BACKYARD BIODIVERSITY BLITZ 2026

Discovering the wildlife living alongside us







environs KIMBERLEY
Protecting the nature of the Kimberley

Environs Kimberley environskimberley

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What lives in Broome's backyards?

Broome is famous for its spectacular natural environment, and you don't have to travel far to encounter wildlife. A brushtail possum moving through the trees at night. Northern blue-tongue skinks basking in the sun. A great bowerbird searching for the perfect trinket to adorn its bower, or a short-beaked echidna, ambling through the bush following the movements of its next meal.

These animals are intrinsic to the rich tapestry that makes Broome special. Our gardens, streets, parks and other urban spaces form part of a much larger landscape used by wildlife, yet little formal wildlife monitoring takes place in residential areas.

The **Backyard Biodiversity Blitz** was developed to change that.

Through this pilot community citizen science project, residents, organisations and businesses hosted motion-sensor wildlife cameras across Broome. Over three weeks, the cameras quietly recorded animals travelling through backyards, managed greenspaces and conservation areas.

The result?

A community-powered effort to discover more about the wildlife sharing our town - and a better understanding of how Broome's urban and peri-urban environments are used by local fauna.



Project Officer, Tom, with fauna camera.



Camera deployment demonstration at Broome Public Library.

WHY BACKYARD MONITORING?

Beyond urban boundaries

Broome sits within one of Australia's most important strongholds for native wildlife. The north Kimberley is unusual in having retained an exceptionally intact mammal fauna, with no documented mammal extinctions since European settlement. This is significant in a continent that has experienced the highest rates of mammal extinctions in the world.

Broome's wildlife moves beyond the boundaries of natural and urban areas. With almost 600 terrestrial species recorded within 10km of Broome, including mammals, birds, reptiles and amphibians, exceptional diversity is part of the everyday landscape (Atlas of Living Australia, 2026).



Administration Officer, Camille, recording monitoring sites.

For wildlife to persist, access to food, water, shelter and places to reproduce and raise young is essential. These resources take many forms: shady trees provide shelter and movement corridors; native flowers, fruit and seeds provide food; logs and leaf litter offer places to hide; bare ground provides sunning spots; and ponds or shallow dishes of water provide opportunities to drink and cool down. Together, these resources form a patchwork across Broome - from conservation areas and natural bushland to managed greenspaces, and backyards.

Monitoring across these different spaces helps build a broader picture of wildlife presence across the country we share. Involving the community strengthens local knowledge, connection to and appreciation for Broome's wildlife, whilst gathering a baseline for understanding how wildlife presence may change over time due to pressures, including climate change, habitat fragmentation, and introduced and invasive species.

2026 SNAPSHOT

64 wildlife cameras deployed

2 workshops delivered

4 environment types monitored

398,397 images captured

30+ community members attended workshops

3-week monitoring period per camera

33 species identified

32 camera hosts, including residents, businesses and community organisations

39 anecdotal species surveys completed, identifying **81** species

5 introduced species

2 sites with no species recorded

28 native species recorded

18 bird species

5 mammal species

4 reptile species

1 amphibian species

11 sites with brushtail possums

4 sites with northern blue-tongue skinks

0 sites with greater bilbies

0 sites with northern quolls

SPECIES SPOTLIGHT

Who were we looking for?

Alongside creating a picture of Broome's biodiversity, the project was interested in species that may be especially vulnerable to changes in habitat, and introduced or invasive species, like cane toads.

Greater Bilby

(Vulnerable - EPBC Act and BC Act)

Once widespread across around 70% of Australia, the greater bilby now occupies just ~20% of its former range. These remarkable "soil engineers" dig spiral burrows up to three metres long and nearly two metres deep, helping water infiltrate the soil and creating microhabitats for other species.

