

INTRODUCTION TO SAW-45 ASSESSMENT REPORT

The Northeast Regional Stock Assessment Workshop (SAW) process has three parts: preparation of stock assessments by the SAW Working Groups and/or by ASMFC Technical Committees / Assessment Committees; peer review of the assessments by a panel of outside experts who judge the adequacy of the assessment as a basis for providing scientific advice to managers; and a presentation of the results and reports to the Region's fishery management bodies.

Starting with SAW-39 (June 2004), the process was revised in two fundamental ways. First, the Stock Assessment Review Committee (SARC) is now a smaller panel with panelists provided by the University of Miami's Independent System for Peer Review (Center of Independent Experts, CIE). Second, the SARC no longer provides management advice. Instead, Council and Commission teams (e.g., Plan Development Teams, Monitoring and Technical Committees) formulate management advice, after an assessment has been accepted by the SARC.

Reports that are produced following SAW/SARC meetings include: an *Assessment Summary Report* – a brief summary of the assessment results in a format useful to managers; this *Assessment Report* – a detailed account of the assessments for each stock; and the SARC panelist report – a summary of the reviewer's opinions and recommendations as well as appendices consisting of a report from each panelist. SAW/SARC assessment reports are available online at <http://www.nefsc.noaa.gov/nefsc/publications/series/crdlist.htm>. The CIE review reports and assessment reports can be found at <http://www.nefsc.noaa.gov/nefsc/saw/>.

The 45th SARC was convened in Woods Hole at the Northeast Fisheries Science

Center, June 4–9, 2007 to review two assessments (northern shrimp *Pandalus borealis*, and Atlantic sea scallop *Placopecten magellanicus*). CIE reviews for SARC45 were based on detailed reports produced by the ASMFC Northern Shrimp Technical Committee and the SAW Invertebrate Working Group.

This Introduction contains a brief summary of the SARC comments, a list of SARC panelists, the meeting agenda, a list of working group meetings and a list of attendees (Tables 1–4). Maps of the Atlantic coast of the USA and Canada are also provided (Figures 1–5).

Outcome of Stock Assessment Review Meeting:

The northern shrimp assessment was accepted by the SARC. Although the reviewers were concerned about how to interpret the unprecedented high abundance index observed in the summer 2006 Gulf of Maine shrimp survey (particularly because the sampling intensity in that survey was lower than in preceding years), evidence of high abundance was also seen in commercial catch rates. The committee concluded that abundance in 2006 was high, but perhaps not as high as indicated by the survey and CSA assessment model. The large measure of agreement between the CSA and ASPIC models reinforced the credibility of the assessment results. Despite preference for reference points that take productivity into account, the reviewers concluded that, given the current low market demand and current high stock size, there is little risk to the stock of using the current reference points in the immediate future. Consumption estimates of northern shrimp by fish predators suggested that the rate of natural mortality (M) is higher than the value assumed. The SARC felt that a higher value

for M should be used in future assessments. If M is changed, reference points will have to be recomputed.

The Atlantic sea scallop assessment was accepted by the SARC. The reviewers noted that much had been accomplished since the last assessment to improve data collection and interpretation. The SARC supported the approach of modeling the Mid-Atlantic and Georges Bank resources separately before combining the results. The committee noted that elimination of the retrospective patterns

when the CASA model results from the two areas were combined was fortuitous, and this does not imply that the patterns have similar causes or that the patterns will cancel out in future assessments. The SARC questioned using F_{\max} as a reference point because it does not explicitly ensure sufficient biomass to protect stock productivity. The SARC supported the projection model (SAMS) because it is based on fairly realistic inputs (e.g., includes spatial considerations).

Table 1. 45th Stock Assessment Review Committee Panel.

45th Northeast Regional Stock Assessment Workshop (SAW 45)
Stock Assessment Review Committee (SARC) Meeting

June 4-9, 2007
Woods Hole MA

SARC Chairman:

Dr. Michael Prager, chair
SEFSC
Beaufort, NC 28516
Mike.Prager@noaa.gov

SARC Panelists (CIE):

Dr. Nick Caputi
Department of Fisheries
Western Australian Fisheries and Marine Research Laboratories
PO Box 20 North Beach WA 6920 Australia
Phone +61 8 9203 0165 Fax +61 8 9203 0199 Mob 0417 920 451
Email: Nick.Caputi@fish.wa.gov.au

Dr. Jake Rice, Director
Fisheries and Oceans Canada
200 Kent Street, Stn. 12S015, Ottawa, Ontario K1A OE6
Ottawa (Ontario) Canada K1A OE6
1-613-990-0288, fax 1-613-954-0807
Email: ricej@dfo-mpo.gc.ca

Dr. Jean-Jacques Maguire
1450 Godefroy
Québec, Qc, Canada, G1T 2E4
Tél: 1 418 688 5501 FAX: 1 418 688 7924
Email: jjmaguire@sympatico.ca

Table 2. Agenda, 45th Stock Assessment Review Committee Meeting.

