



New England Fishery Management Council

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MEETING SUMMARY

Joint Scallop PDT and Advisory Panel Meeting

Hilton Garden Inn, Boston, MA

May 4th, 2017

The Scallop PDT and Advisory Panel met on May 4th, 2017 in Boston, MA to: (1) discuss data needs and analyses for Scallop Framework 29 including development of flatfish accountability measures (AMs) and management measures for the Northern Gulf of Maine management area (NGOM), (2) receive an overview of the Scallop Research Set Aside (RSA) Program and recent awarded projects, (3) receive presentations on preliminary results from recently funded Scallop RSA projects, (4) discuss research priority recommendations for the 2018/2019 Scallop RSA Federal Funding Opportunity announcement, and (5) discuss other business.

MEETING ATTENDANCE: Jim Gutowski (Advisory Panel Chair), Jonathon Peros (PDT Chair), Peter Benya, Brent Fulcher, Ed Mullis, Kristan Porter, Robert Maxwell, Paul Parker, Charles M. Quinn, Jr., Bill DuPaul, Roger Mann, David Rudders, Dvora Hart, Cate O'Keefe, Tim Cardiasmenos, Chad Keith, Kevin Kelly, Travis Ford, Trisha Cheney, Benjamin Galuardi, Dave Bethoney, and Sam Ascii.

Mary Beth Tooley, Chair of the Scallop Committee, was present in the audience. There were approximately 20 members of the public in attendance.

SUPPORTING DOCUMENTATION: Discussions were aided by the following documents and presentations: 1) Staff presentation; 2) Summary of Scallop RSA Awards; 3) NOAA announcement of 2017/2018 RSA awards; 4) the full Scallop RSA Federal Funding Opportunity announcement; 5) a summary of the 2017/2018 Scallop RSA priorities; and 6) list of the 2017 priorities for the Scallop FMP.

KEY OUTCOMES:

- *Northern Windowpane AM:* Closed Area II may not be the optimal place to institute a time/area closure to reduce windowpane bycatch because of the low effort in this area when windowpane are present. Time/area closures that may help to optimize meat yield and reduce flatfish catch may be beneficial to the fishery.
- *RSA Priorities:* The group had an initial discussion around 2018/2019 Scallop RSA priorities. See page 5.

The meeting began at 9:05 am. Jonathon Peros welcomed members of the AP and PDT, representatives of RSA awarded projects, and members of the public. Council staff reminded the AP/PDT that there would be no motions or tasking at this meeting; the main objective of the meeting was to update the group on recent findings from ongoing Scallop RSA projects and to discuss potential RSA priorities for 2018/2019. The PDT/AP were updated on the Council's initiation of Framework 29 at the April meeting, with the likely alternatives including the development of a specifications package, setting the NGOM TAC and addressing management measures, developing and modifying flatfish AMs, and modifying Closed Area I Access Area boundary to be consistent with Omnibus Habitat Amendment 2. The Council acknowledged that keeping Framework 29 as simple as possible will increase the likelihood of the FW being in place for April 1st, 2018 (beginning of FY2018).

Flatfish Accountability Measures

Tasking from the Committee directed the PDT to focus flatfish AM development on gear modifications (i.e. 5-row apron) if possible, and to consider seasonal closures if a gear modification is not sufficient. To date, the PDT had reviewed flatfish bycatch data from observer records and a seasonal bycatch dredge survey of Georges Bank, focusing primarily on Northern windowpane flounder and Georges Bank yellowtail flounder. The PDT plans to use observer data to examine Northern windowpane and yellowtail bycatch as a function of depth and season.

[Presentation: Liese Siemann, CFF. Optimizing the Georges Bank Scallop Fishery by Maximizing Meat Yield and Minimizing Bycatch](#)

AP/PDT Discussion:

Members of the PDT and public agreed with the CFF findings that the assumed dredge efficiency for the seasonal bycatch dredge survey (0.25) was accurate for GB yellowtail and Northern windowpane. Preliminary findings from this survey estimated Northern windowpane swept area biomass to be approximately 8482 mt; the current Northern windowpane sub-ACL for the scallop fishery is roughly 1% of this biomass estimate. Further discussion noted that the current assessment of Northern windowpane is data poor, and that the inclusion of new methods to estimate swept area biomass (i.e. CFF seasonal bycatch dredge survey) would likely have to wait until a benchmark assessment.

