Action statement

Flora & Fauna Guarantee Act 1988

Adamson's Blown-grass (*Lachnagrostis adamsonii*)

Taxon ID: 500148

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

Adamson's Blown-grass. Image by A. J. Brow.

This habitat distribution model displays the indicative range of Adamson's Blown-grass based on occurrence records and likely habitat. See NatureKit for an interactive map.

Conservation Status

Endangered

Listing criteria: 1.2 (a), (b)(i,ii,iii,iv,v), (c)(v) of the Flora and Fauna Guarantee Regulations 2020.

This means that:

- its geographic distribution is highly restricted; and
- the distribution of the population or habitat is severely fragmented; and
- it is restricted to a limited number of areas that are subject to the same threat or suite of threats that can affect all individuals present; and
- there is a continuing decline or reduction in:
  - its extent of occurrence; and
  - area of occupancy; and
  - area, extent or quality of habitat; and
  - the number of locations or populations; and
  - the number of mature individuals; and
- there are extreme fluctuations in the number of mature individuals.

Corresponding International Union for the Conservation of Nature (IUCN) criteria: B2ab(i,ii,iii,iv,v)c(iv).

More information on IUCN listing criteria can be found here: IUCN Red List of Threatened Species

Species Information

Species information such as its description, distribution, ecology and references are provided in the Adamson's Blown-grass Species Forecast Report and VicFlora.

Threats

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

Threat	Description
Climate change	
Increased frequency or length of droughts	• Lengthy periods of low rainfall may potentially lead to widespread extinction of populations.
Habitat loss, degradation or modification	
Land use change / intensification	• Populations on private land are at risk from a change in land use from grazing to cropping. Cropping is a potential threat at several sites (e.g., Warners Road, Moorabool and Millars Road).
Livestock	• Livestock movement and pugging during wet conditions, and/or at high stocking rates, may destroy populations and/or suitable habitat at roadsides and on private land. • Absence of grazing may increase the risk of weed invasion and competition with Adamson's Blown-grass.
Wetlands – soil Disturbance	• Overgrazing, and scalding by salinity, can cause erosion and increased sedimentation in wetlands and streams, which is habitat for Adamson's Blown-grass.
Water properties	
Changes to salinity	• The habitat of many populations has been significantly depleted or lost through the conversion of saline to freshwater or dryland environments from a lowering water table, dryland salinity mitigation, and Blue Gum (*Eucalyptus globulus*) plantation establishment.
Introduced species	
Introduced plants	• Salt-tolerant introduced plants such as Tall Fescue (*Festuca arundinacea*) and Tall Wheat-grass (*Thinopyrum ponticum*, previously *Lophopyrum ponticum*) can out-compete Adamson's Blown-grass in saline conditions. In particular, Tall Wheat-grass is highly competitive, and continued invasion by this species is likely to lead to localised extinctions. Roadside populations are threatened by invasion of Toowoomba Canary-grass (*Phalaris aquatica*). • Less salt-tolerant introduced species including Spiny Rush (*Juncus acutus*) can also threaten Adamson's Blown-grass by lowering the water table allowing freshwater flushing of surface soil layers. This has enabled a new suite of species to invade such as Yorkshire Fog (*Holcus lanatus*). Herbicide application to control these introduced plants can impact Adamson's Blown-grass.

Threat	Description
Native species	• Common Reed (*Phragmites australis*) may pose a threat through competition.
Human disturbance	
Construction / development	• Many populations on roadsides are at risk from road and utility management works (i.e., substantial road works were undertaken at the site of the Eurambeen-Streatham Road, St. Marnocks Station population).
Pollutants	
Nutrient enrichment	• Nutrient-rich runoff from the application of fertilisers on farms can degrade wetland habitat and impact Adamson's Blown-grass.
Population dynamics	
Fluctuating population size	• The species undergoes large population fluctuations and is susceptible to stochastic events when the population is reduced.
Loss of genetic diversity	• Adamson's Blown-grass is classified as 'very high' on the Genetic Risk Index. The index provides an insight into the genetic health of the species. • Significant population decline since the 1970s has resulted in varying genetic diversity among populations with significant inbreeding evident.

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, genetic diversity and minimise future population decline.
- Increase knowledge of the ecology, distribution, demography, emerging threats, and conservation requirements of Adamson's Blown-grass.
- Support community participation and improve awareness of the Adamson's Blown-grass and threats to the species.

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	• Continue consultation with local government, the state road authority, and utilities to avoid impacts of road and utility management works on populations. • Install signage at important roadside populations.

Action	Description
	• Engage landholders to raise awareness of grazing regimes that support species conservation and promote practices that reduce the impact of threats. • Raise awareness of the impacts of Tall Wheat-grass and promote non-invasive salt-tolerant plant alternatives to community groups and land managers. • Promote the use of Adamson's Blown-grass in soil remediation works, rather than introducing non-indigenous species that may pose additional ecological problems, such as Tall Wheat-grass.
Conservation planning	• Align key actions, programs and planning between the Commonwealth Government's Threatened Species Action Plan 2022–2032 and Victoria's current management measures to benefit the species' conservation and protection.
Control weeds*	• Implement effective management and control of Tall Wheat-grass, Phalaris and Spiny Rush.
Identify and protect key habitat	• Investigate the opportunity to establish voluntary conservation agreements and/or planning mechanisms with public authorities and/or private landowners where the species occurs.
Monitor and survey	• Undertake surveys of populations (known and potential) to assess population size, distribution, ecological requirements and the relative impacts of threats.
Research	• Identify the likely need, and options for, genetic intervention within and among populations.

**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
Identify and protect key habitat	• Signage installed to identify populations on public road reserves. • Local government councils and utilities were consulted to minimise threats posed by road works
Seed collection and storage	• Collection of seed of different provenances was established at the Royal Botanic Gardens Victoria (Victorian Conservation Seedbank) in 2008. • A current project is underway to store seed and test/optimise germination
Threat assessment and monitoring	• The threat of Tall Wheat-grass on private land was assessed at Willaura. • Opportunistic searching for the species was undertaken at Lough Calvert between 2011 and 2016. • Population monitoring was undertaken near Skipton between 2011 and 2015.

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

- Adamson's Blown-grass Species Forecast Report
- Threatened Species Assessment report – Adamson's Blown-grass (*Lachnagrostis adamsonii*)
- Commonwealth Species Profile and Threats database
- Victoria's changing climate – understanding the impacts of climate change in Victoria
- 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.

Interested parties are encouraged to work together across community, government, private and public land managers and Traditional Owners to undertake these actions and secure funding for their implementation.

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 – Biodiversity2037.
- 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, including for weeds and introduced animals and observations 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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