

## *Lactophrys bicaudalis* (Spotted Trunkfish)

Family: Ostraciidae (Boxfish)

Order: Tetraodontiformes (Pufferfish, Triggerfish and Boxfish)

Class: Actinopterygii (Ray-finned Fish)



**Fig. 1.** Spotted trunkfish, *Lactophrys bicaudalis*.

[<http://www.fishbase.org/photos/UploadedBy.php?autoctr=9627&win=uploaded>, downloaded 25 October 2016]

**TRAITS.** The spotted trunkfish has a dull light grey or dirty white to light brown background with black or dark brown circular spots all over its body including its fins, with white spots behind the eyes and white lips. The head is pointed, with narrow gill openings, very thick lips, and a protruding mouth with pointed cone-shaped teeth. The body is triangular, narrow at the top (like a hump) and wide underneath. The anal and dorsal fins are at the back of its body, with two sharp spines in front of the anal fin (Fig. 1); the fins lack spines, and there are no pelvic fins (Mexico Fish, Flora & Fauna, 2016). Trunkfish all have strong hexagonal bone plates which unite to make a very rigid structure over the body that only allows for the tail, jaw and fin bases to move (Rosenberg, 2014). The rigid structure acts as a protective shield and protects the trunkfish from predators (Switchzoo, 2016), but as a result the fish is not very fast. At maturity the average length of the spotted trunkfish range from 15-30 cm (Switchzoo, 2016) but can grow to a maximum of 48cm. The juvenile spotted trunkfish has an orange background colour with fewer dark (Mexico Fish, Flora & Fauna, 2016), a round shape, and transparent fins (Fig. 2).

**DISTRIBUTION.** *Lactophrys bicaudalis* are found in the warmer regions of the world, in the western and central Atlantic Oceans, Caribbean Sea and the Gulf of Mexico (Fig. 3) (IUCN, 2016).

**HABITAT AND ECOLOGY.** *Lactophrys bicaudalis* can be found at depths of 50m and they reside in clear water habitats such as seagrass beds, in and around coral reefs, sometimes under ledges or in small holes (Fig. 4). They are diurnal and omnivorous consumers which prey on numerous small invertebrates and vegetation (NOA, 2005). *Lactophrys bicaudalis* has a life expectancy of 6-12 years (Switchzoo, 2016). The family Ostraciidae reproduce by pairs laying eggs at dusk, and its life cycle involves an egg, larva, juvenile (Fig. 2) and adult stage (NOA, 2001). According to Snyder and Burgess (2016) ostraciid larvae are planktonic for about one week.

**BEHAVIOUR.** The spotted trunkfish is very cautious and curious, if confronted it hides itself somewhere until it feels safe to come out (Snyderman and Wiseman, 1996). Fish of the family Ostraciidae generally live alone, and are territorial towards other fish of the same family (Petguide.com, 2013). Ostraciid fish are generally slow due to their shape and the limited movement of their fins. For protection it secretes a poison called ostracitoxin (Burton and Burton, 2002).

**APPLIED BIOLOGY.** According to IUCN (2016) *Lactophrys bicaudalis* is not threatened neither is it a threat so no conservation methods or actions are necessary. It is sold on a small scale for aquarium use.

## REFERENCES

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**Fig. 2.** Juvenile spotted trunkfish.

[<http://reefguide.org/pixhtml/spottedtrunk5.html>, downloaded 25 October 2016]



**Fig. 3.** Map showing the geographical distribution of the spotted trunkfish.

[<http://maps.iucnredlist.org/map.html?id=190106>, downloaded 25 October 2016]



**Fig. 4.** Spotted trunkfish in its habitat.

[<http://petguide.com.vsassets.com/wp-content/uploads/2016/04/Trunkfish-1.jpg>, downloaded 25 October 2016]

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