

Reed  
11/3/07

MID-ATLANTIC FISHERY MANAGEMENT COUNCIL

W. Peter Jensen  
Chairman

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Daniel T. Furlong  
Executive Director

Dr. Gene Kray  
Vice Chairman

November 8, 2007

cc Wendy  
Dave Potter  
Amy V.A.

**ACTION ITEM 08-042**

Need response - Thanks -  
Nancy T

Dr. Nancy Thompson, Director  
Northeast Fisheries Science Center  
166 Water Street  
Woods Hole, MA 02543

Dear Dr. Thompson:

At its October Council meeting in New Bern, NC the Mid-Atlantic Council passed the following motion:

"Recommend to the Science Director that she and the appropriate staff meet with industry and Council members to discuss problems with the database with regard to mesh size measurements."

This motion was raised during discussions of Amendment 10 to our Atlantic Mackerel, Squid, and Butterfish Fishery Management Plan. There are four proposed actions related to reducing bycatch contemplated in Amendment 10. One of these proposed actions would require adjusting the *Loligo* minimum codend mesh size to reduce discards of butterfish and other non-targeted fish. The concern raised during discussions of this aspect of Amendment 10 was that some of the analysis provided to the Council by Council staff was based on erroneous information. Specifically, it was stated that contract observers do not always physically measure the codend mesh opening and that in lieu of taking such measurements they merely ask the vessel Captain what size mesh he is using. It was also stated that when observers do measure the net they often fail to ask the Captain to partially roll out the net so that they can then have better access to the main section of the codend. Hence, in preparation for this requested meeting we ask that you investigate these assertions and determine ~~to what degree~~ ~~on frequency the contract observers have followed mesh measurement protocols and actually physically measured the mesh size prior to collecting and recording such data, as opposed to just recording what is told to them by the vessel Captain.~~ }

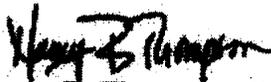
It was also mentioned that the use of 60 millimeter mesh (2 and 3/8 inches) is a misnomer as no such codend mesh size is distributed or provided by net manufacturers. What is theorized is that the 60 millimeters refers to a net that is measured such that the diameter of one knot (or perhaps two knots) is included. If this theory is true, then such a measurement ~~does not represent the true inside measure of the mesh that is being used by commercial fishermen,~~ nor does it comport with what is required by the current regulations and proposed management measures.

We have found some evidence suggesting that liner mesh measurements were incorrectly obtained by asking the captain for this information; however, this practice does not seem wide-spread. The scale of this problem is now being assessed, and steps are being taken to prevent this situation from occurring in the future. We are currently expunging any data records that are considered suspect, and are working on this project as a priority.

With respect to the concern that observers are not asking captains for the target species sought on a tow-by-tow basis, the NEFOP will reinforce the importance of conforming to the established protocol. Observers are instructed to ask the captain for the principal species, or species group, sought in a particular haul before the gear is hauled - not afterwards, based on the catch actually obtained in the haul. This is emphasized in training, reference manuals, and during regular debriefings. In some circumstances (e.g., when fisheries tend to target only one species such as sea scallops on sea scallop trips), observers may assume a particular target species for the trip unless otherwise noted. On *Loligo* trips, however, observers should be asking the captain, first mate, or lead fisherman for the target catch on every tow.

We welcome the opportunity to discuss these matters in more detail. If there is an interest in obtaining an overview of the Observer Program, we will gladly host a meeting at the Observer Training Center in Falmouth, Massachusetts, at which time details will be furnished on observer training and protocols, data quality procedures, etc. If such a meeting is desired, please contact Amy Van Atten (at 508-495-2266) so that a date and time can be arranged. Further findings of our investigation will be compiled over the next month, and will be made available upon request.

Sincerely,



Nancy B. Thompson, Ph.D.  
Science and Research Director

cc: W. Gabriel  
F. Almeida  
D. Potter  
A. Van Atten  
F. Serchuk  
J. Weinberg  
P. Rago  
P. Kurkul (NER)

What is time line  
Prefer a mailing to email?



