



Department of Planning, Industry and Environment

NSW Wildlife Rehabilitation

Annual Report 2017-18





Preface

Most of us at some time are likely to encounter native wildlife that are sick or injured and in need of care. Volunteers with the support of veterinary professionals provide an invaluable service rescuing these native animals and investing considerable time and resources trying to help them recover so they can be released back into the wild.

The draft *NSW Volunteer Wildlife Rehabilitation Sector Strategy* (OEH 2018) was developed to help support and promote the efforts of the thousands of volunteers participating in wildlife rehabilitation. A key action in the strategy is for NSW National Parks and Wildlife Service (NPWS), as part of the Department of Planning, Industry and Environment, to improve access to the data collected on the thousands of animals rescued each year. The knowledge generated from this data will inform research and conservation programs for hundreds of native animal species.

The Department is pleased to present this first annual wildlife rehabilitation report. We hope it sheds light on the important work of volunteers and increases understanding about the tens of thousands of sick and injured animals that are rescued and cared for by this sector each year.

We thank all the wildlife rehabilitation organisations and individuals that have submitted data for this report and acknowledge their ongoing contribution to animal welfare and environment protection outcomes.

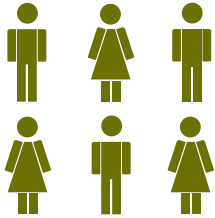


Contents

Preface	ii
NSW wildlife rehabilitation 2017-18 snapshot	iv
Introduction	1
People in the sector	2
Annual trends over five years	6
Number of rescues	6
Reasons for rescue	7
Fate of rescued animals	8
The year in focus: 2017-18	9
Top ten species rescued	9
Why is wildlife coming into care?	10
Fate of rescued animals	12
Threatened species	13
Birds	15
Reptiles and amphibians	20
Mammals	24
Appendix 1: List of data providers 2017-18	29
Appendix 2: Definition of anthropogenic and natural causes	30
Acknowledgments	31
Find out more	32

NSW wildlife rehabilitation 2017-18 snapshot

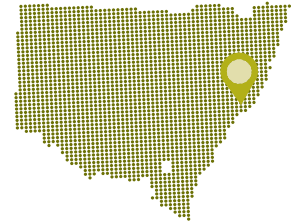
People power



5374
volunteers



1.9%
increase in
volunteers this year



33%
of volunteers are
Sydney based

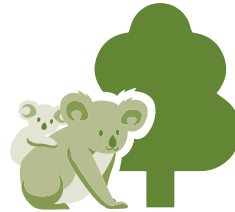
Wildlife rescues



83,482
native animals and
475
species rescued



24%
due to collisions
with motor vehicles



4800
threatened
animals rescued



6698
Rainbow lorikeets
were the most
rescued species

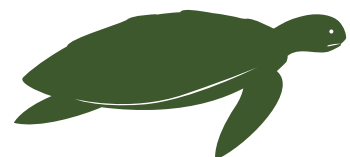
A second chance



26,224
native animals released
back to the wild



13%
increase from the
previous year



53%
of reptiles released
back to the wild

Introduction



This annual report is the collective story of the NSW wildlife rehabilitation sector. Compiled by NSW National Parks and Wildlife Service (NPWS), part of the Department of Planning, Industry and Environment, it highlights the significant efforts of volunteers in the sector and reports on trends in the rescue and rehabilitation of sick and injured wildlife.

In 2017-18, 5374 volunteers supported or were otherwise directly involved in wildlife rehabilitation. Dispersed across the State, volunteers belong to one of 30 groups licensed by NPWS. Home-based care is the sector's primary mode of operation. These groups are augmented by a small number of licensed independent individuals and organisations such as zoos, fauna parks and correctional facilities.

All wildlife rehabilitation providers collect data about the diversity and volume of rescued animals coming into care, including large numbers of threatened species. The data includes the type of animal, date it was rescued and extra information about its sex, age and physical condition, reason for rescue and fate.

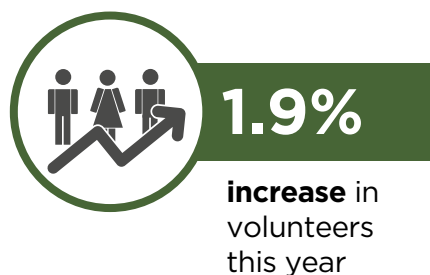
Data is collected and provided to NPWS for collation each financial year. These records are uploaded to NSW BioNet, the NSW Government's repository for wildlife data, to be used by species conservation officers, researchers and biodiversity assessors. By the end of June 2018 over 500,000 records had been incorporated into BioNet, representing the important contribution the wildlife rehabilitation sector makes to the Government's broader land management and conservation program.

This report provides a snapshot of key outcomes for the period from 1 July 2017 to 30 June 2018 in terms of volunteer numbers and animal rescues undertaken by the sector. Rescues include all data except where the animal was unable to be located or rescued or when the record states it was referred to another organisation.

The data presented has limitations. Not all wildlife rehabilitation organisations and individuals submitted reports at the time of writing this report (Appendix 1). Data quality is also being continually improved and maybe subject to change. NPWS has collated the various data sets and made every effort to improve consistency without compromising the accuracy of the results. The value (n) represents the number of groups that provided data for the given year.

Focusing on outcomes for native birds, mammals, reptiles and amphibians, this report does not include marine mammals, introduced animals, fish or invertebrates. Marine mammals will be included in future editions.

People in the sector



Wildlife rehabilitation is a unique activity undertaken by people who have a passion for wildlife and the environment. Most people in the sector are volunteers and they perform a variety of important roles for their groups. These roles include managing and coordinating volunteers, animal rescue and rehabilitation and providing support services such as training and fundraising. Some volunteers perform all these roles at the same time.

Continued recruitment and retention of volunteers is essential to enable wildlife rehabilitation groups to meet ongoing community demand for services. For this section of the report, the number of volunteers in the sector was calculated from membership lists provided by each wildlife rehabilitation group and included independent licence holders. The numbers do not distinguish between active and non-active members.

In 2017-18, there were 5374 volunteer wildlife rehabilitators (n=23). Ten groups reported an increase in membership and seven a decrease. The remainder stayed the same or did not report. The number of volunteers increased by about 1.9% from the previous year but remained lower than 2015-16 (Figure 1). The average number of volunteers between 2015-16 and 2017-18 is 5474.



Figure 1 Number of reported wildlife rehabilitation volunteers over the three years to 2017-18

Wildlife rehabilitation volunteers live throughout most of New South Wales (Figure 2). However, the majority are concentrated in urban areas east of the Great Dividing Range with almost a third of volunteers based in Sydney. There are more members in the Central Coast local government area (LGA) than any other LGA, closely followed by Northern Beaches LGA and the Queanbeyan-Pallerang Regional LGA.

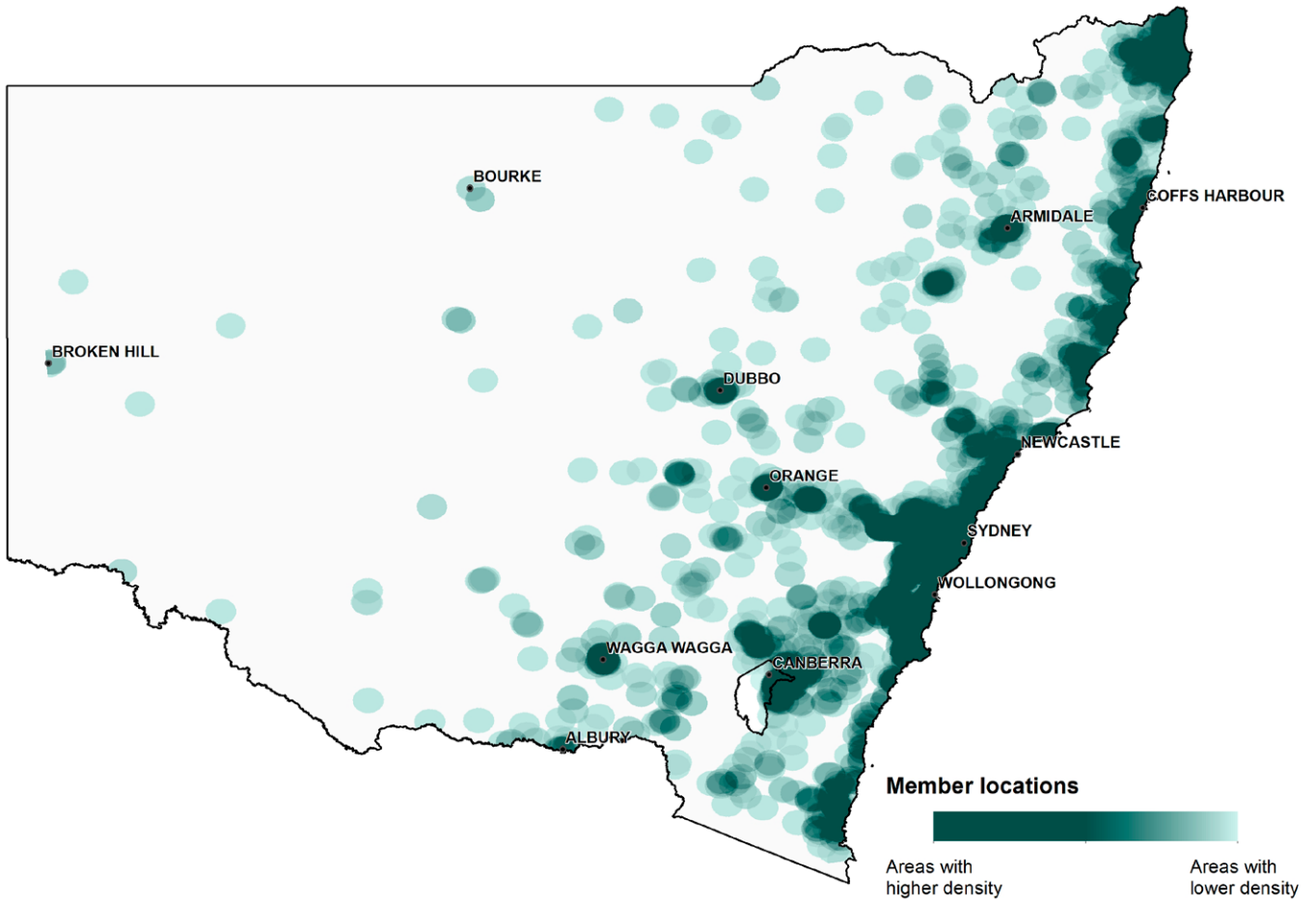


Figure 2 Distribution and density of wildlife rehabilitation volunteers in New South Wales



