



New England Fishery Management Council

50 WATER STREET | NEWBURYPORT, MASSACHUSETTS 01950 | PHONE 978 465 0492 | FAX 978 465 3116
 E.F. "Terry" Stockwell III, *Chairman* | Thomas A. Nies, *Executive Director*

MEETING SUMMARY

Joint Scallop Plan Development Team and Advisory Panel Meeting

Hilton Garden Inn – Boston, MA

May 4, 2016

The Scallop PDT and AP met on May 4, 2016 in Boston, MA to: 1) review preliminary results from recent Scallop RSA projects, 2) discuss potential recommendations for future scallop research set-aside (RSA) priorities, and 3) a preliminary discussion of potential modifications to Georges Bank access areas based on preferred alternatives in the Essential Fish Habitat Omnibus Amendment 2.

MEETING ATTENDANCE:

PDT Members – Ms. Deirdre Boelke (Co-Chair), Mr. Jonathon Peros (Co-Chair), Lt. Josh Boyle, Dr. Bill DuPaul, Mr. Travis Ford, Ms. Emily Gilbert, Mr. Ben Galuardi, Ms. Emily Keiley, Dr. Dvora Hart, Dr. Catherine O’Keefe, Dr. David Rudders.

AP Members – Mr. Peter Hughes (Chair); Mr. James Gutowski (Vice Chair); Mr. Ron Enoksen, Mr. James Fletcher, Mr. Kirk Larson, Mr. Paul Parker, Mr. Eric Hansen, Mr. Robert Maxwell, Mr. Charles Quinn, and Mr. Edward Welch.

In addition, approximately 15 members of the public attended including RSA presenters and Ms. Mary Beth Tooley, the Scallop Committee Chair.

SUPPORTING DOCUMENTATION:

1. Summary of RSA Awards 2010 – 2016
2. Announcement of 2016/2017 RSA Awards (Dated April 7, 2016)
3. 2016/2017 Scallop RSA Federal Funding Announcement
4. Background document on potential modifications to Georges Bank access areas

KEY OUTCOMES:

- The PDT and AP provided initial input directly to RSA recipients about future research.
- The PDT and AP discussed recommendations for future research priorities.
- The PDT and AP began discussions on potential modifications to Georges Bank access areas based on the preferred alternatives in EFH Omnibus Amendment 2.

The meeting began at 9:05am.

AGENDA ITEM #1: OVERVIEW OF RSA PROGRAM AND RECENT AWARDS

PRESENTATION: MR. JONATHON PEROS, NEFMC STAFF

The scallop research set-aside (RSA) program began in 1999. Currently 1.25 million pounds of scallops are set aside annually through scallop specifications to fund the program. For the 2016/2017 grant cycle, a \$12 dollar/lb price estimate was used by NMFS to convert pounds to dollars. A total of fifteen projects were funded – six of which were two year awards. Staff explained that the Council recommends RSA research priorities on at least a biannual basis, and will be discussing them at their June 2016 meeting. Staff also explained the RSA proposal and review processes (Document #3). A complete list of RSA recipients for 2010 – 2016 by year, research priority, and lead institution is contained in Document #1. The vast majority of RSA proposal results have either been used in Council actions or results have been shared with the Council. A suggestion was made to provide opportunities for RSA researchers to present at PDT meetings if they cannot attend future RSA share days.

AGENDA ITEM #2: REVIEW OF PRELIMINARY RESEARCH RESULTS FROM RSA AWARDS

Eight individual presentations were given on preliminary Scallop RSA research results. The list below includes the RSA award year, project title, presenter name, and lead institution. In general, these presentations helped the PDT and AP identify how to adjust future research priorities based on the status of these projects. All presentations are available on the Council website with these meeting materials. [Presentations will be made available to the public at this link on the Council's website.](#)

