

Foreword

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) became smaller panel with panelists provided by the Independent System for Peer Review (Center of Independent Experts, CIE). Second, the SARC provides little management advice. Instead, Council and Commission teams (e.g., Plan Development Teams, Monitoring and Technical Committees, Science and Statistical Committee) formulate management advice, after an assessment has been accepted by the SARC. Starting with SAW-45 (June 2007) the SARC chairs were from external agencies, but not from the CIE. Starting with SAW-48 (June 2009), SARC chairs are from the Fishery Management Council's Science and Statistics Committee (SSC), and not from the CIE. Also at this time, some assessment Terms of Reference were revised to provide additional science support to the SSCs, as the SSC's are required to make annual ABC recommendations to the fishery management councils.

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 individual reports 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 48th SARC was convened in Woods Hole at the Northeast Fisheries Science Center, June 1-4, 2009 to review three assessments (golden tilefish *Lopholatilus chamaeleonticeps*, ocean quahog *Arctica islandica*, and weakfish *Cynoscion regalis*). CIE reviews for SARC48 were based on detailed reports produced by NEFSC Assessment Working Groups for tilefish and ocean quahogs, and by the ASMFC Assessment Working Group for weakfish. This Introduction contains a brief summary of the SARC comments, a list of SARC

panelists, the meeting agenda, and a list of attendees (Tables 1 - 3). Maps of the Atlantic coast of the USA and Canada are also provided (Figures 1 - 5).

Outcome of Stock Assessment Review Meeting:

Based on the Review Panel reports (available at <http://www.nefsc.noaa.gov/nefsc/saw/> under the heading "SARC 48 Panelist Reports"), the SARC review committee concluded that the assessment terms of reference were satisfied for each of the three stocks.

For tilefish, neither of the two assessment models presented (an ASPIC surplus production model and a statistical, age-and-length-structured model fit to the CPUE and length-frequency data) fit the data well. However, because both models and their uncertainty were adequately investigated, the SARC was able to conclude that stock is not overfished and that overfishing is not occurring. The ASPIC model results suggested a recent increase in abundance; however, the commercial CPUE index has been declining in recent years in a manner consistent with the passage of a strong cohort through the stock, lack of age-structure in the population, and nonequilibrium stock conditions. Based on these considerations and some additional factors, the SARC review committee was not convinced that the stock had rebuilt to B_{TARGET} . They concluded that the tilefish projections are useful for displaying the extent of uncertainty in future stock size, but not for predicting future stock size. They also concluded that for the most recent years the biomass estimates from the ASPIC model are likely overestimates.

For ocean quahogs, the SARC felt commercial landings and fishing effort were well characterized, and the analyses were very thorough. As a whole, the stock is slowly being fished down to its B_{MSY} proxy reference point (1/2 of the virgin biomass), the stock is not overfished and overfishing is not occurring. The unique biology of ocean quahogs (slow growth, low levels of recruitment and very long-lived) creates time lags that are outside the planning horizons for most managed activities and presents unique challenges for the assessment of this stock.

For weakfish, multiple analyses were presented to provide estimates of abundance, total mortality and fishing mortality, including an ADAPT VPA, an analysis of survey data as abundance indices, and a Steele-Henderson production model including predation effects. There are technical issues with some of the modeling, but overall the analyses indicate that abundance has declined markedly, total mortality is high, non-fishing mortality has recently increased and that the stock is currently in a depleted state.

Table 1. 48th Stock Assessment Review Committee Panel.

