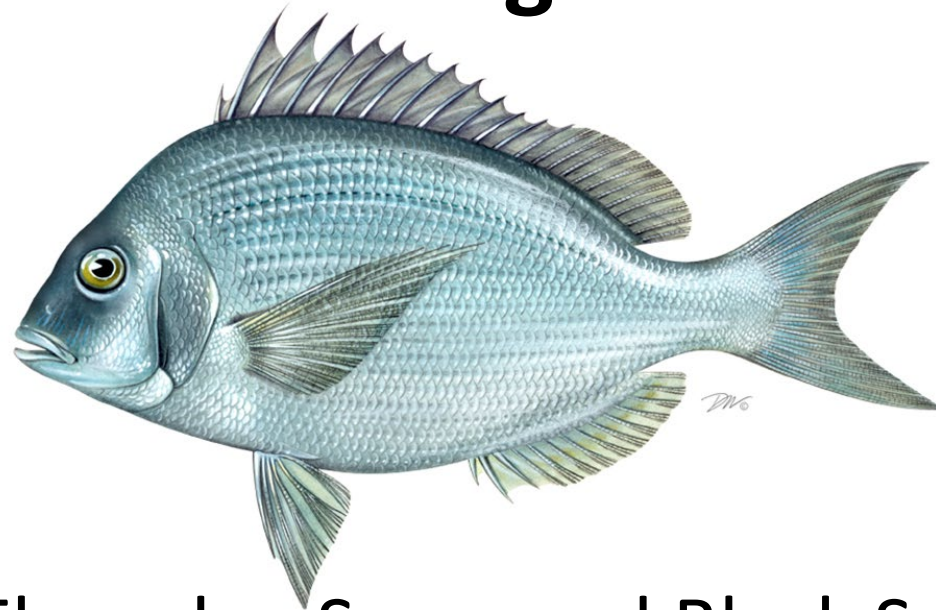# 2019 Scup Recreational Measures for Northern Region States

Summer Flounder, Scup, and Black Sea Bass
Management Board
February 5, 2019

# Outline

- Background

- Technical Committee Review of Scup Northern Region Proposed Measures
  - Questions

- Board discussion and action
  - Consider either A) Approve 2019 Scup Measures or B) Approve Methodologies used to develop 2019 Scup Measures

# Background

- December 2018: Board voted to extend ad hoc regional management for Scup
  - Northern Region state (MA-NY) requested analysis on increasing for-hire bag limit and bonus season changes

- 2018 & 2019 RHLs = 7.37 million pounds

- 2018 Preliminary harvest through wave 5 (September/October) was 5.61 million pounds
  - ~30% liberalization based on 2018 projected harvest

# 2018 NJ- NC Measures

| State | Size Limit | Bag Limit | Season |
|---|---|---|---|
| New Jersey | 9 | 50 | Jan 1- Dec 31 |
| Delaware | 8 | 50 | Jan 1- Dec 31 |
| Maryland | 8 | 50 | Jan 1- Dec 31 |
| Virginia | 8 | 30 | Jan 1- Dec 31 |
| North Carolina NoCH | 8 | 50 | Jan 1- Dec 31 |

- Combined: 4.9% of Projected 2018 Coastwide Harvest
  - Nearly all attributed to NJ
- No proposals submitted
  - Most states measures rollover; none indicated interest to change measures

# Call Summary

- TC met via conference call on January 29<sup>th</sup>

 - TC met via conference call on January 29$^{th}$

- Two types of analysis presented
  - 1) Additive Approach
  - 2) Generalized Additive Model (GAM)

- Both methods evaluated the impact of increasing bag limit and season length on projected harvest
  - 6* scenarios were evaluated

# Methods Slide

- Additive Approach
  - In line with standard approach we've been using
  - Generates weighted frequency distributions of catch/angler by state, wave, mode from MRIP data
  - Uses this info and assumptions about how harvest increases in decaying fashion as bag increases
  - For season, used assumptions about low harvest in other waves (Wave 2 when data available and Wave 6) and applies it to new opened waves