45th Northeast Regional Stock Assessment Workshop (SAW 45)
Stock Assessment Review Committee (SARC) Meeting

Stephen H. Clark Conference Room – Northeast Fisheries Science Center
 Woods Hole, Massachusetts

June 4 – June 9, 2007

Sessions are open to the public, except where indicated.

AGENDA (5-24-07)

TOPIC	PRESENTER	SARC LEADER	RAPPORTEUR
Monday, 4 June (1:00 – 6:00 PM).....			
Opening			
Welcome	James Weinberg , SAW Chairman		
Introduction	Michael Prager , SARC Chairman		
Agenda			
Conduct of Meeting			
Northern shrimp (A)	Bob Glenn & Jason Link	Jake Rice	Brad Spear
SARC Discussion	Michael Prager		
Tuesday, 5 June (9 AM – 6 PM)... (Lunch: Noon – 1:15 PM).....			
Sea scallops (B)	Dvora Hart	Nick Caputi & JJ Maguire	Toni Chute
SARC Discussion	Michael Prager		
Wednesday, 6 June (9 AM – Noon)			
Revisit Northern shrimp (A)	Bob Glenn, Jason Link	Jake Rice	Brad Spear
SARC Discussion	Michael Prager		

Table 3. 45th Stock Assessment Workshop, list of working groups and meetings.

Assessment Group	Chair	Species	Meeting Date/Place
ASMFC Northern Shrimp Technical Committee and NEFSC	Margaret Hunter, Maine Dept. Marine Resources	Northern shrimp	Sept. 28, 2006 Oct. 10, 2006 March 5, 2007 April 19, 2007 Durham, NH
Robert Glenn (Mass. Division Marine Fisheries)			
Josef Idoine (NEFSC)			
Clare McBane (NH Dept. Fish and Game)			
Braddock Spear (ASMFC)			
Jason Link (NEFSC)			
Invertebrate Working Group	Larry Jacobson, NMFS NEFSC	Atlantic sea scallop	March 3-9, April 9-11, April 30 – May 2, 2007. Woods Hole
Dvora Hart (Sea Scallop Assessment Lead Scientist, NEFSC, Woods Hole)			
Chuck Adams (School for Marine Science and Technology, UMASS Dartmouth)			
Andrew Applegate (New England Fishery Management Council)			
Deirdre Boelke (New England Fishery Management Council)			
Danielle Brezinski (University of Maine)			
Antonie Chute (Rapporteur, NEFSC, Woods Hole)			
Chad Demarest (Massachusetts Marine Fisheries Institute)			
Bill Du Paul (Virginia Institute of Marine Science)			
Demet Haksever (New England Fishery Management Council)			
Brad Harris (School for Marine Science and Technology, UMASS Dartmouth)			
Chad Keith (NEFSC, Woods Hole)			
Chris Legault (NEFSC, Woods Hole)			
Michael Marino (School for Marine Science and Technology, UMASS Dartmouth)			
Bob Mohn (Invited outside expert, Department of Fisheries and Oceans, Canada)			
Paul Nitschke (NEFSC, Woods Hole)			
Victor Nordahl (NEFSC, Woods Hole, MA)			
Cate O’Keefe (School for Marine Science and Technology, UMASS Dartmouth)			
Paul Rago (NEFSC, Woods Hole)			
Stacy Rowe (NEFSC, Woods Hole)			
David Rudders (Virginia Institute of Marine Science)			
Chris Sarro (School for Marine Science and Technology, UMASS Dartmouth)			
David Simpson (NEFMC and Connecticut Marine Fisheries Division)			
Stephen Smith (Invited outside expert, Department of Fisheries and Oceans, Canada)			
Ron Smolowitz (Fisheries Survival Fund)			
Kevin Stokesbury (School for Marine Science and Technology, UMASS Dartmouth)			
Jim Weinberg (NEFSC, Woods Hole)			
Noelle Yochum (Virginia Institute of Marine Science)			

