

## Scallop Advisory Council Meeting

June 29, 2016 in Augusta

**DMR staff:** Trisha Cheney, Patrick Keliher, Rene Cloutier, Deirdre Gilbert, Kevin Kelly, Joe Wodjenski, Mike Kersula, Kathleen Reardon and Carl Wilson.

**SAC members:** James Wotton, Tad Miller, Alex Todd, George Freeman, Curtis Haycock, Justin Boyce, Paul Cox, and Ray Swenton.

SAC members not present: Randy Ramsdell, Carla Guenther, Erin Owen, and Marcus Jones.

**Public:** Togue Brawn, Travis Fogg, Doug McLennan, Pete Gasperini, Mike Thalhaser, Kyle Moulton, James West, Mike Murphy II, Ben Crocker Jr., Dana Morse

**Meeting commenced at 6:00pm.**

### Introductions

Pat Keliher opened the meeting by explaining that the goal would be to discuss potential options for changes to the management framework for Zone 1 next season. Also, swipe card implementation for next year has been suspended for now and the Department will only be moving forward with the urchin fishery for next season. Finally, he encouraged all participants to be constructive in their comments and allow for conversations to be first held at the table, then public can provide input and participate in the conversation.

### Approval of Minutes (03/31/2016)

Motioned by J. Boyce, seconded by G. Freeman. **VOTE: Unanimous.**

Trish Cheney made a note that minutes will no longer be transcripts of the meetings discussions, but rather summaries from now on.

### Northern Gulf of Maine [NGOM; Appendix A for slides]

Togue Brawn provided an update on the initiative to address management issues in the Federal NGOM scallop fishery. Currently the area is managed by a Total Allowable Catch (TAC) of 70,000 lbs., which was exceeded last year and the overage deducted from this year's allocation. However, due to increased fishing effort by the General Category (GC; IFQ & NGOM) vessels, the TAC was met in May this year and closed completely very early. In addition, Limited Access (LA; DAS) vessels were fishing in the area for the first time and at this point it is unknown how much was landed by this segment of the fleet whose landings do not count against the TAC, however when it is met by the General Category vessels and closed early all vessels are affected, including LA vessels. At the April New England Fishery Management Council (NEFMC) meeting in Connecticut, the council voted to prioritize one measure associated with shucking and the demarcation line, however, the larger issues remain. It is hoped that if Maine fishermen will continue to participate and make their voices heard, that the issue will be prioritized this fall at the September meeting and the inconsistencies, such as those regarding the TAC, will be formally addressed.

Mike Kersula provided a brief update on the NGOM survey as it was recently completed utilizing Ben Crocker Jr.'s vessel as the survey platform.

### DMR Zone 2 Spring Survey [Appendix B for slides]

Kevin Kelly provided an overview of the spring survey, which was undertaken in late April to early May in the seven rotational areas which will be open for fishing next season (Second rotation; colored in yellow in all diagrams/charts). This will be the first time this rotation will be open on its own as the last time it was open 2 years ago (2013-14 season) it was open along with the third (pink) rotation as the program was phased in for the first two years with 2/3 of the rotations open. The survey methodology was changed this year to incorporate harvester landings locations from logbook data indicating high and low density areas along with the historical survey stations to broaden the coverage and ensure that all currently fished areas are included, resulting in a random systematic survey of each zone. Each rotation has approximately 40 tows each.

For The Cutler Shore rotation, 38 stations were surveyed and a total of 2,229 scallops measured. There were a high abundance of harvestable scallops in this rotation along with many just below the legal size and will have time to recruit up to the fishery this fall. In addition, seed scallops were present indicating strong recruitment occurring in this area. In the Chandler Bay/Head Harbor Island rotation, 56 stations were surveyed and a total of 2,184 scallops were observed. While there were a lot of very large scallops, there were not along of sublegal or seed scallops, which is a poor recruitment signal. The Narraguagus/Pigeon Hill rotation had a total of 23 stations and 396 scallops were observed. While overall density was low, there is a small recruitment pulse of see scallops coming up which may be available in future seasons/rotations.

Kyle Moulton asked if the information was corrected for selectivity for which Kevin responded no and that the information is just plotted out as observed. It may be possible that there are more smaller scallops there than were observed, it is just that the drag may not be fully selecting for them. However, Kevin noted that if scallops are there they do observe them in the tows

For the Cranberry Isle Area 14 tows were conducted and 40 scallops observed which is extremely low. In the Lower Blue Hill Bay/Jericho Bay rotation 40 stations were surveyed and 1,133 scallops observed. There is a fairly larger abundance of large harvestable scallops, however, not a strong recruitment signal and most scallops are in the 4.5-5" range.

Pete Gasperini asked what months do the scallops migrate. He said that he will go to a spot where they are all 5' scallops where he fishes. After he has harvested them, new ones have migrated in and repopulated the area by the time the next season opens again. Kevin replied that while scallops are not know to undertake migrations, however, he has heard of it anecdotally. He also noted that scallops do tend to "bunch up" when they are spawning.

The East Isle Au Haut Bay rotation had 40 stations and only 80 scallops were observed, which were primarily very large animals. Justin Boyce noted that the survey last year said that there was nothing in the Lower Jericho Bay rotation, however, he did very well. He said the last time that the East Isle Au Haut area was open, it was pretty good fishing. Carl Wilson asked if there had been any tows on the south side of Isle Au Haut for which Mike Kersula replied that there was no logbook data or past survey stations that indicated that scallops were in fact there, so they did not survey that area.

Finally, in the Mid Penobscot Bay rotation above North Haven a total of 20 stations were surveyed and 244 scallops observed, with low overall abundance for all sizes of scallops. When comparing the survey means of harvestable scallop densities for all areas, the Lower Blue Hill Bay/Jericho Bay area had the highest density of the seven areas, which is driven by the high concentration of larger scallops. This could change over the summer as scallops just under the measure recruit into the fishery in other areas.

Pete Gasperini expressed the need to protect areas with low scallop densities. In December last season in Vinalhaven was a disaster with lobster gear molested, lobsters dead, impact to bottom habitat and then the area closed 6 weeks into the season. He believes that it shouldn't have to come down to emergency closures. Kevin explained that the Department is moving towards utilizing in-season surveys to monitor the resource and do comparative work in areas, which was done in Vinalhaven this past year. Pete explained that everyone wants to see the fishery stay open throughout the season. He is not mobile and wants stability. 6 fishermen lost gear in December. He also feels that more scallops would be observed if a dive survey was undertaken. Trisha explained that 2 years ago when the rotations moved to 1/3 open that the Department recommended a cut to the season for Zone 2, however, industry and the SAC at the time voted to retain the 70 days and directed the Department to front load the season with more opportunity that the resource could sustain and then close areas based on fishing effort/behavior.

### **Zone 1 Meeting Update**

Trish presented recent landings trends in Zone 1 based on harvester logbooks and Vessel Trip Report (VTR) data [Appendix C for slides] from the 2008-09 season through the 2014-15 season; the most recent 2015-16 data is not yet available. Except for the 08-09 season, which had 29,484 lbs. landed in Zone 1, the following three season maintained landings at ~50,000 lbs.; this was during the three season when the closed areas were in place. Following the closed areas' reopening as Limited Access Area, landings increase significantly to 85,015 lbs. in the 11-12 season and 105,625 lbs. in 13-14 – almost double from the previous years. However, there was a sharp decline in 14-15 down to previous levels with 57,580 lbs. being caught. This drop in landings as well as results from the 2015 spring survey spurred the conversation last year around potential changes and a 10 day season reduction was adopted with a number of closures across the Zone. When looking at the number of active participants, there has been a steady increase from 58 active harvesters in 08-09 to 97 in 13-14, then dropping back down slightly to 82 in 14-16. Also, there are at least 261 unique vessels that have participated in the fishery at least once over the whole time period in Zone 1. Many of the

newly activated effort has been from displaced shrimp fishermen seeking work for their vessels and crew in the winter compounded with increased biomass available from the closure and the historically high price for scallops in recent years that have enticed previously latent fishermen to reactivate. Finally, when looking at total number of pounds landed per harvester over the period, it appears to fluctuate, with a low of 508 lbs. in the 08-09 season, a high of 1,089 lbs. landed in the 13-14 season followed by a drop to 708 lbs. in the most recent 14-15 season. Overall, the data reflects what the majority of industry members have been describing regarding the resource – the resource recovered after the three year closures and biomass increased, however, due to an influx of additional harvesters, the resource has again been depleted and is back to where it was prior to the closures. However, one harvester contributed the recent declines in the 14-15 season to weather as it was horrible with little to no fishing happening in some ports in January and February, as some ports were completely iced in for weeks.

When looking at the landings broken down by county, the majority of landings are coming from Cumberland County (Casco Bay), Lincoln County (Damariscotta & Sheepscot Rivers) and Knox (Muscle Ridge). When the data is broken down between the drag and dive fleets, you can see the same trends as the overall landings, with the highest landings for both in 12-13 and 13-14 seasons. Finally, then broken down by percentage, draggers overall land approximately 90% of the catch, however in 08-09 divers landed 25% and in 11-12 they landed 17% of the catch, then declining to 10% more recently as the majority of reactivated harvesters were draggers who caught the bulk of the landings. Jim Wotton asked if at a future meeting the information could be broken down by days fished (i.e. 10, 20 or 70).

Trish then provided the highlights of the presentation given at last week's Zone 1 meeting by Phoebe Jekielek's from the Hurricane Island Center for Science & Leadership (HICSL) on the Collaborative Lower Muscle Ridge Closed Area Scallop Research Project [**Appendix D for slides**]. The project was initiated in June 2013 by scallop fishermen from the Muscle Ridge area. The project objectives included determining the effect of the closed area on the resident scallop population and also to develop a replicable collaborative approach and methods that meaningfully engage fishermen. Originally it was going to be closed for 3 years, but at recent meeting and participants support the continuation of the closure for the foreseeable future. Dive and drop camera surveys have been undertaken to assess scallop abundance and density. Tissue and shell samples were collected for growth rates and genetic analysis. To understand basic larval dynamic, the team deployed lines spat bags inside and outside the closure.

Observations indicated increases in juveniles inside and outside of the closed area which is positive and there was an increase in the biomass estimate for the entire area; however, these results were not statically significant. This suggests that the population may be rebuilding and recruitment is happening – adult presence is increasing in addition to juveniles. Next steps include requesting the Stokesbury crew for shell height distribution and density estimates by area, calculating the biomass estimate from dive survey data, possibly comparing the drop camera stations to the dive survey sites to delve into the differences being observed between the two methods and to undertaking the shell growth rate analysis.

Finally, Trish presented data collected through the DMR Scallop Survey for Zone 1 and started by reviewing the chronology of the survey, which began in 2002. Western Maine (Zone 1) was sampled in 2002, 2003, 2005, 2009, 2011 in the closed areas only prior to their reopening and in the spring of 2015. Additionally, some information was collected during the 2015-16 season in in-season surveys conducted in the West Pen Bay Limited Access Area, Muscle Ridge, Owls Head and Rockport. For eastern Casco Bay, between 2011 and 2015 there has not been much change in scallop density, except for a slight increase in juveniles. Two closures were implemented for the 2015-16 season in South Portland Harbor and Broad Sound where high concentrations of sublegal scallops were observed last season based on the 2015 spring survey data. For the Sheepscot River, density levels are extremely low, however in 2015 some seed scallops were observed. This area was closed for the 2015-16 season. In the Damariscotta River while there was a marked increase in harvestable biomass prior to reopening in 2011, however in 2015 levels were low again back to pre-closure levels with even lower amounts of seed and sublegal scallops. This area was closed for the 2014-15 and 2015-16 seasons. Inner Muscongus Bay has very low density overall, despite a slight increase in harvestable scallops in 2011, levels have now decreased. This area was closed for the 2015-16 season. For the Muscle Ridge Area, while densities are slightly higher here than the rest of the Zone, 2015 density levels for all sizes area back to the about the same level as in 2009. This area was closed via emergency regulation in the 2015-16 season. Finally, all these density levels were compared to other parts of the state such as Vinalhaven, Gouldsboro, Machias and Cobscook, for which Cobscook Bay densities are 4 fold higher than all other areas of the state in 2015. All of this information was collected prior to the most recent season commencing. All the surveys were done based on past stations. The next survey will incorporate harvester data and locations to make sure the appropriate areas are surveyed.

The presentations were followed by an open discussion amongst the meeting participants. Overall, it was felt that the original closures helped to increase biomass, however, the gains have been offset by influx of effort and the Zone is back to where we were pre-closures (2009). The majority of harvesters expressed the need to do something different. Since lobster fishery is currently strong, it is an opportune time to do something meaningful so the fishery can provide the maximum employment and diversity to coastal communities. A number of harvesters' support some form of rotational management for the eastern portion of Zone, complimenting Zone 2, however there was no consensus. A challenge with the zone is that new effort depleting areas; i.e. dragging all day for a gallon of meats. Finally, one harvester offered a new area for closure with the aim of increasing spat production in the New Meadows River, while another believed we should have smaller, longer term closures to increase spat [Spat Production Areas or SPAs].

### **2016-17 Season Management Recommendations**

Trish then reviewed the DMR recommendations for rulemaking for the SAC to discuss which included:

- **Zone 1: A New Management Framework**
  - Rotational Management for the eastern portion of Zone 1, east of Small Point to Penobscot Bay (Zone 2 line)
  - 70 day season & 15 gallon daily limit
- **Zone 2: Status Quo**
  - 70 day season & 15 gallon daily limit
  - MDI/Somes Sound Limited Access Area
  - East Moosabec Reach Targeted Closure to enhance spat production & recruitment
- **Zone 3: Status Quo**
  - 50 day season & 10 gallon daily limit
  -

Also noted was that DMR will continue its Pilot Tracking Project with the industry volunteers. Finally, the Department will be aiming to increase diver access and safety in the fishery by splitting the season with most fishing days in December, March and April when the weather is better, then possibly allowing continued access to in-season closures by divers when warranted and the potential of allowing divers multiple limits when diving together on one vessel. For this last item, the DMR Safety Council is to have a discussion on the matter and make recommendations. Also, the Department plans on submitting a bill which would lift the season restriction of December 1 – April 15 to divers as that measure was implemented to address gear conflict between draggers and divers. Following the season recommendations provided by DMR staff, the SAC then had a lengthy discussion regarding potential changes to management in Zone 1 next season.

G. Freeman: We should have rotational management for the whole zone.

J. Wotton would prefer 2 year rotations so they have more room to spread out.

T. Brawn suggested lowering the limit; go with a 2 year rotation and doing more survey work.

A. Todd: My guys are not supportive of Rotational Management. The closed areas we have in Casco Bay are dispersing people. It has been working. Puts too many boats in one area.

T. Miller: I support rotational management, but also open to any new ideas.

One participant noted that next year is not looking that great in most of the Zone 2 rotations, so that may not be the best plan to base Zone 1 on.

J. West: The MDI area in Zone 2 never had anything in more recent years anyways. It used to be amazing there way back before the closures, but there has been nothing there recently.

T. Fogg: It is Mother Nature that put out a good set of seed, not what you have done that has rebuilt the fishery.

R. Swenton: Looking at this from a business point of view, we don't have enough information to make a good decision. Something is working with Rotational Management in Zone 2 however. We need the industry to provide us with better data.

J. West: We submit everything through our logbooks already.

T. Cheney: We are also working on the pilot tracking program to better collect location information and be able to make more targeted and effective closures.

P. Gasperini: Hire someone location that knows the bottom and where to go. The in-season survey in Vinalhaven towed from deep water to shallow and then deep again. It is a poor fishing practice.

M. Kersula: I was on that boat that day and it was to compare a before the season tow with results from that day.

C. Wilson: We also got additional input for the in-season survey of that area and changed some of the tows.

A. Todd: Open one of the Casco Bay closures that were implemented last season to see how it has performed.

J. Wotton: The Limited Access Area [Muscongus] in my area is worse off, outside/offshore is about the same as before.

J. Wotton, T. Fogg and A. Todd all oppose lowering the limit any further for the zone.

T. Brawn suggested undertaking some enhancement work as a way to at least move forward.

M. Kersula suggested having smaller, longer term closures as spat sources for all of Zone 1 as a means to preserve habitat and increase broodstock abundances.

K. Kelly: There are two areas in Zone 1 that are successfully producing scallops – Casco Bay and Muscle Ridge. Having 3 year rotations would give you a chance for success. In Casco Bay, most of the seed in the two targeted closures implemented in regular rulemaking will not be ready for this upcoming season. However, there is some recruitment and we will want to let that grow up.

P. Keliher: I am looking at a reduction in days based on this conversation. Is there something else we can do to build biomass?

C. Haycock: The guys in my area want the two year rotations as people want to spread out. It would be interesting to see if it would work on 2 years.

C. Wilson: I think Travis Fogg is right that there has been fortuitous recruitment along the coast. Whether it was the increase in biomass in Eastern Maine that contributed to it, I don't know. Rotation gives us the best opportunity for improvement with the limited resources we have. We are just trying to push the resource forward. My recommendation would be to lay off some of the pressure for a few years and be aware of increased effort in the remaining open areas.

G. Freeman's Proposal:

- Limit per diver for safety reasons as currently you have to split the limit with another diver.
- 10 gallon diver limit/15 gallon drag [reduce the diver limit only].
- Close the New Meadows River as Brian Soper suggested at the last meeting.
- Open up Ocean Point & Casco Bay closures.
- Close Chandler Cove for a year as it is productive.
- Personally, he supports rotational management.

J. Boyce: I would be ok with two limits on the boat for divers as long as it didn't apply to recreational divers.

T. Brawn: I don't think that is fair as all the previous limit reductions have really been on the draggers. We rebuilt the fishery on their backs and I don't think that would be fair.

Tad had suggested a ring size increase to 4.5" to allowing for enhanced spawning.

J. West: the draggers have given and given to make the resource better and you can go out with a mesh bag and still want more? It is not fair to give them more. If so, we should be able to do the same.

P. Keliher: You mean stacking the licenses?

J. West: Yes. Back in the day we had more divers and draggers, we fished together and there was never a problem. I want a tracker, but if I can pick my days, then we are all going to go on good days. I even have to fish with a larger twine top because of my federal permit.

C. Haycock: We are trying to reduce effort, why provide more opportunity? The bigger issue is owner-operator.

P. Keliher: The only other option I see is another meeting for Zone 1 in late July/early August.

**Drag Size Limit Discussion [Appendix F for slide]:**

T. Cheney: While Cobscook is in statute (and Blue Hill), all other drag size limits are in regulation and can be changed in this rulemaking. Many participants would like to have one limit so they don't have to have multiple drags in their possession, especially the nomadic/mobile fishermen.

J. West: Most guys will continue to fish their smaller drag.

J. Wotton: We are already on a daily limit, so what does the drag size do?

P. Keliher: It is not a biological issue, it is a social issue.

J. West: It was put into place to deter larger Boston boats from coming in to state waters.

**MOTION: To require a 10'6" drag size limit in all coastal waters, except for Cobscook Bay which is in statute [and Blue Hill Bay] and cannot be changed through rulemaking.** R. Swenton motioned while J. Wotton seconded the motion. Discussion:

P. Gasperini: You are not thinking of the bottom. A 10'6" drag digs into the bottom. I have seen it. Limit the larger drag to the outside waters, not inshore as that is where all the biodiversity is.

