

## *Fistularia tabacaria* (Cornetfish)

Family: Fistulariidae (Cornetfish)

Order: Syngnathiformes (Seahorses, Pipefish and Trumpetfish)

Class: Actinopterygii (Ray-finned Fish)



**Fig. 1.** Cornetfish, *Fistularia tabacaria*.

[<http://www.fishbase.org/summary/fistularia-tabacaria.html>, downloaded 4 March 2017]

**TRAITS.** *Fistularia tabacaria*, or the cornetfish as it is globally known, is a fish that has a total maximum length of 200cm = for both males and females, and an average length of 120cm (iNaturalist, 2014). It has a slender, cylindrical body with an elongate face with large eyes, and a small mouth and jaw at the end of its snout. Brownish-green bands cover its dorsal side, however these only appear in adulthood as juveniles are darker and usually either brown or green (Froese and Sampang-Reyes, 2017). The belly is a lighter tone. Pale blue spots form a pattern from the tip of the snout to the dorsal fin on the back, and two more rows of pale blue spots on the side of its body start from the snout and run along the side of the fish until they eventually turn into pale blue lines nearing the tail (Fig. 1). The lateral line is well defined and usually very dark in adults; it can either be a line or a series of dark spots along the side of the fish (Wikipedia, 2016).

**DISTRIBUTION.** The cornetfish is widespread in the Atlantic Ocean (Fig. 2), from Nova Scotia to Brazil in the west and Cape Blanc to Angola in the east (Carpenter et al., 2015). They usually live in shallow depths of about 10m of water, although some have been found at depths of 200m. It prefers tropical climates with water temperatures around 23°C (Froese and Sampang-Reyes, 2017).

**HABITAT AND ACTIVITY.** The cornetfish is found mainly in coastal waters, in and around seagrass beds and coral reefs (Carpenter et al., 2015), more rarely over hard rocky bottoms. It is solitary and spends most of its time alone in its habitat, searching for food which include crustaceans and other invertebrates and small fish. It is active mainly during daytime and is often seen swimming slowly, always near to the seagrass, coral or rocks where it can find food easily or hide from predators (IUCN, 2016).

**FOOD AND FEEDING.** Most of the time during the day is spent silently and slowly swimming and stalking the reefs and seagrass beds for prey. Shrimps, crustaceans, small fish and invertebrates are its diet (Froese and Sampang-Reyes, 2017). The coloration of the fish along with its pattern of spots, lines and bands make it difficult to see and serves as camouflage when stalking prey. It typically relies on a combination of camouflage (Fig. 3) and its large eyes with large pupils to notice and seek out prey. Small fish and crustaceans are usually sucked up from the sand or seagrass beds by the long snout (Wikipedia, 2016). Prey hiding in the corals are usually not safe due to the long snout and slender body which allows it to reach almost any prey.

**POPULATION ECOLOGY.** They live almost exclusively solitarily for their entire lives, except for mating. Population density and size are unknown (Carpenter et al., 2015). Apart from patrolling their habitat in the reef, cornetfish will change territory if conditions and resources are more favourable elsewhere (Froese and Sampang-Reyes, 2017). Reproduction is oviparous and the eggs are large, and hatch to produce young that are 6-7mm long (Barros et al., 2007). The young are born small and darkly coloured in order to be able to hide in the reef. They usually spend a lot of time hiding and eating invertebrates to survive since they have to fend for themselves and each go on to live a solitary life (Barros et al., 2007).

**BEHAVIOUR.** The adults have to hide since they are food for bluefin tuna, which are faster than they are (Froese and Sampang-Reyes, 2017). The adults use their varied patterns of stripes, bands and spots to confuse predators as they swim in a winding motion like a snake, and usually head for corals or rocks where they can easily escape any attacker due to their body shape (Fritzsche, 1976). Outside of hiding from predators, adults spend their time silently and slowly stalking their habitat for food (IUCN, 2016).

**APPLIED ECOLOGY.** This species is listed as Least Concern because it is common in its distribution, and it poses no threat to humans (Froese and Sampang-Reyes, 2017). However, it is threatened by damage to coral reefs and seagrass beds by human and natural activities. This species is not primarily targeted by fishermen but if captured, the fish can be smoked, dried or salted and sold in small fish markets (Fritzsche, 1976).