48th Northeast Regional Stock Assessment Workshop (SAW 48)
Stock Assessment Review Committee (SARC) Meeting

June 1-4, 2009
Woods Hole MA

SARC Chairman:

Dr. Patrick Sullivan
Cornell University
Fernow Hall, Room 214
Ithaca, NY
Email: pjs31@cornell.edu

Dr. Jamie Gibson
Population Ecology Division, Science
Branch
Department of Fisheries and Oceans
P.O. Box 1006, Dartmouth, N.S, Canada,
B2Y 4A2
Tel: 902-426-3136
Email: gibsonajf@mar.dfo-mpo.gc.ca

SARC Panelists (CIE):

Dr. Michael Bell
International Centre for Island Technology
(ICIT)
Heriot-Watt University
Old Academy, Back Road, Stromness
Orkney KW16 3AW, UK
Tel: + 44 (0) 1856 850605
Email: M.C.Bell@hw.ac.uk

Dr. Sven Kupschus
Centre for Environment, Fisheries and
Aquaculture Sciences (CEFAS)
Lowestoft, Suffolk NR33 0HT , UK
Email: sven.kupschus@cefasc.co.uk

Table 2. Agenda, 48th Stock Assessment Review Committee Meeting.

**48th Northeast Regional Stock Assessment Workshop (SAW 48)
Stock Assessment Review Committee (SARC) Meeting**

June 1-4, 2009

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

AGENDA* (version: 5-27-09)

TOPIC	PRESENTER(S)	SARC LEADER	RAPPORTEUR
Monday, 1 June			
10:00 – 10:30 AM			
Opening			
Welcome	James Weinberg , SAW Chairman		
Introduction	Patrick Sullivan , SARC Chairman		
Agenda			
Conduct of Meeting			
10:30 - Noon	Tilefish Assessment Presentation (A) Paul Nitschke/ Mike Palmer/ Tiffany Vidal	Jamie Gibson	Palmer/Vidal
Noon – 1:00 PM	Lunch		
1:00 – 2:30 PM	SARC Discussion of Tilefish (A) Patrick Sullivan , SARC Chairman		
2:30 – 3:00 PM	Break		
3:00 - 5:00 PM	Ocean quahog Assessment Presentation (B) Larry Jacobson/ Toni Chute	Mike Bell	Ralph Mayo
5:00 – 6:00 PM	SARC Discussion of Ocean quahog (B) Patrick Sullivan , SARC Chairman		

Tuesday, 2 June

9:00 – 10:15 AM Revisit Tilefish Assessment with Presenters (A)
10:15 – 10:30 AM Break
10:30 - Noon Revisit Ocean Quahog Assessment with Presenters (B)

Noon – 1:00 PM Lunch

1:00 – 3:45 PM Weakfish Assessment Presentation (C)
Jeff Brust/ Sven Kupschus Russ Allen
Vic Crecco/
Jim Uphoff

3:45 – 4:00 PM Break
4:00 – 5:30 PM SARC Discussion of Weakfish (C)
Patrick Sullivan, SARC Chairman

Wednesday, 3 June

9:00 – 10:15 AM Revisit Weakfish Assessment with Presenters (C)
10:15 – 10:30 AM Break
10:30 - Noon Tilefish follow up + review Assessment Summary Report (A)

Noon – 1:00 PM Lunch

1:00 – 3:00 PM Ocean qua. follow up + review Assessment Summary Report (B)
3:00 – 3:15 PM Break
3:15 – 5:15 PM Weakfish follow up + review Assessment Summary Report (C)

Thursday, 4 June

9:00 – 10:15 AM Final Revisits with presenters, if needed (A, B, C)
10:15 – 10:30 AM Break
10:30 AM – 5 PM SARC Report writing. (closed meeting)

*Times are approximate, and may be changed at the discretion of the SARC chair. The meeting is open to the public, except where noted.

