



#### **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 here.

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.

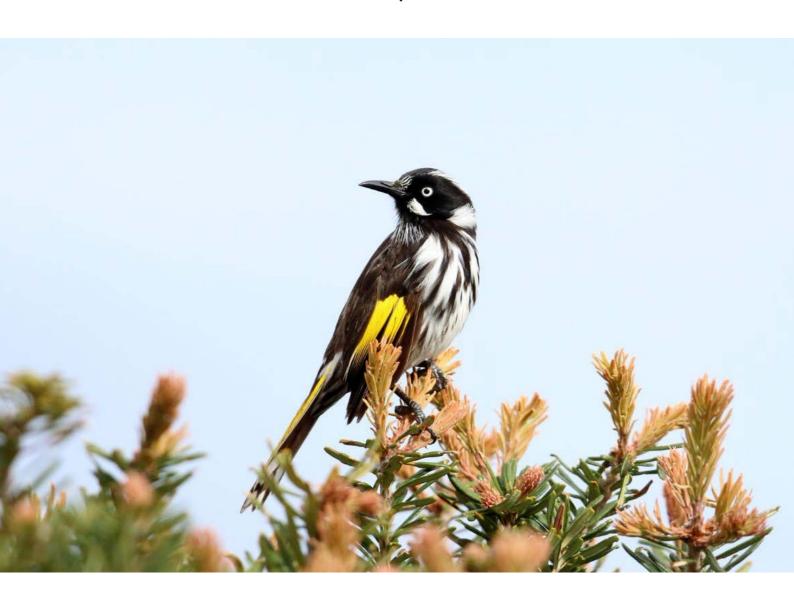
Each year, more and more local councils hold bird-themed events during Bird Week, and birdthemed lesson plans from BirdLife Australia encourage local schools to get involved and engage with their natural environment.



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 **City of South Perth**. The count ran from **17–23 October 2022**.

- **89** observers participated in the Bird Count, submitting **186** counts (**Table 1**). This was a slight decrease in participation numbers compared to 2020 and 2021, though the average number of surveys per person has increased year on year.
- Participants submitted between one and twelve surveys per registered account an average of 2.95 surveys per account.
- Participants counted birds for a combined duration of **60** hours and **55** minutes.
- Participants recorded a total of **5,307** individual birds during Bird Week.
- 69 bird species were recorded, with the Red Wattlebird reported in 70.43% of counts (Table 2).

**Table 1**: Comparative summary statistics from the 2019–2022 Aussie Bird Counts for the City of South Perth. Additional council-level vetting was carried out in 2020 and 2021, with further scrutiny in 2022, so species numbers may differ considerably for some councils in these years compared to others, despite similar or increased participation.

	Year			
	2019	2020	2021	2022
Number of observers	265	113	146	89
Total bird count	9,404	5,089	5,005	5,307
Total surveys	205	192	199	186
Total species	110	87	73	69
Minimum checklists per user	1	1	1	1
Maximum checklists per user	14	15	13	12
Average checklists per user	1.90	2.46	2.55	2.92
Survey length (hours)	68.33	64	62.66	60.92



**Table 2**: Total counts of all 69 bird species observed within the City of South Perth boundaries during the 2022 Aussie Bird Count. This list is based on BirdLife Australia's Working List of Australian Birds (Version 4), available <a href="https://example.com/here.new/memory.com/here.new/here.n

