



Northeast Fisheries Science Center Reference Document 17-10

63rd Northeast Regional Stock Assessment Workshop (63rd SAW) Assessment Report

by the Northeast Fisheries Science Center

April 2017

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NOAA Fisheries, Northeast Fisheries Science Center, 166 Water Street, Woods Hole, MA 02543

U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
National Marine Fisheries Service
Northeast Fisheries Science Center
Woods Hole, Massachusetts

April 2017

Northeast Fisheries Science Center Reference Documents

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1 Ocean quahog Assessment

1.1 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 a 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 Statistical 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 summary of the assessment results in a format useful to managers; an *Assessment Report* - a detailed account of the assessments for each stock; and the SARC panelist reports - a summary of the reviewer's

opinions and recommendations as well as individual reports from each panelist. Both the SAW/SARC assessment reports and the CIE review reports are available online at <http://www.nefsc.noaa.gov/saw/reports.html>.

The 63rd SARC was convened in Woods Hole at the Northeast Fisheries Science Center (NEFSC), February 21-23, 2017 to review a benchmark stock assessment of ocean quahog (*Arctica islandica*). CIE reviews for SARC 63 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:

Text in this section is based on SARC-63 Review Panel reports (available at <http://www.nefsc.noaa.gov/saw/reports.html> under the heading "SAW 63 Panelist Reports").

SARC 63 concluded that the ocean quahog stock is neither overfished nor did it experience overfishing in 2012-2016, the period since the last benchmark assessment. Outcomes based on the new SS3 model, the previous KLAMZ model, and empirical analyses all supported the conclusion. The Panel agreed that the focus on trends and ratios, especially for assessing stock status, was appropriate. The Panel also concluded that the SAW WG had reasonably and satisfactorily completed all tasks specified in the ToRs.

Fishery-independent survey results indicate that the northward shift in ocean quahog landings probably is a response of the fishery to declining

abundance in the southern subregions. These declines in the south were indicated by decreasing commercial effort and LPUE. The fishery is now concentrated off Long Island where 70-80% of landings were recorded during 2005-2015. Commercial LPUE indices were not used in the assessment, and the Panel agreed that this was ap-

propriate because of the small proportion of the stock area fished. The Panel noted the mismatch between the broad spatial scale of the stock assessment for status determination vs the smaller spatial scales at which demographic differences likely occur, and encourages more research on this topic.

Table 1: 63rd Stock Assessment Review Committee Panel.

SARC Chairman (MAFMC SSC):

Dr. Ed Houde
Professor Emeritus
University of Maryland Center for Environmental Science
Chesapeake Biological Laboratory
Email: ehoude@cbl.umces.edu

SARC Panelists (CIE):

Dr. Michael Bell
Research Associate
International Centre for Island Technology, Heriot-Watt University
Orkney, UK
Email: M.C.Bell@hw.ac.uk

Dr. Martin Cryer
Science Manager, Aquatic Environment
Ministry for Primary Industries
Wellington, NZ
Email: martin.cryer@mpi.govt.nz

Dr. Anthony Hart
Principal Research Scientist
Western Australia Fisheries Research Division
North Beach, Australia
Email: anthony.hart@fish.wa.gov.au

Table 2: Agenda, 63rd Stock Assessment Review Committee Meeting.

February 21-23, 2017

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

AGENDA¹ (version: 2/15/2017)

TIME	TOPIC	PRESENTER(S)	RAPPORTEUR
<u>Tuesday, Feb. 21</u>			
10 - 10:30 AM	Welcome	James Weinberg, SAW Chair Edward Houde, SARC Chair	
	Introduction		
	Agenda		
	Conduct of Meeting		
10:30 - 12:30 PM	Assessment Presentation (A. Ocean quahog)	Dan Hennen	Toni Chute
12:30 - 1:30 PM	Lunch		
1:30 - 3:30 PM	Assessment Presentation (A. Ocean quahog)	Dan Hennen	Toni Chute
3:30 - 3:45 PM	Break		
3:45 - 5:45 PM	SARC Discussion w/ Presenters (A. Ocean quahog)	Ed Houde, SARC Chair	Michele Traver
5:45 - 6 PM	Public Comments		
7 PM	(Social Gathering)		

Table 2 cont.

