

Action statement

Flora & Fauna Guarantee Act 1988

Long-nosed Potoroo (*Potorous tridactylus trisulcatus*)

Taxon ID: 11175

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



Long-nosed Potoroo. Image by Dan Pendavingh.



This habitat distribution model displays the indicative range of the Long-nosed Potoroo based on occurrence records and likely habitat. See [NatureKit](#) for an interactive map. The Long-nosed Potoroo also occurs outside of Victoria.

Conservation Status

Vulnerable

Listing criteria: 5.1.1; 5.1.2(a),(b)(iii,iv,v) of the Flora and Fauna Guarantee Regulations 2020.

This means that:

- The Long-nosed Potoroo has undergone, is suspected to have undergone, or is likely to undergo in the immediate future, a substantial reduction in population size; and
- its geographic distribution is restricted; and
- the distribution of the population or habitat is severely fragmented; 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:
 - the area, extent or quality of habitat; and
 - the number of locations or subpopulations; and
 - the number of mature individuals.

Corresponding International Union for the Conservation of Nature (IUCN) criteria: A2bc; B2ab(iii,iv,v).

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

Species Information

Species information such as its description, distribution, ecology and references are provided in the [Long-nosed Potoroo Species Forecast Report](#).

Threats

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

Threat	Description
Introduced species	
Domestic pets	<ul style="list-style-type: none"> Roaming domestic pets (cats and dogs) may cause disturbance and mortality.
Introduced herbivores	<ul style="list-style-type: none"> Introduced herbivores degrade habitat through herbivory, trampling, pugging of wet soils, increasing nutrient loads, erosion of waterway edges, competition for resources and increasing the accessibility of habitat to introduced predators and introduced plants. Of potential concern in areas of Long-nosed Potoroo habitat are feral pigs (<i>Sus scrofa</i>), goats (<i>Capra hircus</i>), Sambar deer (<i>Cervus unicolor</i>), Red Deer (<i>Cervus elaphus</i>) and Fallow Deer (<i>Dama dama</i>) which can degrade habitat and increase risk of exposure to predators. Feral pigs can also compete directly for underground fungi, the main food source for Long-nosed Potoroos.
Introduced plants	<ul style="list-style-type: none"> Introduced plants can change the structure and composition of native habitats, resulting in changes to habitat extent and/or condition including potential impacts to underground fungi abundance. Introduced plant species of concern in Long-nosed Potoroo habitats include transformer woody weeds such as Radiata Pine (<i>Pinus radiata</i>), Coast Wattle (<i>Acacia longifolia</i> subsp. <i>sophorae</i>) and Sweet Pittosporum (<i>Pittosporum undulatum</i>) which can change the composition and structure of habitat, with potential impacts on the abundance of underground fungi. However, in some cases introduced plants may provide important habitat for the species.
Introduced predators	<ul style="list-style-type: none"> Predation by foxes (<i>Vulpes vulpes</i>) and feral cats (<i>Felis catus</i>) contributes to mortality of native species and is likely the most serious threat to the Long-nosed Potoroo.
Climate change	
Altered rainfall and temperature regimes	<ul style="list-style-type: none"> Climate change, increasing temperature and altered rainfall are likely to magnify existing threats and may reduce the stability, extent and condition of habitat. The drying of habitat may impact on the abundance of underground fungi and can reduce population sizes. The droughts in Far East Gippsland between 2015-2019 saw a large decline in the detections of Long-nosed Potoroo.
Fire	
Altered fire regimes	<ul style="list-style-type: none"> Fires (including planned burns) that are too frequent (e.g. intervals of less than 20 years in forest habitat), or too intense, can remove the habitat structure required for refuge and foraging by Long-nosed Potoroos, increase predation risks, alter food resource availability, cause direct mortality and lead to loss of populations. The impact of fire on abundance and distribution of key fungi food sources for Long-nosed Potoroo is not known.

