



NSW Wildlife Rehabilitation

2020–21 Annual Report



Preface

Wildlife rehabilitation is the process of assisting injured, sick or orphaned native animals in such a way as to reduce their distress and optimise their chances of returning to live in their natural habitats. It is a daunting task involving the rescue of tens of thousands of animals each year, mostly by wildlife rehabilitation organisations and their dedicated volunteers. Without their efforts and those of veterinary professionals, many of these animals would not receive humane care or a second chance of survival.

Over the previous 12 months, and on the back of a devastating year of bushfire, drought and flood, volunteer numbers in New South Wales have grown enormously as has the number of animals rescued and released back to the wild. This year more than 150,000 animals were rescued involving more than 500 different species including 100 threatened species. It's the largest number of animal rescues ever reported by the sector.

We know this because wildlife rehabilitation organisations have told us. New South Wales is the only state that can accurately report on its wildlife rehabilitation outcomes. It's a credit to you because you ensure your volunteers keep records and report them to us each year. Keeping accurate records is essential to ensuring your hard work makes a difference to the conservation of each species rescued.

So, thank you to all the wildlife rehabilitation organisations who have submitted their data on time so we can continue to tell government, industry and the community about the important work you all do. Finally, an enormous thank you to all the wildlife volunteers and veterinary professionals, members of the public, non-government groups and response agencies, and donors here and abroad who contributed to fundraising for wildlife rehabilitation. All of you, in the darkest hours, stood up to help our precious native wildlife.

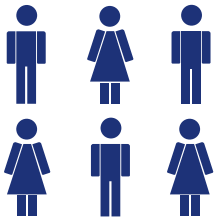


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NSW wildlife rehabilitation sector 2020–21 snapshot

People power



8,150
volunteers



22%
increase from the
previous year



55%
increase over the
last 5 years

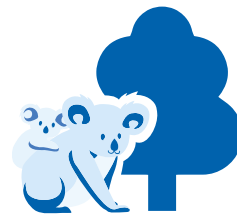
Wildlife rescues



153,445
native animals across
513
species rescued



19%
increase in
rescues from the
previous year



5,654
threatened
animals rescued



11,316
rainbow lorikeets
were the most
rescued species

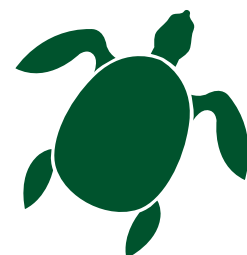
A second chance



31,092 (20%)
native animals released
back to the wild



28%
increase from the
previous year



22%
of threatened animals
released back into the wild



Introduction

This annual report is the collective story of the NSW wildlife rehabilitation sector. It is the fourth report to be compiled by NSW National Parks and Wildlife Service (NPWS), part of the Department of Planning and Environment. It communicates the significant efforts of volunteers in the sector and reports on trends in the rescue and rehabilitation of sick and injured wildlife.

In 2020–21 there were 8,150 volunteers who supported or were otherwise directly involved in wildlife rehabilitation. These volunteers represent more than a third of people involved in this activity across Australia and are dispersed across the State. Most of these volunteers belong to a wildlife rehabilitation group. They are augmented by a small number of independent individuals and other organisations such as zoos and fauna parks.

All wildlife rehabilitation providers collect data about the diversity and number of rescued animals coming into care, including large numbers of threatened species. The data contains useful information on the type of animal, date of rescue, and the animal's sex, age, physical condition, reason for rescue and fate.

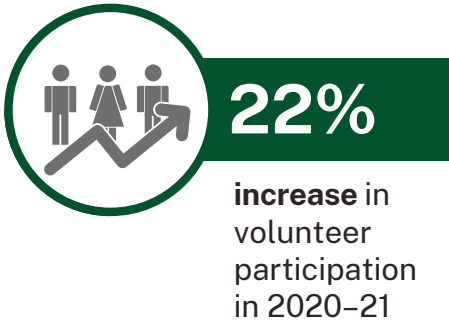
The data is collected and provided to NPWS for collation at the end of each financial year. Where possible, these records are then uploaded to NSW BioNet (NSW Government repository for wildlife data) and SEED (NSW Government Central Resource for Sharing and Enabling Environmental Data) to be used by species conservation officers, researchers and biodiversity assessors.

Apart from these annual reports, the *NSW Wildlife Rehabilitation Dashboard* shows, over multiple years, what this sector does and what is happening to wildlife in New South Wales. It provides a rich resource from which many evidence-based analyses can be made, whether that is looking across the State or in your very own patch. With the help of the Foundation for National Parks and Wildlife's Wildlife Heroes project we are communicating the dashboard's value to the community through social media outlets such as podcasts.

This report gives an insight into the work of the wildlife rehabilitation sector. It provides a snapshot of key outcomes for 2020–21 in terms of volunteer numbers and animal rescues. 'Rescues' include all data, except sightings or where the animal was unable to be located for rescue, the animal evaded capture or where advice was provided. We focus on outcomes for native birds, mammals, reptiles, amphibians and marine mammals and provide case studies to highlight the work of individual volunteers and species of interest. We also look at trends across reporting years to get a sense of what has changed. This report focuses predominantly on native terrestrial animals – fish, invertebrates and introduced animals are not reported on/ have been omitted.

The data presented has limitations. Data quality is being continually improved and may be subject to change. NPWS has collated the various datasets and made every effort to improve consistency without compromising the accuracy of the results.

People in the sector



Volunteers are essential to wildlife rehabilitation. They are first responders to native animal emergencies, often working in challenging and confronting circumstances and bearing significant personal cost and stress. We could not do this work without their ongoing commitment and help.

This section reports on the number of volunteers in the sector, calculated from membership lists provided by each wildlife rehabilitation group and includes independent licence holders.

In 2020-21 there were 8,150 wildlife rehabilitators in the sector, with 15 groups reporting an increase in membership and 9 reporting a decrease. Volunteer numbers increased by 21.7% from the previous year. Over a third of groups who reported have less than 100 members. The largest wildlife rehabilitation group is WIRES (Wildlife Information Rescue and Education Service Inc.) with nearly 4,000 members.



Figure 1 Number of reported wildlife rehabilitation volunteers over the 5 years to 2020-21

New volunteers are encouraged to watch our welcome video (see link in 'More information' section).

Wildlife rehabilitation groups and their volunteers are spread across most of New South Wales. One group, Northern Rivers Wildlife Carers, has been successfully serving the community since 1992. This year is their 30th anniversary. The group has about 110 members and operates across more than 9,500 km² from Byron Bay all the way west past Urbenville and Tooloom (Figure 2). In this report, one of the group's members, Wendy Lawrence, shares her story of a memorable wildlife rescue (see case study on page 8).



Figure 2 The geographic zone serviced by Northern River Wildlife Carers



Helping wildlife rehabilitation groups avoid and manage conflict

Conflict is a normal part of life and working with other people. Conflict can be difficult to manage and can affect people’s reputation and ongoing participation in wildlife rehabilitation. This year Justice Connect – Not for Profit Law developed a new toolkit of resources for all participants in wildlife rehabilitation. The toolkit includes a package of resources and gives guidance about preventing conflict and suggestions for how to resolve different kinds of conflict. The toolkit is available on our website (see link in the ‘More information’ section).

Case study: Wendy Lawrence – a memorable wildlife rescue



Wendy Lawrence (NRWC) and Greg Clancy banding a sooty owl prior to release (Photo: NRWC)



Sooty owl (*Tyto tenebricosa*) (Photo: Wendy Lawrence/NRWC)

Wendy Lawrence is a wildlife rehabilitator and member of the Northern Rivers Wildlife Carers. She is one of the earliest members of the group, which is this year celebrating its 30th anniversary. Wendy is a trained and experienced raptor rehabilitator, and here she shares a story of a memorable wildlife rescue with us.

A call came in through the hotline from a fellow walking under some trees in a gully on his property when a rare, beautiful owl fell from a tree right behind him. She couldn't fly so ran into shrubs and hid from him. Matthew looked for her with no luck but his partner, Caitlin, found her later on in the afternoon. She spotted the owl being attacked by small birds.

She was easily caught, and Matthew took her to the North Coast Emergency vets at Ballina. There she was x-rayed, and no fractures were identified. There was, however, bleeding from her nares (nostrils,) so she must have had trauma to her head. She was also dehydrated. The following afternoon she came into my care. I was expecting a barn owl, and as I carefully opened the box and peered in, I couldn't believe my eyes! Inside was a rare, beautiful female sooty owl. My excitement was immense.

In almost 32 years of rehabilitating birds of prey, I had never seen this special owl anywhere but in books. I felt privileged to be caring for her.

She was underweight at 855gm and had a drooping right wing, most likely due to tissue damage. This took a week to improve, and, in the meantime, she was eating really well.

After almost 3 weeks in care, she was ready to return to her home. I weighed her before release and she was 1.037 kg, a weight gain of 182gm. She was banded by Greg Clancy prior to release.

The sooty owl was taken back to Matthew and Caitlin's house and released there when it was dark. I placed her on a tree stump in an open area where she remained for a few minutes before flying straight ahead then veering to the right and up the gully from where she came.

Annual trends over 5 years



546,223

native animal rescues in the five-year period to 2020–21

Before focusing on 2020–21, this section of the report investigates annual trends in wildlife rehabilitation data over the past 5 years. This enables us to compare results between years and see what is changing over time.

Number of rescues

There were 546,223 native animals rescued over the 5-year period from 2016–17 to 2020–21: an annual average of 109,245. These rescues have involved 544 different native species. Birds were the most frequently rescued class of animal, their number increasing over each reporting year (Figure 3). They represent about 51% of all animals rescued. The average number of bird rescues over these 5 years is 56,340, compared to 38,184 mammal rescues, and 13,133 reptile and amphibian rescues. There are also a relatively small number of unidentified animals rescued each year (1.4% of all reported rescues).

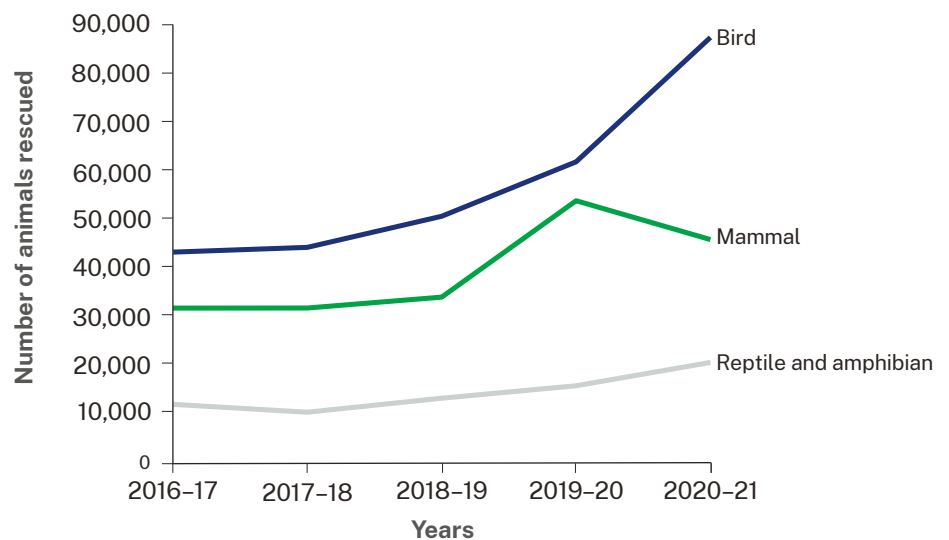


Figure 3 Number of rescues over the 5-year period 2016–17 to 2020–21 by class of animal

Rainbow lorikeets remain the most common species with 42,882 of these birds rescued, an annual average of 8,576 (Figure 4). This species represents 8% of all animals rescued over the 5 year period. The common ringtail possum, eastern grey kangaroo and Australian magpie continue to be in the top 4 most rescued species. Eastern blue-tongue lizards are the only reptiles to be represented in the top 10 most rescued species over 5 years, with a steady increase in rescues since 2017–18.

