

QUARTERLY PROGRESS REPORT

Submitted to the National Marine Fisheries Service,
Northeast Fisheries Science Center.

A. Contract Number	EA133F-10-CN-0322, BAA for Cooperative Research
B. Amount of Contract	Federal \$599,863
C. Project Title	A network approach to conservation engineering for New England's groundfish fishery: collaboration, outreach and demonstration of alternative fishing gears.
D. Award period	09/15/2010 thru 09/14/2012
E. Reporting period	03/01/2011 - 07/31/2011
Principle Investigators	Shelly Tallack (GMRI), Steve Eayrs (GMRI), Pingguo He (SMAST), Jon Knight (Superior Trawl), Mike Pol (MA DMF) and Mike Walsh (FV Guardian)

Report Prepared By / Signature of Principle Investigator



08/09/11

Shelly Tallack, Ph.D.

Date

Gulf of Maine Research Institute

F. SUMMARY OF PROGRESS AND EXPENDITURES

F.I. Work Accomplishments

Our scope of work for this entire contract includes four core objectives:

1. Work with sector managers to hold individual meetings with each groundfish sector (and the common pool) to capture/document urgent fisheries research needs, as perceived by New England's groundfish fishermen; these research needs may or may not involve gear conservation research.
2. Coordinate a three-day workshop (with public and sector participation during the first two days) to review the gear focused research needs proposed by individual sectors. Present this project's objectives to the wider gear research network. In collaboration with workshop attendees, finalize a list of high priority gear research and a 'research gear pool' wish list, then develop a schedule to address these research needs.
3. Establish a multi-institutional Gear Conservation Engineering Demonstration Network (GEARNET) that has the capacity (in terms of both personnel and equipment) to: (a) undertake proof-of-concept gear conservation research projects in partnership with individual sectors, and (b) demonstrate fishing gear modifications and/or fishing sensor equipment to interested parties, and (c) review project outcomes on completion of the sea trials to plan for a Phase Two of research.
4. Disseminate findings through a variety of avenues, including: a user-friendly website, quarterly mailings, feedback meetings with sectors, a one-day reporting back workshop, presentations at relevant meetings/workshops, and progress reports submitted to the Northeast Cooperative Research Program.

Our progress on each of these objectives is summarized in subsequent pages.

F.I.a. Tasks accomplished this period.

Objective 1: Work with sector managers and the common pool to capture/document urgent fisheries research needs, as perceived by New England’s groundfish fishermen; these research needs may or may not involve gear conservation research.

- During the course of December, January and February, meetings had been held with each individual groundfish sector, to brainstorm and ascertain the research/gear conservation engineering needs on a sector-by-sector basis.
- As reiterated in the previous report, this was a time-consuming process the extent of which was underestimated in our original planning and budgeting. Furthermore, it became evident that each sector operates differently, and that we cannot always rely on the sector manager as being the obvious primary contact; some sectors want their managers to play this role, while others do not and it takes time to learn the specifics for each sector.

Objective 2: Coordinate a multi-day workshop to communicate the goals of the network to the wider groundfish industry, research and management community. In this group setting, finalize a list of high priority gear research and a ‘research gear pool’ wish list, then develop a schedule to address these research needs.

- As reported in our previous progress report, over the course of a number of meetings with individual groundfish sectors, it became clear that holding a 3-day workshop would not be perceived by industry as good use of their time, or indeed, good use of GEARNET funds.
- We still plan to hold a 1-day workshop for GEARNET participants in the winter of 2011/2012, in order to share the findings from each GEARNET study/gear demonstration with the wider network, however, there is nothing further to report on this objective at this stage in the project.
- The list of high-priority gear research and the wish list for gear purchases will be reported on under Objective 3.

Objective 3: Establish a multi-institutional Gear Conservation Engineering Demonstration Network (GEARNET) to: (A) undertake proof-of-concept gear conservation research projects in partnership with individual sectors, (B) demonstrate fishing gear modifications and/or fishing sensor equipment to interested parties, and (C) review project outcomes on completion of the sea trials to plan for a Phase Two of research.

- The multi-institutional Gear Conservation Demonstration Network is organic by design, and as such, will continue to grow over the course of the project. By way of demonstration, Table 1 indicates how the number of individuals involved in the project has grown since we received funding in September 2010. The ‘participants’ page on the GEARNET website (www.gearnet.org/participants.html) is updated periodically to reflect the growing number of project participants.

Table 1: Growth in the GEARNET network since September 2010.

	September 2010	July 2011
GEARNET PIs	6	6
GEARNET Project Participants	12	27*
GEARNET Technical Committee	10	14
No. sectors that have submitted GEARNET proposals	0	13 (including Common Pool)

*Based on current active projects

- The GEARNET Technical Committee has been established as a group of experts with the responsibility of advising our efforts to meet the goals under Objective 3. As reported previously, this Technical Committee includes a total of 14 individuals representing the commercial groundfish industry, fisheries research organizations, fishery management organizations and gear manufacturers.
- Coordinated by GMRI, the GEARNET Technical Committee reviewed a total of 22 GEARNET proposals that had been submitted by the groundfish sectors. The review process took place on March 22, 2011 during the course of a 1-day workshop held at SMAST. The summary from this workshop has been included in this report as Annex 1 (p. 10).
- Of the 22 proposals received, the GEARNET Technical Committee agreed to support 17, assuming that each proposal was improved/refined based on the advice given by the GEARNET Technical Committee (Table 2). In all cases, a “yes” is dependent on project refinements in response to the GEARNET Technical Committee suggestions. [Updated based on a review of the decisions during a GEARNET PI conference call, 03/29/2011].

Table 2: Decisions on which proposals to fund, as determined by the GEARNET Technical Committee during the Proposal Review Workshop on March 22, 2011.

Sector	# proposals submitted	Proposal 1	Proposal 2	Proposal 3
Common Pool	1	Yes	-	-
NE Fishery Sector 2	2	Yes	No	-
NE Fishery Sector 3	2	Yes	Yes	-
NE Fishery Sector 5	2	Yes (one of these, depending on the outcome of the RSC meeting on April 14 th , 2011)		-
NE Fishery Sector 6	1	Yes	-	-
NE Fishery Sector 7	1	Yes	-	-
NE Fishery Sector 8	1	Yes	-	-
NE Fishery Sector 9	3	Merge w/ #3	No	Merge w/ #1
NE Fishery Sector 10	2	Yes	Yes	
NE Fishery Sector 11	1	Yes	-	-
NE Fishery Sector 12	1	Yes	-	-
NE Fishery Sector 13	-	-	-	-
Port Clyde Community Sector	2	No	Yes	-
Tri-State Sector	-	-	-	-
NE Coastal Community Sector	1	Yes	-	-
Sustainable Harvest Sector	1	Probably	-	-
GB Cod Fixed Gear Sector	1	Probably	-	-

- Following the proposal review workshop, GMRI coordinated an additional 1-day meeting with the GEARNET PI group and representatives from the NE Region Cooperative Research Program. The purpose of this meeting was to review and discuss a variety of factors that required additional attention, in particular: vessel insurance requirements, vessel charter rates, sale of catch during research projects, schedule of research and personnel needs, etc. The summary from this meeting is included as Annex 2 (p. 39). One outcome of this meeting has been that individual project costs have sometimes increased from the estimates included in the original proposal. This outcome can be attributed to: (a) increasing the scope of work to increase data

integrity/sample sizes, (b) requesting more detailed budgets, and (c) devising a standardized approach to vessel charter rates and sale of catch under an LOA.

- Regarding personnel needs, it is recognized that this network initiative is costly in terms of personnel time, particularly on the network coordination side, but also from the perspective of managing individual projects with each groundfish sector, (i.e. project oversight, coordination, sea time, analysis, etc.). As such it was important to review people’s availability as we planned to move forwards with each GEARNET project. It was agreed that the following allocation of responsibility would be appropriate from this point forward (see p. 44 for detailed comments):

Sector	Who
Common Pool	Shelly
NE Fishery Sector 2	Steve
NE Fishery Sector 3	Pingguo
NE Fishery Sector 5	Shelly /Jon Knight/Laura Skrobe
NE Fishery Sector 6	Mike P & W.
NE Fishery Sector 7	Pingguo
NE Fishery Sector 8	Pingguo
NE Fishery Sector 9	Pingguo
NE Fishery Sector 10	Mike P.
NE Fishery Sector 11	Ken La Valley
NE Fishery Sector 12	Erik Chapman
Port Clyde Community Sector	Steve
NE Coastal Community Sector	Steve/Mike P.
Sustainable Harvest Sector	Shelly/Steve
GB Cod Fixed Gear Sector	Shelly

- Regarding equipment, GMRI has compiled an inventory of ‘GEAR’ available at partner organizations (including SMAST, UNH, GMRI, MA DMF and NOAA Fisheries) within the Northeast Region. This list will be useful as we review proposals and consider what additional equipment will need to be purchased in order to execute the selected projects. To date, a relatively small quantify of additional equipment (specific to specific study needs, e.g. mesh, nets, etc.) has been purchased.
- Table 3 indicates the progress/status of proposals that we intend to undertake as part of this first round of GEARNET proof-of-concept projects.

Table 3: Project progress and status of research.

Sector	Approximate dates of progress (Month/Year)								
	Original proposal reviewed/ accepted	Proposal refinement meeting held	Proposal refined	Refined proposal approved by GEARNET PIs	Research permit received	Equipment purchased	Fieldwork completed	Report prepared	Data / report on website
Common Pool	03/11	4/11	4/11	4/11	5/11	4/11	5 & 6/11		
Northeast Fishery Sector 2	04/11								
Northeast Fishery Sector 3	03/11								
Northeast Fishery Sector 4	N/A ¹	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Northeast Fishery Sector 5	03/11	6/11 ³							
Northeast Fishery Sector 6	03/11								
Northeast Fishery Sector 7	03/11	7/11	7/11	7/11					
Northeast Fishery Sector 8	03/11								
Northeast Fishery Sector 9	03/11								
Northeast Fishery Sector 10	03/11								
Northeast Fishery Sector 11	03/11	4/11	5/11	6/11	7/11	6/11			
Northeast Fishery Sector 12	03/11	4/11	5/11	6/11	7/11	6/11	7/11		
Northeast Fishery Sector 13	N/A ¹	-	-	-	-	-	-	-	-
Port Clyde Community Sector	03/11	5/11	6/11	7/11	N/A ⁴	7/11			
Tri-State Sector	N/A ¹	-	-	-	-	-	-	-	-
NE Coastal Community Sector	03/11	5/11							
Sustainable Harvest Sector	03/11	4/11	N/A ²	-	-	-	-	-	-
GB Cod Fixed Gear Sector	03/11	8/11	9/11	9/11					

¹ No proposal submitted

² Proposal withdrawn by industry member

³ Awaiting input from NOAA regarding implications of moving forwards with the NEFS V's 2nd proposal.

⁴ This project has been included on an EFP application that Steve Eayrs has submitted for other, similar ongoing work that overlaps this time period.

Objective 4: Disseminate findings through a variety of avenues, including: a user-friendly website, quarterly mailings, feedback meetings with sectors, a one-day reporting back workshop, presentations at relevant meetings/workshops, and progress reports submitted to the Northeast Cooperative Research Program.

- GMRI continues to maintain and improve the GEARNET website which serves as the depository for detailed information and updates about the project/network; particular updates include adding photos from field work, maintaining the participants list and adding project information to the page: <http://www.gearnnet.org/projects.html>.
- At the Fishermen’s Forum in March 2011, GMRI prepared an oral presentation for the Cooperative Research Session hosted by NOAA CRP. In addition, GMRI prepared a poster about the GEARNET research model and this was displayed during this session, but also for the duration of the weekend at the GMRI booth. This poster has also been produced in ‘flyer’ format as a hand-out (Annex 3, p. 46).
- GEARNET featured in GMRI’s quarterly newsletter which is distributed electronically to a large regional audience.
- GEARNET featured in the Commercial Fishing News column prepared by Carolyn Woodhead (July 2011).
- Prepared an article for inclusion in the National Fisherman publication (prepared by Willy Goldsmith, intern at GMRI).
- GMRI plans to prepare outreach materials about GEARNET for the upcoming Working Waterfront Festival (New Bedford, September 2011).

