

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 Lowland longjaw galaxias.

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

Help lowland longjaw 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



Lowland longjaw 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

Lowland longjaw galaxias *Galaxias cobitinis*

Lowland longjaws thrive in cool springs and streams amongst the cobbles and gravels in the fast-flowing riffles of braided rivers. The few remaining populations are in the Kauru and Kakanui rivers in North Otago, and in a handful of spring-fed streams in the Mackenzie Basin.

The adults need clean, 'roomy', movable substrates so they can burrow into the cracks and crevices between rocks. In winter, their young can be spotted in schools swimming in slower moving water, such as pools and backwaters.

Features

- A pencil-thin body and a long bottom jaw that protrudes over their top lip
- Pale lemon colour with handsome silver flecks lining their back over dark-brown splotchy patterns
- Their outer eyes are sparkly gold in colour
- One of the smaller species of galaxiid, typically growing up to 80 mm in length
- Feed on small stream invertebrates such as mayflies and stoneflies
- In the Kakanui, peak spawning is May to August, while in the Waitaki, spawning appears later, around August to December. They lay tiny 2mm eggs in spring upwellings
- Can live up to 3 years



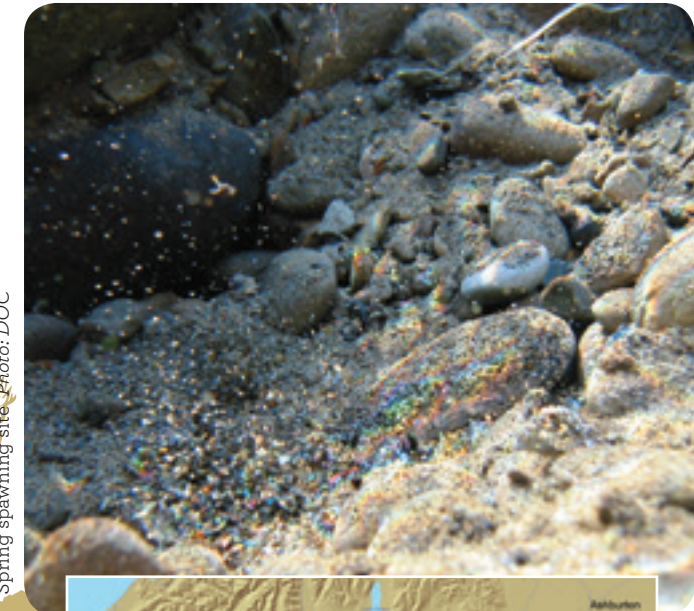
Lowland longjaw galaxias Photo: Simon Higgs

With only a few remaining populations, the lowland longjaw galaxias is New Zealand's rarest native fish, affectionately known as 'jaws'. Classified as 'Nationally Critical', they share the same threat status as the kākāpō. Their total remaining habitat can fit in an area less than 15 hectares.



Lowland longjaw galaxias Photo: DOC

Spring spawning site Photo: DOC



Known locations of Lowland longjaw galaxias as at 2013. Source: New Zealand Freshwater Fish Database 2013.