J. Wotton: I can make a 5'6" drag as heavy as I want. And a 5'6" drag would take 4 hours to reach the limit while a 10'6" drag would take an hour.

D. McLennan: It is the big boats that are the issue – they have the power that they can plow right through stuff that smaller boats have to go around.

A. Todd: In a larger drag the weight is dispersed over more area.

T. Brawn: Put it out to rule and get the comments and then decide.

C. Wilson: If it can reduce the bottom contact time it is better for the resource. In the Federal fishery it has significantly reduced the bottom contact time.

R. Swenton: Ray Hilborn has stated that the drag actually turns up the bottom and gets it more productive, so there is some scientific evidence that says it does help some bottom, but it is very bottom dependent.

P. Gasperini: It silts up everything else and never clears.

J. Boyce: It is fine in areas with a high number of scallops in it. In lower areas, I don't think it makes much difference. I have a 5' drag and fished along side 10'6" drags and we got the limit around the same time.

**VOTE: 4 in favor & 4 opposed. MOTION FAILS without majority.**

**OTHER BUSINESS**

Pete Gasperini presented his Diver proposal (**Appendix F**) to allow divers in the closed rotations in Zone 2. I have been fishing for 33 years in the same bottom as draggers around Vinalhaven. I am targeted by the draggers on the overlapping days in the calendar. They muddy me out and take my spot. All the divers are feeling it and it is a safety issue. Drags have passed me while I have been in the water; I have had boats ram me. The divers are harvesting a small percentage of the landings. This proposal allows me to be safer as we have so many limiting factors. Less than 20% of the bottom is even available to divers and it takes 2-3 days for the water to clear after a storm. Last year my area closed 6 weeks into the season because 30 boats were dragging there and it got shut down and not because anything the divers were doing. We never see our daily limit and the draggers had their limit for 6 weeks; 70 lbs. is a good day. We don't even factor in to the overall landings and we are getting older. The draggers are there from sunrise to sunset and I am limited to 60 feet and 5 tanks for a total fishing time of 2.5 hours. I am not taking the broodstock, I am taking the 4-5" scallops and leaving the larger ones as they are not as great quality and sometimes have a cancer around them. I should have been able to fish all season long and had it wiped out after 6 weeks.

C. Haycock: We risk out lives too.

J. Wotton: Are you asking for more weight?

P. Gasperini: No. To access the closed rotations.

J. Wotton: I have friends who get 3 buckets every day.

C. Haycock: Most guys blame the divers for taking the broodstock and the demise of fishery. I don't think it would be fair to give him more when we just voted to not allow the 10'6" drag everywhere.

A. Todd: The Casco Bay in-season closure that remained open to divers didn't bother me. But for divers to access rotational areas that have been closed to the draggers for two years; I don't think that is fair.

G. Freeman: He just wants to go around Vinalhaven in those 3 rotations.

P. Gasperini: I am just looking for safe areas to fish.

C. Haycock: We are trying to rebuild this fishery.

J. Wotton: The split season and earlier access has its merit. But going in the closed rotations is not right.

P. Keliher: The diver vs. dragger discussion has not been a productive one in the past. I believe we should separate out the two gear types and manage them separately. A more productive conversation would be to look at how to separate out the two fisheries. The SAC can put on the agenda to start the conversation.

P. Gasperini: Thank you so much for letting me speak and listening. Between the Fishermen's Forum meeting and tonight I have learned so much more about the fishery.

Trisha closed out the meeting by thanking everyone for coming and letting them know they could reach out to her with follow up thoughts via email or phone. Pat said it could be likely that there would be one more Zone 1 focused meeting to finalize things before initiating the season rulemaking period.

**Meeting ended at 9:30pm.**

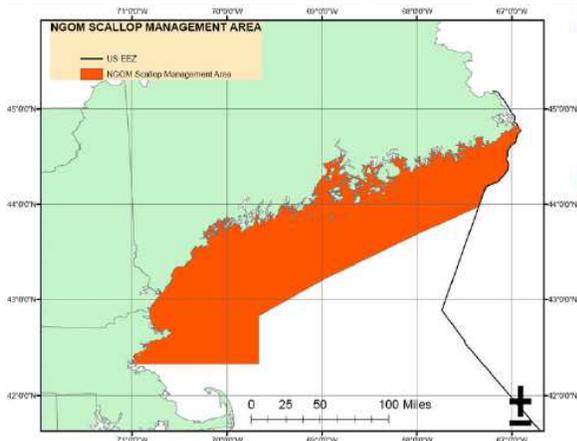
**Appendix A**  
Trisha Cheney's Slides

## **Scallop Advisory Council Meeting**

June 29, 2016  
Augusta, ME

- I. Welcome and review of agenda
- II. Approval of last meeting minutes (03/31/2016)
- III. DMR Updates
  - NGOM Survey
  - DMR Zone 2 Spring Survey
  - Zone 1 Regional Meeting Results
  - 2016-17 Management Recommendations
- IV. Discussion: 2015-16 Season Recommendations for Rulemaking
- V. Discussion: Drag Size Limits
- VI. Other Business
- VII. Adjourn

## **NGOM Management Area - TAC**



- NGOM resource is not currently incorporated into the overall assessment of the scallop resource.
- ACL/TAC is treated separately – Two step process:
  - Estimated catch is added to the overall OFL value
  - Catch is later removed from OFL before setting ABC

NGOM TAC	State Waters Catch
<b>OFL = F of 0.48</b>	

- Hard-TAC of 70,000 lbs since A I I

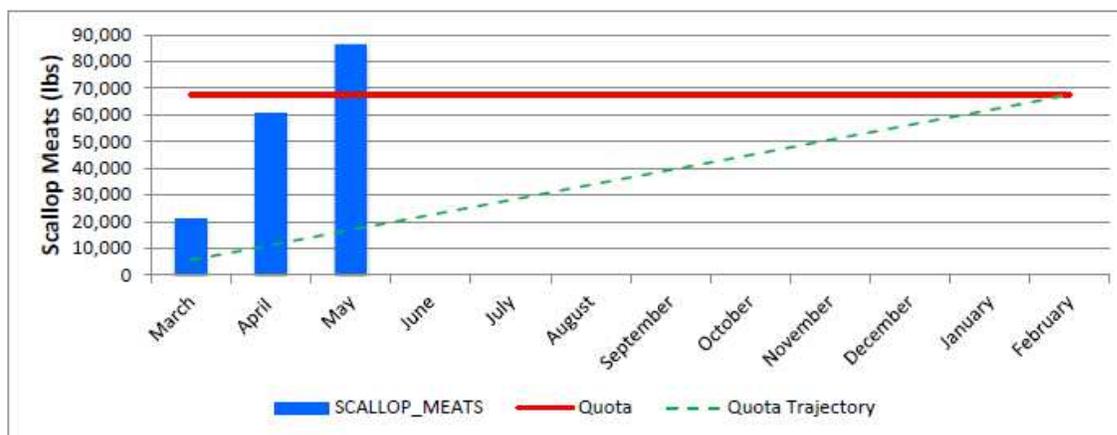
**Limited Access General Category Scallop  
Northern Gulf of Maine Landings**

Report run on: June 16, 2016  
 For data reported through: June 15, 2016  
 Quota period: 2016  
 Quota period dates: 03/01/16 to 02/28/17

Month	Pounds	Cumulative Pounds*	Percent of quota (67,454 lb**)
March	21,222	21,222	31.5%
April	39,647	60,869	90.2%
May	25,678	86,547	128.3%
June			
July			
August			
September			
October			
November			
December			
January			
February			

**The Northern Gulf of Maine Management Area closed May 13, 2016**

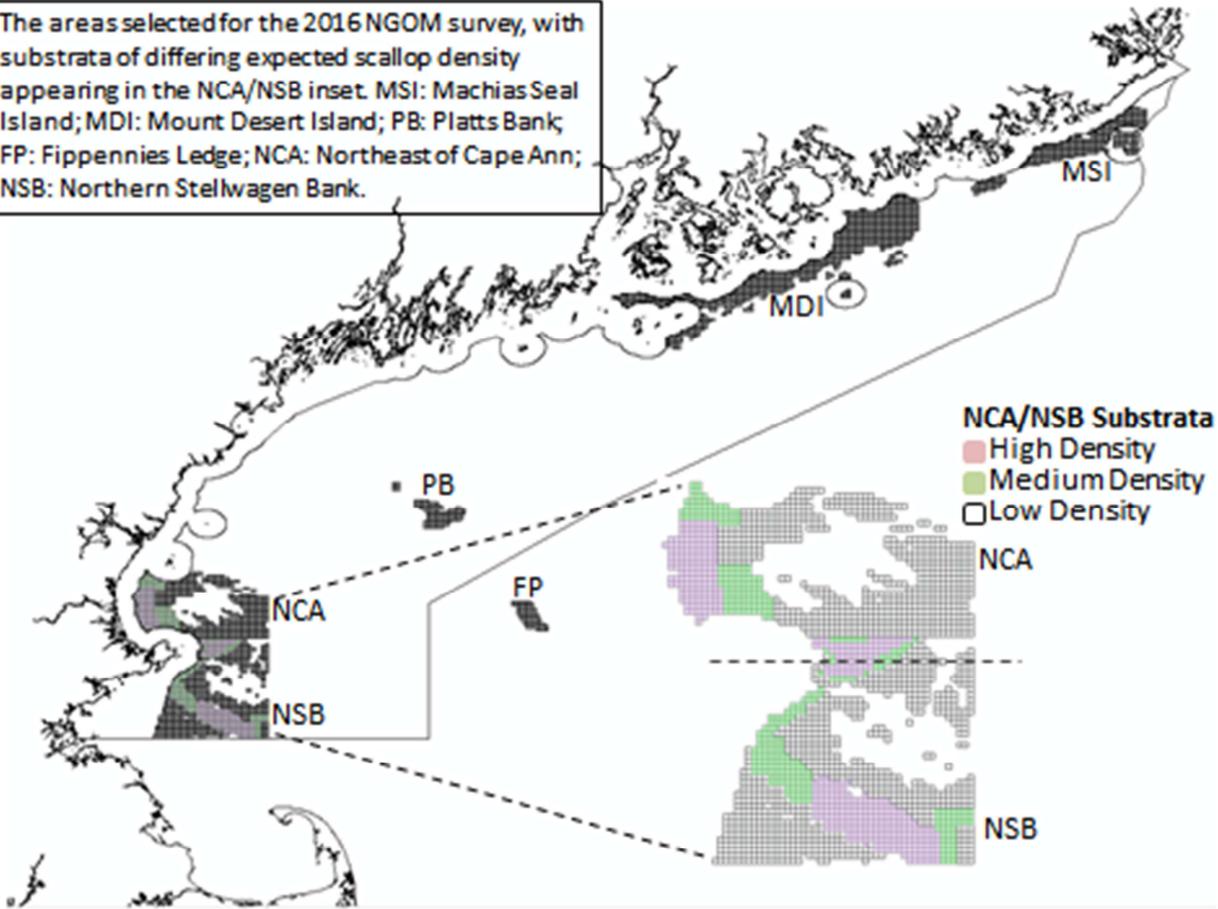
\*In order to comply with data confidentiality requirements  
 this table will no longer show weekly landings  
 \*\* Updated for Framework 27



These data are the best available to NOAA's National Marine Fisheries Service (NMFS) when this report was compiled. Data for this report are supplied to NMFS from vessels via the Vessel Monitoring System, Scallop Pre-Landing Reports, and Vessel Trip Reports, and dealers via Dealer Electronic Reporting. Data may be preliminary. Discrepancies with previous reports are due to corrections made to the database.

### Appendix B Mike Kersula's Slides

The areas selected for the 2016 NGOM survey, with substrata of differing expected scallop density appearing in the NCA/NSB inset. MSI: Machias Seal Island; MDI: Mount Desert Island; PB: Platts Bank; FP: Fippennies Ledge; NCA: Northeast of Cape Ann; NSB: Northern Stellwagen Bank.

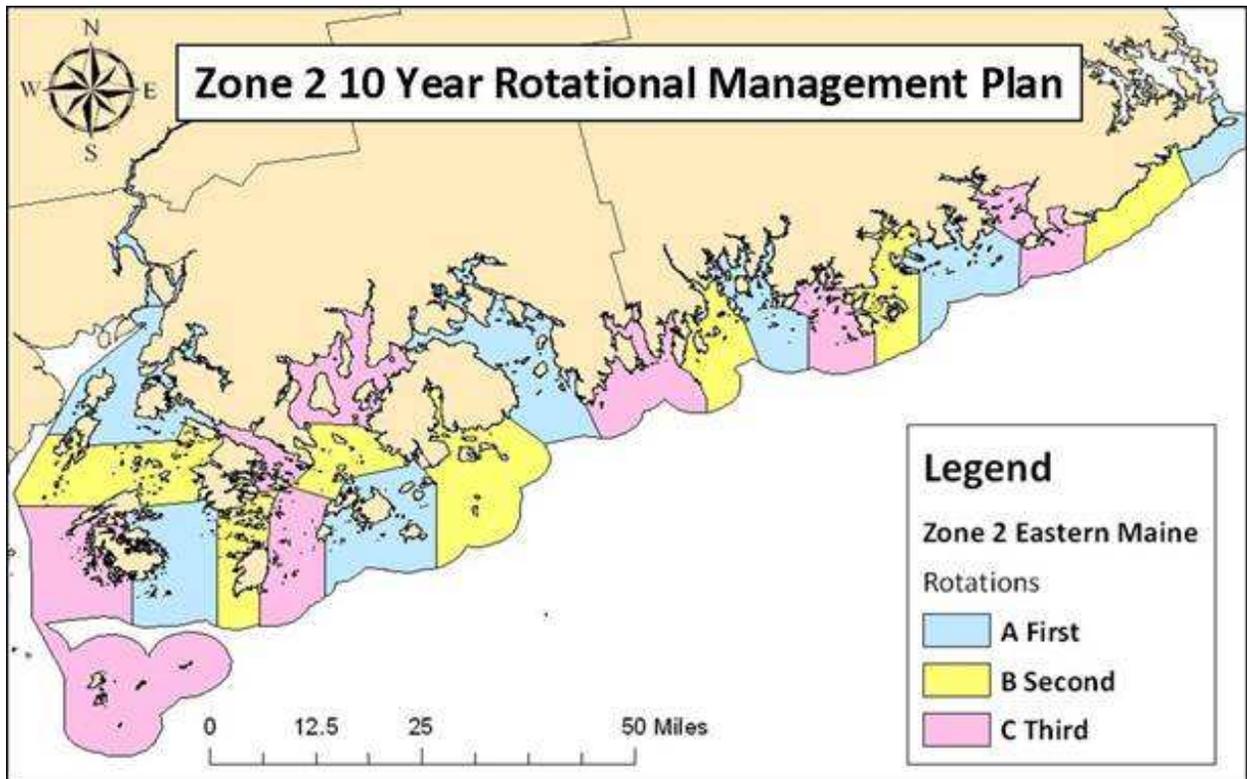


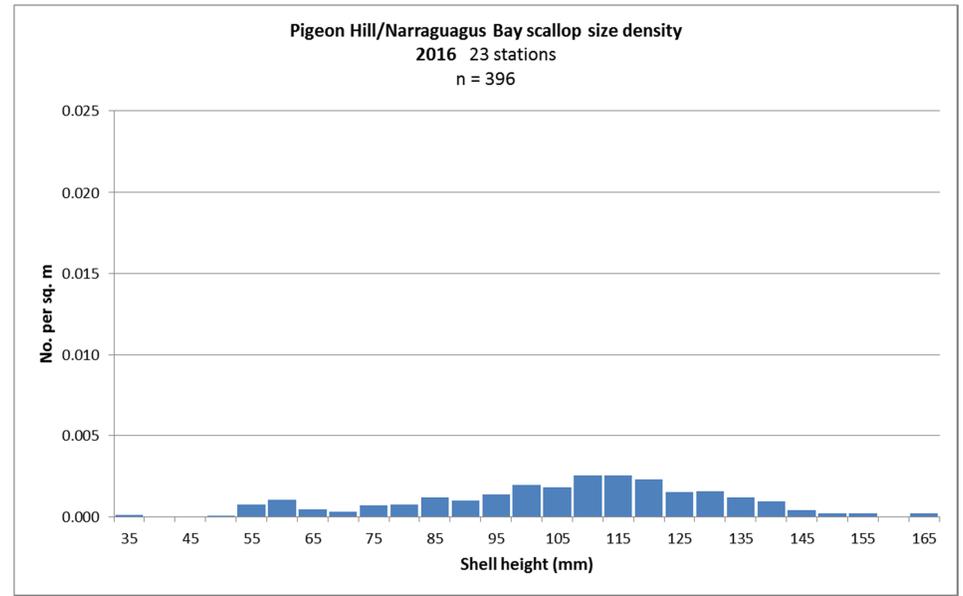
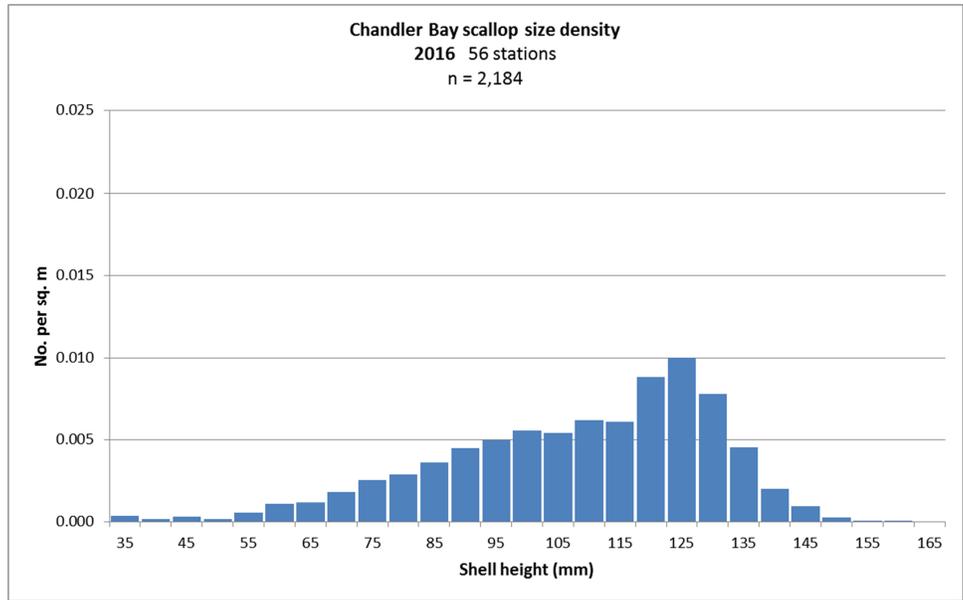
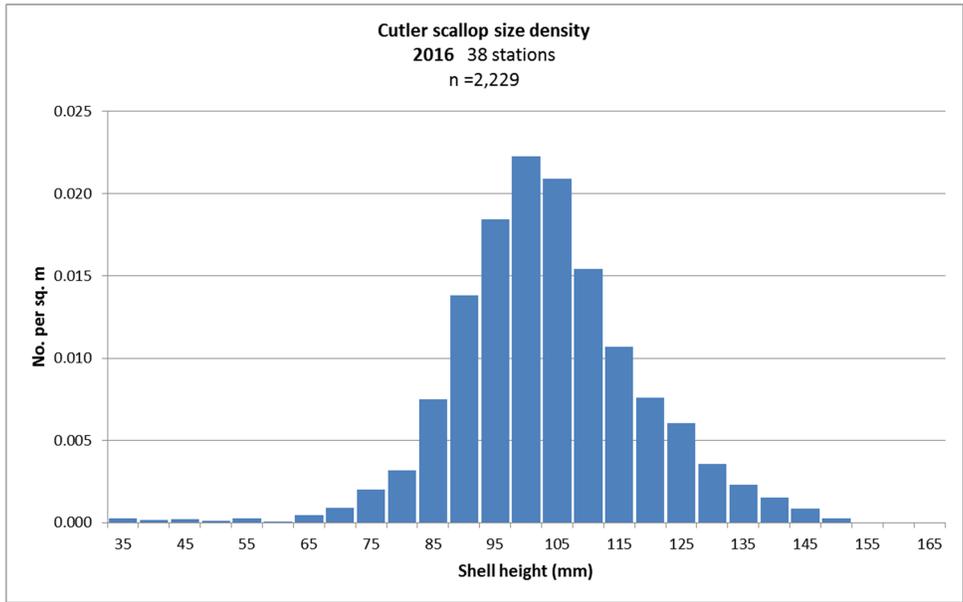
### Appendix C Kevin Kelly's Slides