<sup>\* =</sup> 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	RR (%)	Bird species	Count	RR (%)
Rainbow Lorikeet*	933	68.82	White-cheeked Honeyeater	17	2.69
Red Wattlebird	539	70.43	Laughing Kookaburra*	13	4.84
Pacific Black Duck	405	13.44	Great Pied Cormorant	11	1.61
Australian Raven	326	47.31	Blue-billed Duck (PR4)	10	1.08
New Holland Honeyeater	272	40.32	Sulphur-crested Cockatoo*	10	1.61
Willie Wagtail	234	45.16	Australasian Grebe	9	1.61
Australian Magpie	201	33.33	Black-faced Cuckoo-shrike	8	4.3
Singing Honeyeater	177	33.87	Australian Pied Oystercatcher	6	0.54
Eurasian Coot	175	6.45	Australian Ringneck	6	1.08
Laughing Dove*	174	37.1	Grey Teal	6	0.54
Purple Swamphen	167	7.53	Striated Pardalote	6	3.23
Galah	151	20.97	Australian Shelduck	5	1.61
Australian Wood Duck	142	4.84	Carnaby's Black-Cockatoo (En)	5	1.61
Silver Gull	139	5.38	Caspian Tern	5	0.54
Little Corella	115	12.37	Long-billed Corella*	5	1.08
Brown Honeyeater	104	22.58	Australasian Darter	4	1.08
Black Swan	98	8.6	Chestnut Teal	4	0.54
Spotted Dove*	95	18.28	Great Cormorant	4	1.08
Magpie-lark	90	27.42	Grey Fantail	4	1.08
Dusky Moorhen	86	6.99	Crested Pigeon	3	1.08
Rock Dove*	71	2.15	Domestic Duck*	2	0.54
Hardhead	66	4.84	Great Egret	2	0.54
Australian White Ibis	56	19.89	Mallard*	2	1.08
Australian Pelican	43	5.91	Brown Goshawk	1	0.54
Welcome Swallow	43	4.84	Little Eagle	1	0.54
Silvereye	34	5.38	Little Egret	1	0.54
Pink-eared Duck	32	2.15	Nankeen Kestrel	1	0.54
Red-tailed Black-Cockatoo (VU)	29	4.3	Osprey	1	0.54
Little Pied Cormorant	27	2.15	Royal Spoonbill	1	0.54
Little Black Cormorant	24	1.61	Southern Boobook	1	0.54
Yellow-billed Spoonbill	23	0.54	Spotted Pardalote	1	0.54
Black Duck-Mallard hybrid*	20	2.69	Tree Martin	1	0.54
Grey Butcherbird	20	4.84	White-browed Scrubwren	1	0.54
Australasian Shoveler	19	0.54	White-faced Heron	1	0.54
Weebill	19	1.61			



The City of South Perth is an urban Local Government Area with limited areas of native habitat to support the ecosystems many of our threatened bird species depend on.

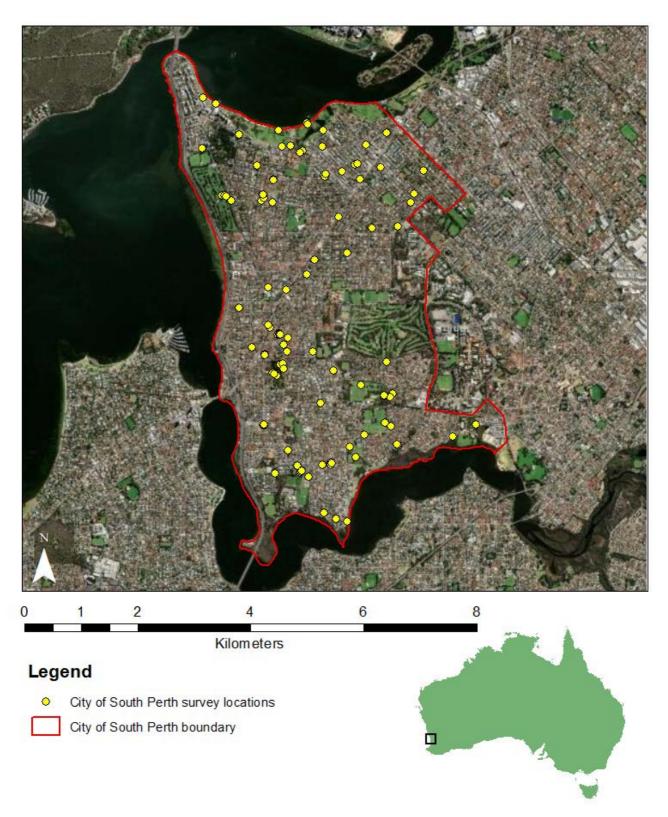
Initiatives such as restoration of native habitat and promoting bird-friendly gardens may boost the number of birds, and number of bird species, reported by Aussie Bird Count participants in future years. Keen participants may like to get involved with the **Birds in Backyards** or **Birds in Schools**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





#### Survey distribution - where did people count?



**Figure 1.** Bird counts (*n*=186) submitted within City of South Perth boundaries during the 2022 Aussie Bird Count. Each yellow dot represents a single survey, though repeat surveys at a single location will overlap.



#### Threatened species in your council

European colonisation has had a major impact on the populations of many Australian birds. Approximately 218 species and subspecies (taxa) of Australian bird are now listed as extinct, threatened, or near-threatened by the *Action Plan for Australian Birds 2020* (Garnett & Baker 2021). A further 69 taxa are listed under one of these categories by the EPBC Act, global IUCN Red List or previous Action Plan for Australian Birds (Garnett & Baker 2021).

It is critical for us to gain an understanding of where threatened birds persist so that we can implement appropriate management actions in these precious refuges. Threatened species can be found in every council across the country, and the Aussie Bird Count provides an excellent opportunity for community members to take a first step in participating in this crucial monitoring.

In total, **three** threatened bird species were recorded within the City of South Perth boundaries in the 2022 Aussie Bird Count (**Table 3**). A visualisation of individual records from the 2022 Aussie Bird Count is provided in **Figure 2**. As there were only two points of overlap between threatened species records, which are visible on the combined map, we have not provided a separate appendix.

