Scallop Committee

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Dvora Hart

Scallop Committee
September 22, 2021
Webinar

New England
Fishery Management Council

Today's Meeting:

- **Updates**
- **Framework 34 – Surveys and projections, management measures**
- **Scallop Work Priorities – Updates and outlook for 2022**

AP and Committee action anticipated today:

- *FW34: PDT Tasking for Spatial Management and LA DAS, other FW topics*
- *Additional items for the 2022 scallop work priorities list*

Update on Petition for Rulemaking Process: Scallopers Campaign Request for LA Leasing

Key Issue: DOC/NMFS has been asked to prepare an amendment to the Scallop FMP on LA leasing outside of the Council process.

Process so far:

- Request to the Secretary of Commerce on January 15, 2021
- NMFS letter to the Council on March 10, 2021
- **Council reply to NMFS on July 19, 2021 (see correspondence)**
- Scallopers Campaign letter to NMFS on July 29, 2021
  - Ask the agency to delay response to the Campaign's petition until after the Council's vote on 2022 scallop work priorities in December.

Next Steps:

- NMFS response to Campaign's petition (TBD – likely after December 2021)

The AP and Committee will discuss 2022 priorities later today. Two work items from last year's discussion that are currently on the list of possible priorities for next year.

Northern Windowpane Numbers & AM

- **Predict that the scallop fishery will be subject to Large AM (exceeded 150% of sub-ACL). Details on next slide.**
- Estimated NWP bycatch values for 2020. Does NOT include estimated catches in other fisheries. (2019 estimate for other fisheries was ~20mt)
- NWP ABC and ACL going up for 2021 – 2023, scallop sub-ACL 31mt.
- Limited observer data for FY2020.

	(Catch)/Legal Limits
Scallop catch	(34.8 mt; 290% of sub-ACL)
Groundfish catch	(10.2 mt; 27% of sub-ACL)
ACL	55 mt
ABC	59 mt
OFL	84 mt

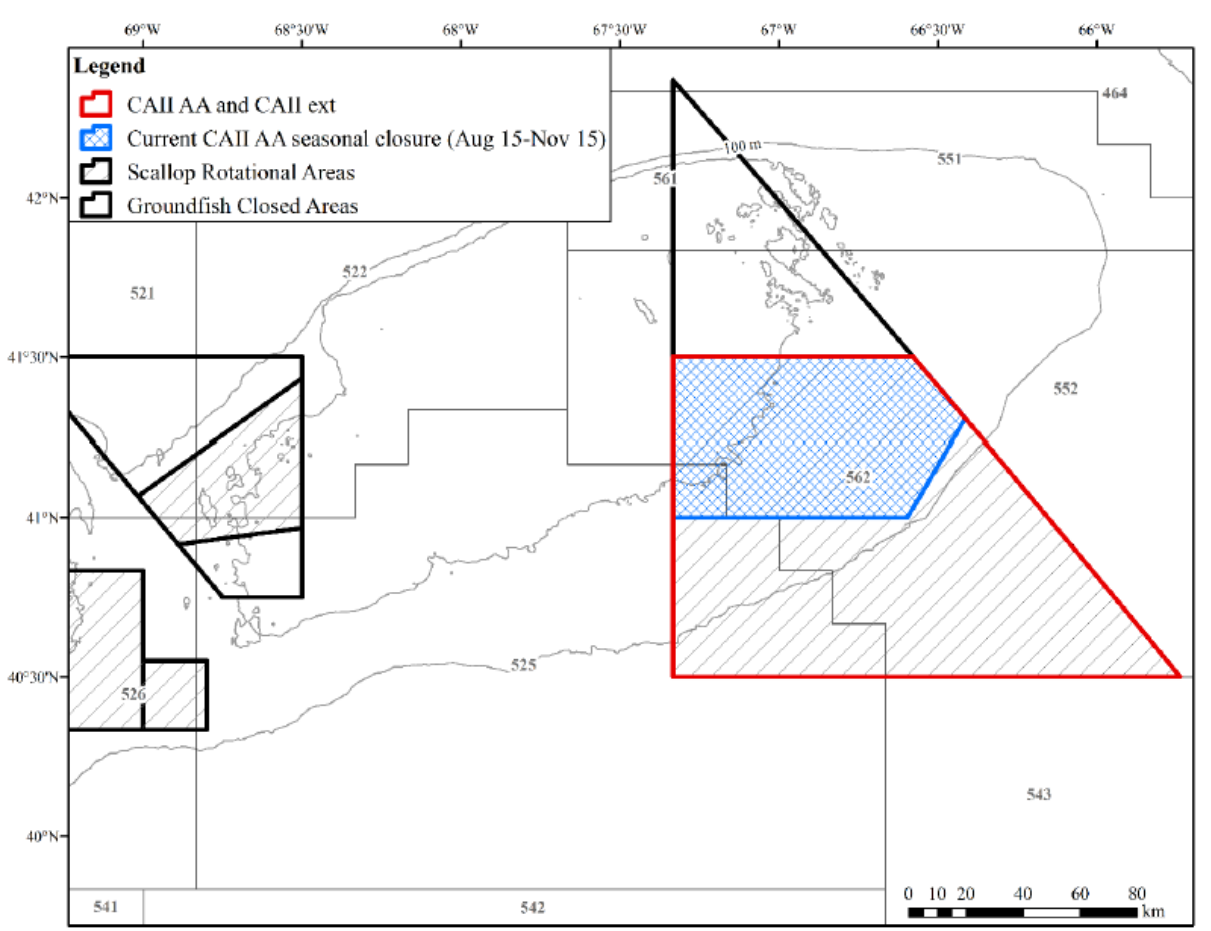
Northern Windowpane Large AM

- Year-round GRA

Gear

- 5 row apron
- Max 1.5:1 hanging ratio

- Must use the gear inside the area shown in red (CAII and CAII-EXT)



Amendment 21

Timeline

Final submission of Amendment 21 to NMFS on August 13, 2021.

NMFS published a notice of availability on September 8, 2021.

Comment must be received on or before November 8, 2021.

A final decision expected before the Council takes final action on Framework 34. Decision date is December 3, 2021.

Expect that NMFS will implement Amendment 21 concurrently with Framework 34 (April 1, 2022, start of FY2022).

Outlook

- FW34 is the vehicle to implement measures proposed in A21.
  - NGOM measures.
  - LAGC IFQ AA possession limits.
- Developing action as if all measures will be approved.
  - NMFS has not raised any red flags about Council's preferred alternatives.

Other Updates

- Georges Bank Yellowtail Flounder
- NMFS letter to SeaWatch EFP request

2020 Management Track Assessment

Two assessment models reviewed.

Stock status as of 2019:

- Not overfished
- Overfishing not occurring

Reference points:

- OFL: F=0.61
- ABC: F=0.45
- ACT: F=0.40

Framework 34

2021 Surveys – GB and Mid-Atlantic

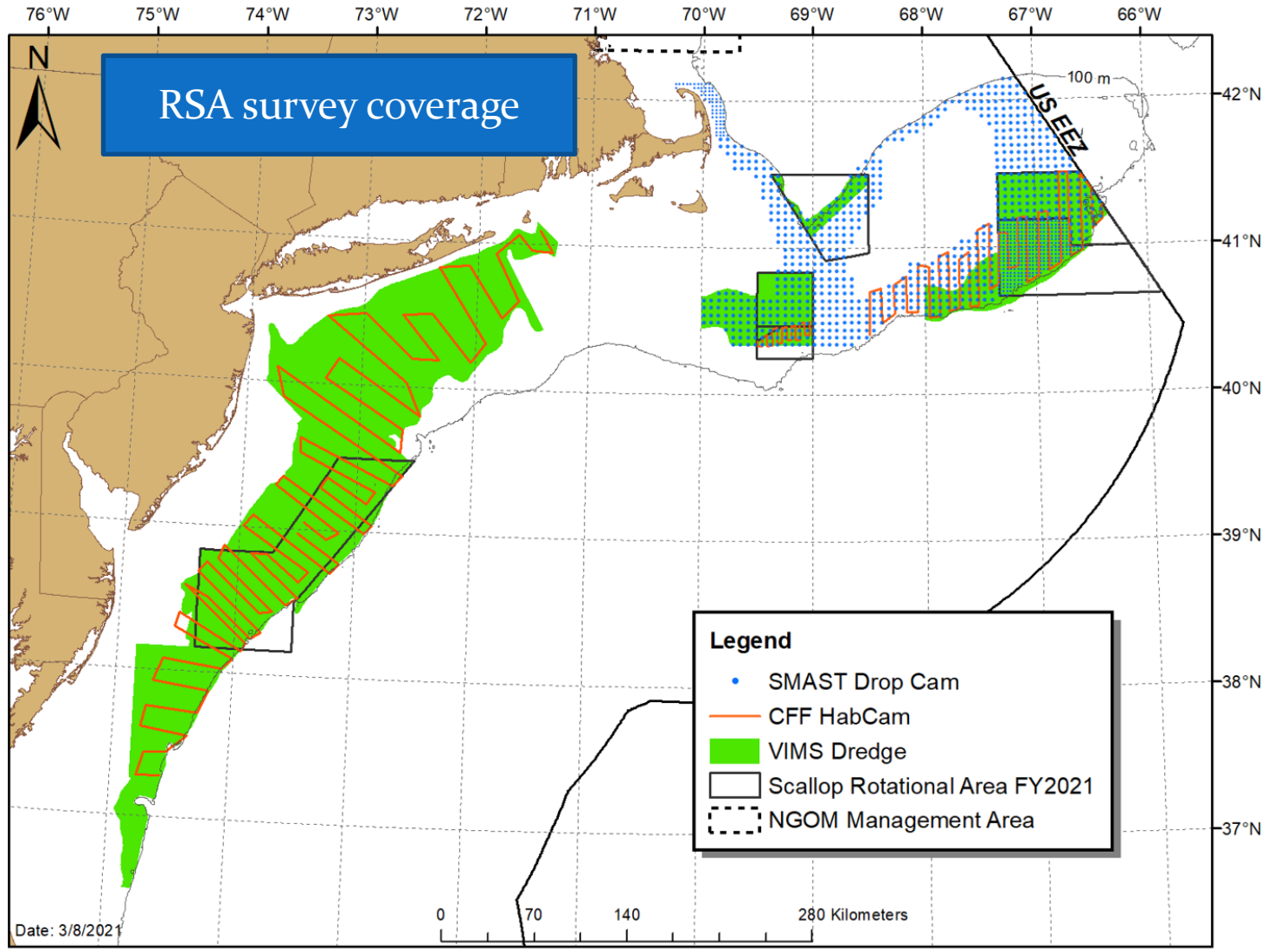
Coonamessett Farm Foundation

VIMS | William & Mary

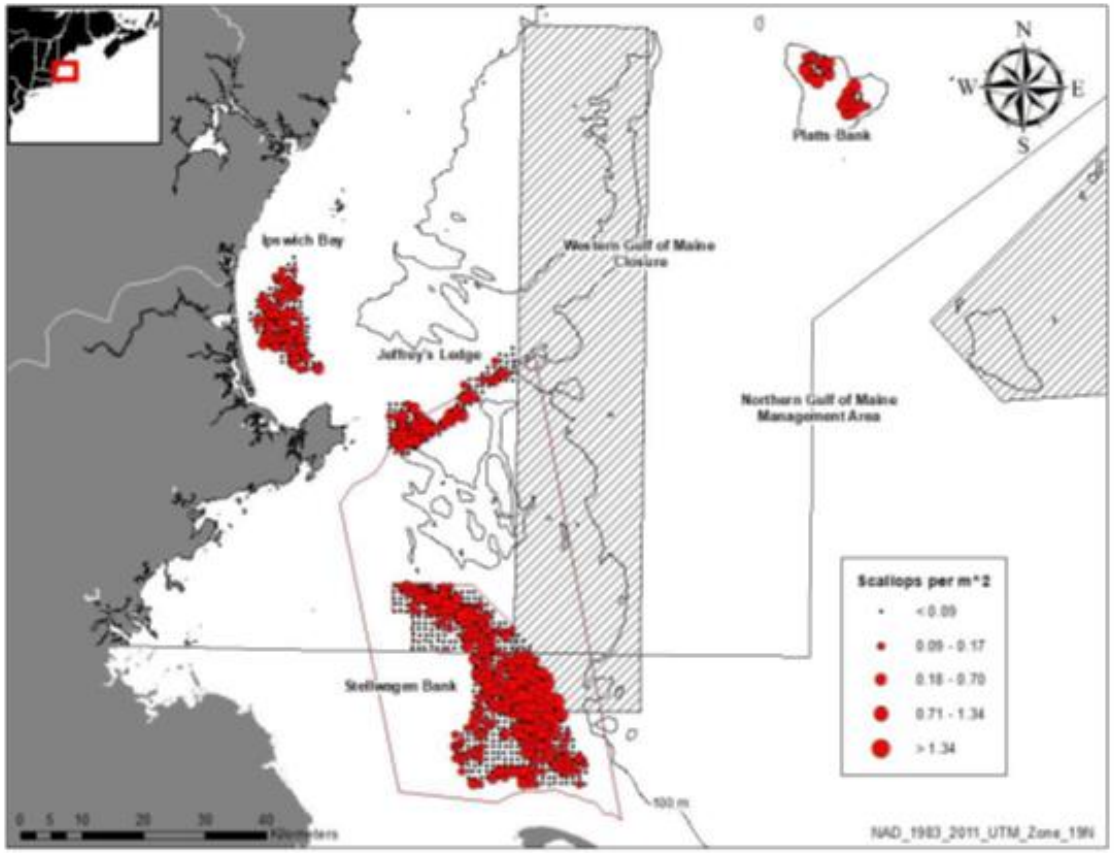
Virginia Institute of Marine Science

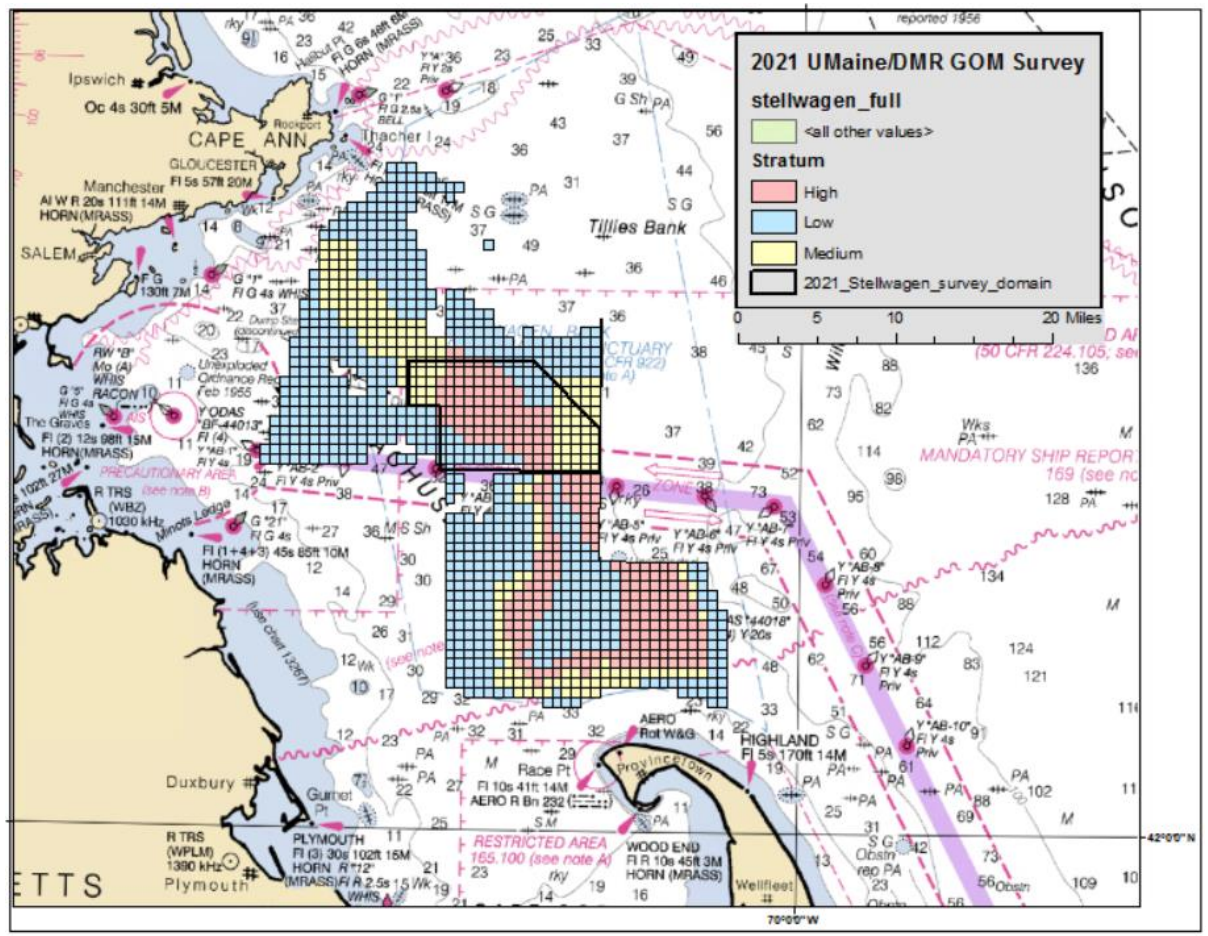
Marine Advisory Services

NOAA National Oceanic and Atmospheric Administration, U.S. Department of Commerce



2021 Surveys – Gulf of Maine

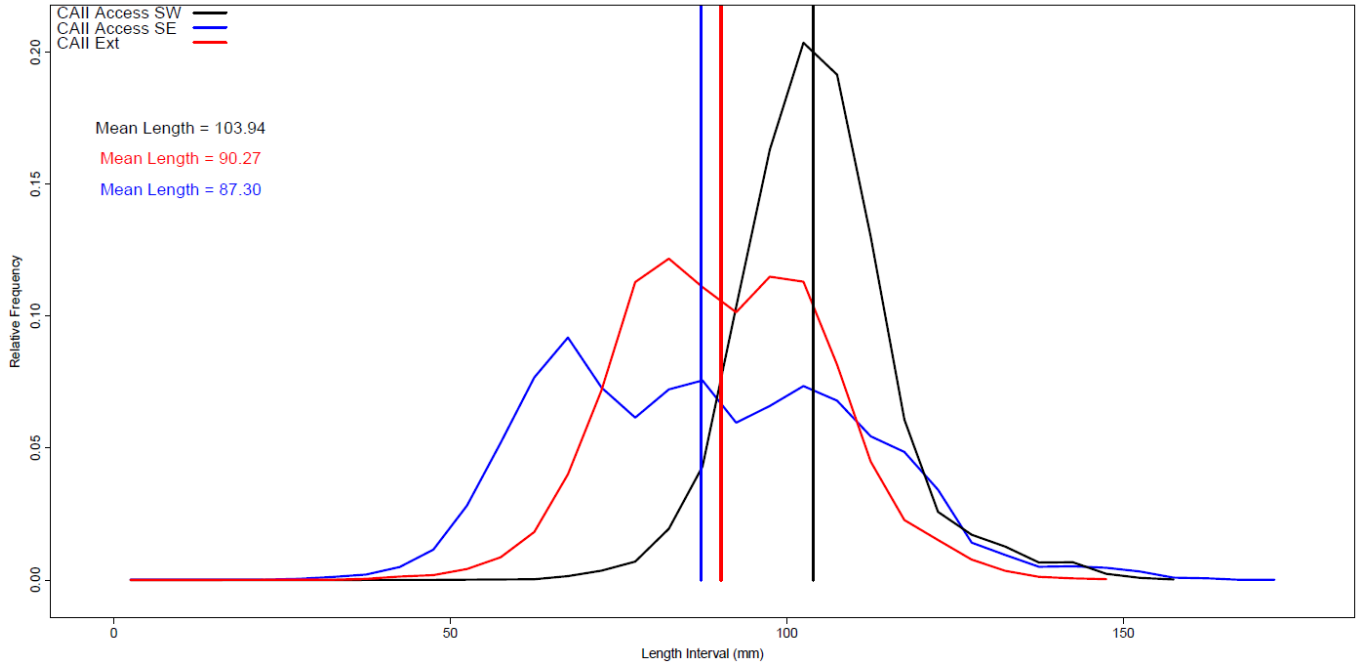




VIMS Dredge Surveys

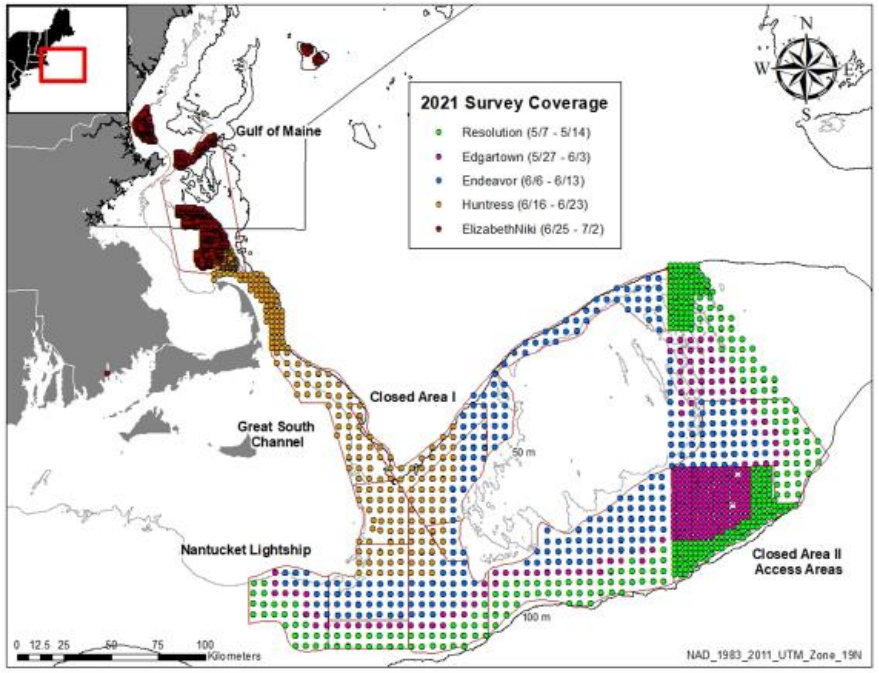
VIMS | William & Mary
Virginia Institute of Marine Science
Marine Advisory Services