Member profile: Audrey Koosmen



What is your current role in wildlife rehabilitation?

I am the President of Hunter Wildlife Rescue. I hold four species coordinator roles and I'm the Incident Disaster Controller. I am also Chair of the NSW Wildlife Council.

Do you have specific animals you care for or rescue?

Marine sea birds, marine turtles and echidnas. I have a special love for these little 'swaggies' of the bush and I have had the honour to rear many puggles (baby echidnas). I have one in care now. I also care for possums (brushtails and ringtails) and all gliders species. Koalas have a warm and loved spot in my heart. I have reared quite a few koala joeys and cared for many burnt ones over the years. I mainly do 'pinkie' possums now (very young possum joeys).

How long have you been a wildlife rehabilitator?

Fifty-five years this year, I think. My goodness, where have the years gone?

How did you get involved in wildlife rehabilitation?

I came from a country farming family. My dad rescued birds and reptiles and my mum rescued macropods and any furry animals. They were all released. I became involved with our beloved wildlife at a very young age, and I followed my parents' footsteps and passion for caring for wildlife.

Why do you do it?

Because I feel we need to conserve as much of our wildlife as we can, and the small bit I do does make a difference. I cannot see myself doing anything else but supporting and caring for native fauna; it has been my lifetime passion to help in conserving them and their habitat.

What is your favourite thing about wildlife rehabilitation?

To care for a very injured animal, watch it recover and then to release it back into its free, wild habitat is so rewarding.

If you had one piece of advice for other rehabilitators what would it be?

Don't allow yourself to burn out. Learn to say 'no' and don't care for something you have no knowledge or experience with. Also, learn to pass fauna on when needed and always ask for help. No question is stupid.

What would you say to someone considering becoming a wildlife rehabilitator?

We need as many people as we can get to help our native species. But you need to understand what it involves – four-hourly feeding, no sleep often – you need to be strong as the work is hard but also have a warm heart in supporting others. But we are here to help conserve our wildlife and not have pets.

Do you have a rescue or animal that stands out for you?

Yes, a rescue of a badly burnt koala in the 1994 bushfires in the Hunter. She was found four weeks after the fire; we were out conducting black walks. She was found on the ground chewing grass and licking the dew on grass. Some said to euthanase

her, but we decided not to because we had vet access close by. She was an intensive care girl for many weeks but showed great strength, recovered and was released 13 months later. She was radio-tracked for two years and gave birth to two healthy boys over the tracking program. Her name was Cinders. She passed away on the same property she was released back to some five years later, as an old lady, and lies there now, peaceful.



Annual trends over five years



400,277

animal rescues
in five-year
period to
2017-18

This section of the report looks at broad annual trends in wildlife rehabilitation data before looking more closely at the focus year 2017-18. The three key areas reported on are number of rescues, reasons for rescue (i.e. encounter type) and fate.

Number of rescues

There were 400,277 animals rescued over the five-year period from 2013-14 to 2017-18. These rescues involved 640 different native species. Birds were the most frequently rescued class of animal with an average of 41,398 rescues each year (Figure 3). They represent nearly 52% of all animals rescued. Over these five years, the average annual number of mammal rescues was 27,483 and reptile and amphibian rescues 10,041. The largest number of animals reported rescued was in 2016-17 (84,413).

Rainbow lorikeets remain the most common species rescued with 31,048 of these birds rescued at an annual average of about 6210 (Figure 4). Other frequently rescued species include the common ringtail and brushtail possums, Australian magpie, eastern grey kangaroo and the grey-headed flying-fox. Together these six species represent 32% of all species rescues. This value is likely to be higher because not all animals rescued were identified to species and named, for example, some were reported as 'unidentified possum' or 'unidentified macropod'.

Eastern grey kangaroos and grey-headed flying-foxes show the most fluctuation in rescues which most likely reflects impacts due to drought and heat stress. Other species have generally consistent annual rescue numbers.

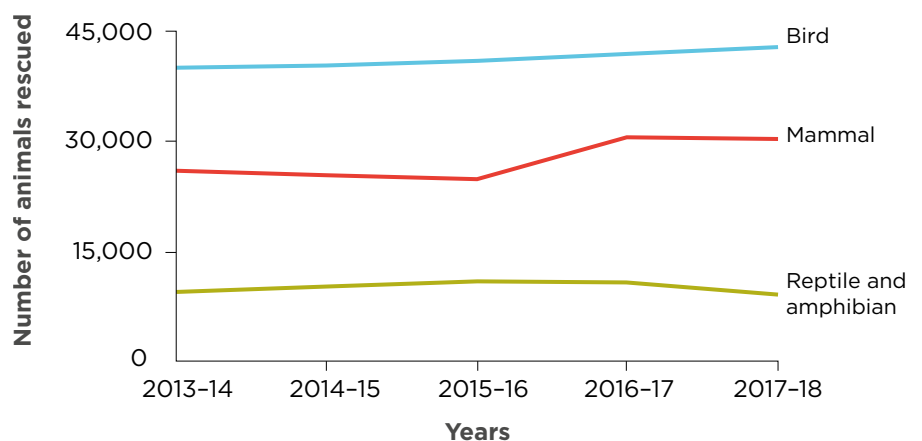


Figure 3 Number of rescues over the five-year period 2013-14 to 2017-18 by class of animal

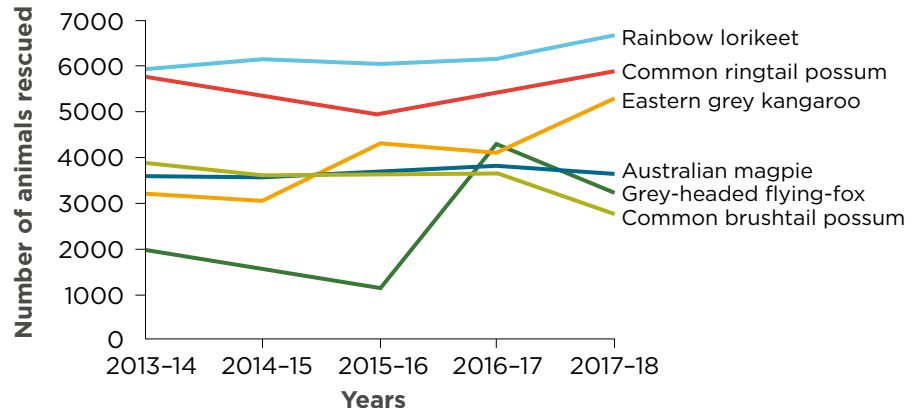


Figure 4 Most frequently rescued species over the five-year period 2013-14 to 2017-18

Reasons for rescue

It is often difficult to determine why animals have come into care, with over 50% of rescues occurring for an unknown reason. For those rescues that were assigned an encounter type, about 40% were for human-related reasons – the most frequent being ‘collision with a motor vehicle’ (Figure 5). Nearly 43,720 animals over the five year-year period (2013-13 to 2017-18) were rescued due to this cause; the number steadily increasing each year. Among other encounter types, ‘unsuitable environment’ rescues decreased from the previous year; the five-year report period average is about 6020 rescues. ‘Abandoned/orphaned’ also decreased. However, ‘dependent on parent taken into care’ recorded the highest number of rescues over the five-year period; 2600 up 16% from the previous year. ‘Collision with a motor vehicle’ and ‘abandoned/orphaned’ were the most common causes for rescues of both birds and mammals, whereas ‘unsuitable environment’ applied mostly to reptiles and amphibians.