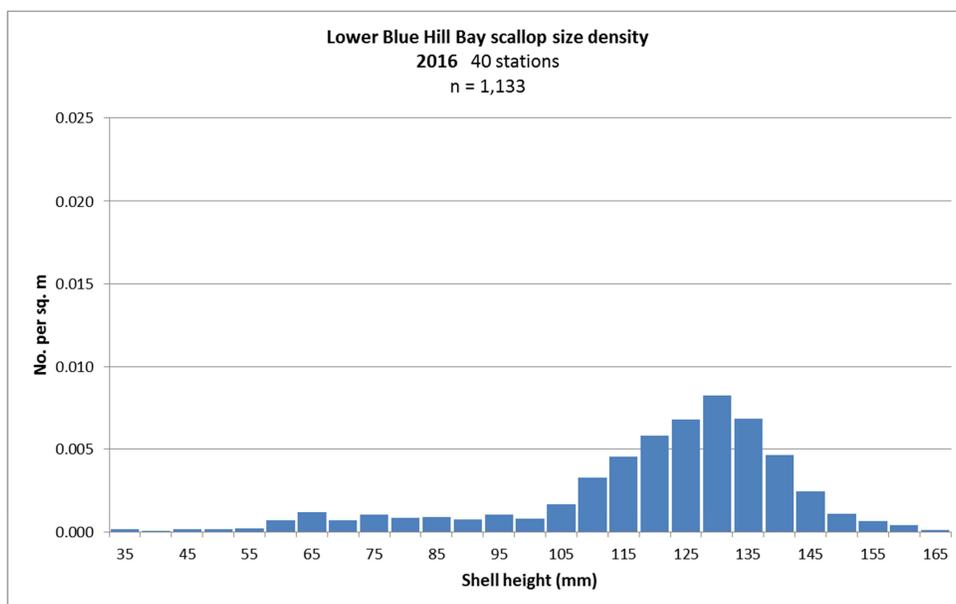
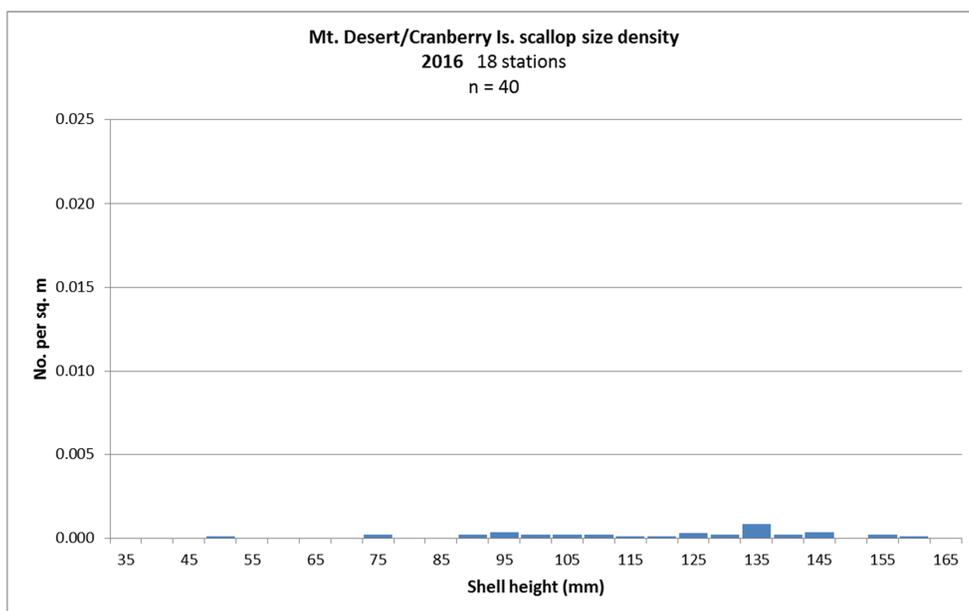
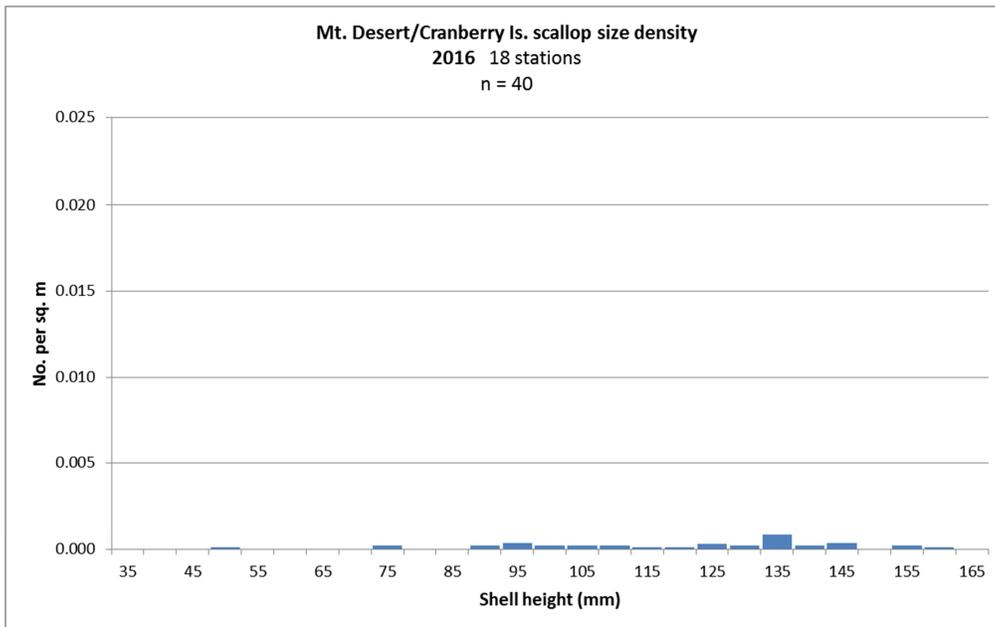
**ME DMR Sea Scallop Survey  
Spring 2016**

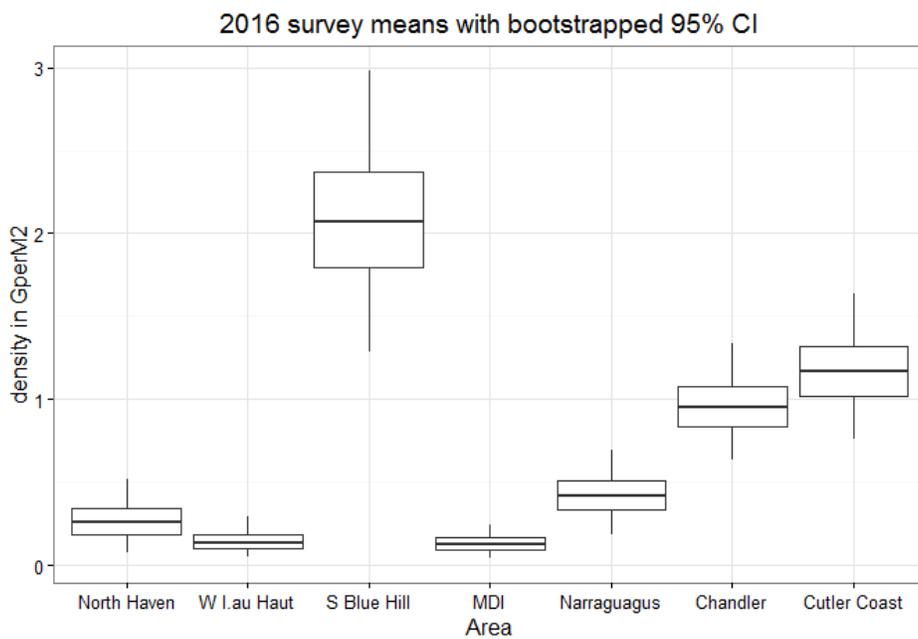
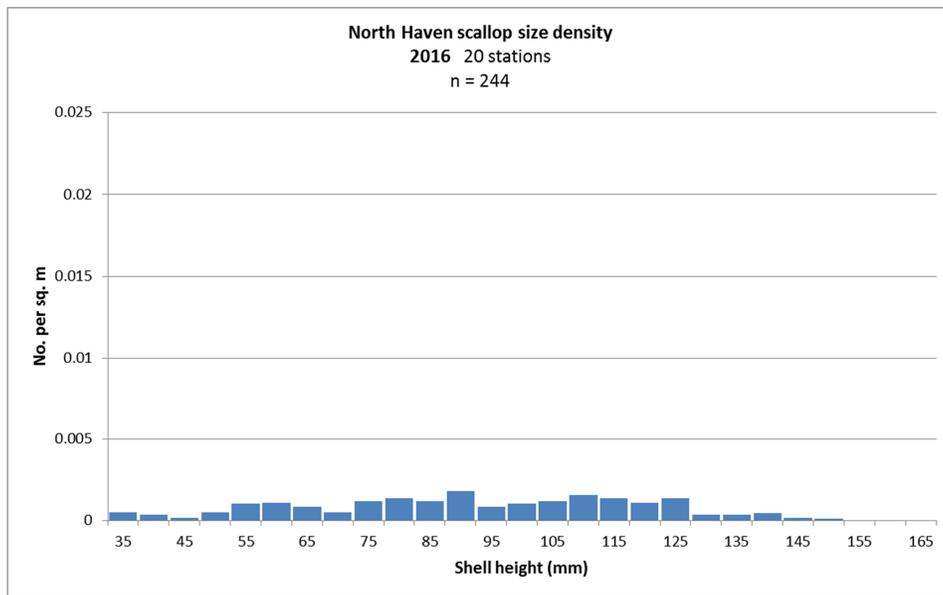
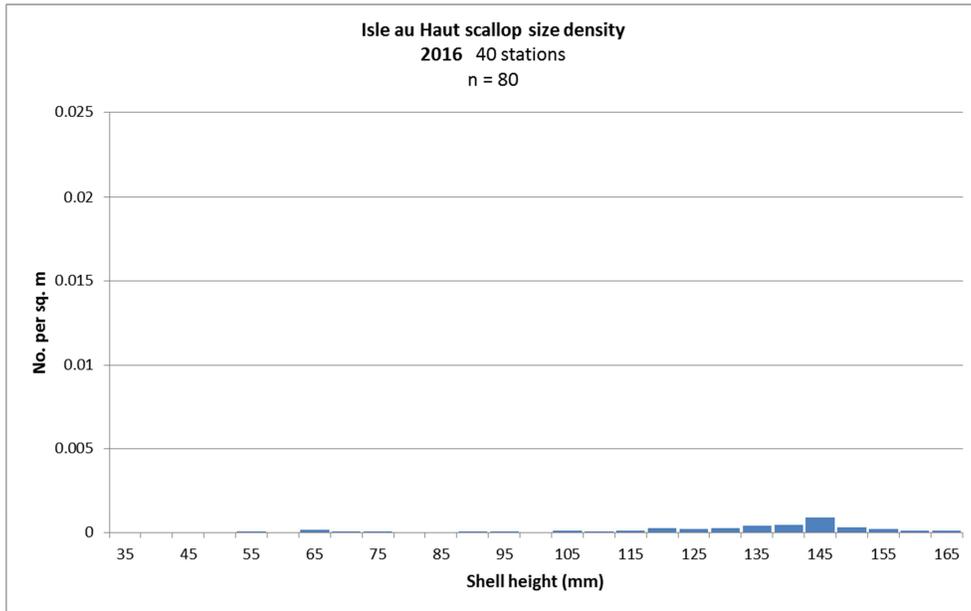


