Hypoplectrus chlorurus (Yellowtail Hamlet)

Family: Serranidae (Groupers and Sea Basses) Order: Perciformes (Perch and Allied Fish) Class: Actinopterygii (Ray-finned Fish)



Fig. 1. Yellowtail hamlet, *Hypoplectrus chlorurus*. [http://biogeodb.stri.si.edu/caribbean/en/pages/random/8450, downloaded 9 October 2016]

TRAITS. *Hypoplectrus chlorurus* is commonly known as the yellowtail hamlet (Fig. 1) as it has a distinctive bright yellow caudal (rear) fin, with brown to bluish coloration that may be visible on the black body (Froese, 2016). They can grow to lengths ranging from 8-13cm and are hermaphrodites, this means each fish has both male and female sex organs (Reefguide, 2016). The yellowtail hamlet is a solitary species (IUCN, 2015), that evades predators by taking cover in nearby holes in reefs.

DISTRIBUTION. It could generally be found in the southern Caribbean (Fig. 2) in countries such as Cuba, Haiti, Puerto Rico, Bahamas, Barbados and Tobago to name a few (IUCN, 2015).

HABITAT AND ECOLOGY. The yellowtail hamlet could be found in the waters with a depth of approximately 10-76m (Aguilar-Perera, 2003), where there is an abundance of coral and rocky reefs. It consumes crustaceans such as crabs and shrimps in addition to small fish (IUCN, 2015),

by use of aggressive mimicry. This means the yellowtail hamlet behaves like a nearby herbivore to get closer to their prey (Robertson, 2013).

REPRODUCTION. Yellowtail hamlets are said to be synchronous hermaphrodites, with both fish acting in turns as male and female during spawning (IUCN, 2015). One would clasp the other at the nape of the tail and gametes would then be released to be fertilized (Reaka, 1985). They spawn during the twilight or crepuscular period, and may sometimes mate with another species of hamlet (Reaka, 1985), for example the black hamlet *Hypoplectrus nigricans* (Fig. 3) (Barlow, 1975).

APPLIED BIOLOGY. The yellowtail hamlet is Least Concern on the IUCN list and there are no conservation measures in place. Its juveniles are prey to the invasive lionfish and are hardly used in aquarium trade (IUCN, 2015). There is an issue with identifying hamlet species, since the hamlets are genetically and structurally similar, the only variation is in their colour. Thus, the taxonomy of the hamlets is still under debate as to whether they are the same or different species.

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Fig. 2. Yellowtail hamlet geographic distribution. [http://maps.iucnredlist.org/map.html?id=190121, downloaded 25 October 2016]



Fig. 3. The black hamlet, *Hypoplectrus nigricans*. [http://www.uwphotographyguide.com/caribbean-creature-feature-hamlets, downloaded 25 October 2016]

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