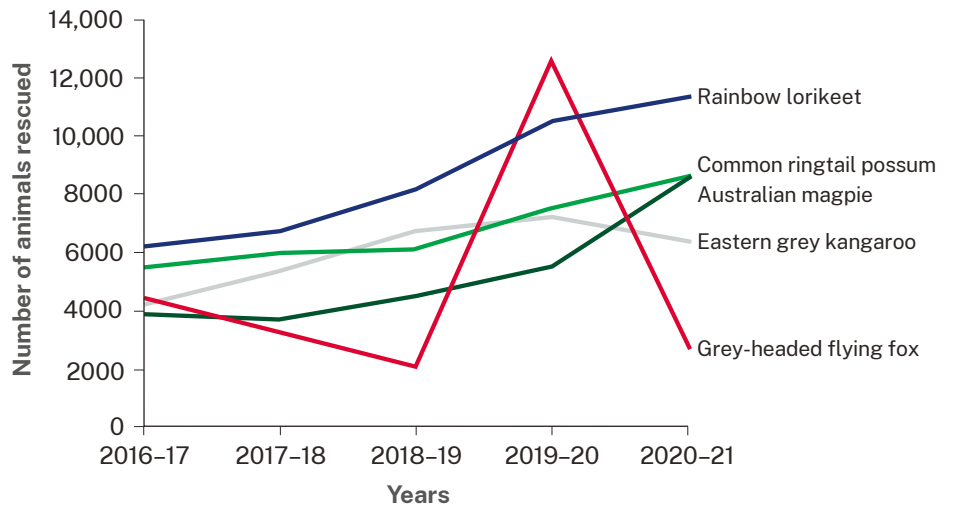


Figure 4 Top 5 most frequently rescued species over the 5-year period 2016-17 to 2020-21

Reasons for rescue

Each year over half of all rescues are assigned an ‘unknown’ reason for rescue. In some cases, such as motor vehicle collisions, the injuries sustained and the location where the animal was found can provide clues as to the reason for rescue. For the majority of rescued wildlife however, the reason for rescue can be multi-factorial and difficult to determine. When a reason for rescue is identified, 30% can be attributed to collision (impact with motor vehicles or other natural and man-made structures). The top 5 reasons for rescue over the past 5 years account for 59% of all rescues (Figure 5).

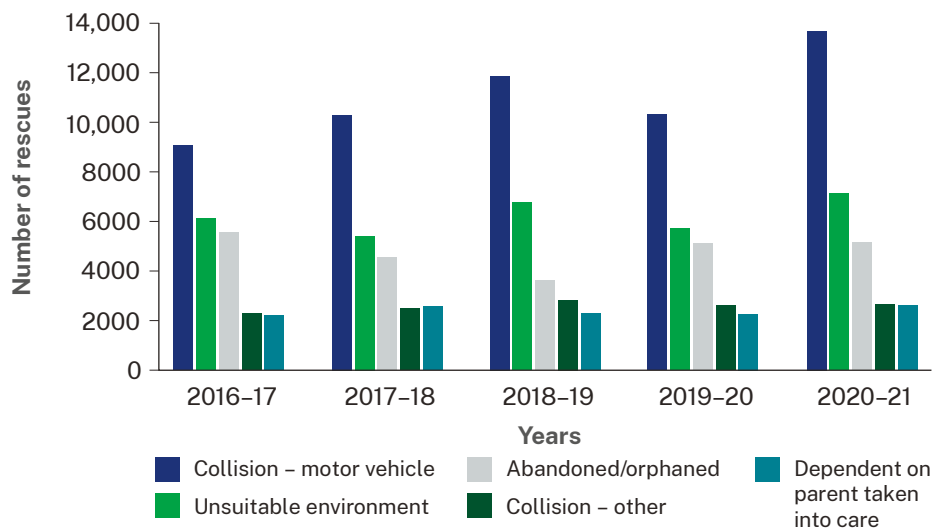


Figure 5 Most frequent reasons for rescue over the 5-year period 2016-17 to 2020-21



129,945

rescued animals
released over
5 years

Fate of rescued animals

The fate of rescued animals over the previous 5 years is shown in Figure 6. Overall, 129,945 rehabilitated animals have been released back into the wild, about 24% of all rescues, although the proportion varies depending on species. Each year, an average of 44,885 animals die or require euthanasia, compared to 25,989 animals that are released. There was again an increase in the number of animals reported in the 'other' fate category this year. The category 'other' encompasses rescued animals that may remain in care, that are left and observed, that are transferred to veterinarians or other organisations, or where the fate of the animals is unknown.

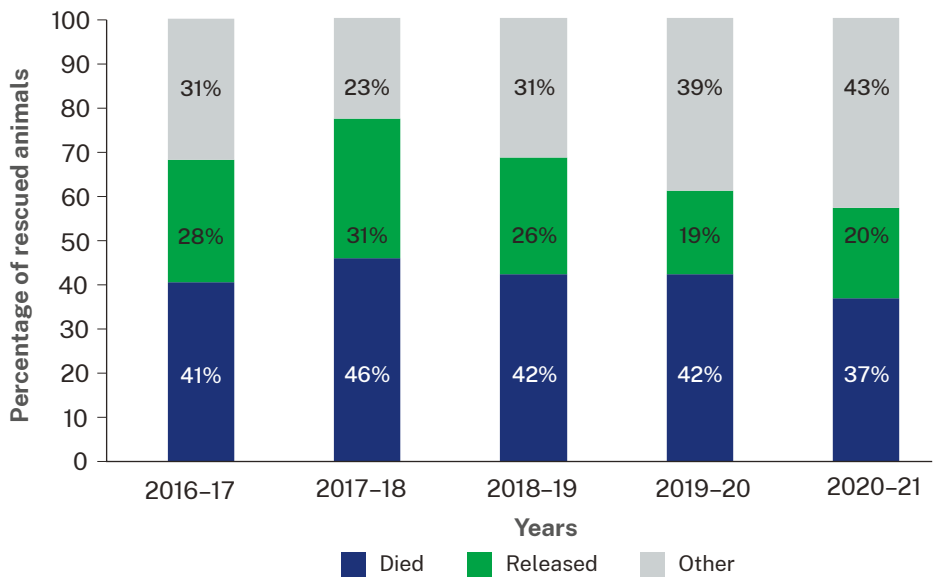


Figure 6 Comparison of fate of animals over the 5-year period 2016-17 to 2020-21



The year in focus: 2020–21



153,445

**native animals
and**

513

species were
rescued in
2020–21

In 2020–21, a total of 153,445 native animals were reported rescued across 513 species (n=32 groups and 10 licensed individuals). The number of rescues was 19% higher than the previous year (2019–20) and the number of species rescued increased by 9%.

Top 10 species rescued

The 10 most rescued species in 2020–21 are shown in Figure 7. Similar to previous years, these species represent about 41% of all animals rescued. There were 11,316 rainbow lorikeets rescues this year, once again, making them the most commonly rescued species. Overall, all but one of the species in the top 10 experienced an increase in the number of rescues compared to the previous year. Eastern grey kangaroo rescues were down 12% compared to the previous year. There was a 92% increase in galah rescues between 2019–20 and 2020–21, the largest recorded increase this year.

Males and females each accounted for about 7–8% of rescues where sex was recorded. Approximately equal sex ratios have been reported since 2017–18. Where age was identified, adults (24%) and juveniles (25%) accounted for most rescues. Each year, a small percentage of eggs are rescued. This year, 58 bird and 39 reptile eggs were rescued, most commonly due to being found in an unsuitable environment or being abandoned.

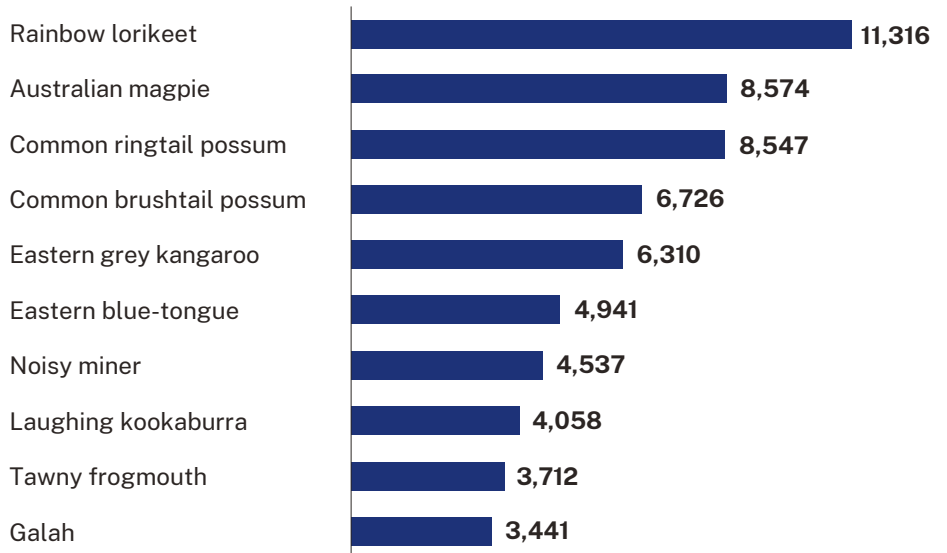


Figure 7 10 most rescued species in 2020–21

Summer and spring were the busiest seasons for wildlife rescues, with 31% and 32% of rescues respectively. Unlike 2019–20 where there was a spike in rescues over summer, correlating with the severe bushfires, the seasonal trend of rescues this year is more closely comparable with previous years. Rescues peaked in November (19,047 rescues) with birds accounting for 63% of all rescues during this month. June (7,503) and July (7,551) recorded the lowest number of rescues (Figure 8).

