



Photo by Ian Wooden



Department of
Primary Industries

Protecting Trout Cod

A guide for fishers and land
managers

Five things you can do to help

1. Take a moment to study this guide and familiarise yourself with the appearance of Trout Cod and other similar looking species such as Murray Cod.
2. If you catch a Trout Cod, or any other threatened species, release it carefully causing the least possible harm.
3. If you live on or manage land adjacent to Trout Cod habitat, prevent stock from directly accessing waterways, manage and protect riparian vegetation, revegetate degraded riparian areas and prevent erosion.
4. Report illegal or suspect fishing activities by:
 - Contacting your nearest Fisheries Office
 - Using the Fishers Watch Phone line **1800 043 536**; or
 - Completing the online report from:
www.dpi.nsw.gov.au/fishing/compliance/report-illegal-activity
5. Participate in the NSW DPI Protected and Threatened Species Sighting Program. If you catch or see a Trout Cod, record the details and send the information to the NSW DPI Threatened Species Unit by emailing:
fisheries.threatenedspecies@dpi.nsw.gov.au
or completing the online report form:
www.dpi.nsw.gov.au/fishing/species-protection/report-it

What if you are not sure?

If you catch a Trout Cod or if you are unsure, release the fish back to the water with minimal harm. Significant penalties apply for buying, selling, possessing or harming any threatened or protected species in NSW without the appropriate approvals.

For more information

NSW DPI has a number of publications available on Trout Cod. The publications are available on-line at the NSW DPI website: **www.dpi.nsw.gov.au**

Alternatively contact NSW DPI Threatened Species Unit: **PO Box 1305**
CROWS NEST NSW 1585

Email: **fisheries.threatenedspecies@dpi.nsw.gov.au**

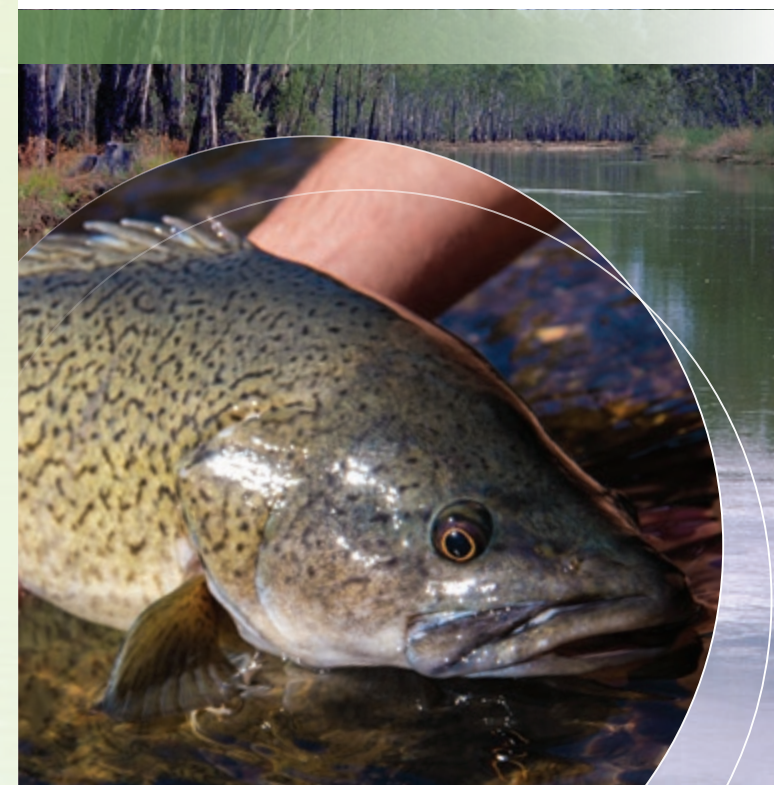
Fishing regulations may change during the life of this publication. It is the responsibility of fishers to ensure they are acting within the law at all times.

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Disclaimer: The information contained in this publication is based on knowledge and understanding at the time of writing (August 2016). However, because of advances in knowledge, users are reminded of the need to ensure that information upon which they rely is up to date and to check currency of the information with the appropriate officer of the Department of Primary Industries or the user's independent adviser.

Published by the Department of Primary Industries.

