## Cichlasoma taenia (Brown Coscarob)

Family: Cichlidae (Cichlids and Tilapias) Order: Perciformes (Perch and Allied Fish) Class: Actinopterygii (Ray-finned Fish)



Fig. 1. Brown coscarob, Cichlasoma taenia.

[www.fishbase.org/summary/Cichlasoma-taenia.html, downloaded 7 March 2017]

**TRAITS.** The brown coscarob *Cichlasoma taenia* is a small species of freshwater fish (Wikipedia, 2016). They have smooth scales with a lateral line with two pairs of black spots; one on the sides and the other at the tail base (Fig. 1). Both males and females grow to a maximum length of 12.8cm (Torres, 1991), but males are mostly larger in size. There is an extended dorsal fin from behind the head to the base of the tail, a single pointed anal fin, rounded tail fin and single pair of short wide pectoral fins. Terminal mouth with small spiked teeth equipped for catching prey or eating plant matter as well as a nostril with two holes on either sides of the head. The colour is metallic silver and green patterned scales tinged with yellow, red eyes and black lateral stripe.

**DISTRIBUTION.** Native to South America, mainly found in northeastern Venezuela (Fig. 2) and distributed throughout Trinidad (Fig. 3), in rivers, lakes and ponds (Torres, 1991).

**HABITAT AND ACTIVITY.** Found in turbid or clear water such as rivers and swamps that flow freely or move sluggishly (Phillip et al., 2013). They are not present in marine areas, reefs

or in brackish waters. Through laboratory experiments, *Cichlasoma taenia* however has been shown to tolerate a salinity level of 50% of that of sea water (McBirney and Brough, 2015). It is found in water that is of pH 7 and in the temperature range of 24-27°C (Torres, 1991). They tend to stay in upstream environments where they can feed on small free swimming animals and consume some plant matter. They stay in mid-water and may venture to the bottom or the surface depending on the water level or season. They live between rocks and plants that they use for safety for both themselves and their offspring. The brown coscarob can live in solitude but will form pairs (McBirney and Brough, 2015). It is only territorial around spawning periods.

**FOOD AND FEEDING.** As a predator, they spend the majority of the day prowling the area for food but do not hunt at night. It uses its nostrils as well as its lateral line equipped with sensors to detect and find nearby moving prey. They can be described as omnivorous as they feed mostly at the bottom of the water bed where they can catch small organisms such as earth worms, live snails and small insects and crustacean (Phillip et al., 2013). Other times they take advantage of the small fish such as small guppies that swim mid-water and sometimes to the surface. It sometimes feeds on plant vegetation that may fall into the water from nearby trees or those that grow below the surface where they use varying degrees of suction and biting to aid in consumption (Keenleyside, 1991).

**REPRODUCTION.** When a pair is formed (Fig. 4), they become extremely territorial and seclude themselves to a specific location where spawning can rapidly occur (De la Torre, 2010). The males and females usually show brighter displays closer to the time of spawning and it may also act as a warning to others. It is common for the parents to use their mouths to clean the desired area that will hold the eggs. The female may lay her eggs in an area that is comfortable and convenient (Fig 5) but the male however, is responsible for the egg protection (De la Torre, 2010). The males are highly aggressive at this stage even toward the female with which it spawned. A fully grown female may lay about 300-600 eggs at a time that will hatch completely after about 8 days at a temperature of approximately 25-27°C (McBirney and Brough, 2015). The fry are about 3mm in length with a silver hue that will become pronounced during development.

**BEHAVIOUR.** When in solitude or in groups it is usually calm and peaceful. Members of the group move closely together and survey their area (McBirney and Brough, 2015). The young are usually energetic but not wildly so, and will be closely protected by the parents. During feeding, it is an opportunistic hunter that will try to catch anything in its sight. It feeds by suction, ramming or biting. When it uses suction feeding it opens its mouth and sucks prey into the mouth cavity; ram feeding involves opening of the mouth and taking over the entire body of the prey; and biting involves using the teeth and jaws to bite into their prey (Keenleyside, 1991). It may use various combinations and orders of attack to capture and consume its meals.

**APPLIED ECOLOGY.** This species is not assessed in the IUCN Red List (IUCN, 2017). There are however no critical threats toward the species. They are sometimes used as pets in aquariums and are not of any danger to humans.

## **REFERENCES**

De la Torre, J. (2010). Los Cichlidae. *Artes de Pesca*. <a href="http://tintorero-wwwartesdepesca.blogspot.com/2014/04/los-cichlidae-9.html">http://tintorero-wwwartesdepesca.blogspot.com/2014/04/los-cichlidae-9.html</a>

IUCN. (2017). Cichlasoma taenia. The Red List of Threatened Species. http://www.iucnredlist.org/search.

Keenlyside, M.H. (1991). Cichlid Fishes: Behaviour, ecology and evolution. **6.2**: 130

McBirney, C. and Brough, C. (2015). *Cichlasoma taenia* (Brown Coscarob). <a href="http://animalworld.com/encyclo/fresh/cichlid/BrownCoscarob.php">http://animalworld.com/encyclo/fresh/cichlid/BrownCoscarob.php</a>

Phillip, D. A.T., Taphorn, D.C, Holm, E., Gilliam, J.F., Lamphere, B.A. and López-Fernández, H. (2013). Zootaxa: Annotated list and key to the stream fishes of Trinidad & Tobago. New Zealand: Magnolia Press.

Torres, A..G. (1991). Cichlasoma taenia (Bennett, 1831) Brown coscarob. FishBase.

 $\underline{http://www.fishbase.se/Country/CountrySpeciesSummary.php?c\_code=780\&genusname=Cichlasoma\&speciesname=taenia$ 

Wikipedia. (2016). Cichlasoma. https://en.wikipedia.org/wiki/Cichlasoma

Author: Natalia Thomas Posted online: 2017



Fig. 2. Brown coscarob geographic distribution.

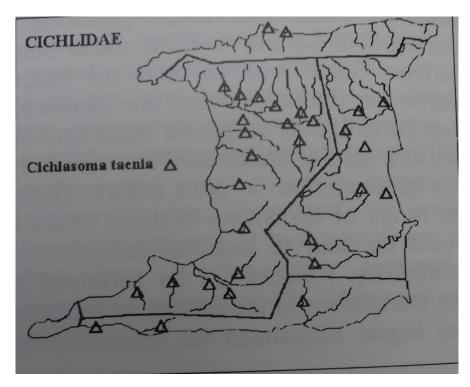


Fig. 3. Brown coscarob distribution in Trinidad.

[Fig. 41 of Kenny (1995)]



Fig. 4. Brown coscarob in spawning pair.



Fig. 5. Brown coscarob guarding eggs after spawning.

[http://www.aquarium-forum.at/album/data/media/7/Cichlasoma\_taenia-Brut-1.jpg, downloaded 10 March 2017]

For educational use only - copyright of images remains with original source