

2026 Scallop Survey Short Report

Prepared by:

Coonamessett Farm Foundation

Tasha O'Hara, Luisa Garcia, Dr. Liese Siemann



8/21/2026

Intentionally Blank

1.0 METHODS

1.1 Survey Methods

Coonamessett Farm Foundation (CFF) utilizes a Habitat Mapping Camera, the HabCam v3, to conduct optical benthic surveys. The HabCam was developed through a collaborative effort involving fishermen and scientists and engineers at Woods Hole Oceanographic Institution (WHOI). Since assuming ownership of the vehicle in 2017, CFF has made substantial investments in upgrading and modernizing the system to improve its reliability, capabilities, and longevity. Beginning in 2022, CFF undertook a multiyear effort to upgrade the HabCam v3, including the installation of higher-resolution cameras, a BlueView forward-facing sonar system to support safe navigation, a new bottle and internal components, upgraded high-speed software with automated image processing capabilities, a faster hydraulic winch system, and improvements to the topside wheelhouse configuration.

The vehicle is deployed from a commercial industry platform (F/V *Princess Scarlett*) and towed via a triple-armored fiber-optic cable operated with a hydraulic winch. The system is towed along continuous, pre-defined transects that follow bathymetric contours across the seafloor, at an approximate altitude of 2.2 m above the seafloor and an average speed of 5.5 knots. The system typically collects about 4 images/second, which are transmitted via the fiber optic cable. All images are integrated with vehicle sensor metadata and ships data (GPS and fathometer depth), so each image is essentially a holistic snapshot of the ecosystem at a particular space and time. Raw images are collected in TIFF format and automatically processed into high resolution JPEGs for use in annotation.

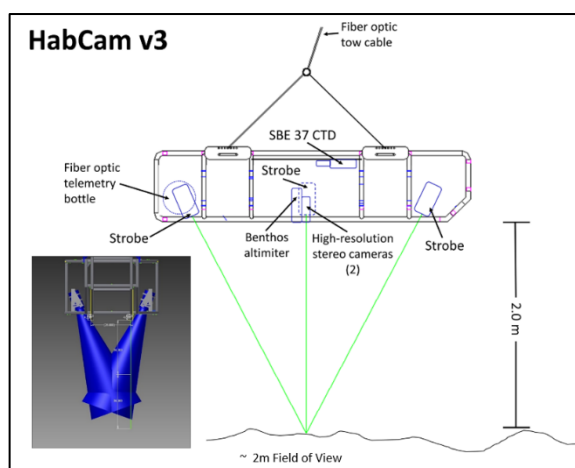


Figure 1: Basic layout of CFF's HabCam v3

1.2 Annotation methods

Images are selected at systematic intervals to ensure each “station” is approximately 40m apart along the track. All new annotators complete a training set before they move on to annotating the current year’s data. Since 2020, CFF has used a modified version of open-source software developed by the Visual Geometry Group (VGG) at Oxford University. Scallops are counted and measured, while fish, sea stars, and other organisms of interest are counted using a bounding box. Measurements are recorded in pixel length and converted to shell heights in millimeters based on the image Field of View (FOV).

2.0 2026 SURVEY BIOMASS ESTIMATES

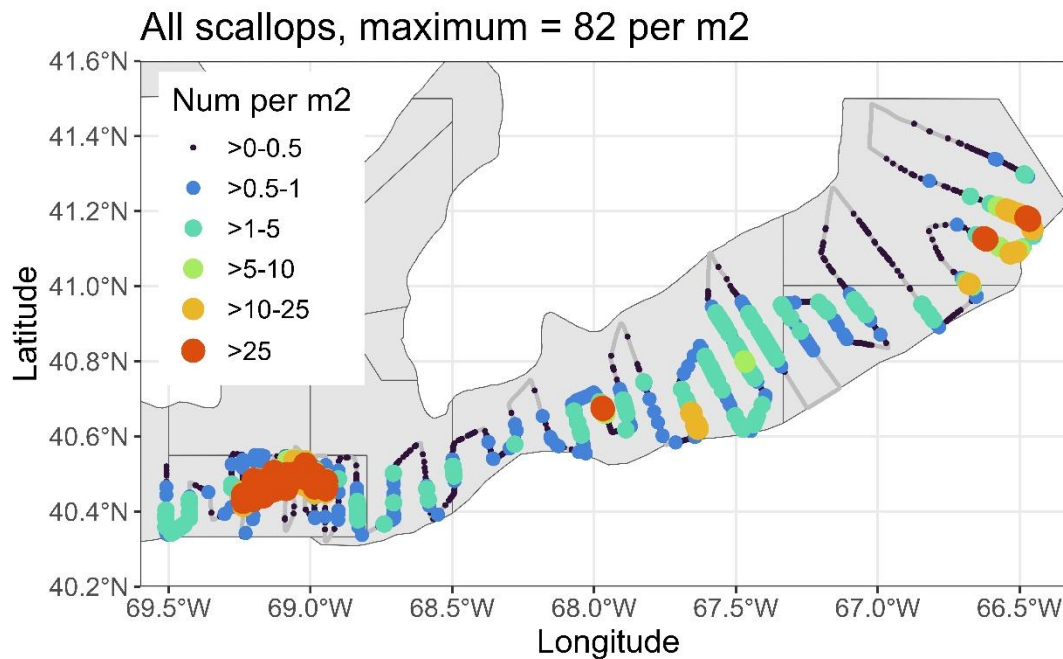
Size cutoff for estimates is 40mm. Refer to 2026 SHMW relationship worksheet for area-specific equations.

