

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 49th SARC was convened in Woods Hole at the Northeast Fisheries Science Center, November 30 - December 3, 2009 to review two assessments Atlantic surfclam (*Spisula solidissima*), and butterfish (*Peprilus triacanthus*). CIE reviews for SARC49 were based on detailed reports produced by NEFSC Assessment Working Groups. 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 49 Panelist Reports"), the SARC review committee concluded that the Terms of Reference (ToRs) for the Atlantic surfclam assessment were met. Commercial landings and effort data were well characterized. Two semi-independent analytical approaches were used to assess the stock, namely, efficiency corrected swept-area biomass and the KLAMZ model. The KLAMZ model was used as the primary tool for stock status determination. Estimates of whole stock biomass from 1981-2008 were fairly stable with a gradual decreasing trend in abundance since the late 1990s. Whole stock estimates of fishing mortality (F) were low and fairly stable,

while estimates of growth and recruitment showed a consistent decline over the time period of the analysis. Despite these downward trends, there was consensus that the Atlantic surfclam stock is not overfished and overfishing is not occurring. Concerns were raised about the validity of the whole stock assumption, particularly given the sedentary nature of surfclams and the potential for metapopulation dynamics.

The review panel concluded that the ToRs for the butterfish assessment were met in that the information specified by each ToR was provided; however, the review panel felt that not all of the assessment results could be used to support management. This conclusion was not a result of poor analytical procedures or any fault of the Coastal/Pelagic Working Group. It was due to the significant uncertainty associated with the input data and KLAMZ assessment model output. Commercial catch estimates were not precisely known due to a lack of precision of the discard estimates. Of the available survey data, only the NEFSC fall index appeared to be a reliable indicator of butterfish relative abundance. Estimates

of biomass and F were fairly imprecise, and the KLAMZ model struggled to capture the scale of butterfish biomass. The review panel felt that the biomass and F estimates reflect appropriate trends, but recommended that the point biomass and F estimates be interpreted with caution. The review panel did not accept the adequacy of the redefined BRPs or the BRPs used for stock status determination in the 2004 butterfish assessment. The review panel questioned the application of MSY theory to a short-lived recruitment-dominated population, particularly the use of equilibrium methods when trends in the data suggest the stock is declining even with low fishing mortality. It was agreed that overfishing was not likely occurring. The review panel concluded that the decline in the butterfish stock appears to be driven by environmental processes and low recruitment. Determination of an overfished versus not overfished condition was not resolved at the meeting, which left the overfished status of butterfish unknown.

Table 1. 49th Stock Assessment Review Committee Panel.

49th Northeast Regional Stock Assessment Workshop (SAW 49)
Stock Assessment Review Committee (SARC) Meeting

November 30 – December 3, 2009
Woods Hole MA

SARC Chairman (MAFMC SSC Member):

Dr. Robert J. Latour
Dept. Fisheries Science
Virginia Inst. Marine Science
Gloucester Point, VA 23062
Email: latour@vims.edu

SARC Panelists (CIE):

Dr. John Cotter, Director
FishWorld Science Ltd.
57 The Avenue
Lowestoft
Suffolk NR33 7LH
United Kingdom
Email: john.cotter@phonecoop.coop

Dr. Henrik Sparholt
ICES
H. C. Andersens -Boulevard 44-46
DK-1553
Copenhagen V
Denmark
Email: henriks@ices.dk

Dr. Mike Smith
Centre for Environmental, Fisheries, and Aquaculture Science (CEFAS)
Pakefield Road
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Suffolk NR33 0HT
United Kingdom
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Table 2. Agenda, 49th Stock Assessment Review Committee Meeting.

