

SPECIES MANAGEMENT PROFILE

Lissotes menalcas Mount Mangana Stag Beetle

Group: Arthropoda, Insecta (insects), Coleoptera (beetles), Lucanidae

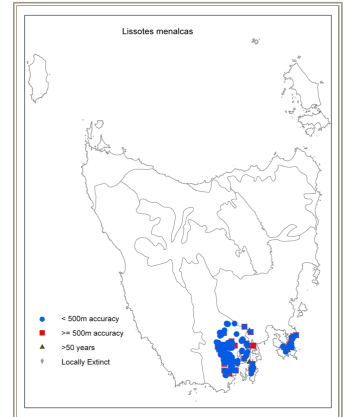
Status: *Threatened Species Protection Act 1995:* vulnerable
Environment Protection and Biodiversity Conservation Act 1999: Not listed

Endemic: Found only in Tasmania

Status:



The Mt Mangana Stag Beetle (*Lissotes menalcas*) is a flightless, glossy black, ground-dwelling beetle reaching up to 25 mm in total length. Stag beetles have enlarged mandibles (or jaws) which, in their resemblance to the antlers of a male deer (or stag), give these beetles their name. The Mt Mangana Stag Beetle occurs in wet forests, including the "Southern Forests" (south and west of Hobart), Bruny Island, and the Tasman and Forestier peninsulas. It inhabits rotting logs on the forest floor, and the preservation of wet forest with an abundant supply of rotting logs is the key to protecting this species. The primary threats are clearing forest habitat and the removal of rotting logs from the forest floor, either through firewood collection or burning.



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 the Mt Mangana Stag Beetle includes wet forests south and west of Hobart (the "Southern Forests"), part of South Bruny Island, and parts of the Tasman and Forestier peninsulas. The distribution of the species is patchy within areas of suitable habitat. The potential range of the species may be greater than is currently known, and further searches may find the species south of the D'Entrecasteaux River, to the northwest in the Styx and West Uxbridge areas, and in the Florentine and Mt Field areas.
- Habitat for the Mt Mangana Stag Beetle corresponds to 'wet forest' in the DPIWE Bushcare Toolkit. See Eucalypt Bush in the Bushcare Toolkit for more information on managing this vegetation type.
- Habitat for the Mt Mangana Stag Beetle includes the following elements: a broad range of wet forest communities from old-growth mixed forest to 20 year old wet silvicultural regrowth forest; the species may also occur in rainforest; preferred habitats appear to occur at be below 650 m a.s.l., and annual rainfall between 700 mm and 1200 mm; the essential habitat element for the species is large decaying eucalypt logs in wet forest in which they spend almost their entire life.

What to avoid

- Conversion of habitat (e.g. to plantation or pasture/cropping land)
- Uncontrolled access by stock to habitat
- High intensity burns in areas of habitat
- Firewood collection in areas of habitat

Surveying

Key	Survey reliability more info
M	Peak survey period
M	Potential survey period
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.

Species	Spring				Summer				Autumn				Winter											
Mt Mangana Stag Beetle	S	S	O	O	N	N	D	D	J	J	F	F	M	M	A	A	M	M	J	J	J	J	A	A

- The Mt Mangana Stag Beetle occurs almost entirely within decayed logs. Destructive sampling of logs involves breaking them open and searching the decayed interior for adult beetles.
- However, determining the presence of the species at a particular site does not necessarily require destruction of decayed logs and can be quite quick. Beetles can be quite close to the surface of the log under dense beds of moss, (which can be gently removed and replaced), and beneath logs (which can be rolled to reveal live beetles or fragments of dead beetles, especially in sites with high population densities).
- Pitfall trapping has very low capture rates for this species and is not a suitable means of sampling for this species.
 - Adults of the Mt Mangana Stag Beetle are unlikely to be confused with most other species of stag beetle. The species is similar to *Lissotes rodwayi*, which occurs south of the range of the Mt Mangana Stag Beetle.
 - For assistance with the identification of stag beetles, contact the Threatened Species Section.

Helping the species

- In order to recognise the species if it occurs on your property, learn to identify the Mt Mangana Stag Beetle. 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 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.
- Habitat for the Mt Mangana Stag Beetle corresponds to 'wet forest' in the DPIPWE Bushcare Toolkit. See Eucalypt Bush in the Bushcare Toolkit for more information on managing this vegetation type.
- For long-term protection of populations on private land – consider protection of habitat through a vegetation management agreement or conservation covenant.

Cutting or clearing trees or vegetation

- To prevent permanent loss of habitat - avoid conversion of habitat (e.g. to plantation or pasture/cropping land).

Stock trampling

- Uncontrolled access by stock to areas of forest habitat can lead to degradation of the leaf litter habitat for this species through compaction of the leaf litter and soil.
- To prevent degradation of habitat through compaction of leaf litter and soil - avoid uncontrolled access by stock to areas of habitat.

Burning

- The burning of forest habitat has the effect of removing accumulated litter and coarse woody debris, which then can take many years to re-accumulate.
- To prevent loss of coarse woody debris and leaf litter - avoid high intensity burns in areas of habitat.

Firewood collection

- The Mt Mangana Stag Beetle spends almost its entire life living in rotting logs on the forest floor, and the presence of rotting logs and other coarse woody debris is vital for the survival of the species.
- To prevent loss coarse woody debris including rotting logs and leaf litter - avoid firewood collection in areas of habitat.

Further information

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

Cite as: Threatened Species Section (2019). *Lissotes menalcas (Mount Mangana Stag Beetle): Species Management Profile for Tasmania's Threatened Species Link*. <https://www.threatenedspecieslink.tas.gov.au/Pages/Mt-Mangana-Stag-Beetle.aspx>. Department of Primary Industries, Parks, Water and Environment, Tasmania. Accessed on 20/11/2019.

Contact details: Threatened Species Section, Department of Primary Industries, Parks, Water and Environment, 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.