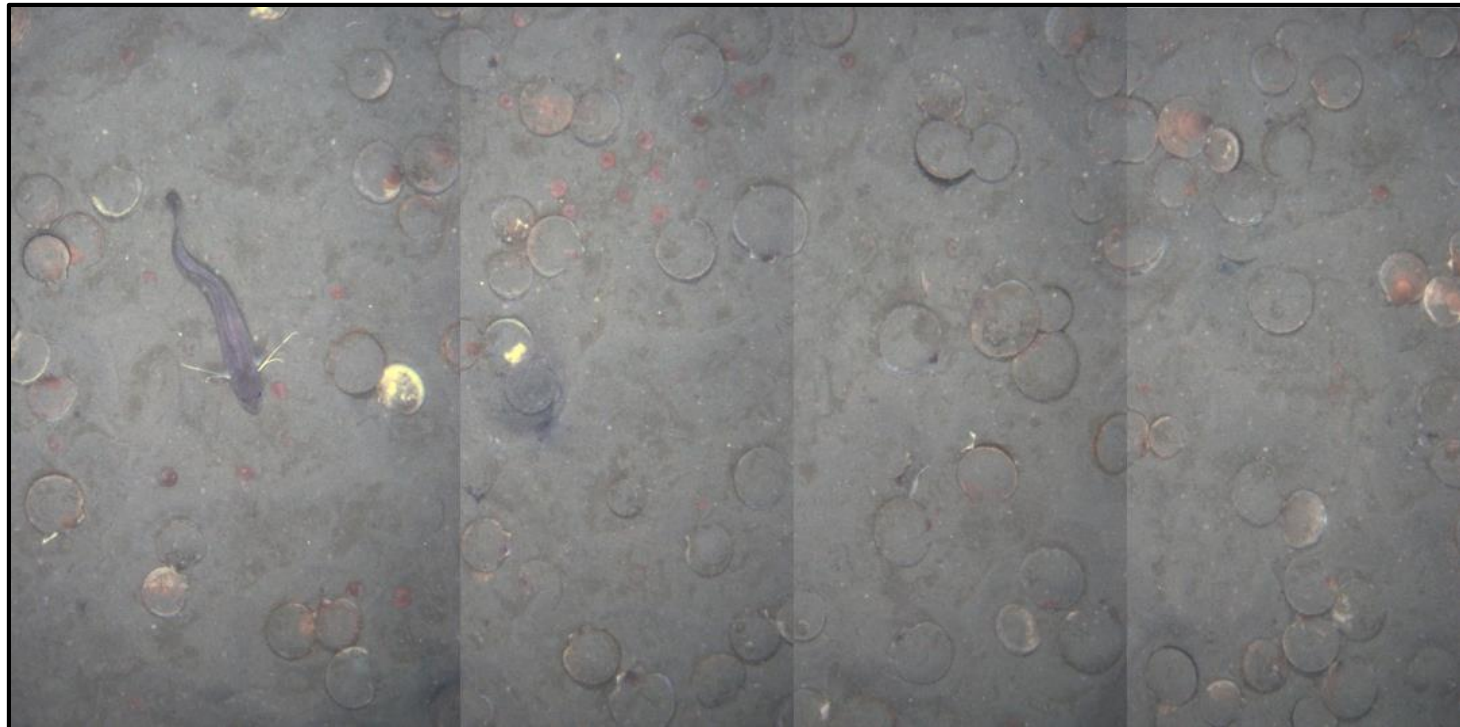


2017 RSA HabCam v3 Survey

Northern Gulf of Maine

Jason Clermont, Liese Siemann, John Ceccolini¹; Richard Taylor, Karen Bolles-Hopkins, Paul Rosonina, Arnie DeMello²; Jui-Han Chang³; David Rudders⁴

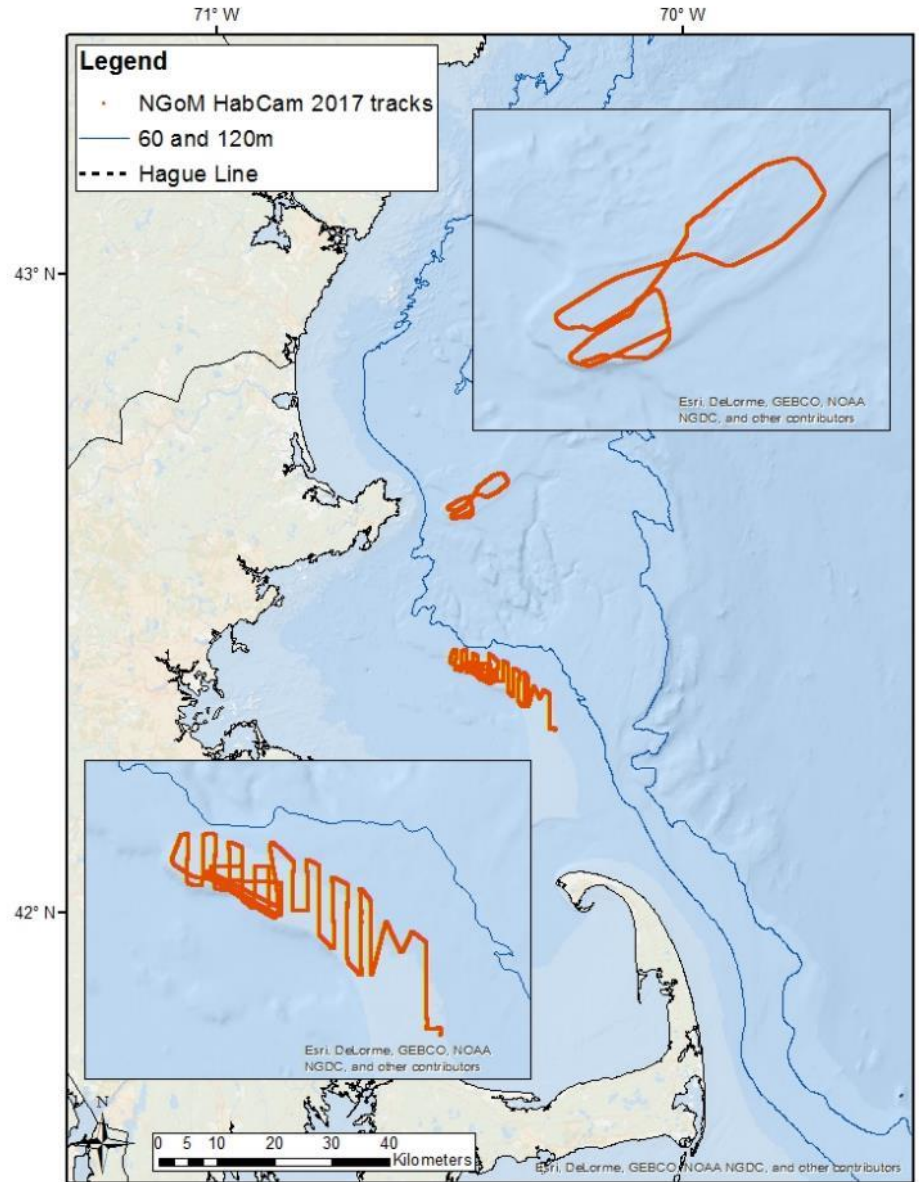
1. Coonamessett Farm Foundation; 2. Arnie's Fisheries / HabCam Group; 3. NOAA Northeast Fisheries Science Center; 4. Virginia Institute of Marine Science



Overview

Objectives

1. Provide size distribution, density, and biomass estimates of scallops in NGoM
2. Provide cursory geographical information on potential scallop predator distributions in survey areas