**49th Northeast Regional Stock Assessment Workshop (SAW 49)
Stock Assessment Review Committee (SARC) Meeting**

November 30 – December 3, 2009

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

DRAFT AGENDA* (version: 11-23-09)

TOPIC	PRESENTER(S)	SARC LEADER	RAPPORTEUR
<u>Monday, 30 Nov</u>			
1:00 – 1:30 PM			
Opening			
Welcome	James Weinberg , SAW Chairman		
Introduction	Robert Latour , SARC Chairman		
Agenda			
Conduct of Meeting			
1:30 – 3:30	Assessment Presentation Surfclam Larry Jacobson	TBD	Toni Chute, Dan Hennen
3:30 – 3:45	Break		
3:45 – 5:30	SARC Discussion of Surfclam Robert Latour , SARC Chairman		Toni Chute, Dan Hennen
<u>Tuesday, 1 Dec</u>			
9:00 – 10:30 AM	Assessment Presentation Butterfish Tim Miller	TBD	Julie Nieland
10:30 – 10:45	Break		
10:45 – Noon	SARC Discussion of Butterfish Robert Latour , SARC Chairman		Julie Nieland
Noon – 1:15	Lunch		
1:15 – 2:15	Continue SARC Discussion of Butterfish Robert Latour , SARC Chairman		
2:15 – 3:30	Revisit Surfclam Assessment with Presenters Robert Latour , SARC Chairman		Toni Chute, Dan Hennen

3:30 – 3:45 Break

3:45 – 5:30 Revisit Surfclam and/or Butterfish Assessments with Presenters
Robert Latour, SARC Chairman

Wednesday, 2 Dec

9:00 – 10:00 Revisit Butterfish Assessment with Presenters
Robert Latour, SARC Chairman **Julie Nieland**

10:00 – 10:15 Break

10:15 - Noon Surfclam follow up + review Assessment Summary Report
Robert Latour, SARC Chairman

Noon – 1:15 PM Lunch

1:15 – 3:00 Butterfish follow up + review Assessment Summary Report
Robert Latour, SARC Chairman

3:00 – 3:15 Break

3:15 – 5:30 SARC Report writing. (closed meeting)

Thursday, 3 Dec

9:00 – 2:00 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. 49th SAW/SARC, List of Attendees

Name	Affiliation	email
Guy Simmons	Sea Watch	guy@seaclam.com
Chris Legault	NEFSC	chris.legault@noaa.gov
Daniel Hennen	NEFSC	daniel.hennen@noaa.gov
Carolyn Creed	Rutgers	creed@aesop.rutgers.edu
Jon Deroba	NEFSC	jon.deroba@noaa.gov
Katherine Sosebee	NEFSC	katherine.osebee@noaa.gov
Mark Terceiro	NEFSC	mark.terceiro@noaa.gov
Chad Keith	NEFSC	charles.keith@noaa.gov
Lisa Hendrickson	NEFSC	lisa.hendrickson@noaa.gov
Wendy Gabriel	NEFSC	wendy.gabriel@noaa.gov
Gary Shepherd	NEFSC	gary.shepherd@noaa.gov
Paul Nitschke	NEFSC	paul.nitschke@noaa.gov
Josef Idoine	NEFSC	josef.idoine@noaa.gov
Tim Miller	NEFSC	tim.miller@noaa.gov
Larry Jacobson	NEFSC	larry.jacobson@noaa.gov
Tom Hoff	MAFMC	thoff@mafmc.org
Eric Powell	Rutgers	eric@hsrl.rutgers.edu
Dvora Hart	NEFSC	dvora.hart@noaa.gov
Tom Alspach	Sea Watch	talspach@goeaston.net
Toni Chute	NEFSC	toni.chute@noaa.gov
Rich Seagraves	MAFMC	rseagraves@mafmc.org
Jason Link	NEFSC	jason.link@noaa.gov
Loretta O'Brien	NEFSC	loretta.o'brien@noaa.gov
Susan Wigley	NEFSC	susan.wigley@noaa.gov
Greg DiDomenico	Garden State Seafood Assoc	gregd@voicenet.com
Olaf Jensen	U of Washington	ojensen@u.washington.edu
Dave Wallace	Wallace and Associates	DHWALLACE@aol.com
Julie Nieland	NEFSC	julie.nieland@noaa.gov
James Weinberg	NEFSC	james.weinberg@noaa.gov
Paul Rago	NEFSC	paul.rago@noaa.gov
Robert Latour	VIMS	latour@vims.edu
Richard Merrick	NEFSC	richard.merrick@noaa.gov
John Cotter	Fish World Science Ltd	john.cotter@phonecoop.coop
Henrik Sparholt	ICES	henriks@ices.dk
Mike Smith	CEFAS	mike.smith@cefasc.co.uk
Carrie Nordeen	NOAA	Carrie.Nordeen@noaa.gov
Jason Didden	MAFMC	jdidden@mafmc.org
Hannah Goodale	NOAA	Hannah.F.Goodale@noaa.gov
Vidar Wepstead		vidarw@werizon.net