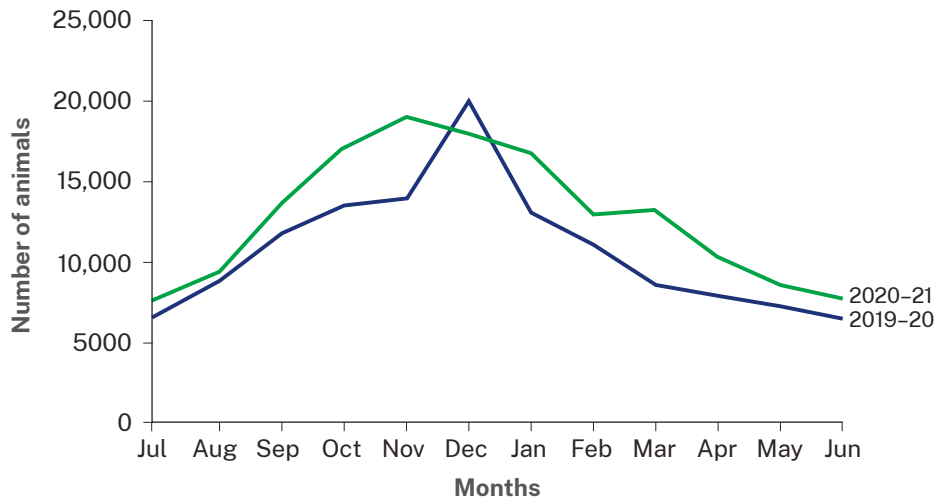


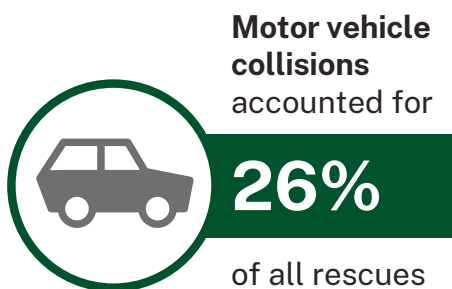
Figure 8 Comparison of the number of animal rescues reported each month in 2019-20 and 2020-21

Case study: Improving our reporting



Platypus (*Ornithorhynchus anatinus*) (Photo: Aditi Sriram/DPE)

Wildlife rehabilitation data has power. It can inform research, local environmental planning decisions and species conservation actions. Make the most out of your data by providing accurate information about where the animal was found, the reason it was rescued and where it was released when rehabilitated. The more we reduce unknowns in our data, the more we will know about how to protect these animals into the future. More information on reporting and data templates can be found on the *NSW Wildlife Rehabilitation Dashboard* (see link in the ‘More information’ section).



Why is wildlife coming into care?

The ‘unknown’ reason accounted for 65% of rescues this year. Of the remaining rescues, the top 10 reasons for rescue in 2020-21 are shown in Figure 9. Like previous years, ‘Collision – motor vehicle’ was again the largest known cause for rescue, particularly for birds and mammals. It accounted for 13,855 rescues, a 33% increase on the previous year. The case study on page 12 shows monthly trends in rescues due to motor vehicle collisions. Young that have been ‘abandoned/orphaned’ or ‘fallen from nest or tree’ were other significant reasons for rescue, accounting for 18% of known rescues.

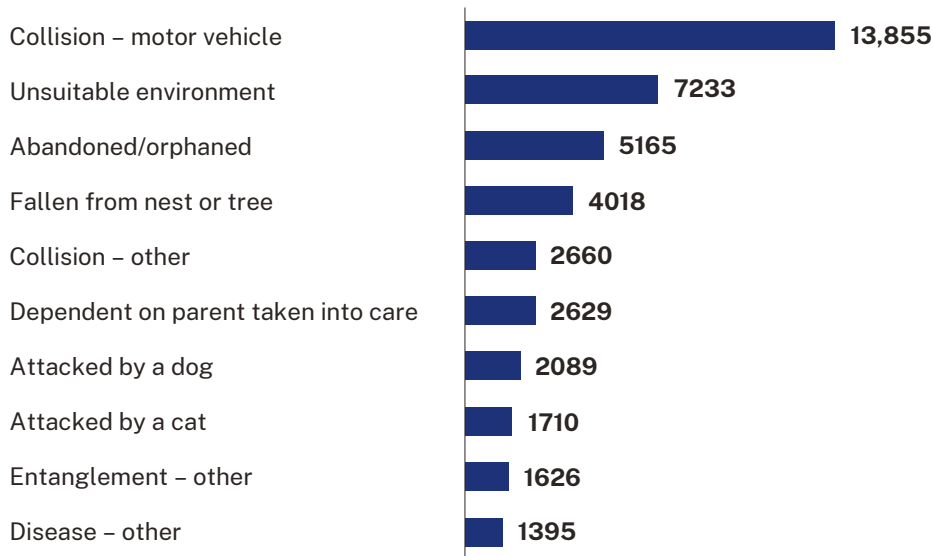
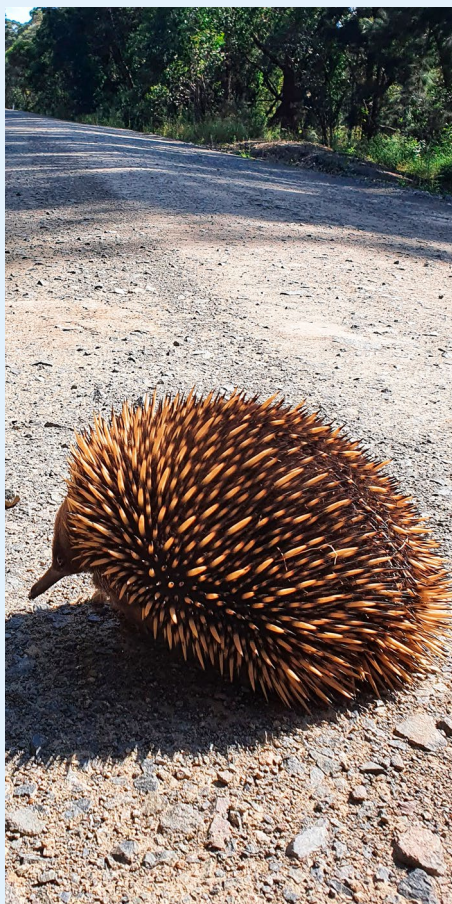


Figure 9 Top 10 reasons for rescue in 2020-21

Case study: Motor vehicle collisions – seasonal trends



Short-beaked echidna (*Tachyglossus aculeatus*) crossing the road (Photo: Tim Johnson/DPE)

Over the last 5 years about 11,120 animals on average were injured or killed each year because of collisions with motor vehicles. Mammals make up 53%, birds 41% and reptiles about 6% of these records. Interestingly, seasonal trends in vehicle collisions vary between each of these 3 classes of animal (Figure 10). For mammals, collisions start to increase over the autumn months, peaking in winter (33% of all mammal records) and declining over spring to their lowest levels in summer (19%). The opposite occurs for birds. Summer is their peak time (29% of all bird collisions), declining in autumn to only 19% in winter, followed by a sharp increase over the spring months. For reptiles the peak time is during spring (42.4% of all reptile collisions).

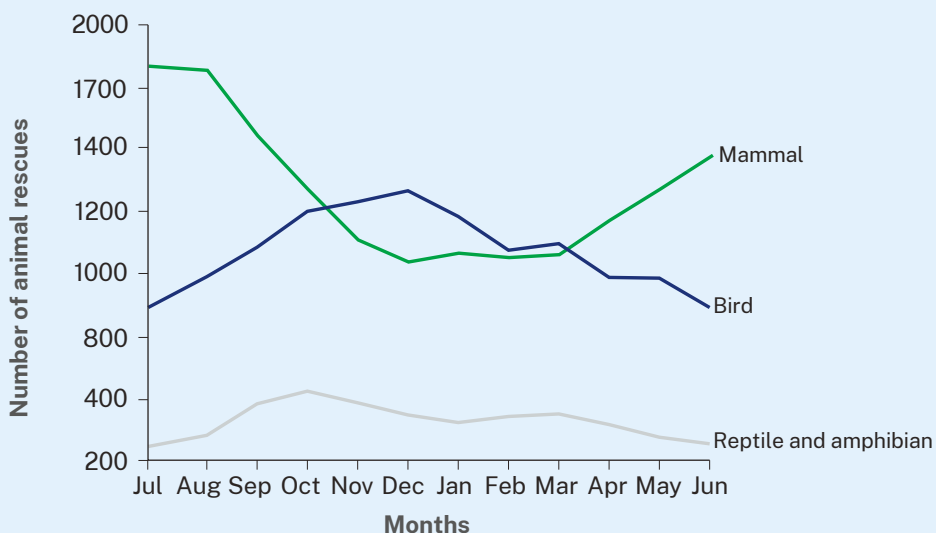


Figure 10 Seasonal trends in rescues of birds, mammals and reptiles and amphibians (average numbers over a 5-year period)



Fate of rescued animals

Rescued animals are usually found in a severely compromised state, impacting their chances of survival. Consequently, many cannot be rehabilitated and returned to the wild. Overall, 20% of all rescued animals (31,092) were rehabilitated and released in 2020–21. This is a slight increase on the previous year where 19% of rescued animals were released. Release rates for mammals, reptiles and amphibians increased this year compared to last year, while release rates for birds decreased (Figure 11).

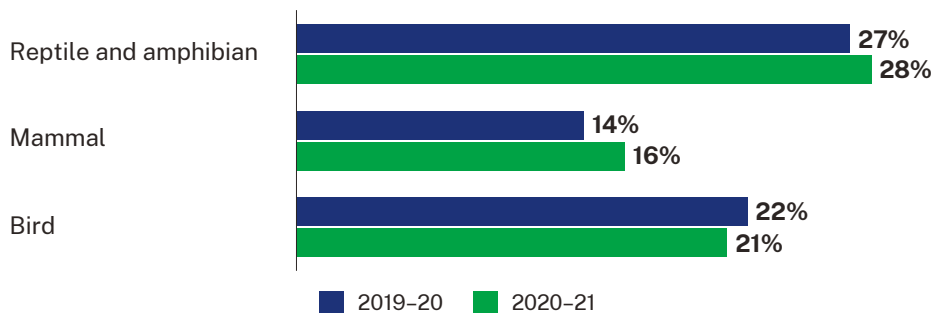


Figure 11 Percentage of animals rehabilitated and released, by class, for 2019–20 and 2020–21



5,654

threatened animals were rescued

Threatened species

Volunteers rescued 101 different NSW threatened species this year totalling 5,654 animals, a 63% decrease on the previous year. The significant difference in threatened species rescues between the 2 years is as a result of a spike in grey-headed flying-fox rescues in 2019–20. Although grey-headed flying-foxes were once again the most rescued threatened species, rescue numbers this year (2,746) are significantly lower than the previous year (12,571).

A total of 55 critically endangered animals across 7 species were rescued, a 58% increase on the previous year. There were 22 red-tailed black-cockatoos rescued, making them the most common critically endangered species rescued. Hooded plovers were a close second, with 20 reported rescues. Loggerhead turtles were among the top 5 threatened species rescued this year, a 189% increase on the last year (38 rescues in 2019–20) (see case study on page 14).

