

A Nationally Threatened Species of the Grassland Community

Description

The Grassland Earless Dragon (*Tympanocryptis pinguicolla*) is a dragon lizard (family Agamidae). All dragon lizards have small, rough scales (that don't usually overlap) and well-developed limbs; they are often fast moving. In earless dragons, the ear opening is covered by skin.

The Grassland Earless Dragon is about 150 mm from nose to tail tip, and mottled light grey and brown in colour with three pale longitudinal stripes. The under-surface is white, sometimes with fine dark speckling, and there is occasionally a yellow flush on the chin and neck. There is a short row of small spines on the nape of the neck.

Closely related species of earless dragon have similar colouring, but *T. pinguicolla* has more mid-dorsal scales and more large spinous dorsal scales that are higher than they are wide.

The Grassland Earless Dragon lays 3-6 eggs in a burrow in late spring or early summer. They hatch after 9-12 weeks and juveniles may disperse soon after hatching. The species goes into torpor during winter, but may be active during this time of year if weather conditions are suitable.



Habitat

All records of this species in southern Victoria are from rocky native grasslands with sparse or absent tree and shrub cover; usually uncultivated paddocks in broadacre farmland with little or no grazing. Distribution within sites is patchy and the subtle requirements of the species are not understood. Lizards shelter in invertebrate burrows or under surface rocks, allowing them to survive in some sites with degraded native grasslands.

Distribution

The Grassland Earless Dragon has been recorded from NSW, the ACT and Victoria and was once locally common. In Victoria, the species occurred on the basalt plains north of Melbourne, west around Geelong and in central Victoria. It was probably more common when climatic conditions were drier and warmer. The Grassland Earless Dragon is the only dragon restricted to natural temperate grasslands and is found in cooler habitats than any other earless dragon.

There were five sightings of the Grassland Earless Dragon in Victoria between 1988 and 1990; one at Merri Creek north of Donnybrook, one at Jackson Creek at Holden Flora Reserve, and three sightings at the Little River Gorge, west of Werribee. Intensive surveys at these sites since 1994 failed to detect the lizard.







Grassland Earless Dragon (Tympanocryptis pinguicolla)

Conservation status

The Grassland Earless Dragon is listed nationally as 'Endangered' under the *Environment Protection and Biodiversity Conservation Act* 1999, 'Threatened' in Victoria under the *Flora and Fauna Guarantee Act* 1988 and is classified as 'Critically Endangered' in Victoria. A National Recovery Team for the Grassland Earless Dragon was established in 1996.

Decline and threats

In Victoria the Grassland Earless Dragon is restricted to the Western Basalt Plains Grassland community, which is a threatened vegetation community. The loss and modification of this grassland habitat has contributed to the decline in range and abundance of the Grassland Earless Dragon and other grassland species including the Eastern Barred Bandicoot, Plains-wanderer, Australian Bustard, Striped Legless Lizard, and Sunshine Diuris.

Threats to the Grassland Earless Dragon include:

- Habitat destruction or degradation by clearing, ploughing, ripping, mining and rock removal
- Habitat destruction as a result of industrial and urban expansion
- Over grazing resulting in changes to the type and cover of grassland vegetation; trampling and destruction of the litter layer; soil compaction and soil erosion
- Fertiliser and herbicide use that promotes weed invasion and the exclusion of native grasses
- Pesticide use which may affect invertebrates the lizard eats, and may also affect the lizards themselves
- Changed and inappropriate fire regimes that remove the low vegetation and litter layer, depriving ground-dwelling species like this lizard of cover and food resources
- Predation from introduced predators, particularly foxes and cats.

Management to protect the species

Most native grasslands are privately owned and are under increasing pressure from agricultural activities and expanding urban and industrial development. More than 95% of Victoria's native grasslands have been destroyed or substantially altered through such activities. Some remaining native grassland remnants may be suitable for land purchase, but the long-term conservation of most Grassland Earless Dragon habitat depends on management agreements with landholders that preserve the habitat while enabling continued agricultural use.

To effectively conserve and manage the Grassland Earless Dragon we must first:

- Determine the extent of the known populations and attempt to locate new ones through surveys
- Determine the habitat management requirements for the lizard
- Define and map suitable habitat and identify it on the ground with land managers.

Targeted surveys

As part of the recovery program for the Grassland Earless Dragon, DSE will be undertaking a number of surveys of remnant grasslands north and west of Geelong to determine the species' current distribution and status. If you think you have seen this threatened species or have remnant grassland on your property please contact

Garry Peterson, Threatened Species Project Officer DSE, Telephone: (03) 5561 9915 e-mail: gary.peterson@dse.vic.gov.au

For more information on this and other threatened species go to www.swifft.net.au



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