# Methods Slide

- GAM Approach
  - Modeling approach, trained by historical MRIP data
  - GAM allows for inclusion of non-linear and linear effects on harvest

$$log(H) = \boldsymbol{\beta_0} + \boldsymbol{\beta_4}(\boldsymbol{State}) + \boldsymbol{\beta_1}(\boldsymbol{Year}) + \boldsymbol{\beta_2}(\boldsymbol{Region}) + \boldsymbol{\beta_5}(\boldsymbol{Fishing.Mode}) + \boldsymbol{\beta_3}(\boldsymbol{RHL}) + \\ \boldsymbol{f_2}(\boldsymbol{MinLen}) + \boldsymbol{f_1}(\boldsymbol{Wave}) + \boldsymbol{f_3}(\boldsymbol{Season}) + \boldsymbol{f_4}(\boldsymbol{Bag})$$

  - Allows for consistent treatment and incorporation of uncertainty in to estimation procedure

# Methods continued: 6 Options

1. ↑ For-hire sector bag limit to 50 fish for the current bonus season (Wv 3 for MA & Wv 5 for RI-NY)

2. ↑ Bag limit to 50 fish for all fishing modes for bonus season

3. ↑ Bag limit to 50 fish for all fishing modes & for status quo fishing season (May 1-Dec 31)

4. *365 Season at 30 fish with 45 fish bag limit during the bonus season for the for-hire sector

5. Status quo season length, for-hire ↑ 50 fish bag limit in 2 <u>separate</u> bonus season waves ( Wv 3 and Wv 5)

6. Status quo season length, for-hire ↑ 50 fish bag limit bonus season is 2 <u>consecutive</u> waves (Wvs 3-4 for MA; Wvs 5-6 for RI-NY)

7. **For-hire bonus season bag limit ↑50 fish and open Wvs 1 & 2 for all modes under current 30 fish bag limit

# Results

- Additive Approach
  - Coastwide Harvest ⬆ ranges from .27% (Option #1) - 3% (Option 3)

- GAM Approach
  - Coastwide Harvest ⬆ ranges from .4% (Option #1) - 200% (Option 3)

- Comparison of two Approaches
  - High uncertainty in projected harvest when bag limit is increased for all fishing modes (options #2 & #3)
  - Differing Approaches: Additive approach leans on MRIP data more; GAM accounts for uncertainty to a degree
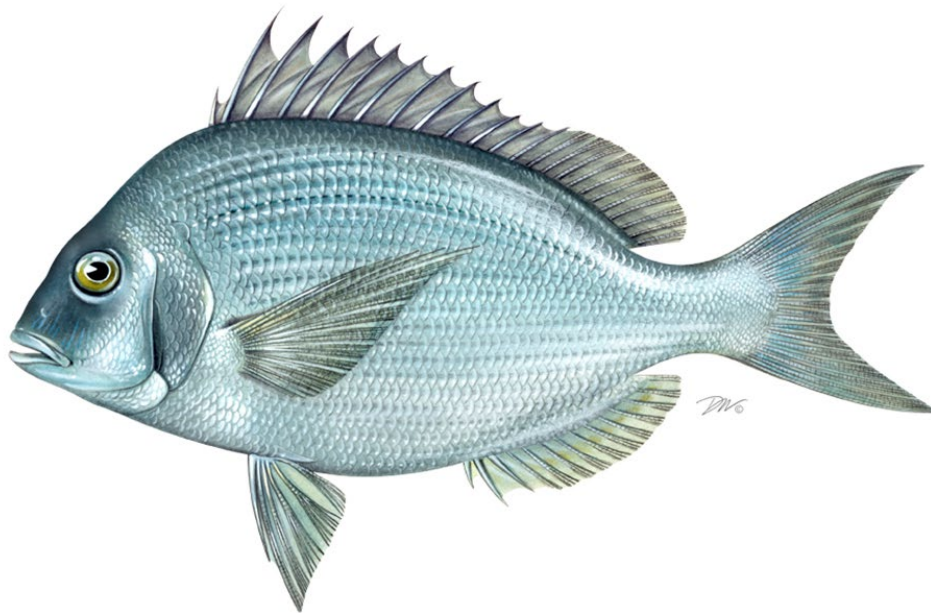
# TC Recommendations

- Board should only consider options **1 and 4-7** that extend the overall season, and adjust the bag limit (from 45 to 50 fish) and bonus season length (adding an additional two months/wave) for the for-hire sector