TIME	TOPIC	PRESENTER(S)	RAPPORTEUR
<u>Wednesday, Feb. 22</u>			
9:00 - 10:45	Revisit with Presenters (A. Ocean quahog)	Ed Houde, SARC Chair	Alicia Miller
10:45 - 11	Break		
11 - 11:45	Revisit with Presenters (A. Ocean quahog)	Ed Houde, SARC Chair	Alicia Miller
11:45 - Noon	Public Comments		
12 - 1:15 PM	Lunch		
1:15 - 4 PM	Review/Edit Assessment Summary Report (A. Ocean quahog)	Ed Houde, SARC Chair	Alicia Miller
4 - 4:15 PM	Break		
4:15 - 5:00 PM	SARC Report writing		
<u>Thursday, Feb. 23</u>			
9:00 AM - 5:00 PM	SARC Report writing		

Table 3: 63rd SAW/SARC, List of Attendees.

NAME	AFFILIATION	EMAIL
Ed Houde	U Maryland Center for Environmental Science	ehoude@umces.edu
Anthony Hart	Western Australian Fisheries	Anthony.Hart@fish.wa.gov.au
Mike Bell	Heriot-Watt University - Intl Centre for Island Tech	M.C.Bell@hw.ac.uk
Martin Cryer	Ministry for Primary Industries, Wellington	Martin.Cryer@mpi.govt.nz
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Tom Alspach	Sea Watch International	talspach@goeaston.net
Eric Powell	University of Southern Mississippi	eric.n.powell@usm.edu
D.H. Wallace	Wallace & Associates	DHWallace@aol.com
Doug Potts	NMFS/GARFO	douglas.potts@noaa.gov
Gary Shepherd	NEFSC	gary.shepherd@noaa.gov

