people to learn in their own space – their homes, streets and gardens – to establish and strengthen their connection to nature. For residents with garden spaces (or similar alternatives), we also have a range of resources available to help people design and implement bird-friendly gardens.

Birds in Backyards takes a three-pronged approach to engagement:

LEARN about Aussie birds

PARTICIPATE in surveys

CREATE habitat and change



These steps enable people to build on their initial interest, learn more, then take direct action for their local birdlife.

Birds in Backyards can work with your council to provide resources or collaborate on a range of projects. For example, we can provide:

- Hard-copy materials like A4 Backyard Birds posters (available in six languages) and gardening advice brochures.
- 'Train the Trainer' workshops and associated materials (aimed at council staff or community leaders), or direct-to-public workshops.
- Ongoing monitoring for keen participants, via Birds in Backyards bird surveys, with training sessions and feedback available.
- Region-specific planting guides, currently under development. A guide for Perth LGAs is available <u>here</u>.
- Children's engagement activities and school resources (see the Birds in Schools section of this report). Both teacher-delivered and BirdLife Australia-supported options are available.

<u>Contact the Urban Birds team</u> to get involved, or for any general enquiries about our programs.





Birds in Schools is a free environmental education program designed by BirdLife Australia's Urban Birds Team. Available online through BirdLife's e-learning platform, Birds in Schools enables teachers right across Australia to deliver education and action for local birds, with support from BirdLife Australia.

Birds in Schools engages students in the scientific process through investigation and monitoring of the birds and habitat on their school grounds. Students use their own observational skills and ideas to develop and implement action plans to help their local birdlife. Action plans may include planting native flora, installing nest boxes or birdbaths, or delivering education campaigns in their school or local neighbourhood.

Birds in Schools offers students and teachers:

- The chance to become citizen scientists and actively participate in the scientific process.
- A valuable experience of connection with, and improved understanding of, the natural world.
- An opportunity to investigate real-life issues, reflect and problem-solve, and develop action-oriented responses to sustainability challenges.
- A supported, curriculum-linked teaching resource for Years 3 to 6, including lesson plans and resources, that builds students' knowledge and skills. Highschool resources are under development!
- A way to prioritise biodiversity within the school, with greener spaces improving the wellbeing of students too.
- The opportunity to collaborate and partner with the local school community and local council.



Lessons and support

Birds in Schools consists of **ten** lessons for students from Years 3 to 6, through which students:

- Conduct bird and habitat surveys and contribute survey data to Birdata (our database of bird records).
- Learn about local birds, biodiversity, and habitats.
- Analyse surveys and make recommendations based on their own research.
- Develop and implement an action plan to improve habitat for birds.



Support for teachers includes:

- Lesson plans and accompanying resources to support teachers delivering content.
- Student assessments, to easily measure learning outcomes.
- Online professional development
- Online lesson options for students
- Assistance and advice from a BirdLife staff member

How much time does it take?

Birds in Schools is designed to give schools flexibility of delivery. Schools can deliver the program over one term, two terms, or more. There are ten lessons, with each lesson designed to fit into a 50-60 minute-long session (although some activities will extend beyond these times, particularly the implementation of students' action plans). We encourage schools to adapt the program to meet their needs – for example, some may choose not to deliver every lesson. BirdLife Australia can assist with program adaptation if required.

Who teaches the students?

Teachers deliver the lessons, and we provide them with an online professional training session to develop the technical skills and knowledge required to deliver the Birds in Schools program. This includes skills in bird identification, conducting bird surveys, using Birdata, and identifying the types of actions that help birds. A BirdLife Australia staff member will deliver online Q&A sessions for students, and is available for periodic support of teachers delivering the program.

How much does it cost?

Birds in Schools is **free** for schools to take part in. Schools may wish to fundraise or secure grants to enable the completion of student action plans, such as revegetating school grounds, or installing nest boxes and birdbaths.

