

Action statement

Flora & Fauna Guarantee Act 1988

Stiff Groundsel (*Senecio behrianus*)

Taxon ID: 503101

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



Stiff Groundsel. Image from VicFlora.



This habitat distribution model displays the indicative range of the species Stiff Groundsel on occurrence records and likely habitat. See [NatureKit](#) for an interactive map. The Stiff Groundsel also occurs outside of Victoria.

Conservation Status

Critically endangered

Listing criteria: 3.1.1; 3.1.3(a),(b)(i,ii); 3.1.4 of the Flora and Fauna Guarantee Regulations 2020.

This means that:

- the Stiff Groundsel 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 extremely low, the number is likely to continue to decline at a very high rate; and
 - each subpopulation is extremely small; and
 - most of the individuals are in one subpopulation.

Corresponding International Union for the Conservation of Nature (IUCN) criteria: A2ace+3ce+4ce; C1+2a(i,ii); D.

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 [Stiff Groundsel Species Forecast Report](#) and [VicFlora](#).

Threats

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

Threat	Description
Human disturbance	
Road and track construction or maintenance	<ul style="list-style-type: none"> Roads and irrigation channels where the Stiff Groundsel occurs are subject to periodic maintenance such as grading and herbicide spraying that could inadvertently damage populations.
Pollutants and toxicants	
Nutrient enrichment	<ul style="list-style-type: none"> Stiff Groundsel grows in areas that are subject to runoff from nearby farmland (fertilizer, pesticides, stock manure), resulting in elevated nutrient levels favouring weed invasion.
Introduced species	
Introduced herbivores	<ul style="list-style-type: none"> Rabbits (<i>Oryctolagus cuniculus</i>) and hares (<i>Lepus europaeus</i>) damage populations by browsing and digging.
Introduced plants	<ul style="list-style-type: none"> At Corop, vigorous perennials such as Blackberry (<i>Rubus fruticosus</i>) and Canary Grass (<i>Phalaris aquatica</i>) and annual grasses such as Wild Oats (<i>Avena fatua</i>) can dominate the sites and out-compete native plants. At the Ballarat site, the population is surrounded by introduced weeds including Canary Grass, Onion Grass (<i>Romulea rosea</i>), Strawberry Clover (<i>Trifolium fragiferum</i>) and numerous thistle species.
Population dynamics	
Loss of genetic diversity	<ul style="list-style-type: none"> The plants are rhizomatous, so many individual stems are clones. Recruitment from seed has not been observed in the field, so the number of genetically distinct plants may be quite low. Low genetic variability may render existing wild and planted populations vulnerable to pests and diseases and heightens the risk of population loss due to stochastic events.
Altered hydrology	
Altered flow regimes	<ul style="list-style-type: none"> The sites of current wild populations at Corop and Ballarat would have once been periodically flooded, but no longer retain their natural flooding regime. The impact of this change on plant health and recruitment is not well understood.
Fire	
Altered fire regimes	<ul style="list-style-type: none"> A hotter, drier climate may increase the likelihood or frequency of fire impacting Stiff Groundsel populations, with the potential to cause direct mortality, reduce habitat quality and/or extent and affect the long-term survival of the species.

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 knowledge of biology, ecology, distribution, demography, emerging threats, and conservation requirements.
- Support community participation and improve awareness of the Stiff Groundsel and conservation of its habitat.
- Because the species has a long generation length, its decline over a time span of three generations cannot be reduced in the short term, but the future outlook can still improve.

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"> • Engage with local governments, Country Fire Authority brigades, water authorities and relevant landholders to identify and protect known sites. • Provide information on the impacts of runoff and nutrients, and road and channel maintenance activities, and offer mitigation options. • To protect vulnerable populations, install signs as needed.
Control introduced herbivores *	<ul style="list-style-type: none"> • Implement effective management and control of rabbits and hares.
Control introduced plants *	<ul style="list-style-type: none"> • Implement effective management and control of introduced plants.
Develop, update and apply forestry protections	<ul style="list-style-type: none"> • Maintain prescriptions for this species under the <i>Code of Practice for Timber Production 2014 (as amended in 2022)</i> (the Code). • Where relevant, incorporate species-specific protection measures into plans and permits relating to timber harvesting operations in native forest on private land.
Ex-situ management	<ul style="list-style-type: none"> • Establish an ex-situ population to provide an insurance population, and to produce seed for seed banking and supplementation of existing wild populations.
Population supplementation	<ul style="list-style-type: none"> • Introduce additional plants to existing populations, to increase genetic diversity and population size, to guard against future stochastic and demographic declines. This action should follow genetic studies to determine underlying population structure.

Action	Description
Research	<ul style="list-style-type: none"> Determine the grazing regime that is best suited to ensure the plants' long-term persistence. Investigate inundation requirements (if any) for supporting sufficient survival and recruitment. Determine the level of genetic diversity, the conservation implications of the reproductive system of the species (e.g., self-incompatibility) and the risks of inbreeding. Investigate and determine a suitable fire regime (including exclusion of fire) that meets the ecological requirements of the species and promotes its recovery.
Survey and monitoring	<ul style="list-style-type: none"> Survey for new records within the species current and past range, especially on private land in the Corop area, and suitable habitat in the Murray River corridor.
Translocation	<ul style="list-style-type: none"> Explore options to reintroduce plants back into areas where it was previously recorded, and into new suitable habitat.

**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"> The Stiff Groundsel has a current species-specific prescription in the Code: <ul style="list-style-type: none"> In the Portland-Horsham Forest Management Area: Manage occurrences in consultation with the Department unless already protected.
Ex-situ management	<ul style="list-style-type: none"> Ex situ populations have been established in cultivation at the Royal Botanic Gardens Victoria and White Hills Botanic Gardens, Bendigo.

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

- [Stiff Groundsel Species Forecast Report](#)
- [Threatened Species Assessment report – Stiff Groundsel \(*Senecio behrianus*\)](#)
- [Commonwealth Species Profile and Threats database](#)
- [Victoria's changing climate – understanding the impacts of climate change on Victoria](#)
- [Code of Practice for Timber Production 2014](#)
- [Genetic Risk Index](#)
- [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: [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 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, 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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