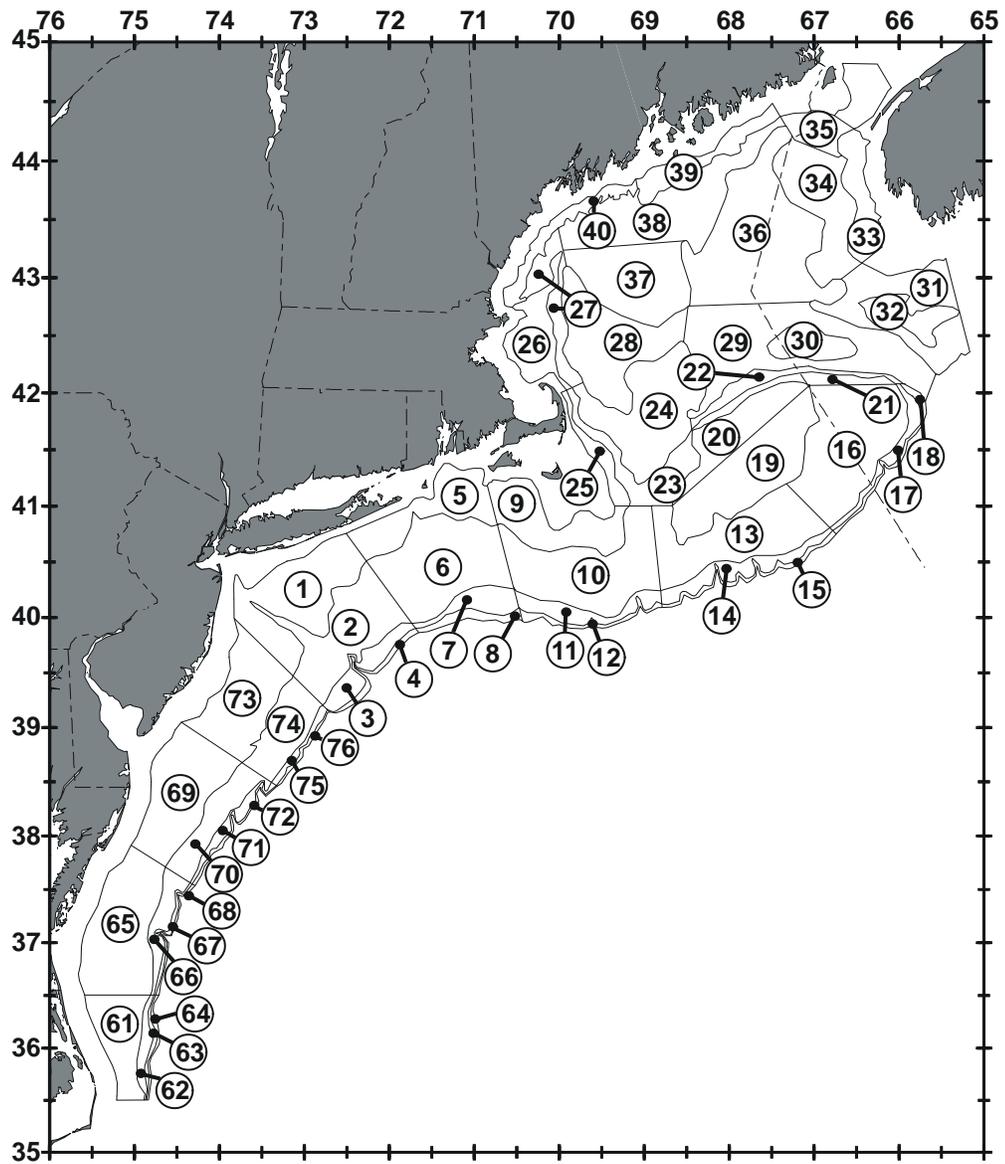


Figure 1. Offshore depth strata sampled during Northeast Fisheries Science Center bottom trawl research surveys.