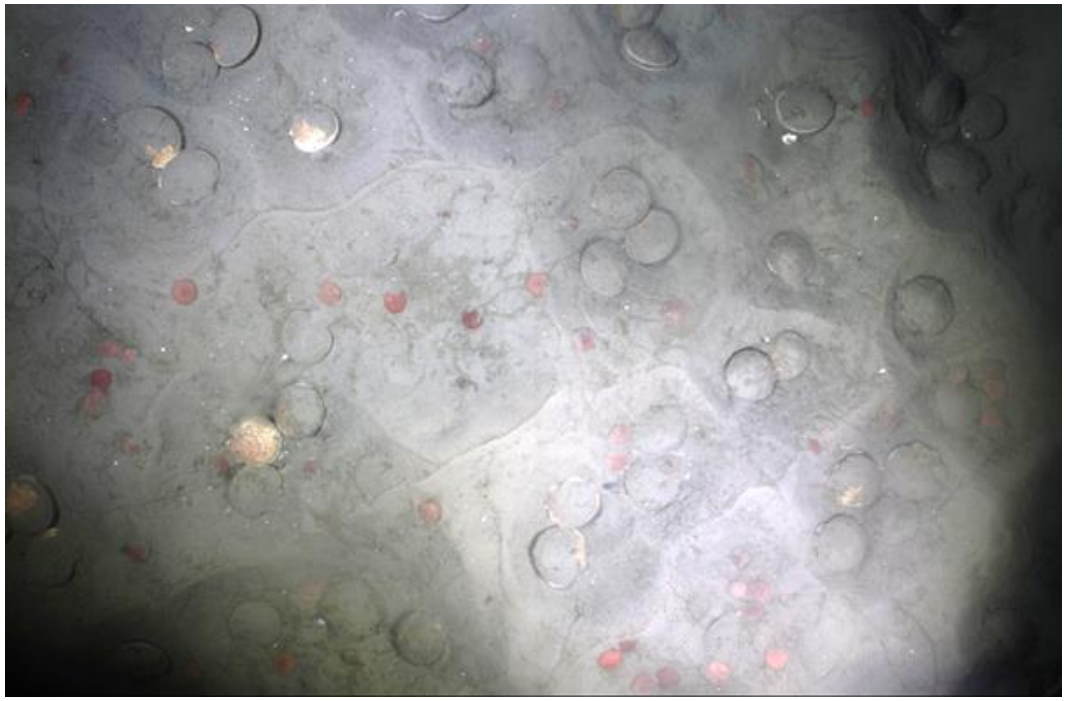
- Four cruises from May – June, 2021.
  - Leg 1: 5/7 – 5/16 (VIR → HCS)
  - Leg 2: 5/27 – 6/7 (NYB → BI – 450 total stations in MA, ~4,840 SH/MW samples)
  - Leg 3: 6/10 – 6/17 (CAI & CAII – 125 stations, ~1,524 SH/MW samples)
  - Leg 4: 6/19 - 6/25 (NLS – 135 stations, ~1,500 SH/MW samples)



SMAST Surveys

- Five cruises that covered Georges Bank and the Gulf of Maine from May 7 – July 2
  - Nantucket Lightship Region – 5.6 km grid (112 stations)
  - Georges Bank – 5.6 km grid (510 stations)
  - Closed Area II SW and EXT – 2.8 km grid (313 stations)
  - Gulf of Maine – 1 km grid (440 stations in NGOM, 376 in Southern Stellwagen, WGOM)



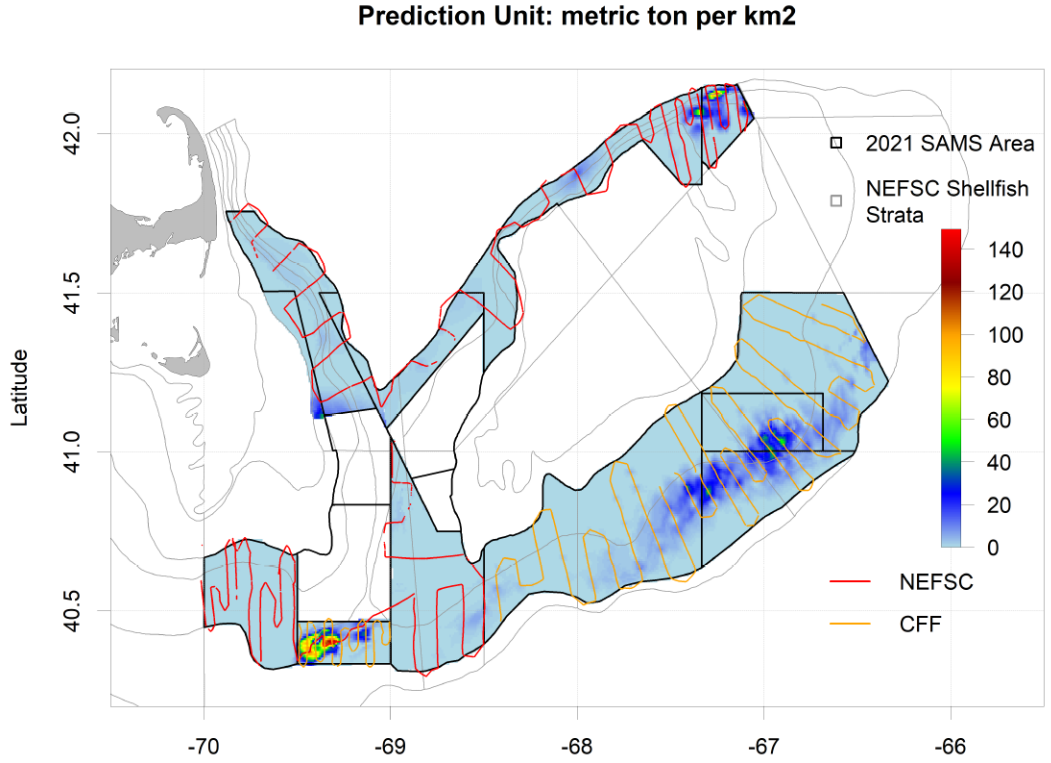


CFF Surveys

- Three cruises with HabCam v3 on F/V Kathy Marie.
  - Leg 1: 6/17 – 6/25 (NLS-South, SF, CAII & Ext, 622nm, 1:400 annotation rate, ~6,100 images annotated, 4.8 million images)
  - Leg 2: 6/29 – 7/8 (DMV, ET, HCS, MAB, part of NYB, 807nm, ~1:400 annotation rate, ~7,900 images annotated, 6.3 million images)
  - Leg 3: 7/13 – 7/19 (NYB, LI, BI, 621nm, ~1:400 annotation rate, ~5,500 images annotated, 4.4 million images) → Recruitment in NYB and LI

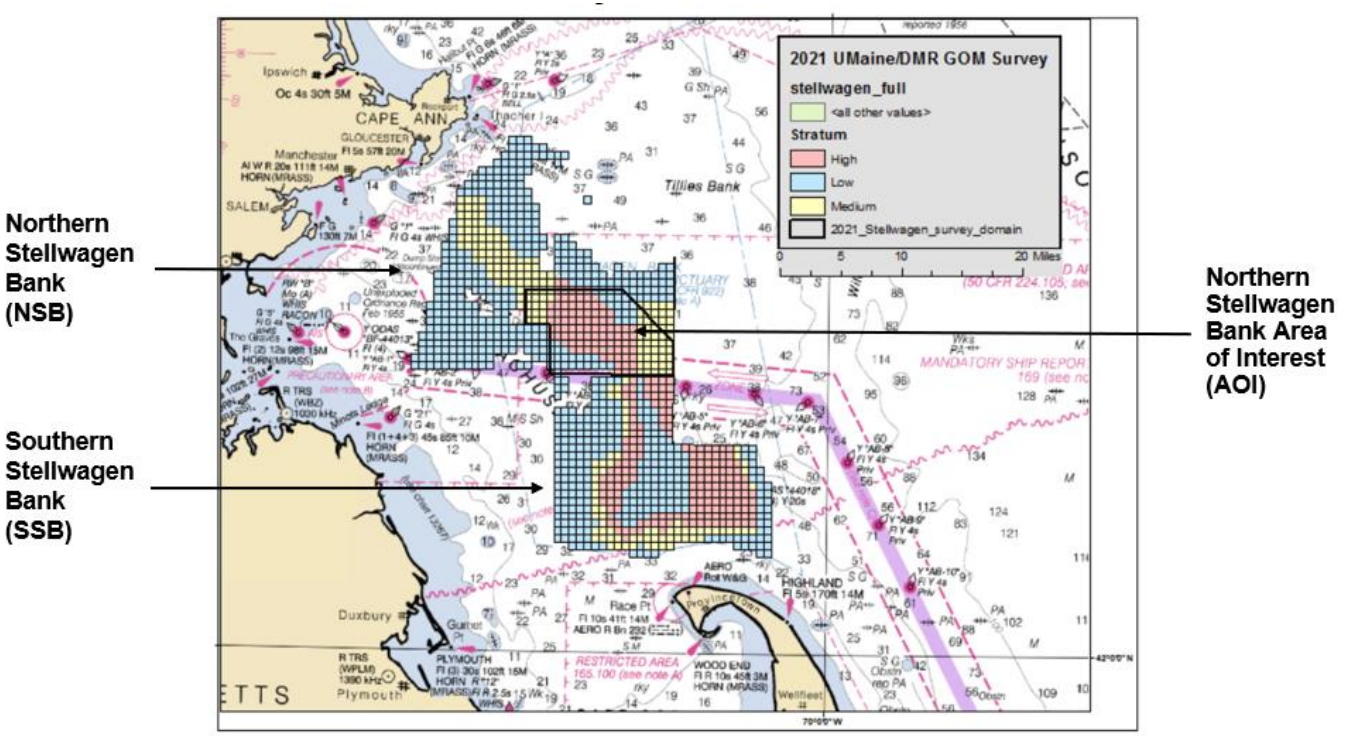
NMFS Survey

- Two cruises with HabCam v4 on R/V Sharp. (6/8 – 6/17 & 6/26 – 7/3)
  - 89 dredge tows in Great South Channel, Northern and Southern Flanks, CAI, CAII-N
  - HabCam coverage of the Great South Channel, Northern Flank, NLS-West, CAI sliver, CAII-N (708nm, 2.5 million images, ~43,700 annotated, annotation rate 1:50)



ME DMR/UMaine Survey

- Dredge survey of Stellwagen region of the Gulf of Maine in June and July
  - 178 dredge tows, with 76 in the area of interest on Stellwagen in NGOM
  - 5min tows at 3.5kts, 7' unlined drag, with 2" rings and 5" twine top, rock chains



Combined Survey Biomass Estimates

		Dredge				DropCam				Habcam				Mean				F33 Projections		
Region	Subarea	Num	Bmsmt	SE	MeanWt	Num	Bmsmt	SE	MeanWt	Num	Bmsmt	SE	MeanWt	Num	Bmsmt	SE	MeanWt	Num	Bmsmt	%Change
GB	CL1ACC					65	1254	634	19.2					65	1254	634	19.2	78	896	40.0%
GB	CL1-Sliver	37.8	792	55	20.0	131	1125	382	8.6	113.0	1387	224	12.3	93.9	1101	149	11.7	76	878	25.4%
GB	CL-2(N)	177.7	4958	1418	27.9	246	1,886	727	14.1	282.0	7371	103	26.1	235.2	4738	532	20.1	335	5375	-11.8%
GB	CL-2SE	353.7	5942	409	16.7	753	9464	2634	12.6	283	3947	429	13.9	463.2	6451	900	13.9	892	7251	-11.0%
GB	CL-2SW	452.4	11852	1684	26.3	608	14724	2578	24.2	397	9970	682	25.1	485.8	12182	1051	25.1	1296	28145	-56.7%
GB	CL2Ext	767.8	13602	1581	18.0	1093	18983	2720	17.4	890	14724	829	16.6	916.9	15770	1084	17.2	1279	17984	-12.3%
GB	SF	741.3	13125	1574	17.7	734	11516	2829	15.7	707	11398	729	16.1	727.4	12013	1106	16.5	876	7149	68.0%
GB	NLSAccN	27.9	886	85	30.8	83	1,830	926	22.0					55.5	1358	465	24.5	128	2019	-32.7%
GB	NLSAccS-Deep	1953	22546	6276	11.5	2012	23009	9662	13.1	1285	17,333	728	13.5	1750.0	20963	3848	12.0	2551	31835	-34.2%
GB	NLS-W	8.1	228	50	28.0	10	202	1,658	20.4	17	400	171	23.9	11.7	277	556	23.6	38	364	-24.0%
GB	NF	117.8	1710	639	14.3	94.0	1,886	727	14.1	296.0	4295	361	14.5	169.3	2630	344	15.5	203	1806	45.6%
GB	GSC-N	222.0	3936	924	17.7	246	5716	1269	23.2	141.0	3024	394	21.5	203.0	4225	539	20.8	460	3154	34.0%
GB	GSC-M	54.2	1091	167	20.1	190	4872	1200	25.7					122.1	2981	606	24.4	277	2225	34.0%
GB	GSC-S	16.0	353	156	22.1	103	1775	553	17.2	66.0	1396	21	21.1	61.7	1175	192	19.0	140	877	34.0%
GB	**TOTAL**	**4929.7**	**81021**	**7121**	**16.4**	**6368**	**98242**	**11441**	**15.4**	**4477**	**75245**	**1665**	**16.8**	**5361**	**87118**	**4601**	**16.3**	**8628**	**109958**	**-20.8%**
MAB	BI	93.0	1564	274	17.1					32	815	66	25.5	62.5	1190	141	19.0	141	1294	-8.1%
MAB	LI	436.5	8302	367	19.3					613	13463	269	22.0	524.8	10883	228	20.7	1362	11454	-5.0%
MAB	NYB	414.8	6043	446	14.4					332	4919	851	14.8	373.4	5481	480	14.7	488	6234	-12.1%
MAB	MA inshore	34.0	513	44	15.2					52	1479	130	28.5	43.0	996	69	23.2	60	555	79.6%
MAB	HCSAA	89.4	2019	94	22.8					206	4453	239	21.6	147.7	3236	128	21.9	475	5507	-41.2%
MAB	ET Open	81.0	1814	71	22.7					97	1664	272	17.2	89.0	1739	141	19.5	510	9526	-81.7%
MAB	ET Flex	33.1	812	58	27.1					32	677	190	21.1	32.6	745	99	22.9	400	5884	-87.3%
MAB	DMV	17.5	115	15	7.2					13	163	80	12.3	17.5	115	41	6.6	322	719	-84.0%
MAB	VIR	3.6	16	2	4.6									3.6	16	2	4.4	61	146	-89.0%
MAB	**TOTAL**	**1203**	**21198**	**654**	**17.6**					**1377**	**27633**	**996**	**20**	**1294**	**24400**	**596**	**18.9**	**3819**	**41319**	**-40.9%**
NGOM	Stellwagen AOI	86	1427	668	21	112	1508	501	13.4					99.0	1468	418	14.8			
NGOM	Jeffreys					15	268	48	17.7					15	268	48	17.7			
NGOM	Platts					7	108	24	14.7					7	108	24	14.7			
NGOM	Ipswich					10	143	28	14.7					10	143	28	14.7			
NGOM	**TOTAL**	**86**	**1427**	**668**	**21**	**144.0**	**2027**	**505**	**14.1**					**131.0**	**1987**	**422**	**15.2**			
TOTAL	**TOTAL**	**6219**	**103646**	**7182**	**16.7**	**6512**	**100269**	**11453**	**15.4**	**5854**	**102878**	**1940**	**17.6**	**6786**	**113504**	**4659**	**16.7**	**12447**	**151277**	**-25.0%**

DAS Usage

Year	DAS
1994	204
1995	182
1996	182
1997	164
1998	142
1999	120
2000	120
2001	120
2002	120
2003	120
2004	42
2005	40
2006	52
2007	51
2008	35
2009	42
2010	38
2011	32
2012	34
2013	33
2014	31
2015	30.86
2016	34.55
2017	30.41
2018	24
2019	24
2020	24
2021	24

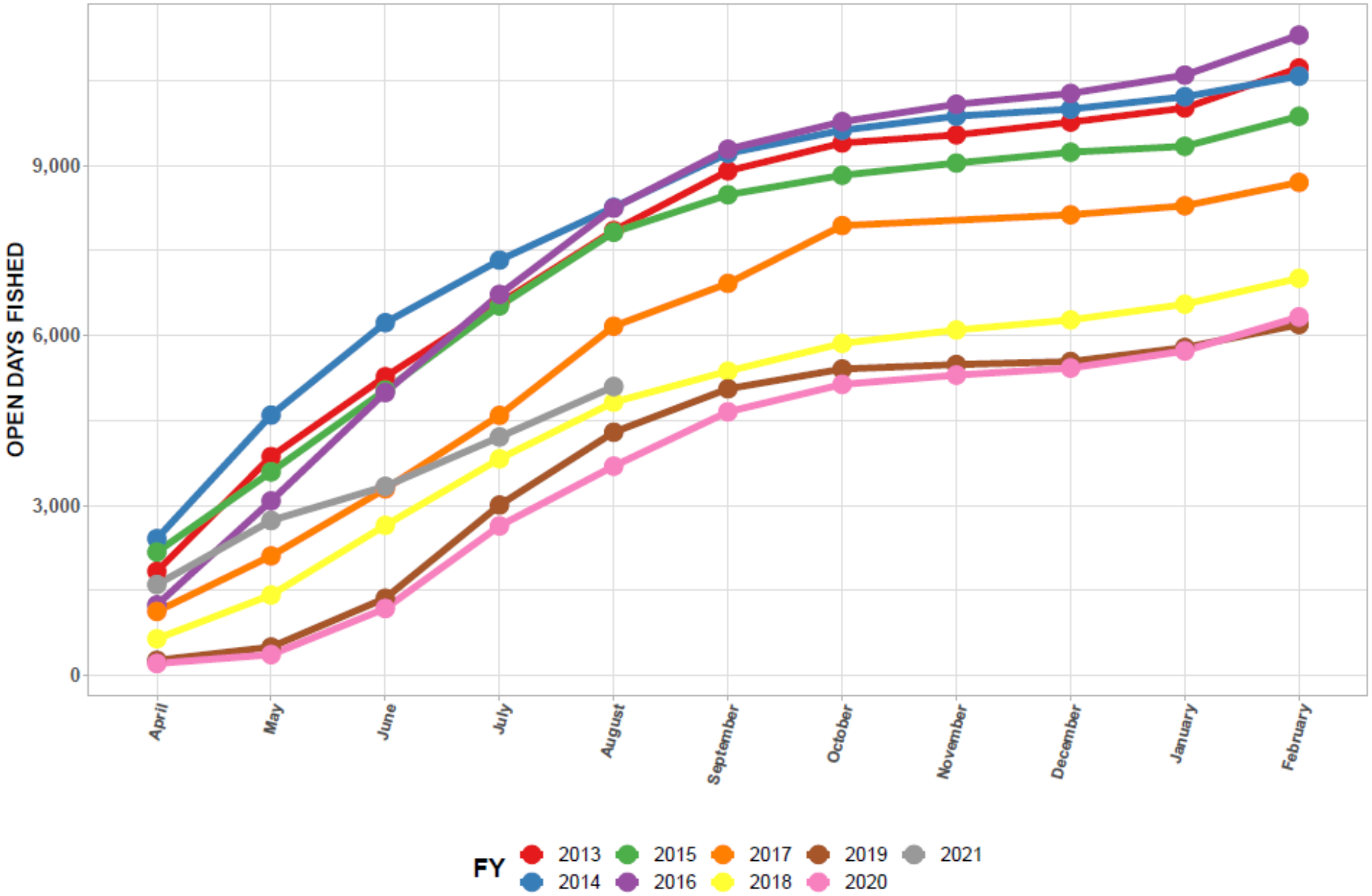


Figure 11: Cumulative open area days fished, for 2013-2021

Monthly Landings – 2021 in yellow

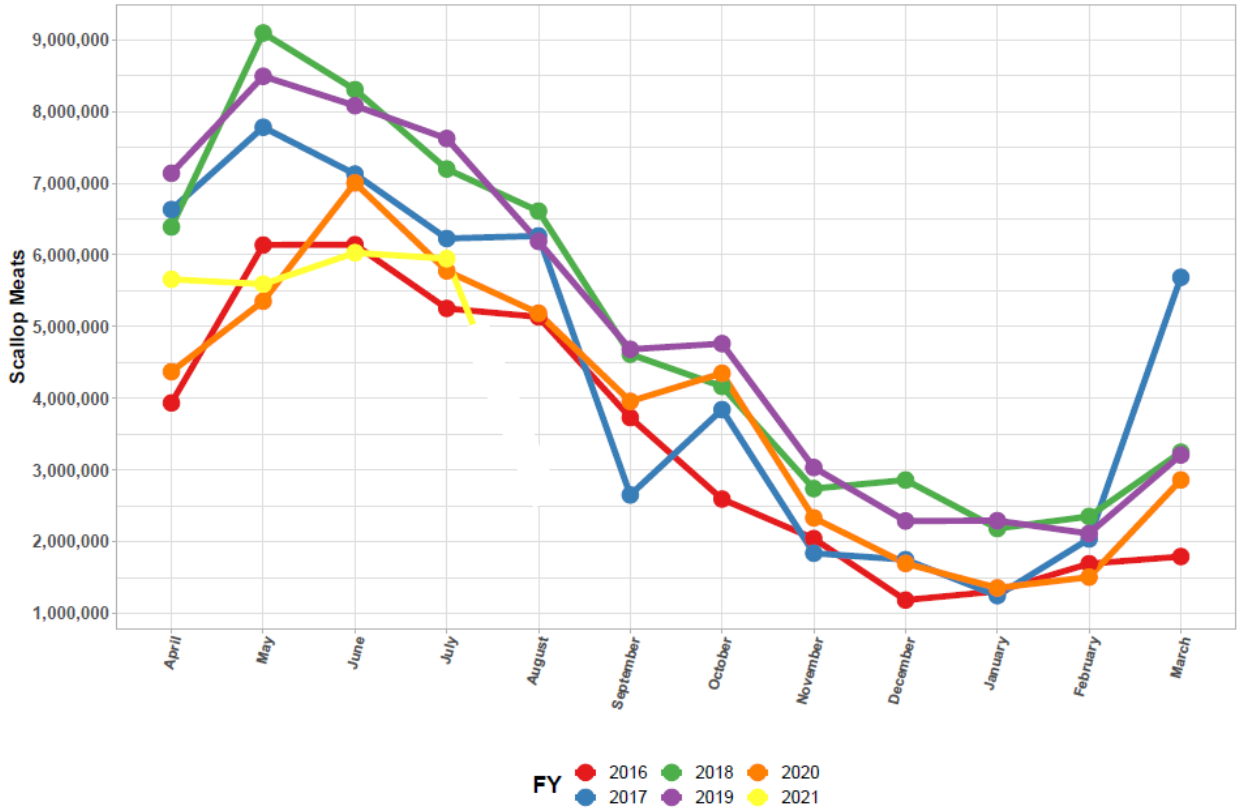


Figure 9: Total scallop landings by month, 2016-2021

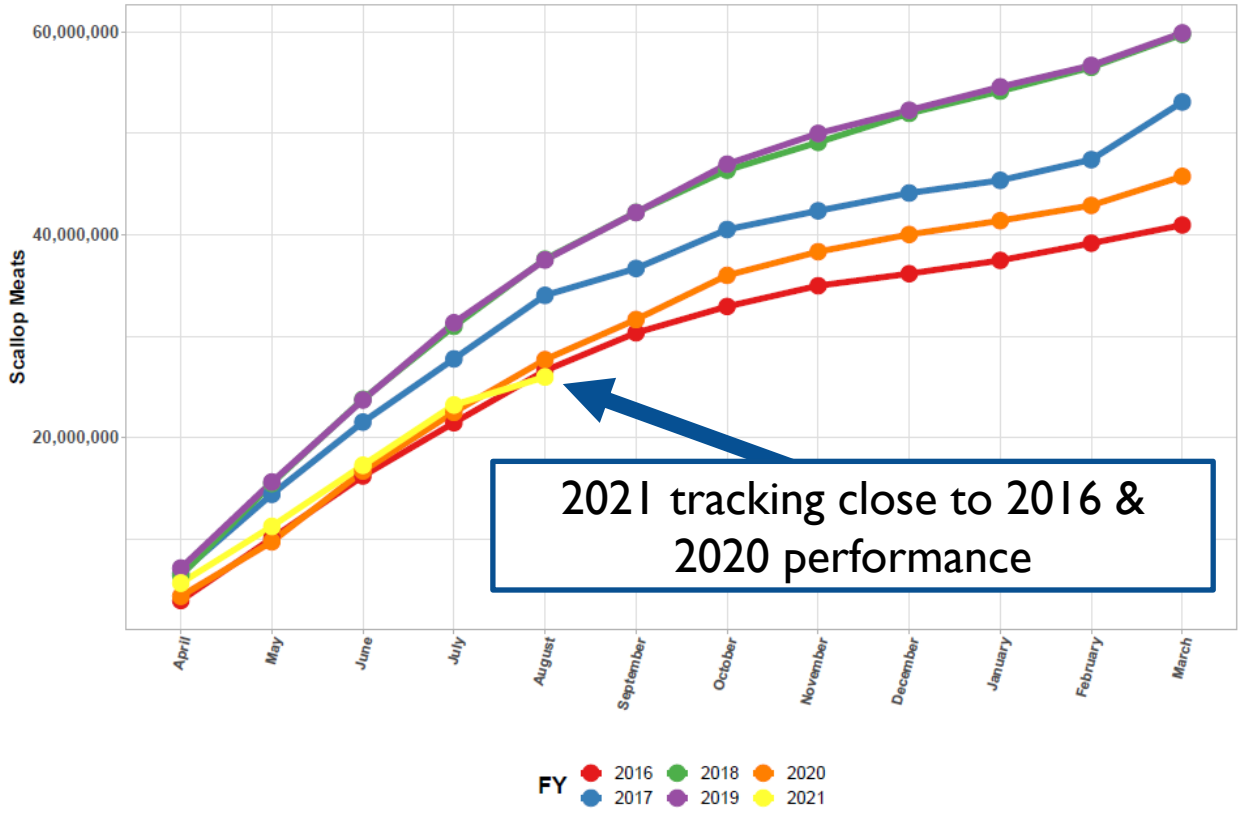


Figure 10: Cumulative landings, by month, for 2016-2021

LPUE

FW33 Estimate:
1,799 pounds per day

As of Sept 15, 2021

FY2021
Open Area Fishing:

- 12,734,905 lbs
- 5,704 DAS used
- LPUE: 2,233

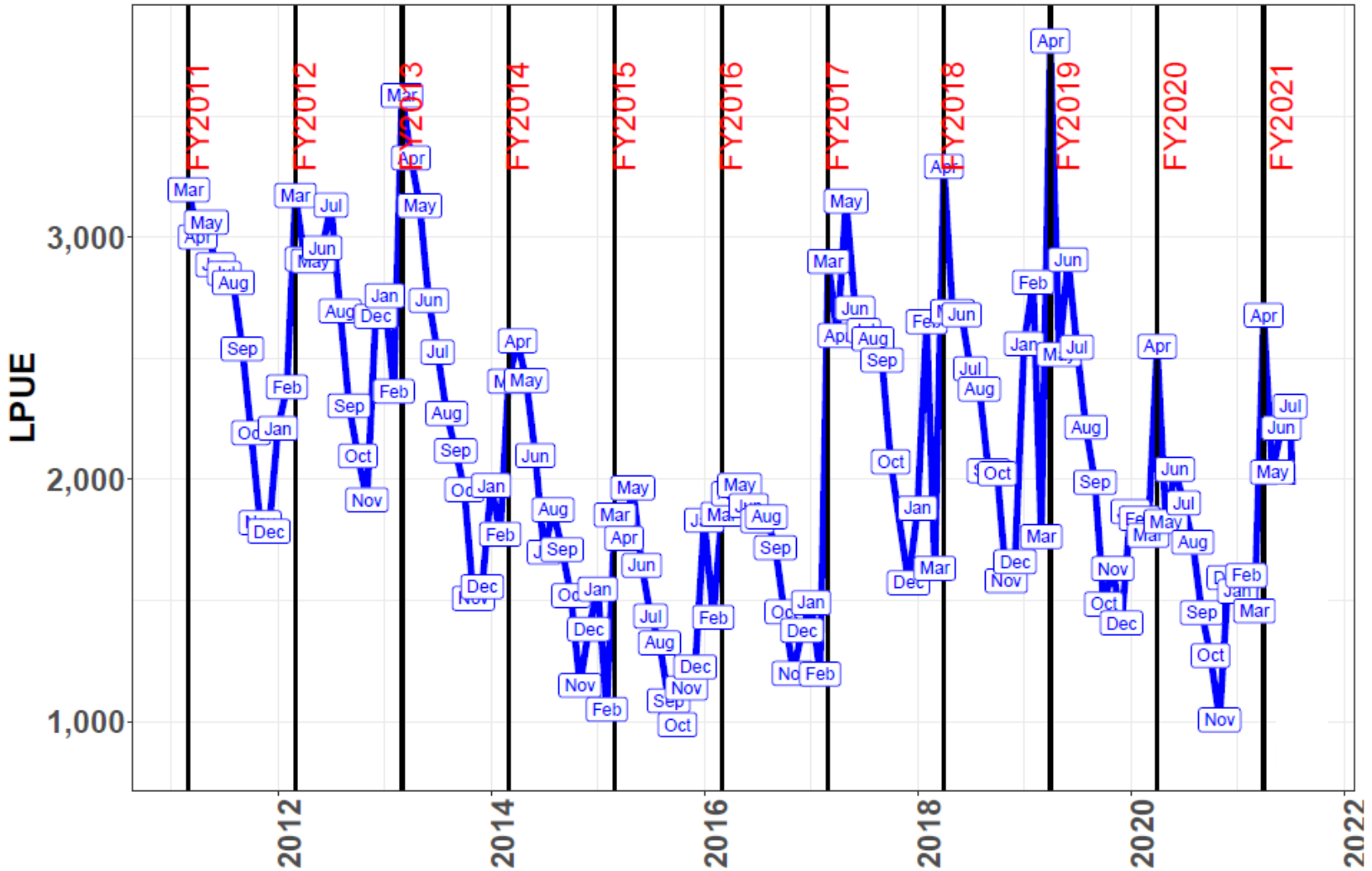


Figure 8: LPUE by month for Open Area Limited Access fishing. LPUE was calculated by dividing monthly scallop meat total landings by the days-at-sea charged.

Reports Run on: 2021-09-16

For data reported through 2021-09-15

Quota Period: *2021*

Quota period dates: *April 1, 2021 to March 31, 2022*

Limited Access sub-ACL

	OPEN	CA I	CA II 2020	CA II 2021	MID-ATL	NLS-N	NLS-S Deep	MONTHLY TOTAL	CUMULATIVE TOTAL	% OF SUB-ACL (61,713,184 lb)	% OF APL (36,613,116 lb)
April	4,299,144	0	155,043	0	660,231	21,400	150,369	**5,286,187**	**5,286,187**	**8.57%**	**14.44%**
May	2,296,208	32,707	337,033	276,530	1,601,384	74,292	614,622	**5,232,776**	**10,518,963**	**17.04%**	**28.73%**
June	1,333,733	17,998	61,043	2,354,623	697,435	23,035	933,946	**5,421,813**	**15,940,776**	**25.83%**	**43.54%**
July	2,066,053	0	0	1,958,997	346,524	0	973,784	**5,345,358**	**21,286,134**	**34.49%**	**58.14%**
August	1,935,906	0	0	1,331,864	237,933	0	799,565	**4,305,268**	**25,591,402**	**41.47%**	**69.9%**
September	803,861	0	0	0	129,229	0	491,761	**1,424,851**	**27,016,253**	**43.78%**	**73.79%**
TOTAL	**12,734,905**	**50,705**	**553,119**	**5,922,014**	**3,672,736**	**118,727**	**3,964,047**	**27,016,253**			

Observer Kept and Discard Data Update

NOAA FISHERIES

NEFSC/FMRD/FMO

NEFMC

Joint Advisory Panel

and Plan Development Team Meeting

September 21, 2021

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Industry Funded Scallop Lead

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Observer Sampling - Quick Review

Observed Haul: A haul for which weights are collected for all species, both kept and discarded. Discard information includes everything brought up in the gear: vertebrate and invertebrate animals, rocks, plants, and debris.

A minimum of 50% of hauls from scallop trips should be observed, with watches that capture fishing activity at all time periods throughout the trip. Every attempt is made to observe all hauls on General Category trips.

Length frequencies of shell heights should be obtained at least every other haul, from alternating dredges. Approximately 100 scallops should be measured alternating between kept and discarded dispositions.

Discard Ratio Calculation:

1. All observed hauls where catch was present.
2. Observed kept scallop meat weight converted to round using 8.33 conversion factor. If round scallops were kept (rare case Gen Cat) then round weight used.
3. Observed discard round weights used and in the case of discarded meat (nematodes/grey) 8.33 conversion factor applied.
4. Discard Ratio = Discarded Round (lbs) / Kept Round (lbs)

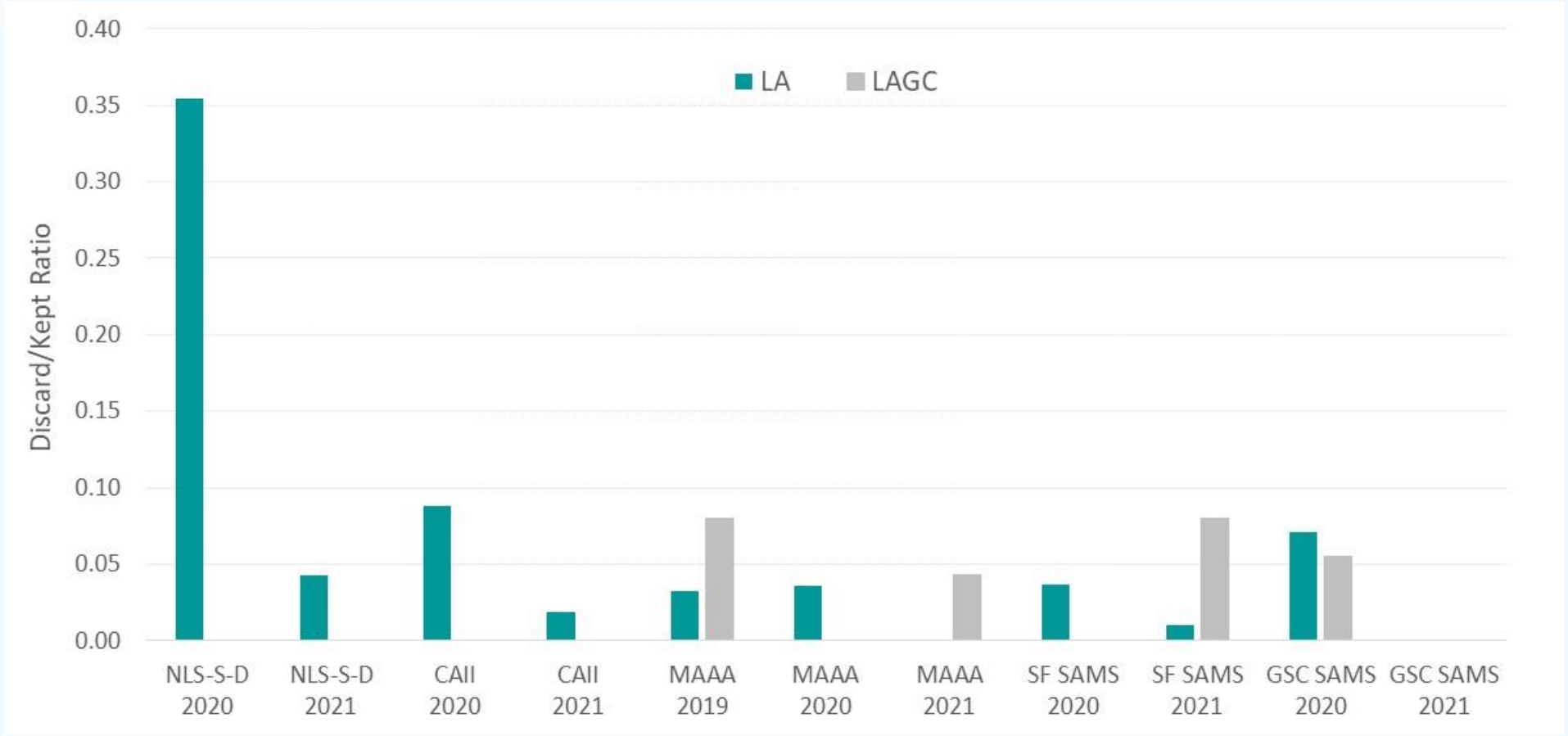
Limited Access

	Fishing Year	Number of Observed Trips	Number of Observed Tows	Obs Kept Meat Wt (lbs)	Obs Kept Meat Wt / Tow (lbs)	Obs Kept Round Wt (lbs)	Obs Discard Meat Wt (lbs)	Obs Discard Round Wt (lbs)	Total Obs Disc Round Wt (lbs)	Obs Disc Round Wt / Tow (lbs)	Discard Ratio (Disc/Kept)
NLS-South-Deep AA	2020	6	205	31,816	155	265,027	-	93,895	93,895	458	0.3543
NLS-South-Deep AA	2021	2	32	7,695	240	64,099	-	2,756	2,756	86	0.0430
CA II AA	2020	3	228	19,718	86	164,251	-	14,540	14,540	64	0.0885
CA II AA	2021	1	18	2,749	153	22,899	-	425	425	24	0.0186
MAAA	2019	92	2411	818,486	339	6,817,988	9,396	141,831	220,100	91	0.0323
MAAA	2020	37	1529	295,607	193	2,462,406	1,864	73,013	88,540	58	0.0360
MAAA	2021	5	377	35,127	93	292,608	-	36	36	0	0.0001
SF SAMS (Open)	2020	10	446	103,220	231	859,823	-	31,313	31,313	70	0.0364
SF SAMS (Open)	2021	2	135	27,010	200	224,993	-	2,288	2,288	17	0.0102
GSC SAMS (Open)	2020	17	686	56,710	83	472,394	-	33,353	33,353	49	0.0706
GSC SAMS (Open)	2021	0	0								

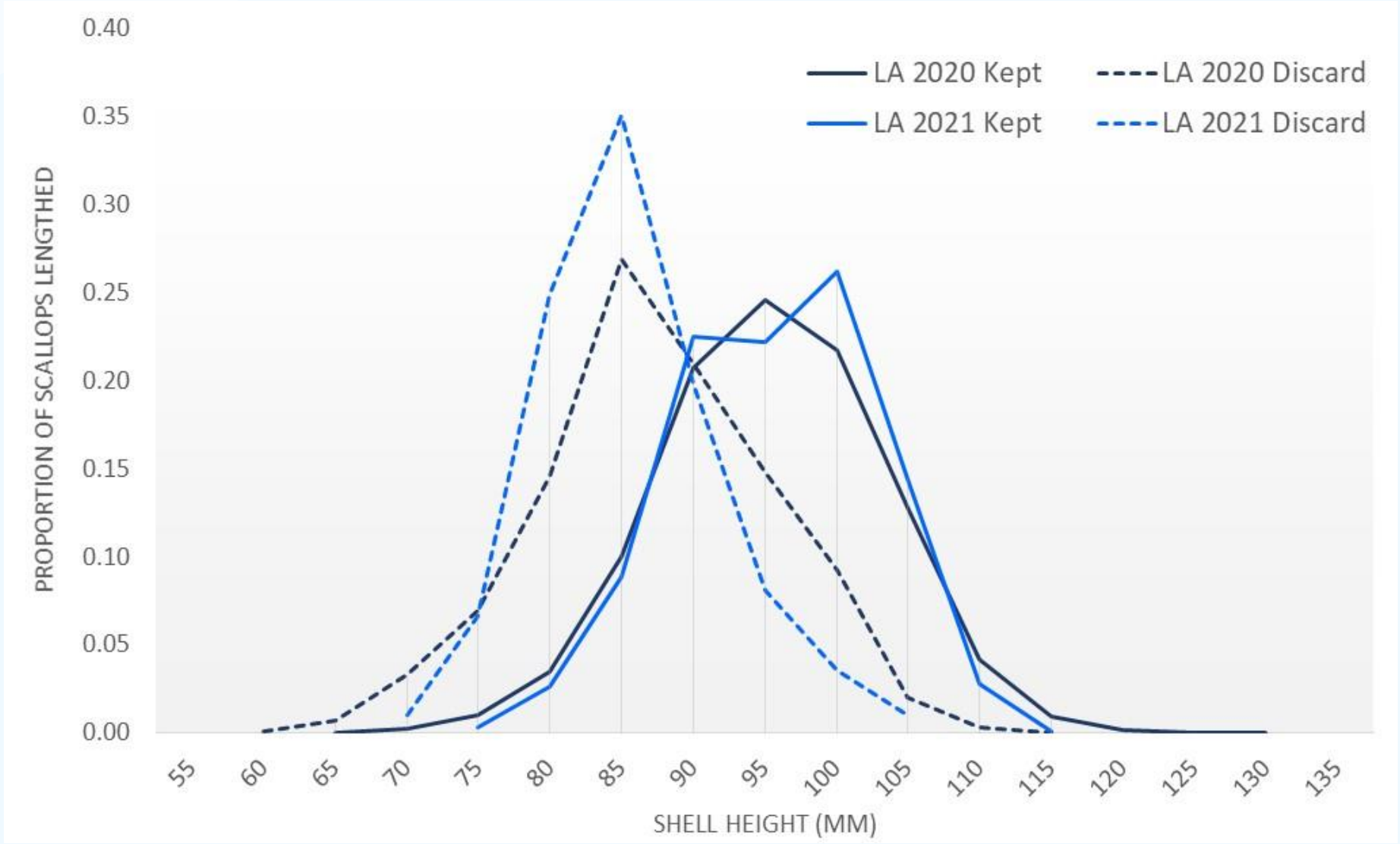
Limited Access General Category

	Fishing Year	Number of Observed Trips	Number of Observed Tows	Obs Kept Meat Wt (lbs)	Obs Kept Meat Wt / Tow (lbs)	Obs Kept Round Wt (lbs)	Obs Discard Meat Wt (lbs)	Obs Discard Round Wt (lbs)	Total Obs Disc Round Wt (lbs)	Obs Disc Round Wt / Tow (lbs)	Discard Ratio (Disc/Kept)
MAAA	2019	59	225	45,914	204	382,464	94	29,804	30,587	136	0.0800
MAAA	2020	0	0								
MAAA	2021	1	24	619	26	5,156	-	221	221	9	0.0429
GSC SAMS (Open)	2020	6	83	3,133	38	26,098	-	2,083	2,083	25	0.0798
GSC SAMS (Open)	2021	1	2	174	87	1,449	-	80	80	40	0.0552

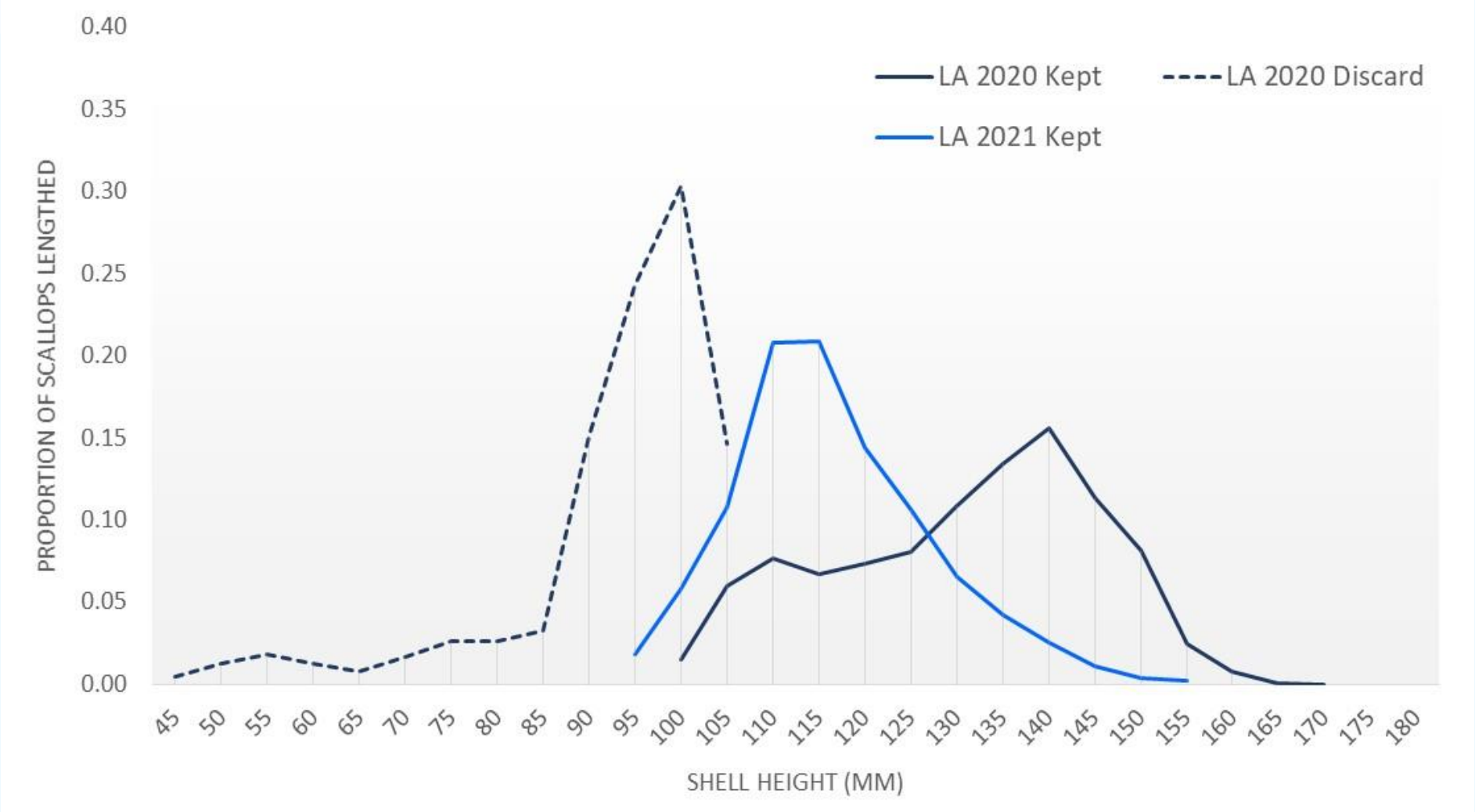
Discard Ratios
(Discarded/Kept)



