

Action statement

Flora & Fauna Guarantee Act 1988

Eastern Barred Bandicoot (Mainland) (*Perameles gunnii*)

Taxon ID: 11098

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



Eastern Barred Bandicoot (Mainland). Image by Ryan Davis.



Eastern Barred Bandicoot Victorian Biodiversity Atlas (VBA) records since 1970. These records include past unsuccessful translocations. See [NatureKit](#) for an interactive map.

Conservation Status

Endangered

Listing criteria: 4.1.2(a), (b)(iii) of the Flora and Fauna Guarantee Regulations 2020.

This means that:

- its geographic distribution is highly restricted; and
- it is restricted to a limited number of areas that are subject to the same threat or suite of threats that can impact all individuals present; and
- there is a continuing decline or reduction in its area, extent or quality of habitat.

Corresponding International Union for the Conservation of Nature (IUCN) criteria: B2ab(iii).

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 [Eastern Barred Bandicoot \(Mainland\) Species Forecast Report](#).

Threats

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

Threat	Description
Introduced species	
Feral cats	<ul style="list-style-type: none"> Cats (<i>Felis catus</i>) prey upon Eastern Barred Bandicoots, particularly juveniles, however their impact on populations is less significant than that of foxes as bandicoots can establish populations in areas with feral cats present. The parasitic disease, Toxoplasmosis, is carried and transmitted by cats and can be fatal to bandicoots.
Foxes	<ul style="list-style-type: none"> Predation by foxes (<i>Vulpes vulpes</i>) is the leading cause of decline and local extinction for Eastern Barred Bandicoots across Victoria. As a contributing cause in the failure of eight historical reintroductions, the Victorian Government's Animal Ethics Committee ceased to support reintroductions where a fox-free environment could not be provided.
Rabbits	<ul style="list-style-type: none"> Over-grazing by introduced herbivores, notably rabbits (<i>Oryctolagus cuniculus</i>) potentially limits food availability and habitat.
Weeds	<ul style="list-style-type: none"> Weeds can invade and outcompete native vegetation, thus degrading the Eastern Barred Bandicoot's habitat, but in the absence of feral predators, habitat complexity appears less important.
Native species	
Macropods	<ul style="list-style-type: none"> The Eastern Barred Bandicoot requires the coverage of large tussocky grasses for survival. Overgrazing by macropods can limit food availability and habitat for nesting, causing population decline.
Climate change	
Increased frequency or length of droughts	<ul style="list-style-type: none"> Prolonged drought and reduced rainfall impact can prey availability, increase competition for resources and reduce breeding capacity. Cumulative impacts of drought and fox predation significantly elevate the likelihood of local extinction. At feral predator-free reintroduction sites, Eastern Barred Bandicoots appear much more drought tolerant.
Population dynamics	
Loss of genetic diversity	<ul style="list-style-type: none"> Descended from 23 individual founders collected for captive breeding in 1990, the Eastern Barred Bandicoot population suffered from further loss of genetic diversity, potentially reducing the species' future ability to adapt to environmental change and the effects of predators/pathogens. The considerable increase in population size and outbreeding with Tasmanian animals has recently reduced this threat.

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, increase genetic fitness and minimise future population decline.
- Maintain Victorian population size above 2500 individuals.
- Establish at least one new reintroduction site within its historic range.
- Increase knowledge of biology, ecology, distribution, demography, emerging threats, critical for its conservation.
- Support community participation and improve awareness of the Eastern Barred Bandicoot and conservation of perennial tussock grassland and grassy woodland environments.

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
Build resilience by translocation/gene mixing	<ul style="list-style-type: none"> • Introduce outbred individuals to all established and new sites. • Monitor outbreeding with Tasmanian Eastern Barred Bandicoots to document increased genetic diversity and mitigate the impacts of inbreeding.
Community engagement and awareness	<ul style="list-style-type: none"> • Promote community awareness of the species and conservation of its grassland habitat. • Promote responsible cat ownership in key locations where Eastern Barred Bandicoots are present.
Control feral cats *	<ul style="list-style-type: none"> • Implement effective management and control of feral cats as required at island introduction sites and mainland re-introduction sites using all appropriate tools and techniques to a level that mitigates the impact of feral cats on the Eastern Barred Bandicoot.
Control foxes *	<ul style="list-style-type: none"> • Implement effective management and control of foxes where there are any signs of incursions in fenced populations and eradicate foxes at future sites prior to introductions as required by the Victorian Government's Animal Ethics Committee. • Continue formal monitoring programs on Phillip Island for signs of fox reinvasion. • Continue informal fox monitoring on French Island through reports of sightings and information from landholders.
Control rabbits *	<ul style="list-style-type: none"> • Regularly monitor and measure rabbit activity and vegetation cover and quality at reintroduction sites. Implement effective management and control of rabbits to prevent grazing impacting habitat quality for Eastern Barred Bandicoots.
Establish and maintain exclusion fencing	<ul style="list-style-type: none"> • Patrol predator-fenced reintroduction sites regularly to monitor for signs of predator incursions and fence failure, and to ensure speedy repair of damaged fences.