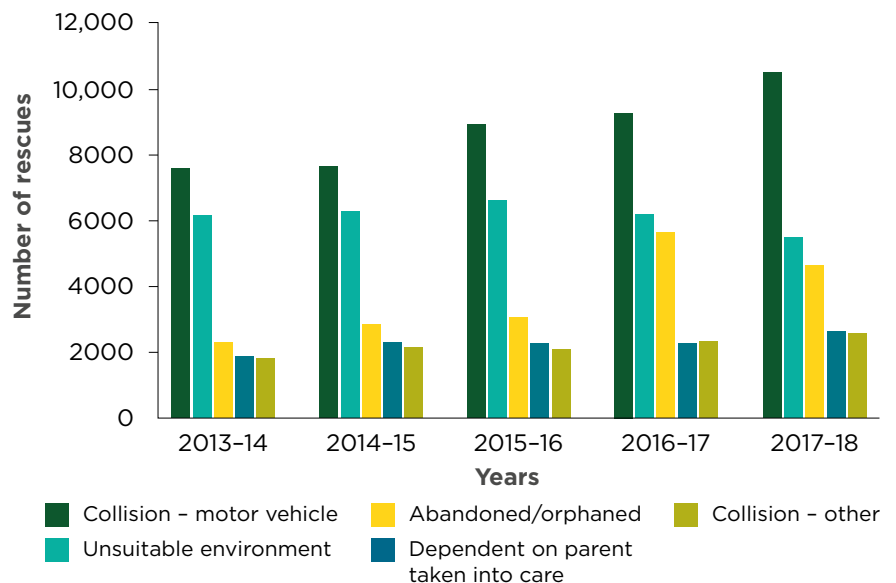


Figure 5 Most frequent reasons for rescue over the five-year period 2013-14 to 2017-18

Fate of rescued animals

The fate of rescued animals remained relatively consistent over the five-year period (Figure 6). Overall, 115,186 rehabilitated animals were released back into the wild. Unfortunately, more animals die than are released. The average number of deaths per year was about 32,920 compared to 23,037 releases. Some animals remain in care or are surrendered pets with a new owner.



Figure 6 Comparison of died and released animals over the five-year period 2013-14 to 2017-18



The year in focus: 2017-18



83,482

native animals and

475

species were rescued in 2017-18

2017-18 was another busy year for the NSW wildlife rehabilitation sector. A total of 83,482 native animals were reported rescued across 475 species (n=27 groups and 13 licensed individuals). The number of rescues reported was 1.1% less than the previous year (2016-17).

Top ten species rescued

The 10 most rescued species in 2017-18 are shown in Figure 7. These species represent 44% of all animals rescued during this year. They include five bird, four mammal and one reptile species. The most common species was the rainbow lorikeet with 6698 birds rescued. Central Coast LGA recorded the most animal rescues followed by Northern Beaches and Shoalhaven LGAs. Collectively these areas represented 14% of all rescues.

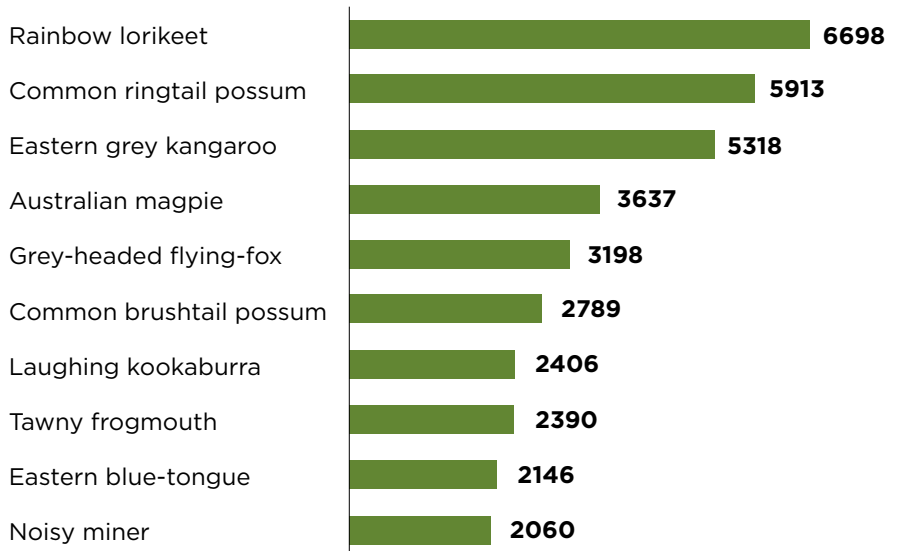


Figure 7 Ten most rescued species in 2017-18

Males and females each accounted for about 11% of records where gender was recorded. Juveniles were the most frequently encountered age class (32% of all rescues), followed by adults (27%) and subadults (2%). Age class for the rest was unknown.

The spring months were the busiest season for volunteers, with 32% of all rescues, closely followed by summer with 30%. Approximately 9950 rescues were reported in the peak month of January compared to 4382 in July, the month with the lowest number reported (Figure 8).

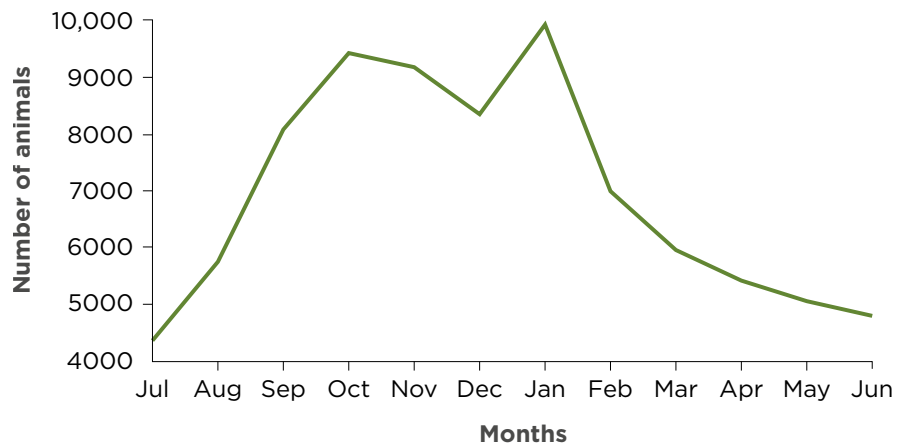



Figure 8 Rescues reported each month from in 2017-18

Why is wildlife coming into care?

Human-related interactions with wildlife were the cause of 44% of rescues in 2017-18 (when unknowns are removed from the analysis) (Appendix 2). Natural causes accounted for only 12% of 'known' rescues. 'Collision with motor vehicles' was the largest known contributor (Figure 9). It accounted for 10,461 rescues and almost a quarter of all those which had a known rescue encounter type assigned, when unknowns are removed from the analysis. Most collisions with vehicles were reported in Queanbeyan-Palerang Regional, Lismore and Lake Macquarie LGAs.

The categories 'abandoned/orphaned' and 'dependent on parent taken into care' together represent an additional 7207 rescues. There were also 4796 animals reported as 'attacked' of which 67% were attacks by dogs and cats (see case study below). Further detail on the cause of rescue for individual mammals, birds and reptiles and amphibians is provided in the following sections.



10,461 animals were injured by collisions with motor vehicles this year

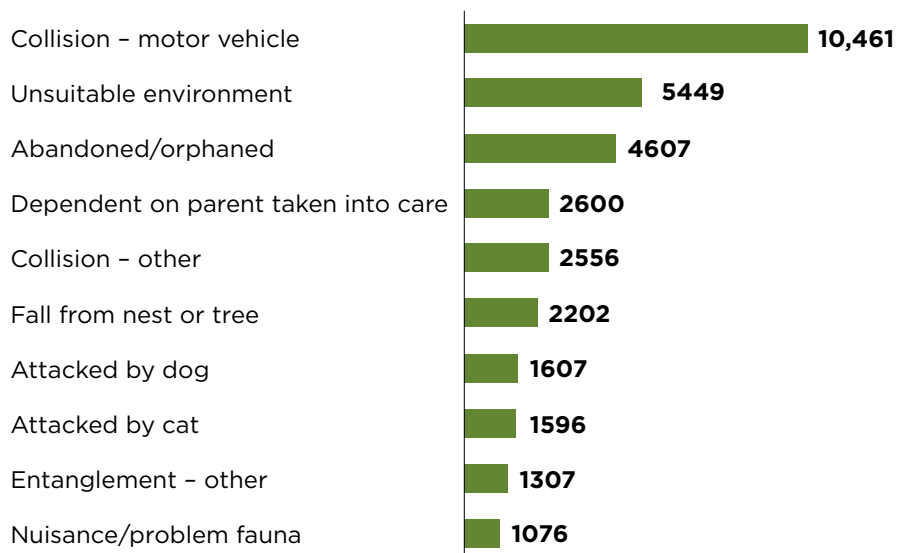


Figure 9 The top ten reasons for rescue in 2017-18



Case Study: Reason for rescue — Attacks

There were 4796 rescued in 2017-18 as a result of being attacked by another animal or person. Cat attacks (34%) were the most commonly reported encounter followed closely by dog attacks (33%).

The common ringtail possum (*Pseudocheirus peregrinus*) and the eastern blue-tongue lizard (*Tiliqua scincoides*) were the two species most affected by attacks. There were 348 reported cat attacks on ringtail possums compared to 184 dog attacks. Conversely, there were 376 dog attacks on blue-tongues and only 66 by cats. Surprisingly for rainbow lorikeets (*Trichoglossus haematodus*) more attacks were reported as dog attacks than cat attacks, although nearly 50% of attacks on 'unidentified birds' were from cats.

