

# Action statement

*Flora & Fauna Guarantee Act 1988*

## Colquhoun Grevillea (*Grevillea celata*)

Taxon ID: 504716

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



Colquhoun Grevillea. Image from Atlas of Living Victoria.



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

### Conservation Status

#### Critically Endangered

**Listing criteria:** 3.1.1; 3.1.2(a),(b)(ii,iii,v) of the Flora and Fauna Guarantee Regulations 2020.

This means that:

- The Colquhoun Grevillea has undergone, is suspected to have undergone, or is likely to undergo in the immediate future, a very severe reduction in population size.
- Its 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:
  - 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:** A3bce; B1ab(ii,iii,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 [Colquhoun Grevillea Species Forecast Report](#) and [VicFlora](#).

## Threats

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

Threat	Description
<b>Fire</b>	
Altered fire regime	<ul style="list-style-type: none"> <li>A hotter, drier climate may increase the likelihood or frequency of fire impacting habitat, with the potential to reduce habitat quality and/or extent.</li> <li>Increased frequency and intensity of fire may cause mortality of adult plants before they reach maturity, damage the habitat and modify habitat processes.</li> <li>Colquhoun Grevillea resprouts slowly after low intensity fires, and another fire in quick succession might impact the survival of individual plants.</li> </ul>
Fire management activities	<ul style="list-style-type: none"> <li>Fire management operations such as creation and maintenance of fuel breaks (soil disturbance, slashing) may remove habitat, increase mortality, and reduce regeneration.</li> </ul>
<b>Climate change</b>	
Increased frequency and/or length of droughts	<ul style="list-style-type: none"> <li>Drying and warming of the environment, including droughts, is likely to lead to plant death and a lack of successful recruitment.</li> </ul>
<b>Introduced species</b>	
Introduced herbivores	<ul style="list-style-type: none"> <li>Introduced herbivores degrade habitat through herbivory, trampling, pugging of wet soils, increasing nutrient loads, erosion of waterway edges, and increasing the accessibility of habitat to introduced predators and introduced plants.</li> <li>Herbivores of concern for the Colquhoun Grevillea include feral pigs (<i>Sus scrofa</i>), which browse on plants and may damage habitat, rabbits (<i>Oryctolagus cuniculus</i>) and hares (<i>Lepus europaeus</i>) which browse seedlings and young recruits. Browsing and trampling by Sambar Deer (<i>Cervus unicolor</i>) is an emerging threat.</li> <li>Juvenile plants may be severely browsed by herbivores, resulting in mortality, and potentially recruitment failure of an entire cohort.</li> </ul>
Introduced invertebrates	<ul style="list-style-type: none"> <li>Introduced invertebrates degrade habitat, disrupt ecosystem function, and/or impact directly on individuals through herbivory, predation, and competition for resources.</li> <li>Of potential concern to Colquhoun Grevillea is nectar robbing by European Honeybees (<i>Apis mellifera</i>) which are ineffective pollinators and may reduce visitation by effective pollinators.</li> </ul>