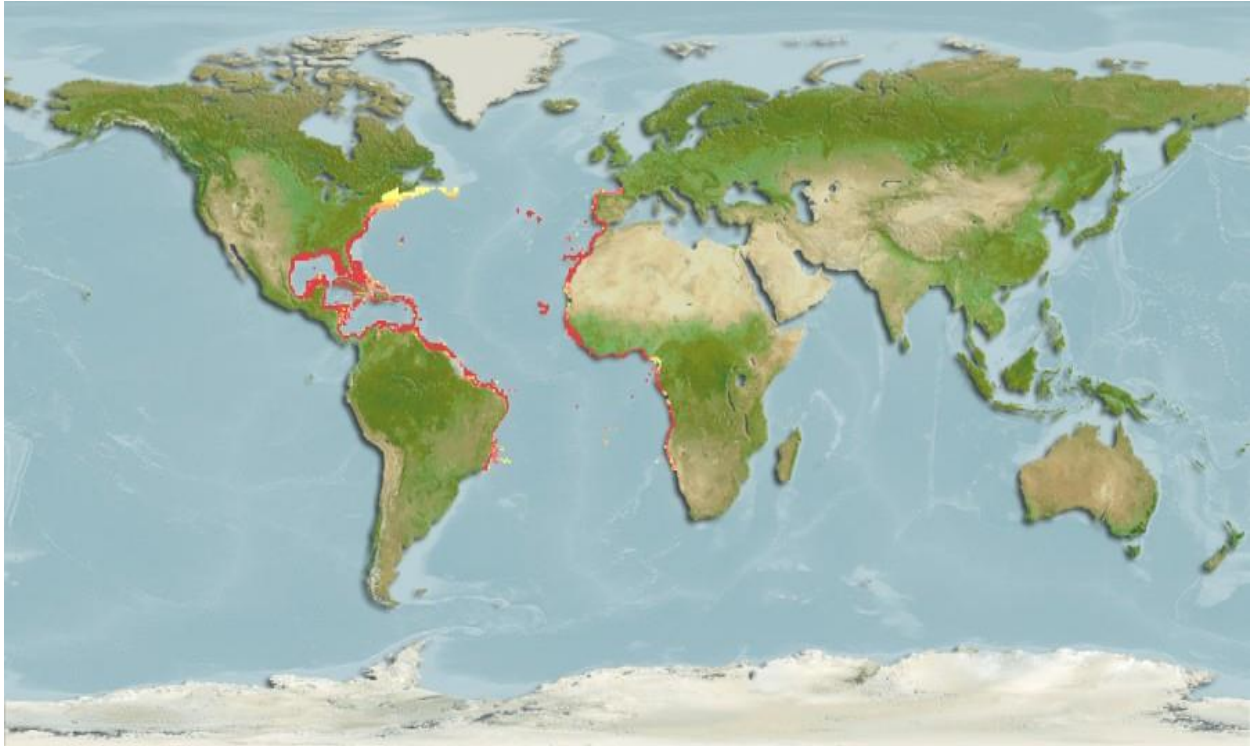
## REFERENCES

- Barros, F., de Castro, M., and Bonecker, A. (2007). Description and distribution of the larvae of two species of *Fistulariidae* (Teleostei, Syngnathiformes) in the southeastern Brazil. *SciELO*. [http://www.scielo.br/scielo.php?script=sci\\_arttext&pid=S1676-06032007000100014](http://www.scielo.br/scielo.php?script=sci_arttext&pid=S1676-06032007000100014).
- Carpenter, K., Robertson, R., Munroe, T., and Pollom, R. (2015). *Fistularia tabacaria* (Cornetfish, Tobacco trumpetfish, Unarmed trumpetfish). *Iucnredlist.org*. <http://www.iucnredlist.org/details/summary/16781124/0>.
- Fritzsche, R. (1976). A Review of the Cornetfishes, Genus *Fistularia* (Fistulariidae). <http://www.ingentaconnect.com/content/umrsmas/bullmar/1976/00000026/00000002/art00006>.
- Froese, R. and Sampang-Reyes, A. *Fistularia tabacaria* summary page. *FishBase*. <http://www.fishbase.org/summary/fistularia-tabacaria.html>.