Table 4. 45th SAW/SARC, List of Attendees

D. Cowan	NEFSC
R. Brown	NEFSC
H. Cook	NEFSC
M. Underwood	NEFSC
L. Brady	NEFSC
T. Lewandowski	NEFSC
L. Jacobson	NEFSC
J. Blaylock	NEFSC
N. Jacobson	SMAST, UMASS Dartmouth
P. Hughes	Atlantic Cape Fisheries, Inc.
D. Boelke	NEFMC
J. Fletcher	United National Fishermen's Assoc.
T. Bigelow	SMAST, UMASS Dartmouth
D. Hart	NEFSC
W. Gabriel	NEFSC
H. Moustahfid	NEFSC
K. Sosebee	NEFSC
M. Terceiro	NEFSC
W. Michaels	NEFSC
C. Keith	NEFSC
A. Hall	NEFSC
T. Chute	NEFSC
M. Taylor	NEFSC
J. Link	NEFSC
F. Almeida	NEFSC
K. Whitmore	MASS Division of Marine Fisheries
P. Chase	NEFSC
J. Idoine	NEFSC
B. Spear	ASMFC

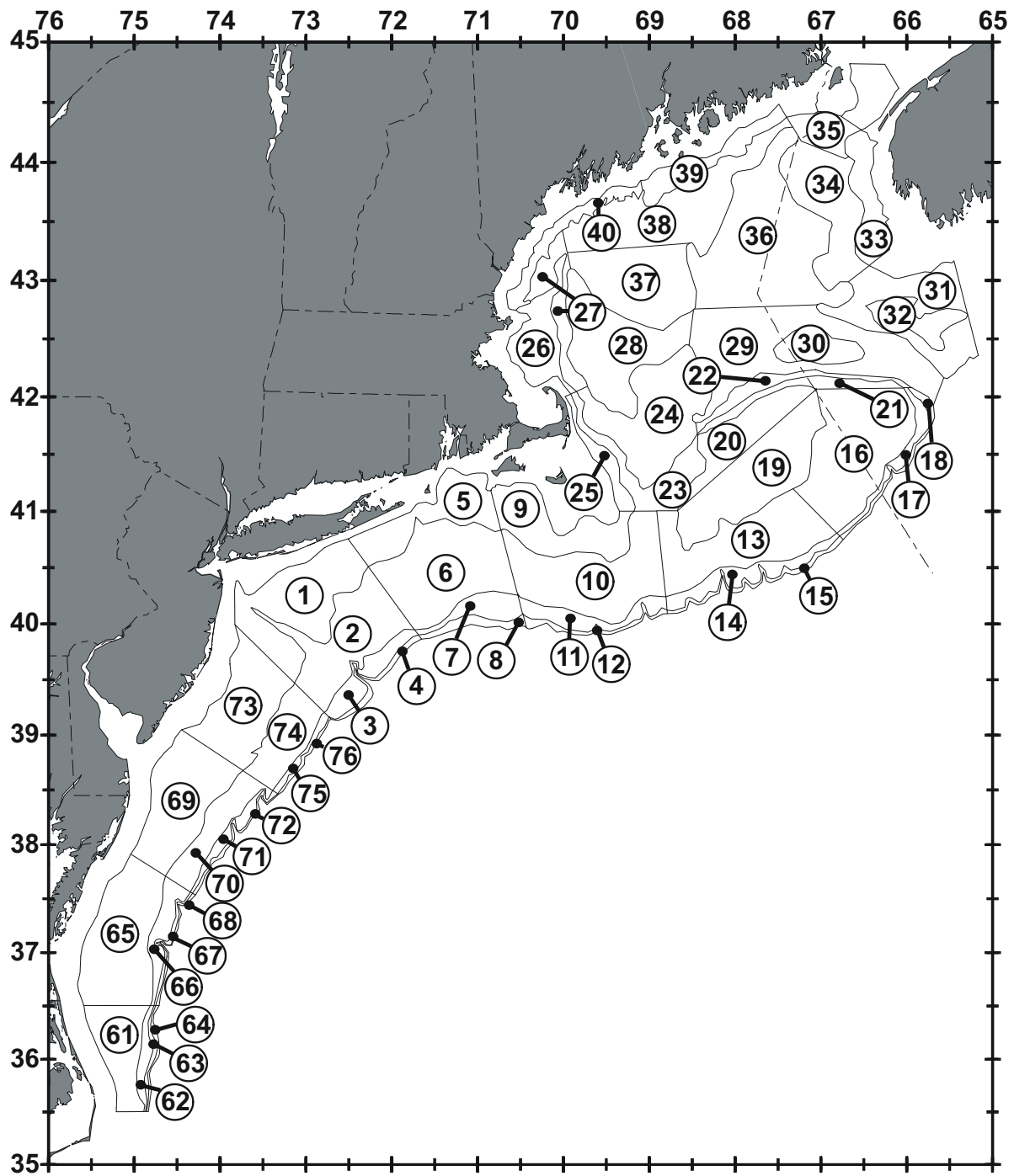


Figure 1. Offshore depth strata sampled during Northeast Fisheries Science Center bottom trawl research surveys.

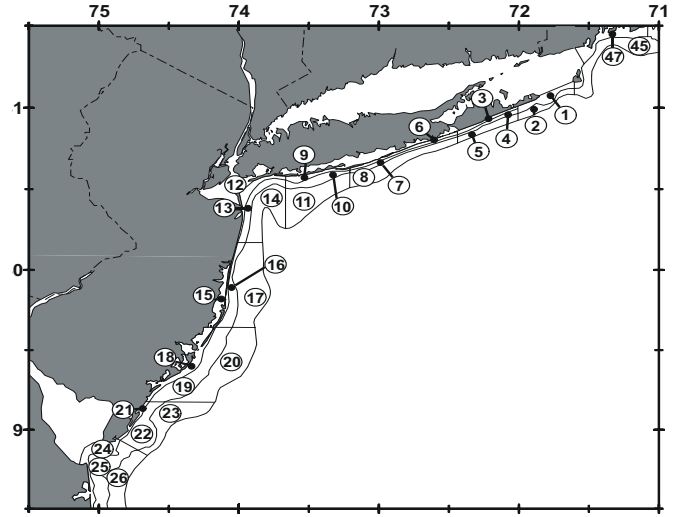
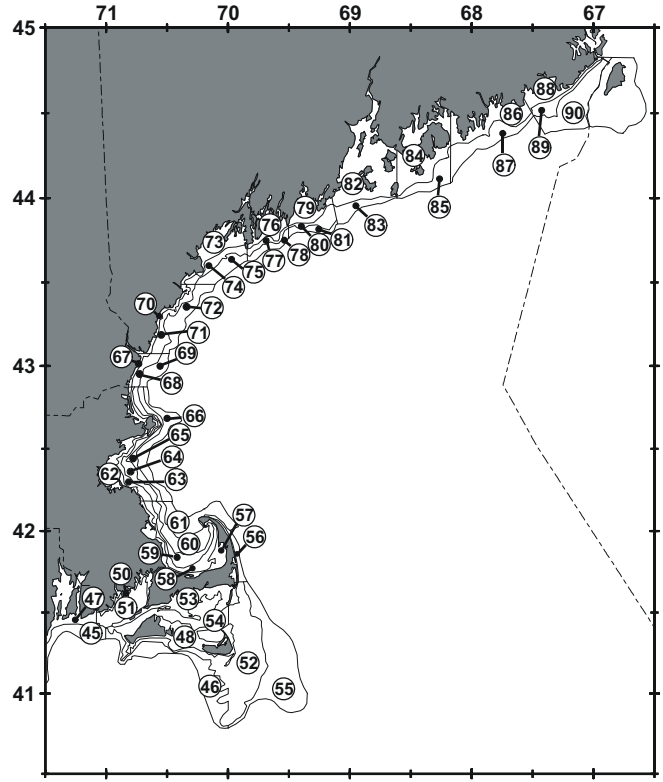
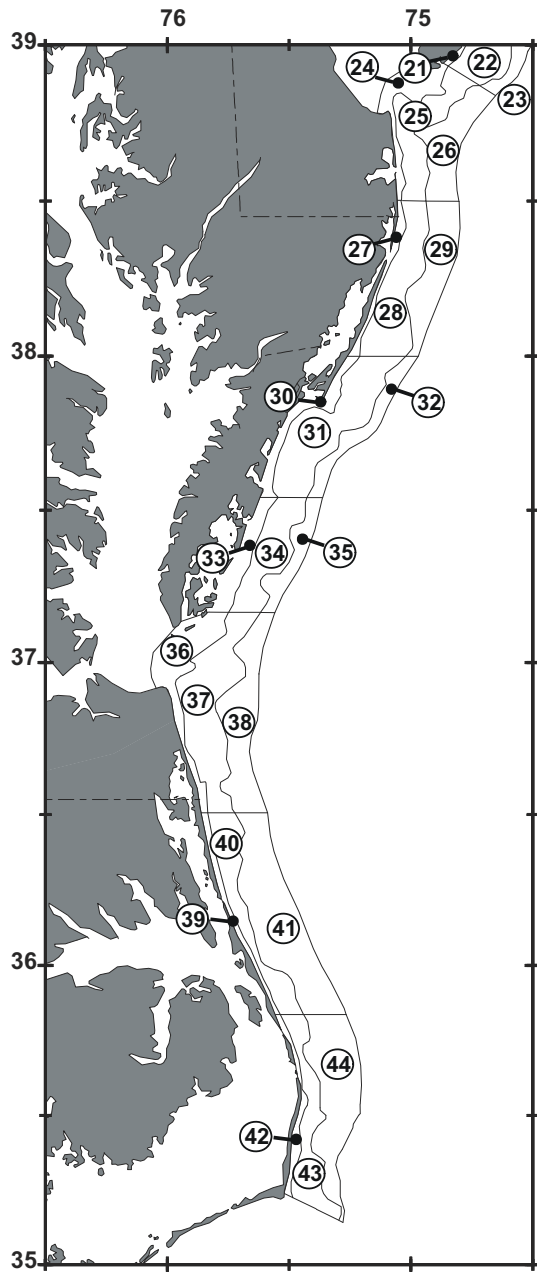


