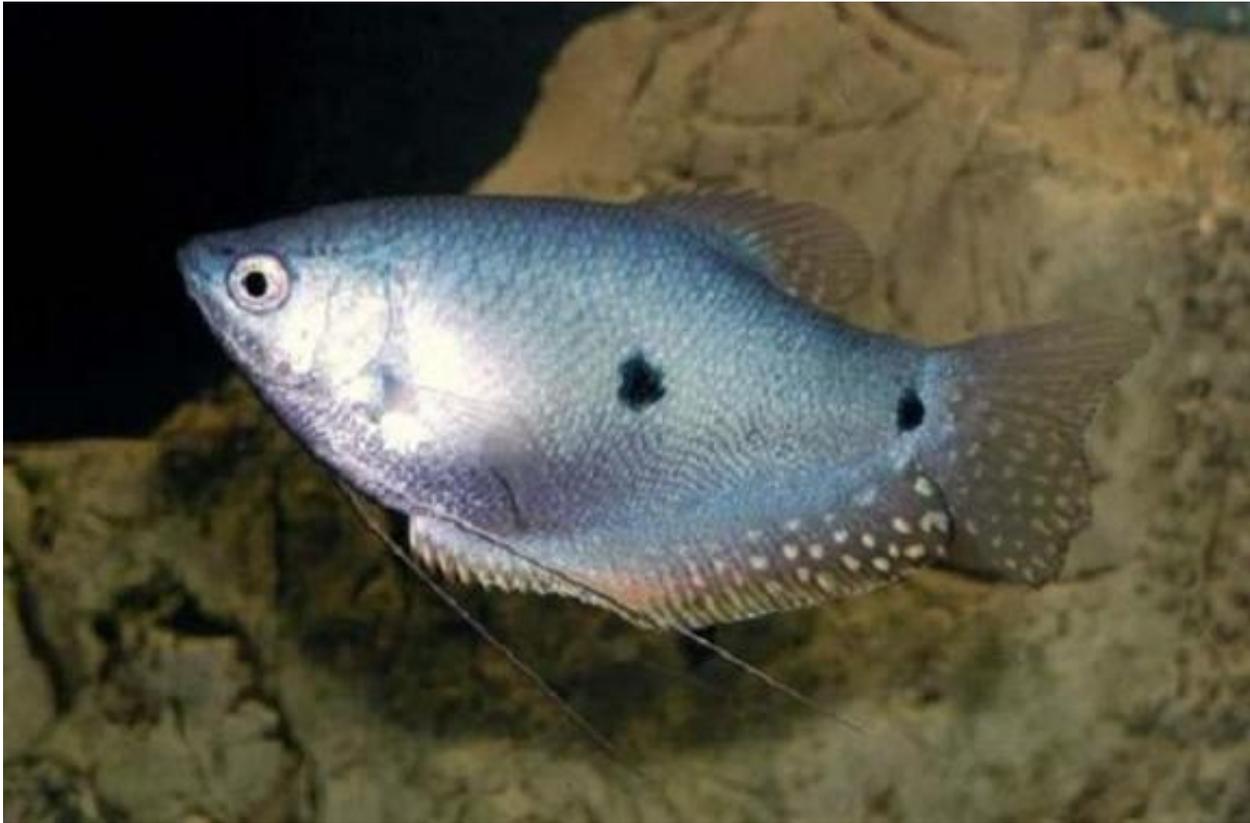


## *Trichopodus trichopterus* (Three Spot Gourami)

Family: Osphronemidae (Gouramis)

Order: Perciformes (Perch and Allied Fish)

Class: Actinopterygii (Ray-finned Fish)



**Fig. 1.** Three spot gourami, *Trichopodus trichopterus*.

[<http://marinelifeinfo.blogspot.com/2012/07/three-spot-gourami.html>, downloaded 1 April 2015]

**TRAITS.** The three spot gourami has two spots on each side; the third spot is the eye (Fig. 1). Its scales are coloured blue and it can also be called the blue gourami. This species is also known as a brown and yellow colour form (Fig. 2). The mouth is very small, the upper jaw is retracted and the lower jaw is prominent. The sensory lateral line is curved and irregular. The males and females have a difference in dorsal fins, those of the males are longer. Body coloration in *T. trichopterus* is controlled by two genes, with dominance at both loci required for the blue phenotype (Frankel, 1992).

**DISTRIBUTION.** The blue gourami is endemic to south-east Asia. They can be found in fresh water in Cambodia, Thailand and Laos (Allen, 1991). They are also found in the south of Trinidad in the Oropouche River basin. It is believed that the fish may have been introduced by fish keepers.

**HABITAT AND ACTIVITY.** The gourami is found in tropical fresh water, it can live in fresh water swamps and wetlands. The fishes may migrate downstream in the wet season. The fish travel downstream to hunt. The gourami is attracted to areas that have heavily vegetated low lands, where they can hide (Fig. 3). Most gourami are hard to find as they live close to the bottom and live around aquatic plants. The temperature of their environment must be 24-30°C.

**FOOD AND FEEDING.** The three-spot gourami eats mosquito eggs, algae and other small organisms. The larger gouramis are able to eat shrimp and other small fishes. The fish is able to shoot water from its mouth and hit insects that are on plants into the water and feed on them.

**POPULATION ECOLOGY.** The gouramis stay to themselves most of the time, hiding around logs and aquatic plants. The males have a dominance hierarchy, when compared to the females and other smaller fish. Females are smaller than the males, both live for an estimated 4 years in aquariums. They grow to lengths of 15cm. There is no grouping of these fish as they mostly stay alone, only coming together for reproduction. Males build a bubble-nest for the eggs, and they get more aggressive and territorial.

**REPRODUCTION.** Like most fish in this family, blue gouramis are bubble-nest builders. When they are mating, they make a large air bubble nest, among the water plants to hold the eggs. The water must be 26°C and have small aquatic plants. When the bubble-nest is made the males courts the female to lay her eggs in the bubbles. The blue gourami lays around 700-800 eggs. The female must then leave or the male fish will kill her, as he guards the eggs till they hatch.

**APPLIED ECOLOGY.** According to the IUCN Red List of Threatened Species, the three-spot gourami is of “Least Concern”. They might be killed in polluted water ways but it is able to move to other areas. Invasive in some counties, such as The Republic of Trinidad and Tobago and Jamaica, they feed on smaller fish and are very aggressive and territorial.

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**Fig. 2.** Three spot gourami, *Trichopodus trichopterus* (brown form).

[<http://marinelifeinfo.blogspot.com/2012/07/three-spot-gourami.html>, downloaded 1 April 2015]



**Fig. 3.** An example of blue gourami habitat; the Oropouche stream.

[Original photo by Krystal Austin]