Sea turtle related research			
RSA Award Year	Project Title	PI / Presenter	Organization
2015	Understanding Impacts of the sea scallop fishery on loggerhead sea turtles	Samir Patel	CFF
2009-2013	Temperature observations from turtle-borne sensors to improve ocean models	Jim Manning	NOAA
2015	Update on the nematode parasite in sea scallops (<i>Sulcascaris sulcata</i>)	David Rudders	VIMS
Scallop Biology and gear research			
2013	Identifying source sink dynamics in sea scallop populations of the Northwest Atlantic	Steve Vollmer	Northeastern
2013	Survey of persistent scallop aggregations and an examination of their influence on recruitment using the FVCOM oceanographic model	Changsheng Chen	SMAST

2015	Determination of the impacts of dredge speed on bycatch reduction and scallop selectivity	Farrell Davis	CFF
Incidental Mortality of sea scallops			
2014	Incidental mortality estimates of sea scallops from AUV based BACI surveys	Danielle Ferraro	U Delaware, VIMS
2014	Determining Incidental discard mortality of Atlantic Sea scallops	Elenor Bochenek and Jason Morson	NFI and Rutgers

AGENDA ITEM #3: INITIAL DISCUSSION OF FUTURE RESEARCH PRIORITY RECOMMENDATIONS

Staff reviewed the 2016/2017 RSA priorities, focusing on the language describing each priority in the RSA FFO (Document #3). The group noted that six projects had received funding for two years, including surveys of the Mid-Atlantic, and Nantucket Lightship and surrounds. Around 400,000 lbs of 2017/2018 RSA set-aside will be used to cover the cost of these six projects.

Several potential modifications to the RSA priorities were identified. The AP and Committee will consider these revisions at upcoming meetings in June. Suggested PDT/AP changes to the RSA process and priorities will be reflected in an updated red-line version of the 2016/2017 RSA FFO. The group requested that staff identify topics of projects that received two year funding, particularly survey work. It was noted that the 2017 RSA cycle will solicit projects for 2017/2018. Several members of the PDT and AP expressed interest in adding impacts of density dependence and keeping disease/parasite research as a highest priority under the umbrella of area management research. Bycatch was recommended to remain as a highest priority, with the addition of gear research to reduce the impact on small scallops. The group recommended non-harvest mortality (including natural, incidental, and discard) as a medium priority. Turtle research was also recommended as a medium priority. The group briefly discussed adding vaccinations to the turtle priority for 2017. A new priority of research that investigates the factors affecting fishing power and estimates of how they relate to projections of landings per unit effort (LPUE) was recommended for other projects.

An AP member requested that staff work with the NEFSC to determine whether or not the names of vessels that receive compensation pounds each year can be released. Several people suggested that RSA research published in peer-review journals be open access. It was explained that journal articles can be made open access if the author(s) cover the cost. Members of the PDT noted that not all RSA research is published in peer-reviewed journals, and it may be difficult to make this a requirement of the program. There was general support that RSA research be available to the public.

AGENDA ITEM #4: DISCUSSION ON POTENTIAL MODIFICATIONS TO THE GEORGES BANK ACCESS AREAS BASED ON PREFERRED ALTERNATIVES IN EFH OMNIBUS AMENDMENT 2

Council staff provided an overview of the omnibus habitat process, explaining that the Council identified final recommendations for modifications to habitat management areas over two Council meetings, April 2015 and June 2015. Council staff sent a draft submission document to

GARFO on January 14, 2016, and suggested revisions have come back that need to be changed before the final draft is complete for the proposed rule. Staff expects to send the final submission document to GARFO in May. Measures have not been approved; a proposed rule is expected early summer 2016, and a final decision on the amendment will be available 90 days from publication of the amendment, so roughly late September. The final rule based on this decision should be published in December. Staff explained that the scallop fishery will not have immediate access to areas that may potentially open to other fisheries when the habitat rule publishes. Rather, the Council will need to develop measures to allow the scallop fishery to access previously closed areas through a framework.