UNITED STATES DEPARTMENT OF COMMERCE  
National Oceanic and Atmospheric Administration  
NATIONAL MARINE FISHERIES SERVICE  
Northeast Fisheries Science Center  
166 Water Street  
Woods Hole, MA 02543 1026

December 27, 2007

Mr. Daniel Furlong  
Executive Director  
Mid-Atlantic Fishery Management Council  
300 South New Street  
Room 2115, Federal Building  
Dover, DE 19904-6790

Dear Mr. Furlong,

This letter is in response to your letter of 8 November 2007 regarding mesh size measurements obtained by the Northeast Fisheries Observer Program (NEFOP). Your letter requested that the NEFSC investigate assertions made at the October 2007 Mid-Atlantic Fishery Management Council meeting that fishery observers do not measure the codend mesh openings as instructed, and instead merely ask the vessel captain what size mesh is being used during a fishing trip.

Your letter highlights a legitimate concern. Our staff has been alerted to the problem, and we have begun to investigate this matter and have formulated a plan to check errors in the database and address any misinterpretations that observers may have. The following steps have already been undertaken by the Fisheries Sampling Branch (FSB):

- (1) Surveyed current observers (53) for their feedback on collecting cod end mesh size measurements, with a 60% return rate so far;
- (2) Interviewed gear manufacturers to learn first hand of the twine primarily being used for squid liners;
- (3) Re-assessed the NEFOP observer training and data collection methods;
- (4) Briefed all editors who review observer data for adherence to protocols;
- (5) Reviewed all gear logs observed on vessels where a problem has been identified;
- (6) Re-evaluated current database audits and improved the scale of error detection for liner mesh sizes;
- (7) Researched literature on the accuracy of gauges used world-wide to measure meshes;
- (8) Consulted with other National Observer Programs on how mesh size data are collected;
- (9) Reviewed relative liner mesh size measurements on the same vessel over time;
- (10) Examined trends of liner mesh size measurements taken by the same observer over time;
- (11) Compiled results from Fishermen Comment Cards on mesh size measurements;
- (12) Compiled results from Captain's Interviews on mesh size measurements; and
- (13) Reviewed the raw data logs for all liner mesh sizes in question (i.e., 60mm, 48mm, and 80mm) for indications of improper data collection.

④ Debriefers workshop  
Case study  
Played audio

② Refined audits  
if ranges by  
target species

③ National +  
International  
Alaska  
Northwest  
G. of Mexico  
Australia  
EU  
Antarctica

① 35 results from obs survey

② samples from Trawlworks

③ Have squid codend @ training center

⑤ Interview obs mention in letters

⑥ Average range was 45-55 mm

⑬ 60mm - 40 Gears from '96-'06  
(lot of 515 - 1270)

- ⑭ Created Shadow Trip Program
- ⑮ Modified our contract to require the contractor to report



## 1.7 AREAS OF CONTROVERSY

The public hearing process for Amendment 10 is the primary vehicle to allow affected members of the public to comment on issues and alternatives that concern them. During that time, some of the management alternatives under consideration may be identified as controversial by affected members of the fishing community and other concerned citizens. During the development of the DSEIS for Amendment 10, comments from stakeholders at Council and Committee meetings with Industry Advisors indicated several areas of controversy:

- 1) Industry voiced concerns about the economic impact of increasing the minimum mesh size in the *Loligo* fishery and/or the implementation of gear restricted areas where larger mesh sizes would be required.
- 2) Concerns that industry has not been given credit for bycatch reductions that have already occurred due to changes in fishing practices in the *Loligo* fishery over time.
- 3) Some industry members noted that they report mesh size in the VTR as the inside stretch measure plus the diameter of one knot and that this would impact conclusions drawn from VTR data about the impacts of changes in the minimum codend mesh sizes required in the *Loligo* fishery. They have also voiced concerns that at-sea observers have either not always measured the mesh size of their codends (but rather have asked the Captain of the vessel what codend size was in use), or have sometimes measured the wrong part of the codend. Due to the lack of any universal convention to describe mesh size among vessel operators, the potential exists that the mesh size reported by the Captain might differ from an actual measurement of the mesh size. The extent of these problems related to mesh measurements is currently being investigated by the observer program via an audit of their data QAQC and training methods. More information on the observer program's finding should be available during public hearings. } ←
- 4) The industry has voiced concerns about the costs associated with increased observer coverage necessary to implement the butterfish mortality cap in the *Loligo* fishery. } ←

