

## INTERSTATE FISHERIES MANAGEMENT PROGRAM OVERVIEW

### *Atlantic Croaker*

#### **Species Range**

Gulf of Maine through Florida

#### **Management Unit**

New Jersey through Florida



#### **Stock Status**

Atlantic croaker are considered to be a single stock on the Atlantic coast. [The 2010 benchmark stock assessment for Atlantic croaker](#) was the last assessment that was recommended for management use. This assessment indicated that the resource was not experiencing overfishing. Model estimates of spawning stock biomass (SSB) were too uncertain to be used to precisely determine overfished stock status, but biomass had increased and the age structure of the population had expanded since the late 1980s.

The major source of uncertainty for the assessment was the magnitude of Atlantic croaker bycatch in South Atlantic shrimp trawls. Most croaker caught in this fishery are less than 1 year old, too small to be marketed, and are discarded. Croaker are one of the largest components of the shrimp trawl bycatch; some studies found that shrimp trawls caught more croaker than shrimp. At the time of the 2010 assessment, there were no continuous monitoring programs to account for these discards. This is a problem because the best available estimates of these landings are, in some years, as large or larger than reported landings.

Because of the high degree of uncertainty in the amount of shrimp trawl discards, the estimated values of stock size and fishing mortality from the 2010 assessment are not considered reliable. However, the estimated trends showing increasing biomass and decreasing fishing mortality were very similar whether estimates of shrimp trawl discards were included in the model or not.

The 2017 benchmark stock assessment indicated that the stock is not overfished and overfishing is not occurring, based on model results. However, alternative model runs revealed that these results were sensitive to some of the assumptions within the model, specifically data weighting methods and commercial fishery selectivity (the relative vulnerability of different sizes of fish to capture by the gears used in the commercial fishery). While the Review Panel generally agreed with the model results that the stock is likely growing and there is no immediate need for management action, they were not confident enough in the results to recommend specific overfished and overfishing stock statuses to be used for management.

The Review Panel recognized several advances made by the Stock Assessment Subcommittee since the previous assessment in 2010, particularly estimation of shrimp trawl bycatch removals. Due to the large percentage of removals attributed to shrimp trawl bycatch (over 90% of total removals annually) the Review Panel recommended these removals be incorporated into the annual Traffic Light Analysis used to monitor Atlantic croaker. The Atlantic Croaker Technical Committee presented an updated Traffic Light Analysis and potential methods for incorporating the shrimp trawl removals at the August 2017 Board Meeting. The 2016 Traffic Light Analysis showed conflicting results, with a decline in recent harvest numbers, but an increase in estimated abundance. Even so, the Board did not believe that immediate management actions were necessary.

In 2020, the annual TLA indicated that Atlantic croaker harvest and adult abundance composite metrics exceeded thresholds outlined in Addendum III. Management response was triggered at the 30% level, or a moderate level response. Non *de minimis* states are required to implement a 50 fish bag limit for recreational fisheries, and reduce commercial harvest by 1% of the state's 10-year average. The Board reviewed and approved state implementation plans in 2021, and continue to monitor abundance composite indices for Atlantic croaker through the annual TLA process. The measures must be in place for at least three years for Atlantic croaker (2021-2023) before management may be relaxed.

In the update of the Atlantic croaker TLA with data through 2023, an abundance metric exceeded the 30% threshold in all four terminal years. Addendum III states, in this case, the TC must evaluate trends in the stock's abundance to recommend to the Board whether triggered measures should remain in place or more restrictive measures should be considered. The Board agreed with the TC's recommendation of maintaining the current management measures, due to the anticipation of results from the ongoing benchmark stock assessment within the next year.

### **Involved States and Jurisdictions**

NJ, DE, MD, PRFC, VA, NC, SC, GA, FL, NMFS

### **Active Boards/Committees:**

Sciaenids Management Board, Atlantic Croaker Technical Committee, Atlantic Croaker and Spot Stock Assessment Subcommittee, Atlantic Croaker Plan Review Team, South Atlantic Species Advisory Panel

### **Chairs**

Board, Chair – Doug Haymans (02/2024); Vice-Chair – Ben Dyers  
Technical Committee, Chair – Margaret Finch; Vice-Chair – Vacant  
Advisory Panel, Chair – Craig Freeman (11/2019)

### **Staff Lead**

Tracey Bauer, [tbauer@asmfc.org](mailto:tbauer@asmfc.org)

## **Management Plan History**

### **[Fishery Management Plan for Atlantic Croaker \(October 1987\)](#)**

The Interstate Fishery Management Plan (FMP) for Atlantic Croaker was adopted to address several issues, including the availability of data to assess the population and the amount of Atlantic croaker bycatch occurring in fisheries, especially the southern shrimp fishery. Data collected under the plan helped make the first coastal croaker assessment possible and the use of bycatch reduction devices has drastically reduced unwanted croaker catch.

1993 – The Management Board reviews the FMP and finds it to be vague and no longer valid; the Board recommends an amendment to define a management program capable of achieving the goals of the FMP.

### **[Amendment 1 to the Interstate Fishery Management Plan for Atlantic Croaker \(November 2005\)](#)**

Amendment 1 was developed and implemented after the 2004 stock assessment was completed. The amendment establishes biological reference points for the Mid-Atlantic region. Because of the favorable stock status of Atlantic croaker, the amendment does not require any specific measures restricting harvest. States with more conservative measures are encouraged to keep them. A set of management triggers is implemented—based on an annual review of certain metrics, a stock assessment can be triggered earlier than formerly scheduled.

### **[Addendum I \(March 2011\)](#)**

Addendum I changes the management unit to one region (New Jersey to the east coast of Florida) and redefines and allows setting of the biological reference points by board action, if already peer-reviewed. As a result of the change, the Board modified the biological reference points based on the results of the 2010 stock assessment.

### **[Addendum II \(August 2014\)](#)**

The addendum establishes a new management framework (i.e., Traffic Light Approach) to evaluate fisheries trends and develop state-specified management actions (i.e., bag limits, size restrictions, time & area closures, and gear restrictions) when harvest and abundance thresholds are exceeded over three years. Management measures remain in place for three years.

### **[Addendum III \(February 2020\)](#)**

Addendum III adjusted the TLA to incorporate additional fishery-independent indices, age information, use of regional characteristics, and changes to the management triggering mechanism. Management triggers and responses include bag limits for the recreational fishery and percentage harvest reductions from a 10 year average for the commercial fishery. The response is defined by which percentage threshold (30% or 60%) that was exceeded in any of the 3 out of 4 terminal years.

### **Annual Events**

- Compliance reports due July 1 with reminders distributed 90 days earlier
- PRT reviews compliance within 30 days of deadline and Board determines compliance within 60 days of deadline
- Compliance reported in annual FMP review produced by PRT
- Advisory Panel receives an update after each Board meeting and should meet annually
- In July during all non-assessment years, the Technical Committee evaluates the fishery using the Traffic Light Approach and management framework to evaluate whether management action should be taken.