

Aussie Backyard Bird Count 2018 Results:

Wingecarribee Shire Council

Parrot + Add-on Package



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## 1. Introduction

### 1.1 Aussie Backyard Bird Count (ABBC)

In 2014, as part of BirdLife Australia's National Bird Week celebrations, BirdLife Australia ran the first ever Aussie Backyard Bird Count — now one of the largest citizen science projects of this nature in Australia. The Aussie Backyard Bird Count provides an opportunity for everyone — from school children, senior citizens, families and community groups — to become citizen scientists for one week every October. With over 90% of Australians living in urban environments with often limited opportunities to experience nature, the Aussie Backyard Bird Count is a great way to get outside and connect with nature.

The data collected by these citizen scientists plays a vital role in providing important information to BirdLife Australia. We know more about our threatened birds than we do about our common backyard birds and the Aussie Backyard Bird Count helps to fill this knowledge gap, as well as increasing our understanding of Australian bird species that live where people live. The Aussie Backyard Bird Count also helps raise the profile of bird species throughout Australia, highlighting their importance and promoting a national passion for Australian birds.

Each year this natural passion is confirmed, with the Aussie Backyard Bird Count attracting significant interest from the public eager to be involved and help contribute to our growing knowledge of Australian birds. Public involvement continues to increase each year the Aussie Backyard Bird Count is run, with the number of birds counted also significantly increasing each year. Additionally, involvement by local councils increases year-on-year with more bird-focused events being held during Bird Week, improving the awareness and importance of local birds within their communities. And with the release of lesson plans which encourages students to participate both at school and at home, the number of schools participating in the Aussie Backyard Bird Count continues to grow.

The national focus on birds is extremely important with data showing Australian backyards have been shrinking since the 1990s, and populations of some of our most familiar birds like the Laughing Kookaburra, have also declined. While data collected from the Aussie Backyard Bird Count is currently only a baseline, results from the past five years show that Australian backyards — in all their shapes and sizes — continue to attract a range of birds, giving us hope that even as the iconic Aussie backyard shrinks, many native birds can and do remain. Results from the Aussie Backyard Bird Count support the decline in Kookaburra numbers over the years while aggressive species such as the Noisy Miner appear to be increasing. With growing national and international concern for the welfare of these iconic Australian birds, citizen science projects such as the ABBC can help provide an insight into how Aussie birds are faring and results can help formulate subsequent management decisions.

## **1.2 Birds in Backyards (BIBY)**

Urbanisation is one of the most dramatic and rapidly expanding forms of man-made change to our landscapes. As our urban habitats change, our bird life does as well. The loss of urban bird diversity has both ecological and human/cultural consequences. With over 90% of Australians living in urban and regional centres, for many people, the only place where they connect with the natural world is in their own backyards. The Birds in Backyards Program (BIBY) builds knowledge, skills and practical support to develop action-oriented responses to the decline of bird diversity. BIBY began in 1998 and celebrated its 20th year as a national citizen science program in 2018. Underpinned by bird monitoring and habitat assessments, BIBY encourages people to take conservation action for birds wherever they enjoy them – home, school, work, or local parks and reserves. There have been exciting changes recently – a new framework and program objectives are seeing BIBY work with stakeholders towards an Urban Bird Conservation Action Plan – a tool to develop focussed strategies and projects to conserve Australia’s urban birds and measure our success. In 2017, our surveys joined BirdLife Australia’s data portal Birdata and have now joined the Birdata App as well. This survey data is used to inform policies, best practice guidelines, and provide advocacy for threatened species. We want people taking action for birds, informed by their own data.

The ultimate goal of BIBY is a diverse urban native bird community, achieved by behavioural change through action research, education for sustainability and advocacy. Through our dedicated citizen scientists and our partners, BIBY empowers people to make changes at all levels (from individuals in a patch to government at landscape scales) to create and maintain habitat for birds. Local councils can partner with BIBY to achieve education and conservation outcomes for our urban birds – let’s get our communities taking action together!

## 2. 2016-2018 Aussie Backyard Bird Count Statistics

The following statistics relate to the Wingecarribee Shire Council region during the Aussie Backyard Bird Counts that ran from the 17<sup>th</sup> to 23<sup>rd</sup> October 2016, 23<sup>rd</sup> to 29<sup>th</sup> October 2017 and 22<sup>nd</sup> to 28<sup>th</sup> October 2018:

- 2016: 185 observers participated in the bird count, submitting 294 checklists (Figure 1)  
2017: 221 observers participated in the bird count, submitting 286 checklists (Figure 1)  
2018: 284 observers participated in the bird count, submitting 465 checklists (Figure 1)
- 2016: Submitted checklists ranged from between 1 and 8 per registered user (average of 2.4 per registered user)  
2017: Submitted checklists ranged from between 1 and 16 per registered user (average of 2.3 per registered user)  
2018: Submitted checklists ranged from between 1 and 11 per registered user (average of 2.4 per registered user)
- 2016: The combined duration that observers surveyed over was 90 hours and 55 minutes  
2017: The combined duration that observers surveyed over was 91 hours and 33 minutes  
2018: The combined duration that observers surveyed over was 148 hours and 34 minutes
- 2016: The number of birds recorded ranged from 1 to 311 per registered user, with an average of 53 birds recorded per registered user  
2017: The number of birds recorded ranged from 1 to 366 per registered user, with an average of 60 birds recorded per registered user  
2018: The number of birds recorded ranged from 1 to 445 per registered user, with an average of 51 birds recorded per registered user
- 2016: A total of 6,482 individual birds were observed and recorded during bird week (Table 1)  
2017: A total of 7,316 individual birds were observed and recorded during bird week (Table 1)  
2018: A total of 10,110 individual birds were observed and recorded during bird week (Table 1, Figure 2)
- 2016: 132 bird species were recorded (Table 1)  
2017: 119 bird species were recorded (Table 1)  
2018: 148 bird species were recorded (Table 1)

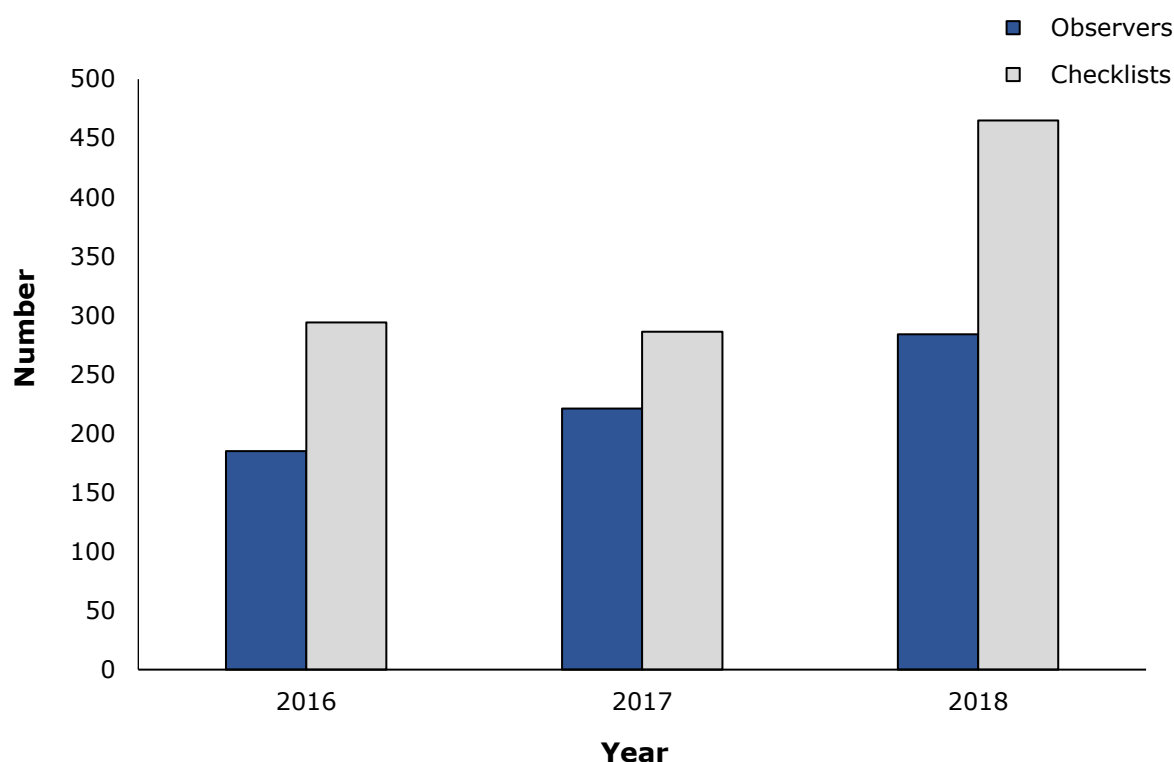
- 24 bird species detected in the 2018 Aussie Backyard Bird Count were not detected in either the 2017 or 2016 Aussie Backyard Bird Counts. Three species were detected in 2017 that were not detected in either 2018 or 2016. Twenty species were only detected in 2016 (Table 1).
- 2016: The reporting rate for species (percentage of surveys a species was detected in) ranged from 0.34% to 73.81% (Table 1).

