

THREATENED SPECIES OF THE NORTHERN TERRITORY

SANDHILL DUNNART *Sminthopsis psammophila*



Conservation status

Australia (*Environment Protection and Biodiversity Conservation Act 1999*): Endangered.

Northern Territory (*Territory Parks and Wildlife Conservation Act 2000*): Data Deficient.

Description

A medium sized carnivorous marsupial with a body mass of 26-40 g. The upperparts are a plain grey to buff with darker hairs interspersed throughout. There is a dark triangle of fur on the crown and forehead. The face and flanks are buff, the eyes are dark. The underparts and feet are whitish. The tail length is longer than the head-body length. The tail is grey above and darker below with a crest of short, black hairs near the tip.



Fig. 1. The sandhill dunnart.
(Photo: P. Canty NPWSA)

Distribution

The first specimen of the sandhill dunnart was collected by members of the Horn Expedition in 1894 near Lake Amadeus between Kurtitina Well and Uluru. Since that time it has not been

seen in the Territory, although remains of the species have been identified in owl pellets collected from Uluru and Kata Tjuta.

Outside of the Northern Territory, the species has been recorded on the Eyre Peninsula (South Australia) and in the Yellabinna region, south-eastern Great Victoria Desert (South Australia). The species also occurs in the south-western corner of the Great Victoria Desert in Western Australia (Pearson and Robinson 1990). A total of 60 individuals have been captured at all sites up to 2000 (Churchill 2001).

The sandhill dunnart is not known from any conservation reserve in the Northern Territory.

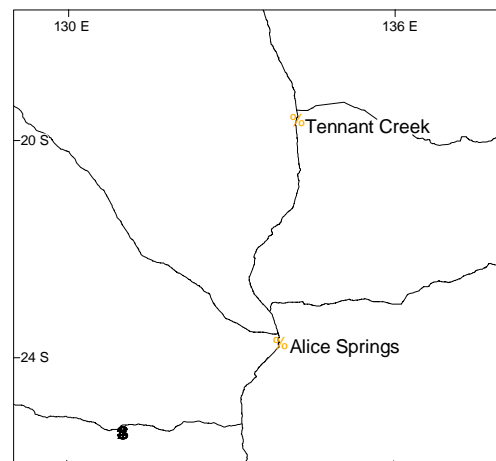


Fig. 2. Location of the Northern Territory record of the sandhill dunnart.

Ecology

The Northern Territory specimen came from sand dune country in an area covered by spinifex hummocks with

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groves of desert oaks in the swales. On the Eyre Peninsula, the sandhill dunnart occupies sand ridges covered by hummock grassland and mallee-broombush shrub. In the Great Victoria Desert and at Yellabinna it occurs in sandy environments, either sand plains or dunes. The vegetation occupied consists of low woodland or low open woodland with a diverse shrub understorey and a ground cover of at least 20% spinifex hummocks (Pearson and Robinson 1990). The species is insectivorous and breeding takes place in spring and early summer.

Conservation assessment

The sandhill dunnart has been recorded only once in the Northern Territory and that was over 100 years ago. However, the small amount of survey work carried out in the vicinity of Lake Amadeus where the specimen was obtained means that it is premature to regard it as regionally extinct. Therefore, the status of the sandhill dunnart in the Northern Territory is **Data deficient**.

Threatening processes

Inappropriate fire regimes and clearance of land for agriculture are major threats faced by the sandhill dunnart in southern Australia (Churchill 2001). In particular, the species prefers large, mature spinifex clumps in which it builds a small nest chamber composed of spinifex needles. Spinifex reaches the size and structure preferred by sandhill dunnarts 5-10 years after fire and this type of spinifex constitutes only 5% of the available spinifex hummocks on sites occupied by the dunnart on the Eyre Peninsula (Churchill 2001). Therefore, fire regimes that threaten the preferred nest sites of the sandhill dunnart may represent a long term threat to the species.

Conservation objectives and management

There is no existing management program for the sandhill dunnart in the Northern Territory.

Any future survey of the Great Sandy Desert bioregion, particularly in the vicinity of Lake Amadeus, should include targeted surveys for this species.

Compiled by

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