

Cruise Report

2023 Sea Scallop Survey

Georges Bank

14 May – 17 June 2023  
UNOLS R/V Hugh R Sharp

Submitted to: NOAA, NEFSC

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Date: 2023



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National Oceanic and Atmospheric Administration  
NATIONAL MARINE FISHERIES SERVICE  
Northeast Fisheries Science Center  
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October 06, 2023

## 2023 Sea Scallop Survey Cruise Report

### Survey Vessel Name (Cruise Code)

UNOLS R/V *Hugh R. Sharp* (S1 23-01)

### Project Title

2023 Sea Scallop Survey

### Operating Institution

NOAA National Marine Fisheries Service, Northeast Fisheries Science Center

### Cruise Dates and Survey Legs

The cruise dates were 14 May – 17 June 2023 and consisted of 1 leg, which was 14 - June - 17 June. \*Unexpected vessel malfunctions prior to sailing led to the cancellation of legs I and II. An additional malfunction terminated leg III after only 3 days. To compensate for the loss of survey data due to the vessel issues, NEFSC partnered with cooperating RSA partners and the New England Fisheries Management Council (NEFMC) to provide coverage of the missing NEFSC data.

### Cruise Objectives

1) Determine the distribution and relative abundance of sea scallops (*Placopecten magellanicus*) and associated fauna utilizing two sampling devices; the 8' standardized sea scallop dredge and the stereo-optic towed camera array (HabCam V4 ). 2) Collect biological samples from dredge sampling. 3) Determine the most economical and valid methodology for consecutive sampling of the dredge and the HabCam.

### Area of Operation and Cruise Track

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

### Operations and Gear

Operational and gear details for cruise S1 23-01 are outlined in the sea scallop survey cruise instructions dated 27 April, 2023.

## Data and Sample Collection Results

Overall, the NOAA Fisheries survey completed less than 1 percent of planned stations. All of those planned dredge stations were located in the Georges Bank area. The Mid-Atlantic dredge survey is conducted by the Virginia Institute of Marine Science. A total of 10 biological samples were collected to support internal investigations (Table 1). Catch 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 NOAA NMFS NEFSC Woods Hole.

## HabCam Image Collection Results

The survey completed 15 nautical miles of HabCam survey transects out of 1156 nm scheduled, completing less than 1 percent of the planned work in the difficult and challenging Great South Channel and Closed Area I. During the trackline, 51,996 pairs of images were collected.