The group's discussion on this topic was wide ranging. Multiple members of the AP voiced support for treating openings of new bottom as access areas for the first year, before determining whether or not the area should be open access or part of rotational area management. There was also support expressed for potentially smaller access area trips (~12,000lbs) to newly opened areas. Some AP members voiced that all areas on GB should not be included in access areas, and more area should be open for DAS fishing. The group discussed that there are unused trips in CAI still, and it may make sense to allocate those trips first into CAI if the boundary is extended north. One PDT member argued that part of the CAII north access area should remain closed, potentially along the Hague line to maintain an area to assess the impacts of fishing on habitat, but other speakers opposed this idea and argued that there will be a control area just to the south of the potential access area. Another PDT member suggested that some sort of experimental fishery may be necessary in CAII north if it opens. The quality of the scallops in that area is very uncertain and the plan may not want to allocate a large volume from that area. Council staff also explained that closures which were put in place through FW27 (notable CAII extension and NL) may be reopened through the anticipated framework action for 2016. These discussions will likely continue this year, particularly after survey results are available for the areas.

Other Business

Staff explained that the Council prioritized work on windowpane flounder management measures for 2016, and that a windowpane flounder discussion paper was presented to the Groundfish Committee at their April meeting. The Groundfish Committee has tasked the Groundfish PDT to examine approaches for developing a northern windowpane sub-ACL for the scallop fishery. Staff explained that the Groundfish PDT would be discussing options at their upcoming meeting on May 11th in Boston, MA, and that the Groundfish Committee would receive an update on the PDT's work at their meeting on June 9th. A member of the public asked if a joint Scallop/Groundfish AP meeting was being planned to discuss windowpane issues. Staff explained that the current process will be for the Groundfish PDT and Committee to meet before next steps are formalized.

The meeting adjourned at 4:45pm.

are made. Priority will be given to scallop research proposals that investigate research priorities identified by the Council, which are detailed under the Program Priorities section of this announcement.

FULL ANNOUNCEMENT TEXT

I. Funding Opportunity Description

A. Program Objective

The Scallop RSA Program was established through the Atlantic Sea Scallop Fishery Management Plan (FMP) to address scallop research priorities identified by the Council. NMFS, in coordination with the Council, is soliciting proposals for scallop research to be conducted under the 2016/2017 Atlantic Sea Scallop RSA Program. Set-aside quota will be awarded to successful applicants.

B. Program Priorities

Projects funded under the Atlantic Sea Scallop RSA Program must enhance the understanding of the scallop resource or contribute to scallop fishery management decisions. Priority is given to funding research proposals addressing the below list of 2017⁶ and 2018⁷ Atlantic Sea Scallop Research Priorities.

Applicants responding to scallop survey priorities should be aware that 2-year survey proposals will be accepted under this competition. Additionally, such applicants are encouraged to review and consider the findings of the Scallop Survey Methodologies Peer Review, which was convened by the Northeast Fisheries Science Center in March 2015. This includes efforts to increase the level of coordination between scallop survey efforts. Reports and additional information for this peer review are posted at: www.nefsc.noaa.gov/saw/scallop-2015.

2017⁶ and 2018⁷ Atlantic Sea Scallop Research Priorities

HIGHEST (listed in order of importance)

1. Survey Related Research (a, b, and c have equal priority)

1a. an intensive industry-based survey of each of the relevant scallop access areas (Closed Area I, Closed Area II, Nantucket Lightship¹, Delmarva, Elephant Trunk and Hudson Canyon) that will provide estimates of total and exploitable biomass to be used for setting fishery catch limits under the rotational area management program. To support these area management decisions, survey data and biomass estimates must be available by early August of the year in which the survey is conducted (e.g. survey results that would inform 2018⁷ fishing area decisions must be available by August 2017⁶). Areas scheduled to be open in the following fishing year generally have a higher priority than other areas. For 2017/2018⁶ the priority areas are likely to be: Elephant Trunk, Hudson Canyon, the access area in southern part of Closed Area II, the access area in Nantucket Lightship including the extension to the east as well as to the west within the

¹ An intensive industry based survey of the Nantucket Lightship and surrounds was funded for two years (2016/2017) through the 2016 Scallop RSA process.

