

Threatened Species of the Northern Territory

KOWARI

Dasyuroides byrnie

Conservation status

Australia: Vulnerable

Northern Territory: Extinct



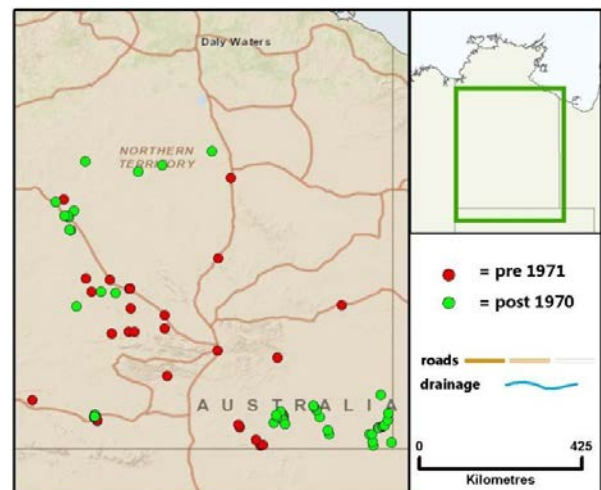
Description

The kowari is a robust, grizzled grey carnivorous marsupial up to 140 g in body mass and with a head-body length up to 180 mm. The distinguishing feature of this species is the tail, which is slightly shorter than head-body length, thick and reddish in the basal half with a large black brush encircling the distal half. The hind feet have only four toes.

Distribution

The species occurs on the gibber plains of north-eastern South Australia and south-western Queensland, where it is patchily distributed. Records from the Northern Territory (NT) come from Charlotte Waters (several specimens collected by P. M. Byrne in 1895 including the lectotype), Illamurta (four specimens collected in 1895) and Barrow Creek (one specimen collected in 1901) (Mulvaney *et al.* 2000). However, suitable habitat does not occur at the last two localities, so it is highly likely that the specimens were incorrectly labelled (Parker 1973).

Conservation reserves where reported:
None.



Known locations of the kowari

Ecology

The kowari is a terrestrial, burrowing animal that occurs on gibber patches among grasslands, sand dunes and river channels (Lim 1992). The diet consists of invertebrates and small vertebrates which they hunt at night. Kowari may bask at the burrow entrance on cold winter days (Lim 2008).

Kowaris are solitary, except during the brief, locally synchronised mating period. Breeding occurs between May and December and litters are of up to six young (Lim 2008). Individuals have been recorded living more than two years in the wild, but the average life expectancy is a little over one year.

Conservation assessment

Nationally, the kowari is considered to be vulnerable. There are no records from the NT since the few specimens collected more than 100 years ago. Targeted surveys for the species in 2008-09 on New Crown and Andado Stations, including previous collection localities and suitable gibber plain habitat, failed to detect the species. The species also no longer occurs in adjoining areas of northern South Australia (Witjira National Park) so there is no opportunity for movement of animals into the NT. Consequently, this species is classified as Extinct in the NT.

Threatening processes

The exact cause of the decline in the kowari is unknown (Maxwell *et al.* 1996). Introduced herbivores (cattle and rabbits) reduce cover and food for invertebrates and small vertebrates that are the prey of kowaris. Feral predators (cats and foxes) affect the species. Roads and tracks are often located on gibber plains and the gibber is used as road base. This disturbance has the potential to have a detrimental effect on kowari habitat (Lim 1992). In its range outside the NT, an increase in traffic along roads has increased the incidence of road-killed kowaris (Lim 1992).

Conservation objectives and management

The national recovery plan for this species is now out of date. As the species is believed to be extinct in the NT, there is no management program for it in the Territory. There are no plans for reintroduction into the NT. Any reliable potential sightings of the species should be followed-up as soon as possible.

Complied by

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References

- Lim, L. (1992). *Recovery Plan for the Kowari Dasyuroides byrnei Spencer, 1896 (Marsupialia, Dasyuridea)*. (Environment Australia, Canberra.)
- Lim, T.L. (2008). Kowari *Dasyuroides byrnei* Spencer, 1896. In *The Mammals of Australia Third Edition* (eds S. Van Dyck & R. Strahan.) pp. 52-54. (Reed New Holland, Sydney.)
- Maxwell, S., Burbidge, A.A., and Morris, K. (eds.) (1996). *The 1996 Action Plan for Australian Marsupials and Monotremes*. (Wildlife Australia, Canberra.)
- Mulvaney, J., Petch, A., and Spencer, B. (2000). *From the Frontier: outback letters to Baldwin Spencer*. (Allen & Unwin, Sydney.)
- Parker, S.A. (1973). An annotated checklist of the native land mammals of the Northern Territory. *Records of the South Australian Museum* 16, 1-57.