2017: The reporting rate for species ranged from 0.35% to 62.59% (Table 1).

2018: The reporting rate for species ranged from 0.21% to 68.17% (Table 1).

Species which had lots of individuals detected but were associated with a low reporting rate indicates that multiple birds were detected within single surveys (i.e. seen in large flocks).

- 2018: 45 registered schools (kindergarten to high school) participated in the Aussie Backyard Bird Count within New South Wales which comprised of 377 participants submitting 147 checklists totalling 4,826 birds counted representing 112 bird species



**Figure 1:** Comparison of the number of observers and number of checklists submitted during the Aussie Backyard Bird Count over the last three years for the Wingecarribee Shire Council.

**Table 1:** The complete species list, number of individuals observed and reporting rate within the Wingecarribee Shire Council boundaries during the 2018 Aussie Backyard Bird Count.

Bird Species	Count			Reporting rate (%)		
	2016	2017	2018	2016	2017	2018
Crimson Rosella	807	606	1126	73.81	62.59	67.96
Australian Magpie	598	619	932	57.14	59.09	68.17
Sulphur-crested Cockatoo	438	480	904	41.50	39.86	49.25
Noisy Miner	369	370	649	31.29	29.37	35.27
Australian King-Parrot	275	220	574	34.69	29.37	43.01
Galah	228	235	402	22.45	26.22	27.74
Common Myna*	268	247	363	20.07	25.17	19.78
Pied Currawong	271	195	346	36.39	34.27	35.27
Australian Wood Duck	180	571	313	13.27	14.34	11.40
Eastern Rosella	179	143	296	23.13	20.28	18.49
Little Corella	93	173	296	9.18	9.44	13.12
Crested Pigeon	87	111	258	14.63	17.13	20.86
Australian Raven	153	203	254	25.17	27.97	24.73
Magpie-lark	203	191	242	31.29	31.47	25.59
Satin Bowerbird	75	78	238	14.63	13.29	24.73
Laughing Kookaburra	91	122	222	18.03	22.03	27.74
Red Wattlebird	144	97	191	26.53	17.13	21.51
House Sparrow*	109	167	163	5.78	10.14	8.17
Superb Fairy-wren	134	166	154	16.33	15.03	11.61
Pacific Black Duck	36	210	118	5.44	8.04	8.17
Common Blackbird*	100	34	103	15.31	9.09	10.32
Common Starling*	92	104	103	7.82	7.34	5.81
Little Wattlebird	19	55	99	2.38	10.14	10.75
Eastern Spinebill	71	33	95	12.59	7.69	10.75
Bell Miner	1	0	77	0.34	0.00	2.37
Welcome Swallow	86	83	73	12.59	10.49	6.45
Eurasian Coot	1	184	72	0.34	2.45	1.94
Rainbow Lorikeet	201	52	60	13.27	5.94	5.16
White-winged Chough	26	6	58	2.38	0.70	2.15
Silvereye	37	19	54	3.06	2.10	3.23
Straw-necked Ibis	0	12	51	0.00	0.35	0.43
Grey Butcherbird	35	28	50	9.18	5.59	9.03
Wonga Pigeon	29	27	49	1.70	4.55	3.23
Yellow-tailed Black-Cockatoo	36	101	47	4.42	9.09	4.52
White-browed Scrubwren	24	10	46	3.74	1.40	2.58
Willie Wagtail	64	52	46	8.50	9.79	6.24



Bird Species	Count			Reporting rate (%)		
	2016	2017	2018	2016	2017	2018
Purple Swamphen	5	38	45	1.02	3.15	3.44
Yellow-faced Honeyeater	49	11	45	8.16	1.75	3.87
Eastern Whipbird	19	19	42	4.08	3.85	6.88
Grey Fantail	38	12	35	7.14	3.15	5.38
Rock Dove *	0	80	35	0.00	2.45	0.86
New Holland Honeyeater	2	8	32	0.68	1.75	2.37
Dusky Woodswallow (VU)	16	13	31	0.68	2.10	1.29
Brown Thornbill	47	18	30	5.44	2.10	2.15
Eastern Koel	32	28	30	6.12	7.69	4.30
Long-billed Corella	56	8	28	4.08	1.05	1.29
Masked Lapwing	31	24	27	3.40	4.20	3.23
Hardhead	1	87	25	0.34	1.05	1.08
Australian White Ibis	7	11	24	1.02	0.70	1.29
Brown Gerygone	12	11	24	1.70	1.75	1.51
Common Greenfinch*	11	5	23	1.36	0.70	1.51
White-faced Heron	36	58	23	5.78	9.44	3.01
Striated Pardalote	15	13	21	4.42	1.75	2.37
Topknot Pigeon	4	16	21	1.02	2.10	2.15
Grey Shrike-thrush	27	2	20	6.12	0.35	2.58
Red-browed Finch	49	20	20	3.74	2.80	1.29
Spotted Dove*	7	318	18	1.36	1.75	2.37
Superb Lyrebird	8	11	18	1.70	2.80	2.58
Dusky Moorhen	2	20	16	0.68	3.85	1.29
Gang-gang Cockatoo (VU)	16	60	16	2.04	3.50	2.15
Black-faced Cuckoo-shrike	15	25	13	4.08	4.90	2.37
Common Bronzewing	2	12	13	0.68	2.80	1.29
Glossy Black-Cockatoo (VU)	7	12	13	1.02	1.05	1.29
Little Raven	67	33	13	8.84	4.20	1.51
Domestic Duck*	0	30	12	0.00	1.75	0.65
Striated Thornbill	6	11	12	1.02	1.05	1.51
Channel-billed Cuckoo	4	3	11	1.36	1.05	1.94
Dollarbird	4	11	10	0.68	1.75	1.72
Spotted Pardalote	32	5	10	6.46	1.75	1.72
White-throated Treecreeper	16	3	10	3.74	1.05	0.86
Lewin's Honeyeater	13	17	9	2.38	2.80	1.08
Australian Reed-Warbler	12	10	8	1.02	3.15	1.51
Nankeen Night-Heron	0	0	8	0.00	1.05	0.43
Sacred Kingfisher	9	5	8	2.72	1.40	1.08
Tree Martin	7	8	8	1.02	0.70	0.22