Northern Gulf of Maine

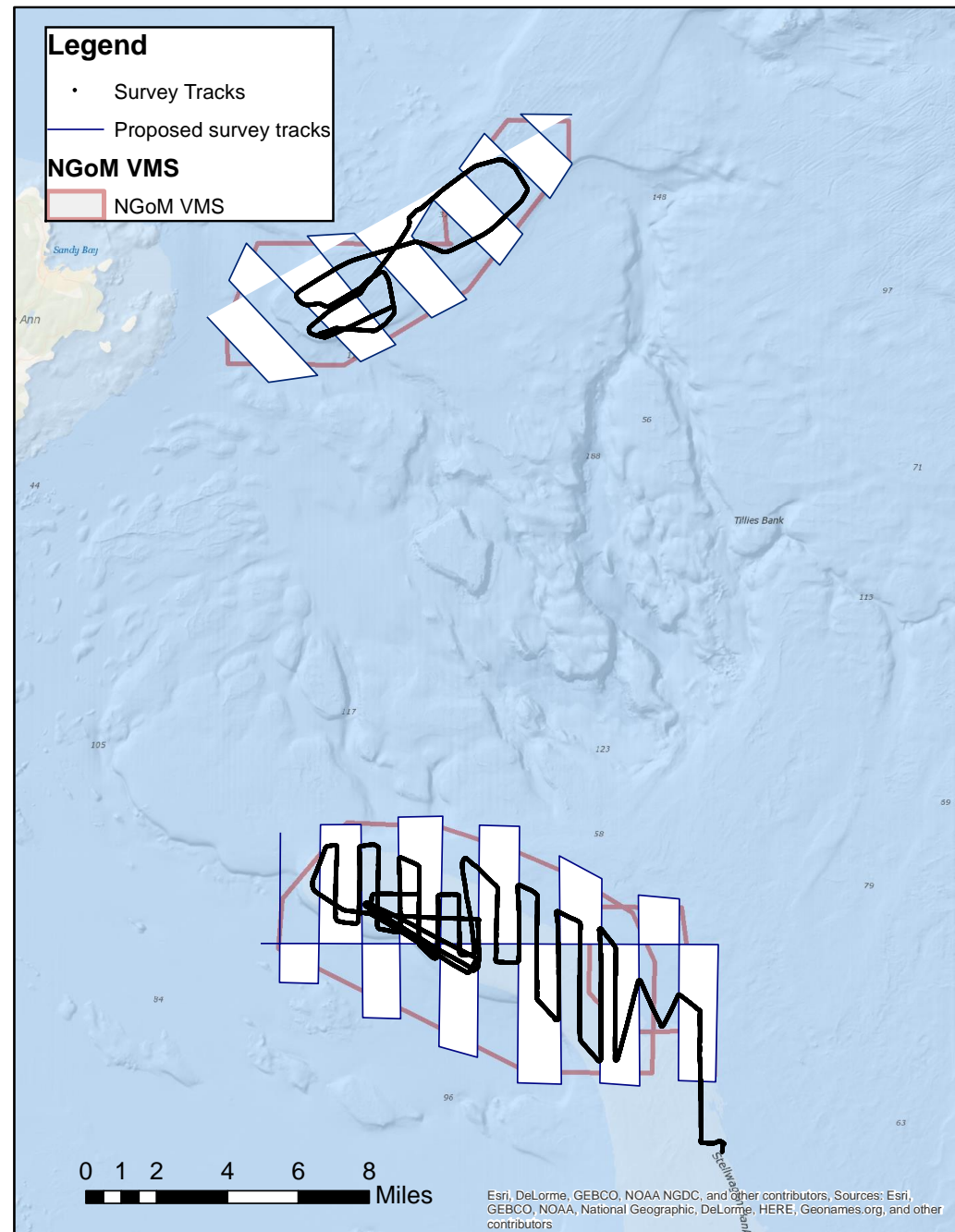
Survey Information

Survey

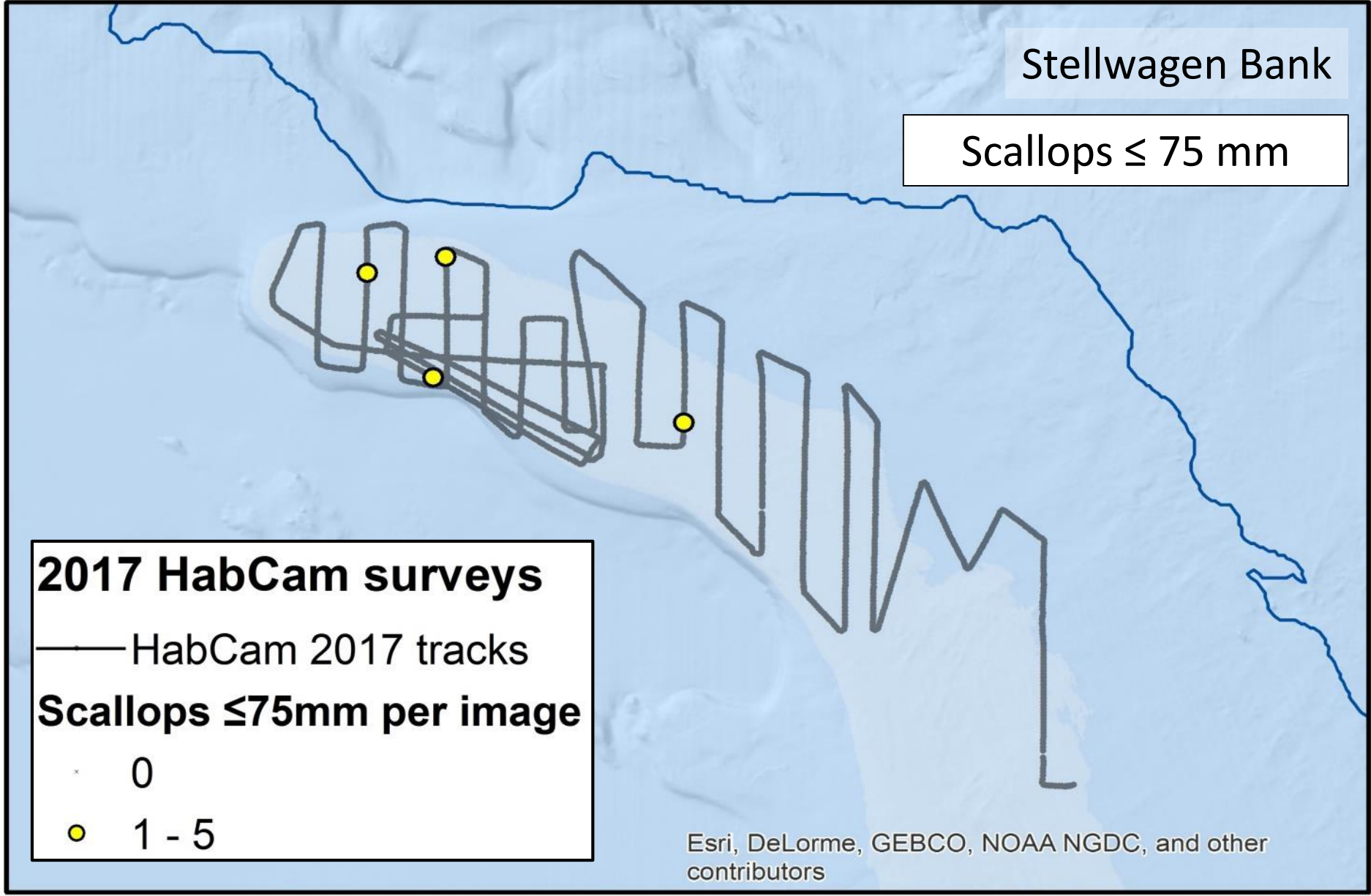
- 08-09 July 2017
- Stellwagen & Jefferys Ledge
- 90 nm
 - Stellwagen: 67 nm
 - 6 Dredge tows
 - Jefferys: 22 nm
 - High density of gear

Images

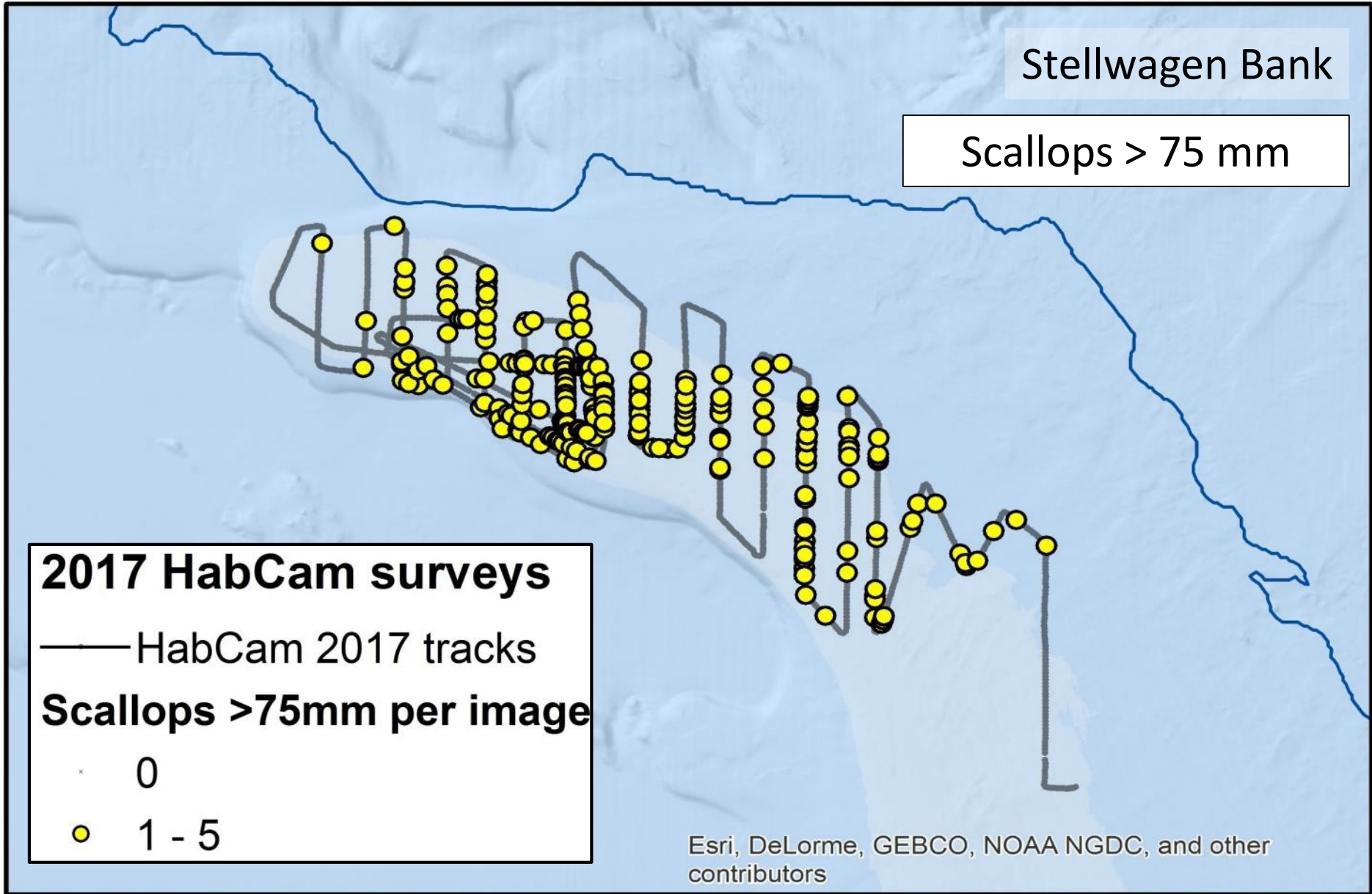
- Target altitude 1.7-1.9 m
- 4.5-5 knots
- Collected: approx. 400,000
- Annotated: approx. 2,000
 - Rate: 1:200