Threat	Description
	<ul style="list-style-type: none"> A hotter, drier climate may increase the likelihood or frequency of fire, impacting habitat, with the potential to reduce habitat extent and/or condition including availability of food resources.
Fire management activities	<ul style="list-style-type: none"> Fire management operations such as creation of fuel breaks (soil disturbance, slashing) may remove or modify habitat, cause mortality of individuals, reduce regeneration and increase the accessibility of habitat to introduced predators and introduced plants.
Habitat loss, degradation or modification	
Forestry operations	<ul style="list-style-type: none"> Forestry operations have the potential to remove or degrade habitat, compact soils, contribute to erosion and sedimentation, exacerbate the spread of introduced species, pathogens and parasites, and cause mortality of individuals.
Land use change	<ul style="list-style-type: none"> Land use change alters vegetation extent and condition, and may impact water regimes, contributing to habitat loss and degradation. This can result in isolated Long-nosed Potoroo populations where habitat is fragmented.
Population dynamics	
Loss of genetic diversity	<ul style="list-style-type: none"> Small, greatly reduced, and/or isolated populations are at increased risk of loss of genetic diversity, which leads to a heightened risk of reduced recruitment and/or increased mortality rates.
Population fragmentation	<ul style="list-style-type: none"> Fragmentation of once connected populations into smaller, isolated populations increases the risk of genetic decline and associated changes to recruitment and/or mortality rates.
Pathogens and disease	
<i>Phytophthora cinnamomi</i>	<ul style="list-style-type: none"> Infection by <i>Phytophthora cinnamomi</i> leads to mortality, reduced fitness, reduced recruitment/reproduction, and local population declines of many plant species. Construction and maintenance of roads is a risk for spreading <i>Phytophthora cinnamomi</i>. The risk is greatest on private and rural roads. <i>Phytophthora cinnamomi</i> can cause forest dieback and therefore may impact on Long-nosed Potoroo habitat and food sources.
Toxoplasmosis	<ul style="list-style-type: none"> Toxoplasmosis (infection with the <i>Toxoplasma gondii</i> parasite) is spread by feral cats and may impact susceptible individuals, impacting recruitment and/or mortality. However, there is uncertainty as to how this disease may affect the Long-nosed Potoroo.

Conservation Objectives

Conservation objectives are informed by the conservation status and criteria under 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 Long-nosed Potoroo's range and/or extent, by providing opportunities for natural movement.

- Increase knowledge of biology, ecology, distribution, demography, emerging threats, and conservation requirements.
- Support community participation and improve awareness of the Long-nosed Potoroo 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 management	<ul style="list-style-type: none"> • Ensure that 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.
Community engagement and awareness	<ul style="list-style-type: none"> • Continue to raise landholder and broader community awareness of the importance of protecting Long-nosed Potoroo habitat and managing threats. • Work with key stakeholders to reduce threats and encourage adherence to behaviours that support a healthy environment. This includes promoting the responsible management of domestic cats.
Conservation management planning	<ul style="list-style-type: none"> • Review and update, or develop, relevant plans or planning tools to support conservation management.
Control introduced herbivores *	<ul style="list-style-type: none"> • Implement and maintain effective control of feral pigs, feral goats and deer in priority areas.
Control introduced plants*	<ul style="list-style-type: none"> • Implement and maintain effective control of introduced plants, especially transformer woody weeds, where they are demonstrated to be having a detrimental impact on Long-nosed Potoroo population viability and undertake revegetation with appropriate native species.
Control introduced predators *	<ul style="list-style-type: none"> • Implement and maintain effective control of foxes in priority areas. This includes immediate and ongoing post-fire predator control where possible. • Implement and maintain control of feral cats, where feasible, in priority areas once suitable techniques are readily available and shown to be cost-effective.
Develop, update and apply forestry protections	<ul style="list-style-type: none"> • Maintain prescriptions for this species under the <i>Code of Practice for Timber Production 2014 (as amended in 2022)</i> (the Code). • Where relevant, incorporate species-specific protection measures into plans and permits relating to timber harvesting operations in native forest on private land.
Ex-situ management	<ul style="list-style-type: none"> • Assess the need for ex-situ conservation and if required, establish and maintain ex-situ populations in suitable secure sites, to service the conservation objectives of the species.
Genetic rescue	<ul style="list-style-type: none"> • Investigate the need and options for managing risks from stochastic events and improving resilience through enhancing genetic exchange, via physically linking

