



Australian Government



# Native Fish Strategy

## FISH FACTSHEET: BARRED GALAXIAS



Scientific Name

*Galaxias fuscus* Mack, 1936

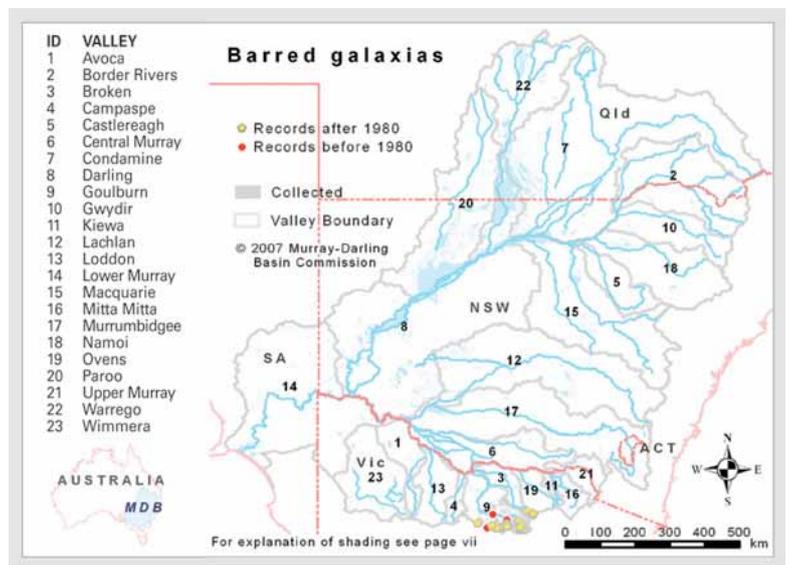
photo by Gunther Schmida

### CONSERVATIONS STATUS

Threatened.

### DISTRIBUTION AND ABUNDANCE

The Barred galaxias is only found in the headwaters (above 400 m altitude) of the Goulburn River catchment in the central highlands of Vic, in the southern Murray-Darling Basin. There are approximately 20 known populations of this species still extant, and at least five previous populations are now extinct. It is possible that additional small populations may be discovered in inaccessible areas of the upper Goulburn catchment, but this is unlikely to affect the highly threatened status of the species.



## BIOLOGY AND HABITAT

The Barred galaxias occurs in cool, clear, upland streams with stony or sandy substrates. Little is known of its ecology due to its highly threatened status and small population size. The preferred habitat is thought to be slow-flowing deep pools adjacent to riffles and cascades. Spawning is triggered by an increase in day-length and water temperature in August-September. Average fecundity is about 500 eggs, which are large (unshed eggs are ~ 2.2mm diameter) and demersal. The eggs are laid under large boulders when water temperatures are around 2-3°C. Time to hatching and size of larvae at hatching are unknown, but 12mm long larvae are present in streams by December. Movement requirements are unknown, but the species is thought to be non-migratory and relatively sedentary, judging by recolonisation rates of streams where trout have been removed.

The diet consists of drifting and benthic aquatic invertebrates taken at the upstream end of pools. The species is relatively long-lived for a small fish-individuals up to 13 years old have been recorded.

## POTENTIAL THREATS

Interaction with Rainbow and Brown trout (largely predation) is the major threat to the Barred galaxias. Following the invasion of trout, the species has been eliminated from streams where it was formerly abundant. It has been recorded in gut samples of trout captured in Barred galaxias habitat, and juvenile galaxias are the most severely impacted by predation. Competition between larger Barred galaxias and trout may be a secondary threat. As a result of the small, fragmented distribution of the species, local habitat modifications and degradation could also threaten populations. The effects of the invading Climbing galaxias on natural galaxiid populations are unknown, but competition or displacement is possible.

Barred galaxias now exist only in trout-free streams, with physical barriers to exclude upstream invasion by trout an essential part of their management.

## GENERAL REFERENCES

- Allen et al. 2002;
- DSE 2006;
- Lintermans & Raadik 2003;
- Morris et al . 2001;
- Raadik 1995a, 2000;
- Raadik et al . 1996;
- Shirley & Raadik 1997.

## PDF LINKS

Fishes of the Murray-Darling Basin: An introductory Guide;

<http://mdba.gov.au/files/publications/MDBA-Fish-species-book.pdf>



**First published - January 2009**

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