Bird attacks accounted for 12% of rescues. Common species rescued included ringtail possums, rainbow lorikeets and barn owls (*Tyto alba*). Human attacks were not frequently reported and involved animals harmed by firearms or arrows. Welcome swallows (*Hirundo neoxena*) were most affected, most likely due to a single event

involving nine chicks in Coffs Harbour. Other species affected included eastern grey kangaroos (*Macropus giganteus*) and eastern carpet pythons (*Morelia spilota*).

Attacks as an encounter type were most commonly reported in northern NSW LGAs.

Attack type	Number reported 2017-18
Dog	1607
Cat	1596
Bird	557
Other	546
Suspected	350
Human	111
Same species	22
Fox	7



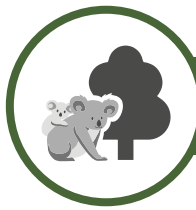
Fate of rescued animals

Rescued animals are usually found in a severely vulnerable state, compromising their chances of survival. Unfortunately, many cannot be rehabilitated and returned to the wild. In 2017-18 volunteers were able to release nearly a third of all rescued animals (26,224), which was about a 13% increase on the previous year.

Over half of all rescued reptiles were released (Figure 10). Many of these animals were found relatively healthy in unsuitable locations such as inside people's homes. Less than a third of all rescued birds were released and less than a quarter of mammals. The higher rate of mortality in mammals is likely a result of increased trauma sustained from their injuries. For example, about 16% of animals rescued from a collision with a motor vehicle were successfully rehabilitated and released. The three most successfully rehabilitated species were the rainbow lorikeet, common ringtail possum and Australian magpie.



Figure 10 Percentage of animals rehabilitated and released in 2017-18 by class



4800

**threatened
animals
rescued**

Threatened species

Volunteers rescued 86 different NSW threatened species this year totalling 4800 animals. The most frequently rescued threatened species was the grey-headed flying-fox (66% of rescues) followed by the koala. Two NSW critically endangered species were reportedly rescued. They include the beach stone-curlew and red goshawk. A case study on threatened sea turtle rescues is presented below.

Top five rescued threatened species	Number rescued 2017-18
Grey-headed flying-fox	3198
Koala	967
Green turtle	102
Loggerhead turtle	84
Squirrel glider	49

'Abandoned/orphaned' and 'weather events' collectively accounted for 42% of flying-fox rescues. A further 16% were entanglements and about 7% electrocutions. Nearly a quarter of all koala rescues were due to collisions with motor vehicles. A further 18% were attributed to chlamydia. Approximately 26% of grey-headed flying-foxes and 30% of koalas were rehabilitated and released.

The most frequent reason for squirrel glider rescues was entanglement and attacks. These animals were mostly rescued in northern NSW LGAs although four were found in Albury.



Case study: Sea turtles

Approximately 220 individual sea turtles across four species were rescued in 2017–18. The green turtle (*Chelonia mydas*) was the most rescued (102), followed closely by loggerhead turtles (*Caretta caretta*) (84). These two species account for 85% of all sea turtle rescues. All four species are nationally listed as threatened species, with the loggerhead turtle also listed as endangered in New South Wales and the green turtle as vulnerable.

About 42% of sea turtles found were rescued in April. This coincided with two lots of hatchling rescues: 16 green turtle hatchlings from Coffs Harbour LGA and 74 loggerhead hatchlings in Byron LGA. December was also an active month with 25 rescues of which 11 were subadults. Nearly 82% of hawksbill turtle (*Eretmochelys imbricata*) rescues also occurred in Coffs Harbour LGA, mostly juveniles and subadults. Nearly 95% of all rescued turtles did not have an assigned gender.

The southernmost rescue was for a female adult green turtle in Broulee between Batemans Bay and Moruya.

More than half of sea turtles rescued were released back into the wild, most likely because the majority were hatchlings which required relocation only.

Loggerheads had an 81% release rate, compared to 42% for green turtles and 21% for hawksbill turtles. Habitat loss and abandoned/orphaned were the most reported reasons sea turtles were rescued.

Sea turtles	Total rescued 2017-19
Green	102
Loggerhead	84
Hawksbill	28
Flatback	3
Unidentified	3

Birds



42,996

bird
rescues

Birds are the largest and most diverse group of animals rescued by NSW wildlife rehabilitators. They represented 52% of all animals rescued in 2017-18. A total of 42,996 birds were rescued across 305 species – a 1.9% increase on the previous year. There were 50 threatened bird species rescued. Advice to the community was given about a further 4035 birds, mostly about magpies, rock doves (common pigeons) and rainbow lorikeets.

The 10 bird species most rescued in 2017-18 are shown in Figure 11. These species comprised 52% of all birds rescued. Rainbow lorikeets were the most common species (6698 birds rescued) having over 84% more rescues than the next most common species, Australian magpies, followed by the laughing kookaburra. Two short case studies – on one of the top ten birds (the Australasian figbird) and on birds of prey – are presented below.

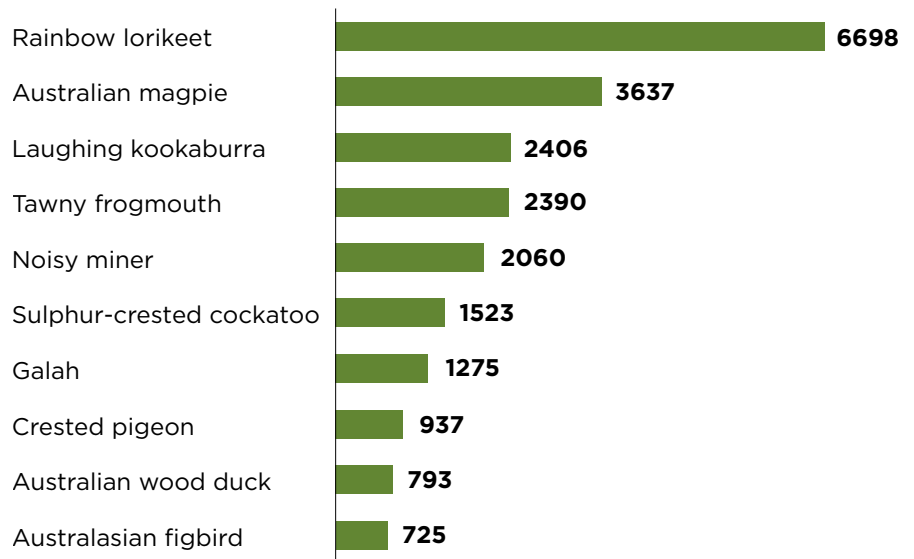


Figure 11 Top ten bird species rescued in 2017-18

About 23% of birds were adults and 31% juveniles. However, for certain bird species such as the Australasian figbird, it was the opposite. As expected, spring was the busiest season for rescues (35%), followed by summer (31%). The month with the lowest number of rescues was July (1972 rescues) and with the highest number was October (5575 rescues) (Figure 12).

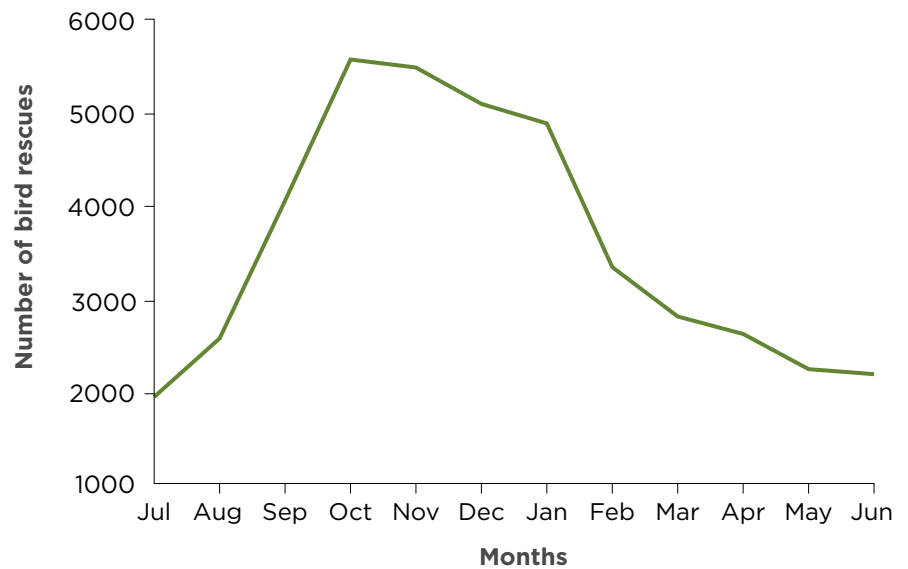


Figure 12 Bird rescues each month in 2017-18

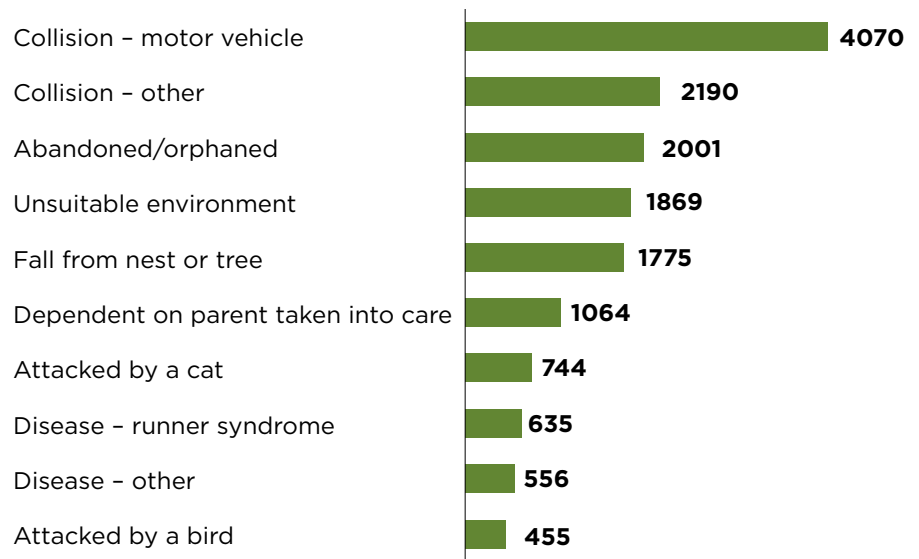


Figure 13 Ten most common reasons for bird rescues in 2017-18

Collisions with a motor vehicle accounted for 4070 or 21% of all bird rescues when unknowns are excluded from the analysis (Figure 13). The species most affected was the laughing kookaburra. About 25% of these birds were assessed as concussed and nearly 40% recovered.

