Summer Flounder

Monitoring Committee
2022-2023 Specifications
July 27, 2021
Overview

- **Review:**
  - 2021 Management Track Assessment results
  - Recent fishery performance
  - Advisor comments
  - SSC recommendations
  - Staff recommendations

- **MC Objectives:**
  - Adopt recommendations for 2022-2023 ACLs, ACTs, comm. quotas, and RHLs
  - Review commercial management measures and recommend changes if warranted
Stock Status: 2021 Management Track Assessment

SSB
- Not overfished in 2019
- 2019 SSB = 47,397 mt, 86% of SSB_{MSY} = 55,217 mt

F
- Overfishing not occurring in 2019
- 2019 F = 0.340, 81% of F_{MSY} proxy = 0.422
Total Catch and Fishing Mortality (F)

Year


Total Catch (mt)

0 5,000 10,000 15,000 20,000 25,000 30,000 35,000

0.0 0.2 0.4 0.6 0.8 1.0 1.2 1.4 1.6 1.8

F (age 4)

FMSY = F35% = 0.422

Total Catch

F (age 4)

FMSY = F35% = 0.422
Spawning Stock Biomass (SSB) and Recruitment (R)

SSBMSY = SSB35% = 55,217 mt
1/2 SSBMSY = 1/2 SSB35% = 27,609 mt
COVID Related 2020 Data Gaps: Commercial

- Commercial effort/markets affected, but commercial landings data collection continued as normal
- Commercial dead discard estimates for 2020 unavailable due to suspension of observer program (mid-March through mid-August 2020)
- Unclear at this time if other methods will be used to generate 2020 dead discard estimates
COVID Related 2020 Data Gaps: Recreational

- As discussed earlier:
  - APAIS (shoreside intercept) sampling disrupted
  - MRIP developed 2020 estimates by filling in gaps with proxy data from 2018-2019
  - Adjustments to 2020 estimates may occur once 2021 data are available (MRIP will review methods that use 2021 data)
  - Recreational dead discard estimates in weight currently unavailable for 2020
Fishery Landings
1981-2020

Landings (Millions of lb)

- Commercial landings (mil lb)
- Recreational landings (mil lb)
- Total landings (mil lb)
## Fishery Performance

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>7.81</td>
<td>8.12</td>
<td>-4%</td>
<td>6.18</td>
<td>13.24</td>
<td>5.42</td>
<td>+14%</td>
</tr>
<tr>
<td>2017</td>
<td>5.83</td>
<td>5.66</td>
<td>+3%</td>
<td>3.19</td>
<td>10.06</td>
<td>3.77</td>
<td>-15%</td>
</tr>
<tr>
<td>2018</td>
<td>6.14</td>
<td>6.44</td>
<td>-5%</td>
<td>3.35</td>
<td>7.60</td>
<td>4.42</td>
<td>-24%</td>
</tr>
<tr>
<td>2019</td>
<td>9.06</td>
<td>10.98</td>
<td>-17%</td>
<td>--</td>
<td>7.80</td>
<td>7.69</td>
<td>+1%</td>
</tr>
<tr>
<td>2020</td>
<td>9.11</td>
<td>11.53</td>
<td>-21%</td>
<td>--</td>
<td>10.06&lt;sup&gt;b&lt;/sup&gt;</td>
<td>7.69</td>
<td>+31%</td>
</tr>
<tr>
<td>Avg.</td>
<td></td>
<td></td>
<td>-9%</td>
<td></td>
<td></td>
<td></td>
<td>+7%</td>
</tr>
</tbody>
</table>

<sup>a</sup> 2015-2018 evaluated using old MRIP data; 2019-2020 with revised MRIP data

<sup>b</sup> 2020 harvest estimated using imputation methods with 2018-2019 data in addition to limited 2020 data
2021 Commercial Landings

Quota: 12,478,484 lbs

Commercial landings through July 14, 2021
General Management Issues (All 3 Species)

- Concerns with the accuracy of MRIP data
  - One added an accurate count of all saltwater rec. anglers is needed to comply with MSA/better manage the fishery
  - Concerns with 2020 rec. estimates using imputation methods

- COVID-19: major impacts on commercial and recreational fishing effort in 2020, negative impacts on commercial markets and prices.

