

Action statement

Flora & Fauna Guarantee Act 1988

Brush-tailed Rock-wallaby (*Petrogale penicillata*)

Taxon ID: 11215

Action statements are developed under the *Flora and Fauna Guarantee Act 1988* (FFG Act). Their preparation and implementation complement the FFG Act strategy *Protecting Victoria's Environment – Biodiversity 2037* and its vision that “Victoria's biodiversity is healthy, valued and actively cared for”.

Species and Distribution



Brush-tailed Rock-wallaby. Image by Ryan Davis



Victorian Biodiversity Atlas (VBA) records since 1970. See [NatureKit](#) for an interactive map. The Brush-tailed Rock-wallaby also occurs outside of Victoria.

Conservation Status

Critically Endangered

Listing criteria: 3.1.4 of the Flora and Fauna Guarantee Regulations 2020.

This means that:

- the species' estimated total number of mature individuals is extremely low.

Corresponding International Union for the Conservation of Nature (IUCN) criteria: D

More information on IUCN listing criteria can be found here: [IUCN Red List of Threatened Species](#).

Species Information

Species information such as its description, distribution, ecology and references are provided in the [Brush-tailed Rock-wallaby Species Forecast Report](#).

Threats

Threats listed below have been identified through expert consultation, published literature and spatial analysis.

Threat	Description
Population dynamics	
Loss of genetic diversity	<ul style="list-style-type: none"> Genetic diversity in the East Gippsland population is low and will continue to decline, with a loss of adaptive potential to environmental change and climate change impacts. Low juvenile survivorship is attributed in part to inbreeding depression.
Small population size	<ul style="list-style-type: none"> There are only two small in-situ populations in Victoria, both under 40 individuals, with a high extinction risk from stochastic events such as fire.
Introduced species	
Feral cats	<ul style="list-style-type: none"> Brush-tailed Rock-wallabies, particularly juveniles, are susceptible to predation by feral cats (<i>Felis catus</i>).
Feral pigs and deer	<ul style="list-style-type: none"> Deer compete with Brush-tailed Rock-wallabies for foraging habitat. Deer and feral pigs (<i>Sus scrofa</i>) can damage and degrade foraging habitat by trampling and grazing plants, preventing plant regeneration, altering ecological communities, and promoting weed invasion.
Foxes	<ul style="list-style-type: none"> Foxes (<i>Vulpes vulpes</i>) prey on the species.
Weeds	<ul style="list-style-type: none"> Weeds can alter foraging habitat by invading and outcompeting native vegetation, particularly following fire.
Climate change	
Increased fire frequency and intensity	<ul style="list-style-type: none"> Increased fire frequency and intensity will likely degrade and alter habitat, exposing animals to predation. Brush-tailed Rock-wallabies are less susceptible to direct mortality from fire when they have access to rocky shelters that provide protection from radiant heat and rocky terrain that limits fire spread.
Increased frequency or length of droughts	<ul style="list-style-type: none"> Increased frequency or length of droughts will likely alter and degrade foraging habitat.

Conservation Objectives

Conservation objectives are informed by the conservation status and criteria in which the species was listed under the FFG Act. This provides a framework to understand how we can work towards recovery and improve the species' conservation status over time as per the objectives of the FFG Act.

The key objectives of this action statement are:

- Mitigate threats to populations and habitat to increase resilience, improve genetic fitness and minimise future population decline.
- Increase the wild population size into at least 300 mature individuals.
- Establish at least two new viable populations within its historic range.
- Increase knowledge of biology, ecology, distribution, demography, emerging threats, and conservation requirements.

- Support community participation and improve awareness of the Brush-tailed Rock-wallaby and conservation of its habitat.

Conservation Actions

The actions below have been identified through expert consultation, published literature and spatial analysis. Actions are listed in alphabetical order to allow all interested parties to prioritise based on their context, capacity and capability. Landscape scale actions may mitigate threats for other species. For more information on where to undertake actions that benefit multiple species and identify the most beneficial locations to undertake actions for this species, please refer to [NatureKit](#).