Table 3. 48th SAW/SARC. List of Attendees

Name	Affiliation	email
Tom Hoff	MAFMC	thoff@mafmc.org
Jose L Montanez	MAFMC	jmontanez@mafmc.org
Tim Cardiasmenos	NERO	timothy.cardiasmenos@noaa.gov
Andrea Toran	NEFSC	andrea.toran@noaa.gov
Mike Bell (Reviewer)	Heriot-Watt University	m.c.bell@hw.ac.uk
Mike Palmer	NEFSC	michael.palmer@noaa.gov
Susan Wigley	NEFSC	susan.wigley@noaa.gov
Tiffany Vidal	NEFSC	tiffany.vidal@noaa.gov
Michael Ball	NEFSC	michael.ball@noaa.gov
Gary Shepherd	NEFSC	gary.shepherd@noaa.gov
Richard McBride	NEFSC	richard.mcbride@noaa.gov
Anne Ricgards	NEFSC	anne.richards@noaa.gov
Ian Conboy	NEFSC	ian.conboy@noaa.gov
Bob Fallon	F/V Endorphin	
Dan Farnham	F/V Kimberly	offshorefishery@aol.com
Laurie Nolan	F/V Seacapture	tilefish1@optonline.net
Barbara Rountree	NEFSC	barbara.rountree@noaa.gov
Pat Sullivan (Chair)	Cornell University	pis31@cornell.edu
John Womack	Wallace & Assoc	dnwallace@aol.com
David Wallace	Wallace & Assoc	dnwallace@aol.com
Katherine Sosebee	NEFSC	katherine.sosebee@noaa.gov
Jamie Gibson (Reviewer)	DFO Canada	gibsonajf@mar.dfo-mpo.gc.ca
Russell Brown	NEFSC	russell.brown@noaa.gov
Eric Powell	Rutgers University	eric@hsrl.rutgers.edu
Toni Chute	NEFSC	toni.chute@noaa.gov
Sven Kucschus (Reviewer)	CEFAS	sven.kupschus@cefias.co.uk
Richard Merrick	NEFSC	richard.merrick@noaa.gov
Mark Terceiro	NEFSC	mark.terceiro@noaa.gov
Paul Nitschke	NEFSC	paul.nitschke@noaa.gov
Larry Jacobson	NEFSC	larry.jacobson@noaa.gov
Jim Uphoff	MD DNR	juphoff@dnr.state.md.us
Tom Alspach	Sea Watch	talspach@goeaston.net
Desmond Kahn	DE DFW	desmond.kahn@state.de.us
Gary Nelson	MA DMF	gary.nelson@state.ma.us
Ralph Mayo	NEFSC	ralph.mayo@noaa.gov
Russ Allen	NJ DFW	russ.allen@dep.state.nj.us
Jeff Brust	NJ DFW	jeffrey.brust@dep.state.nj.us
Vic Crecco	CT Marine Fisheries	victor.crecco@ct.us
Nichola Meserve	ASMFC	nmeserve@asmfc.org