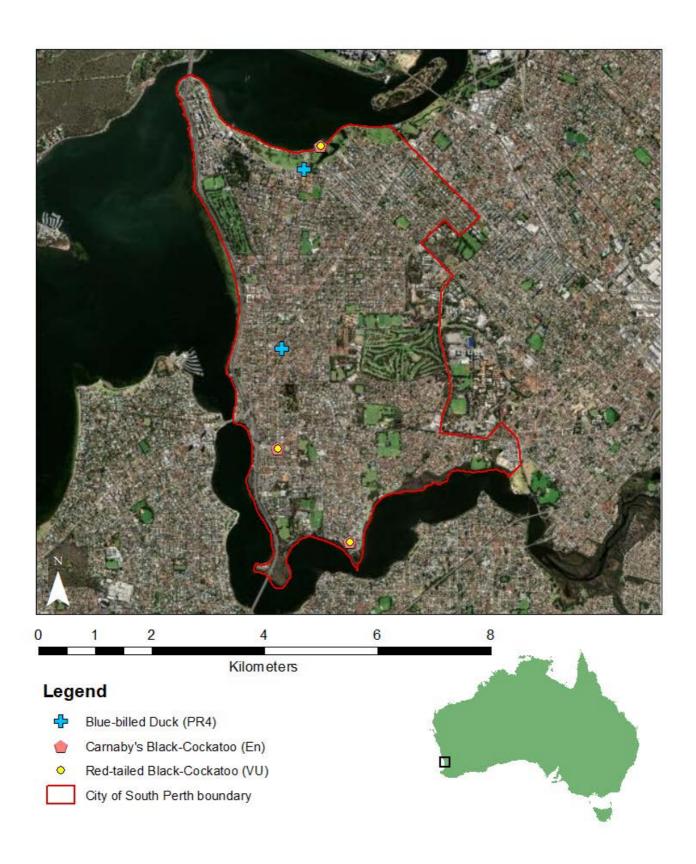
We encourage councils to explore the full set of threatened species data for your region <a href="here">here</a> – simply type your species of interest into the 'Species' filter on the left. Please note some threatened species will not have their exact location made visible in this public interface. You can enquire via <a href="mailto:birdata@birdlife.org.au">birdata@birdlife.org.au</a> if you wish to organise a free download of these data for a particular purpose.

**Table 3**: Total counts and reporting rates (%) of all three threatened species observed within the City of South Perth boundaries during the 2022 Aussie Bird Count. This list is based on BirdLife Australia's Working List of Australian Birds (Version 4), available <a href="here">here</a>. **RR (%)** = reporting rate (percentage of all surveys submitted).

\* = 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	Status	Count	Number of counts including this species	RR (%)
Red-tailed Black-Cockatoo	VU	29	8	4.30
Blue-billed Duck	PR4	10	2	1.08
Carnaby's Black-Cockatoo	En	5	3	1.61





**Figure 2**. Distribution of threatened species records from the 2022 Aussie Bird Count for the City of South Perth. Where multiple threatened species are reported in the same count, these records will overlap.



**Two** threatened black-cockatoo species were recorded within the City of South Perth in 2022:

- Carnaby's Black-Cockatoo (Endangered)
- Red-tailed Black-Cockatoo (Vulnerable)

The black-cockatoos of south-western Australia face many threats, including vegetation clearing, competition for nesting hollows, impacts from stock, poaching and landowner persecution, and road strike. The slow reproductive rates of these long-lived species mean turning their decline around can take many decades.

The **Southwest Black-Cockatoo Recovery** team have been working on black-cockatoo recovery actions since 2001. Staff and volunteers in Western Australia work with local communities, landholders, and land managers to secure the protection of the South West's three black-cockatoo species. This includes citizen science initiatives like the **Great Cocky Count** - this count is likely to include participants from your very own council.

You can find out more about the Southwest Black-Cockatoo Recovery project, or contact the team, here.

One threatened species of waterbird was recorded within the City of South Perth in 2022:

Blue-billed Duck (Priority Four)

Numerous Australian waterfowl and other wetland-associated birds are threatened by the continual loss and degradation of wetlands and natural waterways. Practices such as water diversion, river regulation, land clearing and changes in salinity all reduce the amount of suitable habitat for these birds, and recreational duck shooting in some Australian states is also an ongoing threat (BirdLife Australia, 2015).

BirdLife Australia's **Wetland Birds Program** was established to conserve important wetlands and waterways, and the birds they support. You can read more about how BirdLife Australia is monitoring and conserving wetland birds here.