Action	Description
Avoid and/or mitigate impacts associated with fire	<ul style="list-style-type: none"> • Ensure species distribution data, and ecological information, is available and considered in fire management activities. • Undertake biodiversity values check prior to fuel management in areas of the species habitat, to confirm treatment suitability and timing. • Develop and implement an ecological fire management plan for Brush-tailed Rock-wallaby habitat in Snowy River and Grampians (Gariwerd) National Parks.
Build resilience by translocation/gene mixing	<ul style="list-style-type: none"> • Continue the gene pool mixing program and use these methods to establish new populations.
Community engagement	<ul style="list-style-type: none"> • Facilitate stakeholder and community engagement on the plight of the Brush-tailed Rock-wallaby through institutions that hold populations.
Control introduced animals*	<ul style="list-style-type: none"> • Implement effective management and control of foxes, feral cats, deer, feral pigs and feral horses in and around the Snowy River National Park populations, and at future reintroduction sites.
Control weeds	<ul style="list-style-type: none"> • Implement effective management and control of weeds in and around the Snowy River National Park, and at future reintroduction sites.
Establish new population	<ul style="list-style-type: none"> • Identify release sites and reintroduce two new populations by 2027, ensuring that any potential threats at the site have been controlled, and the animals are suitably tagged and monitored.
Ex-situ management	<ul style="list-style-type: none"> • Maintain free-ranging captive populations of at least 200 adults across multiple fenced sites to provide insurance in the case of stochastic events (fire, major disease outbreak) and to enable reintroductions. • Monitor the genetics of the captive population and manage the breeding program to produce populations with greater adaptive potential. • Fence Widgewah Conservation Reserve for future releases.
Research	<ul style="list-style-type: none"> • Undertake research into knowledge gaps critical for recovery of the Brush-tailed Rock-wallaby.
Survey and monitoring	<ul style="list-style-type: none"> • Undertake monitoring of the wild population to assess survivorship, reproduction, population size and genetic diversity. • Monitor to determine the success of supplementation and reintroduction translocations so as to increase the knowledge of the best translocation techniques.

Action	Description
	<ul style="list-style-type: none"> Collect information including biopsies for genetic analysis from all wild-recruited animals in the Little River Gorge population (Snowy River National Park). Monitor the effectiveness of introduced animal control.

**Indicates landscape-scale actions that may deliver benefits to multiple species*

Past Actions

The key conservation management actions listed below have been delivered in the past 10 years.

Past action	Description
Community engagement	<ul style="list-style-type: none"> The Brush-tailed Rock-wallaby Recovery Team has undertaken a range of engagement activities, including regular media releases and recruitment of volunteers for fieldwork and captive management-related activities.
Ex-situ management	<ul style="list-style-type: none"> A gene pool mixed population was established in 2016 at Mt Rothwell, and by 2022, the population size was estimated to be 200. The ACT government manage an ex-situ population at Tidbinbilla Nature Reserve and have undertaken intensive genetic management of a robust founder population for other captive institutions. The fence at Mt Rothwell was replaced to secure the site for the next 20 years.
Introduced species management	<ul style="list-style-type: none"> Fox control and management has occurred across East Gippsland's Southern Ark program over the past decade, and within the Little River Gorge by Parks Victoria. Integrated predator control program was undertaken around the Moora Morra reintroduction colony in the Grampians (Gariwerd) National Park. Feral pig, goat and deer control has been undertaken by Parks Victoria in the Snowy River National Park.
Monitor threats	<ul style="list-style-type: none"> Feral predators are monitored through the Southern Ark and Grampians Ark programs, which include the Snowy River and Grampians (Gariwerd) National Parks subpopulations.
Research	<ul style="list-style-type: none"> DNA scat research was undertaken on the Grampians (Gariwerd) National Park population. A study on the levels of genetic diversity and relatedness for both the wild and captive population has been undertaken. A site selection study of the Grampians (Gariwerd) National Park was completed in 2012. A site selection study of the entire range of the Brush-tailed Rock-wallaby in Victoria (and the Australian Capital Territory) was completed in 2022, and potential re-introduction sites in Victoria were identified and short-listed.
Survey and monitoring	<ul style="list-style-type: none"> Existing populations are monitored annually and searches for new subpopulations are periodically undertaken.

Past action	Description
Translocation	<ul style="list-style-type: none">• The Little River Gorge colony was supplemented by 11 captive-bred animals between 2019 and 2022.• Thirty-nine captive-bred animals were released into Grampians (Gariwerd) National Park between 2008 and 2012. The reintroduction failed to meet its success criteria due to high adult mortality, so further releases were suspended. A review of this reintroduction was undertaken in 2018 and two animals were introduced in 2019 to remove immediate inbreeding risks.