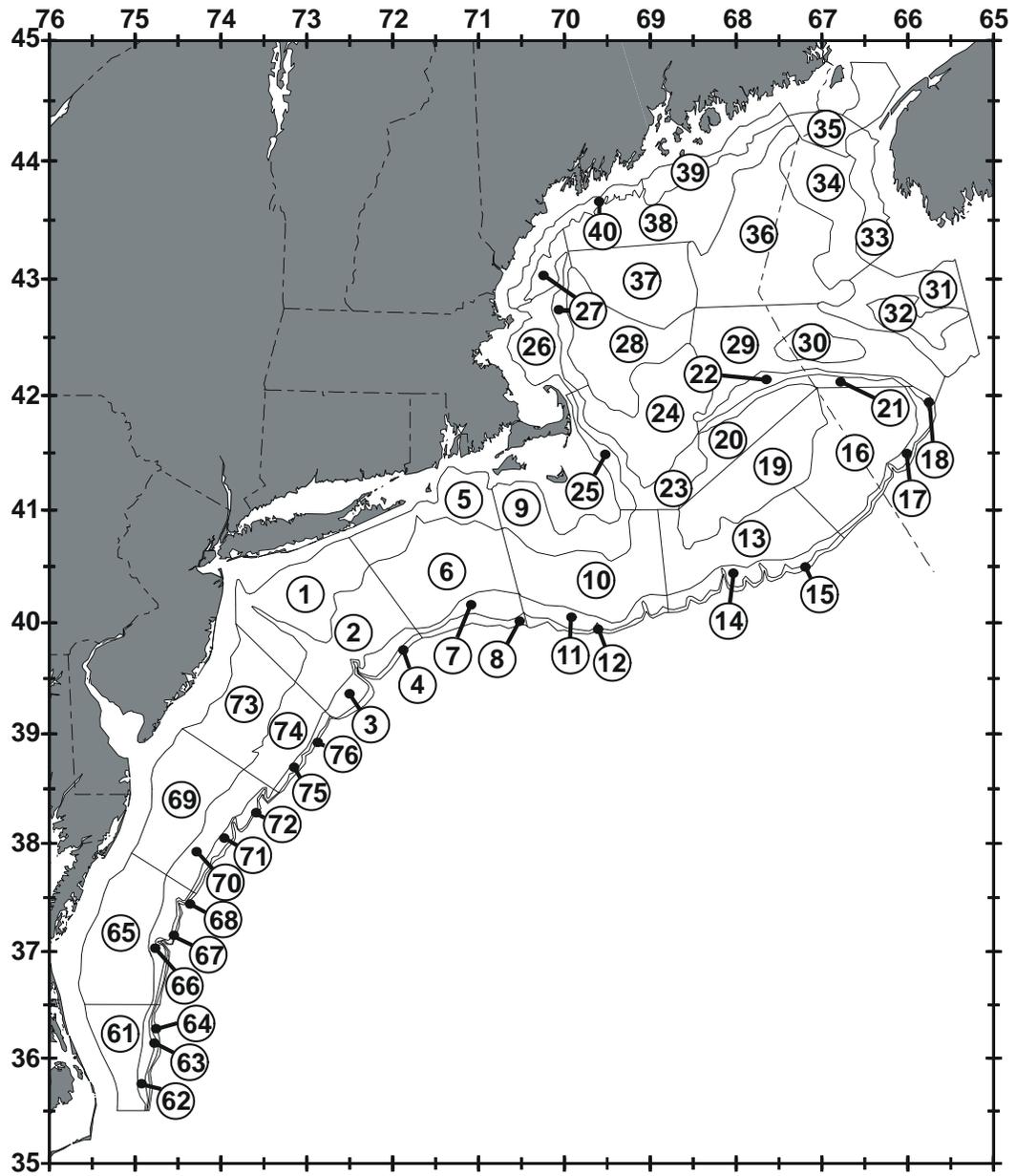


Figure 1. Offshore depth strata sampled during Northeast Fisheries Science Center bottom trawl research surveys.