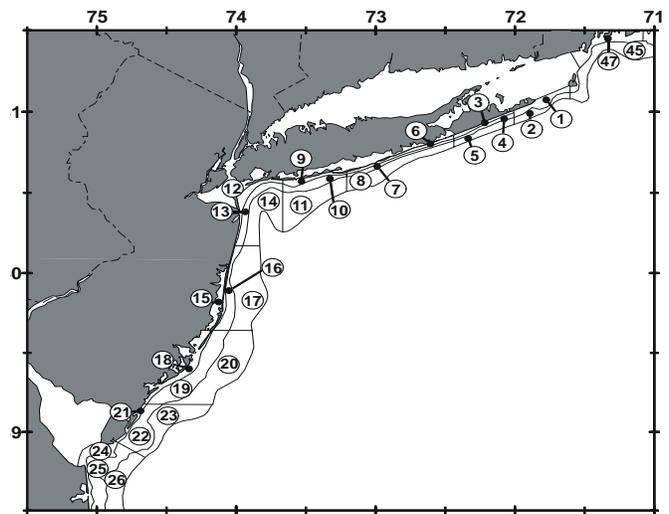
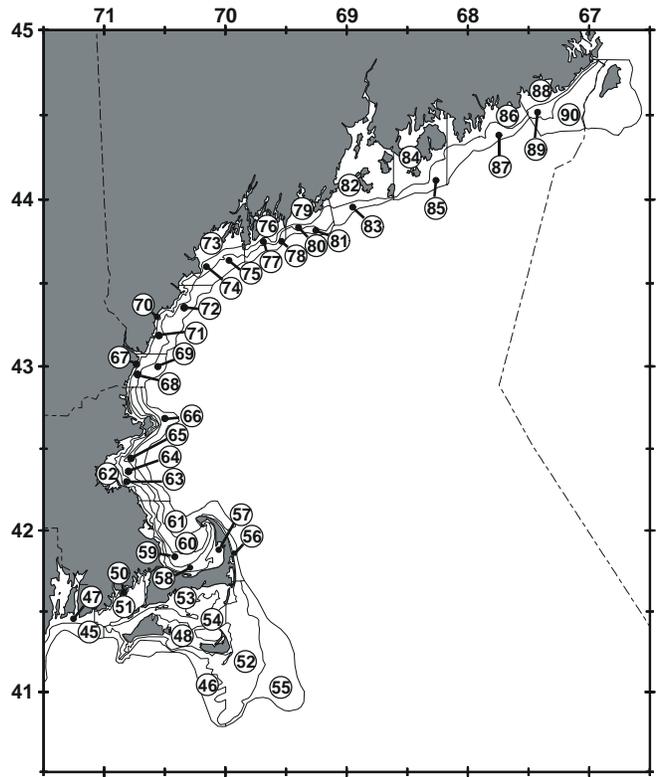
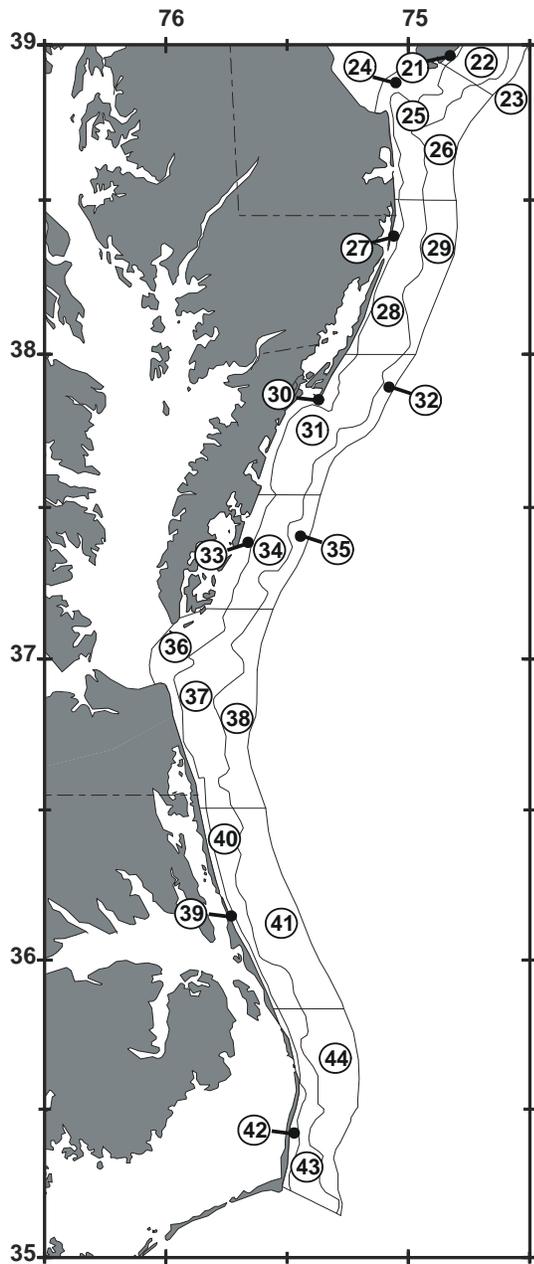


