SMAST Gulf of Maine Survey Results 2026

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Scallop PDT Meeting

Department of Fisheries Oceanography
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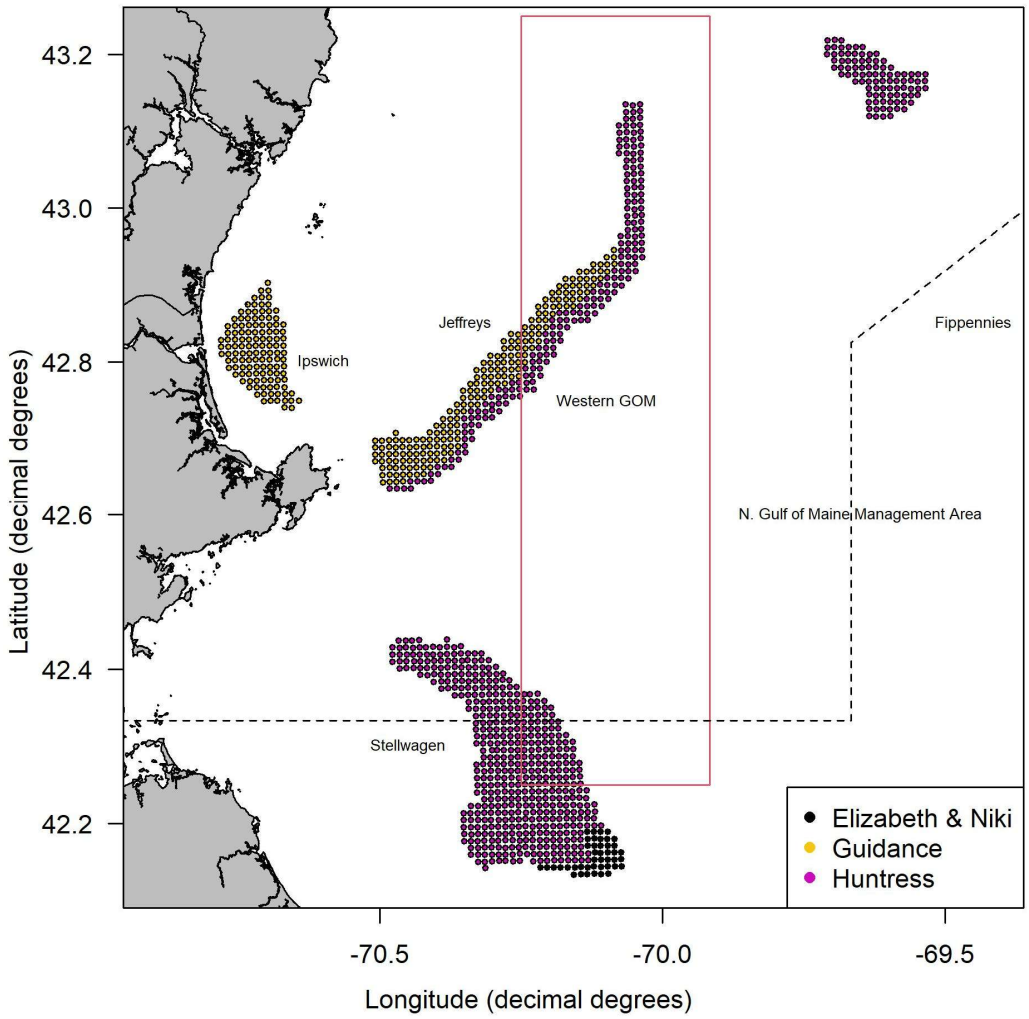
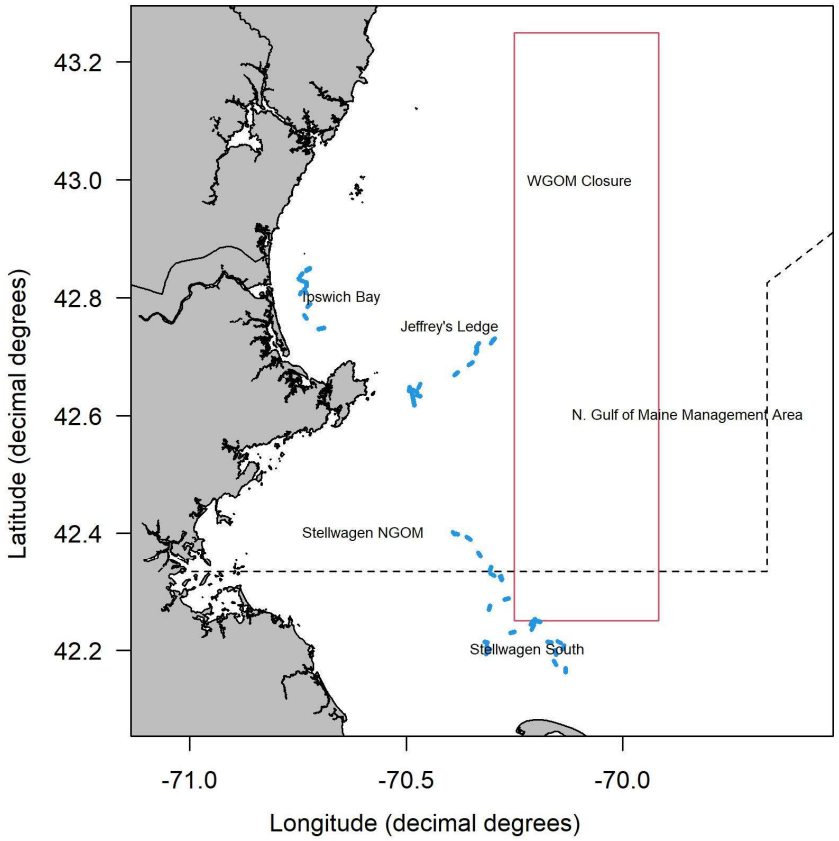
University of Massachusetts Dartmouth


43.2
43.0
42.8
42.6
42.4
42.2
Latitude (decimal degrees)
-70.5
-70.0
-69.5
Longitude (decimal degrees)
Ipswich
Jeffreys
Western GOM
Fippennies
N. Gulf of Maine Management Area
Stellwagen
Elizabeth & Niki
Guidance
Huntress

Gulf of Maine dredge samples



Shell height meat weight equations: GoM

DMR & SMAST (2016-2026) for Ipswich, Jeffreys, and Stellwagen

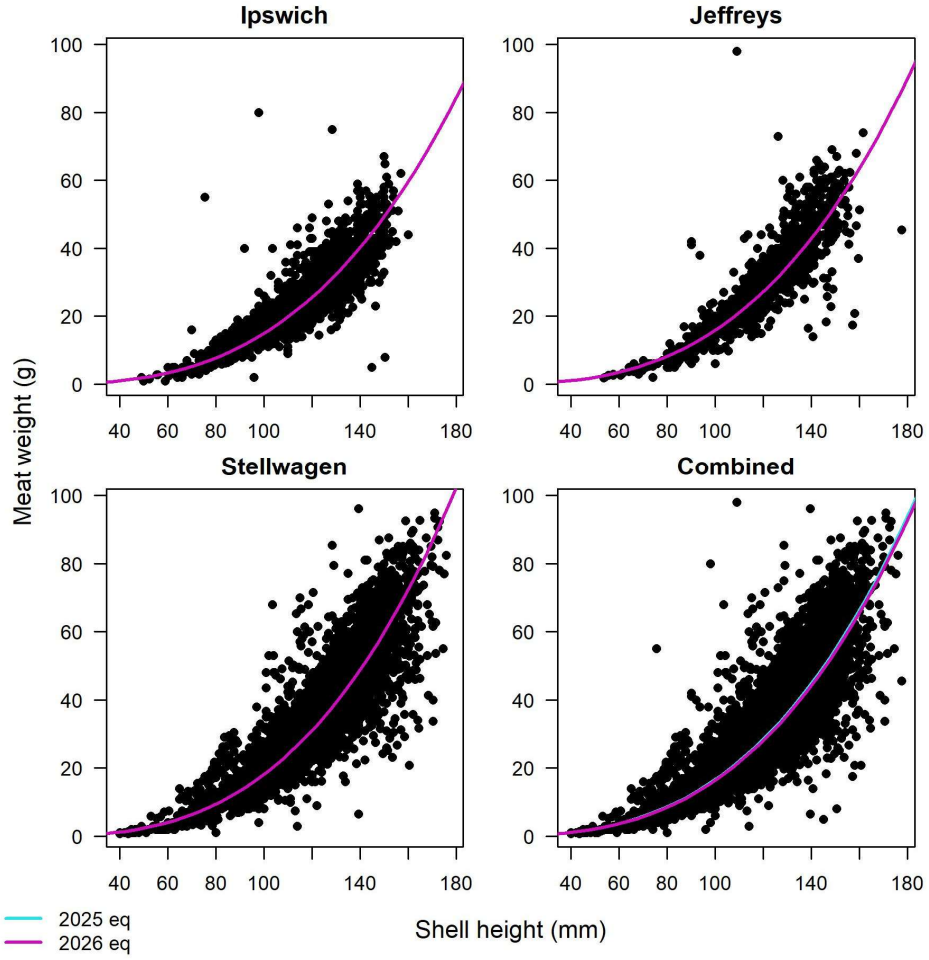
$$W = \exp(-10.00 + 2.946 * \ln(shell\ height) - 0.1955 * \ln(depth) - 0.0004299 * latitude + area)$$