With predation and habitat loss among their key threats, understanding bilby distribution around Broome is important. We weren't expecting to find one in a backyard - that would have been an exciting surprise! Instead, we hoped to build a better picture of their range, particularly across conservation areas. Not detecting a bilby is important, helping us understand where they may, and may not, occur.



Image: Damian Kelly Photography

Did you know?
Their backward-facing pouch helps keep dirt out while digging.

Northern Brushtail Possum

(Vulnerable - EPBC Act and BC Act)

A treasured backyard visitor, brushtail possums are a familiar sight around Broome after dark, and cameras provided a chance to learn more about where they move through the urban landscape.

Broome's possums play an important role in the ecosystem, helping disperse seeds through their droppings and supporting the regeneration of native plants; however, life isn't always easy for these nocturnal neighbours. Habitat loss, fire, human disturbance and predation by feral and domestic animals adds pressure to possum populations.



Image: Robert Browne-Cooper, Atlas of Living Australia

Did you know?
Brushtail possums can create their homes in tree hollows, making mature trees an important part of their habitat.

Northern Quoll
(Endangered - EPBC Act and BC Act)

Whilst an unlikely find, any detection of a northern quoll makes for a thrilling discovery. The Kimberley is one of the species' last major strongholds after cane toads have contributed to significant declines and local extinctions in the Northern Territory.

The smallest of Australia's quolls, northern quolls weigh just 250g–1kg and are recognisable by their grey-brown fur and white spots. Detecting - or not detecting - quolls helps build a better picture of where this threatened species is using the landscape around Broome.



Image: Brad Leue / Australian Wildlife Conservancy

Did you know?
Males have an extraordinary life history: after a single, intense breeding season, they die, making populations vulnerable to local extinction.

Northern Blue-tongue Skink
(Critically Endangered - BC Act)

A familiar sight to Broome locals, these distinctive reptiles provide natural pest control by eating insects and other small animals, whilst also helping disperse seeds.

These tough little lizards face a major threat from cane toads, which are expanding across the Kimberley. By putting cameras in backyards, this project turns anecdotal sightings into real monitoring data - helping us understand where they occur, and how the community can help protect them.



Image: Martin Pritchard

Did you know?
Their famous blue tongue is a clever defence, flashed to startle and deter predators.

Cane Toad (Declared Pest – WA)

Cane toads are one of the Kimberley's most serious invasive species threats. Introduced to Australia in 1935, they have spread across northern Australia and into the Kimberley. Their toxins can be lethal to native animals that try to eat them, with species such as northern quolls, goannas, northern blue-tongue skinks, and some snakes especially vulnerable.



Image: Alex Gibson

For Broome, keeping watch matters. Cane toads are now arriving at the edge of Broome, and early detection and community awareness are critical to slowing establishment and protecting local wildlife. Surveillance can help identify cane toads before they become established.

If you spot a suspected cane toad in the Kimberley, take a photo, note where you saw it and **report it to DBCA** so it can be confirmed and managed appropriately.

Cat (Wildlife Threat)

While a cat moving through the neighbourhood may be a common sight, for native wildlife they can pose a serious threat. Both feral cats and domestic cats that roam outdoors can prey on native mammals, birds, reptiles, frogs and other animals.



Our cameras recorded whether cats were present across different areas of Broome, and while the cameras cannot tell us whether a cat is feral or a roaming domestic cat, simply recording their presence helps build a picture of the wildlife pressures that occur across our urban and natural landscapes.

For pet owners, keeping cats contained, particularly at night, is one practical way to reduce opportunities for them to hunt native wildlife.

Dog (Wildlife Threat)

Dogs may be Australia's most common pet, but when domestic dogs roam freely or enter areas where wildlife lives, they can disturb native animals. Dogs may chase wildlife, disrupt feeding and resting behaviour, and cause injury or wildlife fatalities. It is important to distinguish the impacts of roaming domestic dogs from those of dingoes, which are a natural part of the Kimberley ecosystem.



