

MEETING OVERVIEW

The Stock Assessment Review Committee (SARC) meeting of the 37th Northeast Regional Stock Assessment Workshop (37th SAW) was held at the School of Marine Science and Technology (SMASST, University of Massachusetts Dartmouth) in New Bedford, Massachusetts, June 16-20, 2003. The SARC Chairman was Patrick Cordue, Innovative Solutions, Ltd, New Zealand (CIE). Members of the SARC included scientists from the NEFSC, the NMFS's Northeast Regional Office, the New England and Mid-Atlantic Fishery Management Councils (NEFMC, MAFMC), Atlantic States Marine Fisheries Commission (ASMFC), University of Maine, Massachusetts Department of Marine Fisheries, the SEFSC's Miami laboratory and the UK (Table 1). In addition, 22 other persons attended some or all of the meeting (Table 2). The meeting agenda is presented in Table 3.

Table 1. SAW-37th SARC Composition.

Patrick Cordue (Innovative Solutions, New Zealand; CIE), **Chairman**

Northeast Fishery Science Center:

Chris Legault
Paul Nitschke
Loretta O'Brien

Regional Fishery Management Councils:

Andy Applegate, NEFMC
Tom Hoff, MAFMC

Atlantic States Marine Fisheries Commission/States:

Yong Chen, Univ. of ME
Lydia Munger, ASMFC
Gary Nelson, MA

Other experts:

Jerome Hermsen, NMFS, Gloucester
Mauricio Ortiz, SEFSC, Miami
Paul Medley, UK; CIE
Erik Williams, SEFSC, Beaufort

Industry Advisor:

Maggie Raymond, NEFMC

Table 2. List of Participants

Anne Beaudreau, NEFMC	Paul Rago, NEFSC
Laurel Col, NMFS	Anne Richards, NEFSC
Steven Correia, MADMF	Roger Rulifson, East Carolina University
Chad Demarest, NEFMC	Terry Smith, NEFSC
Sonja Fordham, Ocean Conservancy	Katherine Sosebee, NEFSC
Megan Gamble, ASMFCM	Mark Terceiro, NEFSC
Dvora Hart, NEFSC	David Wallace, Industry
Larry Jacobson, NEFSC	James Weinberg, NEFSC
Teresa Johnson, Rutgers	Sue Wigley, NEFSC
Steve Murawski, NEFSC	John Womack, Industry
Jillian Norton, NEFSC	
Eric Powell, Rutgers	

**Table 3. Agenda of the 37th Northeast Regional Stock Assessment Workshop
(SAW 37) Stock Assessment Review Committee (SARC) Meeting**

School of Marine Science and Technology (SMAST)
University of Massachusetts Dartmouth
New Bedford, Massachusetts
16-20 June, 2003

TOPIC	WORKING GROUP & PRESENTER(S)	SARC LEADER	RAPPORTEUR
MONDAY, 16 June (1:00-5:00 PM)			
Opening			
Welcome	Terry Smith, SAW Chairman		
Introduction	Patrick Cordue, SARC Chairman		
Agenda			
Conduct of Meeting			
Witch flounder Stock (A)	S. Wigley	A. Applegate	L. Col
TUESDAY, 17 June (9:00 AM - 5:00 PM)			
Spiny dogfish (B)	P. Rago R. Rulifson	P. Medley	M. Gamble
Atlantic hagfish (E)	A. Beaudreau	Y. Chen	C. Demarest
Reception, 6 pm, Library	SMAST		
WEDNESDAY, 18 June (9:00 AM - 5:00 PM)			
Illex squid (D)	L. Hendrickson	M. Ortiz	A. Richards
Atlantic surfclam (C)	J. Weinberg	T. Hoff	A. Richards
THURSDAY, 19 June (9:00 AM - 5:00 PM)			
Review Advisory Reports and Consensus Summary Sections for the SARC Report			
FRIDAY, 20 June (9:00 AM - 5:00 PM)			
SARC comments, research recommendations, and 2nd drafts of Advisory Reports			

The Process

The Northeast Regional Coordinating Council, which guides the SAW process, is composed of the chief executives of the five partner organizations (NMFS/NEFSC, NMFS/NER, NEFMC, MAFMC, ASMFC). Working groups assemble the data for assessments, decide on methodology, and prepare documents for SARC review. The SARC members have a dual role – panelists are both reviewers of assessments and drafters of management advice. As products of the meeting, the Committee prepares two reports: a summary of the assessments with advice for fishery managers known as the *Advisory Report on Stock Status*; and a more detailed report of the assessment, results, discussions and recommendations known as the *Consensus Summary of Assessments* (this report).

