The Herring Committee met on December 11, 2020 at 9:00 AM via webinar primarily to discuss development of a rebuilding plan, review herring accountability measures, and continue development of Framework 7.

**MEETING ATTENDANCE:** Rick Bellavance (Chair), Vincent Balzano, Peter deFur, Emily Gilbert (GARFO), Ritchie White, Melissa Smith, Melanie Griffin, Scott Olszewski, John Pappalardo, Matthew McKenzie and Peter Hughes; Megan Lapp (Advisory Panel vice-Chair); Deirdre Boelke (PDT Chair), Rachel Feeney, Janice Plante, and Michelle Bachman (NEFMC staff); Mitch MacDonald and Carrie Nordeen (GARFO staff). In addition, about 15 others attended.

**KEY OUTCOMES:** The Committee provided input on development of a rebuilding plan, potential measures to adjust herring accountability measures, and Framework 7 (GB spawning).

**AGENDA ITEM #1: REBUILDING PLAN**

Staff presented slides on the specific requirements of rebuilding plans and initial PDT input including preliminary projections for Tmin (F=0) and the Amendment 8 harvest control rule. The Committee discussed this topic for almost two hours. The Committee commented that it will be useful to see projections for Tmin as well as Tmax of ten years, even if they are not alternatives in the rebuilding plan. It was pointed out that Tmin can be an alternative, but it is not required if it is not a “reasonable alternative.” The analysis would need to show whether it is a reasonable alternative or not. There was substantial discussion about the projections using assumptions of average recruitment and how realistic that is based on recent observations of very poor recent recruitment levels. The Committee discussed several possible ways to address that further and passed motions below tasking the PDT to explore that topic further.

Some expressed concerns that fishing targets are already very low and it is difficult to fathom even lower fishing mortality levels if biomass declines further. Members expressed concerns about infrastructure and providing some access to help support a fleet until herring is rebuilt. A few additional ideas were offered to identify fishing mortality targets that would have 50% probability of overfishing in 7 and 10 years, several years longer than the ABC control rule (4-5 years). Several Committee members spoke in favor of using the control rule but expressed concern that the projections of attaining a rebuilt status in 5 years was not realistic under poor recruitment levels. Therefore, an option for analysis was included that will apply the control rule but set Ttarget at ten years. This would use the same Frebuild values as the ABC control.
rule already prepared, but on paper the time period to attain a rebuilt status would extend another five years out to recognize that it may take longer if recruitment does not improve.

Other members pointed out that determining what is best for the industry is complex in this situation because the needs of the herring and lobster industries must be considered, as well as other businesses that focus on predators of herring. Multiple users will need to be considered when evaluating the needs of a community. Another member pointed out that lower quotas in the short term can have negative impacts on the industry, but the longer-term positive impacts of a rebuilt resource also need to be considered. The faster a fishery can rebuild the earlier those positive impacts can occur. Finally, a member commented that the Council had a very long discussion during development of Amendment 8 about what should happen if rebuilding was needed. Therefore, there would need to be a strong reason to deviate from it.

**Motion 1: Smith/DeFur**

Task the PDT to develop rebuilding analyses that include:

- \( T_{\text{target}} = \text{HCR sets F} \) (and preliminary results are 4-5 years for \( T_{\text{target}} \))
- \( T_{\text{target}} = 7 \) years (set \( F_{\text{rebuild}} \) so that \( P_{\text{prebuild}} \) is 0.5 in year 7)
- \( T_{\text{target}} = 10 \) years (set \( F_{\text{rebuild}} \) so that \( P_{\text{prebuild}} \) is 0.5 in year 10)
- \( T_{\text{target}} = \text{HCR sets F} \) (but \( T_{\text{target}} = 10 \) years)

**Rationale:** \( T_{\text{min}} \) and \( T_{\text{max}} \) are routine analyses for the rebuilding plan and will bookend projections, showing the variability of \( F \) rates, \( SSB \) and overfishing/overfished. It is expected to utilize the HCR to develop a rebuilding plan, as determined through A8. But there is concern that the \( F \) rates associated with the HCR might have significant economic impact to the herring industry; analyzing \( T_{\text{target}} \) of 7 years will offer additional information to better inform the Ctte/Council to determine if there is a compromise to be had about maintaining reasonable fishing operations while focusing on rebuilding the herring resource.

