

Scarus iseri (Striped Parrotfish)

Family: Scaridae (Parrotfish)

Order: Perciformes (Perch and Allied Fish)

Class: Actinopterygii (Ray-finned Fish)



Fig. 1. Striped parrotfish, *Scarus iseri*.

[<http://www.wetwebmedia.com/SWPOTD904.htm>, downloaded 20 October 2016]

TRAITS. The striped parrotfish *Scarus iseri* (formerly *S. croicensis*) can grow up to a maximum length of 35cm (Tolentino, 2007). Parrotfish are named because of the hard beak-shaped mouth, which resembles that of a parrot. This species of parrotfish is characterized by the various coloured stripes along its fusiform (spindle-shaped) body. It has a white stripe located just above its gills, and a dark stripe below. They have a short blue/green tail fin, on which the upper and lower margins are paler in colour. Terminal phase males are bluish-green and orange with pink on the head and chest, and a green stripe under the eye (Fig. 1). They also have a yellow stripe on the pectoral fin, and a multicoloured dorsal fin with stripes of pink and yellow or orange running along it, crossed by blue/green markings. The initial and juvenile stages are less brightly coloured, as they have three black stripes and two white stripes running along the body and a yellow spot on the mouth (Fig. 2) (De Kluijver, 2016).

DISTRIBUTION. This species is found in tropical waters of the western Atlantic, from Bermuda and Florida to Venezuela, and is the most common parrotfish in the Caribbean Sea (Rocha et al., 2012).

ECOLOGY AND HABITAT. Found mainly in shallow marine waters with dense coral populations, however, some striped parrotfish may be found in areas of brackish and even fresh water (Tolentino, 2007). They make their homes in rocky areas inclusive of coral reefs and seagrass. They are herbivores, and their hard beak-like jaws allow them to graze on the algae on rocks and dead corals. These fish use their pharyngeal apparatus located in the oesophagus to grind and digest plant, detritus and calcareous material broken off by the primary jaws (De Kluijver, 2016). Their feeding on the algae that populate reefs prevents overgrowth of the live corals.

REPRODUCTION. Fertilization occurs externally as the eggs are released into the open water, to be fertilized by the sperm (Jonna, 2003). Eggs hatch within about 25 hours of fertilization. *Scarus* is a diandric species as most eggs hatch as female in the initial stages; but there may exist a few juvenile males. As development continues, some of the females change sex to terminal males; if the male in their group dies, the largest female changes into a male (Tolentino, 2007).

BEHAVIOUR. This species has three different breeding patterns; territorials, stationaries, and foragers (Jonna, 2003). The characteristic feature of territorials is that there is one dominant female, other inferior females, and a terminal male in the group. Pair spawning occurs and all individuals are involved in defending the territory. Stationaries always use the same area when spawning, however, unlike the territorials they do not defend the area. Lastly, forager groups (which mainly consist of females) find temporary spawning areas, in pairs or sometimes in groups. The features of these groups are dependent on the size of the population, the competition for space, and environmental factors such as seasons and water temperatures. Parrotfish are diurnal creatures, active throughout the day. At night, parrotfish secrete a thick foul-smelling mucous layer, which deters predators that use smell to detect prey (Jonna, 2003).

APPLIED BIOLOGY. As parrotfish graze on the algae on coral reefs, the breakdown of the coral skeletal material results in the production of beach sand. Feeding on algae also prevents them from depriving the reef of nutrients, which allows the corals to thrive (Jonna, 2003).

REFERENCES

- De Kluijver, M. 2016. Marine Species Identification Portal: Striped parrotfish - *Scarus iseri*. http://species-identification.org/species.php?species_group=caribbean_diving_guide&menuentry=soorten&id=251&tab=beschrijving.
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- Rocha, L.A., Choat, J.H., Clements, K.D., Russell, B., Myers, R., Lazuardi, M.E., Muljadi, A., Pardede, S. and Rahardjo, P. 2012. *Scarus iseri*. The IUCN Red List of Threatened Species 2012:e.T190732A17782171.<http://dx.doi.org/10.2305/IUCN.UK.2012.RLTS.T190732A17782171.en>.
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Fig. 2. A school of juvenile *Scarus iseri* in their natural habitat.

[<http://www.wetwebmedia.com/SWPOTD904.htm>, downloaded 20 October 2016]

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