F.I.b. Permits required

Table 4 shows the permit requirements anticipated for all GEARNET projects; in addition, this table notes whether any sale of catch occurred in conjunction with the project, and if so, the total revenue.

Table 4: Permit requirements and sale of catch for each GEARNET project.

Sector	Permit anticipated	Permit secured?	Sale of catch
Common Pool	LOA	April 2011	\$54,811
NE Fishery Sector 2	Currently unknown		
NE Fishery Sector 3	EFP		
NE Fishery Sector 5	None required if proposal #2		
NE Fishery Sector 6	Temporary Possession LOA		
NE Fishery Sector 7	LOA	Requested	
NE Fishery Sector 8	Temporary Possession LOA/EFP		
NE Fishery Sector 9	Temporary Possession LOA/EFP		
NE Fishery Sector 10	Currently unknown		
NE Fishery Sector 11	Temporary Possession LOA	July 2011	-
NE Fishery Sector 12	Temporary Possession LOA	June 2011	-
Port Clyde Community Sector	None required / EFP	Ongoing EFP	-
NE Coastal Community Sector	EFP	Requested	
Sustainable Harvest Sector	N/A	-	-
GB Cod Fixed Gear Sector	EFP/LOA/Sector 10 permit?		

F.I.c. Interactions with Protected Species

None to date.

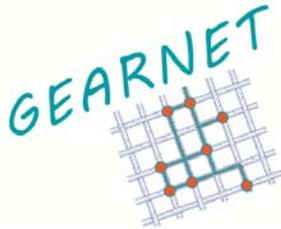
F.II. Special problems, differences between scheduled and accomplished work, etc.

- Some of the most significant problems GEARNET has encountered relate to the concept of working as a research network, in an organic manner, with a flexible yet limited budget.
- During a recent collaborative research meeting hosted by the NOAA Cooperative Research Program at the Holiday Inn (Portland, ME), GMRI stated that while NOAA's efforts to fund and support multiple gear conservation networks (the GEARNET/CEMFIN network being just one of seven) are commendable, there is concern that the funding available may have been spread too thin to realize effective commitment by network participants. There is a limited number of experts in the region (both in the scientific arena and within industry) and it appears that people are struggling to invest the time needed (with other project/business commitments) to ensure that GEARNET can perform and respond to industry needs in the timely manner that was intended.
- From GMRI's perspective, the investment of personnel time has far exceeded (by necessity) the amount of time budgeted for and if Year 2 of the project is as time-intensive as Year 1, additional personnel funds will be required.
- Communication (or lack thereof) is an ever-present challenge for both the growth of the network, and ensuring that individual projects can move forwards on schedule (with e.g. proposal refinements, permit applications, gear purchases, etc.).
- One issue that GEARNET has tried to tackle is how to handle sale of catch for projects that require an LOA (and therefore, provide increased access to fish). Despite the PI groups efforts to establish a model that would allow us to standardize the options for sale of catch across projects (i.e. by requiring the catch (permitted by an LOA) to be shared between the industry partner(s) and the project), this system has not been accepted by all fishermen. Furthermore, this system has had the impact of increasing the cost of individual projects (e.g. for the Common Pool project, the original project proposal was ~\$10,000, but the refined budget (after adding a vessel day rate and increasing the number of sampling trips as recommended) was ~\$59,000). Depending on how much the costs of other projects increase through refinement, the Phase 1 funds will be used up quickly. It should also be noted that this exercise has required considerable investment of people's time to discuss, negotiate and manage (i.e. added administrative/accountant time) that was also not anticipated in the original budget.
- An additional cause for concern is how we may or may not utilize sale of catch funds towards future costs of the project; original expectations that funds could be used to offset the costs of the project (through adjusted invoices to NOAA) is now not allowed. NOAA CRP is aware of this concern, and future weeks/months should shed light on exactly how this revenue will be utilized. However, to reiterate, it is important to find a solution in the near future, since GMRI (as a non-profit organization) is not in the habit of being the recipient of sale of catch funds and is not comfortable with the current situation.
- Finally, GMRI has currently expended >\$55,000 in vessel costs and thus, it should be considered a priority for NOAA and MA DMF to help solidify a written agreement for how GMRI can recuperate vessel charter funds from MA DMF.

F.III. Tasks planned for the next quarter

- There is an ongoing need for refining a number of the GEARNET projects: additional meetings with individual sectors may be necessary to refine the original GEARNET proposals and move forwards with these projects in a time-sensitive manner.
- Solidify a written agreement between GMRI and MA DMF to enable the transfer of funds between organizations to cover vessel charter costs.
- Hold a meeting with GEARNET PIs to discuss potential uses for sale of catch revenue.
- Data summary and analysis for GEARNET projects that have already completed their fieldwork.
- Begin planning the winter 2011/2012 GEARNET 1-day workshop that updates network participants on the progress of each project.
- Review funds available for the combined GEARNET/CEMFIN budget and determine whether a second request for proposals can be afforded.

ANNEX 1 – Agenda from the GEARNET Technical Committee Proposal Review workshop, March 22, 2011.



Northeast Groundfish

Gear Conservation Engineering & Demonstration Network

GEARNET Technical Committee Proposal Review Workshop - SUMMARY

Purpose: Review of Submitted GEARNET Proposals

Date: Tuesday March 22nd, 8.30 am – 5.30 pm

Location: School for Marine Sciences and Technology (SMAST), New Bedford, MA

Attendees (15): Shelly Tallack (GMRI), Steve Eayrs (GMRI), Mike Pol (MA DMF), Pingguo He (SMAST), Jon Knight (Superior Trawl), Tor Bendiksen (Reidar Manufacturing), Carl Bouchard (FV Stormy Weather), Laura Skrobe (URI/SeaGrant), Ken La Valley (UNH/SeaGrant), Carolyn Woodhead (NOAA CRP), John Hoey (NOAA CRP), Henry Milliken (NEFSC), Travis Ford (NOAA NERO/Sustainable Fisheries Division), Ryan Silva (NOAA NERO/Sustainable Fisheries Division), and Patty Collins (GMRI).

AGENDA

8.30 Light breakfast, coffee, tea

9.00 Introduction

9.15 Overview/reminder of selection criteria

9.30 Proposal review

12.00 Working lunch

12.30 Resume proposal review

4.30 Wrap-up/Next steps/actions

5.00 End

1) Introduction, funds available, funds requested & review of selection criteria

The meeting began with a brief overview of the GEARNET process that had been undertaken, in order to solicit GEARNET proposals from industry. The number and cost of all proposals received was summarized and presented in the context of a review/update of the funds available to fund the proposals received.

Funds available: The funds available for Phase 1 GEARNET research (as a function of combining the CEMFIN and GEARNET contracts) is \$482,000; plus \$50,000 as a gear replacement/repair fund. In addition, it was learned that the \$300,000 originally earmarked as Phase 2 funds in the CEMFIN contract is also available for use at this stage if needed.

Combined gear testing budget since Nov 19 2010									
	GEARNET			CEMFIN			Combined total	(assuming 17) ~ per sector	Total
	Y1	Y2	Total	Meetings	Capacity Building	Total			
Seadays	\$ -	\$ -	\$ -	\$ -	\$150,000	\$150,000	\$ 150,000	\$ 8,824	
Field support	\$ 42,000	\$ -	\$ 42,000	\$ -	\$ -	\$ -	\$ 42,000	\$ 2,471	
Equipment	\$150,000	\$ -	\$ 150,000	\$ -	\$140,000	\$140,000	\$ 290,000	\$ 17,059	
								\$ 28,353	\$ 482,000
Phase II	\$ -	\$ -	\$ -	\$15,000	\$285,000	\$300,000	\$ 300,000	\$ 17,647	\$ 300,000
Total available to projects	\$ 192,000	\$ -	\$ 192,000	\$ 15,000	\$ 575,000	\$ 590,000	\$ 782,000	\$ 48,941	\$ 832,000
Equipment replacement/repair fund	\$ 50,000	\$ -	\$ 50,000	\$ -	\$ -	\$ -	\$ 50,000		
Totals	\$242,000	\$ -	\$ 242,000	\$15,000	\$575,000	\$590,000	\$ 832,000		

Funds requested: A total of \$454,549 was requested, across 22 proposals. It was reiterated that fishermen had been encouraged to move away from the typical 'vessel charter'-type costing estimates, and instead see GEARNET funds as means of reimbursing the cost of gear research proposed (rather than 'making a profit' off GEARNET). The range in project costs is high (\$4,950 - \$43,750) as a function of: equipment needs, range in vessel sizes (~30 ft - ~80 ft), planned inshore/offshore field trial locations, and requests for a day-at-sea charter rate versus stipends/fuel reimbursement.

It was reiterated that not all groundfish sectors have submitted a proposal this time around, and it is probable that we will invite additional proposals during the summer of 2011. Therefore, making sure some funds remain available to enable at least one project with each sector is important.

Sector	No. proposals	Estimated Project Cost				GEARNET liaison	Date submitted	
	Submitted	Proposal 1	Proposal 2	Proposal 3	Total			
Common Pool	1	\$ 10,000				\$ 10,000	Shelly Tallack	2/22/2011
NE Fishery Sector 2	2	?	?	-		?	Steve Eayrs	2/28/2011
NE Fishery Sector 3	2	\$ 24,050	\$ 4,950			\$ 29,000	Pingguo He	2/28/2011
NE Fishery Sector 4	-	-	-	-		\$ -	Permit bank	-
NE Fishery Sector 5	2	\$ 26,780	\$ 25,430			\$ 52,210	Shelly Tallack/Jon Knight	2/28/2011
NE Fishery Sector 6	1	\$ 43,750				\$ 43,750	Mike Pol	2/28/2011
NE Fishery Sector 7	1	\$ 43,500				\$ 43,500	Pingguo He	2/28/2011
NE Fishery Sector 8	1	\$ 41,300				\$ 41,300	Pingguo He	2/28/2011
NE Fishery Sector 9	3	\$ 40,580	\$ 20,500	\$ 36,250		\$ 97,330	Pingguo He	2/24/2011
NE Fishery Sector 10	2	\$ 15,200	\$ 40,000			\$ 55,200	Mike Pol	2/18/2011
NE Fishery Sector 11	1	\$ 13,500				\$ 13,500	Ken La Valley/E. Chapman	2/23/2011
NE Fishery Sector 12	1	\$ 17,375				\$ 17,375	Ken La Valley/E. Chapman	2/24/2011
NE Fishery Sector 13	-	-	-	-		\$ -	Mike Pol	-
Port Clyde Community Sector	2	?	?	-		?	Steve Eayrs	3/17/2011
Tri-State Sector	-	-	-	-		\$ -	Mike Pol	-
NE Coastal Community Sector	1	\$ 22,500				\$ 22,500	Steve Eayrs	3/21/2011
Sustainable Harvest Sector	1	\$ 10,500				\$ 10,500	Shelly Tallack/Jon Knight	2/23/2011
GB Cod Fixed Gear Sector	1	\$ 18,384				\$ 18,384	Shelly Tallack	2/28/2011
	22	\$ 327,419	\$ 90,880	\$ 36,250		\$454,549		
						Average project cost \$ 25,253		

Overview of Proposal Selection Criteria: It was reiterated that the GEARNET process is a new approach to funding projects, and unlike other more formal research funding bodies (e.g. SNECRI, NEC, NOAA) the proposals being reviewed will not receive a 'score'. Instead, the pros and cons of each study will be discussed and captured, within the framework of the following criteria, as outlined in the "Proposal Selection Guidelines" that had been developed and refined in December 2010.