- Considerations
  - Extent of changing regulations
  - Still using CHTS data until Operational Assessment complete
  - Resource is robust, current high RHL, and trip limits are generally not met
  - Similar data challenges as Black Sea Bass, but very different situations

# TC Recommendations cont'd

- If new regulations are considered outside of those analyzed so far, TC recommends the additive approach as the preferred methodology

- TC hopes to move towards using GAM approach soon
  - Similarities to contract work for MAFMC on Fluke
  - Hope to use for all three species
  - Potential Meeting/Workshop later this year for use

# Board Discussion

- Action for Consideration
  - A) Approve 2019 Scup Measures or
  - B) Approve Methodologies used to develop 2019 Scup Measures

# Technical Committee Recommendations for 2019 Black Sea Bass Recreational Measures

Caitlin Starks (ASMFC) and Jason McNamee (RI DEM)

Atlantic States Marine Fisheries Commission

February 5, 2019

# Presentation Outline

1. Background

2. TC Analysis of Harvest Estimates

3. Harvest Projections and RHL

   – TC recommendations for 2019 recreational measures

4. VA and NC proposals

   – TC recommendations

5. Next Steps

6. Questions

# Background

- Addendum XXX recreational measures expired in 2018

- 2019 measures will be set through specifications process under Addendum XXXII

- The 2019 RHL is 3.66 million pounds

- NOAA opened black sea bass recreational fishery in federal waters with 12.5" minimum size and 15 fish possession limit, February 1-28, 2019

- VA and NC submitted proposals to adjust measures later in 2019 season to account for February harvest

- The Technical Committee (TC) analyzed 2018 MRIP harvest estimates
  - Back-calibrated to be consistent with those used in the assessment and to derive the RHL

- 2018 Wave 6 harvest projected using ratio of total harvest in Waves 1-5 to total harvest in Wave 6 across most recent three years (2015-2017)

- Smoothed values were used for previously identified outliers (NY Wv 6, 2016 & NJ Wv 3, 2017)

# Harvest Projections and RHL

| | 2018 | 2019 | % Change from 2018 to 2019 RHL |
|---|---|---|---|
| **RHL** | 3.66 million lbs | 3.66 million lbs | 0% |
| **PROJECTED HARVEST** | 3.92 million lbs | -- | +7% |

- **The TC recommends maintaining status quo recreational management measures in 2019**

- TC expressed concern about using back-calibrated MRIP estimates

- Regulatory changes based on back-calibrated estimates may not be appropriate or result in the intended effect at state level

- TC concerned with using current RHL of 3.66 million pounds based on past assessment that doesn't incorporate important changes to the stock (strong 2015 cohort and new MRIP estimates)

- Uncertainty in 2018 harvest projection likely overlaps significantly with harvest needed to achieve RHL

- Stock status for Black Sea Bass is robust, therefore low risk of causing damage to the stock by remaining at status quo

# 2018 BSB Recreational Measures

| State | | Minimum Size | Possession Limit | Open Season |
|---|---|---|---|---|
| ME | | 13" | 10 fish | May 19–Sep 21; Oct 18–Dec 31 |
| NH | | 13" | 10 fish | Jan 1–Dec 31 |
| MA | | 15" | 5 fish | May 19–Sep 12 |
| RI | | 15" | 3 fish | Jun 24–Aug 31 |
| | | | 7 fish | Sep 1–Dec 31 |
| CT | Private/Shore | 15" | 5 fish | May 19–Dec 31 |
| | Authorized Party/Charter | 15" | 5 fish | May 19–Aug 31 |
| | | | 7 fish | Sep 1–Dec 31 |
| NY | | 15" | 3 fish | Jun 23–Aug 31 |
| | | | 7 fish | Sep 1–Dec 31 |
| NJ | | 12.5" | 10 fish | May 15–Jun 22 |
| | | 12.5" | 2 fish | Jul 1–Aug 31 |
| | | 12.5" | 10 fish | Oct 8–Oct 31 |
| | | 13" | 15 fish | Nov 1–Dec 31 |
| DE, MD, VA, & NC (N. of Hatteras) | | 12.5" | 15 fish | May 15–Dec 31 |

# VA Proposal for February Fishery

- VMRC proposes 2 options to account for harvest during the February black sea bass fishery

| Option | Adjustment to Measures | Harvest Savings (lbs) |
|:------:|:-----------------------|:---------------------:|
| 1 | Close 14 days in wave 3 | 6,802 |
| 2 | Close 14 days in wave 5 | 6,755 |

- Both options would account for landings that occurred in February 2018 (6,459 pounds).