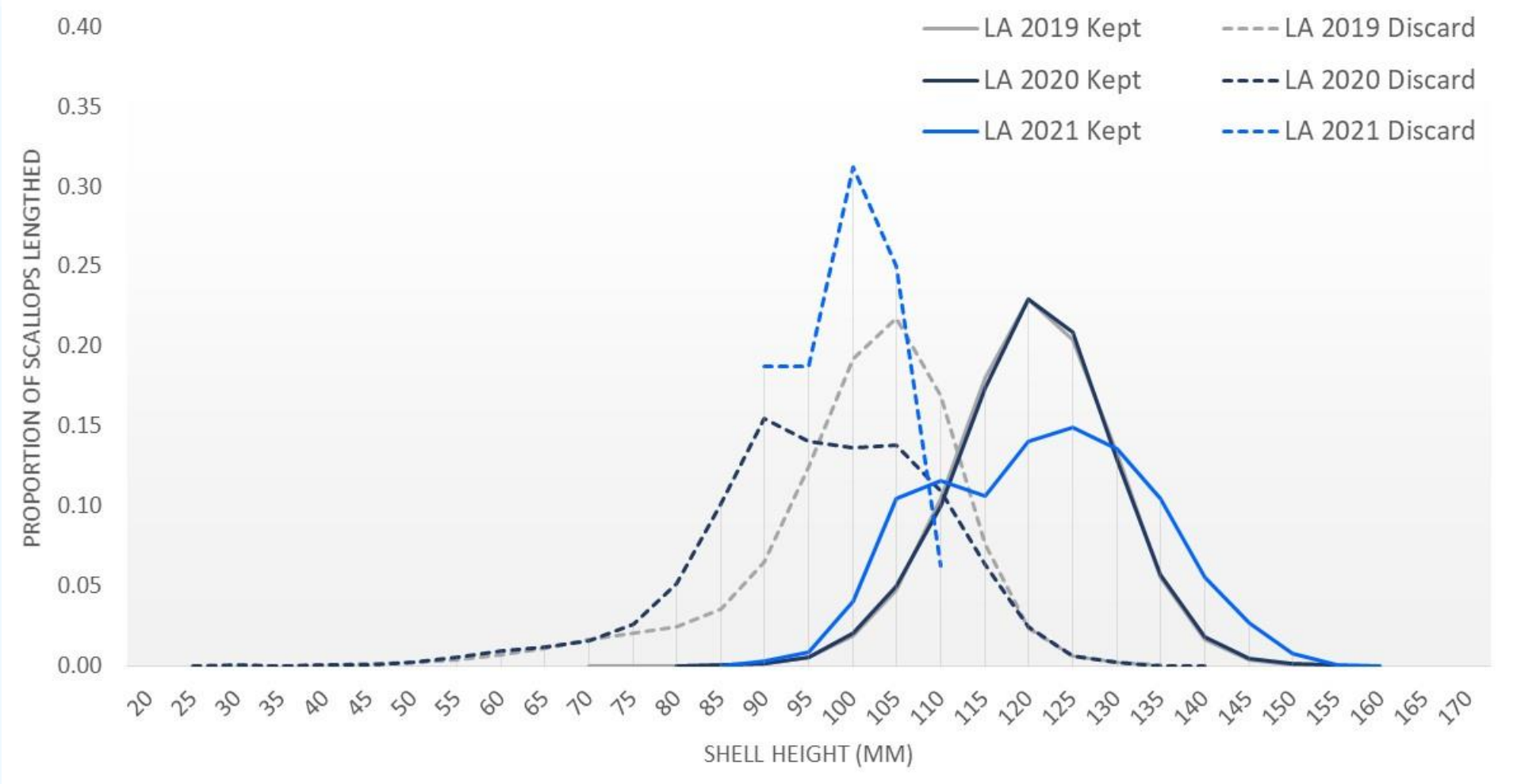
2020-2021 Nantucket Lightship South Deep AA Observed Shell Height Length Frequency



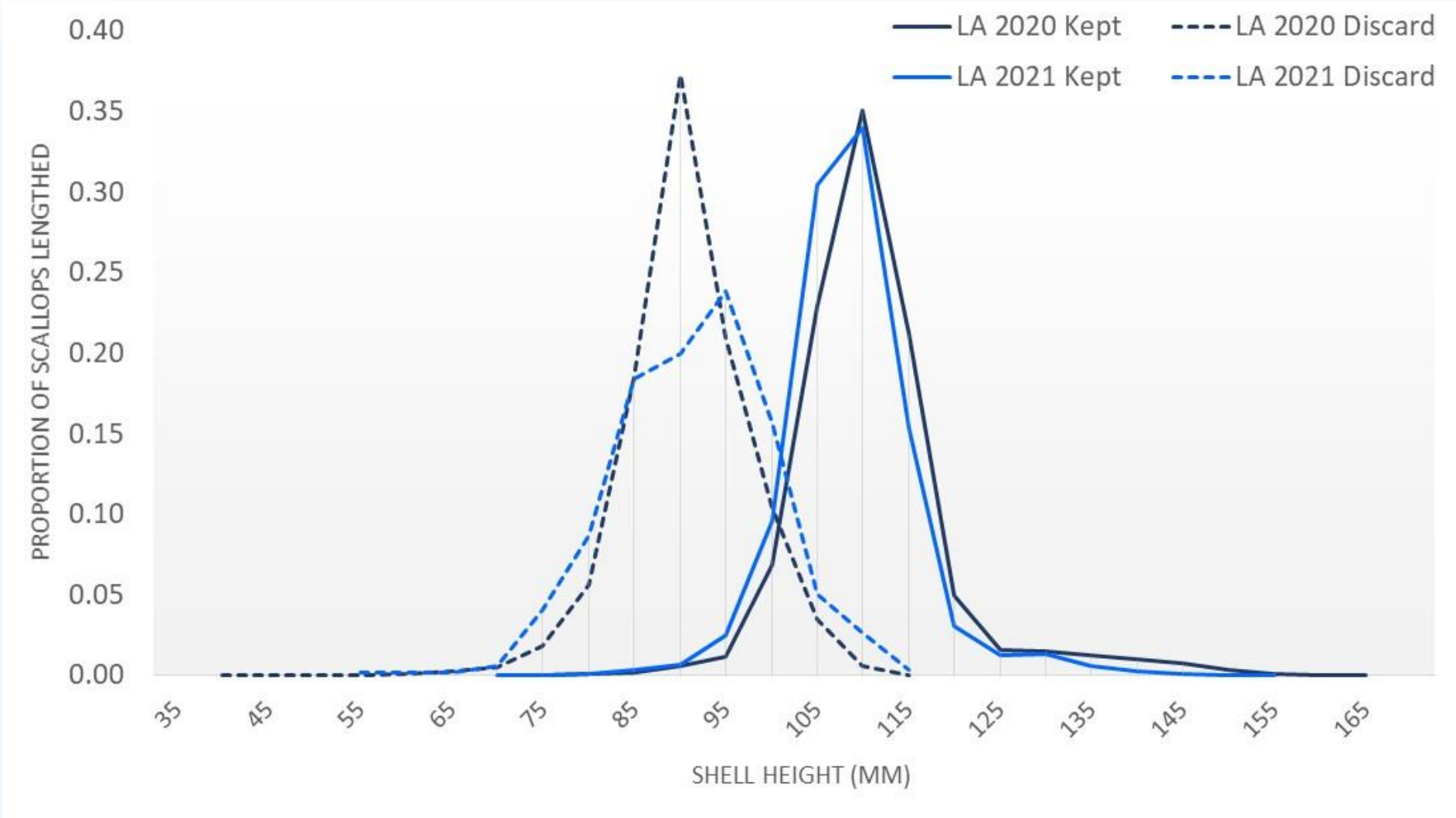
2020-2021 Closed Area II AA
Observed Shell Height Length Frequency



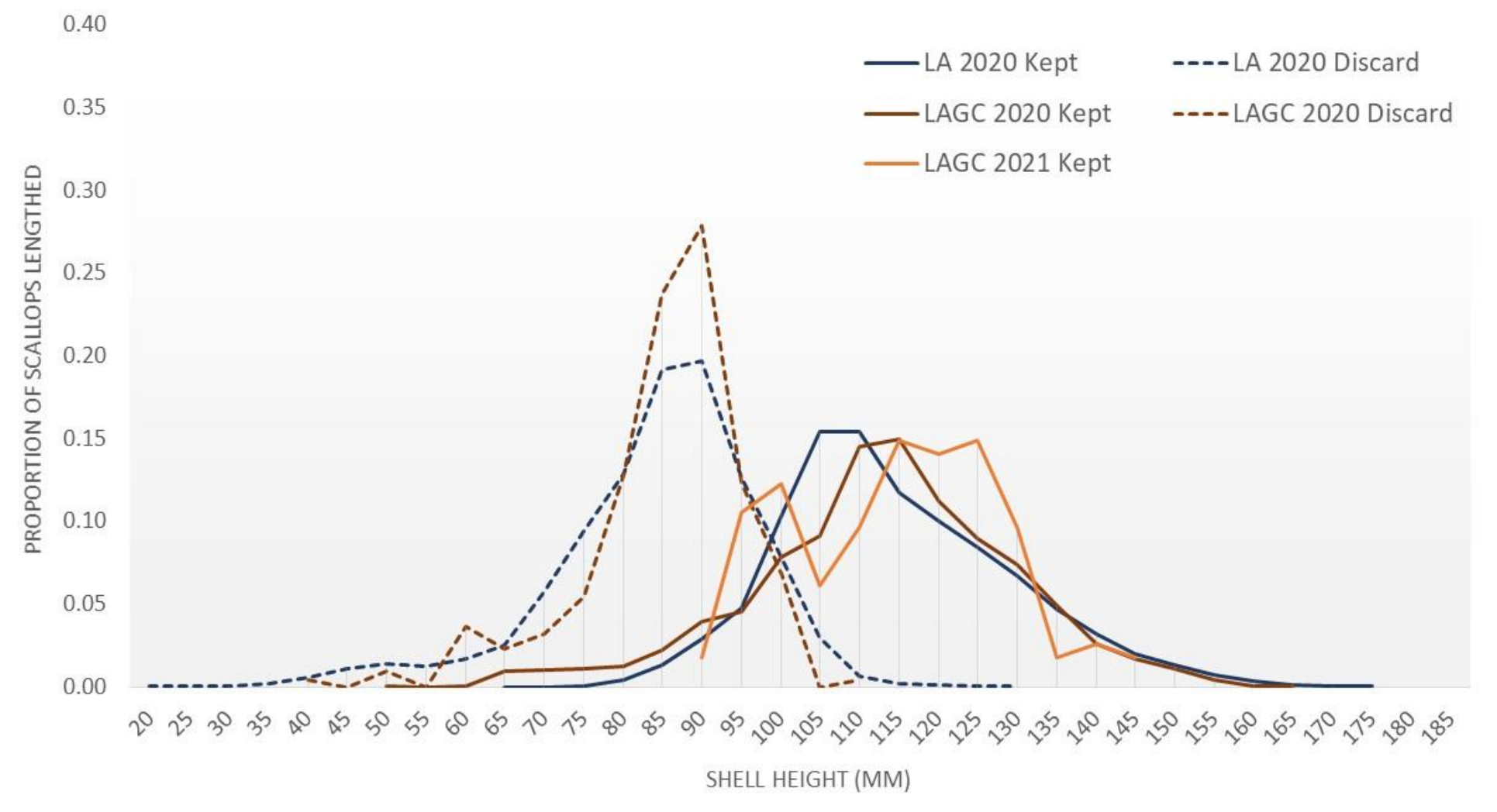
2019-2021 Mid-Atlantic AA
Observed Shell Height Length Frequency



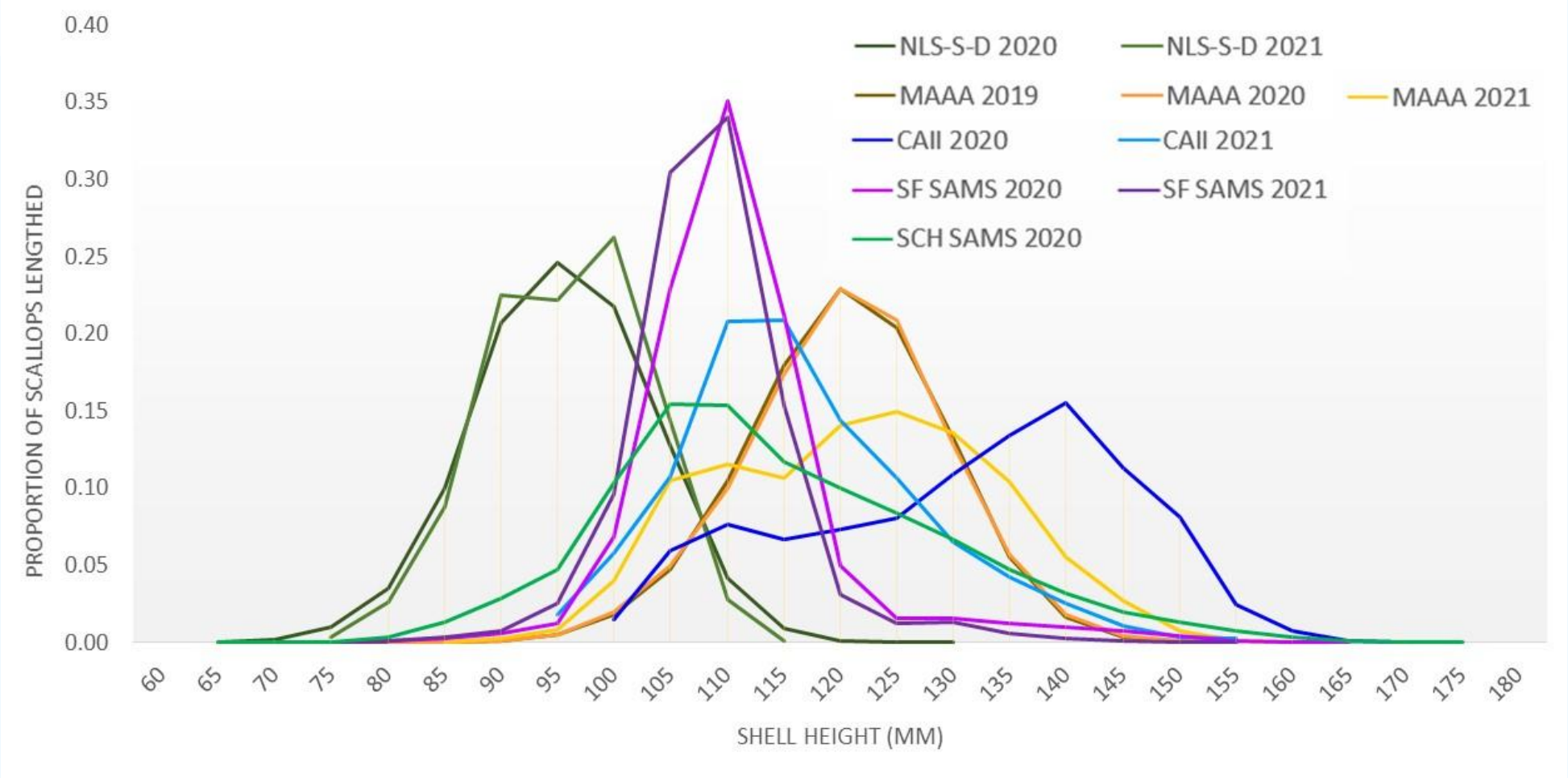
2020-2021 Southern Flanks SAMS area (Open)
Observed Shell Height Length Frequency



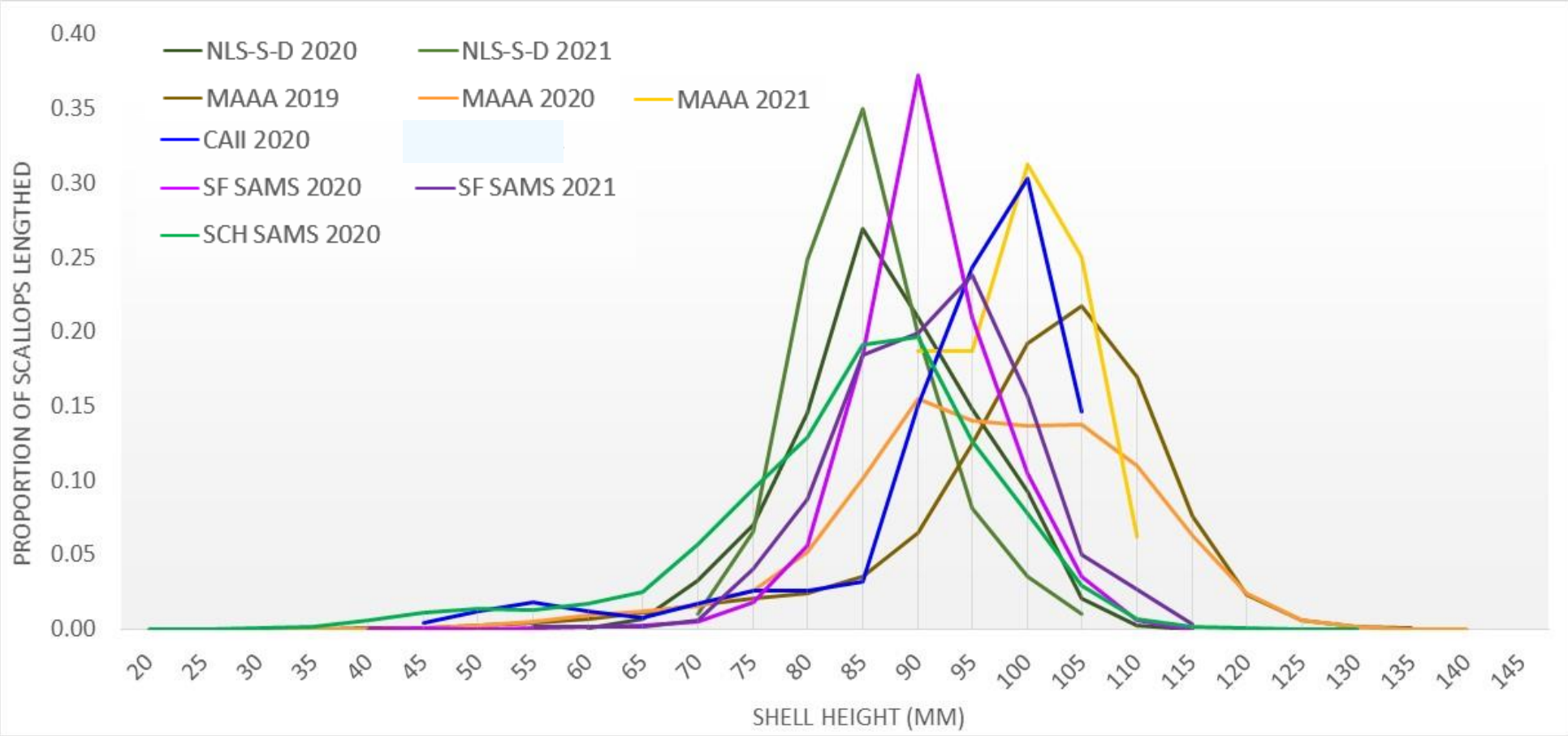
2020-2021 Great South Channel SAMS area (Open)
Observed Shell Height Length Frequency

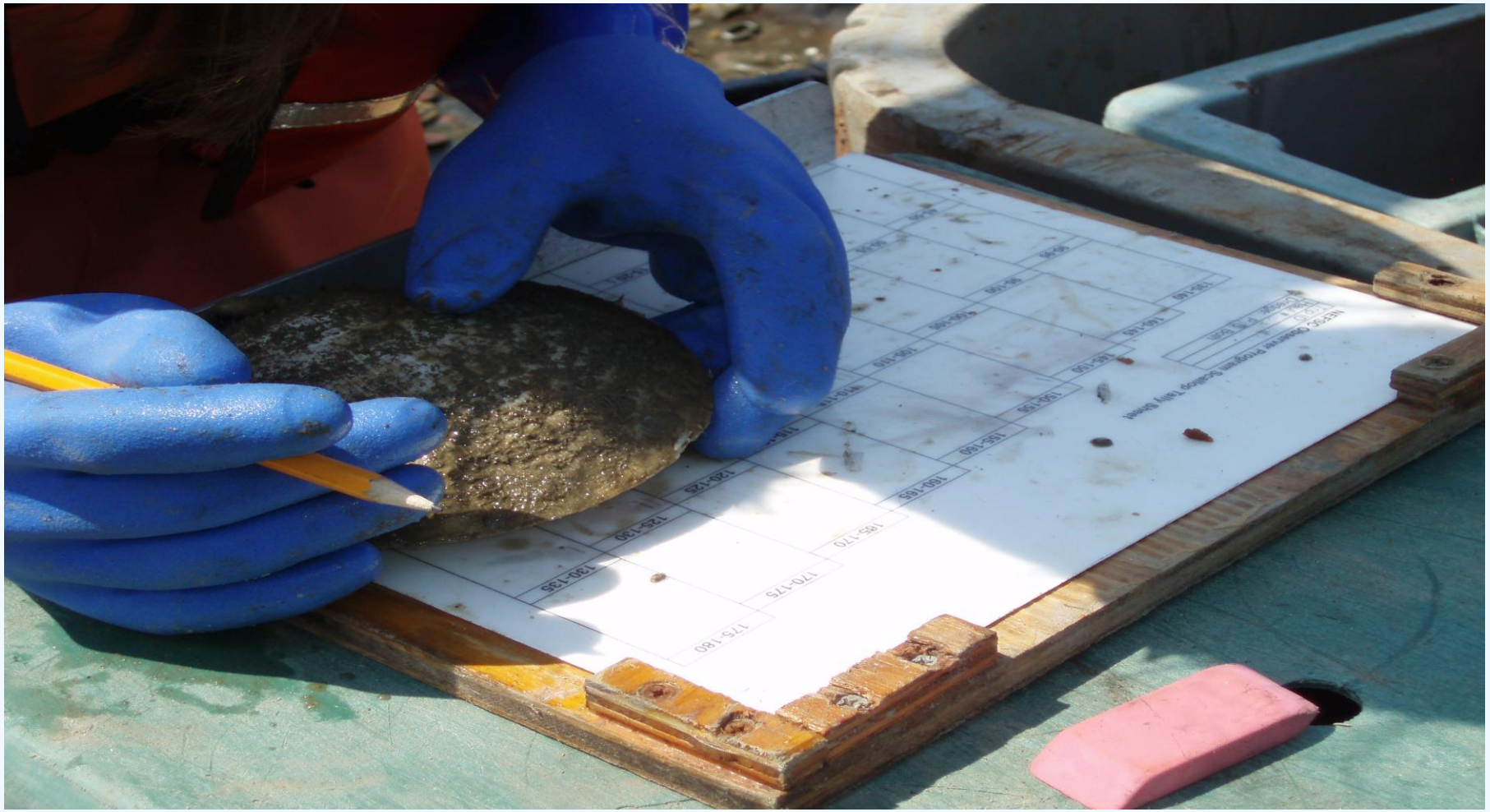


Combined Kept Scallop
Observed Shell Height Length Frequency



Combined Discard Scallop
Observed Shell Height Length Frequency





~ ACKNOWLEDGMENTS ~

IFS observers and providers
Scallop industry vessel operators
NEFSC operations, training, data quality, and data management staff

Preliminary Projections

Document 2b.

