

SPECIES MANAGEMENT PROFILE

Dasyurus maculatus Spotted-tailed Quoll

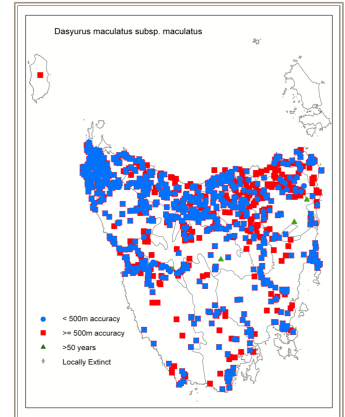
Group: Chordata (vertebrates), Mammalia (mammals), Dasyuromorphia, Dasyuridae (marsupial mice)

Status: *Threatened Species Protection Act 1995*: rare
Environment Protection and Biodiversity Conservation Act 1999: Vulnerable

Endemic Status: Found in Tasmania and elsewhere



The Spotted-tailed Quoll (*Dasyurus maculatus*) is a large carnivorous marsupial that is found in a range of habitats throughout mainland Tasmania. The species also occurs in south-eastern mainland Australia, and a separate sub-species occurs in Queensland. Male Spotted-tailed Quolls can weigh up to 7.2 kg and females up to 4 kg. Spotted-tailed Quolls have long bodies and short legs, and a brown coat with a lighter underside. Numerous bold white spots are found on the body, legs and tail. They can be distinguished from the superficially similar Eastern Quoll (*Dasyurus viverrinus*) by their larger size and long spotted tail. Eastern Quolls do not have spots on their tail. Habitat important to the Spotted-tailed Quoll includes large patches of forest containing adequate denning sites and high densities of mammalian prey such as rats, possums and small wallabies. Habitat loss, fragmentation, and modification are believed to be the major threats to the species in Tasmania. Competition and predation from introduced predators such as cats, road mortality, and wildfires are also threats. Causes of habitat loss and modification include urban and agricultural development, conversion of forest to pasture or plantation, road construction, and vegetation clearance in general.



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.
- The Spotted-tailed Quoll is widely but sparsely distributed across Tasmania. The species occurred on King and Flinders Islands until the early 1900s but is now extinct on these islands.
- Spotted-tailed Quolls are broad-ranging species that tend to occur at low densities. They can be found in numerous types of vegetation. However forest elements such as rainforest, and wet and dry eucalypt forest are important components of their habitat. They can also be found in non-forest vegetation types such as coastal scrub and heath, and pastoral areas. This wide range of vegetation types are generally characterised by relatively high and predictable seasonal rainfall.
- The presence of den sites is an important component of this species' habitat. Den sites can include rock crevices, hollow logs, windrows, clumps of vegetation, caves, boulder tumbles, under buildings, and burrows. High densities of medium-sized mammalian prey such as rats, possums and small wallabies are also important.

What to avoid

- Clearing vegetation (e.g. for conversion to pasture and plantation, and coastal development).
- Activities such as some types of timber harvesting which may reduce prey or den sites.

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.

| | | | | |
|---------------------------|--------|--------|--------|--------|
| <i>Dasyurus maculatus</i> | Spring | Summer | Autumn | Winter |
|---------------------------|--------|--------|--------|--------|

- The most appropriate time to survey is not known. It is possible that Spotted-tailed Quolls may be harder to detect during the mating period (June to August) therefore surveys conducted in the months September to May may be preferable.
- Spotted-tailed Quolls can be difficult to detect in the wild. A range of techniques such as live-trapping, hair-tubing, spotlighting, transect walks (to detect tracks and scats), baited sand pads, and remote cameras can be used by qualified practitioners. The relative efficacy of each technique is unknown, and may vary depending on the time of year, location, and population status at the time of survey.
- Note that the Spotted-tailed Quoll can be difficult to detect even when known to be present at a site, therefore negative results should be treated with caution.
- Survey for the Spotted-tailed Quoll using live-traps, hair tubes, and remote cameras requires a permit. Contact the Threatened Species Section for information on obtaining a permit for surveying this species.

Helping the species

- Identify potential habitat on your property. If in doubt, seek expert assistance.
- If you are interested in knowing for certain whether the species occurs on your land, organise a formal survey. You will need to employ an ecological consultant to do this.
- 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 the 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 Spotted-tailed Quolls 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.
- Drive slowly at night! Spotted-tailed Quolls can be killed on the road by vehicles while scavenging on the carcasses of other road-killed animals.
- Reduce the chance of your pet cat adding to the feral cat problem by desexing, fitting with a collar and bell, and keeping it indoors at night. Cats may compete with Spotted-tailed Quolls for food.
- Support fox eradication. Foxes may compete with Spotted-tailed Quolls for food.

Cutting or clearing trees or vegetation

- Clearing of habitat for timber harvesting and agriculture are threats to this species.
- To prevent loss of habitat - avoid broad-scale clearing of native vegetation which can lead to loss of den sites and foraging habitat on a scale which renders a landscape unsuitable for this species.
- Note that the Spotted-tailed Quoll can be difficult to detect even when known to be present at a site. As a result, it is recommended that vegetation consistent with habitat be managed appropriately regardless of whether the species has been detected by survey.

Burning

- There is little information available on the effects of wildlife and prescribed burning on Spotted-tailed Quolls. Intense fires may destroy denning and foraging sites.
- To prevent loss of den sites and foraging habitat - avoid large-scale wildfire in areas of habitat.

Agriculture

- Clearing of habitat for agriculture and conversion to pasture are principal threats to this species.
- To prevent loss of habitat - avoid broad-scale clearing of native vegetation which can lead to loss of den sites and foraging habitat on a scale which renders a landscape unsuitable for this species.
- Note that the Spotted-tailed Quoll can be difficult to detect even when known to be present at a site. As a result, it is recommended that all areas of habitat be managed for the Spotted-tailed Quoll regardless of whether or not the species has been detected by survey.

Further information

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

Recovery Plan

Cite as: Threatened Species Section (2024). *Spotted-tailed Quoll (Dasyurus maculatus): Species Management Profile for Tasmania's Threatened Species Link*. <https://www.threatenedspecieslink.tas.gov.au/Pages/Spotted-tailed-Quoll.aspx> Department of Natural Resources and Environment Tasmania. Accessed on 17/9/2024.

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.