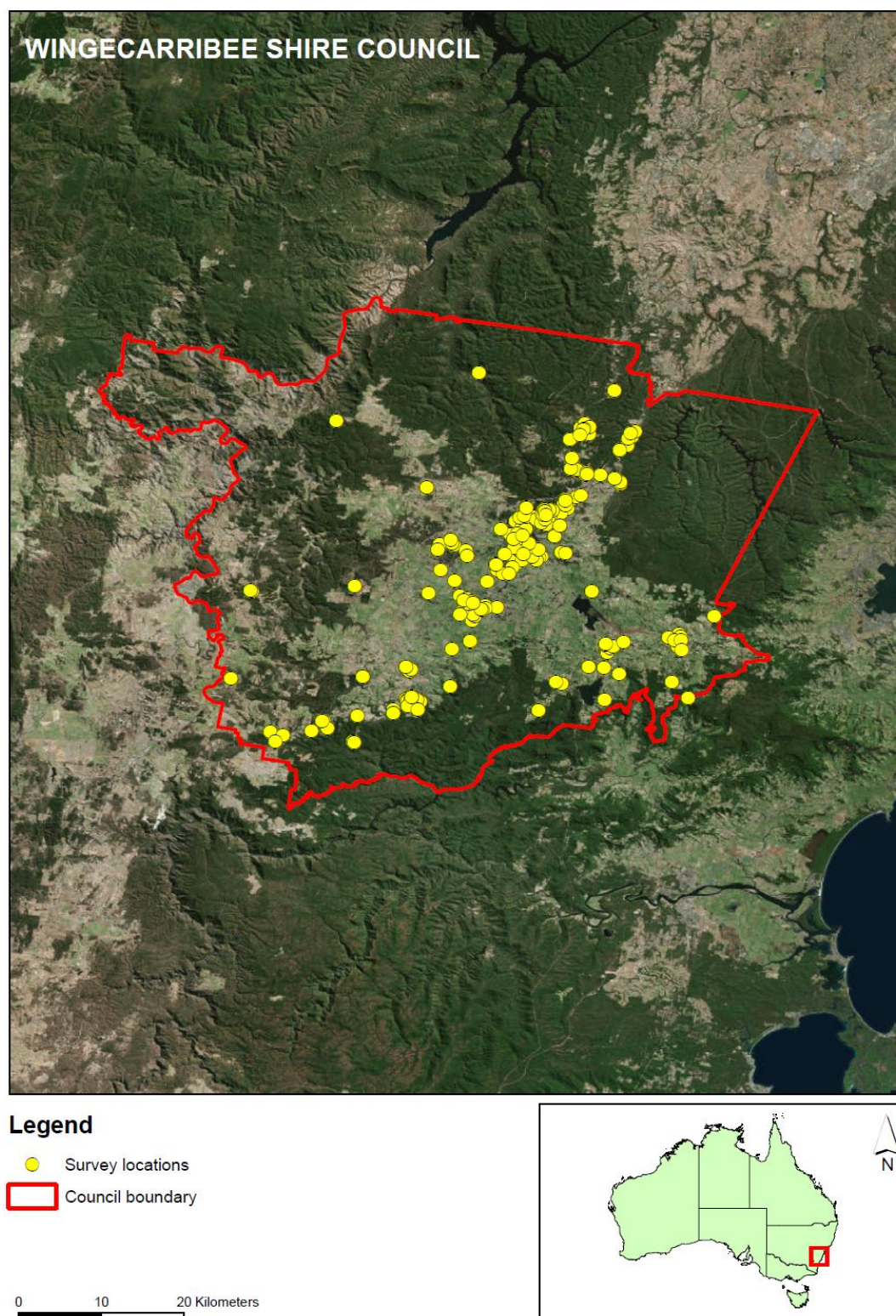
Bird Species	Count			Reporting rate (%)		
	2016	2017	2018	2016	2017	2018
Peaceful Dove	0	3	7	0.00	0.35	0.86
Rufous Whistler	6	9	7	1.02	1.40	0.86
Yellow-rumped Thornbill	4	1	6	1.02	0.35	0.22
Brown Cuckoo-Dove	0	4	5	0.34	1.05	0.86
Brown-headed Honeyeater	1	1	5	0.34	0.35	0.43
Little Black Cormorant	1	8	5	0.34	1.40	0.86
Little Lorikeet (VU)	0	0	5	0.00	0.00	0.22
Noisy Friarbird	3	19	5	0.68	0.70	0.86
Australasian Grebe	1	13	4	0.34	4.55	0.65
Domestic Goose*	0	2	4	0.00	0.35	0.43
Eastern Yellow Robin	11	8	4	3.06	2.45	0.65
Freckled Duck (VU)	0	0	4	0.00	0.00	0.22
Jacky Winter	27	4	4	1.36	0.70	0.43
Plumed Whistling-Duck	0	0	4	0.00	0.00	0.22
Wedge-tailed Eagle	0	7	4	0.00	1.40	0.65
Western Gerygone	0	0	4	0.00	0.00	0.22
White-headed Pigeon	2	2	4	0.68	0.70	0.43
White-necked Heron	1	15	4	0.34	2.10	0.65
Fan-tailed Cuckoo	2	3	3	0.68	0.70	0.65
Grey Currawong	7	10	3	1.36	2.10	0.43
Little Friarbird	0	1	3	0.00	0.35	0.22
Musk Lorikeet	7	0	3	0.34	0.00	0.22
Pied Butcherbird	3	8	3	1.02	1.40	0.43
Rufous Fantail	0	1	3	0.00	0.35	0.43
Tawny Frogmouth	7	3	3	0.68	0.70	0.65
White-bellied Sea-Eagle (VU)	0	0	3	0.00	0.00	0.43
White-browed Woodswallow	0	0	3	0.00	0.00	0.22
White-throated Gerygone	2	1	3	0.68	0.35	0.22
Yellow Thornbill	19	0	3	1.02	0.00	0.43
Yellow-billed Spoonbill	0	0	3	0.00	0.00	0.22
Australasian Darter	0	2	2	0.00	0.35	0.22
Australian Hobby	0	1	2	0.00	0.35	0.43
Australian Pelican	1	20	2	0.34	1.40	0.43
Australian Shelduck	0	1	2	0.00	0.35	0.22
Brush Bronzewing	0	0	2	0.00	0.00	0.22
Buff-rumped Thornbill	2	30	2	0.68	1.75	0.22
Cockatiel	12	0	2	0.68	0.70	0.22
Crested Shrike-tit	0	0	2	0.00	0.00	0.22
Great Crested Grebe	1	0	2	0.34	0.00	0.22

Bird Species	Count			Reporting rate (%)		
	2016	2017	2018	2016	2017	2018
Green Catbird	11	0	2	2.04	0.00	0.22
Hoary-headed Grebe	0	0	2	0.00	0.00	0.22
Little Pied Cormorant	1	2	2	0.34	0.35	0.22
Musk Duck	0	0	2	0.00	0.00	0.22
Rufous Songlark	0	0	2	0.00	0.00	0.22
Scaly-breasted Lorikeet	0	4	2	0.00	0.35	0.22
Australasian Figbird	0	0	1	0.00	0.00	0.22
Azure Kingfisher	0	1	1	0.00	0.35	0.22
Barking Owl (VU)	0	0	1	0.34	0.00	0.22
Black Swan	4	1	1	0.68	0.35	0.22
Black-chinned Honeyeater (VU)	0	0	1	0.00	0.00	0.22
Black-tailed Native-hen	0	0	1	0.00	0.00	0.22
Brown Goshawk	0	0	1	0.00	0.00	0.22
Brown Quail	0	2	1	0.00	0.35	0.22
Brown Treecreeper (VU)	2	2	1	0.68	0.35	0.22
Crescent Honeyeater	4	0	1	0.68	0.00	0.22
Golden-headed Cisticola	6	0	1	0.68	0.00	0.22
Great Cormorant	0	0	1	0.00	0.00	0.22
Grey Teal	4	4	1	0.34	0.70	0.22
Hooded Robin (VU)	1	5	1	0.34	1.05	0.22
Large-billed Scrubwren	0	0	1	0.00	0.00	0.22
Latham's Snipe	1	0	1	0.34	0.00	0.22
Magpie Goose (VU)	0	0	1	0.00	0.00	0.22
Olive-backed Oriole	5	0	1	1.70	0.00	0.22
Peregrine Falcon	0	0	1	0.00	0.00	0.22
Pied Cormorant	2	4	1	0.68	0.70	0.22
Powerful Owl (VU)	0	0	1	0.00	0.00	0.22
Rockwarbler	1	0	1	0.34	0.00	0.22
Scarlet Robin (VU)	0	0	1	0.00	0.00	0.22
Southern Boobook	2	1	1	0.68	0.35	0.22
Whistling Kite	0	2	1	0.00	0.35	0.22
White-fronted Chat (VU)	0	0	1	0.00	0.00	0.22
White-naped Honeyeater	0	0	1	0.00	0.00	0.22
Yellow-throated Scrubwren	1	0	1	0.34	0.00	0.22
Bassian Thrush	1	0	0	0.34	0.00	0.00
Black Duck-Mallard hybrid*	0	2	0	0.00	0.35	0.00
Black Kite	2	0	0	0.34	0.00	0.00
Black-shouldered Kite	1	0	0	0.34	0.00	0.00
Blue-faced Honeyeater	2	10	0	0.34	0.35	0.00

Bird Species	Count			Reporting rate (%)		
	2016	2017	2018	2016	2017	2018
Brown Falcon	1	0	0	0.34	0.00	0.00
Chestnut Teal	6	2	0	0.34	0.35	0.00
Chestnut-rumped Heathwren	6	0	0	0.68	0.00	0.00
Cicadabird	2	0	0	0.34	0.00	0.00
Double-barred Finch	3	0	0	0.68	0.00	0.00
Eurasian Skylark	1	0	0	0.34	0.00	0.00
European Goldfinch	3	0	0	0.34	0.00	0.00
Golden Whistler	3	3	0	1.02	1.05	0.00
Horsfield's Bronze-Cuckoo	1	0	0	0.34	0.00	0.00
Leaden Flycatcher	2	0	0	0.34	0.00	0.00
Nankeen Kestrel	0	1	0	0.00	0.35	0.00
Pallid Cuckoo	7	0	0	0.34	0.00	0.00
Red-capped Plover	10	0	0	0.34	0.00	0.00
Satin Flycatcher	6	0	0	1.02	0.00	0.00
Scarlet Honeyeater	2	10	0	0.34	0.35	0.00
Silver Gull	0	3	0	0.00	0.35	0.00
Shining Bronze-Cuckoo	1	0	0	0.34	0.00	0.00
Square-tailed Kite	1	0	0	0.34	0.00	0.00
Swamp Harrier	1	0	0	0.34	0.00	0.00
Torresian Crow	3	0	0	0.34	0.00	0.00
Varied Sittella	2	0	0	0.34	0.00	0.00
White-eared Honeyeater	1	0	0	0.34	0.00	0.00
White-plumed Honeyeater	1	0	0	0.34	0.00	0.00
Zebra Finch	4	0	0	0.34	0.00	0.00

\* Introduced species; ‡Naturalised species to New South Wales; VU = Vulnerable (BirdLife Australia, 2018; NSW Government, 2018).

