

Chaetodipterus faber (Atlantic Spadefish)

Family: Ephippidae (Spadefish)

Order: Perciformes (Perch and Allied Fish)

Class: Actinopterygii (Ray-finned Fish)



Fig. 1. Atlantic spadefish, *Chaetodipterus faber*.

[<https://rollingharbour.com/2015/11/16/atlantic-spadefish-bahamas-reef-fish-28/>, downloaded 15 October 2016]

TRAITS. A disk shaped fish usually greyish silver with approximately 4-6 black vertical bands or stripes (Fig. 1) which fade as the fish ages. The body of this fish is generally flattened with a short, blunt snout (MarineBio, 2013). This fish has a small mouth; in adults the jawbone ends below the nostrils. Their teeth are small, brush like and run in bands (Bester, 2016). The average length is about 50cm while the maximum length is 91cm, and the maximum weight is 9.0 kg.

DISTRIBUTION. The Atlantic spadefish is found in subtropical and tropical reefs from the USA to Brazil as well as the Gulf of Mexico (Fig. 2).

HABITAT AND ECOLOGY. The Atlantic spadefish is typically found in shallow, marine waters in addition to the salty waters of mangroves, beaches, harbours, and ship wrecks (Fig. 3) (Bester, 2016). They are found in waters depths of 3-35m. Young fish live in very shallow water,

camouflaging themselves as foliage or mangrove pods to avoid being hunted. They feed on invertebrates such as polychaete sabellid worms, crustaceans, tunicates, hydrozoans, soft corals, annelids, amphipods, sponges, anemones, crustacean larvae, molluscs, cnidarians and plankton (Bester, 2016). This generally happens during the day; peak feeding time is midday. Foraging occurs throughout the water, but more towards the bottom and often within and around man-made structures. The life expectancy is 8-10 years (Luna, 2016).

REPRODUCTION. Both male and female fish mature by one year. Eggs are deposited on the surface of offshore waters during May to September with the peak spawning time being between May and June. Upon spawning one female can lay up to one million eggs. Eggs are small and can float, and take 24 hours to hatch. The young ones use creeks as their nurseries. The larvae that had been just hatched feed on a yolk sac for the first two days. Teeth and lateral lines appear as the fish reaches the juvenile stage of its life cycle (Bester, 2016).

BEHAVIOUR. The location of these fish depends on temperature. They are found mainly in shore waters between the months of April to November. The young ones leave the creeks during fall and join the adults in shallow offshore waters. However, some young ones may live in manmade reefs all year long. The older fish venture into deep offshore waters or southwards due the cool temperature of the waters during fall (DNR, 2016). The fish swim together in schools consisting of from a few to about 500 fish (Fig. 4). These fish are hunted by sharks and other larger fish.

APPLIED BIOLOGY. The Atlantic spadefish has been linked to ciguatera poisoning due to ciguatoxins found in the flesh. This causes gastrointestinal illnesses if the fish is eaten, weakness in the arms and legs, and problems in telling the difference between hot and cold (MarineBio, 2013). The Atlantic spadefish is part of the SAFMC Snapper Grouper Management Plan because of their reliance on reefs and coastal habitats. Under these regulations every person is only allowed 20 fish per day.

REFERENCES

- Bester, C. 2016. *florida museum of natural history* . Accessed october 16, 2016. <https://www.flmnh.ufl.edu/fish/discover/species-profiles/chaetodipterus-faber/>.
- DNR. 2016. *SCDNR-Marine-Species-Atlantic spadefish*. <http://www.dnr.sc.gov/marine/species/atlanticspadefish.html>.
- Luna, S. M. 2016. *fishbase.org*. Accessed october 16, 2016. <http://www.fishbase.org/summary/1024>.
- MarineBio. 2013. Accessed october 16th, 2016. <http://www.fishbase.org/summary/1024>.

Author: Padminie Ramsaroop

Posted online: 2016

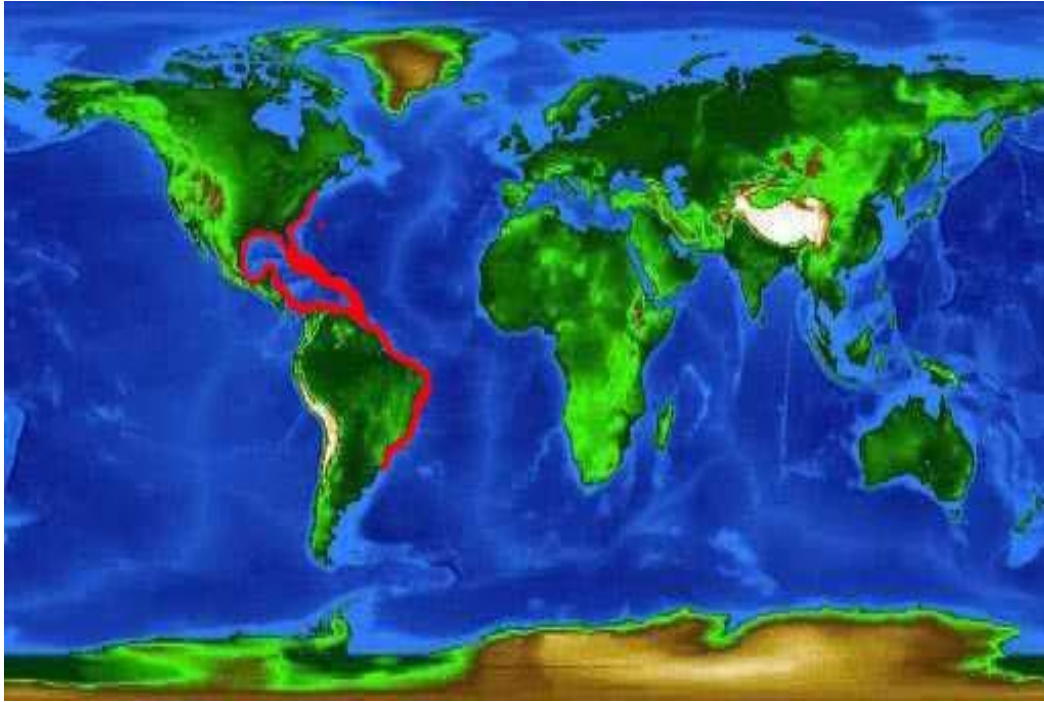


Fig. 2. Atlantic spadefish geographic distribution.

[<https://www.flmnh.ufl.edu/fish/discover/species-profiles/chaetodipterus-faber/> downloaded 16 October 2016]



Fig. 3. Atlantic spadefish swimming above the wreck of the Caribsea, North Carolina.

[<https://www.flmnh.ufl.edu/fish/discover/species-profiles/chaetodipterus-faber/> downloaded 20 October 2016]



Fig. 4. A school of Atlantic spadefish.

[<http://www.photographydiver.com/gallery/school-of-atlantic-spadefish/> downloaded 20 October 2016]

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