29 June 2016



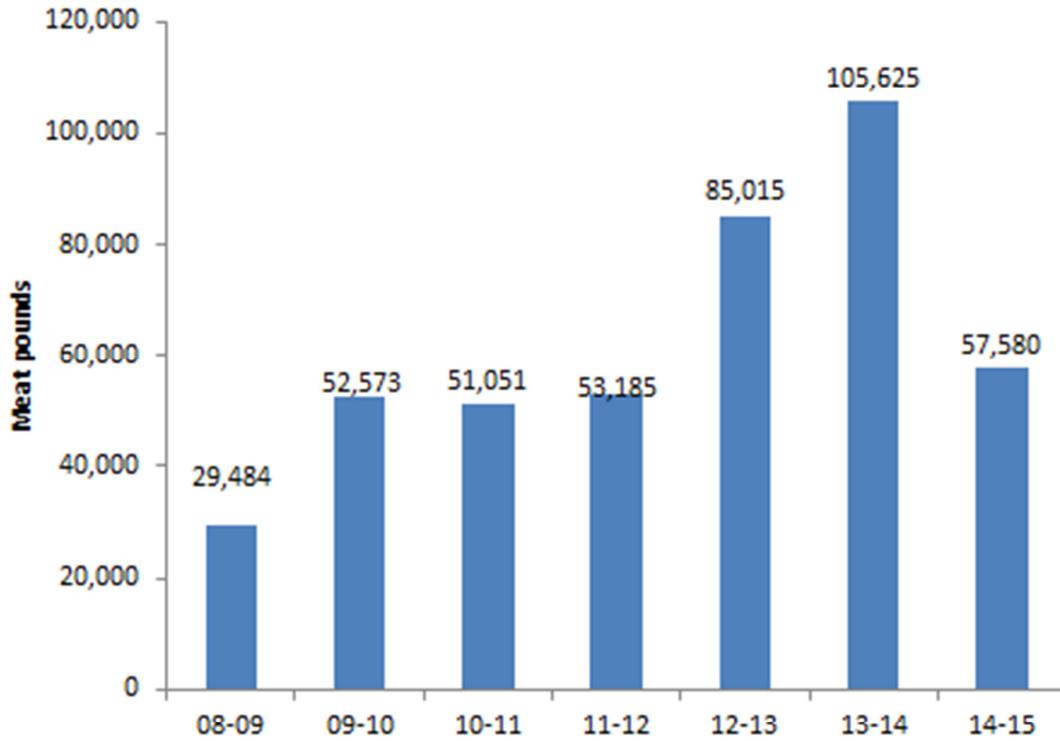






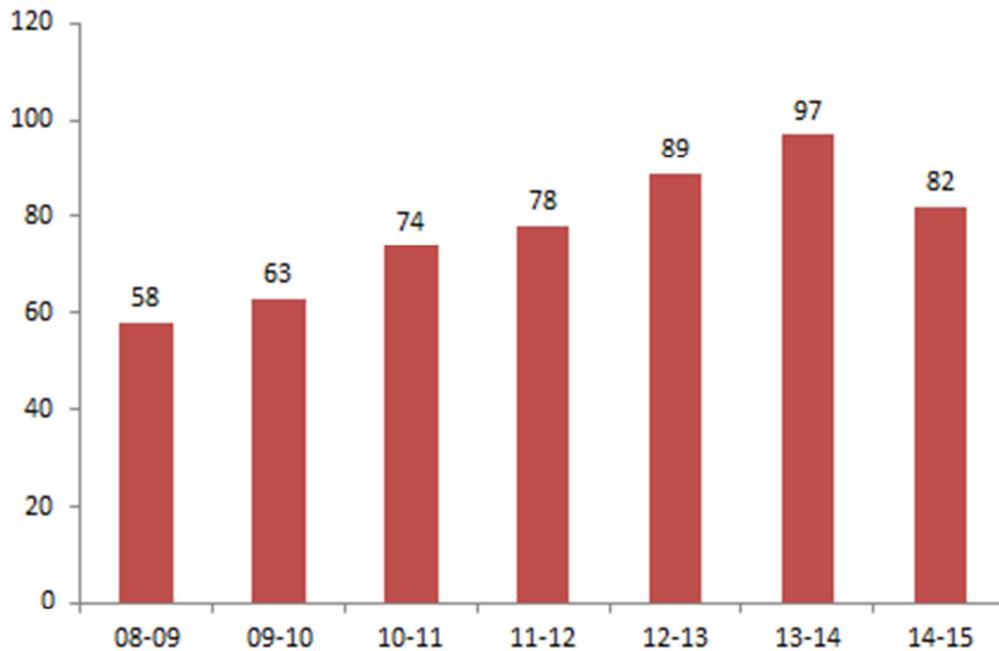
### Appendix D Trisha Cheney's Slides

#### Zone 1 landings

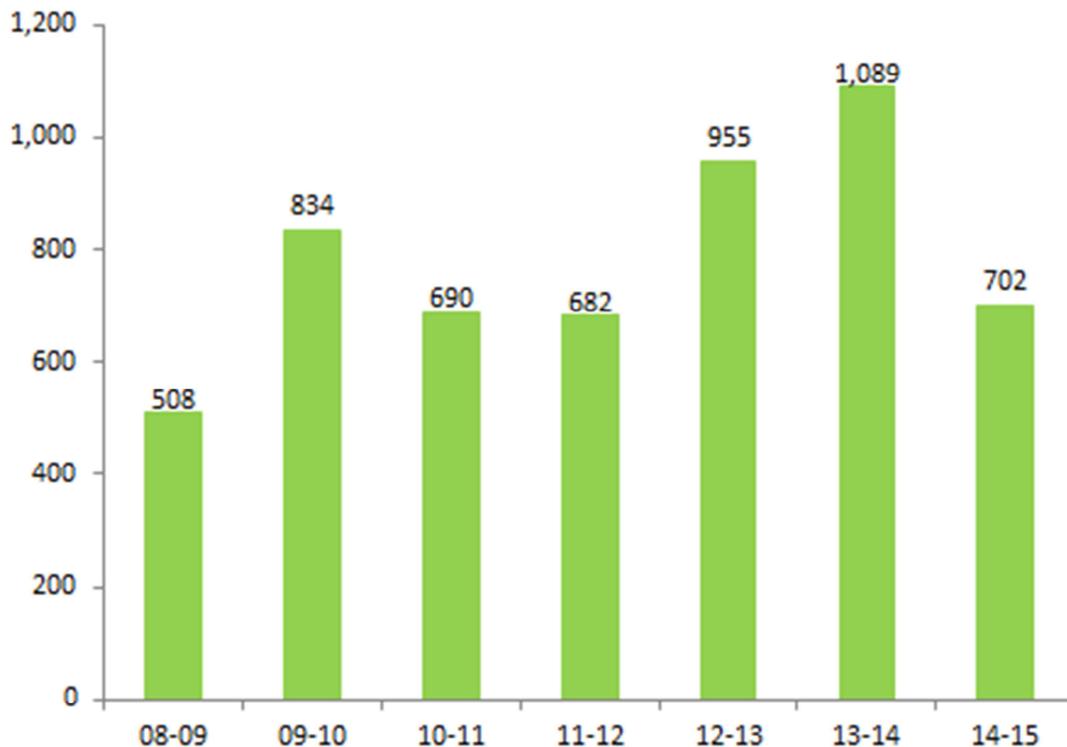


Note: at least 261 unique vessels have participated during this time

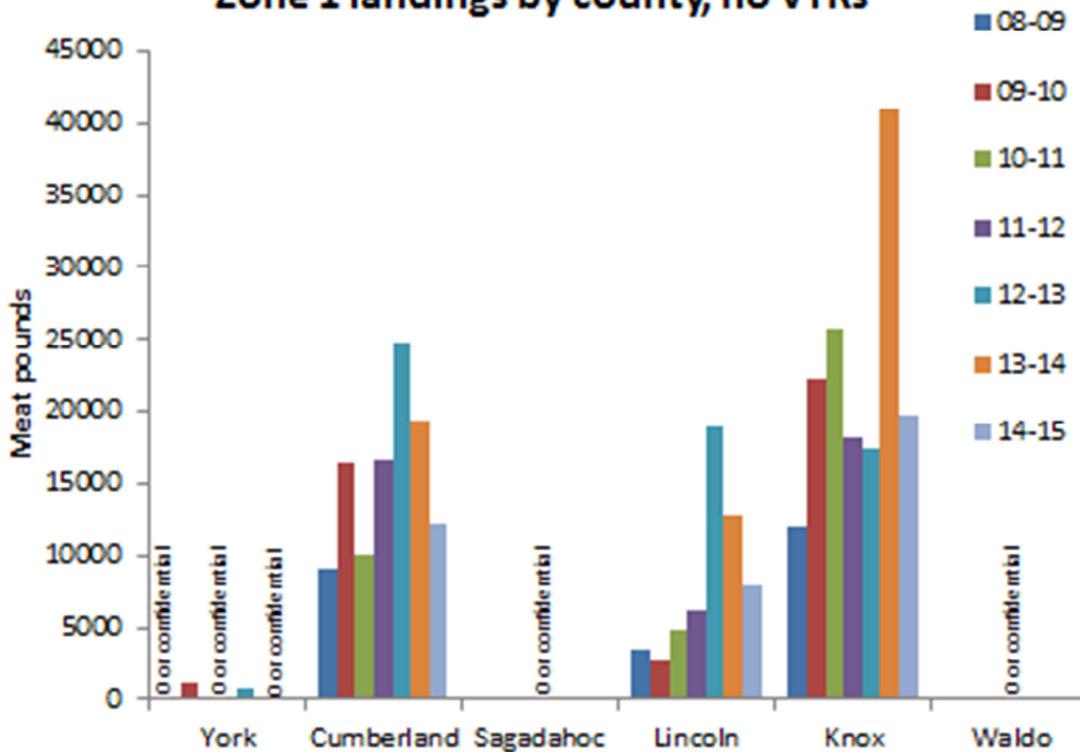
#### Zone 1 active harvesters

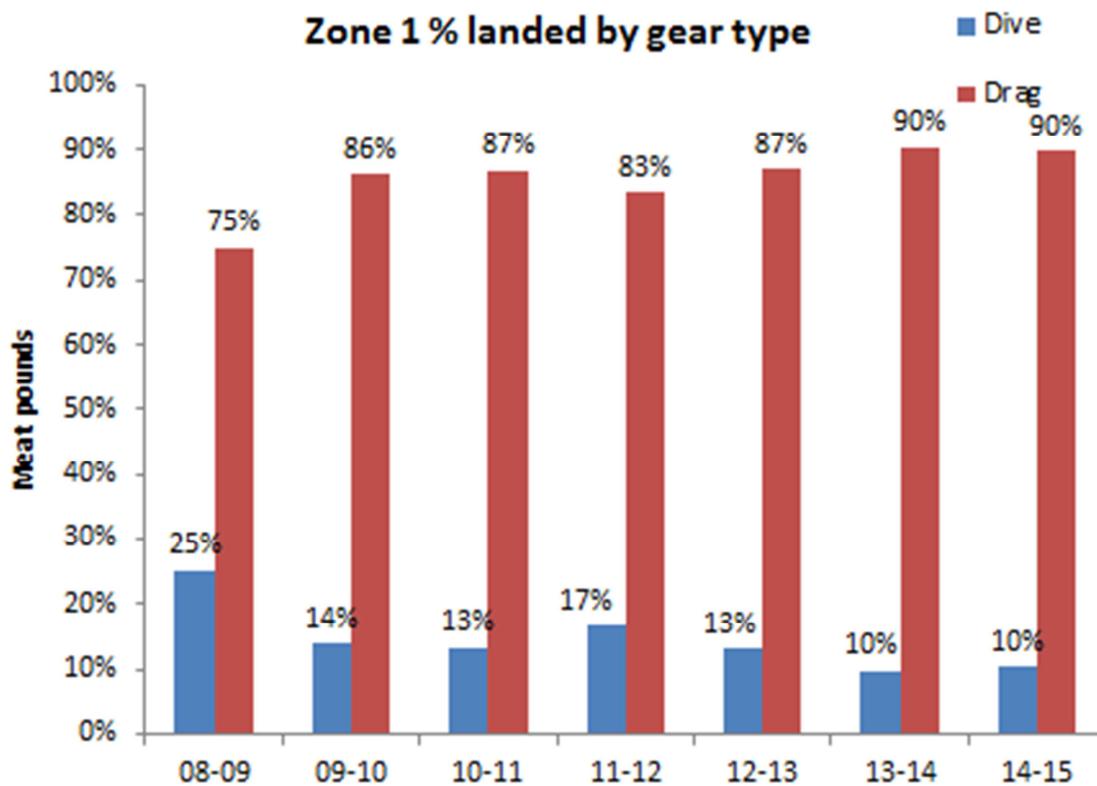
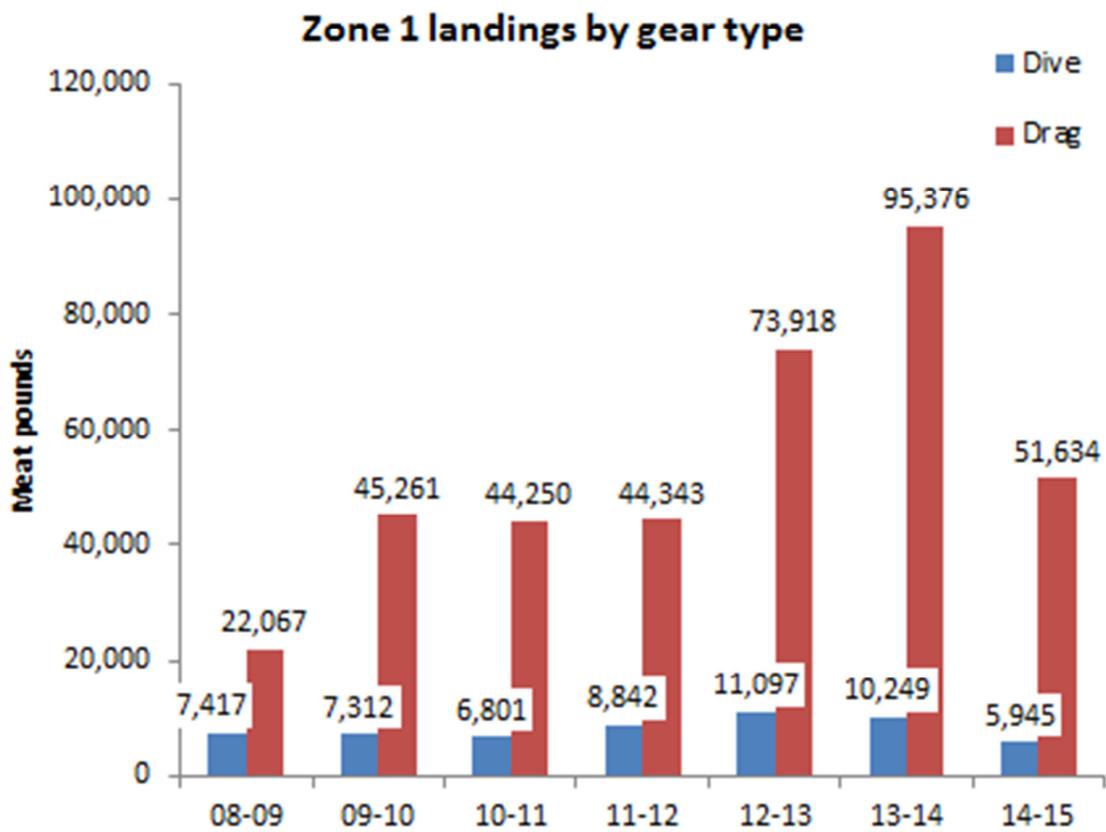


### Zone 1 Lbs./Harvester



### Zone 1 landings by county, no VTRs



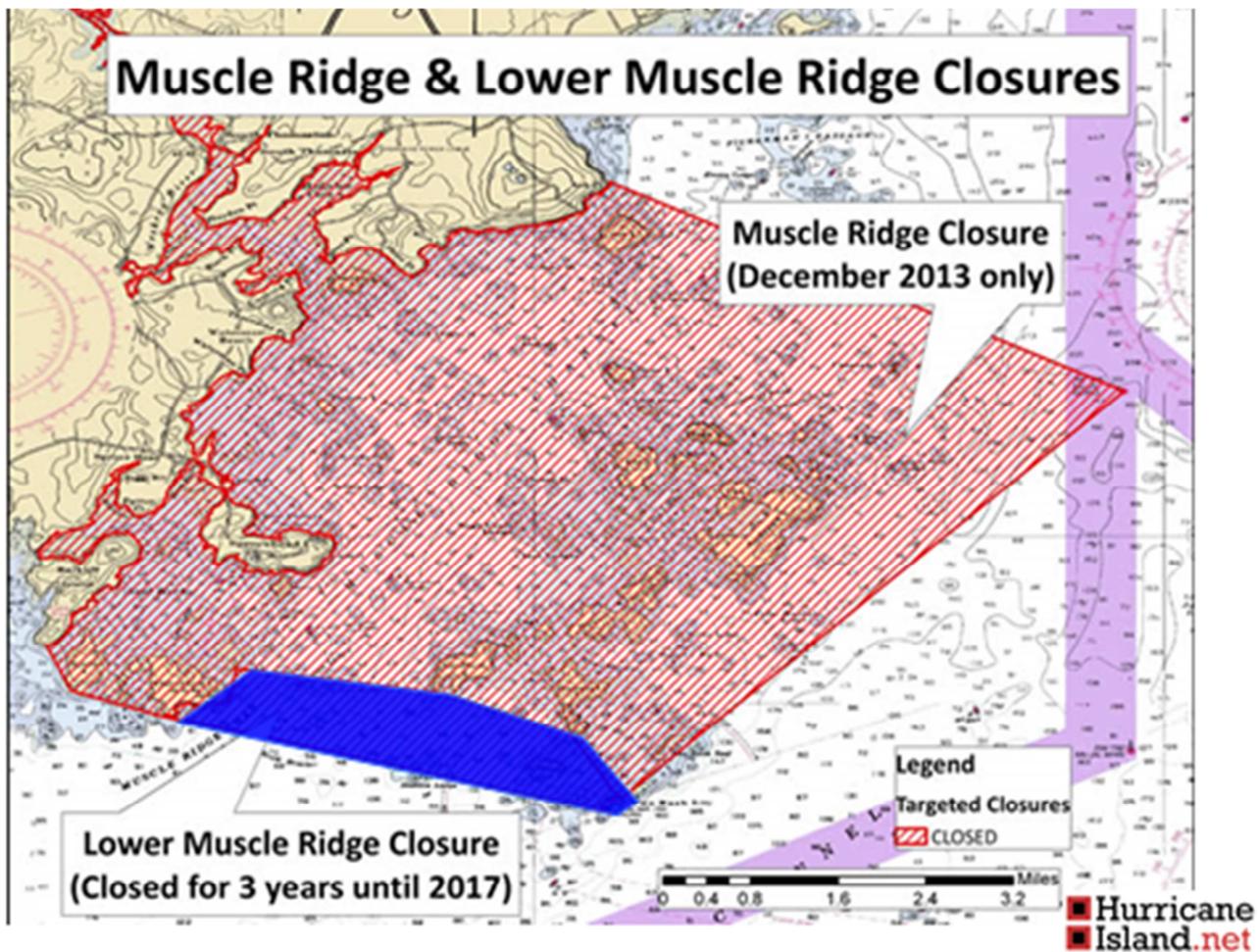




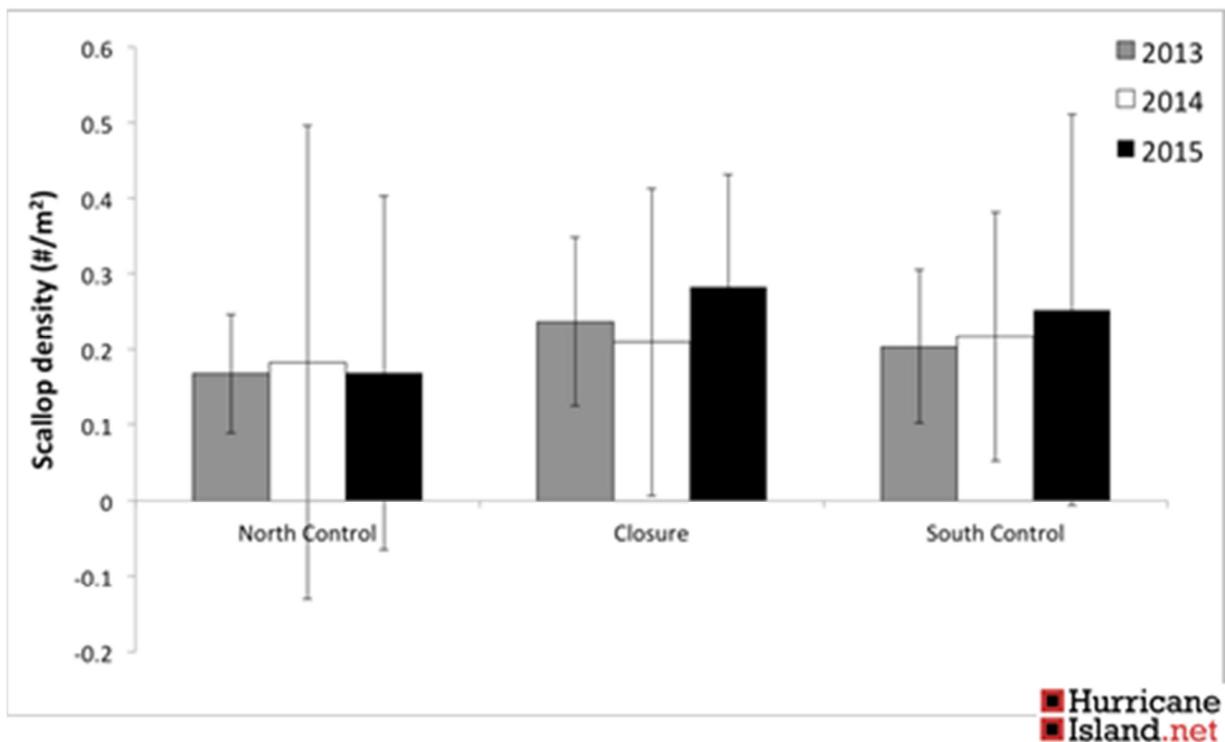
## Project objectives

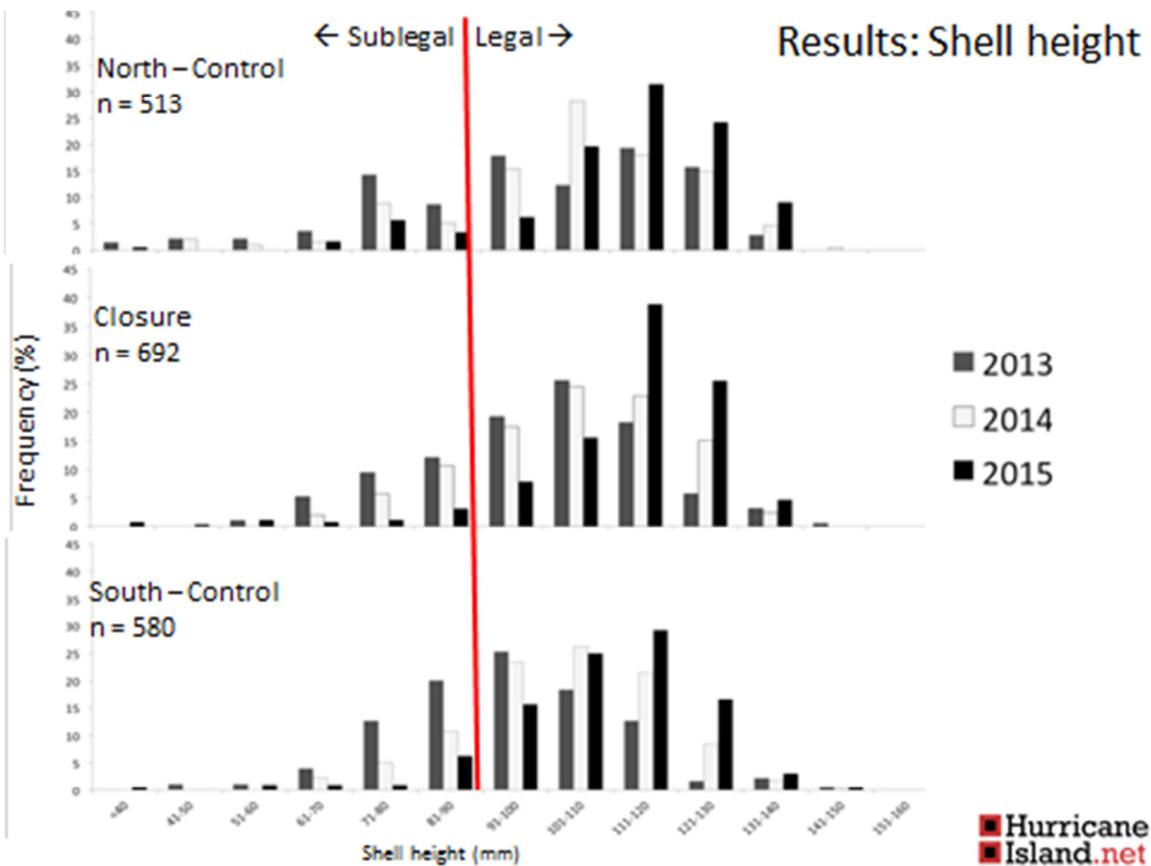
1. To determine the effect of the closed area on the resident scallop population;
2. To develop a replicable collaborative approach and methods that meaningfully engage fishermen.





