

SPECIES MANAGEMENT PROFILE

Isoetopsis graminifolia grass cushion

Group: Magnoliophyta (flowering plants), Magnoliopsida (dicots), Asterales, Asteraceae

Status: *Threatened Species Protection Act 1995*: vulnerable
Environment Protection and Biodiversity Conservation Act 1999: Not listed

Endemic: Found in Tasmania and elsewhere

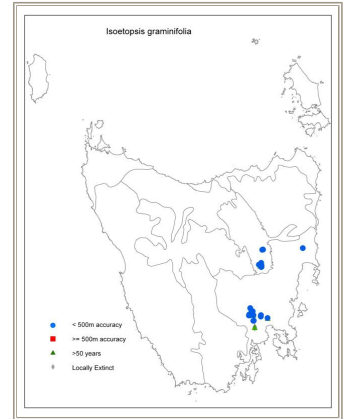
Status:



Grass cushion (*Isoetopsis graminifolia*) is a diminutive annual herb in the Asteraceae (daisy) family. Grass cushion is found across Australia where it is reportedly widespread and common. In Tasmania it has a disjunct distribution, with around 15 extant localities in the northern and southern Midlands. The species grows in native grasslands dominated by *Themeda triandra* (kangaroo grass) or on rockplates. Land clearance for agriculture, light industry and urban expansion pose the greatest threat to the species. The threat to potential habitat is exacerbated by the ephemeral nature of the species as plants may not emerge or only emerge in low numbers in unfavourable years, evading detection during impact assessment surveys. Additional threats to the species include over-grazing, weed invasion and a lack of disturbance.

Key Points

- **Important:** Is this species in your area? Do you need a permit? Ensure you've covered all the issues by checking the Planning Ahead page.
- **Important:** Different threatened species may have different requirements. For any activity you are considering, read the Activity Advice pages for background information and important advice about managing around the needs of multiple threatened species.



Habitat

- 'Habitat' refers to both known habitat for the species (i.e. in or near habitat where the species has been recorded) and potential habitat (i.e. areas of habitat with appropriate characteristics for the species and within the species potential range which have not yet been surveyed).
- If in doubt about whether a site represents potential habitat for this species, contact the Threatened Species Section for further advice.
- The known range of grass cushion includes disjunct localities in the northern and southern Midlands. The potential range of grass cushion is unlikely to extend further than the current known range, however there is a reasonable likelihood that additional sites will be discovered within the species known range given a well resourced and targeted survey effort. Areas of native vegetation that have supported the species in the past also remain potential habitat due to the probable presence of dormant soil-stored seed.
- Habitat for grass cushion corresponds to 'lowland grassland' in the NRE Bushcare Toolkit. See Grassy Bush in the Bushcare Toolkit for more information on managing this vegetation types.
- Habitat for grass cushion includes the following elements: native grasslands dominated by kangaroo grass or on rockplates; the underlying substrate mostly Tertiary basalt or Jurassic dolerite; elevation range of recorded sites in Tasmania is 20 to 360 m above sea level, with an annual rainfall of about 450 to 600 mm.
- Note that grass cushion requires some level of disturbance to create open ground to germinate, which may be prevented if tussock grasses become rank.

What to avoid

- Clearing of habitat for agriculture, light industry and urban expansion
- Overgrazing of habitat
- Infestation of habitat by weeds
- Lack of suitable disturbance

Surveying

Key	Survey reliability more info
M	Best time to survey
M	Potential time to survey
<i>M</i>	Poor time to survey
M	Non-survey period

To ensure you follow the law - check whether your survey requires a permit. Always report any new records to the Natural Values Atlas, or send the information direct to the Threatened Species Section. Refer to the Activity Advice: Surveying page for background information.

<i>Isoetopsis graminifolia</i>	Spring						Summer						Autumn						Winter					
grass cushion	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A

- Flowers are required to identify and aid detection of this small annual herb from the daisy family. Surveys for the species should be undertaken during its peak flowering period, September to November. Due to the species' ephemeral nature the precise timing of surveys will be governed by seasonal conditions. This cryptic species can be difficult to detect in its grassland habitat when in low numbers. It may not emerge in drought conditions.
- In Tasmania, *Isoetopsis graminifolia* occurs in the northern and southern Midlands in gaps between tussocks in native grasslands dominated by *Themeda triandra* (kangaroo grass) and on rockplates. It has been recorded at altitudes of 20 to 360 m above sea level.