Top 5 rescued threatened species	Number rescued 2020–21
Grey-headed flying-fox	2,746
Koala	1,444
Green turtle	367
Bush stone-curlew	120
Loggerhead turtle	110

Case study: Loggerhead turtle rescues



Loggerhead turtle hatchlings (Photo: Guy Dixon/Taronga Zoo)

Loggerhead turtles are one of 6 species of marine turtles found in Australia. They are federally listed as endangered. The loggerhead turtles rescued in New South Wales are of particular significance as they are considered part of the critically endangered south-west Pacific population.

Loggerhead turtle rescues significantly increased this year compared to last year. Rescuing and rehabilitating marine turtles requires specialised training and facilities and there are only a proportion of rehabilitation organisations in New South Wales licensed to undertake this activity.

In terms of the age of the rescued loggerhead turtles in 2020–21, most (58%) fall into the post-hatchling category. There were 11 hatchlings rescued (10%) and 4 adults rescued (4%). There were 31 rescues (28%) where their age was reported as ‘unknown’.

The majority (56%) of loggerhead turtle rescues occurred in autumn and ‘stranded/haul out’ was the most commonly reported reason for rescue during this period. Strandings and haul outs are most likely related to ocean conditions where post-hatchlings may get washed ashore and are subsequently rescued. The top reasons for rescue are shown in Figure 12.

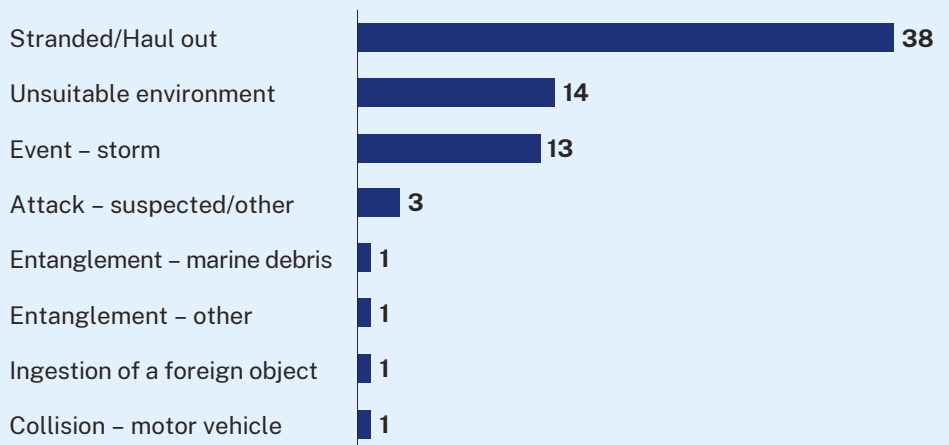
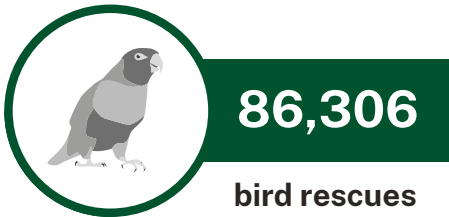


Figure 12 Top reasons for loggerhead turtle rescues in 2020–21

Overall, 44% of rescued loggerhead turtles were able to be rehabilitated and released back into the wild. Hatchlings and post-hatchlings can be very compromised prior to rescue. It is not uncommon to find post-hatchlings cold (hypothermic) and with flipper injuries.

Birds



In 2020–21, 86,306 birds were rescued across 333 species, including 59 threatened species. Alongside these rescues, wildlife rehabilitation providers also provided advice to the community about a further 4,174 birds – mostly regarding rainbow lorikeets and Australian magpies. The number of bird rescues increased by about 42% on the previous year, and the number of species rescued increased by 7 species.

The 10 bird species most rescued in 2020–21 are shown in Figure 13. These species comprise 52% of all birds rescued. Rainbow lorikeets, Australian magpies, noisy miners, laughing kookaburras and tawny frogmouths have been consistently represented in the top 5 most rescued species each year for the past 4 years. All bird species in the top 10 experienced an increase in rescues this year. Galah rescues increase by 92%, the largest increase across bird species (see case study on page 18).

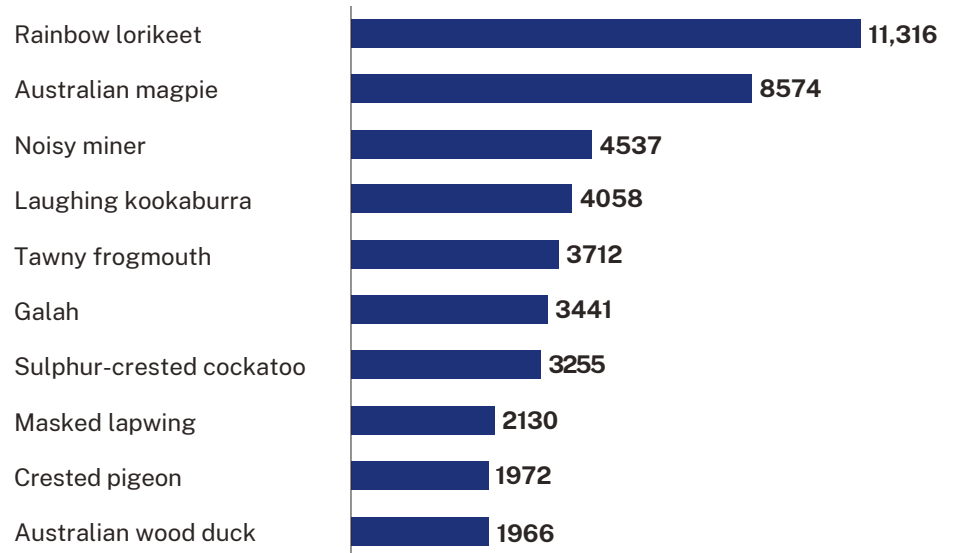


Figure 13 Top 10 bird species rescued in 2020–21

The age of half of the birds rescued was reported as ‘unknown’. Of the remainder, about 21% were adults and 27% were juveniles or young. Sex was reported in only 3% of rescues, with males and females equally represented.

Spring and summer were the busiest seasons for bird rescues (35% and 33% respectively). The winter months are consistently the quietest for rescues, with the lowest number of rescues this year again recorded in July (3,565 rescues) (Figure 14).

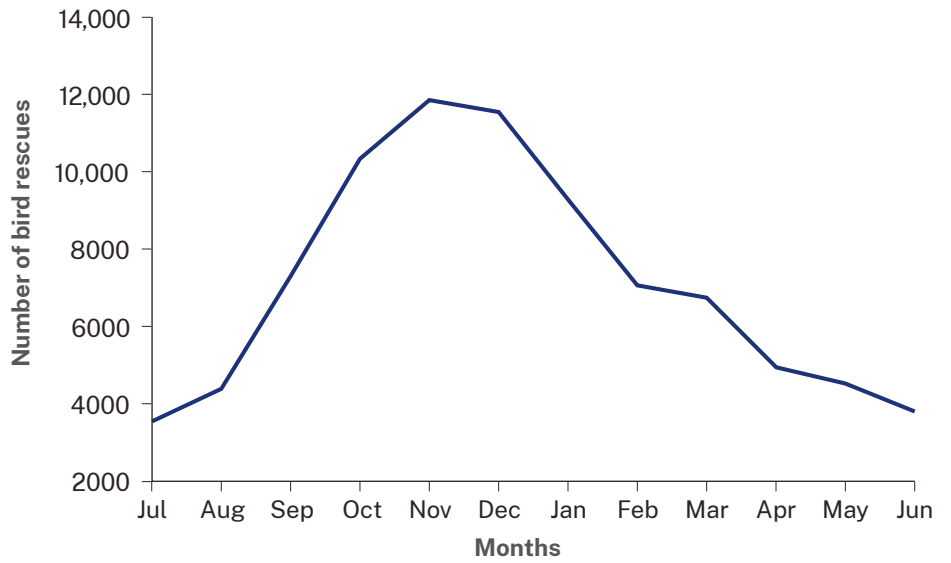


Figure 14 Bird rescues each month in 2020–21

The top 10 reasons for bird rescues are shown in Figure 15. The cause of 67% of bird rescues was ‘unknown’. ‘Collision–motor vehicle’ has consistently been the most common reason for bird rescues for the last 4 years. Motor vehicle collision-related rescues in birds significantly increased (35%) this year compared to last year (Figure 16). The species most impacted by motor vehicle trauma are laughing kookaburras (752 rescues), rainbow lorikeets (703 rescues) and Australian magpies (571 rescues). Young birds that have been abandoned/orphaned or have fallen from their nest or a tree account for 23% of bird rescues. More than half of the birds (55%) rescued due to these 2 encounter types were able to be rehabilitated and released back into the wild.

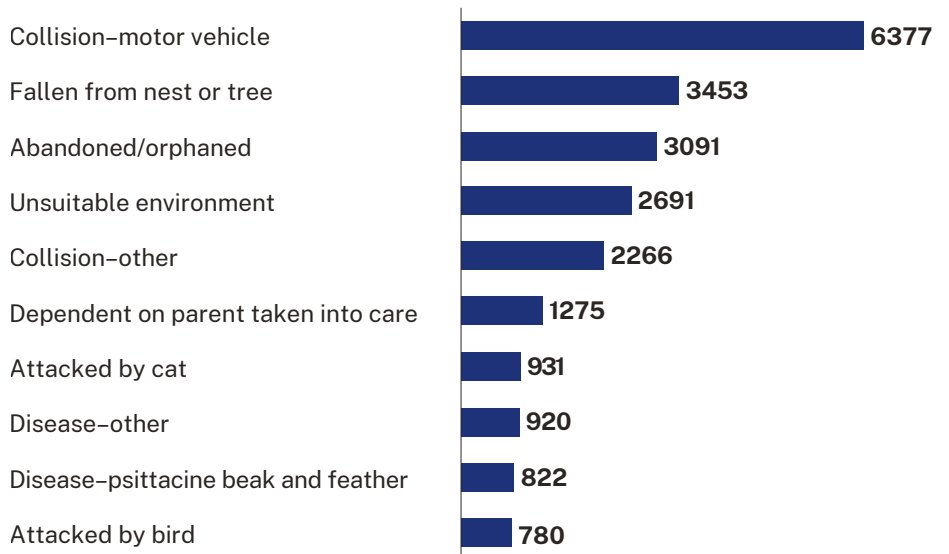


Figure 15 Top 10 reasons for bird rescues in 2020–21

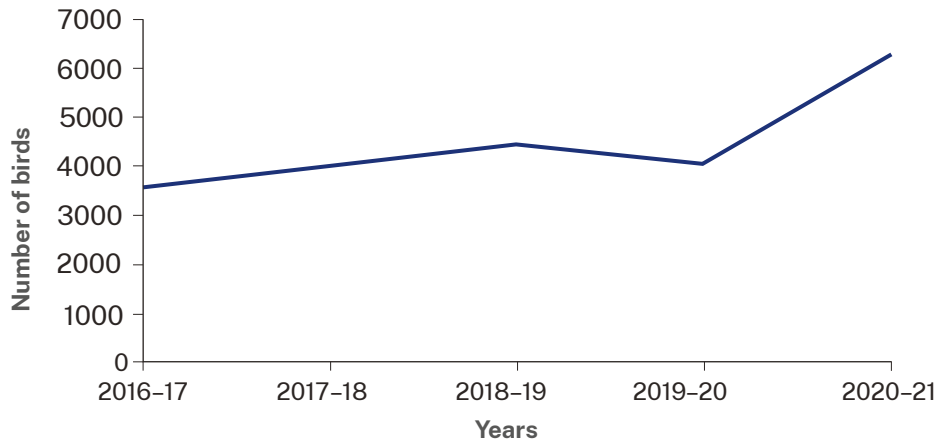


Figure 16 Collision – motor vehicle rescues in birds between 2016-17 and 2020-21



21%

of rescued birds were **rehabilitated and released**

Overall, 21% of birds rescued in 2020-21 were able to be rehabilitated and released. A breakdown of the fate of the top 10 commonly rescued species is provided in Figure 17.

