

# AUSSIE BACKYARD BIRD COUNT

**2021 Results for  
Bega Valley Shire Council**

Brolga package



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**18-24 October 2021**

  
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# Introduction



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 85% 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 four 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 Aussie Backyard Bird Count can help provide an insight into how Aussie birds are faring and results can help formulate subsequent management decisions.

**The next Aussie Backyard Bird Count will take place from 17 - 23 October 2022**

# 2021 Aussie Backyard Bird Count Results

## Count Summary

The following statistics summarise the results of the 2021 Aussie Backyard Bird Count for the **Bega Valley Shire Council**. The count ran from the **18<sup>th</sup> to 24<sup>th</sup> October 2021**.

- **364** observers participated in the bird count, submitting **914** checklists.
- Submitted checklists ranged from between **1** and **20** per registered user (average of **3.13** per registered user).
- Observers counted birds for a combined duration of **289** hours and **4** minutes.
- Observers recorded a total of **26,528** individual birds during Bird Week.
- **191** bird species were recorded (Table 1).
- The reporting rate for individual species (percentage of total surveys a species was detected in) ranged from **0.11 %** (representing a single observation) to **50.77 %** (Table 1). Low reporting rates for species with high counts indicate that many birds of these species were reported within single surveys (i.e., seen in family groups or large flocks).

**Table 1:** Total count and reporting rate (%) of all 191 bird species observed within the Bega Valley Shire Council boundaries during the 2021 Aussie Backyard Bird Count.

\* Introduced species; RA = Rare; NT = Near Threatened; VU = Vulnerable; En = Endangered, CE = Critically Endangered (based on IUCN listings; BirdLife Australia, 2019).

Bird Species	Count	Reporting Rate (%)	Bird Species	Count	Reporting Rate (%)
Little Wattlebird	1611	43.87	Great Egret	22	2.19
Welcome Swallow	1393	36.65	Olive-backed Oriole	22	2.19
Rainbow Lorikeet	1268	32.17	Whistling Kite	21	1.97
Australian Magpie	1262	50.77	Domestic Duck *	21	1.2
Galah	1181	27.9	Australian Reed-Warbler	21	1.09
Sulphur-crested Cockatoo	1134	23.41	Hooded Plover (CE)	21	0.98
Silver Gull	1062	8.86	Australasian Gannet	20	0.55
Red Wattlebird	926	31.4	Oriental Dollarbird	16	1.09
Little Corella	902	12.36	Crescent Honeyeater	16	0.77
Bell Miner	895	17.94	Australian White Ibis	15	0.98



Australian Wood Duck	841	13.46	Australasian Figbird	15	0.55
Masked Lapwing	735	18.27	Musk Lorikeet	14	0.77
Red-browed Finch	616	10.72	Brown Quail	14	0.44
Superb Fairy-wren	607	23.41	Grey Goshawk	13	1.31
House Sparrow *	601	12.14	Black-faced Monarch	13	0.88
Australian King-Parrot	495	18.71	Leaden Flycatcher	13	0.88
Yellow-tailed Black-Cockatoo	493	10.18	Striated Pardalote	13	0.88
Satin Bowerbird	454	22.65	European Goldfinch *	13	0.77
Greater Crested Tern	399	1.31	Shining Bronze-Cuckoo	12	1.09
Black Swan	386	5.58	Nankeen Kestrel	12	0.98
Crimson Rosella	369	19.37	Pink-eared Duck	12	0.55
Common Blackbird *	341	18.82	Azure Kingfisher	11	0.88
Australian Raven	341	15.54	Australasian Pipit	10	0.55
Willie Wagtail	325	19.69	Australasian Darter	9	0.66
Grey Fantail	289	15.97	Variiegated Fairy-wren	9	0.55
Laughing Kookaburra	287	17.83	Peaceful Dove	9	0.33
New Holland Honeyeater	271	13.57	Sacred Kingfisher	8	0.77
White-headed Pigeon	269	9.63	Common Myna *	8	0.44
Eastern Whipbird	266	20.02	Rufous Fantail	7	0.55
Eastern Rosella	256	7.11	Tawny Frogmouth	7	0.44
Pied Currawong	255	12.58	Hardhead	7	0.33
Common Starling *	234	6.35	Australasian Grebe	6	0.44
Magpie-lark	223	11.16	Peregrine Falcon	5	0.55
Australian Pelican	180	6.89	Restless Flycatcher	5	0.55
Yellow-faced Honeyeater	177	7.55	Eastern Shrike-tit	5	0.33
Great Cormorant	173	3.83	Grey Teal	5	0.33
Eastern Spinebill	171	9.08	Large-billed Scrubwren	5	0.33
Pacific Black Duck	169	4.38	Scarlet Robin (VU)	5	0.33
Brown Thornbill	156	5.25	Black-faced Cormorant	5	0.22
Common Bronzewing	151	7.22	Fairy Tern	5	0.11
Crested Pigeon	147	6.89	Brown Goshawk	4	0.44
Wonga Pigeon	143	9.63	Common Cicadabird	4	0.44
Purple Swamphen	142	4.05	Rose Robin	4	0.44
Grey Butcherbird	139	10.72	Musk Duck	4	0.33
Noisy Miner	139	3.28	Buff-banded Rail	4	0.22
Bar-tailed Godwit	134	0.77	Little Lorikeet (VU)	4	0.22
Little Black Cormorant	124	3.83	Swamp Harrier	4	0.22
Dusky Woodswallow (VU)	120	3.5	Australasian Shoveler	4	0.11
Royal Spoonbill	110	1.31	Long-billed Corella	4	0.11