Figure 2. Inshore depth strata sampled during Northeast Fisheries Science Center bottom trawl research surveys.

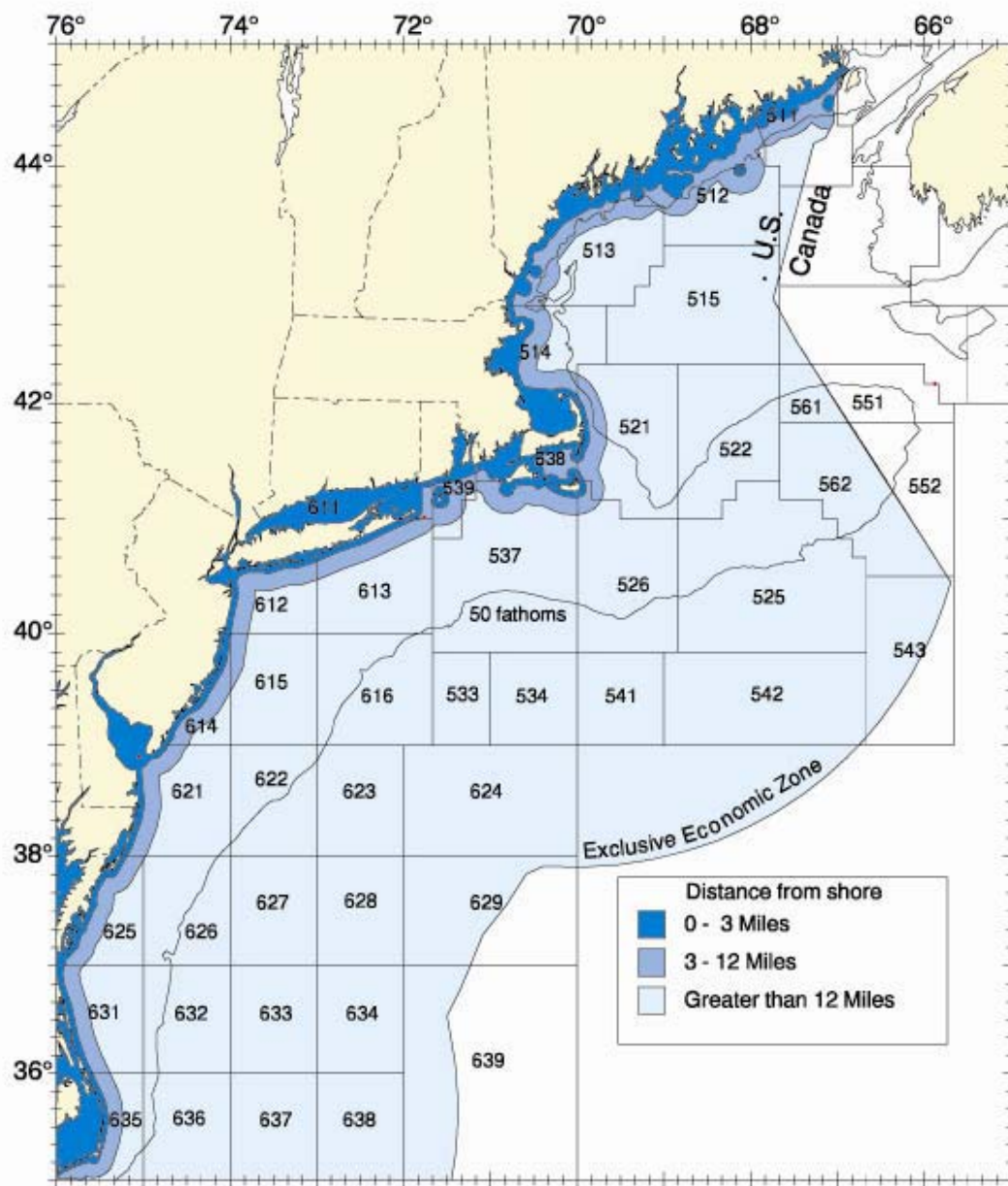


Figure 3. Statistical areas used