#### **Introduced species in your council**

**Ten** introduced taxa were recorded within the City of South Perth during the 2022 Aussie Bird Count (**Table 4**; **Figure 3**). The Black Duck-Mallard hybrid is a descendent of the native Pacific Black Duck and introduced Mallard, and is not a full species; the Domestic Duck is also descended from the Mallard.

Records of introduced species were evenly distributed throughout the council. This reflects the heavily urbanised nature of the City of South Perth; areas of intact habitat are limited and mainly fringing waterbodies around the edges of the council. These degraded environments are usually most suitable for introduced species that are tied to human-dominated spaces.

The Rainbow Lorikeet (68.82%), Laughing Dove (37.1%), and Spotted Dove (18.28%) were the most frequently recorded introduced species during the Aussie Bird Count. Together, these species accounted for more than one-fifth of all recorded individual birds. Of these species, the Rainbow Lorikeet accounted for an astounding 17.58% of all birds counted in the council. All the other introduced species were only counted in a handful of surveys, though the Laughing Kookaburra was reported on nine separate occasions.

**Figure 3** gives an indication of introduced species records from the 2022 Aussie Bird Count. As many records overlap, individual maps for counts of each introduced species are provided in **Appendix One**.

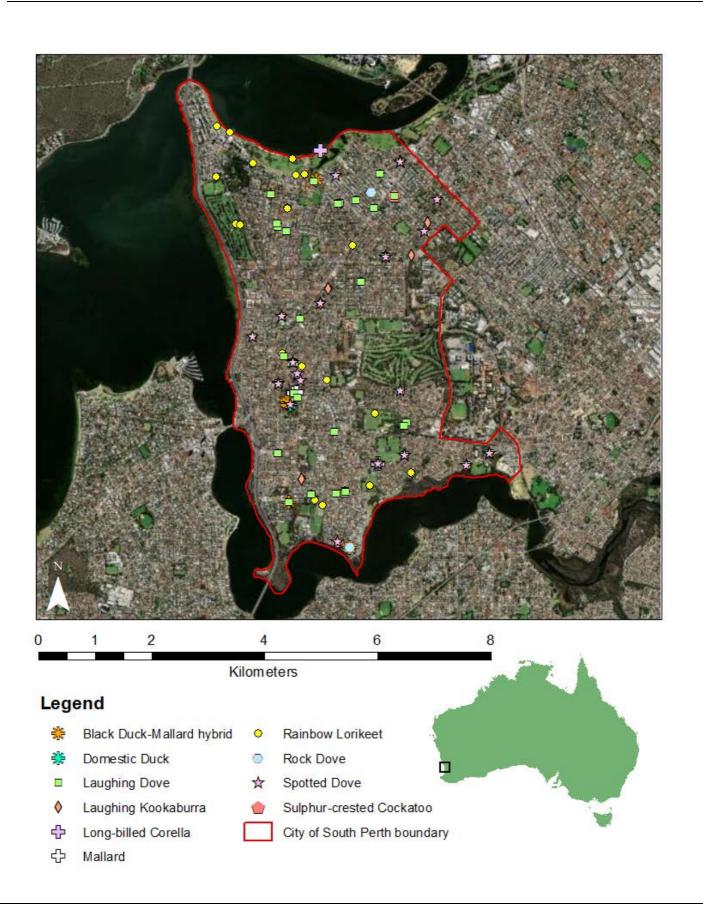
**Table 4**: Total counts and reporting rates (%) of all ten introduced taxa observed within the City of South Perth boundaries during the 2022 Aussie Bird Count. This list is based on BirdLife Australia's Working List of Australian Birds (Version 4), available <a href="https://example.com/here.com/he

Bird species	Count	Proportion of all birds counted (%)	Number of counts including this species	RR (%)
Rainbow Lorikeet	933	17.58	128	68.82
Laughing Dove	174	3.28	69	37.1
Spotted Dove	95	1.79	34	18.28
Rock Dove	71	1.34	4	2.15
Black Duck-Mallard hybrid	20	0.38	5	2.69
Laughing Kookaburra	13	0.24	9	4.84
Sulphur-crested Cockatoo	10	0.19	3	1.61
Long-billed Corella	5	0.09	2	1.08



 Domestic Duck
 2
 0.04
 1
 0.54

 Mallard
 2
 0.04
 2
 1.08





**Figure 3.** Distribution of introduced species records from the 2022 Aussie Bird Count for the City of South Perth. Where multiple introduced species are reported in the same count, these records will overlap.

