

OURS.

THE MANAWATŪ RIVER
LEADERS' ACCORD

Ngā ika i te awa

FISH IN OUR AWA

There are 23 species of fish in the Manawatū catchment (both native and introduced), some of which are present in lower numbers than we would like.

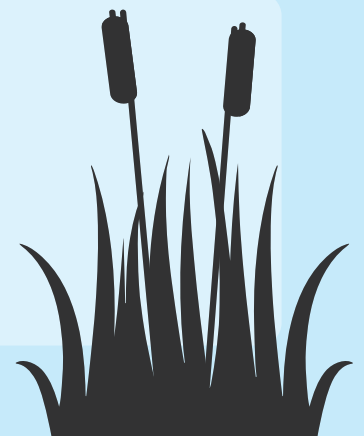
Historically, many of our native fish have declined in numbers due to a few factors:

LOSS OF HABITAT, INCLUDING: IN-STREAM, RIPARIAN, AND KEY BREEDING GROUNDS, which would otherwise provide food, shade and shelter from predators.

RECREATIONAL AND COMMERCIAL FISHING has inevitably impacted some native fish, along with predation from introduced species, including trout.

INCREASED NUTRIENT LEVELS LEADING TO MORE ALGAE IN SOME AREAS, resulting in a decrease of available food sources and bigger fluctuations in dissolved oxygen concentrations.

BARRIERS TO FISH PASSAGE, which limit access to otherwise suitable habitats.



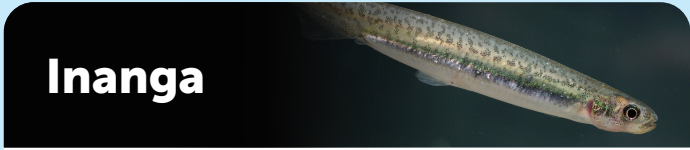
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Here is some brief information about some of our native fish and how the Manawatū River Leaders' Accord has helped.



Inanga

Where are they found?

Juvenile inanga make up 95% of the whitebait catch; as adults, they are generally found in lowland areas, and no further upstream than the Manawatū Gorge; inanga are diadromous and spawn in the tidal zone of the Manawatū River; Whirokino near Foxton is one of the main spawning grounds in the Manawatū catchment; their threat classification of 'declining' is the same classification as our kiwi.

Threats

Habitat loss; predators (mice eat inanga eggs); whitebaiting; barriers to fish passage.

What has the Accord done to help?

Mapped inanga spawning sites; restoration riparian planting at Whirokino; prevented stock access to spawning sites; ongoing weed control at major spawning sites.



Kōkopu and Kōaro

(Banded, Shortjaw, Giant)

Where are they found?

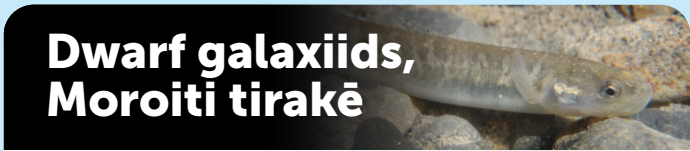
Headwaters of streams such as the Mangatainoka, Tokomaru, and some lowland streams; they can be found mostly in reaches which have good riparian zones as these provide moist areas which are important for spawning; kōkopu are diadromous and use flood events to spawn; except for the banded and shortjaw kōkopu, all other species have a threat classification of 'declining' which is the same classification as our kiwi.

Threats

Habitat loss; barriers to fish passage; predators; whitebaiting.

What has the Accord done to help?

Installed fish passes to open up more habitat; stock exclusion to streams; riparian planting for food (75% of their diet comes from invertebrates (bugs) which fall from overhanging stream vegetation). Riparian planting lowers stream temperatures, and provides woody debris in-stream to create suitable habitat for fish.



Dwarf galaxiids, Moroiti tirakē

Where are they found?

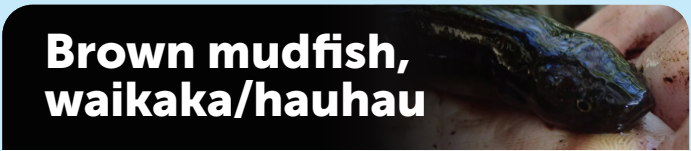
Dwarf Galaxiids are non-migratory so spend their entire lives in a small area; the south eastern Ruahine Ranges are a stronghold for this species in the Horizons region; they spawn in the same areas that they complete the rest of their life cycle in.

What has the Accord done to help?

Undertaken riparian planting to provide shading and lowering stream temperatures; in some places where galaxiids are found, we encourage barriers in the stream to stay in place to prevent trout reaching galaxiid areas.

Threats

Their biggest threat are trout which predate on this species; the biggest stronghold for these fish are in areas in which trout cannot access.



Brown mudfish, waikaka/hauhau

Where are they found?

Lowland wetlands, once widespread throughout the wider Manawatū catchment; they have a remarkable ability to aestivate (similar to hibernation) in the summer when wetlands dry out, when the water comes back they spawn.

What has the Accord done to help?

Undertaken regular mudfish monitoring, actively working with landowners to restore and retire sites.

Threats

Draining of wetlands (and loss of movement between wetlands).



Eels, tuna

(longfin and shortfin)

Where are they found?

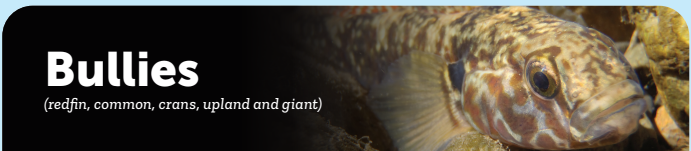
Found throughout the Manawatū catchment; longfin eels have a threat classification of 'declining' which is the same as a kiwi.

What has the Accord done to help?

Any of the management listed above benefits eels.

Threats

One of the biggest threats is commercial eeling; habitat loss; in other areas, hydroelectric dams prevent young eels from swimming to their adult rearing grounds, or returning as adults to the sea for spawning.



Bullies

(redfin, common, crans, upland and giant)

Where are they found?

There are seven species of bully in NZ but not all are found in the Manawatū catchment; unlike our native fish, many of which are nocturnal, bullies can be active in the day, and you most likely will spot them when playing by the river.

Threats

Habitat loss; predators; barriers to fish passage.

What has the Accord done to help?

Any of the management activities listed above benefits the bully.