

SPECIES MANAGEMENT PROFILE

Thismia rodwayi fairy lanterns

Group: Magnoliophyta (flowering plants), Liliopsida (monocots), Orchidales, Burmanniaceae

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

Endemic: Found in Tasmania and elsewhere

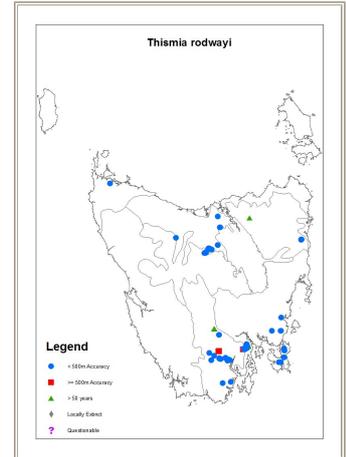
Status:



Thismia rodwayi (fairy lanterns) is seldom seen because it flowers virtually beneath the soil surface. Fairy lanterns are often mistaken for fungi, but are true flowering plants. This delicate fleshy plant (not more than 2 cm tall) is aptly named 'fairy lanterns' with its bright orange lantern-like flowers that poke out of the soil. The species flowers from October to December. It lacks chlorophyll and is therefore incapable of photosynthesis, relying instead on fungi associated with the roots to provide food from rotting plant matter. Fairy lanterns grow in damp or wet forests. The species needs deep well-developed soils with a thick cover of leaf litter. The main threat to the species is clearing of habitat, which mainly occurs through forestry activities but also more locally from trackworks and residential subdivisions.

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 adequately surveyed).
- If in doubt about whether a site represents potential habitat for this species, contact the Threatened Species Section for further advice.
- Fairy lanterns have been recorded from the following areas: Meander, Birrallee, St Marys, Mt Arthur (northeast), Wielangta, Nugent, Tasman Peninsula, Forestier Peninsula, Mt Field, Styx valley, Hastings, Mt Wellington (Fern Tree/Lenah Valley/Summerleas), and the Southern Forests. The potential range is much wider than indicated by the currently known localised populations.
- Habitat for fairy lanterns include the following elements: damp to wet forests dominated by eucalypts, usually with a tall moderately dense canopy of eucalypts (stringybark *E. obliqua* and giant ash *E. regnans*), an understorey of tall broad-leaved shrubs; the species needs deep well-developed soils with a thick cover of leaf litter.

What to avoid

- Clearing and substantial modification of wet forest habitat

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>Thismia rodwayi</i>	Spring					Summer				Autumn				Winter										
fairy lanterns	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A

- This small saprophytic herb can be identified when flowering, in spring and early summer, or earlier from buds that appear as small red-orange globules just above the soil surface.
- In Tasmania, *Thismia rodwayi* occurs in the north and south of the State in wet eucalypt forest with an understorey dominated by *Pomaderris apetala* (dogwood) *Olearia argophylla*, (musk), *Coprosma quadrifida* (native currant), *Bedfordia*

salicina (blanketleaf) or *Acacia melanoxyton* (blackwood). The species occurs on well-developed litter layers over moist friable loamy soils, usually with very low rock or pebble content. Decaying logs are often a feature of *Thismia rodwayi* sites.

Helping the species

- Learn to identify fairy lanterns so as to recognise the species if it occurs on your property. If in doubt about what it is, 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 DPIPWE 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.
- For long-term protection of localities on private land – consider protection of habitat through a vegetation management agreement or conservation covenant. See the DPIPWE Private Land Conservation Program for more details.
- See the 'What is Needed' section in the fairy lanterns Listing Statement for a full list of conservation management actions for this species.

Cutting or clearing trees or vegetation

- Clearing of wet eucalypt forests for establishment of plantation or development for agriculture are the main historical and ongoing threats to fairy lanterns.
- To protect known localities – retain a buffer of undisturbed native vegetation around known localities to maintain suitable moist microclimate conditions.
- To prevent loss of habitat – avoid clearing and/or substantial modification of the understorey of damp and wet forest habitat.

Further information

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

Cite as: Threatened Species Section (2024). *fairy lanterns (Thismia rodwayi): Species Management Profile for Tasmania's Threatened Species Link*. <https://www.threatenedspecieslink.tas.gov.au/Pages/Thismia-rodwayi.aspx> Department of Natural Resources and Environment Tasmania. Accessed on 17/4/2024.

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.