

# Action statement

*Flora and Fauna Guarantee Act 1988*

## Garland Lily (*Calostemma purpureum*)

Taxon ID: 505936

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



Garland Lily. Image by Loraine Jansen. All rights reserved.



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

### Conservation Status

#### Vulnerable

**Listing criteria:** 5.1.5 of the Flora and Fauna Guarantee Regulations 2020.

This means that:

- it has a restricted geographic distribution and plausible future threats could drive it to become critically endangered or extinct in a very short time.

**Corresponding International Union for the Conservation of Nature (IUCN) criteria:** D2.

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 [Garland Lily Species Forecast Report](#) and [VicFlora](#).

## Threats

The threats below have been identified through expert consultation, published literature and spatial analysis.

Threat	Description
<b>Climate change</b>	
Altered rainfall and temperature regimes	<ul style="list-style-type: none"> <li>Increasing temperature and altered rainfall are likely to magnify existing threats and may reduce the stability, extent, and condition of habitat.</li> </ul>
Increased frequency and/or length of droughts	<ul style="list-style-type: none"> <li>Drying and warming of the environment, including droughts, may lead to habitat changes, and impact recruitment and/or mortality rates.</li> </ul>
<b>Altered hydrology</b>	
Altered water regime	<ul style="list-style-type: none"> <li>Changes to flow or water regimes which do not align with the species' needs may impact habitat suitability, recruitment and/or mortality, and ultimately site occupancy.</li> </ul>
<b>Habitat loss, degradation or modification</b>	
Livestock	<ul style="list-style-type: none"> <li>Livestock can cause habitat degradation through the combined effects of herbivory, trampling, soil compaction, pugging of wet areas, and excess nutrient loads.</li> </ul>
Vegetation clearing or damage	<ul style="list-style-type: none"> <li>Removal or damage to vegetation contributes to habitat loss.</li> </ul>
<b>Introduced species</b>	
Feral pigs	<ul style="list-style-type: none"> <li>Feral pigs (<i>Sus scrofa</i>) cause direct mortality and damage habitat through pugging and wallowing that compacts soils. Pigs can also cause erosion and increase nutrient loads that result in degraded water quality and changes to vegetation structure.</li> </ul>
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> </ul>
Introduced plants	<ul style="list-style-type: none"> <li>Introduced plants can directly compete for resources and reduce species abundance and diversity.</li> </ul>
<b>Native species</b>	
Over-abundant native mammals	<ul style="list-style-type: none"> <li>Herbivory by over-abundant native herbivores (e.g., Eastern Grey Kangaroos (<i>Macropus giganteus</i>)) can lead to competition for resources and/or damage to native habitats.</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, increase genetic fitness and minimise future population decline;
- Increase the Garland Lily's range and/or extent, by providing opportunities for natural movement/dispersal;
- Increase knowledge of biology, ecology, distribution, demography, emerging threats, and conservation requirements; and
- Support community participation and improve awareness of the Garland Lily 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
Community engagement and awareness	<ul style="list-style-type: none"> <li>Increase landholder awareness of the species' presence and ecological needs, and the impacts of livestock grazing to the species and its habitat. Provide guidance on the changes to grazing that may be required, such as exclusion, to support the recovery of the species.</li> </ul>
Control feral pigs*	<ul style="list-style-type: none"> <li>Implement and maintain effective control of feral pigs in priority areas.</li> </ul>
Control introduced herbivores*	<ul style="list-style-type: none"> <li>Implement and maintain effective control of introduced herbivores in priority areas.</li> </ul>
Control introduced plants*	<ul style="list-style-type: none"> <li>Implement and maintain effective control of introduced plants in priority areas and undertake revegetation with appropriate native species, where required.</li> </ul>
Manage environmental water	Explore options for the provision of environmental water if required.
Manage over-abundant native species	<ul style="list-style-type: none"> <li>Develop and apply management techniques to maintain appropriate abundance and diversity of native species where required.</li> </ul>
Permanent protection*	<ul style="list-style-type: none"> <li>Investigate incentives, voluntary agreements, covenants, and other permanent protection measures to protect and restore habitat.</li> </ul>
Survey and monitoring	<ul style="list-style-type: none"> <li>Undertake targeted field surveys to confirm the extent of all known populations and seek to discover previously undetected populations based on predicted habitat and ecological information.</li> </ul>
	<ul style="list-style-type: none"> <li>Monitor representative populations to determine trends and management needs.</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
Control feral pigs	<ul style="list-style-type: none"> <li>Implemented and maintained effective control of feral pigs in priority areas.</li> </ul>
Control introduced herbivores	<ul style="list-style-type: none"> <li>Implemented and maintained effective control of introduced herbivores in priority areas.</li> </ul>
Manage over-abundant native species	<ul style="list-style-type: none"> <li>Developed and applied management techniques to maintain appropriate abundance and diversity of native species where required.</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](#)
- [Biodiversity Knowledge Framework](#)

## Further Information

- [Garland Lily Species Forecast Report](#)
- [Threatened Species Assessment Report - Garland Lily \(\*Calostemma purpureum\*\)](#)
- [Victoria's changing climate - understanding the impacts of climate change in Victoria](#)
- [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 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 are 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 or 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/>

### Acknowledgement

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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