Magpies, Australian wood ducks and 'unidentified birds' were most likely to be rescued as a result of being 'abandoned/orphaned' (696 reported rescues). 'Fall from nest or tree' was another frequently reported encounter type for birds, particularly noisy miners and magpies. Overall, birds were the animal group most likely to be attacked by a cat.



Case Study: Australasian figbird

The Australasian figbird (*Sphecotheres vieilloti*) lives in rainforests and wet sclerophyll forests of northern and eastern Australia. This year 725 birds were rescued making it the 10th most commonly reported bird species. Unfortunately, rescues were up 45% on the previous year.

Nearly 50% of rescues were from LGAs in Northern NSW such as Tweed, Byron and Lismore.

More females than males were rescued and over 66% of birds rescued were juvenile or younger in age. This finding correlates with the two most common encounter types for this species: 'fall from nest or tree' and 'abandoned/orphaned'.

Overall, 289 or 40% of birds were released back into the wild with 93 being able to be reunited with their parents. More chicks were able to be reunited than juveniles.



32%

of **birds** were rehabilitated and released

Of the birds rescued, 32% were able to be rehabilitated and released. More rainbow lorikeets, Australian magpies and laughing kookaburras were released than any other bird species. Unfortunately, over 45% of birds that were rescued died or were euthanased as a result of their injury or illness. Of the top ten bird species rescued, only two species, the laughing kookaburra and Australian wood duck, had more individuals released than died (Figure 14).

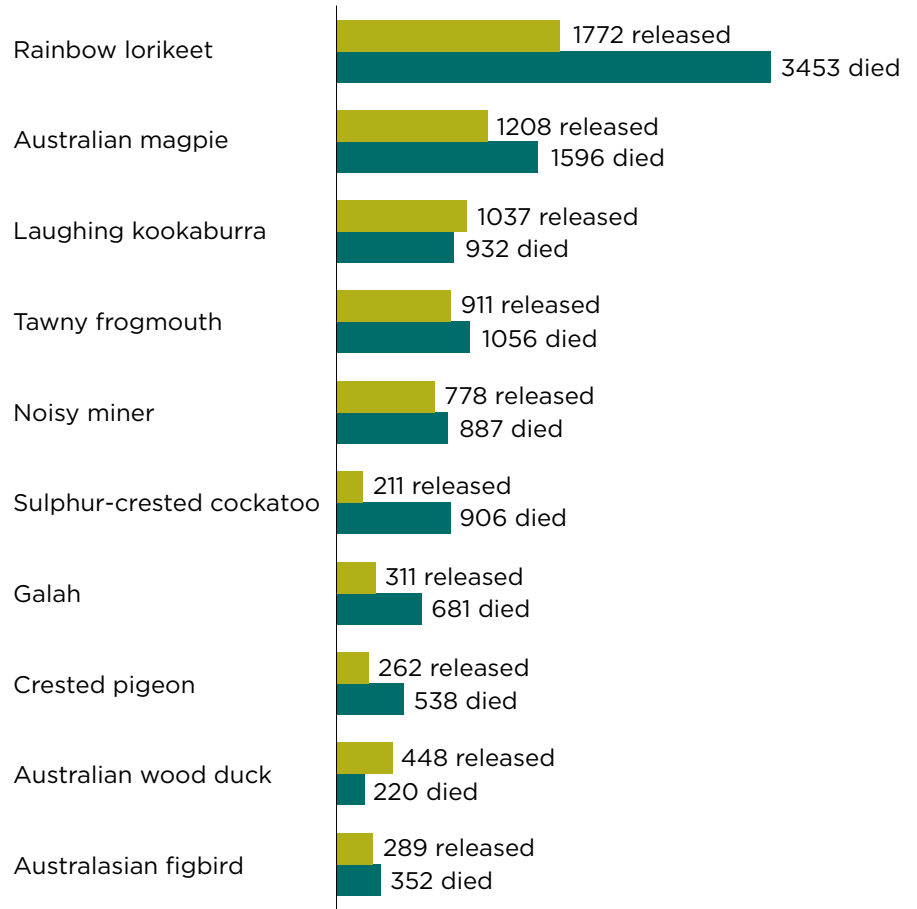


Figure 14 Fate of commonly rescued birds in 2017-18



Case study: Birds of prey

Birds of prey or raptors are primarily those species that hunt and feed on other vertebrates. There were 1061 individual birds of prey rescued across 26 species in 2017-18, a 5% increase in the rescues from the previous year. Nine were NSW listed threatened species.

The barn owl (*Tyto alba*) (244 rescues) and southern boobook (*Ninox boobook*) (228) accounted for almost 45% of the total number of all rescues. The powerful owl (*Ninox strenua*) (38) was the most commonly rescued threatened species.

About 35% of rescues were attributed to 'collision with motor vehicle', or collisions with other objects such as building and pool fences. 'Attacked by other birds' was the next most frequent at 4% of rescues. More adult birds were rescued than chicks or juveniles. The most common injuries reported were wing injuries, followed by concussion.

Almost 400 birds of prey were released back into the wild i.e. 38% of the total number rescued. Unfortunately, 49% died or were humanely euthanased as a result of their condition.

Reptiles and amphibians



9078

reptile and amphibian rescues

This year 9078 reptiles and amphibians were rescued across 94 different species including 11 threatened species — a 15% decrease on the previous year. Advice was provided on another 2519 animals. Snakes (particularly elapids and pythons) represent 49% of all rescues followed by lizards being about 37% of rescues and turtles 11%. Very few frogs were rescued, and these were mostly green tree frogs.

Eastern blue-tongue lizards (2146 rescues) represent nearly a quarter of all reptile rescues (Figure 15). Carpet pythons and red-bellied black snakes account for another 19%. There were also 347 eastern brown snakes rescued. About 37% of rescues were adults and 14% juveniles. Hardly any animals were assigned a gender. A case study on eastern snake-necked turtles is presented below.

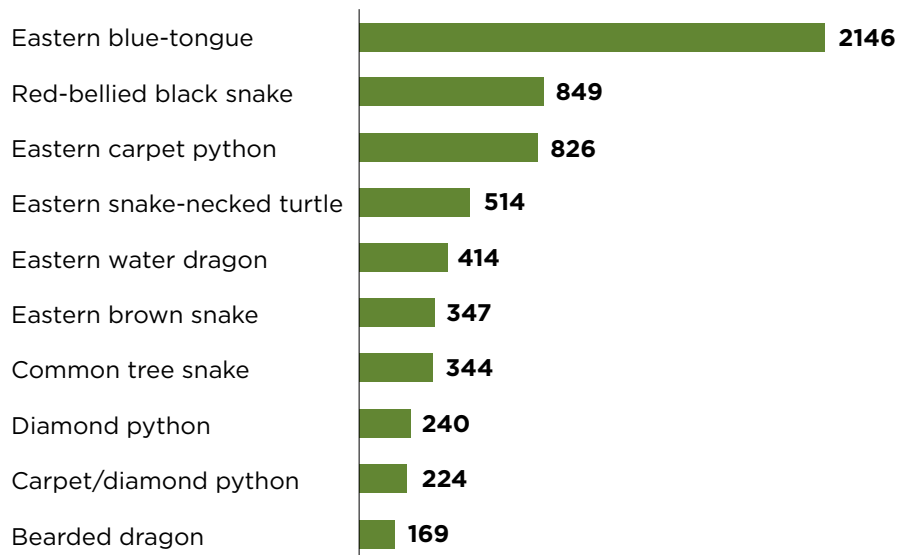


Figure 15 Top ten reptile species rescued in 2017-18

As expected, the busiest period for encountering reptiles was in the warmer months of summer and spring with only 9% of animals rescued in winter (Figure 16). Most rescues occurred in January (1222 rescues) and the fewest were in July (220 rescues).

