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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.

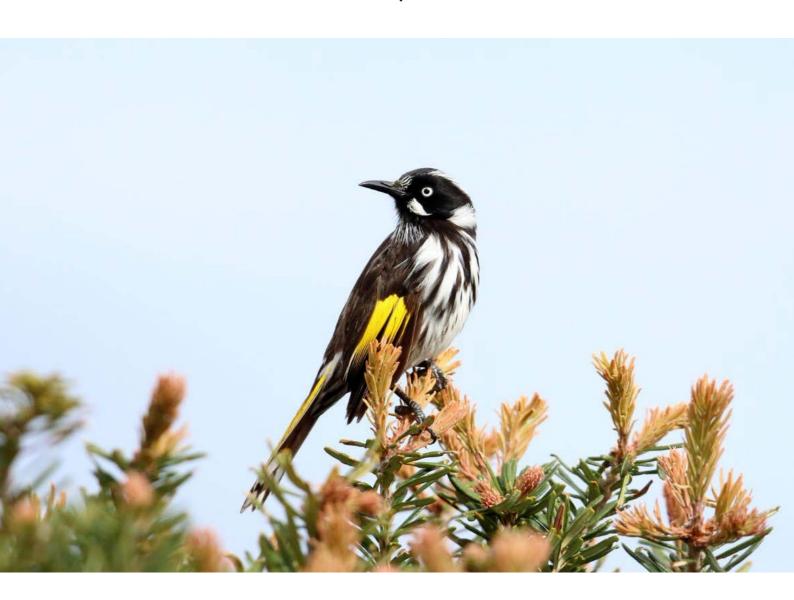
Each year, more and more local councils hold bird-themed events during Bird Week, and birdthemed lesson plans from BirdLife Australia encourage local schools to get involved and engage with their natural environment.



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 **Bega Valley Shire**. The count ran from **17–23 October 2022**.

- **352** observers participated in the Bird Count, submitting **798** counts.
- Participants submitted between one and twenty-eight surveys per registered account an average of
   3.17 surveys per account.
- Participants counted birds for a combined duration of **250** hours and **51** minutes.
- Participants recorded a total of **24,901** individual birds during Bird Week.
- 175 bird species were recorded, with the Rainbow Lorikeet reported in 61.74% of counts (Table 1).

**Table 1**: Total counts of all 175 bird species observed within the Bega Valley Shire 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	Count	RR (%)	Bird species	Count	RR (%)
Rainbow Lorikeet	2396	43.98	Fan-tailed Cuckoo	21	2.13
Welcome Swallow	1917	38.22	Whistling Kite	21	2.38
Red Wattlebird	1650	44.24	Buff-banded Rail	20	0.75
Galah	1196	31.45	Nankeen Kestrel	20	2.01
Australian Magpie	1134	51.63	White-throated Treecreeper	19	1.75
Little Wattlebird	1048	35.84	Channel-billed Cuckoo	18	1.13
Little Corella	997	13.41	Great Egret	18	1.5
Black Swan	807	4.64	Grey Goshawk	18	2.01
Sulphur-crested Cockatoo	765	20.93	Dusky Moorhen	17	0.75
Superb Fairy-wren	647	26.19	Oriental Dollarbird	17	1.38
Bell Miner	586	15.04	Yellow-billed Spoonbill	17	0.38
Satin Bowerbird	566	23.93	Cattle Egret	16	1
Red-browed Finch	538	8.65	Fairy Martin	16	0.25
Silver Gull	535	10.15	Grey Teal	16	0.38
Crimson Rosella	460	18.67	Little Egret	16	0.88
Australian King-Parrot	447	20.43	Brown-headed Honeyeater	14	0.63
Masked Lapwing	435	20.43	Common Myna*	14	0.5
Common Blackbird*	413	23.56	Hardhead	14	0.88
House Sparrow*	400	10.28	Variegated Fairy-wren	12	0.63



Australian Wood Duck	374	10.4	Jacky Winter	11	1
Yellow-tailed Black-Cockatoo	322	11.28	Australasian Grebe	10	1
Willie Wagtail	281	20.8	Eurasian Coot	10	0.88
Laughing Kookaburra	269	20.93	Muscovy Duck*	10	0.38
Eastern Whipbird	260	20.93	Restless Flycatcher	10	0.75
Eastern Rosella	244	9.4	Scarlet Honeyeater	10	0.75
New Holland Honeyeater	241	10.03	Greater Crested Tern	9	0.5
Grey Fantail	238	15.04	Sacred Kingfisher	9	0.88
Australian Raven	208	13.03	Sooty Oystercatcher (VU)	9	0.88
Chestnut Teal	203	5.01	White-naped Honeyeater	9	0.63
Australian Pelican	192	5.51	White-winged Chough	9	0.5
Great Pied Cormorant	180	3.26	Peaceful Dove	8	0.38
Brown Thornbill	173	6.89	Southern Emu-wren	8	0.25
Pied Currawong	172	11.4	Striated Pardalote	8	1
Common Starling*	169	3.76	Black-faced Cormorant	7	0.38
Magpie-lark	168	11.03	Topknot Pigeon	7	0.63
White-headed Pigeon	165	8.4	Australasian Pipit	6	0.63
Pacific Black Duck	163	5.51	Brown Goshawk	6	0.75
Grey Butcherbird	160	12.03	Double-barred Finch	6	0.13
Crested Pigeon	154	8.52	Golden-headed Cisticola	6	0.13
Purple Swamphen	147	4.89	Leaden Flycatcher	6	0.5
Dusky Woodswallow (VU)	140	4.89	Square-tailed Kite (VU)	6	0.75
Noisy Miner	139	4.01	Tawny-crowned Honeyeater	6	0.13
Little Black Cormorant	129	3.88	White-throated Gerygone	6	0.5
Common Bronzewing	124	6.14	Australasian Gannet	5	0.25
White-browed Scrubwren	106	5.51	Black-shouldered Kite	5	0.63
Eastern Spinebill	105	8.52	European Goldfinch*	5	0.13
Royal Spoonbill	104	1.5	Hooded Plover (CE)	5	0.38
Little Pied Cormorant	99	3.76	Shining Bronze-Cuckoo	5	0.5
Black-faced Cuckoo-shrike	98	6.89	Beautiful Firetail	4	0.13
Australian White Ibis	95	1	Brown Falcon	4	0.38
Striated Thornbill	87	3.88	Eastern Shrike-tit	4	0.38
Wonga Pigeon	87	7.64	Grey Currawong	4	0.38
Yellow-faced Honeyeater	87	5.26	Little Lorikeet (VU)	4	0.13
Eastern Koel	84	8.77	Pacific Golden Plover	4	0.13
Great Cormorant	82	2.01	Black-faced Monarch	3	0.25
Australian Pied Oystercatcher (En)	78	3.88	Brush Cuckoo	3	0.38
Spotted Dove*	67	3.88	Buff-rumped Thornbill	3	0.25
Little Raven	57	4.14	Crescent Honeyeater	3	0.25
Musk Lorikeet	54	1	Helmeted Guineafowl*	3	0.13
Brown Gerygone	53	1.75	Little Eagle (VU)	3	0.25
Grey Shrike-thrush	52	4.01	Little Grassbird	3	0.13
White-bellied Sea-Eagle (VU)	51	5.39	Swamp Harrier	3	0.38
Lewin's Honeyeater	49	4.01	Tawny Frogmouth	3	0.38