Criteria	Description
Relevance	<ul style="list-style-type: none"> - Is this a fishery that primarily targets groundfish? - Are there other species bycatch issues when targeting groundfish? - Is it a fishery that catches and discards groundfish?
Technical merit	<ul style="list-style-type: none"> - Is the project likely to be able to demonstrate the concept proposed? - Will the data have sufficient integrity? - Is 5-days vessel time enough for reaching some conclusion?
GEARNET mission	<p>Does the project further GEARNET's mission to help Northeast groundfish fishermen develop and adopt fishing equipment that:</p> <ul style="list-style-type: none"> - Improves efficiency or selectivity; - Reduces environmental impact; - Helps secure a sustainable, profitable groundfish resource and industry for future years.
Permits	<ul style="list-style-type: none"> - Will the proposed project qualify for the required LOA/EFP?
Budget	<ul style="list-style-type: none"> - Is the proposed budget reasonable? Affordable?

2) Proposal reviews

The GEARNET Technical Committee (TC) reviewed a total of 22 proposals during the workshop.

Sector:	Common Pool	Proposed budget:	\$10,500
Proposal #:	1 of 1	Sector's Priority:	N/A
Title:	Modification of a groundfish net, into a topless flounder net		

- | | |
|-----------------|--|
| Relevance | <ul style="list-style-type: none"> - Target yellowtail (dab, people have lots of dab quota), while avoiding cod and haddock. - If proven effective, it's not a given that a rolling closure exemption would follow (or be requested), but there are already vessels fishing in this area in June, and if effective it would only improve fishing selectivity and enable vessels fishing in this area to target the dabs with reduced impact on cod. |
| Technical merit | <ul style="list-style-type: none"> - A similar design has been accepted on US Georges Bank (Eastern US/Canada and has also been tested in Germany. - The head-rope would be cut back more than has been done for the 'turtle trawl'; the 'floppiness' of the net experienced by Mike Pol in his trials of a similar gear (a few years ago) may not be an issue with this design, as the design is quite different. - GEARNET TC Suggestion: Additional input from net builders (Mary from Trawlworks has looked at the design and is involved, Jon Knight has also looked at the design and would be involved) is needed. - Regarding retention of viable amounts of flounder, Pingguo He added that when testing the topless shrimp trawl, the catch of flatfish did not suffer; - Project timing: Flatfish are abundant in May, but by June, the cod become a problem. |
| GEARNET mission | <ul style="list-style-type: none"> - This project supports the GEARNET mission. |
| Permits | <ul style="list-style-type: none"> - Candidate for an LOA; catch would not be attributed against sector quota. |
| Budget | <ul style="list-style-type: none"> - Fish would be sold to cover the vessel costs, but recent trip limit cuts mean that the sale may not cover the costs. - GEARNET TC Suggestion: Requests for Sale of Catch and Vessel Charter Rates require further discussion with GEARNET – we are currently developing guidelines on both. |
| Other | <ul style="list-style-type: none"> - It is possible that the vessel will be sold in coming months, and thus might operate within Sector 2; either way, the project would go ahead. |

GEARNET TC Decision:	<ul style="list-style-type: none"> - This project will be funded, assuming the proposal is refined according to the suggestions of the GEARNET TC. - In light of the minimal reimbursement requested by the industry representative, in addition to recent reductions in Common Pool trip limits which will impede the vessel owner's efforts to recuperate costs, that GEARNET considers increasing the budget for this project, to ensure a minimum daily vessel rate.
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Sector:	NEFS 2	Proposed budget:	\$6,000-\$7,000
Proposal #:	1 of 2	Sector's Priority:	1st
Title:	Codend mesh selectivity to decrease catch of undersized yellowtail flounder		

- Relevance
- The area proposed is known for having a high discard rates.
- Technical merit
- This mesh size has been assessed previously in 4 separate studies (one on GB, 2 in the GOM, and 1 elsewhere), do we need to do it again? Do we not trust the information that has already been collected?
 - Is the science that has been done not getting out to people? Do these fishermen know about this work?
 - Yes, this feedback was given during the proposal development process (although since the proposal only cites one of the studies it isn't clear if all four studies had been received), but these fishermen still feel that this research is warranted since a number of years have passed, fish assemblages and fish sizes are different.
 - The proposed study is not a classic mesh selectivity study, instead it is more of a gear comparison.
 - Is side-by-side towing the best way to assess catch rates in the GOM? It's been suggested at the recent RSC meeting that it is not due to differences in bottom depth on parallel tracks; this variable and others would need to be monitored or controlled.
 - Information on study location has not been provided ahead of this meeting. [An updated proposal received on 3/23/2011 indicates GOM, Stellwagen Bank (30-40 fathom edge), during the Fall/Winter.]
- GEARNET mission
- This project supports the GEARNET mission.
 - **GEARNET TC suggestion:** GEARNET is about trying to help each sector fish better, so if this work helps this sector fish better, then we should support the study, but narrowed down in terms of mesh sizes/types assessed.
 - This group is very engaged.
- Permits
- Clarification needed, but we think they want undertake this study as part commercial trips and land the catch – as long as they're not using a mesh size that is smaller than permitted, this is fine. Otherwise an EFP would be needed.
 - If they are to be measuring catch (of potentially undersized fish), then obtaining a Temporary Possession Letter of Authorization is recommended (if they're not using an LOA or an EFP). However, this requires that a scientist be on board – is vessel insurance an issue?
- Budget
- It is not possible to review since no budget information was provided ahead of this workshop. [Budget information received on 3/23/2011 indicates a low-cost budget of \$6,000 - \$7,000].
 - **GEARNET TC Suggestion:** Requests for **Sale of Catch** and **Vessel Charter Rates** require further discussion with GEARNET – we are currently developing guidelines on both.
 - **GEARNET TC suggestion:** Please provide more detail on the breakdown of proposed costs. For example, vessel costs (broken out as fuel, insurance,

crew, other), equipment, project support costs (data collection, data analysis, project management/oversight), etc.

Other – N/A

GEARNET TC Decision:	– Further communication is required to refine this study before approval for funding. It is recommended that the group meet with their GEARNET contact to review and refine the experimental design and objectives.
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Sector:	NEFS 2	Proposed budget:	None provided
Proposal #:	2 of 2	Sector's Priority:	2nd
Title:	Flume tank workshop on selectivity, bycatch reduction and conservation in trawl fisheries		

Relevance – Addresses selectivity, bycatch reduction, conservation in trawl fisheries.

Technical merit – More modeling/theoretical.
– This type of gear demonstration/education is helpful, and gives fishermen a tool.

GEARNET mission – This project supports the GEARNET mission.
– NEFS 2 is open to other sectors' fishermen also attending.
– Maybe we would have seen more interest from other sectors if we had indicated that GEARNET funds could be used for this, but we didn't.

Permits – N/A

Budget – No budget information has been provided, though communication with NEFS 2 has indicated that some members would be prepared to cover the cost of travel, if GEARNET covers the cost of the flume tank.
– The group estimated that \$2000 pp. is a reasonable estimate to cover travel, accommodation and food. Plus a 4-day facilitation fee (~\$9000), plus tank time (~\$16,000).
– **GEARNET TC suggestion:** Please provide more detail on the breakdown of proposed costs. For example, vessel costs (broken out as fuel, insurance, crew, other), equipment, project support costs (data collection, data analysis, project management/oversight), etc.

Other – The GEARNET TC felt that they would prefer to enable this for 30-40 guys, rather than just a small number of individuals who can afford to pay their way.
– The GEARNET TC will look also for additional funds (e.g. Commercial Fisheries Research Foundation, Sea Grant) to try to afford a scaled-up version of this.

GEARNET TC Decision:	– GEARNET likes this idea and is currently investigating additional funding options. In light of recent conversations with the Northeast Consortium, GEARNET is look at options to co-fund a flume tank workshop on a wider-scale, enabling groundfish fishermen from multiple sectors to attend. – In summary, GEARNET will not fund this proposal, but we do like the idea of a flume tank workshop and will make sure that NEFS 2 fishermen are made aware of future flume tank opportunities.
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Sector:	NEFS 3	Proposed budget:	\$24,050
Proposal #:	1 of 2	Sector's Priority:	1st
Title:	Evaluation of 5 ¼" mesh gillnets to target haddock in the GOM during the months of March, April and May		

- Relevance
- These fishermen are trying to target haddock which they currently can't target due to larger mesh size regulations.
 - 6" gillnet mesh can now be used in this area, but even with this, fishermen are still not catching that much (of what was caught a good quantity are larger 'bull' haddock).
 - The target window of time is narrow.
- Technical merit
- Since the 6" is now allowed from Jan-April, then the 'control' should now be 6" (not 6.5") [note: there is a pending sector exemption request that would extend the 6" exemption through May. A decision on this request will be made mid-April.].
 - The current minimum landing size for haddock is 18"/45 cm TL, and thus, based on a study completed by Mike Pol (which did not catch many haddock, but did have some data), the size might be justified.
 - The point of a pilot study is to test the impact, rather than guess at it during this workshop, but if we are concerned about encouraging small mesh, we should suggest a smaller-scale study, thus involving fewer nets and perhaps vessels.
 - 'Undersized' mesh can be hard to come by, do we know that we will be able to source 5 ¼" mesh? Maybe 5 ½" is more available?
 - **GEARNET TC Suggestion:** A true "selectivity" study will be more acceptable scientifically (and possibly when applying for a permit). Therefore, we recommend testing 3 mesh sizes: 5 ¼" (or 5 ½" if 5 ¼" mesh is not available), 6" (as the control) and 6.5" (since at certain times of year, this mesh must still be used). [If you are just testing two sizes, you're actually doing a catch comparison study, rather than a "selectivity" study].
 - **GEARNET TC Suggestion:** To assess the gear effectively, you will need to standardize variables like mesh color and hanging ratio.
 - **GEARNET TC Suggestion:** Needs more attention to experimental design; can we be sure to have enough data points, etc. from the study as currently proposed? This study might require additional sea days.
- GEARNET mission
- Is encouraging a study on 5 ¼" mesh going in the wrong direction? Is this conservation engineering? You'd be targeting scrod haddock, and the mesh size proposed is that used ~20 years ago.
 - Current permitted gillnet mesh sizes do not catch smaller legal fish, or any sublegal fish. Trawl fisheries with the same size meshes do, due to the physical characteristics of the gear. Allowing smaller gillnet mesh sizes equalizes access to the fishery between gillnets and trawls.
 - 5 ¼" mesh may improve "efficiency", but not necessarily "selectivity", or "sustainability" of the resource if we're harvesting smaller fish.
 - What is the incentive to harvest the smaller fish? Is it better to catch more smaller haddock or fewer larger haddock? Should some cost benefit analysis be suggested?

	<ul style="list-style-type: none"> - These fishermen are fishing from small vessels and are thus limited to inshore waters; they can't access the larger offshore haddock, and because the fish that come into their area are smaller, the current 6" mesh means that these fishermen can't access haddock generally.
Permits	<ul style="list-style-type: none"> - An Experimental Fishing Permit (EFP) would be needed; as such, this study would need to plan on taking place next year, since an EFP will likely take ~60 days to secure.
Budget	<ul style="list-style-type: none"> - GEARNET TC Suggestion: If funded, the GEARNET TC would not want to invest in as many small mesh nets, and would want to increase the number of sampling days – thus the budget would need to be revised. - GEARNET TC Suggestion: If data collection/analysis costs are anticipated, these need to be identified in the budget so that we understand the true total cost of the project (even if they are coming out of CEMFIN personnel funds). - GEARNET TC suggestion: Please provide more detail on the breakdown of proposed costs. For example, vessel costs (broken out as fuel, insurance, crew, other), equipment, project support costs (data collection, data analysis, project management/oversight), etc.
Other	<ul style="list-style-type: none"> - N/A
GEARNET TC Decision:	<ul style="list-style-type: none"> - The GEARNET TC is supportive of this idea in principle, but further communication is required to address the suggestions that have been made.

