# **Action statement**

Flora & Fauna Guarantee Act 1988

# Aniseed Boronia (Boronia galbraithiae)

Taxon ID: 504555

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**



Aniseed Boronia. Image by Andre Messina.



This habitat distribution model displays the indicative range of Aniseed Boronia, based on occurrence records and likely habitat. See <u>NatureKit</u> for an interactive map.

### **Conservation Status**

#### **Critically Endangered (Victoria)**

Listing criteria: 3.1.2 (a), (b)(iii) of the Flora and Fauna Guarantee Regulations 2020.

This means that:

- its geographic distribution is extremely 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.

### Corresponding International Union for the Conservation of Nature (IUCN) criteria: B1ab(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 <u>Aniseed Boronia Species Forecast Report</u> and <u>VicFlora.</u>

# **Threats**

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

Threat	Description
Climate change	
Increased frequency or length of droughts	<ul> <li>Changes in frequency, magnitude and length of droughts may lead to mortality, and stop or reduce recruitment. Reduced annual rainfall and/or changes in rainfall patterns are likely to reduce the availability of suitable habitat.</li> </ul>
Fire	
Altered fire regimes	<ul> <li>Fire poses a significant risk due to the restricted distribution of this species.</li> <li>Increased fire frequency and intensity will lead to mortality and/or eliminate or reduce regeneration capacity.</li> <li>Plants may resprout or seed after low-intensity fire, but hot fires or fires in short succession (at intervals less than 8 years) may eliminate or reduce resprouting and seed production, and lead to loss of populations.</li> </ul>
Introduced species	
Deer	<ul> <li>Introduced herbivores, specifically Sambar Deer (Cervus unicolor), impact Aniseed Boronia by targeted browsing that kills plants and/or removal of seeds.</li> </ul>
Native species	
Native animals	<ul> <li>Targeted browsing by Black-tailed Wallaby (Wallabia bicolor) may pose a risk during early recruitment phase, and to mature individuals during drought.</li> </ul>
Human disturbance	
Fire management activities	<ul> <li>Fire management operations such as creation of fuel breaks (soil disturbance, slashing) may remove habitat, cause mortality of individuals, and reduce regeneration.</li> </ul>
Road and track maintenance	<ul> <li>Populations adjacent to roads/tracks may be at risk of mortality due to road maintenance activity.</li> </ul>
Population dynamics	
Loss of genetic diversity	<ul> <li>Some populations are at high risk of decline or extinction from stochastic events such as fires and floods.</li> </ul>

# **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 and minimise future population decline.
- Establish at least two new viable populations.
- Increase knowledge of biology, ecology, distribution, demography, emerging threats, and conservation requirements.
- Support community participation to improve awareness of the Aniseed Boronia.

### **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 <a href="NatureKit">NatureKit</a>.

Action	Description
Avoid and/or mitigate impacts associated with fire management	Ensure species distribution data and ecological information is available and considered in fire management activities.
	<ul> <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> <li>Maintain seed storage and ensure the material represents adequate genetic diversity from across its range; ensure seed is processed for long term storage; ensure adequate numbers are available for future reintroduction; and ensure essential information (such as dormancy) is known.</li> </ul>
Control deer*	<ul> <li>Implement effective management and control of Sambar Deer in and around all known populations of Aniseed Boronia, particularly after fire events.</li> </ul>
Develop, update and apply forestry protections	<ul> <li>Maintain prescriptions for this species under the Code of Practice for Timber Production 2014 (as amended in 2022) (the Code).</li> </ul>
	<ul> <li>Where relevant, incorporate species-specific protection measures into plans and permits relating to timber harvesting operations in native forest on private land.</li> </ul>
Ex-situ management	<ul> <li>Maintain ex-situ living collection, including mature plants with representation from each known population.</li> </ul>
Herbivore exclusion fencing	<ul> <li>Erect and maintain herbivore exclusion fences around populations after fire, or as required, to protect seedlings from deer and macropod impacts.</li> </ul>
Manage road and track works	<ul> <li>Install and maintain signs at the Insolvent Track and Howards Road sites to limit the potential for accidental damage.</li> </ul>
	<ul> <li>Undertake biodiversity values checking as part of operational planning for future road construction and maintenance.</li> </ul>
	Prioritise closure of tracks where the species occurs, where feasible.

Action	Description
Research	Investigate and determine an appropriate burning regime for the species.
	<ul> <li>Investigate options for future translocation sites.</li> </ul>
	<ul> <li>Investigate options for increasing the number of mature individuals in populations carrying fewer than 250 mature individuals to reduce genetic risks.</li> </ul>
	Research the species' population composition and germination requirements.
Survey and monitoring	Comprehensively survey likely habitat to locate any additional populations.
	<ul> <li>Establish and maintain a monitoring program to assess population size/trends, habitat condition/degradation, recruitment, and longevity across the species' range.</li> </ul>
	<ul> <li>Undertake post fire monitoring to identify the impacts, and level of risk from Sambar Deer and other herbivores.</li> </ul>
Translocation	<ul> <li>Establish at least two new viable populations, at a sufficient distance from the existing subpopulations that they are unlikely to be impacted by the same threat or suite of threats.</li> </ul>
Undertake ecological burning	<ul> <li>Implement a suitable fire regime that meets the Aniseed Boronia's ecological requirements and promotes the species recovery.</li> </ul>

<sup>\*</sup>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> <li>Ongoing biodiversity values checking has been undertaken as part of forest/fire management operations including planned burns.</li> </ul>
Develop, update and apply forestry protections	<ul> <li>The Aniseed Boronia has a current species-specific prescription in the Code:</li> <li>In the Gippsland Forest Management Area: Apply a protection area overeach population.</li> </ul>
	<ul> <li>The risk of forestry operations was considered for this species in 2020 under the Victorian Government Threatened Species and Communities Risk Assessment. Additional permanent protections were not found to be required.</li> </ul>
Establish management Areas or Special Protection Zones	<ul> <li>Since 2008, habitat has been permanently protected within a Special Protection Zone by the Victorian State Government.</li> </ul>
Ex-situ management	There are a small number of plants in the Royal Botanic Gardens Victoria nursery.
Maintain and manage seed collection and storage	<ul> <li>Seed is stored in the Victorian Conservation Seedbank from collections in 2004 and 2020.</li> </ul>
Survey and monitoring	Population monitoring was undertaken in 2011/12 and 2012/13.

## **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**

- Aniseed Boronia Species Forecast Report
- Threatened Species Assessment report Aniseed Boronia (Boronia galbraithiae)
- Commonwealth Species Profile and Threats database
- Threatened Species and Communities Risk Assessment
- Code of Practice for Timber Production 2014
- Victoria's changing climate understanding the impacts of climate change in Victoria
- Victorian Deer Control Strategy
- Commonwealth Threat Abatement Plans
- 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: <a href="Action statements">Action statements</a> (environment.vic.gov.au)

To identify the relevant Traditional Owners, use the <u>Aboriginal Cultural Heritage Register and Information System</u> (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 <a href="mailto:threatened.species@deeca.vic.gov.au">threatened.species@deeca.vic.gov.au</a>

### **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 <u>Protecting Victoria's Environment Biodiversity 2037</u>.
- 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)

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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