Rufous Whistler	49	3.63	White-bellied Cuckoo-shrike	3	0.25
Yellow-rumped Thornbill	49	1.13	Australian Hobby	2	0.25
Bar-tailed Godwit	44	0.38	Common Tern	2	0.13
Gang-gang Cockatoo	44	2.13	Mistletoebird	2	0.13
Yellow Thornbill	44	1.88	Nankeen Night-Heron	2	0.25
Silvereye	43	2.13	Powerful Owl (VU)	2	0.25
Wedge-tailed Eagle	40	3.01	Scarlet Robin (VU)	2	0.25
White-faced Heron	38	3.76	Striated Heron	2	0.25
Brown Cuckoo-Dove	36	2.13	White-eared Honeyeater	2	0.13
Golden Whistler	36	3.26	Baillon's Crake	1	0.13
Spotted Pardalote	36	2.26	Brown Treecreeper (VU)	1	0.13
Eastern Yellow Robin	35	3.01	Brush Bronzewing	1	0.13
Rock Dove*	32	0.5	Collared Sparrowhawk	1	0.13
Australian Reed-Warbler	31	1.5	Eastern Reef Egret	1	0.13
Superb Lyrebird	30	3.26	Emu	1	0.13
Noisy Friarbird	28	2.26	Musk Duck	1	0.13
Olive-backed Oriole	27	2.51	Pallid Cuckoo	1	0.13
Australasian Figbird	25	1	Peregrine Falcon	1	0.13
Far Eastern Curlew	25	0.5	Pied Stilt	1	0.13
Little Tern (En)	24	0.5	Pink-eared Duck	1	0.13
Tree Martin	24	0.63	Red-browed Treecreeper	1	0.13
Australasian Darter	22	0.75	Rufous Fantail	1	0.13
Domestic Duck*	22	0.88	Sooty Shearwater	1	0.13
Glossy Black-Cockatoo (VU)	22	1.38	Spotted Quail-thrush	1	0.13
Red-capped Plover	22	0.63			



The Bega Valley Shire is a regional Local Government Area with large remnant areas of native habitat that support the ecosystems many of our threatened bird species depend on. However, urbanisation and clearing for mining, development and agriculture threaten the biodiversity of many regional councils.

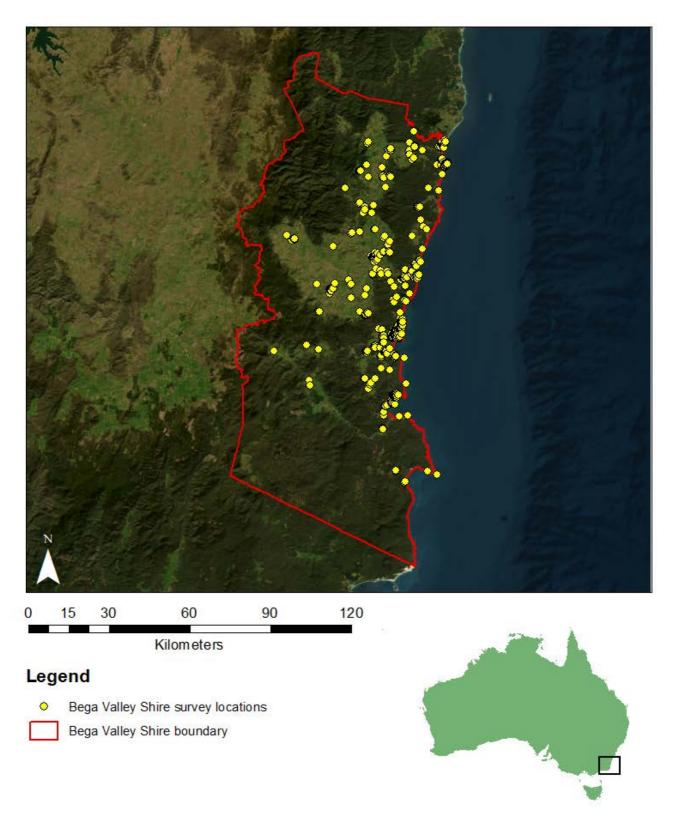
Initiatives such as restoration of native habitat and promoting bird-friendly gardens may boost the number of birds, and number of bird species, reported by Aussie Bird Count participants in future years. Keen participants may like to get involved with the **Birds in Backyards** or **Birds in Schools**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

If you'd like to enquire about ways for your council to get constituents involved in bird conservation, you can contact the **Urban Birds** team <a href="here">here</a>. 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=798) submitted within Bega Valley Shire 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, **thirteen** threatened bird species were recorded within the Bega Valley Shire boundaries in the 2022 Aussie Bird Count (**Table 2**). A visualisation of individual records from the 2022 Aussie Bird Count is provided in **Figure 2**. As there was considerable overlap between threatened species, we have provided individual maps in **Appendix One**.

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 2**: Total counts and reporting rates (%) of all thirteen threatened species observed within the Bega Valley Shire 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).

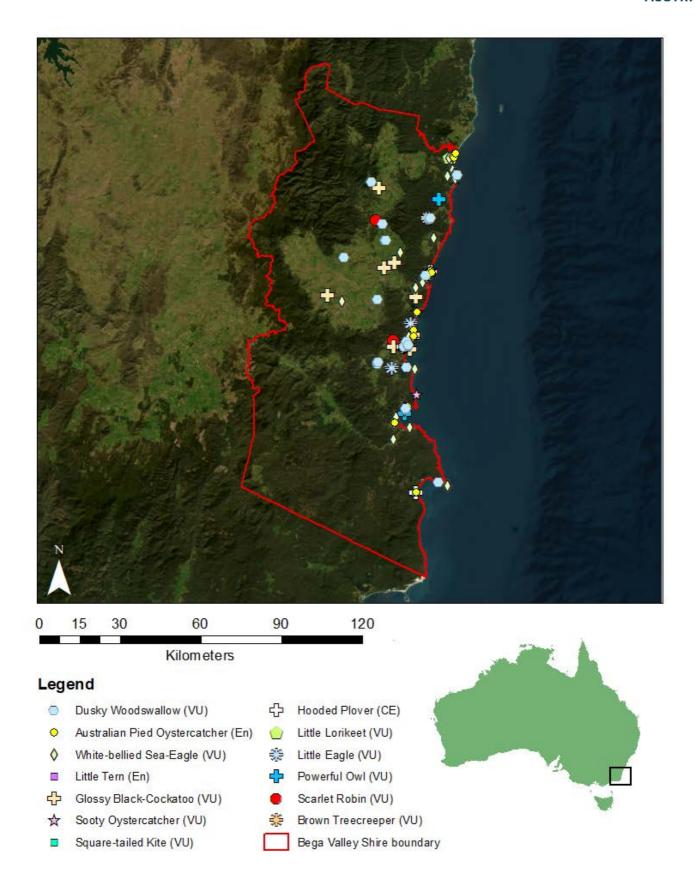
\* = introduced species; RA = Rare; NT = Near Threatened; VU = Vulnerable; En = Endangered; CE = Critically Endangered; PR4 = Priority Four (WA) (based on IUCN listings; BirdLife Australia, 2020).

