

## New Zealand's most endangered fish species

The streams and rivers that flow through Otago are home to a group of fascinating native freshwater fish found nowhere else on Earth. These fish belong to an ancient, scaleless fish family called Galaxiidae, named for the galaxy-like gold flecks and patterns adorning their backs.

Unlike whitebait, which migrate to sea, some non-migratory galaxiid species live out their entire life in the stream or river in which they hatched. Over millennia, these populations of galaxiids were isolated by geological events such as earthquakes and glacial movement. They evolved into distinct species, each with their own individual features and stories. Today, Otago is a biodiversity 'hot spot', home to 13 of New Zealand's most endangered non-migratory galaxiids.

*This brochure puts the spotlight on Clutha flathead galaxias.*

*See the companion brochures on Eldon's, Dusky, Teviot flathead, Lowland longjaw, Taieri flathead, Central Otago roundhead, Canterbury, Southern flathead, Gollum, and Nevis galaxias.*

## Help Clutha flathead galaxiids in your neighbourhood

- When repairing or replacing culverts or structures in streams, talk to someone at DOC to make sure they're compatible with protecting native fish. Barriers can help prevent galaxiids from being eaten by other fish.
- Fence off spawning areas in spring.
- Protect breeding grounds by restoring and protecting vegetation on stream banks and wetlands. Planting alongside streams also helps create shade, which galaxiids love, and reduces nutrient run-off.
- Check, Clean and Dry to prevent the spread of aquatic pests - fish such as koi carp and aquatic weeds such as didymo can wreak havoc on our freshwater environments.

### For more information

Contact your local DOC office

Visit [www.doc.govt.nz](http://www.doc.govt.nz)

Read *A photographic guide to freshwater fishes of New Zealand* by McQueen and Morris (2013), New Holland Publishers (NZ) Ltd

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# Galaxiids – Otago's unique freshwater fish



## Clutha flathead galaxias



- Learn about these fascinating and rare creatures
- Find out how you can help save them in your neighbourhood

Department of  
Conservation  
Te Papa Atawhai

## Clutha flathead galaxias *Galaxias 'species D'*

Clutha flatheads are found in the upper tributaries of the Clutha River upstream of Roxburgh, and two tributaries of the Pool Burn. They thrive in headwater streams and seepages that are small enough to step across and are surrounded by grasses and tussock.

They are the more peculiar of the galaxiid species, as individuals look very different, and can also be genetically distinct!

### Features

- A broad, flattened head and thick luscious lips
- Generally golden brown with darker markings in the form of flecks and splotches all over
- Some display beautiful gold and orange dustings
- Typically grow up to 100 mm in length but can get to 150 mm
- Feed on small stream invertebrates such as mayflies and stoneflies
- Difficult to spot as they hide in vegetation
- Spawn in spring (October to November) laying tiny 2 mm eggs in stream vegetation or amongst stones
- Can live up to 10 years



Clutha flathead galaxias Photo: rodmorris.co.nz

Classified as 'Nationally Critical' Clutha flatheads are one of our most endangered galaxiids, sharing the same threat status as the kākāpō. Their total remaining habitat can fit in an area less than 12 hectares.



Clutha flathead galaxias eggs Photo: DOC

### Threats

Over the last decade, we have lost 35% of known Clutha flathead populations. This can be directly linked to the spread of sports fish (trout and brook char), which eat galaxiids; and changes in land use such as stock access to streams, reduction of native vegetation, land development and forest harvesting. These land use changes impact on the streams in which galaxiids live, increasing sedimentation, changing natural flows through water abstraction, and reducing the amount of habitat available for spawning.



Locations of Clutha flathead galaxias