### 3. Distribution Map



**Figure 2:** Bird observations recorded within the Wingecarribee Shire Council boundaries during the 2018 Aussie Backyard Bird Count. Bird observations recorded in a single survey overlap as they have the same GPS co-ordinates.

#### 4. Species List: Least Common

The least commonly observed bird species recorded within the Wingecarribee Shire Council boundaries all corresponded to a single observation and included:

- Australasian Figbird
- Azure Kingfisher
- Barking Owl (VU)
- Black-chinned Honeyeater (VU)
- Black-tailed Native-hen
- Black Swan
- Brown Goshawk
- Brown Quail
- Brown Treecreeper (VU)
- Crescent Honeyeater
- Golden-headed Cisticola
- Great Cormorant
- Grey Teal
- Hooded Robin (VU)
- Large-billed Scrubwren
- Latham's Snipe
- Magpie Goose
- Olive-backed Oriole
- Peregrine Falcon
- Pied Cormorant
- Powerful Owl (VU)
- Rockwarbler
- Scarlet Robin (VU)
- Southern Boobook
- Whistling Kite
- White-fronted Chat (VU)
- White-naped Honeyeater
- Yellow-throated Scrubwren

All of the least commonly detected birds are native to Australia. Seven of the listed species are listed as Vulnerable in New South Wales, while the remaining species are considered to have secure populations within New South Wales. The declining populations of the threatened bird species in New South Wales may partly account for the single observations recorded for these species during bird week.

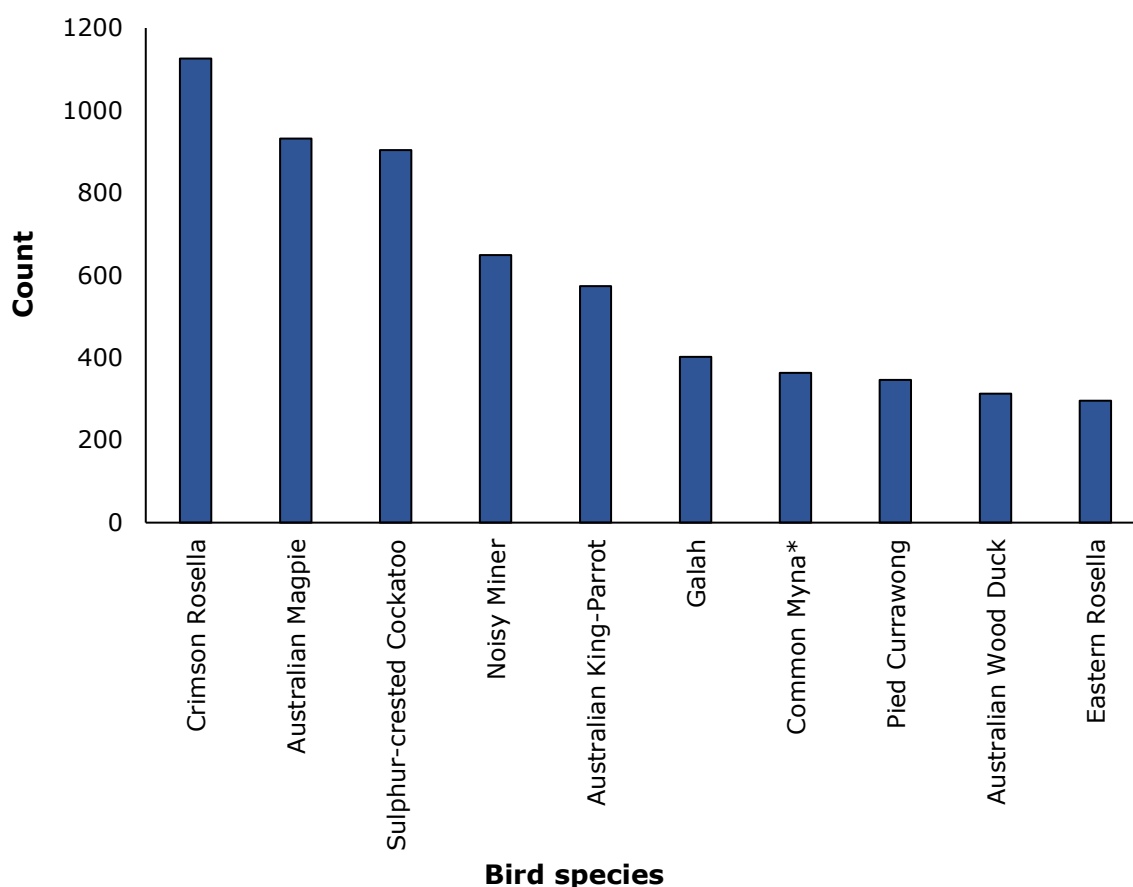
Six of the least commonly detected species are raptors, three species are nocturnal and eight species are associated with water habitats. The behaviours and habitat requirements of these species may account for the single observations recorded during bird week, especially if the majority of surveys are occurring in people's backyards during daylight hours.



## 5. Species List: Most Common

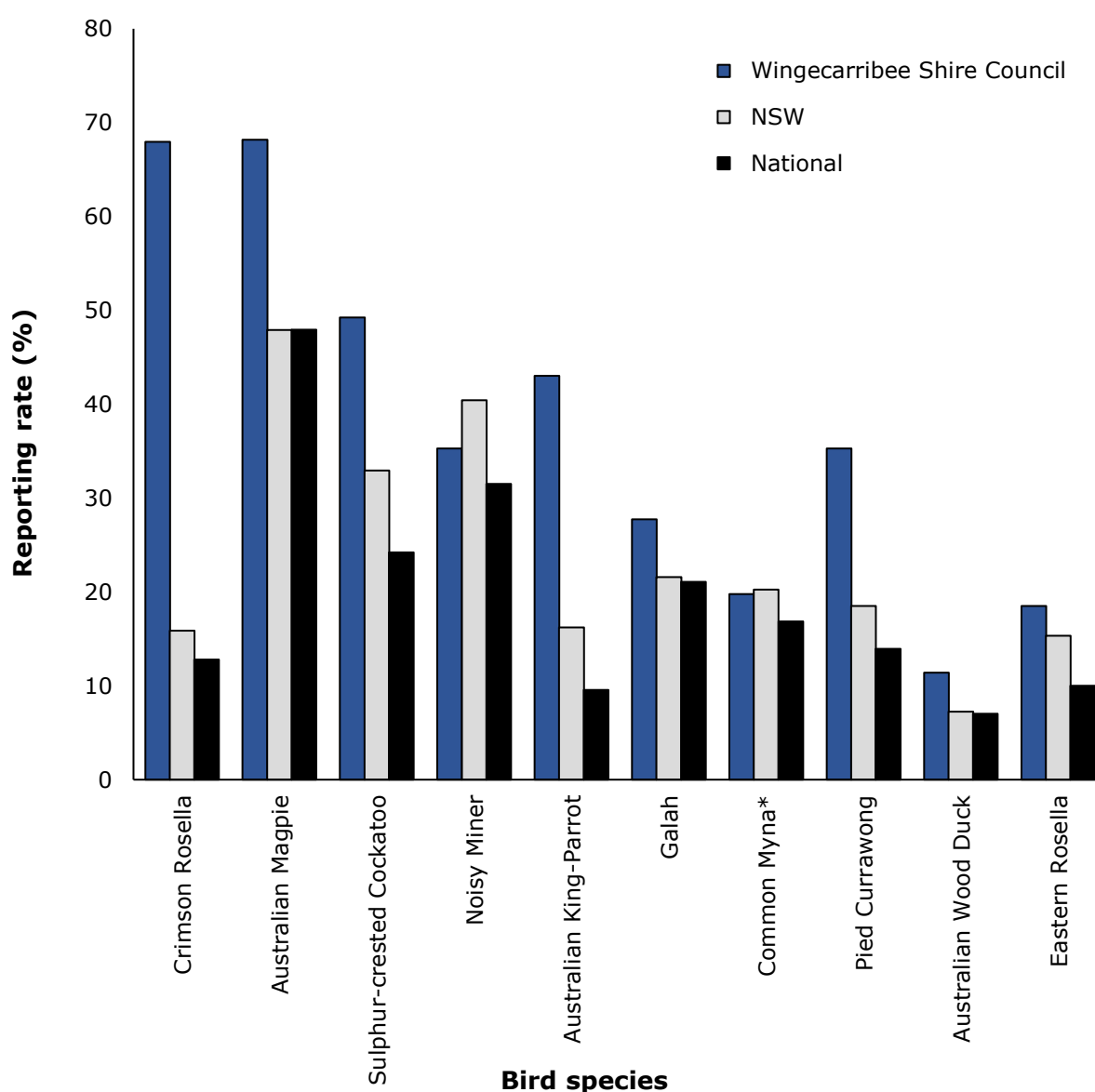
The ten most commonly observed bird species recorded within the Wingecarribee Shire Council boundaries ranged from 1,126 to 296 observations and included both native and introduced species (Figure 3). All ten species are considered to have secure populations within New South Wales.