Sector:	NEFS 3	Proposed budget:	\$4,950
Proposal #:	2 of 2	Sector's Priority:	2nd
Title:	Utilization of electric rod & reel to target pollock in WGOM Closure Area		
Relevance	<ul style="list-style-type: none"> - Targeting pollock. - There are a lot of pollock in this area in the fall, the party boats are in there in the fall; these guys would not likely have any more impact on the area/habitat than the charter/party boats. 		
Technical merit	<ul style="list-style-type: none"> - GEARNET TC Suggestion: The study should collect detailed information on hook size and shape, bait, and other gear and environmental characteristics. - GEARNET TC Suggestion: Include an economic feasibility study; - GEARNET TC Suggestion: Increase the sampling effort (up from 5 days) to make sure there is ultimately sufficient information to apply for an SAP. 		
GEARNET mission	<ul style="list-style-type: none"> - This project supports the GEARNET mission. - These are low impact vessels, with low fuel usage; if good quantities can be caught, they could install ~6 reels/boat to make it economically viable. - It would provide access to an alternative fishery/resource, though there is some sensitivity around doing so in a closed area. 		
Permits	<ul style="list-style-type: none"> - As a fishery, they would need a SAP (Special Access Permit) through the Council. - For the experimentation, an EFP is most fitting since the study is more about developing a fishery, rather than conservation engineering (a condition of an LOA). Since the target time of year is the Fall, there is sufficient time to apply for an EFP. 		
Budget	<ul style="list-style-type: none"> - Inexpensive, though the cost would increase through increasing the sampling effort. - GEARNET TC Suggestion: If data collection/analysis costs are anticipated, these need to be identified in the budget so that we understand the true total cost of the project (even if they are coming out of CEMFIN personnel funds). - GEARNET TC suggestion: Please provide more detail on the breakdown of proposed costs. For example, vessel costs (broken out as fuel, insurance, crew, other), equipment, project support costs (data collection, data analysis, project management/oversight), etc. 		
Other	<ul style="list-style-type: none"> - N/A 		
GEARNET TC Decision:	<ul style="list-style-type: none"> - This project will be funded, assuming the proposal is refined according to the suggestions of the GEARNET TC. 		

Sector:	NEFS 5	Proposed budget:	\$26,780 - \$38,870
Proposal #:	1 of 2	Sector's Priority:	1st
Title:	Supplemental sea-time for mid-Eliminator trawl approval		
Relevance	<ul style="list-style-type: none"> - This is the key issue/problem faced by groundfish fishermen in NEFS 5. 		
Technical merit	<ul style="list-style-type: none"> - Not possible to comment, since precise study objectives/design has not been detailed since this is dependent on the outcome of the Research Steering Committee (RSC) meeting on April 14th 2011. - Even if the mid-Eliminator is approved, it may still be important to collect additional data on its performance. - Can data from this gear be compared to that from other separator trawls? - Gear modifications may be necessary for some vessels in order to qualify for the SAP (if NEFS 5 applies for one). - GEARNET TC Suggestion: Limit additional testing to the original two vessels that worked on the mid-Eliminator Trawl. 		
GEARNET mission	<ul style="list-style-type: none"> - This project supports the GEARNET mission through its interest in research and gear technology transfer of selective groundfish gear. 		
Permits	<ul style="list-style-type: none"> - This study would likely be a candidate for a Letter of Acknowledgement (LOA), but this is difficult to determine until further experimental design detail is available. - The NEFMC processes applications for a Special Access Permit (SAP). - The NERO would handle requests for a new code to indicate when fishing with some form of an eliminator trawl. - The NERO would be responsible for revising the Ruhle Trawl net specification regulations. 		
Budget	<ul style="list-style-type: none"> - Appropriate. - GEARNET TC Suggestion: Requests for Sale of Catch and Vessel Charter Rates require further discussion with GEARNET – we are currently developing guidelines on both. 		
Other	<ul style="list-style-type: none"> - N/A 		
GEARNET TC Decision:	<ul style="list-style-type: none"> - The GEARNET TC supports helping NESF 5 address this issue further, but exactly how will depend on the outcome of the next RSC meeting, scheduled for April 14th. 		

Sector:	NEFS 5	Proposed budget:	\$25,430
Proposal #:	2 of 2	Sector's Priority:	2nd
Title:	Gear modifications for NEFS 5 Members to meet Ruhle or mid-Eliminator (if approved) Trawl specifications		
Relevance	<ul style="list-style-type: none"> - This relates to the key issue/problem faced by groundfish fishermen in NEFS 5, as outlined in their proposal #1; - If additional testing of the mid-Eliminator trawl is not required, and if the Rhule Trawl net specifications cannot be relaxed, this proposal would be the next priority. 		
Technical merit	<ul style="list-style-type: none"> - The nets of fishermen who use smaller versions of the Ruhle or other separator trawls would be modified to conform with the regulated net specifications for the Ruhle Trawl. - If the mid-Eliminator Trawl is approved on April 14th, nets could also be modified to comply with these net specifications. - Superior Trawl would work with NEFS 5 to achieve this goal. 		
GEARNET mission	<ul style="list-style-type: none"> - This would enable fishermen to record on their VTRs that they are using an approved Ruhle separator trawl, enabling them to operate under discard rates attributed to that gear type. 		
Permits	<ul style="list-style-type: none"> - N/A. 		
Budget	<ul style="list-style-type: none"> - Appropriate. 		
Other	<ul style="list-style-type: none"> - N/A 		
GEARNET TC Decision:	<ul style="list-style-type: none"> - The GEARNET TC supports this proposal if required, but this depends on the outcome of the next RSC meeting, scheduled for April 14th. 		

Sector:	NEFS 6	Proposed budget:	\$43,750
Proposal #:	1 of 1	Sector's Priority:	1st
Title:	Ruhle Trawl demonstration project on Georges Bank		
Relevance	<ul style="list-style-type: none"> - Haddock & yellowtail flounder - Want to demonstrate a Ruhle Trawl, on GB – can't afford to buy one, but need this to try fishing in the SAP. 		
Technical merit	<ul style="list-style-type: none"> - GEARNET TC Suggestion: Little technical information has been provided – we require more information on the project design. 		
GEARNET mission	<ul style="list-style-type: none"> - This project supports the GEARNET mission. 		
Permits	<ul style="list-style-type: none"> - This study would likely require a Temporary Possession LOA (if there is a catch sampling component). 		
Budget	<ul style="list-style-type: none"> - The catch would be sold to offset costs; - GEARNET TC Suggestion: Requests for Sale of Catch and Vessel Charter Rates require further discussion with GEARNET – we are currently developing guidelines on both. - Scientist costs (not included here) would be covered by CEMFIN's personnel line item. - GEARNET TC Suggestion: If data collection/analysis costs are anticipated, these need to be identified in the budget so that we understand the true total cost of the project (even if they are coming out of CEMFIN personnel funds). - GEARNET TC Suggestion: Investigate net leasing options with Superior Trawl. - GEARNET TC suggestion: Please provide more detail on the breakdown of proposed costs. For example, vessel costs (broken out as fuel, insurance, crew, other), equipment, project support costs (data collection, data analysis, project management/oversight), etc. 		
Other	<ul style="list-style-type: none"> - N/A 		
GEARNET TC Decision:	<ul style="list-style-type: none"> - This project will be funded, assuming the proposal is refined according to the suggestions of the GEARNET TC, and after providing additional information on scientific design. 		

Sector:	NEFS 7	Proposed budget:	\$43,500
Proposal #:	1 of 1	Sector's Priority:	1st
Title:	Testing of a new Reidar's Haddock Trawl on Georges Bank		

- Relevance
- Haddock, on Georges Bank.
 - This is a modular net that can have panels exchanged at sea, without needing to come in and change nets, or carry multiple nets on the vessel – it can be an effective solution for smaller vessels with one net drum.
 - These fishermen are very interested in this net, but can't afford to invest without seeing it perform.
 - **GEARNET TC Suggestion:** This net will help reduce the incidental catch of flatfishes, i.e. flounder. This point should be emphasized in the proposal.
- Technical merit
- If the aim is eventually to apply for a SAP then data on how the gear performs will be needed;
 - **GEARNET TC Suggestion:** Need more detail on data objectives/data collection design.
- GEARNET mission
- This project supports the GEARNET mission in the form of a gear demonstration / research project.
 - These fishermen are currently using very traditional flat net; in this study they will learn how to use the new Reidar net.
- Permits
- LOA ideally, but the project design needs to be sufficiently scientific to warrant this.
- Budget
- The price of \$8500 for the trawl includes the sweep;
 - The net could get passed from one vessel to another, after the initial vessel uses it.
 - NEFS 7 wants to sell the catch and use the proceeds to support additional testing on other vessels in the sector.
 - **GEARNET TC Suggestion:** Requests for **Sale of Catch** and **Vessel Charter Rates** require further discussion with GEARNET – we are currently developing guidelines on both.
 - **GEARNET TC Suggestion:** Explore net lease options?
 - **GEARNET TC Suggestion:** If data collection/analysis costs are anticipated, these need to be identified in the budget so that we understand the true total cost of the project (even if they are coming out of CEMFIN personnel funds).
 - **GEARNET TC suggestion:** Please provide more detail on the breakdown of proposed costs. For example, vessel costs (broken out as fuel, insurance, crew, other), equipment, project support costs (data collection, data analysis, project management/oversight), etc.
- Other
- N/A

GEARNET TC Decision:	- This project will be funded, assuming the proposal is refined according to the suggestions of the GEARNET TC.
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Sector:	NEFS 8	Proposed budget:	\$40,800
Proposal #:	1 of 1	Sector's Priority:	1st
Title:	Strong Dyneema netting will replace top panel of a commercial trawl and evaluate fuel costs		
Relevance	<ul style="list-style-type: none"> – Groundfish focused – the proposed projects will use an existing commercial net, but will change the top with Dyneema twine and monitor impact on fuel consumption. 		
Technical merit	<ul style="list-style-type: none"> – Ideally this study would need 14-16 days if looking at catch, but if they are just looking at fuel 5 days should suffice. – GEARNET TC suggestion: We require more information on the experimental design and how NEFS 8 intends to monitor fuel usage. – GEARNET TC suggestion - Option A: Use one vessel with a double net drum to do alternate tows using a control net (regular net) and a test net. Incorporate the collection of catch data and charge a set rate per day. Use an SMAST technician to help collect biological/catch data. – GEARNET TC suggestion Option B: Limit the project to monitoring fuel (as is currently proposed) and just land the catch as normal (i.e. do not charge a vessel rate since data collection time is minimal). 		
GEARNET mission	<ul style="list-style-type: none"> – This project supports the GEARNET mission, through efforts to reduce environmental impact in the form of fuel consumption. 		
Permits	<ul style="list-style-type: none"> – Option A: with the gear conservation element and sampling of catch by an SMAST technician, the study should qualify for a Temporary Possession LOA, or an EFP; – Option B: no permit required, just regular fishing. 		
Budget	<ul style="list-style-type: none"> – NEFS 8 wants to sell their catch and use the proceeds to purchase additional Dyneema for other vessels; Dyneema is more expensive but more durable than Sapphire twine. – GEARNET TC Suggestion: Requests for Sale of Catch and Vessel Charter Rates require further discussion with GEARNET – we are currently developing guidelines on both. – GEARNET TC Suggestion: Investigate cost of load sensors – only a proxy for fuel, but it's portable/transferrable between vessels. – GEARNET TC Suggestion: If data collection/analysis costs are anticipated, these need to be identified in the budget so that we understand the true total cost of the project (even if they are coming out of CEMFIN personnel funds). – GEARNET TC suggestion: Please provide more detail on the breakdown of proposed costs. For example, vessel costs (broken out as fuel, insurance, crew, other), equipment, project support costs (data collection, data analysis, project management/oversight), etc. 		
Other	<ul style="list-style-type: none"> – N/A 		
GEARNET TC	<ul style="list-style-type: none"> – This project will be funded, assuming the proposal is refined according to 		

