

## *Sparisoma atomarium* (Greenblotch Parrotfish)

Family: Scaridae (Parrotfish)

Order: Perciformes (Perch and Allied Fish)

Class: Actinopterygii (Ray-finned Fish)



**Fig. 1.** Greenblotch parrotfish, *Sparisoma atomarium*.

[<http://www.fishdb.co.uk/img/Fish2330.jpg>, downloaded 21 October 2016]

**TRAITS.** *Sparisoma atomarium* was previously classified as *Scarus atomarius* (FishWise, 2016). It has one dorsal fin with 9 spines and 10 soft rays and one anal fin with 2 spines and 9 soft rays. It has been recorded to grow to a maximum length of 25cm total length. Terminal phase males (Fig. 1) display an olive-green or red dorsal half lightly flecked with other colours, an iridescent pale blue-green and undulating orange striped ventral half, and a bright green blotch or one or two dark blue blotches, as large as the eye, in the shoulder region. Juvenile females (Fig. 2) display an olive-brown body lightly spotted with pale pink and a whitish striped ventral half. The intermediate phase (Fig. 3) displays an extensive dark olive-brown stripe along the dorsal half of the body from the snout to the caudal fin, which includes the eye (Froese, 2016).

**DISTRIBUTION.** The greenblotch parrotfish is found in the western Atlantic region (Fig. 4), from Florida (USA) and Bermuda to Venezuela. One of the nations it is native to is Trinidad and Tobago (IUCN, 2012).

**HABITAT AND ECOLOGY.** This parrotfish populates tropical marine systems, at a depth range of 20-55m (Froese, 2016), including coral reefs with algae, and turtle grass beds (Robertson and Warner, 1978). At day it feeds on the benthic algae lining coral reefs and

detritus, and at night it rests in turtle grass beds. It is a diurnally active, herbivorous species (Froese, 2016).

**REPRODUCTION.** Greenblotch parrotfish are protogynous hermaphrodites, which transition from females, in the juvenile phase, to mature males, in the terminal phase. At the point of sex change, the intermediate phase, these fish are 5.5cm in length. Moreover, these fish are polygamous. They spawn in groups of one mature male and several females (Froese, 2016). The eggs are scattered in dense turtle grass beds and left unguarded. The number of eggs spawned has not been recorded; fertilisation is achieved externally (Froese, 2016).

**BEHAVIOUR.** Terminal males are solitary and territorial (Robertson and Warner, 1978). Juveniles and females are sociable, they have been observed feeding in schools of twenty. Females confine their swimming to territories of terminal males (Robertson and Warner, 1978).

**APPLIED BIOLOGY.** There are no major threats to *Sparisoma atomarium*. It is categorised as Least Concern on The IUCN Red List of Threatened Species, for the reason that, it populates conservation regions throughout the western Atlantic region (IUCN, 2012). What is more, this fish is no harm to humans (Froese, 2016).

#### REFERENCES

- FishWise. (2016). *Sparisoma atomarium* (Poey 1861) Greenblotch parrotfish (2016). <http://www.fishwisepro.com/Species/details.aspx?Zoom=True&Sid=5558>, downloaded 21 October 2016.
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- IUCN. (2012). The IUCN Red List of Threatened Species (2012). <http://www.iucnredlist.org/details/summary/190768/0>, downloaded 21 October 2016.
- Robertson R. and Warner D. (1978) Sexual Patterns in the Labroid Fishes of the Western Caribbean, II: The Parrotfishes (Scaridae). Washington: Smithsonian Institution Press.

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**Fig. 2.** Greenblotch parrotfish, juvenile female.

[<http://www.fishdb.co.uk/img/Fish2331.jpg>, downloaded 21 October 2016]



**Fig. 3.** Greenblotch parrotfish, intermediate phase.

[<http://www.fishdb.co.uk/img/Fish2326.jpg>, downloaded 21 October 2016]



**Fig. 4.** Greenblotch parrotfish, geographic distribution.

[<http://maps.iucnredlist.org/map.html?id=190768>, downloaded 21 October 2016]