Northern Gulf of Maine: Scallop Size Distribution



Northern Gulf of Maine: Scallop Size Distribution



Northern Gulf of Maine: Scallop Size Distribution

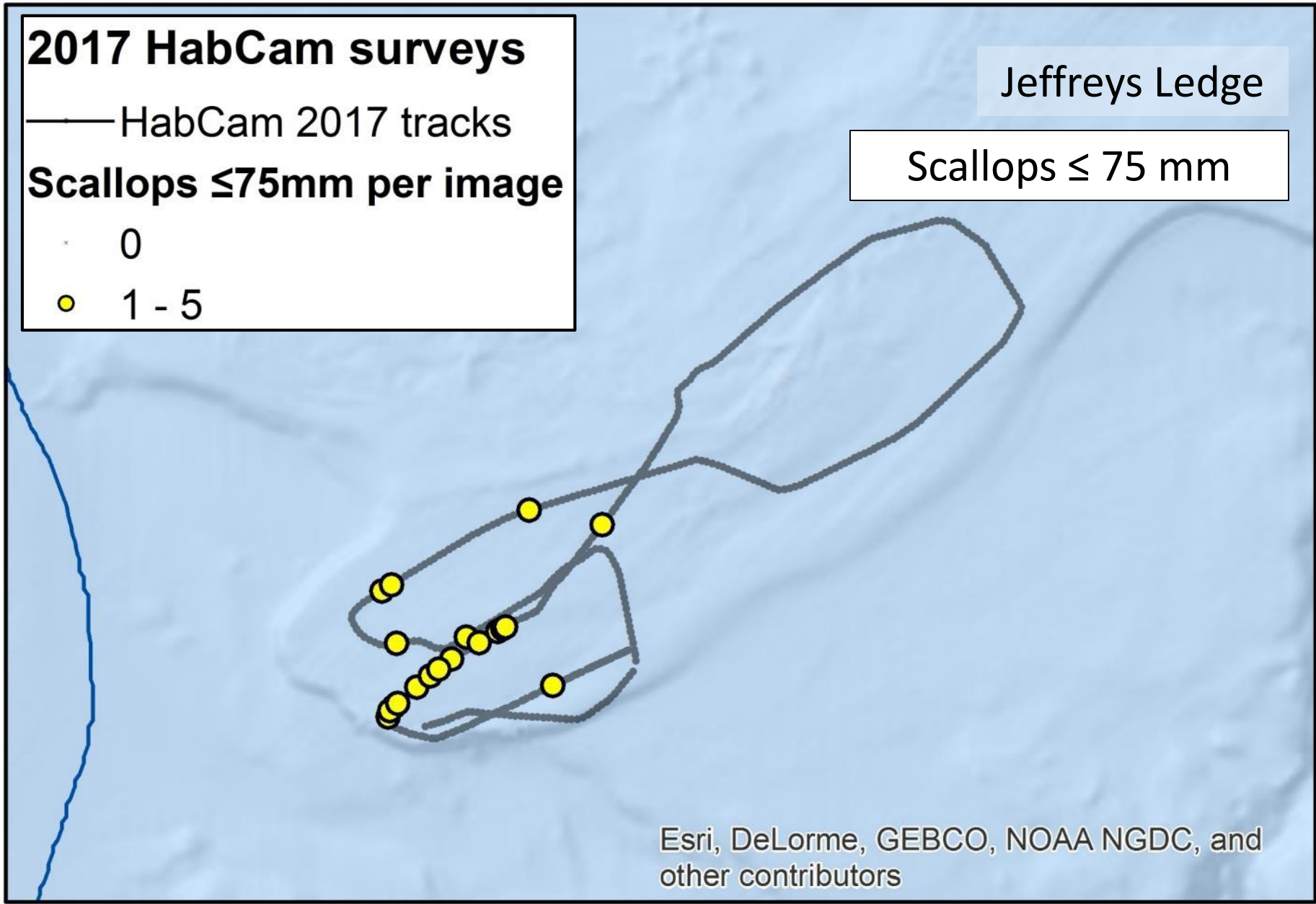
2017 HabCam surveys

— HabCam 2017 tracks
Scallops ≤ 75 mm per image

- × 0
- 1 - 5

Jeffreys Ledge

Scallops ≤ 75 mm



Esri, DeLorme, GEBCO, NOAA NGDC, and other contributors

Northern Gulf of Maine: Scallop Size Distribution

2017 HabCam surveys

— HabCam 2017 tracks

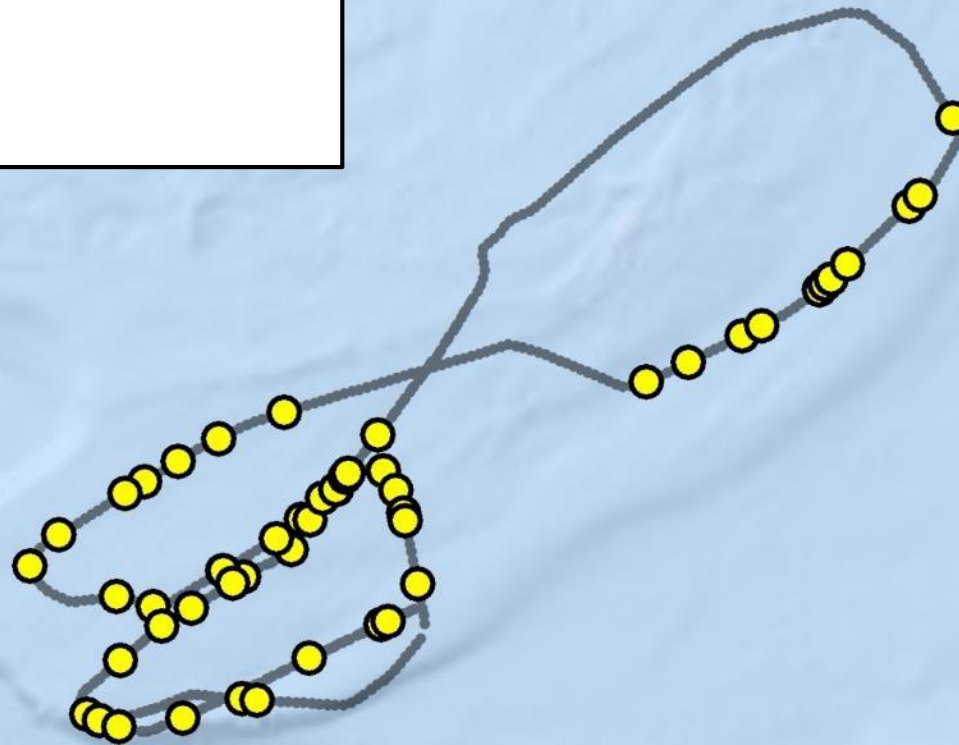
Scallops >75mm per image

× 0

● 1 - 5

Jeffreys Ledge

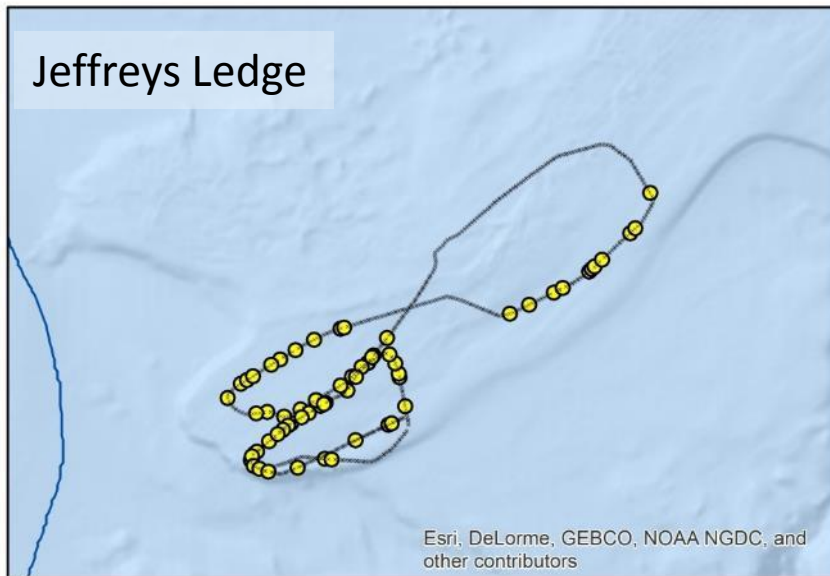