for reporting commercial catches.

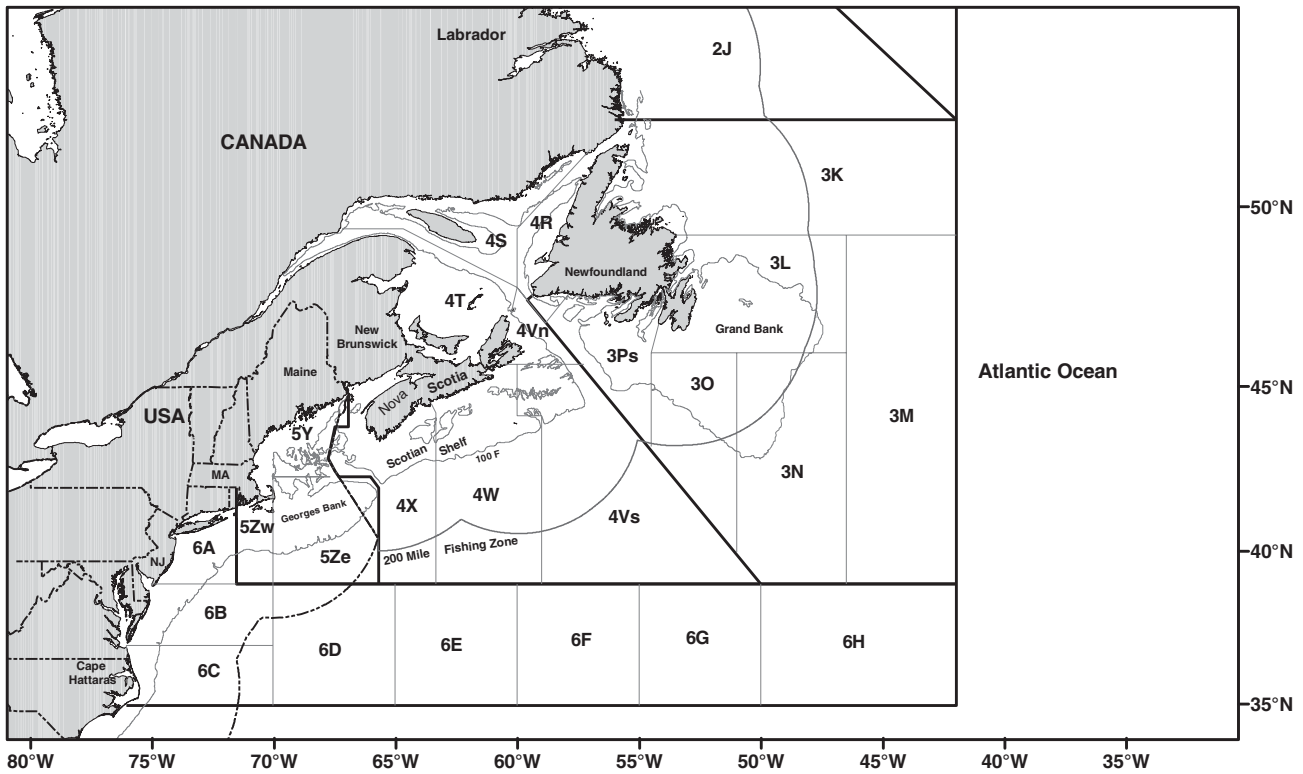


Figure 4. Catch reporting areas of the Northwest Atlantic Fisheries Organization (NAFO) for Subareas 3-6.