Bird species	Status	Count	Number of counts including this species	RR (%)
Dusky Woodswallow	VU	140	39	4.89
Australian Pied Oystercatcher	EN	78	31	3.88
White-bellied Sea-Eagle	VU	51	43	5.39
Little Tern	EN	24	4	0.50
Glossy Black-Cockatoo	VU	22	11	1.38



Sooty Oystercatcher	VU	9	7	0.88
Square-tailed Kite	VU	6	6	0.75
Hooded Plover	CR	5	3	0.38
Little Lorikeet	VU	4	1	0.13
Little Eagle	VU	3	2	0.25
Powerful Owl	VU	2	2	0.25
Scarlet Robin	VU	2	2	0.25
Brown Treecreeper	VU	1	1	0.13





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



Five threatened woodland bird species were recorded within the Bega Valley Shire boundaries in 2022:

- Dusky Woodswallow (Vulnerable)
- Glossy Black-Cockatoo (Vulnerable)
- Little Lorikeet (Vulnerable)
- Scarlet Robin (Vulnerable)
- Brown Treecreeper (Vulnerable)

Since European colonisation began, over 80% of Australia's temperate woodlands have been cleared, resulting in the decline of many woodland-dependent bird species (BirdLife Australia, 2015). Over one-third of Australia's bird species rely on woodland habitats, and more than one in five of these are threatened.

The temperate south-eastern regions of Australia have experienced the largest number of woodland species declines. However, high rates of land clearing in Queensland also threaten species that inhabit our lesser-studied tropical woodlands.

BirdLife Australia's **Woodland Birds Program** aims to prevent and reverse the declines of woodland birds and the habitats they rely on. Key actions include:

- ongoing monitoring of bird populations and their trends, particularly in south-eastern Australia;
- using this information to identify sites of priority for our woodland birds;
- engaging the community in woodland bird conservation on private property, and;
- monitoring signs of climate change on our woodland birds and habitats.

Some of the most familiar flagship species our team works with include the critically endangered Regent Honeyeater and Swift Parrot, both of which are the focus of intensive recovery efforts by BirdLife Australia, in tandem with Traditional Owners and local communities.

You can learn more about the numerous projects under the Woodland Birds Program umbrella - and contact the team – <u>here</u>.

The **South-eastern Glossy Black-Cockatoo** is also the subject of intensive work from BirdLife Australia. This subspecies had over 38% of its habitat impacted in the 2019-20 Black Summer fires, and is threatened by ongoing clearing across its range.

The South-eastern Glossy Black-Cockatoo is dependent on she-oaks (*Allocasuarina* and *Casuarina*) for food, and these trees may not produce seed for up to ten years post-fire. Fires and land clearing also reduce the availability of tree hollows on which these birds rely for successful nesting.



BirdLife Australia is working with various partners to run an annual **Great Glossy Count** on the east coast – your council and constituents can register to participate in this crucial data collection here.

**Four** species of threatened shorebird were recorded within the Bega Valley Shire in 2022:

- Sooty Oystercatcher (Vulnerable) beach-nesting
- Little Tern (Endangered) beach-nesting
- Hooded Plover (Critically Endangered) beach-nesting
- Australian Pied Oystercatcher (Endangered) beach-nesting

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). Some migratory shorebirds, including iconic species like the Far Eastern Curlew, have experienced population declines of up to 80% over the past 30 years.

The **Migratory Shorebirds Program** at BirdLife Australia works to improve the future of our 37 regularly visiting migratory shorebirds by:

- Raising awareness of shorebirds within the community;
- Coordinating national population monitoring through the engagement of community members;
- Conducting research to detect national population trends and the drivers behind population changes;
- Identifying and protecting critical shorebird habitat, and;
- Educating stakeholders and lobbying for habitat restoration and prevention of further habitat destruction.

You can reach out to the Migratory Shorebirds Team <u>here</u> with any enquiries, or to request data.

Local shorebird species that nest solely on beaches (beach-nesting birds) are also under immense pressure in Australia. The greatest threat these species face in many areas, alongside factors such as coastal erosion and predation, is habitat disturbance from people visiting beaches. Peak beach use by humans coincides with the nesting season of the birds, resulting in eggs failing to hatch, and chick death due to abandonment or starvation while hiding from passers-by (BirdLife Australia, 2015). In 2006, BirdLife Australia established the **Beach-nesting Birds Program** which works with community volunteers to:

Train people to monitor beach-nesting birds and identify threats to their local populations;



- Erect signage, temporary fencing and artificial shelters to protect eggs and chicks;
- Raise awareness of beach-nesting birds with beach users, and;
- Conduct research to improve breeding success and nest protection strategies.

You can learn more about the Beach-nesting Birds Program and get involved here.

Four species of threatened raptor were recorded within the Bega Valley Shire in 2022:

- Little Eagle (Vulnerable)
- Square-tailed Kite (Vulnerable)
- White-bellied Sea-Eagle (Vulnerable)
- Powerful Owl (Vulnerable)

Several Australian raptor species are threatened due to habitat destruction, loss of nesting hollows, declining prey availability, and the use of rodenticides. As naturally long-lived bird, raptor populations also take a long time to recover even once threats are removed.

The **BirdLife Australia Raptor Group** (BARG) promotes the conservation, management and study of Australia's birds of prey. You can find out more about BARG <u>here</u>.

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

**Ten** introduced taxa were recorded within the Bega Valley Shire during the 2022 Aussie Bird Count (**Table 3**; **Figure 3**). However, the Domestic Duck is descended from domesticated Mallards and is not a true species. The Muscovy Duck is also a domestic form, descended from Central American ancestors, that is not considered truly wild in Australia.

Most records of introduced species were clustered around urban and agricultural centres of the council, with very few in patches of intact forest or heath habitat. However, it should be noted that survey bias is partly responsible for this pattern; most of the people participating in the Aussie Bird Count live and count in urban spaces, and large tracts of bushland in the Bega Valley Shire are inaccessible and/or undervisited. Nevertheless, few introduced species (other than the Common Blackbird) are known to use large expanses of forest, and it is likely these areas are genuinely not as rich in introduced birds as townships and farming areas.

