

*CRUISE RESULTS*  
*UNOLS R/V Hugh R. Sharp*  
*(Contracted Survey Vessel)*  
*Cruise No. S1 19-01 (Parts I-III)*  
*Sea Scallop Survey*  
*May 15 - June 14, 2019*

**For further information, contact Peter Chase, National Marine Fisheries Service, Northeast Fisheries Science Center, Woods Hole, Massachusetts 02543-1097. Phone (508) 495-2348; FAX (508) 495-2380; [Peter.Chase@noaa.gov](mailto:Peter.Chase@noaa.gov).**



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National Oceanic and Atmospheric Administration  
NATIONAL MARINE FISHERIES SERVICE  
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## 2019 Sea Scallop Survey Cruise Report

### Survey Vessel Name (Cruise Code)

UNOLS R/V *Hugh R. Sharp* (S1 19-01)

### Project Title

2019 Sea Scallop Survey

### Operating Institution

NOAA National Marine Fisheries Service, Northeast Fisheries Science Center

### Cruise Dates and Survey Legs

The cruise dates were 15 May – 14 June 2019, which consisted of three legs. Leg I was from 15 – 21 May; Leg II was from 23 May – 4 June; and Leg III was from 6 – 14 June, 2019.

### Cruise Objectives

1) Determine the distribution and relative abundance of sea scallops (*Placopecten magellanicus*) and associated fauna; 2) collect biological samples.

### Area of Operation and Cruise Track

Mid-Atlantic Bight to Georges Bank. Approximate dredge station locations are shown in Figures 1 and 2. HabCam V4 cruise tracks are shown in Figures 3 and 4.

### Operations and Gear

Operational and gear details for cruise S1 19-01 are outlined in the sea scallop survey cruise instructions dated 1 May, 2019.

### Data and Sample Collection Results

The survey sampled at 122 dredge stations; 108 of those stations were representative. Bottom temperatures were collected at 35 stations using the CTD system; water samples for CTD calibration were taken at 19 stations. A total of 1,917 biological samples were collected to support two internal and external investigations (Table 1). Catch and oceanographic data were analyzed at the NEFSC Laboratory in Woods Hole, MA. Resulting data were audited, edited, and archived in an Oracle database. HabCam images were further analyzed for biological data at the NOAA NMFS NEFSC Woods Hole Lab. During the three legs of the survey, NOAA HabCam V4 captured images along a cruise track of approximately 1,605 nm, with 1,319 nm in the Mid-Atlantic Bight and about 286 nm throughout part of Georges Bank. A total of roughly 2,585,168 image pairs were collected.

### Scientific Personnel

#### **National Marine Fisheries Service, NEFSC, Woods Hole, MA**

Nicole Charriere<sup>3</sup>, Chief Scientist<sup>2</sup>

Peter Chase, Chief Scientist<sup>1</sup>

Joshua Dayton<sup>3</sup>

Dvora Hart<sup>3</sup>

Chad Keith<sup>2</sup>

Nancy McHugh<sup>1</sup>

Jillian Price<sup>2</sup>

Sandy Sutherland<sup>1</sup>

#### **Contractors, Integrated Statistics, Woods Hole, MA**

Michael Bergman<sup>2</sup>, Chief Scientist<sup>3</sup>

Jennifer Casey<sup>2</sup>

Jui-Han Chang<sup>1, 2</sup>

Katelyn Depot<sup>3</sup>

Joseph Dunphy<sup>2, 3</sup>

Corinne Endres<sup>3</sup>

Kristof Ketch<sup>1</sup>

Claire Ober<sup>3</sup>

#### **WHOI, HabCam Group, Woods Hole, MA**

Cameron Fairclough<sup>1, 2, 3</sup>

### **Volunteers**

Nina Bakker<sup>3</sup>

Talya ten Brink<sup>1</sup>

Stephanie Carter<sup>2</sup>

Nilanjana Das<sup>2</sup>

Tyler Fairclough<sup>3</sup>

Christine Gardiner<sup>2</sup>

Adam Graves<sup>2</sup>

Joseph Molina<sup>1</sup>

Michael Saint-Antoine<sup>3</sup>

Nina Santos<sup>1</sup>

Evan Woerner<sup>1</sup>

Roger Williams University, RI

University of Rhode Island, RI

Sam Houston State University, TX

Stockton University, NJ

University of Massachusetts, Dartmouth, MA

University of Rhode Island, RI

Unity College, ME

Coastal Carolina University, SC

University of Delaware, DE

University of Rhode Island, RI

Colonia, NJ

<sup>1</sup> 15 – 21 May, 2019

<sup>2</sup> 23 May – 4 June, 2019

<sup>3</sup> 6 – 14 June, 2019

### Additional Information Contact

Peter Chase, National Marine Fisheries Service, Northeast Fisheries Science Center, Woods Hole, MA 02543. Phone (508) 495-2348; [Peter.Chase@noaa.gov](mailto:Peter.Chase@noaa.gov). The resource survey report for this survey can be viewed at: [NEFSC Ecosystems Surveys Branch website](#).

