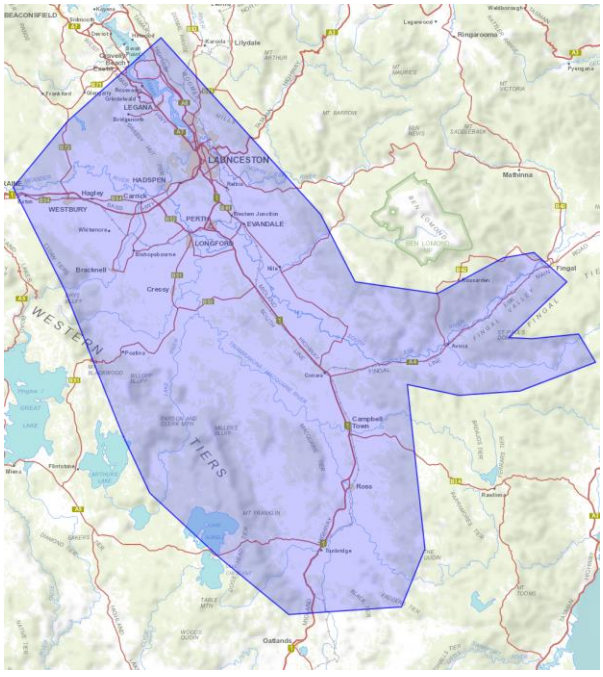
The amazing orchids of the Tasmanian Midlands

Where can they be found?

The Midlands Region of Central Tasmania, identified as one of 20 Priority Places in the *Australian Government's* *Threatened Species Action Plan 2022-2032*, is home to 32 nationally listed threatened species and over 180 plants and animals that are considered threatened in Tasmania.

The native grasslands and grassy woodlands found in this region support exceptionally high levels of biodiversity and are also home to several threatened orchid species found nowhere else in the world.



Map of central Tasmania showing core project target area (blue polygon).

Leek orchids *Paraprasophyllum* (syn Prasophyllum) are so named due to their erect, hollow leaf resembling a leek. They grow from small, fleshy tubers with a few irregular roots and are typically dormant in summer and autumn, beginning growth in early winter.

Three species of leek orchid found in the Midlands are listed as critically endangered under the *Environment Protection and Biodiversity Conservation (EPBC) Act 1999*: Graveside leek-orchid (*P. taphanyx*), Golfer's leek-orchid (*P. incorrectum*), and Pungent leek-orchid (*P. olidum*).

Pungent leek-orchid. Photo credit: Geoff Curry

A related species, the Tunbridge leek-orchid (*P. tunbridgense*), is also listed as endangered.

Other threatened orchids that can be found in this region include the black-tipped spider

Australian Government

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Midlands Conservation Partnership

Bush Heritage Australia

LANDSCAPE RECOVERY FOUNDATION

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orchid *Caladenia anthracina*, Midlands greenhood *Pterostylis commutata,* and fleshy greenhood *Pterostylis wapstrarum.*

The Landscape Recovery Foundation coordinates the Tasmanian Orchid Conservation and Research Program (TOCRP), which aims to improve the conservation status of threatened orchids through research and conservation activities both in the midlands and in their facilities at the Royal Tasmanian Botanical Gardens.

THREATS	IMPACTS	MANAGEMENT ACTION
Over-visitation of sensitive sites	• Spreading weed seeds or fungal diseases such as phytophthora into sensitive areas. • Potential trampling of threatened species. • Soil compaction from foot traffic may reduce aeration and water infiltration. • Excessive or inappropriately timed mowing or recreational use of land occupied by orchids can disrupt reproduction.	• Follow LRF's principles of ethical photography. • Don't share location information of sensitive sites. • Watch your step and limit your footprint. • Follow management plans put in place to protect sensitive sites. • Ensure your boots and equipment are clean.
Land clearance and conversion (e.g. cropping, shelterbelts, pasture, urban expansion)	• Eliminates vegetation and disturbs seedbank. • Can increase or create soil erosion. • Dams can flood lowland grasslands, impacting orchids and other threatened species habitat. • Loss of habitat for orchids and important pollinator species. • Fragmented habitat is more susceptible to further degradation. • Modification to landscape can disrupt natural water flows. • Clearing of native vegetation can increase dryland salinity. • Plantations, shelterbelts and other plantings dominated by trees and shrubs replace natural grasslands.	• Identify high conservation value areas, minimise disturbance and implement buffer zones to maintain connectivity. • Revegetate areas that aren't utilised for farm practice and create corridors for wildlife by connecting existing remnant vegetation. • Retain understorey plants and fallen logs. • Ensure maintenance activities and infrastructure development don't have an adverse impact on threatened species habitat. • If you are planning to convert land that could contain threatened flora and/or fauna you must seek advice from the Commonwealth's Environment Department (EPBC section).
Pasture improvement, fertiliser and herbicide application	• Herbicides can degrade or destroy native grasslands and orchid and injure species such as frogs and insects. • Pesticide/herbicide spray drift from crops and pastures can lead to dieback in adjacent native vegetation that are home to threatened species.	• Avoid application of fertilisers in or near high conservation value areas. • If using broad scale herbicide application, such as boom spraying, include a buffer zone between the application area and remnant vegetation.