Our cameras recorded whether dogs were present across different areas of Broome, providing a snapshot of where dogs and wildlife are sharing the landscape. While a camera cannot tell us whether a dog was being walked, roaming from a nearby home or otherwise unrestrained, recording their presence helps us understand where dogs are occurring in the same places as native wildlife.

Keeping dogs contained at home and on a leash where required is a simple way to reduce disturbance to wildlife and help keep both dogs and native animals safe.

OUR MONITORING SITES

A network of cameras across Broome

64 non-baited wildlife cameras were deployed through the project, spanning residential backyards, peri-urban areas, managed greenspaces and conservation areas.

- **Residential backyards** provided a rare opportunity to monitor wildlife in places where people live.
- **Peri-urban areas** gave glimpse to wildlife movement along the fringes of built-up urban areas.
- **Managed greenspaces** captured wildlife using parks, gardens and other managed spaces woven into the urban landscape.
- **Conservation estate** extended the monitoring network into areas managed for their natural values, helping us to understand wildlife presence across Broome's interconnected landscape.

The spread of monitoring sites across the landscape is one of the project's strengths, creating a network of observation points – recording where wildlife was detected, and where it wasn't.

A mix of Reconyx Hyperfire and Swift Enduro Pro infrared motion-sensor cameras were deployed for a minimum of 21 days between April-June 2026. Cameras operated 24-hours a day, recording over 1,300 sampling days. At each deployment, information about the site type, camera height and angle, vegetation cover and potential wildlife attractants - such as water sources, flowering plants and fruit trees - was recorded.



Environs Kimberley's Project Officer, Alex, installing a fauna camera.

Figure 1.
Broad map of camera locations in and around Broome townsite.



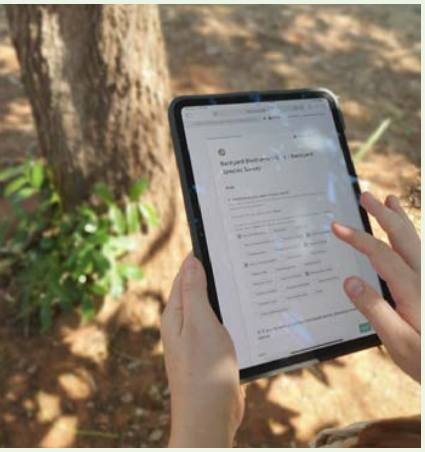
Land types across the 64 camera locations include:

- 12 Conservation area sites
- 20 Managed greenspaces
- 9 Peri-urban sites
- 23 Residential backyards

Community observations

The short monitoring period and time of year meant that not every species present at a site would be captured on camera. Wildlife activity changes seasonally, so an anecdotal survey was also completed wherever possible. Participants recorded species they had observed at or around their site over the time they had spent there.

This additional information captured a broader picture of the backyard visitors participants were familiar with, provided context for expected species during the survey period, and in future, may support further monitoring.



Anecdotal species survey underway.



Common tree snake snacking on a green tree frog. Image: Noe Vivot, Seashells Resort.



Northern snapping frog. Image: Holliandra Taylor.



Horner's dragon. Image: Maia Sauren.



Pheasant coucal on a bush block.



Northern blue-tongue skink in a managed greenspace.

OUR BIOBLITZ COMMUNITY

Citizen science starts at home

The Backyard Biodiversity Blitz encouraged participants to see spaces differently. Gardens became survey sites, trees potential habitat, patches of vegetation became places to investigate, and a quiet corner of the backyard became a window into the lives of animals that might otherwise go unnoticed.

You didn't need to be a wildlife expert to take part. Community members could host a motion-sensor camera in their backyard or another suitable site, with cameras, instructions and support provided by the project.

Before cameras were deployed, participants could attend workshops covering:

- the purpose of the project and priority species
- where and how to position and install a camera
- how to record camera- and site-specific data
- how observations and camera records contribute to wildlife monitoring.