The Common Blackbird (23.56%) and House Sparrow (10.28%) were the only frequently recorded introduced species during the Aussie Bird Count, and together these accounted for only one-thirtieth of all recorded individual birds. Several other introduced species were reported, but at very low rates when compared to cities in the south-east of the country. The Common Myna is particularly notable, being a



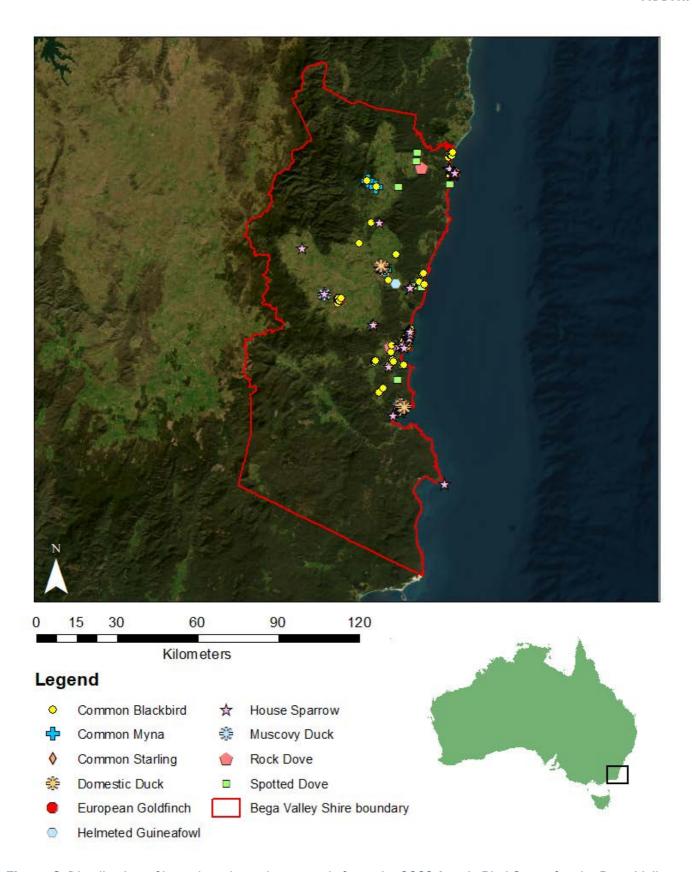
fairly recent (and still rare) coloniser in the Bega Valley Shire, but much more common along the coast closer to Sydney and Melbourne.

**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 Two**.

**Table 3**: Total counts and reporting rates (%) of all ten introduced taxa observed within the Bega Valley Shire 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).

Bird species	Count	Proportion of all birds counted (%)	Number of counts including this species	RR (%)
Common Blackbird	413	1.66	188	23.56
House Sparrow	400	1.61	82	10.28
Common Starling	169	0.68	30	3.76
Spotted Dove	67	0.27	31	3.88
Rock Dove	32	0.13	4	0.5
Domestic Duck	22	0.09	7	0.88
Common Myna	14	0.06	4	0.5
Muscovy Duck	10	0.04	3	0.38
European Goldfinch	5	0.02	1	0.13
Helmeted Guineafowl	3	0.01	1	0.13





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



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

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

- Baillon's Crake
- Beautiful Firetail
- Brown Treecreeper (VU)
- Brush Bronzewing
- Collared Sparrowhawk
- Common Tern
- Double-barred Finch
- Eastern Reef Egret
- Emu

- European Goldfinch
- Golden-headed Cisticola
- Helmeted Guineafowl
- Little Grassbird
- Little Lorikeet (VU)
- Mistletoebird
- Musk Duck
- Pacific Golden Plover
- Pallid Cuckoo

- Peregrine Falcon
- Pied Stilt
- Pink-eared Duck
- Red-browed Treecreeper
- Rufous Fantail
- Sooty Shearwater
- Spotted Quail-thrush
- Tawny-crowned Honeyeater
- · White-eared Honeyeater

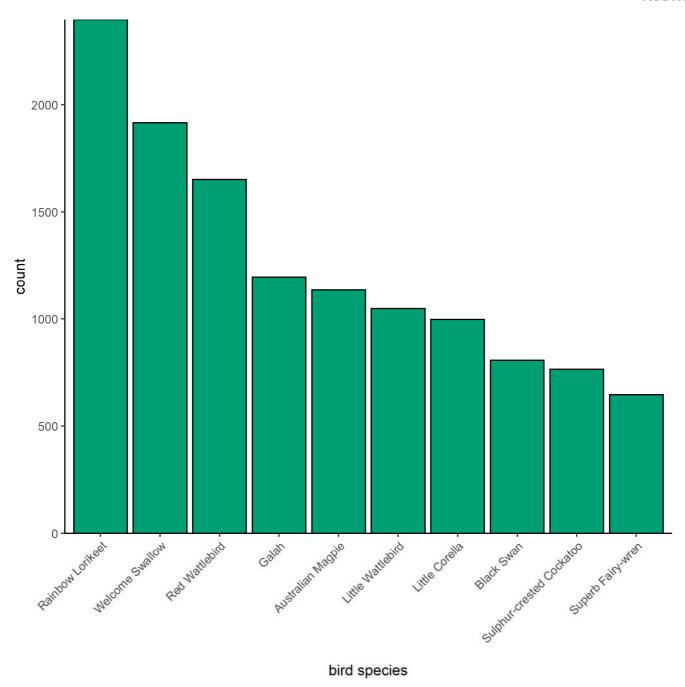
All but two of the twenty-seven species are native to Australia, while the European Goldfinch and Helmeted Guineafowl are introduced. None of the twenty-seven species are endangered or critically endangered, though two are listed as Vulnerable. Ten species are restricted to aquatic habitats such as swamps, wetlands and beaches, and two are birds of prey. Many of the other species reported only once, such as the Red-browed Treecreeper, Spotted Quail-thrush and Tawny-crowned Honeyeater, are limited to intact heath or forest habitat, from which few surveys were submitted. Several of these species are also quite shy and hard to identify for novice observers. 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 **2,396** individuals counted in the Bega Valley Shire, the **Rainbow Lorikeet** was 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 Welcome Swallow (1,917 individuals), edging out the Red Wattlebird with 1,650 individuals counted.

Unlike in most of the urban councils near and north of Sydney, all of the ten most abundant bird species recorded within the Bega Valley Shire boundaries are native to New South Wales. None of these species are considered threatened in the state. While the Black Swan and Little Corella appear in the Top Ten, this is largely a reflection of their tendency to form big flocks – they were reported in far fewer surveys than the other species in the Top Ten, but when they did occur were likely to be reported in large numbers.



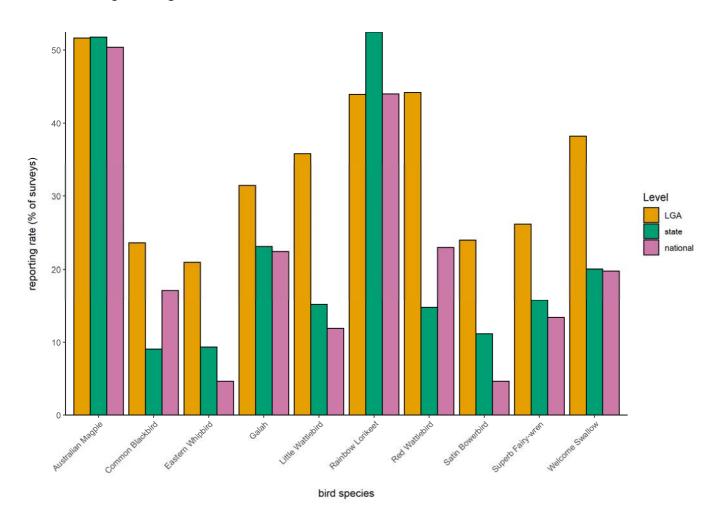


**Figure 4.** The ten most abundant bird species reported in the 2022 Aussie Bird Count, for the Bega Valley Shire. As this ranking is based on the total number of birds, and not how often they were seen, species that form large flocks are more likely to be over-represented in this figure.

