



Photo credit: David Ramjohn, www.fishbase.org.

KEY INFORMATION

Areas of Concern

Western Atlantic: Florida.

Year Identified as "Species of Concern"
1991

Factors for Decline

- Habitat alteration including beach nourishment and dredging
- Increased sea urchin erosion
- Alien species
- Eutrophication pollution

Conservation Designations

IUCN: Not Evaluated

American Fisheries Society: Vulnerable

Current Status:

Demographic and Genetic Diversity Concerns:

During surveys from 1972 to 1988, striped croakers were often found on nearshore rock-algal reefs from Sebastian Inlet south to Jupiter Inlet but not north of 28° 00'N or south of 26° 58'N (Gilmore 1992). Since striped croaker are patchily distributed within this 60-mile (100 km) reef tract, are not ubiquitous, and are often solitary as adults, there may be fewer than a few hundred individuals per square mile, meaning there would be less than 10-20,000 individuals in these vulnerable inshore reef formations (R.G. Gilmore, personal communication). The species has never been found during intensive studies of reef-fish populations elsewhere around the Florida peninsula. The very limited distribution on the east coast of Florida parallels that of other fishes and may be attributed to the occurrence of the proper habitat and hydrological conditions, promoted by the nearshore occurrence of the Florida current (Gilmore 1992). Since sciaenid eggs sink within 40 hours of spawning, thus limiting dispersal, it is possible that the Florida population is distinct from others nearby (Gilmore, personal communication).

The striped croaker is dependent on the nearshore rock algal reefs for much of its life span. It's only known breeding population on the North American continent resides on the nearshore reefs of Brevard, Indian River, and St. Lucie counties (Gilmore 1992).

Existing Protections and Conservation Actions:

None.

Factors for Decline:

The specific habitat occupied by the species is vulnerable to beachfront habitat alteration activities including beach renourishment projects and dredge-and-fill operations, both of which increase sedimentation and water turbidity and cover necessary habitat. In addition, the nearshore reefs on the Florida east coast have been continuously impacted during the past 10 to 15 years by biological erosion of rock reef formations by decadal population explosions of rock boring sea urchins (*Echinometra lucunter*) and algal displacement by alien algae and explosive growth of noxious native species (Dr. Brian LaPointe, Harbor Branch Oceanographic Institute, personal communication) due to eutrophication from nutrient laden water from mainland sources (sewage, agriculture and major freshwater release from coastal human population growth).



Species of Concern

NOAA National Marine Fisheries Service

Status Reviews/Research Underway:

None.

Data Deficiencies:

Genetic studies are needed to determine whether the population in east Florida is distinct from those in the Caribbean.

Brief Species Description:

The striped croaker is an oblong small fish (maximum length about 10 inches or 25 cm) with a moderate sized mouth that is slightly oblique and terminal. They are distinguished from the similar silver perch (*B. chrysoura*) by being darker in color and with more prominent stripes that slant slightly upward. They are grey or greyish blue in color dorsally and silvery below. Major prey items include **benthic** crustaceans (shrimp) inhabiting soft sediments.

This is a tropical species whose range is centered in the Caribbean Sea. It was first recorded from Florida waters south of Sebastian Inlet, adjacent to the Indian River Lagoon (Gilbert 1973).

The rock-reef habitats that this species occurs in typically support luxuriant growths of attached algae. Juveniles (0.6 to 2 inches or 15-50 mm length) have often been seen over mats of accumulated algae, into which they retreat when disturbed. Juveniles are most abundant on nearshore reef formations at depths of less than 33 feet (10 m). Adults may occur on these same shallow reefs, but are more abundant on deeper formations to depths of 100 feet (30 m). Little is known about their reproduction.

Contact Information

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References:

- Gilbert, C.R. 1973. Quart. J. Fla. Acad. Sci. 35:130-144.
- Gilmore, R.G., Jr. 1992. Striped croaker, *B. airdiella sanctaeluciae*. In: C.R. Gilbert, ed. Rare and endangered biota of Florida. U Florida Press, pp. 218-222.