Action	Description
Manage over-abundant macropods	<ul style="list-style-type: none"> Monitor macropod numbers and vegetation cover and quality at reintroduction sites and manage as appropriate to prevent overgrazing and avoid macropod welfare issues.
Monitor populations	<ul style="list-style-type: none"> Monitor populations bi-annually to assess population trajectories and trigger management interventions as required. Monitor genetic diversity across sites using genetic markers, at least every two years to ensure uptake of Tasmanian genes into the Victorian population.
Recovery Team	<ul style="list-style-type: none"> Coordinate and deliver activities through the Eastern Barred Bandicoot Recovery Team.
Research	<ul style="list-style-type: none"> Develop “triggers” for management intervention based on habitat, population and genetic trajectories.

**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
Build resilience by translocation / gene mixing	<ul style="list-style-type: none"> The population size has been increased rapidly to prevent further loss of genetic diversity, from greater than 70 animals at the time of genetic assessment, to a population size of 750-1115 in 2018. A gene-pool mixing trial with Tasmanian males was completed in 2019 at Mount Rothwell. Outbred offspring from this project have, so far, been introduced into Tiverton, Churchill Island and Hamilton Parklands.
Captive breeding	<ul style="list-style-type: none"> A captive breeding and insurance program commenced in 1988 at Woodlands Historic Park. It moved to Zoos Victoria in 1991 where the program was managed by zoo and partner properties until its completion and wind down in 2021, when it was deemed no longer required. More than 1200 animals have been bred, and over 730 individuals have been released from captivity into fenced and wild locations.
Community engagement and awareness	<ul style="list-style-type: none"> The Recovery Team has undertaken a range of community education activities including the production of a newsletter, a crowd-funding campaign to enhance the genetic viability, and visitation opportunities at Mount Rothwell, Phillip Island Nature Parks and Zoos Victoria. Bandicam, livestreaming Eastern Barred Bandicoots on Gunditjmara Country, and numerous mainstream and social media articles have assisted in raising the awareness of the bandicoot and its conservation programs.
Conservation status assessment	<ul style="list-style-type: none"> In 2021 the Victorian Eastern Barred Bandicoot was reassessed, resulting in a change in conservation status from ‘Extinct in the Wild’ to ‘Endangered’, highlighting the success of recovery efforts.
Control feral cats	<ul style="list-style-type: none"> Feral cat control continues to be undertaken on fox-free islands. Fenced reintroduction sites are monitored and managed for feral cats. Feral cat control has been undertaken since 2001 on French Island and efforts have recently been strengthened through the inclusion of French Island in the Commonwealth’s ‘Five Feral Cat-Free Islands’ program in 2016.

Past action	Description
Control foxes	<ul style="list-style-type: none"> The Hamilton Community Parklands, Mt Rothwell, Woodlands Historic Park and Tiverton fenced reintroduction sites are maintained fox free. Regular and effective fence monitoring and maintenance help to ensure that these sites remain fox free. An effective fox control program has completely eradicated foxes from Phillip Island since 2017 and Churchill Island since 2007.
Control herbivores	<ul style="list-style-type: none"> Native and feral herbivores are managed at fenced sites to limit total grazing pressure and minimise any impacts on habitat quality.
Recovery Team	<ul style="list-style-type: none"> Formed in 1989, the Eastern Barred Bandicoot Recovery Team and associated working groups maintain an effective partnership to deliver conservation action.
Research	<ul style="list-style-type: none"> Completed or ongoing research projects include guardian dog trials, the role of bandicoots as ecosystem engineers, toxoplasmosis and health, predator aversion, transmitter trials, mate choice, diet, density and demographics, habitat use and movement ecology, genetic outbreeding, and community dynamics models.
Translocation	<ul style="list-style-type: none"> An initial successful small-scale trial release on French Island of non-breeding individuals in 2012 was followed by releases on Churchill Island in 2015 and a large-scale introduction program on Phillip Island in 2017, French Island in 2019 and Tiverton in 2020.

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

- [Eastern Barred Bandicoot \(Mainland\) Species Forecast Report](#)
- [Threatened Species Assessment report – Eastern Barred Bandicoot \(*Perameles gunnii*\)](#)
- [Victoria's changing climate – understanding the impacts of climate change in Victoria](#)
- [Commonwealth Threat Abatement Plans](#)
- [Commonwealth Species Profile and Threats database](#)
- [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.



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