Two community workshops were delivered at the Shire of Broome Public Library and through Incredible Edible, reaching **more than 30 members of the public**.

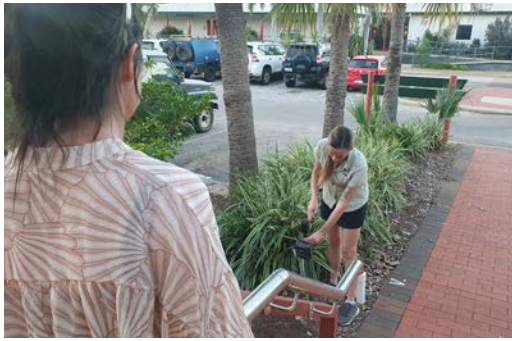


Environs Kimberley team with Incredible Edible's Kirrily at the IEB Monthly Share.

83%

of citizen science volunteers surveyed felt taking part had made them more likely to take actions that support wildlife.





Project Officer, Alex, demonstrating fauna camera installation at Broome Public Library.

Learning by doing

Taking part in the project gave participants practical experience in observation, wildlife monitoring, data collection, species identification and field equipment. Volunteers learned to look more closely at the wildlife around them, use motion-sensor cameras and contribute observations to a structured citizen science project.

The project also strengthened connections between organisations working across Broome. Environs Kimberley worked alongside DBCA Yawuru Rangers to deploy cameras across the Yawuru Conservation Estate, and with the Shire of Broome to establish monitoring sites in managed greenspaces.

In addition, the Environs Kimberley team were thrilled to engage with local resorts - many showed strong interest in getting involved in efforts to support Broome's natural environment and biodiversity.

Together, these contributions helped extend wildlife monitoring across Broome and brought together community participation, and knowledge, practical skills development.



Deploying fauna cameras with the DBCA Yawuru team in Yawuru Conservation Estate. Image: DBCA Yawuru.



Final camera checks. Image: DBCA Yawuru.



Deploying fauna camera with the Shire of Broome team.

100%

of citizen science volunteers surveyed felt proud to have contributed to learning more about Broome's wildlife.

What was the most interesting or enjoyable part of taking part?

"Community engagement and team at Environs Kimberley."

WHAT DID THE CAMERAS REVEAL?

Species detected

Across more than 60 camera sites, the project identified a total of **33 species**, demonstrating the diversity of fauna moving through the places where Broome's residents live, work and spend time. The most abundant species detected was the cat, which was found at a total of 40 separate survey sites. The next most common species were the bar-shouldered dove, agile wallaby, domestic dog and black rat. There were also multiple sightings of rodents, butterflies and geckos, and one sighting of a snake that could not be identified due to poor visibility.

By group, birds were the most numerous with 18 species identified, followed by mammals (10 species), reptiles (4 species) and amphibian (1 species).
Five of the mammal species detected were introduced species.



Juvenile agile wallaby at Habitat Resort.