Threat	Description
<b>Habitat loss, degradation and fragmentation</b>	
Forestry operations	<ul style="list-style-type: none"> <li>Timber harvesting operations in native forest have the potential to remove or degrade habitat, compact soils, contribute to erosion and sedimentation, exacerbate the spread of introduced species, pathogens and parasites, and cause mortality of individuals.</li> </ul>
<b>Native species</b>	
Problematic native plants	<ul style="list-style-type: none"> <li>Increasing abundance and/or extent of some native plant species, particularly Austral Bracken (<i>Pteridium esculentum</i>), may compete with Colquhoun Grevillea.</li> </ul>
<b>Human disturbance</b>	
Construction, development and/or infrastructure	<ul style="list-style-type: none"> <li>Construction, development and infrastructure maintenance may degrade the Colquhoun Grevillea's habitat. Removal or damage to vegetation due to mechanical treatment along powerline easements may cause mortality of individuals and populations.</li> </ul>
Illegal Firewood Collection	<ul style="list-style-type: none"> <li>Firewood collection can result in disturbance and damage to habitat and may result in some mortality of individuals.</li> </ul>
Recreational activities-	<ul style="list-style-type: none"> <li>Recreational activities such as walking, horse-riding and particularly illegal off-road driving of 4WD and motorbikes in the Colquhoun State Forest may damage individuals and habitat, potentially impacting recruitment, and mortality rates, and/or persistence at the site.</li> </ul>
Road and track construction or maintenance	<ul style="list-style-type: none"> <li>Many populations of Colquhoun Grevillea occur close to roads and tracks and may be prone to physical damage from grading or other track maintenance (e.g., mowing, slashing, or lopping). This threat is exacerbated when the works occur frequently enough that plants are unable to reach maturity and reproduce.</li> </ul>
<b>Pathogens and disease</b>	
<i>Phytophthora cinnamomi</i>	<ul style="list-style-type: none"> <li>Infection by <i>Phytophthora cinnamomi</i> leads to mortality, reduced fitness, reduced recruitment/reproduction, and local population declines of many plant species. Construction and maintenance of roads is a risk for spreading <i>P. cinnamomi</i>.</li> </ul>
<b>Population dynamics</b>	
Small population size	<ul style="list-style-type: none"> <li>Small populations have lower resilience to the risk of stochastic events, and increased risk of genetic decline.</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, improve genetic fitness and minimise future population decline.

- Increase the Colquhoun Grevillea range and/or extent, by providing opportunities for natural movement.
- Establish at least four new populations at sites with suitable habitat.
- Increase knowledge of biology, ecology, distribution, demography, emerging threats, and conservation requirements.
- Support community participation and improve awareness of the Colquhoun 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 style="list-style-type: none"> <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>
Collect and store reproductive material	<ul style="list-style-type: none"> <li>• Undertake or maintain appropriate propagule collection for long-term storage. Ensure that adequate supply and genetic diversity is secured for future reintroduction, and that essential information (such as how to break dormancy) is known.</li> </ul>
Community engagement and awareness	<ul style="list-style-type: none"> <li>• Continue to identify, promote and support opportunities for community involvement in conservation efforts.</li> <li>• Continue to raise broader community awareness of the importance of protecting habitat and managing threats.</li> <li>• Work with key stakeholders (including organisations responsible for road and track and easement creation and maintenance) to share knowledge of Colquhoun Grevillea populations, reduce threats and encourage adherence to behaviours that support a healthy environment.</li> </ul>
Compliance and enforcement	<ul style="list-style-type: none"> <li>• Undertake risk-based compliance and enforcement activities to limit the impacts of illegal off-road recreational activities to the Colquhoun Grevillea.</li> </ul>
Control introduced herbivores *	<ul style="list-style-type: none"> <li>• Implement and maintain effective control of introduced herbivores, including feral pigs, rabbits, hares, and Sambar Deer.</li> <li>• Support the implementation of Victoria's Deer Control Strategy.</li> </ul>
Control introduced invertebrates	<ul style="list-style-type: none"> <li>• Employ a risk-based approach to limit the impacts of commercial apiaries on known populations of Colquhoun Grevillea.</li> </ul>
Develop, update and apply forestry protections	<ul style="list-style-type: none"> <li>• Maintain prescriptions for this species under the <i>Code of Practice for Timber Production 2014 (as amended in 2022)</i> (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> </ul>

