

# Biodiversity



Number 15

## Brown Mudfish (*Neochanna apoda*)

### DESCRIPTION

Brown mudfish are a shy, nocturnal fish with elongated, slender bodies, a blunt head and small eyes. They are usually sandy brown-grey with darker blotching. Their skin lacks scales and has a thick mucous coat that helps to protect them from infection and desiccation. They can grow up to 190mm long.

### DISTRIBUTION, BREEDING AND FEEDING

The loss of a large percent of New Zealand's wetlands has drastically affected the distribution of brown mudfish, with North Island populations now mainly found from Warea in Taranaki southwards, usually at elevations lower than 240 metres. They tolerate a wide range of habitats including peaty bogs, raupo swamps, lake margins, forest pools and streams.

A lot of the habitats that brown mudfish occupy dry out over summer, forcing the fish to aestivate (summer hibernation). During summer mudfish bury themselves deep in mud or under logs, making sure their refuge is damp enough to avoid dehydration but allows access to air, and wait until the first significant rain autumn. They spawn in autumn after the dry period, laying several hundred eggs that hatch in 3-4 weeks. This gives the fry the longest time to grow before the next dry period. Diet consists of small aquatic or terrestrial animals, such as other larvae, amphipods or copepods. These fish are New Zealand's most specialised freshwater fish and a unique component to our heritage.

### BROWN MUDFISH IN TARANAKI

Historically, brown mudfish would have been extremely abundant in Taranaki, especially in the large peat swamps in the Ngaere and Eltham areas. Only a few small natural populations now exist and efforts to protect these habitats have been successful thanks to the goodwill of the landowners. Taranaki is also part of the national survey and monitoring program directed from the "Mudfish Recovery Plan" to assist with the national conservation of this species.

### WHAT CAN YOU DO TO HELP

- Protect streamside vegetation by fencing it off from stock.
- Plant native plants along stream edges to provide shaded habitats.
- Create, protect and retire wetlands on your property.
- Report sightings of pest fish and do not spread pest fish to new habitats.
- Report sightings of brown mudfish to the Taranaki Regional Council.



### CONSERVATION

The brown mudfish is an endemic species and have a conservation rating of 'at risk, declining'.

### THREATS

Threats to this species include:

- Habitat loss and degradation.
- Predation, mainly by the introduced mosquito fish.

### QUICK FACTS

- Brown mudfish are the largest species of mudfish in New Zealand.
- Though they are named mudfish they much prefer clear, non-turbid waters.
- They can survive around two months out of water.
- It was the first mudfish species to be discovered in New Zealand.
- They live up to eight years.
- The Maori name is waikaka or hauhau.