A member of the PDT suggested that adjusting a seasonal closure in CAII South to account for peaks in Northern windowpane may not be necessary, as there is already minimal effort in CAII S during that time of year. It was further suggested that a seasonal closure may not be a fitting AM for Northern windowpane in CAII S, but that there are other areas on Georges Bank with high Northern windowpane bycatch which could warrant a time-area closure. Members of the AP noted that a time-area closure which reduces Northern windowpane bycatch and optimizes meat yield would be beneficial to the fleet; however, it was also stated that maintaining flexibility is crucial to fishing operations because fishermen must constantly adapt to varying conditions of fishing grounds throughout the year.

Discussion moved to other available data sources that could inform the development of flatfish AM's. The PDT has used observer data to guide AM development, including investigating observed Northern windowpane and GB yellowtail bycatch as a function of season and depth, and is working to package findings for the next AP and Committee meeting.

PDT deliverables:

- Direct the on-going time-area closure AM development to Georges Bank yellowtail stock areas, as this is where the most effort occurs and where the most Northern windowpane/GB yellowtail bycatch is observed.
- Follow up on Northern windowpane/GB yellowtail bycatch as a function of season and depth analysis. (Mr. Chad Keith, Dr. Dvora Hart)

Northern Gulf of Maine Management

Council staff directed discussion to the Northern Gulf of Maine, noting that the AP and Committee will be looked to for input on developing alternatives at the upcoming meetings (AP-May 31st, Committee-June 1st). At the April meeting, the Council adopted a NGOM problem statement/goal and requested that the southern portion of the NGOM management area be surveyed in 2017 (see [Motions 2 and 3](#)). The AP/PDT were reminded that setting a NGOM TAC will be part of Framework 29, and were asked to contemplate the following:

1. Consider how the NGOM TAC could be set to distribute removals between groups. Existing approaches used in the Scallop FMP include using historic landings of each component to estimate a TAC, and splitting an overall TAC by giving a percentage to each fishery component. And
2. Consider possible harvest approaches for the LA component within the NGOM management area, noting that feasible harvest approaches will likely be informed by the overall TAC. Existing harvest approaches for the LA component used in the Scallop FMP include limiting days-at-sea and the number of trips taken within an area.

A member of the PDT stated that splitting an overall TAC between fishery components could be done temporarily (as an Amendment is being developed) through the Framework process, further noting that a permanent division of an overall TAC between components would likely require an Amendment.

The AP/PDT discussed whether or not the NGOM should be treated as an access area. The PDT agreed that the NGOM is different than most access areas and, due to the specific protocols used to manage an access area (as outlined in the Scallop FMP), it should not be treated in the same manner. It was further noted that the preferred way to manage the NGOM moving forward will likely be dictated by the survey results and how many scallops are actually in the area. A member of the AP suggested using daily LPUE as a way to track and control removals by the LA component; it was agreed that this approach would prove difficult because of the time-lag associated with landings data, and the lack of administrative support required for such a labor-intensive method.

The consensus of the PDT/AP was that splitting an overall TAC between fishery components and capping removals would be the best way to control/track removals from the NGOM. Furthermore, it was agreed that this would be a relatively straightforward approach and would be the best option to ensure the NGOM TAC is in place before the start of the 2018 fishing year.

RSA Program Overview and Recent Awards

Council staff presented information on the background of the Scallop Research Set-Aside program, including the process undergone to review and award proposed projects.

The 2017/2018 RSA awards were announced on March 17, 2017; 17 projects were funded with over 30 researchers from 15 different organizations. Awarded surveys for 2017/2018 include the VIMS dredge survey, the SMAST drop camera survey, and HabCam surveys from both CFF/Arnie's Fisheries and Woods Hole Oceanographic Institution.

