

Action statement

Flora and Fauna Guarantee Act 1988

Australian Whitebait (*Lovettia seali*)

Taxon ID: 4689

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



Australian Whitebait. Image by Tarmo A. Raadik.



Australian Whitebait Victorian Biodiversity Atlas (VBA) records since 1970. See [NatureKit](#) for an interactive map. This species also occurs outside of Victoria.

Conservation Status

Critically Endangered

Listing criteria: 3.1.1; 3.1.2(a)(b)(i)(ii)(iii)(iv)(v); 3.1.3(b)(ii) 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 very severe reduction in population size; and
- its geographic distribution is extremely 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; and
- the total number of mature individuals is very low, the number is likely to continue to decline and most of the individuals are in one subpopulation.

Corresponding International Union for the Conservation of Nature (IUCN) criteria: A2ace+3ce+4ce; B1ab(i,ii,iii,iv,v)+2ab(i,ii,iii,iv,v); C2a(ii). More information on IUCN listing criteria can be found here: [IUCN Red List Criteria](#).

Species Information

The Australian Whitebait also occurs outside of Victoria where it may have a different conservation status throughout its broader distribution. Species information such as its description, distribution, ecology and references are provided in the [Australian Whitebait Species Forecast Report](#) and the [Atlas of Living Australia](#).

Threats

The threats listed below have been identified with input from ecologists, databases, decision support tools and published literature. Traditional Owners may have additional threats to those listed for this species. Threats are listed in alphabetical order under specific threat categories.

Threat	Description
Altered hydrology	
Altered water regime	<ul style="list-style-type: none"> 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.
Climate change	
Altered rainfall and temperature regimes	<ul style="list-style-type: none"> Climate change, increasing temperature and altered rainfall are likely to magnify existing threats and may reduce the stability, extent, and condition of habitat.
Increased frequency and/or length of droughts	<ul style="list-style-type: none"> Drying and warming of the environment, including droughts, may lead to habitat changes, and impact recruitment and/or mortality rates.
Habitat loss, degradation or modification	
Barriers to movement	<ul style="list-style-type: none"> Physical barriers to instream movement, reduce access to habitat and opportunity for genetic exchange between populations.
Livestock	<ul style="list-style-type: none"> Livestock can cause habitat degradation through, trampling, soil compaction, soil erosion, pugging of wet areas, and excess nutrient loads.
Reduced estuary extent	<ul style="list-style-type: none"> Estuaries may be reduced through changes in land use, groundwater levels, surface flows, rainfall, and/or estuary mouth management, resulting in reduced habitat extent and/or condition.
Introduced species	
Introduced fish	<ul style="list-style-type: none"> Introduced fish can degrade habitat, impact water quality, disrupt ecosystem function, and/or impact directly on individuals through predation, and competition for resources.
Pathogens and disease	
Disease	<ul style="list-style-type: none"> Threatened species with small populations and/or reduced genetic diversity are more susceptible to disease risk, both from known, and new/emerging diseases.
Population dynamics	
Loss of genetic diversity	<ul style="list-style-type: none"> 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.

Threat	Description
Water properties	
Degraded water quality	<ul style="list-style-type: none"> Poor water quality arising through siltation, pollution, changes to salinity, increased nutrients, eutrophication and/or blackwater events impacts habitat condition.

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 Australian Whitebait'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 Australian Whitebait and conservation of its habitat, including the restoration of cultural knowledge where appropriate.

Conservation Actions

The actions listed below have been identified with input from ecologists, databases, decision support tools and published literature. Actions are listed in alphabetical order to allow all interested parties to prioritise based on their context, capacity and capability. In undertaking actions for this species, consider the full extent of the species' range.

Holistic management of the cultural landscape where this species occurs is encouraged. Traditional Owners may identify other actions including cultural practice that will benefit this species and may also need to review existing actions to ensure they are culturally appropriate. In undertaking actions for this species, consider the full extent of the species' range.

Action	Description
Climate adaptation	<ul style="list-style-type: none"> 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.
Community engagement and awareness	<ul style="list-style-type: none"> Increase landholder awareness of the species and the impacts of livestock grazing. Provide guidance on the changes to grazing that may be required, such as exclusion from areas of nearby habitat, to support conservation outcomes.
Control introduced fish	<ul style="list-style-type: none"> Implement and maintain effective control of introduced fish such as Brown Trout (<i>Salmo trutta</i>), in priority areas.
Genetic rescue	<ul style="list-style-type: none"> Investigate options for improving resilience through enhancing genetic exchange via physically linking populations with enhanced habitat, translocation, or genetic management in an ex-situ setting.
Ex-situ management	<ul style="list-style-type: none"> Establish and maintain ex-situ populations in suitable secure sites, to service the conservation objectives of the species.
Improve habitat connectivity	<ul style="list-style-type: none"> Restore habitat and/or provide appropriate engineering solutions to improve connectivity between habitat patches.

Action	Description
Manage barriers to movement	<ul style="list-style-type: none"> Consider the species needs and distribution in decision making around works that may create potential barriers to movement. Consider opportunities to overcome the impacts of existing barriers to movement.
Manage impacts from natural disaster events	<ul style="list-style-type: none"> Identify and implement recovery actions for vulnerable populations impacted by natural disaster events and/or emergency response (e.g., associated with significant bushfire or flood events).
Manage environmental water	<ul style="list-style-type: none"> Explore options for the provision of environmental water where required to improve flow regimes for the species.
Permanent protection*	<ul style="list-style-type: none"> Investigate incentives, voluntary agreements, covenants, and other permanent protection measures to protect and restore habitat.
Protect key habitat	<ul style="list-style-type: none"> Manage water quality to support retention, restoration and/or creation of habitat and/or population persistence.
Restoration and/or revegetation*	<ul style="list-style-type: none"> Undertake restoration and/or revegetation to increase habitat suitability and/or create new habitat areas.

*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

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 the following decision support tools:

- [Choosing actions for nature](#)
- [Biodiversity Knowledge Framework](#)

Further Information

- [Australian Whitebait Species Forecast Report](#)
- [Threatened Species Assessment Report - Australian Whitebait \(*Lovettia sealii*\)](#)
- [Atlas of Living Australia – Open access to Australia’s biodiversity data](#)
- [Victoria’s changing climate - understanding the impacts of climate change in Victoria](#)
- [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 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 \(environment.vic.gov.au\)](https://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 \(environment.vic.gov.au\)](https://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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