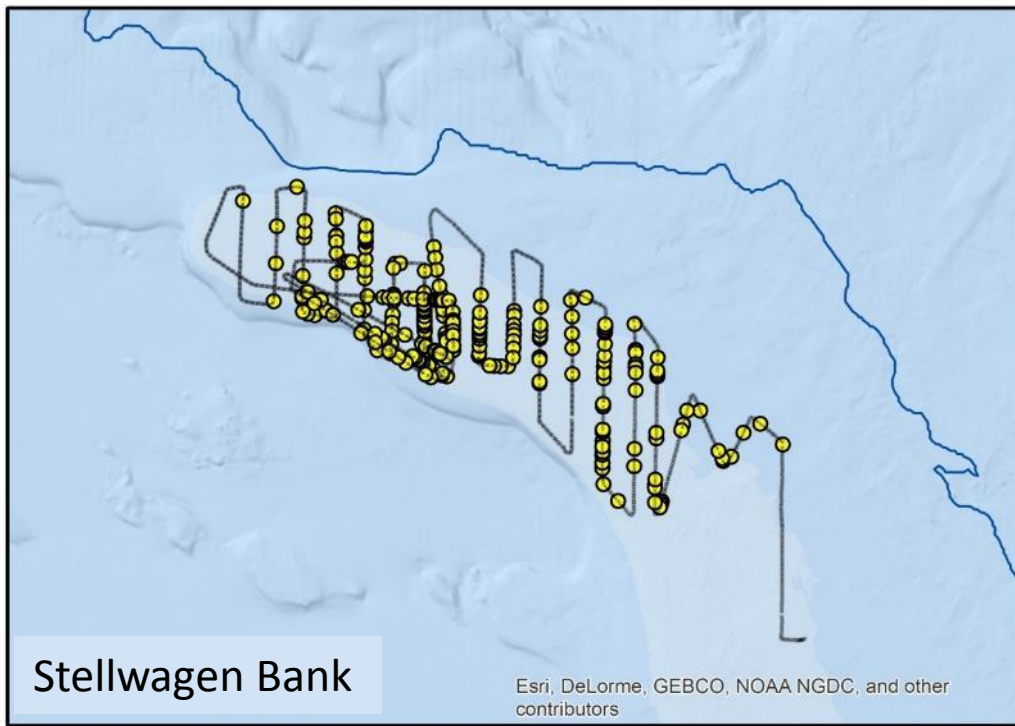
Scallops > 75 mm



Esri, DeLorme, GEBCO, NOAA NGDC, and other contributors

Northern Gulf of Maine

All scallops



2017 HabCam surveys

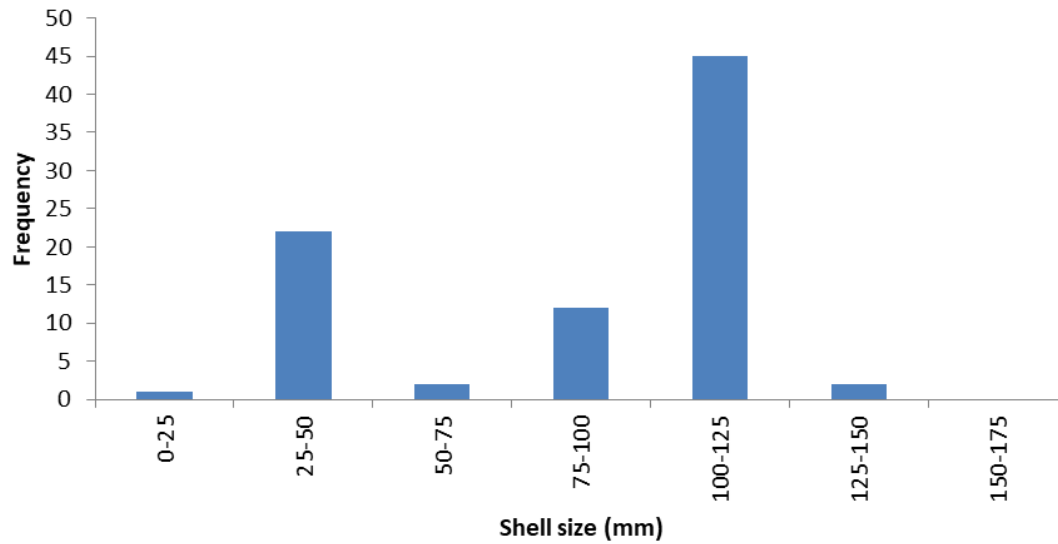
— HabCam 2017 tracks

Scallops per image

- 0
- 1 - 5
- 6 - 10
- 11 - 25
- 26 - 50
- 51 - 81

Jefferys Ledge

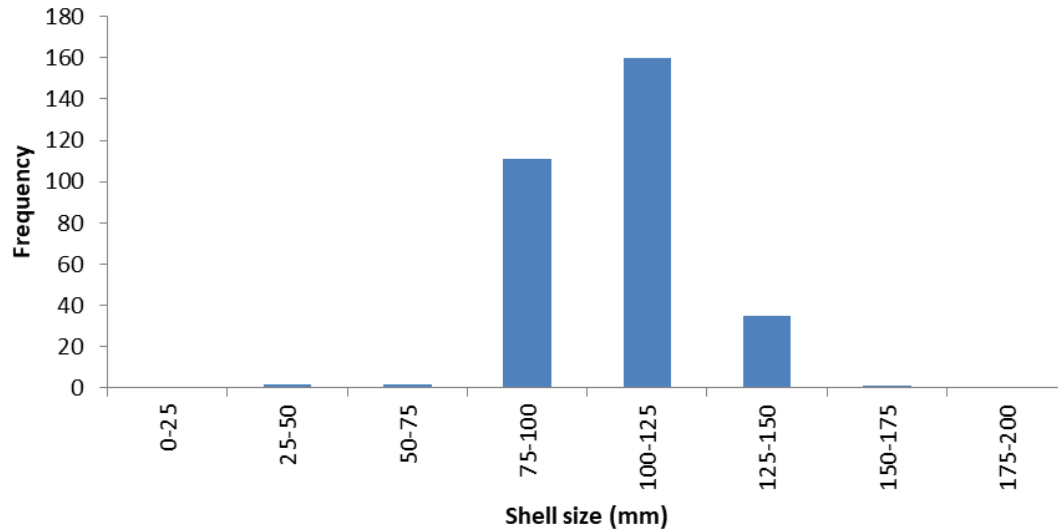
n=84



Bin	Frequency
0-25	1
25-50	22
50-75	2
75-100	12
100-125	45
125-150	2
150-175	0
175-200	0

Stellwagen Bank

n=311

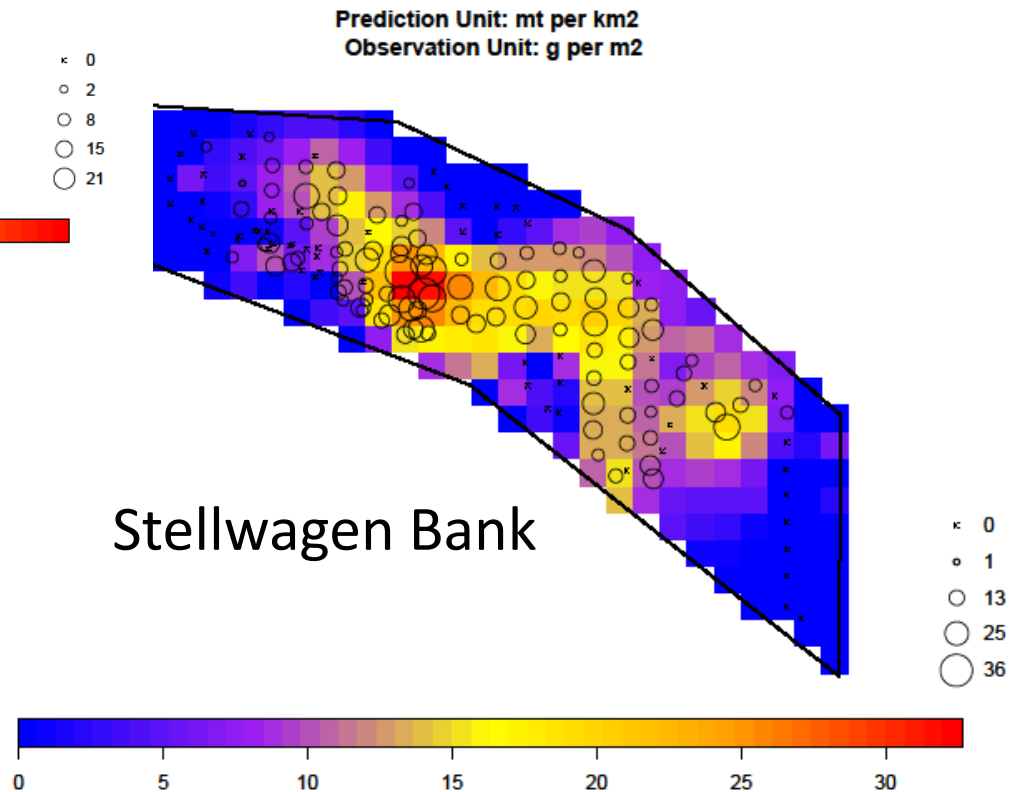
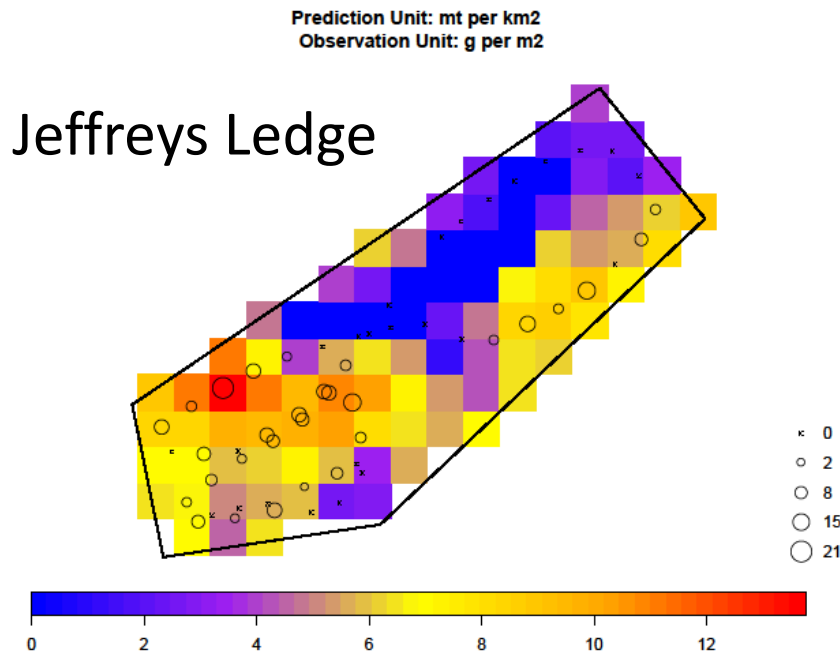