Figure 2. Inshore depth strata sampled during Northeast Fisheries Science Center bottom trawl research surveys.

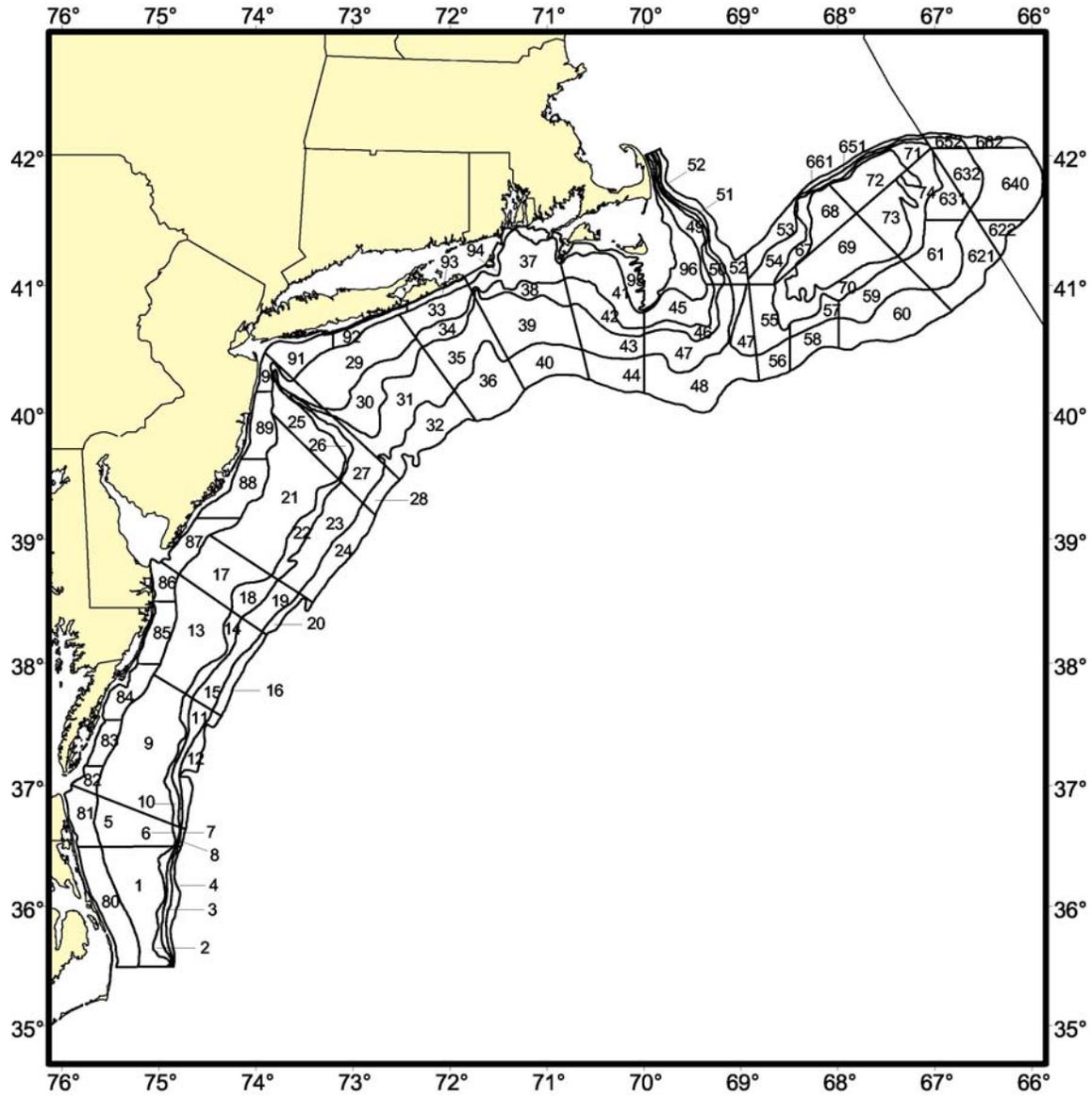


Figure 3. Depth strata sampled