

## 21.2 Outreach on 2017 groundfish operational assessments

### OVERVIEW

In 2011, the Northeast Regional Coordinating Council determined that operational assessments were most appropriate for providing regular stock updates for the 20 stocks within the Northeast Multispecies Fishery Management Plan. This strategy was first implemented in 2015 and was a change from prior years, when benchmark assessments were used to update groundfish status. These do not occur every year, or for all species/stocks in the same year, but operational assessments could be completed and provide information more frequently.

In order to make this new process more easily understood and transparent, the Northeast Fishery Science Center (NEFSC) hosted several simultaneous webinars/onsite seminars for sector managers, the New England Fishery Management Council staff, members of the fishing industry at five ports, and the general public on July 22, 2015. It also built a data-rich website dedicated to the operational stock assessments.

During 2017, the NEFSC expanded upon this outreach effort to conduct a series of outreach meetings at eight ports that allowed an exchange between fishery scientists and the fishing industry. From August 15 to September 7, 2017, scientists from the NEFSC met with fishermen, industry representatives, and other stakeholders to educate and solicit feedback about the stock assessment process and opportunities for cooperative research with the NEFSC. The meeting objectives were to:

1. Explain the types of stock assessments, the stock assessment process and the stock assessment schedule.
2. Highlight examples that demonstrate when industry concerns led to new data inputs into stock assessments through cooperative research efforts.
3. Offer a space for the fishing industry and their representatives to ask questions, raise concerns, and learn about opportunities for input.

This structure allowed stakeholders to ask questions and raise concerns about the stock assessment process, and allowed the Cooperative Research Program to highlight work they have done with the industry and how that has been used.

While this is not the first outreach done about the stock assessment process, we felt that this format moved beyond reporting and recording fishermen's concerns, to offering information about how the NEFSC is working to develop research with fishermen that can be used to improve stock assessments.

The intended audience for these meetings was fishery stakeholders. This included fishermen (captains, crew, and vessel owners), sector managers, dealers, members of commercial fishing organizations, members of nonprofit organizations, and the general public.

The audience for this report is the 2017 Groundfish Operational Stock Assessment Peer Review Panel. This summary of the themes and topics expressed in the port outreach meetings will be

included in documents presented to the peer review panel and in the 2017 Operational Assessment Report.

This report is a summary and is not intended to capture every comment made at the eight port meetings. We also recognize that we only captured the thoughts of those who were present. People who attended these meetings were self-selecting, and the attendance was not comprehensive or large. Nonetheless, this work furthered our outreach efforts, and offers insights on how to improve them.

Follow-ups with attendees at each of these port meetings include written questions and answers based on those raised at the meetings that will be distributed via email, and specific follow-ups with some individuals by the Cooperative Research Branch.

## **PORT MEETING DEVELOPMENT**

Using an iterative process to develop the port meeting agenda and outreach materials allowed the NEFSC to introduce information about how the stock assessment process works and answer questions that were port specific, species specific, or process specific. It also allowed for more stakeholder participation and interaction, and for the center to be more responsive to questions and concerns from those present at the meetings.

To schedule these meetings, we first solicited feedback from NOAA Fisheries Greater Atlantic Regional Fisheries Office (GARFO) port agents about when and where we should hold them. The port agents are located in fishing ports from Maine to North Carolina, but we focused on those within the geographic range of major groundfish fleet activity.

The agents provided a list of contacts in each port, suggestions for ways to effectively provide information to the stakeholders (fishermen and industry representatives), suggestions for locations, and topics outside of the stock assessment process that might come up during the meetings. Port agents also suggested that we reach out to the industry - dealers, representatives, and fishermen to ask for input about an appropriate day and time for meetings.

The outreach coordinator reached out to dealers, groundfish sector managers, industry organization representatives, and NGO representatives. She solicited information about best dates and times for each port. This was an important step, because dates and times varied by port. For example, in Portland, Maine, most groundfish permit holders land at the Portland Fish Exchange, which is closed on Fridays. The Portland Fish Exchange owner suggested Thursday. Dealers and port agents in Gloucester suggested Friday mornings since business was done for the week, and fishermen would be available. Other ports were not as easily committed to a day or time and responded that it just depended on the weather; any day was as good (or bad) as any other day.