Chestnut Teal	106	3.61	Shy Albatross (VU)	4	0.11
Great Pied Cormorant	102	4.38	Brown Falcon	3	0.33
Spotted Dove *	97	7.22	Brush Cuckoo	3	0.33
Little Pied Cormorant	96	3.83	Domestic Goose *	3	0.33
Cattle Egret	96	0.98	Nankeen Night-Heron	3	0.33
Eurasian Coot	86	2.19	Striated Heron	3	0.33
Black-faced Cuckoo-shrike	84	6.02	Diamond Firetail (VU)	3	0.22
Noisy Friarbird	81	5.25	Muscovy Duck *	3	0.22
Tree Martin	80	1.42	White-cheeked Honeyeater	3	0.22
Eastern Koel	79	6.89	White-eared Honeyeater	3	0.22
Silvereye	78	2.95	Brown Songlark	3	0.11
Grey Shrike-thrush	75	5.58	Curlew Sandpiper (En)	3	0.11
Australian Pied Oystercatcher (En)	73	3.5	Sanderling (VU)	3	0.11
Lewin's Honeyeater	67	5.36	White-necked Heron	3	0.11
White-browed Scrubwren	65	3.28	Bassian Thrush	2	0.22
Rock Dove *	65	0.55	Caspian Tern	2	0.22
Rufous Whistler	64	4.7	Double-barred Finch	2	0.22
Eastern Yellow Robin	64	4.27	Flame Robin (VU)	2	0.22
White-bellied Sea-Eagle (VU)	59	5.03	Horsfield's Bronze-Cuckoo	2	0.22
Brown Cuckoo-Dove	56	3.17	Osprey	2	0.22
Spotted Pardalote	56	3.06	Pallid Cuckoo	2	0.22
Golden Whistler	54	4.05	Black-fronted Dotterel	2	0.11
Yellow-rumped Thornbill	53	1.09	Black-tailed Godwit (VU)	2	0.11
White-faced Heron	50	4.16	Brush Bronzewing	2	0.11
Channel-billed Cuckoo	50	3.28	Fairy Martin	2	0.11
Striated Thornbill	50	2.52	Indian Peafowl *	2	0.11
Red-capped Plover	50	0.98	Australian Owlet-nightjar	1	0.11
Little Raven	47	2.3	Barn Owl	1	0.11
White-throated Treecreeper	43	3.06	Black-shouldered Kite	1	0.11
White-winged Chough	43	0.77	Blue-billed Duck (VU)	1	0.11
Fan-tailed Cuckoo	41	3.28	Collared Sparrowhawk	1	0.11
Yellow Thornbill	41	1.75	Eastern Reef Egret	1	0.11
Scarlet Honeyeater	37	2.52	Far Eastern Curlew	1	0.11
Glossy Black-Cockatoo (VU)	36	1.42	Helmeted Guineafowl *	1	0.11
Dusky Moorhen	33	1.31	Intermediate Egret	1	0.11
Wedge-tailed Eagle	31	2.52	Little Eagle (VU)	1	0.11
Gang-gang Cockatoo	31	1.64	Mistletoebird	1	0.11
Topknot Pigeon	30	0.77	Pacific Gull	1	0.11
Little Egret	28	0.88	Red-browed Treecreeper	1	0.11

Red-necked Stint	28	0.22	Ruddy Turnstone	1	0.11
Superb Lyrebird	27	2.3	Short-tailed Shearwater	1	0.11
Jacky Winter	24	1.86	Southern Emu-wren	1	0.11
Sooty Oystercatcher (VU)	24	0.77	Spangled Drongo	1	0.11
Little Tern (En)	24	0.55	Stubble Quail	1	0.11
Brown Gerygone	23	1.86	Varied Sittella (VU)	1	0.11
White-naped Honeyeater	23	1.2	White-throated Gerygone	1	0.11
Brown-headed Honeyeater	23	0.98			

## Survey Distribution



0 10 20 30 40 50 Kilometers



### Legend

- Bega Valley Shire Council
- Bega Valley Shire Council survey locations



**Figure 1:** Bird observations recorded within Bega Valley Shire Council boundaries during the 2021 Aussie Backyard Bird Count. Bird observations that were recorded in a single survey overlap due to having the same GPS coordinates, so each yellow circle represents a single complete survey.



## Least Common Species

The least commonly observed bird species recorded within the Bega Valley Shire Council boundaries all corresponded to one single survey observation and included:

- Fairy Tern
- Australasian Shoveler
- Long-billed Corella
- Shy Albatross (VU)
- Brown Songlark
- Curlew Sandpiper (En)
- Sanderling (VU)
- White-necked Heron
- Black-fronted Dotterel
- Black-tailed Godwit (VU)
- Brush Bronzewing
- Fairy Martin
- Indian Peafowl \*
- Australian Owlet-nightjar
- Barn Owl
- Black-shouldered Kite
- Blue-billed Duck (VU)
- Collared Sparrowhawk
- Eastern Reef Egret
- Far Eastern Curlew
- Helmeted Guineafowl \*
- Intermediate Egret
- Little Eagle (VU)
- Mistletoebird
- Pacific Gull
- Red-browed Treecreeper
- Ruddy Turnstone
- Short-tailed Shearwater
- Southern Emu-wren
- Spangled Drongo
- Stubble Quail
- Varied Sittella (VU)
- White-throated Gerygone

