



#### 2020 Stock Overview

DEPARTMENT OF ENVIRONMENTAL QUALITY

Marine Fisheries

Marine Fisheries Commission | Lee Paramore | August 2020



# - STOCK OVERVIEW

Online report released annually in July

Data through prior calendar year

 Report links directly to the fishery management plan review for each species



# - STOCK OVERVIEW

- Stock overview website separates by:
  - > 14 state-managed species or species groups
  - ➤ 23 federal and interstate managed species or species groups

 Fishery management plan reviews provided for all 37 species or species groups



## - STOCK OVERVIEW

Fishery management plan reviews provide:

- Status of Fishery Management Plan
- Life History
- Stock Status (overfished and overfishing)
- Trends in Landings
- Trends in Surveys
- Research Needs
- Schedule Change Recommendations



DMF - Homepage ▼

About DMF

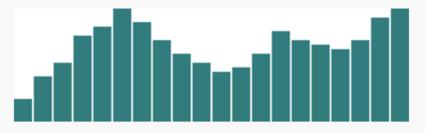
Contact DMF

DMF Offices

- Text +

 North Carolina Annual Fishery Management Plan Review

- Species
- North Carolina Annual Stock
   Overview State Managed
   Species
- Management Authority for Species
- Atlantic States
   Marine
   Fisheries
   Commission Managed
   Species
- Mid-Atlantic
   Fishery
   Management
   Council Managed
   Species
- South Atlantic
   Fishery



#### **Stock Overview**

The North Carolina Division of Marine Fisheries Stock Overview is issued annually and reviews available information to determine the overall condition of North Carolina's state-managed species. The information in the report each year is based on fisheries data available from the prior year. In this year's report, data for all recreational fishing activity monitored through the Marine Recreational Information Program (MRIP) has been updated based on new MRIP methodology. Estimates across all years are now based on the MRIP new Fishing Effort Survey-calibrated estimates. For more information on MRIP methodology changes see https://www.fisheries.noaa.gov/topic/recreational-fishing-data &.

In the report, the phrase "stock status" is used to describe the current condition of the stock relative to established reference points associated with the threshold or point where a stock is considered to be experiencing overfishing or is considered to be in an overfished state. When the rate of removals is too high, a stock is considered to be above the fishing mortality threshold and overfishing is said to be occurring. When the size of a stock is below the stock size threshold, it is said to be overfished or, sometimes, the term depleted is used if fishing mortality is not the reason for low stock size. Assignment of stock status based on this definition requires a stock assessment that provides both the values of the thresholds and the current estimates of fishing mortality and stock size to compare to those thresholds. Stock assessments are the primary tools used by managers to assist in determining the status of stocks and developing appropriate management measures for their long-term viability. Stock status in the Stock Overview is described based on overfishing and overfished/depleted status.

#### 2020 NORTH CAROLINA DIVISION OF MARINE FISHERIES STOCK OVERVIEW -STATE MANAGED SPECIES (July 2020, based on 2019 Data)

Species

Comments

Bay Scallop (Closed to fishing)



Bay scallops are a short-lived species that are managed as an annual crop. They are sensitive to environmental change and may experience high levels of predation, which can impact annual abundance. As a result, a stock assessment is not an effective tool for management. Harvest has not been allowed since 2013 because abundance levels have not met the thresholds to open the season. For more information, contact Jeff Dobbs at Jeffrey.Dobbs@ncdenr.gov

Blue Crab



Results of the 2018 benchmark stock assessment indicate the blue crab stock is overfished and overfishing is occurring. The assessment passed peer review and the model was accepted for use in management. Amendment 3 to the Blue Crab Fishery Management Plan was approved in February 2020 to address the overfished status and end overfishing. For more information, contact Corrin Flora at Corrin.Flora@ncdenr.gov

Eastern Oyster



A stock assessment could not be conducted due to limited data; therefore, population size and the rate of removals from the population are not known. Commercial landings from public bottom have been variable, and landings from private bottom in the past few years have increased significantly due to more interest in aquaculture. Work is underway with N.C. State University and the Nature Conservancy to develop methodologies to determine stock status. Amendment 4 to the Oyster Fishery Management Plan was approved in February 2017. For more information, contact Joe Facendola at Joe.Facendola@ncdenr.gov

Estuarine Striped Bass:





Amendment 2 to the N. C. Estuarine Striped Bass Fishery Management Plan is being jointly developed with the N.C. Wildlife Resources Commission. Results from a peer-reviewed benchmark stock assessment utilizing data through 2017 are expected in 2020. For more information, contact Sean Darsee at Sean.Darsee@ncdenr.gov