## **ORGANIZATION**

NOAA Fisheries staff at each meeting included stock assessment scientists, scientists and staff from the Cooperative Research Branch, port agents and others from GARFO, and the NFEFSC outreach coordinator. The typical agenda followed this plan:

- Operational Stock Assessments - timelines and process - Population Dynamics Branch

- 15 minute presentation - questions during and after
- What is Cooperative Research/ Research projects with a stock assessment component - Cooperative Research Program
  - two-part part presentation –questions during and after

## RESULTS

### Attendance

The eight port outreach meetings attracted 118<sup>3</sup> attendees.

Port	Meeting Date	Attendees
Chatham, MA	8/15/2017	9
New Bedford, MA	8/16/2017	17
Portland, ME	8/17/2017	12
Gloucester, MA	8/18/2017	23
Narragansett/Point Judith, RI	8/28/2017	13
Montauk, NY	8/30/2017	18
Portsmouth, NH	9/6/2017	13
Plymouth, MA	9/7/2017	13

<sup>3</sup>This number is the number of people that attended who were not NEFSC staff or GARFO Port Agents assigned to attend. This number does include staff/contractors from other branches who chose to come. It does include fishermen and their families who attended more than one port meeting. In those cases those individuals were counted twice.

Role <sup>a</sup>	Chatham	New Bedford	Gloucester	Portland	Point Judith	Montauk	Portsmouth	Plymouth
Commercial Fisherman	x	x <sup>b</sup>	x	x	x	x	x	x
Recreational (for hire) Fisherman			x			x	x	x
Council Member/Staff	x	x	x	x			x	
Sector Manager	x	x	x	x			x	
Dealer/Processor				x	x		x	
MADMF	x	x	x					
NGOs <sup>c</sup>			x	x			x	
Press	x	x			x			
City Reps		x						x
Academics		x	x			x	x	x
General Public	x		x					
Other <sup>d</sup>		x	x	x				
Fishery Orgs <sup>e</sup>			x	x	x			
GARFO Fisheries Management Staff			x					

<sup>a</sup> Roles are general categories of participants. While efforts were made to capture all who attended, roles capture the types of attendees.

<sup>b</sup> The commercial fishermen present in New Bedford do not actively fish or land in the Port of New Bedford. There were no fishermen from the New Bedford area present at the New Bedford port meeting. The fishing family that was present at the New Bedford meeting also returned to the Plymouth port meeting.

<sup>c</sup> For example, the North Atlantic Marine Alliance, The Nature Conservancy.

<sup>d</sup> “Other” consists of people who worked in the fishing industry - as biologist in some capacity. Generally these were staff from NEFSC that came to observe, or contracting companies. This included contractors from AIS, port samplers, and one person from the NEFSC Social Science Branch.

<sup>e</sup> Commercial Fishery organization staff-for example, the Gulf of Maine Research Institute and Commercial Fishing Research Foundation

## Port Meeting Questions and Concerns across All Meetings

### *Stock Assessment Data, Methods, and Process*

Generally, stakeholders wanted to know when the assessments take place, the differences among assessment types and what data are used. Across all meetings fishermen expressed frustration with a long lag-time between data collection and reporting, and frustration between what they see on the water every day and what the NEFSC reports. Fishermen were also frustrated with the inflexible assessment schedule that limits the introduction of new information. They explained that they can not wait for the science and management advice to catch up with current conditions and consequently the industry is contracting and “collapsing” in many ports.

In many fisheries, historical catches are higher than the current total allowable catch. Some fishermen were concerned that this has been interpreted as a change in abundance when it is actually a change in fishing effort owing to management measures that govern groundfish. They are concerned that this will both lower quotas and keep them low.

One repeated example given was about closed areas. Fishermen argued that if there are no commercial catch samples or vessel trip reports from those areas, then it could be interpreted to mean that there are no fish in those areas. This would be shown as a decline in abundance. They felt that if no one is fishing there, and those areas aren't surveyed, then we don't know what fish are

present. To them, this lack of data would lead people to think there was less fish in the system than are present.

In Portland, some questioned the Operational Assessment review plan. They were concerned about NOAA scientists serving on the panel not being sufficiently independent as reviewers. There was discussion of how the peer review panel works and how disagreements are documented. There was also an opportunity to talk about how the final reports are developed and used. There was also discussion about “Plan B” options for assessments (a fall-back option for providing catch advice if an assessment is not accepted) and in one port it was suggested that the Council should decide to either use Plan A or Plan B not the stock assessment scientists.