Commented [JP1]: We did not discuss priority order of 1, 2, 3 at our meeting. Is bycatch #2, and scallop area management research (disease/parasite, density dependence) #3?

Commented [JP2]: NL is the only intensive IBS of AA funded for two years. See footnote.

Commented [DVB3]: PDT we need identify the areas that are expected to be open in FY2018 and are NOT already funded through RSA. Right now NL is the only AA that is funded for 2017 survey already.

current EFH closed area where small scallops have been observed, and to the north of the Closed Area I access area within the current EFH closed area that has known concentrations of scallops. For ~~2019~~²⁰¹⁷ the priority areas are: Elephant Trunk, the access area in the southern part of Closed Area II, and the access area in Nantucket Lightship with extension to the east. If boundaries of scallop access areas change as a result of a future Council action, then applicants may be requested to adjust their survey to be consistent with new or modified access area boundaries. Additionally, applicants should note that the priority areas listed here may change based on results of 201~~6~~⁵ surveys and/or feedback from the scallop fishing industry. Therefore, applicants may be requested to adjust their proposed survey to meet these emergent survey needs.

1b. an intensive industry-based survey of areas that may be candidate access areas in the future (i.e., open areas with high scallop recruitment or closed areas that may open to fishing).

Examples areas include the Northern Edge of Georges Bank in and around Closed Area II, the northern part of Closed Area I that is currently part of an essential fish habitat (EFH) closed area, east and west of the Nantucket Lightship scallop Access Area, south of Closed Area II, and south of Nantucket Lightship along the 40 fathom curve to Hudson Canyon. Seasonal monitoring of candidate access areas will be considered to monitor the survival of small scallops.

1c. a broad, resource wide industry-based survey of scallops within Georges Bank and/or Mid-Atlantic resource areas². The survey or surveys do not need to be carried out by a single grant recipient. The primary objective of these surveys would be to provide an additional broadscale biomass index to improve the overall precision of the scallop biomass estimate produced by the Scallop Plan Development Team. Survey results must be available by early August of the year in which the survey is conducted (e.g. survey results that would inform 201~~8~~⁷ fishing effort decisions must be available by early August 201~~7~~⁶).

2. Bycatch research

Identification and evaluation of methods to reduce the impacts of the scallop fishery with respect to bycatch of small scallops and non-target species. This would include projects that reduce impacts on small scallops through gear modifications, determine seasonal bycatch rates of non-target species, characterize spatial and temporal distribution patterns, gear modifications to reduce non-target bycatch and avoid fishery conflicts, as well as the associated discard mortality rates of yellowtail flounder, windowpane flounder, lobster, and other key bycatch species. Research efforts should be targeted to provide results that would help the scallop industry avoid pending or potential implementation of accountability measures.

3. Scallop area management research

~~Such research would include, but would not be limited to, research to actively manage spat collection and seeding of sea scallops;~~ and R-research aimed at describing the occurrence, as well as understanding the mechanisms, of processes that affect scallop product quality

² A broad, resource wide industry-based survey of the Mid-Atlantic resource area was funded for two years (2016/2017) through the 2016 Scallop RSA process.

Commented [DVB4]: PDT - Should this list be the same?

Commented [JP5]: VIMS funded for 2 years to survey MA resource area already, do we want to recommend that this only list GB, or not?

Commented [DVB6]: Draft text has included bycatch of both non-target species and small scallops – but could separate out into two items instead – 2a and 2b – preference?

Commented [JP7]: Moved down to “Other” under #7 for the time being – most commented that the item be moved down (medium or other?), and a subset of speakers argued that it remain under high. Looking for PDT/AP comments on where seeding/spat issue should fall on the list at upcoming meetings.

(i.e., scallops with grey meats or evidence of disease/parasites); research aimed at evaluating the impact of density dependence and the potential impacts of area rotation on scallop product quality would be particularly useful.