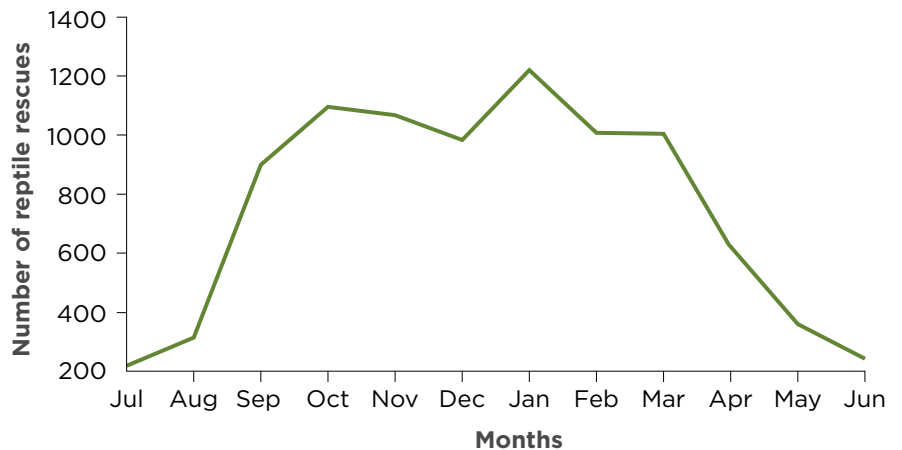
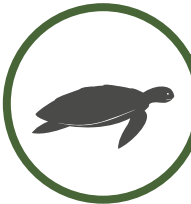


Figure 16 Reptile rescues each month in 2017-18

‘Unsuitable environment’ was identified as the reason for 42% of known reptile rescues (Figure 17). These are animals mostly found in people’s homes or other living areas. Reptiles were the animal group most affected by dog attacks (634 reported rescues) particularly eastern blue-tongue lizards, eastern water dragons and red-bellied black snakes. Reptile seizures and domestic escapes accounted for 305 animals or nearly 3.5% of rescues. Bearded dragons were most affected by collisions with motor vehicles (15%) and factors associated with the seizure, surrender or loss of pet animals (19%).



53%
of rescued reptiles were rehabilitated and rescued

Overall, 53% of rescued reptiles were released back into the wild, which is the highest release rate of any animal group. Twenty-five per cent of reptiles died or were humanely euthanased. All species except the eastern blue-tongue lizard and the bearded dragon had more releases than died or were euthanased (Figure 18).

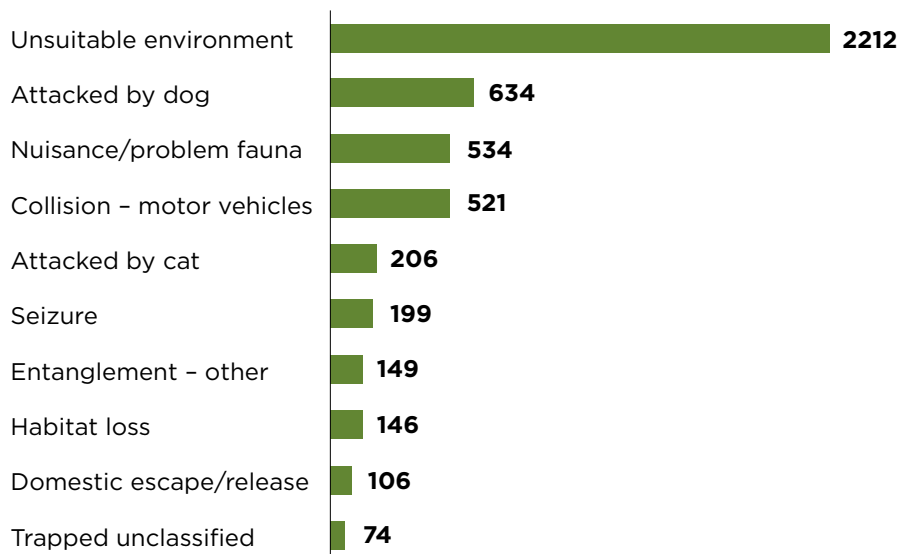


Figure 17 Ten most common reasons for reptile and amphibian rescues in 2017-18

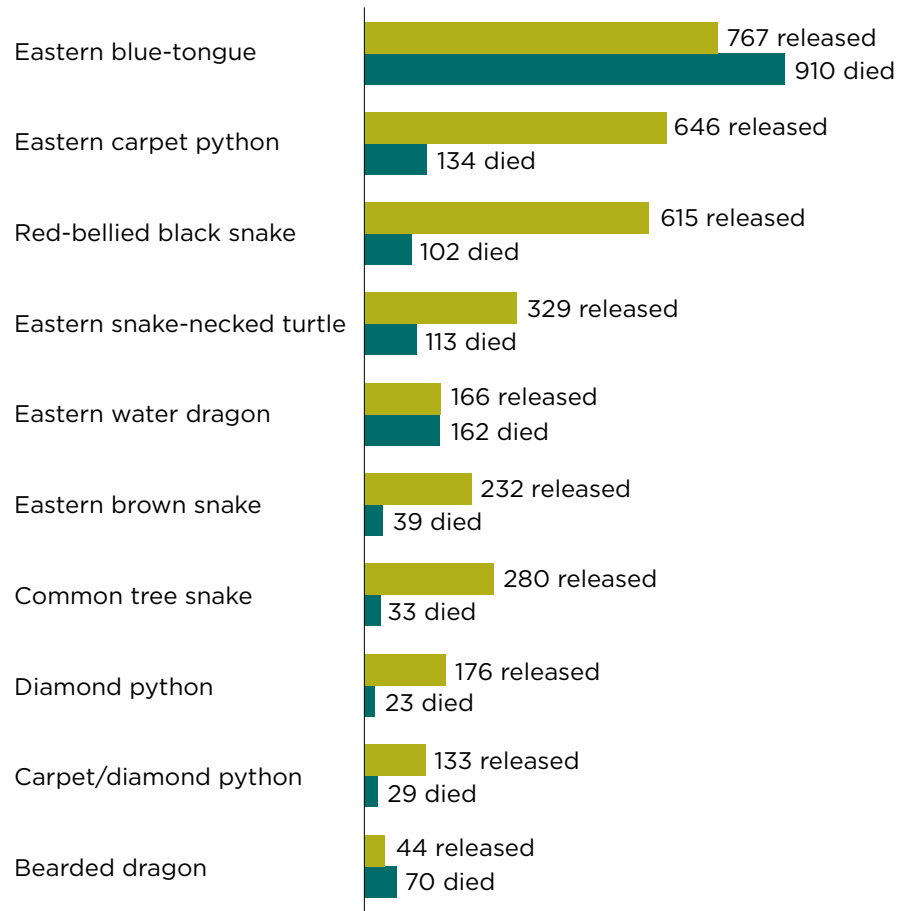


Figure 18 Fate of commonly rescued reptiles in 2017-18





Case Study: Eastern snake-necked turtle

Eastern snake-necked turtles (*Chelodina longicollis*) are a common freshwater species found in slow-moving water bodies throughout eastern NSW. In 2017-18, 514 animals were rescued which was a 32% reduction on the previous year. Most turtles were reported from the Queanbeyan-Palerang, Yass Valley and Blacktown LGAs. More animals were rescued during October than any other month.

'Collision with a motor vehicle' was the reported cause of 29% of rescues, with animals presenting with injuries to the body or shell. Eastern snake-necked turtles were also rescued from unsuitable environments. These animals were mostly uninjured, and 91% were able to be relocated to a more suitable environment.

Overall 65% of all eastern snake-necked turtles were able to be released into the wild, with only 22% dying or requiring euthanasia.

Mammals



30,461

**mammal
rescues**

There were 30,461 mammal rescues this year across 76 different species including 33 threatened species to a slight decrease on the previous year. Advice was provided for 2619 additional animals, over half of which were possums.

The top ten mammal species rescued are shown in Figure 19. They account for 72% of all mammal rescues this year. Possums, macropods and flying-foxes comprise most animal species rescued. There were 5913 common ringtail possum rescues with the majority occurring in Sydney's northern suburbs. Together with common brushtail possums, they comprise 29% of mammal rescues. Eastern grey kangaroos, swamp wallabies and red-necked wallabies account for 23% and grey-headed and black flying-foxes 12%. There were also 1043 wombats and 967 koalas rescued this year. Case studies on short-beaked echidnas and flying-fox pups are presented below.

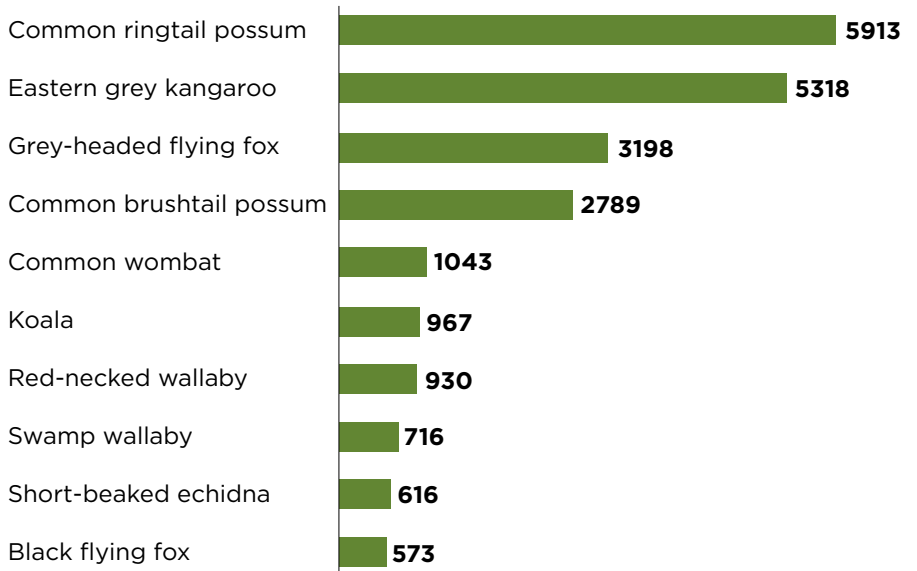


Figure 19 Top ten mammal species rescued in 2017-18

Males and females each comprised 27% of rescues. Adults comprised 30% compared to 38% juveniles.