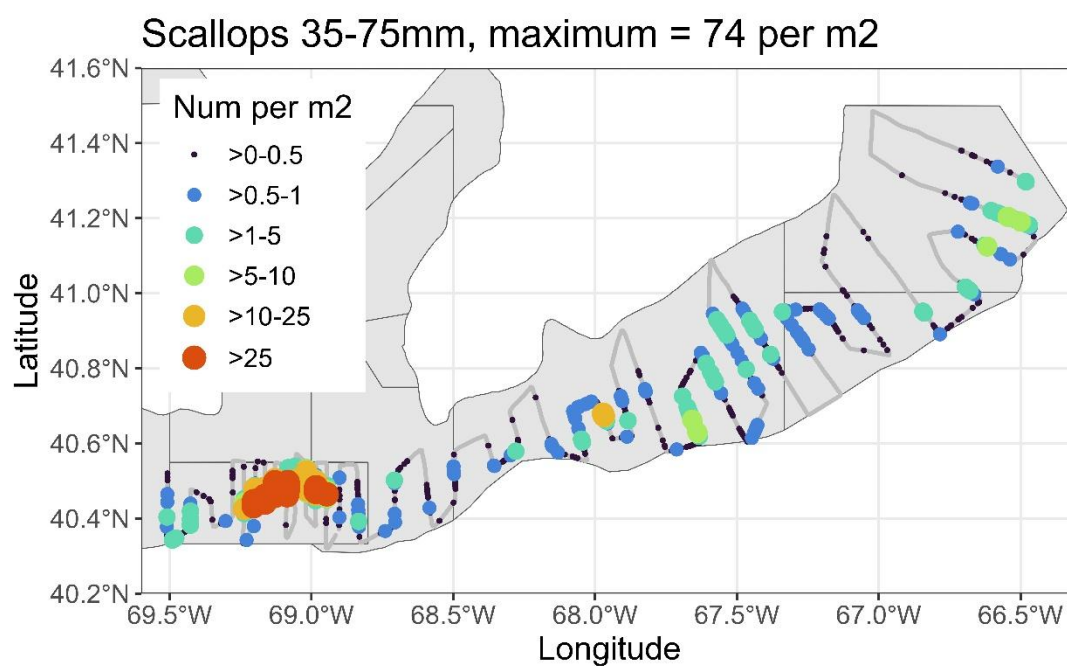
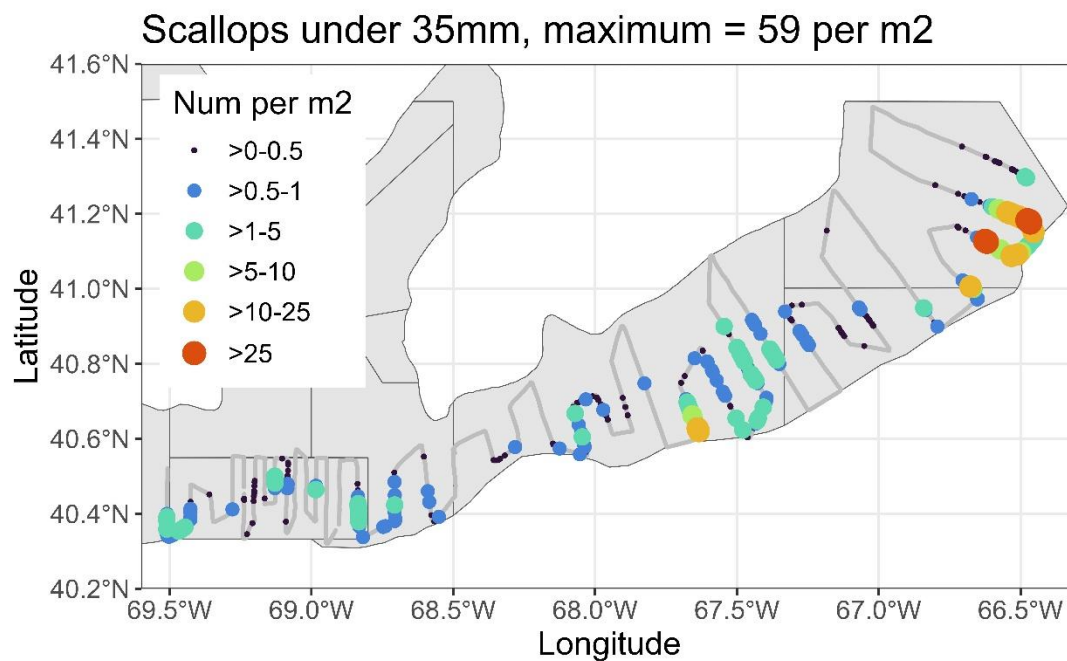
Region	Area	Abundance (mil.)	Biomass (mt)	SE	Avg. Weight (g)	Avg. Size (mm)	Avg. Density (#/m ²)	# Tows/Drops, HabCam images annotated
Georges Bank	CL1-Access							
	CL1-Sliver							
	CL1-South							
	CL2-North							
	CL2-South (Access)	88.26	737.99	195.6	12.62	72.44	0.04	5061
	CL2-Extension	107.75	1599.25	374.35	15.02	91.94	0.08	2550
	NLS-North							
	NLS-South	4784.45	36649.54	6838.41	7.93	77.83	4.13	6575
	NLS-West							
	GSC							
	NF							
	SF	673.08	8309.86	2636.12	12.28	81.83	0.22	8152
	GB Total							
Mid-Atlantic	BI	45.21	392.35	188.28	8.82	70.34	0.07	1455
	LI	350.51	6170.09	856.6	17.88	97.33	0.03	17173
	NYB							
	MAB-Nearshore							
	HCS							
	ET							
	DMV							
	VIR							
	MA Total							
Non-SAMS	[Add rows as needed]							
	Non-SAMS Total							

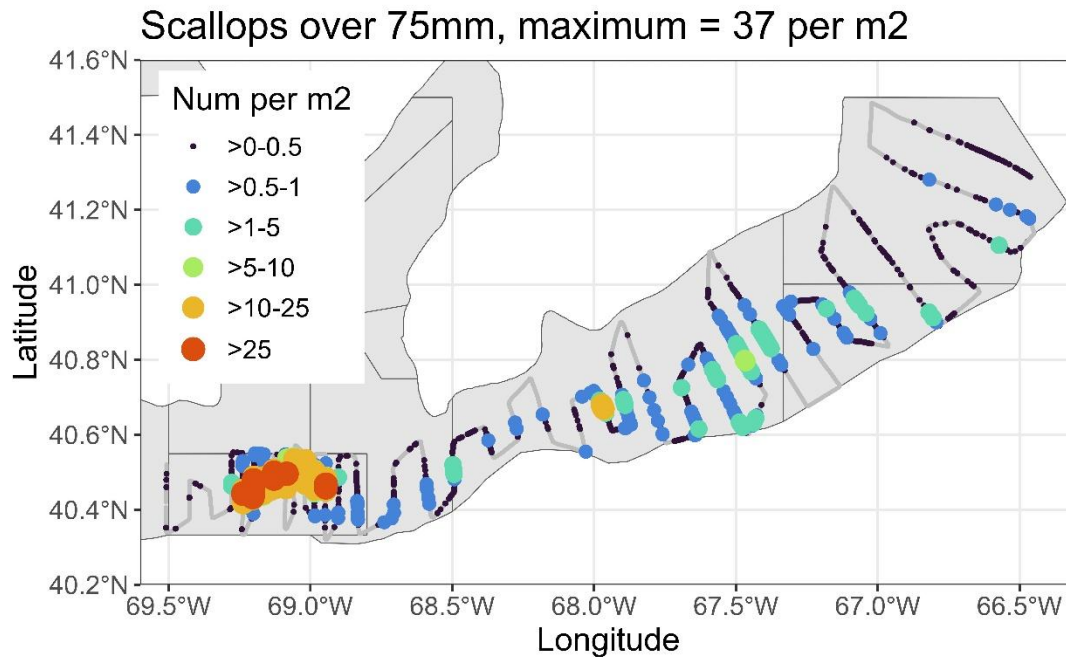
3.0 FIGURES OF SURVEY COVERAGE

3.1 Georges Bank and Nantucket Lightship South (NLS-S)

Our Georges Bank survey took place from May 29th – June 4th covering around 700 nm of continuous transects in Closed Area 2 Access (CL2-Access), Closed Area 2 Extension (CL2-Ext), the Southern Flank (SF), and Nantucket Lightship South (NLS-S). The trip experienced minor delays due to unseasonably rough weather. Scallops of all sizes were observed throughout the track, with the largest numbers seen in the NLS-S (See 3.1.1 below). Pre-recruit scallops (< 35 mm) were also noted in all surveyed areas, though primarily in the SF, CL2-Ext, and the CL2-Access areas. By far, the greatest numbers of pre-recruits were noted in CL2-Access.