Bin	Frequency
0-25	0
25-50	2
50-75	2
75-100	111
100-125	160
125-150	35
150-175	1
175-200	0

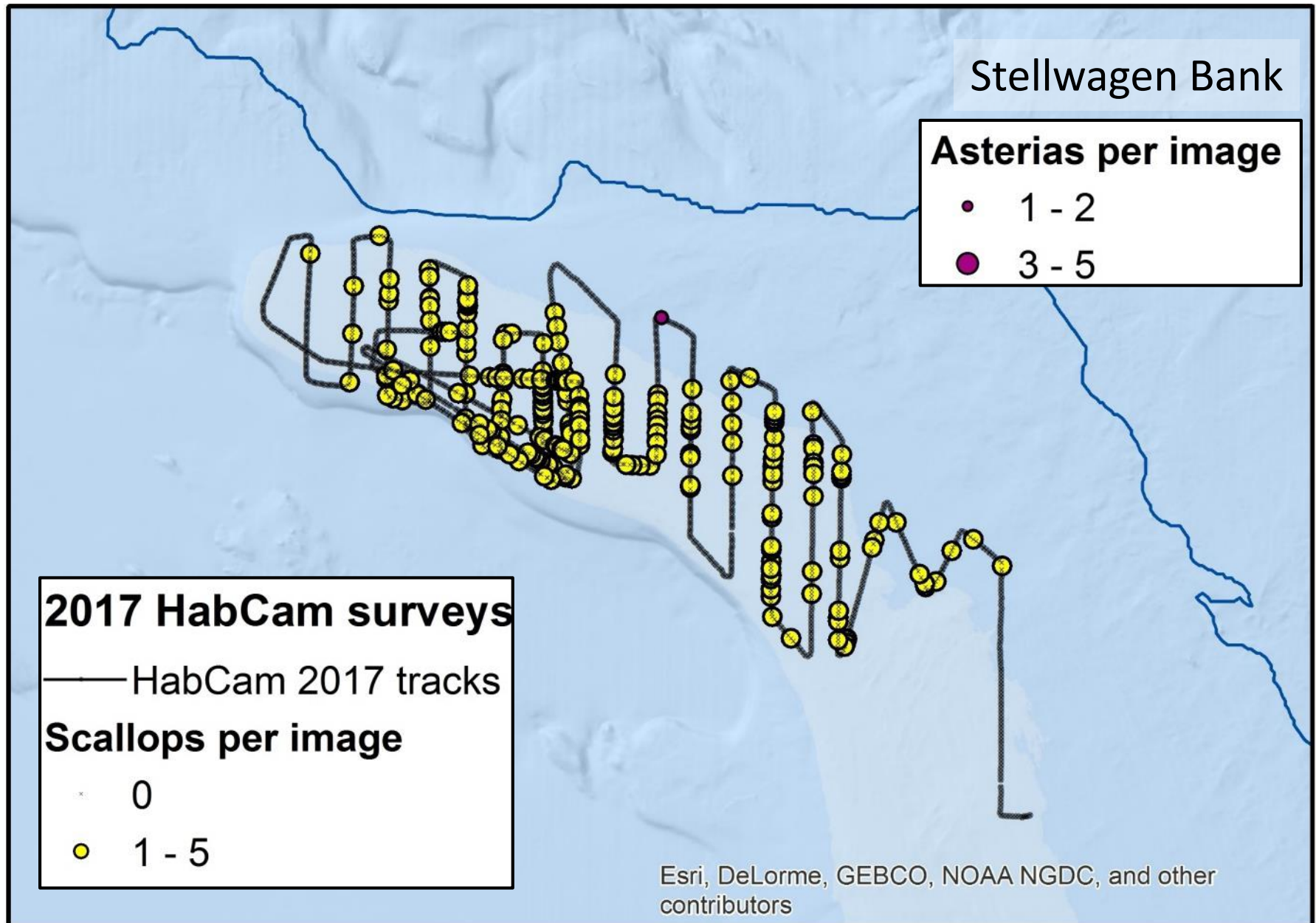
Northern Gulf of Maine: Biomass Estimates

	SARC 50		
Area	EST	SE	# Images Annotated
NGOM-S	459.1	53.84	2120
NGOM-N	152.06	35.23	680

Northern Gulf of Maine: Biomass Estimates



Northern Gulf of Maine: Scallops & *Asterias* spp.



Northern Gulf of Maine: Scallops & *Asterias* spp.

