



## New England Fishery Management Council

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# MEETING SUMMARY

## Herring Committee

Holiday Inn, Portsmouth, NH

March 30, 2016

The Herring Committee met on March 30, 2016 in Portsmouth, NH, to make recommendations to the Council on: 1) Georges Bank haddock catch cap accountability measures, 2) Amendment 8 to the Atlantic Herring Fishery Management Plan (FMP), and 3) address other business, as necessary.

**MEETING ATTENDANCE:** Mr. Peter Kendall (Chairman), Dr. Matthew McKenzie (Vice-Chairman), Mr. Vincent Balzano, Mr. Peter Christopher (NMFS/GARFO), Mr. Mark Gibson, Mr. Doug Grout, Mr. John Pappalardo, Dr. David Pierce, Mr. Eric Reid, Mr. Terry Stockwell, Ms. Mary Beth Tooley, Mr. Jeff Kaelin (MAFMC), Mr. John McMurray (MAFMC); and Mr. Chris Weiner (Herring AP Chairman). The Committee was supported by Council staff members Dr. Rachel Feeney (Interim Herring Plan Development Team Chairman) and Mr. Tom Nies; Mr. Daniel Luers, and Ms. Carrie Nordeen (NMFS/GARFO); and Mr. Mitch MacDonald (NOAA General Counsel). In addition, about 10 members of the public attended.

**SUPPORTING DOCUMENTATION:** Discussion was aided by the following documents and presentations: 1) meeting memo; 2) meeting agenda; 3) staff presentation; 4) Herring Plan Development Team meeting summaries of January 21, 2016, February 10, 2016, and March 22, 2016; 5) PDT memo on Georges Bank haddock catch cap AMs (January 5, 2016); 6a) Amendment 8 to the Atlantic Herring FMP Action plan, version 3 (March 2016 update); 6b) Management Strategy Evaluation Workshop overview (March 24, 2016 update); 6c) PDT memo on localized depletion (March 25, 2016); 7) ASMFC update on Amendment 3 to the Atlantic Herring Interstate FMP (March 23, 2016), 8) Correspondence, and 9) Herring Advisory Panel motions from March 29, 2016.

### **KEY OUTCOMES:**

- Recommended initiating an action to consider amending the Georges Bank haddock catch cap accountability measures in the herring fishery, with the goal to incentivize the midwater trawl fleet to minimize the incidental catch of haddock in the herring fishery while providing the opportunity to fully harvest the sub-ACL of herring for Herring Management Areas 3 and 1B.

- Recommended a problem statement for the localized depletion aspect of Amendment 8: “Scoping comments for Amendment 8 identified concerns with concentrated, intense commercial fishing of Atlantic herring in specific areas and at certain times that may have caused detrimental socioeconomic impacts on other user groups (commercial, recreational, ecotourism) who depend upon adequate local availability of Atlantic herring to support business and recreational interests both at sea and on shore. The Council intends to further explore these concerns through examination of the best available science on localized depletion, the spatial nature of the fisheries, reported conflicts amongst users of the resources and the concerns of the herring fishery and other stakeholders.”
- Tasked the Herring PDT with several analyses regarding localized depletion.

***OPENING REMARKS:***

Chairman Mr. Peter Kendall opened the meeting at 10:00 AM with no announcements or agenda revisions.

***HERRING ADVISORY PANEL REPORT:***

Herring Advisory Panel (AP) Chairman Mr. Chris Weiner gave the AP report from their meeting on March 29, 2016. The AP recommends developing an action to allow flexibility for the herring fishery while ensuring the Georges Bank haddock stock is sustainable. Three motions passed with specific ideas for alternatives. Regarding Amendment 8, the AP recommended further PDT tasks to help understand herring, its predators, and the respective fisheries. One motion passed with a specific idea for alternatives regarding localized depletion. Finally, the AP supported for the ASMFC decision to not roll over the fixed-gear set-aside to the Area 1A fishery.

Dr. Pierce asked for explanation about the AP recommendation to use more bottom temperature data to help locate key areas preferable fish habitat, regarding how the data is being collected, analyzed, and made available to managers. Mr. Weiner indicated that the AP discussed the Study Fleet data and how, technology can be used to help, for example, avoid river herring. Dr. Pierce wished for more information about the Study Fleet program: who is involved, the nature of the data, and how managers may be able to use the information. Chairman indicated that it would be good to have an update at a future meeting. Mr. McMurray concurred that the water temperature research is good, but wondered whether the information would be used for management or for voluntary avoidance by the fleet. Mr. Kaelin explained that the Lundø Fisheries vessels have been involved in Study Fleet for about a year, with the help of a grant from the Pacific States Marine Fisheries Commission to help collect real-time data, but more work is needed on analyzing the data. It has helped the vessels find mackerel. They collaborate with Dr. John Manderson (NEFSC) who is developing forecasting and hindcasting models of where species are likely to be found (e.g., demonstrated that the surveys have missed butterfish). The NEFSC will be doing an internal review of Study Fleet. The technology helps reduce the amount of time spent steaming around.