Most of the species in the Top Ten (including the Black Swan and Little Corella) are also common in urban areas between Melbourne and Sydney. While the native habitat in the shire is much more expansive than in most LGAs, and likely to host a very different set of bird communities than what is seen in the Top Ten, the majority of counts were submitted from the region's major towns. The rankings, based largely on counts from these human-modified environments, show a similarity between the bird diversity of urban areas of the Bega Valley Shire and other urban centres in the region.



Reported from **51.63%** of counts, the **Australian Magpie** was the most *frequently* recorded bird in the Bega Valley Shire 2022 Aussie Bird Count. The second-most reported species (Red Wattlebird) was reported in 44.24% of counts, just ahead of the Rainbow Lorikeet (43.98%). The fourth-most reported species (Welcome Swallow) was reported in about 38% of counts. Except for the Australian Magpie and Rainbow Lorikeet (which were both reported at rates similar to or lower than the state average), 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**).



**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 Bega Valley Shire boundaries.



The Eastern Whipbird and Satin Bowerbird both make a notable appearance in the Top Ten most-reported birds, being wet forest species that are uncommon in heavily built-up areas. Both species are abundant in forests throughout the Bega Valley, with the Satin Bowerbird expanding into cleared areas in the cooler months to take advantage of planted fruit trees. The proximity of many towns (e.g. Merimbula, Pambula and Tathra) to relatively healthy bushland, throughout the Bega Valley, is no doubt a factor in the prominence of these species in the Aussie Bird Count. This is a rare privilege in regional population centres – Eastern Whipbirds quickly disappear from towns with a lack of suitable habitat and have already vanished from intensively modified areas like Bega and Candelo.

The over-representation of the well-loved Superb Fairy-wren may also be a positive indicator of the overall health of the Bega Valley Shire's natural environment. While this species uses degraded habitats, it does not thrive in heavily urbanised or large-scale agricultural conditions, disappearing from areas without protective groundcover.

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.





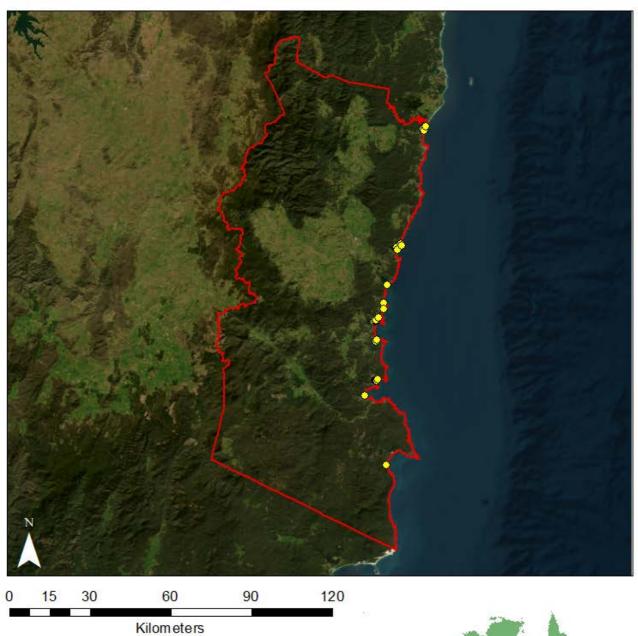
#### **Threatened species maps**

We have provided individual maps of 2022 Aussie Bird Count records for each threatened species in the Bega Valley Shire 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:

- Australian Pied Oystercatcher
- Brown Treecreeper
- Dusky Woodswallow
- Glossy Black-Cockatoo
- Hooded Plover
- Little Eagle
- Little Lorikeet
- Little Tern
- Powerful Owl
- Scarlet Robin
- Sooty Oystercatcher
- Square-tailed Kite
- White-bellied Sea-Eagle



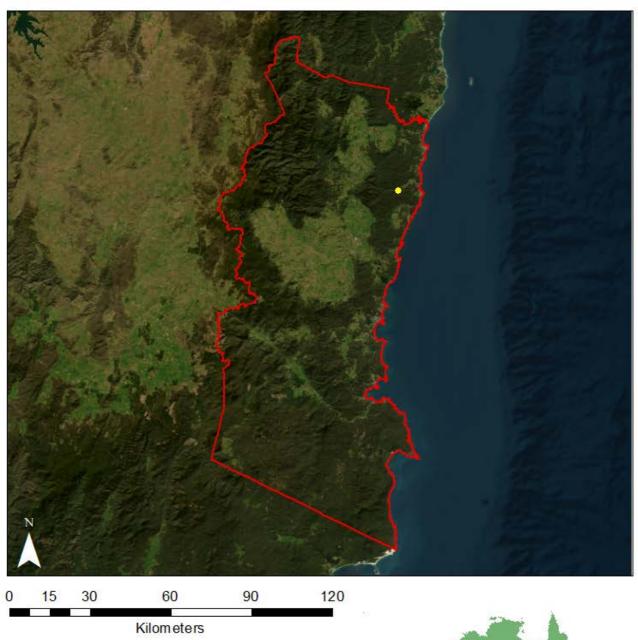


### Legend

- Australian Pied Oystercatcher (En)
- Bega Valley Shire boundary





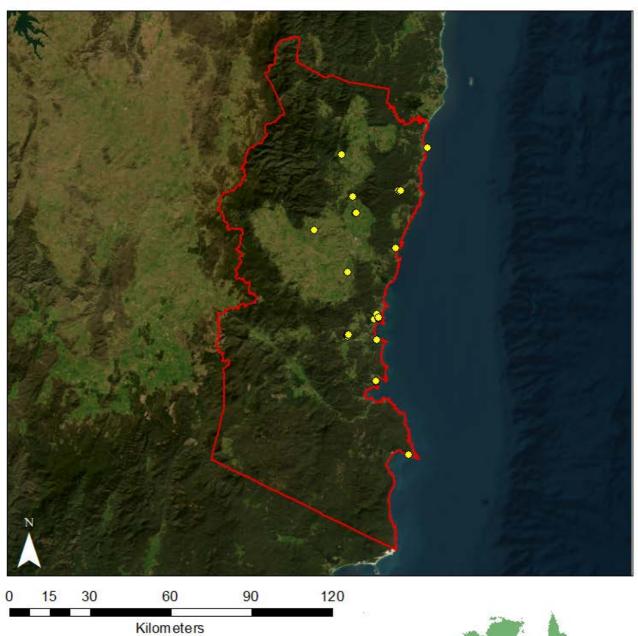


Brown Treecreeper (VU)