Decision Support Tools

Decision making for conservation actions is supported through the following Victorian Government tools which may be of assistance in choosing the most appropriate or beneficial actions for biodiversity:

- [Choosing actions for nature: NatureKit](#)
- [Biodiversity Knowledge Framework](#)

Further Information

- [Brush-tailed Rock-wallaby Species Forecast Report](#)
- [Threatened Species Assessment report – Brush-tailed Rock-wallaby \(*Petrogale penicillata*\)](#)
- [Commonwealth Species Profile and Threats database](#)
- [Victoria's changing climate – understanding the impacts of climate change in Victoria](#)
- [Commonwealth Threat Abatement Plans](#)
- [Genetic Risk Index](#)
- [Flora and Fauna Guarantee Regulations 2020](#)
- [IUCN Red List criteria descriptions](#)

Get Involved and Take Action

If you are interested in supporting this species' recovery, there are some important things you need to consider.

The Department of Energy, Environment and Climate Action (DEECA) is committed to engaging and partnering with Traditional Owners on how they wish to be involved in the planning and implementation of actions for this species. Steps must be taken to avoid harm and where appropriate ensure actions can deliver cultural benefits.

You can find advice about required approvals, land manager / owner permissions, options and incentives for private land conservation, and engagement with Traditional Owners and public land managers here: [Action statements \(environment.vic.gov.au\)](#)

To identify the relevant Traditional Owners, use the [Aboriginal Cultural Heritage Register and Information System \(ACHRIS\) Welcome to Country and Acknowledgements Map](#).

Interested parties are encouraged to work together across community, government, private and public land managers and Traditional Owners to undertake these actions and secure funding for their implementation.

You can also register your interest in taking action so we can connect you to other people or organisations working to help us secure the future for this species at threatened.species@deeca.vic.gov.au

Reporting Actions

Activity data is critical to monitoring the implementation and progress of actions and evaluating action statements. These data are also used to:

- Determine progress towards achieving the contributing targets for [Protecting Victoria's Environment – Biodiversity 2037](#)
- Inform the five-yearly State of the Environment Report.

For guidance on reporting actions undertaken on this species, refer to [Activity Data](#).

Submitting Monitoring Data

The Victorian Biodiversity Atlas (VBA) provides a foundational dataset showing where biodiversity occurs across the Victorian landscape and how it may have changed over time. As a core input for decision support tools that inform conservation action, public land management, research activities and reporting, we encourage all participants in the delivery of on-ground actions to submit species records, including for weeds and introduced animals, and observations as they carry out their projects.

For further information see: Victorian Biodiversity Atlas (environment.vic.gov.au)

Sign up and begin submitting your data today at: <https://vba.biodiversity.vic.gov.au/>

Acknowledgment

We acknowledge and respect Victorian Traditional Owners as the original custodians of Victoria's land and waters, their unique ability to care for Country and deep spiritual connection to it. We honour Elders past and present whose knowledge and wisdom has ensured the continuation of culture and traditional practices.

We are committed to genuinely partner, and meaningfully engage, with Victoria's Traditional Owners and Aboriginal communities to support the protection of Country, the maintenance of spiritual and cultural practices and their broader aspirations in the 21st century and beyond.



© The State of Victoria Department of Energy, Environment and Climate Action August 2023



This work is licensed under a Creative Commons Attribution 4.0 International licence. You are free to re-use the work under that licence, on the condition that you credit the State of Victoria as author. The licence does not apply to any images, photographs or branding, including the Victorian Coat of Arms, the Victorian Government logo and the Department of Energy, Environment and Climate Action (DEECA) logo. To view a copy of this licence, visit <http://creativecommons.org/licenses/by/4.0/>

ISSN 1448-9902 (online)

Disclaimer

This publication may be of assistance to you but the State of Victoria and its employees do not guarantee that the publication is without flaw of any kind or is wholly appropriate for your particular purposes and therefore disclaims all liability for any error, loss or other consequence which may arise from you relying on any information in this publication.

Accessibility

If you would like to receive this publication in an alternative format, please telephone the DEECA Customer Service Centre on 136186, email customer.service@delwp.vic.gov.au or via the National Relay Service on 133 677 www.relayservice.com.au. This document is also available on the internet at www.environment.vic.gov.au