



New England Fishery Management Council

50 WATER STREET | NEWBURYPORT, MASSACHUSETTS 01950 | PHONE 978 465 0492 | FAX 978 465 3116

John Pappalardo, *Chairman* | Paul J. Howard, *Executive Director*

## Discussion Materials Herring Stock Assessment Timing





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John Pappalardo, *Chairman* | Paul J. Howard, *Executive Director*

January 5, 2010

Nancy B. Thompson, Ph.D.  
Science and Research Director  
Northeast Fisheries Science Center  
166 Water Street  
Woods Hole, MA 02543-1026

**RE: Schedule for Atlantic Herring Benchmark Stock Assessment**

Dear Nancy:

As you are aware, the Northeast Region Coordinating Committee (NRCC) was not able to satisfy the New England Fishery Management Council's request for a benchmark stock assessment for the Atlantic herring stock complex during 2010 and instead scheduled an assessment for June 2012 (SARC 54). However, the timing for the next assessment is not practical and may cause management problems. The results of the upcoming benchmark assessment will form the basis of scientific and management decisions for the 2013-2015 Atlantic herring fishery specifications, which must be developed during 2012. Adequate time should be budgeted for the Council to make informed decisions based on the best available scientific information. I am therefore writing to request that the Science Center reschedule the next benchmark stock assessment for Atlantic herring from SARC 54 (June 2012) to SARC 53 (December 2011).

The Council's new process for establishing annual catch limits (ACLs) requires at least six months to review new scientific information, work with the Science and Statistical Committee (SSC) to determine acceptable biological catch (ABC) levels, consider management uncertainty and analyze options for ACLs, and select the final ACLs/sub-ACLs for the herring management areas. The Atlantic herring fishing year begins on January 1, so the 2013-2015 fishery specifications should be submitted to NMFS by October 2012 if possible. A benchmark stock assessment in June 2012 does not leave adequate time for the process to develop the 2013-2015 fishery specifications.

The Council faced a similar situation in 2009 when the updated assessment results from the Transboundary Resource Assessment Committee (TRAC) were released in July 2009. As a result of the assessment timing, developing the 2010-2012 herring fishery specifications became more difficult under an abbreviated and rushed meeting/work schedule. Final decisions were made by the Council in November 2009, and the specifications were submitted in late December 2009 and will not be implemented until sometime during the 2010 fishing year. This process created confusion and uncertainty, imposed significant burdens on the analysts and staff

members involved, and may generate additional problems if any quotas are reached/exceeded before the specifications are implemented.

There is an opportunity now to avoid this situation for the 2013-2015 herring specifications if the assessment can be rescheduled such that the Council has adequate time to consider the assessment results and incorporate the new science into the decision-making process. A benchmark stock assessment for Atlantic herring will presumably produce a substantial amount of new scientific information, which needs to be fully reviewed by the Herring Plan Development Team (PDT), the SSC, and the Council so that sound and informed decisions can be made regarding scientific uncertainty, management uncertainty, and ACLs for the herring fishery. A December 2011 benchmark assessment (SARC 53) would give the Council and NMFS adequate time to ensure that the best available information forms the basis of the 2013-2015 specifications, and that the specifications can be developed, submitted, and implemented in a timely manner.

Thank you for your consideration of this request. Please feel free to contact me if you have any additional questions.

Sincerely,

Paul J. Howard  
Executive Director

cc: Patricia Kurkul, NMFS Regional Administrator  
Council Members



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

January 20, 2010

Capt. Paul J. Howard  
Executive Director  
New England Fishery Management Council  
50 Water Street  
Newburyport, MA 01950

Dear Capt. Howard:

Subject: Schedule for Atlantic Herring Benchmark Stock Assessment

Thank you for your letter of January 5, 2010, requesting that the Science Center reschedule the next benchmark stock assessment for Atlantic herring from SARC 54 (June 2012) to SARC 53 (December 2011). This change can be accommodated in the SARC schedule, but it will require some details to be considered before the NRCC makes this change official. First, given that the assessment will be held six months earlier, there will be less time to work on the assessment, less data available, and the Terms of Reference will have to be adjusted. This is explained more fully in the enclosed table. Second, adding herring to SARC 53 will mean that either a benchmark assessment (black sea bass or GOM cod) or the review of signposts will need to be deferred to a subsequent SARC. Our staffs will need to work out these details for consideration by the NRCC.

We have consulted with NERO and they support your request to change the herring assessment to SARC 53.

Sincerely,

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

Enclosure

cc: F. Almeida  
R. Merrick  
F. Serchuk  
P. Rago  
J. Weinberg  
W. Gabriel  
R. McBride  
R. Brown