Of the top ten species, the Sulphur-crested Cockatoo and Noisy Miner were also in the top three species counted within New South Wales during the Aussie Backyard Bird Count, as well as being in the top four species most commonly counted nationally (Figure 3; Appendix 1). The number of Sulphur-crested Cockatoos observed within the Wingecarribee Shire Council represented 1.8% of the total number of birds recorded for the species within the entire state, while the number of Noisy Miners observed represented 1.0% of the total number observed in New South Wales. Overall, four of the most commonly detected bird species in the Wingecarribee Shire Council were in the top ten most commonly recorded species nationwide (Figure 3; Appendix 1). The Rainbow Lorikeet which was the most counted bird species both nationally and in New South Wales was not amongst the top ten counted birds within the Wingecarribee Shire Council.



**Figure 3:** The ten most commonly observed bird species within the Wingecarribee Shire Council boundaries during the 2018 Aussie Backyard Bird Count. \* indicates introduced species.

All of the ten most commonly detected species recorded within the Wingecarribee Shire Council boundaries had higher reporting rates compared to the national reporting rates for each species (Figure 4). The reporting rates for the Noisy Miner and Common Myna were both lower than the reporting rates within New South Wales; all of the other eight species had higher reporting rates (Figure 4). Of interest, the reporting rate for the introduced Common Myna within the Wingecarribee Shire Council was comparable to the New South Wales reporting rate (Figure 4). The Crimson Rosella and Australian Magpie were detected in over half of the surveys conducted within the Wingecarribee Shire Council boundaries during the 2018 Aussie Backyard Bird Count, while the Sulphur-crested Cockatoo was detected in 49% of all surveys conducted (Figure 4).



**Figure 4:** Comparison between the reporting rates of the top ten counted species during the 2018 Aussie Backyard Bird Count within the Wingecarribee Shire Council boundaries, New South Wales and nationally. \* indicates introduced species.



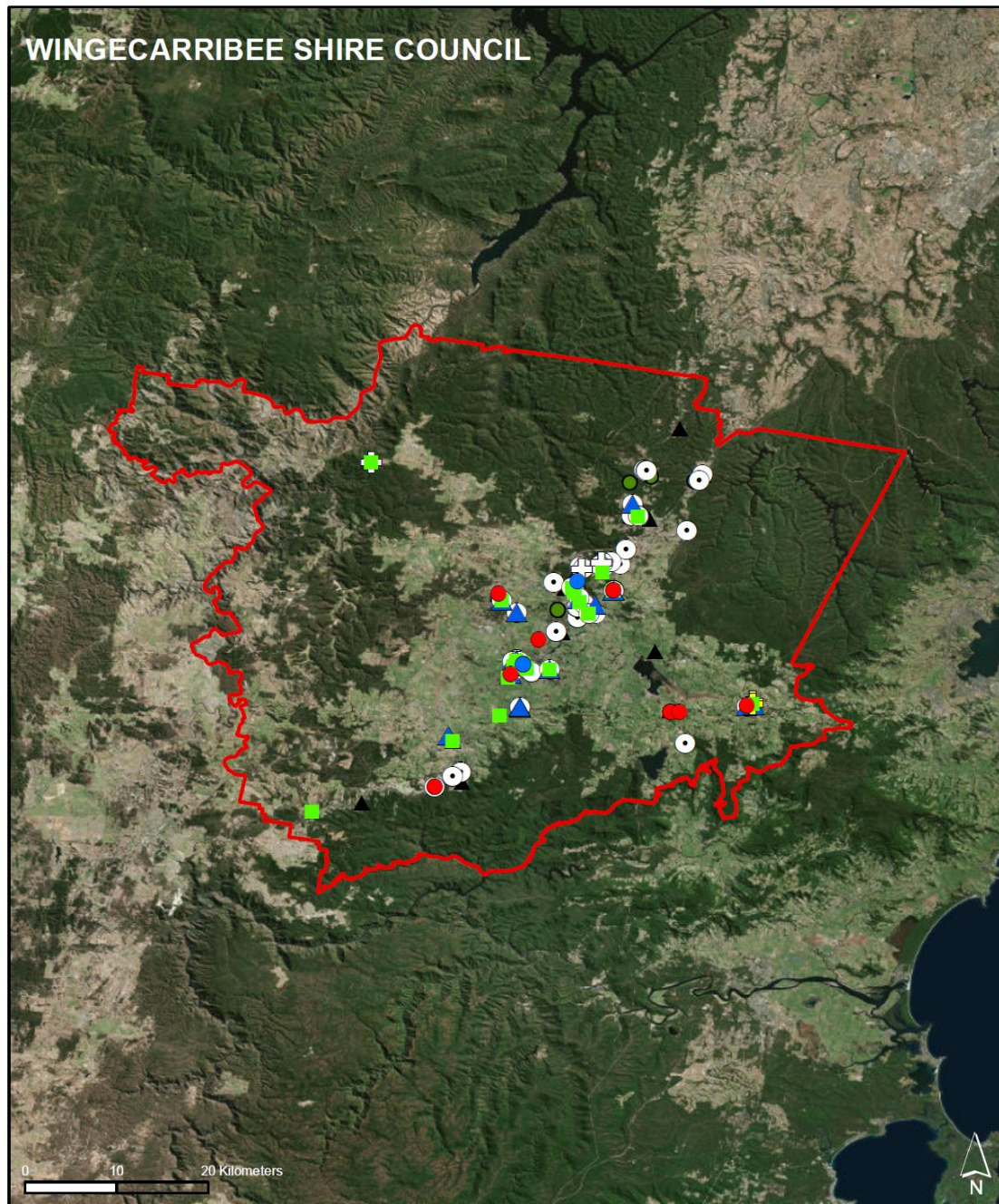
## 6. Introduced Species

Nine introduced bird species were observed and recorded within the Wingecarribee Shire Council boundaries during the 2018 Aussie Backyard Bird Count (Table 2, Figure 5). Introduced species were mainly observed throughout the central region of the council's boundaries corresponding to the more populated urban regions (Figure 5). There were largely no detections of introduced species in the western and eastern regions including Wombeyan Caves, Bullio, Joadja, Canyonlegith, Belanglo, High Rage and the Nattai National Park (Figures 5, 6). The majority of the recorded introduced species overlapped in their distribution (Figure 5). The highest concentrations of introduced species occurred in Moss Vale (259 birds) and Mittagong (187 birds; Figure 6).

The Common Myna was the most commonly recorded introduced species within the Wingecarribee Shire Council (Table 2). The number of individuals counted for this species was nearly double that of the House Sparrow which was the second most commonly detected introduced species (Table 2). Of the introduced species detected, the Common Myna was recorded in the most surveys, being recorded in nearly 20% of all the surveys conducted in the Wingecarribee Shire Council (Table 2). A high bird count relative to surveys conducted indicates that observers encounter multiple individuals either throughout the duration of the survey period or all together (e.g. in a flock; Table 2).

**Table 2:** Survey statistics for the introduced bird species recorded within the Wingecarribee Shire Council boundaries during the 2018 Aussie Backyard Bird Count.

Species	Count	Proportion of total count (%)	Number of surveys detected in	Reporting rate (%)
Common Myna	363	3.59	92	19.78
House Sparrow	163	1.61	38	8.17
Common Blackbird	103	1.02	48	10.32
Common Starling	103	1.02	27	5.81
Rock Dove	35	0.35	4	0.86
Common Greenfinch	23	0.23	7	1.51
Spotted Dove	18	0.18	11	2.37
Domestic Duck	12	0.12	3	0.65
Domestic Goose	4	0.04	2	0.43