## 1.8 CONSIDERED BUT REJECTED MANAGEMENT ACTIONS

There were nine considered but rejected management actions in Amendment 10. The considered but rejected actions would have:

1. developed a less than five-year plan to allow the butterfish stock to rebuild to  $B_{MSY}$ ;
2. developed a seven-year plan to allow the butterfish stock to rebuild to  $B_{MSY}$ ;
3. developed a ten-year plan to allow the butterfish stock to rebuild to  $B_{MSY}$ ;
4. reduced fishing effort in the *Loligo* fishery through rationalization and individual tradable quotas (including a butterfish mortality cap for the *Loligo* fishery);
5. reduced bycatch by requiring jig gear;
6. provided for a small-mesh fishing area where minimal butterfish bycatch can be demonstrated;
7. provided for variable *Loligo* trip limit conditional on minimum mesh size;

Table E-0. Overview of Measures

Alternatives	Effectiveness to Rebuild Butterfish <sup>1</sup>	Effectiveness to Reduce Discards	Implementation Difficulty	Enforcement Difficulty <sup>2</sup>	Monitoring Needs	Economic Effects <sup>3</sup>
No Action: Status Quo 500 mt directed quota, 5,000 lb trip limit, 3" mesh to possess 1,000 lb or greater, 1 7/8 Lolligo mesh requirement	NONE: already in effect and will not reduce butterfish discarding	NONE: already in effect and will not reduce general discarding	Easy: infrastructure <sup>4</sup> currently in place	Difficult, but already in place	Existing reporting adequate. More observer coverage would better estimate discards	None: already in effect
Measure 1: Butterfish Mortality Cap on Lolligo Fishery	HIGH: Direct, year-round control on butterfish mortality in Lolligo fishery, which accounts for most butterfish mortality (reduces juv. and spawner discards) LOW-HIGH: Indirect, year-round, listed in order of increasing effectiveness: 2.18", 2.38", 2.12", 3". Some spawner escapement with 2.5" and 3" mesh	LOW-MEDIUM: discards reduced if Lolligo closes early due to butterfly mortality cap (no Lolligo fishing during closure) LOW-HIGH: Indirect, year-round, listed in order of increasing effectiveness: 2.18", 2.38", 2.12", 3". Some spawner escapement with 2.5" and 3" mesh	Difficult: needs infrastructure <sup>4</sup> for closing Lolligo fishery based on butterfish landings and discards Easy: infrastructure <sup>4</sup> currently in place	Difficult, but similar to what is already in place	Requires substantial increase in observer coverage. Additional reporting (e.g. trip declaration) likely required.	Substantial costs for infrastructure, industry funded observers, and if Lolligo fishery is closed early Cost for new codends and possible reduction in Lolligo catch (% unknown and depends on size)
Measure 2: Increased Lolligo Minimum Codend Mesh Size Requirement (2.18", 2.38", 2.12", 3")	LOW: <i>Illex</i> fishery only accounts for ~7% of butterfish discards and increase to 1.78" won't allow much additional escapement of juveniles	LOW: <i>Illex</i> fishery is relatively clean and increase to 1.78" won't allow much additional escapement of bycatch	Easy: infrastructure <sup>4</sup> currently in place	Difficult, but similar to what is already in place	Existing reporting adequate. More observer coverage would better estimate discards	Cost for new codends & "gilling" issues with 1.78 mesh, minimal reduction in <i>Illex</i> retention.
Measure 3: Elimination of <i>Illex</i> Fishery's Exemption from Lolligo Mesh Requirements	LOW-MEDIUM: Should reduce winter discards (juv. & adults) in GRA. But: not year-round, strictest GRA only accounts for 36% of butterfly discards by bottom other trawls; within GRA, gear likely to still catch some butterfly; effort likely to shift outside GRA	LOW-MEDIUM: Should reduce winter discards in GRA. But: not year-round measure; within GRA, gear likely to still retain some bycatch; and effort likely to shift to areas outside the GRA	Moderate changes to existing infrastructure <sup>4</sup>	Difficult, and would be in addition to what is already in place. Coast Guard noted season, location, and shape makes Enf. more difficult	Coast Guard has recommended VMS requirement to promote compliance. More observer coverage would better estimate discards	Moderate costs for infrastructure, monitoring, and reporting. LOW to HIGH lost revenue from not fishing in GRAs depending on GRA & effort shifting
Measure 4: Seasonal Gear Restricted Areas						