- **The TC found the proposal technically sound and recommends approval**

# NC Proposal for February Fishery

- NC DMF proposes 2 options to account for harvest during the February fishery

| Option | Adjustment to Measures | Harvest Savings (lbs) |
|--------|------------------------|-----------------------|
| 1 | Close 1 day in Wave 3 (May 15) | 84 |
| 2 | Close two days in Wave 3 (May 15 & 16) | 168 |

- Both options would account for landings that occurred in February 2018 (62 pounds).

- **The TC found the proposal technically sound and recommends approval**

# Next Steps

1. Consider 2019 black sea bass recreational management measures:
   - Status Quo Measures
   - Alternative Measures (Board would need to indicate how regions would set 2019 measures)

2. Consider approval of VA and NC proposals for February black sea bass fishery

# Questions?

# Background

- Purpose: Identify issues and management strategies for the commercial fishery related to changes in black sea bass abundance and distribution

- Members: David Borden (Chair, RI), Nichola Meserve (MA), Matthew Gates (CT), John Maniscalco (NY), Joe Ciminio (NJ), Rob O'Reilly (VA)

- Conference calls Summer/Fall 2018, January 2019

# Commercial Working Group Timeline

| Date | Activity/Action |
| --- | --- |
| August 2018 | Commercial WG formed |
| September 2018 | WG conference call |
| October 2018 | Board reviewed WG proposal for statement of the problem and goals |
| Dec 2018/ Jan 2019 | Additional WG calls to develop potential management strategies |
| **February 2019** | Board review of WG report: revised statement of the problem, goals and potential management strategies |