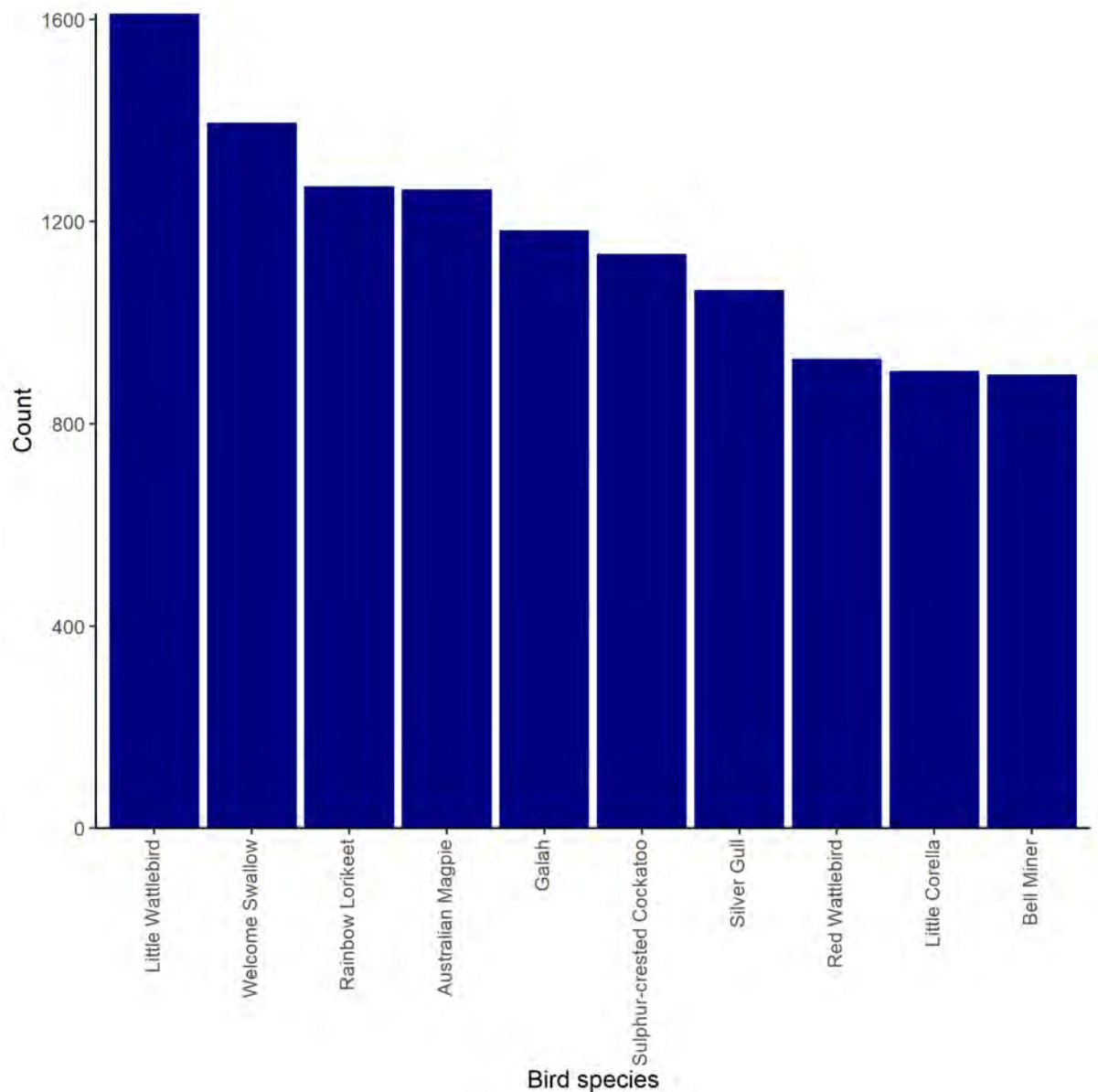
**31** of the **33** bird species reported only once are native to Australia. The Indian Peafowl and Helmeted Guineafowl are both introduced species and can persist from escaped captive animals. Seven of the 31 native species are classified as threatened in New South Wales, with the Curlew Sandpiper being classed as Endangered. Three of the 31 native species are raptors, two are nocturnal, and 15 are associated with aquatic habitats such as coastlines, lakes, and wetlands. The remaining species are typically found in woodlands or forests, away from the modified vegetation of larger towns. The behaviours and habitat requirements of these species may account for the lack of reports during Bird Week, especially if most surveys occurred in people's backyards.

## Most Common Species

All of the ten most abundant bird species recorded within the Bega Valley Shire Council boundaries are native to New South Wales (Figure 2). The top ten bird abundances ranged from **895** to **1,611** individual birds (Figure 2). All birds in the top 10 species are considered to have secure populations in New South Wales.

The most *counted* species, the Little Wattlebird was the 14<sup>th</sup>-most counted species in the state and 22<sup>nd</sup>-most counted nationally. The second-most counted species, the Welcome Swallow was the sixth-most counted in the state and seventh-most counted nationally. The Rainbow Lorikeet, the third-most counted species, was the most counted species in the state and the country. The

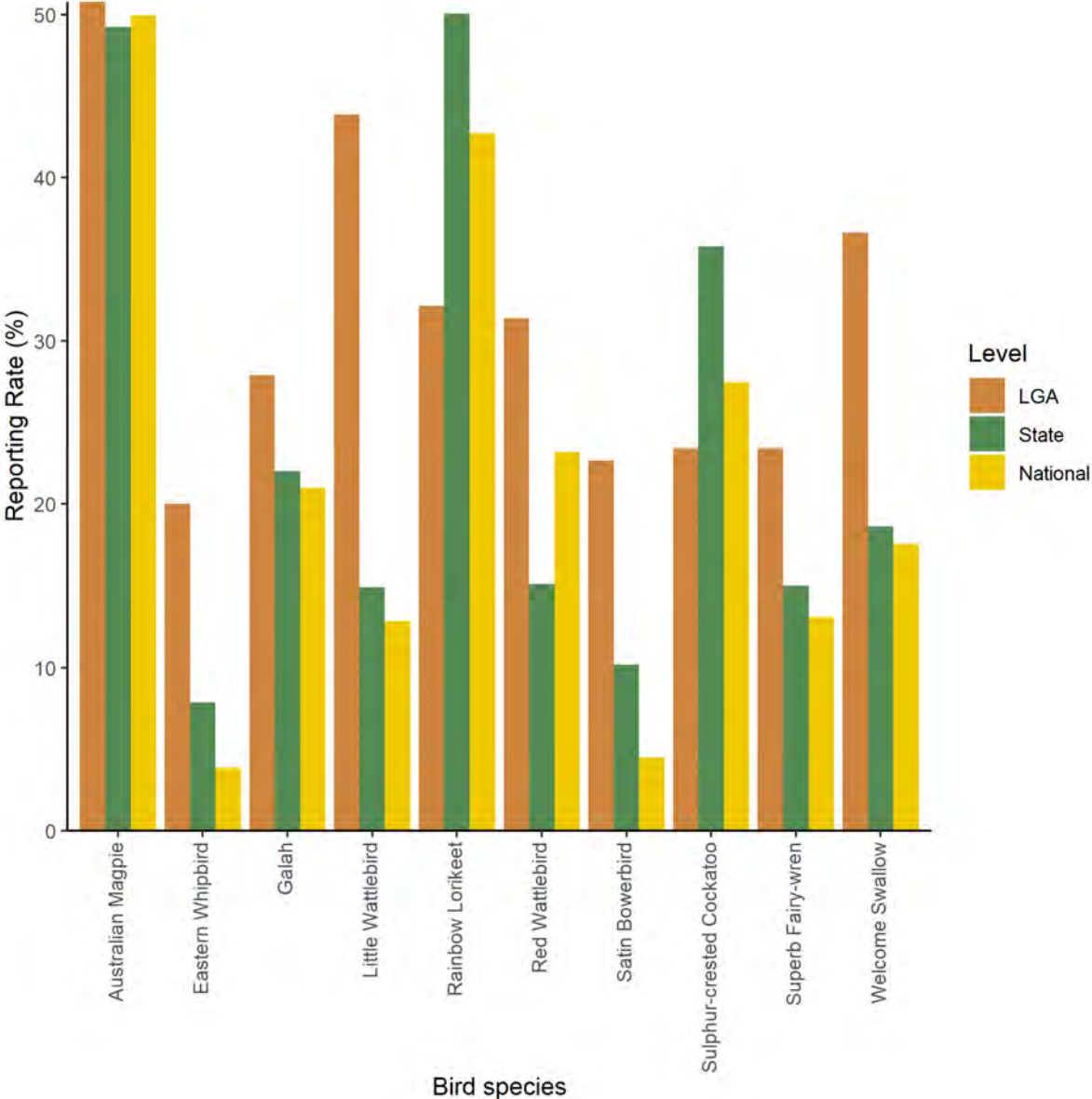
remainder of the species in the top ten mostly had similar standings to the state-wide counts reflecting the similarity of the council's urban/suburban habitat to the other urbanised regions of New South Wales (from where the vast majority of surveys were submitted). The exception here is the Bell Miner (10<sup>th</sup>), which was over-represented in the Bega Valley Shire Council, coming in at only 45<sup>th</sup>-most abundant in the state.