Noisy miners (29%) and tawny frogmouths (28%) had the highest release rates. Unlike the previous year where more laughing kookaburras were released than died, this year all the most rescued bird species had higher mortality rates than release rates. Australian white ibis (14%) and galahs (16%) had the poorest release rates, likely as the most commonly known reason for rescue in these species was motor vehicle collision.

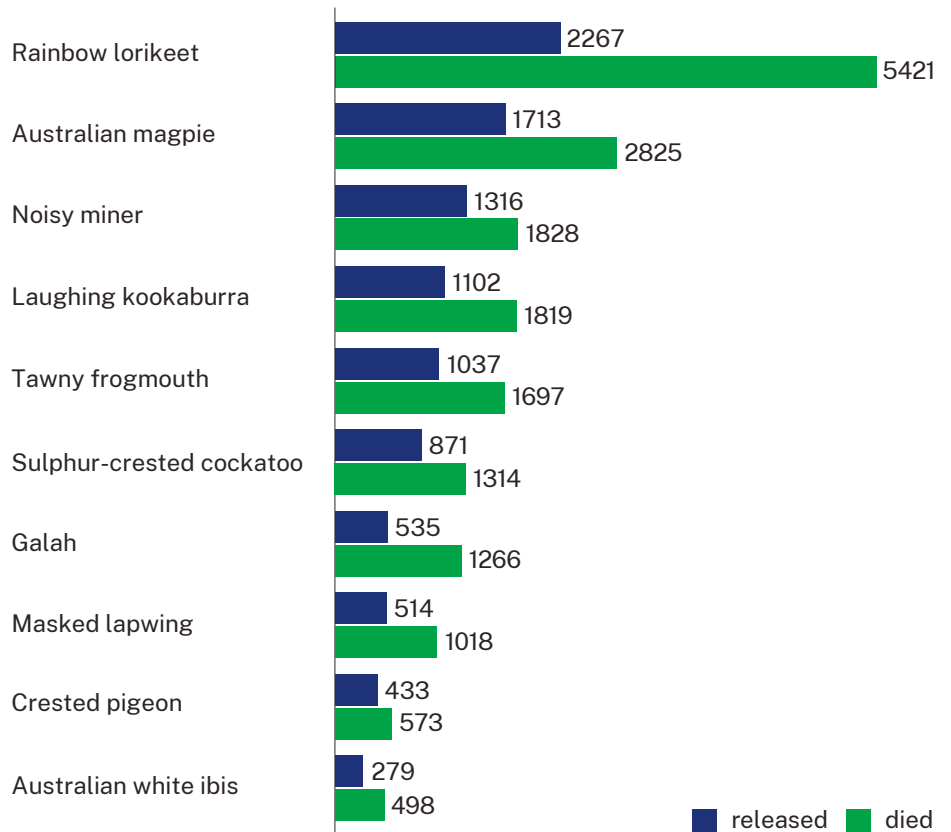


Figure 17 Fate of commonly rescued birds in 2020-21

Case study: A spike in galah rescues



Galah chick (*Eolophus roseicapilla*) (Photo: Jenny Packwood/WRSC)

Galahs have consistently been one of the top 10 most rescued bird species for the last 5 years, with a notable spike in rescues this year (Figure 18). They are a familiar sight in many cities and occur across most of Australia, including some offshore islands. They are a gregarious species, with larger flocks a sight to see, and can travel large distances to forage for food.

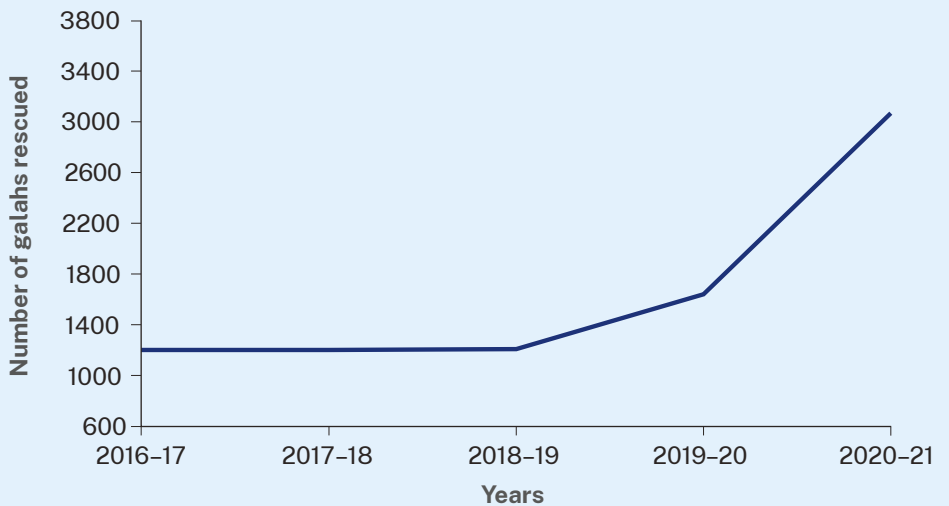


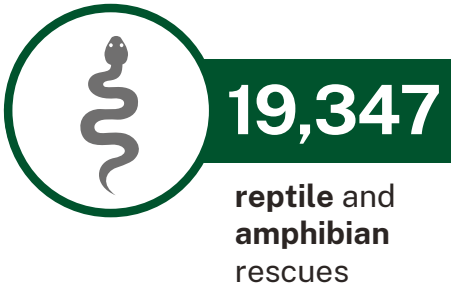
Figure 18 Galah rescues over the past 5 years

Where age was identified, adults (27%) were more commonly rescued compared to juveniles or young (22%). Galahs display sexual dimorphism where males and females (older than 12 months of age) can be distinguished based on eye colour. However, for most rescues (86%) sex was reported as 'unknown'.

Similar to the seasonal trend in bird rescues, summer and spring were the busiest period for galah rescues (67% of rescues). Dubbo Regional Council and Queanbeyan-Palerang Regional Council local government areas (LGAs) accounted for more than 10% of rescues.

Motor vehicle collisions were by far the most commonly identified reason for rescue in galahs (50%). As a result, the majority of rescued galahs (53%) died or were euthanased. Motor vehicle collisions result in significant trauma in birds and in most cases recovery is not possible. This year, 16% of rescued galahs were able to be rehabilitated and released back into the wild.

Reptiles and amphibians



This year, 19,347 reptiles and amphibians were rescued across 105 species including 16 threatened species – an increase in rescues of 32% from 2019–20. Wildlife rehabilitators additionally also fielded 1,721 requests for advice regarding reptiles and amphibians.

Snakes account for 45% of all rescues (8,801) followed by lizards (37%) and turtles and tortoises (15%). Frog rescues doubled this year compared to last year (211 rescues), with 446 frogs rescued across 13 species.

The top 10 species accounted for 64% of all reptile and amphibian rescues (Figure 19). Eastern blue-tongues have consistently been the most common species rescued over the past 4 years. Eastern carpet python rescues increased 4-fold this year, with the most common reason for rescue reported as ‘unsuitable environment’. Carpet/diamond pythons were the only species with a decrease in rescues this year (60% decrease).

Lace monitors have been in the top 10 for the past 3 years and rescues increased by 17% this year compared to last year. The reason for rescue in the majority of cases is unknown. Motor vehicle collision and being found in an unsuitable environment are the next 2 most common reasons for rescue in this species. Casey Hill is a wildlife rehabilitator in Newcastle, and you can read more about her experiences working with this species in the case study on page 24.

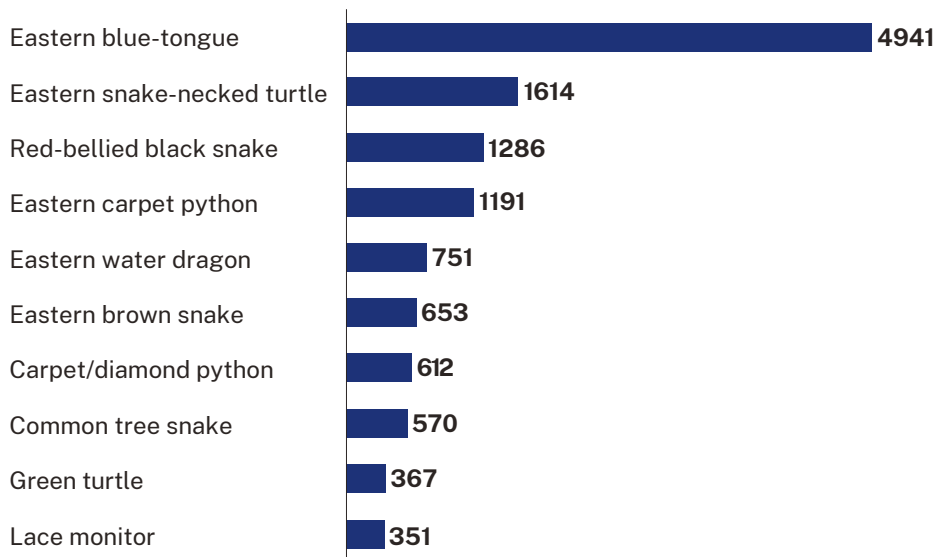
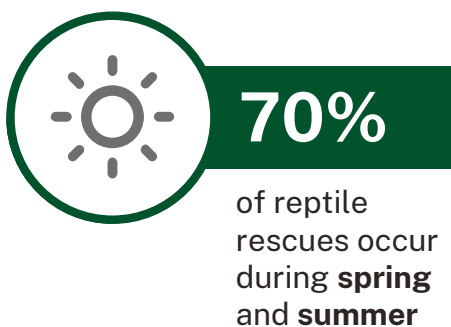


Figure 19 Top 10 reptile species rescued in 2020–21



The age for the majority (69%) of rescued reptiles and amphibians is reported as unknown. Unlike birds, where rescues are equally distributed across age class, where age is reported, adults (23%) make up most reptile rescues. It is often difficult to distinguish between sexes in the majority of reptile and amphibian species. Accordingly, sex is unknown for 89% of rescues.