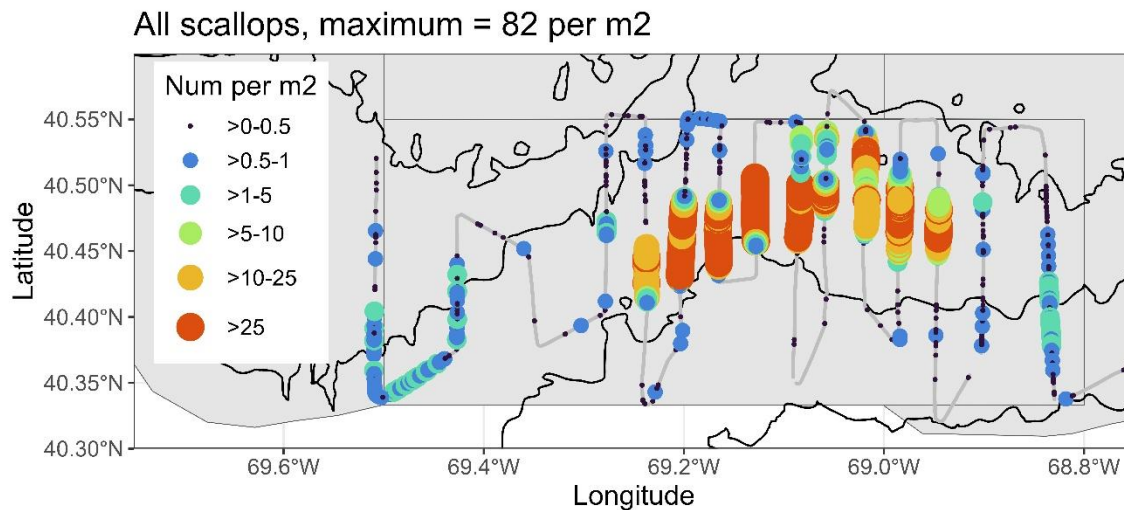




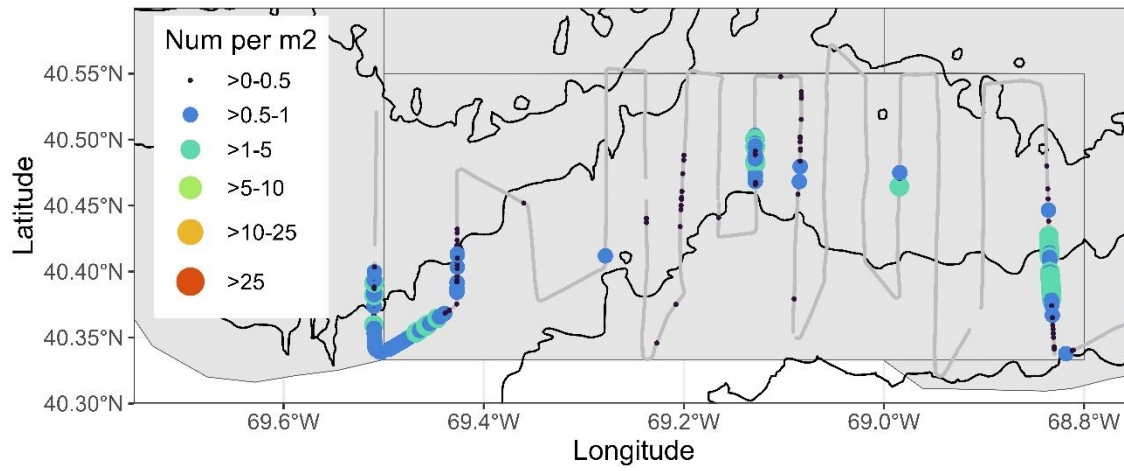


3.1.1 Nantucket Lightship South

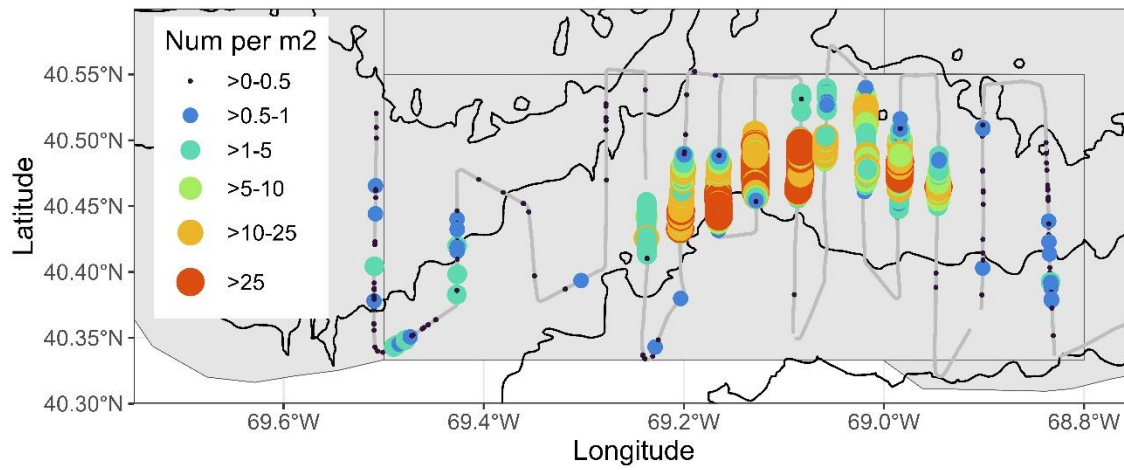
CFF has been following the large scallop cohort in the NLS-S since it was first discovered by the HabCam v3 in 2023. The NLS-S was primarily comprised of recruit and large adult scallops (> 75 mm), though small numbers of pre-recruits were noted in the eastern and western extents of the area. In the western extent, the small pre-recruits extend into the NLS-West.



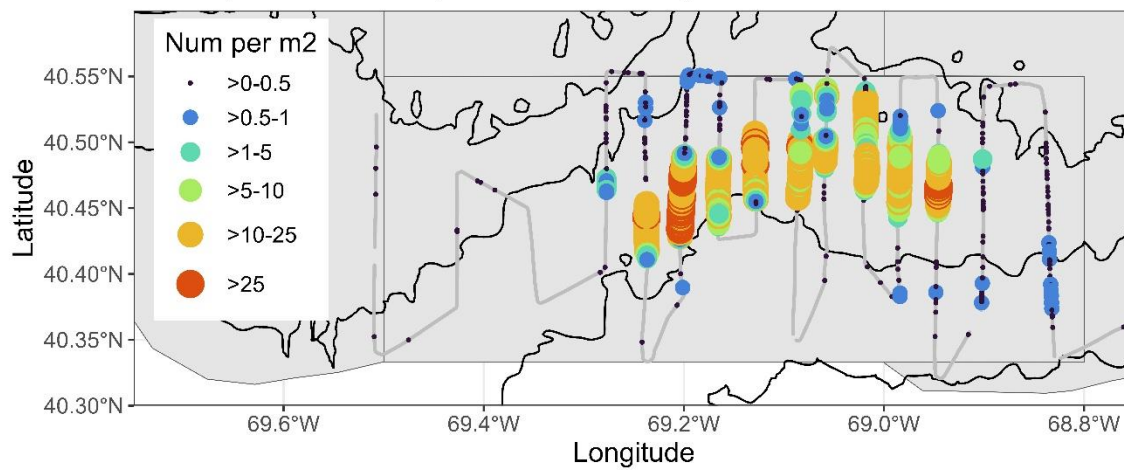
Scallops under 35mm, maximum = 59 per m2



