

# Action statement

*Flora & Fauna Guarantee Act 1988*

## Grampians Bitter-pea (*Daviesia laevis*)

Taxon ID: 504423

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



Grampians Bitter-pea.  
Image by Felicity G Christian.



This habitat distribution model displays the indicative range of the Grampians Bitter-pea based on occurrence records and likely habitat. See NatureKit for an interactive map. See [NatureKit](#) for an interactive map.

### Conservation Status

#### Critically endangered

**Listing criteria:** 3.1.3(a)(iii),(b)(iii) of the Flora and Fauna Guarantee Regulations 2020.

This means that:

- the total number of mature individuals is very low, and the number is expected to continue to decline at a very high rate; and
- each subpopulation is extremely small and there are extreme fluctuations in the number of mature individuals.

**Corresponding International Union for the Conservation of Nature (IUCN) criteria:** C1+2a(i)b

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 [Grampians Bitter-pea Species Forecast Report](#) and [VicFlora](#).

## Threats

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

Threat	Description
<b>Climate change</b>	
Extreme weather	<ul style="list-style-type: none"> <li>Increased frequency, magnitude and duration of storms and floods may kill plants and degrade or destroy species' habitat through increased erosion.</li> </ul>
Increased frequency or length of droughts	<ul style="list-style-type: none"> <li>Increased frequency, intensity and duration of droughts will reduce or prevent recruitment and may cause adult mortality.</li> <li>More frequent and severe droughts increase the risk of repeated high severity bushfires.</li> </ul>
<b>Fire</b>	
Altered fire regimes	<ul style="list-style-type: none"> <li>The optimal fire regime for the species is not known. Fires occurring at too frequent intervals may lead to a reduction in the seedbank and regeneration, which could cause localised extinctions.</li> </ul>
<b>Habitat loss, degradation or modification</b>	
Forestry operations	<ul style="list-style-type: none"> <li>Timber harvesting near Mount Cole may cause habitat loss and degradation, mortality, and reduce connectivity between populations.</li> </ul>
Road and track maintenance	<ul style="list-style-type: none"> <li>Roadside populations are vulnerable to disturbance from road run-off, erosion, weeds and pathogens especially during road maintenance and fire suppression.</li> </ul>
<b>Pathogens and disease</b>	
Phytophthora	<ul style="list-style-type: none"> <li><i>Phytophthora cinnamomi</i> can cause habitat degradation and direct mortality of Grampian Bitter-pea.</li> </ul>
<b>Introduced species</b>	
Deer, feral goats	<ul style="list-style-type: none"> <li>Sambar Deer (<i>Cervus unicolor</i>), Red Deer (<i>C. elaphus</i>), Fallow Deer (<i>Dama dama</i>) and feral goats (<i>Capra hircus</i>) damage plants and browse on seedlings.</li> </ul>
Weeds	<ul style="list-style-type: none"> <li>Competition from weeds may be a threat for some populations.</li> </ul>
<b>Native species</b>	
Native herbivores	<ul style="list-style-type: none"> <li>Browsing by Black-tailed Wallabies (<i>Wallabia bicolor</i>) threatens juveniles and drought-stressed individuals.</li> <li>High levels of damage to plants from insects and birds has been observed at some sites.</li> </ul>
<b>Population dynamics</b>	
Small population size	<ul style="list-style-type: none"> <li>Some populations are very small, fragmented, have low genetic diversity and may be subject to stochastic events that could lead to a rapid decline in abundance or local extinction within a short time frame.</li> </ul>

## 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 and minimise future population decline.
- Increase the total wild population size in Victoria to at least 250 mature individuals.
- Increase knowledge of the Grampians Bitter-pea's biology, ecology, distribution, demography and conservation requirements.
- Support community participation and improve awareness of the Grampians Bitter-pea 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"> <li>• Ensure that species distribution data and ecological information are available and considered in fire management activities.</li> <li>• Undertake biodiversity values check prior to fuel management in areas of the species habitat, to confirm treatment suitability and timing.</li> </ul>
Collect and store reproductive material	<ul style="list-style-type: none"> <li>• Maintain seed storage, ensuring adequate genetic diversity.</li> </ul>
Community engagement and awareness	<ul style="list-style-type: none"> <li>• Identify, promote, and support opportunities for community education and engagement.</li> </ul>
Control deer and feral goats *	<ul style="list-style-type: none"> <li>• Implement effective management and control of Sambar deer and feral goats.</li> </ul>
Develop, update and apply forestry protections	<ul style="list-style-type: none"> <li>• Maintain prescriptions for this species under the Code of Practice for Timber Production 2014 (as amended in 2022) (the Code).</li> <li>• Where relevant, incorporate species-specific protection measures into plans and permits relating to timber harvesting operations in native forest on private land.</li> <li>• Apply the following additional permanent protection as recommended in the Victorian Government Threatened Species and Communities Risk Assessment (TSCRA):               <ul style="list-style-type: none"> <li>– <i>Forest zoning amendment</i></li> </ul> <p>Within the West Regional Forest Agreement region: The Secretary will establish Special Management Zone(s) of 200 m radius over populations of strategic importance as identified through comprehensive surveys.</p> </li> </ul>
Establish herbivore exclusion fencing	<ul style="list-style-type: none"> <li>• Erect and maintain exclusion fences and/or cages around populations where practical, particularly those subject to intense fire to protect seedlings from browsing.</li> </ul>