To find out more and get in touch with the Birds in Schools team, head to our <u>webpage</u>!





Rodent poisons kill birds – say NO to SGARs

Download our free Council Action Toolkit <u>here</u> to make a change in your region today!

Rodenticides are commonly used to control rats and mice in both urban and rural councils, but these poisons can also spell doom for pets and wildlife. **Second generation anticoagulant rodenticides (SGARs)** are particularly bad.

What are SGARs?

SGARs are animal poisons, often found in bait form, that work by causing internal bleeding when ingested. SGARs don't kill their targets immediately, and take a long time to break down in the body, turning poisoned animals into mobile, ticking time bombs.

Rodent-loving birds of prey, such as owls and kestrels, can be easily poisoned by eating animals that have recently consumed baits. Other species, such as insects and possums, may also eat baits left out for rodents.

Because of their persistence, and ability to travel quickly through the environment, SGARs put a wide range of animals at risk – including our own cats and dogs.



Studies both internationally and in Australia have found harmful levels of SGARs in the organs of many carnivorous animals (Cooke *et al.* 2022; Lohr & Davis 2018; Nakayama *et al.* 2019; Shore *et al.* 2014). Testing on the livers of deceased Powerful Owls, commissioned by BirdLife Australia, has also shown dangerous SGAR levels in 60% of tissue samples, and rodenticides were detected in all but 1 of 38 owls.



The public sale and use of SGARs has been restricted in parts of the US, Canada, and the European Union. But Australian regulations lag behind, and SGARs are found in supermarkets and hardware shops across the country. This includes products as recognisable as Mortein, RatSak Fast Action, and The Big Cheese.

What can our council do?

Your council can help in **three** key ways:

CHANGE your pest management practices EDUCATE local residents about rodent control SHARE knowledge and spread the word

Changing your pest control practices, and sharing these changes with residents, is the best way to reduce the amount of deadly SGARs entering the environment in your region. You can act by:

- Distributing information about the impacts of SGARs on birds and other wildlife to council residents.
- Providing lists of alternatives to poison, and lower-impact poisons, to businesses and residents.
- Specifying preferred, lower-impact rodenticide treatments in commercial pest operator contracts.
- Including additional conditions to assist with rat and mouse control in demolition licenses.

How can we change our pest control practices?

Taking initiative to employ wildlife-friendly rodent control on all council-managed properties is an excellent way to show your community their councillors are committed to protecting native animals from SGARs. Wildlife-friendly rodent control may include:

- Making properties including homes and gardens less rodent-friendly.
- Encouraging the presence of native predators for example, by protecting owl-friendly tree hollows.
- Reducing dependence on poison baits.

<u>Click here</u> to access a range of resident-friendly tips for sustainable rodent control.

Where poisons are required for rodent control, you can place requirements on pest control contractors to use only **first generation anticoagulant rodenticides (FGARs)**. These use less harmful ingredients like warfarin (e.g. RatSak Double Strength) and coumatetralyl (e.g. Bacumin). In domestic settings, non-chemical pest control, such as snap traps, should always be promoted as the first choice.

<u>Click here</u> for a list of which pest control products to purchase – and which to avoid.



Want to get more involved?

Take the safe

pledge!

We are encouraging local councils to champion our rodenticide campaign by taking the actions detailed above. Making full use of the resources and links included in our <u>Council Action Toolkit</u> is an excellent way to get started.

If you would like more information, please don't hesitate to contact the Campaigns Team by emailing **conservation@birdlife.org.au**.

actforbirds.org



Data limitations

An annual bird count in gardens, parks and other habitats across Australia has incredible value to engage people with nature and foster a shared sense of community. It also has the potential to be a valuable monitoring tool for Australian bird species and ecological communities.