Table 1. Special samples obtained for various investigators on UNOLS R/V *Hugh R. Sharp* Sea Scallop Survey, during 15 May – 13 June 2019.

<b>Investigator and Affiliation</b>	<b>Samples Saved</b>	<b>Approximate Number</b>
Gallager, Scott Woods Hole Oceanographic Institution, Woods Hole, MA	sea scallop viscera	369 meats frozen
Hart, Dvora NMFS, NEFSC, Woods Hole, MA	sea scallop shells	402 shells
Hart, Dvora NMFS, NEFSC, Woods Hole, MA	sea scallop meat weights	382 weights
Hart, Dvora NMFS, NEFSC, Woods Hole, MA	sea scallop gonad weights	382 weights
Hart, Dvora NMFS, NEFSC, Woods Hole, MA	sea scallop shell widths	382 widths

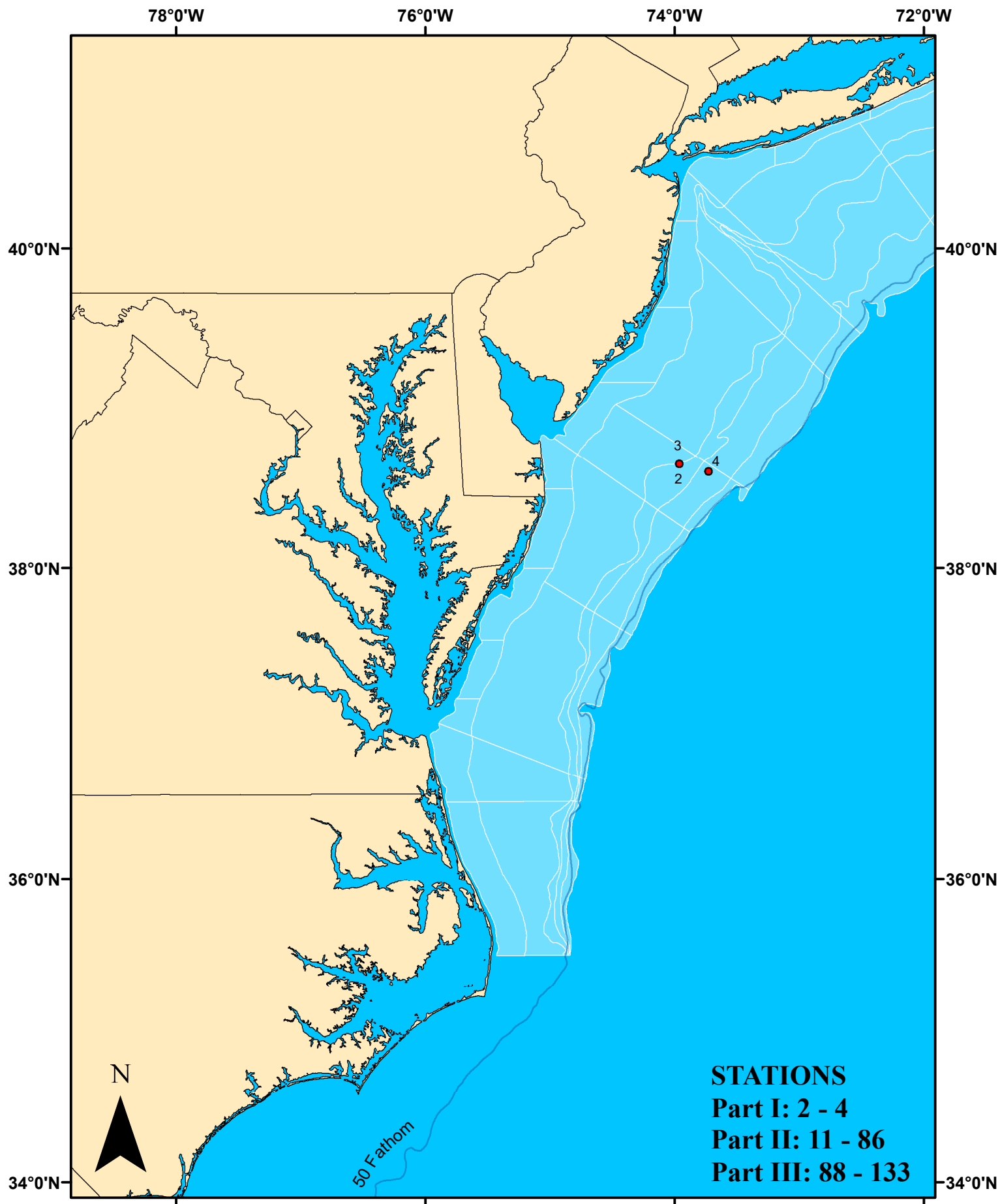


Figure 1. Dredge tows made from UNOLS R/V *Hugh R. Sharp* during NOAA NMFS NEFSC's summer sea scallop survey, 15 May - 13 June 2019