Helping the species

- In order to recognise the species if it occurs on your property, learn to identify grass cushion. If in doubt, seek expert assistance with identification.
- If you live or work in the area where the species occurs (see distribution map, above), look out for and record any observations of the species. All records of this species can provide important information on distribution and abundance.
- If you are interested in knowing for certain whether the species occurs on your land, organise a formal survey. You may need to employ an ecological consultant to do this. Your local Bushcare or Field Naturalist club may be able to assist you with a survey.
- Important! Always report any observations of the species to the NRE Natural Values Atlas, or else provide the data direct to the Threatened Species Section. Records stored on the NVA are a permanent record and are accessible to other people interested in this species.
- Consider the needs of the whole habitat. Preserving a threatened species' habitat is the best way to manage both the species and the environment in which it lives.
- Habitat for grass cushion corresponds to 'lowland grassland' in the NRE Bushcare Toolkit. See Grassy Bush in the Bushcare Toolkit for more information on managing this vegetation types.
- For long-term protection of populations on private land – consider protection of habitat through a vegetation management agreement or conservation covenant. See the NRE Private Land Conservation Program for more details.
- See the 'What is Needed' section in the grass cushion Listing Statement for a full list of conservation management actions for this species.

Cutting or clearing trees or vegetation

- Much of the species' potential native grassland habitat in the northern and southern Midlands has probably been cleared and improved, with extant populations surviving in just a few remnants, typically in areas that have been too rocky to plough.
- Urban and light industrial expansion in the Brighton, Pontville and Richmond areas continue to threaten the species' habitat.
- To prevent loss of habitat – avoid removal of native grassland habitat.
- Grass cushion requires open ground to germinate, and some level of disturbance may be required to maintain suitable habitat for the species .
- To prevent loss of habitat through lack of disturbance, consider reducing the level of competing vegetation through either slashing, burning or light grazing, outside the species' spring flowering period. –.

Burning

- Grass cushion requires open ground to germinate, and some level of disturbance may be required to maintain suitable habitat for the species .
- To prevent loss of habitat through lack of disturbance, consider reducing the level of competing vegetation through either slashing, burning or light grazing, outside the species' spring flowering period.

Construction

- Localities of this species occur adjacent to urban areas, roads or other light industrial infrastructure, and construction works may pose a threat to the species.
- To prevent loss of habitat – avoid clearing of known populations during construction activities.

Subdivision

- Localities of this species occur adjacent to urban and light industrial areas (especially in the Brighton–Pontville area), and subdivision may pose a threat to the species.
- To prevent loss of habitat – avoid clearing of known localities during subdivision activities.

Stock grazing

- Grass cushion is highly palatable to sheep, with over-grazed sites being vulnerable to woody weed invasion.
- To prevent degradation of habitat – protect habitat from over-grazing by stock. Light grazing outside the species' flowering season may be beneficial by reducing competition from native grasses.

Weed establishment

- Grass cushion is vulnerable to invasion by woody weeds (gorse, sweet briar), posing a threat to several of the known sites.

- To prevent degradation of habitat – prevent establishment and spread of weeds in areas of habitat.

Use of chemicals

- Localities of this species occur adjacent to urban areas, roads and other light industrial infrastructure, and may be susceptible to off-target damage from herbicides during weed control operations.
- To protect roadside populations – ensure all weed control operations in and adjacent to habitat are appropriately managed to avoid off-target damage to grass cushion.

Further information

Check also for listing statement or notesheet pdf above (below the species image).

Cite as: Threatened Species Section (2023). *grass cushion (Isoetopsis graminifolia): Species Management Profile for Tasmania's Threatened Species Link*. <https://www.threatenedspecieslink.tas.gov.au/Pages/Isoetopsis-graminifolia.aspx> Department of Natural Resources and Environment Tasmania. Accessed on 30/3/2023.

Contact details: Threatened Species Section, Department of Natural Resources and Environment Tasmania, GPO Box 44, Hobart, Tasmania, Australia, 7001. Phone (1300 368 550).

Permit: A permit is required under the Tasmanian *Threatened Species Protection Act 1995* to 'take' (which includes kill, injure, catch, damage, destroy and collect), keep, trade in or process any specimen or products of a listed species. Additional permits may also be required under other Acts or regulations to take, disturb or interfere with any form of wildlife or its products, (e.g. dens, nests, bones). This may also depend on the tenure of the land and other agreements relating to its management.