DMR & SMAST (2016-2025) for Ipswich, Jeffreys, and Stellwagen

$$W = \exp(-9.916 + 2.942 * \ln(shell\ height) - 0.2132 * \ln(depth) - 0.00003543 * latitude + area)$$

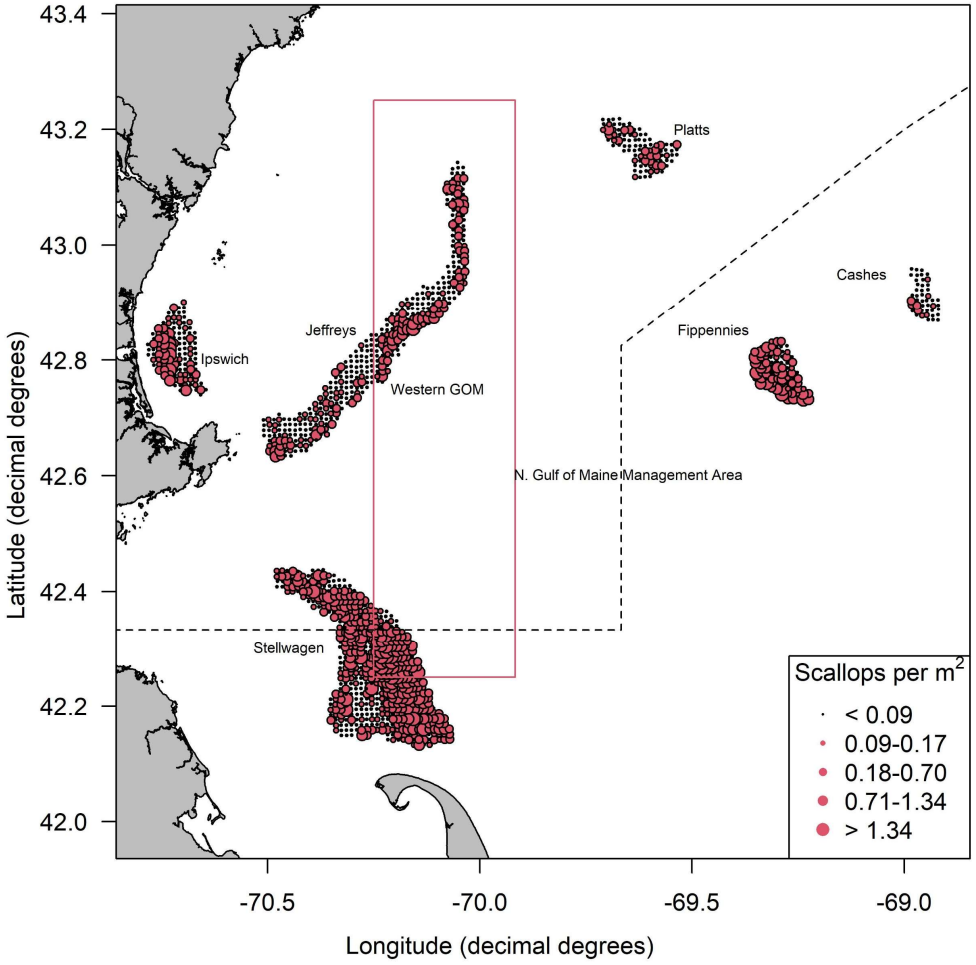
DMR (2016-2026) Platts

$$W = \exp(189.9926 + 2.1389 * \ln(shell\ height) - 0.2476 * \ln(depth) - 4.5429 * latitude)$$

