



FRESHWATER FISH
Mountain Galaxias

Galaxias olidus

AUS	SA	AMLR	Endemism
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Photo: © Michael Hammer

Conservation Significance

In SA, the majority of the distribution is confined within the AMLR, disjunct from the remaining extant distribution.²

Mountain Galaxia occurring across south-eastern Australia is currently under systematic review with initial indications of multiple species including two distinct species in SA.³

Recommended for listing as Rare under NPW Act as part of the threatened species status review in 2003.¹

Description

Long slender fish to 14 cm, more commonly 4.5-8 cm. Can be distinguished from other galaxias by: origin of the anal fin set behind the origin of the dorsal fin (used to distinguish between Common Galaxias – fins aligned, or Dwarf Galaxias – dorsal fin slightly in front of the anal fin); and small pectoral and anal fins, equal length jaws and a lack of a large black spot behind the gill cover (used to distinguish from Climbing Galaxias).³

Distribution and Population

The two species of Mountain Galaxia have discrete ranges, with an approximate separation following the east-west divide of catchments in the MLR. There has been a decline in its occurrence. In recent surveys it was not found in some catchment areas/regions where it was previously known to occur, namely:

- Bungala River and Inman River (southern Fleurieu Peninsula)
- Scott Creek (Bremer Catchment), Murray Bridge and Lake Alexandrina (SAMDB)

- Kangaroo Island.³

Within the AMLR the species occurs in the Fleurieu Peninsula, Gawler River, Myponga River, Lower Murray River, Onkaparinga River and Torrens River Basins, within the South Australian Gulf and Murray-Darling Drainage Divisions.²

A reasonable number of historic SA Museum records suggest that Mountain Galaxias were once widespread and common in southern SA but is now less common.⁴

Recorded from inland (cooler) freshwater watercourses, mainly in the MLR. Known WMLR catchments Gawler, Little Para, Torrens, Patawalonga, Sturt, Onkaparinga, Myponga, Carrickalinga, Bungala, Yankalilla, Hindmarsh and Inman; EMLR catchments Marne, Bremer, Angas, Finniss, Tookayerta and Currency, with outlying records including swamps of the lower River Murray at Murray Bridge (prior to 1928) and at Lake Alexandrina (Point McLeay 1886). A distinct sub-section of habitat is known from the South East (records from Mosquito Creek) and there are unverified records from Kangaroo Island (1883; no specific collection location) and southern Yorke Peninsula (a single record from 1934).³

Habitat

While two distinct species of Mountain Galaxia are recognised, there is as yet no differentiation of biological information for the species. As the name implies, occurs most commonly in areas with higher elevation including streams and swamps across a variety of environmental conditions, but most commonly in areas with shallow flowing areas and moderate levels of instream cover. Cooler water temperatures are preferred and are provided by stream flow and/or shade from edge riparian and terrestrial vegetation.³

Biology and Ecology

Fish in reproductive condition have been found in autumn through to spring. Appears to undertake small scale movements within stream sections for population expansion and recolonisation with the return of suitable conditions. Interstate studies suggest that its diet includes a variety of terrestrial and aquatic insects and macro-invertebrates, and spawning occurs under rocks in flowing areas (riffles).⁴ Longevity is not known but most fish in a population are less than 2 years old, with sexual maturity reached within around a year.³

Further information:

Biodiversity Conservation Unit, Adelaide Region
Phone: (61 8) 8336 0901 Fax: (61 8) 8336 0999
<http://www.environment.sa.gov.au/>

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Prepared as part of the Regional Recovery Plan for Threatened Species and Ecological Communities of Adelaide and the Mount Lofty Ranges, South Australia 2009 - 2014



ADELAIDE AND MOUNT LOFTY RANGES SOUTH AUSTRALIA

Threatened Species Profile

Department
for Environment
and Heritage

Aboriginal Significance

Post-1983 records indicate the AMLR distribution occurs in all Aboriginal Nations - Kurna, Ngadjuri, Nganguraku, Ngarrindjeri and Peramangk.²

Threats

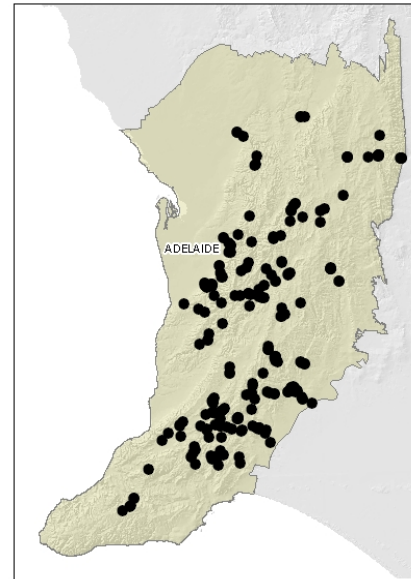
Distribution highly fragmented at broad (catchment) and local (stream reach) scales, especially with habitat change and the presence of introduced predators, particularly in the Adelaide region (Torrens, Sturt and Onkaparinga catchments). Extensive pool drying, habitat degradation and general habitat change are affecting southern Fleurieu populations. Abundance and occupied area has also decreased at Mosquito Creek (SE) in the last five years due to pool drying and loss of flow.³

Reasons for population decline and continuing threats include:

- altered hydrology affecting the permanency and quality of pools (e.g. decline of springs and permanent pools, delayed onset of seasonal flows due to water abstraction from watercourses and groundwater), which are likely to become more pronounced with climate change
- habitat loss or degradation, especially due to loss of stream-side vegetation
- major barriers or disruptions to dispersal due to instream structures, such as dams, reservoirs, vertical weirs, road culverts inhibit or prevent the ability to migrate to and from the sea
- altered lower stream reaches, especially reduced flow, are likely to impede the colonisation of juveniles (if this lifecycle occurs in a region)
- predation by and competition from introduced fish species (trout and possibly Redfin).^{3,4}

Additional current direct threats have been identified and rated for this species. Refer to the main plan accompanying these profiles.

Regional Distribution



Map based on filtered post-1983 records.² Note, this map does not necessarily represent the actual species' distribution within the AMLR.

References

Note: In some cases original reference sources are not included in this list, however they can be obtained from the reference from which the information has been sourced (the reference cited in superscript).

1 Department for Environment and Heritage (2003). *Review of the Status of Threatened Species in South Australia. Proposed Schedules under the South Australian National Parks and Wildlife Act 1972 Discussion Paper*. National Parks and Wildlife Council in partnership with the Department for Environment and Heritage.

2 Department for Environment and Heritage (2007). *Adelaide and Mount Lofty Ranges Regional Recovery Pilot Project Database*. Unpublished data extracted and edited from BDBSA, SA Herbarium (July 2007) and other sources.

3 Hammer, M., Wedderburn, S. and Van Weenen, J. (2007). *Action Plan for South Australian Freshwater Fishes: 2007-2012 Draft*. Native Fish Australia (SA) Inc., Adelaide.

4 Turner, M. S. (2001). *Conserving Adelaide's Biodiversity: Resources*. Urban Forest Biodiversity Program, Adelaide.

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