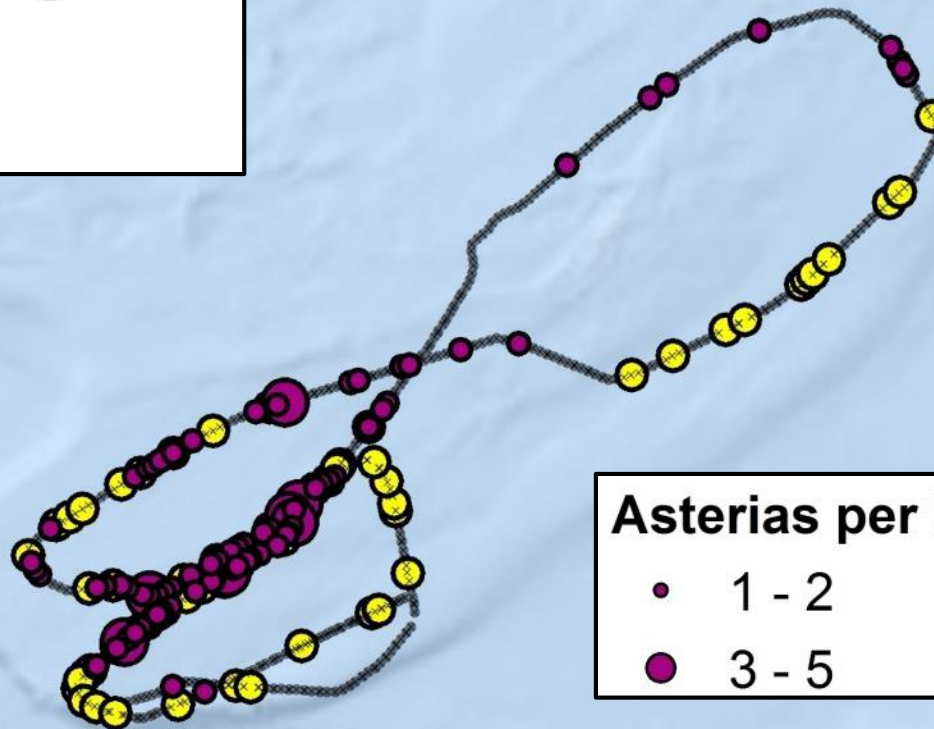
2017 HabCam surveys

— HabCam 2017 tracks

Scallops per image

- × 0
- 1 - 5

Jeffreys Ledge

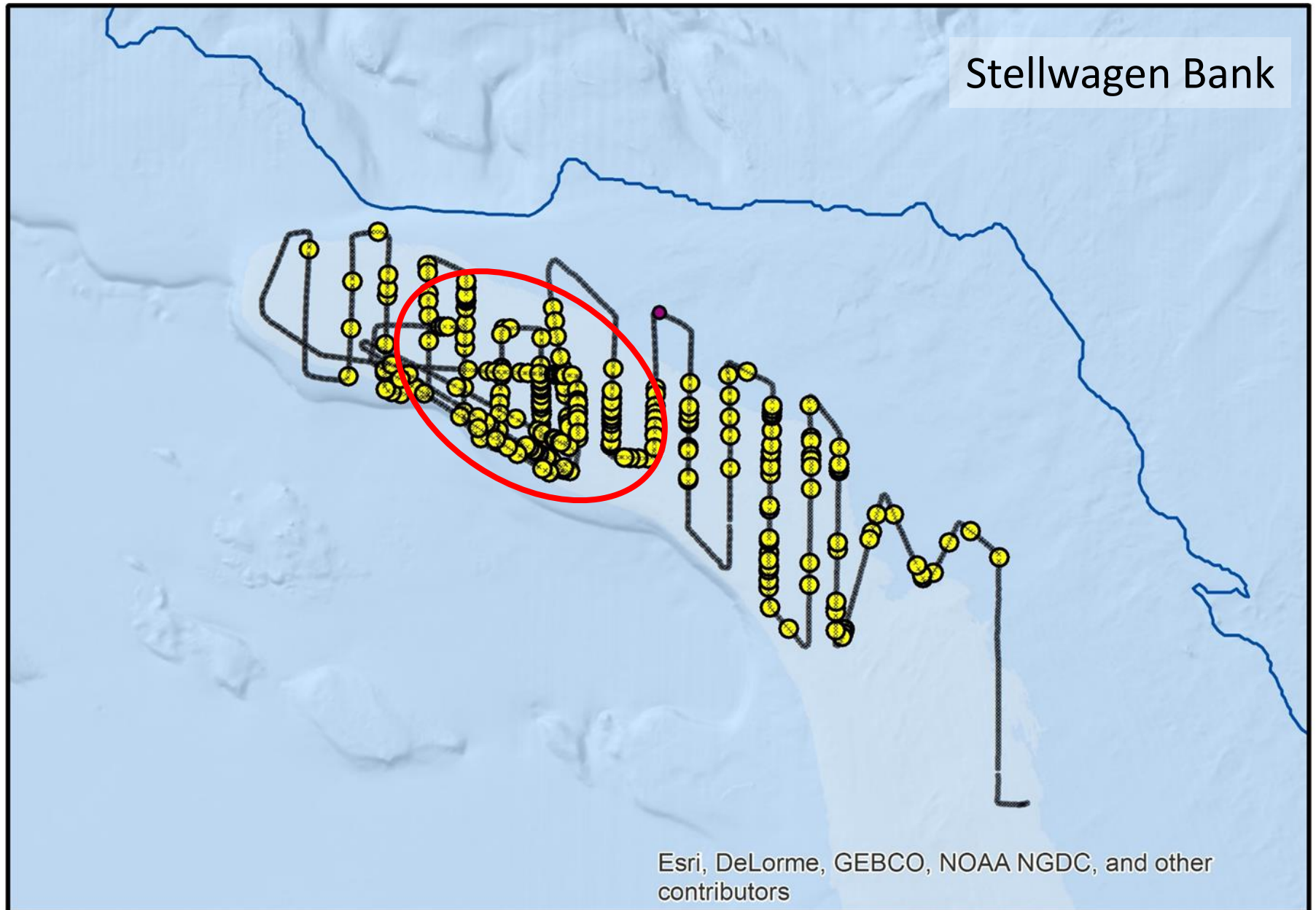


Asterias per image

- 1 - 2
- 3 - 5

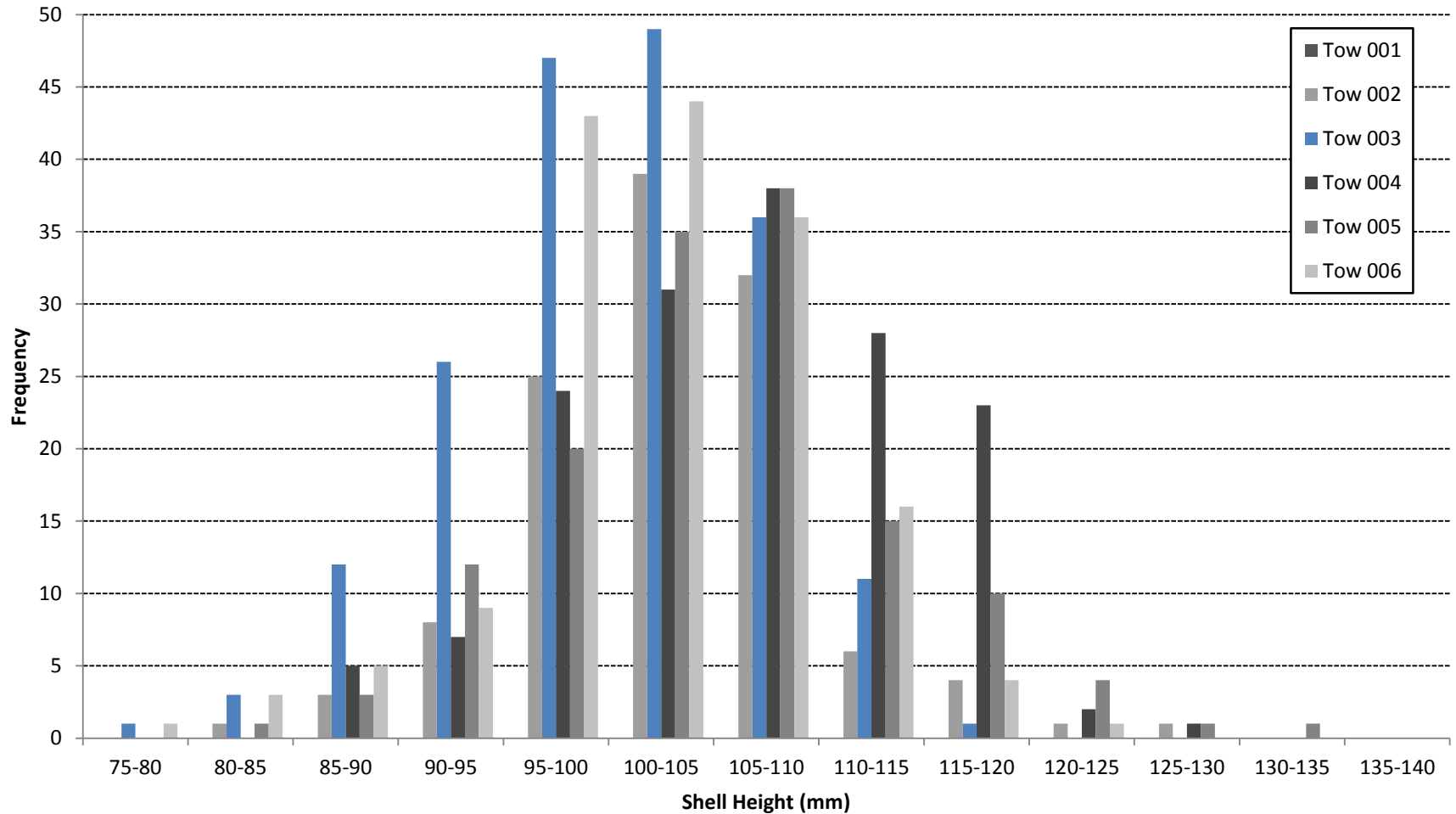
Esri, DeLorme, GEBCO, NOAA NGDC, and other contributors