#### **Least commonly reported birds**

**Nineteen** species were recorded in just a single survey in the 2022 Aussie Bird Count – these were:

- Australasian Shoveler
- Australian Pied Oystercatcher
- Brown Goshawk
- Caspian Tern
- Chestnut Teal
- Domestic Duck
- Great Egret

- Grey Teal
- Little Eagle
- Little Egret
- Nankeen Kestrel
- Osprev
- Royal Spoonbill
- Southern Boobook

- Spotted Pardalote
- Tree Martin
- White-browed Scrubwren
- White-faced Heron
- Yellow-billed Spoonbill

All but one species is native to Australia; the Domestic Duck is an introduced bird that regularly escapes captivity. None of the nineteen species are endangered or critically endangered at a state level. Eleven are largely restricted to aquatic habitats such as swamps, wetlands and beaches, one is nocturnal, and five are birds of prey. The Spotted Pardalote is a small and inconspicuous canopy-dweller, while the White-browed Scrubwren is only found in dense undergrowth. The behaviour and habitat requirements of these species may account for the lack of reports in the 2022 Aussie Bird Count, as most people submit their counts from close to – or at – home.

#### Most common birds

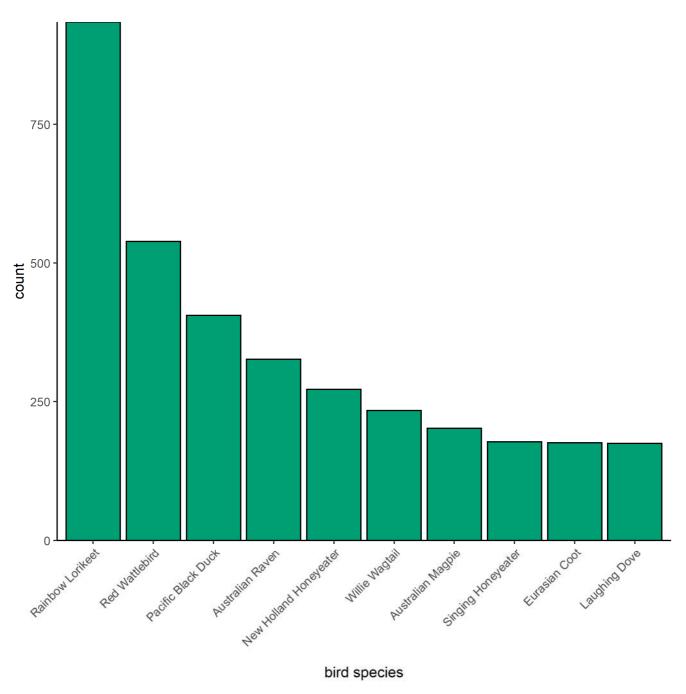
With **933** individuals counted in the City of South Perth, the **Rainbow Lorikeet** was by far the most abundant bird in the 2022 Aussie Bird Count (**Figure 4**). This species was also the most counted bird for the country as a whole. The next-most abundant species was the Red Wattlebird (539 individuals), which was also the fifth-most counted species in the state and ninth-most counted in the country. These were followed by the Pacific Black Duck and Australian Raven, with 405 and 326 birds counted respectively.

Eight of the ten most abundant bird species recorded within the City of South Perth boundaries are native to Western Australia, and none of these species are considered threatened in the state. The Rainbow Lorikeet (first place) and Laughing Dove (tenth place) are both introduced species.

All the species in the Top Ten are typical urban 'winners' in south-western Australia, indicating a similarity between the urban areas of the City of South Perth and other parts of the region. The New Holland and Singing Honeyeaters, as well as the Red Wattlebird, are all aggressive and able to defend flowering



ornamental shrubs and trees in gardens that might be used by other, shier species in intact native habitats. The abundance of the Willie Wagtail is notable, as this species is declining in urban regions in eastern Australia (Campbell *et al.* 2022).



**Figure 4.** The ten most abundant bird species reported in the 2022 Aussie Bird Count, for the City of South Perth. As this ranking is based on the total number of birds, and not how often they were seen, species that form large flocks are more likely to be over-represented in this figure.



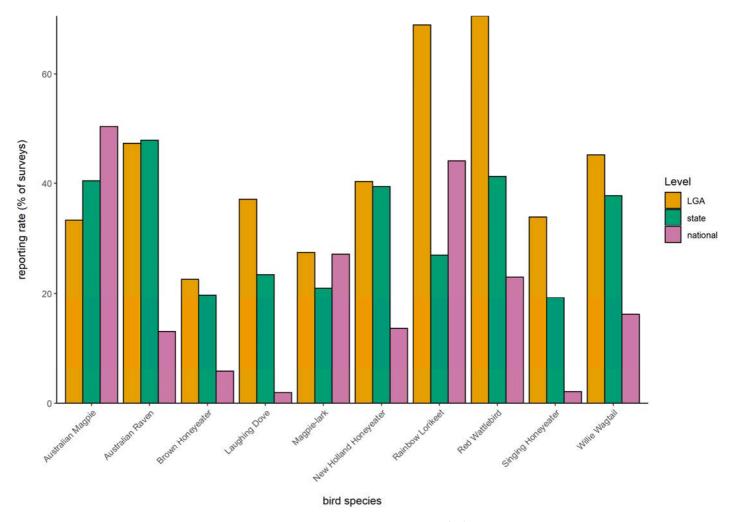
Reported from **70.43%** of counts, the **Red Wattlebird** was the most *frequently* recorded bird in the City of South Perth 2022 Aussie Bird Count, just pipping the Rainbow Lorikeet (68.82%) for first place. The Australian Raven (47.31%) and Willie Wagtail (45.16%) came in at a distant third and fourth place. While the Brown Honeyeater was not in the Top Ten based on count, it was reported from almost one-quarter of counts.

