Action statement

Flora & Fauna Guarantee Act 1988

Gully Grevillea (Grevillea barklyana)

Taxon ID: 501529

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



Gully Grevillea. Image by Russell Larke.



This habitat distribution model displays the indicative range of the Gully Grevillea based on occurrence records and likely habitat. See NatureKit for an interactive map.

Conservation Status

Critically Endangered

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

This means that:

- the Gully Grevillea's geographic distribution is extremely 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 the number of mature individuals.

Corresponding International Union for the Conservation of Nature (IUCN) criteria: B1ab(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 <u>Gully Grevillea</u> <u>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 and/or length of droughts	 Drying and warming of the environment, including droughts, is likely to lead to plant death and a lack of successful recruitment
Fire	
Altered fire regime	 A hotter, drier climate may increase the likelihood or frequency of fire impacting habitat, with the potential to reduce habitat quality and/or extent.
	 Increases in fire frequency and intensity may cause adult mortality and recruitment failure and lead to a long-term contraction in available habitat. Plants may require 10–15 years to attain reasonable levels of seed production to replenish seedbanks.
Habitat loss, degradation	on and fragmentation
Forestry operations	 Forestry operations can cause direct mortality and impede recruitment, particularly if disturbance intervals are short. Mitigations are in place to reduce this threat.
Human disturbance	
Firewood collection	 Disturbance associated with illegal and legal firewood collection may pose a threat to some highly accessible subpopulations.
Recreational activities - motor vehicles	Disturbance from off-track use of recreational vehicles (4WD and trailbikes) on public land may pose a threat to some highly accessible subpopulations.
Road and track construction or maintenance	 Roadside populations are vulnerable to direct and indirect disturbance including runoff, soil erosion and weed and pathogen introduction during road maintenance and fire suppression. Roadside slashing can also impact on individual plants but is a necessary maintenance activity.
Introduced species	
Introduced herbivores	 Sambar Deer (Cervus unicolor) may browse both adult and juvenile plants and target established adults for antler rubbing. Wallowing and pugging of damp sites may further degrade the habitat of the species.
Introduced plants	 Invasion of introduced plants, most notably by Blackberry (Rubus fruticosus spp. agg.), may pose a long-term threat to the species' habitat. Human activities may spread this weed.
Pathogens and disease	
Parasites	 Plants in some subpopulations demonstrate high levels of leaf damage and defoliation. The cause is not known, but it is suspected this is caused by leaf skeletonising invertebrates.
Phytophthora cinnamomi	Infection by <i>Phytophthora cinnamomi</i> may lead to mortality, reduced fitness, population size/reduction and reduced recruitment/reproduction.
	• Construction and maintenance of roads, and firewood collection is a risk for spreading <i>Phytophthora cinnamomi</i> . The risk is greatest on private and rural roads.
Population dynamics	

Threat	Description
Lack of pollinators	 The species may be threatened by decreased pollination success due to local declines in natural pollinators or nectar robbing by other species that fail to support effective pollination.

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 knowledge of biology, ecology, distribution, demography, emerging threats, and conservation requirements.
- Support community participation and improve awareness of the Gully 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	 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.
Collect and store reproductive material	 Undertake appropriate seed collection for long-term storage. Ensure that adequate supply and genetic diversity is secured for future reintroduction, and that essential information (such as dormancy) is known.
Community education and awareness	 Connect with community and commercial nurseries to further promote the conservation status of the species and its benefit as a garden plant (hedges, attracting native birds and pollinators, and aesthetic values).
Compliance and enforcement	 Undertake risk-based compliance and enforcement activities to limit the impacts of illegal recreational use of recreational vehicles (4WD and trailbikes) and firewood collection on public land.
Control introduced herbivores *	Implement effective management and control of Sambar Deer.
Control introduced plants*	 Implement effective management and control of introduced plants, most notably Blackberry (Rubus fruticosus spp. agg.).
Develop, update and apply forestry protections	 Maintain prescriptions for this species under the Code of Practice for Timber Production 2014 (as amended in 2022) (the Code).

Action	Description
	 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 Gully Grevillea.
Ex-situ management	Maintain ex-situ living collections in cultivation.
Minimise spread of Phytophthora	• Implement vehicle, tool, and footwear hygiene to minimise risk of <i>Phytophthora cinnamomi</i> introduction or spread.
Protect key habitat	Develop roadside management plans and encourage maintenance crews to identify threatened species so harm can be avoided during maintenance activities.
Research	 Investigate biology and ecology of species, especially seedbank longevity, fecundity, germination mechanisms and response to disturbance.
	 Investigate the cause of defoliation/leaf damage and identify management options.
	 Investigate and determine a suitable fire regime that meets the ecological requirements of the Gully Grevillea and promotes its recovery.
Survey and monitoring	 Assess changes in habitat extent by updating habitat distribution modelling every five years.
Translocation	 Investigate options for linking, supplementing, or establishing additional subpopulations.

^{*}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
Community engagement and awareness	 Gully Grevillea fact sheets prepared for community members. Planting activities and interpretive signage installed in the Bunyip State Park.
Develop, update, and apply forestry protections	 The Gully Grevillea has a current species-specific prescription in the Code: In the Central Highland Forest Management Areas: Protect mature individuals from disturbance where possible. 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.
Restoration and/or revegetation	 Seed collection, propagation and planting undertaken in the Bunyip State Park in 2016.
Survey and monitoring	 Targeted searches for the species undertaken in 2016 in road and tracks margins within public land in the Bunyip State Park and Yarra State Forest.

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

- Gully Grevillea Species Forecast Report
- Threatened Species Assessment report Gully Grevillea (Grevillea barklyana)
- 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: <u>Action</u> <u>statements (environment.vic.gov.au)</u>

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 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 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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