Action	Description
	populations with enhanced habitat, translocation, or genetic management in an ex-situ setting.
Identify and protect refuges	<ul style="list-style-type: none"> Identify and protect Long-nosed Potoroo habitat areas that provide important refugia from disturbance events (e.g., fire) or significant weather events (e.g., drought).
Improve habitat connectivity	<ul style="list-style-type: none"> Restore habitat to improve connectivity between habitat patches.
Manage impacts from natural disaster events	<ul style="list-style-type: none"> Identify and implement recovery actions for vulnerable Long-nosed Potoroo populations impacted by natural disaster events (e.g., significant bushfire events).
Minimise the spread of <i>Phytophthora cinnamomi</i>	<ul style="list-style-type: none"> Implement vehicle, tool, and footwear hygiene to minimise risk of <i>Phytophthora cinnamomi</i> introduction or spread.
Mitigate the risks posed by pathogens and disease	<ul style="list-style-type: none"> Identify and manage the risks associated with pathogens and/or diseases, considering management options to limit exposure, infection, and impact of infection.
Protect key habitat from direct and indirect disturbance	<ul style="list-style-type: none"> Identify opportunities to manage threats of land use change and development, including programs to encourage protection and management of remaining Long-nosed Potoroo habitat areas.
Research	<ul style="list-style-type: none"> Improve understanding of the Long-nosed Potoroo's movements and/or dispersal, pathogens and diseases, habitat requirements and diet including identification of the species of underground fungi that are important throughout the year. Improve understanding of population dynamics (e.g., sex ratios, recruitment, causes of mortality) to inform management priorities, including the possible impacts of toxoplasmosis. Investigate and determine suitable fire regimes that meet the Long-nosed Potoroo's ecological requirements and promote its recovery. Improve understanding of, and develop guidelines for, habitat restoration and management approaches. Increase understanding of genetic risks and management options.
Restoration and/or revegetation *	<ul style="list-style-type: none"> Undertake restoration and/or revegetation to increase habitat suitability and/or create new habitat areas where necessary.
Survey and monitoring	<ul style="list-style-type: none"> Monitor populations at known sites and other suitable locations to assess distribution, population trends and habitat condition. Monitor the impact of threats and success of management approaches to inform adaptive management interventions. Monitor representative populations to determine trends and management needs.
Translocation	<ul style="list-style-type: none"> Assess the need for, and if required, design and implement translocation program to meet the objectives of the action statement.

*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
Avoid and/or mitigate impacts associated with fire management	<ul style="list-style-type: none"> Input and guidance provided during Fire Operation Planning in East Gippsland to ensure appropriate fire regimes were in place in areas with known records.
Control introduced predators	<ul style="list-style-type: none"> Implemented effective ongoing fox control and management as part of the Southern Ark, Otways Ark, Grampians Ark and Glenelg Ark programs.
Develop, update and apply forestry protections	<ul style="list-style-type: none"> The Long-nosed Potoroo has a current species-specific prescription in the Code: <ul style="list-style-type: none"> In the Portland-Horsham Forest Management Area: Protect gully lines and patches of dense vegetation in areas where this species is known to occur and that are currently not protected through Special Protection Zones or Special Management Zones. The risk of forestry operations was assessed for this species in 2020 under the Victorian Government Threatened Species and Communities Risk Assessment. Additional permanent protections were not found to be required. A further risk assessment is underway as a result of the listing of the subspecies that occurs in Victoria as Vulnerable under the EPBC Act in 2022.
Research	<ul style="list-style-type: none"> Research into the population ecology and movement of Long-nosed Potoroos was conducted in 2020 on French Island. Research into habitat use on French Island with a declining feral cat population was undertaken in 2021/2022. Research (commenced in 2022) is currently being undertaken into the impact of toxoplasmosis on Long-nosed Potoroo. Research into fire ecology, habitat requirements and predation in south west Victoria undertaken in 2013 and 2020-23.
Survey and monitoring	<ul style="list-style-type: none"> The presence of the species has been monitored at 700 camera-trap sites surveyed in 2016/2017, 2021 and 2022 across East Gippsland. Population monitoring has been undertaken through time as part of the Southern Ark, Glenelg Ark and Otway Ark programs. Long-nosed Potoroos have been monitored biannually on French Island by trapping and continuously with camera traps since 2019.

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

- [Long-nosed Potoroo Species Forecast Report](#)
- [Threatened Species Assessment report – Long-nosed Potoroo \(*Potorous tridactylus trisulcatus*\)](#)

- [Commonwealth Species Profile and Threats database](#)
- [Code of Practice for Timber Production 2014](#)
- [Threatened Species and Communities Risk Assessment](#)
- [Victoria's changing climate – understanding the impacts of climate change in Victoria](#)
- [Commonwealth Threat Abatement Plans](#)
- [Genetic Risk Index](#)

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 and/or 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](#).

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 and observations, including for introduced plants and animals, 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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