Regarding the AP motions on transferring Georges Bank haddock quota from the groundfish fishery to the herring fishery, Mr. McMurray asked if doing so require a groundfish amendment. Mr. Weiner clarified that the AP is interested in having the ability to transfer quota between fisheries, whether that required a framework or amendment.

### Public comment

Pete Kaiser (Fisheries representative for the County Commissioners of Nantucket, MA, and Squid, Mackerel Butterfish AP member) ó Recording bottom water temperatures is not new, but the technology has come a long way. Do the sensors record both depth and temperature? [Mr. Jim Ruhle indicated that both are recorded every ten seconds.] Great. I've been fishing for 40 years around Nantucket. It's not rocket science to understand where the haddock live. If you have the technology to move the net up in the water column, you'll avoid haddock. If you have both temperature and depth, it's easy to avoid bycatch.

Mr. Patrick Paquette (recreational fishing advocate, MA) ó Does AP motion #2 regard Georges Bank and/or Gulf of Maine haddock? [Chairman Weiner clarified that it regards GB haddock.]

Mr. Jim Ruhle (commercial fisherman, NC/RI) ó Collecting bottom temperature data is not new, but we now have a model and the ability to transmit data on a 24-hour basis to the NEFSC to help with modeling tomorrow. We have come so far with cooperative research. I've been involved with Study Fleet for seven years. It's a lot of work. We enter information on every tow, and it's automatically tied to GPS. Yes, we can use it for bycatch avoidance. We can avoid dogfish and river herring. We participated in a project to determine if river herring can be avoided using the model, us out of Newport and three boats out of Point Judith. River herring are tricky. They prefer certain temperatures, but also to be close to the bottom at certain times of the day and then they come up in the water column. The program needs continual funding. The information gathered by fishermen with NEFSC equipment has potentials beyond what we dream. It can help predict weather too. On how it could be used for management, I see this as a solution to help with determining when co-occurrence of herring and predators occur would help reduce the user conflicts. This is based on the science and the way forward. Manderson loves NEMAP data. We contribute to his forecasting, from Cape Hatteras to Martha's Vineyard. Dave Goethel and Jim Ford have been participating for years in Gulf of Maine. Expand and apply it. Managers should have the flexibility to make annual predictions of co-occurrence and manage accordingly. It is the only tool to help get to where you want to be: maximum sustainable yield for every fishery while avoiding conflicts. In the Loligo squid fishery, it has reduced butterfish bycatch by 54% and made us more efficient, because we know the preferred temperature range for the squid. It is the way forward folks.

### ***GEORGES BANK HADDOCK CATCH CAP ACCOUNTABILITY MEASURES***

#### Herring PDT update

Dr. Feeney reviewed the Council 2016 priority to consider revising the accountability measures (AMs) for the Atlantic herring fishery Georges Bank (GB) haddock catch cap, and the current cap and AMs. The Herring PDT recommends bringing draft goals/objectives for an action to the April Council meeting and focus discussion on desired goals and alternatives rather than trying to develop an action that would only require Herring PDT/Cte work ó this action would require some degree of Groundfish PDT/Cte work.

#### Committee discussion

Mr. Grout acknowledged that both PDTs would be involved, but asked if changing allocations (e.g., transferring quota) between the groundfish and herring fleets requires a groundfish action. Dr. Feeney indicated so, and that it may be possible to include alternatives in the annual

groundfish framework. Mr. Balzano asked about the process for initiating this action. Ms. Tolley reiterated that it would take joint work, and encouraged discussion of the desired solution. Dr. Feeney clarified that the Herring Committee could bring a motion to the Council to initiate an action. If it passes, then there would be decisions about how best to develop the action (e.g., which species committee would take the lead). Dr. McKenzie indicated that the GB haddock cap is increasing by 125% in 2016 and asked if the Committee is considering increasing the cap even more. Dr. Feeney reiterated the January Council motion to consider a 0.5% buffer around the cap, so yes, but options to revise the AM could be considered (e.g., make the area closure effective the following year rather than in-season, make the size of the area closure proportional to the degree of overage). For good public process, Dr. Feeney indicated that an action should be formally initiated before much work is done on developing it. Mr. Stockwell indicated that, pending the discussion at the April Council meeting, the right combination of herring and groundfish staff will be directed to work on the action.

It was clear to Dr. Pierce that the Committee is not yet agreed on whether the cap should be changed or the AM. Given that the cap has increased in 2016, he asked what the problem is that would be addressed through a framework; perhaps there is a needed change with the AM. Ms. Tooley recalled that the Council passed the motion regarding this priority subsequent to increasing the cap.

**1. Motion (Tooley/Kaelin):** To recommend initiating a framework adjustment to the herring and/or groundfish fishery management plan(s) to consider revising the Georges Bank haddock catch cap in the herring fishery.

Dr. Pierce asked that the problem be articulated for why a framework is necessary. Ms. Tooley replied that the estimations for haddock catch in the herring fishery have a high degree of error due to the low number of observed trips. Regardless of the size of the cap, that problem will continue. She acknowledged that the cap has increased for 2016, but it is likely to go down. She urged fixing a problem while there is not a crisis. Dr. McKenzie was concerned that the problem statement is ambiguous, which will make it difficult to determine if the problem gets solved. Mr. Kaelin recalled that this discussion started at the Groundfish Committee and that holding the herring fishery to 1% of a haddock resource, only 30% of which is caught is a spanking and not biologically relevant. He proposed two problems: that the cap is not biologically relevant and the AM is outrageous. The Groundfish Committee agreed to bring this discussion to the Council. He suggested that the herring fishery be considered part of other sub-component. He urged fair treatment of the herring fishery.