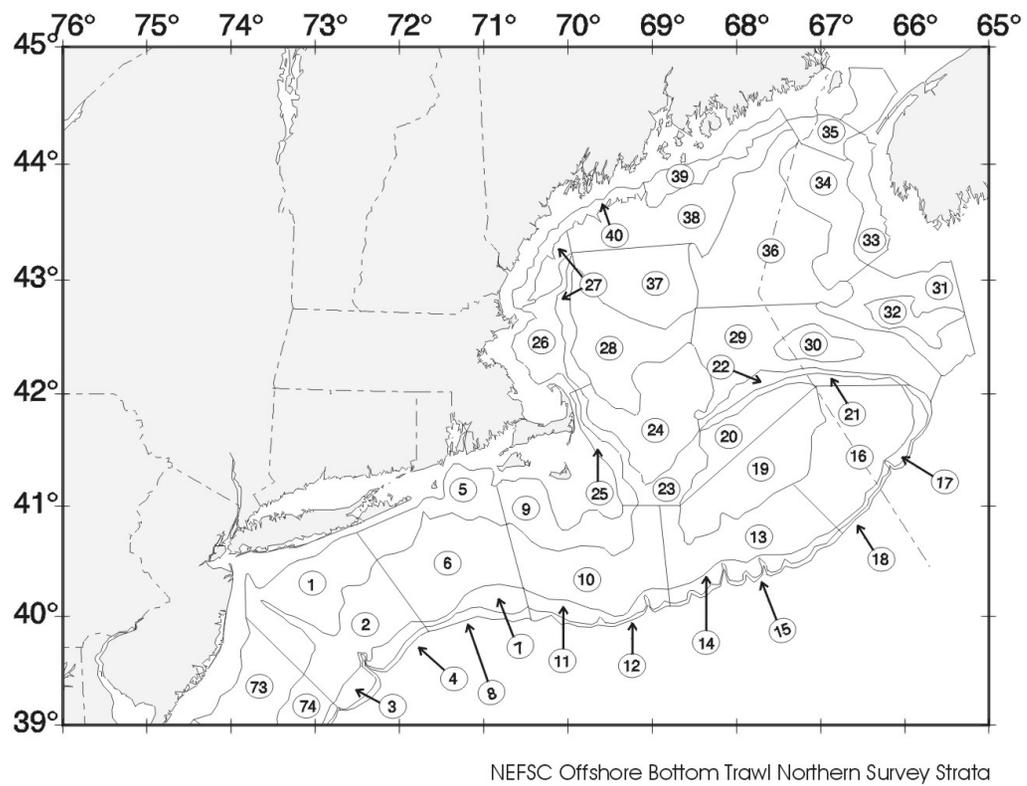
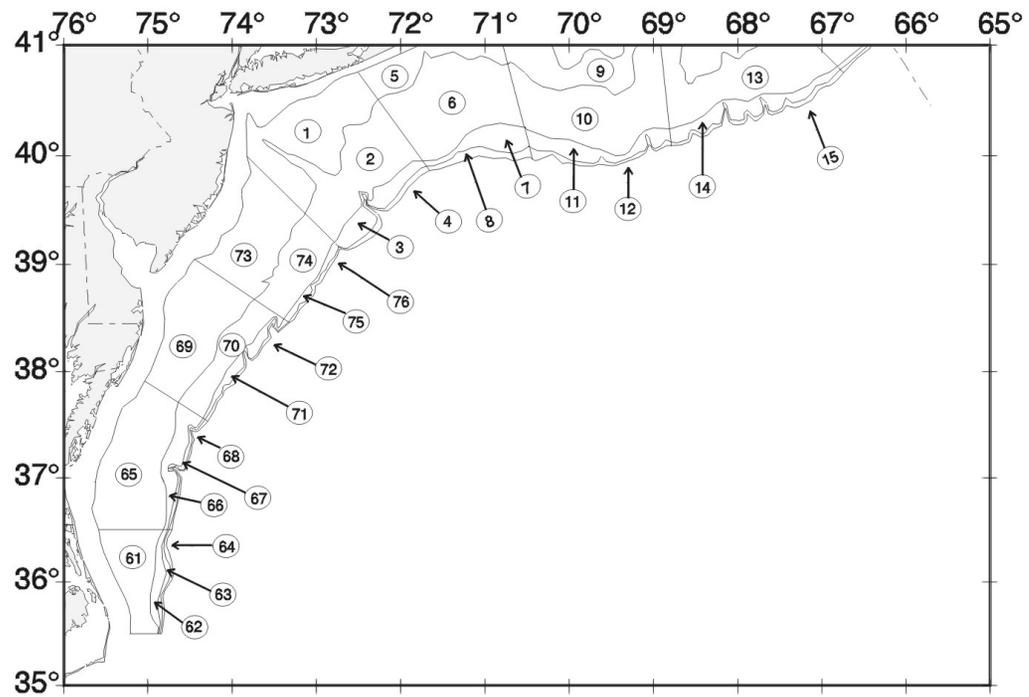


Figure 1: Offshore depth strata that have been sampled during Northeast Fisheries Science Center bottom trawl research surveys. Some of these may not be sampled presently.



NEFSC Offshore Bottom Trawl Southern Survey Strata

Figure 1 cont.