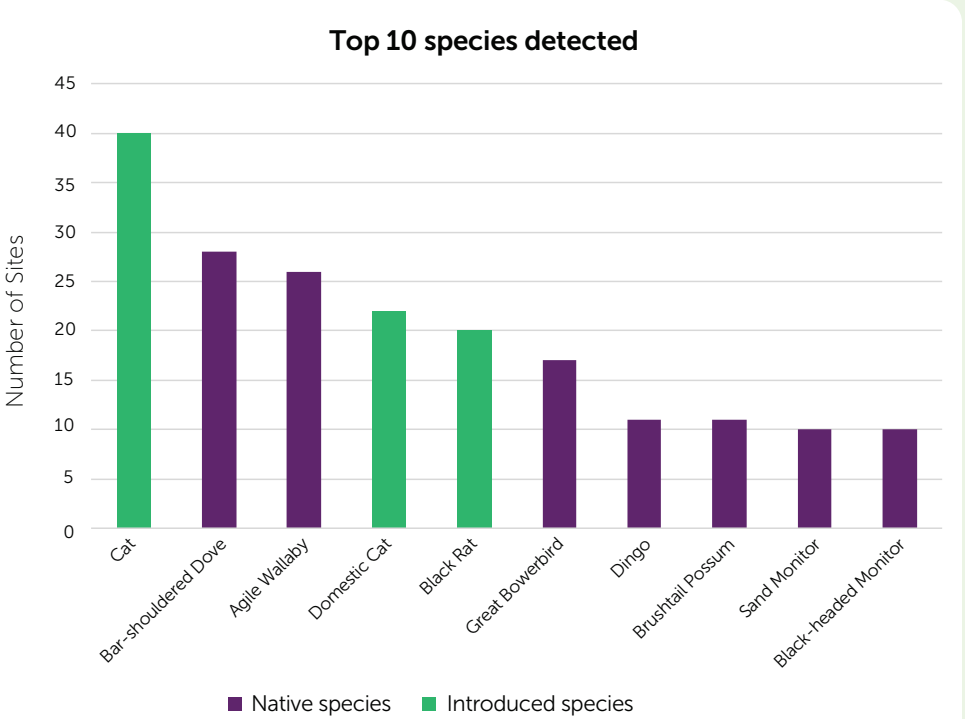


Figure 2.

Top ten species detected according to the number of sites they were present at. Species are categorised as native or introduced.



A flock of bar-shouldered doves at the Broome Bird Observatory

Table 1.

List of identified species recorded across all camera locations, categorised into groups – birds, mammals, reptiles, amphibians and introduced species.

Birds	
Australian Ibis	*Threskiornis molucca*
Bar-shouldered Dove	*Geopelia humeralis*
Black Kite	*Milvus migrans*
Blue-winged Kookaburra	*Dacelo leachii*
Brahminy Kite	*Haliastur indus*
Brown Goshawk	*Accipiter fasciatus*
Brown Honeyeater	*Lichmera indistincta*
Diamond Dove	*Geopelia cuneata*
Double-barred Finch	*Stizoptera bichenovii*
Great Bowerbird	*Chlamydera nuchalis*
Grey-crowned Babbler	*Pomatostomus temporalis*
Magpie-lark	*Grallina cyanoleuca*
Peaceful Dove	*Geopelia placida*
Pheasant Coucal	*Centropus phasianinus*
Singing Honeyeater	*Gavicalis virescens*
Torresian Crow	*Corvus orru*
Whistling Kite	*Haliastur sphenurus*
Willie Wagtail	*Rhipidura leucophrys*
Mammals	
Agile Wallaby	*Notamacropus agilis*
Brushtail Possum	*Trichosurus vulpecula*
Dingo	*Canis familiaris dingo*
Short-beaked Echidna	*Tachyglossus aculeatus*
Spinifex Hopping Mouse	*Notomys alexis*
Reptiles	
Black-headed Monitor	*Varanus tristis*
Northern Blue-tongue Skink	*Tiliqua scincoides intermedia*
Sand Monitor	*Varanus gouldii*
Yellow-spotted Monitor	*Varanus panoptes*
Amphibians	
Green Tree Frog	*Litoria caerulea*
Introduced Species	
Black Rat	*Rattus rattus*
Cat	*Felis catus*
Domestic Dog	*Canis lupus familiaris*
House Mouse	*Mus musculus*
Red Fox	*Vulpes vulpes*