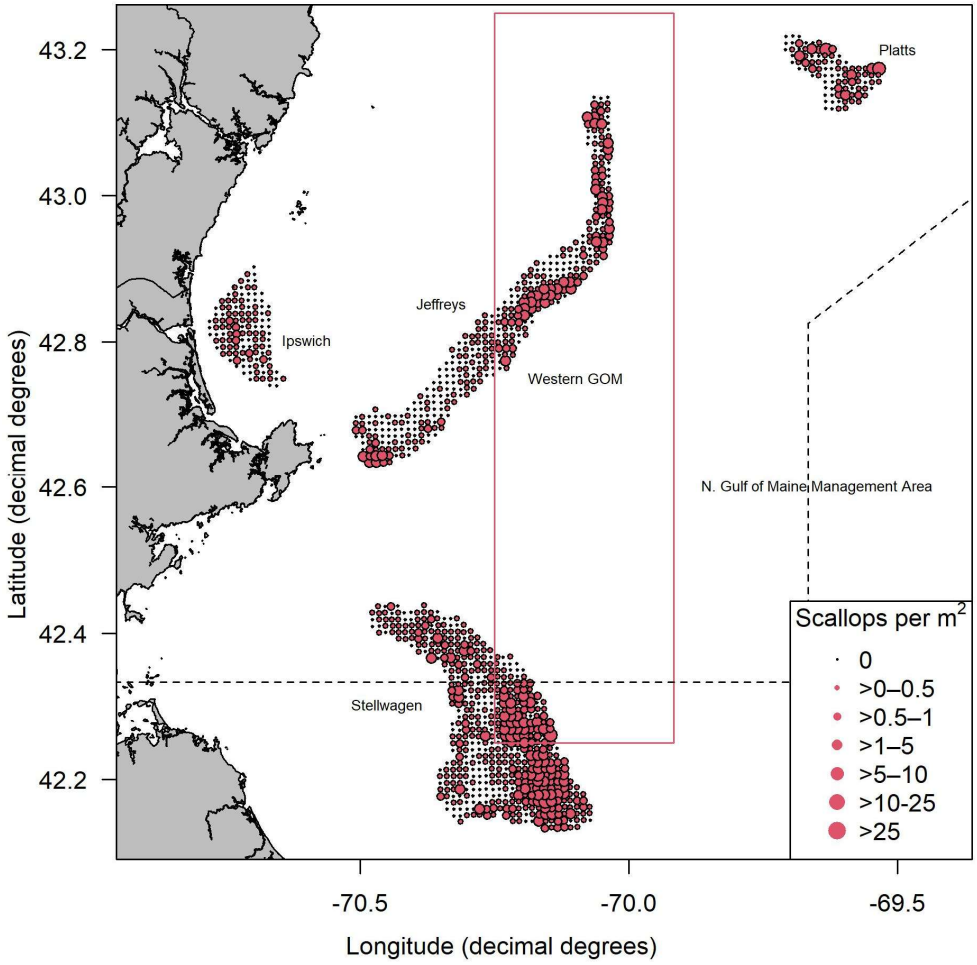


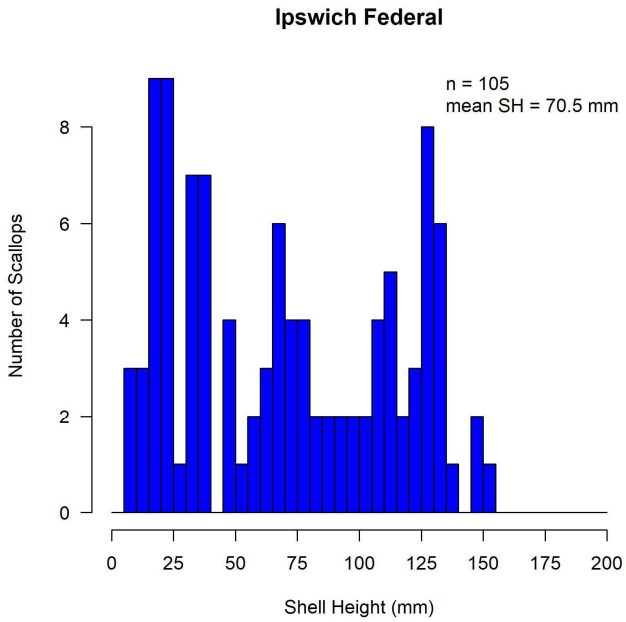
	Abundance (millions)			Biomass (metric tons)			Exploitable Biomass (metric tons)		
	2025	2026	Percent Difference (%)	2025	2026	Percent Difference (%)	2025	2026	Percent Difference (%)
Platts Bank	3.2	4.8	50	60	66	10	36	37	4
Ipswich Bank NGOM	4.7	6.8	43	130	121	-7	75	67	-11
Jeffrey's Ledge	8.0	5.7	-28	188	110	-42	113	62	-45
Stellwagen Bank NGOM	16.7	12.4	-26	389	253	-35	219	140	-36
Non-NGOM									
Stellwagen South	23.3	71.8	208	297	428	44	128	143	12
WGOM Closure	54.9	49.3	-10	2559	2401	-6	1968	1874	-5
Ipswich Bay MA State waters	1.1	1.6	42	15	15	-1	7	5	-26
Jeffrey's Ledge WGOM	24.1	30.2	26	721	776	8	502	518	3
Total	**135.9**	**182.6**	**34**	**4358.2**	**4170.2**	**-4**	**3047.0**	**2845.1**	**-7**

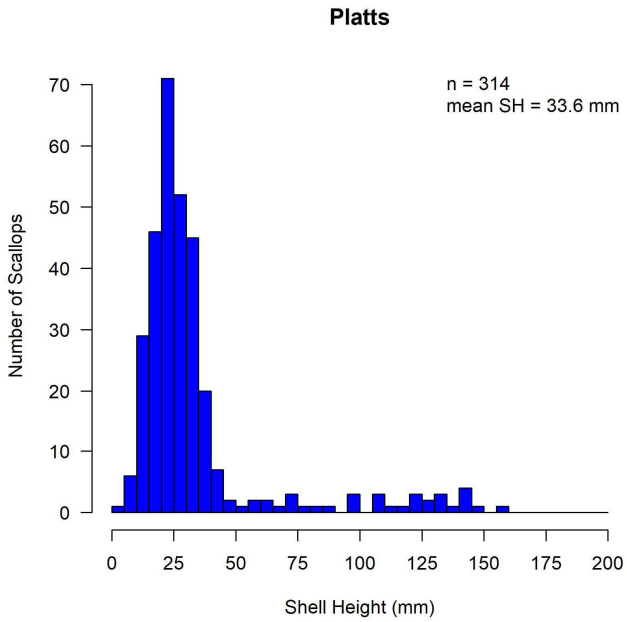
2025

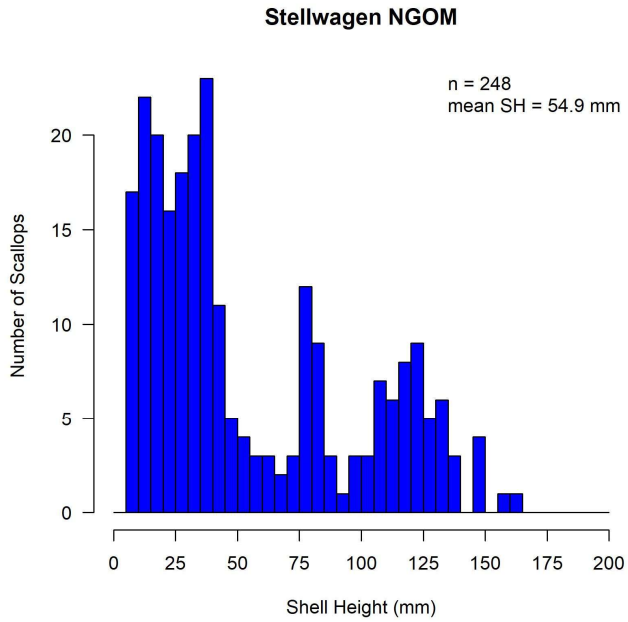

43.4
43.2
43.0
42.8
42.6
42.4
42.2
42.0
Latitude (decimal degrees)
-70.5
-70.0
-69.5
-69.0
Longitude (decimal degrees)
Platts
Cashes
Fippennies
Jeffreys
Ipswich
Western GOM
N. Gulf of Maine Management Area
Stellwagen
Scallops per m2
< 0.09
0.09-0.17
0.18-0.70
0.71-1.34
> 1.34