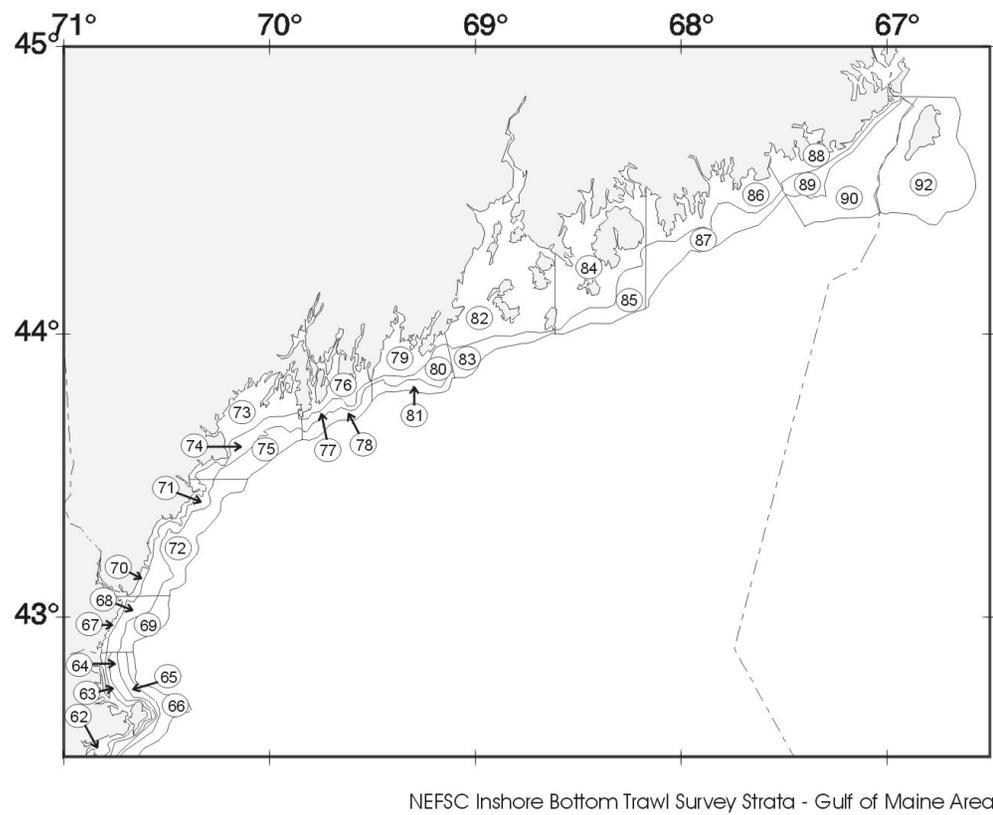
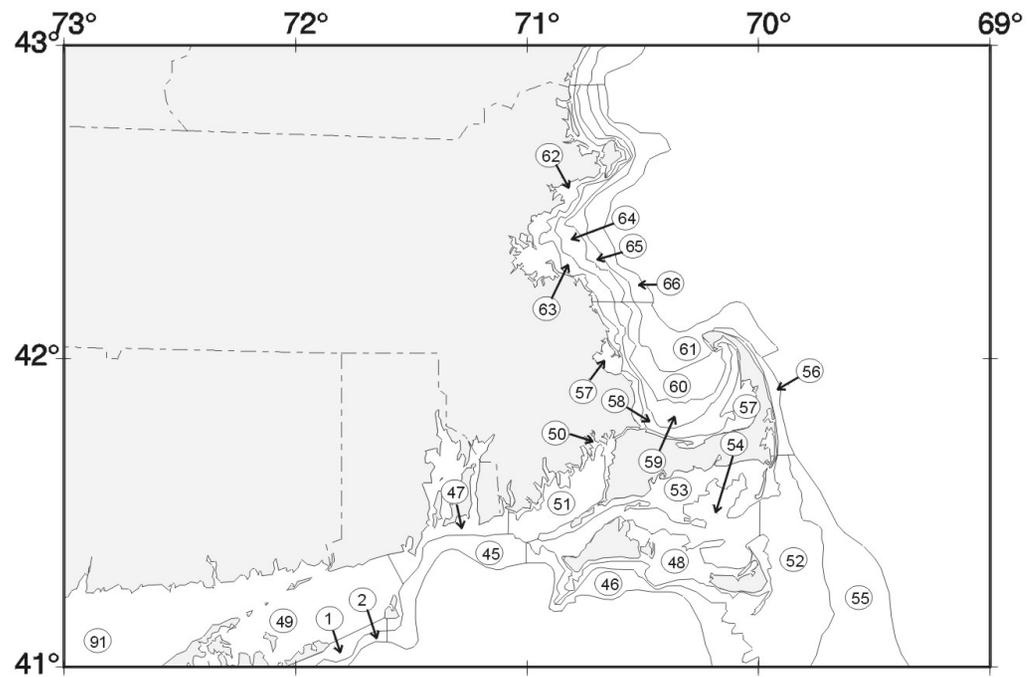