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Cover photo by Rhys Creed

www.dpi.nsw.gov.au

A threatened species

Trout Cod (also known as Bluenose Cod) is a threatened species under NSW and Commonwealth law. They grow to 85 cm in length and 16 kg in weight, but more commonly occur at 50 cm and up to 1.5 kg. Trout Cod used to be widespread throughout the southern tributaries of the Murray–Darling River system but the species has undergone dramatic declines in its abundance and distribution over the past century. Natural Trout Cod populations are now limited to a single self-sustaining population in the Murray River between the Yarrawonga Weir and Barmah. Several other populations have been re-established in NSW and Victoria by stocking of captive bred fingerlings or through translocation. Reasons for the decline of Trout Cod include habitat loss and degradation, impacts from introduced species and historical illegal fishing.

Habitats

Trout Cod are often found in faster flowing water with rocky and gravel bottoms as well as slower flowing, lowland rivers. The similar looking Murray Cod occupy similar habitats; however Murray Cod have a much wider distribution than Trout Cod. Both species use the cover of large woody debris which provide complex habitats for each stage of the species' life cycle.



Identifying a Trout Cod

In NSW, Trout Cod listed as an endangered species. They can often be misidentified for Murray Cod so it is important that fishers and land managers can identify each species. A prominent feature often used to identify Trout Cod is a dark horizontal eye stripe on the side of the head. However, the eye stripe should not be used as the only identification feature as juvenile Murray Cod can also possess a similar stripe and the stripe can often be absent, broken or indistinct on Trout Cod. A combination of features should be used to distinguish Trout Cod from Murray Cod.

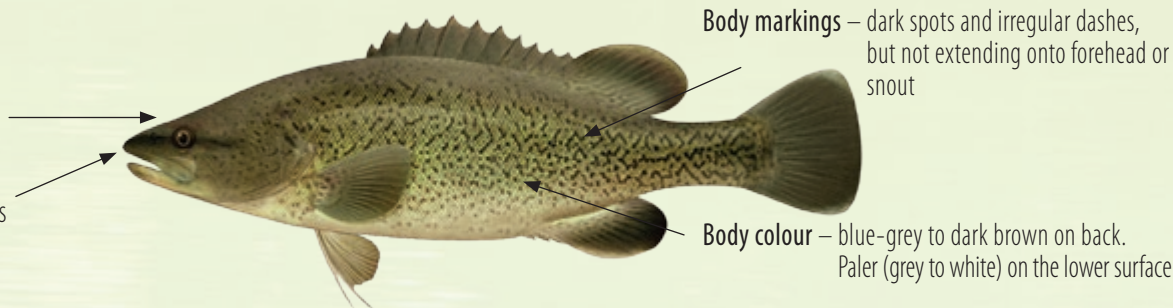
Trout Cod

Max reported weight 16 kg

Head profile – straight

Head width – narrow

Jaws – upper overhangs the lower



Body markings – dark spots and irregular dashes, but not extending onto forehead or snout

Body colour – blue-grey to dark brown on back. Paler (grey to white) on the lower surface

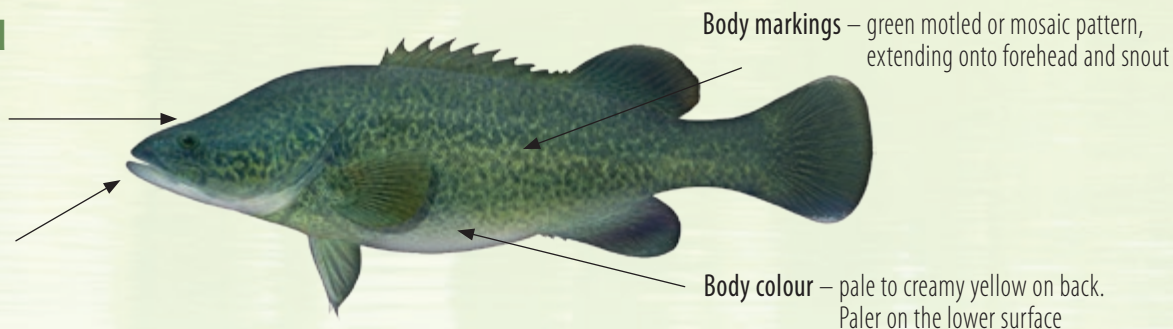
Murray Cod

Max reported weight 114 kg

Head profile – concave

Head width – broad

Jaws – equal or bottom jaw protrudes



Body markings – green mottled or mosaic pattern, extending onto forehead and snout

Body colour – pale to creamy yellow on back. Paler on the lower surface

Deliberately fishing for Trout Cod from natural rivers and streams is illegal and significant penalties apply

The aggressive nature of Trout Cod makes them relatively easy to catch, and they are often incidentally caught by anglers targeting other species. The apparent local abundance of Trout Cod at some sites often leads people to believe that the species has recovered and is no longer in danger of extinction.