Assessments for SARC review were prepared at meetings listed in Table 4.

Table 4. SAW 37 Working Group meetings and participants.

Working Group and Participants	Stock/Species	Meeting Date
<u>SAW Northern Demersal Working Group</u>		
R. Bowering, DFO, St. John's Nfld J. Brodziak, NEFSC J. Burnett, NEFSC S. Cadrin, NEFSC L. Col, NEFSC R. Mayo (Chair), NEFSC L. O'Brien, NEFSC P. Rago, NEFSC K. Sosebee, NEFSC S. Sutherland, NEFSC M. Terceiro, NEFSC S. Wigley, NEFSC	Witch flounder	May 14-16, 2003 NEFSC, Woods Hole

Table 4. (cont.) SAW 37 Working Group meetings and participants.

Working Group and Participants	Stock/Species	Meeting Date	
<u>SAW Invertebrate Working Group</u>			
M. Bell, CEFAS, Lowestoft	Illex	April 14 - 15, 2003	
E. Bochanek, Rutgers University		May 12 - 13, 2003	
D. Hart, NEFSC		NEFSC, Woods Hole	
L. Hendrickson, NEFSC			
J. Idoine, NEFSC			
L. Jacobson, NEFSC			
C. Pickett, NEFSC			
E. Powell, Rutgers University			
P. Rago, NEFSC			
J. Ruhle, MAFMC			
R. Seagraves, MAFMC			
M. Bell, CEFAS, Lowestoft		Surfclam	April 16 - 17, 2003
T. Hoff, MAFMC			May 14 - 15, 2003
L. Jacobson, NEFSC	NEFSC, Woods Hole		
S. Murawski, NEFSC			
C. Pickett, NEFSC			
P. Rago, NEFSC			
D. Wallace, Wallace & Assoc.			
J. Weinberg, NEFSC			
J. Womack, Wallace & Assoc.			
<u>ASMFC Spiny Dogfish Technical Committee/SAW Southern Demersal Working Group</u>			
Jim Armstrong, MAFMC	Spiny dogfish	May 12-14, 2003	
Laurel Col, NEFSC		NEFSC, Woods Hole	
Eric Dolan, NERO			
Megan Gamble, ASMFC			
Joe Grist, N. Carolina Div. of Marine Fisheries			
Ralph Mayo, NEFSC			
Steve Murawski, NEFSC			
Loretta O'Brien, NEFSC			
Chris Powell, R.I. Div. of Fish and Wildlife			
Paul Rago, NEFSC			
Jim Ruhle, MAFMC			
Roger Rulifson, E. Carolina University			

Table 4. (cont.) SAW 37 Working Group meetings and participants.

Alexi Sharov, Maryland Dept. of Natural Resources
Katherine Sosebee, NEFSC
Mark Terceiro, NEFSC

Ad hoc Atlantic Hagfish Working Group

Anne Beaudreau, NEFMC, Chair	Atlantic hagfish	March 28, 2003
Mark Boulay, F/V Camano		Newburyport, MA
Andrew Cooper, Univ. of New Hampshire		
Chad Demarest, NEFMC		
Larry Jacobson, NEFSC		
Chad Keith, NEFSC		
Chris Kellogg, NEFMC		
Frederic Martini, Univ. of Hawaii		
Steve Nippert, F/V Kristin & Michael		
Mickie Powell, Birmingham-Southern College		
Terry Smith, NEFSC		

Agenda and Reports

The 37th SARC reviewed assessments for witch flounder, spiny dogfish, Atlantic surfclam and northern short-finned (illex) squid. Witch flounder and illex assessments were last reviewed in 1999 by the 29th SARC; spiny dogfish in 1998 by the 26th SARC; and surfclam in 2000 by the 30th SARC.

The panel also reviewed a working paper on the Atlantic hagfish resource and fishery. The Atlantic hagfish fishery is new to the region, involves relatively few participants and is currently un-managed as there is no FMP nor fishery regulations in place. As the hagfish fishery has developed, questions related to resource abundance, sustainability, and the need for management have emerged.

There are two reports produced subsequent to the meeting of the Stock Assessment Review Committee: one containing the assessments, SARC comments, and research recommendations (SARC Consensus Summary of Assessments - *this report*), and another produced in a pre-specified format which includes standard information on stock status and management advice (SARC Advisory Report). The draft reports were provided to the NEFMC, MAFMC and ASMFC in July and August. Presentations to the Councils occurred in July and August 2003 (NEFMC, 14 July, Portland; MAFMC, 5 August, Baltimore). Following review by the Councils and Commission and the Northeast Regional Coordinating Council, the documents have been finalized and published in the NEFSC Reference Document series as the 37th SARC Consensus Summary of Assessments (CRD 03-16) and the 37th SAW Advisory Report (CRD 03-17).

