

Action statement

Flora & Fauna Guarantee Act 1988

Masked Owl (*Tyto novaehollandiae*)

Taxon ID: 10250

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



Masked Owl. Image from Tony Mitchell.



This habitat distribution model displays the indicative range of the Masked Owl based on occurrence records and likely habitat. See [NatureKit](#) for an interactive map. The Masked Owl 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 Masked Owl 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: [IUCN Red List criteria](#).

Species Information

Species information such as its description, distribution, ecology and references are provided in in the [Masked Owl Species Forecast Report](#).

Threats

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

Threat	Description
Habitat loss, degradation or modification	
Forestry operations	<ul style="list-style-type: none"> Timber harvesting operations in native forest may remove hollow-bearing trees, exacerbating the rate of decline of this key habitat feature. Timber harvesting operations in native forest may also impact mid-storey vegetation which supports prey.
Vegetation clearing or damage	<ul style="list-style-type: none"> Removal or damage to vegetation contributes to habitat loss, resulting in a more fragmented landscape with fewer mature paddock trees, fewer nest sites, and lower prey availability.
Climate change	
Increased frequency and/or length of droughts	<ul style="list-style-type: none"> Drying and warming of the environment, including droughts, may trigger habitat changes and reduce prey availability, reducing recruitment and leading to elevated mortality rates.
Fire	
Altered fire regimes	<ul style="list-style-type: none"> A hotter, drier climate may increase the likelihood, frequency, and/or intensity of fire impacting habitat, with the potential to reduce habitat extent and/or condition. Fire may reduce the availability of hollows for roosting and nesting through hazardous tree removal or the direct impacts of fire. Fire may also reduce abundance of ground dwelling prey and mid-storey prey. Impacts depend on size and scale of fire. Nests within dry forest types are vulnerable to intense fire.
Bushfire	<ul style="list-style-type: none"> Bushfires can result in mortality and habitat degradation. Important impacts can include the loss of key habitat features and food sources.
Fire management activities	<ul style="list-style-type: none"> Fire management operations such as creation of fuel breaks (soil disturbance, slashing) may remove habitat.
Introduced species	
Deer	<ul style="list-style-type: none"> Introduced deer species such as Sambar Deer (<i>Cervus unicolor</i>) degrade habitat through herbivory, antler-rubbing, trampling, pugging of wet soils, increasing nutrient loads, erosion of waterway edges, and increasing the accessibility of habitat to introduced predators and introduced plants.
Introduced predators	<ul style="list-style-type: none"> Introduced predators (foxes (<i>Vulpes vulpes</i>) and feral cats (<i>Felis catus</i>)) contribute to mortality of native prey species, reducing food availability.
Human disturbance	
Firewood collection	<ul style="list-style-type: none"> Firewood collection can result in disturbance and damage to habitat, limiting prey availability.
Road traffic	<ul style="list-style-type: none"> Individuals may suffer injury or direct mortality through collisions with road traffic. Masked Owls are over-represented in road carrion in Australia.

Threat	Description
Population dynamics	
Loss of genetic diversity	<ul style="list-style-type: none"> Small, 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. At a population level, loss of genetic diversity may reduce the capacity to adapt to changing conditions.
Pollutants and toxicants	
Pesticide use	<ul style="list-style-type: none"> Ingestion of prey containing chemicals such as anti-coagulant rodenticides can lead to toxic effects and mortality.

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 knowledge of biology, ecology, distribution, demography, emerging threats, and conservation requirements.
- Support community participation and improve awareness of the Masked Owl 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 [NatureKit](#).

Action	Description
Avoid and/or mitigate impacts associated with fire management	<ul style="list-style-type: none"> 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.
Community engagement and awareness	<ul style="list-style-type: none"> Engage citizen scientists in information gathering to inform improved management for the Masked Owl. Continue to identify, promote, and support opportunities for community involvement in conservation efforts and behaviours that support a healthy environment. Work with key stakeholders to reduce threats from human disturbance, including the impacts of rodenticides.
Compliance and enforcement	<ul style="list-style-type: none"> Undertake risk-based compliance and enforcement activities to limit the impacts of illegal firewood collection to the Masked Owl.