- One advisor: should be a common commercial minimum mesh size for summer flounder, scup, and black sea bass
Environmental Issues (All 3 Species)

- More sharks due to overabundance of menhaden, increased predation on bluefish and striped bass, potentially also impacting BSB and SF
  - Predator/prey dynamics are not properly factored into current catch estimate data

- Need to address chemicals in the water, such as surfactants, that may negatively impact fish populations
Email Comments (all 3 species)

- Need to research fertilizers and pesticides in the water and the negative impacts to fish
- Need to understand effects of windmills, their construction, and seismic blasting on fish
- Due to Covid-19, 2020 data should be eliminated from evaluation methods
Market and Economic Issues

- COVID-19 had major impacts on comm. and rec. fisheries
- Effort notably down in commercial fishery as low prices did not justify trip costs
- Restaurant closures had big impact on markets & prices
- Some vessels did not fish all year
- Some noted difficulty finding reliable crew labor
Market and Economic Issues

- Commercial size limits resulted in markets for smaller fish being lost to imports
  - Market would be better for smaller fish that fit on plates/are better for single servings
  - Request for lowering commercial minimum size below 14” to allow targeting smaller fish
Market and Economic Issues

- Mixed comments on recreational catch and effort in 2020:
  - Reduced participation in marinas – does not match with MRIP data that shows an increase in rec. catch
  - Charter industry in VA shut down for good part of season; does not believe that private boat effort was actually up as indicated by managers
  - Overall recreational effort for all species seemed to be up in 2020
Environmental and General Fishing Trends

- Summer flounder fishing “off” last year; many commercial and rec. fishermen not targeting or catching very few
- Showed up late in the season (August instead of April or May)
  - Due to sharks keeping fish offshore?
Management Issues

- Concerns with 2020 MRIP estimates using 2018-2019 data given differences in fisheries in these years
- Question about whether regulatory discards are counted against catch limits despite being unavoidable for vessels
- Request for consideration of recreational total length limit with mandatory retention
Email Comments (Summer Flounder)

- Virtually no summer flounder rec. fishery inshore anymore (MA)

- Summer flounder comm. minimum size should be lowered to 13”
  - Turn discards into landings; discarded fish are not spawning

- Request for changes to small mesh exemption program (will cover later in presentation)
2022-2023 SSC ABC Recommendations

- Provided annually varying and constant recs. (policy decision for Council and Board)
- Applied 60% OFL CV; sampled R from recent below-average time series; assumes catch = ABC in each year

<table>
<thead>
<tr>
<th></th>
<th>Varying</th>
<th>Constant</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>OFL (mt)</td>
<td>OFL (mil lb)</td>
</tr>
<tr>
<td>2022</td>
<td>16,458</td>
<td>36.28</td>
</tr>
<tr>
<td>2023</td>
<td>15,759</td>
<td>34.74</td>
</tr>
</tbody>
</table>
2022-2023 Sector-Specific Limits

- Commercial/recreational allocation amendment pending final action Dec. 2021
  - Would impact 2023 sector catch and landings limits if allocations were modified
Summer Flounder
Generic Specifications
Flowchart

OFL
From stock assessment projections

ABC
SSC Recommendations

Landings portion of ABC
ABC projections from NEFSC

Discards portion of ABC
ABC projections from NEFSC

Comm. landings
60% of ABC landings portion (current FMP allocation)

Rec. landings
40% of ABC landings portion (current FMP allocation)

Projected comm. discards
% of total expected discards based on 3-year moving average by sector

Projected rec. discards
% of total expected discards based on 3-year moving average by sector

Commercial ACL
Commercial landings allocation plus proj. commercial discards

Recreational ACL
Recreational landings allocation plus proj. recreational discards

Commercial ACT
ACL minus deduction for management uncertainty

Recreational ACT
ACL minus deduction for management uncertainty

Commercial Quota
ACT minus commercial discards and any applicable overage deductions

State Quotas

Recreational Harvest Limit
ACT minus recreational discards and any applicable overage deductions
## Deriving 2022-2023 ACLs (mil lb)

<table>
<thead>
<tr>
<th></th>
<th>Varying 2022</th>
<th>Varying 2023</th>
<th>Constant 2022-2023</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ABC</strong></td>
<td>33.96</td>
<td>32.27</td>
<td>33.12</td>
<td>SSC recs</td>
</tr>
<tr>
<td><strong>ABC Landings</strong></td>
<td>26.48</td>
<td>25.29</td>
<td>25.89</td>
<td>ABC projections (avg. approach includes averaged 2022-2023 expected landings)</td>
</tr>
<tr>
<td><strong>ABC Discards</strong></td>
<td>7.48</td>
<td>6.99</td>
<td>7.23</td>
<td>ABC projections (avg. approach includes averaged 2022-2023 expected disc.)</td>
</tr>
<tr>
<td><strong>Comm. Discards</strong></td>
<td>3.05</td>
<td>2.85</td>
<td>2.95</td>
<td>41% of ABC dead discards portion (2017-2019 average % dead discards by sector)</td>
</tr>
<tr>
<td><strong>Rec. Discards</strong></td>
<td>4.43</td>
<td>4.14</td>
<td>4.28</td>
<td>59% of ABC dead discards portion (2017-2019 average % dead discards by sector)</td>
</tr>
<tr>
<td><strong>Comm ACL</strong></td>
<td>18.94</td>
<td>18.02</td>
<td>18.48</td>
<td>60% of ABC landings portion (FMP allocation) + expected commercial dead discards</td>
</tr>
<tr>
<td><strong>Rec ACL</strong></td>
<td>15.02</td>
<td>14.25</td>
<td>14.64</td>
<td>40% of ABC landings portion (FMP allocation) + expected rec. dead discards</td>
</tr>
</tbody>
</table>
2022-2023 ACTs