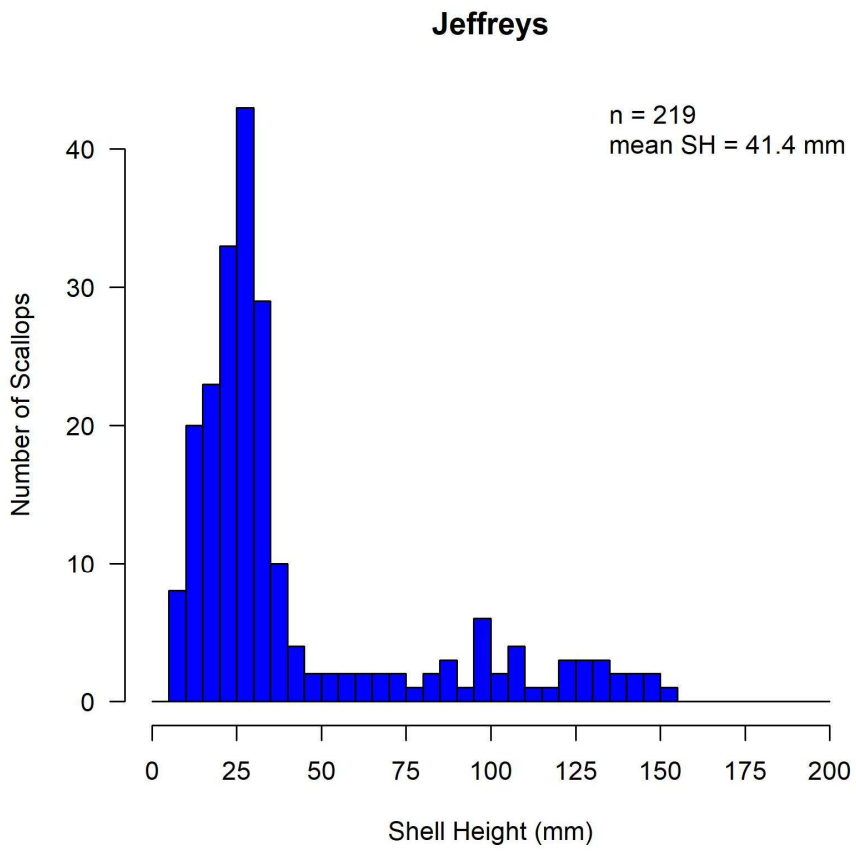
2026

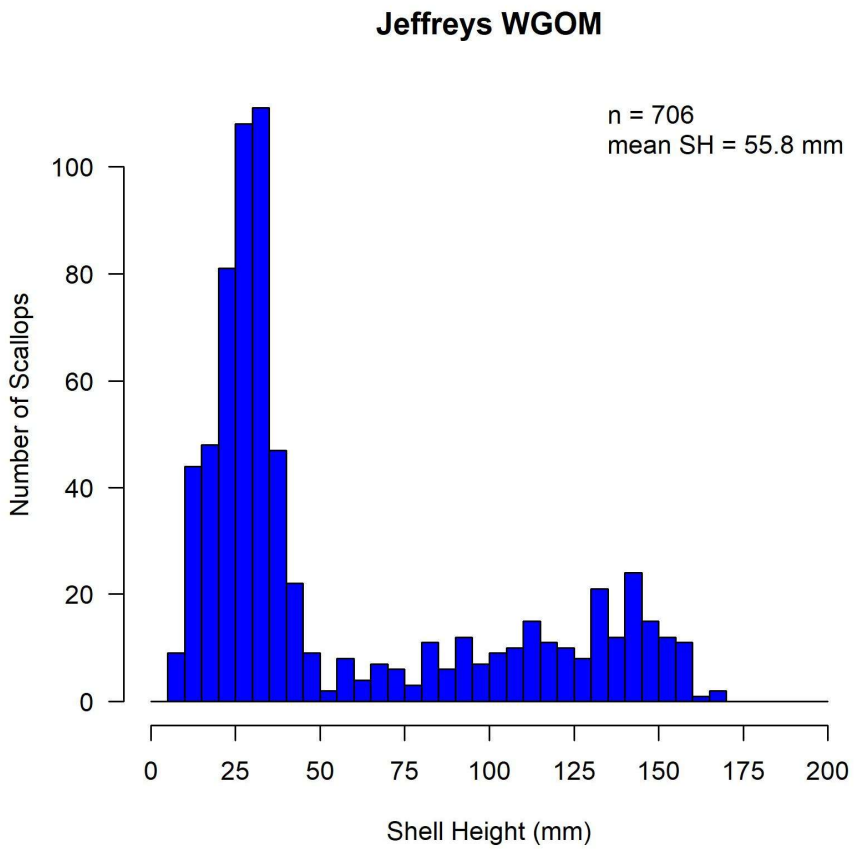

43.2
43.0
42.8
42.6
42.4
42.2
Latitude (decimal degrees)
-70.5
-70.0
-69.5
Longitude (decimal degrees)
Platts
Jeffreys
Ipswich
Western GOM
N. Gulf of Maine Management Area
Stellwagen
Scallops per m2
0
>0–0.5
>0.5–1
>1–5
>5–10
>10-25
>25

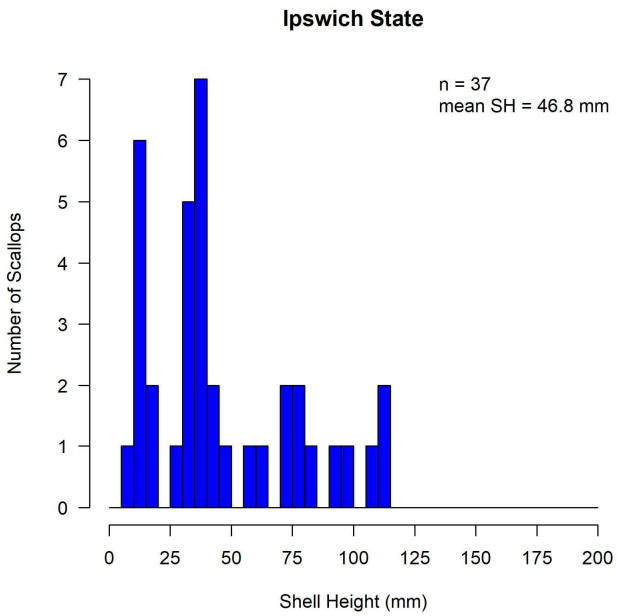

Ipswich Federal
n = 105
mean SH = 70.5 mm
Number of Scallops
Shell Height (mm)
0
2
4
6
8
0
25
50
75
100
125
150
175
200

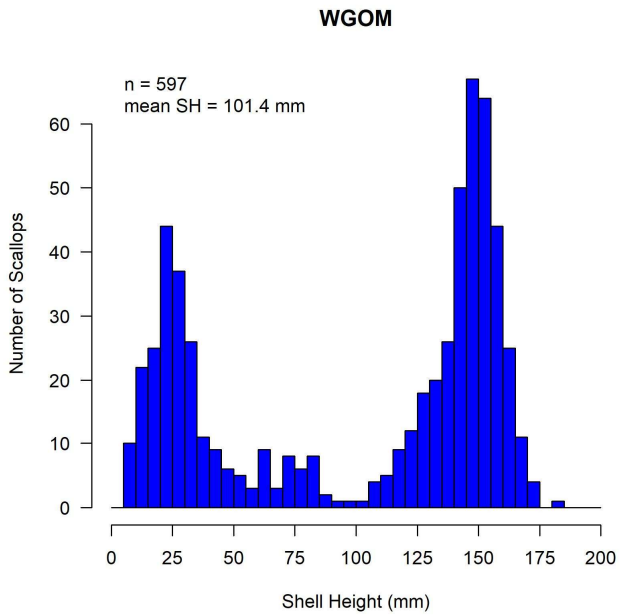

Platts
n = 314
mean SH = 33.6 mm
Number of Scallops
Shell Height (mm)
0
10
20
30
40
50
60
70
0
25
50
75
100
125
150
175
200

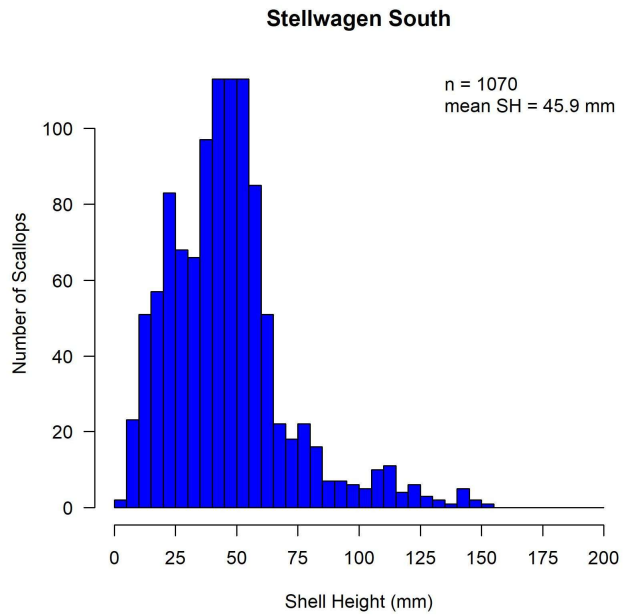

Stellwagen NGOM
n = 248
mean SH = 54.9 mm
Number of Scallops
Shell Height (mm)
0
5
10
15
20
0
25
50
75
100
125
150
175
200


Jeffreys
n = 219
mean SH = 41.4 mm
Number of Scallops
0
10
20
30
40
0
25
50
75
100
125
150
175
200
Shell Height (mm)

