## **MARY RIVER COD BREEDING PROGRAM**

A captive breeding program for the Mary River cod has taken place at the Gerry Cook Fish Hatchery at Lake Macdonald, Cooroy since 1983. A breeding and stocking program for the endangered Mary River Cod is one of a suite of recommendations within the Mary River Cod Research and Recovery Plan (Simpson and Jackson 1996).

The aim of the Hatchery's breeding and restocking program is to:

- breed and release Mary River cod fingerlings to re-establish self-sustaining populations of Cod to their former historical range throughout the Mary River catchment, and to
- mitigate the impact of recreational fishing to Cod recovery through provision of Cod fingerlings to Recreational Fishing Stocking Groups for water storage impoundments.

Over half a million (500,000) fingerlings have been released into South East Queensland waterways since the breeding program began, of which one third was for conservation stocking in waterways in the Mary River Catchment.

Landholders throughout the catchment from the headwaters of the Mary River near Conondale to the upper tributaries in the vast grazing country in the lower Mary, assist with conservation releases.

Waterways in the upper Mary River catchment with good streambank vegetation, in-stream habitats of snags, fallen trees, and riffles and pool sequences are ideal for the



release of cod fingerlings (35-50 mm). These sites provide habitat for the little pioneers to hide, feed, grow and establish their own territory.

The Hatchery Steering Committee\* is committed to ensuring the aims of the program are met in order to sustain Mary River cod populations in their native habitat.

\*Comprising of representatives of MRCCC, Department of Natural Resources, Mines and Energy, Seqwater, the Department of Agriculture and Fisheries, Noosa Council and recreational fish stocking groups.



#### Mary River Catchment Coordinating Committee

Mary Catchment Resource Centre

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www.facebook.com/MaryRiverCCC/

The Mary River Catchment Coordinating Committee acknowledges the support of Seqwater for their contribution to the breeding program for the Mary River Cod at the Gerry Cook Fish Hatchery.

For details of hatcheries which sell native fish fingerlings, visit https://www.qld.gov.au/recreation/activities/boating-fishing/ rec-fishing/dams/stocking

The MRCCC has worked with landholders throughout the Mary River Catchment to improve riparian condition and aquatic biodiversity for a suite of threatened species including the Mary River cod, the Australian lungfish, the Mary River turtle and the Giant Barred frog.

Support for this work is provided by the Australian Government Department of Environment, local government in the Mary River Catchment and thousands of landholders who contribute significantly to voluntary conservation activities in the Mary River Catchment.



# THE RIVER



Respected... and Protected!

# ABOUT THE MARY RIVER COD

The Mary River cod was once abundant in south east Queensland's coastal streams, providing food for Aboriginal communities, European settlers and stock.

By the mid 1990s Mary River Cod were restricted to the Mary River only, and it was estimated that there were less than 600 individuals remaining in prime cod habitat within Tinana Creek, Six Mile Creek and Obi Obi Creek. A combination of overfishing and habitat deterioration contributed to the population decline during the 20th century.

Mary River cod are listed as endangered under the Environment Protection Biodiversity Conservation Act.

The Mary River cod is a yellowish to pale green fish, with a concave head profile and a protruding lower jaw. The largest confirmed Mary River cod weighed in at 23.5 kg, although anecdotal evidence suggests cod up to 38 kg were being caught in the 1900s.

Deep, shaded, slow flowing pools with plenty of snags and submerged trees and logs provide ideal habitat for cod. Cod are highly territorial and tend to have a home range 100 m to 1000 m in length that contains two to four core areas where the fish will spend most of its time.

Mary River cod live to at least 40 years of age. To breed, they will travel long distances (in the order of 50 -70km). Annually around Spring, the cod form pairs and breed.





The male guards the eggs and the brood until they disperse to search for food.

Water temperature is a critical factor during breeding. Breeding is triggered after winter when water temperatures rise to around 16-20 °C. The health and survival of the Mary River cod can be adversely affected by water temperatures over 28°C which gives some indication of the potential for climate change to impact upon cod populations.

The Mary River cod is an ambush predator, darting out from a cover of sunken logs and undercut banks, swallowing passing prey whole. Their diet mainly costs of shrimps, fish and crayfish. They have also been known to eat water fowl, water rats and water

dragons.



UPPER MARY FARMER TREVOR CARBERY RELEASING FINGERLINGS WITH SHAUNA THOMPSON AND SARAH GRIMISH



### WHAT DO I DO IF I CATCH A MARY RIVER COD?

It is an offence to be in possession of any Mary River cod from the Mary River system or any of its tributaries where fines of up to \$120,000 may apply. This means that any cod caught when fishing must be immediately released. This should be done as quickly and carefully as possible.

A few tips for releasing cod include:

- Use barbless hooks so they can be easily removed from the cod's mouth
- Don't remove the fish from the water, If the fish needs to be removed from the water to remove hooks use a wet cloth or wet hands, dry hands will remove the mucus from the cod's body and allow infection in.

  Never hold a cod vertically by the mouth or gills this can easily damage the internal organs. If a cod must be held out of the water, hold it horizontally with a hand supporting the stomach area.
- Don't throw a cod back into the water place it in carefully so it can reorient itself and swim away at its own pace.

If you see someone catch and keep a Mary River cod, call the Fishwatch hotline on 1800 017116