The behaviour of the Brown Honeyeater likely accounts for the lower total count of the species; most of the species in the Top Ten by count are seen in groups, while the Brown Honeyeater is typically seen in ones or twos. While the Willie Wagtail is not a flocking species, it is very recognisable, meaning it may have been reported by many novices who excluded species like honeyeaters from their counts. Except for the Australian Magpie and (at a state level) Australian Raven, all the species in the Top Ten were reported at higher-than-average rates when compared to both state- and nation-wide figures (**Figure 5**).

The Rainbow Lorikeet and Red Wattlebird are both notable in this respect, with the Rainbow Lorikeet being reported at more than twice the state-wide average, and the Red Wattlebird at more than twice the national average despite being a common species in Adelaide, Melbourne and Sydney. This is likely to reflect an over-representation of ornamental nectar-producing trees and shrubs in the council, and a lack of well-structured understorey habitat. Both species are urban adapters that outcompete smaller and more timid birds, many of which rely upon dense groundcover for nesting and protection.

The over-representation of Singing Honeyeaters compared to the national average is almost certainly because this species is not found in the urban landscape of other capital cities (though it occurs in dry coastal habitats near Adelaide and Melbourne). This is probably also true for the Rainbow Lorikeet at a state level; the inflated reporting rate compared to Western Australia as a whole is probably because this species has been heavily restricted from spreading beyond Metro Perth.





**Figure 5.** Comparison of council, state, and national reporting rates (%) of the ten most frequently recorded species during the 2022 Aussie Bird Count within the City of South Perth boundaries.



#### **Species-specific results**

#### Little Corella

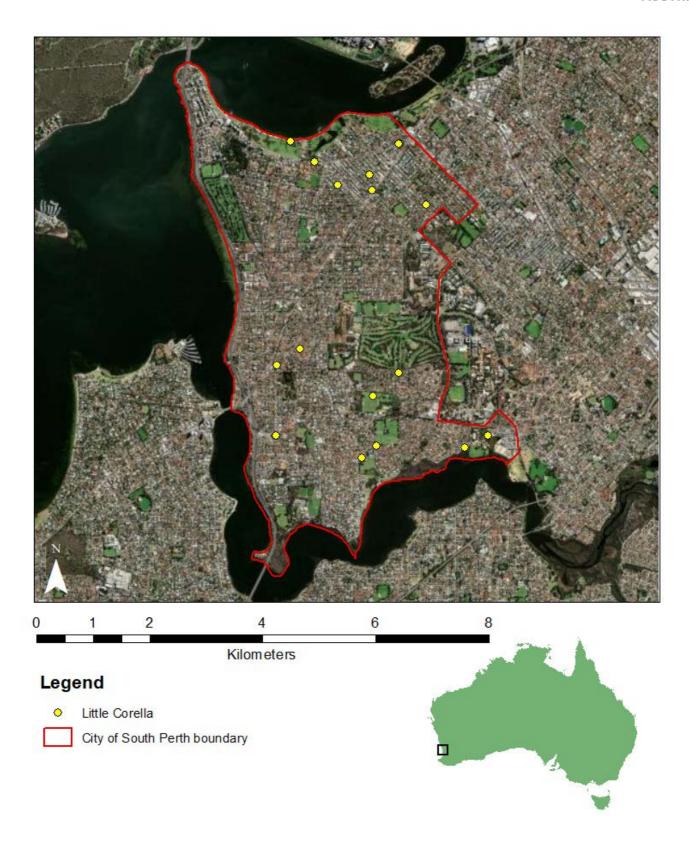
Just **22** Little Corellas were counted within the City of South Perth in the 2022 Aussie Bird Count, across a total of **seven** surveys. This is a noticeable decline from 2021, when 52 Little Corellas were reported (**Table 5**). Even accounting for the decline in participation in 2022, the reporting rate of this species almost halved (**6.53%** vs. 3.80%). The Little Corella was the fifteenth-most reported species in the council in 2022, and reported in the fifteenth-highest numbers. State (twenty-seventh place) and national (twenty-ninth place) reporting rates were similar, when accounting for the much higher number of species reported at these scales.

