Atlantic Chub Mackerel
2023-2025 Specifications

Council Meeting
June 8, 2022
Meeting Objective

- Review:
  - Recent fishery information.
  - 2020-2022 specifications.
  - SSC, AP, and MC recommendations.

- Recommend 2023-2025 specifications.
  - Status quo recommended by SSC, AP, and MC.
**Commercial Fishery**

- Overlap with *Illex* squid fishery
  - Vessels, time of year, area
  - “Bailout” species/alternative fishery
- 95% of com. landings over past 20 years from fewer than 5 vessels, fewer than 3 dealers
- 91% landings from bottom trawl, 9% from midwater trawls (fed VTRs)
- 97% landings from June-October
- $0.53/lb on avg, 2002-2021 (adjusted to 2021 $)
Recreational Fishery

On avg. 2017-2021:

- 56% harvest from state waters, 44% federal.
- Most harvest in NY (42%), RI (28%), NJ (18%), CT (8%).
- 57% private/rental, 38% party/charter, 5% shore.
- Most harvest July-Aug (57%), Sept-Oct (40%).

![Graph showing harvest and discards over years](image-url)
**Chub Mackerel ABCs for 2023-2025**

- No new information to inform specifications that are based on recent catches and expert judgement.
- Prospects for conventional stock assessment approaches are limited for the foreseeable future.
- Given general productivity of this widely distributed species and fisheries on similar species worldwide, current catches in Mid-Atlantic are unlikely to cause overfishing.
- The SSC recommends continuation of the existing quota ABC = 2,300 mt for the period 2023-2025.
- SSC believes recommendations are based on information that meets applicable National Standards for best scientific information available.
Chub Mackerel: Sources of Uncertainty and Research Recommendations

• Sources of Uncertainty
  • Range expansion?
  • Range: Gulf of Mexico to Mid-Atlantic but limited stock structure info
  • No fishery-independent measures of abundance
  • Limited fishery-dependent data. Commercial fishing is often opportunistic (alternative species for Illex vessels)
  • Low observer coverage in potential fisheries
  • Diet study of potential predators revealed low incidence rates
  • High uncertainty in recreational catch

• Research Recommendations
  • Expand commercial fishery sampling
  • Comprehensive evaluation of spatial and temporal patterns for all data sources
  • Many others...
  • Collections should begin now to lay basis for future Research Track Assessment
2020-2022 Specifications

- **Expected SC-FL Catch**: 0.08 mil lb (38 mt)
- **Management Uncertainty**: 4% of ACL, 0.20 mil lb (90 mt)
- **Expected Dead Discards**: 6% of ACT, 0.29 mil lb (130 mt)

**Acceptable Biological Catch (ABC)**
- 5.07 mil lb (2,300 mt)

**Annual Catch Limit (ACL)**
- 4.99 mil lb (2,262 mt)

**Annual Catch Target (ACT)**
- 4.79 mil lb (2,171 mt)

**Total Allowable Landings (TAL)**
- 4.50 mil lb (2,041 mt)
ACL

- ACL = ABC - expected SC-FL catch.
- Expected SC-FL catch = 38 mt / 84,500 lb.
- Intended as a conservative estimate.
- Represents ~2% of ABC.
- Highest com + rec landings, 1998-2017, increased by about 10% to account for discards, which are uncertain.
- Recent data suggest SC-FL catch has remained well below this amount.
  - No MRIP catch SC-FL east coast, 2018-2021.
  - Commercial data confidential, but landings less than 250 lb total, 2018-2021 combined.

- **MC recommends no change.**
ACT

- **ACT = ACL - mgmt. uncertainty buffer.**
- Council previously recommended 4% reduction in ACL.
- **MC recommends no change.**
TAL

- TAL = ACT - expected discards.
- No expanded discard estimates.
- Council previously recommended 6% reduction in ACT.
- Based on overall % discards shown in 2003-2017 observer data. Driven by years with higher catch.
- More recent years shown higher discard %, but lower overall catch.
- As ABC is loosely based on the year with highest catch, **MC recommends no changes.**

Additional MC input:
- Observer data preferable to VTR for these calculations.
- Would be beneficial to have expanded SBRM discard estimates.

<table>
<thead>
<tr>
<th>Years</th>
<th>Observer Discard %</th>
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<tr>
<td>2006-2020 (15 years)</td>
<td>7% (337 trips)</td>
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<tr>
<td>2011-2020 (10 years)</td>
<td>6% (301 trips)</td>
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<tr>
<td>2016-2020 (5 years)</td>
<td>43% (193 trips)</td>
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<tr>
<td>2013-2015 (top 3)</td>
<td>4% (95 trips)</td>
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<tr>
<td>2013 (historic high)</td>
<td>3% (27 trips)</td>
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Possession Limits

- Commercial possession limits.
  - 40,000 lb after 90% of TAL projected to be landed.
  - 10,000 lb after 100% of TAL projected to be landed.

- No recreational possession limit.

- 40,000 lb intended to discourage targeting while minimizing dead discards.

- 2002-2021 (typo in staff memo, not 2020-2021): 90% of commercial trips landed less than 10,000 lb.

- MC recommends no change.
Commercial fleet has not targeted chub mackerel in recent years. Focusing on Illex.

Increasing recreational catch likely due to increased availability with warming waters.
No changes recommended to any mgmt. measures for 2023.

No data to suggest changes are needed. Hopefully can have more data for next cycle of setting ABCs.

Emerging fishery.
- Mgmt is overly precautionary.
- Should prioritize and support development of sustainable emerging fisheries.
- Need to adapt to a changing environment.

Recommend research on range of the species, especially regarding climate change.
Thread Herring

- AP member associated with a processor/dealer that has encouraged vessels to target chub mackerel in the past said the company is now more interested in exploring potential for a thread herring fishery.

- Company submitted an EFP, but revisions were requested.

- MC member: would be first case of considering expanded fishery for a Forage Amendment EC species; therefore, thorough consideration needed regarding most appropriate process.
Discussion

- Recommend 2023-2025 specifications.
- SSC, AP, MC recommend no changes from 2020-2022.