



# Spot-tailed quoll

## *Dasyurus maculatus*



### What do they look like?

The spot-tailed quoll is the largest marsupial carnivore surviving on mainland Australia. They are more than 50 per cent larger than other quolls (eastern, western and northern) and, unlike other species, have white spots that extend along their tail. They have bright eyes, a moist pink nose and sharp teeth. They have a pointed snout and a long tail. Their fur has a coarse texture and is red-brown to dark brown with white spots of varying size.

### Where do they live?

Spot-tailed quolls are found in a range of forest environments, from rainforest to open woodland. They require forest with suitable den sites such as rock crevices, caves, hollow logs, burrows and tree hollows. They have a large home range and can cover more than six kilometres overnight. The spot-tailed quoll was once common throughout southeastern Australia, including Tasmania. However, since European settlement it has become rare across most of its range.

### CONSERVATION STATUS

#### Mainland populations:

**ENDANGERED**

*Australian Government*

#### Tasmanian populations:

**VULNERABLE**

*Env. Protection & Biodiversity Cons. Act 1999*

#### New South Wales:

**VULNERABLE**

*Threatened Species Conservation Act 1995*

#### Queensland:

**VULNERABLE**

*Threatened Species Conservation Act 1992*

#### Victoria:

**THREATENED**

*Flora and Fauna Guarantee Act 1988*

#### Australian Capital Territory:

**VULNERABLE**

*Nature Conservation Act 1982*

### Introduction

Four species of quolls are found in Australia. Most parts of the country were once inhabited by at least one quoll species and they were among the first native animals to be described by European scientists. All quoll species have declined in numbers since European settlement.

### Did you know?

Captain Cook collected quolls along the east coast in 1770, and recorded 'quoll' as an Aboriginal name for these animals.

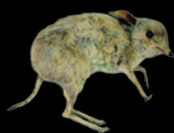
### Spot-tailed quoll life history and ecology

Spot-tailed quolls hunt mostly at night being largely nocturnal and solitary. Their diet appears to consist primarily of medium-sized mammals including gliders, possums, rabbits, and even small wallabies. They like carrion (dead animals), birds and eggs as well.



1930\*

Tasmanian tiger  
**EXTINCT**



1950\*

Pig-footed bandicoot  
**EXTINCT**



1970\*

Carnaby's black-cockatoo  
**ENDANGERED**



1990\*

Gilbert's potoroo  
**CRITICALLY ENDANGERED**



2000\*

Flatback turtle  
**VULNERABLE**



2008\*

What's going to be  
**NEXT...?**

Small mammals, reptiles and invertebrates are also a significant part of the diet, particularly for juvenile quolls.

Spot-tailed quolls are sexually mature at two years of age. Adult males begin searching for females around May, and mating takes place in mid-June. The young are born in early July, and by mid-August are no longer attached to their mothers, although they feed from her and spend much time in the den. By early November at only 18 weeks of age, young are completely independent and they live for approximately five years.

### Threats to spot-tailed quolls

Adult spot-tailed quolls have a territory of up to 500ha. There are few areas where such territories can exist without quolls encountering the effects of humans.

#### *Habitat loss*

One of the main threats to the spot-tailed quoll is the loss and fragmentation of habitat, especially areas of suitable forest with sufficient numbers of den sites and prey.

#### *Introduced species*

The introduction of foxes and cats has had a major effect on many of Australia's unique species, including quolls. Not only are young quolls at risk of predation by foxes and cats but these introduced species also compete for food. Poisoning by cane toads has led to the death of many quolls who try to eat them.

#### *1080 poison*

This is used to control fox and wild dog numbers. Unfortunately, female and juvenile spot-tailed quolls can also be susceptible to the poison. It is vital that when 1080 baits are used, best practice management guidelines are employed in order to keep impacts to native species to a minimum.

#### *Fire*

Since spot-tailed quolls favour habitats with abundant prey and refuges from predation, wildfire and controlled burns which reduce these are also a threat to the species.

#### *Persecution*

In some areas quolls are killed in response to raids on poultry runs, having a devastating impact on local populations.

Other threats to the spot-tailed quoll include road mortality in some areas, due to scavenging of road-killed carcasses, as well as the impacts of climate change on fragmented habitat areas.

### Case Study – Creating corridors for the tiger quoll

For the Wonyip Landcare Group the spot-tailed quoll is very important and is even their emblem. That's why in 2007 they applied for a TSN Community Grant to search for this threatened species and restore its habitat.

The aim of the project is to find out if quolls still inhabit the region and to protect habitat and create wildlife corridors for them and other species. Hair-traps, which collect hair samples as an animal enters a tube to investigate a food source placed at the end, are being set in hope that evidence of their presence can be confirmed. Ten years ago this technique proved successful when quoll hair was collected after two hair-sample surveys were conducted along near-by creeks.

The landcare group is also working with local pine plantation owners in securing and rehabilitating habitat for the quolls. The plantation owners have agreed to convert 15 gullies, currently bare and about to be planted to pine, to quoll habitat which will provide corridors of native vegetation for the quolls to move through safely.

### What you can do

- Find out if your land is likely to be spot-tailed quoll habitat – you can contact your Threatened Species Network Coordinator for information.
- Road-related deaths are quite common for this species, as the quoll often scavenges on road kill and is thus placed in danger. Take extra care driving through areas of known quoll habitat, especially at night.
- Keep your pets indoors or fenced in at night so they don't escape and become feral predators.
- Participate in revegetation and tree planting projects in your local area. You should ensure that all plants are locally sourced and appropriate for the region and the animals within it.
- Report any quoll sightings to your local conservation department.
- Help the spot-tail quoll by reporting any activities that you see that are likely to harm them or their habitat to the Department of the Environment, Water, Heritage and the Arts – Compliance and Enforcement Branch. Visit [www.environment.gov.au/epbc/compliance/index.html](http://www.environment.gov.au/epbc/compliance/index.html) or freecall 1800 110 395 for more information.

### Contacts

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### Reference

Edgar R. and Belcher C. (1995). Spotted-tailed Quoll (pp. 67-8) in Strahan, R. (ed.), The Australian Museum Complete Book of Australian Mammals. Angus & Robertson, Sydney.