Action statement

Flora and Fauna Guarantee Act 1988

Serpent Heath (*Richea victoriana*)

Taxon ID: 502937

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

Serpent Heath. Image by Nina Kerr.

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

Conservation Status

Endangered

Listing criteria: 4.1.1; 4.1.2(a)(b)(ii)(iii)(iv)(v) of the Flora and Fauna Guarantee Regulations 2020.

This means that:

- the taxon has undergone, is suspected to have undergone, or is likely to undergo in the immediate future, a severe reduction in population size; and
- its geographic distribution is highly 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 extent of occurrence; and
  - its area of occupancy; and
  - the area, extent or quality of habitat; and
  - the number of locations or subpopulations; and
  - the numbers of mature individuals.

Corresponding International Union for the Conservation of Nature (IUCN) criteria:
A2ce; B1ab(ii,iii,iv,v) +2ab(ii,iii,iv,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 Serpent Heath Species Forecast Report and VicFlora.

Threats

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

Threat	Description
Altered hydrology	
Altered wetland water regime	• Changes to wetland hydrology, because of local wetland draining or hydrological changes upstream or in the surrounding landscape, can lead to habitat loss and plant mortality.
Climate change	
Altered rainfall and temperature regimes	• Climate change, increasing temperature and altered rainfall and snowfalls are likely to magnify existing threats and may reduce the stability, extent, and condition of habitat.
Altered snow cover and duration	• Climate change may change the timing, duration, and depth of snow cover, changing the ecology of alpine systems.
Fire	
Altered fire regimes	• Increased frequency and intensity of fire may cause mortality of plants before they reach maturity. Fires contribute to vegetation change by opening the habitat and permitting drying winds to enter, facilitating overgrowth by short-lived shrubs and herbs, and allowing expansion of eucalypt species.
	• A hotter, drier climate may increase the likelihood or frequency of fire impacting habitat, with the potential to reduce habitat extent and/or condition. This includes the drying of buffers which act to prevent planned burns from entering rainforest.
Fire management activities	• Fire management operations such as creation of fuel breaks (soil disturbance, slashing) may remove or degrade habitat, cause mortality of individuals, and reduce regeneration.
Habitat loss, degradation or modification	
Land use change	• Ploughing of ephemeral wetlands can damage or lead to the loss of these habitats.
	• Land use change alters vegetation extent and condition, and may impact water regimes, contributing to habitat loss and degradation.
Human disturbance	
Construction, development and/or infrastructure	• Construction and development may result in direct removal of habitat, or indirect impacts to habitat through changes to water regimes and increased risk of weed incursion.
Ground disturbance	• Trampling and the use of off-road motor vehicles impacts the soil, damages habitat and may directly and indirectly cause species mortality.
Introduced species	
Deer	• Introduced deer species (Sambar Deer (*Cervus unicolor*), Red Deer (*Cervus elaphus*) and Fallow Deer (*Dama dama*)) degrade habitat through herbivory, antler-rubbing, trampling, pugging of wet soils, increasing nutrient loads, erosion of waterway edges, and increasing the accessibility of habitat to other introduced species.

Threat	Description
Native species	
Competition and/or herbivory by other native species	• Competition for resources with, and/or herbivory by, other native species can impact habitat, recruitment and/or mortality rates. This threat is exacerbated where habitat loss or degradation reduces availability of resources.
Population dynamics	
Loss of genetic diversity	• Small, greatly reduced, and/or isolated populations are at increased risk of loss of genetic diversity, which leads to a heightened risk of reduced recruitment and/or increased mortality rates.

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 Serpent Heath'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 Serpent Heath and conservation of its habitat, including the restoration of cultural knowledge where appropriate.

Conservation Actions

The actions below have been identified through expert input, 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. Holistic management of the cultural landscape where this species occurs is encouraged noting additional actions including cultural practice may benefit this 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.
Climate adaptation	• Consider the incremental and/or transformational adaptation actions that may be required to support the recovery of the species. This may be done by applying the climate adaptation lens and triggers for transformational adaptation from the Victorian Government's Climate Change Adaptation Action Plans.
Collect and store reproductive material	• Maintain seed collections from target populations within the Victorian Conservation Seedbank at the Royal Botanic Gardens Victoria.
	• Undertake appropriate collection of propagules 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.

Action	Description
Community engagement and awareness	• Identify, promote, and support opportunities for raising awareness and community involvement in conservation efforts, including through citizen science to inform improved management for the species.
Control deer*	• Implement and maintain effective control of deer in priority areas.
Establish and maintain fencing	• Establish and maintain fencing to prevent access and damage to individuals or populations from introduced or native species where required.
Manage public access	• Exclude access from horse-riding, vehicles and motorbikes, and discourage human trampling through the provision of appropriate fencing, signage and community education.
Permanent protection*	• Investigate incentives, voluntary agreements, covenants, and other permanent protection measures to protect and restore habitat.
Protect key habitat	• Work with land managers, planners and developers to minimise impacts from construction and development or identify alternative sites for placement of infrastructure.
	• Minimise alterations to hydrological regimes upstream or in surrounding landscapes.
Restoration and/or revegetation*	• Undertake restoration and/or revegetation to increase habitat suitability and/or create new habitat areas.
Survey and monitoring	• 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.
	• Monitor representative populations to determine trends and management needs.

**Indicates landscape-scale actions that may deliver benefits to multiple species*

Past Actions

The compilation process for this action statement did not identify any past management actions undertaken in the last 10 years. If you are aware of recent actions that have been undertaken to benefit this species, please contact threatened.species@deeca.vic.gov.au

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

- Serpent Heath Species Forecast Report
- Threatened Species Assessment Report - Serpent Heath (*Richea victoriana*)
- Victorian Deer Control Strategy
- Victorian Deer Control Strategy
- 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
- Natural Environment Climate Change Adaptation Action Plan 2022-2026

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

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/

Indigenous Data Sovereignty

DEECA is committed to recognising and enabling Indigenous Data Sovereignty (IDS). Indigenous data comprise any information or knowledge of species and Country collected or recorded by, or about, Traditional Owners. IDS asserts Traditional Owner rights to access and have governance over the collection, ownership and use of their data, including that which is included or referred to in this Action Statement.

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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Accessibility

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