- Monitoring Committee should consider whether to recommend a deduction from the commercial and/or recreational ACL to account for management uncertainty.
Considerations for Commercial ACTs

- Commercial landings well monitored/controlled; in-season closure authority
  - Underages in 2019-2020 due to mid-year quota revision and COVID-19

- Commercial discards caused overages of commercial ACLs in 2016-2018 (2%-21%), likely due to low quotas

- Under higher limits since 2019, less of a concern: 2019 commercial catch under ACL by 20%
Considerations for Recreational ACTs

- **Recreational performance variable**
  - Evaluated with old MRIP data through 2018; new MRIP data since 2019
  - New MRIP: 2019 harvest was 1% over RHL; 2020 estimated at 31% over RHL

- **AMs triggered by evaluation of 3-year dead catch vs. 3-year ACL average**
  - Not triggered for 2021 based on 2017-2019
  - 2020 catch info not available
Considerations for Recreational ACTs

- Council and Board currently considering many possible changes to recreational management through Recreational Reform Initiative that could better address recreational management uncertainty
ACT Recommendation

- Staff recommend continued application of ACLs=ACTs; no reduction applied for management uncertainty
<table>
<thead>
<tr>
<th></th>
<th>Current 2021</th>
<th>Varying 2022</th>
<th>Varying 2023</th>
<th>Constant 2022-2023</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFL</td>
<td>31.67</td>
<td>36.28</td>
<td>34.74</td>
<td>36.28 (2022)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>34.98 (2023)</td>
</tr>
<tr>
<td>ABC</td>
<td>27.11</td>
<td>33.96</td>
<td>32.27</td>
<td>33.12</td>
</tr>
<tr>
<td>Commercial ACL = ACT</td>
<td>14.63</td>
<td>18.94</td>
<td>18.02</td>
<td>18.48</td>
</tr>
<tr>
<td>Recreational ACL = ACT</td>
<td>12.48</td>
<td>15.02</td>
<td>14.25</td>
<td>14.64</td>
</tr>
<tr>
<td>Commercial Quota</td>
<td>12.49</td>
<td>15.89</td>
<td>15.17</td>
<td>15.53</td>
</tr>
<tr>
<td>Recreational Harvest Limit</td>
<td>8.32</td>
<td>10.59</td>
<td>10.12</td>
<td>10.36</td>
</tr>
</tbody>
</table>
Staff Recommendation: Mesh and Fish Size Regulations

- No changes to:
  - Minimum fish size (14”)
  - Seasonal mesh size possession thresholds (200 lb Nov 1-Apr 30; 100 lb May 1-Oct 31)
Mesh Size Regulations & Exemptions

- MC has previously identified additional work & industry input needed to evaluate mesh regulations & exemptions for all 3 FMP species
  - Council/Board identified as lower priority given other actions
  - Unable to address this in 2021 due to other priorities
  - Staff recommend seeking contractor for additional policy analysis of SF/scup/BSB mesh regulations in 2022
Minimum Mesh Size

- Current requirement: 5.5” diamond or 6.0” square
- Mesh size study (Hasbrouck et al. 2018) results indicate 5.5” diamond/6.0” square may not be equivalent
  - 6.0” square appears closer to 5.0” diamond
  - Some past MC concern about retention of undersized fish with 6.0” square; recommendation to evaluate possible phase out of 6.0” square option
Staff Recommendation: Small Mesh Exemption Program

- SMEP allows authorized small mesh vessels to land more than 200 lb of summer flounder east of longitude 72° 30.0’W, Nov. 1 - April 30

- FMP requires review of observer data to determine whether these vessels are discarding more than 10% of their summer flounder catch
## Staff Recommendation: Small Mesh Exemption Program