Scallops 35-75mm, maximum = 74 per m2



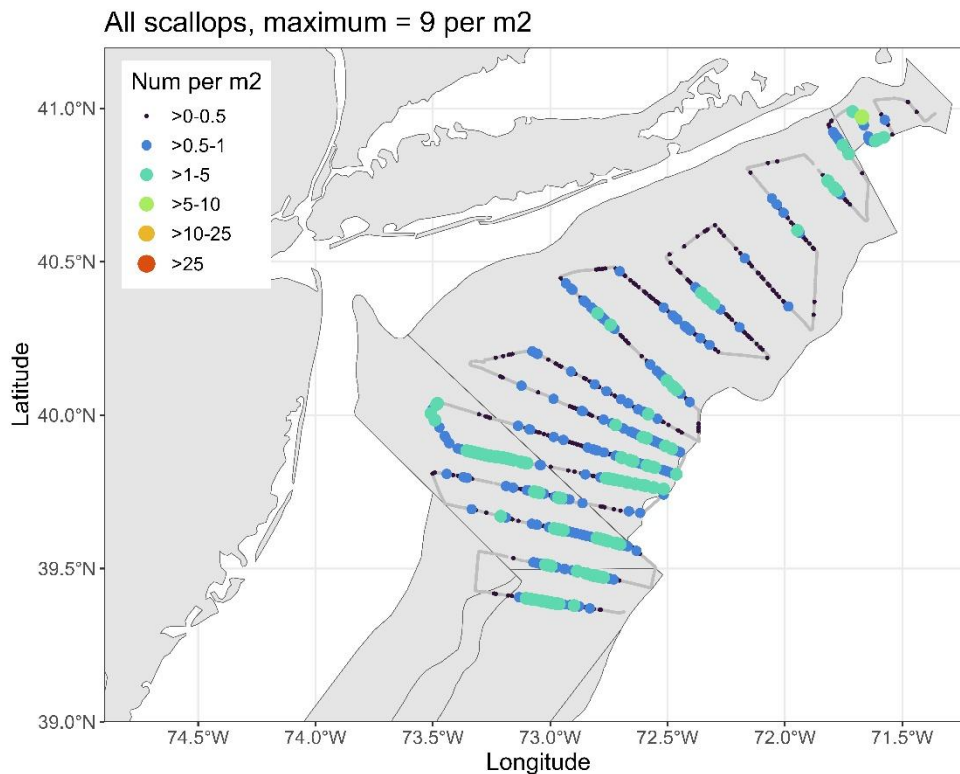
Scallops over 75mm, maximum = 37 per m2



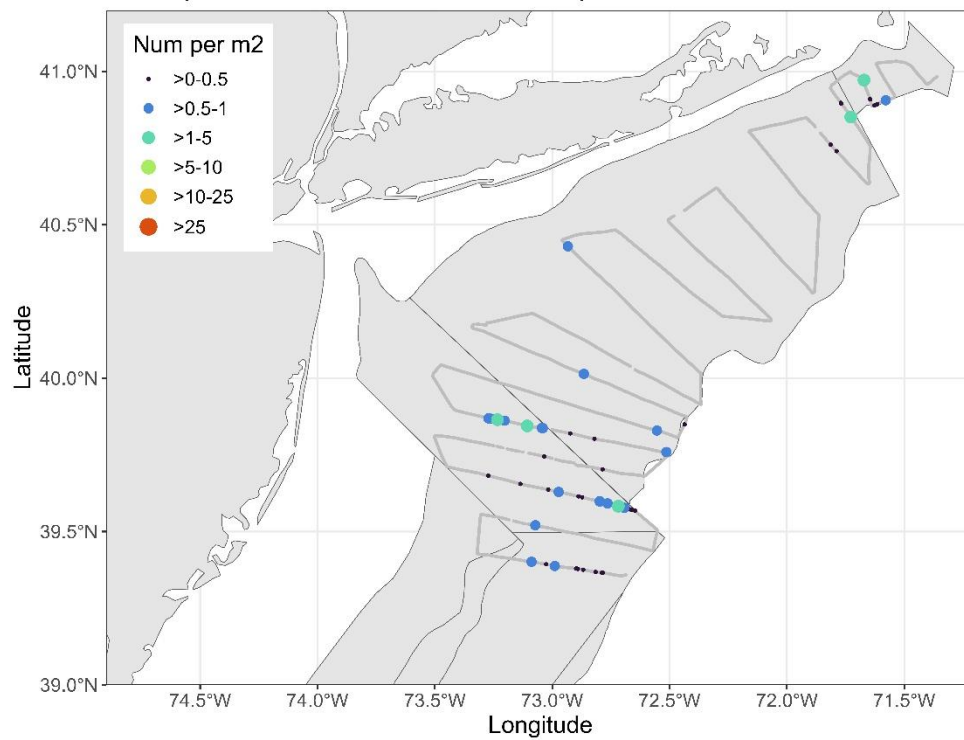
3.2 Mid-Atlantic

The Mid-Atlantic survey covered nearly 700 nm of continuous transects from Block Island (BI) through the northern extent of Hudson Canyon South (HCS), covering the former New York Bight (NYB) closure area. The survey took place over two trips due to extreme weather and ran from May 19th-May 28th.

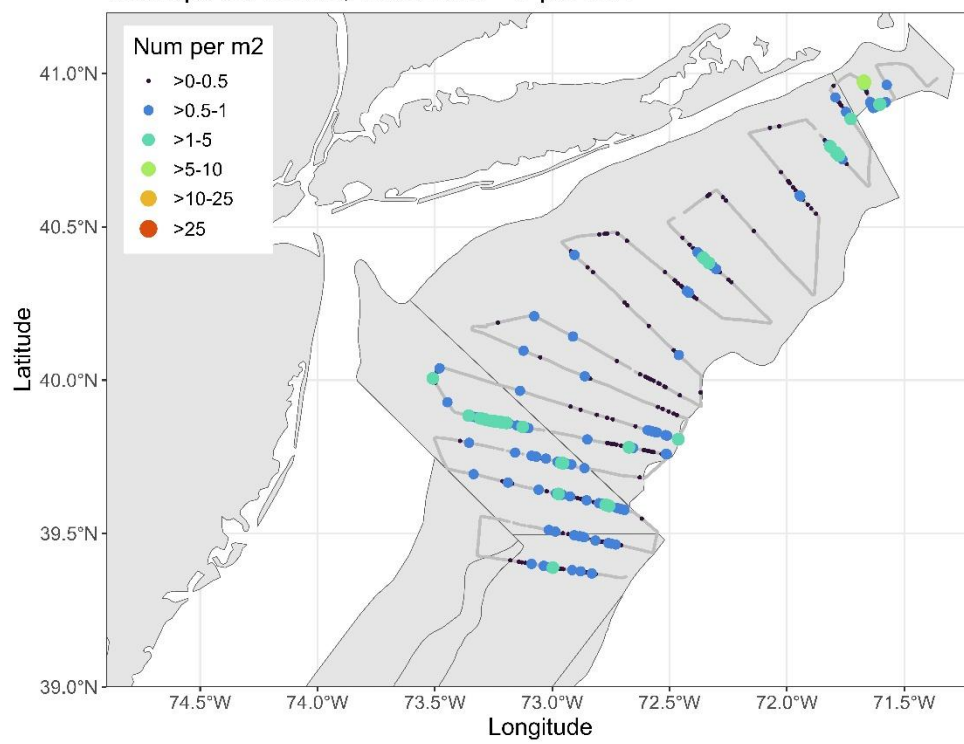
Scallops were noted throughout the tracks in the Mid-Atlantic, though recruits and adult scallop sizes were dominant. Pre-recruits were more commonly noted around the BI and Long Island (LI) border, and within the former NYB closure area.