Mammal rescues remained relatively constant throughout the year with peaks occurring in January (3764 rescues) and a smaller peak in September (3078 rescues) (Figure 20). Autumn was the quietest season with 21% of reported rescues. The lowest number of mammal rescues occurred in March (2046 rescues).

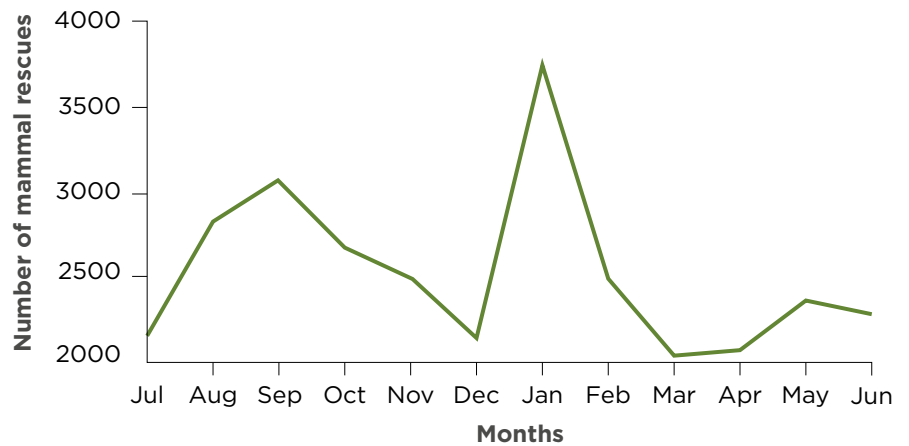


Figure 20 Mammal rescues each month from 2017-18

‘Collision with a motor vehicle’ was the most common reason mammals required rescue (Figure 21). It accounted for 5847 rescues or nearly a third of all rescues where a known reason was given. The eastern grey kangaroo, red-necked wallaby, common wombat, swamp wallaby and common ringtail possums were the top five mammals affected. The ‘abandoned/orphaned’ encounter type affected 2519 animals, of which 41% were grey-headed and black flying-foxes. Over half of all ‘dependent on parent taken into care’ encounters were attributed to common ringtail and brushtail possums. Also, 42% of all rescues in ‘unsuitable environments’ were assigned to possums.

‘Multiple health issues’ and ‘injury to the hindlimb’ were the most commonly reported conditions for mammals entering rehabilitation. In both cases, euthanasia and death were common – the fate over 83% of mammals in these categories.

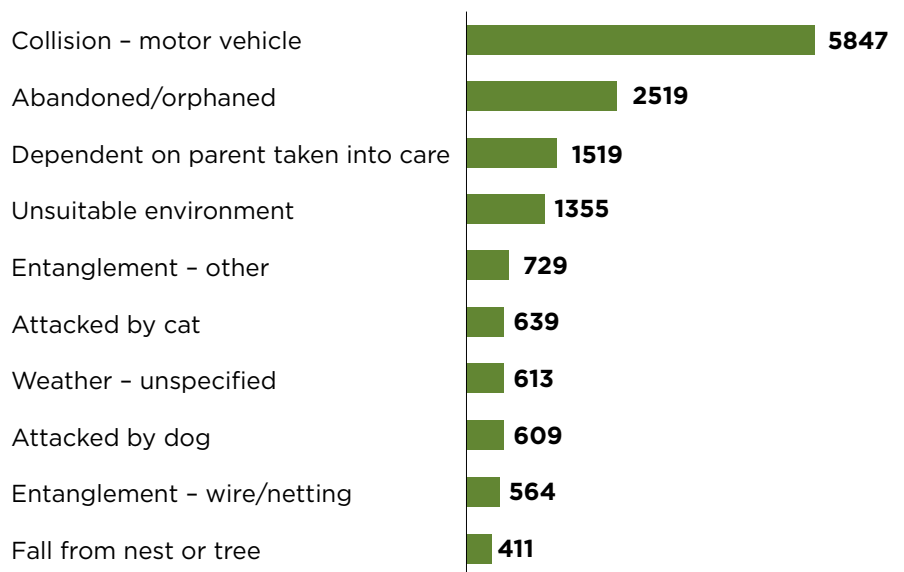


Figure 21 Ten most common reasons for mammal rescues in 2017-18



Case Study: Short-beaked echidna

The short-beaked echidna (*Tachyglossus aculeatus*) is a monotreme species found in a variety of habitats throughout Australia. There were 616 echidna rescues in 2017-18, which was about a 40% decrease on the previous year. An additional 610 animals were reported needing assistance but were unable to be located for rescue. About 20% of all rescues were from northern NSW LGAs such as Byron, Lismore and Ballina.

Most echidna rescues were in September and October, with the fewest during the summer months. Adults were rescued more often than juveniles or puggles.

'Collision with a motor vehicle' accounted for nearly 30% of rescues. 'Unsuitable environment' (19%) and 'attacks by dogs' (4%) were the next two main reasons reported. Approximately 55% of echidnas were able to be rehabilitated and released back into the wild.



Overall, 24% of rescued mammals were able to be rehabilitated and released. Unfortunately, 53% died or required euthanasia. Short-beaked echidnas were the only commonly rescued species that had more individuals released than died (or euthanased) (Figure 22). About 35% of rescued common ringtail possums and common brushtail possums were released. Of the two flying-fox species, 41% of black flying-foxes were released, but only 26% of grey-headed flying-foxes. The comparative outcome for macropod species such as eastern grey kangaroos (7%), swamp wallabies (13%), red-necked wallabies (21%) and wombats (7%) was much worse due to the nature of their injuries. About 30% of koalas were also rehabilitated and released. Of the mammals hit by a car, only 8% were able to be rehabilitated and released and 75% died.

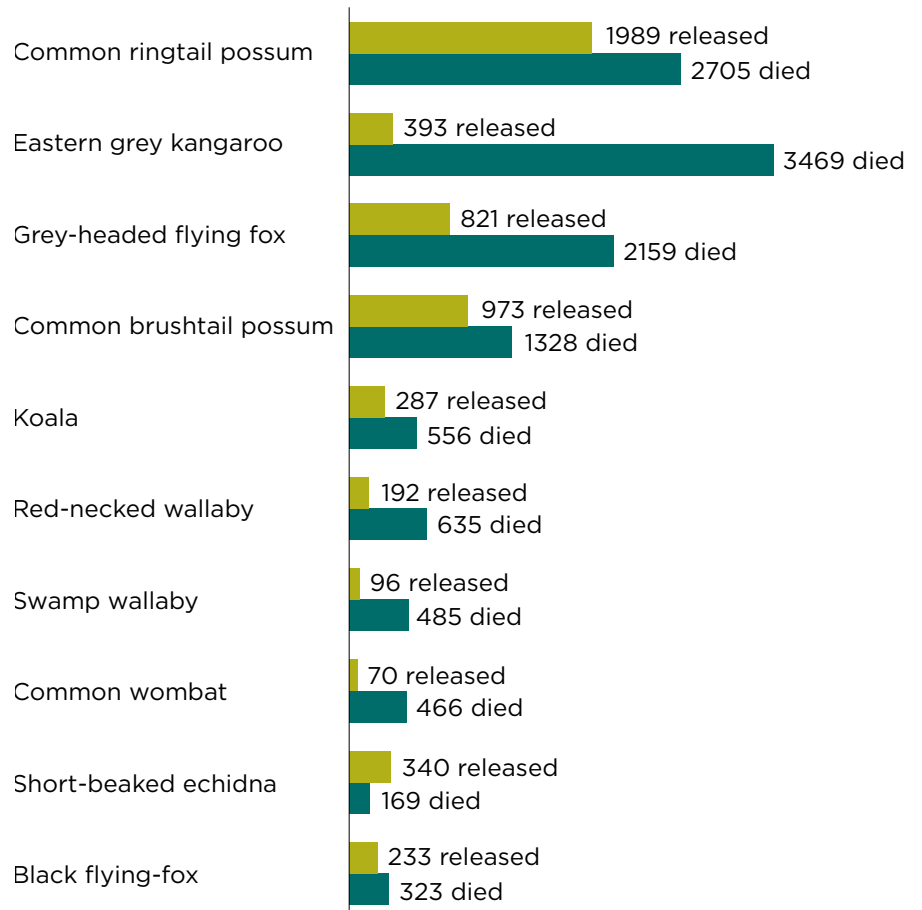


Figure 22 Fate of commonly rescued mammals in 2017-18

Case Study: Flying-fox pups in Armidale



Jacque Maisey, Northern Tablelands Wildlife Carers

In October 2017, grey-headed flying-foxes arrived in Armidale. They are listed nationally as a vulnerable species, and they created a maternity colony. As far as we know this has not happened previously in the area.