## Results: Dive survey density





Hurricane Island.net

Summary:

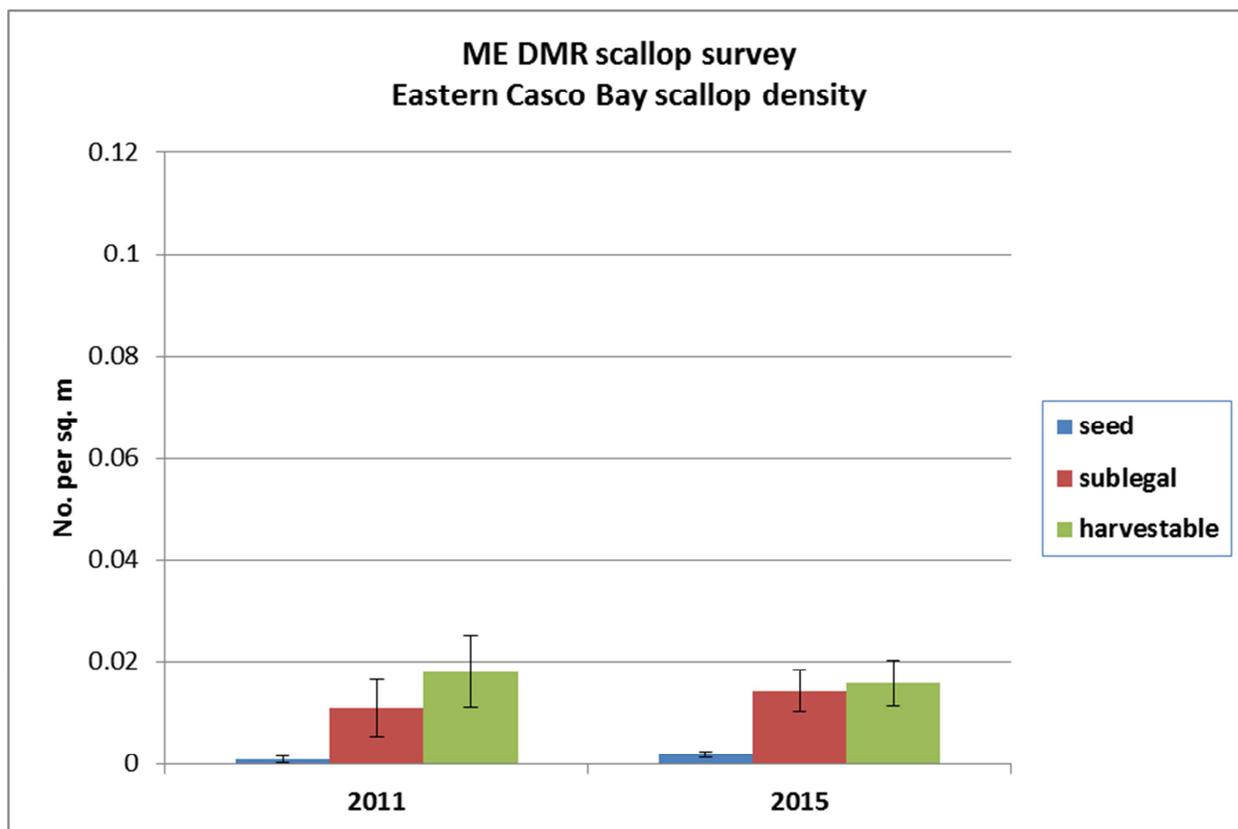
- Increase in juveniles inside and outside of the closed area is positive (juveniles are not as well represented in dive surveys)
- Increase in biomass estimate for the entire area
- Suggest that the population is rebuilding and recruitment is happening – adult presence is increasing in addition to juveniles

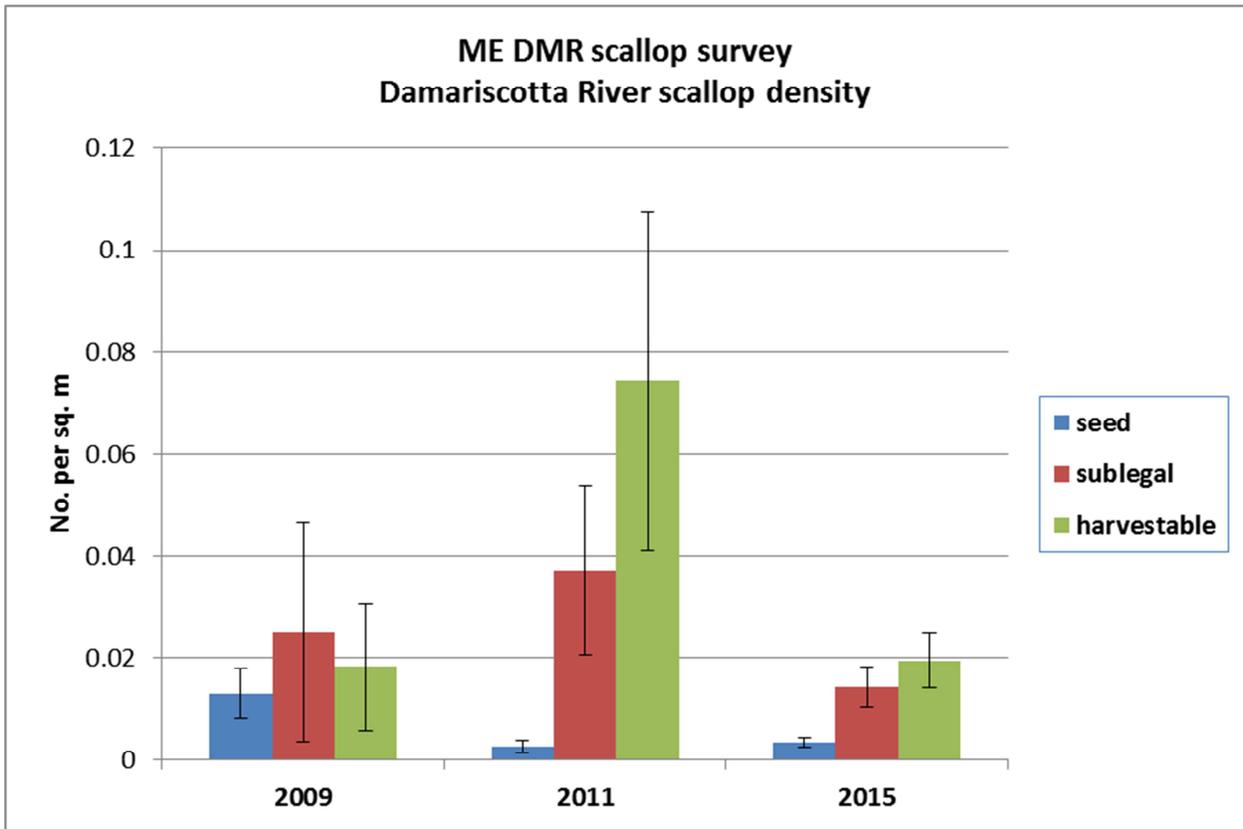
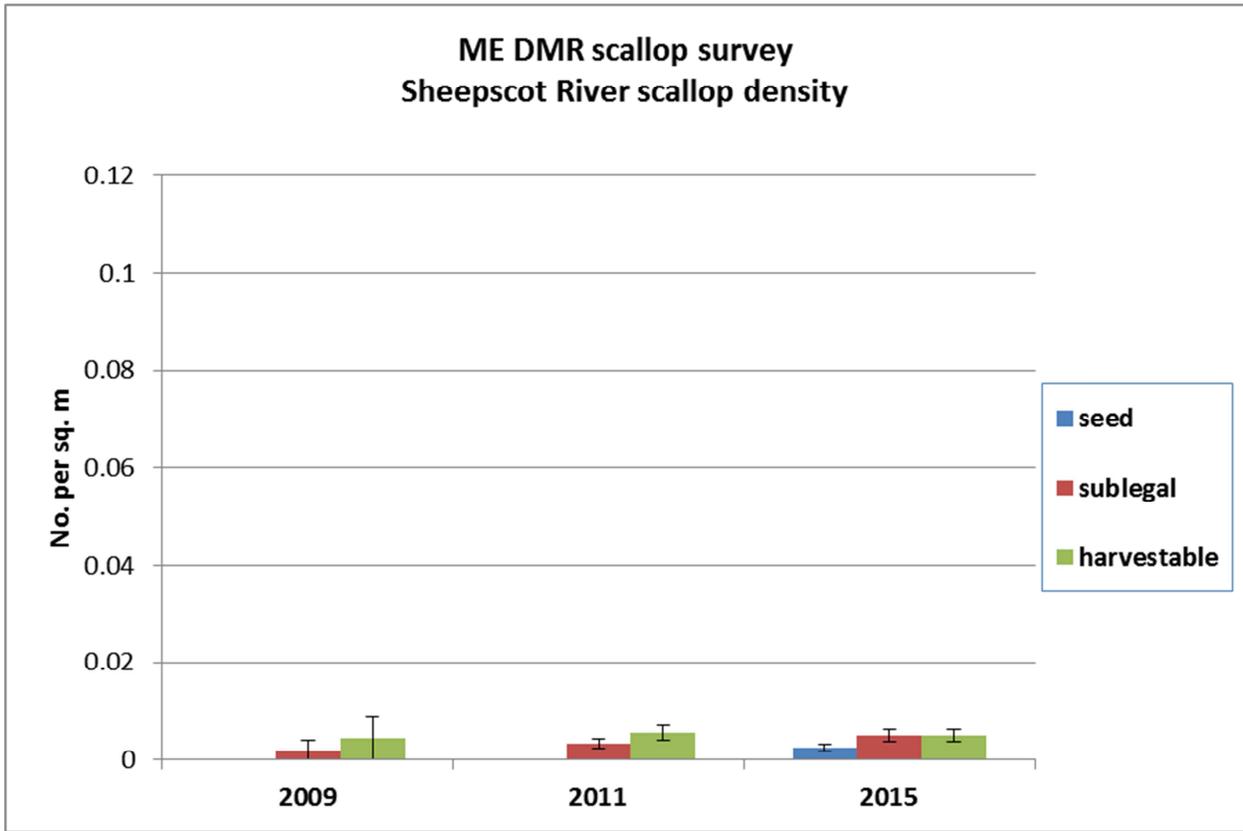
Next steps:

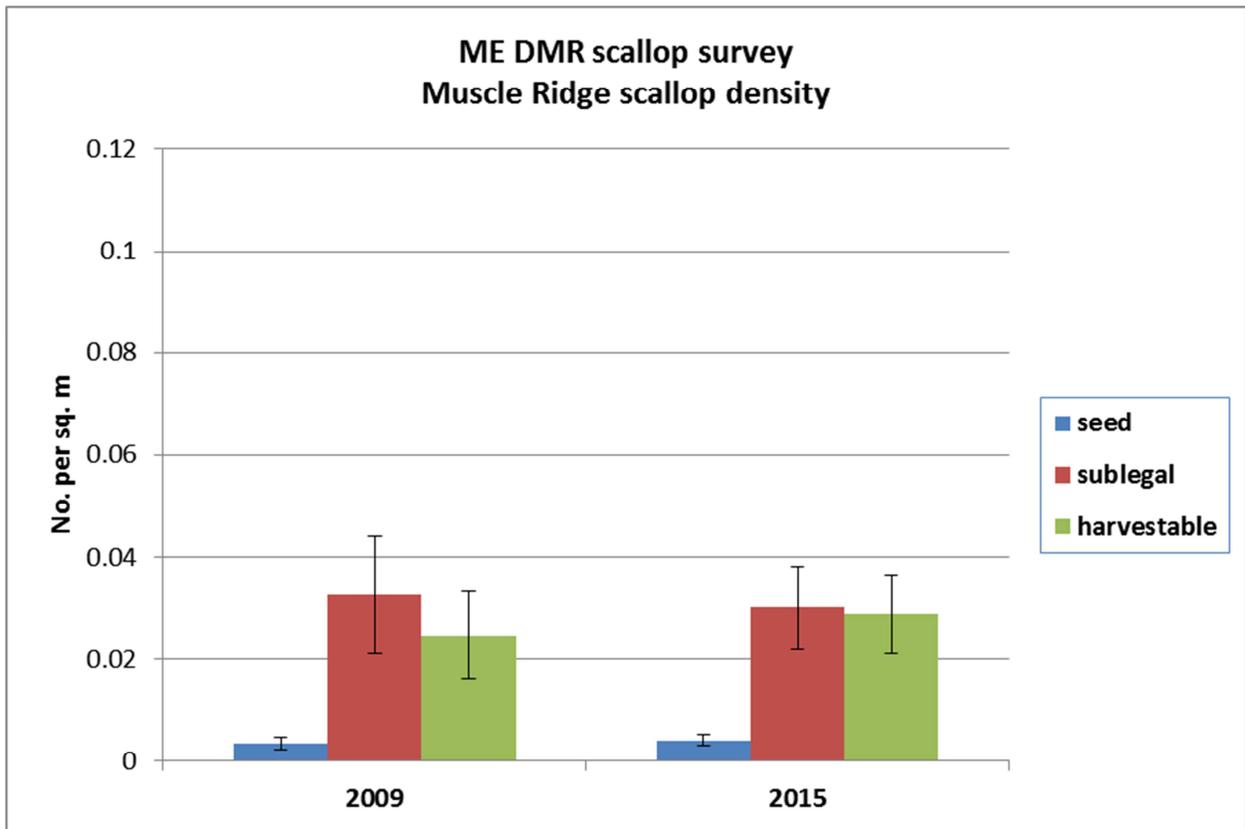
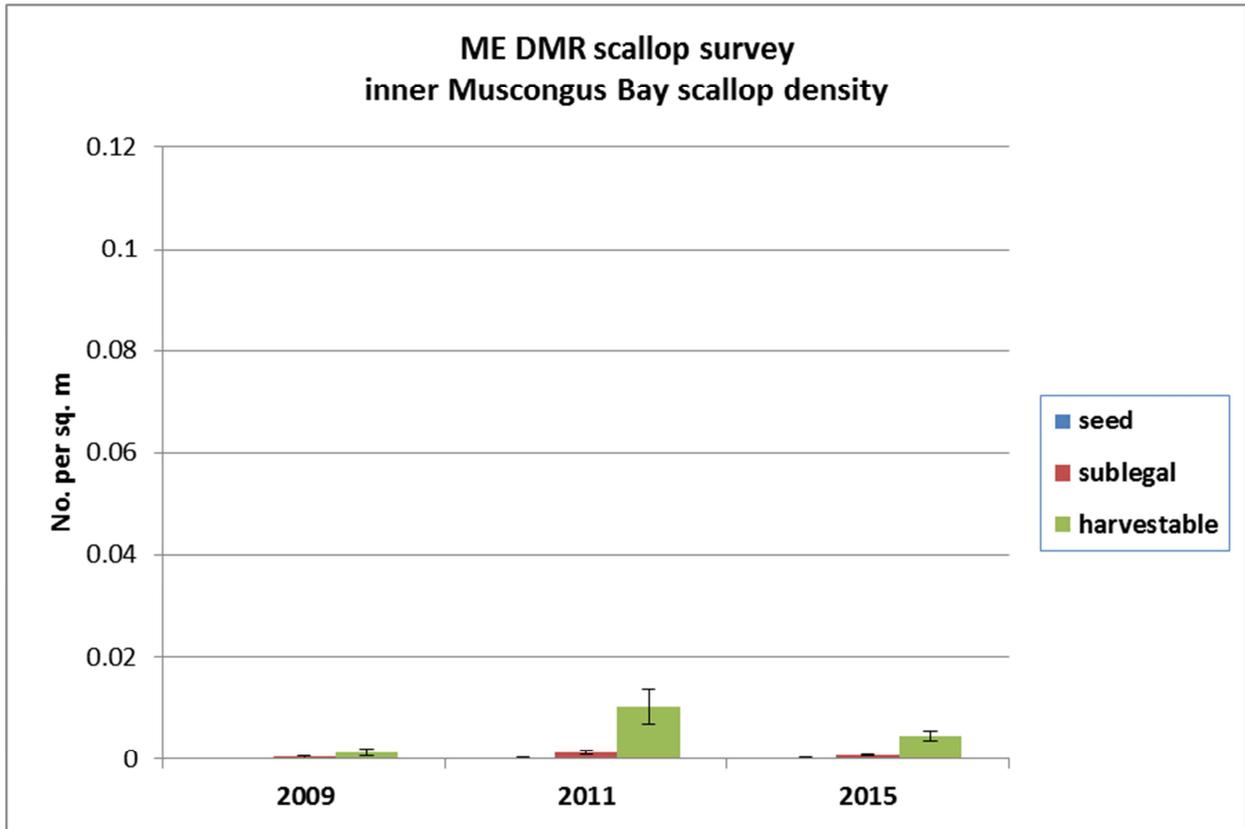
- Ask Stokesbury crew for shell height distribution by area and density estimates by area
- Biomass estimate from dive survey data
- Possibly compare Drop camera stations to where we have dive survey sites to delve into the differences we're seeing between the two methods
- Shell growth rate analysis

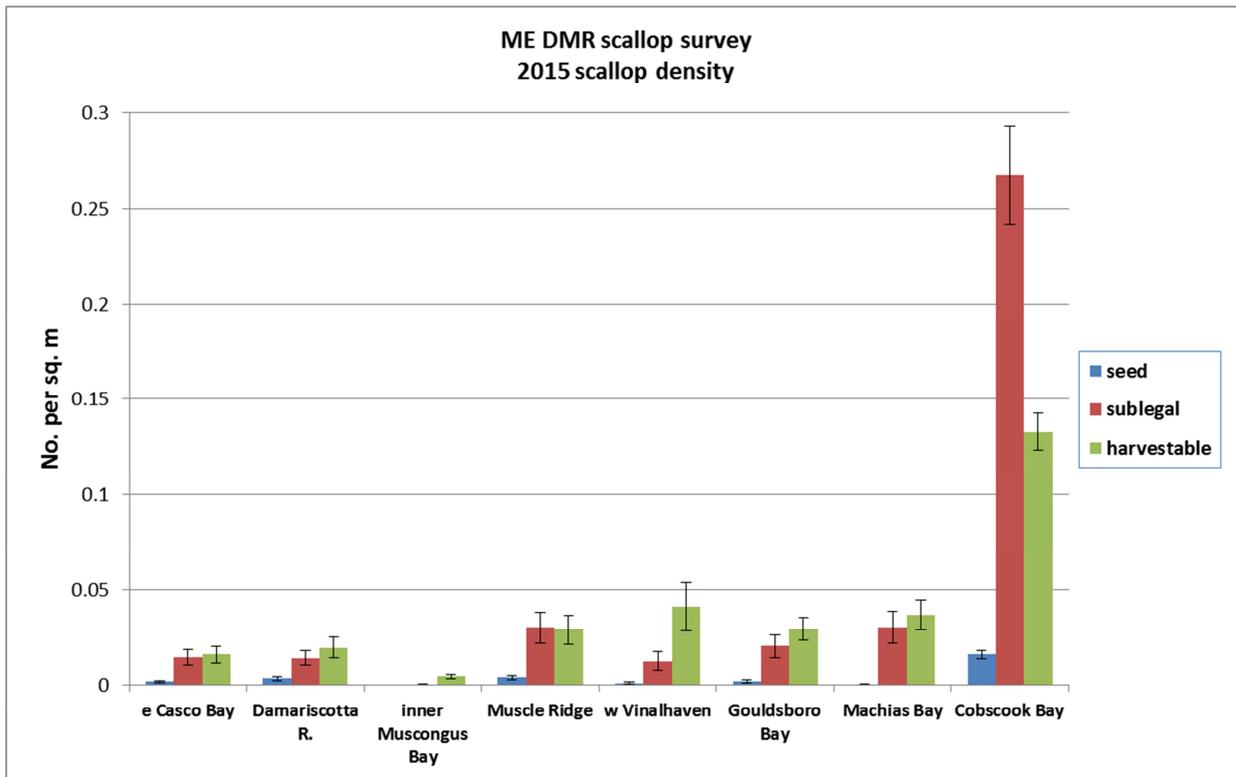
Hurricane Island.net

		Year													
		2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
	Cobscook Bay/St. Croix R.	S	S	NS	NS	S (begin higher intensity survey)	S	NS	S	S	NS	S	S (fall)	S (fall)	S (fall)
Area	Eastern Maine	S	S	NS	NS	S (begin higher intensity survey)	NS	S	S (Machias Seal Is. and Mt. Desert Rock only)	NS	S (incl. closures 4A-8C)	S (Machias Seal Is. and Mt. Desert Rock only)	S (spring - all open areas in mgt. Zone 2)	S (spring - all open areas in mgt. Zone 2)	S (spring - all open areas in mgt. Zone 2)
	Western Maine	S	S	NS	S	NS	NS	NS	S	NS	S (closures 1-3 only)	NS	NS	NS	S (spring - three (3) sections)