Reports of this self-introduced species were spread throughout the council, with little discernible reliance on any particular habitat (**Figure 6**). As Little Corellas are often seen on urban lawns and infrastructure, and are not dependent on trees when not breeding, this is not surprising.

**Table 5**: Comparative summary statistics for the **Little Corella** for the 2019-2022 Aussie Bird Counts for the City of South Perth. Additional council-level vetting was carried out in 2020 and 2021, with further scrutiny in 2022, so species numbers may differ considerably for some councils in these years compared to others, despite similar or increased participation.

		Year			
	2019	2020	2021	2022	
Total council surveys	205	192	199	186	
Species-specific count	44	64	52	22	
Reporting rate (%)	3.90	10.94	6.53	3.80	





**Figure 6.** Distribution of Little Corella records from the 2022 Aussie Bird Count for the City of South Perth. Where multiple counts containing this species were submitted from the same location, these observations will overlap.



#### **Rainbow Lorikeet**

**993** Rainbow Lorikeets were counted within the City of South Perth in the 2022 Aussie Bird Count, across a total of **128** surveys. This number is up from 2021, when 866 birds were recorded (**Table 6**). The reporting rate in 2022 was also at a record high (**68.82%**) This is an incredibly high reporting rate for any species in any council, indicating the Rainbow Lorikeet is ubiquitous throughout the region and continuing to thrive despite control efforts. Reporting rates have increased on previous years, but not considerably beyond the 2016 peak of just over 67%.

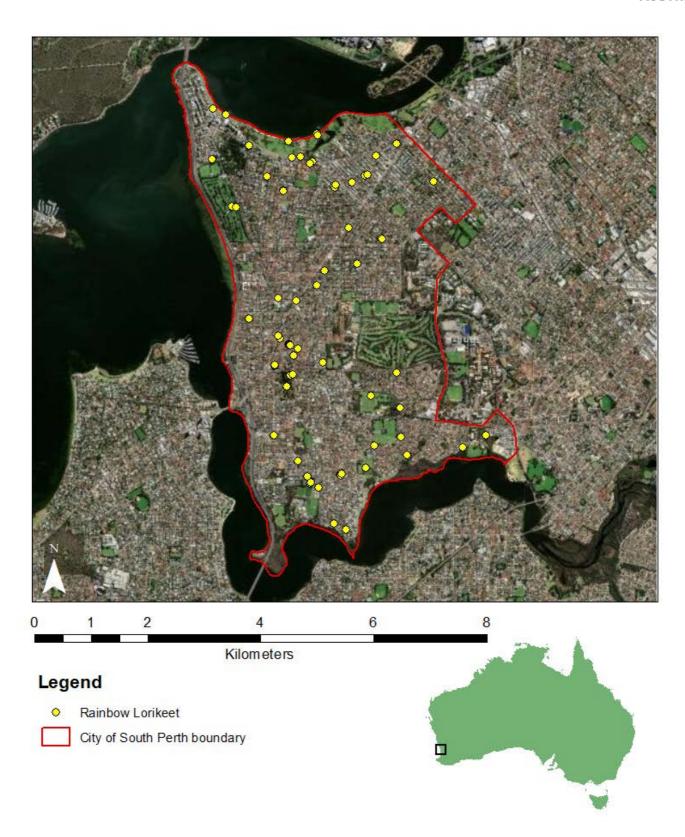
The Rainbow Lorikeet was both the second-most reported and most abundant species in City of South Perth in 2022. This aligns closely with national results; Rainbow Lorikeets placed first for overall count and second for overall reporting rate. While further down the rankings in Western Australia, this simply reflects the fact that Rainbow Lorikeets are largely restricted to Metro Perth in the state, and not found in other urban centres like Albany or Geraldton.

Reports of Rainbow Lorikeets were spread widely across the council, with any absences (such as around Collier Park Golf Course) simply reflecting a lack of counts submitted from these areas (**Figure 7**).

**Table 6**: Comparative summary statistics for the **Rainbow Lorikeet** for the 2019-2022 Aussie Bird Counts for the City of South Perth. Additional council-level vetting was carried out in 2020 and 2021, with further scrutiny in 2022, so species numbers may differ considerably for some councils in these years compared to others, despite similar or increased participation.

		Year			
	2019	2020	2021	2022	
Total council surveys	205	192	199	186	
Species-specific count	621	692	866	993	
Reporting rate (%)	50.26	61.49	58.29	68.82	





**Figure 7.** Distribution of Rainbow Lorikeet records from the 2022 Aussie Bird Count for the City of South Perth. Where multiple counts containing this species were submitted from the same location, these observations will overlap.