Decision:	the suggestions of the GEARNET TC (either Option A or Option B).		
Sector:	NEFS 9	Proposed budget:	\$40,580
Proposal #:	1 of 3	Sector's Priority:	1st
Title:	Improving fuel efficiency through gear modifications		
Relevance	<ul style="list-style-type: none"> – Groundfish focused – the proposed projects will use an existing commercial net, but will change the top to Dyneema twine and add hydrodynamic floats, then monitor fuel consumption. 		
Technical merit	<ul style="list-style-type: none"> – The project aims to look at fuel, net dimensions and catch. – The project will use one vessel with a double net drum for the control net and the test net; an alternate tow technique will be used. – GEARNET TC suggestion: The utility of hydrodynamic floats is questionable due to minor fuel savings and high expense – consider removing this part. – GEARNET TC suggestion: Consider adding a separator trawl panel (as per indicated in Proposal #3) and monitoring catch. – GEARNET TC suggestion: Consider using a fuel meter or load gauge for assessing drag reduction/fuel saving. 		
GEARNET mission	<ul style="list-style-type: none"> – This project supports the GEARNET mission, through efforts to reduce environmental impact in the form of fuel consumption. 		
Permits	<ul style="list-style-type: none"> – If the catch are to be sampled, then a Temporary Possession LOA or an EFP would be needed. 		
Budget	<ul style="list-style-type: none"> – The fuel monitor installation is not listed in the budget (~\$3,000 installed). – Since they intend to sell the catch and are essentially operating as a commercial trip, it's hard to justify the day rate requested – GEARNET would already be providing equipment at no cost to the sector. – GEARNET TC Suggestion: The hydrodynamic floats seem expensive – consider omitting. – GEARNET TC Suggestion: Requests for Sale of Catch and Vessel Charter Rates require further discussion with GEARNET – we are currently developing guidelines on both. – GEARNET TC Suggestion: If data collection/analysis costs are anticipated, these need to be identified in the budget so that we understand the true total cost of the project (even if they are coming out of CEMFIN personnel funds). – GEARNET TC suggestion: Please provide more detail on the breakdown of proposed costs. For example, vessel costs (broken out as fuel, insurance, crew, other), equipment, project support costs (data collection, data analysis, project management/oversight), etc. 		
Other	<ul style="list-style-type: none"> – GEARNET TC suggestion: Combine this project with NEFS 9 Proposal #3. In which case, a day rate could be included for the days spent using a camera, while selling the catch from the days spent monitoring fuel/catch. 		
GEARNET TC Decision:	<ul style="list-style-type: none"> – This project will be funded, assuming the proposal is refined and merged with Proposal #3 according to the suggestions of the GEARNET TC. 		

Sector:	NEFS 9	Proposed budget:	\$20,500
Proposal #:	2 of 3	Sector's Priority:	3rd
Title:	Improving knowledge and skills of operation and adjustment of the haddock separator trawl and other trawls designed to selectivity target haddock- model testing and video recording in the flume tank.		

- Relevance
 - Relevant, but not ranked highly by the sector;
 - One day in the flume tank is not really enough to learn anything.
- Technical merit
 - For the budget proposed, GEARNET needs more information on how NEFS 9 would implement the transfer of knowledge through this exercise – workshops? Meetings? etc.?
- GEARNET mission
 - This project supports the GEARNET mission in the form of enabling knowledge transfer on bycatch reduction/gear performance.
- Permits
 - N/A
- Budget
 - At a cost of \$20,500 more information is needed to understand how NEFS 9 would implement the transfer of knowledge through this exercise.
 - **GEARNET TC suggestion:** Please provide more detail on the breakdown of proposed costs. For example, vessel costs (broken out as fuel, insurance, crew, other), equipment, project support costs (data collection, data analysis, project management/oversight), etc.
- Other
 - It might be possible to combine this proposal with that prepared by NEFS 2 (unless there are proprietary concerns).

GEARNET TC Decision:	<ul style="list-style-type: none"> - GEARNET likes this idea and is currently investigating additional funding options. In light of recent conversations with the Northeast Consortium, GEARNET is look at options to co-fund a flume tank workshop on a wider-scale, enabling groundfish fishermen from multiple sectors to attend. - In summary, GEARNET will not fund this proposal, but we do like the idea of a flume tank workshop and will make sure that NEFS 9 fishermen are made aware of future flume tank opportunities.
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Sector:	NEFS 9	Proposed budget:	\$36,250
Proposal #:	3 of 3	Sector's Priority:	2nd
Title:	Improving knowledge and skills of operation and adjustment of the haddock separator trawl – field trials and video recording in the sea		

- Relevance
- This project addresses haddock and other core groundfish species.
- Technical merit
- It would be good to gain general fish behavior footage around fishing gears; it may be possible to look for archives of video footage also. Other sectors have also expressed interest in video footage (though this is the only video-related proposal).
 - **GEARNET TC suggestion:** It's too risky/expensive to focus just on video work (due to potential for camera malfunction, poor weather, etc.), but consider combining with the objectives of Proposal #1.
 - **GEARNET TC suggestion:** Hold additional meeting with GEARNET camera experts (Henry Milliken, Mike Pol, Steve Eayrs, Pingguo He) to refine video objectives and equipment options.
- GEARNET mission
- This project supports the GEARNET mission.
 - Transfer of knowledge; fish behavior; net performance.
- Permits
- Temporary Possession LOA (if accompanied by a research technician from a scientific organization).
 - The catch could be sold during Dyneema days (if you blend project #1 and #3); in which case, vessels would be on commercial fishing trips and could land whatever they are authorized to land. Catch counts against applicable commercial quota.
- Budget
- Regular commercial trips for the Dyneema part of the study – i.e. sell the catch and don't request a vessel day rate;
 - Vessel day rate should be charged for camera days only.
 - **GEARNET TC Suggestion:** Requests for **Sale of Catch** and **Vessel Charter Rates** require further discussion with GEARNET – we are currently developing guidelines on both.
 - **GEARNET TC Suggestion:** If data collection/analysis costs are anticipated, these need to be identified in the budget so that we understand the true total cost of the project (even if they are coming out of CEMFIN personnel funds).
 - **GEARNET TC suggestion:** Please provide more detail on the breakdown of proposed costs. For example, vessel costs (broken out as fuel, insurance, crew, other), equipment, project support costs (data collection, data analysis, project management/oversight), etc.
- Other
- **GEARNET TC suggestion:** Combine this project with NEFS 9 Proposal #1. In which case, a day rate could be included for the days spent using a camera, while selling the catch from the days spent monitoring fuel/catch.

GEARNET TC Decision:	- This project will be funded, assuming the proposal is refined and merged with Proposal #1 according to the suggestions of the GEARNET TC.
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Sector:	NEFS 10	Proposed budget:	\$40,000
Proposal #:	1 of 2	Sector's Priority:	?
Title:	Raised foot-rope groundfish net with light groundgear		
Relevance	<ul style="list-style-type: none"> - Target groundfish while eliminating flatfish; - Modifies an existing groundfish net. 		
Technical merit	<ul style="list-style-type: none"> - How do you share the net between vessels of such different sizes/HP? What would it cost to modify each vessel's (x4) net? - GEARNET TC suggestion - Option A: If you want to work under an LOA, the scientific emphasis needs to be greater, use two similar vessels/nets and compare the modified net with a control. - GEARNET TC suggestion - Option B: If you want to fish your allocation, use all 4 vessels, and a control net is not necessary. - Would they be aiming for a SAP down the road? If yes, then more data will be needed to support this, and thus the sampling strategy and data collection of this project should be refined. - Will a technician be involved? (MA technician?) 		
GEARNET mission	<ul style="list-style-type: none"> - This project supports the GEARNET mission. - Knowledge transfer and technology transfer. 		
Permits	<ul style="list-style-type: none"> - Possible candidate for an LOA, if the project becomes more scientific, otherwise a Temporary Possession LOA (if accompanied by a research technician from a scientific organization). 		
Budget	<ul style="list-style-type: none"> - Refine vessel rates based on vessel size. - GEARNET TC Suggestion: Requests for Sale of Catch and Vessel Charter Rates require further discussion with GEARNET – we are currently developing guidelines on both. - GEARNET will commit to providing funds (Phase 2 funds) to modify 3 additional nets for participating vessels, if based on the performance demonstrated in this study, participants do still want this (after the study). - GEARNET TC Suggestion: If data collection/analysis costs are anticipated, these need to be identified in the budget so that we understand the true total cost of the project (even if they are coming out of CEMFIN personnel funds). - GEARNET TC suggestion: Please provide more detail on the breakdown of proposed costs. For example, vessel costs (broken out as fuel, insurance, crew, other), equipment, project support costs (data collection, data analysis, project management/oversight), etc. 		
Other	<ul style="list-style-type: none"> - How did this proposal rank in terms of priority? 		
GEARNET TC Decision:	<ul style="list-style-type: none"> - This project will be funded, assuming the proposal is refined according to the suggestions of the GEARNET TC. 		

Sector:	NEFS 10	Proposed budget:	\$15,200
Proposal #:	2 of 2	Sector's Priority:	?
Title:	Technology transfer: Seven-inch square knotless codends		
Relevance	– Groundfish generally		
Technical merit	<ul style="list-style-type: none"> – This will provide a tool to lower the discard rate on all species. – There were some discussion on the possibility of low retention and the effects of catching only the largest fish. – GEARNET TC suggestion: Consider buying one or two 7" codends to begin with for testing, and if performance is good, then purchase an additional 5 codends for other sector members. 		
GEARNET mission	– This project supports the GEARNET mission in the form of technology transfer (purchasing seven 7" Ultracross knotless square mesh codends to distribute to sector members).		
Permits	– N/A		
Budget	<ul style="list-style-type: none"> – Inexpensive. – GEARNET TC suggestion: Please provide more detail on the breakdown of proposed costs. For example, vessel costs (broken out as fuel, insurance, crew, other), equipment, project support costs (data collection, data analysis, project management/oversight), etc. 		
Other	– How did this proposal rank in terms of priority?		
GEARNET TC Decision:	– This project can be funded; see the GEARNET TC suggestion regarding the quantity of nets to purchase and when.		

Sector:	NEFS 11	Proposed budget:	\$13,500
Proposal #:	1 of 1	Sector's Priority:	1st
Title:	Vertical profile and reduced mesh depth as a method to improve gillnet selectivity and operational efficiency		
Relevance	<ul style="list-style-type: none"> – Groundfish, focusing on pollock while avoiding cod. 		
Technical merit	<ul style="list-style-type: none"> – Detailed description, good outline on methods; – Testing the idea that fish are at different heights within the gillnet is interesting/valid concept – however, the logistics of measuring where a fish is in the gillnet (height from the bottom) is tricky; – GEARNET TC suggestion: The number of nets proposed may not suffice to capture sufficient quantities of fish; consider increasing equipment needs/sampling effort; – The idea of stringing all mesh types in one string was discussed; but this may cause hanging issues. – GEARNET TC suggestion: Suggest use of DST tags along the bottom of the netting panel and along the float rope to monitor vertical spread of net. 		
GEARNET mission	<ul style="list-style-type: none"> – This project supports the GEARNET mission. 		
Permits	<ul style="list-style-type: none"> – This project would likely qualify for an LOA. – As long as gillnets are attached to the bottom (i.e. leadline is on-bottom) then there should be no issues with the whale regulations, but the gear would still need to comply with large whale regulations. (Confirmed by Ryan Silva with John Higgins; the PI should contact him (207) 677-2316 once the study design coalesces to confirm gear configuration). 		
Budget	<ul style="list-style-type: none"> – Budget is affordable. – GEARNET TC suggestion: Please provide more detail on the breakdown of proposed costs. For example, vessel costs (broken out as fuel, insurance, crew, other), equipment, project support costs (data collection, data analysis, project management/oversight), etc. 		
Other	<ul style="list-style-type: none"> – GEARNET TC suggestion: a detailed discussion with the GEARNET PI group is recommended, to help refine the sampling procedure. 		
GEARNET TC Decision:	<ul style="list-style-type: none"> – This project will be funded, assuming the proposal is refined according to the suggestions of the GEARNET TC. 		