#### Public comment

Mr. Gerry O'Neill (herring fisherman, Gloucester, MA) I sit on the AP and made the motion regarding transferring quota and the seasonal split in the cap. I appreciate that the cap is increasing and hope that there won't be a problem. However, there may still be SBRM issues. The estimates of total catch can swing wildly with the addition of each observed trip. I'm nervous about the limited observer coverage. Shoreside monitoring may help.

Mr. Jim Ruhle I support the motion, and the plan needs flexibility. The resource of haddock is not where it was 5-7 years ago. If <30% of the TAC is caught, what's the need of any cap. The total mortality is insignificant relative to the total population. You could

suspend the cap if you have a spawning stock biomass at 200% above the target. The effects of the fishery won't be negative to the stock. When the stock goes down, you go back to having caps. Because we had a mild winter, the fish didn't go to Area 2, so couldn't be caught. You could change the fishing year for herring. It would be beneficial to have the herring and groundfish years aligned. Be on the same clock.

Mr. Patrick Paquette is uncomfortable with the motion. Are we talking about allowing the herring fishery to catch and sell haddock or deal with bycatch? The boats are fishing for groundfish now. Can we get a goal attached to the motion? I hope avoidance programs are tied to this action. We hear how wonderful the avoidance programs are, but also how we need to increase bycatch caps. We need to know the plan. What are we talking about?

### Committee discussion

Mr. Stockwell reiterated the recent Council motions on this issue. Ms. Tooley revised her motion to reflect the Council motions more clearly.

**1a. Perfected motion (Tooley/Kaelin):** To recommend initiating a framework adjustment to the herring and/or groundfish fishery management plan(s) to consider revising the Georges Bank haddock catch cap accountability measures in the herring fishery.

Mr. Kaelin reminded the Committee on the prohibition on selling haddock in the herring fishery, and there is no interest to become haddock fishermen. There is data on the haddock that are caught on the PDT could look at the length at age data. He thinks that most of the encounters are with juvenile haddock seasonally. Splitting the cap would help. Mr. Grout felt that the current cap and AMs were appropriate when they were approved, because of the higher observer coverage at the time. With lower coverage, he felt the AMs should be revised (e.g., not have the AM be effective in-season, splitting the cap into seasons, revising calculation method).

Dr. Feeney reminded the Committee that the December Council motion said to consider revising the AM on the consequence for exceeding the cap. Then in January, the Council took a different tack on consider revising the cap. Adding a 50% buffer would increase the cap to 1.5%). Motion #1a would be to consider revising the consequence only, and would not include altering the cap. Ms. Tooley indicated that the buffer on the yellowtail cap doesn't change the cap, but when the AM would be implemented. Mr. Nies clarified that in the scallop example, their AMs only trigger if certain circumstances are met, related to if both the overall catch limit and the scallop cap is exceeded. If not, the scallop fishery can go up to 0.5% above their cap. That was adopted through a groundfish action. If you want the Council to consider both the AM and when the AM is implemented, make it clear in the motion. Ms. Tooley revised the motion to be consistent with the Council motions to date.

**1b. Perfected Motion (Tooley/Kaelin):** To recommend initiating a framework adjustment to the herring and/or groundfish fishery management plan(s) to consider revising the Georges Bank haddock catch cap accountability measures in the herring fishery and the way it is implemented.

Mr. Pappalardo asked for clarification. Dr. Pierce thought it could address current AMs (e.g., closure size). Mr. Reid said that the industry is asking for the 50% buffer and shoreside monitoring, because of method for calculating catch, and that the method should be revisited. Dr. Feeney offered to bring to the Council meeting some clarity on if developing the 50% buffer concept would be included in this motion. She also reminded the Committee that the Council determined in January that the review of the 50% buffer concept would not get reviewed until after April; today's discussion should be about initiating the framework and general goals. Dr. Pierce understood the rationale for having a 50% buffer to account for errors in catch estimates, but did not support it, because it will be primarily juvenile fish. Mr. Christopher indicated that the framework wouldn't be implemented until 2017, so the cap increase in 2016 is not that relevant, and that it will be important to address these issues relative to the Amendment 8 discussion. Mr. Balzano felt that the motion would not solve the problem, the CV and the SBRM, which has been a problem for years. Mr. Pappalardo reiterated observer problem; he could support a motion like what passed the Council in December, which would preclude the buffer concept.

**1c. Motion to substitute (Pappalardo/Pierce):** To recommend initiating an action to consider amending the Georges Bank haddock catch cap accountability measures in the herring fishery.

Ms. Tooley indicated that she would like the buffer concept to be considered.

#### Public comment

Mr. Peter Kaiser ó The herring models support status quo and that there are plenty of herring out there. I'm hearing that the herring boats are tied up. There is plenty of area in 1B and the top and bottom of Area 3. On shifting of quota from one fishery to another, it's by weight, but should be by units. It's assumed that the fish are adults, unlike what Dr. Pierce said. The haddock are small.