In the beginning of November, Armidale experienced a very cold night of around minus 3°C. The newborn pups, we think, were too cold to cling to their mothers as they flew out to feed on blossom and many of the newly born pups dropped and died.

Our role as wildlife carers is to rescue orphaned and injured animals, liaise with the community and councils and to care for those animals that we rescue. We didn't have a large number of vaccinated carers as flying-foxes rarely visit Armidale and never in the birthing season, so it was just a handful of carers that had to deal with thousands of flying-foxes.

A roster was organised between Carla, Julia, Carole and me, and the colony was monitored every day for four months, involving a 50-kilometre round trip for most of us. Each day a carer checked for fallen pups and injured adults which took between two and four hours, through scrub, barbed-wire fences and backyards. Added to this we were often called back by a resident that had found an orphan in their yard. My conscripted husband of 50 years and I often also did a 1am to 3am check of the colony, especially on cold nights. Of course, as well as colony shifts and rescues, we all had pups at home that needed four-hourly feeds. Other groups in New South Wales also gave us invaluable help. I would gather the pups that we had in care and transfer them to other groups able to take them and within a week we would be busy with more pups rescued.

I'm so proud of our bat carers, not only for coping with the enormous emotional turmoil of finding dead pups most days, coping with the demands of jobs and family and the time spent searching the colony, but like you we are human and become attached to our animals in care and nobody complained when asked to transfer their pups to make room for new ones.

As a small group of bat carers we dealt with 450 dead bats, and with the help of other groups released 50 grey-headed flying-foxes back into the wild. By March, when most of the colony left, the difference we made in the attitude of the community on the edges of the colony was immense. Instead of hating flying-foxes the majority of the residents were fascinated by their behaviour and would ring me if they thought a bat was in trouble.

Appendix 1:

List of data providers 2017-18

The Department is grateful to the following organisations and independent licence holders who provided their records for 2017-18.

Wildlife rehabilitation organisation and facilities

Australian Seabird Rescue (ASR)

Dolphin Marine Conservation Park

For Australian Wildlife Needing Aid (FAWNA)

Friends of the Koala (FoK)

John Moroney Correctional Centre

Kangaroo Protection Co-operative

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)¹

Organisation for the Rescue and Research of Cetaceans in Australia (ORRCA)²

Port Stephens Koalas (PSK)

Rescue and Rehabilitation of Australian Native Animals (RRANA)

Saving Our Native Animals (SONA)

Sunraysia

Sydney Metropolitan Wildlife Services (SMWS)

Taronga Conservation Society

Wildlife rehabilitation organisation and facilities

Tweed Valley Wildlife Carers (TVWC)

Waterfall Springs

Wildcare Queanbeyan

Wildlife Aid

Wildlife Animal Rescue and Care Society (Wildlife ARC)

Wildlife in Need of Care (WINC)

Wildlife Rescue South Coast (WRSC)

Independent licence holders

C McGregor

E Latham

I Kopievsky

J McConnell

K Holdsworth

L Hayes

P Hughes

R Molony

S Stewart

S Brookhouse

S Rowe

¹WIRES contributed about 58% of the wildlife rescue data for 2017-18

²ORRCA marine mammal data was not included in this report. Marine mammal data for 2018-19 and over the previous five years will be included in the next report.

Appendix 2: Definition of anthropogenic and natural causes

Encounter types used to report on anthropogenic and natural causes of rescue.

Natural

Attack - bird

Attack - same species

Disease - chlamydia

Disease - external parasite

Disease - internal parasite

Disease - mange

Disease - other

Disease - psittacine beak and feather disease (Pbfd)

Event - storm

Fallen from nest or tree

Stranded/haul out

Cannot be attributed

Abandoned/orphaned

Attack - suspected/other

Collision - other

Dependent on parent taken into care

Disease - botulism

Entanglement - other

Entrapment

Event - drought

Event - extreme heat

Event - fire

Event - flood

Fouled by substance

Ingestion of a foreign object

Unknown

Unsuitable environment

Anthropogenic

Attack - cat

Attack - dog

Attack - fox

Collision - building

Collision - motor vehicle

Collision - vessel strike

Domestic pet - escaped

Domestic pet - seized

Domestic pet - surrendered

Electrocution

Entanglement - marine debris

Entanglement - netting

Entanglement - wire

Human impact - alteration/tree falling

Human impact - intentional harm

Human impact - interference

Poisoned

Negative interaction



Acknowledgments

The Department thanks the people working in the wildlife rehabilitation sector for all the important work they do rehabilitating our sick and injured wildlife. We are grateful to Audrey Koosmen, Hunter Wildlife Rescue (Native Animal Trust Fund), and Jacquie Maisey, Northern Tablelands Wildlife Carers, for sharing their personal stories. We look forward to profiling the work of other volunteers in the future.

We also thank WIRES, the largest wildlife rehabilitation group in NSW, and the NSW Wildlife Council, the peak body for the wildlife rehabilitation sector.

This report has been prepared by Hannah Ryan and Ron Haering, NSW National Parks and Wildlife Service (NPWS) Biodiversity and Wildlife Team, Department of Planning, Industry and Environment.

Photo credits

- Cover photo:** Brushtail possums (Stirling West);
Preface: Laughing kookaburra, *Dacelo novaeguineae* (Nick Cubbin/DPIE);
Contents: Brushtail possum (Joanna Munnelly);
Page 1: Tawny frogmouth, *Podargus strigoides*, nocturnal native bird (Rosie Nicolai/DPIE);
Page 3: Wildlife rehabilitators at the white-bellied sea eagle release (Mark Kelly);
Page 4: Audrey Koosmen (Audrey Koosmen);
Page 5: Koala (Audrey Koosmen);
Page 8: Grey-headed flying-fox, *Pteropus poliocephalus* (Sabrina Velasco/DPIE);
Page 11: Rainbow lorikeet parrot, *Trichoglossus haematodus*, on grevillea (Rosie Nicolai/DPIE);
Page 12: Koala at the Koala Hospital, Port Macquarie (David Finnegan/DPIE);
Page 14: Green sea turtle, *Chelonia mydas* (Taronga Conservation Society);
Page 16: Scaly breasted lorikeet (Hannah Ryan);
Page 17: Australasian figbird, *Sphecotheres vieilloti* (Hannah Ryan);
Page 19: Powerful owl, *Ninox strenua* (Rosie Nicolai/DPIE);
Page 22: Eastern blue-tongue lizard/skink, *Tiliqua scincoides*, in Ben Boyd National Park (John Spencer/DPIE);
Page 23: Eastern long necked turtle, *Chelodina longicollis* (Rosie Nicolai/DPIE);
Page 26: Short-beaked echidna, *Tachyglossus aculeatus* (Hannah Ryan);
Page 27: Swamp wallaby and joey, Pretty Beach (David Finnegan/DPIE);
Page 28: Grey-headed flying-fox pups (Jacquie Maisey);
Page 31: Swamp wallaby, Palm Jungle Loop track, Royal National Park (Nick Cubbin/DPIE);
Imprint: Rainbow lorikeet feeding on flower, nectar, Arakoon National Park (David Finnegan/DPIE).



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 [Getting involved in wildlife rehabilitation](#) on the Department's website, or use the International Fund for Animal Welfare [ifaw app](#).

To learn more about Australia's unique wildlife, and things that you can do to live in harmony with wildlife, go to the Foundation for National Parks and Wildlife [Backyard Buddies](#) website.

© 2020 State of NSW and Department of Planning, Industry and Environment

With the exception of photographs, the State of NSW and Department of Planning, Industry and Environment (DPIE) are pleased to allow this material to be reproduced in whole or in part for educational and non-commercial use, provided the meaning is unchanged and its source, publisher and authorship are acknowledged. Specific permission is required for the reproduction of photographs.

DPIE has compiled this report in good faith, exercising all due care and attention. No representation is made about the accuracy, completeness or suitability of the information in this publication for any particular purpose. The Department shall not be liable for any damage which may occur to any person or organisation taking action or not on the basis of this publication. Readers should seek appropriate advice when applying the information to their specific needs.

All content in this publication is owned by DPIE and is protected by Crown Copyright, unless credited otherwise. It is licensed under the Creative Commons Attribution 4.0 International (CC BY 4.0), subject to the exemptions contained in the licence. The legal code for the licence is available at Creative Commons.

DPIE asserts the right to be attributed as author of the original material in the following manner: © State of New South Wales and Department of Planning, Industry and Environment 2020.

Published by:

Environment, Energy and Science

Department of Planning, Industry and Environment

Locked Bag 5022, Parramatta NSW 2124

Phone: +61 2 9995 5000 (switchboard)

Phone: 1300 361 967 (Environment, Energy and Science enquiries)

TTY users: phone 133 677, then ask for 1300 361 967

Speak and listen users: phone 1300 555 727, then ask for 1300 361 967

Email: info@environment.nsw.gov.au

Website: www.environment.nsw.gov.au

Report pollution and environmental incidents

Environment Line: 131 555 (NSW only) or

info@environment.nsw.gov.au

See also www.environment.nsw.gov.au

ISSN 2652-6451

EES 2020/0253

September 2020