- iNaturalist,. (2014). Atlantic Cornetfish (*Fistularia tabacaria*). <http://www.inaturalist.org/taxa/47242-Fistularia-tabacaria>.
- IUCN. (2016). Cornetfishes & trumpetfishes. IUCN Seahorse, Pipefish & Stickleback Specialist Group. <https://iucn-seahorse.org/cornetfishes-trumpetfishes/>.
- Wikipedia. (2016). Cornetfish. <https://en.wikipedia.org/wiki/Cornetfish>

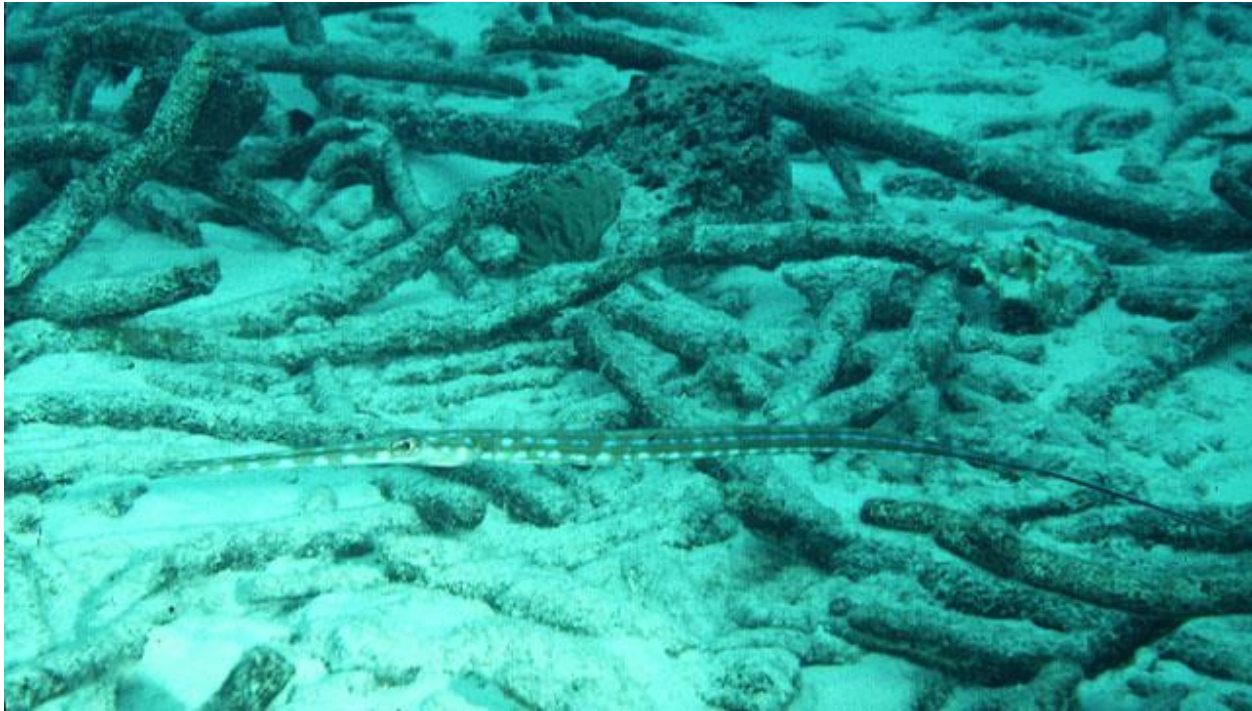
Author: Shaueel R. Persadee

Posted online: 2017



**Fig. 2.** Cornetfish geographic distribution.

[<https://en.wikipedia.org/wiki/Cornetfish>, downloaded 8 March 2017]



**Fig. 3.** Cornetfish camouflaged on a reef.

[<http://www.forestventure.com/speciesdetail.cshhtml?id=74188>, downloaded 8 March 2017]

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