## IMPLICATIONS OF ALTERNATIVE ASSESSMENT DATE FOR HERRING

<i>Factor</i>	<i>Elements</i>	<i>Dec 2011</i>	<i>June 2012</i>
Terms of Reference	2009 Landings + Discards	Yes	Yes
	2009 LAA (Landings at age)	Yes	Yes
	2010 Landings+ Discards	Yes	Yes
	2010 LAA	Yes	Yes
	2011 Landings + Discards	No	Yes
	2011 LAA	No	Probable
	Yrs of Bigelow Spring Data	3	4
	Yrs of Bigelow Fall data	2	3
	Examination/treatment of Retrospective Pattern (recognizing that alternative model configurations or models might eliminate the pattern)	Somewhat detailed. Might consider alternative measures of Mohn's rho, through 2011, plus could be tied to MSE analyses (below). Would also examine "what-if" scenarios.	More Detailed. Would examine alternative measures of Mohn's rho, through Dec 2011, plus would be tied to MSE analyses (below). Would also examine "what-if" scenarios.
	MSE (Management Strategy Evaluation) of harvest pattern	Possible examination of alternative harvest strategies, some feedback effects, and evaluation of retrospective patterns.	Definite examination of alternative harvest strategies, some feedback effects, and evaluation of retrospective patterns.
	Review of historical landings-at-age data. (This involves review of measures used by Maine to estimate landings across fleets and state fisheries)	Likely	Definite
	Review treatment of acoustic survey	Probable: Detailed analysis of sampling protocols, comparison with Albatross and Bigelow catch rates	Probable: Detailed analysis of sampling protocols, comparison with Albatross and Bigelow catch rates, Possible: Recommendations for revising sampling strategy.
	Review reference points (analyses would progressively improve with more time)	Somewhat extensive: Revise estimates to be consistent with	More Extensive — Revise estimates to be consistent with

		assessment model, and examine of Stock-Recruit relation.	assessment model, and examine Stock-Recruit relation. Use an additional year of data.
	Ecosystem Considerations	Somewhat extensive. Results would inform model scale and might be included as a model based estimate of M2. Unlikely to get predictive model for ecosystem analyses.	More Extensive. Results would inform model scale and probably be included as a model based estimate of M2. Could also explore implications about large predators such as whales.
	Spatial structure of stock	Limited. Existing spatial information might be included in revised assessment model or various simple exploratory models. Possible examination of VMS data.	Possible. Existing spatial information might be included in revised assessment model or various simple exploratory models. Possible examination of VMS data. Further analysis would depend on new data on stock structure. A calibrated spatially structured model is unlikely since existing and historical data would be insufficient to support.
	Review assessment model formulation	Consider alternative models of differing complexity.	Develop alternative models, include any model advances, and possibly shift to alternative model.
Workload	Center	Manageable if TORs constrained	Manageable



**Scheduling Worksheet for Stock Assessments.**

**date: 10/9/09**

**Basis for entries in Table: Fall 2009 NRCC meeting**

	<b>SARC 47, June 2008</b>	<b>(No SARC), Dec. 2008</b>
1	Summer flounder, June 16 - 20	
2		
3		
4	(Updates: Bluefish, BlkSeaBass, Scup, SMB, Dog, Herr)	("Data Poor" WG: 12/8-12, BSB,RCrab,Scup,Skates,Wolf,Weak)
5	(GARM III - BRP Meeting, Apr 28 - May 2)	(ICES Assess. Methods WG, Oct. 7-16)
6	(GARM III - 19 Benchmark Assessments, Aug. 4-8)	
7	(TRAC - EGBK Cod, Haddock, June 23 -27)	
8	(TRAC - GBK YT, Aug 12 - 14)	

	<b>SARC 48, June 2009</b>	<b>SARC 49, Nov 30 - Dec 3 2009 (11/30-12/3)</b>
1	Ocean quahog	Atlantic surfclam
2	Tilefish	Butterfish
3	Weakfish	
4		
5	(Updates: Bluefish, BlkSeaBass, Scup, SMB, Fluke, Dog (date??))	(TRAC - Mackerel - Data - Oct 22-23 '09 )
6	(Vessel Calibration, Aug)	
7	(TRAC - EGBK Cod - Data - Jan)	
8	(TRAC - EGBK Cod - Modeling - April)	
9	(TRAC - (EGBK Cod, EGBK Hadd, GB YT), Herring - June)	
10	(TRAC - Dogfish - Data - April '09)	
11	(Wolffish Status Review - Jun '09)	

	<b>SARC 50, June 1-4, 2010</b>	<b>SARC 51, Dec. 2010</b>
1	Sea scallop	Loligo
2	Monkfish	Hakes: 3 spp - silver, red, offshore
3	Pollock	
4		
5	(TRAC - Dogfish - Benchmark - Jan 25-29 '10)	
6	(TRAC - Mackerel - Benchmark - Mar 1-5 '10)	
7	(Updates: Bluefish, BlkSeaBass, Scup, Fluke, Butter, Dog)	
8	(TRAC - EGB cod, EGB haddock, GB YT - Jul 19-23 '10)	(MSRA ABC support)
9		

	<b>SARC 52, June 2011</b>	<b>SARC 53, Dec. 2011</b>
1	Summer flounder	Black sea bass
2	Winter flounder: 3 stocks - GM, GB, SNE	GOM Cod
3		Analysis of ' Signposts '
4		
5		
6		
7	(TRAC - EGB cod, EGB haddock, GB YT )	

	<b>SARC 54, June 2012</b>	<b>SARC 55, Dec. 2012</b>
1	Ocean quahog	Atlantic surfclam
2	SNE YT flounder	GB Cod
3	Herring	<i>Windowpane flounder</i>
4		
5		
6		
7	(TRAC - EGB cod, EGB haddock, GB YT )	

*Italics* = under consideration, but not officially scheduled.

"( )" = not in the SARC process.

~/sarc/boilerplate/Schedule-worksheet-assessments(date).xls 10-9-2009.