

# Threatened Species of the Northern Territory

## CREST-TAILED MULGARA

### *Dasyercus cristicauda*

#### Conservation status

Australia: Vulnerable

Northern Territory: Vulnerable



Photo: T. Robinson NPWSA

#### Description

The crest-tailed mulgara is a robust, carnivorous marsupial with body mass up to about 190 g, and head body length to about 18 cm. The tail is short, slightly enlarged at the base and tapering to a point.

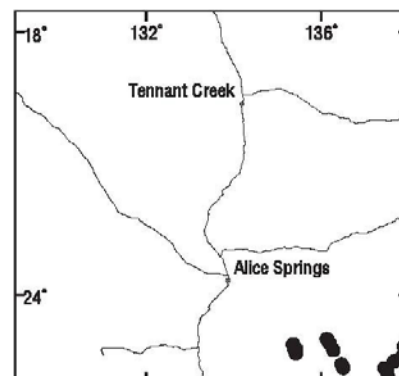
There has been considerable taxonomic confusion and re-sorting of the mulgaras. For most of the last 30 years only one species, *D. cristicauda*, was recognized. More recently, based on some genetic and morphological attributes, two species were recognized, the Mulgara *D. cristicauda* and Ampurta *D. hillieri* (Adams *et al.* 2000), with both occurring in the Northern Territory. However, Woolley (2005, 2006) re-considered the complex historical treatment of *Dasyercus* and re-assigned the species to the brush-tailed mulgara *D. blythi* and crest-tailed mulgara *D. cristicauda*, both of which occur in the Northern Territory. Woolley (2005, 2006) distinguished these two species on the following characteristics: (i) appearance of black hairs on the distal half of the tail (a brush in *D. blythi* versus a dorsal crest in *D. cristicauda*), (ii) the number of upper pre-molar teeth (two in *D. blythi* versus three in *D. cristicauda*), and (iii) in females, the number of teats (6 in *D. blythi* versus 8 in *D. cristicauda*).

#### Distribution

Because most previous records did not distinguish among the two species of mulgara now recognized, there is ambiguity about the distribution of both species.

Most records of this species are from the Simpson Desert and the north of South Australia, however it may occur far more widely across semi-arid and arid Australia, with (old) records from the Canning Stock Route in Western Australia and the Nullabor Plain. In the Northern Territory, there are confirmed records from Charlotte Waters and Crown Point (during the 1890s).

*Conservation reserves where reported:*  
None.



Known locations of crest-tailed mulgara (note that this map includes records that may be either *D. blythi* or *D. cristicauda*).

○ = pre 1970; ● = post 1970.

## Ecology

The ecology of the species is poorly known; however, it is probably largely similar to the brush-tailed mulgara. Both species shelter in burrows, are primarily nocturnal, and feed on invertebrates, reptiles and small mammals (Wood Jones 1923).

The crest-tailed mulgara may prefer sand dune habitats: in the Simpson Desert, especially where these are vegetated with canegrass (*Zygochloa paradoxa*) with *Triodia basedowii* in the interdunes (Masters 1997).

## Conservation assessment

Assessment of the conservation status of the crest-tailed mulgara is complicated by ambiguity of many historical records. As a consequence, information on its distribution and ecology is scarce, and very little is known about the trends in any population. The species has been recorded from a large number of sites in north-eastern South Australia and it may possibly be of less conservation concern than currently recognized.

The decline in the range of the crest-tailed mulgara in the Northern Territory occurred earlier than relevant to IUCN criteria (i.e. <10 years or three generations). However, the species qualifies as Vulnerable (under criteria B1ab) based on:

- extent of occurrence estimated to be <20,000 km<sup>2</sup>;
- severely fragmented; and
- a continuing decline observed, inferred or projected.

## Threatening processes

The cause of decline in the crest-tailed mulgara is unknown and, therefore, it has not been possible to identify threatening

processes. However, it is likely that the processes of environmental degradation and habitat homogenization that have occurred throughout arid Australia following European settlement have negatively affected its populations. Changes in fire regimes, grazing by introduced herbivores including cattle and rabbits, and predation by introduced predators are all likely threatening processes (Maxwell *et al.* 1996).

## Conservation objectives and management

A national Recovery Plan for mulgaras is due for release in 2007.

In the Northern Territory, there is no current specific management of this species being undertaken. Research and management priorities in the Northern Territory are:

- i. to better define the abundance, distribution and habitat preferences of this species in the NT;
- ii. to establish regular monitoring programs in at least one representative population.

## Complied by

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## References

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