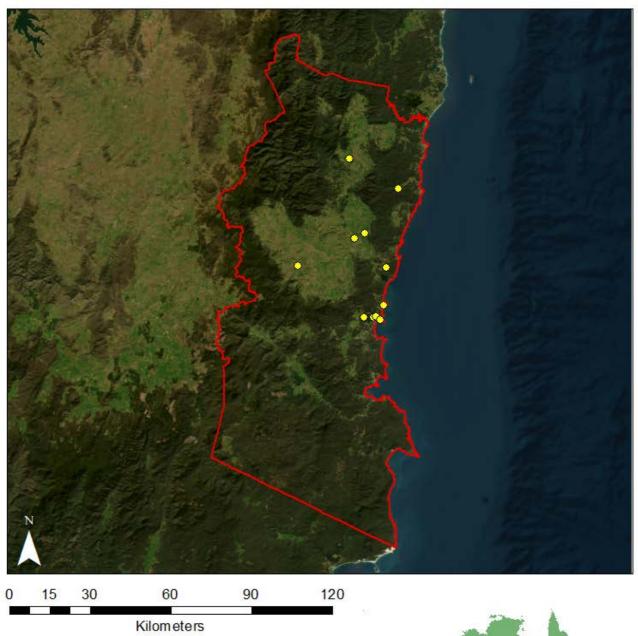


Dusky Woodswallow (VU)







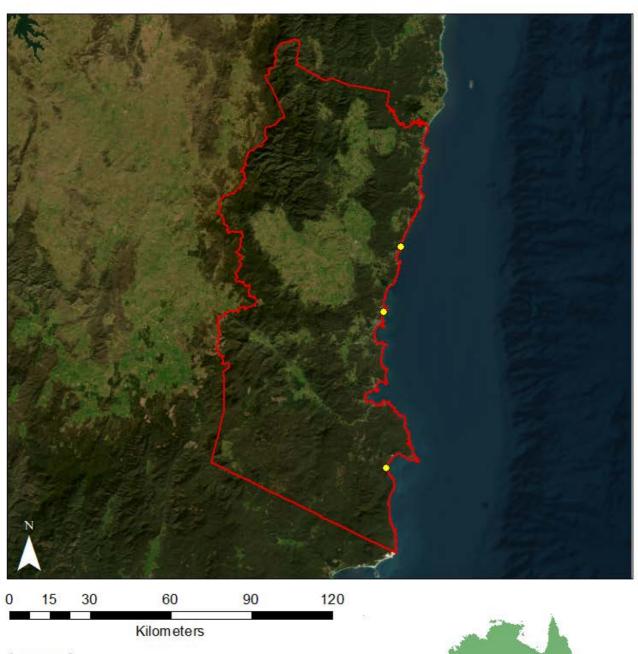


Glossy Black-Cockatoo (VU)







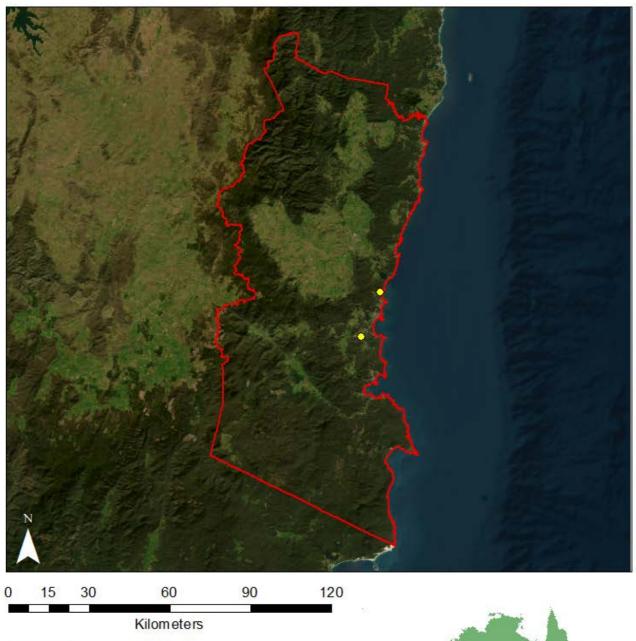


Hooded Plover (CE)

Bega Valley Shire boundary





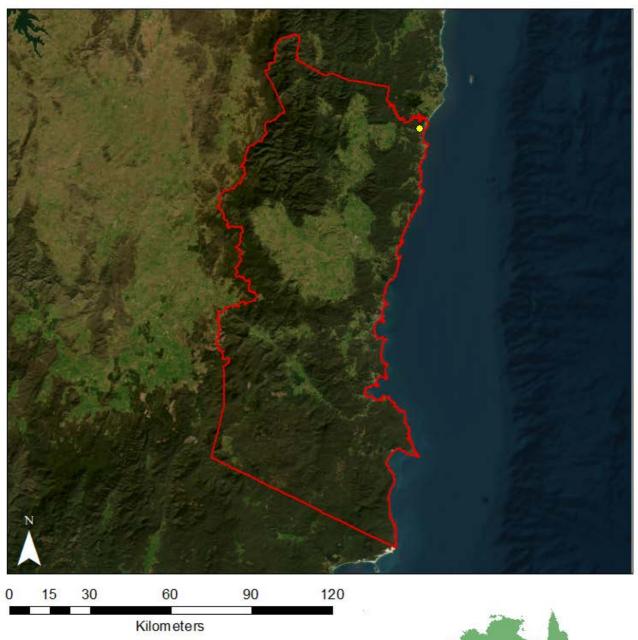


Little Eagle (VU)

Bega Valley Shire boundary





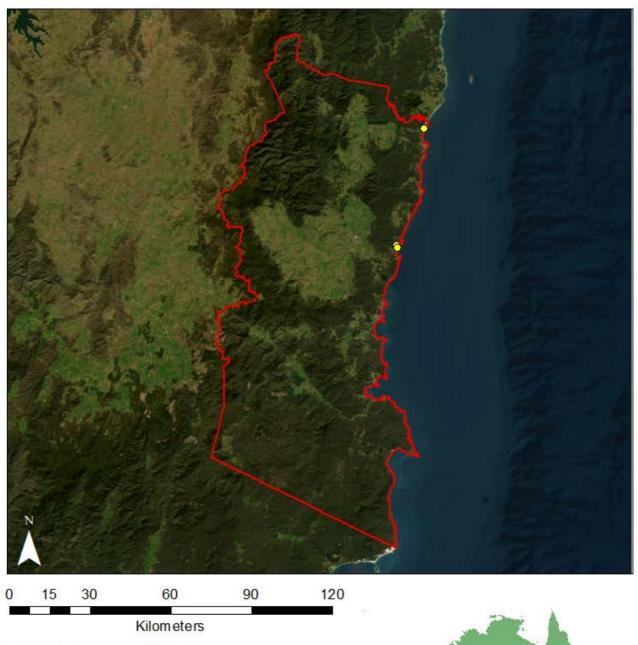


Little Lorikeet (VU)