Mr. Chris Weiner (CHOIR, ABTA, tuna fisherman) - This motion makes more sense. Given what's going on with Amendment 8, I'm being flexible. This is a sign of being willing to work together. Take this and run with it.

#### Committee discussion

Mr. McDonald added that it would be helpful on the intent of the motion; is it trying to exclude discussion of an issue? Mr. Pappalardo clarified that he didn't want to exclude consideration of issues. Mr. Reid suggested that the motion be revised to review the method for estimating the catch. Mr. Pappalardo kept the motion as is, because the Council doesn't have the power to change SBRM. Mr. Christopher clarified that a review is ongoing. Mr. Balzano and Ms. Tooley said that the motion does preclude concepts. Mr. Pappalardo concurred and does not want haddock added to the cap or consider a buffer, but focus on how we manage the AM.

Motion #1c to substitute **carried** on a show of hands (7/4/1).

Main motion as substituted **carried** on a show of hands (8/2/2).

**2. Motion (Grout/Kaelin):** To recommend including the following as a goal for the management action: to incentivize the midwater trawl fleet to minimize the bycatch of haddock in the herring fishery while providing the opportunity to fully harvest the sub-ACL of herring for Herring Management Area 3.

Ms. Tooley supported the motion, but felt that Area 1B should be included.

**2a. Motion to amend (Tooley/Balzano):** To recommend including the following as a goal for the management action: to incentivize the midwater trawl fleet to minimize the bycatch of haddock in the herring fishery while providing the opportunity to fully harvest the sub-ACL of herring for Herring Management Areas 3 and 1B.

Mr. McDonald asked if the intent was to minimize bycatch (discard) or incidental catch (retained). Mr. Grout clarified that the intent is the latter, and Ms. Tooley agreed.

**2b. Perfected motion to amend (Tooley/Balzano):** To recommend including the following as a goal for the management action: to incentivize the midwater trawl fleet to minimize the incidental catch of haddock in the herring fishery while providing the opportunity to fully harvest the sub-ACL of herring for Herring Management Areas 3 and 1B.

Mr. Pappalardo hoped that the intent would be to minimize haddock catch. Ms. Tooley clarified that haddock is not target but incidental catch in the herring fishery. Mr. Kaelin indicated that haddock must be retained and that the herring fishery has one of the lowest discard rates, which is why so few observers are assigned.

#### Public comment

Mr. Steve Weiner (CHOIR) ó Does minimizing incidental catch include improve monitoring of the fishery? [Ms. Tooley clarified that the intent of the framework is to incentivize minimizing catch of haddock.] Until there is proper monitoring, we won't know what is caught.

#### Committee discussion

Motion #2b to amend as perfected **carried** on a show of hands (11/0/0).

The main motion as amended **carried** on a show of hands (11/0/0).

### ***AMENDMENT 8 - MANAGEMENT STRATEGY EVALUATION***

Ms. Feeney gave a brief update on plans for a public workshop on the Management Strategy Evaluation (MSE) of Atlantic herring ABC control rules, to be held May 16-17 in Portland, ME. With the approval of the workshop goals and objectives by the Committee on March 16, the steering committee is moving forward with fleshing out the agenda and a there will soon be a Council webpage for registering.

Mr. Kaelin asked a question about the third objective, why a discussion about control rules would come prior to the MSE ó wouldn't the model produce control rules? Dr. Feeney clarified that the MSE is an evaluation of control rules, how they would perform against various objectives, so both the objectives and the rules need to be identified. Also, there are various approaches to MSEs, from considering objectives, performance metrics, and control rules at distinct phases or together as planned here. The rationale for considering them together is the need to get Amendment 8 completed in a timely manner. Ms. Tooley indicated that she has talked with an MSE expert who said that control rules are an output rather than an input to the process, and suggested that the steering committee discuss it.

## ***AMENDMENT 8 - LOCALIZED DEPLETION***

### ***Herring PDT update***

Dr. Feeney reviewed the Herring PDT's progress on the tasks provided to the Committee in January to describe what is known about how forage needs are accounted for, the footprint of the Atlantic herring and predator fisheries, relationships between catches of herring and predators, impacts of potential midwater trawl closures, cod and herring in Ipswich Bay, and the analytical ideas from public scoping. The PDT has focused on summarizing the spatial and temporal footprint of herring and predator (cod, pollock, dogfish, tuna, striped bass, whale watching) fisheries and businesses to the degree possible, but could do more work on other time scales, fisheries, and gear. Strong evidence in the data has not been found for linking herring catches with negative impacts on predators, but even if correlations are found, the PDT reiterated caution that identifying causality is not trivial and will be difficult using just the data available.

### ***Committee questions***

Ms. Tooley noted that the maps of midwater trawl activity show effort on Area 1A in May. Dr. Feeney clarified that effort from the years 2000-2014 are mapped, so would show some activity in 1A prior to the seasonal closure.

Ms. Tooley asked for clarification of the figures related to predator catches. Ms. Feeney explained that they plot the change in predator catches between weeks vs predator catch each year for different statistical areas. A negative correlation may be evidence of localized depletion, however, very few statistically significant correlations have been found with this approach.

