Action statement

Flora & Fauna Guarantee Act 1988

Strzelecki Gum *(Eucalyptus strzeleckii)*

Taxon ID: 504558

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

Strzelecki Gum. Image by Irene Proebsting.

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

Conservation Status

Critically endangered

Listing criteria: 3.1.1 of the Flora and Fauna Guarantee Regulations 2020.

This means that:

- the Strzelecki Gum has undergone, is suspected to have undergone, or is likely to undergo in the immediate future, a very severe reduction in population size.

Corresponding International Union for the Conservation of Nature (IUCN) criteria: A2bc+4bce.

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 Strzelecki Gum Species Forecast Report and VicFlora.

Threats

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

Threat	Description
Habitat loss, degradation or modification	
Land use change	• Land use change and intensification associated with urban development, agriculture (including farming and plantations), mining and infrastructure (including roads) can cause fragmentation, loss, degradation or modification of habitat and loss of individuals.
Livestock	• Stock damage paddock trees by rubbing (in some cases causing ringbarking) and reduce seedling recruitment by trampling and grazing. Trampling also damages root systems and causes soil compaction, impacting plant health and leading to changes in habitat.
Loss of key habitat features	• The reliance of Strzelecki Gum on damp sites, especially along small watercourses and on moist sheltered slopes, makes it susceptible to any alteration of local hydrology, such as draining or impounding streams or altering upstream water sources.
Climate Change	
Altered rainfall and temperature regimes	• Predicted changes in temperature, rainfall and climate variability are likely to result in a decline in suitable habitat for the Strzelecki Gum.
Fire	
Altered fire regime	• Strzelecki Gum grows in habitats that are seasonally wet and likely susceptible to fire in the summer months. Periodic fire may provide opportunities for recruitment by reducing competitive pressures, however high frequency fire increases the risk of adult mortality and recruitment failure.
Fire management activities	• Fire management operations such as creation of fuel breaks (soil disturbance, slashing) can cause mortality of individuals and impede seed-based recruitment.
Introduced species	
Introduced plants	• Competition for resources and alteration to habitat from introduced plants, particularly grasses, limit recruitment. Species known to impact Strzelecki Gum are Toowoomba Canary grass (*Phalaris aquatica*), and Brome (*Bromus* spp.) as well as Blackberry (*Rubus fruticosus* spp. agg.), Atlantic Ivy (*Hedera hibernica*) and Cape Ivy (*Delairea odorata*), White Clover (*Trifolium repens*) and Spear Thistle (*Cirsium vulgare*).
Human disturbance	
Firewood collection	• Individual or small groups of Strzelecki Gum have been removed for firewood, and this is an ongoing threat, particularly in relation to roadside populations and isolated paddock trees.
Road and track construction or maintenance	• Many subpopulations of Strzelecki Gum are restricted to narrow roadsides and individuals are at risk of removal, loss or damage when activities such as roadworks are required.

Threat	Description
Pollutants and toxicants	
Nutrient enrichment	• Increased nutrient levels from fertilizer application and animal manure may be a threat, especially through enhancing pasture and weed growth. • Runoff from urban development and roading poses a potential threat to streamside subpopulations.
Population dynamics	
Fragmentation	• Much of the habitat for Strzelecki Gum has been cleared with surviving subpopulations highly fragmented.
Loss of genetic diversity	• The small size and isolation of stands and subsequent lack of gene flow may result in reduced genetic fitness and reduced ability of Strzelecki Gum to adapt to changes in the environment. • Seed collection from limited source trees and subsequent revegetation efforts may also compromise genetic diversity.

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 futurepopulation decline.
- Increase the Strzelecki Gum's range and/or extent, by providing opportunities for natural movement.
- Increase knowledge of biology, ecology, distribution, demography, emerging threats and conservationrequirements.
- Support community participation and improve awareness of the Strzelecki Gum and conservation of its habitat.

Please note: As this 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
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.

Action	Description
Collect and store reproductive material	• Maintain seed storage, ensuring adequate genetic diversity.
Community engagement and awareness	• Install signage at important roadside subpopulations. • Identify, promote and support opportunities for community education and involvement in conservation efforts. • Inform and consult landowners and managers of sites where there are known subpopulations to mitigate the risk of unintentional damage, such as through grazing, weed invasion, machinery use and inappropriate fire regimes. Encourage these key stakeholders to contribute to the implementation of conservation management actions.
Compliance and enforcement	• Undertake risk-based compliance and enforcement activities to limit the impacts of illegal firewood collection to the species.
Control introduced plants*	• Implement effective management and control of introduced plants, especially pasture grasses including Toowoomba Canary- grass, and Brome, Blackberry, Ivy, and pasture weeds. • Manage sites to prevent introduction of invasive weeds.
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). • Where relevant, incorporate species-specific protection measures into plans and permits relating to timber harvesting operations in native forest on private land.
Establish and maintain fencing	• Encourage exclusion of livestock from sites where Strzelecki Gum occurs e.g., through fencing of paddock trees and stands.
Manage road and track works	• Avoid damage during roadworks using appropriate on-site signage and mapping and data checking in advance of on-ground works.
Permanent protection	• Investigate incentives, voluntary agreements, covenants and other permanent protection measures to protect and restore habitat.
Protect key habitat	• Consider Strzelecki Gum in planning and design of works and any land use change close to habitat, to minimise disturbance.
Research	• Investigate the species' ecological requirements that are relevant to persistence, particularly in the context of climate change and high fire frequency. • Investigate and determine a suitable fire regime that meets the ecological requirements of the Strzelecki Gum and promotes its recovery. • Investigate the role of soil moisture and hydrological conditions, including flooding, in recruitment and determine key recruitment drivers. • Increase knowledge of revegetation success at reintroduction and supplementation sites. • Investigate options for linking existing populations or establishing additional subpopulations in secure locations to ensure the persistence of the Strzelecki Gum across its range and the maintenance of its evolutionary potential.

Action	Description
Restoration and/or revegetation	• Increase population size and widen habitat around existing subpopulations, where feasible, to help buffer them from stochastic risks, extreme climatic events and reduce genetic risks. • Undertake revegetation with Strzelecki Gum seedlings/saplings, using seed sourced from a genetically diverse range of individuals in areas of suitable habitat.
Survey and monitoring	• Maintain monitoring programs to assess population demography, habitat condition, revegetation outcomes and threats including hydrological changes. • Map populations and 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	• The Strzelecki Gum has a current species-specific prescription in the Code: – In the Gippsland Forest Management Areas: Apply a protection area over each population. • 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.
Permanent protection	• A Strzelecki Gum site was protected under a Trust for Nature covenant at Shady Creek.
Survey and monitoring	• A population survey for the Strzelecki Gum was undertaken in West and South Gippsland in 2020.

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

- Strzelecki Gum Species Forecast Report
- Threatened Species Assessment report – Strzelecki Gum (*Eucalyptus strzeleckii*)
- Threatened Species and Communities Risk Assessment
- Victoria's changing climate – understanding the impacts of climate change on Victoria
- Code of Practice for Timber Production 2014
- Commonwealth Threat Abatement Plans
- Genetic Risk Index
- 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, 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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Accessibility

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