



A couple of handfuls of whitebait. Photo courtesy Otago Daily Times

Whitebait are a mixture of young native fish

In the spring these young fish swim up rivers and streams around the country after spending up to 6 months in the sea. The young fish develop into adult fish when they get to good habitat upstream.

The fish in your net

Your catch is likely to be a mix of six different freshwater fish: īnanga/īnaka, kōaro, banded kōkopu, giant kōkopu, shortjaw kōkopu and common smelt/paraki. Īnanga are the most common, making up about 85% of the total number. Kōaro and banded kōkopu make up 5–10% and the remaining species are less than 1%.

The mix of species can vary around the country and at different times during the whitebait fishing season. Sometimes other species like eels are caught at the same time.

Threatened fish

There used to be a lot more whitebait. Stories are told of huge shoals turning the water black as they moved upstream. People used them for garden fertiliser until the 1930s. That's not the case anymore. Populations of most species are in decline. Some are in serious trouble and at risk of extinction.

Whitebait fishing regulations are designed to help support a healthy fishery into the future. DOC is also researching to learn more about the whitebait species and how best to protect them.



Department of
Conservation
Te Papa Atawhai

**Te Kāwanatanga
o Aotearoa**
New Zealand Government



Adult īnanga (left) and kōaro. Photo: Angus McIntosh, University of Canterbury

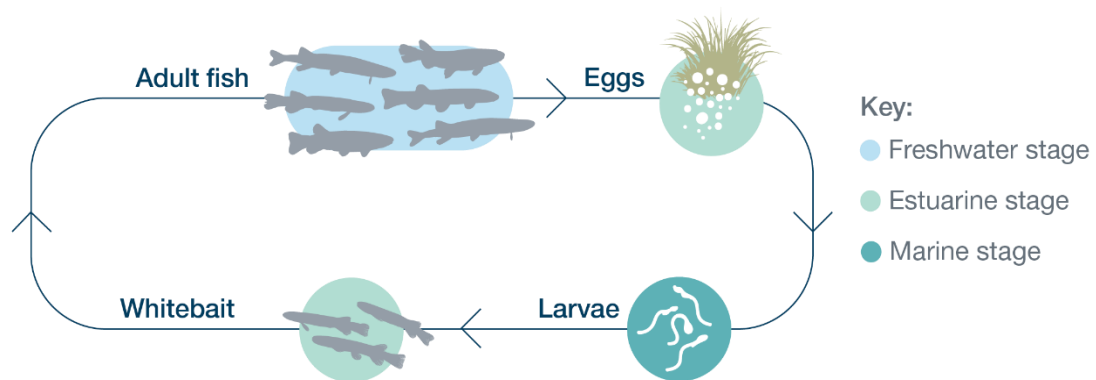
Superstar fish

Apart from common smelt, whitebait species are part of the migratory galaxiid family. Migratory fish are specially adapted to live in and move between freshwater and the sea during their lives. The name galaxiid comes from the patterns on the skin of adult fish that look like a galaxy of stars. Galaxiids are found in many places in the Southern Hemisphere, but banded, giant and shortjaw kōkopu only exist in New Zealand.

The lifecycle of whitebait

All the whitebait species have a similar lifecycle:

1. adult males and females move into spawning habitat
2. eggs are laid and fertilised by milt (sperm) in grasses and other plants beside waterways
3. eggs develop on land, then hatch into tiny larvae that are washed downstream into the ocean
4. larvae grow into young fish in the sea, then move upstream in the spring as whitebait
5. young fish grow into adults.



Īnanga lifecycle
Image: Department of Conservation | Crown copyright

How you can help increase the number of whitebait

When you're out whitebaiting, follow the whitebait fishing regulations. Take only what you need for a feed and encourage your family and whānau to do the same.

If you own land near a stream or river, you can help make better habitat for whitebait by fencing it off to keep farm animals out. Encourage long grass and native plants beside waterways as they provide good spawning habitat, but reduce weeds and pest fish. Set traps for rats and mice near streams to help prevent fish eggs from being eaten – especially during spawning in autumn and winter.

Check whitebait can move freely up and downstream. Whitebait need fish-friendly culverts, weirs, dams and floodgates to move upstream to grow into adult fish. Check the streams on your land allow easy access.

Get involved in a stream restoration project near you – help create the shady waterways that adult fish love.