Sector:	NEFS 12	Proposed budget:	\$17,375
Proposal #:	1 of 1	Sector's Priority:	1st
Title:	Codend mesh size, sensors and fishing efficiency		
Relevance	<ul style="list-style-type: none"> - Target cod, while reducing bycatch of other species. 		
Technical merit	<ul style="list-style-type: none"> - Interesting project design - use of net sensors to determine haul length. - May be less effective on the square mesh codends, because the square mesh does not expand in the same way as diamond. - May have too much loss of marketable catch with 7.5" codends – will this be a wasted material cost? 		
GEARNET mission	<ul style="list-style-type: none"> - This project supports the GEARNET mission. - Worthwhile to try to promote the use of codend sensors. 		
Permits	<ul style="list-style-type: none"> - The Technology transfer focus means that this project would be a candidate for a Temporary Possession LOA or EFP for catch sampling. 		
Budget	<ul style="list-style-type: none"> - Low; participants propose to share the fuel monitor between vessels. - GEARNET TC suggestion: Consider increasing the budget to provide 2 additional fuel monitors (app. \$3,000 per vessel, installed) so that these do not need to be removed and re-installed. - Sea Grant will supply one cod end sensor. - GEARNET TC suggestion: Please provide more detail on the breakdown of proposed costs. For example, vessel costs (broken out as fuel, insurance, crew, other), equipment, project support costs (data collection, data analysis, project management/oversight), etc. 		
Other	<ul style="list-style-type: none"> - N/A 		
GEARNET TC Decision:	<ul style="list-style-type: none"> - This project will be funded, assuming the proposal is refined according to the suggestions of the GEARNET TC. 		

Sector:	Port Clyde Community Groundfish Sector	Proposed budget:	None provided
Proposal #:	1 of 2	Sector's Priority:	?
Title:	Testing the performance and viability of jigging machines as an alternative harvesting method for groundfish		

- Relevance
 - Groundfish – various
 - Commercial viability study
- Technical merit
 - GEARNET TC requires more information for this project.
 - Where would the study take place – is fish abundance sufficiently high for harvesting with jigging machines?
 - The idea is appealing, but the TC is concerned about the high quantity of machines; yet there is an argument for needing a certain critical mass of machines/bait to attract fish.
 - **GEARNET TC suggestion:** Consider using fewer vessels, to reduce the purchase requirements of jigging machines.
- GEARNET mission
 - This project supports the GEARNET mission.
- Permits
 - Too little information to be able to determine this; are there scientists involved, what data will be collected from trips?
- Budget
 - No budget information has been provided.
 - Installation of fuel monitors is ~\$3000/vessel.
 - Jigging machines cost several thousand \$; 16 machines would be very costly.
 - **GEARNET TC suggestion:** Please provide more detail on the breakdown of proposed costs. For example, vessel costs (broken out as fuel, insurance, crew, other), equipment, project support costs (data collection, data analysis, project management/oversight), etc.
- Other
 - How did this proposal rank in terms of priority?

GEARNET TC Decision:	- This project will not be funded.
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Sector:	Port Clyde Community Groundfish Sector	Proposed budget:	None provided
Proposal #:	2 of 2	Sector's Priority:	?
Title:	Evaluating gear selectivity and improving fuel efficiency of trawl vessels in the Port Clyde Sector		

Relevance	<ul style="list-style-type: none"> – Groundfish, gear selectivity and fuel efficiency.
Technical merit	<ul style="list-style-type: none"> – GEARNET TC suggestion: More information needed is needed for this project. – What gear effects are being assessed? Is this a continuation of a study using fine twine 7” diamond Sapphire mesh? – How many vessels would be involved? (4 nets requested, but 8 fuel monitors?).
GEARNET mission	<ul style="list-style-type: none"> – This project is relevant to the GEARNET mission. – Fuel efficiency, gear selectivity, technology transfer.
Permits	<ul style="list-style-type: none"> – Too little information to be able to determine this; are there scientists involved, what data will be collected from trips?
Budget	<ul style="list-style-type: none"> – No information provided. – Installation of fuel monitors is ~\$3000/vessel. – GEARNET TC suggestion: Please provide more detail on the breakdown of proposed costs. For example, vessel costs (broken out as fuel, insurance, crew, other), equipment, project support costs (data collection, data analysis, project management/oversight), etc.
Other	<ul style="list-style-type: none"> – How did this proposal rank in terms of priority?
GEARNET TC Decision:	<ul style="list-style-type: none"> – Maybe – the GEARNET TC requires further detail before being able to make a decision.

Sector:	Sustainable Harvest Sector	Proposed budget:	\$10,500
Proposal #:	1 of 1	Sector's Priority:	N/A
Title:	Feasibility study to document the catch rates of groundfish using a 'Flying Beam Trawl'		
Relevance	<ul style="list-style-type: none"> – Groundfish focused and gear innovation. 		
Technical merit	<ul style="list-style-type: none"> – Interesting idea, innovative – hard to picture, but GEARNET is committed to encouraging innovation. – There are objectives to monitor fuel efficiency. – GEARNET TC suggestion: The GEARNET TC needs to understand the gear better. Fishing gears have moved away from beam trawls for a reason, so can we be sure that this gear is definitely fishing off-bottom? Has this gear been shown to catch fish yet? 		
GEARNET mission	<ul style="list-style-type: none"> – This project supports the GEARNET mission with its objectives for reducing impact on non-target species and the sea-bed. – Adoption by industry of this gear may be unlikely, but the gear warrants further experimentation. 		
Permits	<ul style="list-style-type: none"> – Additional detail on the nature of the design is needed. Is it designed to fish more selectively and reduce bycatch and/or habitat impact? If so, this work may qualify for an LOA. 		
Budget	<ul style="list-style-type: none"> – Inexpensive, vessel owner has already invested a lot of his own funds into this project. – GEARNET TC suggestion: Please provide more detail on the breakdown of proposed costs. For example, vessel costs (broken out as fuel, insurance, crew, other), equipment, project support costs (data collection, data analysis, project management/oversight), etc. 		
Other	<ul style="list-style-type: none"> – Is Doug Mayo looking to patent this gear if it performs well? Are there any hurdles to him doing so if the gear was researched using federal funds? 		
GEARNET TC Decision:	<ul style="list-style-type: none"> – This project may be suitable for funding, though the GEARNET TC would like to see additional gear specification information/images in order to understand the design and catch prospects better. 		

Sector:	GB Fixed Gear Sector	Proposed budget:	\$18,384
Proposal #:	1 of 1	Sector's Priority:	1st
Title:	A feasibility study to assess the performance of seal deterrents in groundfish gillnet gear.		

- Relevance
- Focuses on groundfish and aims to reduce the loss/wastage of catch through seal predation.
 - This is the most pressing issue faced by groundfish fishermen in this sector (both gillnet and longline operators).
 - This is one of the highest research priorities identified under the Harbor Porpoise Take Reduction Plan. **GEARNET TC suggestion:** The PI should contact Amanda Johnson for additional details (978-281-9463, Amanda.johnson@noaa.gov).
- Technical merit
- How would you measure seal predation? Damaged fish in the net may not be sufficient.
 - Complex / tricky sampling design – would require a lot more attention, and funding to tackle this thoroughly?
- GEARNET mission
- This project supports the GEARNET mission.
- Permits
- Might require a Sector 10 permit (marine mammal focus); the applicant has already initiated discussions with the MMPA HQ and they should have a good feel for the permit requirements for this work; the RO contact would be Amanda Johnson (see above comment);
 - Possible candidate for an LOA (from a fishery perspective), but much greater detail is needed for this determination;
 - What is the time-frame required for obtaining a relevant permit?
 - You will likely need scientists on board - Will vessel insurance be an issue?
 - **GEARNET TC suggestion:** Need more documentation on what permitting is needed.
- Budget
- Inexpensive, but this is a pilot-scale project.
 - **GEARNET TC suggestion:** Please provide more detail on the breakdown of proposed costs. For example, vessel costs (broken out as fuel, insurance, crew, other), equipment, project support costs (data collection, data analysis, project management/oversight), etc.
- Other
- Overall, a study to investigate this fully would need to be much more expensive, and there may be too many permitting hurdles to overcome. It is recognized that seals are a big problem in this area.

GEARNET TC Decision:	- This project may be suitable for funding, but the GEARNET TC will need more information on permitting needs, in addition to experimental design.
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Sector:	Northeast Coastal Communities Sector	Proposed budget:	\$22,500
Proposal #:	1 of 1	Sector's Priority:	1st
Title:	Are Newfoundland fish pots and effective and economically viable approach to catch cod in New England?		

- Relevance
 - Cod and groundfish generally.
 - Low impact gear, high fish quality, alternative groundfish gear.
- Technical merit
 - Are there enough fish around to test this? Can you have a targeted fishery with a passive gear with such low fish abundance?
 - Gear design can/does work, but still not shown at commercial levels in New England to date.
 - No detail on bait consideration.
 - **GEARNET TC suggestion:** Recommend using the smaller Norwegian pots; much more manageable on small vessels; mast and boom would not be needed for these pots because they're small enough.
 - **GEARNET TC suggestion:** Until we know that there are cod to catch in DE Maine, the pot design / bait studies need to be undertaken more thoroughly in MA/NH/Southern ME where fish abundance is more predictable; once refined, then test in DE Maine.
- GEARNET mission
 - This project supports the GEARNET mission.
- Permits
 - EFP already requested.
- Budget
 - Reasonable.
 - **GEARNET TC suggestion:** Please provide more detail on the breakdown of proposed costs. For example, vessel costs (broken out as fuel, insurance, crew, other), equipment, project support costs (data collection, data analysis, project management/oversight), etc.
- Other
 - Mike Pol has expertise in developing cod pots; he has communicated with Aaron Dority (Sector Manager) and has expressed interest in collaborating if this project goes ahead.

GEARNET TC Decision:	- This project may be suitable for funding, providing that it is refined according to the suggestions of the GEARNET TC.
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3) Summary of project funding decisions

Following is a summary of which projects the GEARNET Technical Committee decided should be funded. In all cases, a “yes” is dependent on project refinements in response to the GEARNET Technical Committee suggestions. [This has been updated based on a review of the decisions during a GEARNET PI conference call, 03/29/2011].

Sector	# proposals submitted	Proposal 1	Proposal 2	Proposal 3
Common Pool	1	Yes	-	-
NE Fishery Sector 2	2	Yes	No	-
NE Fishery Sector 3	2	Yes	Yes	-
NE Fishery Sector 5	2	Yes (one of these, depending on the outcome of the RSC meeting on April 14 th , 2011)		-
NE Fishery Sector 6	1	Yes	-	-
NE Fishery Sector 7	1	Yes	-	-
NE Fishery Sector 8	1	Yes	-	-
NE Fishery Sector 9	3	Merge w/ #3	No	Merge w/ #1
NE Fishery Sector 10	2	Yes	Yes	
NE Fishery Sector 11	1	Yes	-	-
NE Fishery Sector 12	1	Yes	-	-
NE Fishery Sector 13	-	-	-	-
Port Clyde Community Sector	2	No	Yes	-
Tri-State Sector	-	-	-	-
NE Coastal Community Sector	1	Yes	-	-
Sustainable Harvest Sector	1	Probably	-	-
GB Cod Fixed Gear Sector	1	Probably	-	-

4) Proposed time-frame of projects

Following is a summary when each project should happen to meet project objectives.

Sector	Proposal 1	Proposal 2	Proposal 3
Common Pool	May	-	-
NE Fishery Sector 2	Fall/Winter	April	-
NE Fishery Sector 3	Mar, Apr, May	Nov-Dec	-
NE Fishery Sector 5	Late Spr/early Sum	N/A	-
NE Fishery Sector 6	Mar/Apr		-
NE Fishery Sector 7	May-Jul		-
NE Fishery Sector 8	May-Jul		-
NE Fishery Sector 9	Spr/Sum is best	preferably May 2011	Spr/Sum is best
NE Fishery Sector 10	Year-round	Year-round	-
NE Fishery Sector 11	May-Oct	-	-
NE Fishery Sector 12	May-Oct	-	-
Port Clyde Community Sector	May-Nov	May-Nov	-
NE Coastal Community Sector	May/June & Nov-Apr	-	-
Sustainable Harvest Sector	Spr/Sum	-	-
GB Cod Fixed Gear Sector	May/June & Nov-Apr	-	-

5) Additional discussion points

During the course of the day a number of issues became evident and these are summarized following. It is likely that each will require further research/discussion as we move forwards with funding these projects.

