Antennarius multiocellatus (Longlure Frogfish)

Family: Antennariidae (Frogfish)

Order: Lophiiformes (Anglerfish and Frogfish)

Class: Actinopterygii (Ray-finned Fish)



Fig. 1. Longlure frogfish, Antennarius multiocellatus.

[http://photography.nationalgeographic.com/staticfiles/NGS/Shared/StaticFiles/Photography/Images/Content/frogfis h-laman-981881-lw.jpg, downloaded 29 March 2015]

TRAITS. The longlure or yellow frogfish is a small, plump, bulbous species (Fig. 1). It usually does not exceed 13cm in length, and has very thick skin covered in highly modified scales known as dermal spicules. It therefore appears prickly or warty, similar to a toad. They have very small eyes and an enormous mouth that slants upwards, and tiny gill openings. The pectoral fins are on stalks (Fig. 2). They have elongated illicium (first spine that is highly modified into a rod) that is used as fishing bait. The 2nd and 3rd dorsal spines are enclosed in thick skin and are apart from the others (Wikipedia, 2015). Colour is highly variable. The longlure frogfish coloration can range from a faint yellow to a bright red or dark green to red-brown colour. They usually imitate the colour of the sponges in its surroundings (Patton, 2015). It usually very hard to distinguish between the male and female frogfish.

DISTRIBUTION. The longlure frogfish can be located in the western Atlantic Ocean (Fig. 3), from the Bahamas to the coasts of Central and South America (Patton, 2015).

HABITAT AND ACTIVITY. The longlure frogfish is usually found in shallow reefs that are no more than 70m in depth. They prefer coastal areas with abundant algal growth or close to sponges, which makes it easier to match the surroundings. Frogfishes have been reported to be present on shipwrecks, jetties and artificial reefs. Though they occupy shallow waters, they are found at the bottom of these waters and are referred to as bottom dwellers (Fig. 4). The frogfish has stalked pectoral and pelvic fins that are used to move across the bottom. Frogfishes can also inflate themselves by the intake of water in their stomachs. It is an isolated species usually found in small populations (Patton, 2015).

FOOD AND FEEDING. This frogfish resides in a sponge until its prey swims by and it wiggles its illicium as bait to attack the prey. As it move across the bottom, using its stalked pectoral and pelvic fins using the bait (esca) to attract small fishes and crustaceans (Fig. 5). They are very voracious predators and can consume a fish that is bigger in size than the frogfish. They mainly feed on fishes and seldom feed on crabs and mantis shrimps. They also tend to change location especially if their bait isn't catching any fishes in that particular area (Wikipedia, 2015).

REPRODUCTION. The longlure frogfish family has a distinctive feature; the extruded eggs are enclosed within a ribbon-like structure resilient ball of mucus and is known as an egg raft. This distinctive feature allows for very large numbers of eggs to be transported over a vast geographical distance. Immediately before reproduction, the female frogfish walks across the bottom, with male frogfish behind her. It is observed that the male's snout is immediately in contact with the female's vent. As a result of this the female frogfish is swollen in most cases almost two times her size with over 40,000 eggs during this period. They both dash to the surface causing the egg mass to be ejected from the female. After this process the female frogfish may reproduce multiple times for a few weeks (Patton, 2015).

BEHAVIOUR. The term longlure from longlure frogfish refers to its elongated illicium called a lure attached to the rod that it uses to fish. It is an extremely modified first spine of their dorsal fin. The frogfish usually reside in sponge until a fish swims by only then it shakes the lure up and down to draw the attention of the prey. It can consume a fish almost twice its size. The frogfish is reported to be one of the quickest animals since they can swallow their prey in $1/6^{th}$ of a second (MarineBio, 2013).

APPLIED ECOLOGY. The longlure frogfish is not listed in the World Conservation Union (IUCN) as being threatened or vulnerable to extinction. It is found in the West Indies and is harmless to humans.

REFERENCES

MarineBio.org. (2013). Longlure frogfishes. http://marinebio.org/species.asp?id=28
Patton, C. (2015). Longlure Frogfish. http://www.flmnh.ufl.edu/fish/Gallery/Descript/FrogFish/Frogfish.htm
accessed 02 April 2015.

Frogfish.ch. (2015). Antennarius multiocellatus http://www.frogfish.ch/species-arten/Antennarius-multiocellatus.html, downloaded 02 April 2015.

Wikipedia. (2015). Longlure frogfishes. http://en.wikipedia.org/wiki/Longlure frogfish accessed 02 April 2015.

Author: T'keyah Henry Posted online: 2015

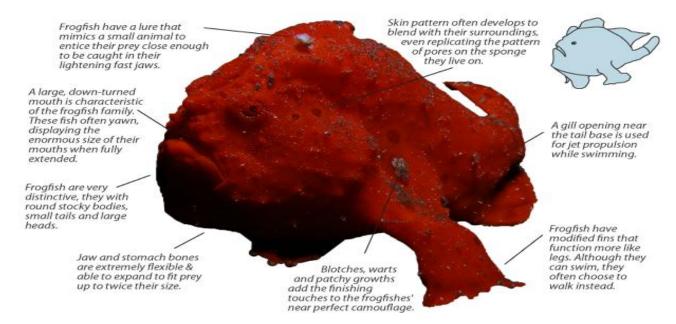


Fig. 2. Anatomy of a frogfish.

[http://www.underwaterasia.info/reef-spotter/frogfish.php, downloaded 2 April 2015]

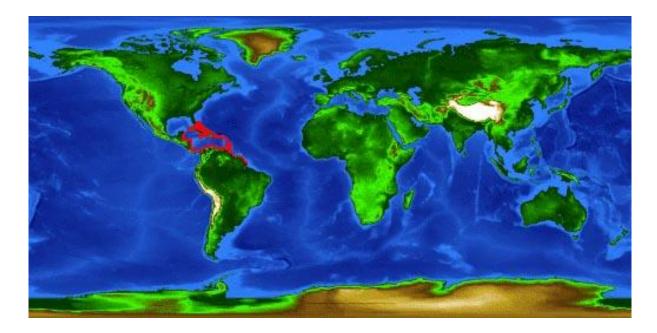


Fig. 3. World distribution map for the longlure frogfish.

[http://www.flmnh.ufl.edu/fish/Gallery/Descript/FrogFish/Frogfish.htm, downloaded 2 April 2015]



Fig. 4. Yellow frogfish, a bottom-dweller.

[http://www.frogfish.ch/species-arten/Antennarius-multiocellatus.html, downloaded 2 April 2015]



Fig. 5. Longlure frogfish and its elongated illicium (rod) and esca (bait). [http://www.frogfish.ch/species-arten/Antennarius-multiocellatus.html, downloaded 2 April 2015]

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