The SARC Consensus Summary of Assessments is organized into chapters: A. Witch flounder; B. Spiny dogfish; C. Atlantic surfclam; D. Northern short-finned squid; and E. Atlantic hagfish. As is customary, each chapter concludes with a section summarizing the SARC's discussion and providing a list of research recommendations offered by the panel.

In this report, in addition to these stock-specific sections, the SARC identified a number of overarching research recommendations which apply to all assessments. These recommendations, to be acted upon by the SAW Methods Working Group, appear below.

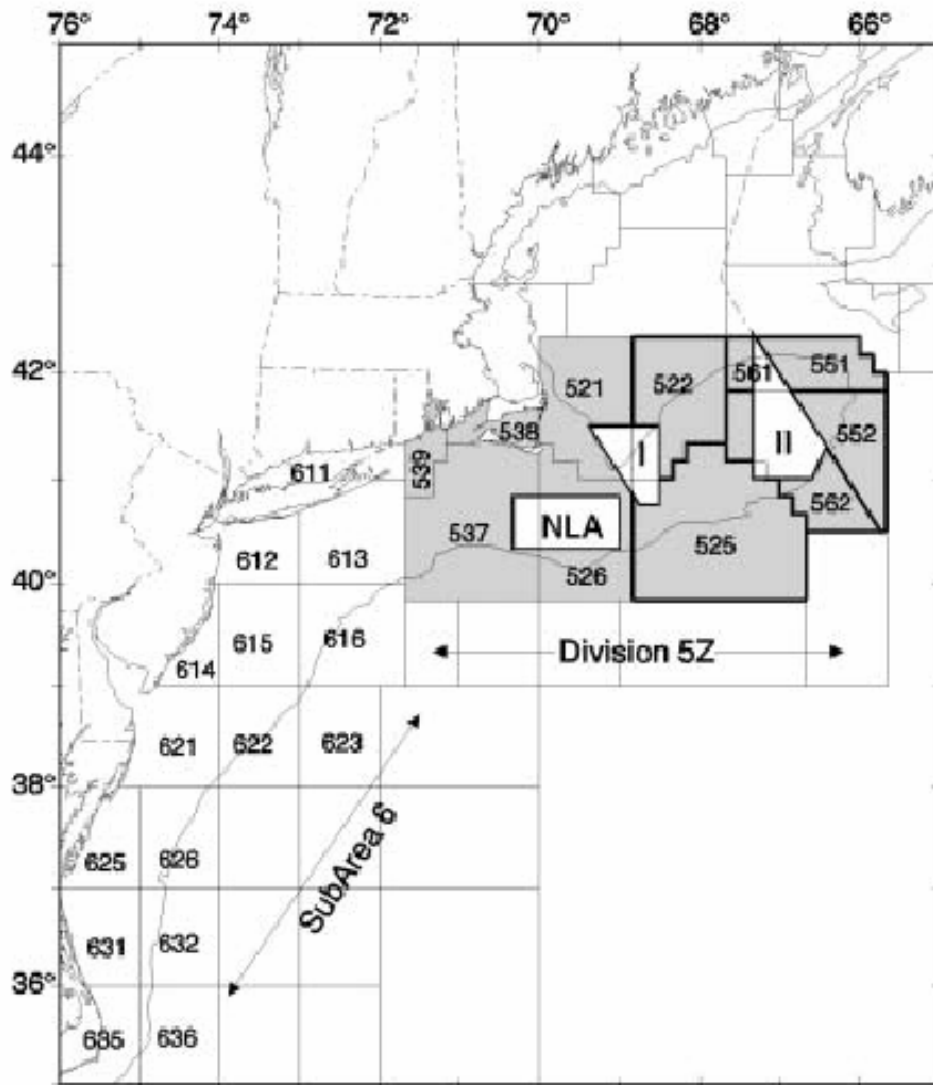
As additional general reference material, a chart of US commercial statistical areas used to report landings in the Northwest Atlantic is presented in Figure 1 and a chart showing the sampling strata used in NEFSC bottom trawls surveys is presented in Figure 2.