# Statement of the Problem

1. **State commercial allocations do not reflect current resource distribution**

   - Set in 2003, based on landings from 1980-2001

   - 33% to ME-NY and 67% to NJ-NC

   - Scientific evidence of shifts in fishery and stock abundance and distribution

   - Management is not responsive to these changes

# Statement of the Problem

**Black Sea Bass SSB by Region as of 2016 Benchmark Stock Assessment**
**(open markers represent retro-adjusted values)**
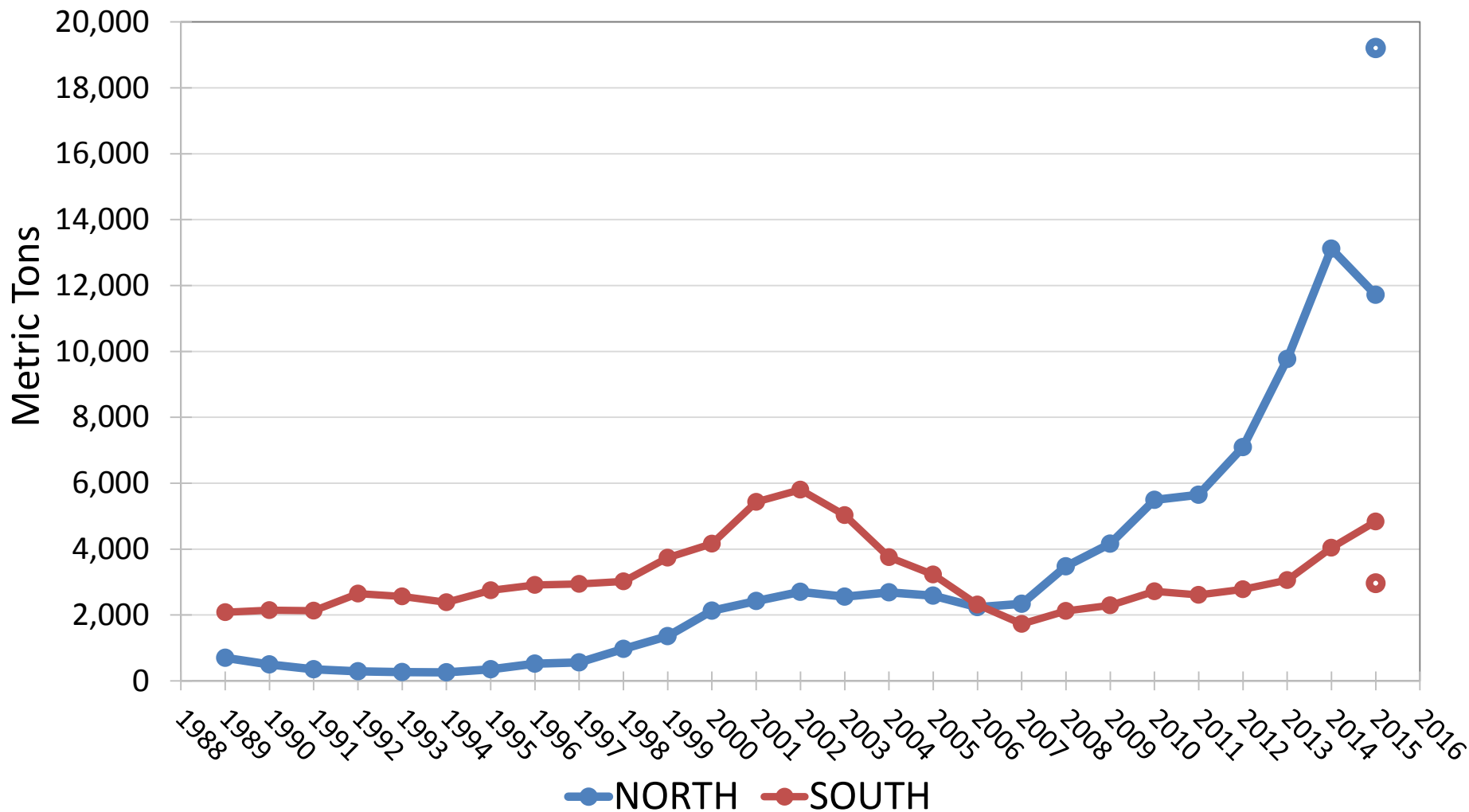
**2. Coastwide black sea bass quota management by NOAA Fisheries**

- – All states in the management unit are subject to fishery closures if a coastwide quota overage occurs

- – Can leave states with remaining commercial quota unable to utilize their full allocation

# Additional Considerations

- Regular review of allocations using the latest and most appropriate data sources

- Changes in allocations should be linked to best available data (stock assessments when practicable, other peer reviewed data sources, state and federal survey indices)

- Future biomass/abundance dynamics may differ from recent shifts. Impacts of year-class strength can be regional or range-wide.

- Dramatic changes in resource availability for some states. Current allocations may provide disproportionate advantage or disadvantage if used as the basis for allocation adjustments (e.g. Connecticut's 1% allocation).

# Additional Considerations

- Investments in infrastructure (e.g. ITQs). Slow or gradual implementation of allocation changes should be considered to reduce unnecessary economic hardships allow industry to respond.

- Impacts to discards

- Changes in recreational information and other factors outside the commercial fishery

# Proposed Management Objectives

- Maintain fishing mortality and spawning stock biomass within established thresholds and targets

- Improve equity in access to the fishery among the states

- Improve fishery efficiency (e.g. use of time, fuel and other resources; reducing discards)

# Potential Management Strategies

- Adjustments to state by state allocations
  - Status quo
  - Dynamic approach modeled after the Transboundary Management Guidance Committee (TMGC) approach

- Defined timeline or trigger for reevaluation of allocations
  - Future consideration of a strategy similar to the scup model (i.e. winter coastwide quota management and summer state-by-state quota management)

# Allocation Adjustment Strategy

- Modeled after TMGC approach

- Objective strategy for gradually transitioning the basis for allocations from resource utilization (allocations, landings) to resource distribution (biomass, abundance)

- More weight on resource utilization to start, and shifts weight to stock distribution over time

- Equation can be modified for different duration, frequency of adjustments, weights

- Control rule for limiting annual allocation changes

# Next Steps

- Provide direction to WG for additional work

  OR

- Initiate management action and form PDT

# Questions?