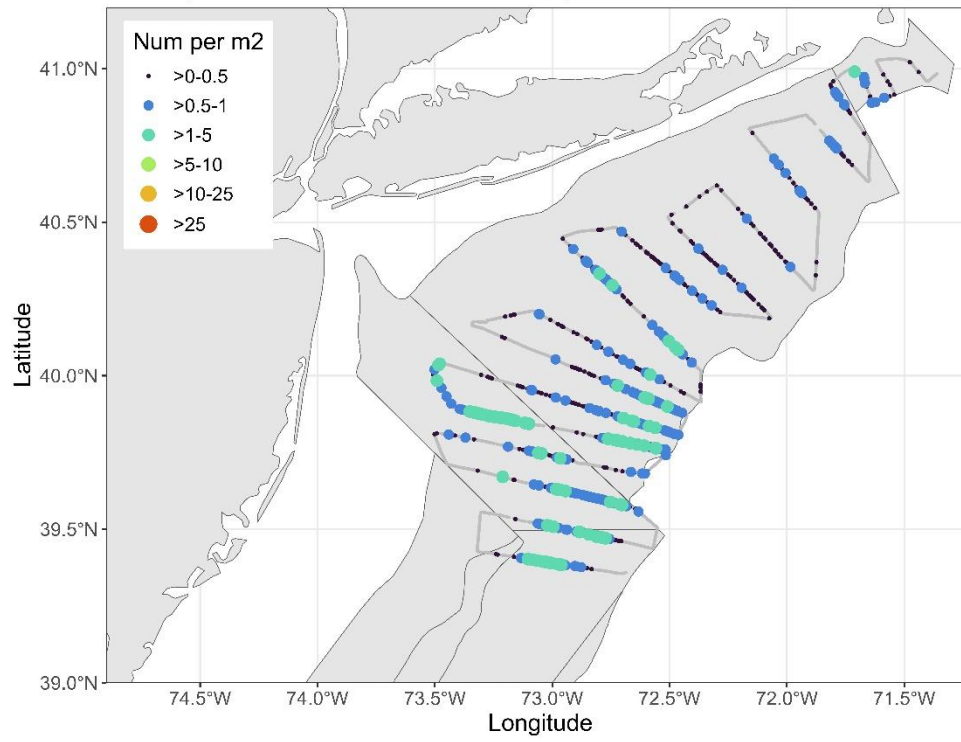
Scallops under 35mm, maximum = 2 per m2



Scallops 35-75mm, maximum = 7 per m2



Scallops over 75mm, maximum = 4 per m2

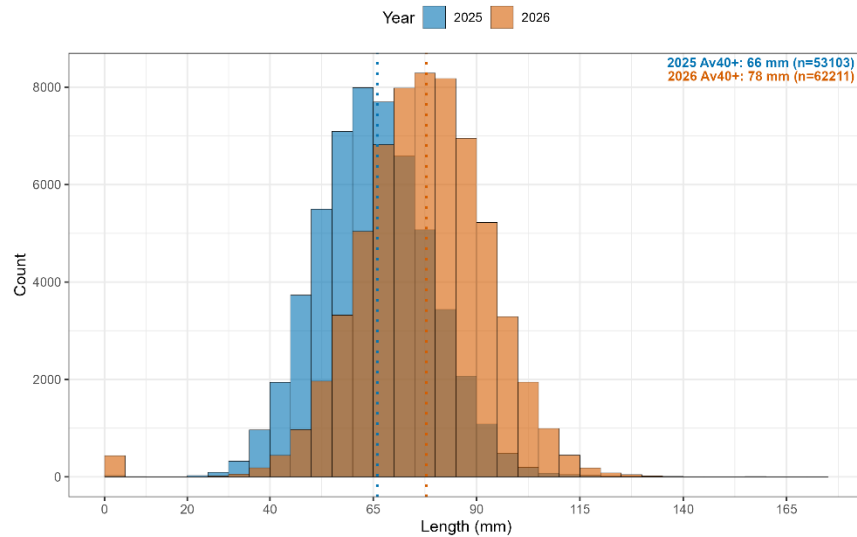


4.0 LENGTH FREQUENCY PLOTS BY SAMS AREA

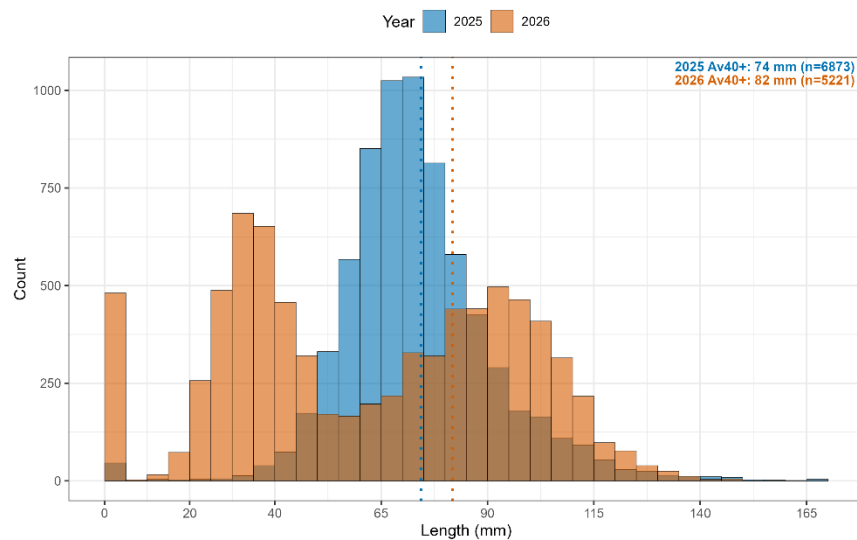
4.1 Georges Bank and Nantucket Lightship

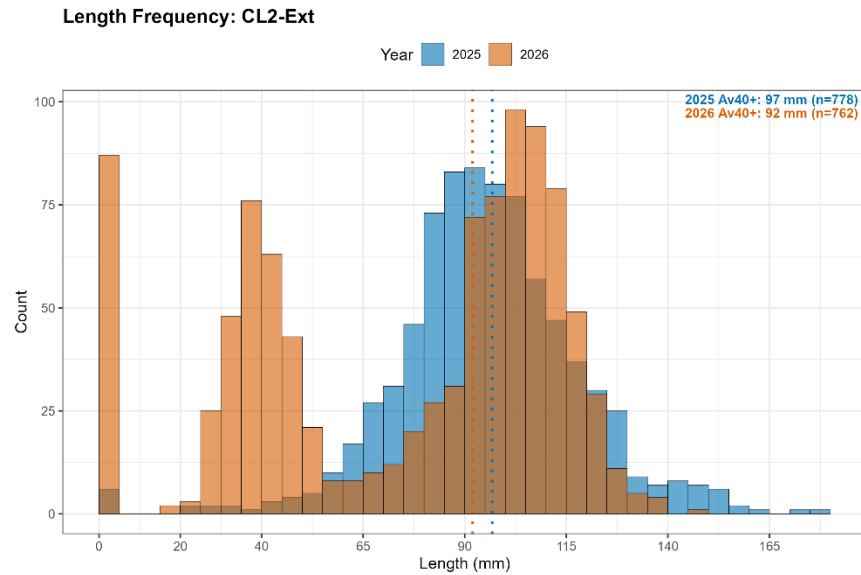
Pre-recruit and recruit scallops were abundant across most areas within Georges Bank. In the Nantucket Lightship, the scallops showed strong growth from 2025, with a small patch of pre-recruits in the eastern and western extent of the area, spilling into NLS-West. In both the SF and CL2-Ext, CFF noted strong growth from 2025, and more substantial recruit and pre-recruit populations.

