## Bothus lunatus (Peacock Flounder)

Family: Bothidae (Flounders)
Order: Pleuronectiformes (Flatfish)
Class: Actinopterygii (Ray-finned Fish)

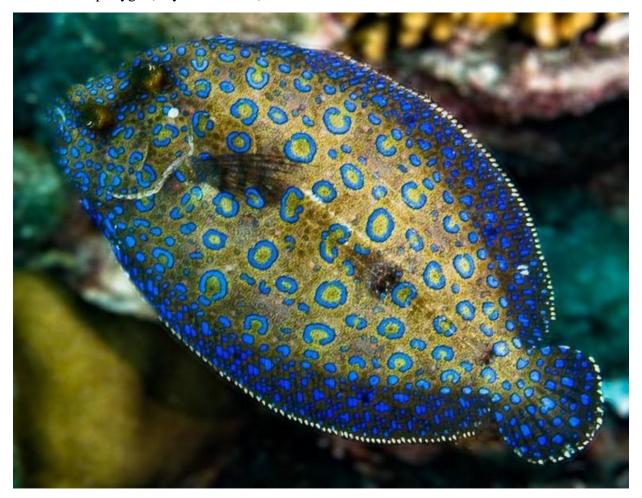


Fig. 1. Peacock flounder, Bothus lunatus

[https://featuredcreature.com/wp-content/uploads/2013/03/15c1637f29a5e35b37c99e1d9f0471fb1.jpg downloaded 31 January 2016]

**TRAITS.** One of the most unique of the sea world is the peacock flounder, also referred to as plate-fish and sole-fish (Bester, 2016). Their uniqueness stems from their amazing ability to camouflage which is second to none, effectively protecting them from predators (Tyrie et al., 2015). They are circular in shape and flattened, with bright coloured eyes that can only be found on the left side of the adult's body (Otterbein, 2011). They can grow to a maximum of 35-45cm in length, covered with rings that are an astounding bright blue (Fig. 1). Dark smudge-like marks are usually observed along the centre lateral line on the body. In the male the pectoral fin on the left side of the body has threadlike fin rays, lacking in females (Otterbein, 2011).

**DISTRIBUTION.** Peacock flounders are usually found in tropical and subtropical regions of the western Atlantic Ocean. Specifically they are found off the coast of Florida, Bermuda as well as South America to Brazil. There are also some reports of their occurrence in areas in the vicinity of the central and eastern Atlantic (Otterbein, 2011; Bester, 2016) (Fig. 2). This species is native to many countries in the region of its distribution including Trinidad and Tobago (Munroe, 2015).

**HABITAT AND ACTIVITY.** Living under these tropical oceanic conditions the peacock flounder engage in what is known as a benthic lifestyle. Peacock flounders are usually found on coral reef areas including sandy and rocky sea bed (Otterbein, 2011; Bester, 2016). The tropical region is well known for its mangroves, which is also suitable for the flounders to thrive, as well as within seagrass beds. They are commonly found at depths of 20-100m. Peacock flounders are usually found partially buried in sandy bottoms, lying on its blind side. They use this as a tactic in obtaining their food; unsuspecting prey would approach and as they get close enough, this is when the ambush takes place (Bester, 2016).

**FOOD AND FEEDING.** Peacock flounders are carnivores, feeding on fish, molluscs and other invertebrates inclusive of crustaceans and rarely octopi. Adults are restricted to a diet of only benthic organisms (Otterbein, 2011).

**REPRODUCTION.** The peacock flounder has a life span of up to about 10 years (Munroe, 2015), and breeds serially and year round. Their willingness to mate is portrayed by signalling gestures exhibited by both parties. The male shows interest by having erected pectoral fin while the female's interest is illustrated by the up-down motion of the pectoral fin (Otterbein, 2011). The harem mating system allows for a situation where one male mates with several females. Usually the male to female ratio is one to six females found within close proximity to the territory of the male. (Otterbein, 2011). Mating occurs just before sunset. The male and female interaction begins with the approach, as they meet both their ocular (upper side) pectoral fins are erected, at this point their backs are arched as their snouts touch. Both will then rise in the water column together, which lasts an average of 15 s. At the peak of their ascent, both individuals discharge gametes simultaneously. These gametes then form a huge cluster (Otterbein, 2011).

**BEHAVIOUR.** This fish can be described as being diurnally active, suggesting that the species is on the go during the day but rests at night. Often observed as resting partially buried in the sandy sea bottom or at the tops of coral reefs. They do not exert a lot of energy while moving from place to place, as they glide along using wave-like motions. They also are able to change colour very quickly (Animalia Life, 2014).

**APPLIED ECOLOGY.** According to Bester (2016) the peacock flounder has not yet been evaluated by the World Conservation Union (IUCN). As of today the actual population status of this species is not exactly known in certain areas of its distribution. While in the meantime the species is not threatened, this status is susceptible to change as human activities changes over the time (Bester, 2016; Munroe, 2015).

## **REFERENCES**

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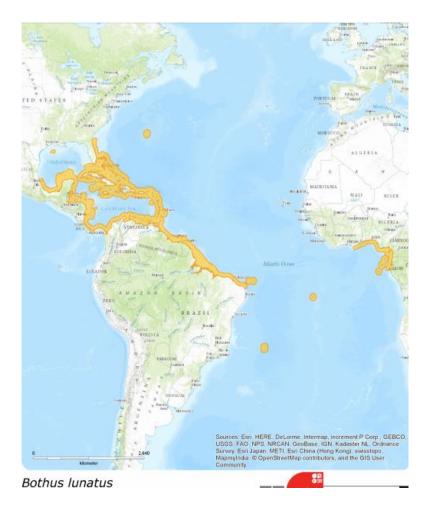


Fig. 2. Map showing the distribution of the peacock flounder.

[http://maps.iucnredlist.org/map.html?id=190102, downloaded 7 March 2016]

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