MEDIUM (not listed in order of importance):

4. Research to support the investigation of non-harvest mortality of scallops. This includes research on natural mortality, such as scallop predation and ways to mitigate predation impacts (e.g. starfish, crab and dogfish), incidental mortality (scallop mortality of uncaptured scallops that interact with gear but are not captured), and discard mortality (e.g. shucked scallops that are discarded due to meat quality, ~~or~~ tearing, or size preference). The assumed non-harvest (natural, incidental, discard) mortality rate used in the assessment is very uncertain; research that would improve the understandings of non-harvest mortality and refine the assumed rate would be useful. Any research that is going to potentially inform the next benchmark assessment for scallops should be available by December 2017 so that results can potentially be considered in the assessment.

5. Research to support the investigation of loggerhead turtle behavior in the Mid-Atlantic (via satellite tagging or other means) to understand their seasonal movements, vertical habitat utilization, and how and where interactions with scallop dredge gear are occurring. This includes monitoring of scallop dredge and scallop trawl operations, exploring possible linkages between turtles and disease/parasites in scallops, and the development of further gear modifications if monitoring should indicate current designs are not eliminating the threat or harm to sea turtles or are resulting in unacceptable reductions in scallop catch.

OTHER (not listed in order of importance):

6. Habitat characterization research including (but not limited to): before after control impact (BACI) dredge studies; identification of nursery and over-wintering habitats of species that are vulnerable to habitat alteration by scallop fishing; evaluation of long-term or chronic effects of scallop fishing on the ecosystem; and habitat recovery potential from fine scale fishing effort. In particular, projects that would evaluate present and candidate EFH closures to assess whether these areas are accomplishing their stated purposes and to assist better definition of the complex ecosystem processes that occur in these areas. Finally, investigation of variability in dredging efficiency across habitats, times, areas, and gear designs to allow for more accurate quantitative estimates of scallop dredge impacts on the seabed and development of practicable methods to minimize or mitigate those impacts.

7. Research projects designed to either 1) examine whether chemicals, water quality, and other environmental stressors affect reproduction and growth of scallops (e.g. jet fuel, pesticides, ocean acidification, etc.); ~~or~~ 2) research other scallop biology projects, including studies aimed at understanding recruitment processes (reproduction, timing of spawning, larval and early post-settlement stages), and seasonal growth patterns of scallop shell height and meat and gonad weight (which could include analysis of Northeast Fisheries Science Center archived scallop shells from the 1980s and 1990s); or 3) research to evaluate the potential impacts of scallop spat

Commented [JP8]: Group discussed making information available for upcoming assessments. Need to check dates.

Commented [DVB9]: Do we want to add specific reference to vaccine idea?

and seeding projects as well as research to actively manage spat collection and seeding of sea scallops.

8. Discard mortality of scallops. The assumed discard mortality rate used in the scallop stock assessment is very uncertain. Research that would improve the understandings of discard mortality and refine the assumed discard mortality rate would be useful, especially if projects are able to assess variability due to habitat, season, and gears, as well as the magnitude scallops discarded at sea and not landed due to scallop meat quality issues.

9. Incidental mortality of scallops. The assumed incidental mortality rate used in the scallop stock assessment is very uncertain. Research that would evaluate the effect of the four inch rings and mesh twine tops on incidental mortality would be useful.

9. Research that investigates the factors affecting fishing power and estimates of how they relate to projections of landings per unit of effort (LPUE).

10. Other resource surveys to expand and/or enhance survey coverage in areas that have the potential to be important resource areas, but which currently lack comprehensive survey coverage (e.g. inshore areas east of the current NOAA Fisheries survey strata or deeper than the surveyed area, Northern Gulf of Maine resource, etc.).

11. Develop methodologies or alternative ways for the scallop fleet to collect and analyze catch and bycatch data on a near real-time basis (i.e., collection of scallop meat weight and quality data, specific bycatch information, etc. Potential ideas include, but are not limited to: concepts like a scallop “Study Fleet”, electronic monitoring, dockside monitors, scallop bag tags, etc.)

