Action statement

Flora & Fauna Guarantee Act 1988

Wellington Mint-bush (Prostanthera galbraithiae)

Taxon ID: 503928

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



Wellington Mint-bush. Image by Marcia Riederer.



This habitat distribution model displays the indicative range of the Wellington Mint-bush based on occurrence records and likely habitat. See <u>NatureKit</u> for an interactive map.

Conservation Status

Endangered

Listing criteria: 4.1.1; 4.1.2(a),(b)(i,ii,iii,iv,v),(c)(iv);4.1.3(a),(b)(iii) of the Flora and Fauna Guarantee Regulations 2020.

This means that:

- the Wellington Mint-bush has undergone, is suspected to have undergone, or is likely to undergo in the immediate future, a severe reduction in population size; and
- its geographic distribution is highly restricted; and
- the distribution of the population or habitat is severely fragmented; 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 number of mature individuals; and
- there are extreme fluctuations in the numbers of mature individuals; and
- the total number of mature individuals is low, the number is likely to continue to decline at a very high rate, and there are extreme fluctuations in the number of mature individuals.

Corresponding International Union for the Conservation of Nature (IUCN) criteria: A3ce+4ace;

B1ab(ii,iii,iv,v)c(iv)+2ab(ii,iii,iv,v)c(iv); C1+2b

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>Wellington Mintbush Species Forecast Report</u> and <u>VicFlora</u>.

Threats

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

Threat	Description
Fire	
Altered fire regimes	 Either over-frequent or infrequent fire may lead to population decline and alter vegetation structure and habitat quality. Fire intervals of less than 10 years may limit soil seed bank replenishment, and fire intervals greater than 20 years may diminish seedbank persistence. Low fire intensity may also limit germination of soil stored seed.
	 A hotter, drier climate may increase the likelihood or frequency of fire impacting Wellington Mint-bush habitat, with the potential to reduce habitat quality and/or extent.
Fire management activities	 Fire management operations such as creation of fuel breaks (soil disturbance, slashing) can cause mortality of individuals and reduce regeneration.
Introduced species	
Introduced herbivores	 Browsing by Sambar Deer (Cervus unicolor), Fallow Deer (Dama dama), Hog Deer (Axis porcinus), Chital Deer (Axis axis) and rabbits (Oryctolagus cuniculus) can lead to mortality of seedlings and reduce regeneration capacity of mature plants.
Introduced plants	 Competition from introduced plants including Ragwort (Senecio jacobaea), Radiata Pine (Pinus radiata) wildings, Fleabane (Erigeron spp.), Red-ink Weed (Phytolacca octandra) and Mullein (Verbascum spp.) may pose a threat, particularly following soil disturbance.
Native species	
Mammals	 Browsing by macropods including Black-tailed Wallaby (Wallabia bicolor) and Eastern Grey Kangaroo (Macropus giganteus) can cause mortality for seedlings and result in recruitment failure or highly compromised adult vigour and seed set.

Threat	Description
Problematic native plants	 Forest Burgan (Kunzea sp.) and Bracken (Pteridium esculentum) have the potential to outcompete Wellington Mint-bush in the Holey Plains State Park. Bracken increases dramatically in response to over-frequent fire and may have contributed to the local extinction of at least one sub-population.
Climate Change	
Increased frequency and/or length of droughts	 Drought conditions reduce plant vigour, reduce seed set and expose the species to increasing grazing pressure. Prolonged and extreme drought stress may lead to mortality and recruitment failure.
Human disturbance	
Construction, development and/or infrastructure	 Changes to pipeline easements or construction of new pipelines and easements within the Holey Plain state park may impact Wellington Mint-bush populations or habitat through impacts to individuals and/or habitat fragmentation, loss, modification or damage.
Recreational activities	 Off-track trail and mountain bike use threatens plants within the Holey Plains State Park.
Road and track construction or maintenance	 Roadside populations are vulnerable to direct physical damage, and indirect disturbance from run-off, soil erosion, weed and pathogen introduction, during road maintenance and fire suppression.
Trampling by humans	 Recreational visitors may trample plants with potential for damage to or loss of individuals.
Vandalism	 Removal of gates from herbivore exclusion areas has occurred at sites in the past leading to heavy browsing of plants.
Population dynamics	
Fragmentation	Wellington Mint-bush is severely fragmented at the landscape scale.
Loss of genetic diversity	 Low population size and fragmented subpopulations may result in reduced genetic fitness and reduced ability of the species to adapt to changes in the environment.
Pollutants and toxicants	
Pesticides	 Spray drift from aerial herbicides used in nearby pine plantations may damage some populations of Wellington Mint-bush.

