

Mycteroperca interstitialis (Yellowmouth Grouper)

Family: Serranidae (Groupers and Sea Basses)

Order: Perciformes (Perch and Allied Fish)

Class: Actinopterygii (Ray-finned Fish)



Fig. 1. Yellowmouth grouper, *Mycteroperca interstitialis*.

[<http://www.reef.org/enews/articles/roatan-field-survey-success>, downloaded 30 March 2015]

TRAITS. Tan to brown in colour, the belly is paler than the rest of the body (Fig. 1), and the mouth is yellow. There is also yellow around the eyes and the edge of the dorsal fin. Juveniles have white bellies and black backs with the front of the dorsal fin yellow (Fig. 2). The upper parts of the body have small brown spots that are close together; sometimes uniformly brown. Dorsal spines 11, dorsal soft rays 16-18, anal spines 3, anal soft rays 10-12. Mature fish are 40-45cm in length, however can potentially reach to 74cm.

DISTRIBUTION. Caribbean (mainly around islands), Gulf of Mexico, western Atlantic, to Brazil and Bermuda (Fig. 3.)

HABITAT AND FEEDING. The adult yellowmouth groupers live among reefs and rocks, whilst smaller ones are frequent in mangrove-lined lagoons. Yellowmouth groupers can grow to reach lengths of 74cm and live up to 41 years (Manickchand-Heileman and Phillip, 2000). *Mycteroperca interstitialis* is a relatively rare species on reefs. Diet consists of fish such as

silversides (Atherinids), brown chromis (*Chromis multilineata*) and parrotfish (*Scarus croicensi*) (Randall, 2004). Juveniles show an intriguing behaviour in order to approach wary prey. The coloration of the juvenile (in addition to the folding of its fins) mimics that of the clown wrasse, a species that does not prey upon fish that the yellowmouth grouper eats. This is known as aggressive mimicry (Sazima, 2002).

REPRODUCTION. Spawning occurs throughout the year, with a peak in April and May. Smaller group mating occurs throughout the year, whilst in the peak season mating would be in massive spawning aggregations (Bullock and Murphy, 1994). Eggs are laid by the thousands, and young are left to fend for and feed themselves. The youngest age a female yellowmouth grouper can be mature is 2 years; all females are fully mature by age 4 years (Bullock and Murphy, 1994). Sexual maturity for female yellow grouper is reached at 39-43cm. Yellowmouth groupers are protogynous hermaphrodites; they are first functional females then change into males. This sex change can occur between the ages of 5-14 years (Manickchand-Heileman and Phillip, 2000). When individuals reach the age of maturity (2-4 years) their growth rate slows as to accommodate the greater physiological and behavioural investments needed in reproduction (Bullock and Murphy, 1994).

APPLIED ECOLOGY. The yellowmouth grouper is on the IUCN Red List of threatened species and is considered vulnerable due to a declining population. The reason for the decline is overfishing, as yellowmouth groupers are often mistaken and/or used as a substitute for scamp. Due to its rarity the yellowmouth grouper is not a major target species, however it is of commercial value in both Bermuda and Venezuela. In Trinidad and Tobago it is fished for on the north and northeastern coast of Trinidad and northwestern coast of Tobago and declines have been recorded. The yellowmouth grouper is not affected by greatly by habitat loss (IUCN, 2014).

REFERENCES

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Posted online: 2015



Fig. 2. Juvenile yellowmouth grouper.

[<http://flowergarden.noaa.gov/about/fishlist3.html>, downloaded 31 March 2015]



Fig. 3. Yellowmouth grouper geographic distribution.

[<http://www.fishbase.org/summary/Mycteroperca-interstitialis.html>, downloaded 1 April 2015]

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