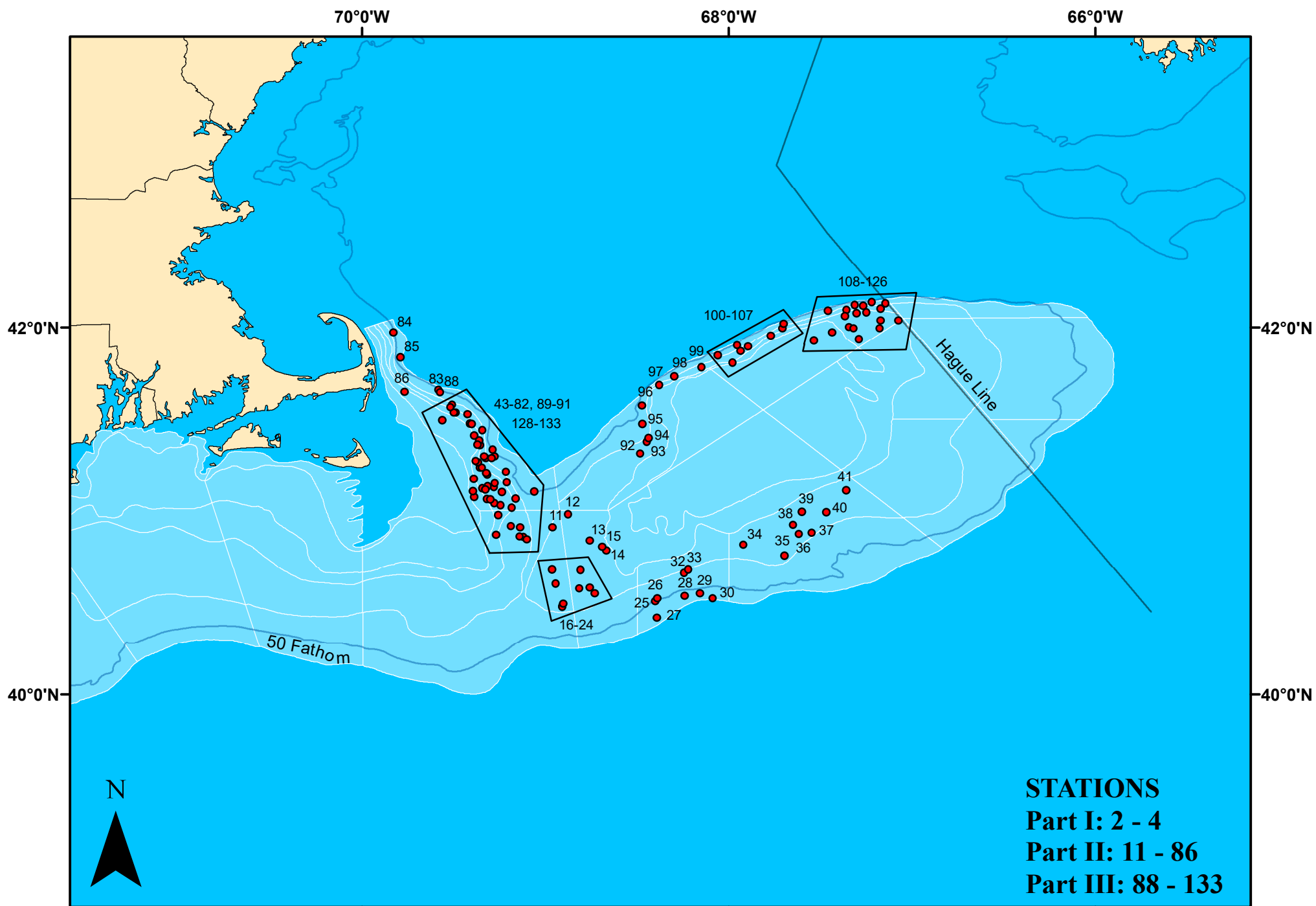


Figure 2. Dredge tows made from UNOLS R/V *Hugh R. Sharp* during NOAA NMFS NEFSC's summer sea scallop survey, 15 May - 13 June 2019

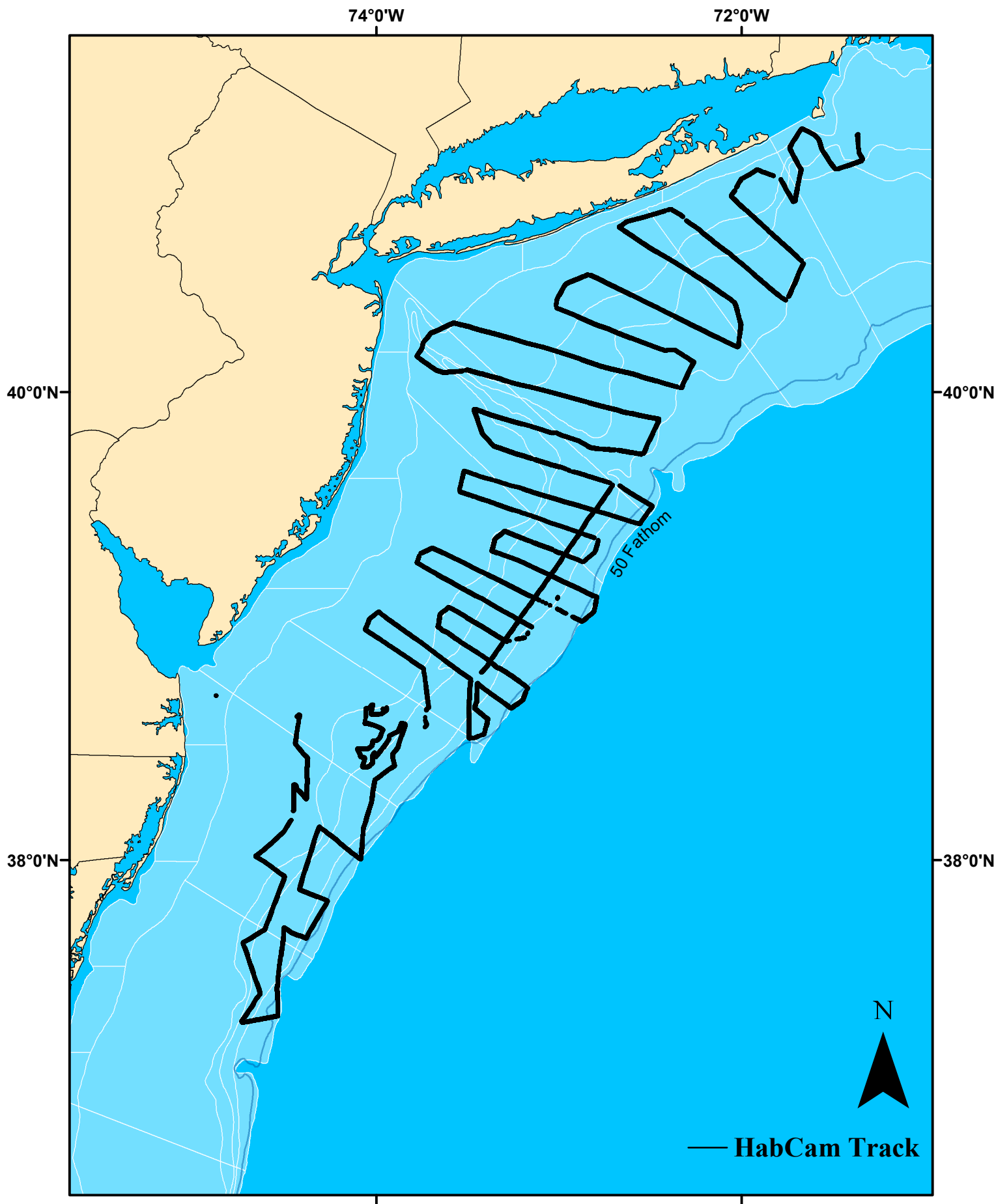


Figure 3. Approximate HabCam Mid-Atlantic Bight cruise track, as followed by UNOLS R/V *Hugh R. Sharp*, during NOAA NMFS NEFSC's summer sea scallop survey, 15 May - 13 June 2019