during Northeast Fisheries Science Center clam dredge research surveys.

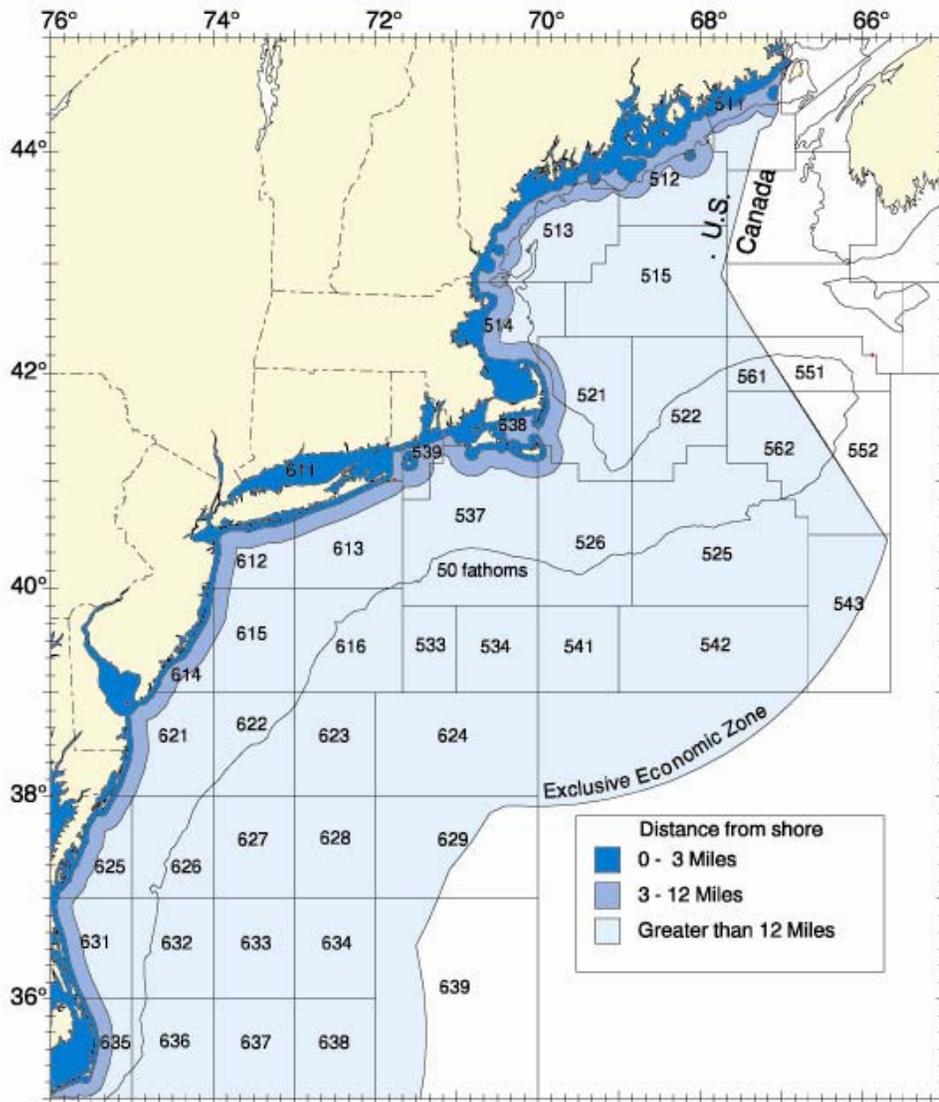


Figure 4. Statistical areas used for reporting commercial catches.