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 Wellington Mint-bush's range and/or extent, by providing opportunities for natural movement.

- Increase knowledge of biology, ecology, distribution, demography, emerging threats, and conservation requirements.
- Support community participation and improve awareness of the Wellington Mint-bush.

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	 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.
Collect and store reproductive material	 Undertake appropriate seed collection for long-term storage. Ensure that adequate supply and genetic diversity is secured for future reintroduction, and that essential information (such as dormancy) is known.
Community engagement and awareness	 Provide up to date species maps to contractors working in sites where Wellington Mint-bush occurs.
	 Raise awareness of Wellington Mint-bush and the importance of protecting its habitat with land managers and recreational users.
	 Engage with plantation managers where the species is known to occur adjacent to plantations, to support the species' recovery.
Compliance and enforcement	 Undertake risk-based compliance and enforcement activities to limit the impacts of human disturbance to the species.
Control introduced herbivores*	Implement effective management and control of deer and rabbits.
Control introduced plants*	Implement effective management and control of introduced plants.
Ecological fire regime	 Implement fire management actions that promote an ecologically appropriate fire regime for the Wellington Min-bush.
Establish and maintain fencing	Erect and/or maintain fencing and/or cages to protect key subpopulations of Wellington Mint-bush from the impacts of herbivory.
Ex-situ management	Maintain ex-situ living collection, including mature plants with representation from each known locality.
Manage problematic native plants	 Implement effective management and control of Burgan and Bracken if required.
Manage road and track works	 Avoid damage during road works using appropriate temporary on-site signage and mapping and data checking in advance of on-ground works.

Action	Description
Research	 Undertake research investigating the density, distribution, movement patterns and dietary preferences of the herbivores responsible for browsing Wellington Mint-bush, particularly in response to fire.
	 Investigate options for linking, enhancing or establishing additional populations.
	 Undertake research into the genetic risks and management options for Wellington Mint-bush to promote the species' recovery.
Survey and monitoring	Undertake post-fire distribution mapping.
	 Maintain a monitoring program of all populations to assess population demography, habitat condition and threats.
	Continue to monitor translocated populations at Dutson Downs.

^{*}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
Collect and store reproductive material	 Seed has been collected and stored in the Victorian Conservation Seedbank at the Royal Botanic Gardens Victoria.
Community engagement and awareness	 Wellington Mint-bush included in presentations to key groups such as Field Naturalists and Landcare Groups.
Control introduced plants	 Control of introduced plants was undertaken at Holey Plains State Park and Dutson Downs.
Develop, update, and apply forestry protections	 The risk of forestry operations was assessed for this species in 2020 under the Victorian Government Threatened Species and Communities Risk Assessment. Additional permanent protections were not found to be required.
Ecological fire regime	 Ecological burning has been undertaken at a number of sites within Holey Plains State Park.
Establish and maintain fencing	 Nine browsing exclusion plots have been established and/or maintained in Holey Plains State Park to protect sites with a high population count from over browsing by wallabies.
	 Two fenced plots were established to protect plants at Dutson Downs from browsing by native and introduced herbivores in 2012.
	 Browsing exclusion cages were established to protect translocated plants at the two new sites at Dutson Downs in 2019.
Fire regimes	 Research was undertaken into the tolerable fire interval of the Wellington Mint- bush.
Manage problematic native plants	 Burgan control has occurred in Holey Plains State Park within some fenced plots.
Manage road and track works	 Signage and exclusion zones have been implemented for on-ground for roading works within Holey Plains State Park.

Past action	Description
Survey and monitoring	 Field inspection of wild plants has been undertaken periodically at Holey Plains and Dutson Downs.
	 Annual demographic monitoring of translocated populations has been undertaken at Dutson Downs since 2019.
Translocation	 Reintroductions have been undertaken at two new sites at Dutson Downs in 2019 using plants propagated from seed collected within the site.

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

- Wellington Mint-bush Species Forecast Report
- Threatened Species Assessment report Wellington Mint-bush
- Commonwealth Species Profile and Threats database
- Threatened Species and Communities Risk Assessment
- Victoria's changing climate understanding the impacts of climate change on Victoria
- Commonwealth Threat Abatement Plans
- Genetic Risk Index
- 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 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: <u>Action</u>Statements (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 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 Biodiversity</u> 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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