**Figure 2:** The ten most abundant bird species within the Bega Valley Shire Council boundaries during the 2021 Aussie Backyard Bird Count. \* Indicates introduced species.

Majority of the ten most frequently *reported* species within Bega Valley Shire Council boundaries were reported at higher rates than both the state and national averages (Figure 3). The Rainbow Lorikeet and Sulphur-crested Cockatoo were both reported at lower rates than both the state and

national averages. Most notably, the Welcome Swallow, Satin Bowerbird, Little Wattlebird, and Eastern Whipbird were all reported at particularly high rates compared to state and national averages. The Stain Bowerbird and Eastern Whipbird both thrive in wet forest, a habitat type which is very common within the council boundaries.



**Figure 3:** Comparison of the reporting rates (%) of the ten most frequently recorded species during the 2021 Aussie Backyard Bird Count within the Bega Valley Shire Council boundaries, with New South Wales and national reporting rates.



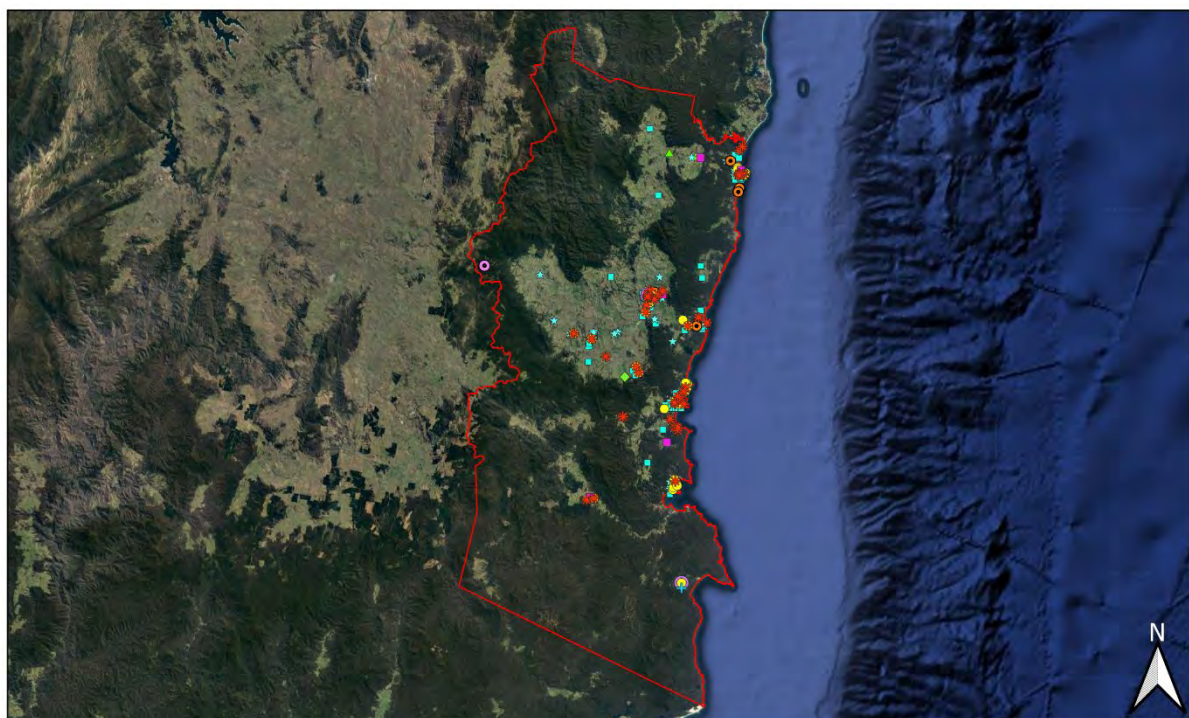
## Introduced Species

**Twelve** introduced bird species were recorded within the council boundaries during the 2021 Aussie Backyard Bird Count (Table 2, Figure 4). Introduced species records were fairly evenly spread across the Bega Valley Shire Council, yet there were more records from the urban areas of the council, and very few records from the better-vegetated forests (Figure 4). It should be noted that very few surveys were submitted from these forested areas, and the distribution maps are likely to reflect this survey bias.

The Common Blackbird (18.82 %), House Sparrow (12.14 %), and Spotted Dove (7.22 %), were the introduced species reported in the highest proportion of surveys within the council boundaries, though the Common Starling was also reported in 6.35 % of surveys. Figure 4 gives an overall indication of introduced species distribution across Bega Valley Shire Council, but individual species distributions are difficult to discern due to the overlap of records. Accordingly, the individual distribution maps for each introduced species have been provided in **Appendix 1**.

**Table 2:** Survey statistics for the introduced bird species recorded within Bega Valley Shire Council boundaries during the 2021 Aussie Backyard Bird Count.