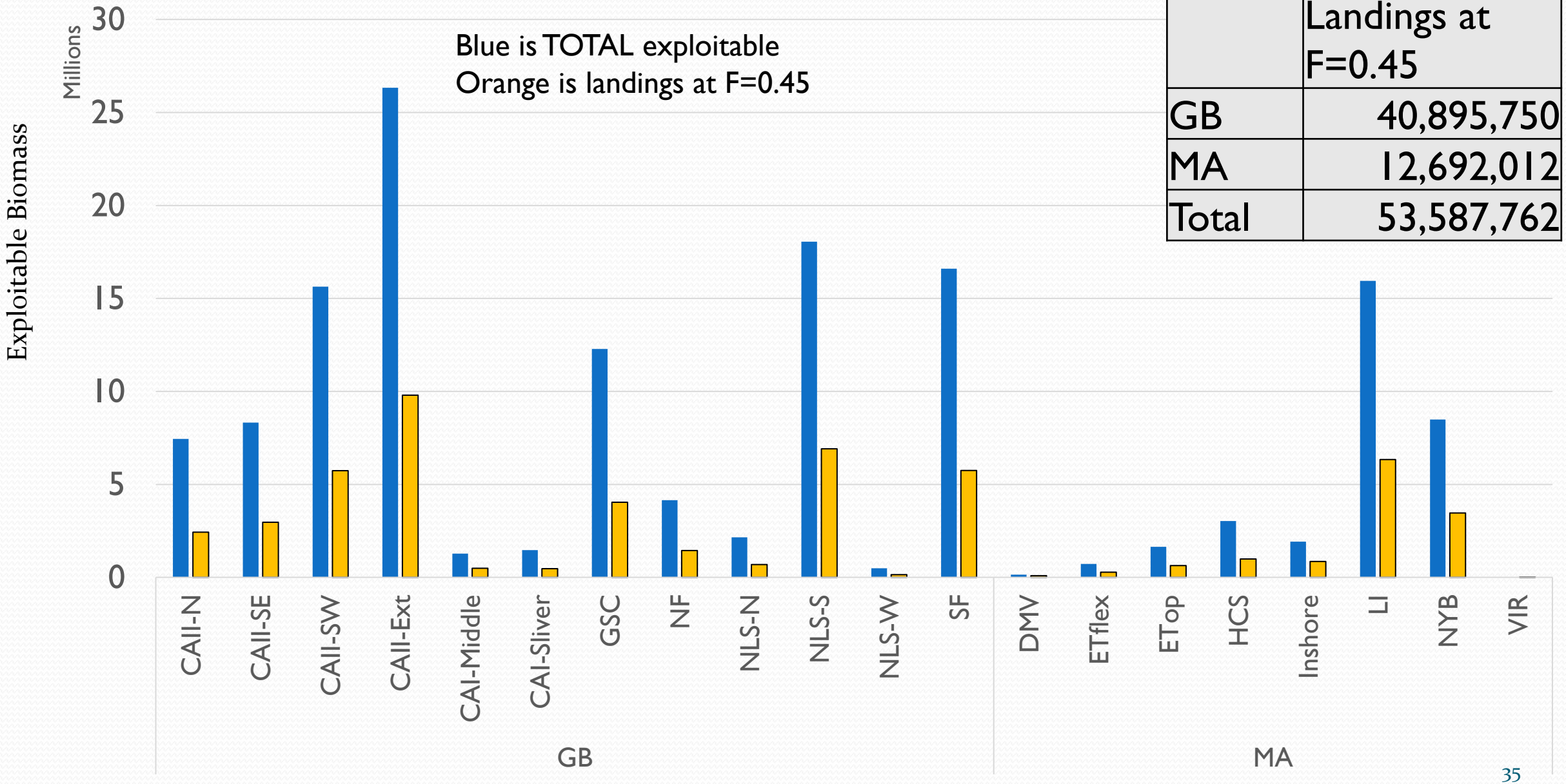
Preliminary FY2022 Projections. Total biomass (Bms22), Exploitable Biomass (EBms22), and Landings fishing at F=0.45

A FT LA access area trip at 18,000 lbs per vessel is ~6 million lbs of exploiatble biomass.

Region	2021 Status	Bms22	EBms22	EBMs22_LBS	Land@F=0.45	Land@F=0.45_LBS
CAI-Sliver	AA	1294	666	1,468,279	215	473,994
CAI-Middle	AA	1455	580	1,278,681	221	487,222
CAII-N	Closed	6185	3378	7,447,215	1105	2,436,108
CAII-SE	Closed	8975	3776	8,324,655	1344	2,963,013
CAII-SW	AA	10378	7094	15,639,593	2605	5,743,042
CAII-Ext	AA	17231	11945	26,334,217	4446	9,801,752
NLS-W	Open	336	224	493,835	66	145,505
NLS-N	Closed	1564	977	2,153,916	313	690,047
NLS-S	AA	17536	8187	18,049,245	3139	6,920,310
GSC	Open	9386	5572	12,284,157	1831	4,036,664
NF	Open	2884	1885	4,155,714	654	1,441,823
SF	Open	10979	7529	16,598,604	2611	5,756,270
Total-GB		**88203**	**51813**	114,228,112	**18550**	40,895,750
HCS	AA	2829	1378	3,037,970	449	989,876
ETop	AA	2243	747	1,646,853	291	641,545
ETflex	AA	1400	331	729,730	129	284,396
VIR	Open	73	4	8,818	8	17,637
DMV	Open	437	69	152,119	44	97,003
NYB	Open	6024	3852	8,492,206	1573	3,467,871
LI	Open	10879	7233	15,946,035	2876	6,340,495
Inshore	Open	1650	872	1,922,431	387	853,189
Total-MA		**25535**	**14486**	31,936,163	**5757**	12,692,012
TOTAL		**113738**	**66299**	146,164,275	**24307**	53,587,762

NOTE: NGOM projections will be part of the OFL and ABC and are still in development.

2022 Exploitable Biomass by SAMS Area (Millions of Lbs)



	Landings at F=0.45
GB	40,895,750
MA	12,692,012
Total	53,587,762

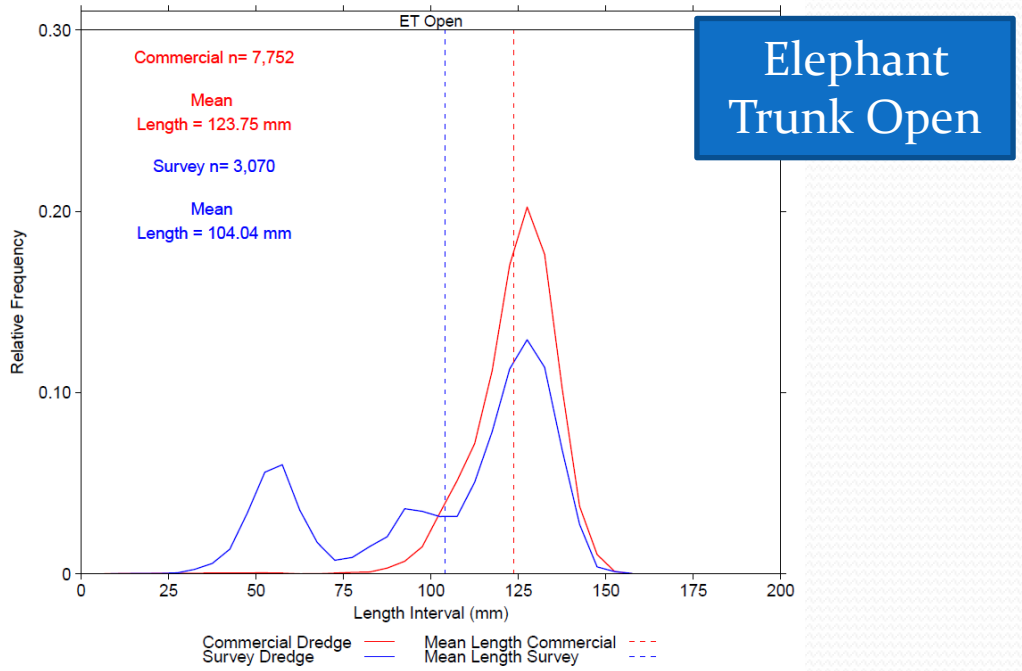
Mid-Atlantic Access Area

Sub-Area	Projection of Exploitable Biomass 2022	Year Classes in the Area	Recruitment?	Average Size (2021 Dredge surveys)
Hudson Canyon	3 mil. Lbs (1,378 mt)	2013 YC	No	Survey: 106 mm Comm: 117 mm
Elephant Trunk Flex	.73 mil. Lbs (331 mt)	2013 YC	No	Survey: 113 mm Comm: 125 mm
Elephant Trunk Open	1.6 mil. Lbs (747 mt)	2013 YC	No	Survey: 104 mm Comm: 124 mm

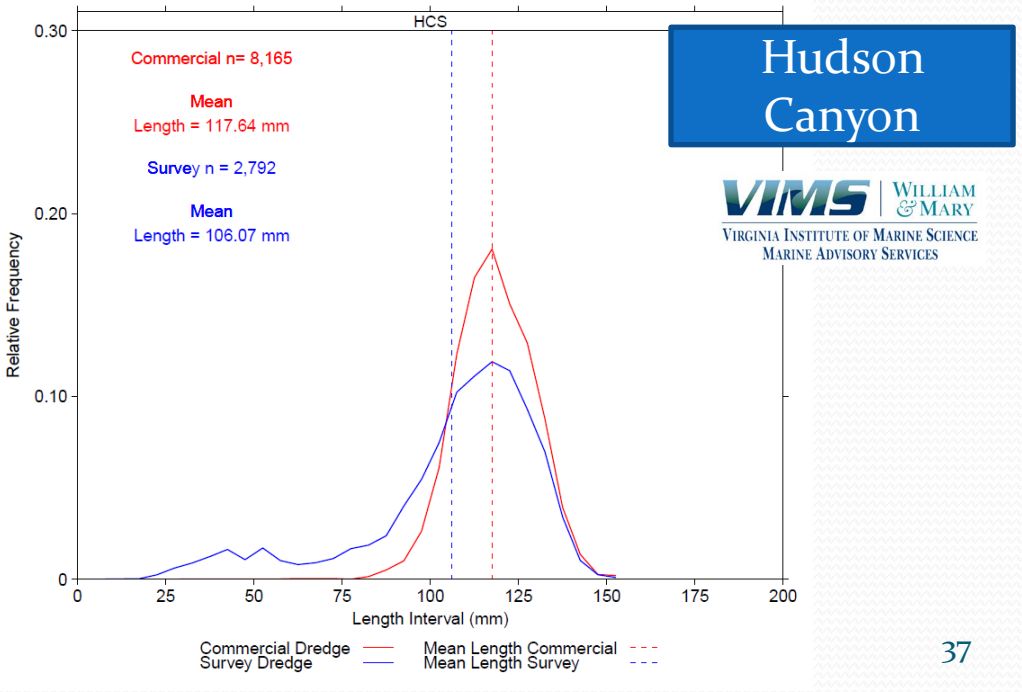
Outlook for 2022
F=0.45 is expected to result in 1.9 mil lbs of landings.

Mid-Atlantic Access Area

- 2021 Survey Data – Length frequencies
- PDT Input for 2022:
  - Blips of pre-recruits, but no signs of strong incoming YC.
  - Twilight of the exceptional 2013 YC in ET and HCS.
  - Biomass is down substantially.
  - Remaining scallop are 9 years old, limited growth potential.
  - Consider open bottom for FY2022, not enough biomass for access area fishing.



Elephant Trunk Open



Hudson Canyon

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Marine Advisory Services

Meat Quality

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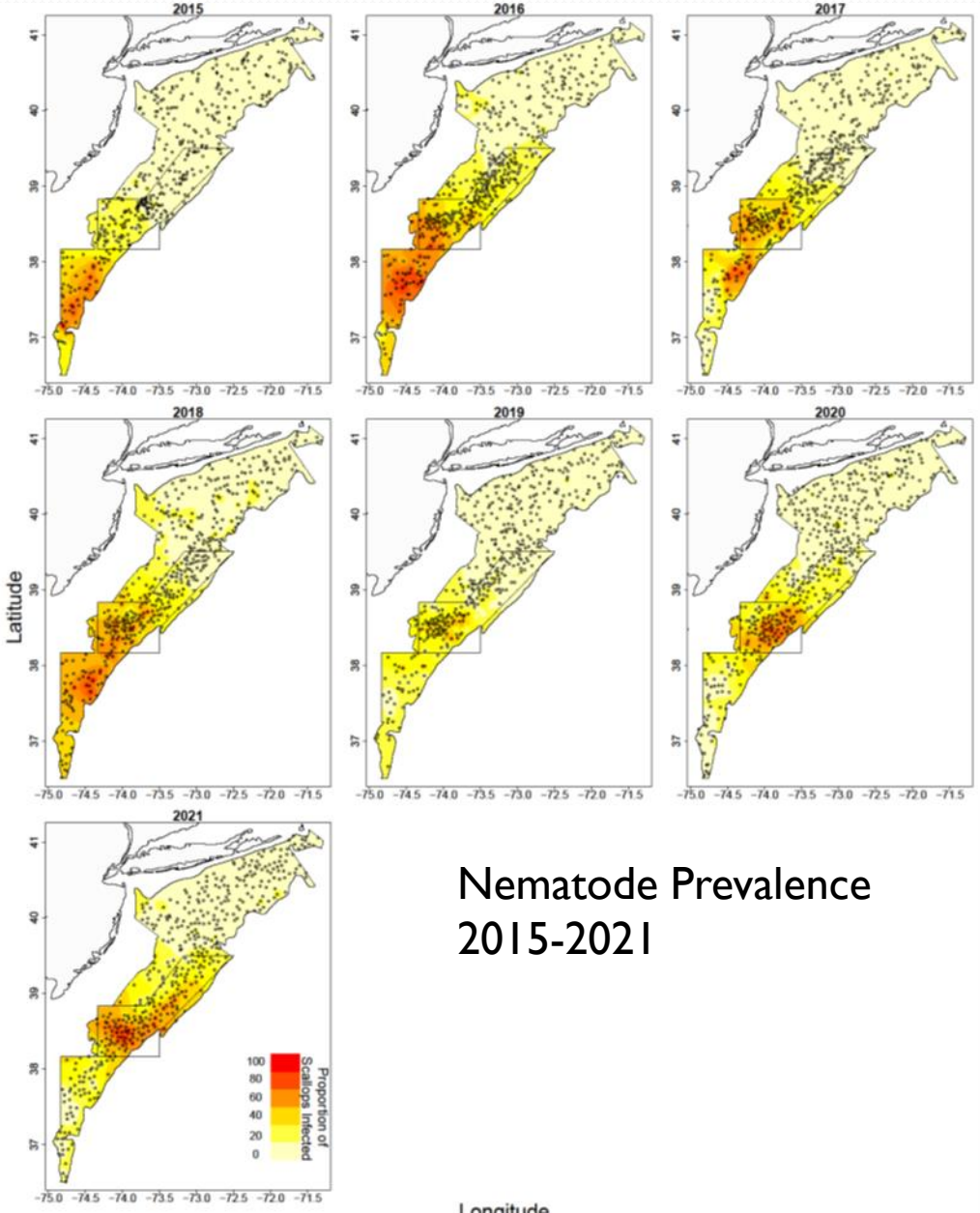
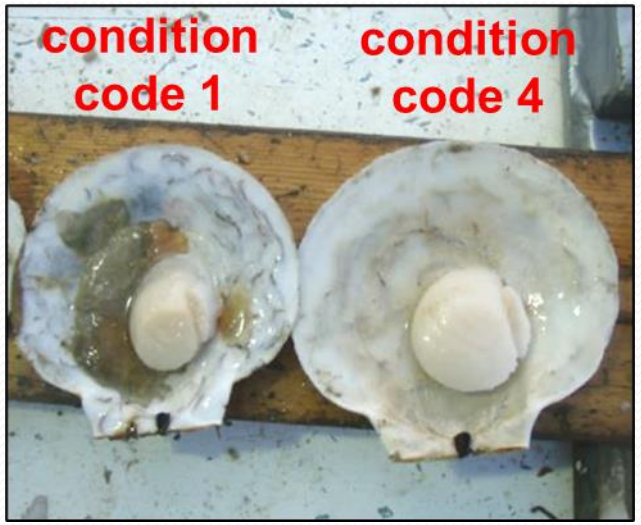
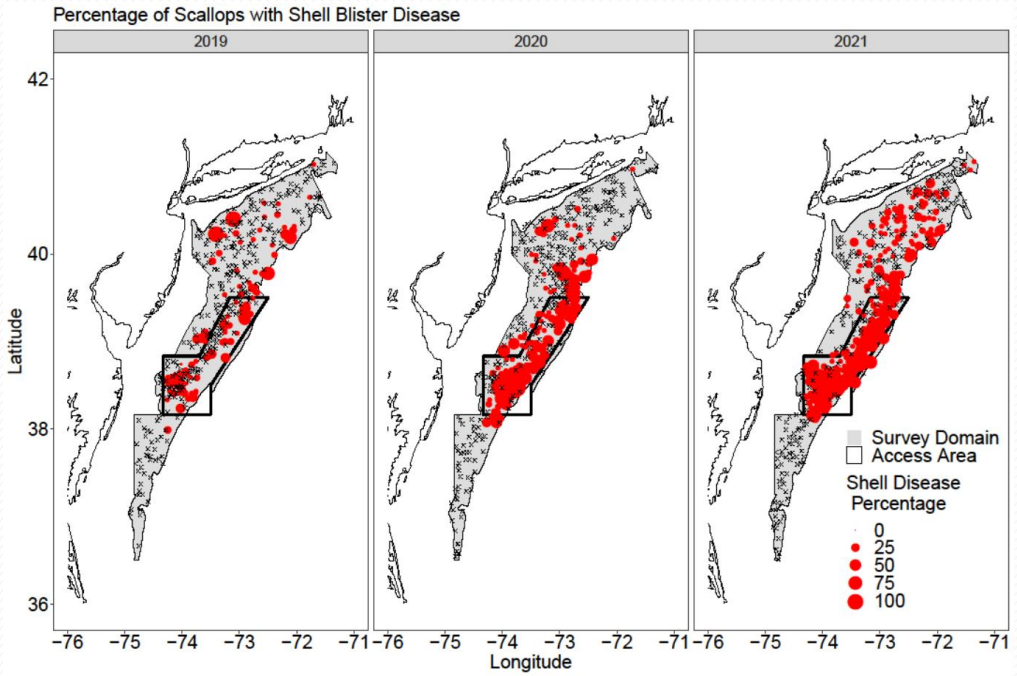
Marine Advisory Services



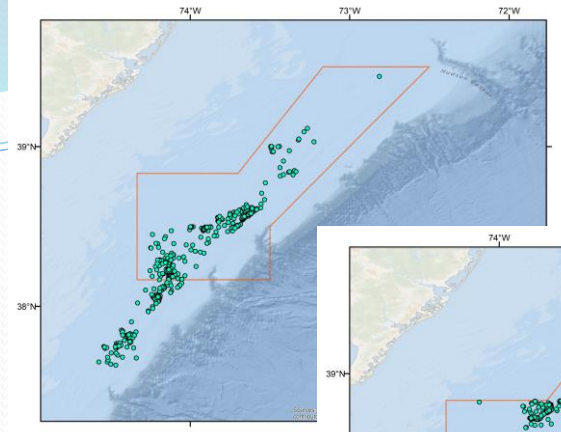
Nematode Prevalence
2015-2021

Shell Disease

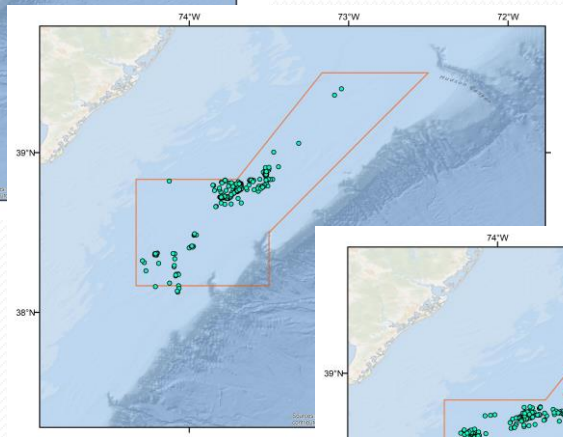




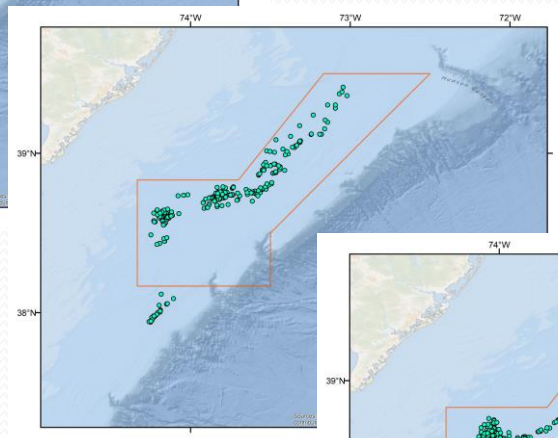
2016-2021 Observed hauls with grey meats/parasites in the Mid-Atlantic