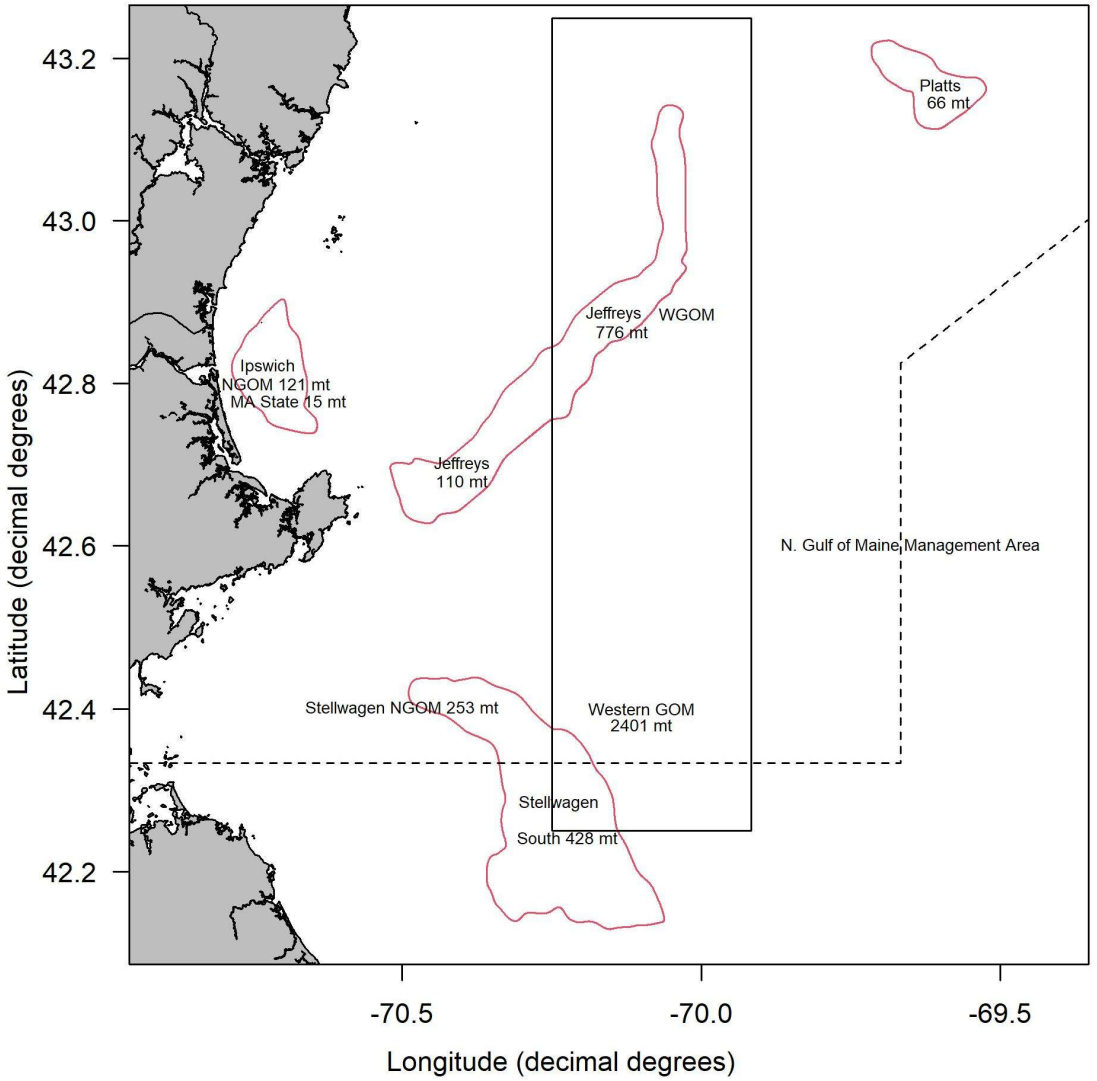

Jeffreys WGOM
n = 706
mean SH = 55.8 mm
Number of Scallops
0
20
40
60
80
100
0
25
50
75
100
125
150
175
200
Shell Height (mm)


Ipswich State
n = 37
mean SH = 46.8 mm
Number of Scallops
Shell Height (mm)
0
1
2
3
4
5
6
7
0
25
50
75
100
125
150
175
200

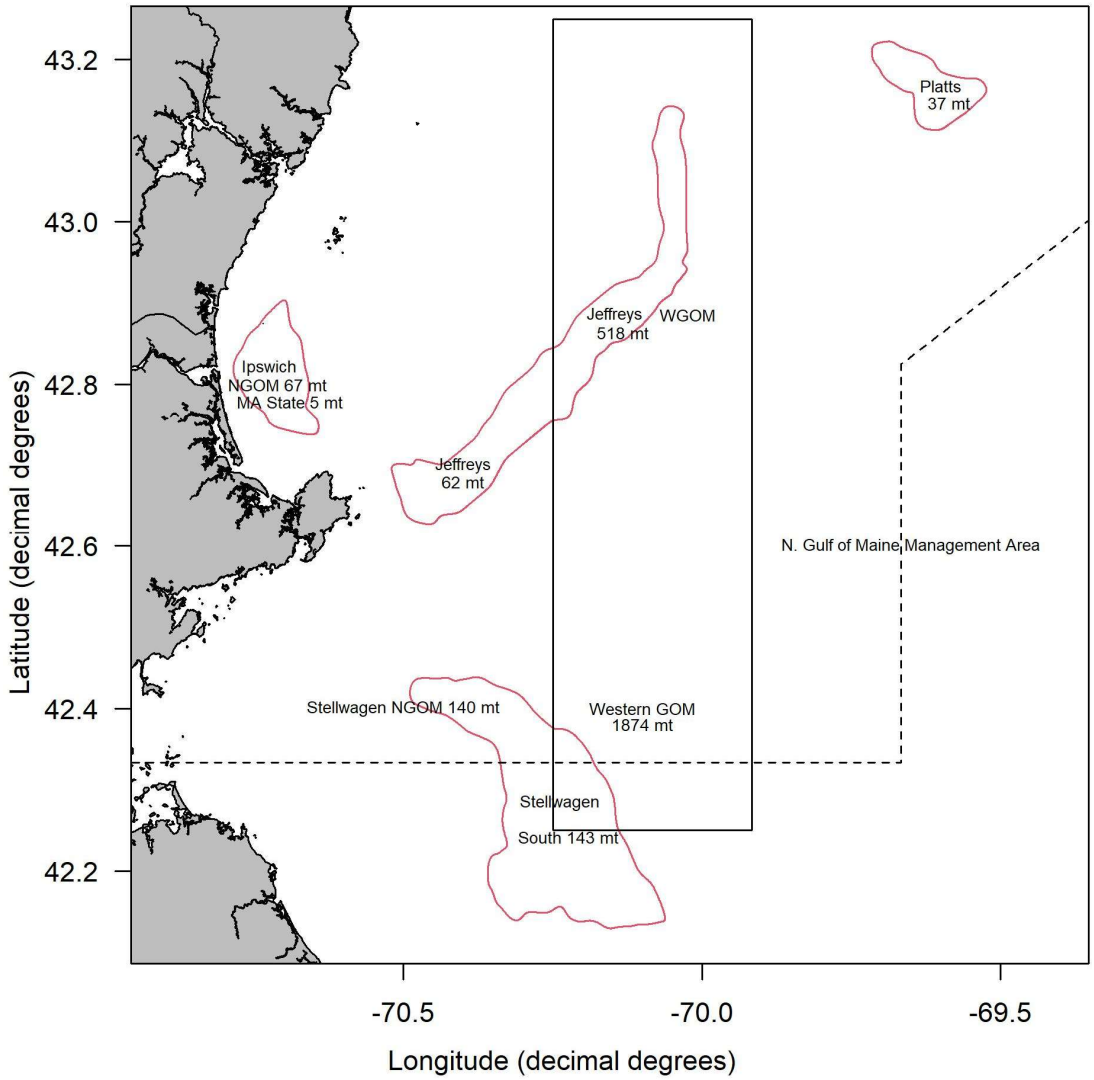

WGOM
n = 597
mean SH = 101.4 mm
Number of Scallops
Shell Height (mm)
0
10
20
30
40
50
60
0
25
50
75
100
125
150
175
200


Stellwagen South
n = 1070
mean SH = 45.9 mm
Number of Scallops
Shell Height (mm)
0
20
40
60
80
100
0
25
50
75
100
125
150
175
200