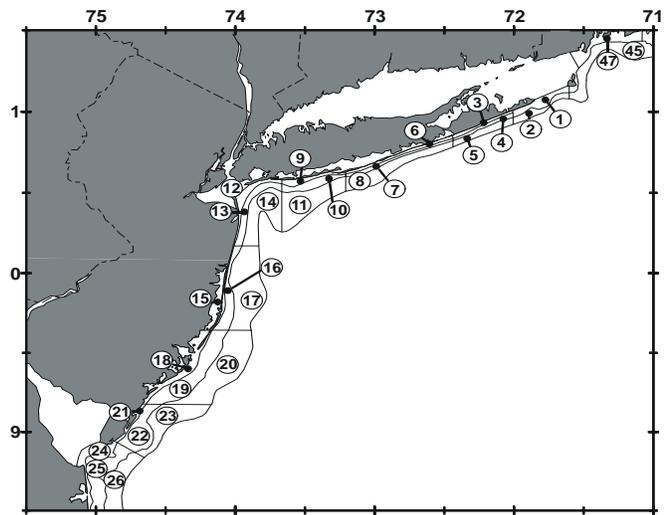
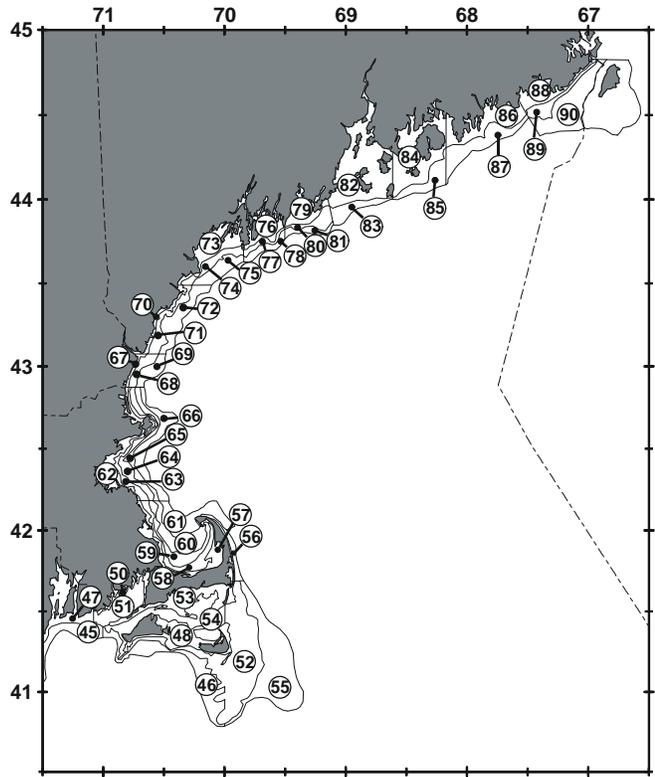
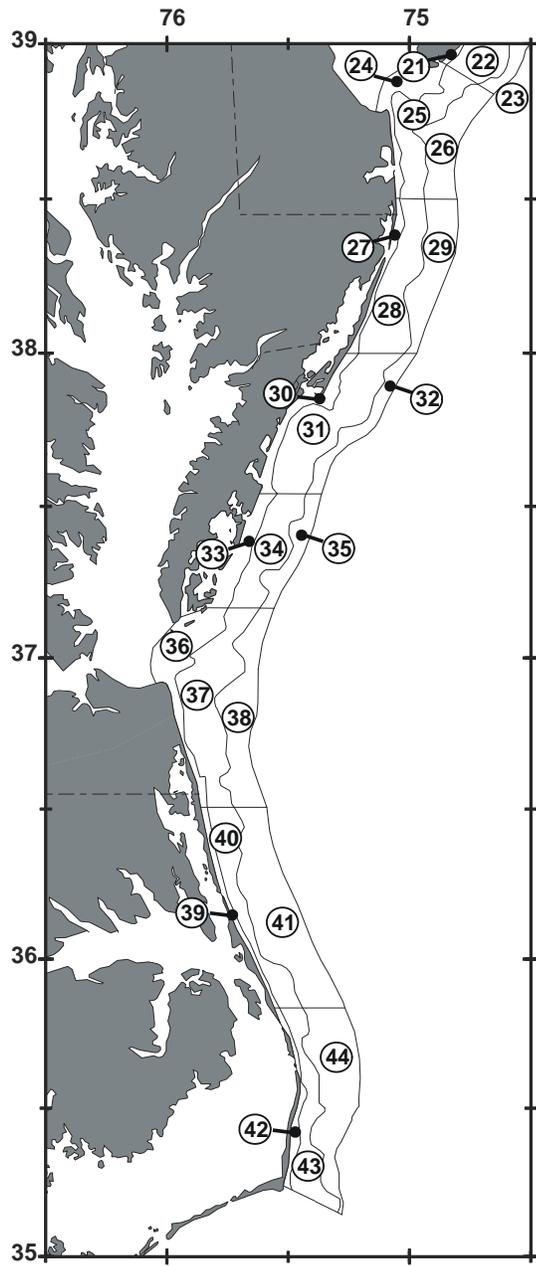


Figure 2. Inshore depth strata sampled during Northeast Fisheries Science Center bottom trawl research surveys.