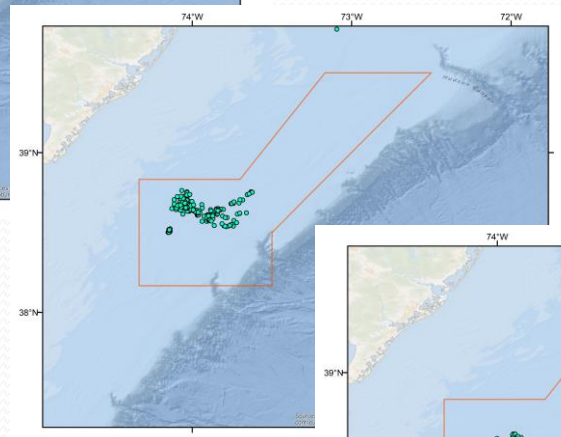
2016



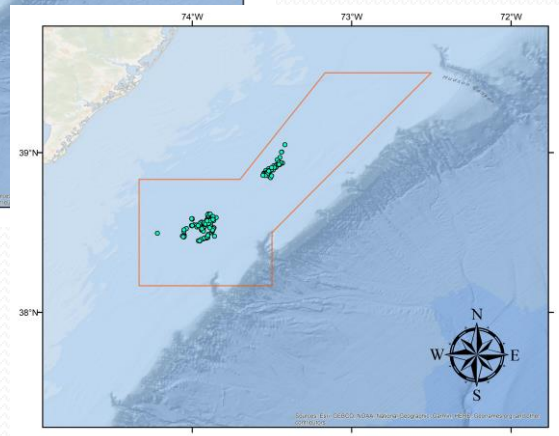
2017



2018

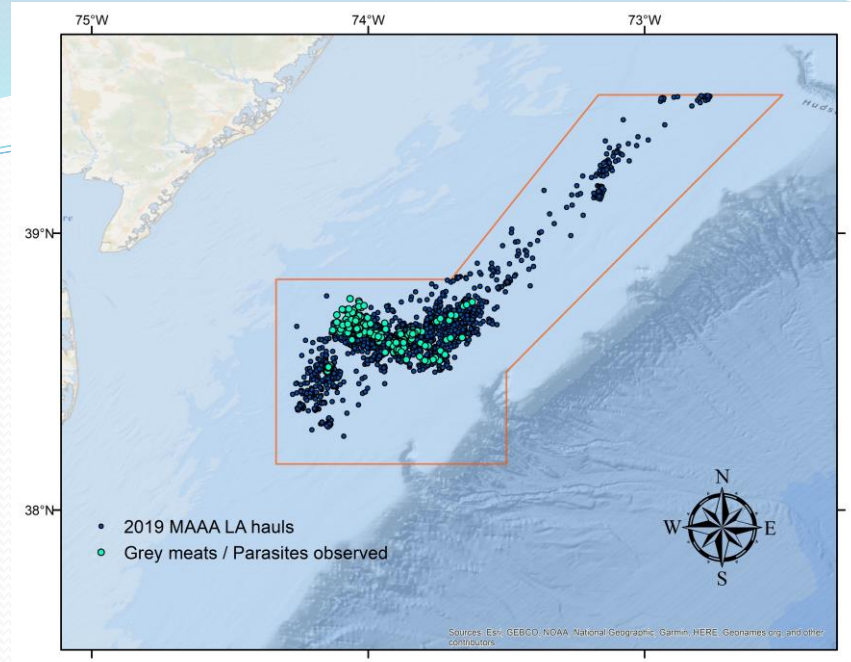


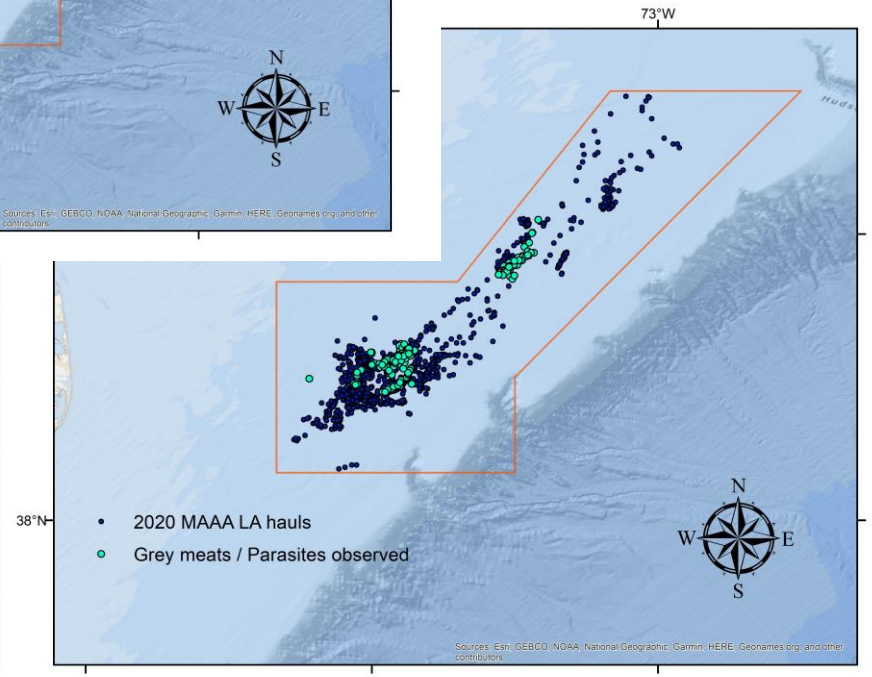
2019

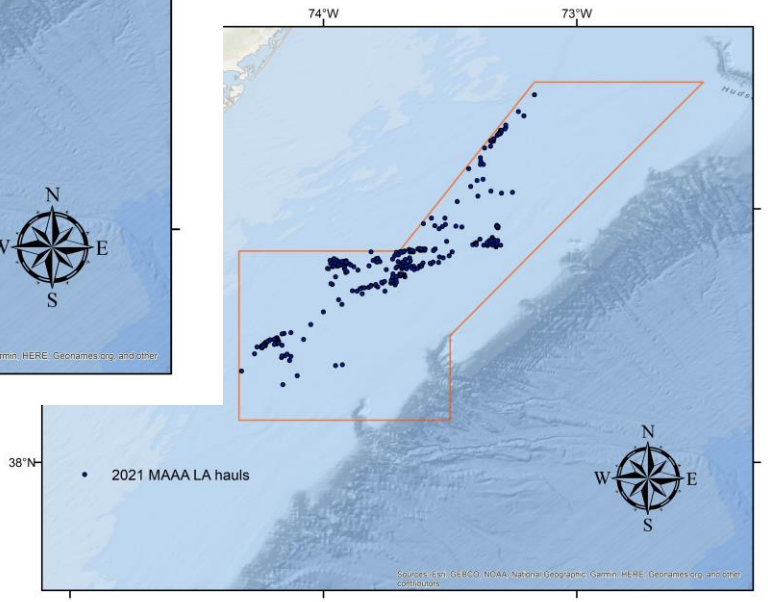


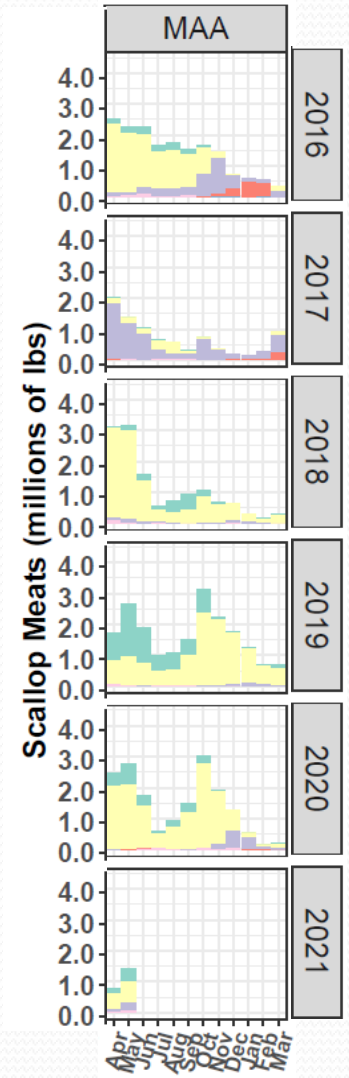
2020

2019-2021 Observed hauls and presence of grey meats/parasites in the Mid-Atlantic AA









Landings and Allocations in the Mid-Atlantic Access Area (2016 – 2021)

YEAR	Rotational Management	Max Allocated Pounds
2016	3 trips at 17,000 lbs, ET-Flex Closed	16.7 mil.
2017	2 trips, 1 in ET-Flex, 1 in rest of MAAA at 18k lbs	12 mil
2018	2 in MAAA 18k lbs	12 mil
2019	3 in MAAA 18k lbs plus 1 FLEX from CAI	18 mil + 6 mil FLEXed
2020	2 in MAAA at 18k lbs plus .5 FLEX from CAI	12 mil + 3 mil FLEXed
2021	1 in MAAA at 18k	6 mil
Total	13 trips, plus 1.5 FLEX trips to MAAA	76.7 Mil + 9 mil FLEXed ~86 mil total, plus RSA

Market Grade

10 AND UNDER COUNT
11–20 COUNT
21–30 COUNT
31–40 COUNT
41–50 COUNT
51–60 COUNT
61+ COUNT
UNCLASSIFIED

Mid-Atlantic Research

Dr. Dvora Hart and Dr. Han Chang

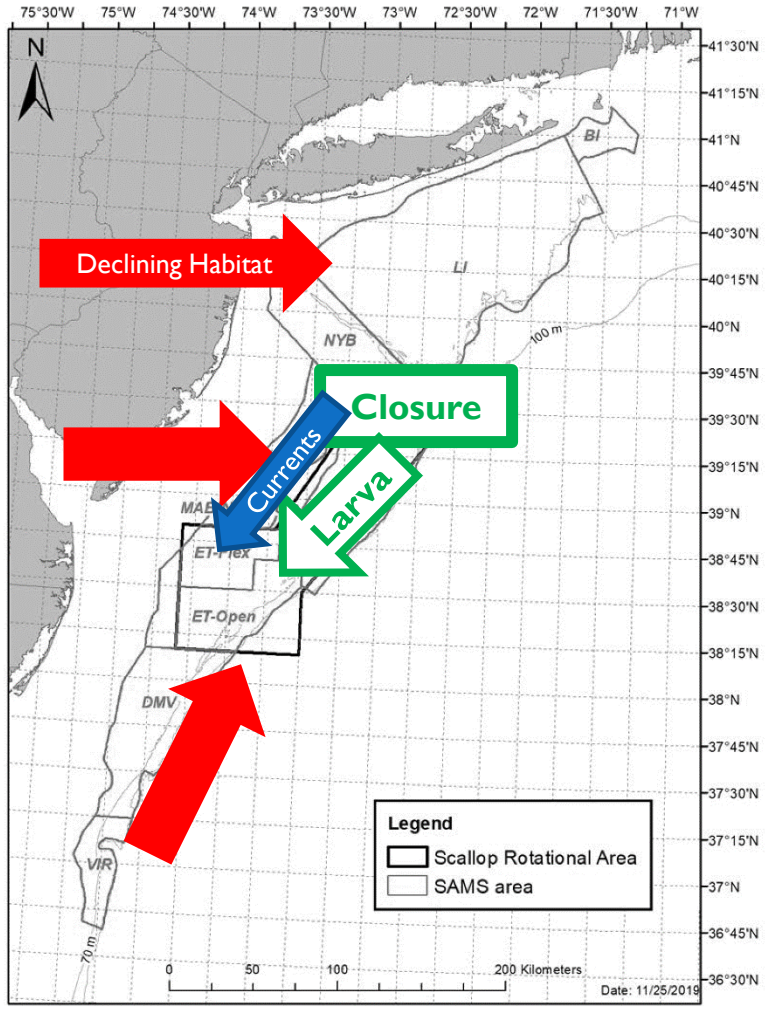
- Increases in recruitment were observed down current of the HCS after this area was closed. Models support connectivity from HCS to ET.
- Scallop habitat has declined in the Mid-Atlantic (in general), and will continue to decline with warmer temperatures.

Recent Surveys

- Order of magnitude decline of biomass in DMV.
- VIR and DMV no longer rotational areas.

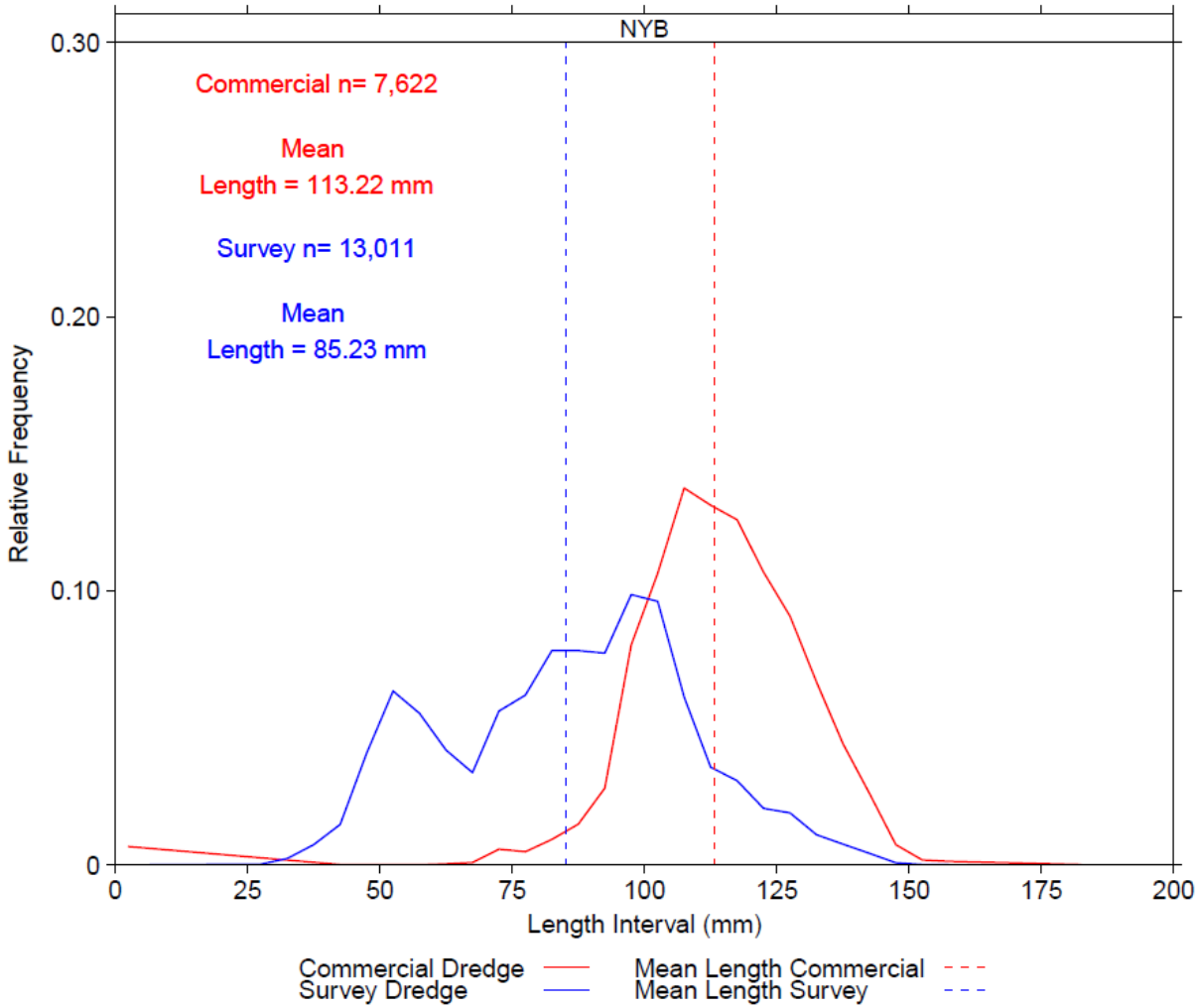
Mid-Atlantic remains a viable fishing area.

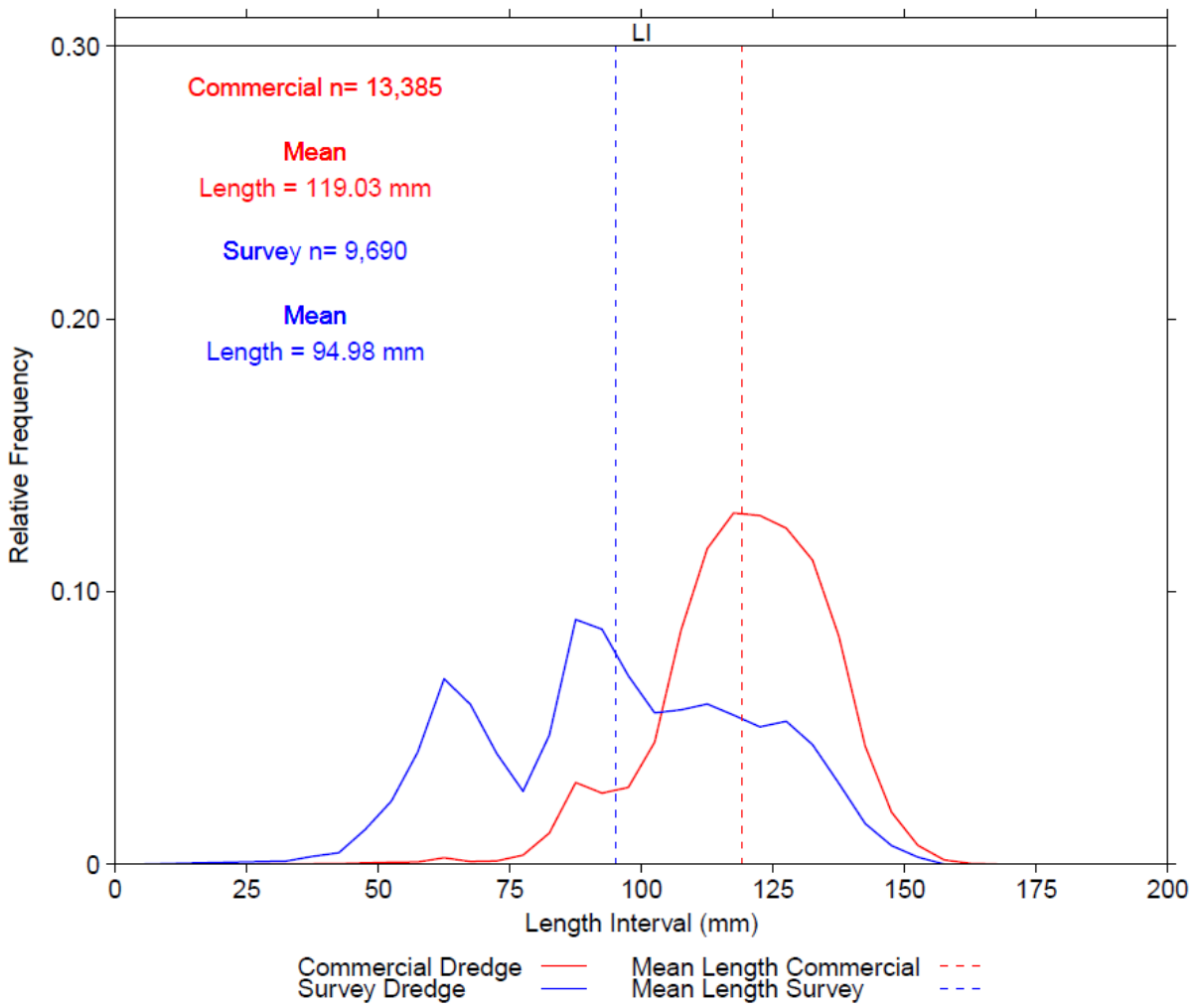
This fall: Assess survey data, discuss if targeted closures can be a way to improve chances of recruitment in ET, areas to the south.



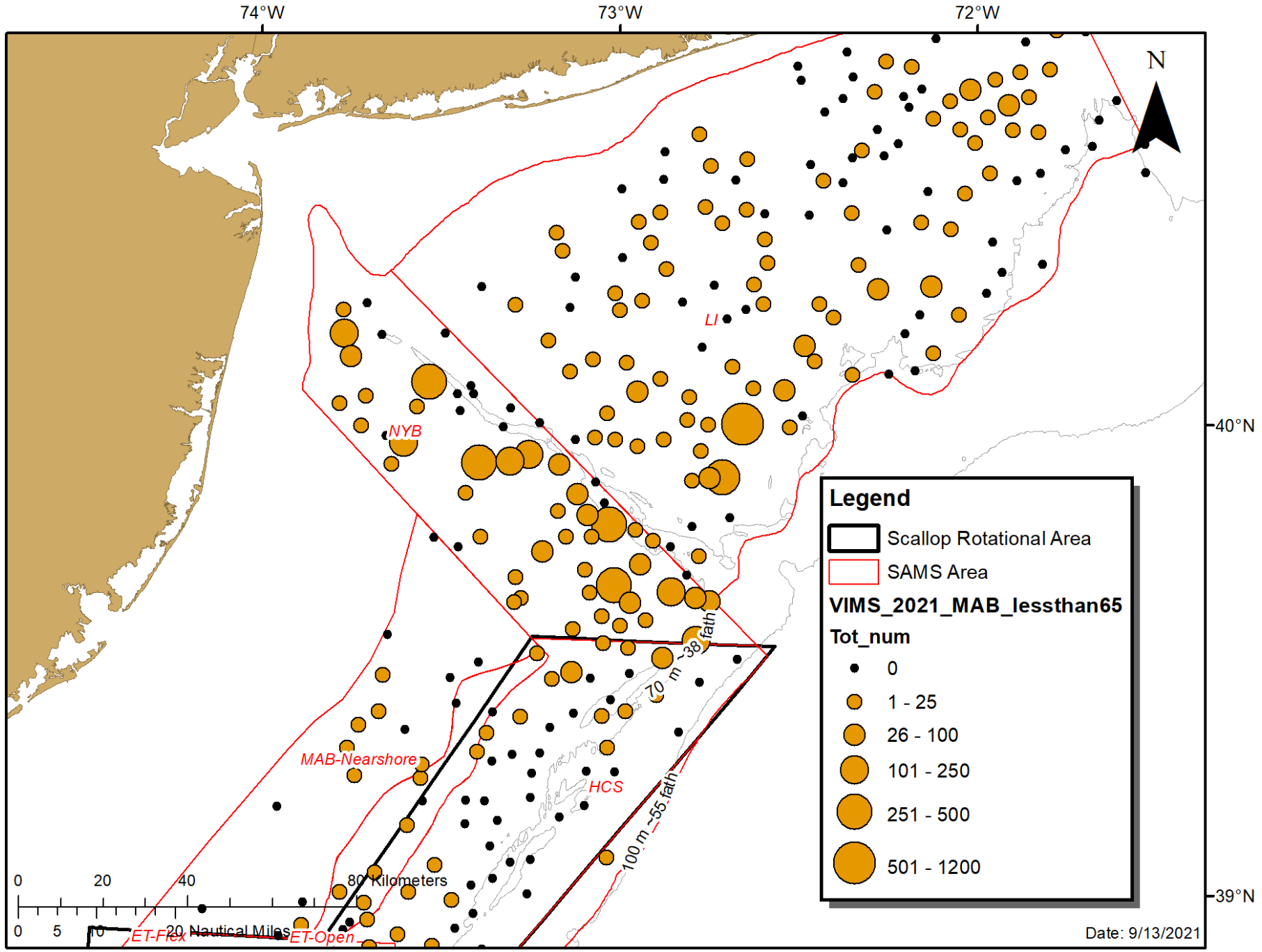
NYB and LI

VIMS | William & Mary
Virginia Institute of Marine Science
Marine Advisory Services