Bird Species	Count	Proportion of total individuals (%)	Number of surveys detected in	Reporting rate (%)
House Sparrow	601	2.27	111	12.14
Common Blackbird	341	1.29	172	18.82
Common Starling	234	0.88	58	6.35
Spotted Dove	97	0.37	66	7.22
Rock Dove	65	0.25	5	0.55
Domestic Duck	21	0.08	11	1.2
European Goldfinch	13	0.05	7	0.77
Common Myna	8	0.03	4	0.44
Domestic Goose	3	0.01	3	0.33
Muscovy Duck	3	0.01	2	0.22
Indian Peafowl	2	0.01	1	0.11
Helmeted Guineafowl	1	0	1	0.11



0 10 20 30 40 50 Kilometers



### Legend

Bega Valley Shire Council	Domestic Goose	Muscovy Duck
Common Blackbird	European Goldfinch	Rock Dove
Common Myna	Helmeted Guineafowl	Spotted Dove
Common Starling	House Sparrow	
Domestic Duck	Indian Peafowl	



**Figure 4:** Distribution of the introduced bird species within the Bega Valley Shire Council boundaries during the 2021 Aussie Backyard Bird Count. Bird observations that were recorded in a single survey overlap due to having the same GPS co-ordinates.

## Native Species of Management Concern

European colonisation has had a large impact on the conservation status of Australian birds. Approximately 234 species of Australian bird are now classified by the International Union for Conservation of Nature (IUCN) as Extinct, threatened with extinction, or Near Threatened (Garnett *et al*, 2011). It is critical that we gain an understanding of where these threatened species persist so that we can implement appropriate management actions in these areas. The Aussie Backyard Bird Count provides an opportunity for community members to participate in this important work.

**Eighteen** species of bird listed as threatened were recorded within the council boundaries (Table 3, Figure 5). The White-bellied Sea-Eagle was reported in over 5 % of checklists. The Hooded Plover, a Critically Endangered shorebird was reported in almost 1 % of surveys. Figure 5 gives an overall indication of threatened species distribution across Bega Valley Shire Council, but individual species

distributions are difficult to discern due to the overlap of records. Accordingly, the individual distribution maps for each threatened species have been provided in **Appendix 2**.

**Table 3:** Threatened species recorded within Bega Valley Shire Council boundaries.

Bird Species	Status	Count	Number of surveys detected in	Reporting rate (%)
Black-tailed Godwit	VU	2	1	0.11
Blue-billed Duck	VU	1	1	0.11
Diamond Firetail	VU	3	2	0.22
Dusky Woodswallow	VU	120	32	3.5
Flame Robin	VU	2	2	0.22
Glossy Black-Cockatoo	VU	36	13	1.42
Little Eagle	VU	1	1	0.11
Little Lorikeet	VU	4	2	0.22
Sanderling	VU	3	1	0.11
Scarlet Robin	VU	5	3	0.33
Shy Albatross	VU	4	1	0.11
Sooty Oystercatcher	VU	24	7	0.77
Varied Sittella	VU	1	1	0.11
White-bellied Sea-Eagle	VU	59	46	5.03
Australian Pied Oystercatcher	EN	73	32	3.5
Curlew Sandpiper	EN	3	1	0.11
Little Tern	EN	24	5	0.55
Hooded Plover	CR	21	9	0.98





0 10 20 30 40 50 Kilometers



**Legend**

- |                               |                       |                         |
|-------------------------------|-----------------------|-------------------------|
| Bega Valley Shire Council     | Flame Robin           | Scarlet Robin           |
| Australian Pied Oystercatcher | Glossy Black-Cockatoo | Shy Albatross           |
| Black-tailed Godwit           | Hooded Plover         | Sooty Oystercatcher     |
| Blue-billed Duck              | Little Eagle          | Varied Sittella         |
| Curlew Sandpiper              | Little Lorikeet       | White-bellied Sea-Eagle |
| Diamond Firetail              | Little Tern           |                         |
| Dusky Woodswallow             | Sanderling            |                         |



**Figure 5:** Distribution of the threatened bird species within the Bega Valley Shire Council boundaries during the 2021 Aussie Backyard Bird Count. Bird observations that were recorded in a single survey overlap due to having the same GPS co-ordinates.

**Two** threatened raptor species were recorded within the Bega Valley Shire Council boundaries in 2021:

- Little Eagle (Vulnerable)
- White-bellied Sea-Eagle (Vulnerable)

A number of Australian raptor species are threatened due to habitat destruction and fragmentation, loss of nesting hollows, declining prey availability, and the use of rodenticides.

**Five** threatened woodland-associated bird species were recorded within the Bega Valley Shire Council boundaries in 2021:

- Diamon Firetail (Vulnerable)
- Dusky Woodswallow (Vulnerable)
- Flame Robin (Vulnerable)
- Scarlet Robin (Vulnerable)
- Varied Sittella (Vulnerable)

Since European settlement, over 80% of Australia's temperate woodlands have been cleared, resulting in many woodland-dependent bird species experiencing population declines and being reclassified as threatened (BirdLife Australia, 2015). 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 its high profile, acts as a flagship species for the conservation of other threatened woodland birds. 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.

**Two** threatened parrot species were recorded within the Bega Valley Shire Council boundaries in 2021:

- Glossy Black-Cockatoo (Vulnerable)
- Little Lorikeet (Vulnerable)

Numerous native parrot species are threatened in Australia, with each species facing its own set of conservation challenges. However, many parrot species are experiencing population declines due to the lack of reliable food access and suitable nesting sites, particularly mature tree hollows, which are essential for successful breeding. Habitat loss and modification is decreasing the number of suitably sized tree hollows available for threatened parrot species to nest in, and the hollows that do remain are subject to fierce competition. These hollows are often won and subsequently used by more aggressive bird species (e.g., Crimson Rosellas, Galahs, Rainbow Lorikeets and Common Starlings), European honeybees, and marsupials (BirdLife Australia, 2015).

**Two** threatened waterbird species were recorded within the Bega Valley Shire Council boundaries in 2021:

- Blue-billed Duck (Vulnerable)
- Little Tern (Endangered)

Numerous Australian waterfowl and wetland-associated birds are threatened due to the continual loss and degradation of wetlands and natural waterways, through practices such as water diversion, river regulation, land clearing and changes in salinity (BirdLife Australia, 2015).