WILDLIFE ACROSS HABITATS

Every site is different

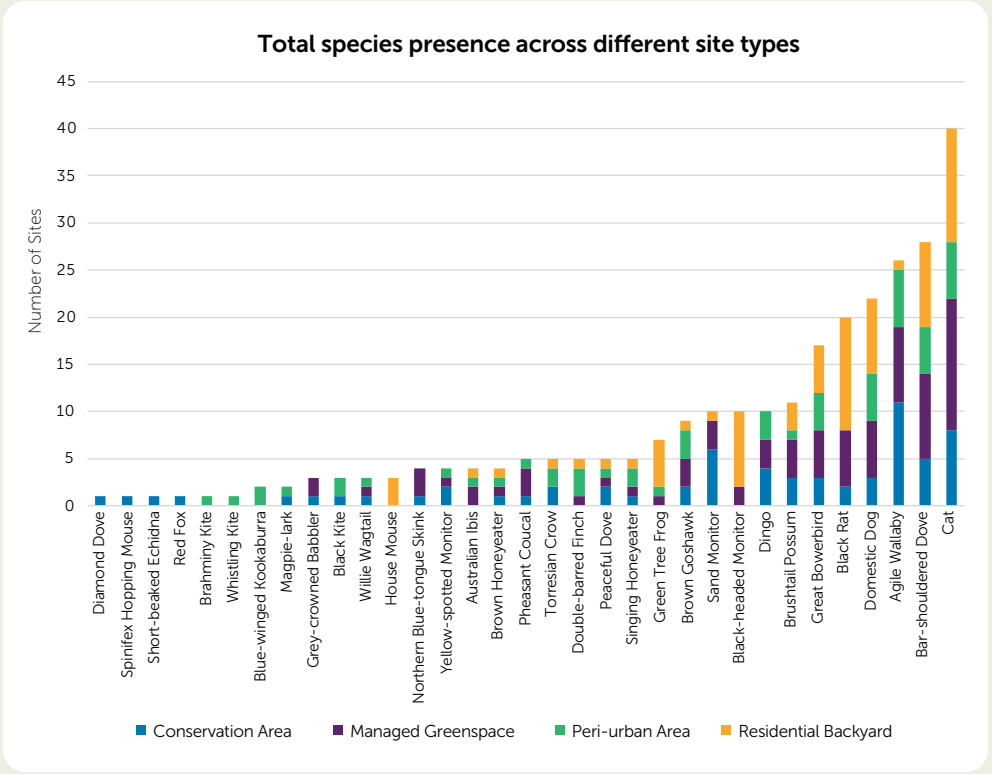


Figure 3.
Presence of species detected on fauna cameras at different site types - conservation area, managed greenspace, peri-urban area and residential backyard.

From the four site types surveyed, conservation areas supported the highest number of species (25 species), followed by peri-urban areas (23 species), managed greenspaces (22 species) and residential backyards (19 species).

Several species were found across all site types, including the agile wallaby, singing honeyeater, brown goshawk and great bowerbird.

Other species were recorded at only one site type, such as the spinifex hopping mouse and short-beaked echidna in conservation areas, and the brahminy kite and blue-winged kookaburra in peri-urban areas. The anecdotal survey recorded the desert spadefoot in one managed greenspace, and species such as Gilbert's dragon, the long-nosed dragon and orange-naped snake were only recorded in residential areas.

The most common species found in residential areas were the cat, black rat, bar-shouldered dove, black-headed monitor, domestic dog, green tree frog, and great bowerbird. In addition, the black flying-fox and Asian house gecko were also commonly recorded in residential spaces in the anecdotal survey.



Black-headed monitor



Australian ibis

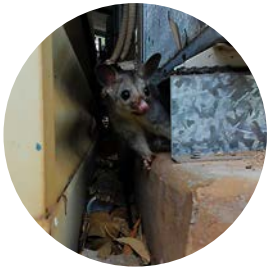


Brown goshawk

WHAT DID WE DISCOVER?

Stories from Broome's backyards

A place for possums



Brushtail possums were recorded at 11 sites in Broome, across all site types - conservation areas, managed greenspaces, peri-urban areas, and residential areas - demonstrating just how these native mammals are using spaces alongside people. Five residents also reported seeing possums in their backyards through the anecdotal survey, highlighting how familiar these nocturnal visitors are to the Broome community. Whilst, the cameras recorded brushtail possums, the images alone cannot identify the subspecies. This requires further analysis, such as genetic testing of scat samples (DBCA, 2025).