As the Aussie Bird Count continues year on year, results from the count have started to mirror regional and national trends in the abundance and distribution of many familiar urban bird species. For example, we've seen the Eastern Koel popping up in more and more Victorian bird counts, Rainbow Lorikeets reported further and further inland, and a decline in Australian Ringnecks in metro Perth. These trends are all backed up by the long-term scientific monitoring data stored in our national monitoring platform, Birdata. Many of these trends are also reported in official publications (e.g. Campbell *et al.* 2022).

While the results from the Aussie Bird Count provide an enticing snapshot of what people see in Bird Week each spring, caution must be taken when interpreting these results. Councils looking for robust long-term datasets on bird abundances in your region should reach out to us directly at <u>birdata@birdlife.org.au</u>.

Some of the key limitations of this dataset are outlined below.

Counts are biased towards familiar and urban-adapted species

Most people do the Aussie Bird Count in their backyards, streets, or local parks. This means that easily recognisable birds common in human environments are most likely to turn up in people's counts. Conversely, species which rely on intact native habitats like dense forest and natural wetlands – as well as hard-to-ID species and shy birds that stick to dense cover – are likely to be under-reported. This is true even for species which are common in high-quality habitats within your Local Government Area, as well as seabirds for those councils that adjoin the open ocean.

For example, Variegated Fairy-wrens are common in dense bushland on the east coast, including in the Greater Sydney and Brisbane regions. However, there are few records of this species in the Aussie Bird Count. By contrast, the iconic Superb Fairy-wren, which is more resilient in suburban areas and degraded habitat, is reported in high numbers from most councils in these regions. Fuscous Honeyeaters are another example – very abundant in box-ironbark woodlands in QLD, NSW and VIC, but almost missing from the Aussie Bird Count in several regions where they occur.



A smaller problem to keep in mind is that some species are often misidentified as other, similarly-sized birds that do not occur in the places participants count in. Where our expert vetters cannot determine exactly what species these are likely to be, the best option is to delete these records.

People may count the same birds several times

The total number of birds reported in your local Bird Count may be inflated, due to the potential for observers (particularly novices) to count the same bird/s multiple times over the course of their 20-minute survey period. Furthermore, counters who submit repeat counts from the same place over the week may be repeatedly submitting the same birds each day, and all these counts will form part of the final tally. This may be particularly noticeable in councils with small populations or low participation levels.

Counters have different levels of experience

Participants in Bird Week have a wide range of birding experience – from total beginners to life-long birdwatchers. While there is ID help available in the Bird Count app, and we edit and delete records that vetters deem to be made in error, a portion of incorrect records will always make their way through into the final dataset.

This is especially true for common birds, which we assume most people have correctly identified – some of these records will be other common species instead! For example, novice observers often mix up Eastern and Crimson Rosellas in Sydney, or Brown and Singing Honeyeaters in Perth.

Counts may be submitted with incorrect GPS coordinates

Most of the counts submitted in Bird Week will fall within about fifty metres of their true location. However, user error means a few surveys may be logged quite far away from the site a participant was counting, and this may affect some of the survey and sighting map pins for councils who have purchased a Brolga Report.

Counters may mis-click their location in the app, intentionally enter their home address even when counting elsewhere, or submit counts in scenarios where GPS access is poor: for example, near tall buildings, in a dense rainforest, or under heavy cloud cover. Where phones fail to pick up a GPS fix, they are forced to rely on mobile towers – this can reduce the accuracy of a count to a radius of 1+ km (particularly troublesome for smaller, urban LGAs). Counts submitted on the Bird Count website are also more prone to inaccurate locations, as most computers lack GPS functionality and participants must manually select a site for their counts.





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Photographed bird species in order of appearance:

Red-browed Finch; Rainbow Bee-eater; New Holland Honeyeater; Yellow-tailed Black-Cockatoo; Variegated Fairy-wren; Spotted Pardalote; Silvereye; Eastern Spinebill; Chestnut Teal; Powerful Owl (x2).

Illustrated bird species in order of appearance:

Variegated Fairy-wren; Yellow-tailed Black-Cockatoo; Silvereye; Willie Wagtail; Southern Boobook.