**One** seabird species was recorded within the Bega Valley Shire Council boundaries in 2021:

- Shy Albatross (Vulnerable)

Many pelagic seabird species are threatened due to marine pollution, global warming, and bycatch.

**Six** species of threatened shorebird were recorded within the Bega Valley Shire Council boundaries during 2021:

- Black-tailed Godwit (Vulnerable)
- Sanderling (Vulnerable)
- Sooty Oystercatcher (Vulnerable)
- Australian Pied Oystercatcher (Endangered)
- Curlew Sandpiper (Endangered)
- Hooded Plover (Critically Endangered)

Shorebirds across Australia are declining due to increasing beach-use conflict with recreationalists as well as habitat loss and/or modification and increased presence of predators (BirdLife Australia, 2015). In 2007, the Shorebird 2020 Program was initiated by BirdLife Australia to:

- Raise awareness of shorebirds within the community.
- Coordinate national population monitoring through the engagement of community members.
- Conduct research to detect national population trends and the drivers causing population changes.
- Identify and protect critical shorebird habitat.



- Educate stakeholders and lobby for habitat restoration/prevention of further habitat destruction.

Additionally, shorebird species that nest solely on beaches (beach-nesting birds) in Australia are under immense pressure resulting in population declines. The greatest threat these species face is habitat disturbance from people visiting beaches. Peak beach use by humans coincides with the nesting season of the birds (spring and summer) resulting in incubation failure (eggs fail to hatch) or chick death due to abandonment or starvation while hiding from passers-by (BirdLife Australia, 2015). In 2006, BirdLife Australia implemented a Beach-nesting Birds Project which works with volunteers from the community to:

- Train volunteers to identify threats to beach-nesting birds as well as monitor them.
- Erect signage, temporary fencing and artificial shelters to protect eggs and chicks.
- Raise awareness of beach-nesting birds with beach users.
- Conduct research to improve breeding success and protection strategies.

# 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 most cases, but occasionally this can also result in a wildly inaccurate point in the case of a moving Wi-Fi hotspot. Most of the time this is not a problem or 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 even worse. The accuracy when submitting surveys on the website is much less predictable than the app. Most computers do not have a GPS so it has to rely on either Wi-Fi or the IP address. Wi-Fi can be quite accurate, but IP address-based locations are very rough – it basically just identifies which city you live in. If you are in a rural area sometimes it will just put you in the nearest major city/centre.

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 Aussie Backyard Bird Count 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 misidentifications 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).

There's always more we can be doing to protect and encourage birds – which is why you're invited to get involved with some of our other programs.





# Birds in Backyards

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 loss of urban bird diversity has both ecological and human/cultural consequences. The Birds in Backyards Program builds knowledge, skills and practical support to develop action-oriented responses to the decline of bird diversity.

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 taking action for birds, informed by their own data.

The ultimate goal of The Birds in Backyards Program is a diverse urban native bird community, achieved by behavioural change through action research, education for sustainability and advocacy. Local councils can partner with The Birds in Backyards Program to achieve education and conservation outcomes for our urban birds – let's get our communities taking action together!



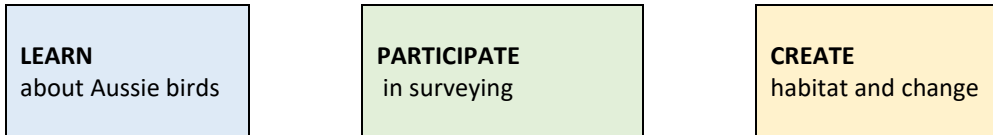
## What Birds in Backyards Can Offer

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 daily 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 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.

Our program takes a three-pronged approach:



**Birds in Backyards can work with your council to provide resources or collaborate on projects. For example:**

- Hard copy materials such as A4 Backyard Birds of 2019 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 Urban Birds Program Manager Dr. Holly Parsons – [holly.parsons@birdlife.org.au](mailto:holly.parsons@birdlife.org.au)

# Rodent poisons are killing birds – How your Council can help



While rodenticides are poisons designed to kill pest mice and rats, impact is much more far-reaching than just these pests. **Second generation anticoagulant rodenticides (SGAR) poisons in particular are the worst.**

SGARs work by causing internal bleeding, but when rats and mice eat baits poisoned with SGARs, they become poisonous themselves, harming, and even killing other animals and birds that eat them. Studies in Australia have found harmful, and often fatal levels of SGARs in dead birds of prey, including Southern Boobooks, Wedge-tailed Eagles, and Powerful Owls.

Evidence is also growing that suggests that rat poison is not only being eaten by the targeted rodents, but by reptiles (which have a very high tolerance), invertebrates and possums. This all means that **these poisons are moving far beyond the rodents they are targeting and impacting our native wildlife.**

These SGAR poisons have been restricted from public sale in parts of the US, Canada and European Union.

But Australian regulations lag behind and SGARs – including Talon, Fast Action RatSak, and The Big Cheese Fast Action brands – are available to purchase from supermarkets and hardware shops throughout Australia.

## What can Local Government do?

With responsibility for the maintenance of numerous properties, local government can reduce the amount of these deadly poisons entering the environment by changing your pest control practices and informing your residents. A number of local government administrations across the country have already taken action to become ‘Owl-friendly’ regions.

You can take action in your local government area by:

- Specifying preferred rodenticide treatments in commercial pest operator contracts (See next page for alternatives)
- Investigating conditions that could be included to assist with rat control in demolition licences;
- Distributing information about the impacts of second-generation rodenticides on birds and other wildlife to your residents.

## Change your pest control practices

Taking the lead and employing wildlife-friendly rodent control on all council-managed properties is the best way to demonstrate to your community that the council is committed to protecting wildlife from rat poisons. If poison baits are required, place requirements on pest control contractors to only use first generation rodenticide products or suggest other alternatives. Look for active ingredients that are less harmful such as Warfarin (RatSak Double-strength) and Coumatetralyl (Racumin) and use products in locked bait stations.

### What are the alternatives to poison?

There are lots of ways to manage rat and mice that reduce the need for pest control interventions and don't involve poison. Local councils can provide information to businesses and residents on more responsible choices that will also meet local government health standards. In domestic settings, non-poison pest control – such as snap traps should be the first choice.