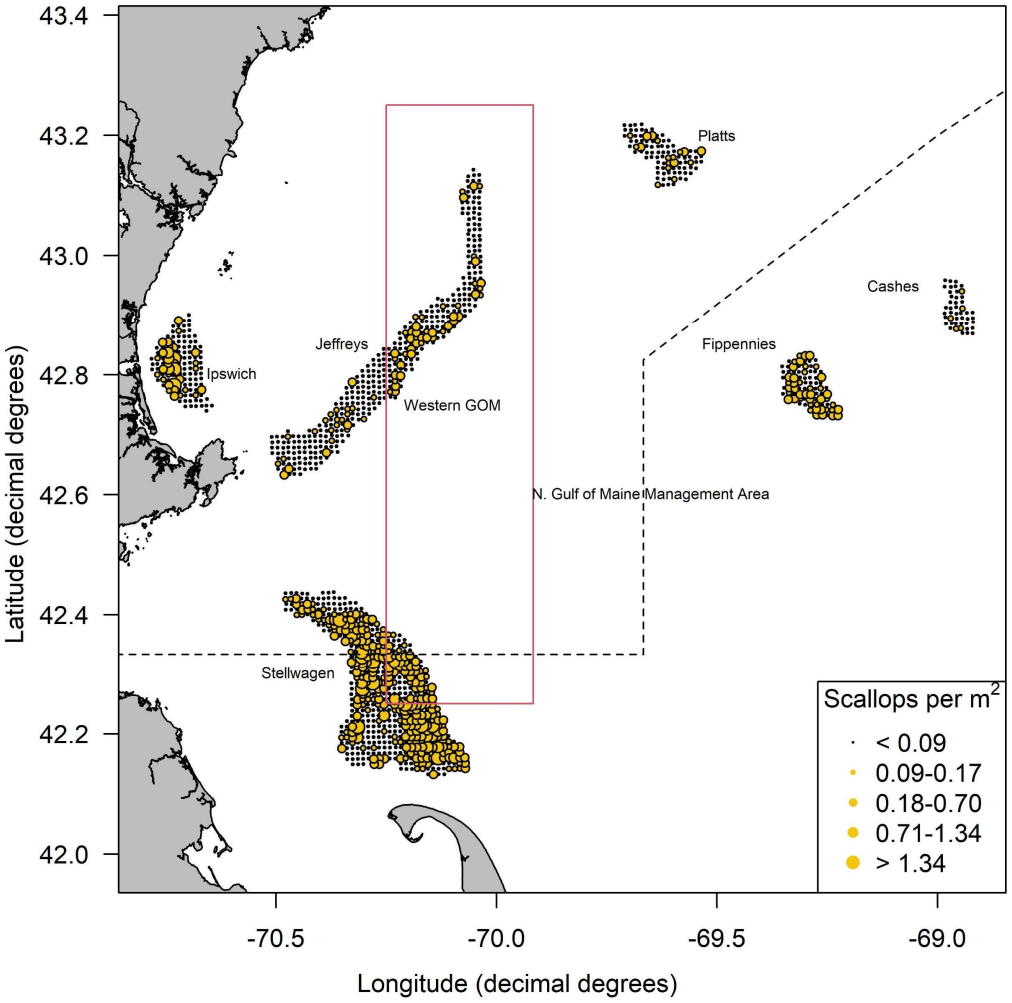
Biomass estimates (≥ 40 mm shell height) in metric tons



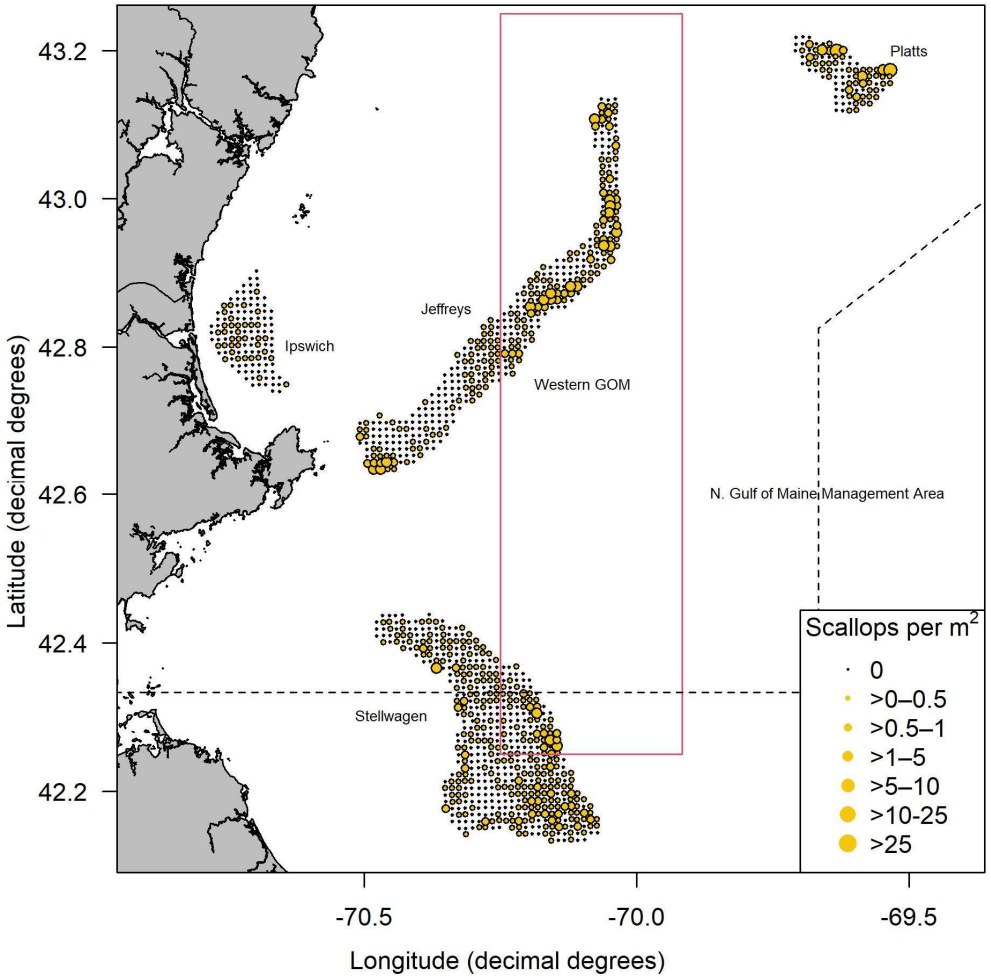
Exploitable biomass estimates in metric tons



