

Bodianus pulchellus (Spotfin Hogfish)

Family: Labridae (Wrasses)

Order: Perciformes (Perch and Allied Fish)

Class: Actinopterygii (Ray-finned Fish)



Fig. 1. Spotfin hogfish, *Bodianus pulchellus*.

[http://calphotos.berkeley.edu/imgs/512x768/0000_0000/1206/1107.jpeg, download 26 February 2016]

TRAITS. *Bodianus pulchellus* is a distinctive and colourful species as it has a generally red body with a white horizontal stripe reaching just past the mid-body on the lower side extending from the mouth, and a transition of red to yellow around the dorsal and anal fins (Fig. 1). Fin ray counts are: dorsal spines 9, dorsal soft rays 10, anal spines 10, and anal soft rays 3 (Smith, 1997). It grows to a length of 18cm (Gomon, 1978). This species does not show sexual dimorphism, and males and females cannot be distinguished easily. They have a tendency to hybridize with the closely related species, *Bodianus rufus* commonly known as the spanish hogfish.

DISTRIBUTION. It is mainly dispersed around the Gulf of Mexico and the western Atlantic region from South Carolina in the USA extending to the Caribbean and Santa Catarina in Brazil (Floeter et al., 2003). It is also found around the São Tomé Island off the coast of Africa in the eastern Atlantic (Alfonso et al., 1999). According to the IUCN red list of endangered species, the spotfin hogfish currently has native occurrence in Trinidad and Tobago (IUCN, 2016).

HABITAT AND ACTIVITY. Usually found in deeper reef areas ranging from 15-24m under tropical temperatures of 24-28°C (Baensch and Debelius, 1997). Coral and rocky reefs are the habitats of choice (Fig. 2). As a source of nutrition, crabs and small shellfish are preferred by the adult fish (Gomon, 1978) whereas the juveniles pick parasites from other fishes.

FOOD AND FEEDING. This species is carnivorous with the adults typically feeding on shellfish and can adapt to other prey of suitable size such as small molluscs, worms and snails (Gomon, 1978). The juvenile fish feed on parasites that can be found on other fish bigger fish. It can therefore be said that the fish has a secondary consumer role as its trophic level.

BEHAVIOUR. It is not overly aggressive (semi-aggressive) and a male tends to fight in the company of another male. This can be assumed to be competition for territory, food or mates. It is generally inoffensive to corals and other sessile invertebrates. This species of fish may hybridize with the closely related *B. rufus*. Juveniles show different behaviour in terms of feeding patterns as they would seek out parasites on bigger fish as a source of nutrition. A marked reduction or almost complete absence of this species in nocturnal counts shows they are more diurnal.

APPLIED ECOLOGY. The spotfin hogfish is frequently seen in the aquarium trade; export data for Brazil in 2007 shows a movement of 3,531 recorded individuals (official statistics from the IBAMA). Due to its prevalence in aquarium trade, it is assumed that this species fish is used as aesthetic pets for their bright attractive colours. This species of fish has been identified as a prey item to the lionfish, but with only juveniles being consumed, there is no evidence of a significant population decline on a global level (IUCN, 2016). The invasion of the lionfish into the Caribbean region can be considered as an ecological disturbance that has not yet affected the population of spotfin hogfish due to the active movement to remove this invasive species from the Caribbean Sea.

REFERENCES

- Afonso, P., F.M. Porteiro, R.S. Santos, J.P. Barreiros, J. Worms and P. Wirtz, (1999). Coastal marine fishes of São Tomé Island (Gulf of Guinea). *Arquipélago* **17(A)**:65-92.
- Baensch, H.A. and H. Debelius, (1997). Meerwasser atlas. Mergus Verlag GmbH, Postfach 86, 49302, Melle, Germany. 1216 p. 3rd edition.
- Floeter, S.R., J.L. Gasparini, L.A. Rocha, C.E.L. Ferreira, C.A. Rangel and B.M. Feitoza, (2003). Brazilian reef fish fauna: checklist and remarks (updated Jan. 2003). Brazilian Reef Fish Project: www.brazilianreeffish.cjb.net.
- Gomon, M.F., (1978). Labridae. In W. Fischer (ed.) FAO species identification sheets for fishery purposes. Western Central Atlantic (Fishing Area 31). **Vol. 3**.
- IUCN. (2016). *Bodianus pulchellus* (Cuban Hogfish, Hogfish, Spotfin Hogfish). Iucnredlist.org. N.p., 2016. Web. 11 Mar. 2016.
- Smith, C.L., (1997). National Audubon Society field guide to tropical marine fishes of the Caribbean, the Gulf of Mexico, Florida, the Bahamas, and Bermuda. Alfred A. Knopf, Inc., New York. 720 p.

Author: Daniel Halliday

Posted online: 2016



Fig. 2. Spotfin hogfish inhabiting a coral reef.

[http://www.reefmaker.com/inc/images/IMG_2192_spotfinhogfish_ccox.jpg downloaded 9 March 2016]

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