Action statement

Flora & Fauna Guarantee Act 1988

Alpine She-oak Skink (Cyclodomorphus praealtus)

Taxon ID: 12987

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



Alpine She-oak Skink. Image by Nick Clemann.



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

Conservation Status

Critically Endangered

Listing criteria: 3.1.1 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.

Corresponding International Union for the Conservation of Nature (IUCN) criteria: A3ce.

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 Alpine She-oak Skink Species Forecast Report.

Threats

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

Threat	Description
Human disturbance	
Development, construction and infrastructure	 Development, creation and/or expansion of car parks, and creation and/or widening of walking tracks and campsites can also destroy and fragment habitat. Clearing, slashing, trampling and/or flattening of vegetation, disturbance of rock associated with grooming ski runs can destroy and/or degrade habitat. This is of particular concern at Mt Hotham where developments are occurring very close to Alpine She-oak Skink known habitat.
Ground disturbance	 Disturbance of natural rock features by people searching for reptiles and creating rock stacks degrades habitat.
Recreational activities – horse-riding	 Recreational horse-riding can destroy and degrade habitat. This is particularly problematic on the Bogong High Plains.
Road and track construction or maintenance	 Creation and widening of roads, tracks and walking trails facilitates movements by invasive predators.
Climate change	
Altered snow cover and duration, rainfall and temperature regimes	 Alpine She-oak Skinks have particular habitat requirements, including specific vegetation structure and over-wintering habitat parameters. These can be significantly affected by reduced snow cover and duration. Alpine She-oak Skinks typically have little or no scope for uphill migration as the climate changes. Climate change can also result in native and invasive species that previously did not occur at these elevations invading Alpine She-oak Skink habitat. These incursions can result in competition, elevated predation rates, changes to habitats
	and the introduction of diseases.
Fire	
Altered fire regimes	 Because Alpine She-oak Skinks frequently shelter in ground-level vegetation, fire may cause direct mortality and degrade habitat, exposing animals to predation. Rates of post-fire vegetation succession in the habitat are comparatively slow, so post-fire vegetation may be unsuitable or suboptimal for long periods.
Introduced species	
Deer and feral pigs	 Grazing, trampling and wallowing by deer, particularly Sambar (Cervus unicolor) and feral pigs (Sus scrofa) damage and degrade habitat.
Feral horses	 Grazing and trampling by feral horses (Equus caballus) causes severe damage to the vegetation structure and soil in the habitat of the Alpine She-oak Skink, particularly on the Bogong High Plains and the eastern alps.
Foxes	• Predation by foxes (Vulpes vulpes) is likely to lead to a direct loss of individuals.

Threat	Description
Weeds	 Weeds, in particular Orange Hawkweed (<i>Hieracium aurantiacum</i>) and potentially Mouse-ear Hawkweed (<i>H. pilosella</i>), degrade and/or modify habitat through competition and exclusion of native species. Introduction and proliferation of weeds is worsened by the presence of invasive large herbivores, such as feral horses and deer, and by recreational horse-riding.
Population dynamics	
Loss of genetic diversity	 Some populations are at high risk of decline or extinction without genetic intervention.

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 and minimise future population decline
- Continue to increase knowledge of biology, ecology, distribution, demography, emerging threats, and conservation requirements.
- Support community participation and improve awareness of the Alpine She-oak Skink and conservation of alpine environments.

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	De	scription
Community engagement and awareness	hal	gage with landholders and land managers on areas of the skink's suitable bitat, particularly alpine resorts, and encourage implementation of conservation tions.
		ise community awareness of the species and the conservation of alpine vironments.
Control feral horses *	Ac	plement the Parks Victoria 'Protection of the Alpine National Park Feral Horse tion Plan', and specifically, deliver the output of removing all feral horses from a Bogong High Plains.
		far as possible, remove feral horses from the range of the Alpine She-oak Skink bitat.
Control other introduced animals *		plement effective management and control of foxes and deer such that impacts the Alpine She-oak Skink are negligible.
		plement effective management and control of feral pigs from Alpine She-oak ink habitat.

Action	Description
Control weeds *	 Implement effective management and control of weeds within Alpine She-oak Skink habitat, in particular Orange Hawkweed and Mouse-ear Hawkweed.
Develop, update and apply forestry protections	 Maintain prescriptions for this species under the Code of Practice for Timber Production 2014 (as amended in 2022) (the Code).
	 Where relevant, incorporate species-specific protection measures into plans and permits relating to timber harvesting operations in native forest on private land.
Ex-situ management	Continue the captive breeding program run by Zoos Victoria.
Identify and protect key habitat	 Avoid activities that destroy, disturb, or degrade native vegetation, rock, soil, and water bodies in all Alpine She-oak Skink habitat (e.g., roading, construction, slashing native vegetation, creation or expansion of campsites, and impacts from domestic horse riding).
	 Explore options to minimise or remove recreational horse-riding from Alpine She- oak Skink habitat.
Research	 Increase knowledge and mitigation of impact of invasive herbivores on Alpine Sheoak Skink.
	 Assess the impact of predation by foxes, cats and rats through analysis of scats and stomach contents.
Survey and monitoring	 Continue long-term survey and monitoring program for Alpine She-oak Skink established in 2005.

^{*}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
Control feral horses	 Parks Victoria removes feral horses from the Bogong High Plains and Victoria's eastern alps.
Develop, update and apply forestry protections	 The Alpine She-oak Skink has a current species-specific prescription in the Code: In the North East Forest Management Areas: Develop management actions to protect Alpine She-oak Skink habitat at sites occupied by at least 1 observed individual. Document and provide to the Secretary a proposed plan for the value management area.
Ex-situ management	 Captive husbandry has been developed and an ex-situ population established at Zoos Victoria for research, breeding and public display.
Genetic analysis	 Two genetic studies have been recently published, in 2021 and 2022. The latter study covers the species' entire known range.
Introduced species management	 Fox management and control have been undertaken since 2011. Cat control has been undertaken since 2017. Deer control has been undertaken since 2015.

Past action	Description
Research	 To date, studies have been conducted and data collected on key areas including genetics, diet, reproduction, response to invasive herbivores, response to severe fire, and survey and monitoring methods.
Survey and monitoring	 There has been an ongoing survey, monitoring, and research program in Victoria since 2005. In recent years a long-term monitoring program for this species was also established in NSW, concurrent with a PhD project investigating impacts on Alpine She-oak Skink of invasive herbivores and severe fire.

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

- Alpine She-oak Skink Species Forecast Report
- Threatened Species Assessment report Alpine She-oak Skink (Cyclodomorphus praealtus)
- Code of Practice for Timber Production 2014
- Victoria's changing climate understanding the impacts of climate change in Victoria
- Victorian Deer Control Strategy
- Protection of the Alpine National Park Feral Horse Action Plan 2021
- Commonwealth Threat Abatement Plans
- Genetic Risk Index
- Victorian Bushfire Biodiversity Response and Recovery
- Commonwealth Species Profile and Threats database
- 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: Action statements (environment.vic.gov.au)

To identify the relevant Traditional Owners, use the <u>Aboriginal Cultural Heritage Register and Information System (ACHRIS) Welcome to Country and Acknowledgements Map.</u>

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 <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, 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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