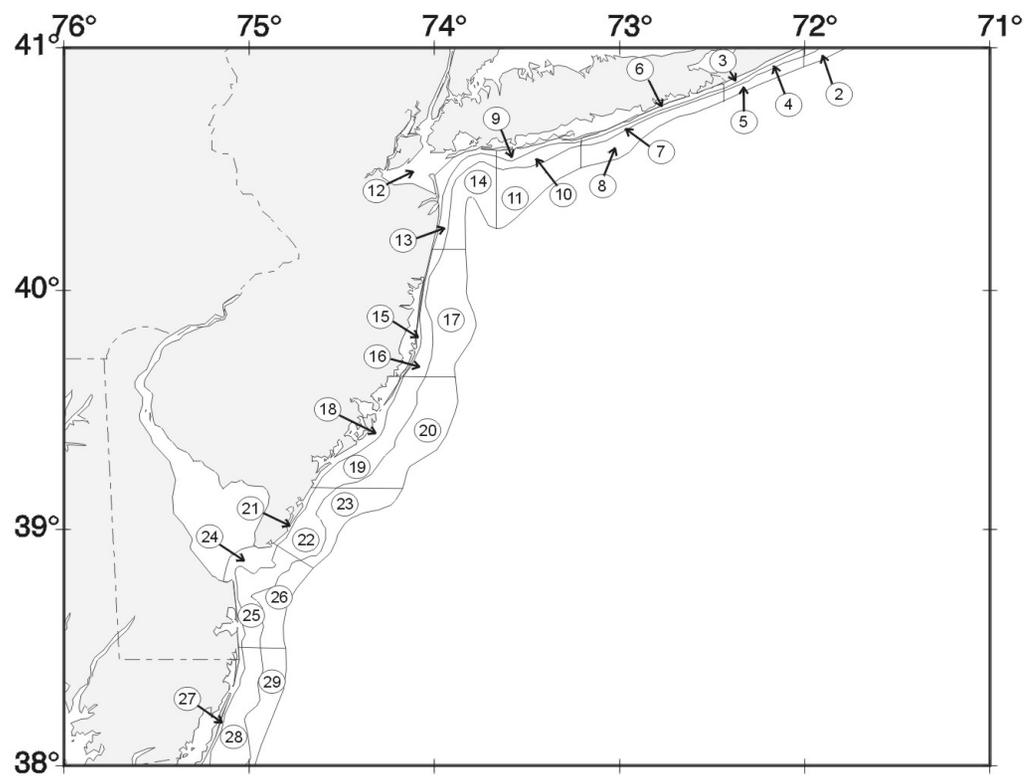