Mr. Kaelin acknowledged the limitations of the tuna catch location data, but asked if the PDT could look at tuna catch per unit effort, like it did for striped bass. Dr. Feeney replied that the PDT could investigate this if tasked by the Committee.

On the ability to use acoustics, Mr. Kaelin noted a 2013 paper by Dr. Stockwell et al. on assessing pelagic fish distributions during and after midwater trawling. The paper describes a potential research strategy, and Mr. Kaelin hoped that a research plan would be developed through Amendment 8.

Dr. Pierce noted his ongoing concern that the lack of data limits investigation of localized depletion issues. He would like to focus on just identifying where and when intensive herring fishing is occurring and if that may have a negative impact on the resource. He asked if the PDT has concluded that localized depletion does not occur when herring are migrating (e.g., on the back side of the Cape). Dr. Feeney clarified that it is more of a hunch based on known migration patterns and rates, but the question has not been fully investigated. Dr. Pierce asked about the availability of data to examine the data at finer scales than a year. Dr. Feeney reiterated that the finer spatial and temporal scale of an investigation of existing data, the fewer the data points, which may negatively impact the statistical power of any conclusions.

Mr. Grout asked, on the striped bass information, he suggests looking at the CPUE by week and seeing if drops in CPUE relate to herring effort. Dr. Feeney noted that there is very little herring effort in state waters (little overlap in the fisheries). Whether herring effort in federal waters negatively impacts striped bass in state waters has not been investigated. Mr. Reid noted that there is indeed a commercial fishery for striped bass in Rhode Island in the summer fall (with herring in the winter).

### Public comment

Mr. C. Weiner - The Committee needs to make decisions or not. The PDT is hard working, and you are asking them to do the impossible. There are three statistical areas in the entire Gulf of Maine. We are talking about small areas, like the northern end of Jeffries Ledge. Even if everyone agreed that we were right, a study by statistical area wouldn't show you it. You had hundreds of scoping comments, which have been a blurb in a presentation. I've lost the point of scoping. It's supposed to help guide it. We need to move forward with something more focused than "study the ocean." I wish we had more data, but we don't. If you don't want to make decisions, then study things to death. Maybe down the road, we will have proved something. We make decisions daily without conclusive facts. Give the PDT tasks that they can accomplish. I've met with Walt. He acknowledges that a localized depletion study may take decades and millions of dollars, and would ultimately hinge on if the fleet would go to an area and fish so hard that it shows a problem. Tuna data does show it. Look at the tuna data. There's been a decline since pair trawling came in. Everyone knows the issue. It's a complicated social and economic user issue, driven by the simple fact that if you have an area where the bait is wiped out, there is nothing else there. I know people understand this. I don't want 3-4 more months of wheel spinning. Kuddos to the PDT for trying. [Chairman Kendall replied that the PDT did a great job with the tasking, but it's time to be more focused.]

Mr. Kaiser - On striped bass, the commercial season starts about the third week of June and lasts for about a month. In relation to the intensity of fishing on the back side of the Cape, that happens mostly in May. In the fall is when the herring run that coast again. During the time of the commercial bass season, the herring have moved offshore, not where the bass are.

Ms. Erica Fuller (Earth Justice) - A question on the presentation, to clarify the relationships found in the catch data. [Dr. Feeney clarified that the study looked at whether there are correlations between the differences in the catch of predators when there was herring fishing and either one or two weeks subsequent, looking at the scale of statistical area and year (2000-2014). Only a few correlations were found.]

Mr. Patrick Paquette - For the commercial striped bass data, was there a regional break down? [Ms. Feeney clarified that catch in the 14 state management zones were examined.] The striped bass commercial is two days per week and is 17% of our fishery. If the bulk of the private and commercial fishery is happening between 1.5-3 miles, and on the back side of the Cape, they are [herring] fishing on the 3 mile line. We have submitted multiple pictures and GPS coordinates over the years, when we thought they crossed the line. There's no hard line out there. Our big complaint, from private and commercial anglers, is that the ecosystem changes when they come through and fish. After the boats come through, our body of striped bass moves from the north side of Nauset, up into Cape Cod Bay to feed on sand eels when the herring are gone. We lose striped bass for about a month. Guys who are chartering out of Chatham, as the commercial season ends, they have to travel much farther. We have an economic per trip cost that goes up, and change in our market scheme, because we can't fish where we were. We have an empty ocean when the [herring] vessels do their thing. The fisheries disappear for a while. My recreational friends in Rhode Island will be happy. Their fishery tends to be fall and winter. They have seen a drastic reduction in other species, because of dispersement. Our ecosystem where we are fishing changes. It's not a shared harvest of resources. The industrial fleet comes through, and it changes, and go find another place to fish. The hickory shad is what the RI guys scream about. The hickory shad in the fall and spring are gone. The RI guys send me to talk about it. I

want to see hickory shad effort in RI mapped with the population data. In the fishing reports, we can show the effort changes. We are working with a university film crew to document what happens on the back side of the Cape. Our nation does a poor job with tracking the largest group of stakeholders ó the recreational effort. We can show it anecdotally at a technical meeting.