2025

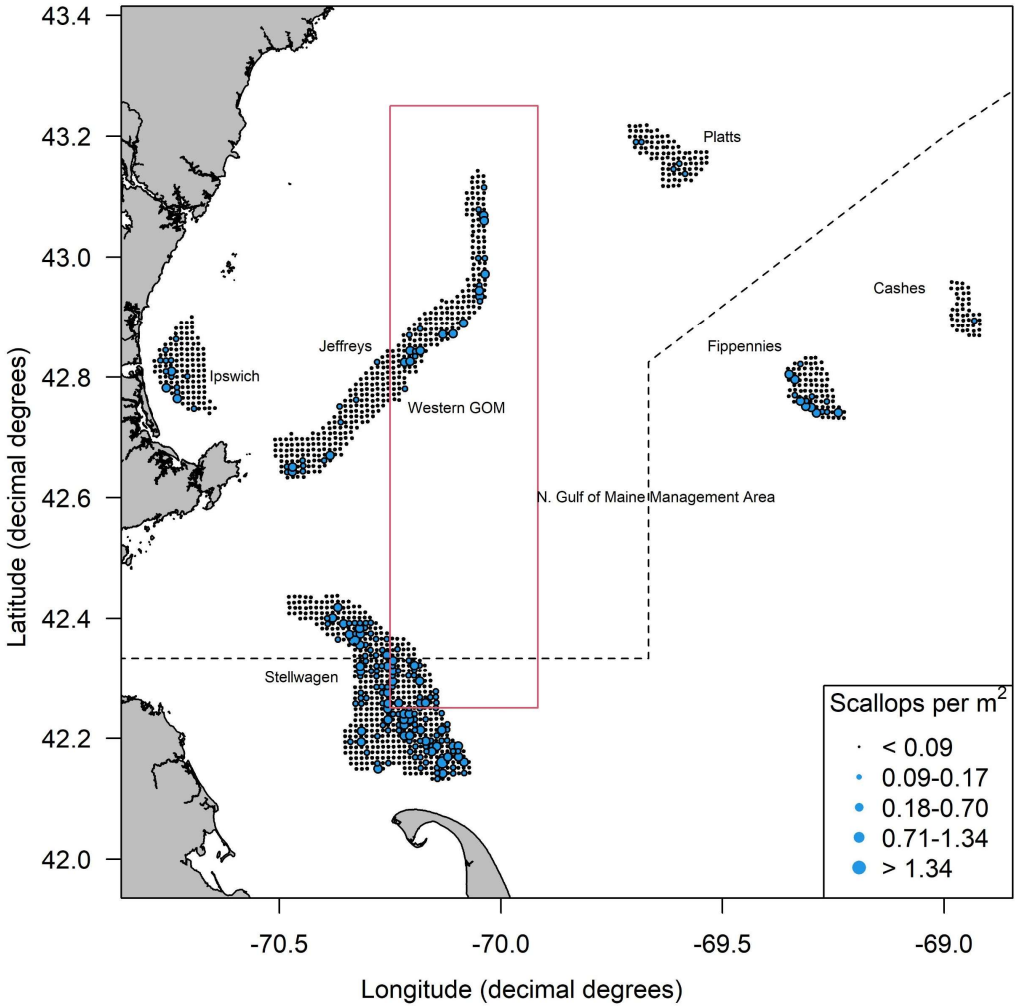


2026

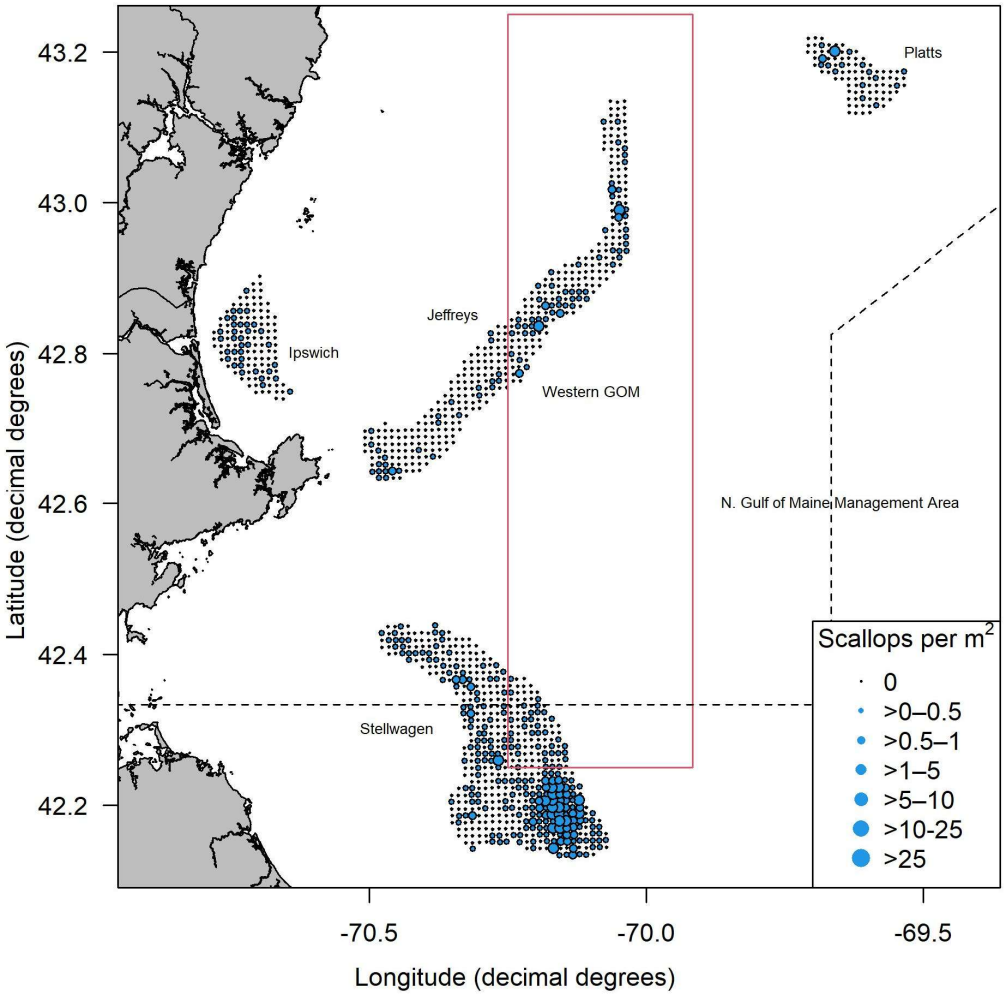


Pre-recruits (< 35 mm shell height)