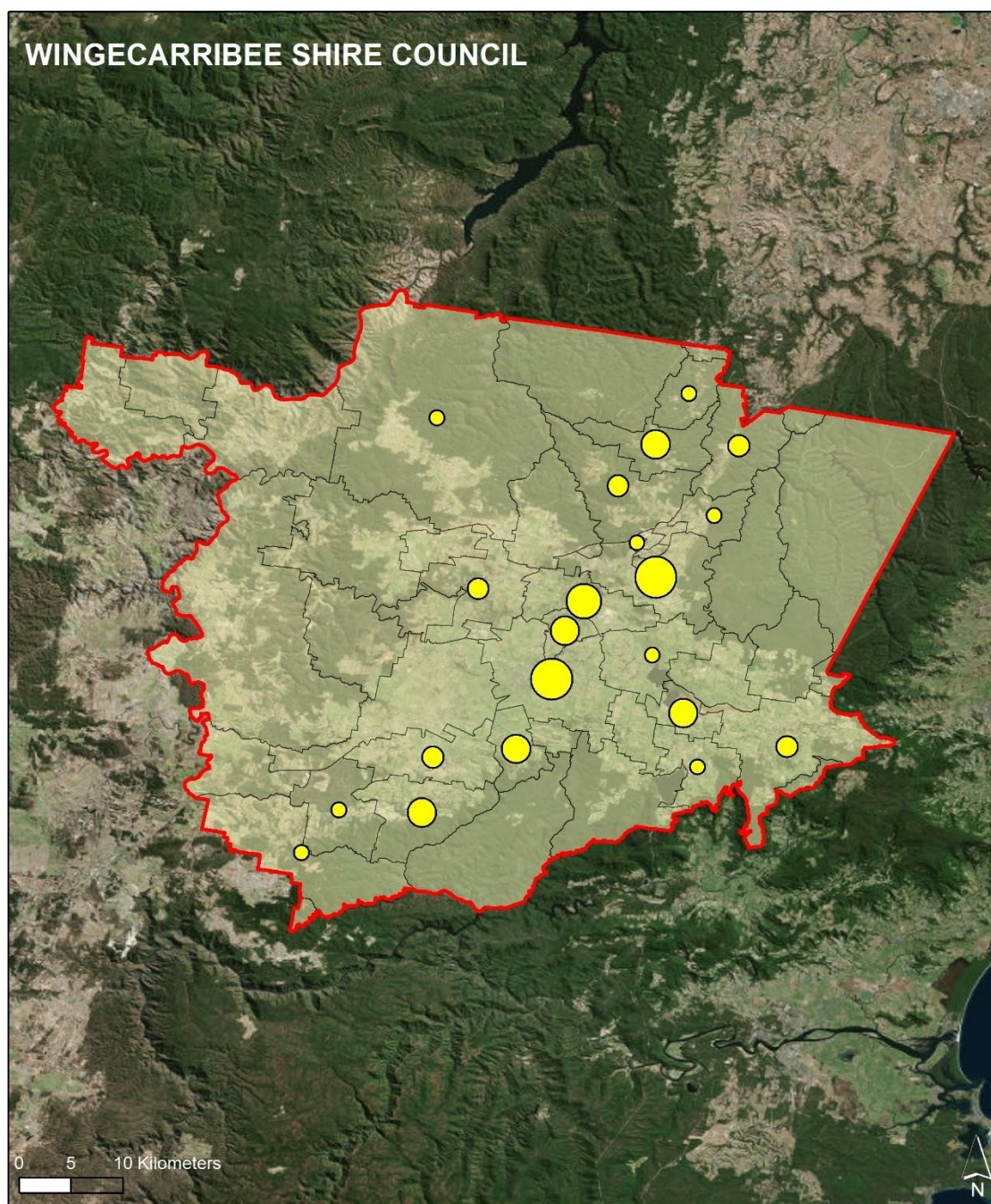


### Legend

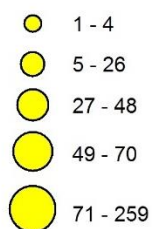
- |                     |                  |                |
|---------------------|------------------|----------------|
| ▲ Common Blackbird  | ⊕ Domestic Duck  | ● Spotted Dove |
| ● Common Greenfinch | ⊕ Domestic Goose |                |
| ◉ Common Myna       | ■ House Sparrow  |                |
| ▲ Common Starling   | ● Rock Dove      |                |

**Figure 5:** Distribution of the introduced bird species recorded within the Wingecarribee Shire Council boundaries (red line) during the 2018 Aussie Backyard Bird Count. Bird observations recorded in a single survey overlap as they have the same GPS co-ordinates.





### Legend



**Figure 6:** Number of introduced birds recorded per suburb within the Wingecarribee Shire Council boundaries (red line) during the 2018 Aussie Backyard Bird Count.

## 7. Native Species of Management Concern

Since European settlement, over 80% of Australia's temperate woodlands have been cleared resulting in many woodland-dependent bird species experiencing population declines resulting in species becoming threatened (BirdLife Australia, 2019). The temperate south-eastern regions of Australia have experienced the largest number of woodland species declines. In response to the documented declines in woodland bird species, BirdLife Australia has implemented the *Woodland Birds for Biodiversity Project* to enhance the conservation of declining and threatened woodland bird species. This project builds on the recovery efforts of the Critically Endangered Regent Honeyeater which has been the focus of long-term intensive recovery initiatives by BirdLife Australia and due to their high profile, act as a flagship species for the conservation of other threatened woodland bird species. The *Woodland Birds for Biodiversity Project* aims to:

- Monitor habitat restoration activities and bird populations to determine priority habitat sites and population trends
- Identify and monitor climate change impacts on woodland habitat and woodland-dependent bird species
- Improve the management and protection of woodland habitat on private and public land
- Restoration and revegetation of areas to improve the amount of available habitat and connectivity of this habitat
- Community education and involvement in survey efforts and monitoring

Five threatened woodland-associated bird species were detected within the Wingecarribee Shire Council boundaries during the 2018 Aussie Backyard Bird Count (Table 3; Figure 7):

- Black-chinned Honeyeater (Vulnerable)
- Brown Treecreeper (Vulnerable)
- Dusky Woodswallow (Vulnerable)
- Hooded Robin (Vulnerable)
- Scarlet Robin (Vulnerable)

Numerous species of Australian parrots are threatened in Australia. Across Australia, each species of parrot faces its own set of conservation challenges. However, the majority of parrot species are experiencing population declines due to the lack of suitable nesting sites, particularly tree hollows which parrots are dependent on especially for successful breeding, and reliable food access. Habitat loss and modification is decreasing the number of tree hollows available for threatened parrot species to nest in and the hollows that do remain are fiercely competed over which are won and subsequently used by the more aggressive bird species (e.g. Crimson Rosellas, Galahs, Starlings) and marsupials (BirdLife Australia, 2019). Without a suitably sized tree hollow, parrots are unable to breed during the breeding season.

Three threatened parrot species were detected within the Wingecarribee Shire Council boundaries (Table 3; Figure 7):

- Gang-gang Cockatoo (Vulnerable)
- Glossy Black-cockatoo (Vulnerable)
- Little Lorikeet (Vulnerable)

A number of Australian raptor species are threatened due to habitat destruction and fragmentation, loss of nesting hollows and declining prey availability. The Powerful Owl is a high-profile species listed as Vulnerable in New South Wales. To help conserve Powerful Owls, a research scientist and a member of the community developed the Powerful Owl Project in New South Wales. This project was then taken on by BirdLife Australia which seeks to study the breeding and behaviour ecology of Powerful Owls and improve the management of the species such as through the protection of crucial habitat (BirdLife Australia, 2019). The project also aims to educate the community and land managers in urban conservation, while recruiting volunteers to participate in the project and record information for future scientific analysis (BirdLife Australia, 2019). BirdLife Australia has since expanded on the success of the Powerful Owl project in Sydney implementing a Melbourne Powerful Owl project.

Three Vulnerable raptor species was detected within the Wingecarribee Shire Council boundaries (Table 3; Figure 7):

- Barking Owl (Vulnerable)
- Powerful Owl (Vulnerable)
- White-bellied Sea-Eagle (Vulnerable)

Numerous Australian water birds and species associated with wetlands or saltmarsh habitats are also threatened due to the continual loss and degradation of wetlands through practices such as water diversion, river regulation, clearing of land and changes in salinity (BirdLife Australia, 2019). Threatened water bird species detected within the Wingecarribee Shire Council boundaries during the 2018 Aussie Backyard Bird Count (Table 3; Figure 7) include:

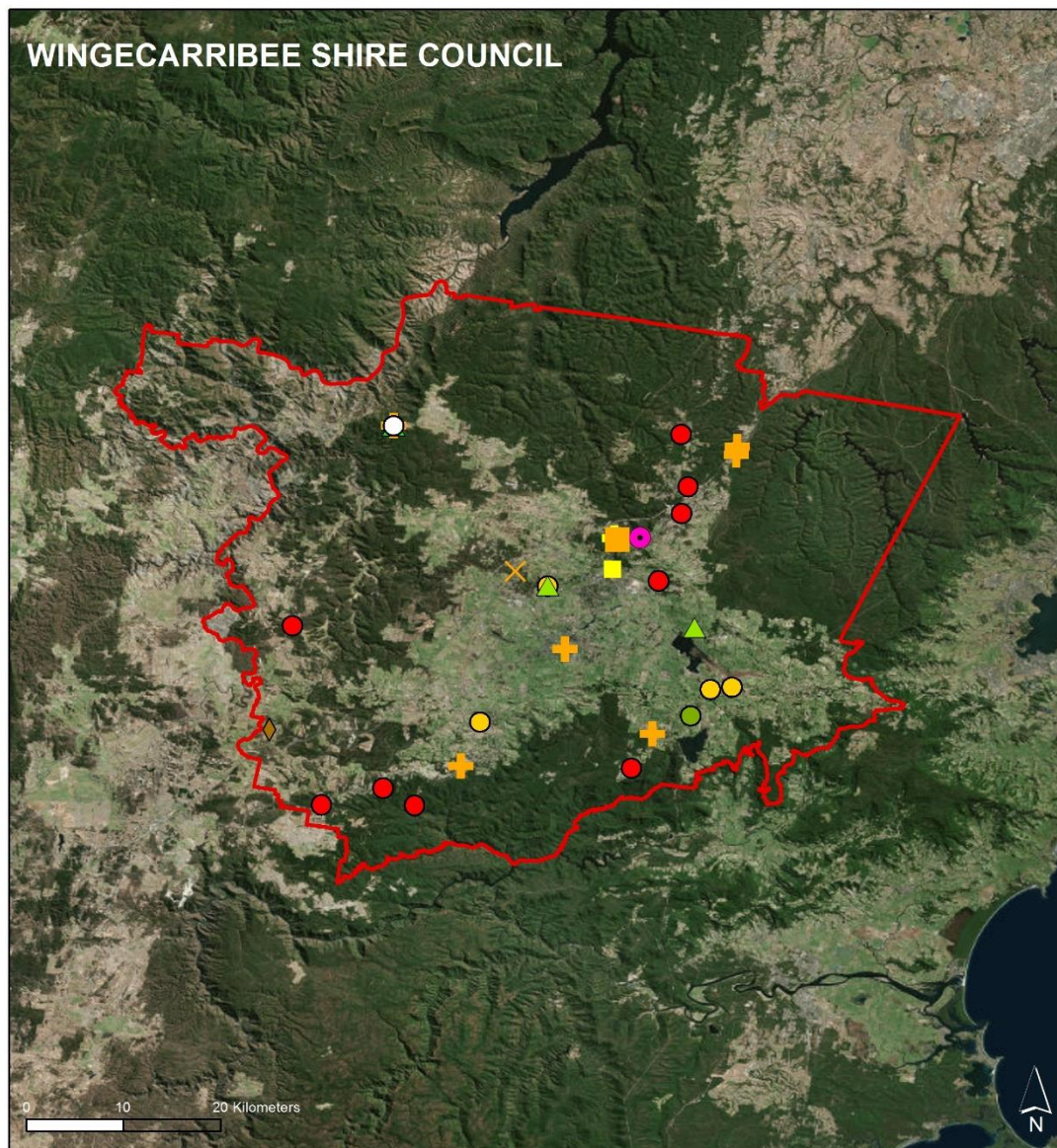
- Freckled Duck (Vulnerable)
- Magpie Goose (Vulnerable)
- White-fronted Chat (Vulnerable saltmarsh-associated species)

**Table 3:** Survey statistics for the threatened bird species recorded within the Wingecarribee Shire Council boundaries during the 2018 Aussie Backyard Bird Count.

Species	Count	Number of surveys detected in	Reporting rate (%)
Barking Owl (VU)	1	1	0.22
Black-chinned Honeyeater (VU)	1	1	0.22
Brown Treecreeper (VU)	1	1	0.22
Dusky Woodswallow (VU)	31	6	1.29
Freckled Duck (VU)	4	1	0.22
Gang-gang Cockatoo (VU)	16	10	2.15
Glossy Black-Cockatoo (VU)	13	6	1.29
Hooded Robin (VU)	1	1	0.22
Little Lorikeet (VU)	5	1	0.22
Magpie Goose (VU)	1	1	0.22
Powerful Owl (VU)	1	1	0.22
Scarlet Robin (VU)	1	1	0.22
White-bellied Sea-Eagle (VU)	3	2	0.43
White-fronted Chat (VU)	1	1	0.22

VU = Vulnerable (BirdLife Australia, 2018; NSW Government, 2018).





### Legend

- |                            |                           |
|----------------------------|---------------------------|
| ▲ Barking Owl              | ● Hooded Robin            |
| ✕ Black-chinned Honeyeater | + Little Lorikeet         |
| ◆ Brown Treecreeper        | ■ Magpie Goose            |
| ● Dusky Woodswallow        | ▲ Powerful Owl            |
| ■ Freckled Duck            | ○ Scarlet Robin           |
| ● Gang-gang Cockatoo       | ▲ White-bellied Sea-Eagle |
| + Glossy Black-Cockatoo    | ● White-fronted Chat      |

**Figure 7:** Distribution of the threatened NSW species within the Wingecarribbee Shire Council boundaries (red line) during the 2018 Aussie Backyard Bird Count. Bird observations recorded in a single survey overlap as they have the same GPS co-ordinates.

## 8. Data Limitations

An annual backyard bird survey occurring in gardens across Australia has the potential to be an extremely valuable monitoring tool for Australian bird species and communities. Over years, data collected from regions can be used to detect population trends for target species (both native and introduced), for different species guilds and for bird communities within specific areas. For example, detection of regional and/or national changes in the abundance and distribution of species especially those of management concern, such as downward trends of native species, or upward trends of pest species. Subsequent management actions can therefore be implemented in response to the survey results.

However, some caution must be taken when interpreting the results from such a survey. The backyards that are surveyed will not constitute a random selection of backyards across Australia. Previous analyses of surveys of a similar nature have suggested that participants are more likely to be interested in birds and have more 'bird-friendly' gardens than the country as a whole (Dunn et al., 2005; Spurr, 2012). If this is correct, the number of birds reported from surveyed backyards could be higher than the average number present within a typical Australian backyard. Additionally, bird species that are more likely to utilise habitat associated with backyard gardens are more likely to be recorded, thus represented, in the dataset than species that are specialised to other habitat types such as forests or water bodies. The lack of presence of these species within the dataset does not imply low abundance or scarce distribution but rather their specific habitat was not represented in the survey.

The number of counted birds may also be over-inflated due to the potential for observers to count the same bird/s multiple times during their 20 minute survey period. Furthermore, some regions may have small sample sizes, with some areas being under-represented (or not represented at all) which will influence data interpretation and population trends within an area and across the country. Survey results are also subject to temporal biases and only provide information of bird communities within a one-week period during spring. Hence, the Aussie Backyard Bird Count survey can be said to monitor population and distribution trends within the backyards of participants during the particular time period, but results may not necessarily be applicable to Australia as a whole, or to the entire region specifically being analysed.

Furthermore, the GPS co-ordinates of surveys may not be completely accurate due to numerous factors. User error may occur when selecting their location through the app, as the placement of the survey flag may not precisely fall on their true location. However, the submitted co-ordinates will provide the general location where the survey occurred. Excluding user error, the accuracy of the GPS coordinates should fall within 5-50 metres as the app waits for up to 20 seconds to obtain an accurate GPS fix. If a GPS fix can't be found within this time, less accurate coordinates may be recorded. Being indoors, near tall buildings and heavy cloud cover can all lead to obtaining a poor GPS fix, or no GPS at all. Having Wi-Fi on and being near a Wi-Fi hotspot can give a fast, accurate result in the majority of cases, but occasionally this can also result in an inaccurate point in the case of a moving Wi-Fi hotspot. Most of the time this is not a problem or it will be picked up by the user when they are looking at the map. If the app can't get a GPS fix and can't use Wi-Fi then it will fall back to using mobile towers, which can reduce accuracy to 1 km or more. The accuracy when submitting surveys on the website is much less predictable than the app. Most computers do not have a GPS so co-ordinates are reliant on either Wi-Fi or the IP address. Wi-Fi can be quite accurate, but IP address-based locations are not – only identifying which city you live in.



The skill and experience of observers conducting backyard surveys in correctly identifying birds will vary and also influence the validity of the survey results. The ABBC app provided the first instance of minimising incorrect species identifications by clearly indicating to the user if a species that they had selected to include on their checklist was “unlikely based on survey location”. Once the survey data was collected in the BirdLife Australia office, data was further vetted based on species distribution information. While every effort was undertaken to vet the survey data of mis-identified birds, it is still probable that some mis-identifications will be included in the dataset and caution is needed when analysing the results. However, a previous study has implied that identification of species occurring in participants backyards are more likely to be correct as these species are familiar to the observer and are likely to be relatively common species (Cannon, 1999).

## 9. What Birds in Backyards (BIBY) Can Offer

We are fortunate in Australia to have such a diverse and colourful range of native birds that live amongst us in the urban landscape. These birds provide an opportunity for people to appreciate and connect with wildlife on a daily basis and increasingly, research is linking biodiversity with a person’s quality of life. In Britain, bird life is so valued that the UK government uses information about their wild birds as a measure of the health of the environment as a whole. This environmental indicator is published alongside more familiar economic and social indicators and reinforces the point that the maintenance of biodiversity is a key part of sustainability.

But our urban bird communities in Australia are changing. Small birds, like Spinebills and Fairy-wrens, were once more common in parks or gardens are now disappearing and being replaced by large and aggressive species like the Noisy Miner and Pied Currawong. Changes in our gardening practices and increasing urbanisation seem to be largely responsible for this – the simplification of our gardens and the loss of shrubs has removed important food, shelter and nesting locations. If vegetation in gardens could be managed to promote a diversity of native bird species, it will provide a valuable secondary habitat for conserving native bird populations, particularly as natural habitat continues to be destroyed. In the urban landscape, engaging with the wider community is necessary in order to turn around this habitat loss and provides a unique opportunity to engage large numbers of the general community actively in the conservation of biodiversity.