THREATS	IMPACTS	MANAGEMENT ACTION
Pasture improvement, fertiliser and herbicide application	• Fertilisers, particularly those high in phosphorus, can give exotic species a competitive advantage over natives, and can even be toxic to some species.	• Adopt targeted weed control methods, such as spot spraying, manual removal and burning. • If controlling weeds in native vegetation, use only targeted approaches and minimise herbicide use.
Exotic weeds and introduced pest animals	• Weeds may outcompete native plants for water, nutrients and space. • Woody weeds provide cover for pest animals such as cats, rabbits and deer and can increase fire intensity. • Introduced herbivores severely impact native vegetation through additional browsing, grazing and excessive soil disturbance and compaction, while feral cats predate on threatened fauna species.	• Develop, and implement long-term management plans for controlling invasive weeds and pests and preventing new introductions and infestations. • Remove invasive weeds, and, if necessary, replant or sow local native species. • Implement control measures for feral animals i.e. deer and rabbit culling. Avoid using poison baits in areas inhabited by bandicoots and other native species.
Heavy grazing	• Leads to severe vegetation degradation, and the loss of native species, particularly threatened species. • Once degraded these areas require a long rest period for recovery. • Can lead to soil compaction and decrease water infiltration into the soil and limits future growth. • Can accelerate weed invasion and soil erosion.	• Develop a grazing regime that is suited to the carrying capacity of your land. • Spell grazing on native grasslands to prevent excessive grazing and promote healthy growth. • Maintain native vegetation to improve soil carbon stocks and water retention.
Inappropriate use of fire	• Insufficient burning can limit species diversity by allowing dominant tussock grasses to outcompete wildflowers, herbs and short grasses. • Burning too regularly, too hot, or at the wrong time of year can lead to loss of sensitive native species and encourage incursion by weeds. • Reduces the productivity of the grasslands for stock and native animals.	• Include strategic ecological fire regimes in management plans in consultation with experts such as Red Hot Tips. • Spell area from stock post-fire to promote native vegetation regrowth.

MORE INFORMATION?

To learn more about how NRM North are improving Midlands biodiversity or to get involved, visit nrmnorth.org.au or contact NRM North at: admin@nrmnorth.org.au or call 6333 7777.

If you would like advice on managing habitat for native orchids, contact the Landscape Recovery Foundation at info@landscaperecovery.org

For information on managing threatened vegetation communities, contact Tasmanian Land Conservancy or Bush Heritage Australia at: mcp@tasland.org.au and refer to the additional resources below.

Paraprasophyllum incorrectum (golfers leek orchid). Photo credit: Geoff Curry.

FURTHER READING:

K. Mokany, D. Friend, J. Kirkpatrick and L. Gilfedder (2006). Managing Tasmanian Native Pastures - A Technical Guide for Graziers. University of Tasmania.

Improving Midlands biodiversity: stewardship and restoration (2025) NRM North.

Reviving Tasmania's lowland native grasslands: pathways to conservation (2025) NRM North.

Reviving Eucalyptus ovata and E. brookeriana woodlands: pathways to conservation (2025) NRM North.

N. Davidson (2022). Restoration of the Tasmanian Midlands.

Threatened Species Action Plan 2022-2032, Australian Government

Midlands Conservation Partnership - Tasmanian Land Conservancy (2024) *Tasmanian Land Conservancy .* (Accessed: 27 November 2024).

J.B. Kirkpatrick and L.A. Gilfedder (1999). Tasmanian Bushcare Toolkit: a guide to managing and conserving the bushland on your property. Government of Tasmania.

Tasmanian Midlandscapes Project (2023) *Bush Heritage Australia.* (Accessed: 27 November 2024).

Tasmanian Orchid Conservation and Research Program Strategic Plan 2022-2027, Landscape Recovery Foundation.