

Biodiversity



Number 12

Longfin eel (*Anguilla dieffenbachii*)

DESCRIPTION

Longfin eel have a long, slender, tubular body which is typically brownish grey-black with a yellow belly. They begin life as larvae around 1mm long and can grow up to two metres. While they appear to have no scales, tiny scales are embedded within their thick leathery skin. Their name describes the distinctive dorsal fin which extends much further along the body than the bottom anal fin.

DISTRIBUTION, BREEDING AND FEEDING

A good climber, the longfin eel can climb steep falls and is found in almost all of New Zealand's waterways from sea level to 1150m altitude and up to 314km inland. Habitats include streams, rivers, wetlands and lakes. Juveniles prefer shallow fast-flowing water with coarse substratum, while adults are more common under the cover of river banks or large debris in slower flowing water.

Longfin eel only breed once in their life. Adult males mature at around 25 years of age and females at around 35 years. When mature, they metamorphose in summer and



migrate to the sea in autumn, travelling to the subtropical Pacific Ocean where females spawn many millions of small eggs. Larvae hatch and take up to 18 months to return to New Zealand in ocean currents. In spring, the small transparent elvers, 60-75mm in length, swim into the rivers. Longfin eel eat a wide range of food, from aquatic insects when small, to and small birds when larger than around 800mm.

LONGFIN EEL IN TARANAKI

The myriad of rivers, streams, ponds and wetlands in Taranaki provide important habitats for longfin eel. Significant efforts to help migration of adults downstream past major dams, or juveniles moving upstream, should greatly assist the conservation of this unique New Zealand species.

WHAT CAN YOU DO TO HELP

- Remove barriers or provide fish passage past structures such as culverts, dams and weirs.
- Protect streamside vegetation by fencing it off from stock.
- Plant native plants along stream edges to provide shaded habitats for eels.
- Create, protect and enhance wetlands on your property.
- Encourage eel conservation and discourage over-fishing.



CONSERVATION

Longfin eel are an endemic species and have a conservation rating of 'at risk, declining'.

THREATS

Threats include:

- Commercial fishing.
- Habitat loss and degradation.
- Artificial structures such as dams, culverts, and floodgates that block migration paths.

QUICK FACTS

- An eel's skin is very sensitive to touch which helps it to 'see' in its watery habitat.
- Present in New Zealand since the early Miocene (23 million years ago).
- One of the largest eels in the world.
- Can live for more than 80 years.

