Common Name: **Striped Croaker**

Photograph by David D. Ramjohn at www.fishbase.org

Scientific Name: *Bairdiella sanctaeluciae*
Area of Concern: Western Atlantic: Florida
Year First Listed as a "Species of Concern": 2004

Species Description:

The striped croaker is characterized as an oblong small fish (maximum length about 20.0cm TL) with a moderate sized mouth that is slightly oblique and terminal. They are distinguished from the similar silver perch (*B. chrysoura*) as being darker in color 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 primarily in the Caribbean Sea. It was first recorded from Florida waters by. C.R. gilbert from collections made in the Atlantic Ocean south of Sebastian Inlet, adjacent to the Indian River Lagoon (Bailey *et al*., 1970; Gilbert, 1973).

The rock-reef habitats that this species occurs in typically support luxuriant growths of attached algae. Juveniles (15-50 mm SL) have consistently been observed hovering over mats of accumulated algae, into which they retreat when disturbed. Juveniles are most abundant on nearshore reef formations at depths of less than 10 m. Adults may occur on these same shallow reefs, but are more abundant on deeper formations to depths of 30 m.

Rationale for "Species of Concern" Listing:

Demographic and Diversity Concern:

During fish surveys conducted from 1972 to 1988, striped croakers were consistently observed on near-shore rock-algal reef formations (depth 10 m or less) from Sebastian Inlet south to Jupiter Inlet but not north of 28^{o} 00'N or south of 26^{o} 58'N (R.G. Gilmore, personal observation, as cited in Gilbert, 1992). Since striped croaker are patchily distributed within this 60-mile reef tract and are not ubiquitous, often solitary as adults, there may be fewer than a few hundred speciments per square mile, meaning there would be less than 10-20,000 individuals limited to these vulnerable inshore reef formations (R.G. Gilmore, personal communication, January 9, 2004). 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 several other fish species and may be attributed to the occurrence of the proper habitat under optimal hydrological conditions, undoubtedly promoted by the near-shore occurrence of the warm Florida current (Gilmore, 1977). Genetic studies are needed to determine whether the population in east Florida is distinct from those in the Caribbean. Since sciaenid eggs sink with 40 hours of spawning, thus limiting dispersal, it is possible that this population is distinct from the others (Gilmore, pers. comm., 2003).

The striped croaker is dependent on the nearshore rock algal reefs for much of its life span. Its only known breeding population on the North American continent resides on the nearshore reefs of Brevard, Indian River, and St. Lucie counties (Gilmore 1992). This species was recognized as a species of special concern in the Rare and

Endangered Biota of Florida, Volume II. Fishes (Gilmore, 1992).

Factors for Decline:

The highly specific habitat occupied by the striped croaker is vulnerable to beachfront activities, especially beach-renourishment projects and dredge-and-fill operations, which serve to increase sedimentation and water turbidity and often cover rock formations directly. Millions of public dollars are spent annually on beach front dredge and fill projects which directly impact the flora and fauna of reef/algal habitats. In addition, the nearshore reefs on the Florida east coast have been continuously impacted during the past 10-15 years by biological erosion of rock reef formations by decadal population explosions of rock boring sea urchins (*Echinometra lucunter*) and algal displacement by exotic algae and explosive growth of noxious native species (doc. by Dr. Brian LaPointe, HBOI) due to eutrophication from nutrient laden water from mainland sources (sewage, agriculture andmajor freshwater release from coastal human population growth).

Status Reviews/ Research Completed or Underway:

For further information on this Species of Concern, or on the Species of Concern Program in general, please contact Ms. Marta Nammack, NMFS, Office of Protected Resources, 1315 East West Highway, Silver Spring, MD 20910, (301)713-1401, Marta.Nammack@noaa.gov *; or Jennifer Jacukiewicz, NMFS, Southeast Region, Protected Resources Division, 9721 Executive Center Drive, St. Petersburg, FL 33702, (727)570-5312,* Jennifer.Jacukiewicz@noaa.gov.

References:

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