Birds in Backyards (BIBY) encourages people to learn in their own space in order to establish an initial connection with the natural world in a somewhat unnatural setting. It is not simply about providing people with information about birds in their local area, but it is about building on that initial interest and encouraging people to learn more and then take action for birds. The program takes a three-pronged approach: LEARN about Aussie birds, PARTICIPATE in surveying, and CREATE habitat and change.

BIBY can work with your council to provide resources or collaborate on projects. For example:

- Hard copy materials such as A4 Backyard Birds of... posters (that can be made available in 6 languages), bookmarks, bird trading cards, gardening advice brochures
- Train the trainer workshops and associated materials or direct public workshops
- Ongoing monitoring programs for participants via our Backyard Bird surveys with feedback provided
- Children's engagement activities and school resources – ask us about our Birds in Schools programs. Options available from fully supported to teacher-delivered

For more information, please contact Birds in Backyards Program Manager

Dr. Holly Parsons  
[holly.parsons@birdlife.org.au](mailto:holly.parsons@birdlife.org.au)

## 10. References

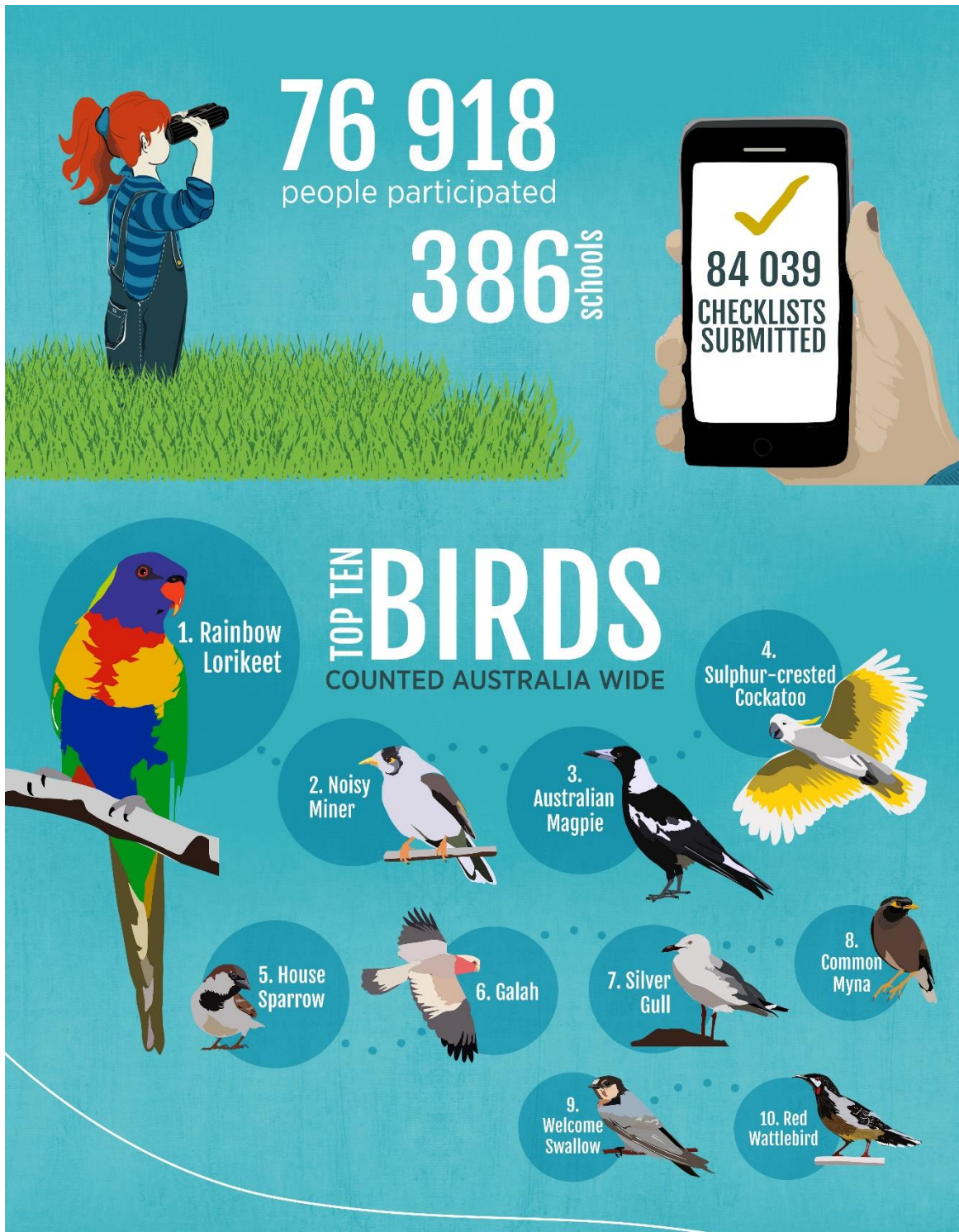
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## 11. Appendix 1 – 2018 ABBC Results



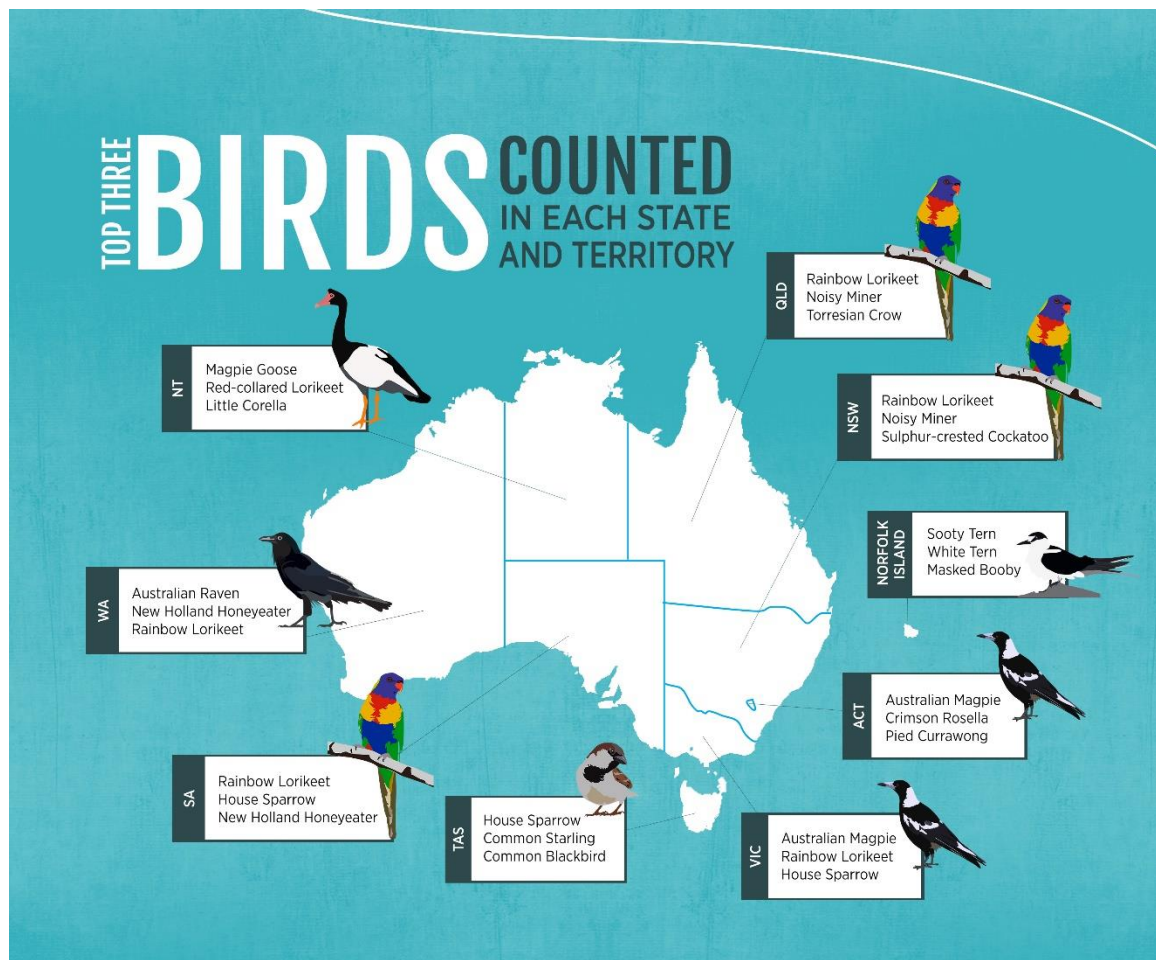
birds are in our nature





birds are in our nature

# TOP THREE BIRDS COUNTED IN EACH STATE AND TERRITORY



Join us for next year's Aussie Backyard Bird Count

## 21-27 OCTOBER 2019