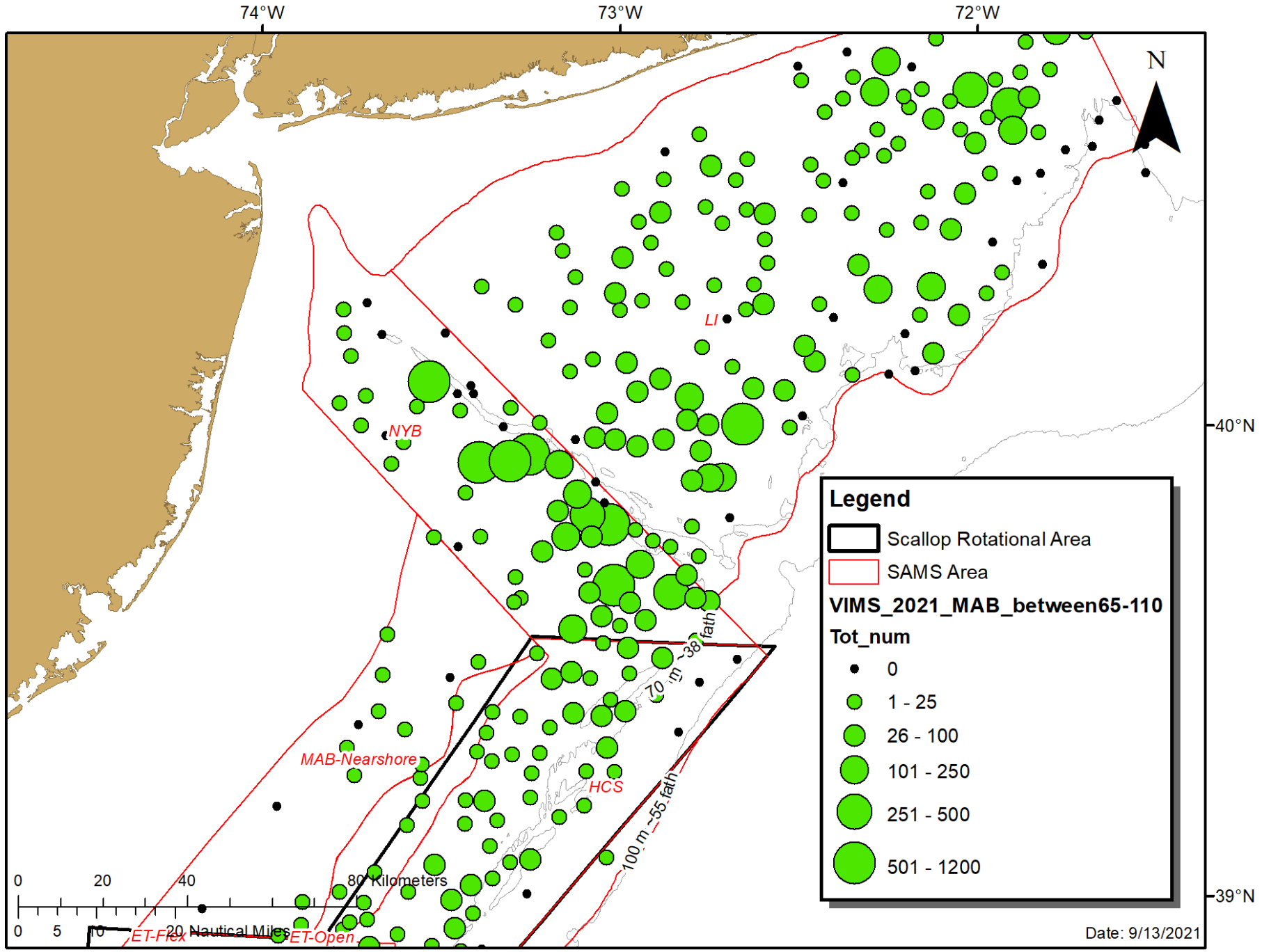




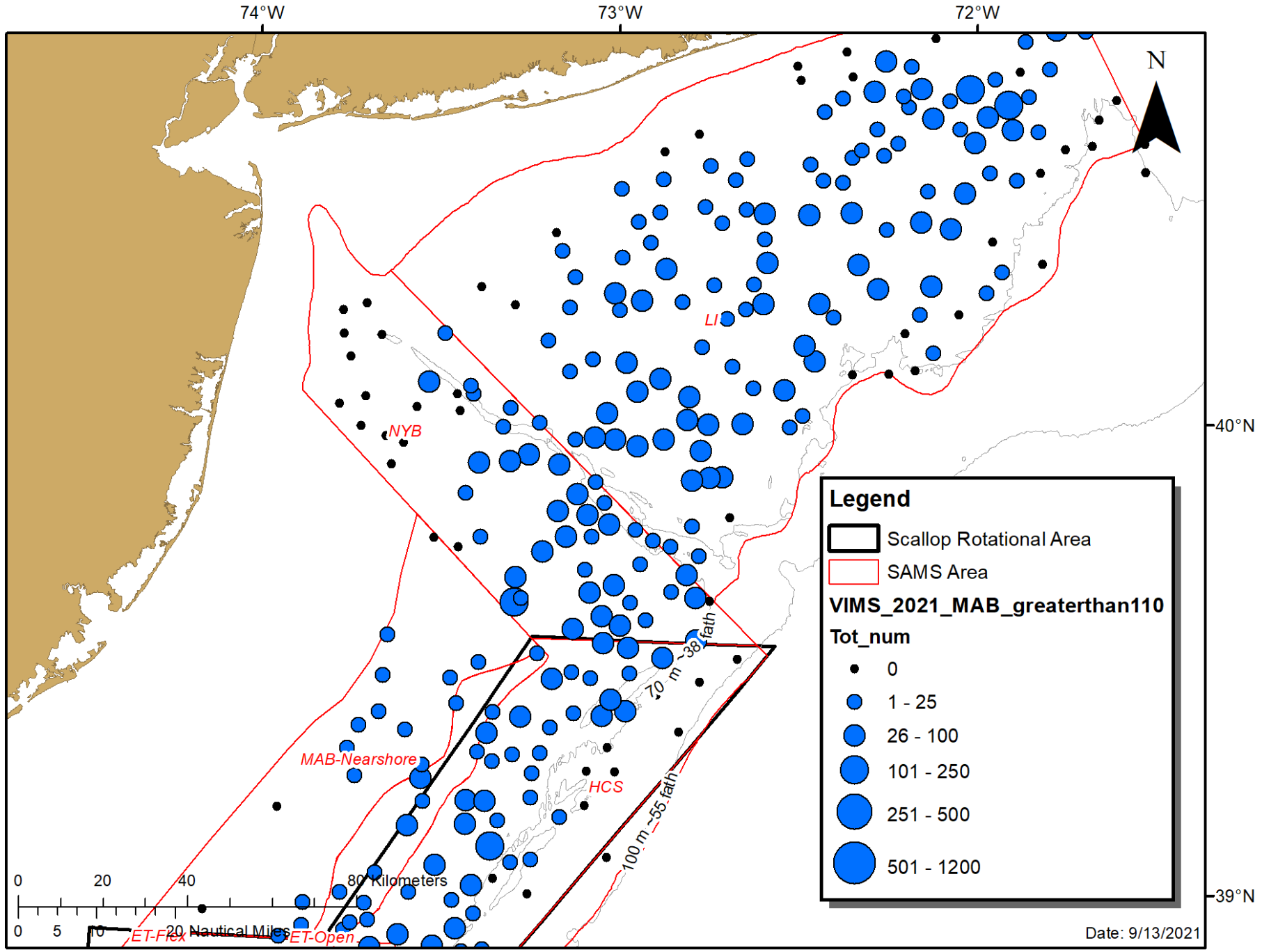
Number per st.
<65 mm SH



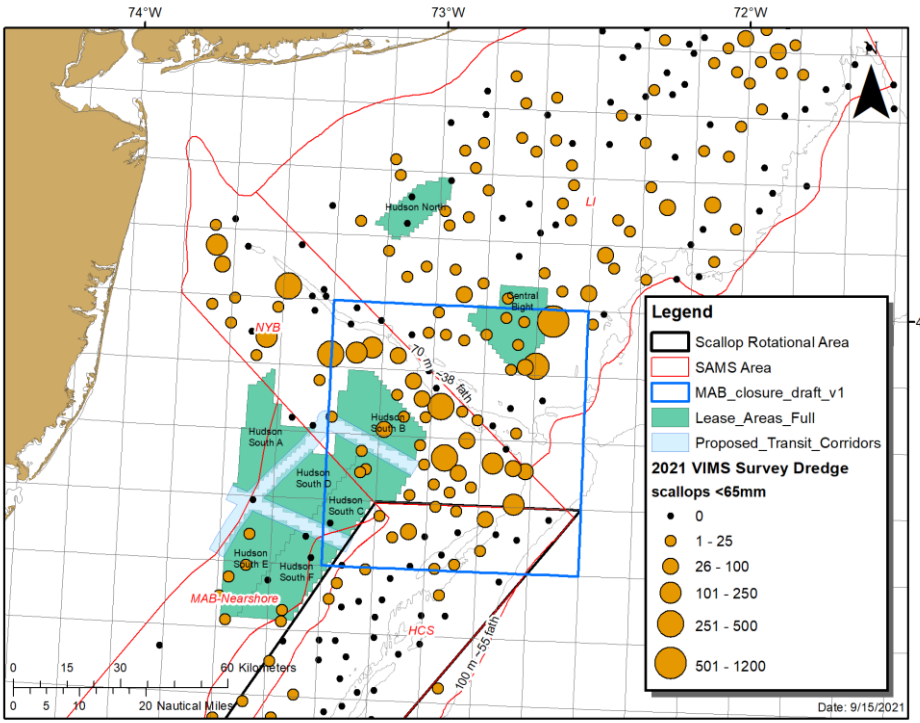
Number per st.
65 to 110 mm
SH



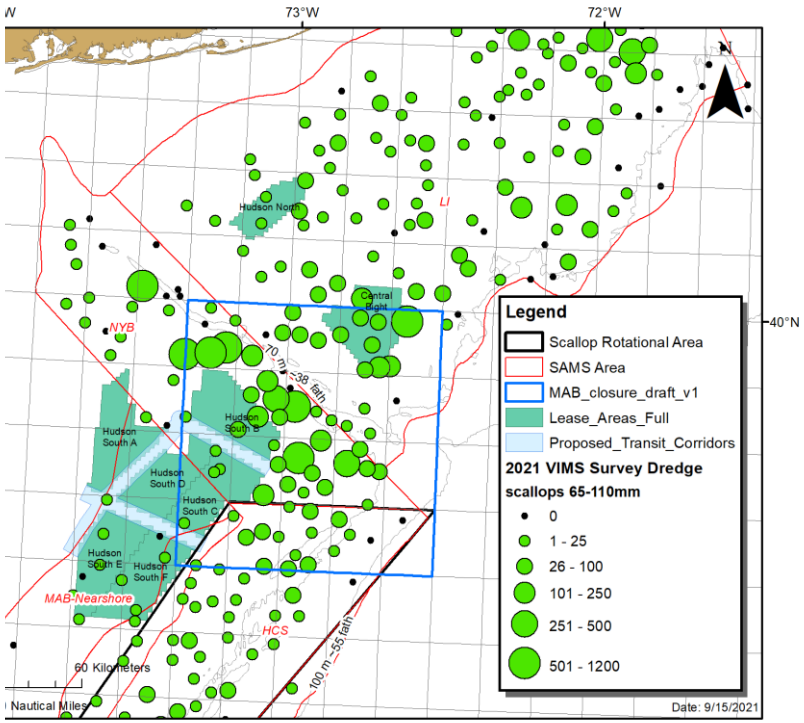
Number per st.
>110 mm SH



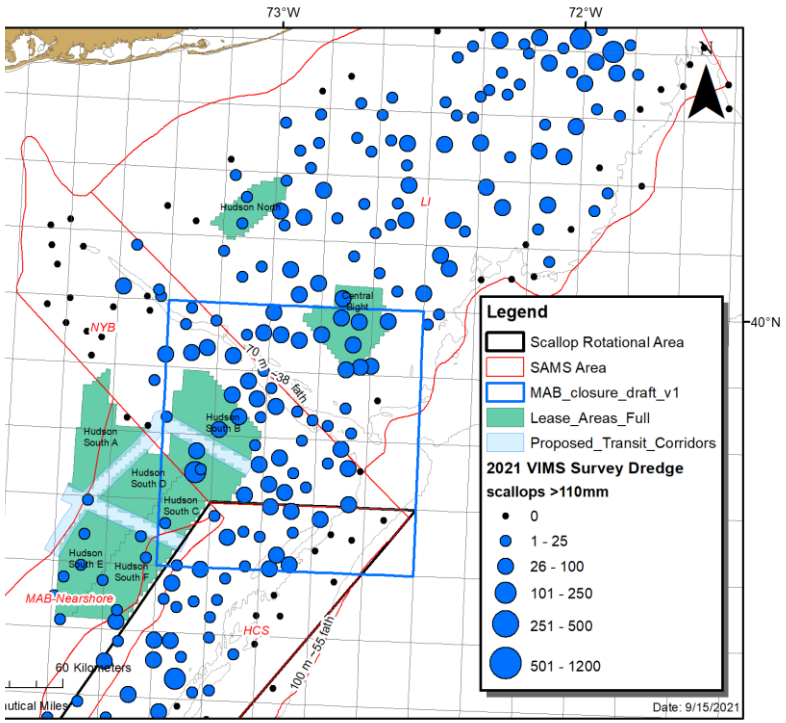
Draft closure v1 relative to VIMS abundance by size class, SAMS areas, and wind areas



Scallops <65mm

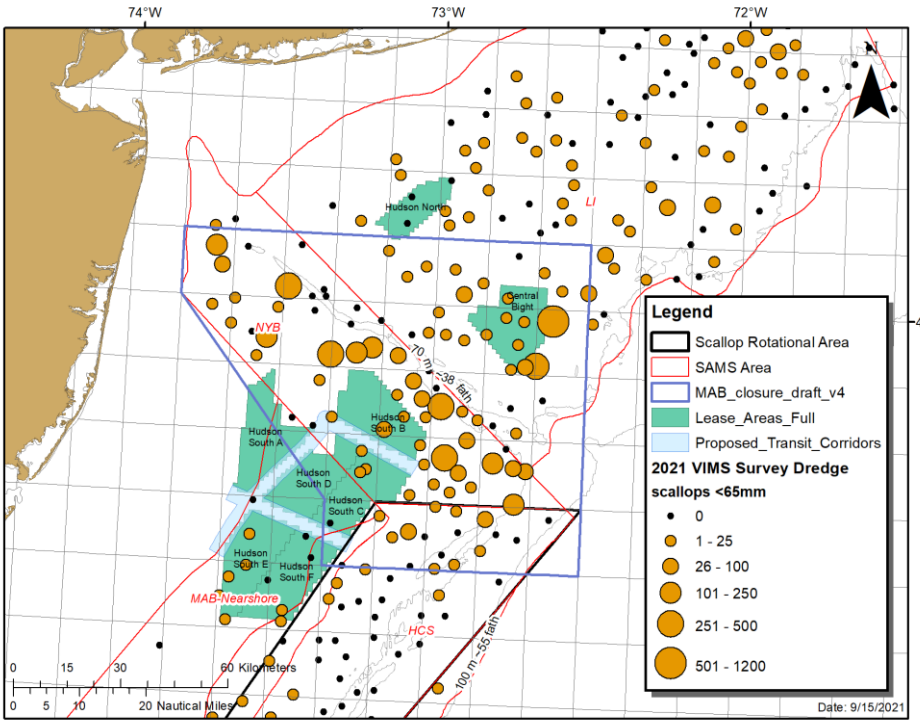


Scallops 65-110mm

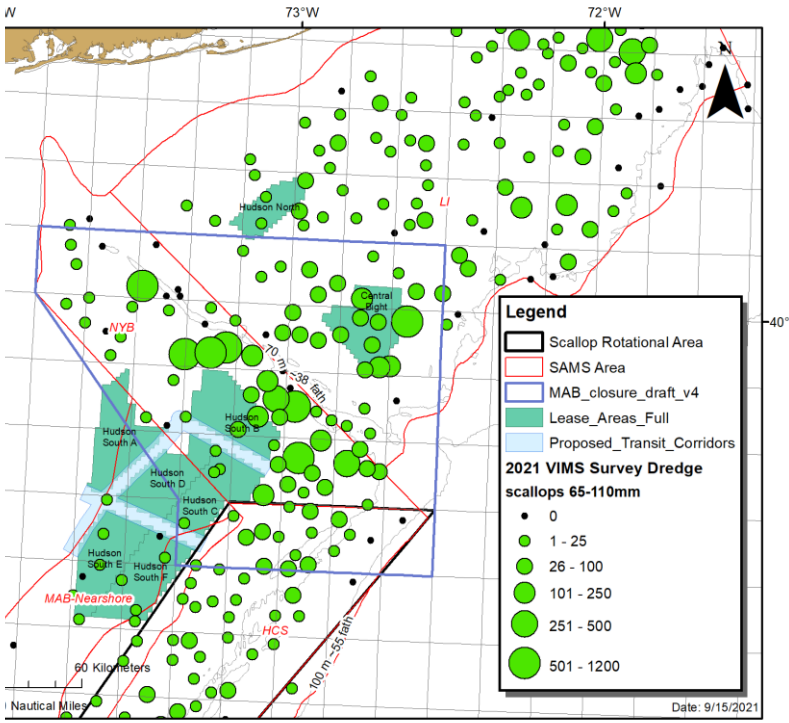


Scallops >110mm

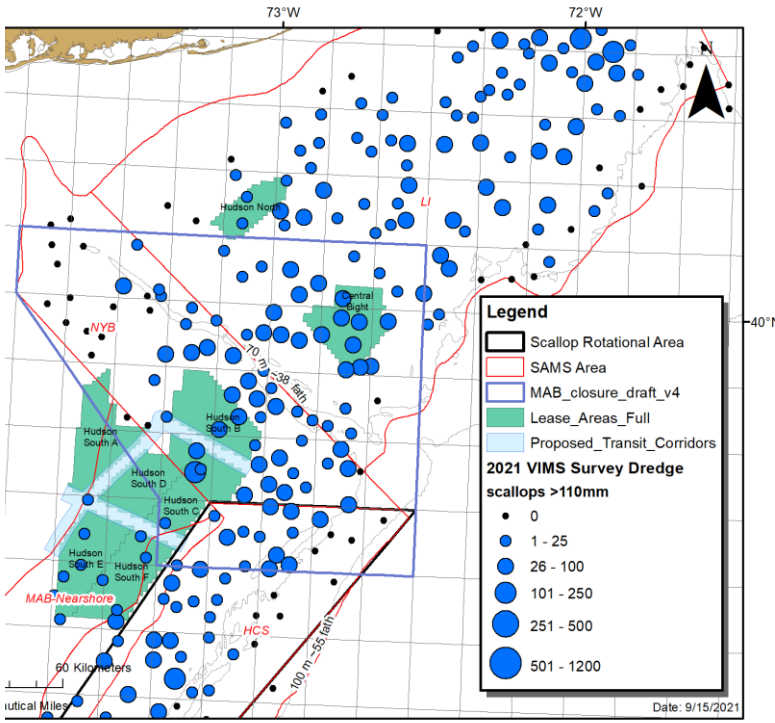
Draft closure v4 (“The Anvil”) relative to VIMS abundance by size class, SAMS areas, and wind areas



Scallops <65mm



Scallops 65-110mm



Scallops >110mm

Input on management approaches in the Mid-Atlantic

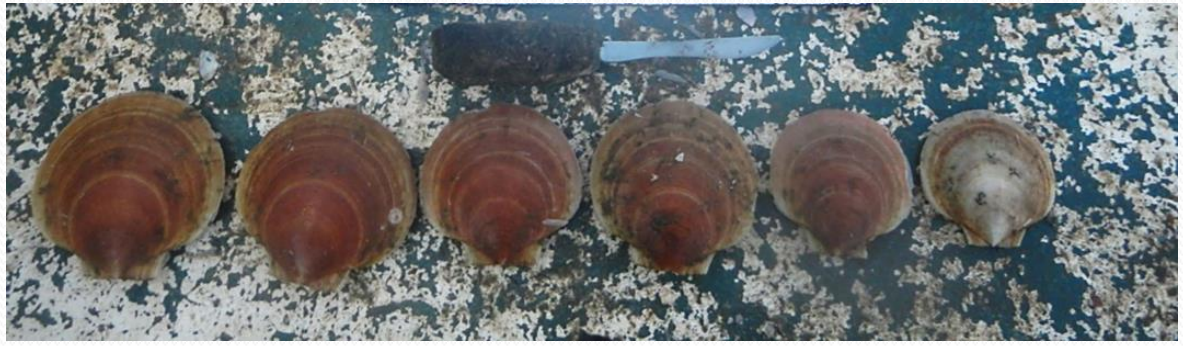
- Mid-Atlantic Access Area:

- New York Bight Closure?