Fishermen across most ports expressed frustration about the presence of retrospective patterns. This ranged from expressing a need to create more real-time management (Chatham) to suggesting that the data are unreliable (New Bedford, Gloucester, Portland), to stating that there needs to be a major overhaul in the way that the modeling is done (Portsmouth and New Bedford). In New Bedford, it was suggested that as a research track project, the entire groundfish modeling process should be examined systematically because there has been such a large amount of retrospective patterning.

In Portland and Plymouth, fishermen suggested that misreporting was strong driver of retrospective patterns, and wanted frank discussion about Carlos Rafael, a major figure in Northeast fisheries who is recently pled guilty in a criminal case that involved misreporting groundfish catch. In these ports, fishermen commented that Raphael was responsible for lowering their quota on yellowtail flounder. In Portland, one stakeholder asked if NOAA was going to release the information from that investigation in order to allow the stock assessment scientists to use more accurate data. She expressed concern that not having access to that data would skew the results of the assessment and then affect the fishing quota for yellowtail flounder.

In New Bedford, the stakeholders were resistant to the conversation about poor data inputs. There, stakeholders felt that the data was biased against fishermen that the NEFSC should be in the business of keeping fishermen fishing, and that when the discussion led to discussing poor data inputs, that the NEFSC was accusing the fishermen of lying. A similar sentiment was expressed in Gloucester, when a fisherman said “you act as if fishermen are the bad guys.” In Gloucester and Portsmouth fishermen expressed that they thought the models were flawed since they have failed multiple times. Many fishermen expressed that they feel the modeling process is not reliable, or does not have enough industry input.

In Chatham one fisherman asked if there could be real-time management. He gave an example in which he catches a large amount of a species with a small quota and then the fishery is closed as a protection measure by managers because the total allowable catch limit for that species is close to being reached. He suggested that making the information about landings in relation to total allowable catch available in real time would help everybody. He also said that type of real-time data “Im out there, and I see a large number of fish” could help with the assessments.

In Plymouth, one fisherman raised the point that even stock assessments going on now use the data through 2016, and the rules that result from them wont be put into place until Fishing Year 18. He also raised the point that if a benchmark is needed for a groundfish species, then it wont be done for at least two years. That is a much longer time than an in-person observation. In Gloucester, several

fishermen repeatedly said they are seeing more cod abundance than the NEFSC is reporting, and they were frustrated that the science center cant “catch up”.

Fishermen in Point Judith were also frustrated with the slow nature of the science and management processes. They felt like their observations were not taken into consideration in a real-time manner, and that maybe the people to address these concerns were not present. In Point Judith, fishermen also said they were noticing a change in the distribution of black sea bass and summer flounder.

Fishermen in Gloucester were particularly concerned about cod, that assessments and managers are misinformed that based on their observations the cod stock is larger than the stock assessment shows. They also feel that this has provoked a catastrophic response to a problem that isnt occurring. Comments included “you say we are like Newfoundland, Ive been hearing that for years, but we arent.” Recreational party/charter and headboat captains and owners who attended the Portsmouth and Gloucester meetings were concerned that cod recreational catch limits are impacting their bookings and reducing their economic viability.

Many fishermen at the Gloucester meeting expressed that they feel like the bad guys. The GARFO representatives present felt like fishermen want to be a more active part of the scientific process, but that they arent. There were also concerned citizens in the room who expressed frustration and distrust of science, and who expressed that within the management system science is “privileged,” and across the board in the US they felt that this is wrong. In Pt Judith and Montauk, there was more discussion of black sea bass and summer flounder, which are not assessed in the updates. In Point Judith, fishermen said they were noticing a change in the distribution of black sea bass and summer flounder. Montauk attendees were concerned about fishery closures and lower quotas despite relatively healthy stocks.