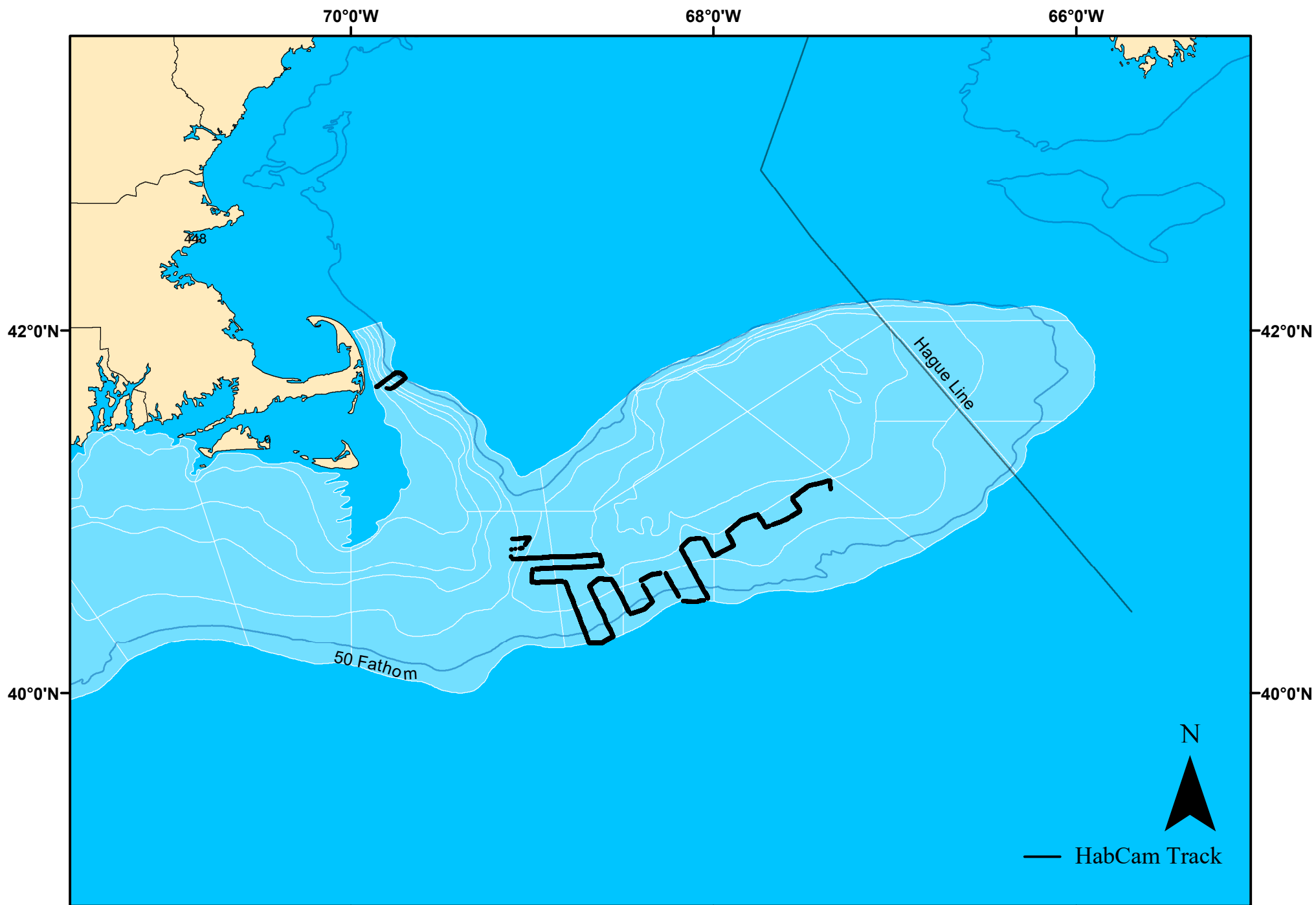


Figure 4. Approximate Georges Bank HabCam cruise track, as followed by UNOLS R/V *Hugh R. Sharp*, during NOAA NMFS NEFSC's summer sea scallop survey, 15 May - 13 June 2019