Keeping mature trees, native vegetation and natural hollows can help retain important possum habitat. Where natural hollows are limited, nest boxes can provide an additional place to shelter.

A starting point for blue-tongue monitoring

Northern blue-tongue skinks were recorded across four sites (conservation areas and managed greenspaces), however a three-week monitoring period can only capture part of the picture. Monitoring at different times of the year would help build a clearer understanding of when and where northern blue-tongue skinks are active, and whether their presence changes over time.

As one volunteer suggested, *"I'd like to see the project undertaken in the warmer months when native animals, particularly reptiles, are likely to be more active."*

Longer-term monitoring is particularly valuable given the threat posed by cane toads, which can fatally poison blue-tongues when eaten.

The impact of roaming and introduced predators



The cameras recorded roaming cats and dogs across 40 and 22 individual sites respectively, as well as one sighting of a red fox in a conservation area. Both cats and dogs were found across all site types and were particularly present in managed greenspaces and residential areas, highlighting the presence of introduced species within spaces used by native wildlife. These encounters can pose risks through predation and disturbance.

Among the footage were striking interactions between a roaming cat and a snake, and another with a frog. While we cannot know the outcome of these encounters, the images provide a glimpse of the challenges native wildlife can face when sharing the landscape with introduced species.

Seeing our backyards differently

The project showed that citizen science can change how people see the wildlife around them. Taking part gave volunteers the opportunity to learn more about local species, discover what was sharing their spaces, and contribute to a growing picture of Broome's wildlife. 83% of citizen science volunteers surveyed believe backyards and other urban spaces can provide important habitat for wildlife.

"The most interesting or enjoyable part of the project was: The results! So interesting to find out who you are sharing your backyard with."

– Citizen science volunteer



Short-beaked echidna in Yawuru Conservation Estate.



Female dingo taking a bath at the Broome Bird Observatory.

Wildlife wonders

With nearly 400,000 images to analyse, there was no shortage of surprises. A short-beaked echidna was captured on camera, along with mating dingoes and an abundance of agile wallabies, many with joeys emerging from the pouch. The team were enthralled by a female dingo, a recent mother, bathing in a watering hole, and by large goannas prowling through the landscape.

Garden ponds and watering holes were particularly busy, with some animals returning night after night, offering a glimpse into the routines of the small creatures moving through Broome's backyards. These moments brought the wildlife of Broome to life and were some of the most enjoyable discoveries of the project.

CANE TOADS ON THE MOVE

Spot a cane toad?

Cane toads are now arriving at the edge of the Broome region, and, unlike the native species in this report, we're not hoping to find them. Early detection is what gives us a chance to slow them down and protect species like northern quolls, blue-tongue skinks and goannas before they are affected.

The difference?

CANE TOADS

- Dry, warty skin
- Bony ridge above the eyes
- Large, swollen glands behind the eyes (the toxin glands)
- Sits upright and doesn't hop far when approached

NATIVE FROGS
(like Broome's green tree frog)

- Smooth, moist skin
- No bony ridge above the eyes
- Long legs built for hopping and climbing

Not sure which one you've spotted? Some native frogs can look like a cane toad at a glance. Reach out to us and we'll help you confirm it.

If you see one:

- **Don't** touch it – the toxin can harm you, and may be lethal to pets
- **Photograph** it from the front and side, if you can
- **Note** exactly where it was spotted – a street address or GPS pin
- **Report** it to DBCA by sending a photo to the Cane Toad Hotline, 0400 693 807. Alternatively, report it to Environs Kimberley.



Image: Wendy Mitchell

Every report helps confirm whether cane toads have reached a new area. Even a photo that turns out to be a native frog is useful.

