

Action statement

Flora & Fauna Guarantee Act 1988

White-footed Dunnart (*Sminthopsis leucopus*)

Taxon ID: 11069

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



White-footed Dunnart. Image by Peter Robertson.



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

Conservation Status

Vulnerable

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

This means that:

- the White-footed Dunnart’s geographic distribution is 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 of occupancy; and
 - the area, extent or quality of habitat; and
 - the number of mature individuals.

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

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 [White-footed Dunnart Species Forecast Report](#).

Threats

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

Threat	Description
Fire	
Altered fire regime	<ul style="list-style-type: none"> Frequent and/or intense fire can lead to direct mortality, habitat degradation, the loss of ground refugia and nesting habitat, and increase predation risk, particularly by feral cats (<i>Felis catus</i>) and foxes (<i>Vulpes vulpes</i>) until the vegetation recovers. A hotter, drier climate may increase the likelihood or frequency of fire impacting White-footed Dunnart habitat, with the potential to cause direct mortality, and reduce habitat quality and/or extent.
Fire management activities	<ul style="list-style-type: none"> Fire management operations such as creation of fuel breaks (soil disturbance, slashing) may cause mortality of individuals, remove habitat and reduce regeneration.
Introduced species	
Introduced herbivores	<ul style="list-style-type: none"> Sambar Deer (<i>Cervus unicolor</i>), feral goats (<i>Capra hircus</i>) and feral pigs (<i>Sus scrofa</i>) are likely to be contributing to habitat degradation.
Introduced predators	<ul style="list-style-type: none"> Feral cats and foxes are likely to be contributing to predation.
Population dynamics	
Fragmentation	<ul style="list-style-type: none"> Population fragmentation, caused by habitat fragmentation, may be contributing to the decline of genetic viability within already small populations.
Pathogens and disease	
<i>Phytophthora cinnamomi</i>	<ul style="list-style-type: none"> Habitat degradation in coastal heathlands due to <i>Phytophthora cinnamomi</i> may be impacting some populations.
Habitat loss, degradation or modification	
Forestry operations	<ul style="list-style-type: none"> Forestry operations including harvesting and regeneration burns can lead to loss or modification of habitat.
Land use change	<ul style="list-style-type: none"> Land use change and associated native vegetation removal can impact available habitat for the White-footed Dunnart.
Human disturbance	
Recreational activities	<ul style="list-style-type: none"> Roaming domestic pets (cats and dogs) may cause disturbance and mortality. Recreational activities (e.g., walking off tracks) may cause habitat modification, disturbance, and nest failure.

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 knowledge of biology, ecology, distribution, demography, emerging and known threats, and conservation requirements.
- Support community participation and improve awareness of the White-footed Dunnart 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](#).

Actions	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"> • Encourage or maintain community participation and awareness in stewardship of the White-footed Dunnart's habitat on private and public land, and involvement in surveys and monitoring. • Encourage compliance with domestic cat curfews in the species' habitat and improve awareness of the importance of preventing domestic cats from roaming, particularly at night.
Control introduced herbivores*	<ul style="list-style-type: none"> • Implement effective management and control of deer, feral goat and feral pigs at key sites.
Control introduced predators*	<ul style="list-style-type: none"> • Implement effective management and control of feral cats and foxes at key sites.
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.
Ecological fire regime	<ul style="list-style-type: none"> • Implement fire management actions that promote an ecologically appropriate fire regime for the White-footed Dunnart.
Research	<ul style="list-style-type: none"> • Assess habitat condition and threats at sites where the White-footed Dunnart is known to occur, to identify management priorities. Assess the population-level impact of introduced predators (feral cats and foxes) and introduced herbivores (deer, feral goats and feral pigs). • Investigate and determine a suitable fire regime that meets the ecological requirements of the White-footed Dunnart and promotes its recovery. • Investigate the genetic variability of the species, and of representative populations, to determine what measures may be required to maintain this variability. • Investigate the need to establish a captive breeding population for this species.

Actions	Description
Survey and monitoring	<ul style="list-style-type: none"> Continue to refine survey and monitoring techniques to increase detection probability. Employ refined techniques to monitor the population on an annual basis.

**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 actions	Description
Control introduced predators	<ul style="list-style-type: none"> Southern Ark and Glenelg Ark have continued to carry out landscape-scale fox control in the Snowy District of Far East Gippsland, across recorded White-footed Dunnart habitat. Fox control included as part of fire recovery actions in Holey Plains State Park along with the Good Neighbour baiting program. Fox control undertaken at Wilsons Promontory. Small scale feral cat control program on Mornington Peninsula.
Develop, update, and apply forestry protections	<ul style="list-style-type: none"> The White-footed Dunnart has a current species-specific prescription in the Code: <ul style="list-style-type: none"> – In the Portland-Horsham Forest Management Area: Apply a protection area of approximately 20 ha of suitable habitat over sites. 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.
Survey and monitoring	<ul style="list-style-type: none"> Ongoing mammal monitoring program using camera trapping at Wilsons Promontory and Mornington Peninsula/Point Nepean commenced in 2014. Ongoing camera trapping program for other small mammals detects this species occasionally (i.e., Pookila monitoring). Eastern Otway sites revisited/monitored in 2018.
Research	<ul style="list-style-type: none"> Five-year project researching the distribution and recovery after fire for small mammals including White-footed Dunnart in Holey Plains State Park commenced in 2022. Research to identify the most cost-effective monitoring techniques including camera trapping versus tile surveys.

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

- [White-footed Dunnart Species Forecast Report](#)
- [Threatened Species Assessment report – White-footed Dunnart \(*Sminthopsis leucopus*\)](#)
- [Threatened Species and Communities Risk Assessment](#)
- [Code of Practice for Timber Production 2014](#)
- [Victoria's changing climate – drivers and 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 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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