### **Fishery Monitoring**

Fishermen were concerned with the amount of observer and at-sea coverage they receive. They expressed concern and frustration about the accuracy of the data, whether the data are used, and the cost of collecting that data. Several fishermen said that people fish differently with an observer or at-sea monitor onboard, and asked how the science center might account for this bias. Fishermen also expressed concern about the cost of observers and dismay at the fact that “observers get paid even when we dont catch, so I take an observer on my boat, I get charged to catch cod \$.07 lb, and the observer gets paid. The observer gets paid whether I make any money or not.” One fishermen in Point Judith recommended that it would be valuable for the Science Center and the Industry if observers could have an additional data collection field that allowed them to capture industry observations or shared knowledge. This fishermen remarked that on some specific instances he wanted the observer to document a specific condition or characteristic regarding a trip and was dismissed by the observer saying there is no way for me to capture that information within our current data system.

### **NEFSC Fishery-Independent Survey**

Concerns expressed about the survey included the reliability of the survey data and the estimates that result from those data, what will happen this year during the fall survey since the primary survey vessel (NOAA Ship Henry B. Bigelow) is in dry dock. Stock assessment scientists explained how the survey was conducted, how stations are selected, and the area covered. Scientists also

explained that a number of fishery-independent surveys are conducted in the region, the majority by states, and that these data are also used in many assessments.

Fishermen were concerned with localized fish abundance and the way that this might be missed by the survey, or bias the survey either positively or negatively. In Gloucester, Portland, and Portsmouth fishermen were concerned with the abundance of cod that they are seeing. They felt that the cod abundance in that area was not adequately reflected in their quota, and linked this to the survey areas.

Many fishermen at these meetings expressed that conducting the survey aboard commercial vessels would be more reliable and relevant than doing it aboard the *Bigelow*.

Across the ports, people were concerned with the reliability of survey data. This included concerns about station density in the survey, use of a standard set of gear that was not good at catching all species it encounters, concerns about how standard the tows are and how quality is monitored for tows. This allowed for further discussion of the survey design.

In several ports we were able to talk about protocols for evaluating each tow, what happens when there is a “bad” tow, and supplemental surveys we are doing to address gaps. Examples included the Gulf of Maine longline survey on rocky bottom, and gear efficiency comparisons for flatfish catchability in collaboration with the Northeast Trawl Advisory Panel. In some ports, people were interested in seeing comparisons of survey data results over time. This provided an opportunity to show the animated plots of distribution and abundance by species developed from survey data by the NEFSC.

### **Ecosystem Concerns**

Another area of general interest in several ports was moving toward comprehensive assessments that take into account ecosystem effects, and toward ecosystem-based fishery management. Some of this discussion centered on recent changes in fish distribution that might be a result of climate change.

Fishermen in Plymouth from Sector 10 expressed real concern and frustration about Amendment 16, and the broader efforts to plan out the uses for the ocean. They felt that these efforts, which they believed to be led by large NGOs, are pushing them out of the fishing industry.

Other fishermen noted that they feel that the groundfish sector-based management is a cap-and-trade system that is really driving fishing, and that the economics of fishing is speaking through the fishery-dependent data. One fisherman suggested controls in the marketplace to correct allocation errors.

The fishermen in Plymouth also wanted more information on the seal population on Cape Cod and their effects on the natural mortality of groundfish species.

### **Cooperative Research**

The Cooperative Research Branch gave a programmatic overview at these meetings. They explained that they were undergoing an evolution from a program to a distinct branch at NEFSC. As they do this, a number of internal and future external efforts are underway to better integrate and design cooperative research at NEFSC. During this process, the Cooperative Research Branch will be

reaching out to the industry to gain input about their research priorities and feedback about how to engage them for future NEFSC studies. They also took this opportunity to highlight cooperative research projects that they've conducted with fishermen over the years, and reinforced that the branches work is designed to address spatial and temporal gaps in the NEFSCs data collection efforts in partnership with industry. These current projects included:

- Study Fleet
- Electronic vessel trip report system
- Industry-based longline survey
- Catchability work aboard the F/V Karen Elizabeth through the Northeast Trawl Advisory Panel

A considerable number of fishermen perceived that the NEFSC did not use Northeast Study Fleet data or observer data in assessments. NEFSC staff clarified how some study fleet data (electronic vessel trip reports) are used and pointed out that their desire to utilize industry-based CPUE does have challenges that the Center needs to overcome. There was also discussion of past attempts to start new data series that addressed industry concerns that were unable to be fully incorporated into the data. In a few instances these projects were unable to capture a full time series because of changes in cooperative research funding and/or research priorities.