The AP/PDT were asked to consider potential research priorities for the 2018/2019 Scallop RSA Federal Funding Opportunity announcement as preliminary results from RSA projects are being presented throughout the day; the group should prepare to make recommendations for the Committee's consideration at the June 1st meeting. The Scallop RSA research priorities for 2017/2018 were:

- Highest: Surveys of the resource, including intensive for access areas, intensive for candidate access areas, broad resource wide (equal importance)
- High: Bycatch, scallop meat quality (equal importance)
- Medium: non-harvest mortality, turtles, spat and seeding projects (in order of importance)
- Other: habitat characterizations, environmental stressors/biology projects, LPUE, other surveys (equal importance)

Representatives of recently awarded RSA projects presented preliminary findings to the AP/PDT, including:

1. [Liese Siemann, CFF. Optimizing the Georges Bank Scallop Fishery by Maximizing Meat Yield and Minimizing Bycatch.](#)
2. [Farrell Davis, CFF. Bycatch mitigation: Review of extended-link, flounder sweep, and cover net project data.](#)
3. [Samir Patel, CFF. Habitat characterization and Sea Scallop Resource Enhancement Study in a Proposed Habitat Research Area-Year Three.](#)
4. [Roger Mann, VIMS. Age structure and growth rate in the sea scallop *Placopecten magellanicus*.](#)
5. [Dave Rudders, VIMS. An investigation into the Scallop Parasite Outbreak on the Mid-Atlantic Shelf: Transmission Pathways, Spatio-Temporal Variation of Infection, and Consequences to Marketability.](#)
6. [Samir Patel, CFF. Understanding impacts of the sea scallop fishery on loggerhead sea turtles through satellite tagging.](#)
7. [Gavin Fay, SMAST. Combining Fishermen's Knowledge to Locate, Evaluate, and Predict Gray Meat Outbreaks.](#)

8. Justin Ries, Northeastern. *Effects of Ocean Acidification and Warming on NW Atlantic Sea scallops.*

2018/2019 Scallop RSA Research Priority Discussion

Members of the AP and PDT gave the following input on how the 2017/2018 RSA research priorities could be modified for 2018/2019:

HIGHEST

Survey Related Research:

In light of the Council's interest in surveying the southern portion of Northern Gulf of Maine management area in 2017, a member of the PDT suggested a survey of the NGOM be elevated from 'Other' to a higher priority. It was further suggested that a survey of the NGOM be expanded past the southern portion because other areas within the NGOM, and in the Gulf of Maine as a whole, have historically supported fisheries (i.e. Fippennies Ledge, Jeffreys Ledge, Cashes Ledge, Platts Bank).

A concern was raised about the implications of setting RSA survey priorities before the results of surveys are known. This can create situations where survey groups are responding to areas identified in the FFO, while other needs may emerge later on in the year that are not specific to the award announcement. Staff followed-up on this point with Deirdre Boelke after the meeting; she indicated that the Council has been explicit and vague about prioritizing specific areas for survey work in the past.

HIGH

Bycatch research and scallop meat quality research (including life cycle and disease processes):

Several AP members felt that scallop meat quality research should stay on the list, and that density dependence should be considered in future work. The group was asked to consider how the current management strategy could be adapted to avoid areas with infected scallops. Ensuing discussion suggested that the current knowledge of scallop disease/parasitism is not robust enough to begin adapting management, and that further research is needed before considering this approach. Other comments suggested that research focusing on how management should adapt to scallop disease/parasitism could be useful. Members of the AP emphasized the furthering our understanding of how disease/parasites are spread, noting that the spread of parasitism to Georges Bank scallops could have negative implications on meat quality and the fishery as a whole.

MEDIUM:

Non-harvest mortality, research on loggerhead sea turtles, and impacts of scallop spat and seeding projects:

A member of the PDT commented that non-harvest scallop mortality research has been covered well, but that scallop predation is an underserved topic. Because of the linkage between sea

turtles and nematode parasites, it was suggested that language could be added to the FFO which underscores the connection of these two potential priorities.

A member of the public argued that turtle research should remain on the priority list, as past turtle research has helped address issues in oceanographic modelling. It was further suggested that the endangered/threatened sea turtles of the northwest Atlantic are a dominant species on scallop grounds, and could implicate the fishery if the status/biological opinion of these sea turtles changed. Another comment suggested research be focused on sea turtle movement, especially as recent findings show sea turtle range has expanded to Georges Bank.

A member of the PDT commented as to whether turtle research should be expanded beyond loggerhead turtles because both green turtles and Kemps Ridley turtles have shown to host nematode eggs, and could be contributing to the spread of the parasite.

OTHER

Some comments questioned whether habitat characterization research should remain on the priority list, as OHA2 has extensively investigated the impacts of fishing operations on marine habitats. It was noted that habitat research has been on the priority list for a long time and has been elevated in priority ranking from time to time. A PDT member suggested leaving habitat research on the priority list for the time-being.

