# **Action statement**

Flora & Fauna Guarantee Act 1988

# Helmeted Honeyeater (Lichenostomus melanops cassidix)

**Taxon ID: 60618** 

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**



Helmeted Honeyeater. Image by Marcia Riederer.



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

#### **Conservation Status**

#### **Critically Endangered**

Listing criteria: 4.1.2(a),(b)(ii,iii,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 of the taxon is severely fragmented; and
- there is a continuing decline or reduction in:
  - its area of occupancy; and
  - the area, extent or quality of habitat; and
  - the number of mature individuals.

Corresponding International Union for the Conservation of Nature (IUCN) criteria: B1ab(ii,iii,v)+2ab(ii,iii,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 <u>Helmeted Honeyeater Conservation Advice</u>.

## **Threats**

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

Threat	Description
Habitat loss, degradatio	on or modification
Loss of key habitat features	<ul> <li>Loss of ecologically important habitat features results in reduced habitat condition and/or extent, potentially impacting persistence.</li> </ul>
	<ul> <li>The combined impacts of historical habitat removal, and reduced understorey in much of the remaining habitat, has resulted in insufficient natural food resources being available at Yellingbo. The current population size at this site is maintained through a supplementary feeding program.</li> </ul>
Vegetation clearing or damage	<ul> <li>Removal or damage to vegetation contributes to habitat loss. Past declines in the range and abundance of the Helmeted Honeyeater were caused by extensive destruction of its habitat, largely through clearance for agriculture followed by further impacts from fire.</li> </ul>
Altered hydrology	
Altered water regime	<ul> <li>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.</li> </ul>
	<ul> <li>An appropriate flooding regime is required for correct maturation of the understorey (<i>Myrtaceae</i> shrub layer) in balance with overstorey Mountain Swamp Gum (<i>Eucalyptus camphora</i>) regeneration.</li> </ul>
Population dynamics	
Loss of genetic diversity	<ul> <li>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.</li> </ul>
	<ul> <li>Loss of genetic diversity, and associated loss of fitness, has been well documented in the Helmeted Honeyeater.</li> </ul>
Small population size	<ul> <li>Small populations have lower resilience to the risk of stochastic events, and increased risk of genetic decline.</li> </ul>
Native species	
Invertebrates	Over-abundance of defoliating invertebrates at a large spatial scale can result in canopy loss, death of trees and/or shrubs, and habitat degradation.
	<ul> <li>Periods of stress (e.g., excess nutrients, drought) for Eucalypt trees increases the incidence of Psyllid outbreaks, which can cause eucalypt canopy dieback resulting in loss of food source for the Helmeted Honeyeater. This impact is exacerbated by Bell Miners' (<i>Manorina melanophrys</i>) use of the insects as a food source that the birds actively defend, thereby further reducing Helmeted Honeyeater's access to food.</li> </ul>

Threat	Description
Over-abundant native birds	<ul> <li>Competition for limited food or breeding resources with other native birds may impact recruitment and/or mortality rates. This threat is exacerbated where native species become over abundant. Bell Miners are the primary native birds of concern for the Helmeted Honeyeater.</li> </ul>
Problematic native plants	<ul> <li>Increasing abundance, or area of occurrence, of some native plant species may impact habitat quality.</li> </ul>
Fire	
Bushfire	<ul> <li>Bushfires can result in habitat degradation, mortality and reduce availability of breeding and foraging habitat.</li> </ul>
Climate change	
Increased frequency and/or length of droughts	<ul> <li>Drying and warming of the environment, including droughts, may to lead to habitat changes, and impact recruitment and/or mortality rates.</li> </ul>
Introduced species	
Introduced herbivores	<ul> <li>Introduced herbivores degrade habitat through herbivory, trampling, pugging of wet soils, increasing nutrient loads, erosion of waterway edges, and increasing the accessibility of habitat to introduced predators and introduced plants.</li> </ul>
	<ul> <li>Introduced herbivores impact the success of both natural regeneration events and revegetation projects in Helmeted Honeyeater habitat.</li> </ul>
Introduced predators	<ul> <li>Predation by foxes (Vulpes vulpes) and feral cats (Felis catus) contributes to mortality of native species, and may contribute to mortality of Helmeted Honeyeaters, with young fledglings likely to be the most susceptible age class.</li> </ul>

## **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 the Helmeted Honeyeater's range and/or extent, by providing opportunities for natural movement and translocation where dispersal potential is limited.
- Increase the wild population size to at least 500 mature individuals.
- Establish at least one new viable population within its historic range.
- Increase knowledge of biology, ecology, distribution, demography, emerging threats, and conservation requirements.
- Support community participation and improve awareness of the Helmeted Honeyeater and conservation of its habitat.