- **Vessel day rates:** We will likely need to develop some form of policy that provides guidelines on how vessel day rates can be calculated; this policy might be derived by consulting policies used by other funding bodies (e.g. the NEC and SNECRI) and contracting organizations (e.g. MA DMF & GMRI). The cost of working on vessels in these 22 proposals varied greatly, from \$0 (fuel only) to \$6,000 day. This is in part a factor of vessel size, but also attitude. We have been careful to try to encourage industry to be competitive when pricing the cost of the projects they have proposed, and this is reflected in some proposals more than others. While not wanting to make the projects prohibitively costly to each sector, we will need to be careful in making sure the funds distributed are both justified (e.g. vessel size, distance from port, disturbance to commercial fishing activity, etc.) and equitable; this may require negotiation in some cases, or potentially raising the funds allocated to those sectors which have requested very little in terms of compensation for vessel time.
- **Sale of catch:** A number of projects propose to sell the catch when working under an LOA; the proceeds are then proposed for different purposes e.g. the vessel owner, or purchasing additional gear for other sector members. In some cases the sale of catch is in addition to a vessel day rate. This is a matter that requires additional discussion. Regardless of the utilization of these funds, NOAA representatives reiterated that any project that intends to sell catch caught on a research permit (i.e. either form of LOA) will be required to provide detailed accounting reports on all sales. It is also noted that contracting agencies (e.g. MA DMF & GMRI) may also have requirements, restrictions or preferences regarding the sale of catch.
- **Vessel insurance needs:** For all projects that require either a LOA, or a Temporary Possession LOA, it will be necessary to have a scientist on board. As such, all vessels involved in these projects will need to have vessel insurance. Furthermore, the CEMFIN contract signed with DMF and the GEARNET contract signed with GMRI both have a clause that requires “(e) *Vessel liability. When contract performance involves use of vessels, the Contractor shall provide, vessel collision liability and protection and indemnity liability insurance as determined by the Government.*”
- **What qualifies as a scientist?** For some projects, it was intended that fishermen be trained to collect data (i.e. to serve as a technician). Will these trained individuals qualify as ‘scientific’ personnel (for the purposes of permits)? Would they need to be contracted by e.g. GMRI/MA DMF in order to qualify? In response to this discussion, the following regulatory language (50 cfr648.12) has been provided by Ryan Silva to help clarify:
 - (2) *Eligibility criteria.* Only personnel from the following bodies are eligible for a temporary possession LOA: Foreign government agency; U.S. Government agency; U.S. state or territorial agency; university (or other educational institution accredited by a recognized national or international accreditation body); international treaty organization; or scientific institution.
 - 3) *Application requirements.* To obtain a temporary possession LOA, the name(s) and affiliation of the fishery research technicians will collect the data; a statement demonstrating the qualifications of the research technician that will collect the data.....”
- **Which GEARNET representatives will work on which projects?** Now that the first collection of proposals have been reviewed, and we have a better idea of what projects will be offered funding, we will need to re-visit *who* will execute the projects with which sector(s)? While respecting the fact that working relationships have in some cases already been initiated through the scoping meetings with each sector, if necessary, we may need to redistribute the funded projects among GEARNET

researchers, keeping in mind different participants' work load, geographic location and research expertise.

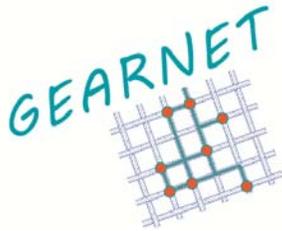
- **Quality of projects and utility of data:** Before beginning to review the projects, there was some discussion regarding the intended utility of the findings from these small, pilot scale projects. Will they be peer-reviewed? Will there be sufficient data for these studies to help change regulations? And in a timely manner? It was suggested that at a minimum, each project funded by GEARNET will undergo internal peer-review by other GEARNET participants, but that getting the projects peer-reviewed in a more formal way by e.g. NOAA, or the Research Steering Committee would likely not happen within an acceptably prompt timeframe since demands for reviewing projects/proposals is currently so high. It was also suggested that five days of vessel time does not usually provide data with statistical significance (a minimum of 16 days are typically planned for trawl comparative fishing trials).
- **Tracking gear types on VTRs:** The Sustainable Fisheries Division is working on developing additional codes for use during commercial fishing trips, in order to improve our ability to monitor the effectiveness of new, experimental fishing gear types. This represents an effort to monitor how catch compares with non-experimental gear; with the aim of letting the data ultimately inform management.

6) Wrap-up/next steps/actions

Following are specific actions that need to be addressed in the immediate future.

Who	Action
Shelly Tallack	– Coordinate follow-up meetings with the PI group.
Shelly Tallack	– Communicate project review decisions to each sector/project lead by March 31 st .
Project leads	– Provide feedback from the GEARNET TC to each sector you are working with and begin refining the project proposals as needed; these will then be reviewed again by the GEARNET PI group.
Project leads	– Permit applications for GEARNET projects; those requiring EFPs will need to get their applications in as soon as possible to allow for the 60-day target turnaround time.
GEARNET PI group	– Review project refinements
GEARNET PI group	– Review the combined budget.
GEARNET PI group	– Outline the research schedule and confirm who will be working on which projects.
GEARNET PI group	– Review equipment, budgetary and purchase needs.

ANNEX 2 – Agenda and summary from the GEARNET PI group meeting, April 11, 2011.



Northeast Groundfish

Gear Conservation Engineering & Demonstration Network

GEARNET PI Group Meeting - SUMMARY

Purpose: Review vessel insurance needs, project budgets, permit applications and research schedule

Date: Tuesday April 12th, 10:00 am – 4:00 pm

Attendees (8): Shelly Tallack (GMRI), Steve Eayrs (GMRI), Mike Pol (MA DMF), Pingguo He (SMASST), Mike Walsh (FV Atlantic Prince, F/V Guardian), John Hoey (NOAA), Carolyn Woodhead (NOAA) and Earl Meredith (NOAA).

7) Vessel insurance

- Mike Walsh: In his policies, “hull” insurance covers “collision”; while P&I insurance covers the crew; **we need to check** that this is the case for all “hull” insurance, in order to be sure that it complies with the NOAA contract requirement for “(e) Vessel liability. When contract performance involves use of vessels, the Contractor shall provide, vessel collision liability and protection and indemnity liability insurance as determined by the Government”.

Feedback from Carolyn Woodhead post meeting:

- In most cases, ‘vessel collision liability’ is included under the P & I (Protection and Indemnity) portion of coverage. This would protect personnel on either vessel involved in the collision, but not necessarily cover the damage to either hull. It is different than ‘hull insurance,’ which may include collision insurance that would cover hull damage.
- Therefore, under clause (e) above, vessel collision liability is likely included in the P&I.
- This clause also indicates that the level of coverage is ‘as determined by the Government’ : For Contractors and **Paid** Subcontractors – Other Federal contract insurance clauses require liability insurance (P&I) of \$500,000 per occurrence. The Government has determined that this \$500,000 minimum is adequate for smaller inshore vessels. For larger, offshore vessels, the Government has determined that a minimum P & I of \$1.0 Million per occurrence is required. This P & I would be shared by all onboard.
- NEFSC policy requires additional Excess P & I of \$1 Million per NMFS scientist (not shared by crew) for the period of the contract or sub-contract and would encourage other organizations providing scientific personnel to do the same.

- What about vessels on which we are not putting a scientific person? Do we still require them to have insurance?

Feedback from Carolyn Woodhead post meeting:

- If we are paying them by contract, the insurance clauses will apply. See above and below.

- *Earl Meredith:* Any sub-contracted vessels will probably fall under the same requirements as the contractor (i.e. GMRI/MA DMF), regardless of whether they have scientists on board – **this needs to be checked and has been added to the Actions table (p. 45).**

Feedback from Carolyn Woodhead post meeting:

- If we intend to pay them by contract, the insurance clauses will flow for Contractor to Sub-contractor, even if we have no scientists onboard. If an incident were to happen while conducting paid work, the Primary Contractor (GMRI) and Government could be held liable.

- *Pingguo He:* If there is a vessel day rate: SMAST requires insurance if the University is to pay the vessel (regardless of whether a scientist is on board). The insurance policy must have a minimum of \$1 million coverage.
- What if there is no vessel day rate (i.e. activity is considered normal fishing and the catch is being sold)? - **this has been added to the Actions table (p. 45), we need clarification on this from NOAA.**

Feedback from Carolyn Woodhead post meeting:

- If the vessel is not being paid by contract, the insurance clauses do not apply. However, if the Primary Contractor will be supplying equipment, workplans, etc., an industry expert advises establishing a 'hold harmless' document in which the vessel participants agree to hold the Primary Contractor and the Government harmless from any incident said to be as a result of the specified protocols/equipment. Question has been raised about supplying gear to the sector to distribute to boats. Same advice goes to the sector: if sector is not paying the vessel by contract, no insurance is required. If sector is paying vessels by contract, the liability would be transferred to sector.

- *Mike Walsh* suggests talking to an attorney. Earl Meredith indicated that we should talk to Dennis Nixon (URI, Admiralty Lawyer) & Brendon (Contracting Officer at NOAA) – **this needs to be checked and has been added to the Actions table (p. 45).**

Feedback from Carolyn Woodhead post meeting:

- An industry expert and Dennis Nixon have been consulted thus far. Brendon Johnson should be consulted on any changes necessary to contract clauses, etc., but generally defers to the NEFSC on requirements for marine insurance.

- Permits - LOAs and Temp LOAs will require scientist on board, therefore all these vessels will need insurance; we may need to tackle this on a project-by-project basis when it comes to EFPs, some will require scientists on board (e.g. Sector III) and some may not.

Feedback from Carolyn Woodhead post meeting:

- Temporary Letters of Authorization to sample bycatch species instead of immediately discarding them may not require a scientist on board. This should be double-checked with Ryan.

- It is possible that insurance needs may mean that some projects don't happen, if vessels aren't willing to obtain insurance; we need clarification on whether if we're just providing gear (no vessel rate & no scientist on board) do we need insurance? – **this has been added to the Actions table (p. 45).**

Feedback from Carolyn Woodhead post meeting:

- See comment on no day rate above. If nothing is paid by contract (day rate, fuel, etc), insurance clauses do not apply. However, if providing gear/equipment, a 'hold harmless' document is recommended by an industry expert.

- *Mike Walsh:* The P&I insurance >\$1M is actually not that much more expensive than getting \$1M; Mike does \$5M P&I for all crew. Vessels that don't have insurance may be high risk.

Feedback from Carolyn Woodhead post meeting:

- CW agrees with Mike Walsh. Increasing the coverage limit, especially for a limited duration, is not the bulk of the expense for insurance. It can be quite reasonable. #2 above is likely fairly expensive, and probably not feasible for a project to cover the costs of, but could be investigated, especially if cost-sharing in conjunction with a larger policy, such as a sector policy? Not sure if anyone is doing this yet. Individual vessel safety considerations should also always prevail. Obtaining P & I for the entire crew could also be investigated for cost estimates as per Shelly's comment, but could be too costly. If P&I exists, but at a lower level than the NEFSC guidelines, GEARNET may be able to increase the coverage level and add coverage for the scientists for the duration of the study. These costs could be reasonable. Some underwriters may also be willing to develop P&I policies on a project basis, which would cover X number of people for Y duration and Z coverage. A number of Universities have explored this option (UNH, possibly Cornell), not sure if it has been applied to crew as well, but could be explored. Follow up with Fred Mattera and other contacts CW can provide. This would not likely include hull coverage, or 'adequate coverage' when no current insurance exists, but could help lower overall costs on a per project basis, especially for scientific staff.

- In light of this, offering that GEARNET covers vessel insurance costs would not be a good idea; (1) the vessel itself may be in less good repair, and (2) securing insurance will require a vessel survey, inspections, etc. Thus, this would quickly become complex and expensive. **GEARNET should only offer to pay for the P&I rider to add scientists to an existing vessel insurance policy**, but the vessel owner must be responsible for obtaining their own hull and P&I insurance.
- All participating vessels must have a valid Coast Guard certificate.

