

Research Steering Committee

Report of July 17 meeting

Mark Alexander, Chairman
Dr. Rachel Feeney, staff

Council meeting
Sept. 26-28, 2017



RSC meeting - July 17, 2017

Agenda

1. Process for setting Council research priorities.
2. Update on Northeast Cooperative Research Program activities, NEFSC planning, and improving stock assessments.
3. Management review of finished research projects.
4. Discuss NEFSC/NCRP network approach to funding research.



I. Setting Council research priorities

- RSC wishes for a more targeted/prioritized list, potentially including a rationale/description and the progress/status of each priority.
- RSC examined two examples of other Councils' lists that are prioritized.
- RSC asked staff to look into how other Councils develop research priorities to see what lessons may be learned.
- RSC expects to develop a recommendation at its next meeting.



2. NEFSC/NCRP

- NEFSC/NCRP aims to institute cross-cutting cooperative research study teams and mechanisms to engage industry in this process. Planning an internal workshop(s) to discuss this goal, research prioritization, and better integrating cooperative research into the science informing assessments.
- RSC discussion points:
 - There seems to be a “push” to use industry data is coming from NCRP, rather than a “pull” from others across the NEFSC to seek out data or identify needs.
 - The assessment world likes time series, and the NCRP projects have mostly been research and development or short-lived surveys.



2. NEFSC/NCRP

- RSC discussion points:
 - NEFSC aims to improve its research prioritization process, and have a broader group across the NEFSC give input on NCRP priorities and better align with NEFMC, MAFMC, and ASMFC priorities.
 - There is a plethora of needs (one-off experiments, methods development, time-series), but a lack of regional structure to determine overall priorities and who should best meet the needs (government vs. external).
 - Emerging technologies (acoustics, video analysis software) may help improve stock surveys and assessments.
 - Both NEFSC staff and RSC members wished to keep the Council engaged in planning long- and short-term NEFSC research activities.



3. Management Reviews

- Staff update on the use of Council-funded research. Highlights:
 - “*Small mesh fishery bycatch reduction in the southern New England/mid-Atlantic windowpane stock area (Hasbrouck)*” Groundfish PDT is developing a memo, recommending that the gear be added to list of approved gears. [UPDATE: Council submitted this request to GARFO on 8/31.]
 - “*Post-release mortality rate and best capture and handling methods for haddock discarded in Gulf of Maine recreational fisheries (Mandelman)*” – Groundfish PDT is using project information in developing FW57 recreational measures. The Stock Assessment Oversight Panel will discuss project. [UPDATE: Data used in haddock assessment.]
- Conducted a management review of three projects.



Project #1: “Assessing recreational haddock discard mortality on Jeffrey’s Ledge through an industry-led collaborative mark-recapture tagging program”

Project leader: Gabriella Bradt (UNH)

Purpose: Calculate a recreational discard mortality rate for GOM haddock, tagging 20,000 haddock from May 2015-Dec 2016.

Results:

- Low tag returns (0.005%) precluded estimating a discard mortality rate.
- Additional data on recreational effort, catch, haddock movement, etc. may be informative.



Project #1: “Assessing recreational haddock discard mortality on Jeffrey’s Ledge through an industry-led collaborative mark-recapture tagging program”

RSC Consensus Statement:

“The RSC recommends forwarding this project and its data to the Groundfish PDT for consideration in developing recreational measures and to forward the data to the I-Mark database for archiving.”



Project #2: “REDNET: Redeveloping a sustainable redfish fishery in the Gulf of Maine (Pol)”

Project leader: Mike Pol (MADMF) & Pingguo He (SMAST)

Purpose: Team up 40+ experts to:

- Build a network of experts.
- Identify temporal/spatial redfish distribution.
- Study codend mesh selectivity.
- Identify bycatch reduction strategies.
- Evaluate potential markets and processing capacity.
- Provide outreach and recommendations.

RSC review
in 2012 &
2014.



Project #2: “REDNET: Redeveloping a sustainable redfish fishery in the Gulf of Maine (Pol)”

Results:

- Fishing with 4.5” diamond mesh has little catch of undersized redfish and other commercially important species.
- Substantial escapement documented; escapee mortality unknown.
- Most escapes occurred during haulback. Codend grid systems tested, but haven’t found a commercially viable system yet.
- Market generally uninformed about redfish. Stability of supply would increase demand. Processing capacity is not a limiting factor.

Additional dissertation research:

- Effect of gear selectivity on yield per recruit and SSB.



Project #2: “REDNET: Redeveloping a sustainable redfish fishery in the Gulf of Maine (Pol)”

RSC Consensus Statement:

“The RSC recommends that the outcomes of the REDNET project (e.g., codend selectivity for diagnostics and in projections) be conveyed to the stock assessment teams and the Groundfish PDT and Committee for scientific and management purposes. The RSC notes that the boom and bust nature of the historical fishery may warrant consideration of different management approaches.”



Project #3: “GEARNET: Northeast Groundfish Gear Conservation Engineering and Demonstration Network”

Project leader: Steve Eayrs (GMRI) & Mike Pol (MADMF)

Purpose: Fund industry-generated projects to help groundfish fishermen develop and adopt fishing equipment that improves efficiency and selectivity, reduces environmental impact, and helps secure a sustainable, profitable groundfish resource and industry.

Results:

- 35 projects; 96 participants; Maine to Rhode Island.
- Adoption of small-diameter large-mesh trawl netting, semi-pelagic doors, and fuel flow meters.
- Invention of a self-closing codend that limits catches to predetermined levels.
- Distribution of low cost gillnet pingers (harbor porpoise).



Project #3: “GEARNET: Northeast Groundfish Gear Conservation Engineering and Demonstration Network”

Project challenges:

- An overall lack of bandwidth; been trying times for industry.
- Hesitation to change operations in the face of uncertainty.
- Despite complaints about the state of the fishery, few ideas for solutions offered.
- Fishermen requested fuel meters, but not all were installed.

No RSC Recommendation:

Most projects didn't have direct management applicability. The one published study on a topless trawl is a gear useable in the fishery already.



4. Funding research via networks

RSC Consensus Statement:

“The RSC believes that the REDNET and GEARNET networks were successful and recommends a review of the NCRP network approach to funding cooperative research to further identify lessons and identify the conditions for success and appropriateness of applying this approach for future collaborative research. There could be a benefit to having multifaceted projects stitched together, with the caution that projects should be designed with scientific rigor and have broad applicability if the intent is to inform management.”