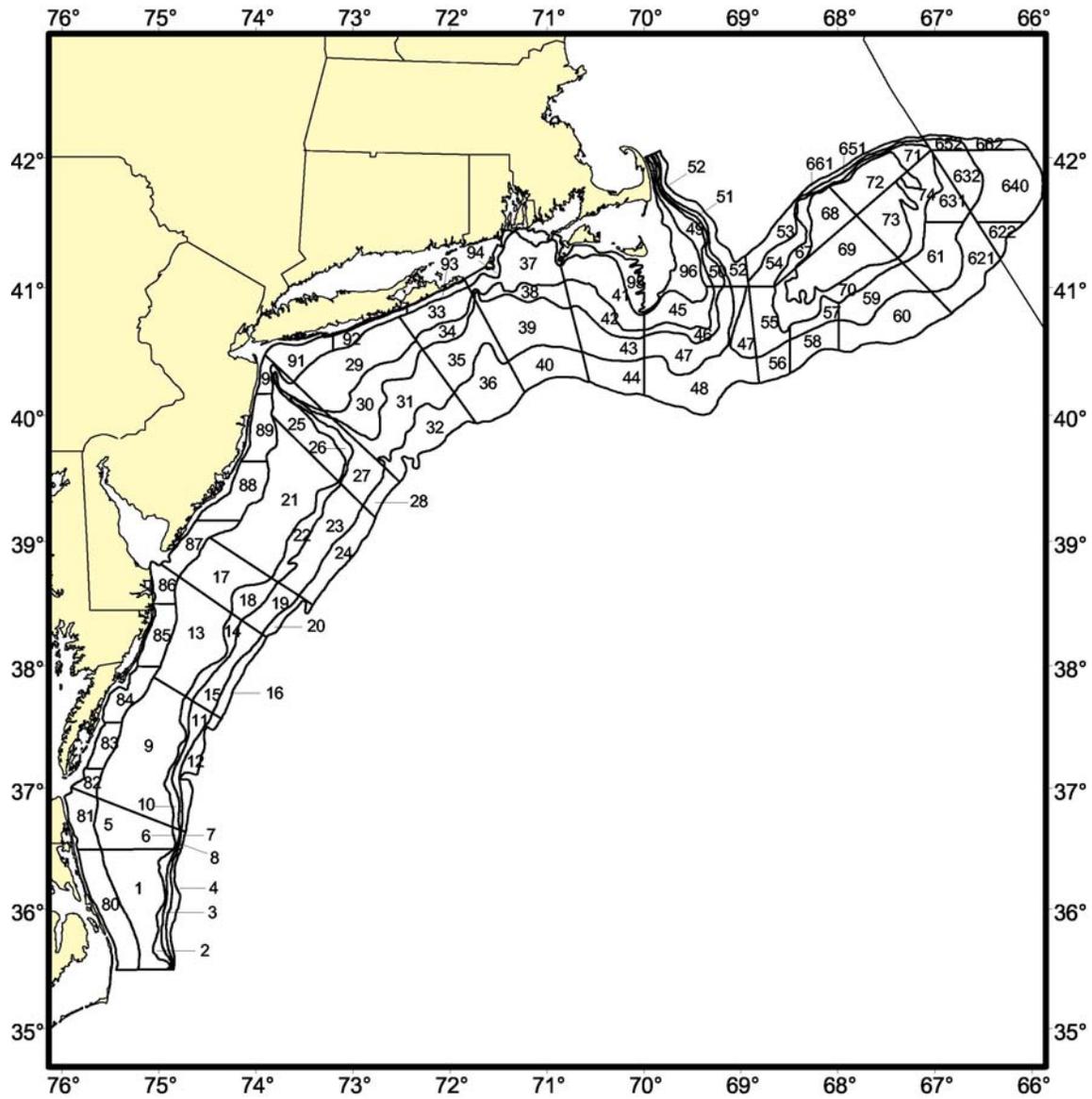


Figure 3. Depth strata sampled during Northeast Fisheries Science Center clam dredge research surveys.