C. Program Authority

Statutory authority for this program is provided under sections 303(b)(11), 402(e), and 404(c) of the Magnuson-Stevens Fishery Conservation and Management Act, 16 U.S.C. 1853(b)(11), 16 U.S.C. 1881a(e), and 16 U.S.C. 1881c(c), respectively. The Scallop RSA Program is established through the Scallop FMP (69 FR 35193, June 23, 2004) and implementing regulations at 50 CFR 648.56.

II. Award Information

A. Funding Availability

No federal funds are provided for research under this notification. Rather, funds generated from the sale of landed scallop RSA quota shall be used to cover the cost of research activities, including vessel costs. The Federal Government is not liable for any costs incurred by the researcher or vessel owner should the sale of set-aside quota not fully reimburse the researcher or vessel owner for their expenses. Any additional funds generated through the sale of set-aside landings, above the cost of the research activities, shall be retained by the vessel owner as compensation for the use of his/her vessel.

The Scallop RSA TAC is 1.25 million pounds per scallop fishing year (March through February). Under the previous 2015/2016 Federal Funding Opportunity, NMFS awarded 3,394

Commented [JP10]: Should this specific concept move to #4?

Commented [JP11]: Should this specific concept move to #4?

Commented [DVB12]: Do we want to add more detail here to give a better sense of the type of projects we are looking for?

Commented [JP13]: From the Council’s 5-year priority list.

Commented [DVB14]: Can we request that the vessels that receive RSA compensation be shared? Is that public information once the awards are given? On a similar note, what is required in terms of a final budget report – is that public information?

pounds of scallops from the 2016 set-aside. Consequently, under this solicitation there are 1,249,606 million pounds available from the 2016 RSA TAC, and 1.25 million pounds available from the 2017 RSA TAC.

All scallop RSA quota awards will be made in pounds of scallops, and will not be associated with a specific fishing area or days-at-sea allocation. RSA quota may be harvested from any area that is open to the scallop fishery (i.e., open access areas and open

areas), unless otherwise restricted by the Council. Applicants should be aware that yellowtail flounder bycatch in the scallop fishery may restrict the harvest of RSA quota in certain times and areas.

In the event that the entire scallop RSA TAC is not fully expended, NMFS may award unused RSA quota to compensate projects due to low scallop prices or to expand a project within its original topic area. In such an instance, the awarded allocation will be posted on the NMFS Northeast Cooperative Research website (www.nefsc.noaa.gov/coopresearch).

To apply for set-aside quota, applicants must submit a budget that is based on funds necessary to execute the research plan and funds necessary to compensate vessel owners harvesting set-aside quota. Upon project selection, NMFS will negotiate with successful applicants on the specific RSA quota award. Projects will be selected based on technical merit, management relevance, and responsiveness to Council research priorities. NMFS will establish a common scallop price estimate, based on the best and most recent data available at the time of negotiations, to determine the amount of set-aside necessary to cover research and compensation fishing expenses.

B. Project/Award Period

Proposals may be submitted for research activities that encompass all or part of the 2016 and 2017 scallop fishing years.

C. Type of Funding Instrument

Proposals selected for funding will be funded through a grant or cooperative agreement depending upon the amount of collaboration, participation, or involvement by NOAA in the management of the project. Examples of substantial involvement may include, but are not limited to, proposals for collaboration between NOAA scientists and a recipient scientist. Funding for contractual arrangements for services or products for delivery to NOAA is not available under this notice.

III. Eligibility Information

A. Eligible Applicants

1. Eligible applicants include, but are not limited to, institutions of higher education, hospitals, other nonprofits, commercial organizations, individuals, state, local, and Native American tribal governments. Federal agencies and institutions are not eligible to receive Federal assistance under this notice. Additionally, employees of any Federal agency or Regional Fishery

Commented [JP15]: NEFSC will update. About 100,000 pounds of scallops from 2017 set-aside were allocated, leaving about 1.15 million pounds for 2017 and 1.25 million pounds for 2018.