1 - The most effective measures occur year-round and increase the number of spawners as well as juveniles

2 - Based on "Guidelines for resource managers on the enforceability of fishery management measures" ASMFC (2002)

3 - Economic effects includes costs to NOAA Fisheries Service, the States, and/or the fishing industry

4 - Infrastructure may include (but is not limited to) resources necessary to monitor, track, catch, implement closures; set quotas and/or allocations, and enforce

No longer a possible measure.



## Long Island, NY

June 20, 2008

Joe Costanzo  
[JC2282@Cornell.EDU](mailto:JC2282@Cornell.EDU)



### Unions recruiting fishermen

Members of the United Food and Commercial Workers Union have visited our two largest local ports, Montauk and Shinnecock, recently. The motive was to urge commercial fishermen dealing with an industry in turmoil to join the union. The theory being that the union would then give fishermen more power to lobby for industry changes in the political arena. The U.F.C.W.U. and its member group, the United Seafood Workers Union, both had representatives on hand to present their position and to answer the fishermen's questions. Some of the proposals being mentioned were a fuel subsidy and fighting imports from Canada. Both ideas were met with some skepticism. First, the fuel subsidy would involve moving the fishing industry from the Department of Commerce to the Department of Agriculture. Secondly, the union represents members in Canada so fighting imports could represent a conflict of interest. To read more about this situation see the article in The East Hampton Star at the following link:



<http://www.easthamptonstar.com/dnn/Archive/Home20060605/News/Fishermen/tabid/5683/Default.aspx>



### Mid-Atlantic Fishery Management Council public hearing

As if the fishermen didn't think things were bad enough for them, they had to deal with the possibility of the closure of the *Loligo* squid fishery. The hearing was scheduled to discuss Amendment 10 to the Atlantic Mackerel, Squid, and Butterfish FMP. At issue was the development of a program to rebuild the butterfish stock and protect the rebuilt stock long-term and also to generally reduce bycatch and mortality of bycatch in the above fisheries. There were four measures proposed to try and achieve these goals and they were:

- 1) A butterfish mortality cap program for the *Loligo* Fishery
- 2) Increase the minimum codend mesh size for *Loligo*
- 3) Eliminate exemptions for *Illlex* vessels from *Loligo* mesh requirements
- 4) Create seasonal gear restricted areas

The fishermen were represented well with a good turnout and they were all anxious to have their say. All of the fishermen opted for the idea that no action be taken at this time and they had a number of reasons to back this notion up with. First, they felt that a butterfish stock assessment needed to be done. The last one was done in 2002 and with the life expectancy of a butterfish around four years they felt that an accurate assessment of the stock could not be reached. Also, and what seemed most upsetting to the fishermen, was the observer program.

continued. . .





## Long Island, NY

June 20, 2008

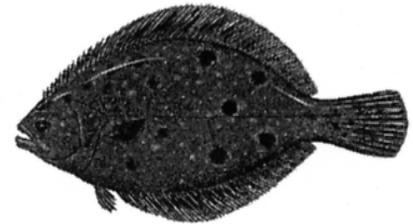
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They all felt that this system of collecting and utilizing data to regulate their industry was flawed. They mentioned many reasons and examples to back this statement. Finally, the fishermen wanted it known that the *Loligo* fishery is the last major fishery left on the east end of Long Island. In their opinion, if it becomes over regulated it spells the end of any large scale commercial fishing in New York. The Mid-Atlantic Council will make its recommendation sometime in late August or early September so only time will tell.



For more information a detailed hearing summary document is available at:  
<http://www.mafmc.org/mid-atlantic/comments/comments.htm>.