Length Frequency: NLS-South

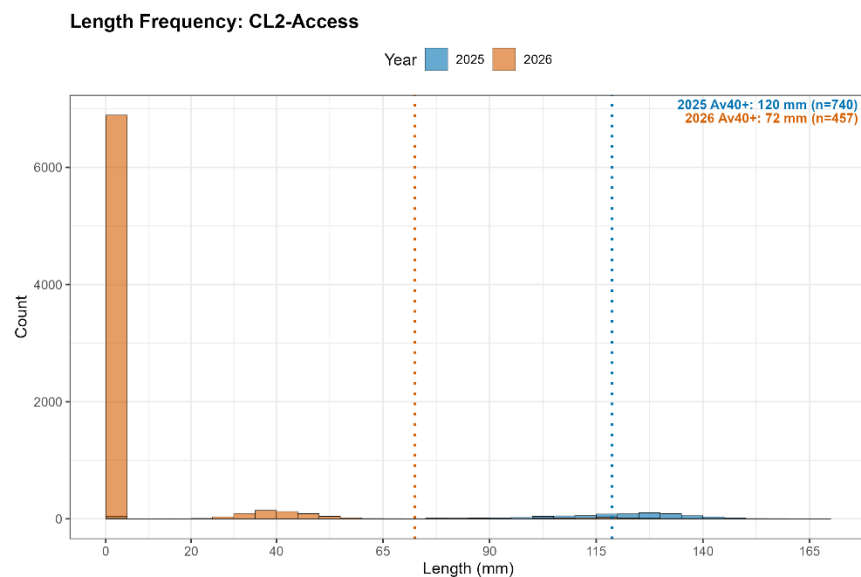


Length Frequency: SF

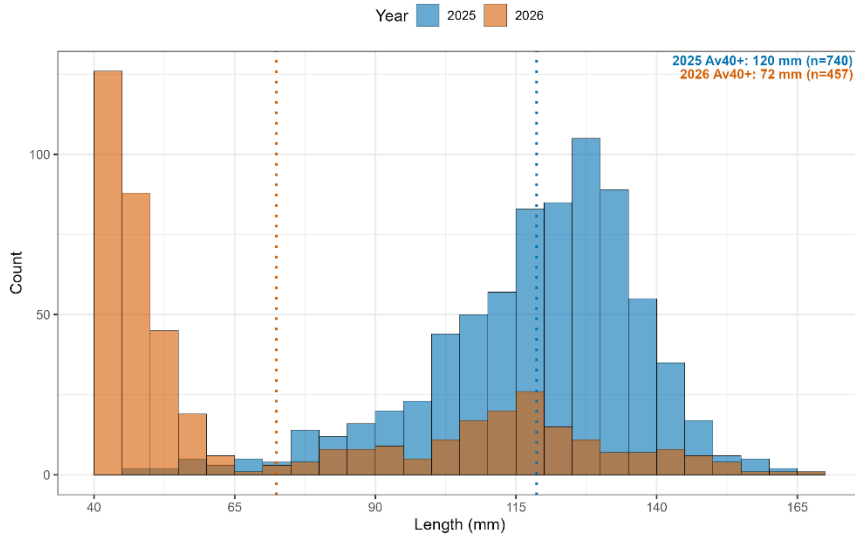




The following two figures show the length frequencies of all scallops in CL2-Access as well as the size distributions for only 40mm and larger scallops to better visualize the growth in recruit and large adult scallops from 2025-2026. Notably, large numbers of pre-recruit scallops were found in CL2-Access and Extension. CL2-Access was opened to fishing on May 15, 2025, and the opening was followed by heavy fishing on the large adult scallop population. CFF surveyed the area prior to any heavy fishing in 2025, leading to the stark contrast in dominant size structures observed between years.



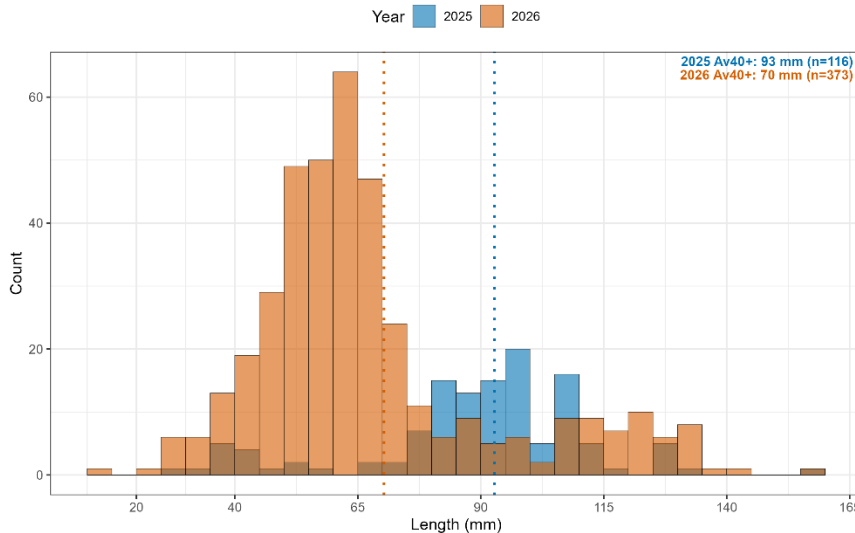
Length Frequency: CL2-Access (40 mm+)



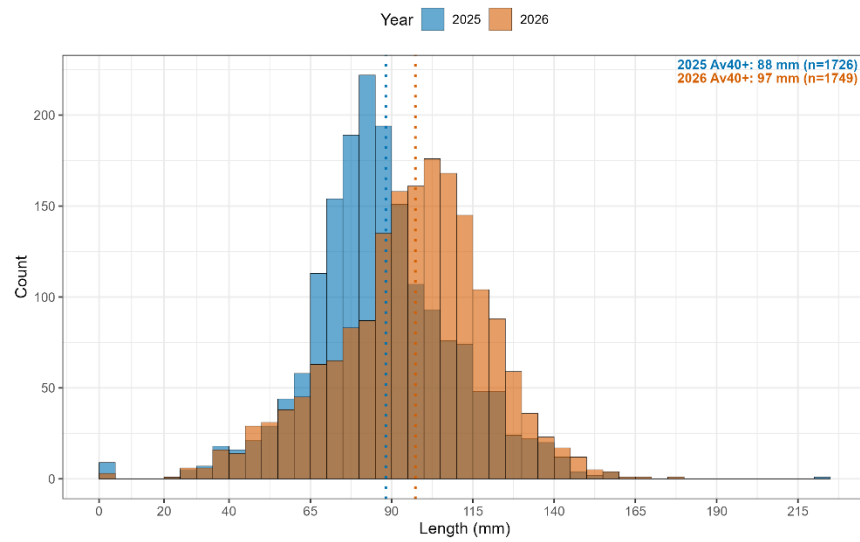
4.2 Mid-Atlantic

Growth from 2025 scallop cohorts was noted in all surveyed areas, with strong growth observed in LI, NYB, and HCS. Coverage of the NYB and HCS was limited to part of the SAMS areas, but because the coverage in these areas remained consistent between years, length frequency data were captured growth and the emergence of newly settled seed. Some small seed and pre-recruit scallops were noted in all areas surveyed in the Mid-Atlantic, though the overall numbers were lower than in Georges Bank. In BI, a notable number of pre-recruit and recruit scallops were noted. Though the HabCam did not observe a large pre-recruit distribution in BI in 2025, two hotspots were observed by the VIMS dredge survey in this management area.

