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 Central Otago roundhead galaxias.

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

Help Central Otago roundhead 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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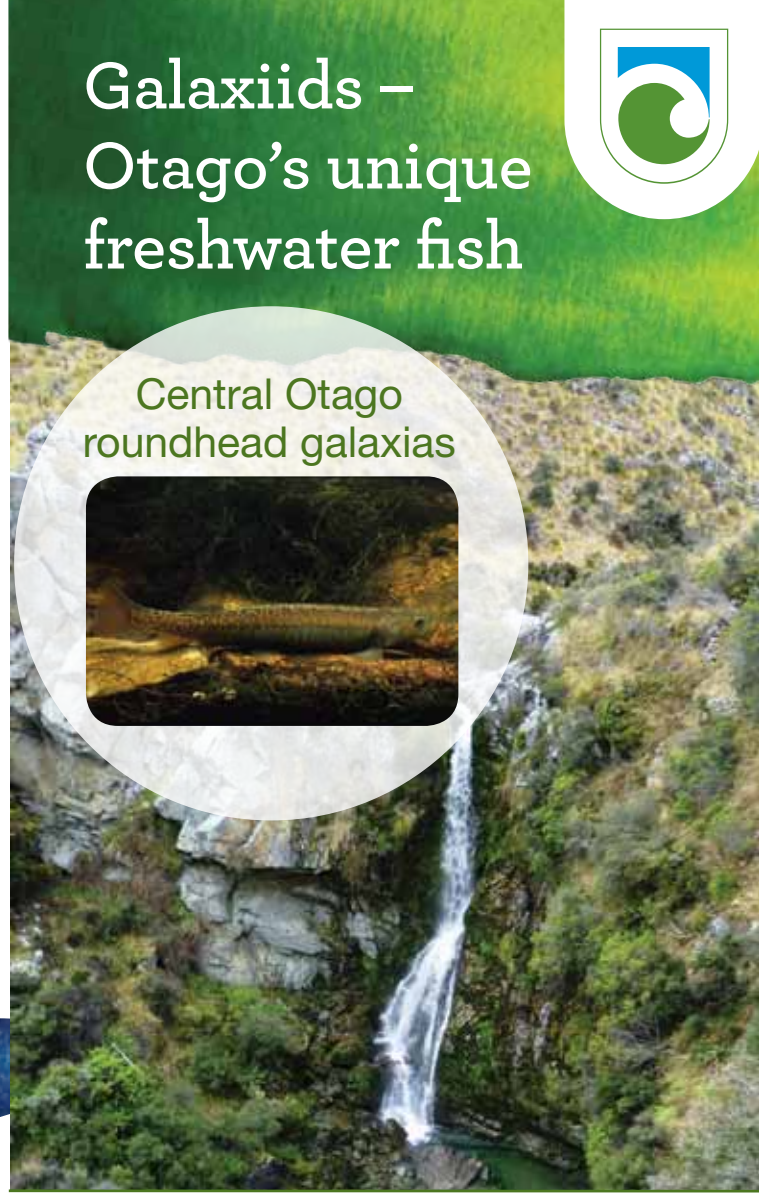
Galaxiids – Otago's unique freshwater fish



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

Department of Conservation
Te Papa Atawhai

Central Otago roundhead galaxias *Galaxias anomalus*

Central Otago roundheads live in headwater tributaries of the Taieri (upstream of Sutton) and Manuherikia rivers (tributaries of the Pool Burn and Ida Burn), with population strongholds in the Ewe Burn and Kye Burn. They are generally found in shallow gravel- and cobble-laden headwater streams and braided rivers 350–800 m above sea level.

Features

- Burnt-brown markings that are disjoined down their backs cover their bodies, appearing like mismatched wallpaper
- If you look carefully, you can see a light covering of gold or silver dusting
- Typically grow up to 100 mm in length but can get to 150 mm
- Feed on small stream invertebrates such as mayflies and stoneflies
- Spawn in spring (October to November) laying tiny 2 mm eggs in streams amongst the cobbles and gravels
- Compared to other galaxiid species, they are relatively short-lived, living to around 4 years of age

Central Otago roundhead galaxias *Photo: rodmorris.co.nz*

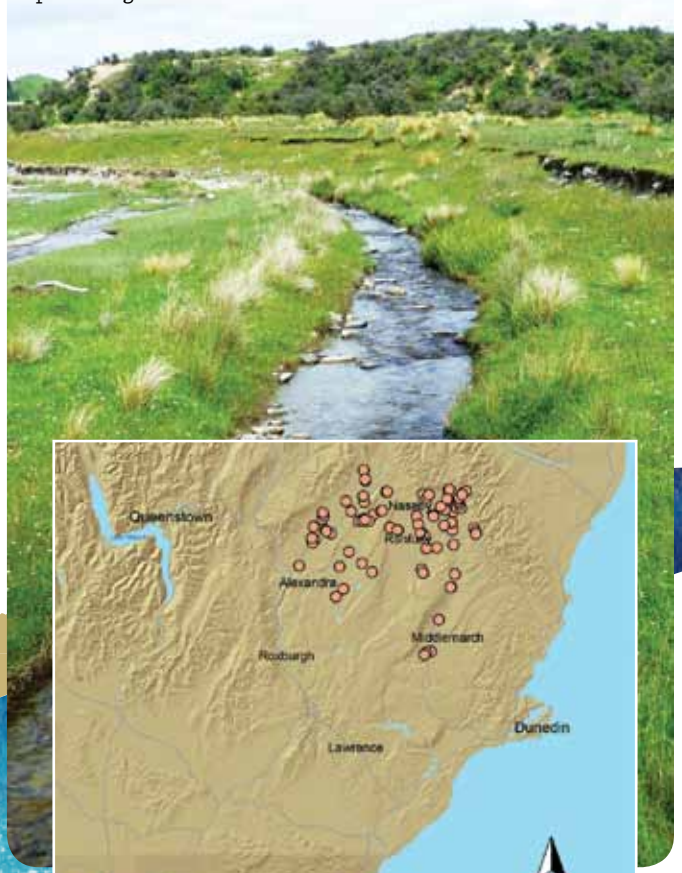
Classified as 'Nationally Endangered', Central Otago roundheads share the same threat status as the rare South Island kākā. Their total remaining habitat can fit in an area less than 22 hectares.

Swin Burn *Photo: DOC*

Threats

Their main threats are habitat loss from land development and predation by trout. Because they're so short-lived, they can be really vulnerable to predation and to drought (although some larger river habitats have enough space for galaxiids and trout to co-exist).

Changes in land use, such as stock access to streams, reduction of native vegetation, and forest harvesting are also contributing factors to its decline. This is due to increased sedimentation in the streams in which they live, changes in natural flows through water abstraction, and reduced habitat available for spawning.



Locations of Central Otago roundhead galaxias