

# Arid Zone Monitoring Species Profile

## Mala, rufous hare-wallaby

*Lagorchestes hirsutus*

### Language names

Mala, At nukwa, Irlraku, Landaa, Landalyparti, Matjirri, Parranti, Tarnnga, Tiwilpa, Warku, Witjari, Raltatu, Ngartinpa, Tarnnga, Tjiwilpa, Tjanpitja, Ninngka, Tintipa, Tjunpu, Wirrini, Liwilpa, Kunatjinpa, Tipirri

National status: Endangered

IUCN Red List: Vulnerable



Newhaven Ranger Christine Ellis shares the release of a Mala on Newhaven with her family.

### Animal Description

The mala is the mainland subspecies of the rufous hare-wallaby. It is a small kangaroo, weighing about 800 g - 2 kg, with brown-silvery fur and large ears with white edges. Its tail is sandy coloured with a grey tip.

### Key threats

- Predation by cats and foxes
- Wrong-way fire
- Habitat change from too much grazing by feral herbivores (cattle, rabbits, camels)

### Habitat

Mala used to be common in the Central and Western deserts and were an important food source for Traditional Owners. They live on sandplains and dunes, and more gravelly plains, with spinifex or tussock grasses, sometimes with mulga. They shelter in a tunnel or scrape under a grass clump or small bush. Mala eat spinifex leaves and seed, and also the leaves, seed and fruits of other plants.





Image: Wayne Lawler/AWC

Mala with pouch young.



Image: Tida Nou

Mala.

### Mala scat

Mala scats are dark brown to black. They are shiny when fresh.



Image: Aliesha Dodson (AWC)

Mala scat.



## Mala tracks

Mala move the same way as larger kangaroos, they either hop on their back legs, or move slowly by alternating between the front paws and back legs, with their tails dragging on the ground. If they are disturbed from their shelter, they hop away in a zig-zag motion (and often make a high squeak noise).



*Image: Danae Moore (AWC)*

*Mala tracks (arrow shows which way the mala is going).*



*Image: Danae Moore (AWC)*

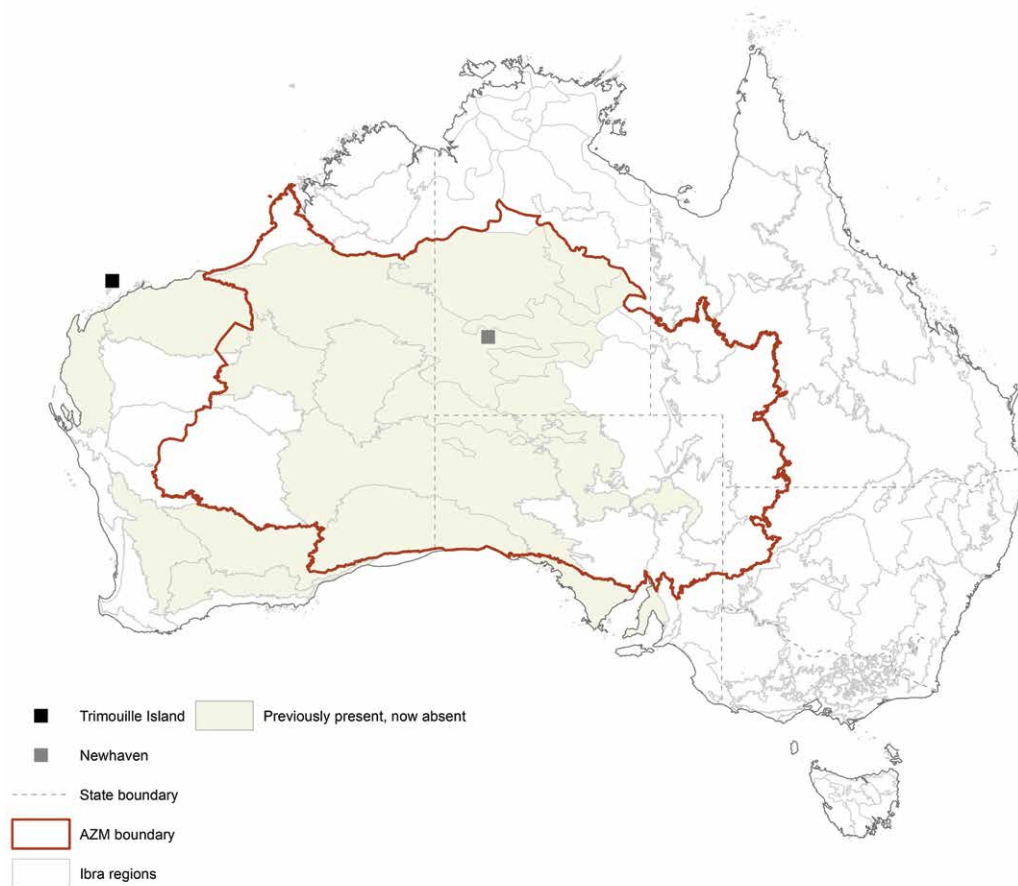
*Mala tracks (arrow shows which way the mala is going).*



## Arid Zone Monitoring project findings

### Mala distribution

Mala used to be common across a large part of the deserts, before cats, foxes, and changed fire regimes almost drove them extinct. Luckily, 22 animals from the last wild population were taken into captivity in the 1980s, before Mala disappeared from the wild in 1991. All surviving Mala are now descended from these 22 animals. Mala were introduced to Trimouille island off the coast of WA, and they have been recently reintroduced to a fenced area at Newhaven Wildlife Sanctuary, on Warlpiri-Luritja country; this is the single dot on the Australian mainland, in the map below. Another subspecies of the rufous hare-wallaby lives on two islands off the WA coast (Bernier and Dorre). The previous distribution shown in the map below is from the Australian Mammal Action Plan<sup>1</sup>.



The map above shows data shared by data providers with the AZM project. The data are from track and sign surveys. This method is great for detecting species that live in sandy deserts, but not as good for species that prefer rocky habitats, or species with distributions that are mostly outside the central deserts. The method also works best for larger-bodied animals with tracks that are easily identified.

It is possible that extra surveys have been carried out that have not yet been shared. If you see 'gaps' in the maps that you could fill by sharing your data, let us know.

### Further information

Arid Zone Monitoring project:

<https://www.nespthreatenedspecies.edu.au/projects/arid-zone-monitoring-surveys-for-vertebrates-across-arid-and-semi-arid-zones>

### References

<sup>1</sup> Woinarski, J.C.Z & Burbidge, A.A. & Harrison, P.L. (2014). The Action Plan for Australian Mammals 2012. (CSIRO Publishing: Melbourne.)



National Environmental Science Programme

This project received support from the Australian Government's National Environmental Science Program.

The Arid Zone Monitoring project is a collaboration between the NESP TSR Hub and over 30 Indigenous ranger groups and Indigenous organisations, 8 NGOs and NRM groups, 5 government agencies institutions, and many individual researchers and consultants. The project has gathered track and sign data from across Australia's deserts, using it to map the distributions of desert species and their threats. The national database includes almost 50,000 species presence records from over 5300 unique sites and almost 15,000 site visits, over the period from 1982 to 2020. The project area was defined by using IBRA subregional boundaries - the project boundary captures Australia's desert subregions where track and sign-based surveys are commonly used. The project showcases the collective work carried out by all groups working across the arid zone, and lays the groundwork for creating ongoing, national-scale monitoring for desert wildlife.

Cite this publication as NESP Threatened Species Recovery Hub, 2021. Arid Zone Monitoring Species Profile: Mala, rufous hare-wallaby. Project 3.2.5 findings factsheet.