A PDT member suggested that the group consider the longer-term [Council research priorities for 2017-2021](#) in upcoming discussion, which include:

1. Research to elucidate modes of infection, transmission and distribution of scallop diseases and parasites that may adversely impact scallop health, meat quality and reproductive viability. Special attention should be directed to conditions that may result in modifications to the scallop rotational area management strategy to maximize yield.
2. Evaluation of ways to control predation on scallops.
3. Research to address potential implications of spat collection, seeding and relocation of scallops for enhancement purposes in light of unknown impacts of diseases and parasites.
4. Research that investigates the factors affecting fishing power and estimates of how they relate to projections of landings per unit of effort.
5. Research related to identifying the major sources of management uncertainty and measuring their potential effects on future fishery allocations.

Socioeconomics:

4. Evaluate the social and economic impacts and consequences of the area rotation program of the scallop fishery, including evaluation of potential distributional effects as well as impacts on other fisheries.

Other Business

No other business was discussed.

RSA Share Day Priorities Discussion

Input from entire group

HIGHEST

Survey related Research:

1. Elevating a survey of the Northern Gulf of Maine Management Area from ‘Other’ to a higher priority.
 - a. Are there areas of more importance within this management area? For example, the southern portion of the NGOM on Stellwagen and Jeffreys?
 - b. Historically, there have been fisheries on Fippenies, Jeffreys Cashes Ledge, and Platts. Other areas besides Stellwagen have been productive.
 - c. Given Council’s recent actions, and potential for prioritizing an amendment that could include NGOM measures, this is a high priority in the near term.
 - d. Scallop fishing regularly occurs in the GOM outside of the NGOM management area, should this be a broad focus on entire GOM?
 - e. Comments re: the status of the NGOM, it is not an access area right now.
2. Comment about the implications of setting RSA survey priorities before the results of surveys are known. This can create situations where survey groups are responding to areas identified in the FFO, while other needs may emerge later on in the year that are not specific to the award announcement. Staff followed-up on this point with Deirdre Boelke after the meeting – she indicated that the Council has been explicit and vague about prioritizing specific areas for survey work in the past.

HIGH

Bycatch research and scallop meat quality research:

3. Two AP members felt that scallop meat quality research should stay on the list, and that density dependence should be considered in future work.
4. Question posed to the group – how do you adapt our current management strategy when there are areas where animals are infected.
5. The group briefly discussed whether or not basic research is still needed or should the focus be on how to adapt. One presenter felt that we do not yet fully understand the mechanisms and processes of these diseases/parasites, and that more work is needed. Other comments suggested that research on how to adapt could be useful.
6. Emphasis on tracking the spread of disease/parasites – particularly to know if they are moving north/east (ex: nematodes). AP member commented that there are further implications on the price and marketability of product – if the parasite moves up to GB this could be a big problem for the fishery.

MEDIUM:

Non-harvest mortality, research on loggerhead sea turtles, impacts of scallop spat and seeding projects.

7. Comment that a fair amount of work has been done on incidental mortality, scallop predation is an under-served topic.
8. Given the apparent linkage between turtles and nematodes, language could be added to the FFO to underscore the connection of these two potential priorities.
9. Comment that turtle work has helped addresses issues in oceanographic modeling.
10. Comment that turtles in the NW Atlantic are endangered and threatened, and are a dominant species on the scallop grounds. Feeling that these species should be monitored – the fishery could be severely impacted if the status of these animals in a biological opinion changes. Nematode work with turtles is an important component, but just one of the issues. Comment not to increase funding levels on this work – by to maintain it as insurance policy for scallop fishery.
11. Another comment was around the movement of turtles and the likelihood of an expanded range on Georges Bank, and the need to research to understand these movements.
12. PDT comment as to whether or not research should expand beyond loggerheads to include Green and Kemps Ridley turtles because nematode eggs were found in these species as well (stranded on Cape Cod).

OTHER:

13. Post-meeting follow-up re: habitat characterization studies and OHA2: Habitat research has been on the priority list for a long time, and has been elevated in importance from time to time.
14. PDT member noted that at one time habitat research was a big issue, and suggested that it be left on the list for now.
15. A PDT member suggested that the group consider longer term Council research priorities in upcoming discussion. These priorities will be circulated to the PDT with this document.