Jim Ruhle ó I complement the PDT for their work. The memo asks more questions than it answers. I sense another laundry list will come from this meeting, but it won't do any good, because things change. Think forward. We all know what happened in the past. [Showed the Study Fleet bottom temperature suitable model ocean model]. I suggest the PDT look at this model. It's the solution.

### Committee discussion

Ms. Tooley suggested that the PDT discuss with Dr. Manderson about the utility of the Study Fleet model. [Consensus statement of PDT tasking listed below.] Mr. Pappalardo asked for clarification of the task. Mr. Grout suggested that the PDT determine if the model would help us with the concept of localized depletion. Mr. Kaelin wanted to know how robust the model is to determine the likelihood that the predator fish will be in the area, to help determine if declines in predator fish are a result of herring fishing or temperature regimes.

Dr. Pierce asked about the PDT task regarding identifying areas and times within 12mi where herring fishing seasonally intensified. Dr. Feeney clarified that the PDT was unable to focus on that task due to time constraints, and awaits further tasking. Dr. Pierce felt that it is critical to knowing if there is localized depletion. Mr. Kaelin concurred. Ms. Tooley said that catch and effort out to 6 mi from shore would be good to know, and would like more zoomed in maps of herring activity and management boundaries. Mr. Pappalardo asked about the uniqueness of 12 mi, with concern that there may be limited data. Dr. Pierce clarified that the highway that herring appear to take around the back side of the Cape and where the fishery is occurring now ó a lot is on the state line.

Dr. Feeney reviewed the January task list and what the PDT has provided to date, and the Committee agreed to start a fresh task list, carrying forward a few tasks.

Mr. Grout suggested that MRIP intercept data, for the charter and private rental, they are assigned a certain place to interview out of. Could look at catch per trip for striped bass and compare to timing of catches by midwater trawls.

Dr. McKenzie offered that the localized depletion issue is what gave birth to the U.S. Fish Commission in 1871 and suggested looking at older data from the 19<sup>th</sup> century up through the 1960s to help understand species assemblages inshore. NMFS has a series of diet studies in the 1980s that may be helpful. Given the paucity of data, perhaps we should stretch the timeframe further back.

Mr. Kaelin was interested in a few AP motions, splitting the catch cap by season, and removing the 1B seasonal restriction. He felt they would help tease apart the user conflicts. Chairman Kendall recommended that the former be considered at a future meeting under a discussion of the framework.

Mr. Pappalardo recalled that through Amendment 1, management boundaries were adjusted to minimize effort on spawning fish and improve reporting. Consequently, Area 3 comes right to Chatham. It's no longer an offshore area. The rationale for the Area 1A midwater trawl closure

had the same problems with lack of data....prove it... but the Council made decisions without the data, and it can do so again. He supported continuing with task #6 on understanding landings from specific 30-minute squares. He urged that it's important to consider that the area off the back side of the Cape is shallow (~80ø), so the herring funnel through and it is easier to be more efficient there than other areas. Ms. Tooley clarified that there are large areas of the stock areas that have no herring effort, and perhaps identify landings by season or month from specific areas, also that the back side of the Cape is not a highway for herring, they are hard to find there.

Dr. Pierce referred to the January Council motion on a definition of localized depletion that was referred to the Committee, that the definition is tied to identifying whether herring in specific areas get depleted. Mr. Christopher hoped that the Committee would work on better defining the problem. Ms. Nordeen asked the Committee to clarify the main concern, is it biological impacts on herring or socioeconomic impacts on the fisheries that rely on predators of herring. The latter would be a user group conflict and could be addressed by reducing the overlap of fisheries. Dr. McKenzie indicated that we have been hearing about user conflicts for 10 years that need to be reconciled and suggested that be the focus of discussion. Mr. Grout concurred that there is a user conflict, due to a concern that one fishery impacts the ability to target other fisheries. It's hard for him to understand how, given that the herring resource is well above a rebuilt status, there can be a negative impact on other resources, given that predators can swim and find other sources of food. Herring comprises a small portion of cod and striped bass diets; they are omnivores. He felt the focus should be on understanding the user conflicts.

**3. Motion (Pierce/Grout):** To adopt the definition of localized depletion referred to the Herring Committee by the Council in January 2016:

*"Localized depletion is a reduction of population size, independent of the overall status of the stock, over a relatively small spatial area as a result of intensive fishing."*

Also, to adopt the following problem statement:

*"Concentrated, intense commercial fishing of Atlantic herring in specific areas and at certain times that has caused detrimental socioeconomic impacts on other user groups (commercial, recreational, ecotourism), who depend upon adequate local availability of Atlantic herring to support business and recreational interests both at sea and on shore."*

Dr. Pierce indicated that, if Motion #3 passes, the PDT would continue to work if what is being defined as a problem concurs with the data.

#### Public comment

Mr. C. Weiner ó Localized depletion isn't a science thing. It's what happens when you deplete the food of what we catch. We can call it a user conflict. Where people fish is getting impacted. Bullard said that you don't need to define it, so it's a waste of time. The scoping comments talked about concentrated midwater trawling. Focus on making a range of alternatives. What drove the issue are socioeconomic impacts.

