Action statement

Flora & Fauna Guarantee Act 1988

Eastern Bristlebird (Dasyornis brachypterus)

Taxon ID: 10519

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



Eastern Bristlebird. Image by Marcia Riederer.



This habitat distribution model displays the indicative range of the Eastern Bristlebird based on occurrence records and likely habitat. See <u>NatureKit</u> for an interactive map. The Eastern Bristlebird also occurs outside of Victoria.

Conservation Status

Critically endangered

Listing criteria: 3.1.3(b)(ii) of the Flora and Fauna Guarantee Regulations 2020.

This means that:

• 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: C2a(ii). More information on IUCN listing criteria can be found here: <u>IUCN Red List of Threatened Species</u>

Species Information

Species information such as its description, distribution, ecology and references are provided in the <u>Eastern Bristlebird</u> <u>Species Forecast Report.</u>

Threats

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

Threat	Description
Fire	
Altered fire regimes	 Too frequent or extensive fires are a major threat causing direct mortality as the Eastern Bristlebird is ground dwelling and a poor flyer, limiting its ability to escape. This threat is exacerbated by slow population recovery.
	• Eastern Bristlebirds may survive moderate-intensity fires by moving to unburnt areas and returning when conditions are suitable. However, this is reliant on suitable refugia and intact connecting habitat.
	 Increases in fire frequency and intensity may reduce the availability of suitable habitat due to direct loss and slow recovery following fire.
Climate change	
Altered rainfall and temperature regimes	 Altered temperatures and rainfall regimes, and increased occurrence of extreme events such as droughts and flooding, will increase the risk of weed and pathogen invasion, alter habitat, and reduce food sources.
Introduced species	
Deer and feral pigs	• Grazing, trampling and wallowing by pigs (<i>Sus scrofa</i>) and deer, particularly Sambar Deer (<i>Cervus unicolor</i>) alters vegetation structure, increasing access of birds to feral predators and the spread of weeds.
Foxes and feral cats	• Predation by foxes (<i>Vulpes vulpes</i>) and feral cats (<i>Felis catus</i>) is a significant threat. As nests are close to the ground, nesting birds, eggs and young are particularly susceptible to predation.
	 Reduced groundcover following fire will concentrate birds in small refuge areas, exposing them to an increased risk of predation.
Introduced plants	 Introduced plants degrade and/or modify habitat through competition and exclusion of native species.
Pathogens and disease	
Phytophthora	• Die-back caused by the introduced root-rot fungus <i>Phytophthora cinnamomi</i> is a direct threat to Eastern Bristlebird habitat.
Population dynamics	
Loss of genetic diversity	 The Eastern Bristlebird is ranked as 'very high' on the Genetic Risk Index, indicating low genetic health of the species.
Small population size	• The small population size can lead to inbreeding and loss of genetic diversity. Populations are restricted to small, isolated habitat patches where low genetic diversity and susceptibility to extreme events (e.g., fires, disease and drought) limit population recovery.
	• The species is limited to a single small breeding population in Victoria, which places it at greater risk of significant impact from localised stochastic events. The recently translocated population at Wilson Promontory is extremely small and the birds have not yet begun to breed.

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, increase genetic fitness and minimise future population decline
- Increase the Eastern Bristlebird range and/or extent.
- Establish at least one new viable population.
- Improve community awareness of the Eastern Bristlebird and conservation of its restricted 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 <u>NatureKit</u>.

Action	Description
Avoid and/or mitigate impacts associated with fire management	 Ensure that species distribution data and ecological information are 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.
Control herbivores *	Implement effective management and control of introduced herbivores.Control the impacts of herbivory in recently burnt habitat.
Control introduced predators *	Implement effective management and control of introduced predators.
Ex-situ management	 Assess the need for a Victorian captive breeding program to support the species' recovery.
Identify and protect key habitat	 Refine Eastern Bristlebird habitat mapping to facilitate the identification of other potentially suitable habitat. Avoid works that disturb the Eastern Bristlebird habitat (e.g., roading, construction and slashing of native vegetation).
Increase genetic diversity	 Implement a genetic management plan to achieve a genetically resilient population through targeted genetic mixing among populations. Investigate the viability of a genetic augmentation project for the extant population at Croajingolong National Park.

Action	Description
Mitigate pathogens and disease risk	 Implement biosecurity protocols when undertaking works in known habitat to minimise the spread of <i>Phytophthora cinnamomi</i>.
Monitor populations	 Continue to monitor the released birds at Wilsons Promontory, collecting data on survival, breeding success, increased genetic diversity and spatial extent.
	 Undertake detailed population monitoring across both populations to establish accurate population trends.
	 Following future bushfire, monitor post-fire habitat extent, quality, connectivity, and refugia.
	 Monitor emerging threats including habitat damage by invasive species.
Research	 Identify and address specific knowledge gaps to ensure accurate understanding of threats, population trends and required management actions.
Translocation	Using monitoring data, determine whether further supplementation is needed.

*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
Conservation planning	 The National Recovery Plan for the Eastern Bristlebird was published in 2012 and reviewed in 2021. The Ecological Fire Management Plan for Eastern Bristlebird in Far East
	Gippsland was produced in 2019.
Genetic studies	 Genetic assessment of Eastern Bristlebirds from Howe Flat, Croajingolong National Park, was undertaken while bushfire-rescued birds were held by Zoos Victoria. A further 27 birds were sampled in 2020.
	 Genetic assessment of birds following the 2019-20 bushfires indicated the Cape Howe population has reduced genetic diversity and high degrees of relatedness between individuals.
Implement ex-situ management	 Following the 2019-20 fires, a small population was rescued from Howe Flat and held in temporary housing with birds returned to the wild in April 2020.
Introduced species management	• Fox and deer control was undertaken, including aerial control of invasive herbivores (e.g., deer) and predators (e.g., foxes, cats) after the 2019/2020 fires.
	Weed management was undertaken.
Monitoring	 Population monitoring protocols were developed, and long-term annual surveys continue to be undertaken of the extant population at Howe Flat.
	 Habitat mapping has been undertaken at Croajingolong National Park and Wilsons Promontory National Park.
Translocation	 A translocation plan was developed, and in April 2022, 17 birds were sourced from Jervis Bay and Booderee National Park in NSW and transported to Wilsons Promontory. This was the first step in a three-year project to build resilience by establishing a population at Wilsons Promontory. The 17 translocated birds at Wilsons Promontory continue to be monitored.
	• The Tr translocated birds at Wilson's Fromoniory continue to be monitored.

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:

- <u>Choosing actions for nature: NatureKit</u>
- Biodiversity Knowledge Framework

Further Information

- Eastern Bristlebird Species Forecast Report
- <u>Threatened Species Assessment Report Eastern Bristlebird (Dasyornis brachypterus)</u>
- Commonwealth Species Profile and Threats database
- <u>Victorian Bushfire Biodiversity Response and Recovery</u>
- Victorian Deer Control Strategy
- Victoria's changing climate understanding the impacts of climate change in Victoria
- Genetic Risk Index
- <u>Commonwealth Threat Abatement Plans</u>
- 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 / owner permissions, options and incentives for private land conservation, and engagement with Traditional Owners and public land managers here: <u>Action statements</u> (environment.vic.gov.au)

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 <u>threatened.species@deeca.vic.gov.au</u>

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> <u>Biodiversity 2037</u>.
- 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 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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