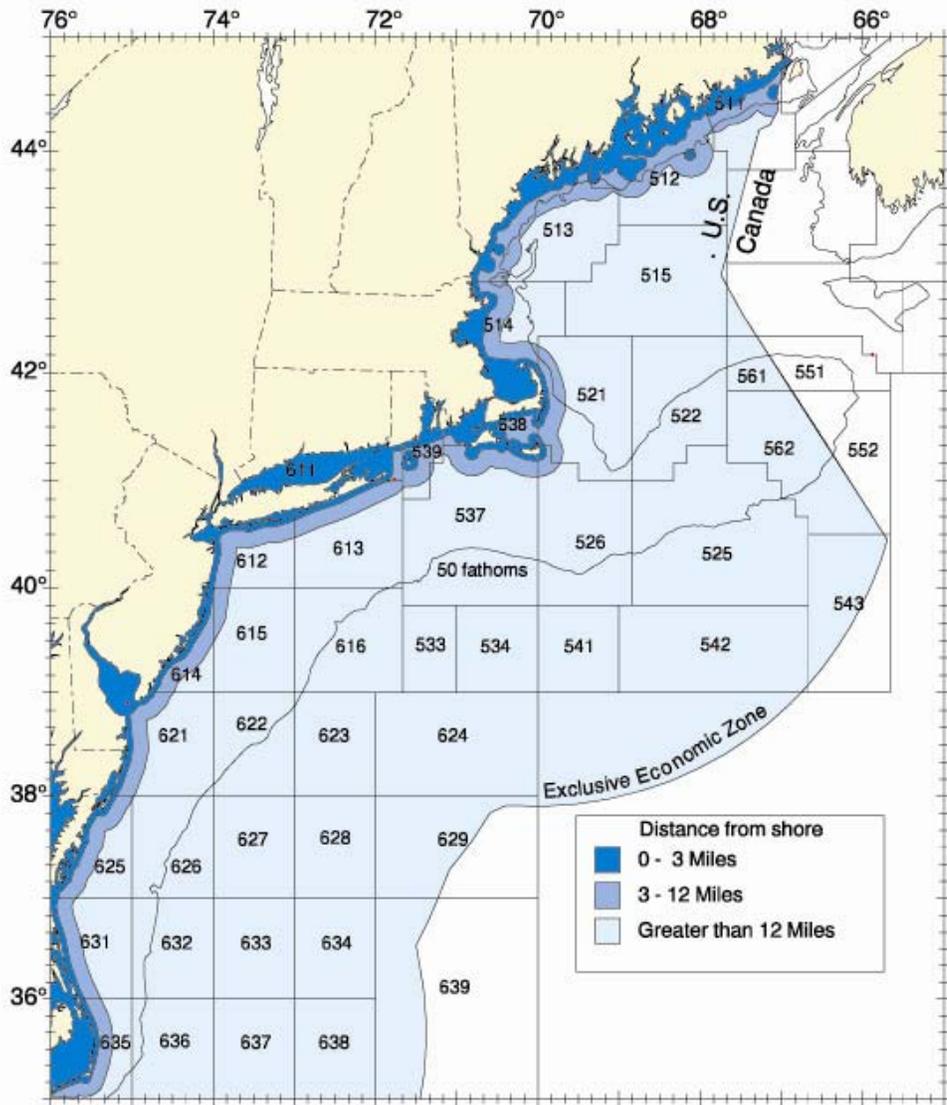


Figure 4. Statistical areas used for reporting commercial catches.