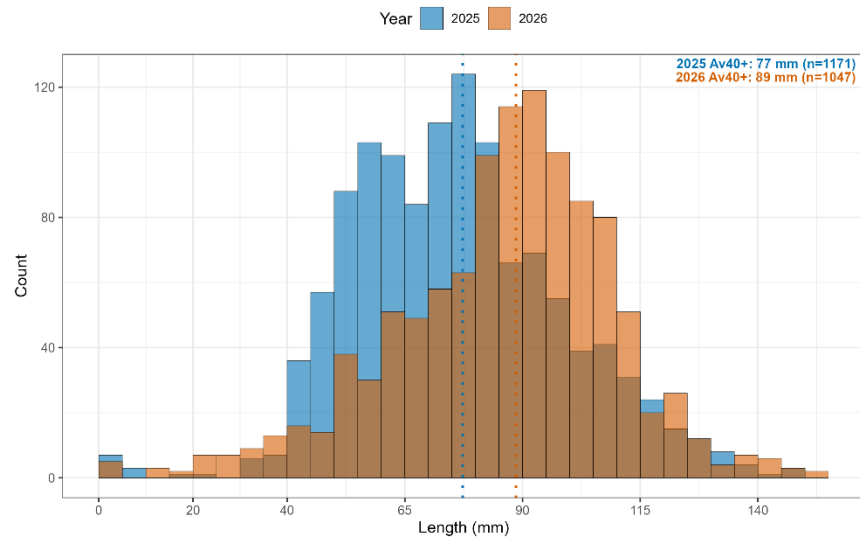
Length Frequency: BI



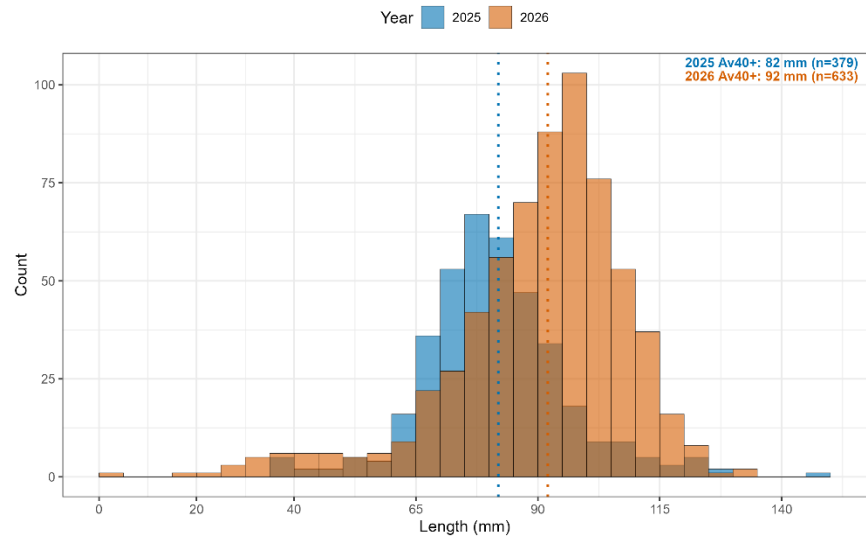
Length Frequency: LI



Length Frequency: NYB



Length Frequency: HCS



5.0 EXPLOITABLE BIOMASS ESTIMATES FOR 2026 (CURRENT FISHING YEAR)

Region	Area	Exp. Abundance (mil.)	Exp. Biomass (mt)	SE	Avg. Weight (g)
Georges Bank	CL1-North (Sliver)				
	CL1-Access				
	CL1-South				
	CL2-North (HAPC)				
	CL2-South	16.09	525.53	148.47	33.58
	CL2-Extension	54.57	1126.99	286.98	20.45
	NLS-North				
	NLS-South	958.63	11299.78	2253.27	12.06
	NLS-West				
	GSC				
	NF				
	SF	225.90	4439.62	1185.30	19.75
Mid-Atlantic	Block Island	7.98	202.85	79.08	25.25
	Long Island	185.35	4392.96	642.98	23.6
	NYB				
	MAB Inshore				
	HCS				
	ET				
	DMV				
	Virginia				
Non-SAMS	[Add rows as needed]				

6.0 COMPARISON WITH PREVIOUS YEARS ESTIMATES

		Abundance (mil.)			Biomass (mil.)			Exploitable Biomass (mil.)		
Region	Area	2025	2026	Percent Difference (%)	2025	2026	Percent difference (%)	2025	2026	Percent Difference (%)
Georges Bank	CL1-Access									
	CL1-Sliver									
	CL1-South									
	CL2-North									
	CL2-South (Access)	67.27	88.26	31.20%	1590.25	737.99	-53.59%	1410.72	525.53	-62.75%
	CL2-Extension	128.18	107.75	-15.94%	1880.34	1599.25	-14.95%	1252.62	1126.99	-10.03%
	NLS-North									
	NLS-South	6976.54	4784.45	-31.42%	28208.76	36649.54	29.92%	4465.71	11299.78	153.03%
	NLS-West									
	GSC									
	NF									
	SF	1008.23	673.08	-33.24%	7438.78	8309.86	11.71%	2518.2	4439.62	76.30%
Mid-Atlantic	Block Island	22.71	45.21	99.08%	347.06	392.35	13.05%	206.39	202.85	-1.72%
	Long Island	429.11	350.51	-18.32%	6008.53	6170.09	2.69%	3438.98	4392.96	27.74%
	NYB									
	MAB Inshore									
	HCS									
	ET									
	DMV									
	Virginia									
Non-SAMS	[Add rows as needed]									

7.0 SHELL-HEIGHT MEAT WEIGHT COMPARISONS

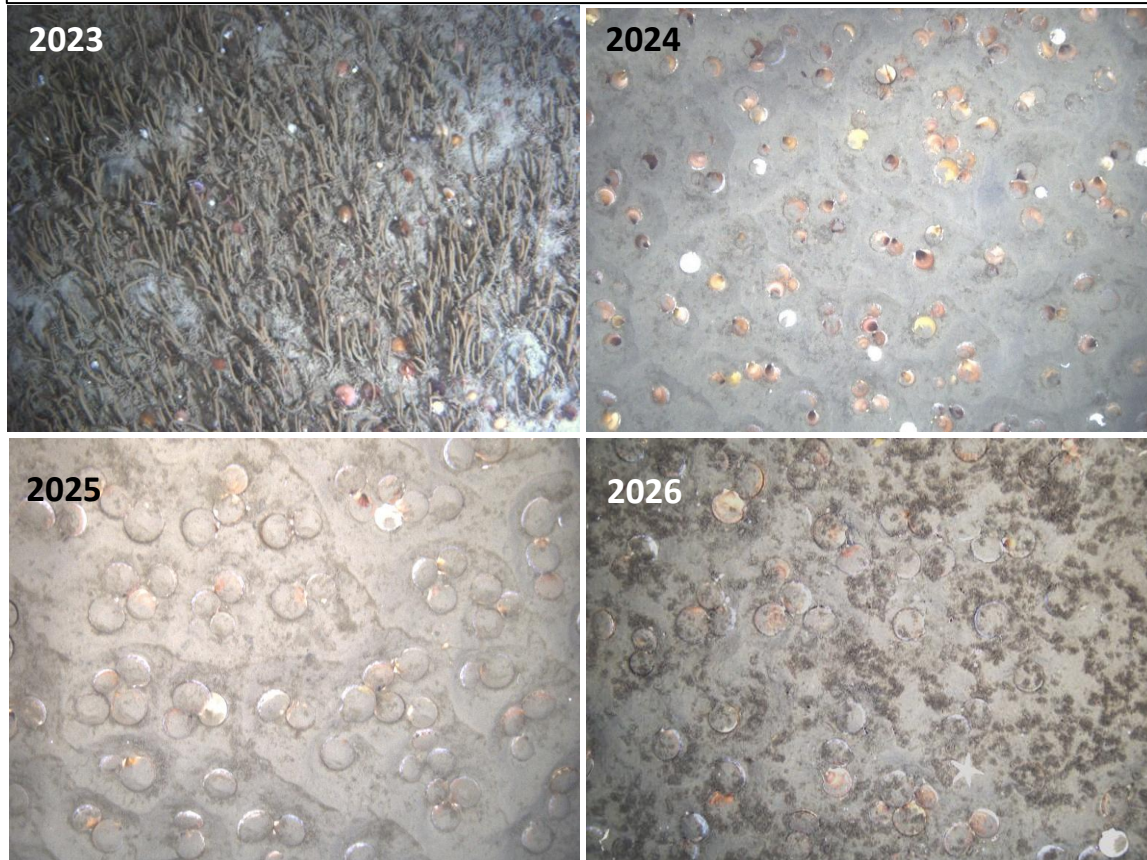
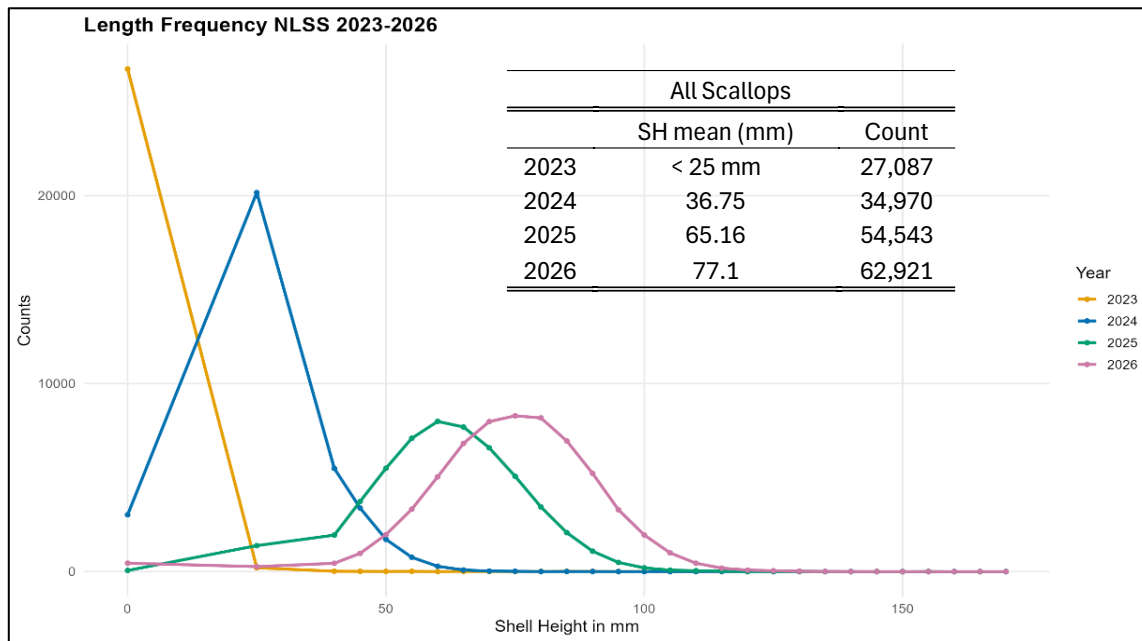
SAMS area	Biomass (mt) using VIMS 2025 equation	Biomass (mt) using VIMS 2025-2026 equation	Exp. biomass (mt) using VIMS 2025 equation	Exp. biomass (mt) using VIMS 2025-2026 equation
NLS-South	36649.54	35865.51	11299.78	11081.49