2025

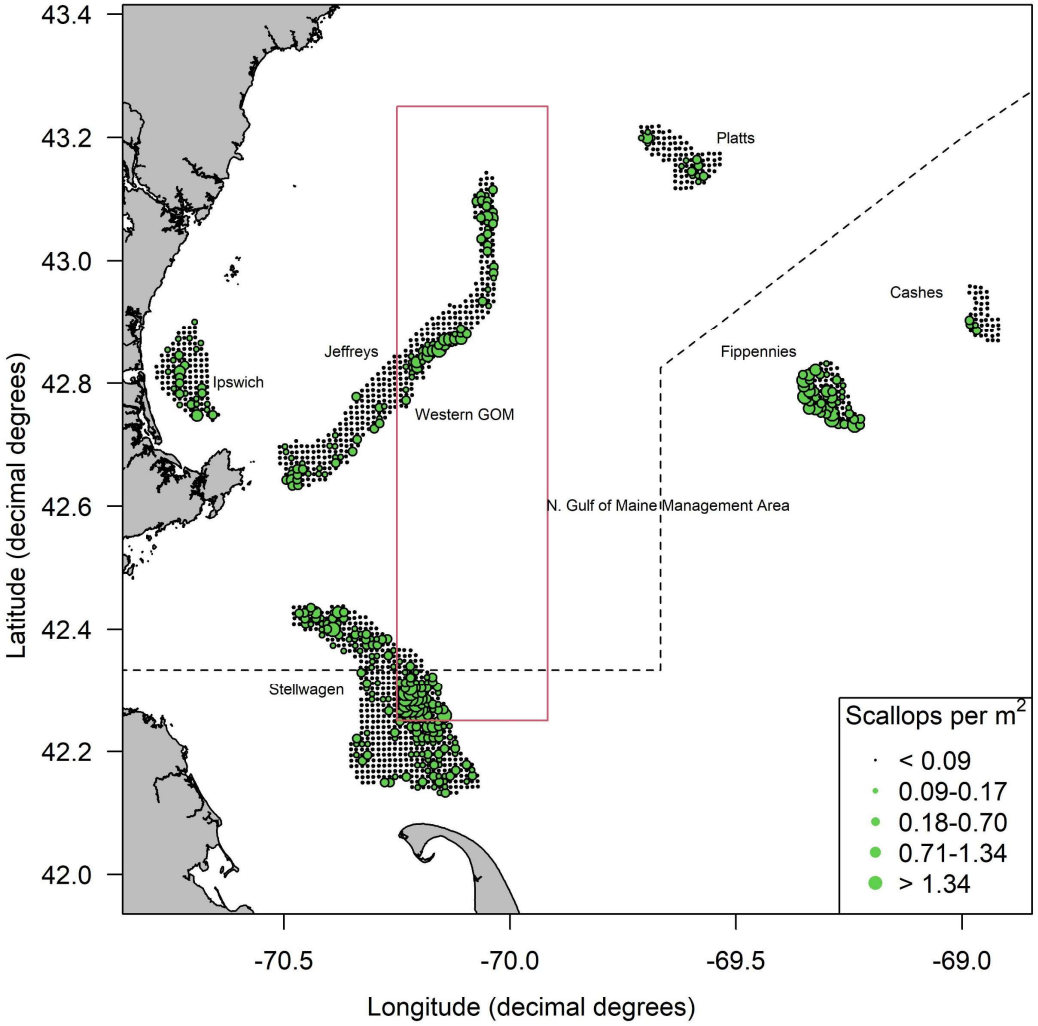


2026

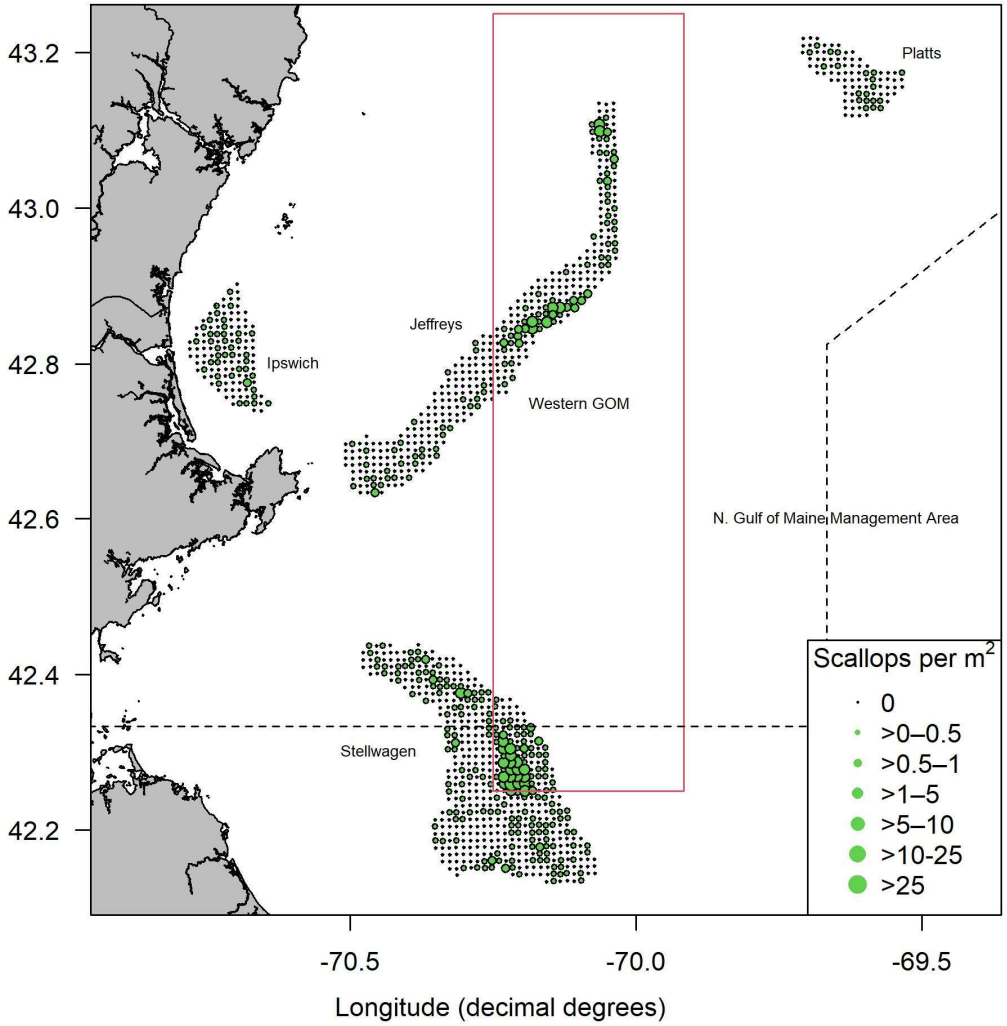


Recruits (35 - 75 mm shell height)

2025



2026



Recruited (> 75 mm shell height)

Shell height meat weight for Stellwagen Bank

DMR & SMAST (2016-2026) for Ipswich, Jeffreys, and Stellwagen

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DMR & SMAST (2016-2025) for Ipswich, Jeffreys, and Stellwagen

$$W = \exp(-9.916 + 2.942 * \ln(shell\ height) - 0.2132 * \ln(depth) - 0.00003543 * latitude + area)$$

	Biomass estimate using: DMR & SMAST 2016-2025	Biomass estimate using: DMR & SMAST 2016-2026
NGOM Stellwagen Bank		
Average meat weight (g)	19.10	20.45
Biomass (mt)	237	253
Standard error	19	20
Exploitable average meat weight (g)	29.67	31.77
Exploitable biomass (mt)	130	140
Exploitable standard error	10	11
Non-NGOM Stellwagen Bank (Stellwagen South)		
Average meat weight (g)	5.56	5.96
Biomass (mt)	399	428
Standard error	17	18
Exploitable average meat weight (g)	13.99	15.01
Exploitable biomass (mt)	133	143
Exploitable standard error	6	6

Shell height meat weight for Ipswich

DMR & SMAST (2016-2026) for Ipswich, Jeffreys, and Stellwagen

$$W = \exp(-10.00 + 2.946 * \ln(shell\ height) - 0.1955 * \ln(depth) - 0.0004299 * latitude + area)$$

DMR & SMAST (2016-2025) for Ipswich, Jeffreys, and Stellwagen

$$W = \exp(-9.916 + 2.942 * \ln(shell\ height) - 0.2132 * \ln(depth) - 0.00003543 * latitude + area)$$

	Biomass estimate using: DMR & SMAST 2016-2025	Biomass estimate using: DMR & SMAST 2016-2026
Ipswich Bank NGOM		
Average meat weight (g)	20.36	17.91
Biomass (mt)	138	121
Standard error	15	13
Exploitable average meat weight (g)	29.44	25.90
Exploitable biomass (mt)	76	67
Exploitable standard error	8	7
Non-NGOM Ipswich Bay (MA State Waters)		
Average meat weight (g)	10.72	9.37
Biomass (mt)	17	15
Standard error	3	3
Exploitable average meat weight (g)	16.16	14.13
Exploitable biomass (mt)	6	5
Exploitable standard error	1	1

Shell height meat weight for Jeffrey's Ledge

DMR & SMAST (2016-2026) for Ipswich, Jeffreys, and Stellwagen

$$W = \exp(-10.00 + 2.946 * \ln(shell\ height) - 0.1955 * \ln(depth) - 0.0004299 * latitude + area)$$

DMR & SMAST (2016-2025) for Ipswich, Jeffreys, and Stellwagen

$$W = \exp(-9.916 + 2.942 * \ln(shell\ height) - 0.2132 * \ln(depth) - 0.00003543 * latitude + area)$$

	Biomass estimate using: DMR & SMAST 2016-2025	Biomass estimate using: DMR & SMAST 2016-2026
Jeffrey's Ledge (outside WGOM)		
Average meat weight (g)	18.98	19.15
Biomass (mt)	109	110
Standard error	10	10
Exploitable average meat weight (g)	28.87	29.15
Exploitable biomass (mt)	62	62
Exploitable standard error	6	6

	Biomass estimate using: DMR & SMAST 2016-2025	Biomass estimate using: DMR & SMAST 2016-2026
Jeffrey's Ledge (inside WGOM)		
Average meat weight (g)	25.32	25.67
Biomass (mt)	766	776
Standard error	51	52
Exploitable average meat weight (g)	35.80	36.30
Exploitable biomass (mt)	511	518
Exploitable standard error	34	35

Acknowledgements

- RSA funding – thank you

- SMAST survey personnel and digitizers
- Electromechanica
- CVision AI
- Blue Fleet Welding
- New Bedford Ship Supply

- Captains and crew of F/V:
  - Elizabeth & Niki
  - Guidance
  - Huntress