

# Positive Impact for Wildlife





I appreciate the valuable contribution ZAA has made, and continues to make, to listings and conservation planning for threatened species. The progression of listing assessments and updated conservation plans for priority species affected by the terrible 2019-2020 bushfires, such as [your organisation's] work on the brush-tailed rock-wallaby, is vital to the recovery of these species. The bushfires had a devastating impact on our wildlife and the momentous task of helping these species recover requires the collaboration of all Australians. We thank you for your support in these efforts.

*The Hon Tanya Plibersek MP  
Minister for the Environment and Water, 27/02/2023*



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7 Brush-tailed Rock-wallaby

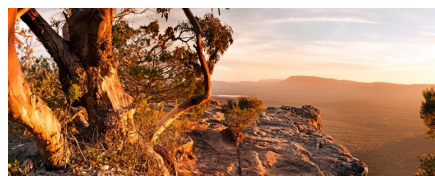
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# Positive Impact for Wildlife



Around the world, more than 25 000 species, almost a third of those known, are in danger of disappearing.

## Global Partnerships to Reverse the Red:

The global climate crisis is increasingly affecting wildlife, from changing ecosystems, inhospitable habitats, through to extinction. That is why the Kunming-Montreal Global Biodiversity Framework has adopted 4 broad goals and 23 targets for achievement by 2030.

That includes Goal A - Human induced extinction of known threatened species is halted.

The Centre for Species Survival (CSS) Australasia is a partnership between the International Union for Conservation of Nature - Species Survival Commission (IUCN-SSC) and the Zoo and Aquarium Association, Australasia (ZAA). The centre supports the governments' conservation efforts and is funded through ZAA's charitable arm, the Wildlife Conservation Fund.

The work programs undertaken by CSS Australasia drives conservation outcomes for native threatened species. Action is catalysed through ZAA's network of welfare accredited, conservation based zoos and aquariums.

Extinction Risk assessment (Listing Assessment) and the listing of a species as threatened is the first step towards promoting its recovery.

Assessment is an extensive process, and once a species is listed as threatened under national legislation, its recovery is guided by a formal conservation plan (Conservation Advice, or Recovery Plan).

These lay out the actions and interventions necessary to recover a species, as well as the potential stakeholders required to deliver the actions.



**ZAA is seeking funding for ongoing Threatened Species action, enabling ongoing assessment, planning and action for threatened and vulnerable native species within Australia and Aotearoa New Zealand.**

# Positive Impact for Wildlife



## Assess. Plan. Act.

The CSS Australasia uses the IUCN SSC's Assess, Plan, Act framework to guide efforts for evaluating and conserving biodiversity.

### IUCN Red List:

The International Union for Conservation of Nature's Red List of Threatened Species (IUCN Red List) was established in 1964 and is regarded as the world's most comprehensive and informative source on the global extinction risk of flora and fauna. It provides information regarding a species' population size, habitat and range, as well as the threats and necessary actions that can be made to inform biodiversity conservation, governmental jurisdiction and policy change. The IUCN Red List categories include:

**Assess** - Understand and inform the world about the status of trends and biodiversity

**Plan** - Develop collaborative, inclusive and science-based conservation actions to improve the status of biodiversity

**Act** - Convene and mobilise conservation actions to improve the status of biodiversity



Currently, there are more than 150 300 on the IUCN Red List and 42 100 animals facing extinction. CSS major native Australian species survival projects to date include the Brush-tailed Rock-wallaby, Pookila (New Holland Mouse), Broad-toothed Rat, Eastern Quoll and Spotted-tailed Quoll species.

Minor projects include the Northern and Southern Corroboree frogs, Burrowing Bettong (Boodie), Forrester's Bottlebrush, Lown Phebalium, Fairall's Honeysuckle, Smoky Mouse, Tasmanian Devil and Orange-Bellied Parrot.

These targeted recovery efforts are assisting the IUCN's aim to reverse, or at least half global declines in biodiversity.

# Funding Actions

Unlike previous extinction events caused by natural phenomena like meteorites and volcanic eruption, the sixth mass extinction is driven by human beings.

*And for this we need your help.*

By providing funds to the ZAA Wildlife Conservation Fund, your money will support threatened species recovery through:



## 1. Threatened Species Assessments and Planning



Assess the extinction risk status of identified native threatened species in accordance with the Australian Federal Environment Protection and Biodiversity Conservation Act 1999 (EPBC).



Consult stakeholders including state, territory and Federal Government agencies, research institutes, zoos and aquariums, Traditional Custodians, private business and community groups, and undertake thorough reviews of the grey and published literature to create up-to-date and comprehensive Conservation Advices and Listing Assessments.