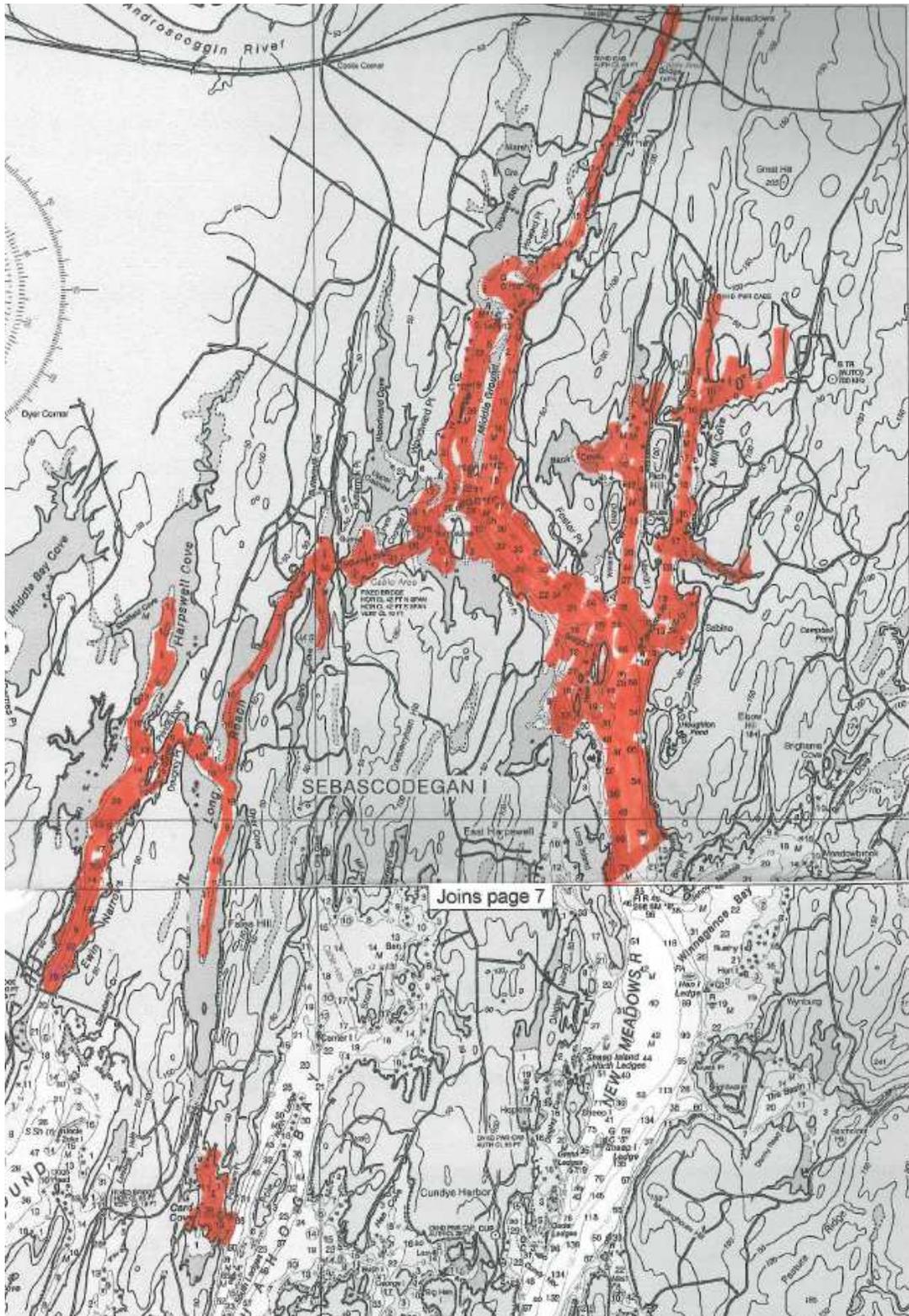






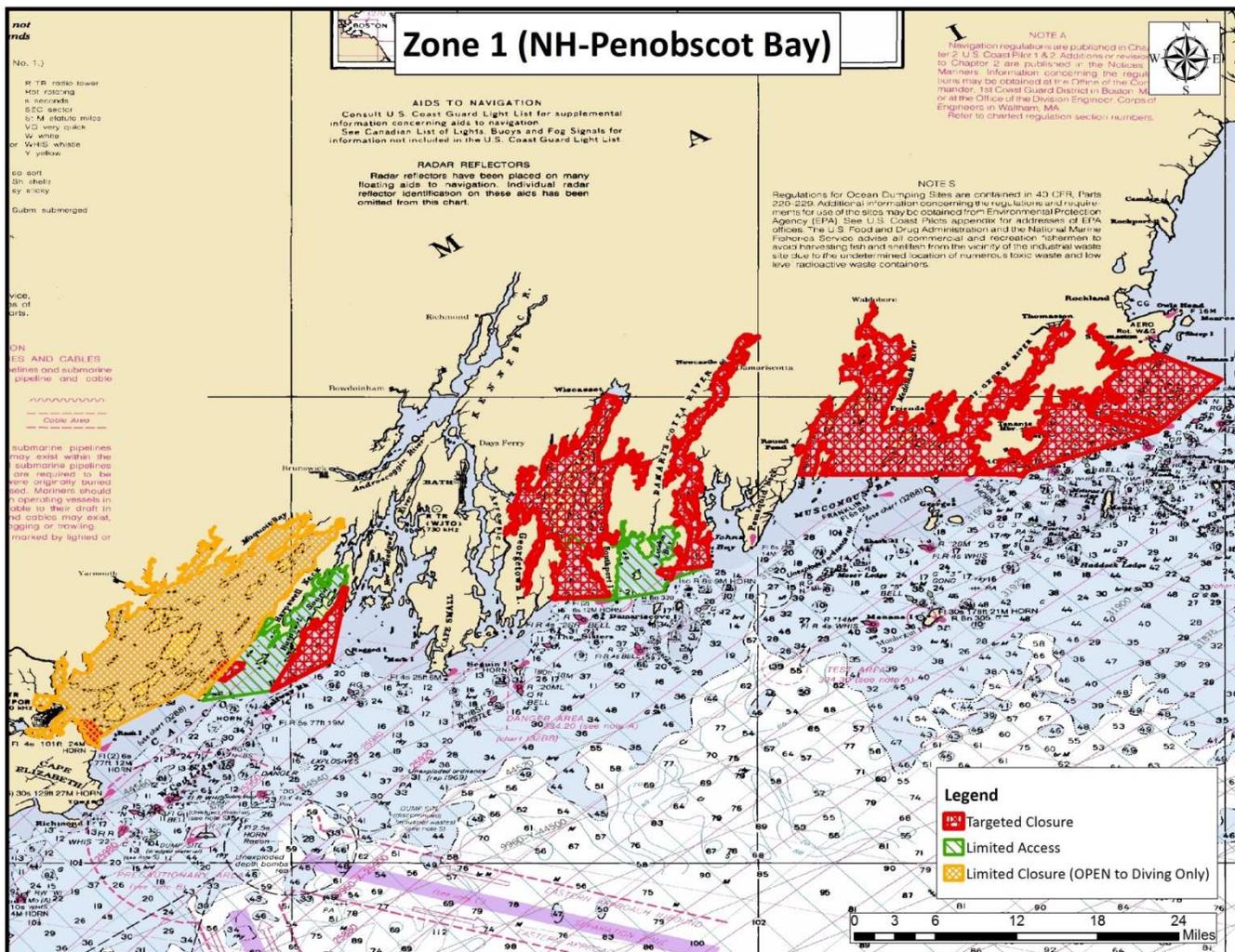
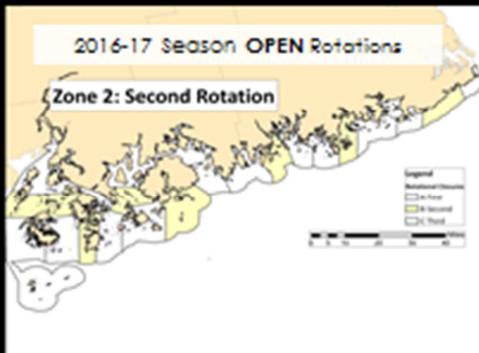
## Zone 1 Meeting Highlights

- Overall, original closures helped to increase biomass, however, gains have been offset by influx of effort. Currently back to where we were pre-closures (2009).
- Majority of harvesters expressed the need to do something different. Since lobster fishery strong, it is opportune time to do something meaningful so fishery can provide maximum employment/diversity.
- A number of harvesters support some form of rotational management for the eastern portion of Zone, complimenting Zone 2, however there was no consensus.
- Issue with new effort depleting areas; i.e. dragging all day for a gallon of meats.
- One harvester offered a new area for closure with aim of increasing spat production in New Meadows River, while another believed we should have smaller, longer term closures to increase spat [SPAs].

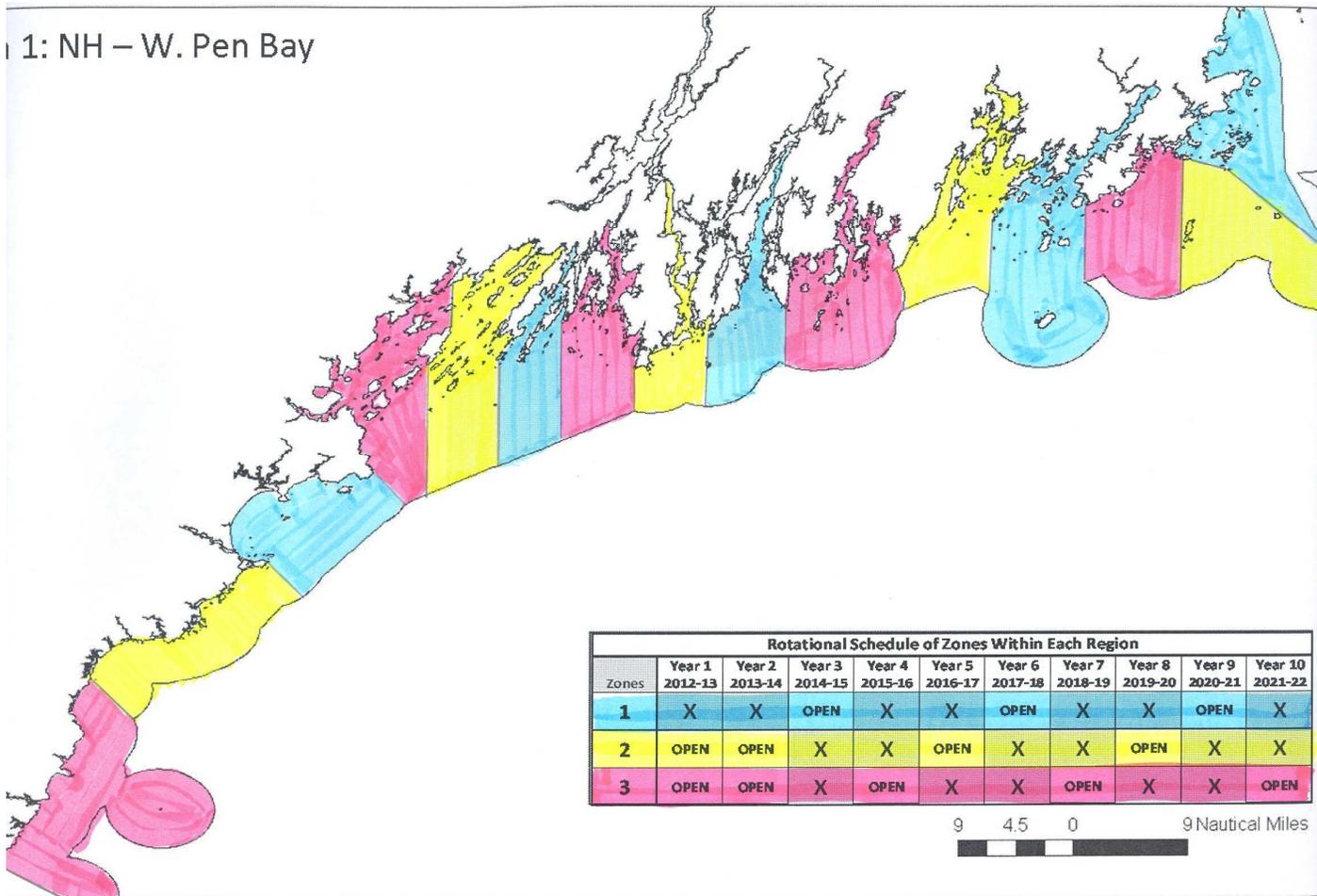


# DMR's 2016-17 Season Recommendations

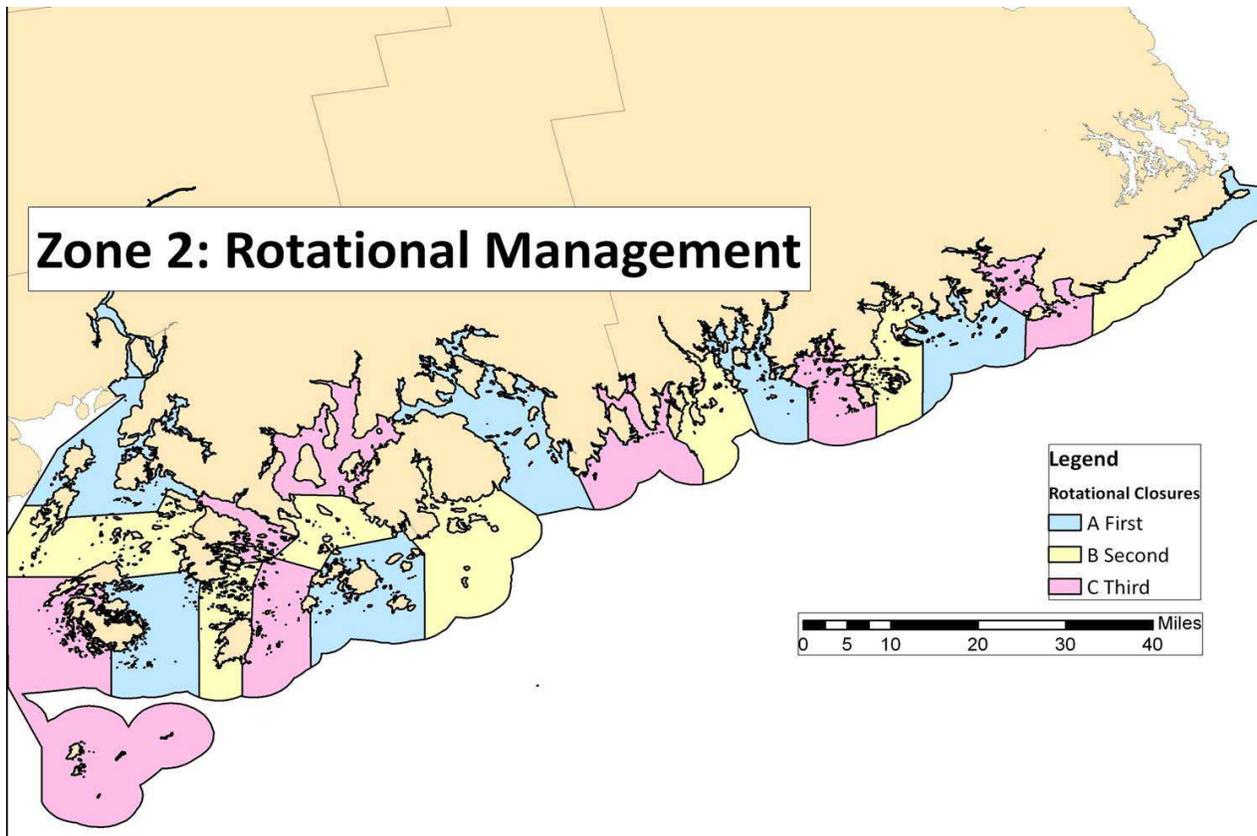
- **Zone 1: New Management Framework**
  - Rotational Management for eastern portion of Zone 1
    - Small Point to Penobscot Bay [Zone 2 line]
    - 70 day season & 15 gallons
- **Zone 2: Status Quo**
  - 70 days & 15 gallons
  - Somes Sounds Limited Access Area
  - East Moosabec Reach Closure
- **Zone 3: Status Quo**
  - 50 days & 10 gallons
- **Continue Pilot Tracking Project**
- **Increase Diver Access/Safety**
  - Split season in Zone 1 & 2 [Dec, March & April]
  - Continued access to in-season closures when warranted
  - Boat limit restriction [DMR Safety Council input]