Northern Gulf of Maine: Dredge Tows



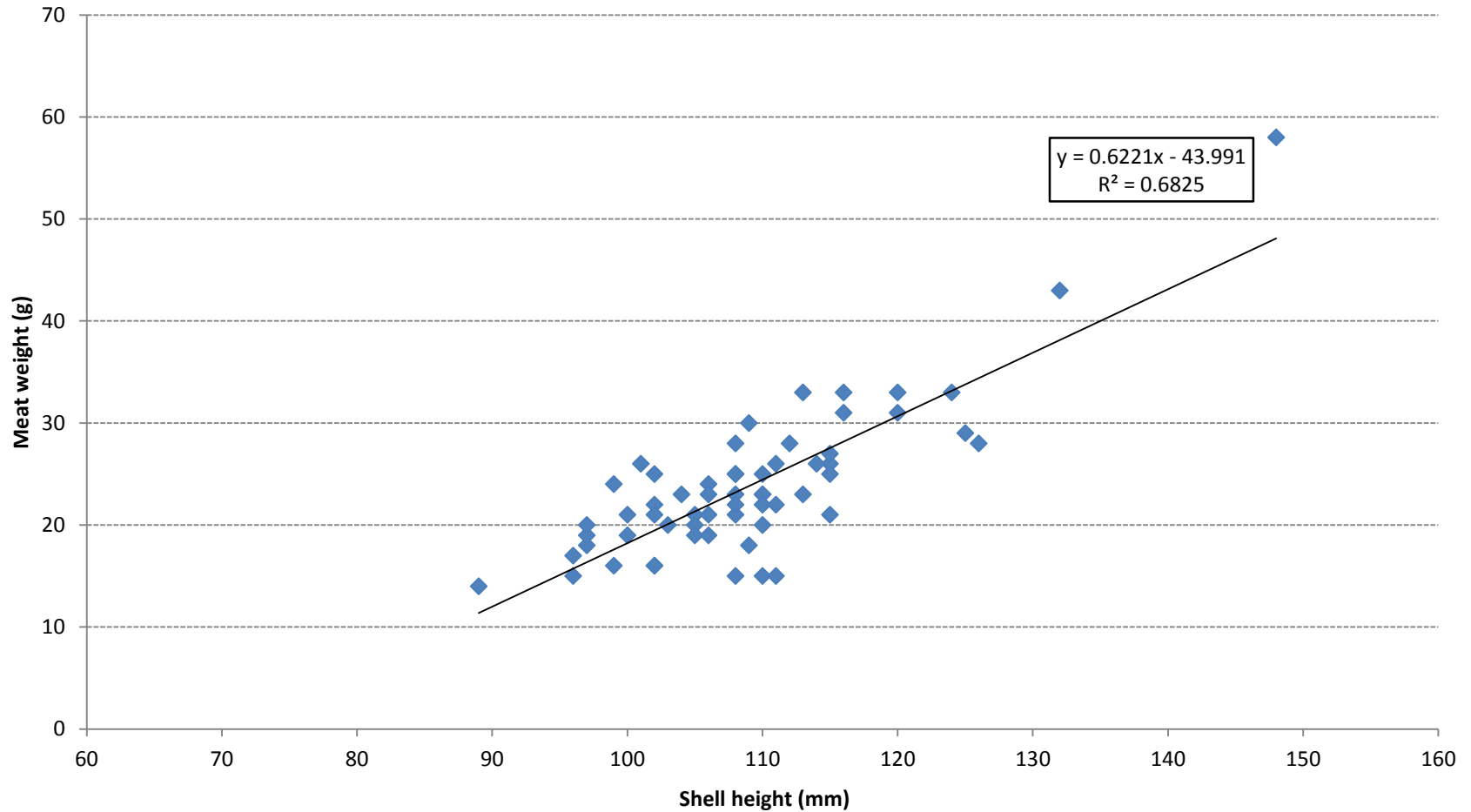
Northern Gulf of Maine: Dredge Tows

Scallop Length-Frequency



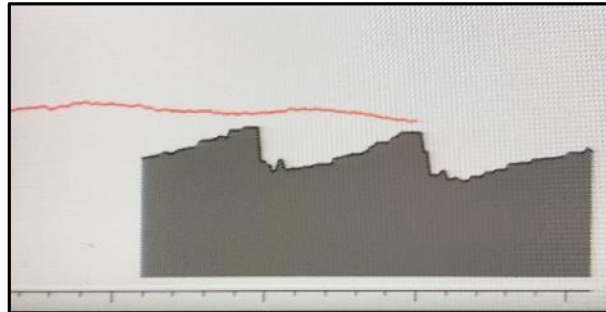
Northern Gulf of Maine: Dredge Tows

Shell Height - Meat Weight

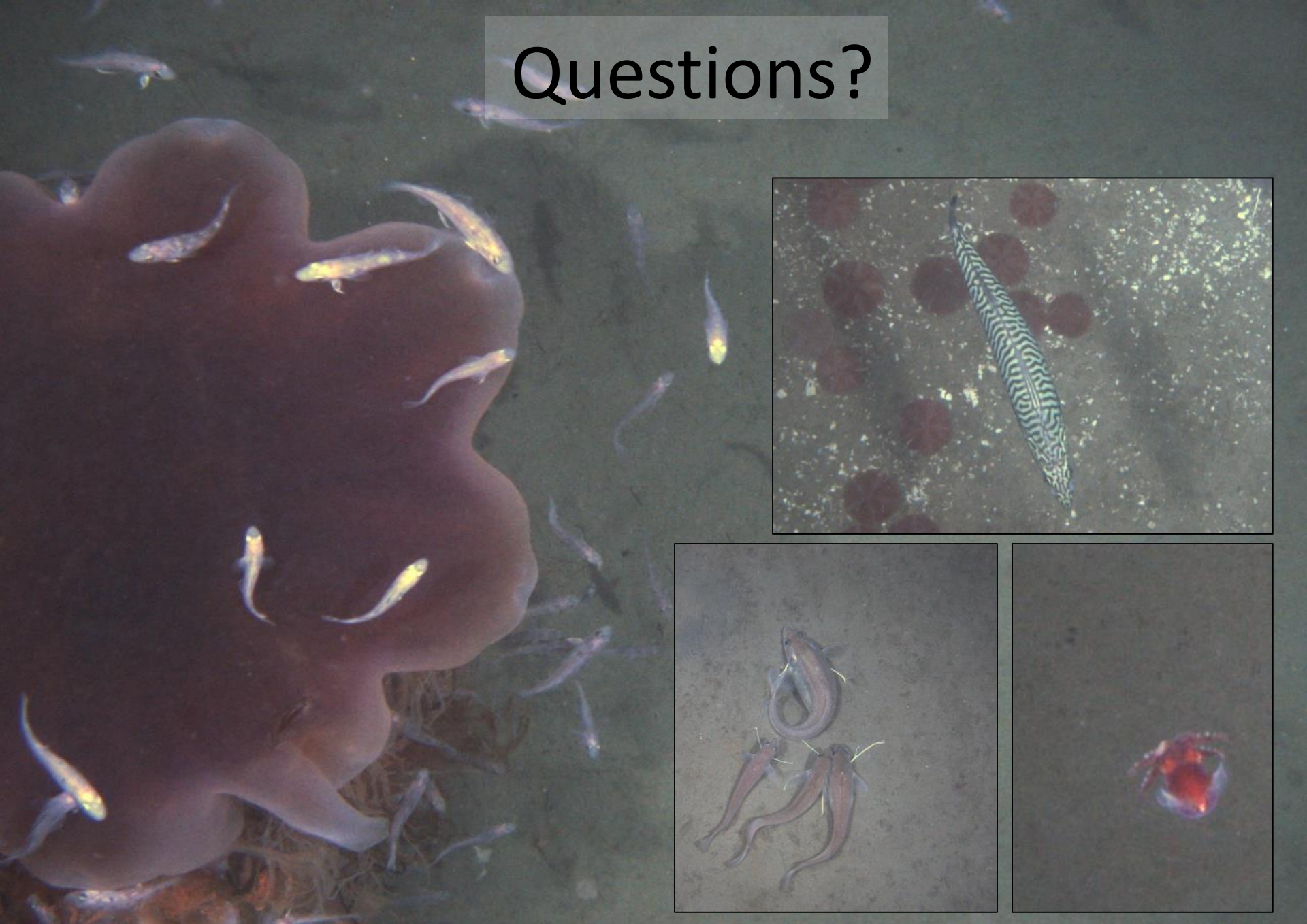


Acknowledgements

- Scallop RSA Program
- Crew of the F/V Kathy Marie | Capt. Paul Rosonina
- Lane Abrams & Jon Howland – WHOI
- Science party – CFF and RWU



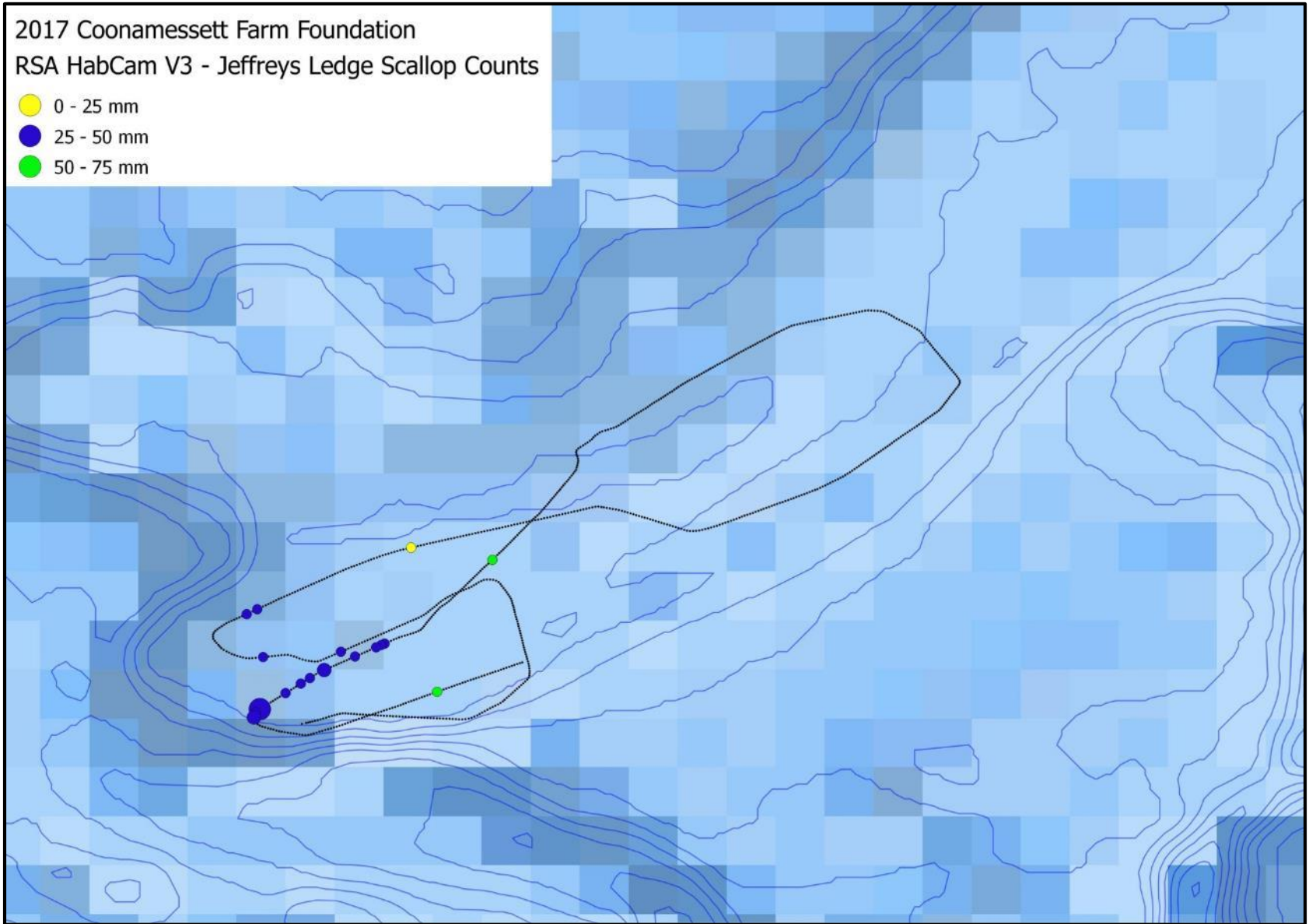
Questions?