RESEARCH RECOMMENDATIONS

(Generic, for the SAW Methods Working Group)

- ◆ Estimate precision (e.g. the 80% CI) for biological reference points and the parameter values used to evaluate stock status.
- ◆ Explore methods to incorporate sampling uncertainty in bootstrap estimates of precision of VPA estimates of SSB, fishing mortality and recruitment.
- ◆ Explore methods for determining how well the VPA fits the input data, for example, using the Akaike Information Criteria or an overall indicator of the quality of the VPA fit, including the information contained in standardized residual patterns, residual sums of squares and retrospective patterns.

Figure 1. Statistical areas used for catch monitoring in offshore fisheries in the Northeast United States.



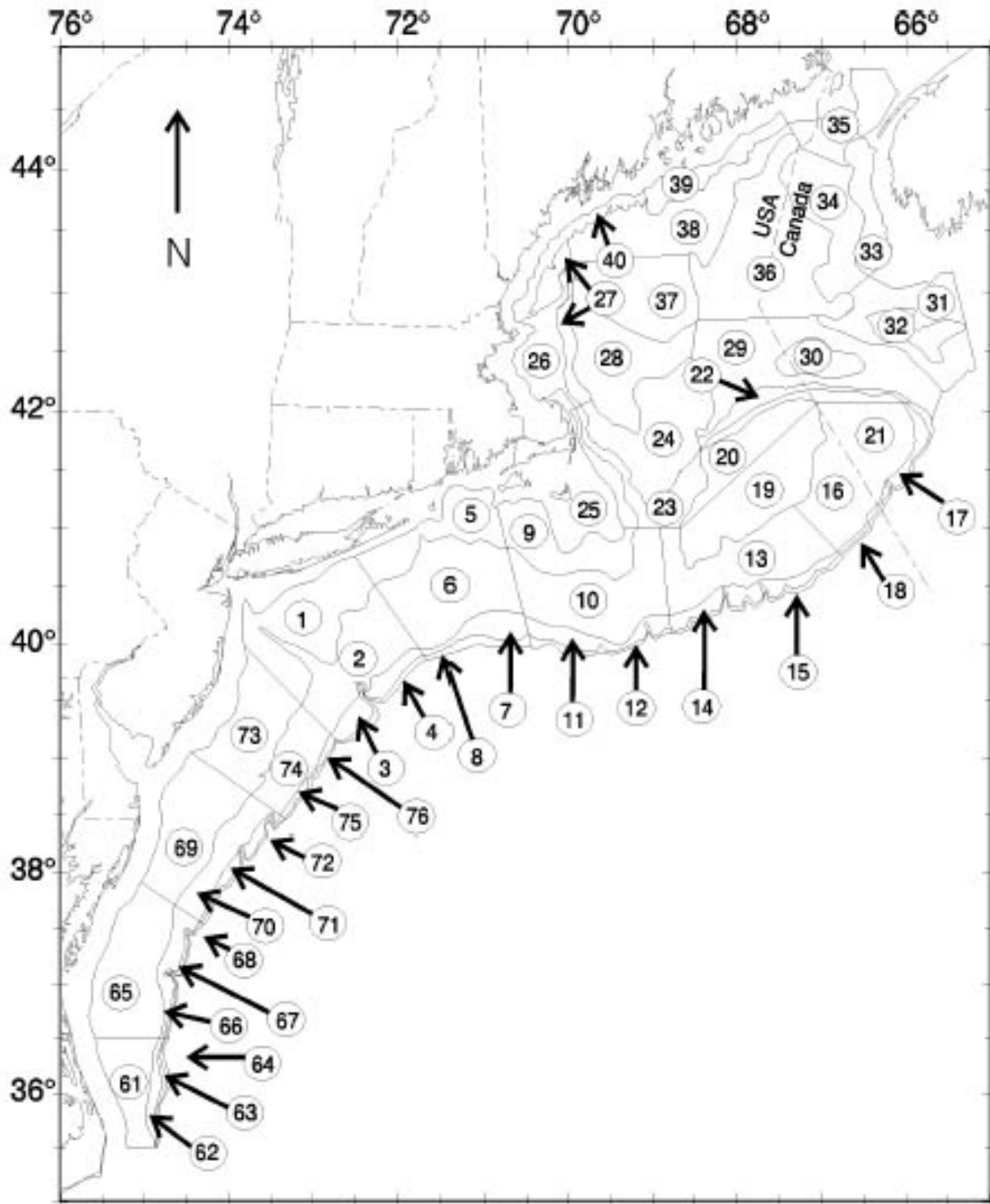


Figure 2. Offshore sampling strata used in NEFSC bottom trawl surveys.