Figure 2: Inshore depth strata that have been sampled during Northeast Fisheries Science Center bottom trawl research surveys. Some of these may not be sampled presently.



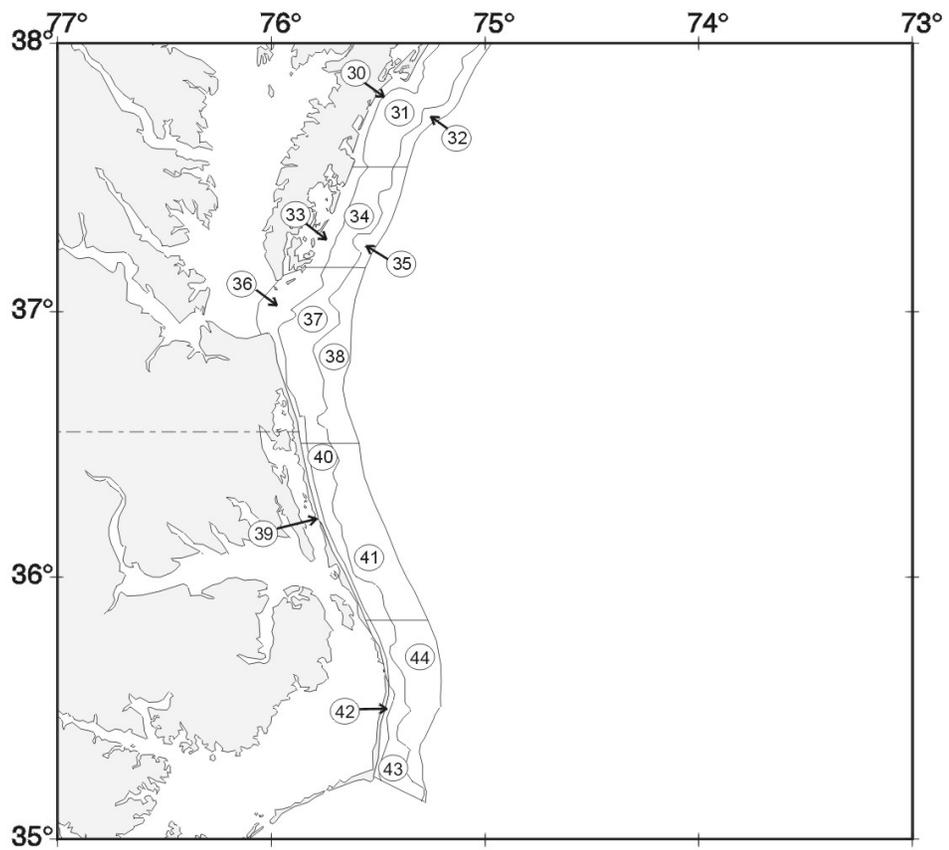
NEFSC Inshore Bottom Trawl Survey Strata - Cape Cod & Southern New England Areas