Northern Gulf of Maine

2017 Coonamessett Farm Foundation
RSA HabCam V3 - Jeffreys Ledge Scallop Counts

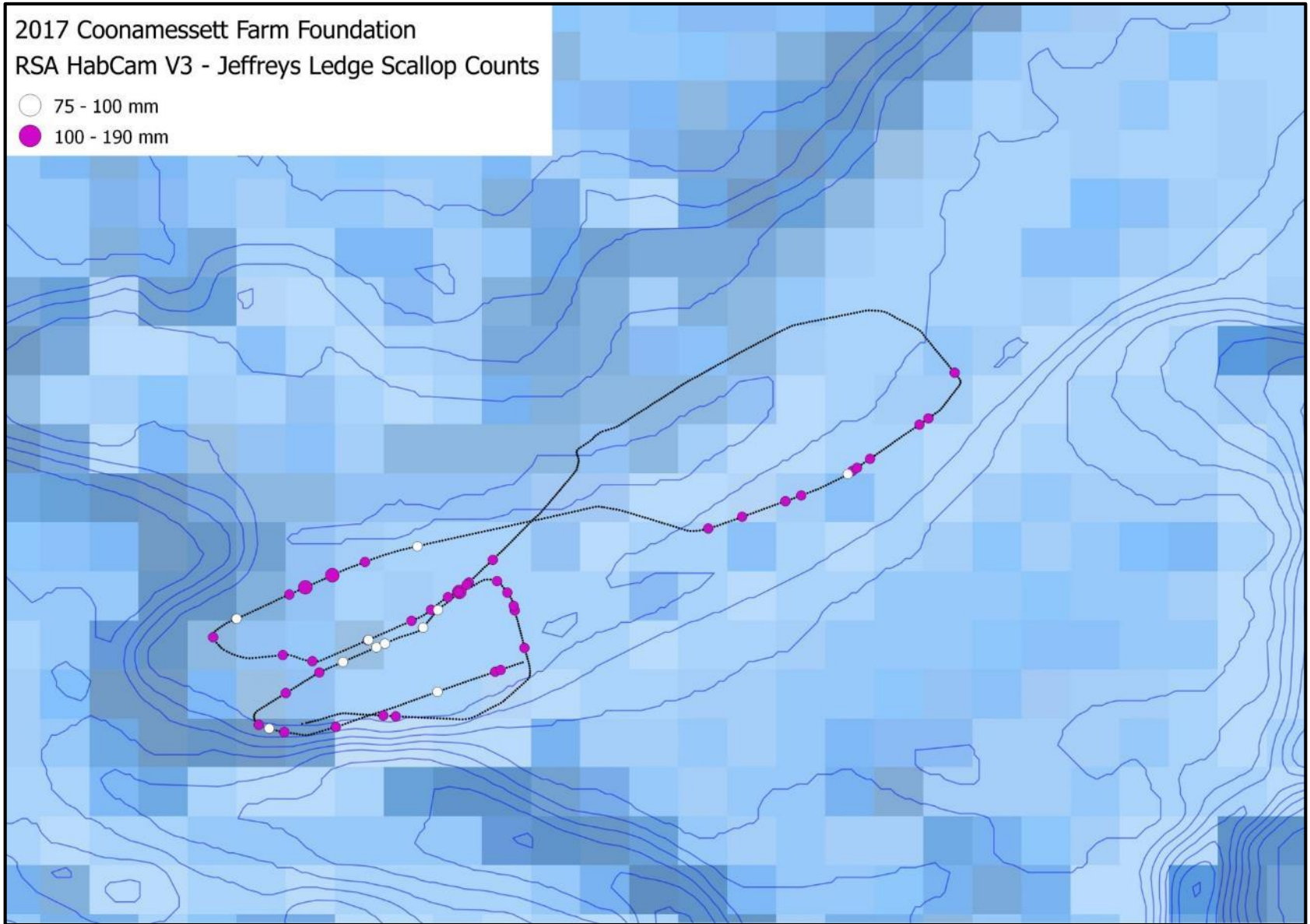
- 0 - 25 mm
- 25 - 50 mm
- 50 - 75 mm



Northern Gulf of Maine

2017 Coonamessett Farm Foundation
RSA HabCam V3 - Jeffreys Ledge Scallop Counts

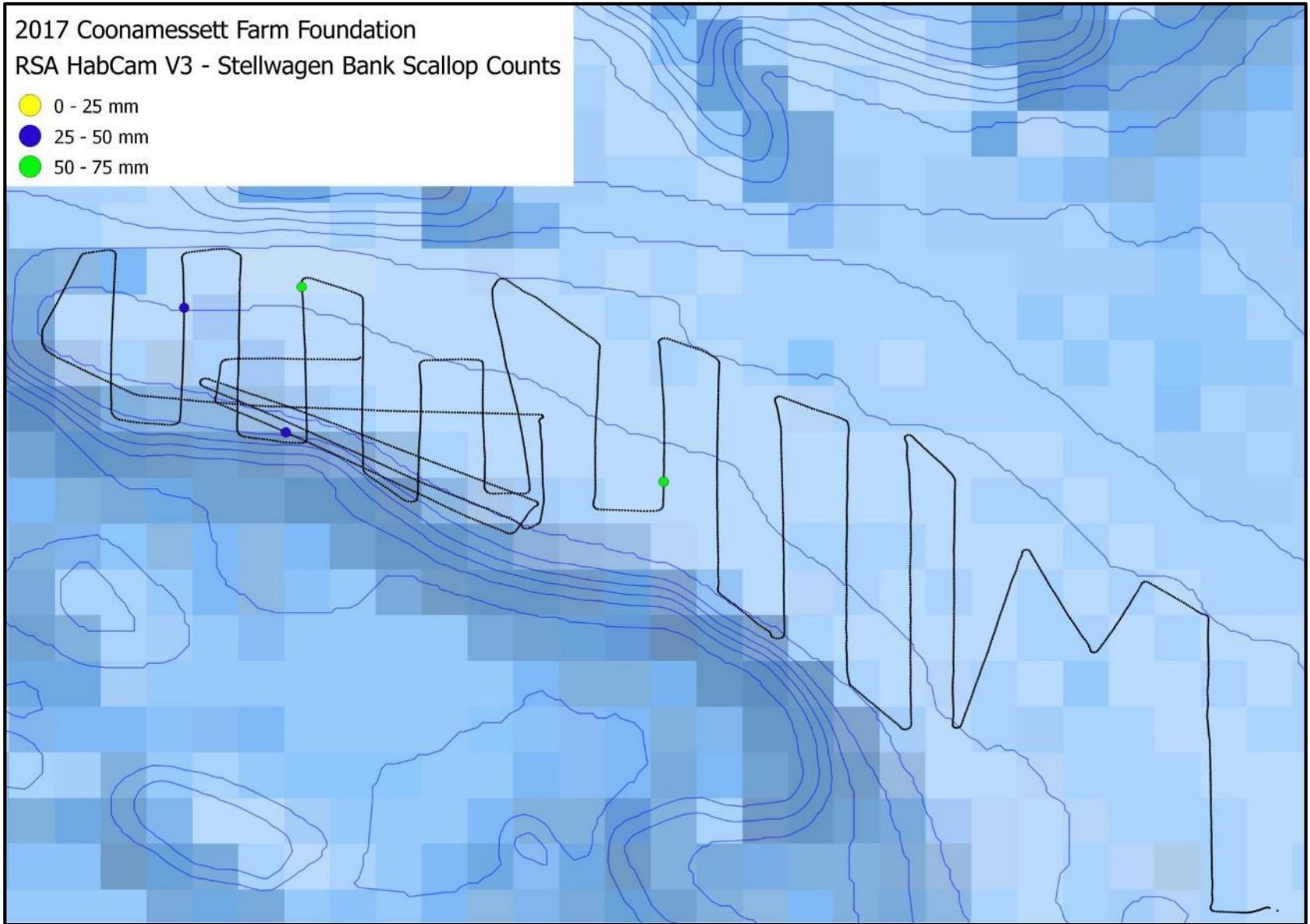
- 75 - 100 mm
- 100 - 190 mm



Northern Gulf of Maine

2017 Coonamessett Farm Foundation
RSA HabCam V3 - Stellwagen Bank Scallop Counts

- 0 - 25 mm
- 25 - 50 mm
- 50 - 75 mm



Northern Gulf of Maine

2017 Coonamessett Farm Foundation
RSA HabCam V3 - Stellwagen Bank Scallop Counts

- 75 - 100 mm
- 100 - 190 mm