This year, 70% of rescues were reported during the warmer months of spring and summer, with only 8% of animals rescued in winter. Monthly trends in reptile rescues are comparable across the years (Figure 20). This year, most rescues occurred in January (2,550) and the fewest rescues were in July (463).

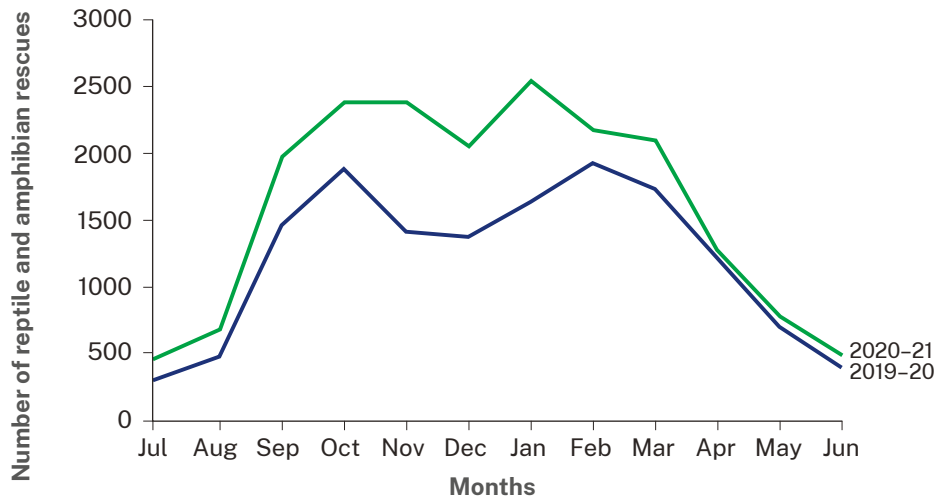


Figure 20 Reptile and amphibian rescues each month in 2019-20 and 2020-21



28%
of rescued
reptiles were
released

Reptiles are often captured from unsuitable locations, such as peoples’ homes and public spaces, and relocated nearby. It is by far, and consistently has been, the most frequent reason for rescue, including this year (Figure 21). Species often found in an ‘unsuitable environment’ this year were the Eastern carpet python (436 rescues), followed by ‘unidentified snake’ (300 rescues) and eastern snake-necked turtle (258 rescues).

Thousands of reptiles are also impacted by collisions with motor vehicles or are attacked by dogs and cats. About 58% of rescues due to motor vehicle collisions occur in summer and spring. About 564 eastern snake-necked turtles were rescued this year due to incidents with motor vehicles. Eastern blue-tongues are the most frequently rescued reptiles, and the most commonly identified reason for rescue in this species was dog attacks (611 rescues).

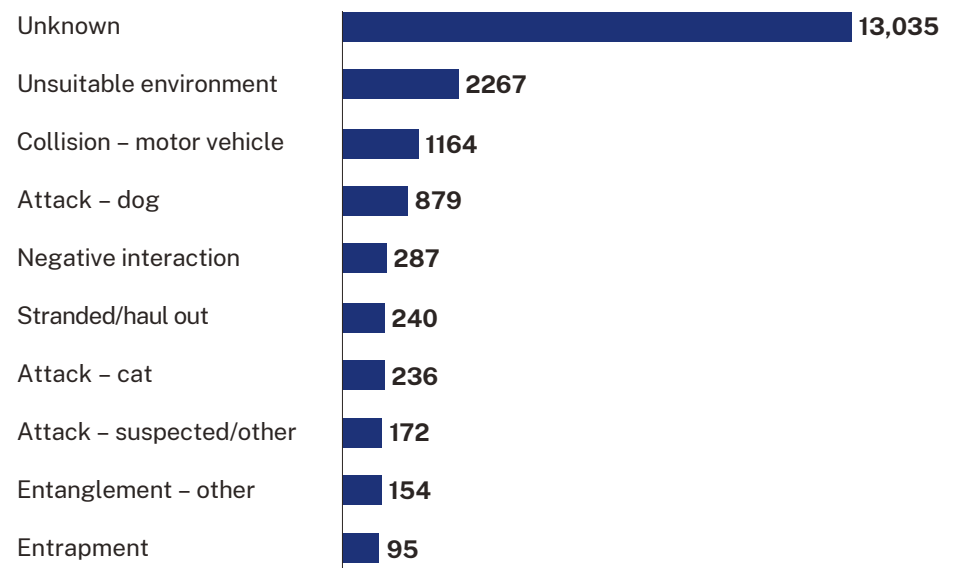


Figure 21 10 most common reasons for reptile and amphibian rescues in 2020-21



Across all species, 28% of rescued reptiles were released back into the wild. Reptiles and amphibians have the highest release rates when compared with birds (21%) and mammals (16%). Of the top 10 rescued species, eastern blue-tongues, eastern water dragons, lace monitors and green turtles had fewer animals released than died (Figure 22). Eastern snake-necked turtles had the highest release rates, with more than half the animals (58%) rescued able to be rehabilitated and released.

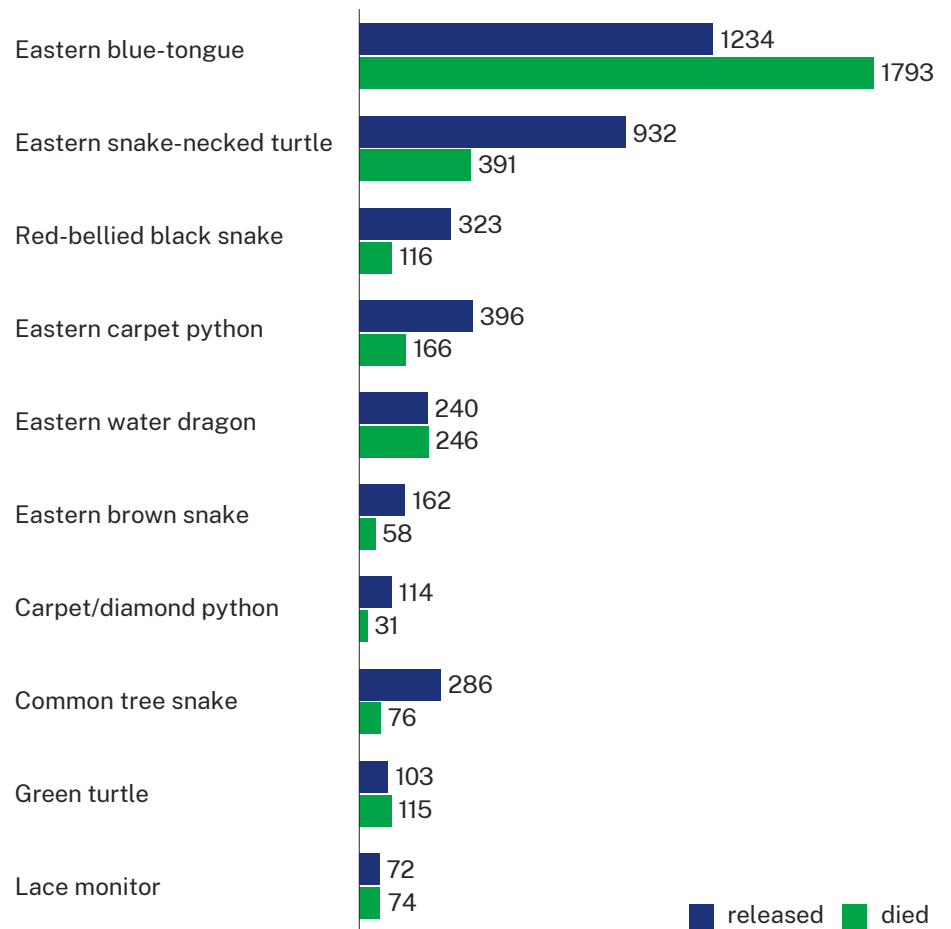


Figure 22 Fate of commonly rescued reptiles in 2020–21

Case study: Casey Hill –rescuing lace monitors



Casey Hill with a lace monitor (*Varanus varius*) rescued from an urban backyard, (Photo: Casey Hill/NATF)

Casey Hill is a volunteer wildlife rehabilitator and is the lizard and monitor coordinator for Hunter Wildlife Rescue, a wildlife rehabilitation organisation based in the Hunter region. She is the person you call when you find a lace monitor in your garage, stowed away in your roof or in the corner of your shed. Casey grew up spending a lot of time in nature, which cultivated her passion for wildlife. As a young girl, she would often see blue-tongue lizards in the bush and started rescuing them from a very young age. Eastern blue-tongues are her particular favourite, but she works across a range of species. She focuses particularly on lizards and monitors, building up her knowledge and experience to provide the best standard of care for the animals she rescues.

Lace monitors are one of Australia's largest lizards, growing up to 2 metres in length. They are known to forage in populated areas and are regularly spotted around picnic and recreational areas. They are strong, agile and adept climbers. Capturing and restraining lace monitors is not an easy task. They have large claws, powerful jaws and a long tail they can use very effectively to whip. Where possible, Casey captures lace monitors by hand and sometimes using cage traps. It's all about technique and Casey has mastered the technique with a fair bit of experience under her belt.

One of her most memorable rescues was a lace monitor, called 'Geoffrey', found injured at a cement plant. Geoffrey was a resident at the site and was regularly sighted by staff. Casey was called in for a rescue as Geoffrey was noticed to be dragging his back legs. Casey manoeuvred around shipping containers to rescue him and took him to a veterinarian for assessment. After 3 months in care, including physiotherapy, unfortunately Geoffrey showed no improvement and a decision was made to euthanase him. Casey developed a bond with Geoffrey, spending a lot of time providing the intensive care he required. He remains one of her more memorable rescues.

Juvenile lace monitor in care (Photo: Casey Hill/NATF).



Mammals



44,486

mammal rescues, a

15%

decrease from the previous year

There were 44,486 mammal rescues this year across 75 different species, including 26 threatened species – a 15% decrease in the number of rescues in the previous year. A further 1,336 calls for advice regarding mammals were managed by the rehabilitation sector.

The top 10 mammal species rescued are shown in Figure 23. These species comprise 72% of all mammal rescues in 2020–21. The top 10 species remain largely unchanged across the last 4 years. Six out of the 10 species in the top 10 have recorded lower rescues this year compared to last year. Koala rescues decreased by 14% from the previous year.

Common ringtail and common brushtail possum rescues have been consistently increasing over the past 5 years (Figure 24). Together, these 2 species accounted for 34% of mammal rescues in 2020–21. There were also 2,036 short-beaked echidna rescues, again an increase of 28% from 2019–20.

