

Lactophrys triqueter (Smooth Trunkfish)

Family: Ostraciidae (Boxfish)

Order: Tetraodontiformes (Pufferfish, Triggerfish and Boxfish)

Class: Actinopterygii (Ray-finned Fish)



Fig. 1. Smooth trunkfish, *Lactophrys triqueter*

[http://flowergarden.noaa.gov/image_library/fish/smoothtrunkfish2gpsmd.jpg, downloaded 18 October 2016]

TRAITS. The smooth trunkfish is scientifically known as *Lactophrys triqueter*, previously as *Rhinesomus triqueter*. This fish possesses a body shape that is angular and even triangular when observed from a frontal viewpoint. Smooth trunkfish are generally a deep chocolate or chestnut colour with white spots (Fig. 1). This species has a carapace (bony case) that shields the fish. The lips, bases of the fins and the edge of the caudal fin are a charcoal colour (Randall, 1996). The maximum length of a smooth trunkfish is 47cm (Robins and Ray, 1986), while the common length is 20cm (Tyler, 1978).

DISTRIBUTION. *L. triqueter* is native to Trinidad and Tobago as well as other regions in the Caribbean and frequently sighted in the north westerly part of the Gulf of Mexico (Fig. 2).

HABITAT AND ECOLOGY. Smooth trunkfish occupy a marine habitat amongst coral and rocky reefs and are found at a depth of 50m. This species of trunkfish is strictly diurnal. (Leis *et al*, 2015). The diet of this species is comprised of small benthic (bottom-living) invertebrates which include crustaceans, molluscs, worms, sessile tunicates and sponges. These may be uncovered by bursts of water from the mouth of the fish (Lieske and Myers, 1994). They can be

seen over sandy bottoms of reefs “blowing jets of water into the soft sediment to stir up a meal” (NOS, 2016) as seen in Fig. 3.

BEHAVIOUR. These trunkfish are commonly found singly, but have also been observed moving about in small groups (Leis et al., 2015), and feeding with other species of fish (Auster and Lindholm, 2002). Juvenile smooth trunkfish may be observed feeding on algae or swimming with juvenile silver fish (Fig. 4). If the smooth trunkfish is threatened it secretes a poisonous substance called ostracitoxin as an anti-predatory measure (Lieske and Myers, 1994).

APPLIED BIOLOGY. The species is listed by the IUCN (2015) as of Least Concern based on the Red List Category and Criteria as there are no recognized, considerable threats. There is also abundance and widespread distribution of this fish due to its large existing population. Consequently, no known conservancy action or conservation methods has been taken or put in place for *L.triqueter* (Leis et al., 2015). The smooth trunkfish is sold across the Caribbean to be prepared for human consumption (Tyler, 1978).

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Fig. 2. Distribution map of *L. triqueter*. Red represents highest probability of occurrence and yellow represents smaller probability of occurrence.

[http://www.aquamaps.org/receive.php?type_of_map=regular downloaded 20 October 2016]



Fig. 3. Smooth trunkfish blowing jets of water to expose food.

[<http://matthewmeierphoto.photoshelter.com/image/I0000gWPeUFO8SWM>, downloaded 20 October 2016]



Fig. 4. Juvenile silver fish shadowing juvenile smooth trunkfish.

[<https://www.superstock.com/stock-photos-images/1899-49079>, downloaded 19 October 2016]

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