Bega Valley Shire boundary





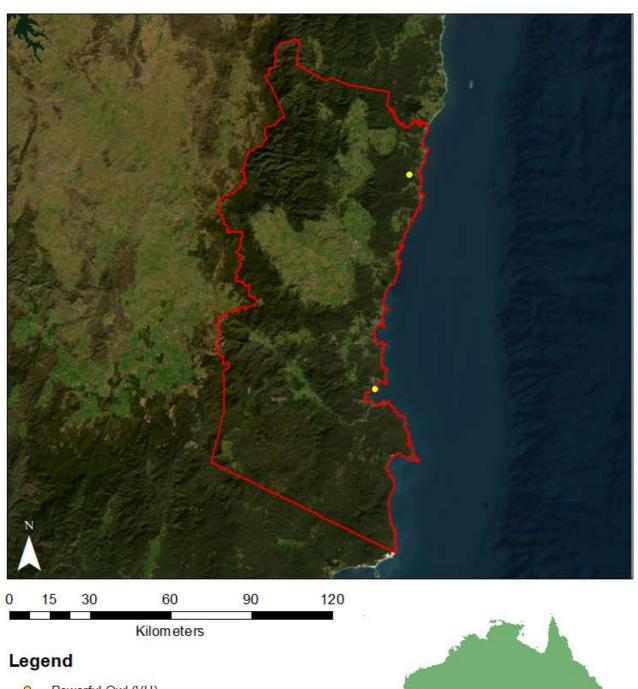


Little Tern (En)

Bega Valley Shire boundary





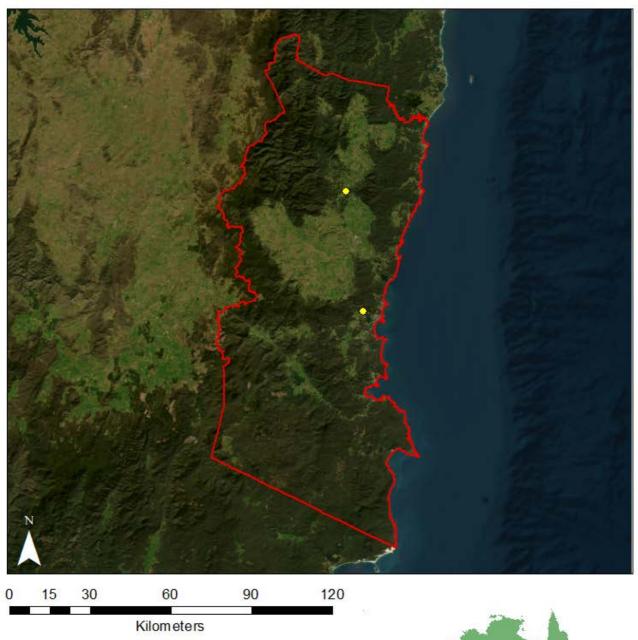


Powerful Owl (VU)

Bega Valley Shire boundary





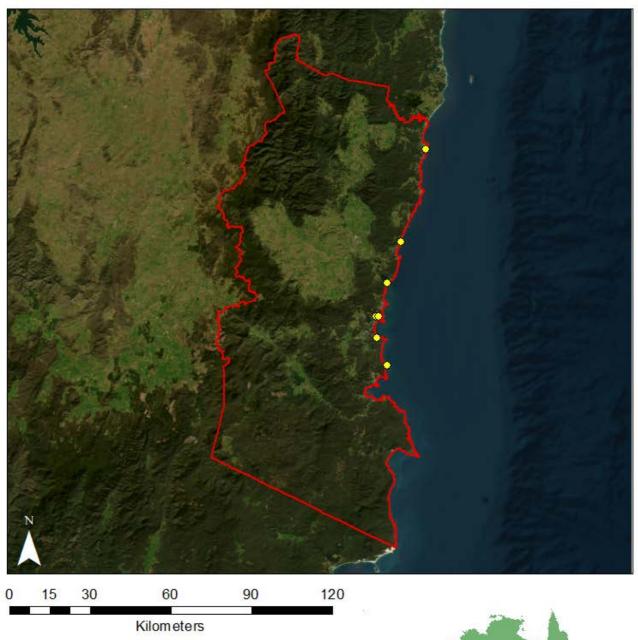


Scarlet Robin (VU)

Bega Valley Shire boundary





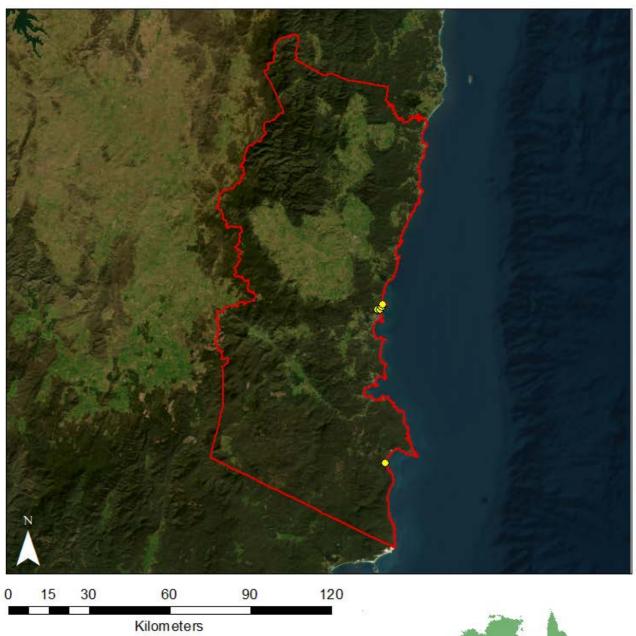


Sooty Oystercatcher (VU)







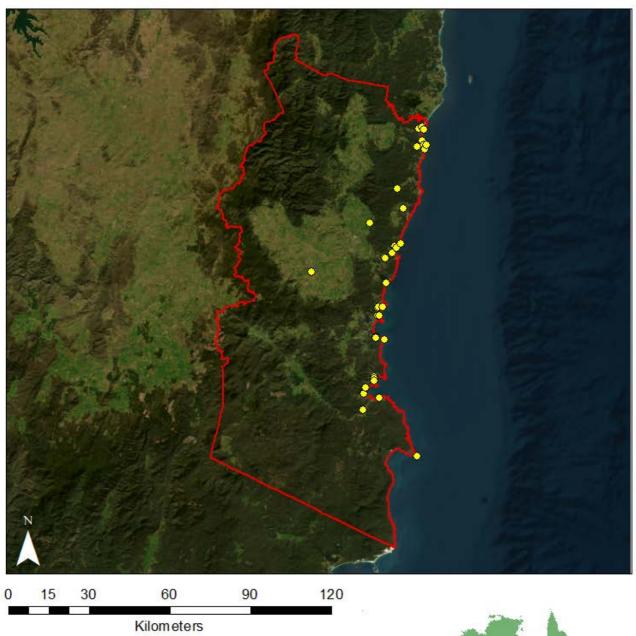


Square-tailed Kite (VU)









White-bellied Sea-Eagle (VU)