Action	Description
Ecological fire regime *	<ul style="list-style-type: none"> <li>Implement fire management actions that promote an appropriate fire regime for the Colquhoun Grevillea.</li> </ul>
Ex-situ management	<ul style="list-style-type: none"> <li>Establish and/or maintain ex-situ populations in suitable secure sites, to service the conservation objectives of the Colquhoun Grevillea.</li> </ul>
Improve habitat connectivity	<ul style="list-style-type: none"> <li>Restore habitat to improve connectivity between habitat patches.</li> </ul>
Manage public access	<ul style="list-style-type: none"> <li>Consider managing public access to Colquhoun Grevillea habitat to limit the risks of human disturbance from recreational activities and illegal firewood collection.</li> </ul>
Manage road and track works	<ul style="list-style-type: none"> <li>Ensure distribution data are considered in planning road and track works. Documented locations of the Colquhoun Grevillea should be recorded into systems that inform risks and mitigations for works.</li> </ul>
Minimise the spread of <i>Phytophthora cinnamomi</i>	<ul style="list-style-type: none"> <li>Implement vehicle, tool, and footwear hygiene to minimise risk of <i>Phytophthora cinnamomi</i> introduction or spread.</li> </ul>
Protect key habitat	<ul style="list-style-type: none"> <li>Ensure that Colquhoun Grevillea distribution data, ecological and genetic information are available and considered in planning road and track works and powerline easements.</li> </ul>
Research	<ul style="list-style-type: none"> <li>Improve understanding of, and develop guidelines for, habitat restoration and management approaches.</li> <li>Improve understanding of population dynamics (e.g., recruitment, causes of mortality) to inform management priorities.</li> <li>Improve understanding of reproductive requirements, including pollinators and pollination regimes and seed germination cues.</li> <li>Increase understanding of genetic risks and management options.</li> <li>Investigate and determine a suitable fire regime that meets the Colquhoun Grevillea's ecological requirements and promotes its recovery.</li> <li>Investigate the impacts of known threats and potential management actions, including building understanding of the potential impact of European Honeybees to effective pollination.</li> </ul>
Survey and monitoring	<ul style="list-style-type: none"> <li>Monitor populations at known sites and other suitable locations to assess distribution, population trends, habitat condition and emerging threats.</li> <li>Monitor the impact of threats to inform management interventions.</li> <li>Undertake targeted field surveys to search for previously undetected populations based on predicted habitat and ecological information.</li> </ul>
Translocation	<ul style="list-style-type: none"> <li>Design and implement a translocation program to meet the objectives of the action statement.</li> <li>Establish at least four new viable populations in secure locations, in suitable habitat elsewhere within the region.</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
Develop, update, and apply forestry protections	<ul style="list-style-type: none"> <li>The Colquhoun Grevillea has current species-specific prescriptions in the Code:               <ul style="list-style-type: none"> <li>Gippsland Forest Management Areas (FMAs): Apply a protection area of 200 m radius over each population.</li> <li>East Gippsland FMA: Apply a management area of 200 m radius over populations. Conduct a site inspection and detailed planning in consultation with the Department to ensure the species is adequately protected during timber harvesting operations.</li> </ul> </li> <li>The risk of forestry operations was assessed for the Colquhoun Grevillea in 2020 under the Victorian Government Threatened Species and Communities Risk Assessment. Additional permanent protections were recommended in 2022.</li> </ul>
Ex-situ management	<ul style="list-style-type: none"> <li>The Victorian Conservation Seedbank, in mid-2023, held one seed collection for the Colquhoun Grevillea, at the Royal Botanic Gardens Victoria (RBGV).</li> </ul>
Research	<ul style="list-style-type: none"> <li>Research to assess the genetic diversity and estimate genetic connectivity among the populations of Colquhoun Grevillea was undertaken in 2021.</li> </ul>
Survey	<ul style="list-style-type: none"> <li>Targeted field surveys to identify important populations based on predicted habitat and ecological information were undertaken in 2022. The species was not found at any modelled sites. Several previous records were confirmed.</li> <li>Targeted field surveys were undertaken in 2021, to assess the impact of fire on population genetic diversity and better understand how the loss of genetic diversity can be minimised through future conservation management actions.</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

- [Colquhoun Grevillea Species Forecast Report](#)
- [Threatened Species Assessment report – Colquhoun Grevillea \(\*Grevillea celata\*\)](#)
- [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](#)
- [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](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 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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