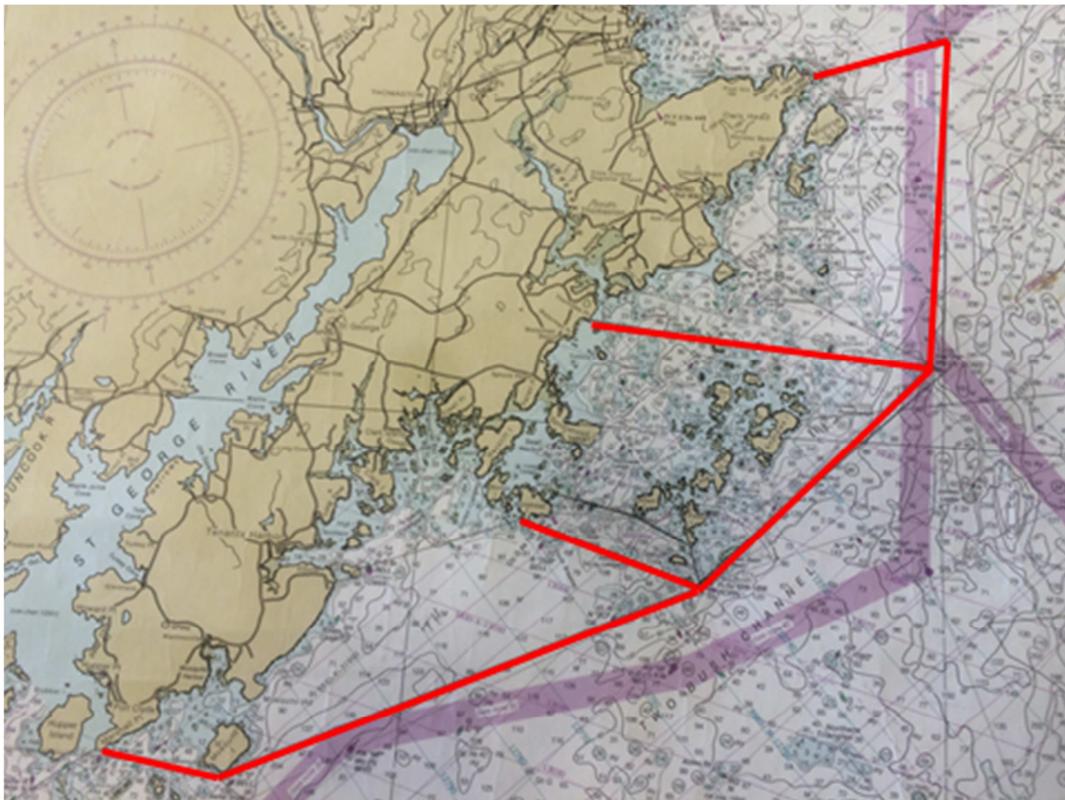
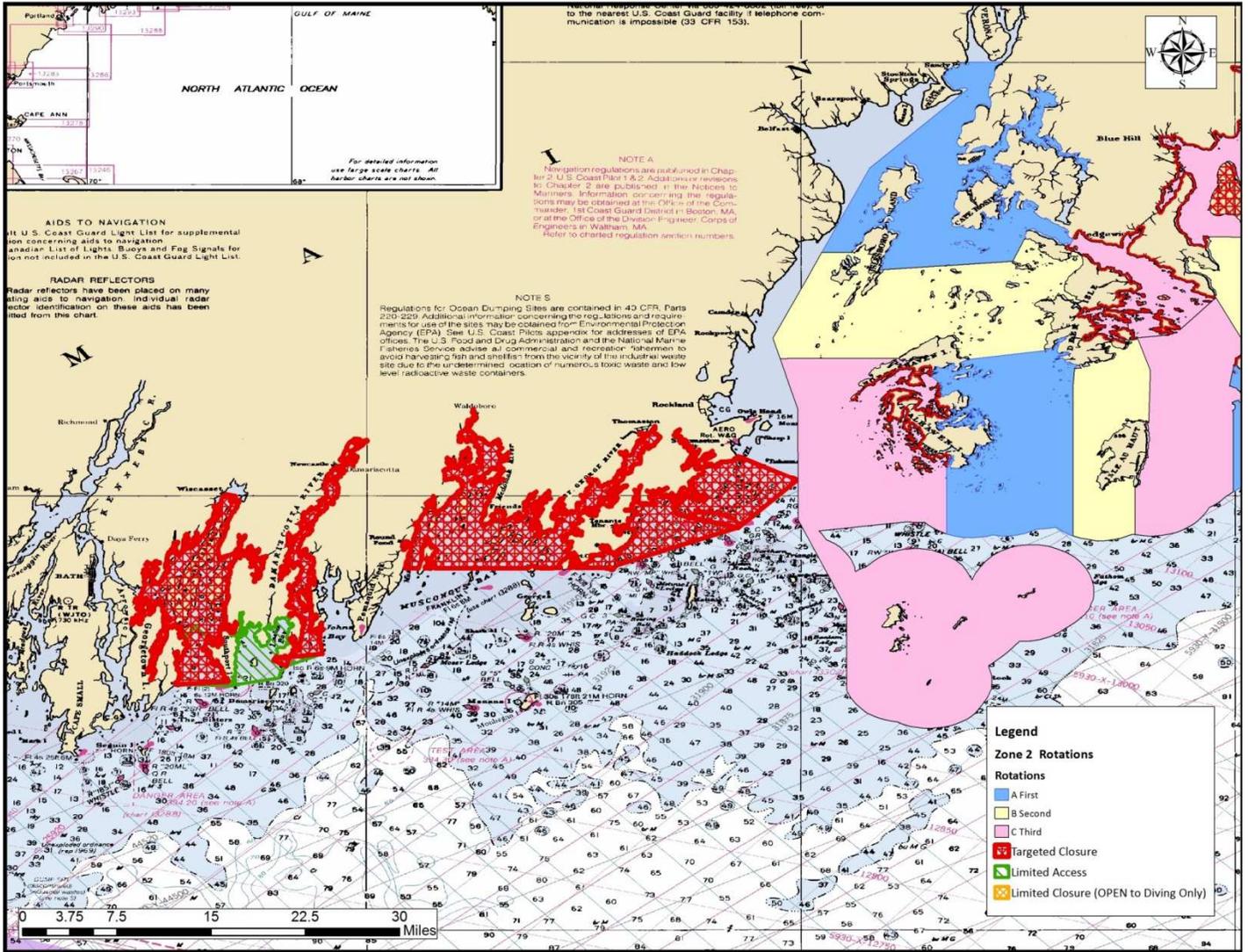


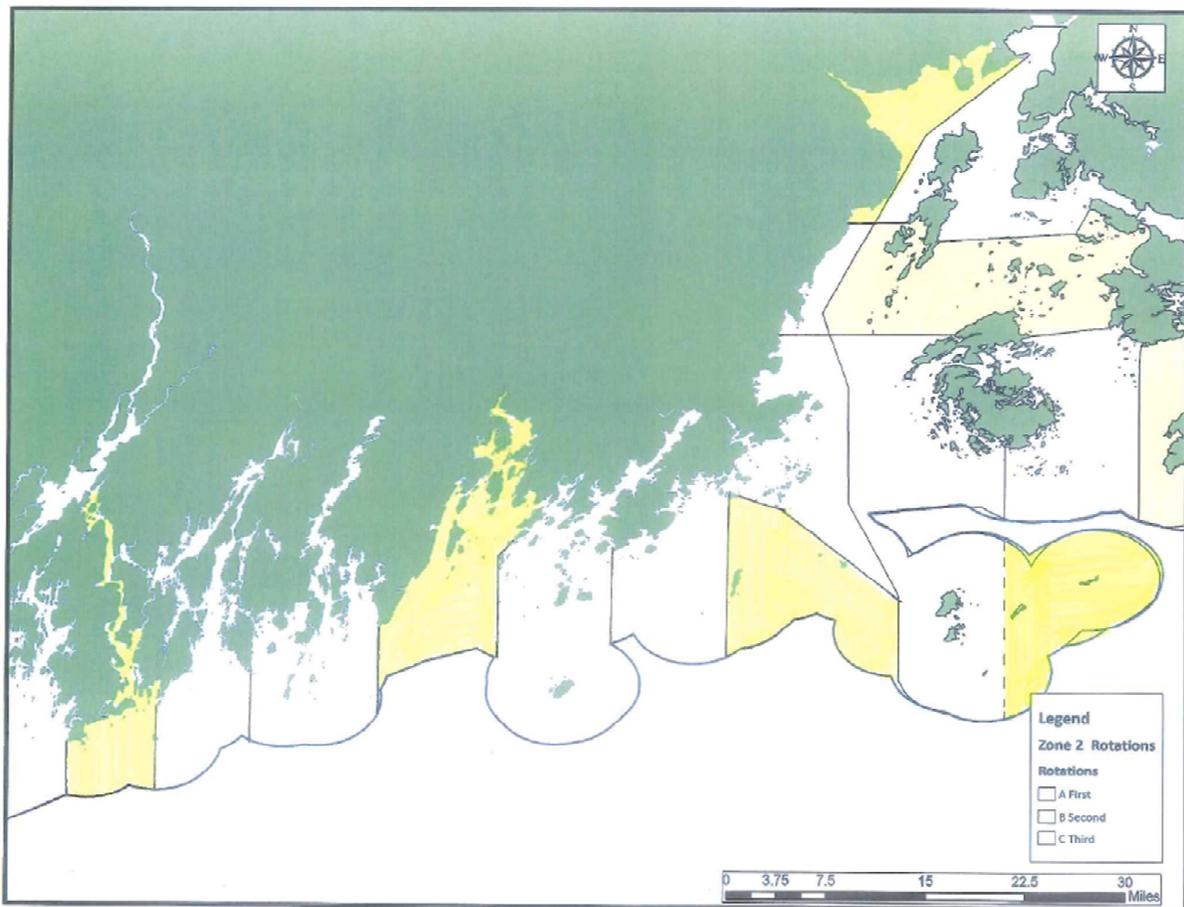
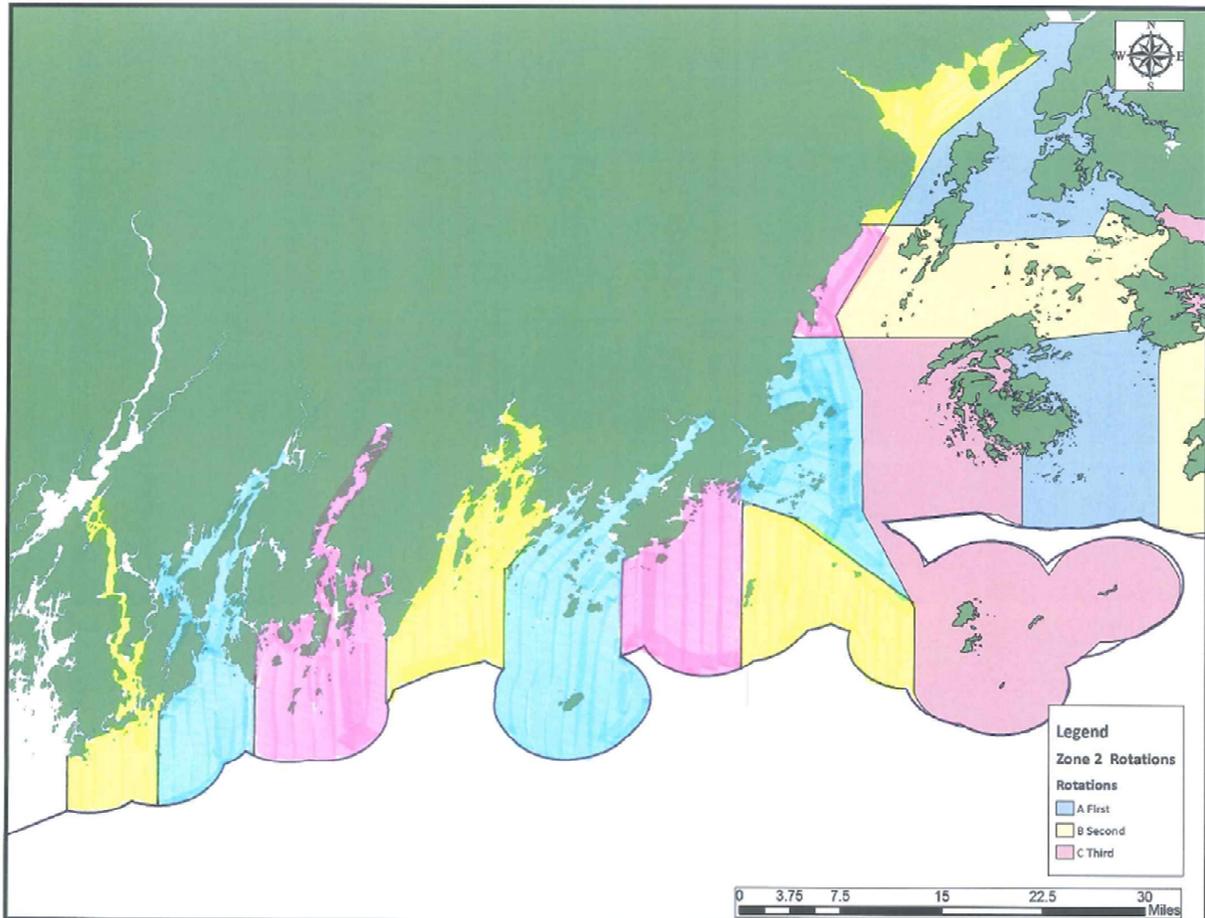
1: NH – W. Pen Bay

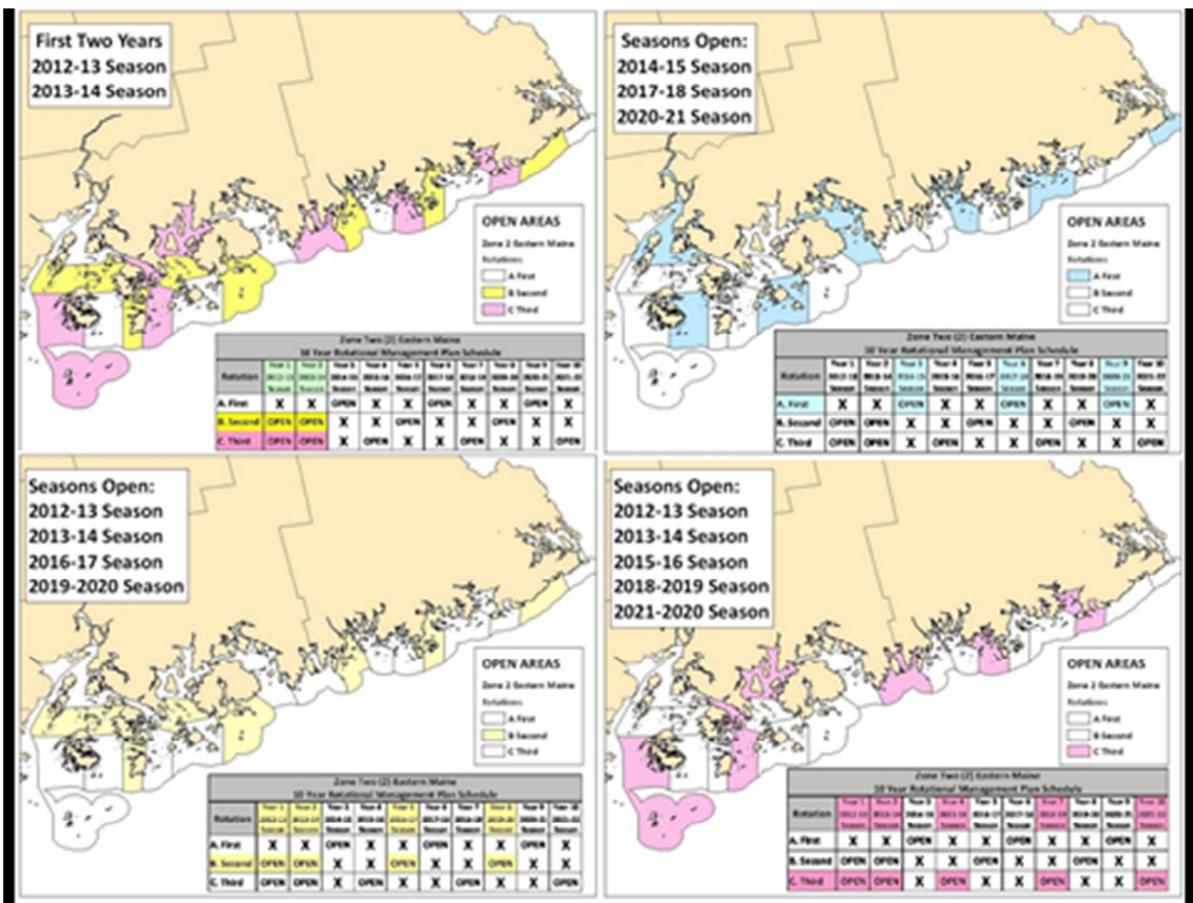
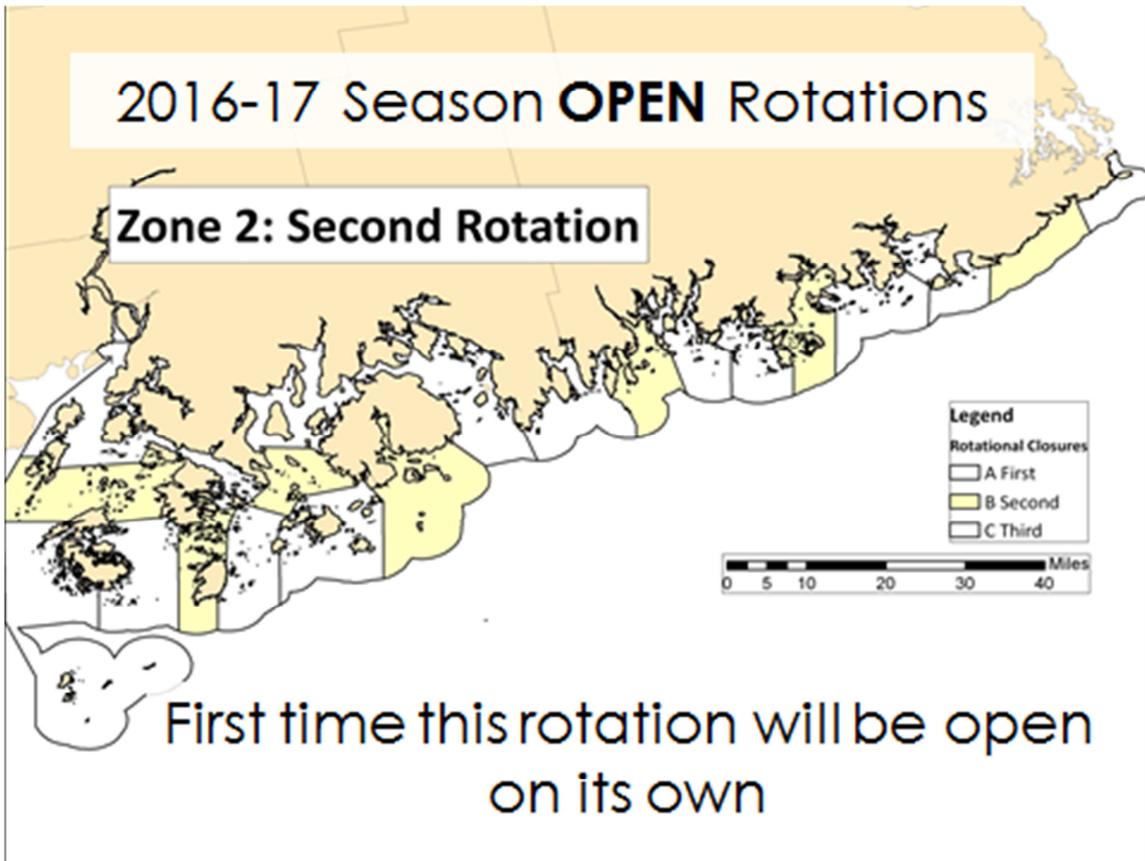