Support the Federal Government review process through each stage of:

- Threatened Species Scientific Committee (TSSC) reviews Common Assessment Method (CAM)
- State Government reviews
- Public Consultation phases.

## 2. Facilitate the development of National Recovery Plans and the establishment and coordination of National Recovery Teams



Establish National Threatened Species Recovery Teams, their governance structure and documentation, and register them with the Federal Government.



Provide coordination and reporting support to Threatened Species Recovery Teams to ensure that species experts can focus their time to progress species recovery actions.



Facilitate the drafting of Recovery Plans including Recovery Team conservation planning workshops in accordance with IUCN Conservation Planning Specialist Group (CPSG) global best practice.






Establish connections with Traditional Custodians across the species range to include their perspectives in National Recovery Plan.

# Funding Actions

## 3. Incorporate Traditional Owners into conservation work

In accordance with emerging Federal requirements, identify Traditional Custodians within the species range, establish communications introducing the process, and facilitate:

-  The representatives of First Nations and Māori perspectives into Recovery Planning documents,
-  The creation of space for their voices to be heard in decision-making processes and,
-  Ongoing opportunities for partnership in conservation work on Country throughout the life of 10-year recovery plans.

## 4. Plans for expansion



Currently, CSS efforts has been directed towards Australian native species impacted by the 2019 - 2020 Black Summer bushfires, as facilitated through government funding. Future work aims to expand to include other threatened species from across the Australasian region and will require partnerships with Australian and New Zealand governments to address more priority conservation needs.

### Examples of ZAA Centre for Species Survival Australasia Outputs:

#### Assess

*Listing Assessments and Conservation Advice*

##### Minor Projects:

- Northern and Southern Corroboree frogs
- Burrowing Bettong (Boodie)
- Forrester's Bottlebrush
- Lowan Phebalium
- Brush-tailed Rock-wallaby
- Broad-toothed Rat
- Fairall's Honeysuckle

#### Plan

*Recovery Plans and recovery planning review*

##### Major Projects:

- Pookila (New Holland Mouse)
- Brush-tailed Rock-wallaby
- Spotted-tailed Quoll
- Eastern Quoll

#### Act

*Recovery team support*

##### Major Projects:

- Pookila (New Holland Mouse)
- Brush-tailed Rock-wallaby
- Eastern Quoll
- Spotted-tailed Quoll

##### Minor Projects:

- Smoky Mouse
- Tasmanian Devil
- Orange-bellied Parrot



Brush-tailed Rock-wallaby  
*Petrogale penicillata*



Pookila New Holland Mouse  
*Pseudomys novaehollandiae*



Broad-toothed Rat  
*Mastacomys fuscus*



Spotted-tailed Quoll  
*Dasyurus maculatus maculatus*



Eastern Quoll  
*Dasyurus viverrinus*



# Brush-tailed Rock-wallaby

*Petrogale penicillata*

The Brush-tailed Rock-wallaby is an agile species which can move confidently throughout rugged and steep areas. This behavior can be attributed to their compact and muscular build, flexible tail used for balancing and well-padded feet which provide excellent traction.



Following the 2019 - 2020 bushfires, population decline was expected for the species. With bushfire scar overlapping with 50% of the species range, there are only 60 southern brush-tailed rock-wallabies left in the wild. Considering their ability to seek refuge in rocky outcrops and the increased rainfall and vegetation growth post bushfire season, it is fortunate less declines in population numbers were observed than originally expected.

## Habitat

Closely associated with rugged, rocky areas (inland cliffs, mountain peaks) in Forest and Savannah environments



## Range

Currently inhabits from south-eastern Queensland to eastern New South Wales and Victoria



## IUCN Red List Category

Vulnerable



## EPBC Act Status

Vulnerable



## CSS Australasia Work and Timing:

- Hosted an online forum for the species in Quarter 1 2022. Bringing together experts/stakeholders from across the Brush-tailed Rock-wallaby range to discuss the species' current status, projects, threats, management and launch the beginnings of a national recovery planning process.
- Drafted a new Listing Assessment to determine the appropriate threatened category for the species (i.e., Critically endangered, Endangered or Vulnerable), as well as a Conservation Advice for the species. The species had not previously had a Listing Assessment completed. Federal review process underway and continuing throughout 2023.
- Drafted a new Recovery Plan for the species - with a long-term vision that, by 2060, the Brush-tailed Rock-wallaby is secure in the wild at the species level. Previous Recovery Plan was outdated (more than 10 years old). New drafted Recovery Plan submitted Quarter 3 2022.
- Hosted workshops for key stakeholders to have input and oversight of the creation of the Recovery Plan. Brush-tailed Rock-wallaby National Forum hosted Quarter 1 2022.