Figure 2 cont.



NEFSC Inshore Bottom Trawl Survey Strata - Northern Mid Atlantic Area

Figure 2 cont.



NEFSC Inshore Bottom Trawl Survey Strata - Southern Mid-Atlantic Area

Figure 2 cont.

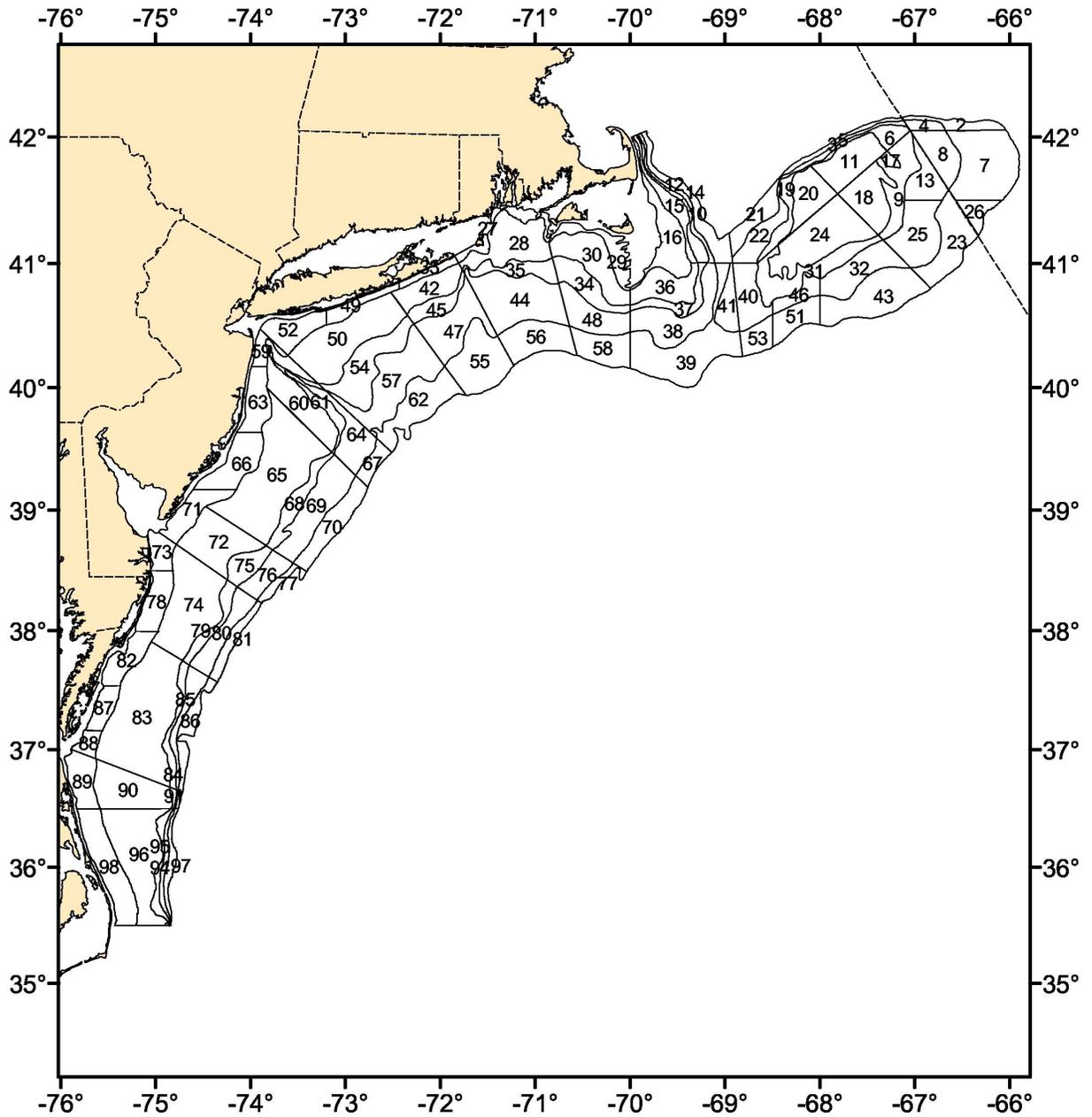


Figure 3: Depth strata sampled during Northeast Fisheries Science Center clam dredge research surveys.