Mr. Kaiser ó There is a negative social and ecological impact. The social impact happens to small commercial and recreational vessels. On the back side of the Cape when the harvesting is happening, in April ó June. That is interrupting sea herring and a lot of spawning river herring. That's coming downstream to where we are. In September-November, the sea herring are spawning and migrating. Localized depletion disrupts or intercepts the historical migratory routes. The decline happens on the same timeline as the herring fleet pressure increases on the

back side of the Cape. Predator fish, birds, mammals declines to near zero. We used to have whales and gannets inshore. It was like being in Alaska. Last fall, when the AM area was closed, there was no pressure in there in the fall at all. All of a sudden, all the herring came through and we saw gannets, bass, bluefish, whales. It was a whole new ball game. There are big algae blooms in the spring that herring eat, and we are having algae problems in ponds. Better in the old days when there was river herring. We hope the herring will come back in. MADMF has a striped bass tagging program. In the last 5 years, there was no tagging inshore. We are asking for a small sliver of 3-12 miles.

Mr. S. Weiner ó In my lifetime, we have never had any problem living with the purse seine fishery. It's a different fishery; you can fail more often. Maybe the boats are smaller. Yes, they have carriers. This is more of a user conflict than a biological issue.

Mr. Paquette ó For a long time, my community hasn't gone after another fishery. I hate fisherman on fisherman crime. There are two instances in the last 20 years that my community has come out loud on another fishery: the industrial midwater trawl fishery and when the offshore draggers were allowed into Stellwagen Bank after [groundfish] Amendment 16. We don't hate the fishermen. We are reacting to changes in the species that we fish. I'm reacting, because when they are done, I can't go fishing. I'm reacting to a biologic situation.

Ms. Fuller ó I support definition and problem statement. Perhaps it would be simpler to frame it as a user conflict to move forward. I hope that doesn't get too complicated by tasking the PDT with a long list. The public has already identified alternatives it is in favor of. Look at 6, 12, 30 (CHOIR), and 50 (Herring Alliance) mile buffers. Move forward with a range of alternatives.

Mr. Ray Kane (Cape Cod Fishermen's Alliance) ó I support the motion and thank the PDT. Brad McHale and Sara McLaughlin at GARFO can give the history of tuna landings on the East Coast. In 1991, we fished GOM out of Gloucester and we saw one seiner. Chris has shown the inversion on landings. In 07, the entire fleet showed up east of Chatham until 2003. Now with 1A protections, the tuna has shown up in the Gulf of Maine. It's an international treaty, and every tuna is tattooed. [Dr. Feeney clarified that the PDT was focused on identifying the spatial distribution of tuna catch at sea.]

Mr. Ruhle ó I oppose the motion. The problem is a user conflict. You don't have to define localized depletion if it's a user conflict. The question is how to address it. The Study Fleet modeling maps are suitable locations for each species. The technology exists. The PDT needs to get deeply involved. The commercial fishery should take place when it doesn't conflict. These charts are critical. Drawing more lines won't be useful in the future. Do it in real-time. Based on success in Loligo fishery over the past 2 years. Everyone can be a winner, but it takes a change in approach.

### Committee discussion

Dr. Pierce clarified that Motion #3 says "commercial fishing" not midwater trawling, because that was the Council motion, and it is not appropriate to just focus on midwater trawling, referring to the PDT caution that, with the advent of carrier vessels, purse seine vessels can catch more herring than they can land.

Mr. Grout was concerned with the term "localized depletion" ó but that is the language in the Amendment 8 goal, so it shouldn't be changed.

**3a. Motion to substitute (Kaelin/Tooley):** To adopt the following problem statement:

*“Localized depletion has been a topic discussed in the herring management arena since at least the mid-2000s. Through Amendment 1 (2007), midwater trawl (MWT) gear was excluded from Management Area 1A from June-September. While no evidence or data linking midwater trawling to localized depletion was used to support that action, the Council’s rationale was to ensure access to herring for purse seine and fixed gear components of the fishery and to address concerns raised by the public about concentrated catch inshore and the need for precaution. There is a perception that MWT gear is particularly prone to causing localized depletion. Scoping for Amendment 8 has raised similar concerns for other geographic areas where herring fishing with MWT gear has caused detrimental impacts on other user groups. The Council intends to further explore these concerns through examination of the best available science on localized depletion, the spatial nature of the fisheries, perceived conflicts of users of the resources and the concerns of the herring fishery and other stakeholders.”*

Mr. Kaelin explained that Motion #3 is a solution before there is investigation to determine if there is a problem. He didn’t see anything in the work to date that tells him there is a problem. Motion #3a says that the Council will investigate the allegations with facts, and then determine if the Council should proceed. Dr. McKenzie indicated that the conflicts are real, not perceived; it’s been a 10-year conflict. The PDT hasn’t been able to confirm or deny the existence of localized depletion. Mr. McMurray concurred with Dr. McKenzie and supported the underlying motion.

Public comment

Mr. Gregg Canton (tuna fisherman) ó This is my first time attending a meeting. I’m on the outside looking in and am baffled and blown away.

Mr. C. Weiner ó Looking at Amendment 1, not sure why that is in the motion. I will pull a 180 and prefer Motion #3, because it’s simpler.