Action	Description
Ex-situ management	<ul style="list-style-type: none"> <li>Maintain ex-situ living collections, including plants representative of each population.</li> </ul>
Manage habitat to prevent and control erosion	<ul style="list-style-type: none"> <li>Implement mitigation where feasible in sites subject to erosion, and in areas of impacted habitat following fires and floods.</li> </ul>
Manage road and track works	<ul style="list-style-type: none"> <li>Protect plants near roads prior to and during road maintenance activities.</li> </ul>
Mitigate pathogens and disease risk	<ul style="list-style-type: none"> <li>Implement biosecurity protocols when undertaking works in known habitat to minimise the spread of <i>P. cinnamomi</i>.</li> </ul>
Research	<ul style="list-style-type: none"> <li>Investigate and determine an appropriate fire regime for the species.</li> <li>Investigate species' ecological requirements (such as genetics, seed bank profile, seed predation) that are relevant to population persistence.</li> <li>Investigate <i>P. cinnamomi</i> impacts on the species, and if necessary, determine suitable management measures.</li> </ul>
Survey and monitoring	<ul style="list-style-type: none"> <li>Implement a monitoring program to assess the habitat condition, population demography and size, recruitment and population trends of all subpopulations, and impact of known and potential threats, including introduced species.</li> <li>Survey likely habitat and map important populations.</li> </ul>
Translocation	<ul style="list-style-type: none"> <li>Identify suitable translocation sites</li> <li>Increase the number of mature individuals in wild populations to a total of at least 250 mature individuals in Victoria.</li> <li>Establish new populations at translocation sites where feasible.</li> </ul>
Undertake ecological burning	<ul style="list-style-type: none"> <li>Following research, implement a suitable fire regime that meets the ecological requirements of the Grampians Bitter-pea and promotes the species' recovery.</li> </ul>

\*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
Collect and store reproductive material	<ul style="list-style-type: none"> <li>Seed was stored in the Victorian Conservation Seedbank at the Royal Botanic Gardens Victoria from collections undertaken in 2006, 2009, 2012, and 2016.</li> </ul>
Conservation and management planning	<ul style="list-style-type: none"> <li>Subpopulations were included in fire management plans and a post-fire rehabilitation plan in 2013.</li> <li>Biodiversity values checking was undertaken (ongoing) as part of forest management planning.</li> </ul>
Develop, update, and apply forestry protections	<ul style="list-style-type: none"> <li>The species has a current species-specific prescription in the Code:             <ul style="list-style-type: none"> <li>In the Portalind-Horsham Forest Management Area: Manage occurrences in consultation with the Department unless already protected.</li> </ul> </li> </ul>

Past action	Description
	<ul style="list-style-type: none"> <li>The risk of forestry operations was assessed for this species in 2020 under the Victorian Government TSCRA. Additional permanent protections were recommended in 2022 and are currently being implemented.</li> </ul>
Ex-situ management	<ul style="list-style-type: none"> <li>A small number of plants were established, and as of December 2022 were being maintained, at the Royal Botanic Gardens Victoria (Cranbourne).</li> </ul>
Herbivore exclusion fencing	<ul style="list-style-type: none"> <li>Cages were established and maintained to limit herbivory damage to seedlings at Langi Ghiran State Park sites between 2012 and 2016.</li> </ul>

## 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

- [Grampians Bitter-pea Species Forecast Report](#)
- [Threatened Species Assessment report – Grampians Bitter-pea \(\*Daviesia laevis\*\)](#)
- [Threatened Species and Communities Risk Assessment](#)
- [Code of Practice for Timber Production 2014](#)
- [Victorian Bushfire Biodiversity Response and Recovery](#)
- [Victorian Deer Control Strategy](#)
- [Commonwealth Threat Abatement Plans](#)
- [Commonwealth Species Profile and Threats database](#)
- [Genetic Risk Index](#)
- [Victoria's changing climate – understanding the impacts of climate change in Victoria](#)
- [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 \(environment.vic.gov.au\)](https://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](mailto: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 weeds and introduced animals, as they carry out their projects.

For further information see: Victorian Biodiversity Atlas ([environment.vic.gov.au](http://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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