

Chilomycterus antennatus (Bridled Burrfish)

Family: Diodontidae (Porcupinefish)

Order: Tetraodontiformes (Pufferfish, Triggerfish and Boxfish)

Class: Actinopterygii (Ray-finned Fish)



Fig. 1. Bridled burrfish, *Chilomycterus antennatus*

[<http://biogeodb.stri.si.edu/caribbean/en/pages/random/10321>, downloaded 26 October 2016]

TRAITS. A species of fish with small, black spots and a yellowish-brown body, head and base of tail. On the anterior base of the dorsal fin and in the middle of the back are two or more white-rimmed, large, black spots. The eyes are large with a gold iris surrounded by a ring of black dots, and above each eye is a large projection (Fig. 1). The body is round and has the ability to inflate or expand. There are no pelvic fins; large pectoral fins without spines; nine caudal fin rays; few motionless, short spines covering the body and head. The teeth are fused and the nasal organ is a hollow, short tentacle with two openings. Size usually 15-30cm, but males can grow up to 38cm. Young fish up to 3cm inhabit the water column (Smith, 1997).

DISTRIBUTION. Range is the Gulf of Mexico from northwestern Cuba, Florida Keys, south from Cape Canaveral along the U.S. coast, the Bahamas, the Caribbean Sea with the exception of the Cayman Islands. Found on both sides of the Atlantic Ocean (Fig. 2). The bridled burrfish is native to Trinidad and Tobago (Leis et al., 2015).

HABITAT AND ECOLOGY. Inhabits reefs (rocky/coral) and seagrass beds at depths of 1-25m; the edges in the water column; sand and gravel; rocks and submerged vegetation (Lieske and Myers, 1994). However, the bridled burrfish is rare (Randall, 1996) but is sometimes the bycatch of shrimp trawlers (Crawford et al. 2011). The fish is carnivorous and crushes prey using fused teeth. The diet consists of starfish, sea cucumbers, anemones, gastropods, crustaceans such as shrimp or crabs, and bivalves (Leis et al., 2015). It is also nocturnal.

REPRODUCTION. The reproductive mode is dioecious, with separate sexes, and fertilization is external, eggs and sperm are released in the open water and the sperm swim to the eggs. The fertilized eggs then float of into the current and become part of the zooplankton, some of which are fed upon. For this reason, they are referred to as pelagic spawners. The bridled burrfish can be referred to as a non-guarder as there is no parental care (Breder and Rosen, 1966).

BEHAVIOUR. Large, pelagic predators usually prey upon the juveniles. As a last resort, the fish can inflate, using air or water, as a mechanism of scaring predators away (Fig. 3). This is a last resort since the fish would give up maneuverability in water. With members of its own family the fish is not aggressive but would nip at long-finned or slow-moving fish. The bridled burrfish is solitary and the current population trend is unknown (Leis et al., 2015).

APPLIED ECOLOGY. According to the IUCN, the bridled burrfish is of Least Concern as the species is not considered to be endangered, critically endangered, vulnerable or near threatened, as such, there are no conservation measures. The bridled burrfish is not of any interest to fisheries, however, although the flesh of the fish is toxic, it is consumed by some fishermen and villagers in native areas (Leis, 2002).

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Posted online: 2016

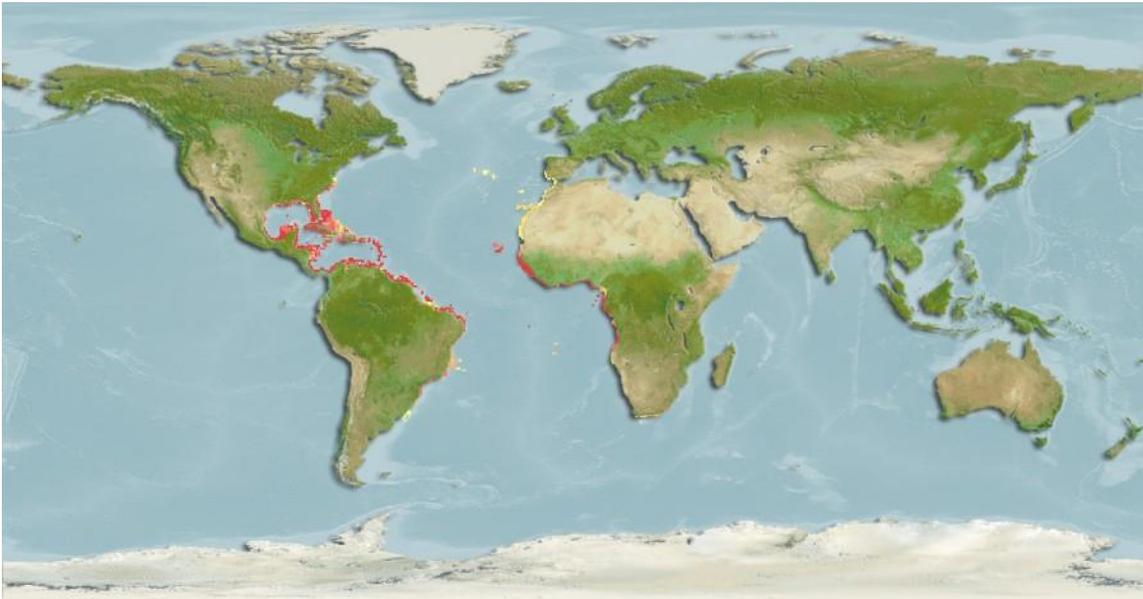


Fig. 2. Bridled burrfish geographic distribution.

[http://www.aquamaps.org/receive.php?type_of_map=regular, downloaded 9 November 2016]



Fig. 3. Bridled burrfish defence against predators.

[<http://www.fishbase.org/Photos/PicturesSummary.php?StartRow=0&ID=4299&what=species&TotRec=2>, downloaded 9 November 2016]

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