# Pookila, New Holland Mouse

*Pseudomys novaehollandiae*



Image Credit: Doug Becker

The Pookila (New Holland Mouse) is a small, nocturnal species that once lived across Australia, but over the years their population has shrunk into smaller, more fragmented groups which has left them vulnerable to extinction. They can be identified by a pale grey to brown fur, with a tail that is longer than its head to body length.

The species is increasingly under threat from loss of habitat, predators including cats and foxes, as well as dieback of its natural food sources caused by Cinnamon Fungus. While the New Holland Mouse has been shown to increase in prominence two to three years after wildfires, the devastating scale of the 2019-2020 bushfires has put the species in continuing decline. It is estimated there are fewer than 10 000 mature individuals left in the wild.



## Habitat

This opportunistic omnivore communally lives in terrestrial burrows and emerges at night to feed



Image Credit: Zoey Williams

## Range

Found in highly fragmented near-coastal locations in Southern Queensland, New South Wales, Victoria and Tasmania



## IUCN Red List Category

Vulnerable



Image Credit: Zoey Williams

## EPBC Act Status

Vulnerable



Image Credit: Ann Jones

## CSS Australasia Work and Timing:

- Established a National Recovery Team and continuing to provide secretariat support to the Recovery Team. Commenced Quarter 3 2021.
- In the process of updating the Recovery Plan, with feedback from the Federal Government to be submitted to its first Federal Threatened Species Scientific Committee (TSSC) review in Quarter 2 2023.



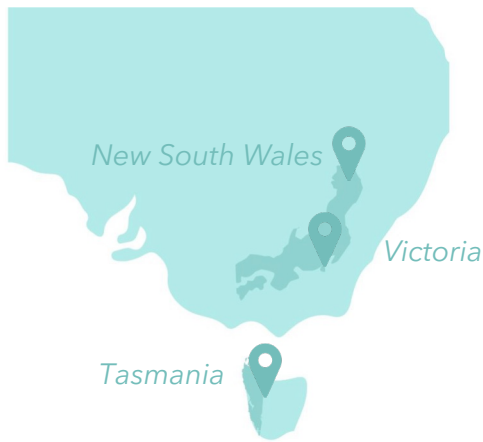
# Broad-toothed Rat

*Mastacomys fuscus*



Image Credit: Heath Warick

The Broad-toothed Rat is known as Australia's native 'guineapig' in appearance and character; with a compact, chubby-cheeked face, short ears and dense brown fur. As a terrestrial and mostly nocturnal rodent, the species nests in burrows in the soil during summer and dens communally in shredded grass during winter.



With upwards of 20 000 mature individuals estimated in the population, the species faces threats from predators including foxes and domestic cats. Habitat destruction and modification as a result of non-native animals, weeds, exotic grasses, fungus and urban development in some parts of its range are challenging its growth. In recent years, the impact of bushfires and loss of protective snow cover in winter, caused by global warming are causing marginalisation of habitat.

## Habitat

Forest, shrubland, grassland and wetlands (inland)



## Range

Isolated subpopulations in Tasmania, Victoria and the Australian Capital Territory



## IUCN Red List Category

Near Threatened



## EPBC Act Status

Endangered



## CSS Australasia Work and Timing:

*Species conservation ongoing throughout 2023*

- Editing work from the Public Consultation phase and final TSSC review. Quarter 2 2023.
- Approaching the final TSSC review in May 2023, for the Conservation Advice and Listing Assessment.

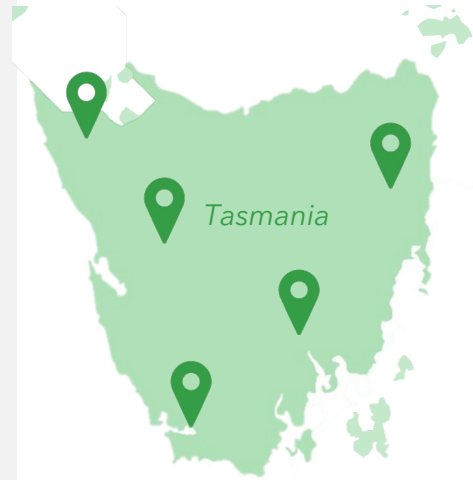
# Eastern Quoll

*Dasyurus viverrinus*



The Eastern Quoll is a predominantly solitary and nocturnal carnivore, which can be found hunting, foraging or nestled under rocks in underground burrows or fallen logs. The size of a small domestic cat, the species has a pointed nose, bushy tail and can be identified by either a soft fawn or dark colour variation; an evolutionary adaptation thought to increase chances of survival in the wild.