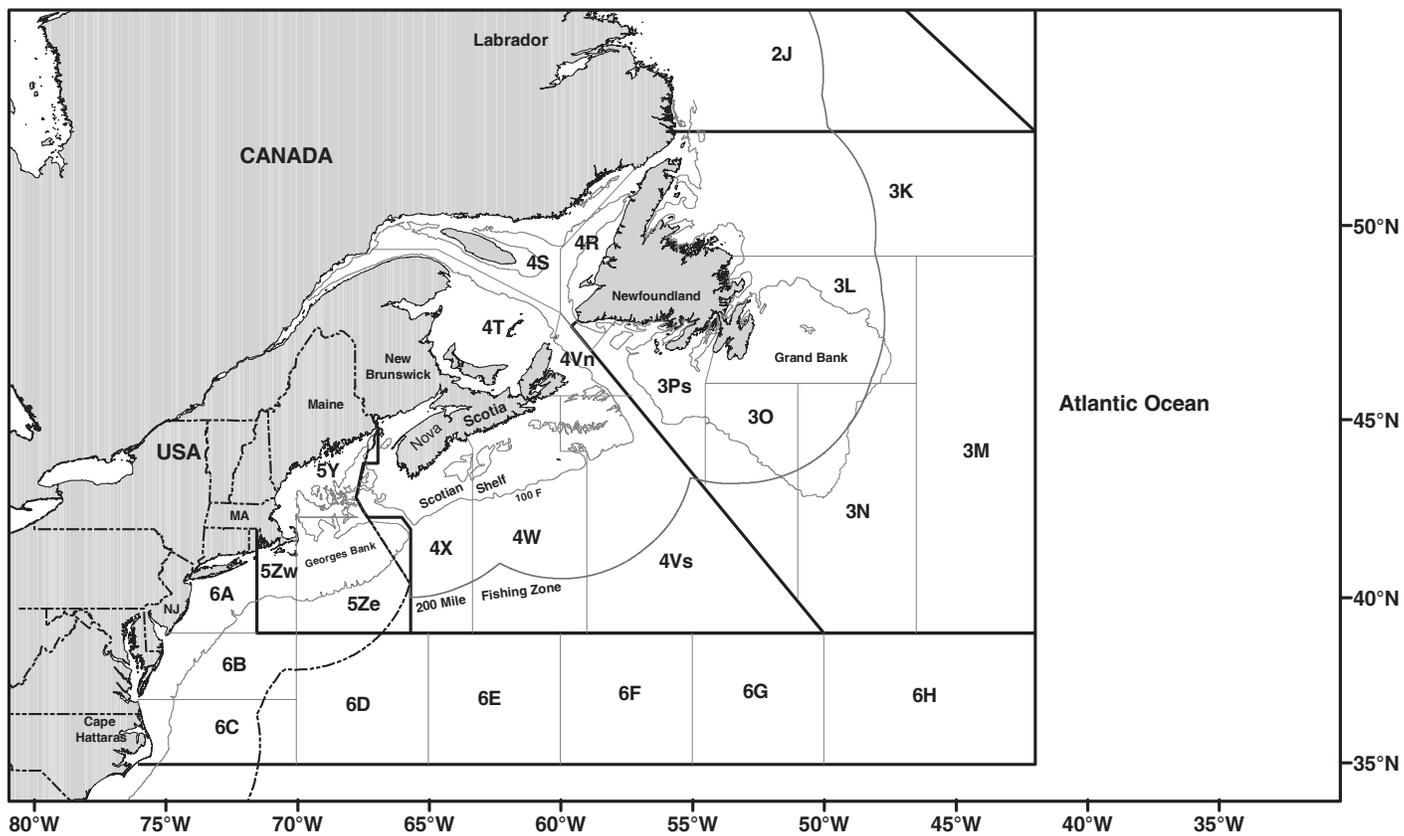


Figure 5. Catch reporting areas of the Northwest Atlantic Fisheries Organization (NAFO) for Subareas 3-6.