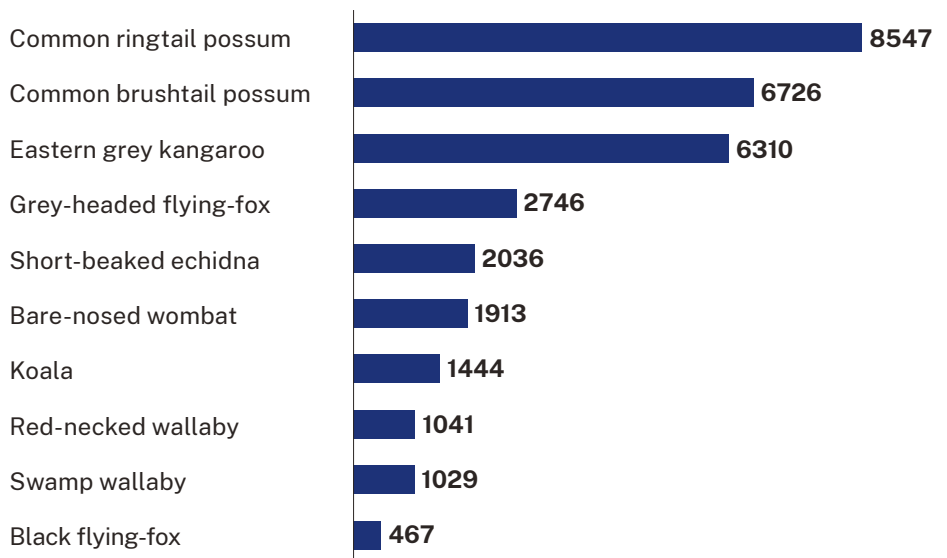


Figure 23 Top 10 mammal species rescued in 2020–21

Males and females were equally represented in mammal rescues. Juvenile and young animals accounted for the majority of rescues in 2019–20, whereas this year adults accounted for most rescues (32%) where the age of the animal was identified.

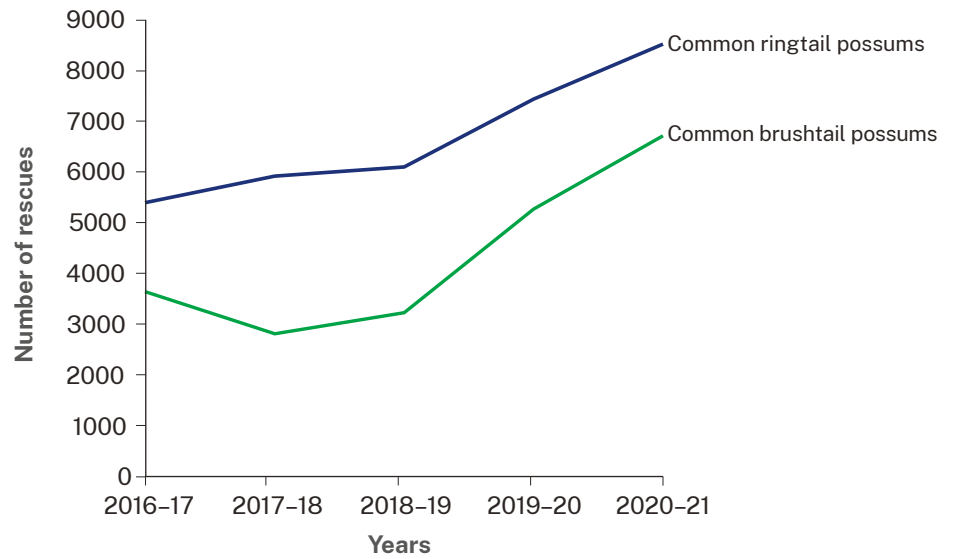


Figure 24 Common brushtail and common ringtail possum rescues over the past 5 years

Unlike last year, where there was a spike in rescues in summer, this year mammal rescues were largely stable throughout the year (Figure 25).

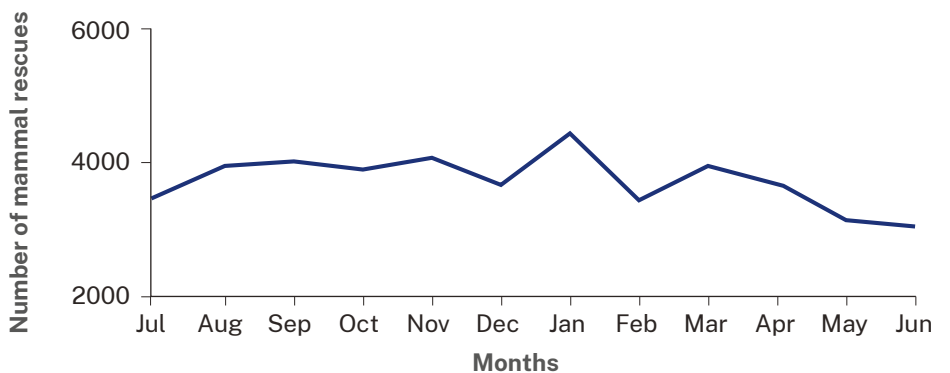


Figure 25 Mammal rescues each month of 2020-21

Where a reason or rescue was reported (42% of rescues) ‘Collision – motor vehicle’ was the most commonly reported encounter type (6,294 rescues) in mammals (Figure 26). This year, 19% of all motor vehicle collisions in mammals were reported in 3 LGAs: Queanbeyan-Palerang Regional Council, Shoalhaven City Council and Snowy Monaro Regional Council. Common brushtail possums and short-beaked echidnas were the 2 species most commonly rescued under the ‘unsuitable environment’ category, the second most common reason for mammal rescues. Grey-headed flying-foxes, a threatened species, were most represented in the ‘Entanglement – other’ category.

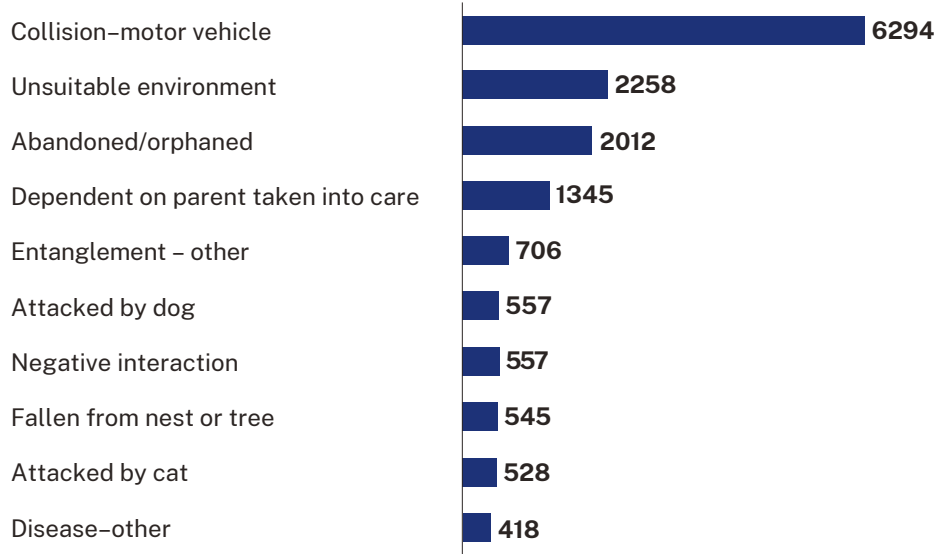


Figure 26 10 most common reasons for mammal rescues in 2020-21

16%
of mammals were **rehabilitated and released**

Overall, 16% of rescued mammals were able to be rehabilitated and released, a slight increase from 14% in the previous year. Less than half died (42%) or required euthanasia. Similar to this year, short-beaked echidnas were the only commonly rescued species that had more individuals released than died (or euthanased) (Figure 27). Eastern grey kangaroos (6%) and bare-nosed wombats (8%) had the lowest release rates.

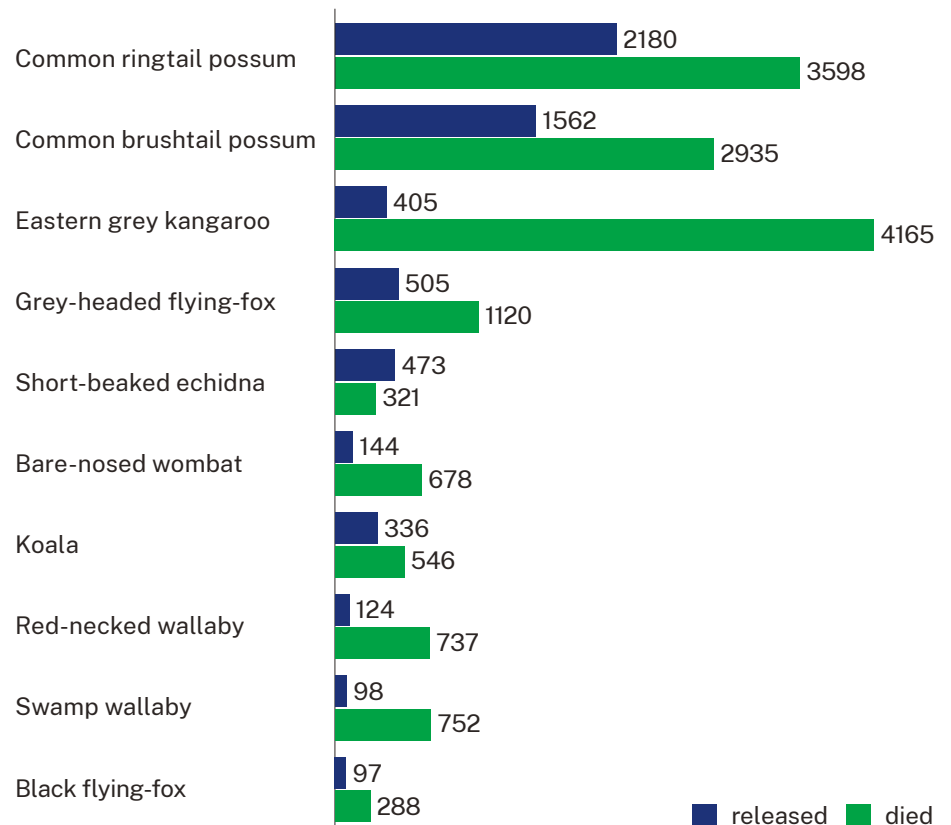


Figure 27 Fate of commonly rescued mammals in 2020-21

Member profile: Lindsay Hayes

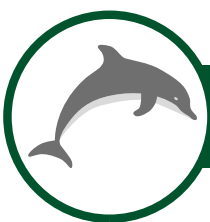


Lindsay Hayes with a rescued juvenile eastern grey kangaroo (*Macropus giganteus*)
(Photo: Aditi Sriram/DPE)

Lindsay Hayes is an independent licensed wildlife rehabilitator based in Narrandera. She has been involved in wildlife rehabilitation for the last 30 years and provides care for koalas, macropods, echidnas, platypus, birds and reptiles. She is the primary koala rehabilitator in the area and is an active member of the Koala Regeneration Committee in Narrandera Shire. The committee works in conjunction with National Parks and Wildlife Service to oversee the welfare of the koala colony at the Narrandera Nature Reserve and the Narrandera Flora and Fauna Reserve. Each year, Lindsay and members of the committee conduct an annual koala count in the reserve to record the trends in the local koala population.

Lindsay is well known in the local community and works closely with community members and local veterinarians to provide care for sick and injured wildlife. When wildlife is brought to the local vets, she is their first point of contact as there are few other people in the area with the experience and skills needed to rehabilitate wildlife.