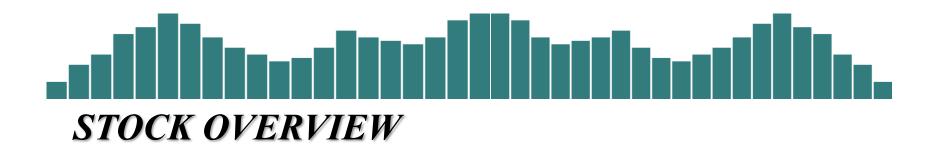


#### MANAGEMENT AUTHORITY FOR INTERJURISDICTIONAL SPECIES

Species or species groups managed under the jurisdiction of the North Carolina Marine Fisheries Commission (NCMFC), the Atlantic States Marine Fisheries Commission (ASMFC), and the South and/or Mid-Atlantic Councils (SAFMC and MAFMC) through the North Carolina Fishery Management Plan for Interjurisdictional Fisheries.

Species	Stock Overview Link	NCMFC	ASMFC	SAFMC	MAFMC
American Eel	ASMFC		•		
American Shad	ASMFC		•		
Atlantic Croaker	ASMFC		•		
Atlantic Menhaden	ASMFC		•		
Atlantic Sturgeon	ASMFC		•		
▶ Black Drum	ASMFC		•		
Black Sea Bass (North of Hatteras)	ASMFC, MAFMC		•		•
Black Sea Bass (South of Hatteras) See Snapper Grouper	SAFMC			•	
N Bluefish	ASMFC, MAFMC		•		•
Cobia	ASMFC		•		
Dolphin	SAFMC			•	





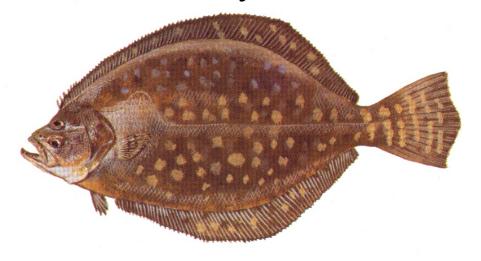
Stock determinations based on peer reviewed assessment

- Relative to overfishing and overfished terminology
- Stocks with no assessment provide pertinent trends in catch and surveys



#### Southern Flounder

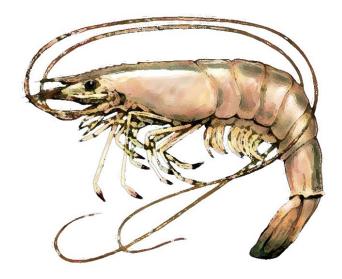
- 2019 peer reviewed assessment
- Amendment 2, passed August 2019, addressed the overfished and overfishing stock status
- Amendment 3 is currently under development





#### **Shrimp**

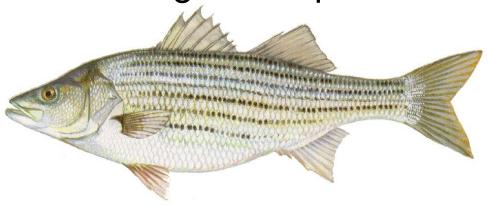
- Development of Amendment 2 is underway
- Additional gear restrictions implemented in 2019





#### **Estuarine Striped Bass**

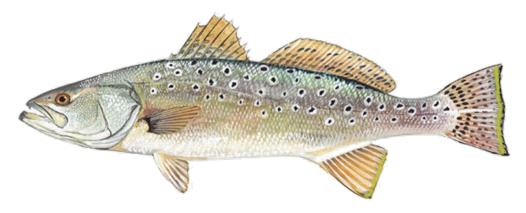
- Albemarle-Roanoke stock
  - Benchmark stock assessment out soon
- Central and Southern stocks
  - Analysis report out soon
- Amendment 2 being developed with WRC





#### **Spotted Seatrout**

- 2014 assessment not overfished with no overfishing
- Susceptible to cold stun events
- Benchmark assessment and plan review is underway





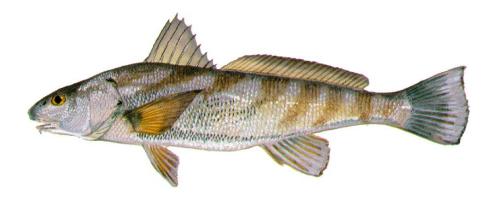
#### **Blue Crab**

- 2018 assessment overfished with overfishing
- Amendment 3 passed in February 2020
- Measures taken to address overfished status and end overfishing



### Kingfishes

- Annual trend analysis to monitor stock
- One of seven triggers tripped in 2019
- No action required
- Plans last formally reviewed in 2015





Stock assessments are not available for all stocks



**Kingfishes** 



**Eastern Oyster** 



**Sheepshead** 



**Hard Clam** 



- Two stocks managed by North Carolina are annual crops
- Annual crops are not assessed due to short life-span



**Bay Scallop** 



Shrimp (Brown, Pink, White)



### **QUESTIONS?**