Action	Description
Conservation management planning	<ul style="list-style-type: none"> Work with key stakeholders to prepare an action statement for the potentially threatening process <i>Poisoning of native wildlife by anticoagulant rodenticides</i>.
Control deer *	<ul style="list-style-type: none"> Implement and maintain effective control of deer in priority areas.
Control introduced predators *	<ul style="list-style-type: none"> Implement and maintain effective control of feral cats and foxes in priority areas.
Develop, update and apply forestry protections	<ul style="list-style-type: none"> Maintain prescriptions for the Masked Owl under the <i>Code of Practice for Timber Production 2014 (as amended in 2022)</i> (the Code). Where relevant, incorporate species-specific protection measures into plans and permits relating to timber harvesting operations in native forest on private land. Apply the following additional permanent protection as recommended in the Victorian Government Threatened Species and Communities Risk Assessment (TSCRA): <ul style="list-style-type: none"> <i>Forest zoning amendment:</i> <ul style="list-style-type: none"> Consider removing the current cap on the number of Masked Owl Management Areas (MOMAs) in East Gippsland to establish one for every pair with a verified detection. Consideration should be given to more explicit specification of minimum habitat requirements within each MOMA. Establish and actively maintain a network of special protection zones and special management zones in State Forest in accordance with the requirements for the Masked Owl in the Department of Energy, Environment and Climate Action's (DEECA) accountability framework.
Protect key habitat	<ul style="list-style-type: none"> Identify opportunities to manage threats of land use change and development, including programs to encourage protection and management of remaining habitat.
Research	<ul style="list-style-type: none"> Review existing special protection zones and special management zones to determine their effectiveness in terms of large forest owl occupation. Determine suitable nest box or artificial hollow design for Masked Owls. Investigate and trial artificial hollows in areas where natural hollows are lacking or in decline.
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.
Survey and Monitoring	<ul style="list-style-type: none"> Monitor the impact of threats to inform management interventions. Assess the impact of secondary poisoning on Masked Owls. Monitor populations at known sites and other suitable locations to identify nest/roost sites and protect key 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
Avoid and/or mitigate impacts associated with fire management	<ul style="list-style-type: none"> Developed a comprehensive Natural Values tool for use by land managers dealing with fire or potentially disruptive processes affecting FFG listed items and other significant natural values. The tool is a spatial representation of Natural Values and supplied to land managers in both electronic and hard copy formats. The objective is to minimise the impact of land management activities (including fire suppression) on these items. Protected Masked Owl habitat from intense and frequent burning. Protected nest and roost trees (where possible) from fire.
Develop, update and apply forestry protections	<ul style="list-style-type: none"> The risk of forestry operations was assessed for the Masked Owl in 2020 under the Victorian Government TSCRA. Additional permanent protections were recommended in 2022 and are being implemented. The Masked Owl has current species-specific prescriptions in the Code requiring the application of a protection area and management area around recently and frequently used nesting or roosting sites unless already protected. A network of special protection zones and special management zones has been established in State Forest in accordance with the requirements for the Masked Owl in DEECA's accountability framework.
Research	<ul style="list-style-type: none"> Dietary studies have been undertaken. Investigation of home ranges and use of habitat in a variety of habitat types. Distribution of Masked Owls has been modelled. Telemetry studies undertaken to determine dispersal and recruitment of young birds into the established population.
Survey and monitoring	<ul style="list-style-type: none"> Conducted large forest owl surveys in conservation reserves of East Gippsland. Field surveys undertaken at priority locations to establish the distribution of individuals and breeding pairs as well as key habitat features (e.g., roosting and breeding sites). Conducted targeted surveys across all land tenures in western Gippsland Plains to locate as many resident pairs of Masked Owls as possible across land tenures throughout the main range of the species, focusing on lowland forests south of the Great Divide. Assessed post-fire status of populations using spotlighting and call playback. Assessed critical habitat features to identify habitat quality and inform management actions. Prioritised areas for protection from future fires and salvage harvesting.

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

- [Masked Owl Species Forecast Report](#)
- [Threatened Species Assessment report – Masked Owl \(*Tyto novaehollandiae*\)](#)
- [Commonwealth Species Profile and Threats database](#)
- [Threatened Species and Communities Risk Assessment](#)
- [Code of Practice for Timber Production 2014](#)
- [Victoria's changing climate – understanding the impacts of climate change in Victoria](#)
- [Commonwealth Threat Abatement Plans](#)
- [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](#).

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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