**Vote:** 7:1:0, carries

**The Committee discussed some concern with the initial projections in terms of estimated biomass several years out. The projection model uses the entire time series for recruitment, so the median recruitment is much higher than observations in recent years. The Committee is interested in the PDT exploring other assumptions for recruitment, including below average recruitment as well as potential use of empirical dynamic modeling (EDM). One Committee member was hesitant to develop projections that use different assumptions than the assessment, what would the rationale be? Another responded that some sensitivity around this issue is important because there is a great deal of uncertainty about recruitment, the SSC has been noting this recently, and the analyses will help illustrate the implications of overestimating recruitment. In the end the Committee developed a tasking statement that passed unanimously. They request**
the PDT explore EDM but understand it may be outside the scope for this rebuilding plan and may be better suited for additional development and review through the assessment process.

**By consensus, recommend the PDT utilize below average recruitment and average recruitment when developing projections for this rebuilding plan. If time permits, explore empirical dynamic modelling (EDM) options.**

**AGENDA ITEM #2: ACCOUNTABILITY MEASURES**

After a brief break the Committee discussed herring accountability measures. The Committee is supportive of flexibility, but some concerns were expressed about carryover, because this fishery has four different management areas that do not have equal allocations to start with and each area has unique fishing patterns. One Committee member added that if the stock was in better shape adding more flexibility would make sense, but under the current situation any unused quota will only help the resource recover. On the other hand, when quotas are relatively low, small overages are more expected given the high-volume nature of this fishery; therefore adjusting overages may make more sense in this action than modifying carryover. Another member asked what specific issue is this action trying to address? When ACLs are small the risks are relatively higher for overages in this fishery because it is high volume and there are monitoring challenges as it is.

NMFS explained the recent monitoring challenges with Area 1A and informed the Committee that they are exploring possible ways to inform the fishery of closures to help prevent overages. The Committee passed Motion #4 requesting the Council show support of that effort, potentially informing the fleet via VMS, compared to federal register notice that can take several days. In the end the Committee passed Motion #2 with specific input about overage alternatives, and Motion #3 a separate tasking motion requesting more information.

**Motion 2: Griffin/Smith**

Task the PDT to analyze tolerance options for triggering payback accountability measures for overages of herring management area sub-ACLs that could include an allowance for a sub-ACL overage up to a certain percent (e.g., 10%) that would not trigger an AM if the total ACL is not harvested. Sub-ACL overages over that tolerance (e.g., >10%) would continue to trigger an AM regardless of the total ACL harvest level.

*Rationale: Allows for some flexibility while recognizing the sub-stock spatial structure of herring.*

**Vote: 9:0:1, carries**

<table>
<thead>
<tr>
<th>Member Name</th>
<th>Vote</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rick Bellavance, RI (Chair)</td>
<td></td>
<td>Matt McKenzie, CT</td>
</tr>
<tr>
<td>Vincent Balzano, ME</td>
<td>Y</td>
<td>Dan McKiernan/Melanie Griffin, MA</td>
</tr>
<tr>
<td>Peter deFur (MAFMC)</td>
<td>Y</td>
<td>Scott Olszewski, RI</td>
</tr>
<tr>
<td>Emily Gilbert (NMFS)</td>
<td>Y</td>
<td>John Pappalardo, MA</td>
</tr>
<tr>
<td>Peter Hughes (MAFMC)</td>
<td>Y</td>
<td>Cheri Patterson, NH</td>
</tr>
<tr>
<td>Patrick Keliher/Melissa Smith, ME</td>
<td>Y</td>
<td>Ritchie White, NH (ASMFC)</td>
</tr>
</tbody>
</table>

**Absent:**

Rick Bellavance, RI (Chair)  Y  
Vincent Balzano, ME  Y  
Peter deFur (MAFMC)  Y  
Emily Gilbert (NMFS)  Y  
Peter Hughes (MAFMC)  Y  
Patrick Keliher/Melissa Smith, ME  Y  

Ritchie White, NH (ASMFC)  Absent
Motion 3: Smith/Balzano

Task the PDT to summarize total ACL usage by herring management area for years 2000-2019; highlight fishing years where OY was not reached; indicate years where carryover occurred; comment on the relationship between probability of overages and carryovers in relation to ABC.