- Additional Safety Concerns: All vessels should have adequate and current safety gears, life rafts, EPIRBS, etc., and agree to conduct required safety drills with all new participants. Commercial Fisheries Research Foundation and probably Northeast Consortium adhere to this and has required paperwork. CW will distribute.

8) Budget template generally / Vessel rates and Sale of Catch

Please see the spreadsheet attached – this is a revised template budget intended for PI use when refining the GEARNET proposals with each sector; this will enable better clarification on project costs, and also better management of combined CEMFIN/GEARNET resources. Following are some specific points:

Fuel reimbursement: The budget will provide an estimate of fuel costs; actual reimbursements for fuel will be based on an invoice produced by the vessel contracted, to enable us to reimburse according to the actual price of fuel at the time of undertaking the project.

Vessel / Base Rate and Sale of Catch: There will be two options for reimbursing vessels and these are permit dependent. When fishing under an LOA, the vessel will not need to use vessel allocation or Days at Sea (Common Pool); when fishing under an EFP, the vessel will need to use vessel allocation or DAS (Common Pool). [**Note:** Shelly communicated with Ryan Silva (NOAA, Sustainable Fisheries Division) after this meeting to ascertain whether a vessel fishing under an EFP can *choose* whether or not to utilize the vessel’s allocation or research allocation. Ryan’s response was as follows: “If the vessel is operating under an EFP, the catch counts against the commercial quota. Basically, we consider these vessels to be operating in the commercial fishery.”]

The table below describes what reimbursements can be covered, depending on the type of permit and intentions to sell the catch.

Fishing research allocation (LOA)		Fishing vessel allocation (EFP, Temporary Possession LOA, or no permit required)
GEARNET will reimburse*	Equipment costs	GEARNET will reimburse*
GEARNET will reimburse*	Scientist P&I insurance	GEARNET will reimburse*
GEARNET will reimburse*	Fuel compensation	None
A guaranteed base rate will be paid, based on vessel operating costs	Base rate per day at sea	None, though on a project-by-project basis, we may provide a labor/sampling stipend.
The proceeds will be shared between the vessel and GEARNET, on a sliding scale as outlined below	Sale of catch	100% goes to the vessel

LOA Example: assumes 5 vessel days, at a base rate of \$3,000/day	Per day	Project total
Scientist P&I Insurance Rider	\$50	\$250
Fuel cost estimate	\$1,500	\$7,500
Guaranteed base rate	\$3,000	\$15,000
Catch sales: 50% to vessel : 50% to science, Capped at 50% of base rate:	\$1,500	\$7,500
Catch sales: 30% to vessel : 70% to science	No cap	No cap

9) Permit applications

- We will need to move forwards promptly with permit applications, particular for spring/summer projects.
- Each project proposal and application needs to include a statement along the lines of ***“Due to limited duration and the location sampled, the project is not likely to have an adverse effect on protected species, including: sea turtle, sturgeon, marine mammals”***.

10) Flume tank funds & planning

- *Pingguo He*: NEC is interested in funding the workshop, but GEARNET could piggyback by funding one or two models relevant to the specific sectors; for example, the New Bedford sectors were interested in obtaining better knowledge for adjusting and rigging the separator trawl for haddock.
- Tor Bendiksen may have additional models (IBS trawl? 5-point trawl?) to test in the flume tank, though it's not clear whether these are working testable models or purely visualization models.
- *Steve Eayrs*: To keep the costs down, we could look into individuals covering their own travel, or some portion of their travel?
- We should look into the options for broadcasting specific presentations/specific segments of the workshop through something like Skype – this could open up the flume-tank learning experience for e.g. fishery managers, sector managers, etc. without taking up valuable places on the course in Newfoundland.
- *Shelly Tallack*: We could also look into additional funding pots if we think it is needed? There may be an option at GMRI if this is something of interest?
- *John Hoey*: Think about pushing this out for a few months, til maybe early October?

11) Research schedule / PI Workload /Project distribution

The PI group revisited the research schedule (as currently anticipated) to make sure that we have sufficient personnel resources between MA DMF, SMAST and GMRI to cover the workload. John Hoey also offered additional personnel at NOAA in the form of technician time if needed. Specific comments related to each GEARNET proposal are listed below:

Sector	Who	Comments
Common Pool	Shelly	Shelly will be working on this project and will be applying for an LOA as soon as possible, in the anticipation of a May 2011 start-date.
NE Fishery Sector 2	Steve	It should be possible to carry out this project in the fall of 2011.
NE Fishery Sector 3	Pingguo	Pingguo, plus students/technicians; realistically this will not kick in until 2012 in order to source the gillnets; fall is probably OK for Pollock rod and reel.
NE Fishery Sector 5	Shelly /Jon Knight/Laura Skrobe	We need to wait until after the RSC meeting on April 14th; John & Carolyn will talk to Laura Skrobe to find out her availability for taking the lead on this (with Jon Knight).
NE Fishery Sector 6	Mike P & W.	Mike and Mike will update their schedule after revising the proposal.
NE Fishery Sector 7	Pingguo	If we are able to get the LOA/EFP in time for June/July, this will go ahead in 2011.
NE Fishery Sector 8	Pingguo	If we are able to get the LOA/EFP in time for June/July, this will go ahead in 2011.
NE Fishery Sector 9	Pingguo	Pingguo needs to check skipper availability.
NE Fishery Sector 10	Mike P.	Mostly gear transfer, David Chosid & Mike.
NE Fishery Sector 11	Ken La Valley	Ken La Valley and Erik Chapman have this covered, and the start date is flexible, any time after May (through October).
NE Fishery Sector 12	Erik Chapman	Ken La Valley and Erik Chapman have this covered, and the start date is flexible, any time after May (through October).
Port Clyde Community Sector	Steve	Needs little technician time; it's mostly a gear transfer project – personnel resources are fine.
NE Coastal Community Sector	Steve/Mike P.	Mike, Steve & John will schedule a call with Aaron Dority, to decide who will take on what, and refine the project. [Steve has communicated with Aaron since this meeting and the study will likely now occur after the summer.]
Sustainable Harvest Sector	Shelly/Steve	We will be refining the proposal, and if we then receive a green light from the PI group; Shelly, Steve and GMRI interns/technicians will cover this project.
GB Cod Fixed Gear Sector	Shelly	Will likely be pushed to 2012, due to the amount of paperwork.

12) Wrap-up / next steps

Following are specific actions that need to be addressed in the immediate future:

Who	Action
Outstanding Actions from March 22nd GEARNET TC workshop to review proposals	
Project leads	– Provide feedback from the GEARNET TC to each sector you are working with and begin refining the project proposals as needed; these will then be reviewed again by the GEARNET PI group.
Project leads	– Permit applications for GEARNET projects; those requiring EFPs will need to get their applications in as soon as possible to allow for the 60-day target turnaround time.
GEARNET PI group	– Review equipment, budgetary and purchase needs.
New items from today's meeting:	
Shelly Tallack	– Refine the GEARNET budget template again (included with this report); this should be used by GEARNET PIs when refining proposals with each sector they are working with.
GEARNET PI group	– Review the combined budget, once refined projects and refined project budgets have been submitted.
Shelly Tallack to check with Mike Pol.	– Notus headrope sensor – can we confirm whether there is a Notus headrope sensor available to the group that could be used for 1-2 days for the Common Pool project (topless flounder net assessment)?
John Hoey, Carolyn Woodhead and/or Earl Meredith.	– Vessel insurance questions: <ul style="list-style-type: none"> ~ Check with Kate Burns for vessel insurance documents. See also information from Peg Parker's group. ~ It's possible that insurance needs may mean that some projects don't happen, if vessels aren't willing to obtain insurance; need clarification on whether if we're just providing gear (no vessel rate & no scientist on board) do we need insurance? ~ Any sub-contracted vessels will probably fall under the same requirements as the contractor (i.e. GMRI/MA DMF), regardless of whether they have scientists on board – check! ~ Do we still require insurance even if there is no vessel day rate (i.e. normal fishing and selling the catch)? ~ Talk to Dennis Nixon (URI, Admiralty Lawyer) & Brendon (Contracting Officer at NOAA).
John Hoey, Carolyn Woodhead	– After learning the outcome of the mid-Eliminator trawl review at the RSC meeting on April 14 th , John & Carolyn will talk to Laura Skrobe to find out her availability for taking the lead on the work with NEFS Sector V (with Jon Knight). John Hoey and Laura are better situated geographically to work with NEFS V, and Laura also has the history of working on this gear.
For future discussion	– The need for standardization of measuring /characterizing nets.

ANNEX 3 – Poster and handout prepared for the Fishermen’s Forum, March 2011.

GEARNET

Northeast Groundfish Gear Conservation Engineering and Demonstration Network



Shelly Tallack (GMRI) – Mike Pol (MA DMF) – Steve Eays (GMRI) – Pingguo He (SMAST) – Jon Knight (Superior Trawl) – Mike Walsh (Industry)



Background

The Northeast Groundfish Gear Conservation Engineering and Demonstration Network (GEARNET) was established in September 2010, to tackle critical gear-related research questions in the groundfish fishery, within the context of the catch share management system.

Funded by NOAA's Northeast Fisheries Science Center Cooperative Research Program, GEARNET is one of seven new network-oriented projects to address different regional fisheries.

Mission

GEARNET's mission is to help Northeast 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 for future years.

'Bottom-up' approach and objectives

Within the 'sectors' management framework, GEARNET is taking a 'bottom-up' approach to capture and document urgent fisheries research needs, as perceived by the Northeast groundfish fishermen. Our objectives are as follows:

- Hold scoping meetings with each groundfish sector and members of the common pool, to identify and prioritize the most urgent gear research needs as perceived by fishermen. Then, work with interested fishermen to develop pilot-scale proposals for work that addresses these needs.
- Establish a multi-institutional GEARNET Technical Committee to:
 - Review the proposals submitted to GEARNET and develop a research schedule to address these needs;
 - Participate in proof-of-concept gear conservation research and/or demonstration projects, with each group of fishermen;
 - Review, analyze and report on project outcomes upon completion of the sea trials.
- Share research findings throughout the region and help fishermen adopt gear designs that have demonstrated their potential to:
 - Reduce the discards of non-target species; and/or
 - Improve the energy efficiency of fishing activities; and/or
 - Minimize the environmental impact of fishing activities.



Figure 1: The process GEARNET is applying to develop, fund and undertake gear conservation research and demonstration projects.

Types of gear research addressed

GEARNET is open to all types of gear that are designed to target groundfish, including trawl, gillnet and hook gear. Following are some examples of the types of gear modifications that could be addressed through GEARNET:

- Modifications to mesh size, shape and angle to improve the selectivity of the net, helping fishermen avoid the species they are not permitted to catch, while catching good quantities of their target species.
- Demonstration of different net measurement systems that enable fishermen to detect when their codend is full, to avoid excessive hauls of fish for which they have no allocation.
- Experimentation with net designs aimed at increasing catch control and reducing discards, for example, the separator trawl, the topless trawl, etc.
- Experimentation with devices aimed at deterring pest species (e.g. seals, dogfish, etc.).
- Monitor and assess fuel efficiency and energy use on fishing vessels, with the aim of lowering operating costs.

GEARNET as a network

Project participants

GEARNET is being coordinated by a group of six partners (*lead PIs) who represent both science and industry organizations:

Shelly Tallack*	Gulf of Maine Research Institute
Mike Pol*	MA Division of Marine Fisheries
Steve Eays	Gulf of Maine Research Institute
Pingguo He	School for Marine Science and Technology, UMass Dartmouth
Jon Knight	Superior Trawl
Mike Walsh	Commercial groundfish fisherman

However, this new network approach to fisheries research is intended to be organic by design; thus, as the project gains momentum, the number, variety and skill set of GEARNET collaborators will grow. For a full list of project participants, please visit our website: www.gearnet.org/participants.html.

Contact and further information

GEARNET uses a variety of methods to communicate about the project, but our website (www.gearnet.org) is the primary source for project details, progress, findings and contact information.



Figure 2: The GEARNET website serves as the primary method for giving fishermen and other participants access to project information.

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Please visit our Research website at:

www.gmri.org/science