Mr. O’Neill ó I support the motion, I want a thorough analysis if areas are being taken away from where we can fish. I fish close to shore, because that is where the fish are, not because I want to have people taking pictures of us. We are in a derby fishery that has been created. When we had access everywhere, there were a lot of differences in where we were fishing.

Mr. Zack Klyver (CHOIR) I do not support the motion. If you are introducing Amendment 1, look at everything that was presented there. I was part of a group that presented whale watch data. There were two abstracts, not peer reviewed, but show conflict between midwater trawls and whale abundance. The Audubon Society showed a relationship between trawling and seabird health on islands. There’s a lot of information in Amendment 8. Look at the Jeffreys Ledge data from the Weinrich abstract; eight examples where there was a high abundance of whales, and midwater trawls showed up and the whale numbers dropped immediately.

Motion #3a to substitute was **withdrawn**. Dr. Pierce wanted to withdraw Motion #3 in anticipation of a more acceptable motion. Dr. McKenzie objected.

**3b. Motion to substitute (Grout/Kaelin):** To adopt the following problem statement:

*“Scoping comments for Amendment 8 identified concerns with concentrated, intense commercial fishing of Atlantic herring in specific areas and at certain times that may*

*have caused detrimental socioeconomic impacts on other user groups (commercial, recreational, ecotourism) who depend upon adequate local availability of Atlantic herring to support business and recreational interests both at sea and on shore. The Council intends to further explore these concerns through examination of the best available science on localized depletion, the spatial nature of the fisheries, reported conflicts amongst users of the resources and the concerns of the herring fishery and other stakeholders.”*

Mr. Grout indicated that Motion #3b combines the strengths of Motions #3 and 3a. Dr. McKenzie liked it, but felt that the last sentence was not needed and may limit the PDT. Mr. Grout felt that it is important to get at what we are going to do, outlining the various aspects. Dr. McKenzie outlined that this will be a long process; he didn't want the Council's hands tied. Ms. Tooley concurred, but doing away with the fishery has serious impacts and should take time to consider; she asked the GARFO staff whether the last sentence is worthy to include or not. Ms. Nordeen didn't think it would bind the PDT would be a good bridge from the problem statement. Mr. McDonald indicated that it would be consistent with the scoping documents. Dr. Pierce is satisfied that PDT task #3 from January would still be in play. Mr. Reid wants to be sure Dr. Manderson's work should be considered as a tool to help avoid conflicts.

#### Public comment

C. Weiner ó Supports motion. Keep sight of the scoping comments.

#### Committee discussion

Motion #3b to substitute **carried** on a show of hands (11/0/1).

The main motion as substituted **carried** on a show of hands (11/0/1).

Chairman Kendall asked the Committee to define the PDT tasking. The Committee developed the following consensus statement.

**Consensus Statement #1:** To ask the PDT to:

1. Work on task #3 from the Committee's January task list, examining herring effort within 6 miles and 12 miles from shore, including the amount of catch.
2. Work on task #6 from the Committee's January task list, focusing on identifying herring catch from the specific 30 min squares, by season or month back to 2000.
3. Make more zoomed in heat maps of herring effort similar to the Herring AP consensus statement of March 29.
4. Determine if the Study Fleet habitat suitability model could be useful to understanding localized depletion.
5. The MRIP charter and private rental data include intercept site. Look at catch per trip for striped bass from private rental and charter intercept sites on Back side of Cape (0-3 mi from shore); compare to herring catches.
6. Describe catch per unit effort in the tuna fishery over time.

Mr. Kaelin wanted to discuss the AP recommendations, particularly removing the 1B seasonal restriction. Chairman Kendall asked that alternatives be considered at a later date, and cautioned

a reality check with timelines and expectations. Dr. Feeney suggested keeping ideas for alternatives separate from the above PDT task list. She indicated that the tasks leftover from January will be addressed first. The Committee agreed without objection.

### ***OTHER BUSINESS***

#### *Update on ASMFC Amendment 3*

Dr. Feeney updated the Committee on the ASMFC Amendment 3 to the Interstate FMP for Atlantic herring. The ASMFC took final action in February 2016, and implementation is planned for June 1. Amendment 3 pilots a new spawning closure system, modifies the fixed gear set-aside (FGSA) rollover, and includes an empty fish hold provision contingent on adoption of Framework 4 to the Atlantic Herring FMP. Removing the rollover of unused FGSA quota to Area 1 after November 1 would be inconsistent with the 2016-2018 Atlantic Herring Specifications. NMFS does not have the flexibility to remove the rollover, but the Council could modify it in future. The ASMFC is recommending that vessels that do not pump fish be exempt from the empty fish hold provision that the Council is recommending through Framework 4.

Mr. Stockwell indicated that MEDMR is committed to developing a real-time monitoring program for the FGSA fishery. Mr. Reid noted that the unit of sale is commonly a truckload, about 40,000 lbs. If there is more or less, you might want to keep it on the vessel until it can be sold. Mr. Grout asked GARFO staff about the timing of Framework 4 final rule. Mr. Christopher indicated that it will likely be published before the April Council meeting.

The meeting adjourned at 4:15 PM