Atlantic Mackerel

2024-25 Specifications

SSC - July 2023
Overview

- Background
- Advisory Panel (AP) Fishery Performance Report
- Staff ABC Recommendation
2023 Specifications

Table 1. Revised rebuilding plan catch and initial biomass trajectory.

<table>
<thead>
<tr>
<th></th>
<th>Catch (MT)</th>
<th>Biomass (MT)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2023</td>
<td>8,094</td>
<td>80,745</td>
</tr>
<tr>
<td>2024</td>
<td>9,274</td>
<td>91,738</td>
</tr>
<tr>
<td>2025</td>
<td>10,540</td>
<td>103,756</td>
</tr>
<tr>
<td>2026</td>
<td>11,906</td>
<td>116,857</td>
</tr>
<tr>
<td>2027</td>
<td>13,408</td>
<td>131,291</td>
</tr>
<tr>
<td>2028</td>
<td>15,004</td>
<td>146,553</td>
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<tr>
<td>2029</td>
<td>16,631</td>
<td>162,239</td>
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<tr>
<td>2030</td>
<td>18,261</td>
<td>177,731</td>
</tr>
<tr>
<td>2031</td>
<td>19,814</td>
<td>192,045</td>
</tr>
<tr>
<td>2032</td>
<td>21,215</td>
<td>204,796</td>
</tr>
</tbody>
</table>
# 2023 Specifications

Table 9. The proposed new specifications and closure provisions for the preferred rebuilding alternative (RPA 4)

<table>
<thead>
<tr>
<th>ABC/ACL</th>
<th>8,094</th>
<th>a</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canadian Catch Deduction</td>
<td>2,197</td>
<td>b</td>
</tr>
<tr>
<td>Rec Catch Deduction</td>
<td>2143</td>
<td>c</td>
</tr>
<tr>
<td>Commercial Discards</td>
<td>115</td>
<td>d</td>
</tr>
<tr>
<td>Commercial Quota</td>
<td>3,639</td>
<td>e=a-b-c-d</td>
</tr>
<tr>
<td>Before May 1 First Closure Threshold (-886 MT)</td>
<td>2,753</td>
<td>f=e-886</td>
</tr>
<tr>
<td>May 1/after First Closure Threshold (-443 MT)</td>
<td>3,196</td>
<td>g=e-443</td>
</tr>
<tr>
<td>Final Closure Threshold (-100 MT)</td>
<td>3,539</td>
<td>h=e-100</td>
</tr>
</tbody>
</table>
Catch 1968-2022

![Bar chart showing fishery removals from 1960 to 2020 with categories for US Commercial land, US Commercial discarding, US Recreational catch, and Other countries. The chart highlights the peak in the 1970s and the decline in recent years.](image)
Mackerel Landings (MT, left/solid blue line) and Ex-Vessel Revenues (2022 dollars, right/dashed orange line) 1996-2022
Prices 1996-2022

Mackerel Inflation-Adjusted Price $/MT
2022/2021

Quota: 10,941,542 lbs
98% of quota
90% of quota

Landings (lbs)


Previous Year Current Year
Quota: 8,022,622 lbs

Initial Closure

Final Closure

Landings (lbs)

Recreational Catch

**Graph Title:** Atlantic Mackerel

**Graph Description:** The graph shows the total catch (A+B1+B2) and the 95% confidence interval for Atlantic Mackerel from 2018 to 2022. The catch data trends downward over the years, with a notable decrease after 2020.
Discussion Questions

- What factors influence catch and landings?
- What other issues or concerns do you want to highlight?
- Recommendations for 2024 regulations?
- Research recommendations?
Mackerel – FPR

- Demand/markets not a limiting factor
- No unusual environmental observations
- NEFMC inshore mid-water trawl buffer affected landings 2/10/21 - 3/29/22
- Horsepower restrictions, and resulting speed limitations, may affect the size of the fish in commercial catch
Mackerel – FPR

- Lack of herring RSA quota limited mackerel landings later in the year in recent years

- But trawl boats are allowed to catch herring in the third trimester in area 1A which does allow trawled herring/mackerel catch
Criticism of the mackerel fishery has made the creation of a fishery performance report moot – in the current situation we can’t catch the quota we have, and therefore can’t provide fishery-dependent information which will increase assessment uncertainty.
Mackerel – FPR

- Recreational catch and its precision and impact on biomass remain a concern.
  - Drop in 2022 – mostly from Massachusetts’ private/rental boat mode: reported but not observed harvests (MRIP B1s) and reported discards (MRIP B2s).

- Concern about mid-water trawl gear and selectivity
Staff ABC Recommendation

- Twice stock has not behaved as projected...
  - Good 2022 recruitment: more of same?

- An ABC of 3,314 MT would allow incidental landings and recreational catch
  - Assuming minimal Canadian catch

- Alternate projection suggests catch around 3,314 MT allows rebuilding (2032) even with 65% pruning of fish that were 1s in 2022
Staff to Council

- Likely recommend that the Council request NMFS take emergency action to close directed mackerel fishing for the remainder of 2023 given that the anticipated F in the alternative projection = overfishing if the full 2023 quota is caught (predicted $F_{2023-\text{Alt}} = 0.23$)
result of 35 years straight of overfishing (plus more in the 1970s), often substantial, due to mis-estimation and more recently, mis-projecting (e.g. 1997 catch limit was 10 times the current 1997 biomass estimate)

Probably not going to be suddenly perfect...

Seems possible that it might take a while going back the other way...
Questions?