Scientific Personnel

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

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

Dvora Hart <sup>3</sup>

Chad Keith <sup>3</sup>

Nancy McHugh <sup>3</sup>

Dana Morton <sup>3</sup>

**Contractors, IBSS Corporation, Silver Spring, MD**

Carolina Breakall <sup>3</sup>

Jennifer Casey <sup>3</sup>

Joseph Dunphy <sup>3</sup>

Cameron Fairclough <sup>3</sup>

Matt Megill <sup>3</sup>

**Contractors, Saltwater Inc., Anchorage, AK**

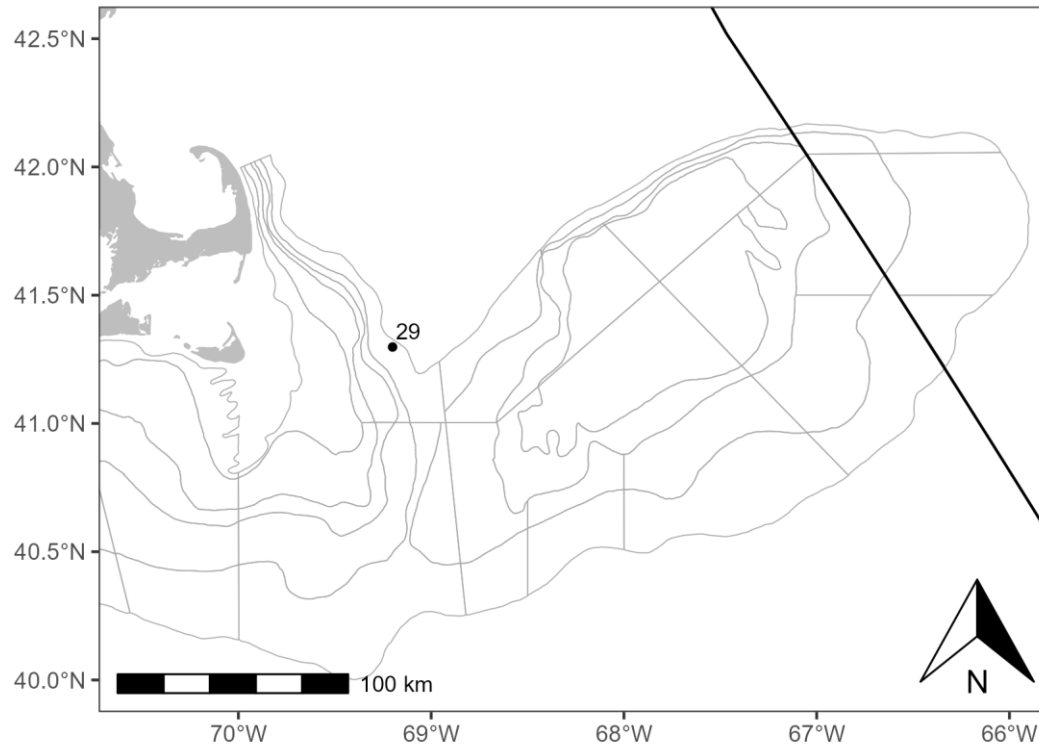
Jui-Han Chang <sup>3</sup>

Additional Information Contact

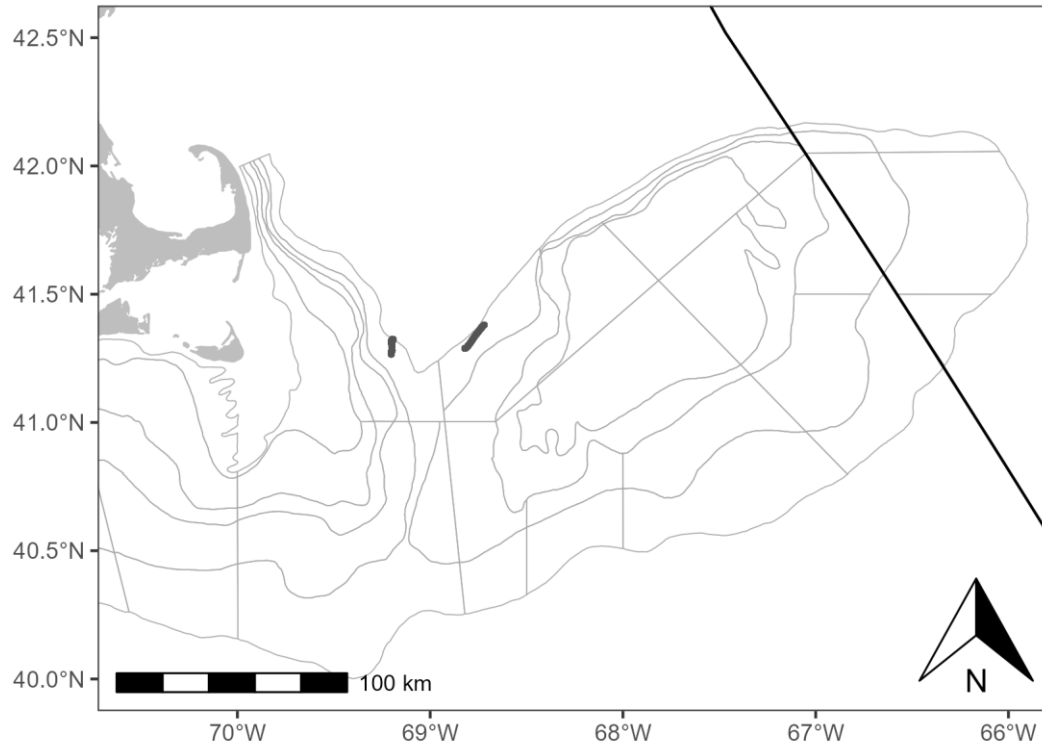
Charles Keith, National Marine Fisheries Service, Northeast Fisheries Science Center, Woods Hole, MA 02543. Phone (401) 366-4851; FAX (508) 495-2000; [Charles.Keith@noaa.gov](mailto:Charles.Keith@noaa.gov). The cruise results can be viewed at: [NOAA Institutional Repository](#). Choose the Cruise Results of interest.

Table 1. Special samples obtained for investigators on UNOLS R/V *Hugh R. Sharp* Sea Scallop Survey, during 14 May – 17 June 2023.

<b>Investigator and Affiliation</b>	<b>Samples Saved</b>	<b>Approximate Number</b>
Hart, Dvora NMFS, NEFSC, Woods Hole, MA	sea scallop shells	10 shells
Hart, Dvora NMFS, NEFSC, Woods Hole, MA	sea scallop meat weights	10 weights
Hart, Dvora NMFS, NEFSC, Woods Hole, MA	sea scallop gonad weights	10 weights
Hart, Dvora NMFS, NEFSC, Woods Hole, MA	sea scallop shell widths	10 widths



**Figure 1:** Dredge hauls made in Georges Bank by UNOLS R/V Hugh R Sharp during NOAA Fisheries Service, Northeast Fisheries Science Center's, summer sea scallop survey June 14-June 17, 2023.



**Figure 2:** *Georges Bank HabCam cruisetrack (usable images), as followed by UNOLS R/V Hugh R Sharp during NOAA Fisheries Service, Northeast Fisheries Science Center's, summer sea scallop survey, June 14-June 17, 2023.*