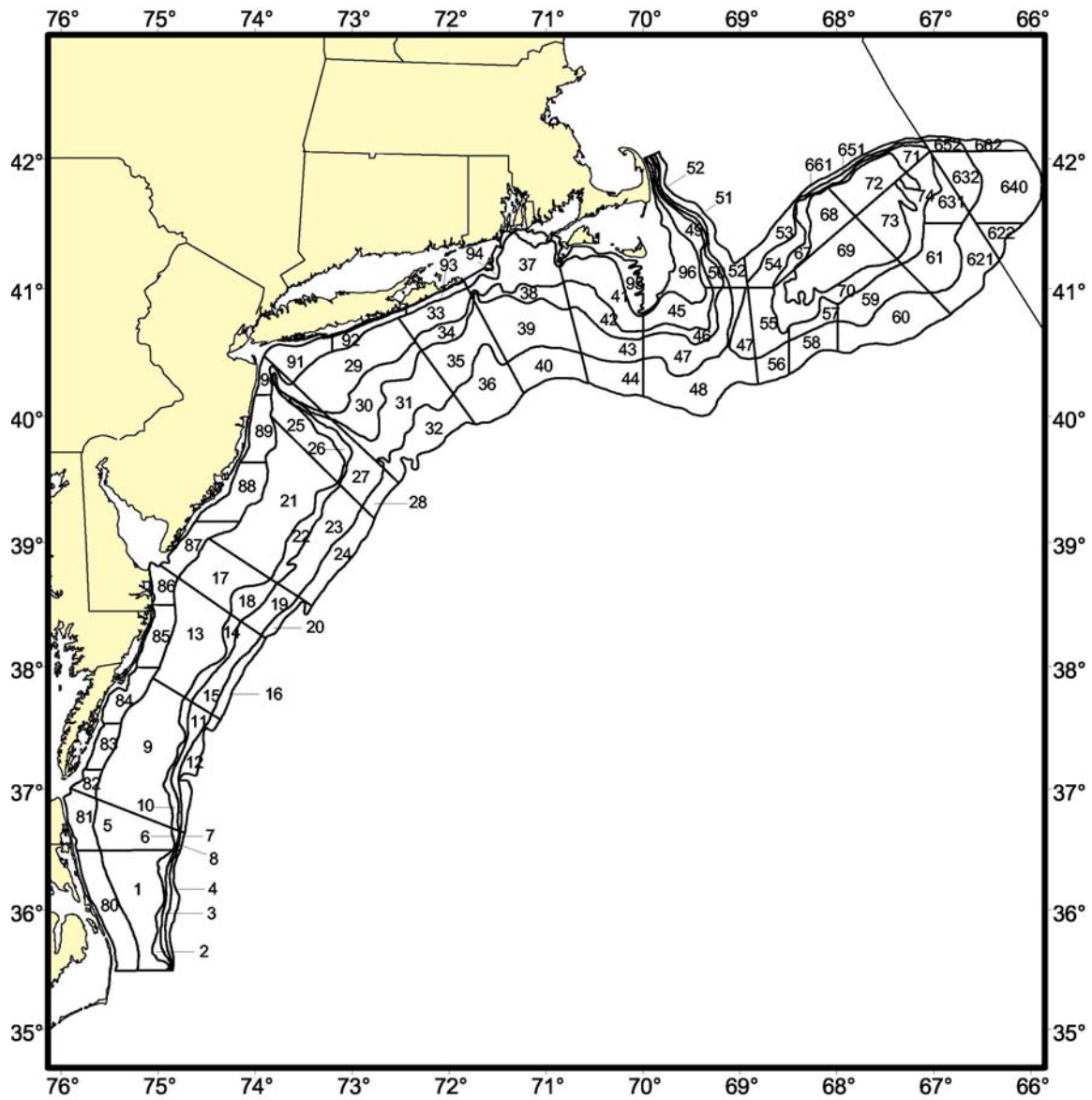


Figure 5. Shellfish strata for NEFSC resource surveys.