#### Western Corella

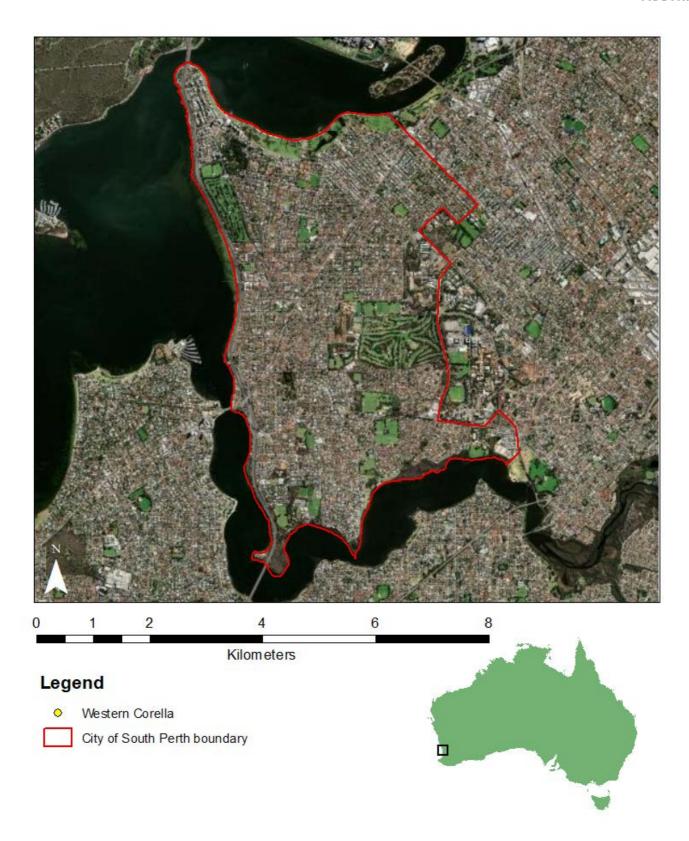
**No** Western Corellas were counted within the City of South Perth in the 2022 Aussie Bird Count (**Figure 8**). This number is down from 2021, when 54 birds were recorded (**Table 7**). However, this is a result of effective scrutiny of 2022 Aussie Bird Count records, rather than reflective of any decline in the species' presence in the area. Any records of Western Corella in this council (or anywhere in Metro Perth) should be treated with utmost caution. It is almost certain that every report of this species is a misidentification of introduced Long-billed Corellas or Sulphur-crested Cockatoos, or self-introduced (and quite abundant) Little Corellas.

The Western Corella, for all intents and purposes, was exterminated from the Swan Coastal Plain early in colonisation. While experienced observers should keep an eye out for possible recolonisation, as the species has made a recovery in agricultural regions outside of Perth, the species is unlikely to establish in such a heavily built-up region (which competition pressures from other corella species) any time soon. Subspecies *butleri* has expanded its range southward in recent years, and may be the one that colonises Perth in time, rather than the subspecies *pastinator* that originally occurred in the area.

**Table 7**: Comparative summary statistics for the **Western Corella** for the 2019-2022 Aussie Bird Counts for the City of South Perth. Additional council-level vetting was carried out in 2020 and 2021, with further scrutiny in 2022, so species numbers may differ considerably for some councils in these years compared to others, despite similar or increased participation.

	<del> </del>	Year			
	2019	2020	2021	2022	
Total council surveys	205	192	199	186	
Species-specific count	4	0	54	0	
Reporting rate (%)	1.06	0	4.02	0	





**Figure 8.** Distribution of Western Corella records from the 2022 Aussie Bird Count for the City of South Perth. Where multiple counts containing this species were submitted from the same location, these observations will overlap.

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-of-life 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 this page 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 here.
- 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.

Contact the Urban Birds team 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 webpage!





# Rodent poisons kill birds – say NO to SGARs

#### Download our free Council Action Toolkit here 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?

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 **Council Action Toolkit** 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.







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 <a href="mailto:birdata@birdlife.org.au">birdata@birdlife.org.au</a>.

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.





#### **Introduced species maps**

We have provided individual maps of 2022 Aussie Bird Count records for each introduced species in the City of South Perth below. Species are arranged in **alphabetical order**, but without a caption, as the formatting is identical to Figure 3 earlier in the report. You can also visualise these data by importing the raw data file provided with this report into GIS software.

#### Species in order:

- Black Duck-Mallard hybrid
- Domestic Duck
- Laughing Dove
- Laughing Kookaburra
- Long-billed Corella
- Mallard
- Rainbow Lorikeet
- Rock Dove
- Spotted Dove
- Sulphur-crested Cockatoo



