

SPECIES AT RISK

Tooarrana Broad-toothed mouse *Mastacomys fuscus* EPBC status: **Vulnerable**

The Tooarrana, also known as the broad-toothed mouse, is a native, chubby-cheeked mammal with long dense fur.

In NSW the Tooarrana only exists above 1000m elevation. These mammals rely on high rainfall, cool summers, cold winters, and an abundance of grasses for food, nesting and protection from predators. They live in a complex of runways through dense wet grass, sedge or heath habitat, usually near a watercourse.

The Tooarrana's habitat is being impacted by the expansion of feral horse populations. Feral horses that occupy the Tooarrana's small and specific habitat have the potential to out-compete the Tooarrana for food (native grasses) and trample remaining nesting areas.

These little guys have distinctive fibrous, green droppings. Scientists can use scat surveys to determine presence and abundance. During systematic scat surveys, no evidence of broad-toothed mice was found in habitats severely impacted by feral horses.

On top of feral horse impacts, broad-toothed mice are threatened by feral cat and fox predation, climate change, habitat loss from development and invasive weeds and catastrophic fires can cause localised population extinctions.

References

- Green, K & Osbourne, WS 2003, 'The distribution and status of the broad-toothed rat *Mastacomys fuscus* (Rodentia: Muridae) in New South Wales and the Australian Capital Territory', *Australian Zoologist*, vol. 32, pp. 229-237.
- Shulz, M, Schroder, M & Green, K 2019, 'The occurrence of the broad-toothed rat *Mastacomys fuscus* in relation to feral horse impacts', *Ecological Management & Restoration*, vol. 20, pp. 31-36.



The presence of feral horses is not good for broad-toothed mouse populations. In broad-toothed mouse habitat sites severely impacted by feral horse impacts, no evidence of this species was found at all.

