# **Action statement**

Flora & Fauna Guarantee Act 1988

## Ben Major Grevillea (Grevillea floripendula)

Taxon ID: 501535

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**



Ben Major Grevillea. Image by Bill Blackburn.



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

### **Conservation Status**

#### Critically endangered

Listing criteria: 3.1.1; 3.1.3(a), (b)(ii) of the Flora and Fauna Guarantee Regulations 2020.

This means that:

- the Ben Major Grevillea has undergone, is suspected to have undergone, or is likely to undergo in the immediate future, a very severe reduction in population size; and
- the total number of mature individuals is very low, the number is likely to continue to decline at a very high rate; and most of the individuals are in one subpopulation.

Corresponding International Union for the Conservation of Nature (IUCN) criteria: A2ace+3bce+4abce; C1+C2a(ii).

More information on IUCN listing criteria can be found here: <u>IUCN Red List criteria</u>.

### **Species Information**

Species information such as its description, distribution, ecology and references are provided in the <u>Ben Major Grevillea Species Forecast Report</u> and <u>VicFlora</u>.

### **Threats**

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

| Threat  | Description  |
|---|--|
| Climate change                                      |  |
| Increased frequency<br>and/or length of<br>droughts | <ul> <li>Drying and warming of the environment, including droughts, is likely to lead to plant<br/>mortality and a lack of successful recruitment.</li> </ul>  |
| Fire  |  |
| Altered fire regime                                 | <ul> <li>Increases in fire frequency and intensity in a hotter and drier climate may reduce<br/>habitat quality and/or extent. Plants likely require longer than 10 years to attain<br/>reasonable levels of seed production. Fires occurring at greater frequency than one in<br/>ten years will impair recruitment.</li> </ul> |
|   | Drought-stressed plants may be more likely to suffer mortality from fire.  |
| Fire management activities                          | <ul> <li>Fire management operations such as creation of fuel breaks (clearing, soil<br/>disturbance, slashing) may remove habitat, increase mortality, and reduce<br/>regeneration.</li> </ul>   |
| Introduced species                                  |  |
| Introduced herbivores                               | <ul> <li>Feral goats (Capra hircus) and feral pigs (Sus scrofa) browse on plants and damage<br/>the habitat. Feral pigs are an emerging threat in the Langi Ghiran area.</li> </ul>  |
|   | • Browsing and trampling by Sambar Deer (Cervus unicolor) is an emerging threat.   |
|   | <ul> <li>Rabbits (Oryctolagus cuniculus) and hares (Lepus europaeus) browse seedlings and<br/>young recruits.</li> </ul>   |
| Introduced plants                                   | <ul> <li>Introduced plants compete for resources and can reduce the abundance of Ben Major<br/>Grevillea. This is particularly the case on some roadsides.</li> </ul>  |
| Habitat loss, degradat                              | ion and fragmentation  |
| Road and track construction or maintenance          | <ul> <li>Many populations occur close to roads and tracks and may be prone to physical<br/>damage from grading or other track maintenance.</li> </ul>  |
| Human disturbance                                   |  |
| Firewood collection                                 | Disturbance associated with firewood collection poses a threat to some populations.  |
| Gold fossicking                                     | <ul> <li>Gold fossicking in the area is common and may cause trampling and disturbance to<br/>soil/root systems of some plants.</li> </ul>   |
| Pathogens and diseas                                | se   |
| Parasites   | <ul> <li>Plants are subject to parasitism by Coarse Dodder-laurel (Cassytha melantha) and<br/>Downy Dodder-laurel (C. pubescens) impairing growth of plants and potentially<br/>causing mortality.</li> </ul>  |
|   | <ul> <li>Plants in some populations demonstrate high levels of leaf damage and defoliation.</li> <li>The cause is not known, but it is suspected this is caused by leaf skeletonising invertebrates.</li> </ul>  |