<table>
<thead>
<tr>
<th>Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Observed trips with at least one catch record east of 72° 30’ W Longitude</td>
</tr>
<tr>
<td>That met the criteria in row A and used small mesh at some point during their trip</td>
</tr>
<tr>
<td>That met the criteria in rows A-B and landed more than 200 pounds summer flounder on whole trip</td>
</tr>
<tr>
<td>That met the criteria in rows A-C and discarded &gt;10% of summer flounder catch east of 72° 30’ W Longitude</td>
</tr>
<tr>
<td>% of observed trips with catch east of 72° 30’ W Longitude that also used small mesh, landed &gt;200 pounds of summer flounder, and discarded &gt;10% of summer flounder catch (row D/row A)</td>
</tr>
<tr>
<td>Total summer flounder discards (pounds) from trips meeting criteria in A-D</td>
</tr>
<tr>
<td>Total summer flounder landings (pounds) from trips meeting criteria in A-D</td>
</tr>
<tr>
<td>Total catch (pounds) from trips meeting criteria in A-D</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>401</td>
<td>391</td>
<td>555</td>
<td>724</td>
<td>646</td>
<td>397</td>
</tr>
<tr>
<td>B</td>
<td>172</td>
<td>252</td>
<td>376</td>
<td>364</td>
<td>354</td>
<td>204</td>
</tr>
<tr>
<td>C</td>
<td>72</td>
<td>92</td>
<td>150</td>
<td>135</td>
<td>164</td>
<td>97</td>
</tr>
<tr>
<td>D</td>
<td>21</td>
<td>18</td>
<td>36</td>
<td>47</td>
<td>53</td>
<td>24</td>
</tr>
<tr>
<td>E</td>
<td>5.20%</td>
<td>4.60%</td>
<td>6.50%</td>
<td>6.50%</td>
<td>8.20%</td>
<td>6.05%</td>
</tr>
<tr>
<td>F</td>
<td>14,579</td>
<td>16,470</td>
<td>14,640</td>
<td>33,868</td>
<td>18,186</td>
<td>11,672</td>
</tr>
<tr>
<td>G</td>
<td>15,224</td>
<td>23,295</td>
<td>25,472</td>
<td>76,780</td>
<td>59,960</td>
<td>29,540</td>
</tr>
<tr>
<td>H</td>
<td>29,804</td>
<td>39,763</td>
<td>40,113</td>
<td>110,648</td>
<td>69,145</td>
<td>41,212</td>
</tr>
</tbody>
</table>
Advisor Email Comment on Small Mesh Exemption

- Request to remove summer flounder small mesh exemption area line
  - Vessels should be allowed to possess up to 1,000 lb with small mesh regardless of fishing area
  - Directed trips over 1,000 lb should have 5” mesh requirement (vs. 5.5” diamond/6” square currently)

- MC comments on this request?
Staff Recommendation: Flynet Exemption

- Vessels fishing with two-seam otter trawl flynet are exempt from the minimum mesh size requirements.

- Exempt flynets have large mesh in the wings that measure 8 to 64 inches, the belly of the net has 35 or more meshes that are at least 8 inches, and the mesh decreases in size throughout the body of the net, sometimes to 2 inches or smaller.
Staff Recommendation: Flynet Exemption

- NC flynet fishery analyzed annually
- No summer flounder landed in NC flynet fishery in last 6 years
- General decrease in flynet landings in recent years largely due to shoaling at Oregon Inlet
Flynet Exemption

- As discussed last year, one advisor noted in 2020 that flynet exemption is being used outside NC with “high rise” nets on multispecies trips
  - Requested change in definition to include 4-seam nets in addition to 2-seam nets

- Very few, if any SNE/Mid-Atlantic fishermen in offshore mixed winter trawl fishery use 2 seam nets
  - Most “high rise” are 4 seam nets: with side panels, box shaped
Flynet Exemption

Previous (2020) MC comments:

- Need to better understand use and configuration of flynet and high-rise nets as related to this exemption

- Possible compliance/enforcement issue if vessels believe they qualify for exemption but are not meeting regulatory definition (2 seam net)

- Better understanding of 2 vs. 4 seam nets needed before commenting on whether expansion of regulatory definition is warranted
Flynet Exemption: Staff Recommendation

- No changes for 2022
- Include in contractor review of mesh size/exemption regulations in 2022
  - Data analysis of specific trawl gear configurations if possible
  - Input from gear experts, industry, and enforcement on this issue
MC Decision Points

- Recommend 2022-2023 ACLs, ACTs, commercial quota, and RHLs for both annually varying and constant ABCs
  - Recommendation for constant vs. varying approach?

- Review commercial management measures and recommend any changes to:
  - Commercial minimum fish size
  - Commercial minimum mesh size
  - Possession thresholds for minimum mesh size requirement
  - Mesh size exemptions (small mesh exemption program and flynet exemption)