#### **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 <a href="NatureKit">NatureKit</a>.

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.
	<ul> <li>Undertake biodiversity values check prior to fuel management in areas of the species habitat, to confirm treatment suitability and timing.</li> </ul>
Community engagement and awareness	<ul> <li>Continue to raise landholder and broader community awareness of the importance of protecting habitat and managing threats.</li> </ul>
	<ul> <li>Continue to identify, promote and support opportunities for community involvement in conservation efforts, including through established groups such as the Friends of the Helmeted Honeyeater.</li> </ul>
Conservation management planning	<ul> <li>Maintain currency of the Helmeted Honeyeater 5-year Strategic Plan, and site- specific planning documents to aid coordination of recovery efforts.</li> </ul>
Control introduced herbivores *	<ul> <li>Implement and maintain effective control of introduced herbivores in priority areas.</li> </ul>
Control introduced plants*	<ul> <li>Implement and maintain effective control of introduced plants in priority areas and undertake revegetation with appropriate native species. For example, undertake control of <i>Phalaris</i> spp. impeding <i>Myrtaceae</i> shrub regeneration.</li> </ul>
Control introduced predators *	<ul> <li>Implement and maintain effective control of feral cats and foxes in priority areas.</li> </ul>
Ex-situ management	<ul> <li>Maintain ex-situ populations in suitable secure sites, to service the conservation objectives of the species, including the conservation breeding program at Healesville Sanctuary.</li> </ul>
Genetic rescue	<ul> <li>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.</li> </ul>
	<ul> <li>In particular, continue to implement and adaptively manage the genetic rescue program established for Helmeted Honeyeaters via managed breeding with the Yellow-tufted Honeyeater (<i>Lichenostomus melanops gippslandicus</i>).</li> </ul>
Manage environmental water	<ul> <li>Manage water regimes and water quality to support retention, restoration and/or creation of habitat and/or population persistence.</li> </ul>
	Where possible, implement restoration of natural stream flow patterns to improve the quality and productivity of Helmeted Honeyeater habitat.
Manage impacts from natural disaster events	<ul> <li>Identify and implement recovery actions for vulnerable populations impacted by natural disaster events (e.g., significant wildfire or flood events).</li> </ul>
	<ul> <li>Develop a Helmeted Honeyeater-specific fire response plan, including an emergency evacuation of captive birds from Healesville Sanctuary.</li> </ul>

Action	Description
Manage problematic native species	<ul> <li>Implement and maintain appropriate control of problematic native species and manage habitat to minimise further impacts.</li> </ul>
	<ul> <li>Manage native species where they represent significant risks to site occupancy, survival, or breeding success through competition (e.g., Bell Miners).</li> </ul>
Permanent protection *	<ul> <li>Investigate incentives, voluntary agreements, covenants and other permanent protection measures to protect and restore habitat.</li> </ul>
Provide artificial habitat features	<ul> <li>Support population persistence through the provision of artificial habitat features, where necessary to support the objectives of this action statement.</li> </ul>
	<ul> <li>Supplementary feeding is a proven management tool for Helmeted Honeyeaters, where intervention is required to compensate for a temporary shortage of natural foods.</li> </ul>
	<ul> <li>Supplementary feeding may continue to prove useful in a range of contexts, including:</li> </ul>
	<ul> <li>to support establishment of translocated populations, while birds adapt to the release locality</li> </ul>
	<ul> <li>to support population sizes above local current carrying capacity of habitat, while habitat restoration is undertaken, to increase natural carrying capacity of the site;</li> </ul>
	<ul> <li>to enhance population growth at sites that are intended to be source populations for translocation programs; and</li> </ul>
	<ul> <li>to support populations through times of food shortages, such as drought.</li> </ul>
Restoration and/or revegetation *	<ul> <li>Undertake restoration and/or revegetation to increase habitat suitability and/or create new habitat areas.</li> </ul>
	<ul> <li>Protect and rehabilitate riparian vegetation, particularly sedge-rich Mountain Swamp Gum swamps. Ensure foraging habitat is restored to provide sufficient food resources for natural Helmeted Honeyeater population growth.</li> </ul>
Survey and monitoring	<ul> <li>Monitor populations at known sites and other suitable locations to assess distribution, population trends and habitat condition.</li> </ul>
Translocation	<ul> <li>Design and implement a translocation program to meet the objectives of the action statement.</li> </ul>
	<ul> <li>Increase the wild population size, and reduce the risk from stochastic events, by using translocation to establish Helmeted Honeyeaters in new locations, and meet genetic and population management objectives.</li> </ul>

<sup>\*</sup>Indicates landscape-scale actions that may deliver benefits to multiple species

## **Past Actions**

The high-level key conservation management actions listed below have been delivered in the past 10 years.

