

SPECIES MANAGEMENT PROFILE

Hoplogonus bornemisszai Bornemissza's Stag Beetle

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

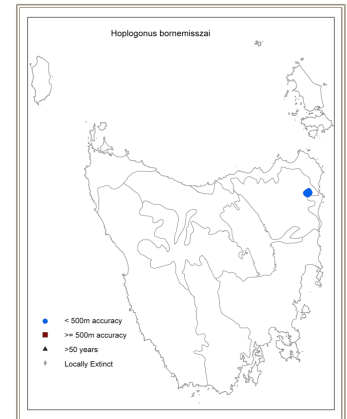
Status: *Threatened Species Protection Act 1995:* **endangered**
Environment Protection and Biodiversity Conservation Act 1999: Critically Endangered

Endemic: Found only in Tasmania

Status:



Bornemisszas Stag Beetle (*Hoplogonus bornemisszai*) is a flightless, black, ground-dwelling beetle reaching 16-30 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. While apparently abundant within its habitat, Bornemisszas Stag Beetle is confined to 700 ha of habitat in north-eastern Tasmania, east of the Blue Tier. Habitat comprises damp areas of forest floor, particularly in mature wet eucalypt forest, damp forest and mixed forest. A leaf litter layer is vital to this species' survival. The primary threat is any activity resulting in exposure and drying of soil and leaf litter. This includes activities that open up the forest canopy or disturb the forest floor, such as cutting or clearing live or dead vegetation, stock grazing, and 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 Bornemisszas Stag Beetle includes a 12 square km area in north-eastern Tasmania, east of the Blue Tier, with its range centred near the Terrys Hill area north of the Ransom River. The potential range of the species is unlikely to extend further as much of the current known range of Bornemisszas Stag Beetle is surrounded by unsuitable habitat and it is unlikely that future searches will significantly extend the range of the species.
- Note that the ranges of the three threatened species of *Hoplogmus* (Bornemisszas Stag Beetle, Simsons Stage Beetle *H. simsoni*, and Vandershoors Stag Beetle *H. vanderschoori*) occur in the same area of north-eastern Tasmania, and there is no overlap in the distribution of the three species.
- Habitat for Bornemisszas 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.
- Habitat for Bornemisszas Stag Beetle includes the following elements: mature wet eucalypt forest, damp forest and mixed forest; in damp eucalypt forest the species is found predominantly in wetter riparian areas; the species has also been recorded in dry eucalypt forest, however these drier forest sites occur within close proximity either to areas of wet/damp forest or moist drainage lines.

Things 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					
Bornemisszas 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

- Bornemisszas Stag Beetle can be surveyed by searching for adult animals and fragments of dead adult beetles. See the Forest Practices Authority Fauna Technical Note No. 11: Method for surveying for *Hoplogonus* stag beetle species for more information on surveying for this species.
- *Hoplogonus* species can be identified by the shape of the mandibles and head of the male. Bornemisszas Stag Beetle has rounded mandibles (mandibles straight in Simsons Stag Beetle), and the mandibles have three apical teeth (mandibles have two apical teeth in Vanderschoors Stag Beetle).

Helping the species

- In order to recognise the species if it occurs on your property, learn to identify Bornemisszas 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 Bornemisszas 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. See the DPIPWE Private Land Conservation Program for more details.

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

- Bornemisszas Stag Beetle can be affected by any activity (including fire) that opens the forest canopy leading to exposure of the leaf litter to sunlight and dehydration of habitat, which may in turn lead to greater predation by species such as currawongs and quolls.
- To prevent opening up the canopy and dehydration of leaf litter habitat - avoid high intensity burns in areas of habitat.
- The burning of forest habitat also has the effect of removing accumulated coarse woody debris (dead twigs, larger branches and rotting logs) and leaf litter from the forest floor, which can take many years to re-accumulate. A deep layer of leaf litter and accumulated coarse woody debris is vital to the survival of this species.
- To prevent loss of coarse woody debris and leaf litter - avoid high intensity burns in areas of habitat.

Firewood collection

- Bornemisszas Stag Beetle can be affected by any activity (including removal of standing dead trees for firewood) that opens the forest canopy leading to exposure of the leaf litter to sunlight and dehydration of habitat, which may in turn lead to greater predation by species such as currawongs and quolls.
- To prevent opening up the canopy and dehydration of leaf litter habitat - avoid removal of dead trees for firewood in areas of habitat.
- A deep, moist layer of leaf litter and accumulated coarse woody debris is vital to the survival of this species. Removal of dead branches, logs and other coarse woody debris for firewood leads to direct loss of habitat and exposure of the leaf litter to dehydration.
- To prevent loss of coarse woody debris and dehydration of leaf litter habitat - avoid removal of coarse woody debris (dead branches and logs) for firewood in areas of habitat.

Further information

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

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.