

Archosargus rhomboidalis (Western Atlantic Seabream)

Family: Sparidae (Seabream)

Order: Perciformes (Perch and Allied Fish)

Class: Actinopterygii (Ray-finned Fish)



Fig. 1. Western Atlantic seabream, *Archosargus rhomboidalis*.

[http://biogeodb.stri.si.edu/caribbean/resources/img/images/species/3741_7981.jpg, downloaded 2 March 2016]

TRAITS. The western Atlantic seabream or tropical sheephead is among the most common of the family Sparidae (IUCN, 2014). Its length typically ranges from 8-20cm but the largest recorded was 33cm (Wikipedia, 2015). Weight in adults attains a maximum of 3.4-4.5 kg (Schultz, 2004). This oval, flattened fish has horizontal yellow-gold stripes running along its body, and a characteristic dark spot close to its gill cover (Fig. 1). Its snout is blunt and mouth small with wide incisor-like teeth and a number of lateral molar-like teeth. They possess 13 spines on their dorsal fin while the anal fin has 3 spines but both have 10-11 soft rays. The large intestine of the fish is one of its defining features, taking up almost the entire digestive tract. Sexes are differentiated by their pelvic fins; males have a partially dark fin while in females it is orange.

DISTRIBUTION. Widely distributed along the coast of the western Atlantic, from Canada to Argentina; endemic to the eastern part of the Gulf of Mexico and the Caribbean excluding The Bahamas and Bermuda (Carpenter, 1978) (Fig. 2).

HABITAT AND ACTIVITY. Found usually in a water depth of 1-40m. Western Atlantic seabream are found in mangrove swamps and seagrass beds. It also could be located in coral reefs (Fig. 3) near the brackish water (a mixture of both fresh and salt water) of the mangrove. The fish is diurnal, active throughout the day and is often found in schools (Carpenter, 1978).

FOOD AND FEEDING. The fish is omnivorous (feeding on both plants and animals). This explains the fact that they are found in large numbers above seagrass beds and coral reefs as they feed on the worms, small fish, molluscs and other epifauna (animals living in the seabed) along with a myriad of vascular plants. As the fish grows, the size of its food of choice increases as its mouth size also increases. The habitat also determines its dietary composition.

POPULATION ECOLOGY. It remains very abundant, even with the decline of mangroves (IUCN, 2016). They have a maximum reported age of two years because of their fast rate of maturity (Aracibia et al., 1984).

REPRODUCTION. Western Atlantic seabreams display gonochoristic features, i.e. each fish displays either male or female reproductive organs. Females are slightly more predominant than males. Spawning occurs in large schools in open water during the dry season, January to April, usually over seagrass beds. Females can spawn several times over the season once they have passed their first maturation at approximately five months old. The average egg diameter is 0.85mm, with freshly hatched larvae averaging 2.0-2.2mm in length (Houde and Poutoff, 1976).

APPLIED ECOLOGY. According to the International Union for Conservation of Nature (IUCN, 2016), *Archosargus rhomboidalis* is not a threatened species, being listed in the least concern category. They are targeted for fishing on a very minor scale by artisanal fishers through use of bottom trawls, nets and traps. For some, its white flesh is used as a meal source and its abundance could possibly make it a greater target of fishing when preferred species' population are possibly depleted in the future. It is also noted that extensive disruption of the habitats in which it resides could cause depletion of its population, hence habitats also needs to be monitored.

REFERENCES

- Aracibia, A., Chavance, P., Hernandez., Dominguez. A., and Linares. F. (1984). Ecology, Biology and Population Dynamics of *Archosargus Rhomboidalis* (Pisces, Sparidae) In a Tropical Coastal Lagoon System, Southern Gulf Of Mexico.
- Carpenter, K.E. (1978). Sparidae.
<http://www.ibiologia.unam.mx/links/peces/fao/WCAidSheets/Vol%203/y4162e23.pdf>, downloaded 5 March 2016.
- Houde, D.D., Potthoff, T. (1976). Egg and Larval Development of the Seabream *Archosargus rhomboidalis*. *Bulletin Of Marine Sciences*. 26: 506- 529
- IUCN Red List. (2016). *Archosargus rhomboidalis* (Brim, Sea Bream, Tropical Sheephead, Western Atlantic Seabream). <http://www.iucnredlist.org/details/full/170156/0>, downloaded March 2016,
- Schultz, K. (2004). Ken Schultz's field guide to freshwater fish. Hoboken, NJ: Wiley.
- Wikipedia. (2015). Western Atlantic seabream.
https://en.wikipedia.org/wiki/Western_Atlantic_seabream#References, downloaded 3 March 2016.

Author: Dhanique C.T Jerry

Posted online: 2016



Fig. 2. Western Atlantic seabream geographical distribution.

[<http://maps.iucnredlist.org/map.html?id=170156>, downloaded 7 March 2016]



Fig. 3. Western Atlantic seabream in coral reef habitat.

[<http://www.snorkelstj.com/sea-bream.html>, downloaded 7 March 2016]

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