Past action	Description
Community engagement and awareness	<ul> <li>The Friends of the Helmeted Honeyeater group provide opportunities for community involvement in the recovery program.</li> </ul>
	<ul> <li>Significant education work has been undertaken within the community to raise awareness of the Helmeted Honeyeater.</li> </ul>
Control introduced herbivores	<ul> <li>Implemented and maintained effective control of introduced herbivores in priority areas of Helmeted Honeyeater habitat.</li> </ul>
Establish/maintain Recovery Team	<ul> <li>A Recovery Team has been established to facilitate collaborative management for this species.</li> </ul>
Ex-situ management	<ul> <li>Captive breeding and management of Helmeted Honeyeaters has occurred to support translocation into the wild to support the Yellingbo population, implement genetic rescue, and establish new sub-populations (e.g., O'Shannassy Creek).</li> </ul>
	<ul> <li>Ex-situ management of this species includes extensive assessment, and interventions to improve the factors that influence captive breeding and release success (e.g., predator avoidance training for release birds).</li> </ul>
Genetic rescue	<ul> <li>Managed breeding with the Yellow-tufted Honeyeater was identified as the best pathway for genetic rescue.</li> </ul>
	<ul> <li>Genetic rescue is underway in the Yellingbo population and the newly established O'Shannassy River population, following trials in captivity.</li> </ul>
Manage problematic native species	<ul> <li>Implemented and maintained appropriate control of problematic native species, and managed habitat to minimise further impacts. In particular, the removal of Bell Miners from priority Helmeted Honeyeater habitat.</li> </ul>
Permanent protection	<ul> <li>Acquisition of three properties by Trust for Nature and subsequent transfer to the Crown, and protection of buffering habitat under conservation covenant.</li> </ul>
Provide artificial habitat features	<ul> <li>Supported population growth and persistence through the provision of artificial habitat features in areas where key habitat features are lacking.</li> </ul>
	<ul> <li>In particular, supplementary feeding of the wild Yellingbo population has allowed the population to grow well above the natural carrying capacity of the site, effectively reducing extinction risk at a time when this was the only occupied site and providing the opportunity for this population to act as a source of birds for translocation to new locations.</li> </ul>
	Supplementary feeding has been used as a supportive management action for the translocated population at O'Shannassy.
Research	<ul> <li>Research has been conducted into understanding the appropriate hydrological conditions for regenerating Mountain Swamp Gum swamp, to improve suitable Helmeted Honeyeater habitat and inform future management approaches for the species.</li> </ul>
Restoration and/or revegetation	Restoration and/or revegetation has been undertaken to increase habitat suitability and/or create new habitat areas. Large-scale habitat restoration

Past action	Description
	projects are currently planned or underway in various locations across the Yarra Valley region.
Survey and monitoring	<ul> <li>Monitoring of populations at known sites to assess population trends, genetic composition, and habitat condition has been undertaken.</li> </ul>
Translocation	<ul> <li>Design and implementation of a translocation program, establishing a new population at O'Shannassy River created via release of captive-bred birds and translocation of birds from Yellingbo.</li> </ul>
	<ul> <li>Planning is underway to establish populations at Cardinia Creek (Guys Hill Reserve) and the Haining Farm habitat restoration site.</li> </ul>

## **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**

- Helmeted Honeyeater Species Forecast Report
- Helmeted Honeyeater Conservation Advice
- Commonwealth Species Profile and Threats database
- Victoria's changing climate understanding the impacts of climate change in Victoria
- Commonwealth Threat Abatement Plans
- 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: <a href="Action statements">Action statements (environment.vic.gov.au)</a>

To identify the relevant Traditional Owners, use the <u>Aboriginal Cultural Heritage Register and Information System</u> (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 <a href="mailto:threatened.species@deeca.vic.gov.au">threatened.species@deeca.vic.gov.au</a>.

#### **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 <u>Protecting Victoria's Environment –</u> 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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ISSN 1448-9902 (online)

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