

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 Gollum galaxias.

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

Help Gollum 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

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



Gollum 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

Gollum galaxias

Galaxias gollumoides

As the name suggests, Gollum galaxias bear a striking resemblance to the infamous character from Tolkien's *The Hobbit* and *The Lord of the Rings*.

They are distributed throughout Southland with population strongholds present in the Mataura, Oreti, Waiau, Aparima, Catlins and Owaka rivers. Incredibly, some populations can even be found on Stewart Island/Rakiura, thought to have been distributed there during the Pleistocene ice age when a land-bridge was present.

They can be found in a wide range of habitats from lowland wetlands near sea level to small headwater streams in high country tussocklands up to 1100 m above sea level.

Features

- Grey to olive green in colour and covered in dark-brown splotches or speckling; they look like they've been dipped in gold metallic dust
- Characterised by their short, stocky bodies, large eyes and blunt, rounded snouts
- Typically grow up to 70 mm in length but can get to 140 mm
- Feed on small stream invertebrates such as mayflies and stoneflies
- Spawn in spring (late August to October) laying tiny 2 mm eggs in small 'caves' under boulders in streams and on plants in wetlands



Gollum galaxias Photo: rodmorris.co.nz

Gollums can be seen in the slower margins of waterways, lurking in ponds or ditches amongst aquatic plants or woody, leafy matter. This unique species is fast disappearing though, classified as 'At Risk: Declining'.

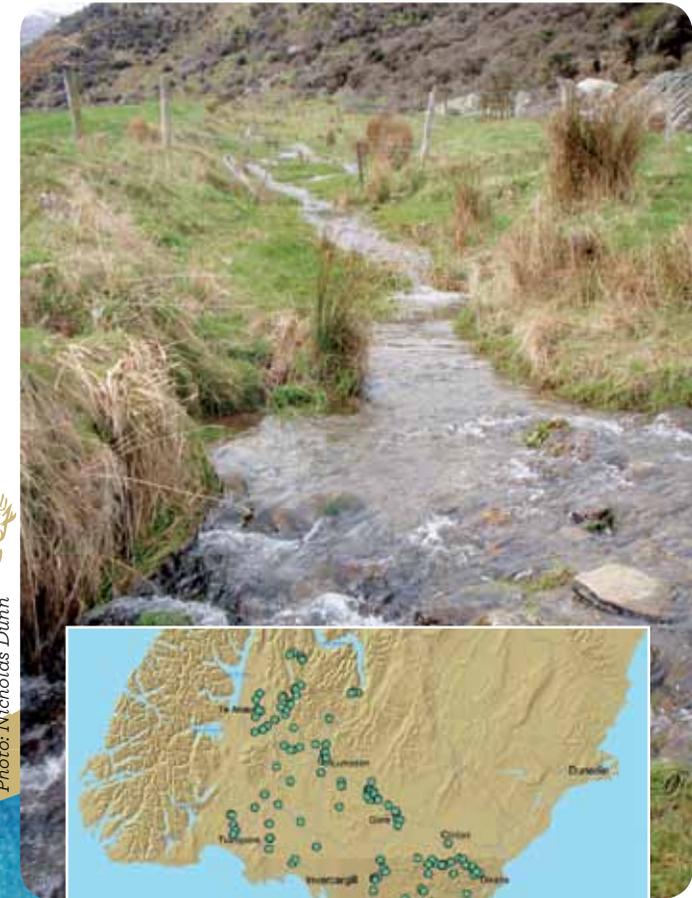


Gollum galaxias Photo: rodmorris.co.nz

Photo: Nicholas Dunn

Threats

Their main threats are habitat loss from land development and water abstraction, and predation by introduced fish species such as trout. Other threats include stock access to streams, reduction of native vegetation, and forest harvesting. These changes in land use impact on the streams in which galaxiids live, increasing sedimentation, changing natural flows through water abstraction, and reducing habitat available for spawning.



Locations of Gollum galaxias