If you accidentally catch a Trout Cod from natural rivers or streams, you must release it immediately, causing the least possible harm. Penalties can include fines of up to \$220,000 and/or two years in prison for harming, possessing, buying or selling them or for harming their habitat.

To protect breeding Trout Cod in natural waterways, **ALL FISHING IS PROHIBITED** in the Murray River and its tributaries between Yarrawonga Weir and the Tocumwal Road Bridge from 1 September to 30 November each year. The possession of fishing gear in, or adjacent to closed waters is also an offence. In addition, persons found to be targeting or in possession of the species at any time or at any location face significant penalties.

Trout Cod are at a critical stage in their recovery

Re-establishment of Trout Cod at a small number of locations represents the early stages of recovery of the species. Trout Cod are still considered to be in danger of extinction from factors such as habitat modification and degradation, illegal fishing activities and the adverse impacts of introduced species. The recovery of Trout Cod relies on an ongoing concerted effort by government authorities and the wider community. A lot has already been achieved including research into the species biology, ecology, distribution and habitat requirements; undertaking a wide range of habitat rehabilitation activities such as re-snagging, re-vegetation, weed control, fencing and fish passage improvement works; and enhanced education and advisory activities.



Photo by Rohan Rehwinkel



Artificial breeding and stocking

NSW DPI maintains a conservation stocking program for Trout Cod at Narrandera Fisheries Centre. The program is run in accordance with genetic guidelines for conservation stocking in the Trout Cod Recovery Plan and the Fisheries Management Strategy for Freshwater Fish Stocking. NSW DPI continues to monitor stocked sites to gain a clearer understanding of the effectiveness of the stocking program in contributing to Trout Cod recovery.

In addition to contributing to the conservation stocking program, NSW DPI may use Trout Cod fingerlings produced at the Narrandera Fisheries Centre to stock specified impoundments for the purpose of catch and release recreational fishing. In 2014, the Minister made an Order that permits specific impoundments in regional NSW to be stocked with Trout Cod. However since the Trout Cod is an endangered species, the conservation stocking program is a priority for the production of fingerlings at Narrandera Fisheries Centre, and it will be determined on an annual basis if any fingerlings will be stocked for recreational fishing.



Left: A Trout Cod (top) and a Murray Cod (bottom).
Photo by Stephen Thurstan

Handy fishing tips

When fishing, please consider the following tips to maximise the survival of Trout Cod:

- Avoid fishing in areas where Trout Cod may occur during the breeding season (September to November). This coincides with the seasonal fishing closure for Murray Cod.
- Use methods and rigs that reduce deep hooking – target fish with artificial lures or choose non-offset circle hooks when using bait.
- If the fish is hooked deeply, cut the line as close as possible to the fish's mouth. Do not try to remove the hook.
- Use barbless hooks or hooks with reduced barbs to make removal easier and minimise damage.
- Avoid lifting the fish from the water – if possible unhook the fish while it is still in the water. Try to retrieve hooks from mouth-hooked fish and release the fish as quickly as possible.
- Support the weight of the fish properly. Use wet hands or wet gloves when handling fish to minimise damage to their skin. Don't hold the fish by the gills or eyes.
- Use knotless mesh nets – avoid knotted landing nets which may damage the fish's scales, skin, eyes and fins.
- Use only legal fishing gear – the use of gaff hooks, spears, spear guns or similar devices is totally prohibited in any freshwater environment.
- If you find that you are catching Trout Cod or other threatened or protected species, you should consider trying to avoid hooking them by changing your location, baits or your fishing rigs.

Impacts of illegal fishing

Any illegal activity that reduces Trout Cod numbers is considered harmful to the viability of the population and long-term conservation of the species. Targeted or indirect capture of Trout Cod directly reduces their numbers, removes breeding age adults and disturbs breeding activities including egg and larvae guarding, leading to increased predation of eggs and juveniles by other fish and turtles.

Where to from here?

A recovery plan has been prepared for Trout Cod that sets out the actions required to recover the species to a position of viability in nature. A specific objective in the recovery plan is to establish and protect a minimum of two new self-sustaining populations of Trout Cod at selected locations throughout the species' former range.

The independent Fisheries Scientific Committee is responsible for listing threatened species of fish and marine vegetation and for reviewing scientific information to assess whether a species should be downgraded or de-listed from the NSW *Fisheries Management Act 1994*. The Committee assesses the eligibility of each species for listing against criteria set out in the Fisheries Management (General) Regulation 2010. Trout Cod will be de-listed when they cease to be eligible for listing as a threatened species in accordance with the criteria set out in the regulations.