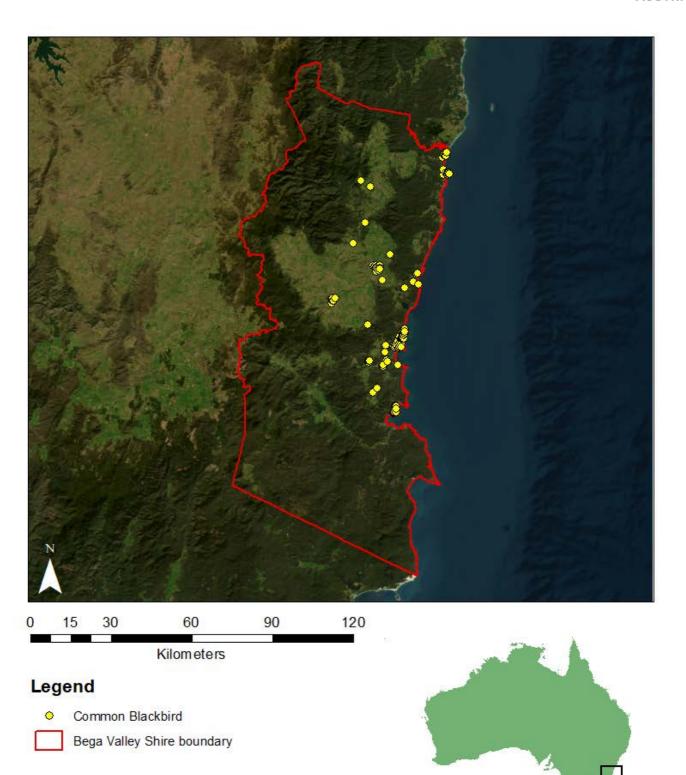
### **Introduced species maps**

We have provided individual maps of 2022 Aussie Bird Count records for each introduced species in the Bega Valley Shire 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.

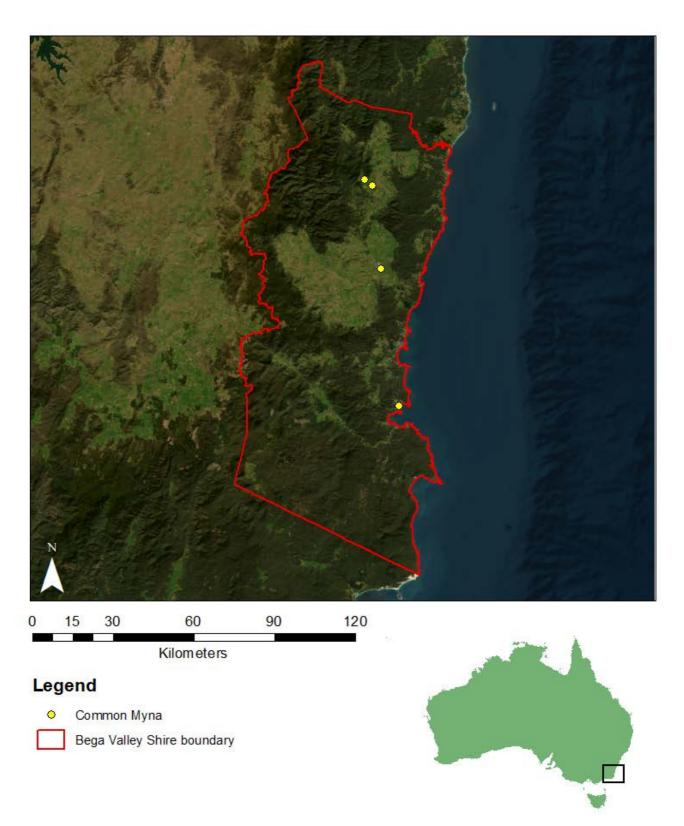
### Species in order:

- Common Blackbird
- Common Myna
- Common Starling
- Domestic Duck
- European Goldfinch
- Helmeted Guineafowl
- House Sparrow
- Muscovy Duck
- Rock Dove
- Spotted Dove

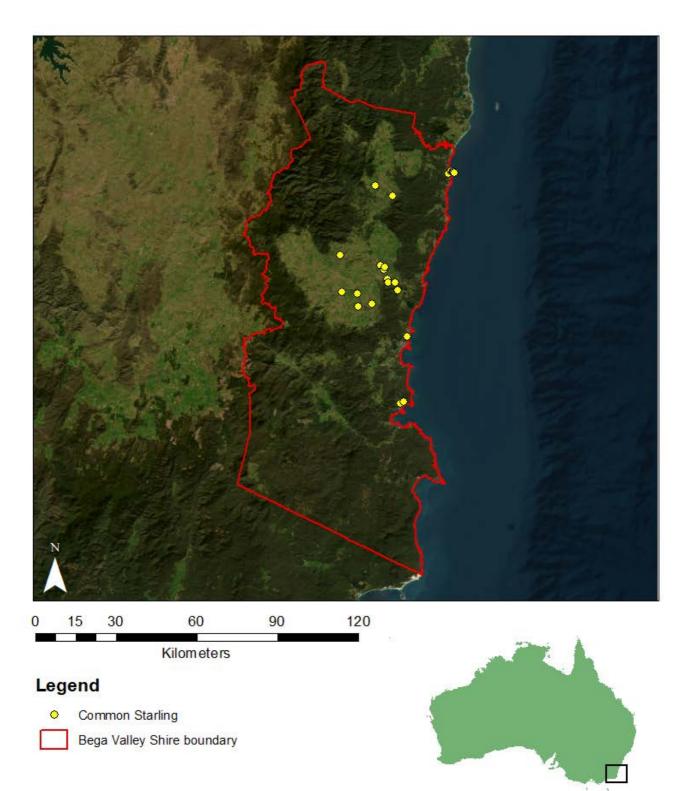




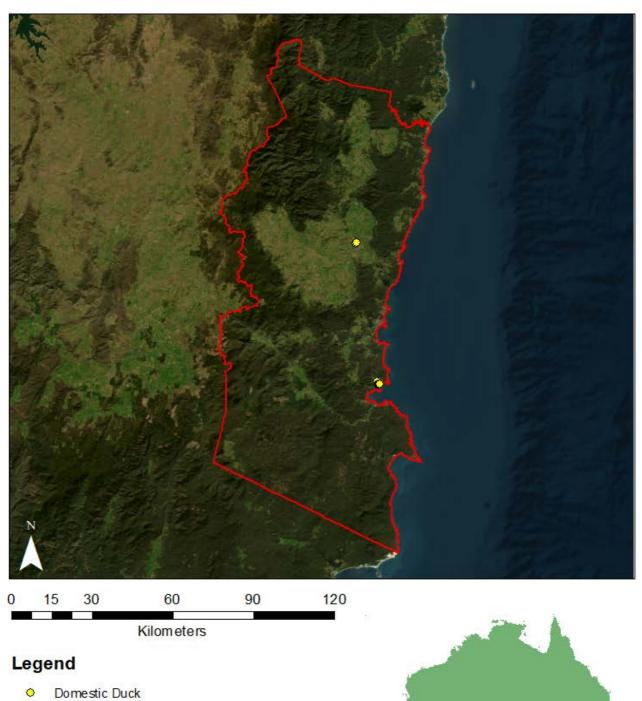












Bega Valley Shire boundary