| Threat                    | Description  |
|---------------------------|--|
| Phytophthora<br>cinnamomi | <ul> <li>Infection by Phytophthora cinnamomi leads to mortality, reduced fitness, recruitment<br/>and reproduction leading to population decline.</li> </ul>   |
|                           | <ul> <li>Construction and maintenance of roads is a risk for spreading Phytophthora<br/>cinnamomi. The risk is greatest on private and rural roads.</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, increase genetic fitness and minimise future population decline.
- Increase the Ben Major Grevillea'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 Ben Major Grevillea 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> <li>Ensure that species distribution data and ecological information is 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>        |
| Build resilience through translocation and/or gene mixing     | <ul> <li>Investigate options for linking, enhancing habitat or establishing additional populations.</li> </ul>   |
| Collect and store reproductive material                       | Undertake appropriate seed collection and storage.   |
| Community engagement and awareness                            | <ul> <li>Engage landholders to raise awareness of the species' occurrence and assist with implementing management measures such as fencing to reduce access.</li> <li>Maintain community participation and awareness in stewardship on private land, and involvement in surveys and monitoring.</li> </ul> |
| Compliance and enforcement                                    | Undertake risk-based compliance and enforcement activities to limit the impacts of illegal firewood collection on the species.   |
| Control introduced herbivores *                               | <ul> <li>Implement effective management and control of deer, feral goats, feral pigs, rabbits<br/>and hares.</li> </ul>  |

| Action   | Description   |
|--|---|
| Control introduced plants*                     | Implement effective management and control of introduced plants.  |
| Develop, update and apply forestry protections | Maintain prescriptions for this species under the Code of Practice for Timber<br>Production 2014 (as amended in 2022) (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                         | • Implement fire management actions that promote an ecologically appropriate fire regime for the Ben Major Grevillea.   |
| Ex-situ management                             | <ul> <li>Establish and maintain ex-situ populations in suitable secure sites e.g., botanic<br/>gardens, specialist growers.</li> </ul>                                  |
| Manage public access                           | Fence areas to constrain vehicle and public access for known sites on public land to prevent accidental damage from trampling and gold fossicking.                      |
| Minimise spread of<br>Phytophthora cinnamomi   | • Implement vehicle, tool, and footwear hygiene to minimise risk of <i>Phytophthora cinnamomi</i> introduction or spread.   |
| Protect key habitat                            | <ul> <li>Protect habitat from both large and small-scale clearing by implementing appropriate<br/>environmental planning and approval processes.</li> </ul>             |
| Research                                       | <ul> <li>Identify pollinators, the pollination regime, and assesses the reproductive<br/>requirements and seed germination cues for the Ben Major Grevillea.</li> </ul> |
|  | <ul> <li>Assess genetic diversity within and among populations, as well as for the two forms<br/>identified on VicFlora, "Ben Major" and "Musical Gully".</li> </ul>    |
|  | <ul> <li>Investigate the impacts of the known threats to the Ben Major Grevillea and<br/>determine the level of recruitment after fire.</li> </ul>                      |
|  | • Investigate the cause of defoliation/leaf damage and identify management options.   |
|  | <ul> <li>Investigate and determine a suitable fire regime that meets the ecological<br/>requirements of the Ben Major Grevillea and promotes its recovery.</li> </ul>   |
| Survey and monitoring                          | <ul> <li>Undertake targeted surveys to determine the limits of the species' range, size of<br/>populations and the rate of decline of the species.</li> </ul>           |
|  | Monitor for the presence and impact of feral pigs.  |

<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>Impacts associated with fire management activities have been managed through a<br/>value checking and risk mitigation process for planned burning and roading<br/>activities.</li> </ul> |
| Collect and store reproductive material                       | <ul> <li>Seed was collected in 2011 and 2017 and stored in the Victorian Conservation<br/>Seedbank at the Royal Botanic Gardens Victoria.</li> </ul>  |

| Past action                                     | Description   |
|---|---|
| Develop, update, and apply forestry protections | <ul> <li>The Ben Major Grevillea has a current species-specific prescription in the Code:</li> <li>In the Midlands Forest Management Area: Avoid disturbance to populations within the management area, Special Management Zones and General Management Zones.</li> </ul> |
|   | <ul> <li>The risk of forestry operations was assessed for this species in 2020 under the<br/>Victorian Government Threatened Species and Communities Risk Assessment.<br/>Additional permanent protections were not found to be required.</li> </ul>                      |
| Survey and monitoring                           | Targeted surveys were undertaken over the last ten years at Ben Major Flora<br>Reserve and Musical Gully.   |

### **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**

- Ben Major Grevillea Species Forecast Report
- Threatened Species Assessment report Ben Major Grevillea (Grevillea floripendula)
- Commonwealth Species Profile and Threats database
- Threatened Species and Communities Risk Assessment
- Victoria's changing climate understanding the impacts of climate change on Victoria
- Code of Practice for Timber Production 2014
- Commonwealth Threat Abatement Plans
- Flora and Fauna Guarantee Regulations 2020
- IUCN criteria summary

### **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: <a href="Action">Action</a> statements (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.

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 <u>Protecting Victoria's Environment –</u> 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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