Property managers and residents can also be encouraged to:

- seal potential roof/wall cavity access points that rodents might be using
- pick up any fallen fruit,
- ensure excess pet food isn't accessible,
- rodent-proof chook pens and aviaries,
- replace rat-friendly palms with owl-friendly natives, and
- tidy up garden waste and limit access to compost heaps

Encouraging native predators also assists to reduce rodent populations. Tactics to do this include planting native trees, and installing nest boxes-for some birds of prey like Southern Boobooks to use as well as native prey like possums.

[You can see a list of rodenticide products available in Australia here.](#)

### Would your Council like to become a Hero in our campaign?

We are encouraging local Councils to become 'Heroes' our campaign by taking the actions detailed above. For more information get in touch with us: [conservation@birdlife.org.au](mailto:conservation@birdlife.org.au)





# Birds in Schools



Birds in Schools is a free environmental education program designed by BirdLife Australia and its Urban Birds Program. 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 the birds and habitat of their school grounds. Students use their own observational skills and ideas to develop and implement an action plan to help their local bird life. Action plans may include planting native plants, installing nest boxes or bird baths, 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, Stage 2-3, including lesson plans and resources, that builds students’ knowledge and skills.
- 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 10 lessons for students from Years 3 to 6, through which students:**

- Conduct bird and habitat surveys and contribute survey data to BirdLife's database, Birdata.
- 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:**

- Lesson plans and accompanying resources supporting teachers to deliver content.
- Assessment for students to easily measure learning.
- Online teacher professional development and online lessons for students.
- Support from a BirdLife staff member including assistance and advice.

### **How much time does it take?**

The project is designed to allow schools flexibility of delivery. Schools can choose to deliver Birds in Schools over one term, two terms or more. There are 10 lessons with each lesson designed to fit into a 50 minute to hour-long session (although some activities will extend outside these times, particularly the action). The program is flexible and we encourage you to adapt it to meet your needs, for example, you do not have to deliver every lesson and we can assist with program adaptation if required.

### **Who teaches the students?**

Teachers deliver the lessons and are provided with an online professional training session with Birdlife to develop the technical skills and knowledge required to deliver the program, including in bird identification, conducting surveys, using Birddata and what actions help birds. A BirdLife Australia staff member delivers online Q&A sessions for students and are available for assistance and advice to support teachers.

### **How much does it cost?**

The program is free for schools to take part in. Schools may wish to secure grants or fundraise to enable the completion of action plans, such as planting native plants or installing nest boxes or bird baths.



### **Find out more**

#### **Website:**

[birdlife.org.au/projects/urban-birds/birds-in-schools-project](https://birdlife.org.au/projects/urban-birds/birds-in-schools-project)

#### **Email:**

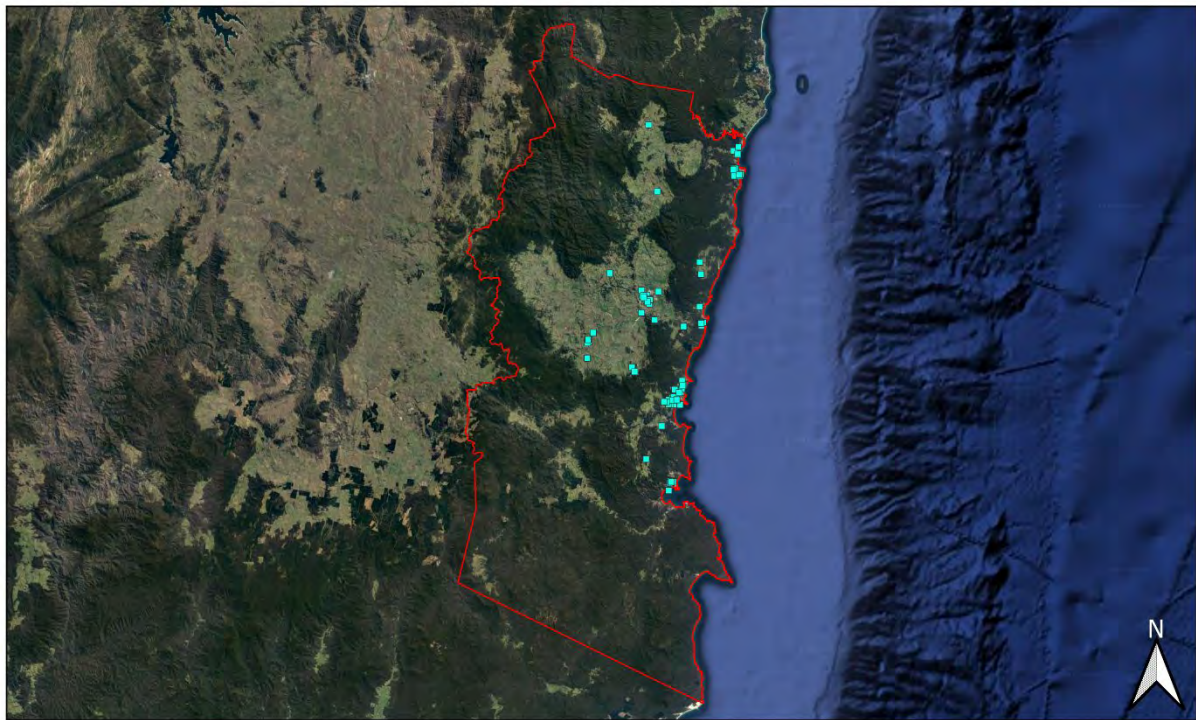
Alexandra Johnson,  
Birds in Schools Project Officer  
[alexandra.johnson@birdlife.org.au](mailto:alexandra.johnson@birdlife.org.au)

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# Appendix One – Introduced Species Maps



The individual distribution maps for each introduced species recorded within council boundaries during the 2021 Aussie Backyard Bird Count, in alphabetical order, are presented in Appendix One. No figure captions have been provided, as the format is identical to that of Figure 4.