SAMS area	Biomass (mt) using SH*Depth equation	Biomass (mt) using Depth^2 equation	Exp. biomass (mt) using VIMS 2025 equation	Exp. biomass (mt) using SH*Depth equation
BI	392.35	433.43	202.85	221.27
LI	6170.09	6810.71	4392.96	4856.61

8.0 SPECIAL COMMENTS

8.1 NLS-S growth

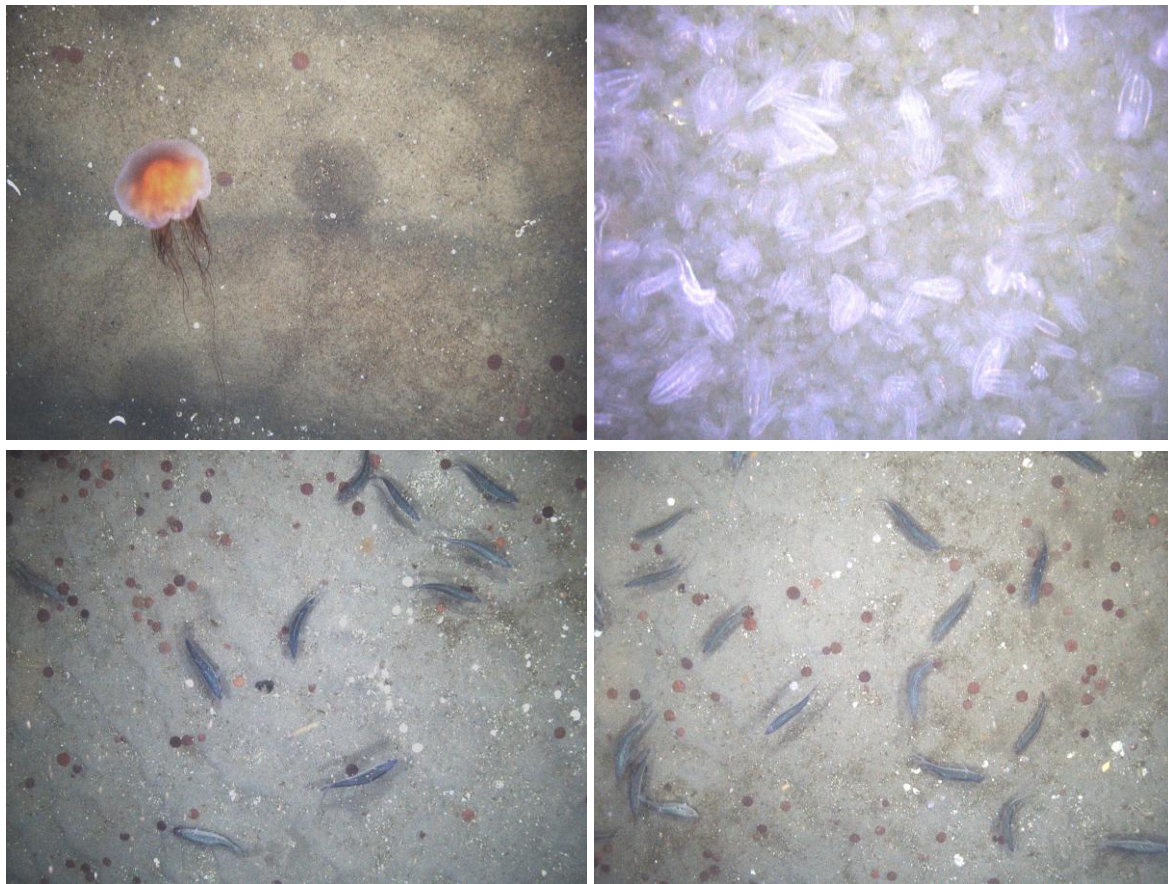
CFF has been monitoring the current NLS-S cohort since it was first discovered by the HabCam v3 in 2023. Despite being densely aggregated, the cohort appears to be growing at a more typical rate than the 2012 Peter Pan cohort. Since 2023, CFF has noted a change in the benthic habitat in this area, shifting from dense bryozoans in 2023 to siltier habitat, which can be seen in the figure below. In 2025, CFF observed the beginning of new bryozoan growth, which appears to have continued into 2026. Below, mean scallop heights are calculated using all scallops measured, not just those 40 mm and greater, as in the length frequency and biomass estimates. Juveniles less than 15 mm are often counted and receive a “0” measurement to indicate they are young-of-the-year scallops, resulting in a peak at size 0 mm in length-frequency curves and skewing the mean lower in 2023-2024.



8.2 Unusual observances

CFF observed several anomalies this year during the survey, which had not been noted in the past 10 years of surveys. This included significant sand waves up to 4m high in the western portion of the NLS-S track, a school of potentially migrating river herring in NLS-S, as well as an

extraordinary number of jellyfish species throughout both legs of the survey.



9.0 BIOMASS MAPS