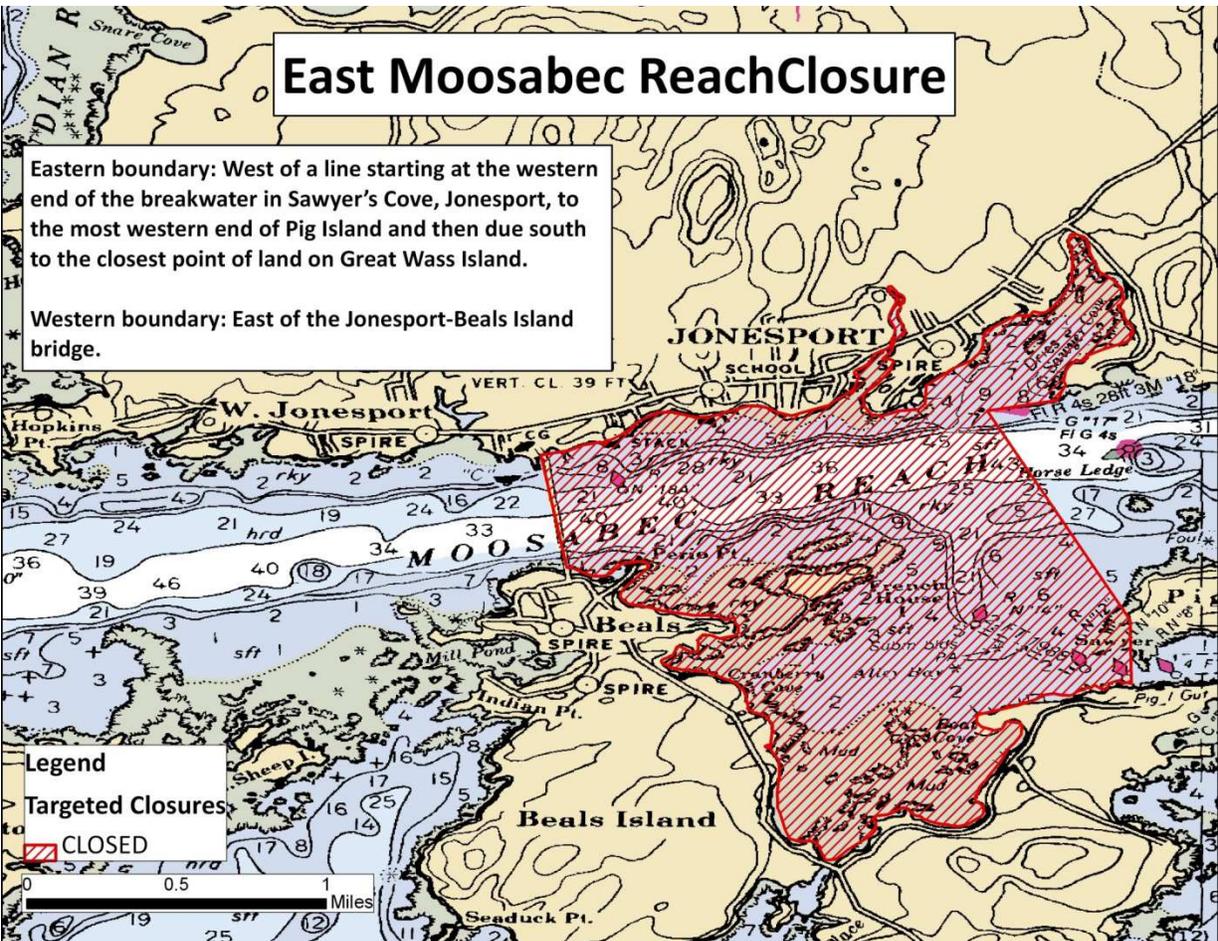
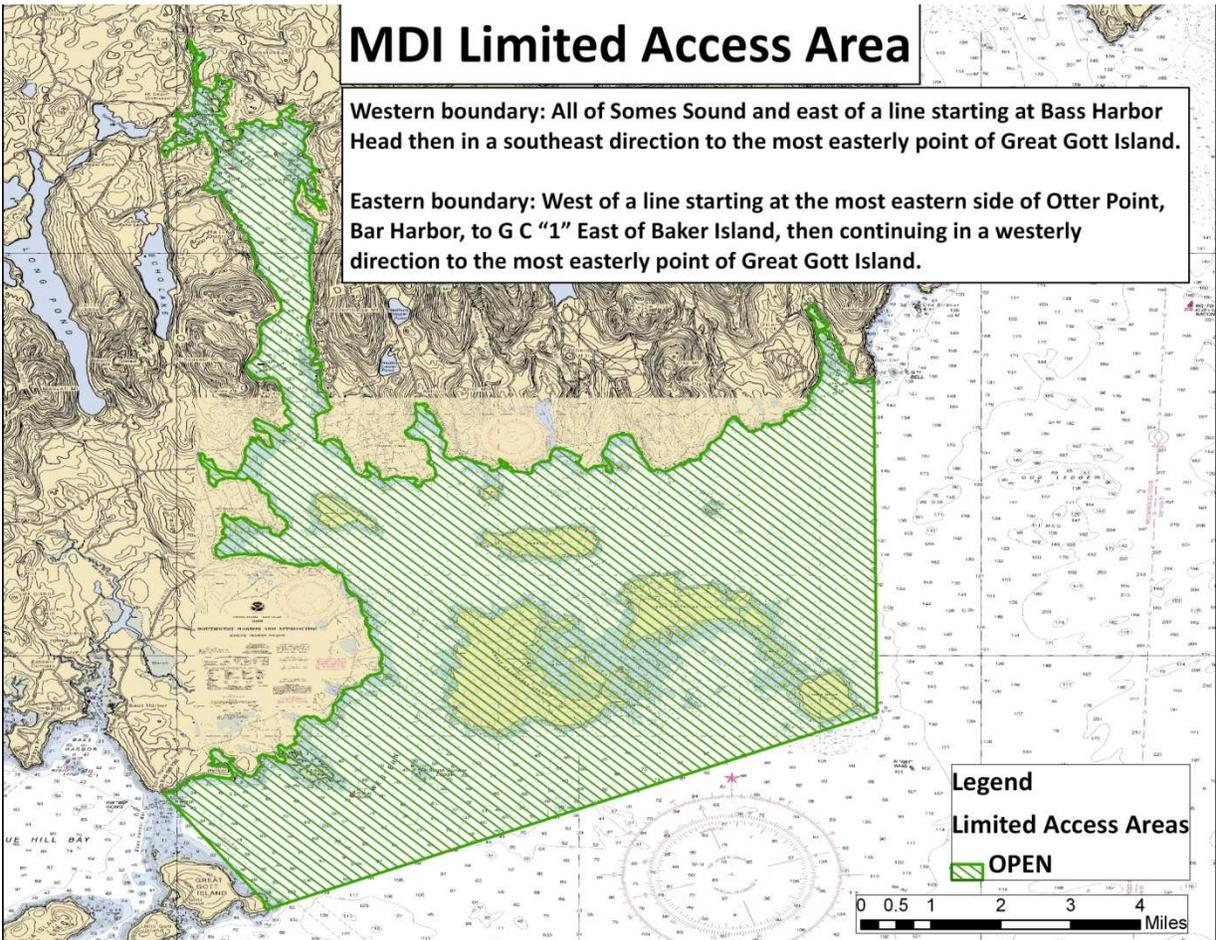
**Zone 2: Rotational Management**











**DRAFT DRAFT DRAFT DRAFT DRAFT**  
**DRAFT 2016 - 2017 Scallop Season Calendar**  
 Zone One (1)  
 60 Day DRAG Season (15 gallons)

**O** Zone 1 Limited Access Areas Draggers    **O** Open     Closed

**December 2016**

S	M	Tu	W	Th	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19 O	20 O	21 O	22 O	23	24
25	26 O	27 O	28 O	29 O	30	31

**January 2017**

S	M	Tu	W	Th	F	S
1	2 O	3 O	4 O	5 O	6	7
8	9 O	10 O	11 O	12 O	13	14
15	16 O	17 O	18 O	19 O	20	21
22	23 O	24 O	25 O	26 O	27	28
29	30 O	31 O				

8

18

**February 2017**

S	M	Tu	W	Th	F	S
			1 O	2 O	3	4
5	6 O	7 O	8 O	9 O	10	11
12	13 O	14 O	15 O	16 O	17	18
19	20 O	21 O	22 O	23 O	24	25
26	27 O	28 O				

**March 2017**

S	M	Tu	W	Th	F	S
			1 O	2	3	4
5	6 O	7 O	8 O	9	10	11
12	13 O	14 O	15 O	16	17	18
19	20 O	21 O	22 O	23	24	25
26	27 O	28 O	29 O	30	31	

16

13

**April 2016**

S	M	Tu	W	Th	F	S
						1
2	3 O	4 O	5 O	6	7	8
9	10 O	11 O	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29

5

**Total Days**  
60

**Total Limited Access Areas Days**  
15

**Total Weeks**  
17

**DRAFT DRAFT DRAFT DRAFT DRAFT**

**DRAFT 2016-2017 Scallop Season Calendar**  
 Zone One (1)  
 60 Day DIVE Season (15 gallons)

Zone 1 Limited Access Areas Divers       Open       Closed

December 2016						
S	M	Tu	W	Th	F	S
				1 O	2 O	3 O
4	5 O	6 O	7 O	8 O	9 O	10 O
11	12 O	13 O	14 O	15 O	16 O	17 O
18	19	20	21 O	22 O	23 O	24
25	26	27	28 O	29 O	30 O	31

January 2017						
S	M	Tu	W	Th	F	S
1	2	3	4 O	5 O	6 O	7 O
8	9	10	11 O	12 O	13 O	14 O
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

21

8

February 2017						
S	M	Tu	W	Th	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28				

March 2017						
S	M	Tu	W	Th	F	S
			1 O	2 O	3 O	4 O
5	6	7	8 O	9 O	10 O	11 O
12	13	14	15 O	16 O	17 O	18 O
19	20	21	22 O	23 O	24 O	25 O
26	27	28 O	29 O	30 O	31 O	

0

20

April 2016						
S	M	Tu	W	Th	F	S
						1 O
2	3	4 O	5 O	6 O	7 O	8 O
9	10	11 O	12 O	13 O	14 O	15 O
16	17	18	19	20	21	22
23	24	25	26	27	28	29

11

**Total Days**  
60

**Total Limited Access Areas Days**  
15

**Total Weeks**  
14

***DRAFT DRAFT DRAFT DRAFT DRAFT***  
**DRAFT 2016 - 2017 Scallop Season Calendar**  
 Zone Two (2)  
 70 Day DRAG Season (15 gallons)

**O** Zone 2 Limited Access Areas Draggers    **O** Open     Closed

December 2016						
S	M	Tu	W	Th	F	S
				1	2	3
4	5 O	6 O	7 O	8 O	9	10
11	12 O	13 O	14 O	15 O	16	17
18	19 O	20 O	21 O	22 O	23	24
25	26 O	27 O	28 O	29 O	30	31

January 2017						
S	M	Tu	W	Th	F	S
1	2 O	3 O	4 O	5 O	6	7
8	9 O	10 O	11 O	12 O	13	14
15	16 O	17 O	18 O	19 O	20	21
22	23 O	24 O	25 O	26 O	27	28
29	30 O	31 O				

16

18

February 2017						
S	M	Tu	W	Th	F	S
			1 O	2 O	3 O	4
5	6 O	7 O	8 O	9 O	10 O	11
12	13 O	14 O	15 O	16 O	17 O	18
19	20 O	21 O	22 O	23 O	24 O	25
26	27 O	28 O				

March 2017						
S	M	Tu	W	Th	F	S
			1 O	2	3	4
5	6 O	7 O	8 O	9	10	11
12	13 O	14 O	15 O	16	17	18
19	20 O	21 O	22 O	23	24	25
26	27 O	28 O	29 O	30	31	

20

13

April 2016						
S	M	Tu	W	Th	F	S
						1
2	3 O	4 O	5 O	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29

3

**Total Days**  
70

**Total Limited Access Areas Days**  
14

**Total Weeks**  
20

**DRAFT DRAFT DRAFT DRAFT DRAFT**

**DRAFT 2016-2017 Scallop Season Calendar**  
 Zone Two (2)  
 70 Day DIVE Season (15 gallons)

Zone 2 Limited Access Areas Divers       Open       Closed

**December 2016**

S	M	Tu	W	Th	F	S
				1 O	2 O	3 O
4	5	6	7 O	8 O	9 O	10 O
11	12	13	14 O	15 O	16 O	17 O
18	19	20	21 O	22 O	23 O	24
25	26	27	28 O	29 O	30 O	31

17

**January 2017**

S	M	Tu	W	Th	F	S
1	2	3	4 O	5 O	6 O	7 O
8	9	10	11 O	12 O	13 O	14 O
15	16	17	18	19 O	20 O	21
22	23	24	25	26 O	27 O	28
29	30	31				

12

**February 2017**

S	M	Tu	W	Th	F	S
			1	2 O	3 O	4
5	6	7 O	8 O	9 O	10 O	11 O
12	13	14	15	16 O	17 O	18
19	20	21	22	23 O	24 O	25
26	27	28				

11

**March 2017**

S	M	Tu	W	Th	F	S
			1 O	2 O	3 O	4 O
5	6	7	8 O	9 O	10 O	11 O
12	13	14	15 O	16 O	17 O	18 O
19	20	21	22 O	23 O	24 O	25 O
26	27	28	29 O	30 O	31 O	

19

**April 2016**

S	M	Tu	W	Th	F	S
						1 O
2	3	4	5 O	6 O	7 O	8 O
9	10 O	11 O	12 O	13 O	14 O	15 O
16	17	18	19	20	21	22
23	24	25	26	27	28	29

11

**Total Days**  
**70**

**Total Limited Access Areas Days**  
**14**

**Total Weeks**  
**21**

***DRAFT DRAFT DRAFT DRAFT DRAFT***  
**DRAFT 2016 - 2017 Scallop Season Calendar**  
 Zone Three (3)  
 50 Day DRAG Season (10 gallons)

**O** Zone 3 Limited Access Areas Draggers    **O** Open     Closed

December 2016						
S	M	Tu	W	Th	F	S
				1	2	3
4	5 O	6 O	7 O	8	9	10
11	12 O	13 O	14 O	15	16	17
18	19 O	20 O	21 O	22	23	24
25	26 O	27 O	28 O	29	30	31

January 2017						
S	M	Tu	W	Th	F	S
1	2 O	3 O	4 O	5	6	7
8	9 O	10 O	11 O	12	13	14
15	16 O	17 O	18 O	19	20	21
22	23 O	24 O	25 O	26	27	28
29	30 O	31 O				

12

14

February 2017						
S	M	Tu	W	Th	F	S
			1 O	2	3	4
5	6 O	7 O	8 O	9	10	11
12	13 O	14 O	15 O	16	17	18
19	20 O	21 O	22 O	23	24	25
26	27 O	28 O				

March 2017						
S	M	Tu	W	Th	F	S
			1 O	2	3	4
5	6 O	7 O	8 O	9	10	11
12	13 O	14 O	15 O	16	17	18
19	20 O	21 O	22 O	23	24	25
26	27	28 O	29 O	30	31	

12

12

April 2016						
S	M	Tu	W	Th	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29

0

**Total Days**  
50

**Total Limited Access Areas Days**  
16

**Total Weeks**  
17

**DRAFT DRAFT DRAFT DRAFT DRAFT**

**DRAFT 2016-2017 Scallop Season Calendar**  
 Zone Three (3)  
 50 Day DIVE Season (10 gallons)

Zone 3 Limited Access Areas Divers     Open     Closed

**December 2016**

S	M	Tu	W	Th	F	S
				1 O	2 O	3 O
4	5	6	7	8 O	9 O	10 O
11	12	13	14	15 O	16 O	17 O
18	19	20	21	22 O	23 O	24 O
25	26	27	28	29 O	30 O	31 O

**January 2017**

S	M	Tu	W	Th	F	S
1	2	3	4	5 O	6 O	7 O
8	9	10	11	12 O	13 O	14 O
15	16	17	18	19 O	20 O	21 O
22	23	24	25	26 O	27 O	28 O
29	30	31				

15

12

**February 2017**

S	M	Tu	W	Th	F	S
			1	2 O	3 O	4 O
5	6	7	8	9 O	10 O	11 O
12	13	14	15	16 O	17 O	18 O
19	20	21	22	23 O	24 O	25 O
26	27	28				

**March 2017**

S	M	Tu	W	Th	F	S
			1	2 O	3 O	4 O
5	6	7	8	9 O	10 O	11 O
12	13	14	15	16 O	17 O	18 O
19	20	21	22	23 O	24 O	25
26	27	28	29	30	31	

12

11

**April 2016**

S	M	Tu	W	Th	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29

0

**Total Days**  
50

**Total Limited Access Areas Days**  
17

**Total Weeks**  
17

## **Drag Size Limit**

**IN REGULATION** [Can change in upcoming rulemaking]

- **Statewide: 10'6"**
- **Kittery Area: 5'6"**
- **Blue Hill Bay: 8'6"**
- **Swan's Island Conservation Area: 8'6"**
- **Gouldsboro Bay: 4'6"**

**IN LAW** [Would have to go to Legislature]

- **Cobscook Bay: 5'6"**

## **George's Proposal**

- **10 gal dive limit, no boat limit**
- **15 gal drag limit**
- **Open Ocean Point**
- **Open Casco Closures**
- **Close Chandler Bay**
- **Close New Meadows**

## Appendix F

### Pete Gasperini's Dive Proposal

Scallop Harvesting Proposal  
presented by

Peter Gasperini, Commercial Diver  
POB 68 Vinalhaven, ME 04863

207-863-4837 foxislandsdiving@msn.com

Introduction: As a commercial scallop diver with 34 years experience harvesting as a diver, as well as 2 years experience harvesting aboard draggers, I am requesting consideration of the following proposal to improve the commercial viability, safety, enforcement, and sustainability of scallop harvesting along the coast of Maine. This proposal is based on my personal experience and conversations with personnel at the Department of Marine Resources, Maine Marine Patrol, Maine Scallop Advisory Council, Penobscot East Resource Center, and other divers who share my concerns for the fishery and diving safety.

Proposal: Beginning with the 2016-17 scallop-harvesting season, exempt divers from the rotational closure system, with the exception of the designated management sections.

Supporting Statement: This change will have little impact on the fishery since dive harvested scallops represent such a small portion of the total landings. There are approximately 60 licensed dive harvesters, of whom about half are active, and no new licenses are being issued. This proposal will give more opportunity for divers to sustain their season, which is more limited than draggers by such environmental factors as water depth, water clarity, wind, wave action, and tides, as well as emergency closures due to over-harvesting by draggers. The Marine Patrol is already a presence in closed areas, so there will be no additional enforcement required.

Commercial Viability:

- Divers are restricted to shoal waters, usually less than 10 fathoms
- Divers have less than 20% of suitable inshore bottom areas for harvesting
- Proposal allows dive harvesting after an emergency closure due to over-dragging

Safety:

- Divers need more protected waters i.e. not in the open bay
- Proposal provides more options to avoid diving when and where draggers are active

Enforcement:

- Marine Patrol is currently a presence in closed areas

Sustainability:

- Less than 4% of the total landings are dive harvested
- There is no by-catch with dive harvesting
- Dive harvesting does not impact the bottom environment
- Dive harvesting does not interfere with lobster gear

Supporting Personnel: (to be confirmed)

Trish Cheney, Resource Coordinator, Department of Marine Resources

Carla Guenther, PhD, Senior Scientist, Penobscot East Resource Center

Officer \_\_\_\_\_, Maine Marine Patrol, Rockland Division

Andrew Mays, Zone 2 Diver, Maine Scallop Advisory Council Member