

## THREATENED SPECIES OF THE NORTHERN TERRITORY

### SPECTACLED HARE-WALLABY (mainland subspecies)

#### *Lagorchestes conspicillatus leichardti*



#### Conservation status

Australia (*Environment Protection and Biodiversity Conservation Act 1999*): Not listed.

Northern Territory (*Territory Parks and Wildlife Conservation Act 2000*): Near Threatened.



Fig. 1. Spectacled hare-wallaby.

#### Description

A small (body mass 1.6-4.5 kg), nocturnal macropod with a superficial resemblance to the European hare in appearance and behaviour. The head and body length (400-470 mm) is slightly greater than the tail length (370-390 mm). Its fur is grizzled brown above. Individual hairs are white tipped giving a peppered appearance to the coat. A bright orange ring of fur around the eye distinguishes the species from others in the genus and is the basis of one of its popular names, "red eye".

#### Distribution

The spectacled hare-wallaby is an inhabitant of the tropical grasslands and

woodlands of northern Australia, and extends into the tussock grasslands of central Australia. It also occurs on Barrow Island off the Pilbara coast of Western Australia. A population of approximately 10,000 wallabies occurs on this Nature Reserve.

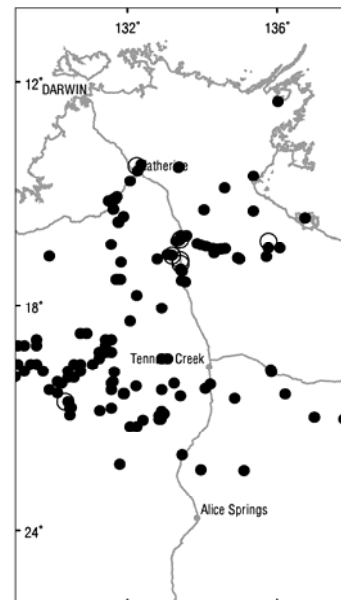


Fig. 2. Distribution of the spectacled hare-wallaby in the Northern Territory.

○ = pre 1970; ● = post 1970.

The species has declined in distribution and abundance during the last century. In the Northern Territory it was formerly common in shrub thickets and hummock grass among the central ranges as far south as the MacDonnell Ranges (24° S) but is no longer found there. It still occurs sparsely in the Tanami bioregion in *Acacia* shrubland and spinifex. Near Newcastle Waters it is found in *Acacia* woodland, particularly *Acacia*



Northern Territory Government

Department of Natural Resources, Environment and the Arts

## Threatened Species Information Sheet

*shirleyi*/*Macropteranthes kekwickii* thickets (Lancewood/Bullwaddy) with an open understorey, whereas near Borroloola in the Gulf Coastal bioregion it occurs in savannah woodland.

The spectacled hare-wallaby has been recorded once from Kakadu National Park and probably also occurs in Katherine Gorge National Park.

### Ecology

The spectacled hare-wallaby is generally a solitary species, but up to three may be seen feeding together. Breeding occurs throughout the year. Young leave the pouch at about five months whilst females become reproductive at twelve months. Vocalisation is limited to a warning "hiss" and a soft "clicking" sound made by the male in the presence of an oestrous female.

In hummock grassland the spectacled hare-wallaby shelters during the day in a hide or tunnel it constructs in large spinifex clumps. In Acacia woodlands it shelters beneath shrubs and at the foot of shady trees. Several hides are constructed within the wallaby's home range. Like other hare-wallabies the spectacled hare-wallaby is a selective feeder browsing on new shrub, forb, grass and herb regrowth following fire or rainfall, but will eat spinifex leaves in long-unburnt and undisturbed areas. It is very well adapted to aridity having a minimal water turnover rate. It does not require free water and produces little urine.

### Conservation assessment

This species once occupied half the continent, but today its distribution is fragmented and patchy. Whilst it seems secure on Barrow Island, the mainland populations are thought to be in decline, particularly in arid and semi arid areas of the Northern Territory. While the

species does not qualify as threatened under IUCN criteria, it is considered a species that may be threatened in the near future if the current decline in distribution and abundance continues. The species has therefore been classified as **Near Threatened**.

### Threatening Processes

The cause of the species decline is unknown and, therefore, it has not been possible to identify threatening processes. Potential threats include introduced predators (foxes in southern parts of the range and possibly cats), and competitors, the pastoral industry (particularly sheep in the Pilbara and cattle in the south-west Kimberley and possibly MacDonnell Ranges) and changes in fire regimes in central Australia). In central Queensland, overgrazing coupled with the effects of the long drought conditions have led to a decrease in the number of shelter sites (tussock grasses reduced in structure) and thereby increased the probability of predation by dingoes.

In the Northern Territory, spectacled hare-wallaby populations seem secure in the belt of Lancewood/Bullwaddy woodland extending between 16° and 18° S. However, clearing of woodland for grazing, uncontrolled burning and logging of *Acacia shirleyi* forests are considered threatening processes for the species in this region.

### Conservation objectives and management

There is no existing management program for the spectacled hare-wallaby in the Northern Territory.

Management priorities are:

- (i) periodically carry out surveys (every 10 years) at established monitoring sites using a standardized methodology to detect changes in distribution or abundance;



## ***Threatened Species Information Sheet***

- (ii) increase protection of vegetation types poorly represented in the reserve system (i.e. Lancewood/Bullwaddy thickets); and
- (iii) enter into protective agreements with landowners having populations of spectacled hare-wallaby on their properties.

### **Compiled by**

Don Langford and Chris Pavey  
[March 2002]

### **References**

- Burbidge, A.A., and Johnson, P.M. (1995). Spectacled hare-wallaby *Lagorchestes conspicillatus*, In *The Mammals of Australia*. (Ed. R. Strahan.) pp. 313-315. (Reed: Sydney.)
- Ingleby, S. (1991). Distribution and status of the spectacled hare-wallaby, *Lagorchestes conspicillatus*. *Wildlife Research* **18**, 501-519.
- Ingleby, S., and Westoby M. (1992). Habitat requirements of the spectacled hare-wallaby (*Lagorchestes conspicillatus*) in the Northern Territory and Western Australia. *Wildlife Research* **19**, 721-741.
- Maxwell, S., Burbidge, A.A. and Morris, K. (eds.) (1996). *The 1996 Action Plan for Australian Marsupials and Monotremes*. (Wildlife Australia: Canberra.)