0 10 20 30 40 50 Kilometers



## Legend

-  Bega Valley Shire Council
-  Common Blackbird









0 10 20 30 40 50 Kilometers



Legend

-  Bega Valley Shire Council
-  Common Myna







0 10 20 30 40 50 Kilometers



**Legend**

-  Bega Valley Shire Council
-  Common Starling









0 10 20 30 40 50 Kilometers



Legend

-  Bega Valley Shire Council
-  Domestic Duck







0 10 20 30 40 50 Kilometers



### Legend

-  Bega Valley Shire Council
-  Domestic Goose









0 10 20 30 40 50 Kilometers



### Legend

-  Bega Valley Shire Council
-  European Goldfinch







0 10 20 30 40 50 Kilometers



**Legend**

-  Bega Valley Shire Council
-  Helmeted Guineafowl









0 10 20 30 40 50 Kilometers



**Legend**

-  Bega Valley Shire Council
-  House Sparrow







0 10 20 30 40 50 Kilometers



**Legend**

-  Bega Valley Shire Council
-  Indian Peafowl









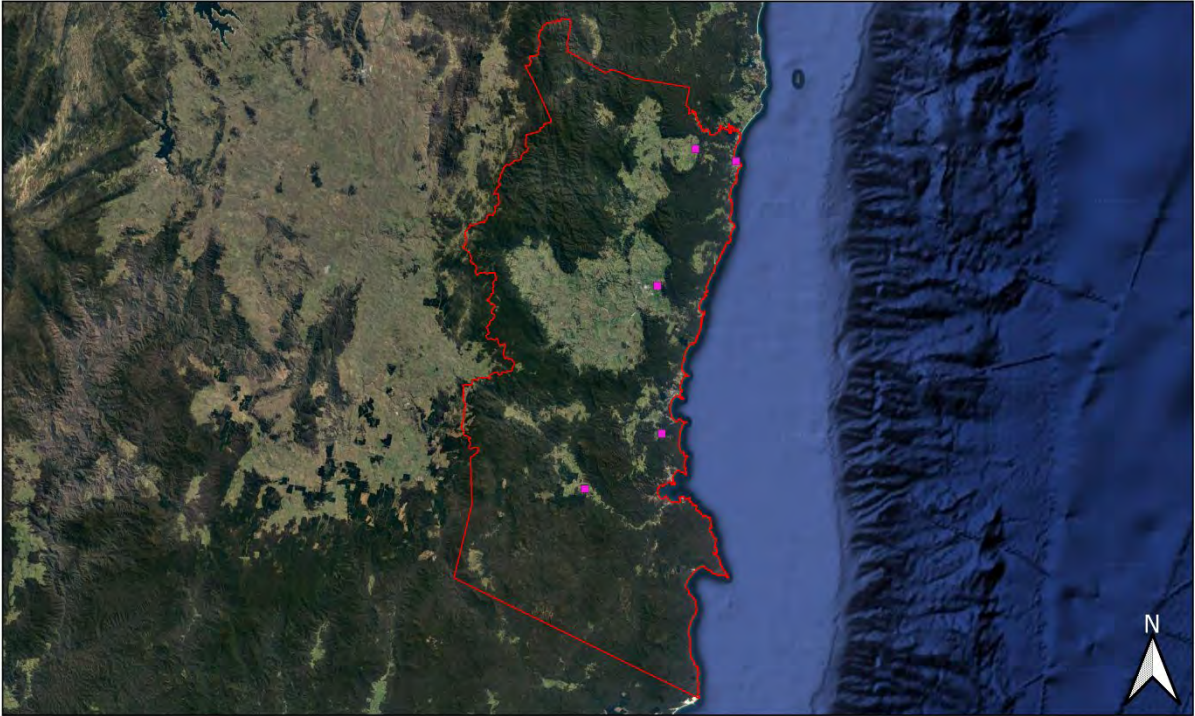
0 10 20 30 40 50 Kilometers



**Legend**

-  Bega Valley Shire Council
-  Muscovy Duck







0 10 20 30 40 50 Kilometers



Legend

-  Bega Valley Shire Council
-  Rock Dove









0 10 20 30 40 50 Kilometers



**Legend**

-  Bega Valley Shire Council
-  Spotted Dove



# Appendix Two – Threatened Species Maps



The individual distribution maps for each threatened species recorded within council boundaries during the 2021 Aussie Backyard Bird Count, in alphabetical order, are presented in Appendix Two. No figure captions have been provided, as the format is identical to that of Figure 5.



0 10 20 30 40 50 Kilometers



## Legend

-  Bega Valley Shire Council
-  Australian Pied Oystercatcher









0 10 20 30 40 50 Kilometers



**Legend**

-  Bega Valley Shire Council
-  Black-tailed Godwit







0 10 20 30 40 50 Kilometers



Legend

-  Bega Valley Shire Council
-  Blue-billed Duck









0 10 20 30 40 50 Kilometers



Legend

-  Bega Valley Shire Council
-  Curlew Sandpiper







0 10 20 30 40 50 Kilometers



### Legend

-  Bega Valley Shire Council
-  Diamond Firetail









0 10 20 30 40 50 Kilometers



**Legend**

-  Bega Valley Shire Council
-  Dusky Woodswallow







0 10 20 30 40 50 Kilometers



Legend

-  Bega Valley Shire Council
-  Flame Robin









0 10 20 30 40 50 Kilometers



**Legend**

-  Bega Valley Shire Council
-  Glossy Black-Cockatoo







0 10 20 30 40 50 Kilometers



Legend

-  Bega Valley Shire Council
-  Hooded Plover









0 10 20 30 40 50 Kilometers



**Legend**

-  Bega Valley Shire Council
-  Little Eagle







0 10 20 30 40 50 Kilometers



Legend

-  Bega Valley Shire Council
-  Little Lorikeet









0 10 20 30 40 50 Kilometers



Legend

-  Bega Valley Shire Council
-  Little Tern









0 10 20 30 40 50 Kilometers



Legend

-  Bega Valley Shire Council
-  Sanderling







0 10 20 30 40 50 Kilometers



Legend

-  Bega Valley Shire Council
-  Scarlet Robin









0 10 20 30 40 50 Kilometers



**Legend**

-  Bega Valley Shire Council
-  Shy Albatross









0 10 20 30 40 50 Kilometers



Legend

-  Bega Valley Shire Council
-  Sooty Oystercatcher







0 10 20 30 40 50 Kilometers



**Legend**

-  Bega Valley Shire Council
-  Varied Sittella









0 10 20 30 40 50 Kilometers



**Legend**

-  Bega Valley Shire Council
-  White-bellied Sea-Eagle