Many attendees said that cooperative research opportunities were too limited and seem to be directed toward a small number of vessels. This point was made in Portsmouth and Portland. In Portsmouth, one fisherman said that “the research money always seems to go to the same few people” while in Portland, one stakeholder reported that they had submitted a proposal, but that “the people who always get the money got the money in that case, too.”

Several fishermen in Pt Judith also had concerns about who gets access to cooperative research dollars. The Cooperative Research Branch explained that they use a network approach to funding due to fluctuations in funding for cooperative research. Several fishermen in room were part of the study fleet, and part of the cooperative research network. Many fishermen expressed that they were pleased with the work that was being done through the Cooperative Research Branch. As part of this discussion other funding mechanisms were discussed. One was the Staltonstall- Kennedy program. This group of fishermen felt that it was unlikely that they would receive those funds since it was a national program and not reflective of regional priorities, and felt that there needed to be more research on Black Sea Bass that was species specific. One suggestion by a member of the group was that in order to do more localized species-specific work, it would be really helpful if the Mid-Atlantic Fishery Management Council brought back more research set-aside programs.

In a few ports, there was also discussion about the Cooperative Research Branch use of “networks” to leverage their research dollars. In Portland, the REDNET project was a topic of concern. One constituent in Portland gave an example of the REDNET project, and said that it took six years to receive a report from that project. This was too long. There was also concern that a network approach to cooperative research projects isnt the most effective way to get work done, and that it privileges who gets to work on those projects.

In Portsmouth, however, where many fishermen work with the Cooperative Research Branch, they felt like the use of networks was appropriate, and that the Cooperative Research Branch was working well with them. In Gloucester, a number of participants were given an opportunity to talk about the work they have done with the Cooperative Research Branch. Several participants expressed favorable views of the Cooperative Research Branch and the staff. Several participants at every meeting had been or are actively involved in cooperative research.

Suggested areas for future research included further investigating bariatric trauma mitigation devices. Also, the issue of declining weight-at-age in cod was raised, along with the hypothesis that this was related to larger parasite loads caused by longer period of warmer water temperatures during recent years.

### **21.3 Assessment Oversight Panel summary**

July 24, 2017 Woods Hole, Massachusetts

As part of the Operational Assessment process for the 20 Groundfish stock assessments, the Assessment Oversight Panel (AOP) met in Woods Hole to review the assessment plans for each stock. The meeting was also broadcast as a Webinar.

The AOP consisted of:

Jason McNamee, Chair NEFMC Scientific and Statistical Committee, RI Division of Environmental Management

John Boreman, Chair MAMFC Scientific and Statistical Committee, North Carolina State University

Russell W. Brown, Northeast Fisheries Science Center, Woods Hole

#### Meeting Participants:

The participants in Woods Hole included: Tom Nies (NEFMC), Jamie Courname (NEFMC), Jim Weinberg (NEFSC), Michael Simpkins (NEFSC), Sheena Steiner (NEFSC), Mark Terceiro (NEFSC), Chris Legault (NEFSC), Gary Shepherd (NEFSC), Larry Jacobson (NEFSC), Liz Brooks (NEFSC), Tony Wood (NEFSC), Toni Chute (NEFSC), Tim Miller (NEFSC), Kathy Sosebee (NEFSC), Lisa Hendrickson (NEFSC), Larry Alade (NEFSC), Chuck Adams (NEFSC), Susan Wiley (NEFSC), Brian Linton (NEFSC), Richard McBride (NEFSC), Geret Depiper (NEFSC)

Remote participants via webinar included: Patrick Sullivan (Cornell University), Patrick Lynch (NOAA Fisheries, Science & Technology), Jim Berkson (NOAA Fisheries, Science & Technology), Gary Nelson (Massachusetts Division of Marine Fisheries), Chris Kellogg (NEFMC) and Rachel Feeney (NEFMC).

The meeting began at 10:00 am. The lead scientist for each stock gave a presentation on the data to be used, model specifications, evaluation of model performance, the process for updating the biological reference points, the basis for catch projections, and an alternate assessment approach if their analytic assessment was rejected by the peer review panel. In some cases the stock was already being assessed using an “index-based” or “empirical” approach. In these cases there was no