### Sampling and possession limits

The NY team has continued its sampling at all of our local ports. It has become a bit more challenging as the quarter winds down and the needed species become more particular. Also the arrival of the squid in our local waters has reduced the number of available species as many of the fishermen solely target the squid. Some of the species we still managed to sample include; tilefish, scup, fluke, butterfish, surf clams, sea bass, and squid.

The NY state daily possession limits as of June 6, 2008 are as follows: summer flounder is at 70 lbs, scup 70 lbs., black sea bass is at 125 lbs., bluefish is at 200 lbs., horseshoe crabs are at 100 pieces, spiny dogfish is at 600 lbs., and striped bass is closed.

The scup season was closed as of June 16, 2008 to vessels with a federal scup permit for the remainder of the federal summer period (May – October) because NMFS has anticipated the commercial quota being reached.

### Dock talk

Not much is new here. The complaints are still focused on the price of fuel and low trip limits. I've also heard continued talk of weekly limits as opposed to daily limits. This, in theory, would reduce the amount of fuel used and reduce bycatch because they would not be fishing everyday to achieve the daily limits. †

Comments from Public

Witness	Oral (Public Hearings)
Number of persons for all	Number of persons for all
Number of persons for A group	Number of persons for B group

Reply to Comments

Observer Issues

<p>The observer data that identified the Loligo fishery as the problem re: butterflyfish and was used to analyze alternatives is flawed; only some problems have been corrected by NMFS and the nature of those corrections and the results of updated analysis are unknown. Given the resulting uncertainty, and the potential impacts on industry, no management measures should be decided or implemented based on the observer data until all issues with the observer program (and related databases) have been corrected. Alleged problems include (not all tabulated comments mentioned every problem - some mentioned none specifically): failure to make mesh measurements accurately and consistently, failure to determine what species the fishing activity is directed at, failure to be on deck when the tows are brought in, failure to check the landed weight at dockside, inability to identify species, using captains' logs to generate reports, general poor execution of protocols.</p>	63	4	19	
<p>The low observer rate for the Loligo fishery, especially for a fishery that spans the eastern seaboard, and which is much below what the SBRA considers acceptable, means that the analysis used to look at discards is not certain enough to justify management decisions of such significant economic consequence.</p>	1			

Comments from Public	Written	Hearings		Reply to Comment
	Number of responses by email	Number of responses by mail	Number of responses by e-mail	
<p>Efforts should be made to devise a plan by which fishermen and NMFS officials can improve the level observer coverage to acceptable, if not ideal levels. If increased observer coverage is to be effective, it must include stringent guidelines on observer obligations, universal data collection and reporting techniques, and a system of accountability where fishermen can report observers who fail to fulfill their duties.</p>	1			
<p>Has never/rarely been asked what vessel was targeting on a tow by tow basis, at least until very recently.</p>		12	1	
<p>Has been asked target on a tow by tow basis.</p>		1		
<p>Has never/rarely seen observers measuring cod-ends, at least until very recently.</p>		13		
<p>Is fabricated monkfish data still in the data base?</p>		1		
<p>How long before observer data goes into the data base? We need to make sure we see what they report. Observers should provide what their edited version of the data looks like. Whatever paperwork they write out should be duplicated and signed off on and the captain should be given a copy.</p>		1		
<p>Re: observer coverage. How accurate it is? How do they use it? Does it incorporate single tows to increase amount of discards across whole Loligo fishery?</p>		3		
<p>There is more coverage recently so doesn't that account the higher percentage of butterfish discards in the Loligo fishery due to higher sample size relative to total numbers of observer trips.</p>		1		

Comment from Public	Written		Oral (Public Hearings)		Reply to Comment
	Number of persons (of all)	Number of persons (for A group)	Number of persons (for all)	Number of persons (for A group)	
<p>If they want my observer reports, I will give them all my copies. You can go through the net measurements, you can see where the same net gets measured by different observers and they record different numbers.</p>			1		
<p>Recommend the Council request a major peer review of the data and observer program in general. This program had run at the cost of the industry for 15 years and has never been evaluated for efficiency.</p>			1		
<p>Take observers off of other fisheries from an over-observed fishery like summer flounder if more observer coverage is needed for Loligo.</p>		1			