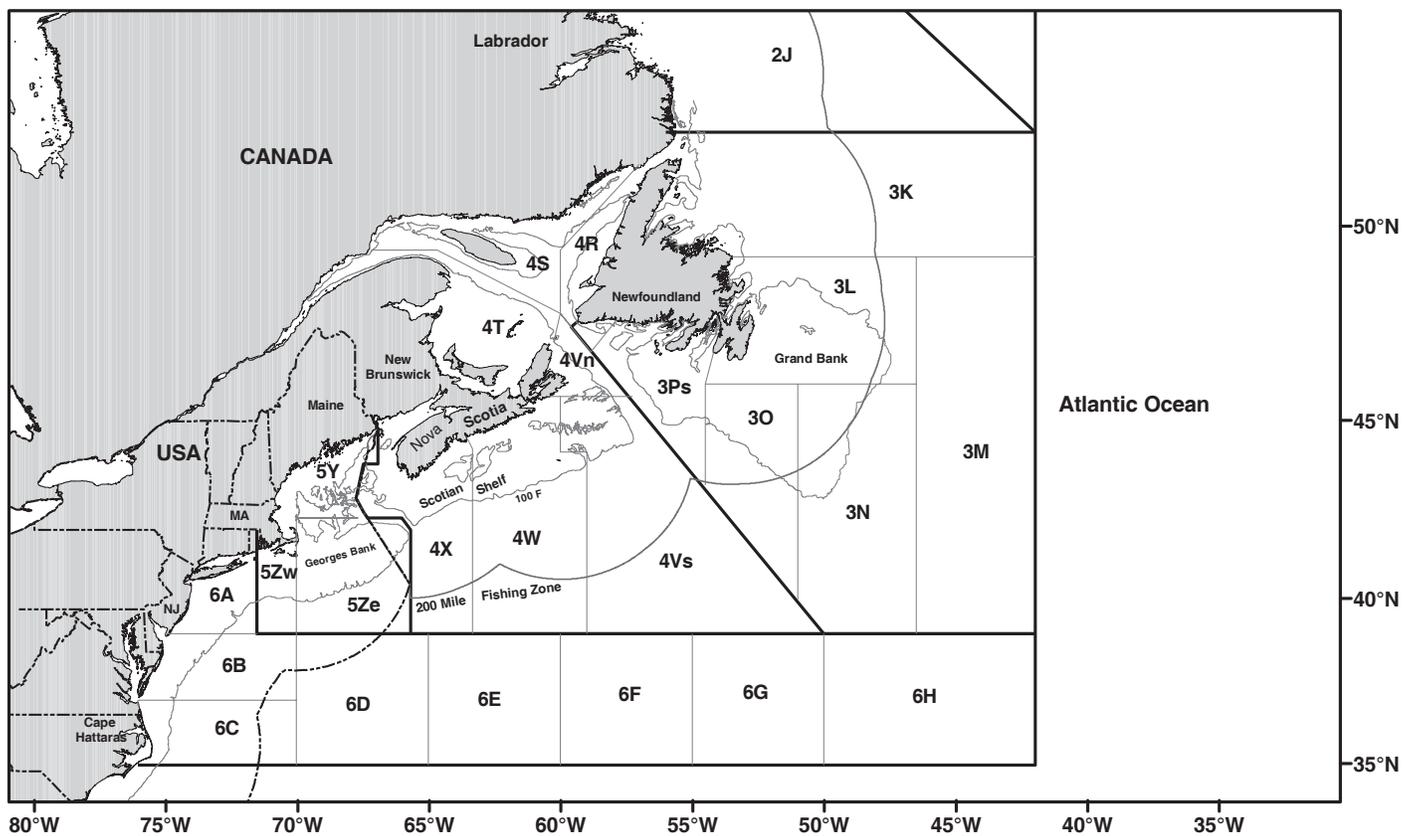


Figure 5. Catch reporting areas of the Northwest Atlantic Fisheries Organization (NAFO) for Subareas 3-6.