Lindsay was a journalist in her past life and continues to publish stories on wildlife and the local community in regional media. She has many stories to tell and is working on a book about the people she has met through her work in wildlife rehabilitation. She smiles as she tells the story of a possum brought to her one evening which turned out to be antechinus. Lindsay continues her work from her riverside farm and says one of the joys of this work is seeing animals she has released return to the area with new young and seeing wildlife in her backyard every day.



195

**marine
mammal
incidents, a**

25%

increase from
the previous
year

Marine mammals

In 2020–21 there were 195 marine mammal incidents reported, an increase of 25% from the previous year. These were evenly spread between cetaceans (100 incidents) and seals (95 incidents), excluding sightings.

Cetacean incidents included 3 threatened species: the humpback whale, southern right whale and sperm whale. Humpback whales were again the most frequently reported species, accounting for 36% of all cetacean incidents (Figure 28). While there is a similar number of cetacean incidents to 2019–20, the number of species reported increased from 9 to 15 (excluding those reported as unknown cetacean and bottlenose dolphins). There were 42 events at sea with humpback whale entanglements accounting for half of the events, as well as 8 strandings and 2 entrapments. This year, 45 cetacean carcasses were reported washed ashore, 3 times the number recorded in 2019–20.

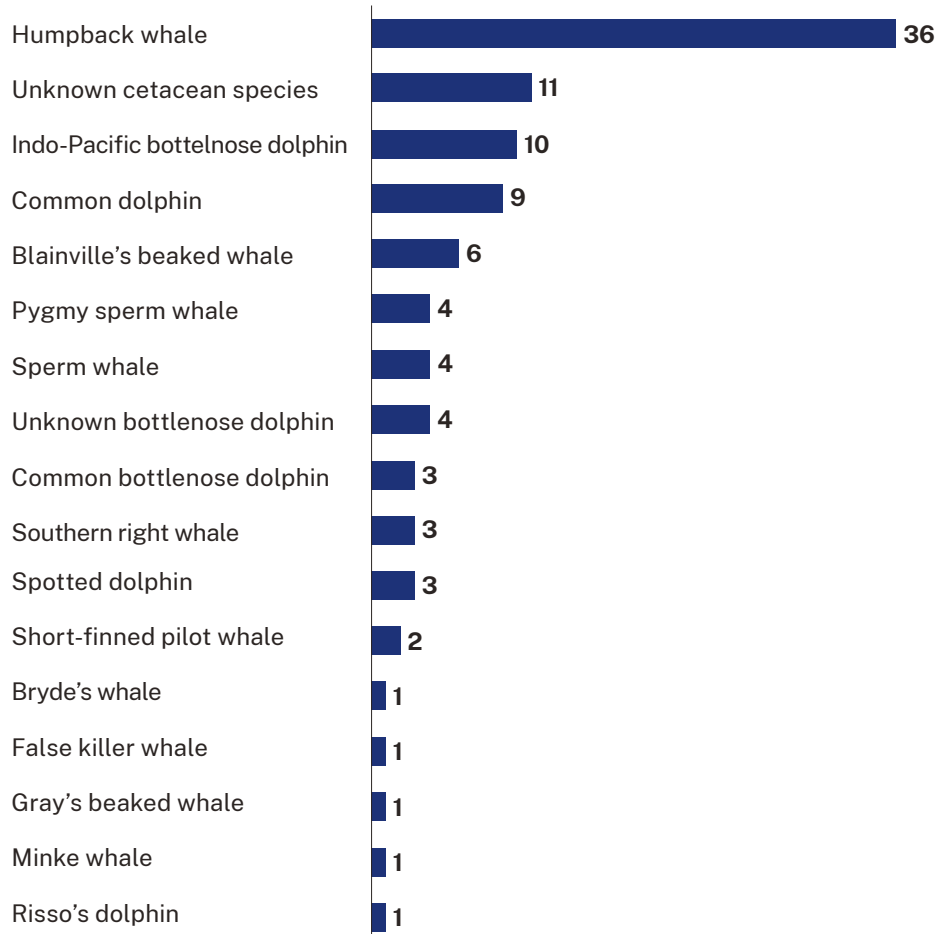


Figure 28 Cetacean species incidents in 2020–21

Three species of seal were reported in 2020–21. They included New Zealand fur seals (38 reports) and Australian fur seals (19 reports), both listed as threatened in New South Wales. Five leopard seals and another 33 unknown seals were also reported by responding organisations. Overall, seal reports increased 75% from 2019–20.

‘Seal haul out’ is the most common reason seals are reported to NPWS. They accounted for 70 seal reports this year. One male Australian fur seal, named ‘Reggie’ by the Organisation for the Rescue and Research of Cetaceans in Australia (ORCCA) volunteers, repeatedly hauled out for 5 months over summer and mainly at crowded beaches. ORCCA volunteers monitored the seal on the Central Coast, Sydney’s northern beaches and the Illawarra region, not only providing updates to NPWS and specialist veterinarians assessing the seal’s health, but also engaging with the local community at each location.

Appendix 1: Data providers 2020–21

The department is grateful to the following organisations (groups) and independent licence holders who provided their records for 2020–21:

Wildlife rehabilitation organisations including facilities
Australian Seabird and Turtle Rescue (ASTR)
Dolphin Marine Conservation Park
For Australian Wildlife Needing Aid (FAWNA)
Friends of the Koala (FoK)
Geoffrey Pearce Wildlife Care Centre
Koala Conservation Australia
Koalas In Care
Ku-ring-gai Bat Conservation Society (KBCS)
Looking After Our Kosciuszko Orphans (LAOKO)
Native Animal Rescue Group (NARG)
Native Animal Trust Fund (NATF)
Northern Rivers Wildlife Carers (NRWC)
Northern Tablelands Wildlife Carers (NTWC)
NSW Wildlife Information, Rescue and Education Service (WIRES)*
Organisation for the Rescue and Research of Cetaceans in Australia (ORRCA)
Port Stephens Koalas (PSK)
Rescue and Rehabilitation of Australian Native Animals (RRANA)
Sea World
Saving Our Native Animals (SONA)
Sunraysia
Sydney Metropolitan Wildlife Services (SMWS)
Sea Life Sydney Aquarium
Taronga Conservation Society
Tweed Valley Wildlife Carers (TVWC)
Waterfall Springs Conservation Association
Wildcare Queanbeyan
Wildlife Aid
Wildlife Animal Rescue and Care Society (Wildlife ARC)
Wildlife Carers Network Central West (WCNCW)
Wildlife in Need of Care (WINC)
Wildlife Rescue South Coast (WRSC)
Zambi Native Wildlife Sanctuary

Independent licence holders
D Johnston
E Latham
S Rowe
H Morrisey
S Brookhouse
J Nunn
M Holdsworth
P Hughes
R Molony
L Hayes

* WIRES contributed about 73% of the wildlife rescue data for 2020–21.

Acknowledgements

The department, thanks the wildlife rehabilitation sector for all the important work they do rehabilitating our sick and injured wildlife. We are grateful to Wendy Lawrence (Northern Rivers Wildlife Carers), Casey Hill (Native Animal Trust Fund) and Lindsay Hayes for sharing their personal stories. We look forward to sharing many more stories on the work of other volunteers in the future.

This report has been prepared by Aditi Sriram, Ron Haering and Shona Lorigan, NPWS Wildlife Programs and Regulations Unit.

Memorial

Sadly, 2 important people in the wildlife rehabilitation community left us in 2020–21.



Pat Connors was a long-time supporter of NPWS and WIRES. He joined WIRES as a volunteer in 2003. Pat developed WIRES' first rescue and rehabilitation database and call recording system pro-bono and supported it for over 16 years. Pat's thousands of hours working on creating and refining this database enabled WIRES to provide rescue advice and assistance for more than 1.5 million animals since its creation. The system has been the backbone of WIRES and the organisation would not be where it is today without this remarkable voluntary contribution, the system significantly helping WIRES to scale and manage the large volumes of calls received. Through his time, effort and technical expertise, Pat played a key role in developing WIRES into the strong, resilient and successful organisation that it is today. His efforts have also made reports like this possible and will have long-term benefits to species conservation. Pat was made a life member of WIRES in 2019.

Pat sadly passed away in December 2020. WIRES has recently implemented an annual grant in Pat's name, the Patrick Connors Avian Grant, to improve rescue and rehabilitation outcomes and/or species recovery and conservation of birds. WIRES and NPWS are grateful for Pat's profoundly generous contribution to the rescue and rehabilitation sector.



Julia McConnell was one of wildlife rehabilitation's earliest pioneers. A specialist in reptiles, Julia was well known in the Blue Mountains for her snake handling skills. She provided leadership in her roles as a former secretary of WIRES Blue Mountains, founding member of the Hawkesbury Herpetological Society and both former treasurer and secretary of the NSW Wildlife Council. For many years Julia was an independent wildlife rehabilitator and holder of a commercial catch and release reptile licence. She was a prolific rescuer of highland copperhead, tiger snakes and red-bellied black snakes. New South Wales Wildlife Council chair Audrey Koosmen said 'Julia's legacy to wildlife education, conservation and to the rehabilitation sector will be long remembered. Her commitment was enormous and engendered huge interest particularly in the region's reptilian fauna.' She passed away in December 2021.

More information



Name	Weblink
NSW BioNet – NSW Government repository for wildlife data	http://www.bionet.nsw.gov.au/
SEED – NSW Government Central Resource for Sharing and Enabling Environmental Data	https://www.seed.nsw.gov.au/
NSW Wildlife Rehabilitation Dashboard – Department of Environment and Planning webpage	https://www.environment.nsw.gov.au/topics/animals-and-plants/native-animals/rehabilitating-native-animals/wildlife-rehabilitation-reporting/wildlife-rehabilitation-data
Wildlife Heroes project – Foundation for National Parks and Wildlife webpage	https://wildlifeheroes.org.au/
How to get involved in wildlife rehabilitation – including the ‘welcome video’ – Department of Planning and Environment webpage	https://www.environment.nsw.gov.au/topics/animals-and-plants/native-animals/rehabilitating-native-animals/getting-involved-in-wildlife-rehabilitation
DPE (2022) ‘Conflict management toolkit for the wildlife rehabilitation sector in NSW: a package of resources to help wildlife rehabilitation organisations to avoid and manage internal conflict’, Department of Planning and Environment.	https://www.environment.nsw.gov.au/research-and-publications/publications-search/conflict-management-toolkit-for-the-wildlife-rehabilitation-sector-in-nsw

Find out more

If you would like to learn about becoming a wildlife rehabilitation volunteer and want to contact your local wildlife rehabilitation organisation, see the How to get involved in wildlife rehabilitation webpage, or use the International Fund for Animal Welfare’s app.

To learn more about Australia’s unique wildlife, and things you can do to live in harmony with wildlife, go to the Foundation for National Parks and Wildlife Backyard Buddies website.



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Environment and Heritage
Department of Planning and Environment
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