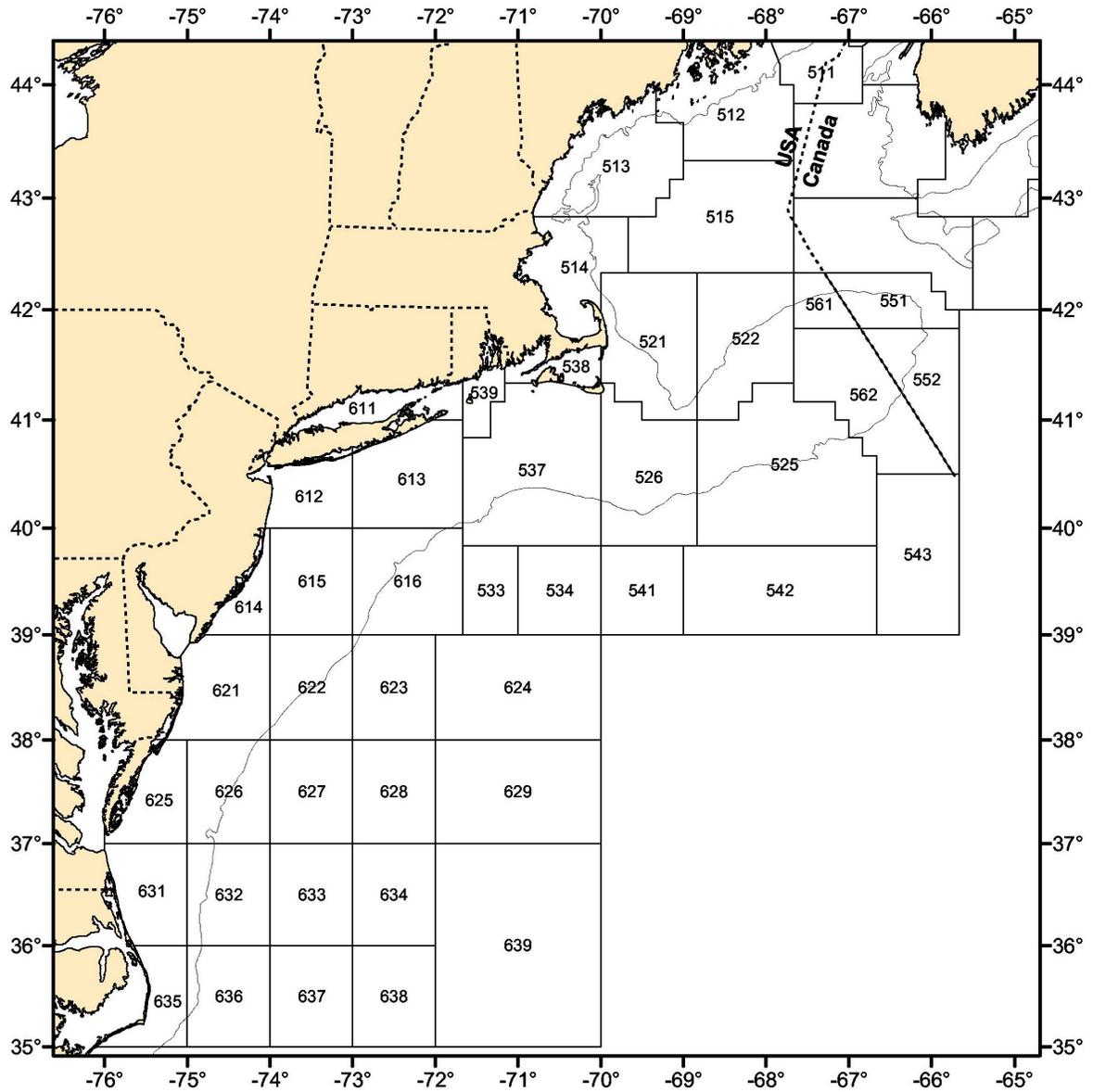


Figure 4: Statistical areas used for reporting commercial catches.

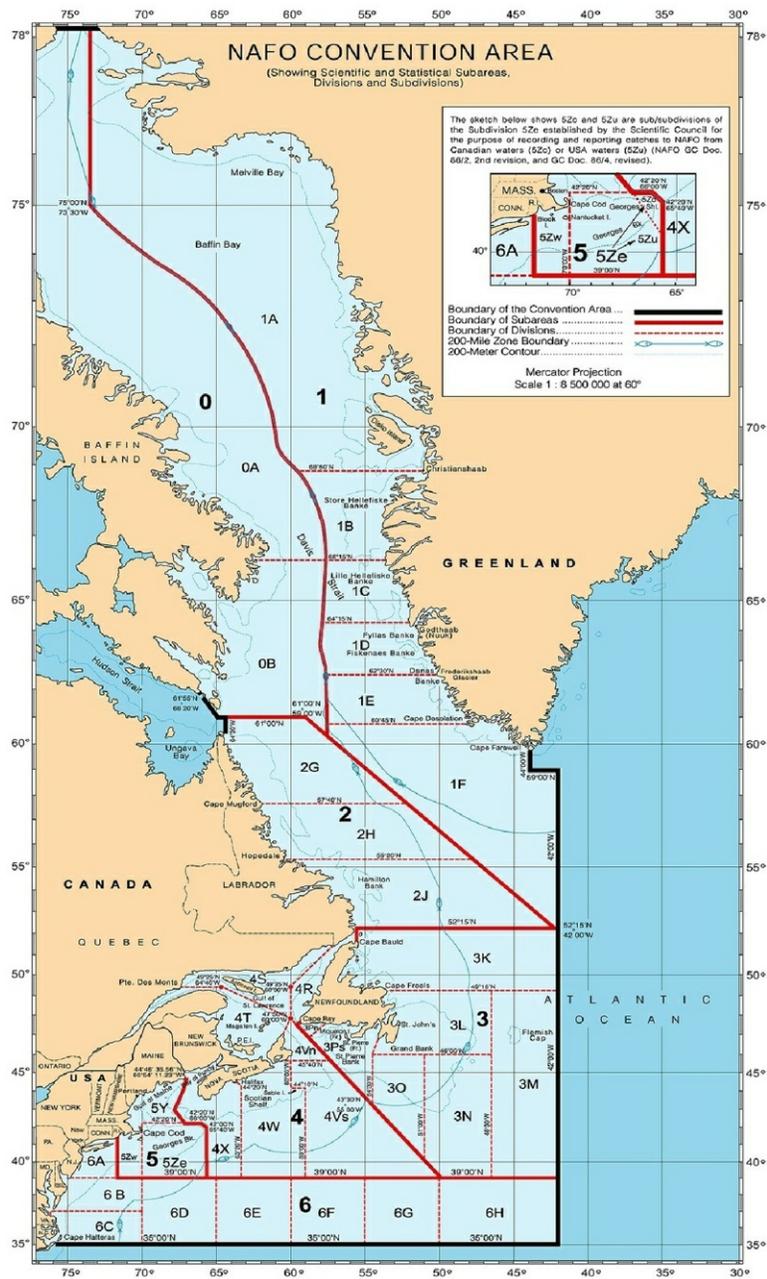


Figure 5: Catch reporting areas of the Northwest Atlantic Fisheries Organization (NAFO).