

Emblemaria pandionis (Sailfin Blenny)

Family: Chaenopsidae (Tube Blennies)

Order: Perciformes (Perch and Allied Fish)

Class: Actinopterygii (Ray-finned Fish)



Fig. 1. Sailfin blenny, *Emblemaria pandionis*.

[<http://www.aquariumdomain.com/adSocial/index.php/sailfin-blenny/>, downloaded 1 March 2017]

TRAITS. The sailfin blenny *Emblemaria pandionis* is also called by other names such as algae blenny and sailfin lawnmower blenny. These names arise because of the species' ability to consume marine algae. This species has whisker-like appendages which protrude at the top of their heads (Fig. 1) and they are equipped with comb-teeth which are used for algae grazing (Aquarium Domain, 2017). This small fish has a large distinct dorsal fin, and no scales on its body. It has a maximum reported length of 5cm (Bester, 2017), and is sexually dimorphic which means that the males and females look different from each other. The females are coloured cryptically and have a low dorsal fin whereas the males (Fig. 2) tend to have a very dark colour with much a higher spinous dorsal fin along with a paddle-shaped pelvic fin (Smith et al., 1998).

DISTRIBUTION. *Emblemaria pandionis* are found in the south-western Atlantic Ocean from the Bahamas, Puerto Rico, and northern Gulf of Mexico to northern coasts of South America (Fig. 3) (Bester, 2017). They are also commonly found in the Caribbean Sea. It is native to the Bahamas, Trinidad and Tobago and the United States (IUCN, 2014).

HABITAT AND ACTIVITY. *Emblemaria pandionis* are marine animals that inhabit areas with clear and shallow water such as coral reefs. They particularly like to reside in places that have empty holes or broken coral (Greenfield, 1975). They tend to live by themselves and away from

other species. Both male and female live in holes in coral rubble, however the females tend not to stay at one location but they rather move among various homes. This species is not affected by the destruction of coral reefs but they use them as their habitat (IUCN, 2014).

FOOD AND FEEDING. *Emblemaria pandionis* are generally carnivores and their main source of food comes from feeding on small invertebrates and plankton such as copepods, amphipods, isopods, decapods, stomatopods, mysids, and crabs (Bester, 2017).

POPULATION ECOLOGY. *Emblemaria pandionis* are generally a shy species and they rarely leave their holes. Their small size makes them vulnerable to many predators such as sharks. They leave their holes mainly for reproduction and feeding (Bester, 2017). The population of this species is stable since they are commonly found in many areas (IUCN, 2014).

REPRODUCTION. *Emblemaria pandionis* breeding males guard the cavities that contains the eggs which are laid by the females (Bester, 2017). The eggs are usually deposited in small groups in the early morning. Different females may deposit their eggs in the same nest. In each nest the number of eggs can vary from 26-509 (Smith et al., 1998).

BEHAVIOUR. Male *Emblemaria pandionis* demonstrate very aggressive behaviour towards other males, they attempt to mark their territories by engaging in combat. Towards the females they engage in flagging as a method of signalling mating. Flagging is where the males moves their large fins up and down repeatedly. This can be done around 1100 times per day (Smith et al., 1998). *Emblemaria pandionis* usually engage in flagging in the early morning and late evening which are the most intense periods. Courtship signals are triggered when the female approaches the male (Bester, 2017). Males engage in flagging whether eggs are present or absent in their shelter (Smith et al., 1998).

APPLIED ECOLOGY. According to the IUCN Red List of threatened species, *Emblemaria pandionis* is widely distributed and common. This is because the species has tolerance to habitat changes such the destruction of coral and their ability to live in broken coral. Therefore, it is not under any serious threat (IUCN, 2014). This species is used for aquariums as they have a great personality and they help to control any nuisance marine algae within their environment (Bester, 2017).

REFERENCES

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Fig. 2. Male sailfin blenny, *Emblemaria pandionis*

[<https://www.flmnh.ufl.edu/fish/discover/species-profiles/emblemaria-pandionis/>, downloaded 9 March 2017]



Fig. 3. Map showing the distribution of *Emblemaria pandionis*.

[<http://maps.iucnredlist.org/map.html?id=46104136>, downloaded 9 March 2017]