Rationale: Data compilation will indicate when OY hasn't been reached and the interactions between not achieving OY and accountability measures. Recent low annual ACLs may also play a role in not reaching OY due to difficulty in monitoring and closing HMAs with small sub-ACLs.

Vote: Carried by consensus

Motion 4: Hughes/Pappalardo

Herring Committee recommends the Council support efforts NMFS is currently doing related to exploring the potential use of closing the herring fishery when it is approaching a sub-ACL by VMS notification rather than a notice in the Federal Register.

Carried by consensus, with one abstention (Ms. Gilbert)

AGENDA ITEM #3: FRAMEWORK 7 – GB SPAWNING

Staff presented some background slides and requested the Committee focus on three topics: 1) what fisheries will be considered in this action; 2) details of a required review; and 3) details for a spawning tolerance alternative. The group started with the last topic – the spawning tolerance. One Committee members explained that there were enforceability issues with the 20% tolerance measures that was in place under ASMFC and recommended the Council reach out to AMSFC to learn more about the details. A member of the audience explained that a spawning tolerance may work better for the offshore fishery because the provide notice of landings much earlier that vessels that fish closer to shore so there is more time for an observer to arrive for an offload. The Committee passed one motion related to potential tolerance alternatives.

Motion 5: Smith/Gilbert

Task the PDT to further analyze options in Framework 7 for a spawning tolerance (between 10-30%) and also investigate enforcement challenges.

Rationale: Tolerances have been used in this fishery in the past; we understand that before enforcement was the challenge. However, the state of Maine for example has improved enforcement efforts, reevaluating this topic now may have different information than before. This option is more flexible for industry compared to large spatial closures and would improve our ability to collect more data about spawning of Atlantic herring on GB.

Vote: 5:1:3, carries

<table>
<thead>
<tr>
<th>Rick Bellavance, RI (Chair)</th>
<th>Matt McKenzie, CT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Offline</td>
<td>Dan McKiernan/Melanie Griffin, MA</td>
</tr>
<tr>
<td>A</td>
<td>A</td>
</tr>
</tbody>
</table>
Next the Committee discussed what gears or fisheries should be included in this action. One member of the audience noted that in theory there may be impacts of bottom tending gears on herring egg mats, but in practice for many decades there has been intense fishing on GB and herring recruitment has been successful with high herring biomass in some of those years. Another commented that closures are controversial and would have substantial impacts on various fisheries; therefore, this action should be an Amendment, and potentially an EIS. Another added that we lose data when areas close. The information we have on spawning on GB is very dated, and fishery data is all we have to help identify when and where fish are spawning. The Committee did not discuss this topic in detail, and decided to leave the door open for now, including alternatives to potentially prohibit other fisheries in these areas.

Finally, the Committee discussed a required review alternative. Several Committee members agreed with the PDT that it would be more beneficial to have a review of the entire management program, not just one measure at a time. There is a research priority on the books for the herring plan to conduct a review of the entire management program. A motion was drafted to move this topic to the considered and rejected section of the action, but that motion failed. Some Committee members are not convinced that a full review of the FMP will happen soon, and support review of spawning closures. A member of the audience argued that data should be collected for several years before considering spawning closures on GB.

**Motion 6: Smith/Hughes**

Recommend the required review of spawning measures (Section 4.2.2) be moved to the considered and rejected section in Framework 7.

**Rationale:** Because review of spawning measures would be included in an overall review of herring measures there would be no need to burden another review of just spawning measures.

**Vote: 1:6:2, motion fails**
AGENDA ITEM #4: OTHER BUSINESS

A Committee member asked for an update on Amendment 8 and the disaster relief requests. NMFS explained that Amendment 8 is under review and the final rule is expected to be published soon. There are several delays in Silver Spring. NMFS added that four states requested disaster relief due to catch reductions in the herring fishery. The Agency is still reviewing the requests. Finally, NMFS responded to a question that came up at the AP meeting earlier in the week about how end of year herring landings are calculated. The question came up about trips that straddle the end of the year, what happens if fishing took place in 2020, but the fish did not get processed by the dealer until January 1, 2021. When herring quotas are so low there is concern that the fleet needs to be very careful about overages. NMFS will try to put out an outreach notice on this topic clarifying this question.