The Quoll could once be found across much of mainland New South Wales, Victoria and eastern South Australia, but became extinct on the mainland in the mid 1960's due to introduced feral predators. Now only existing in mainland Tasmania, the species has experienced a population decline of approximately 50% over the past 10 years. Detrimentially affected by ongoing risks of feral cat and predation, changing land-use and road mortality factors, there are estimated to be only 10 000 to 12 000 mature individuals. The projected establishment of the Red Fox in Tasmania will serve as an additional and severe impact on population growth.



## Habitat

Found in a variety of habitats including forest, shrubland, grassland, artificial/terrestrial



## Range

Previously found in mainland south-eastern Australia, but now relatively widespread in Tasmania



## IUCN Red List Category

Endangered



## EPBC Act Status

Endangered



## CSS Australasia Work and Timing:

*Species conservation ongoing throughout 2023*

- Formation of the Eastern Quoll Recovery Team. Quarter 2 2023.
- Review of the current Conservation Advice and determine if updating is required. Quarter 3 2023
- Establish annual reporting to track progress towards conservation goals. Quarter 3 2023.



# Spotted-tailed Quoll

*Dasyurus maculatus maculatus*

The Spotted-tailed Quoll, or tiger quoll is mainland Australia's largest carnivorous marsupial, about the size of a domestic cat. It is characterised by its rich reddish-brown fur and white spots on the back and down the tail.



The 2019-2020 Black Summer bushfires in eastern and southern Australia have accelerated population decline, with 29% of the Spotted-tailed Quoll national distribution range overlapping with fire-affected areas. This has left the Quoll population fragmented and isolated.

## Habitat

Ground dwelling and nocturnal, using tree hollows, burrows, small caves and rock outcrops as den sites



## Range

Found along both sides of the Great Diving Range from Victorian to Queensland borders



## IUCN Red List Category

Near Threatened



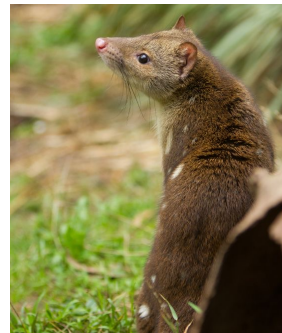
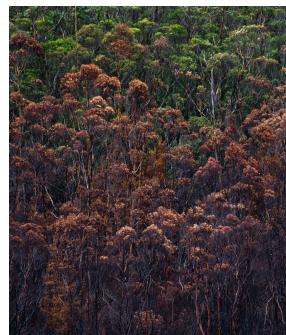
## EPBC Act Status

Endangered



## CSS Australasia Work and Timing:

- Formation of the Spot-tailed Quoll Recovery Team. Quarter 2 2023.
- Review of the current Conservation Advice and determine if updating is required. Quarter 3 2023.
- Establish annual reporting to track progress towards conservation goals. Quarter 3 2023.



# What Are We Asking For?

By providing funding for the TSU, you will be supporting threatened species conservation and recovery efforts in the Australasian region.

**“Effective conservation relies on robust planning to be undertaken before a species is on the brink, so that in times of crisis, interventions can be implemented without hesitation. It relies on all voices, and on all stakeholders doing their part.”**

*James Biggs, Director, Conservation and Population Management*



## The Future of Biodiversity

Biodiversity and its many impacts are increasingly on the radar of businesses, as a risk that requires implementation into long and short term environmental, social and corporate governance.

In our contemporary age, biodiversity accounts for more than \$150 trillion of the world's gross domestic product annually and the decline of natural services costs the global economy more than \$5 trillion a year. For businesses, it is important to mitigate risks associated with operational dependencies on the environment, financial loss, growing threats of litigations and expectations from investors, shareholders or other stakeholders for companies to be financially transparent and reveal their biodiversity related impacts.

However, this crisis has created emerging opportunities for businesses and corporations to demonstrate innovation and leadership in the sector, while minimising threatened species loss.

Companies can enter into new profitable markets by developing valuable products and services which improve value proposition by responding to public demands for sustainability. This also develops clear priorities, faster decision-making and increased accountability and trust, as outlined in the Australian Government's Nature Positive Plan: better for the environment, better for business (December 2022).

## Cost Breakdown:

A donation of \$100,000 will fund one full-time equivalent within the ZAA TSU for 12 months to undertake:



Secretariat support for up to six threatened species recovery teams, or;



The assessment, planning and action for select species.



2.5 full-time TSU staff, and;



Recovery team support for up to 15 teams, and;



The assessment, planning and action select species.

We thank you in advance for your consideration and hope to hear from you soon.

Contact the Zoo and Aquarium Association on:

[Georgia@zooaquarium.org.au](mailto:Georgia@zooaquarium.org.au) or;

61-2-9978-4797

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