WILDLIFE-FRIENDLY BACKYARDS

Small changes that make a big difference

There are simple things we can do at home to make our backyards safer and more useful for wildlife. These actions can provide food, shelter and water, while reducing some of the risks wildlife encounters around our homes.

- **Plant for wildlife**
  Choose native plants that provide flowers, fruit, seeds and habitat for insects.
- **Stay wild**
  Leave some leaf litter, logs, ground cover and natural vegetation for wildlife to shelter in.
- **Provide water**
  Put out a shallow dish or wildlife-friendly water source, with a stick or stone so small animals can get out safely.
- **Protect big trees**
  Mature trees provide shade, shelter, nesting sites and important pathways for wildlife.
- **Leave safe spaces**
  Keep quiet corners where wildlife can feed, rest, hide and move undisturbed.
- **Control pet activity**
  Cats and dogs can pose a serious threat to native wildlife, particularly at night, or if free to roam.
- **Use wildlife-friendly options**
  Avoid poisons and pesticides where possible - they can harm wildlife directly or remove the insects and other animals they rely on for food.
- **Remember the night shift**
  Many of Broome's backyard visitors are most active after dark. Keep lighting to a minimum where possible.



Whistling kite at the watering hole.



Monitor inspecting garden log pile.

WHAT'S NEXT?

This pilot project has helped us learn more about the wildlife sharing Broome with us and given community members the opportunity to build practical skills in wildlife monitoring and identification.

The data collected provides a baseline that could be built on through future monitoring, while the skills and knowledge gained through the project can continue to be used in other citizen science and environmental activities.

Knowing more about the wildlife around us also helps us recognise and value the habitats that support it. Community knowledge, participation and practical skills all contribute to a community that is better equipped to care for Broome's environment.

Thank you to everyone who took part, hosted a camera, shared their observations or helped make the Backyard Biodiversity Blitz possible.

Acknowledgements

The Backyard Biodiversity Blitz brought together community members, organisations, land managers and conservation partners.

The project was generously funded by the **Wettenhall Environment Trust** and delivered in partnership with **Nyamba Buru Yawuru, Parks and Wildlife Service Western Australia and the Shire of Broome.**

Community workshops were supported by local organisations including **Incredible Edible Broome** and the **Broome Public Library.**

Together, these partnerships made it possible to place cameras across a range of Broome landscapes and involve community members in collecting wildlife observations and learning practical monitoring skills.

The result is a dataset that brings together wildlife records from across Broome and the people who helped collect them.

Photos: All images are credited to Environs Kimberley, unless otherwise acknowledged.

What was the most interesting or enjoyable part of the project?

"Being part of a community initiative that has potential to increase the presence of native animals in Broome."

– Citizen science volunteer



Monitor lizard at Habitat Resort



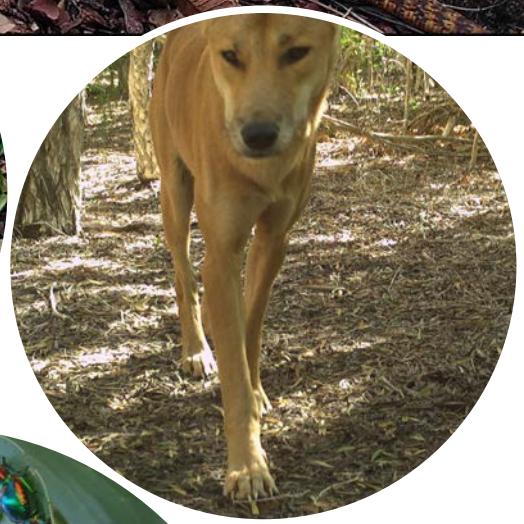




Image: Julie Scullion



Contact us if you would like to get involved!

www.environskimberley.org.au
Email: citizenscience@environskimberley.org.au
Phone: 08 9192 1922