Nantucket Lightship

Sub-Area	Projection of Exploitable Biomass 2022	Year Classes in the Area	Recruitment?	Average Size (2021 Dredge surveys)	PDT Recommendations
NLS-North	2.1 mil. Lbs (977 mt)		No	Survey: 101mm Comm: 121mm	
NLS-South	18 mil. Lbs (8,187 mt)	2012YC	No	Survey: 92 mm Comm: 94 mm	One trip, high density area like the NLS-West.
NLS-West	493,835 lbs (224 mt)	Pre-recruits	YES	Survey: 24 mm Comm: 12 mm	Discussion on closing the area, additional surveys to the south and west to capture recruitment event.
NLS-Triangle	n/a				

Possible Allocations to NLS-South	F rate
One 18,000 lb trips. ~6.9 million lbs	F=0.45

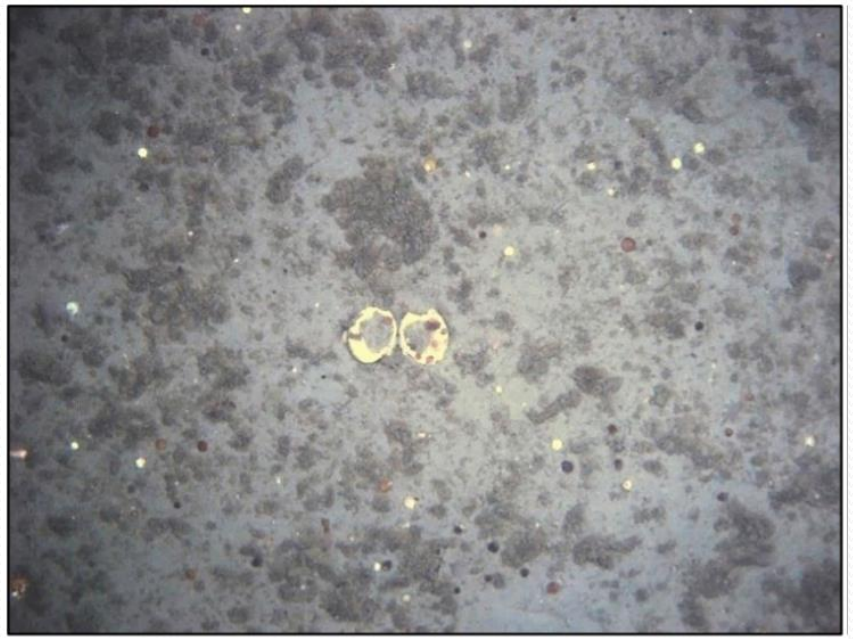


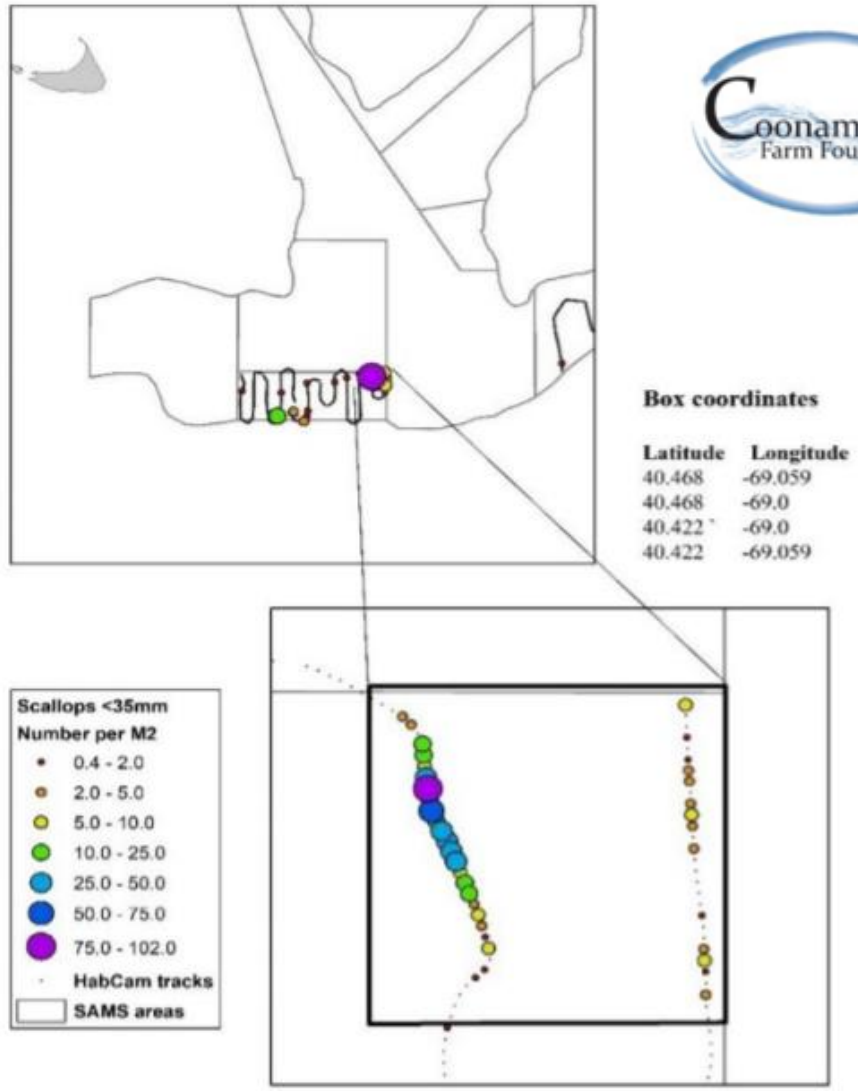
SMAST Drop Camera Data for NLS-S-deep

Year	Density per m^2	Avg. Size
2017	13.66	73mm
2018	6.85	76mm
2019	6.26	87mm
2020	3.69	93mm
2021	3.1	91mm

Nantucket Lightship

- PDT Input for 2021
  - Fishing continues to be on exceptional 2012 YC in NLS-South.
  - 10 years old, slow growers in marginal habitat
  - High densities of smaller scallops. Harvest has been on lower count scallops, price ⬆
  - One trip in 2022.

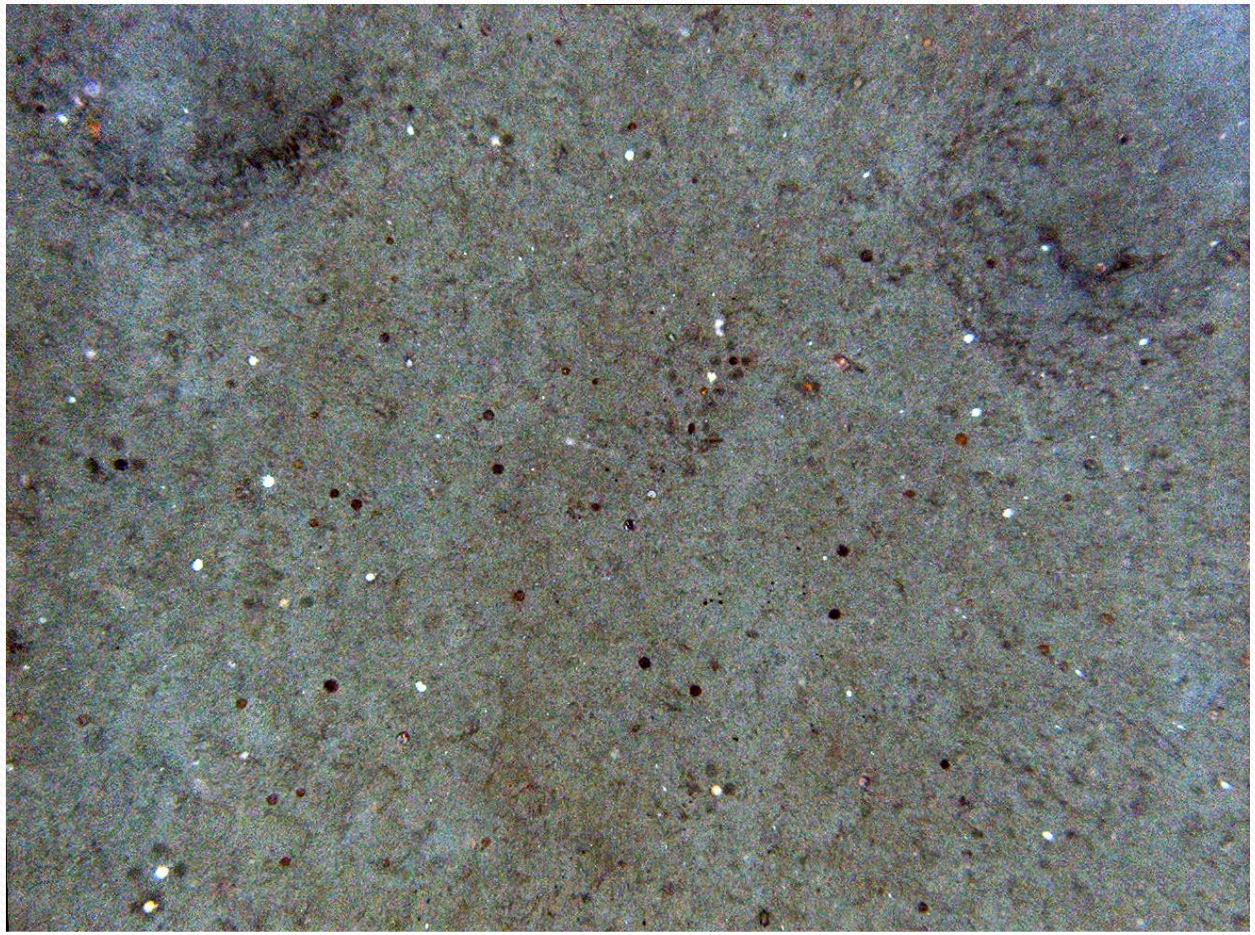


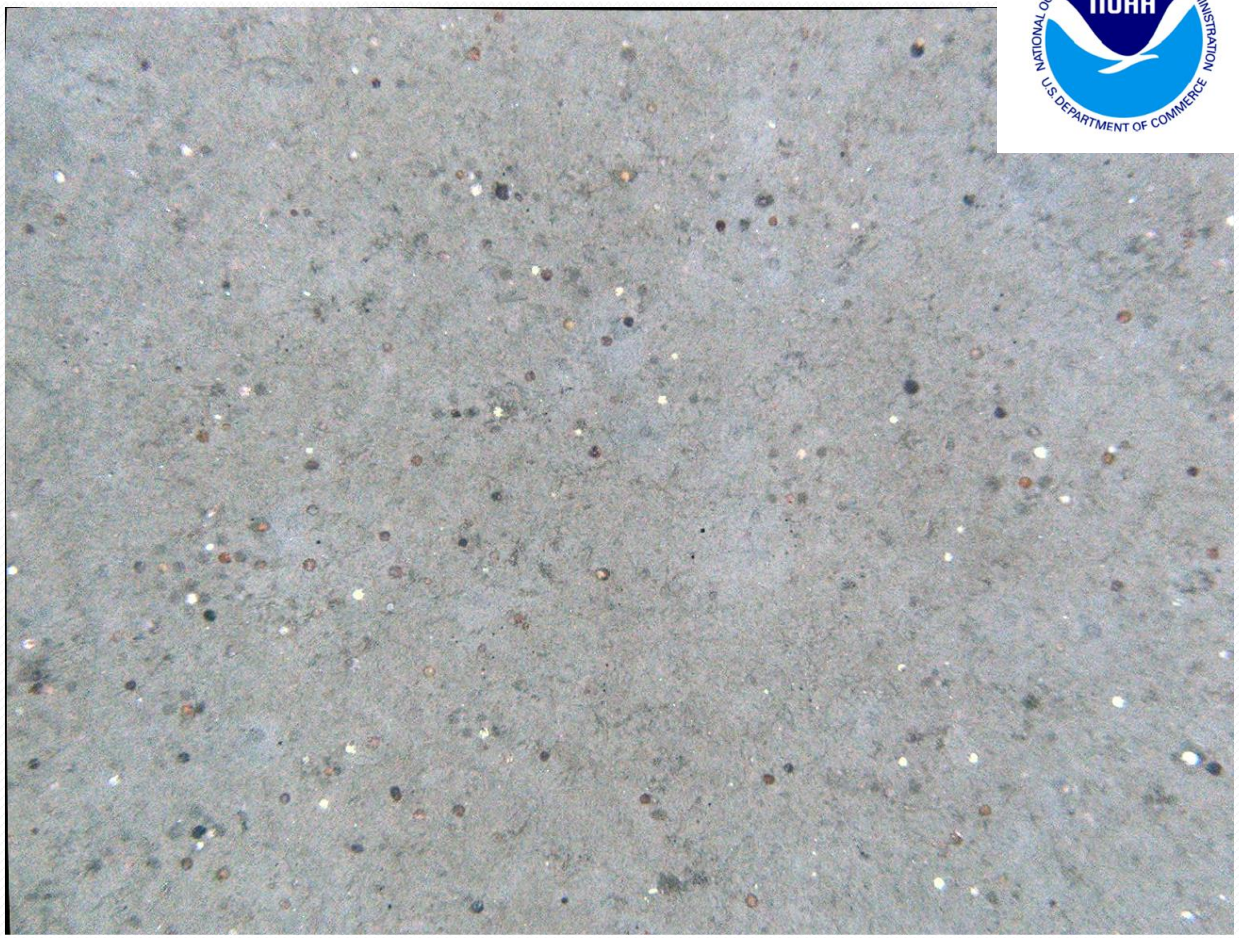


Density and Distribution map of NLS-S with insert of high-density seed area in northeast corner of track.

Nantucket Lightship West Recruitment

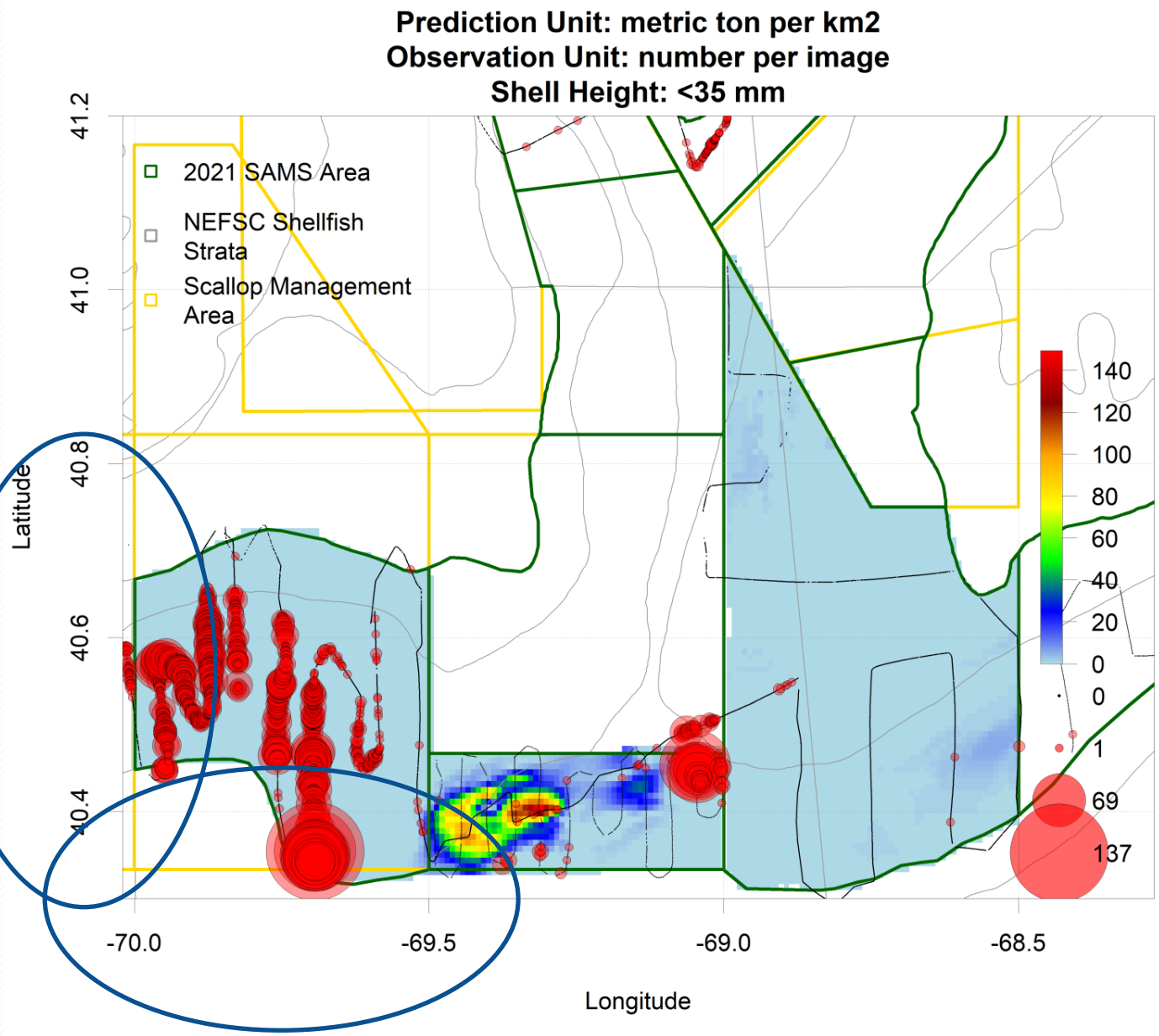
- Spat in the NLS-West. Some scallops are swimming, you can see shadows around them.





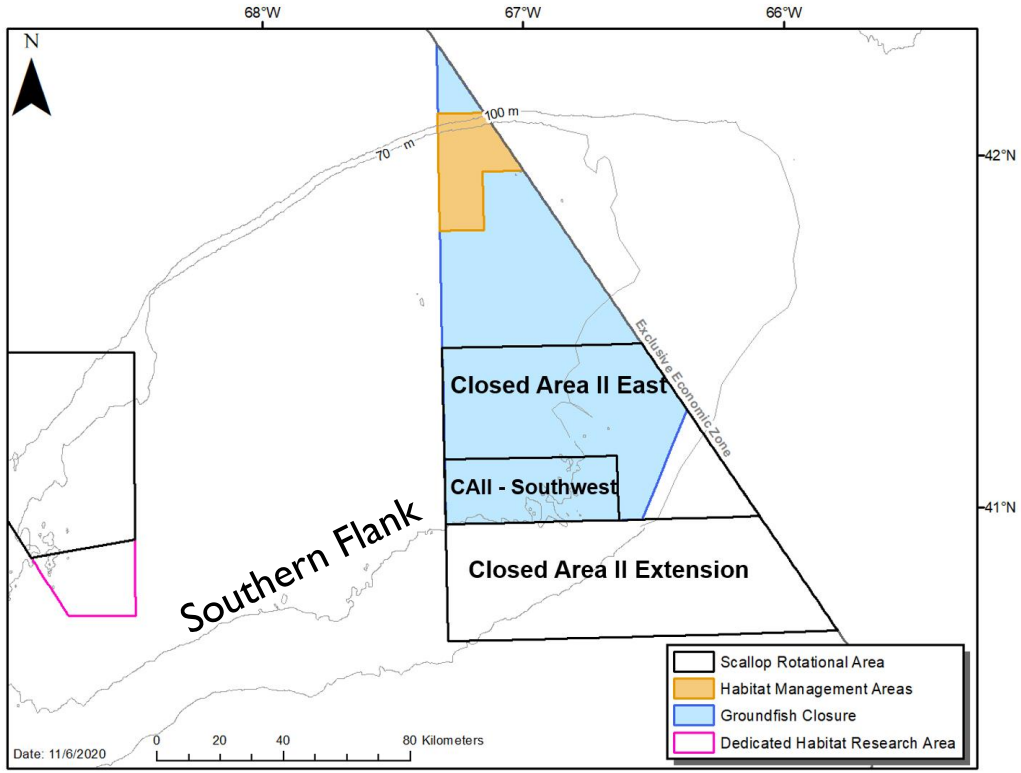
Nantucket Lightship West Recruitment

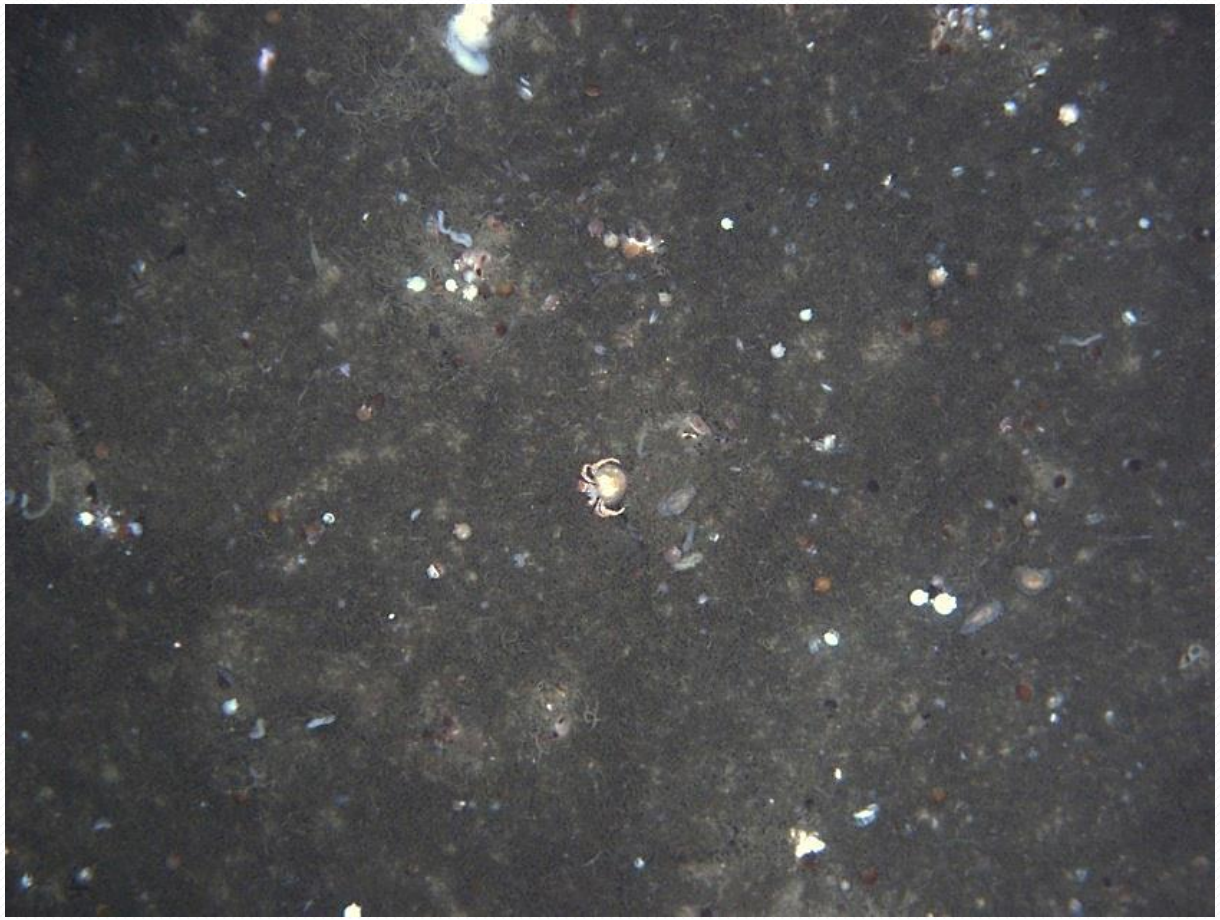
- Spat in the NLS-West. PDT recommends extending surveys to the south and west to assess full scale of recruitment event.
- SMAST may have drop camera data from the area to the west, which includes offshore wind lease sites.



Eastern Georges Bank

- Several Year Classes in region, mixed in some areas.
- Highest biomass "region"
- Candidate areas to open, close



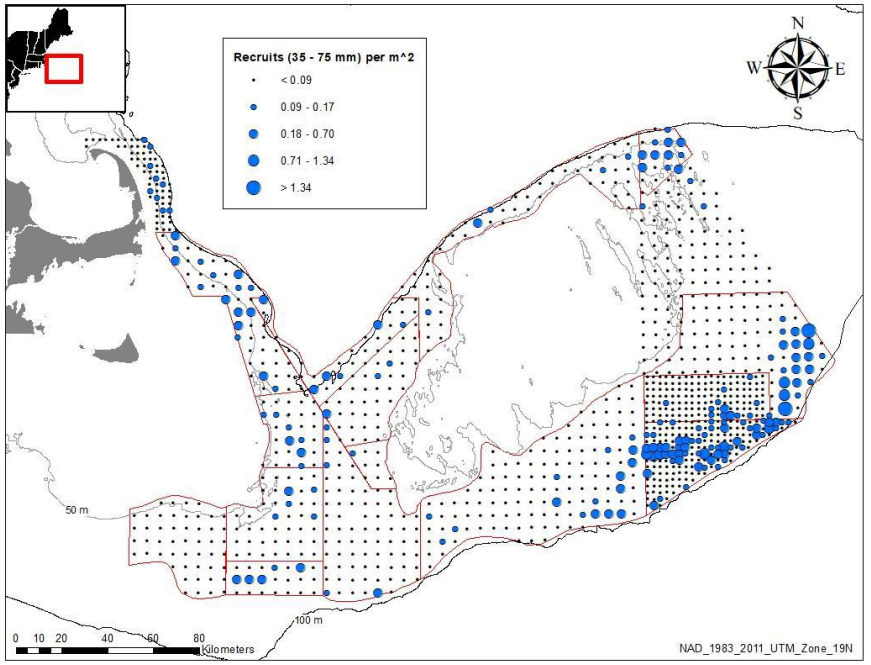


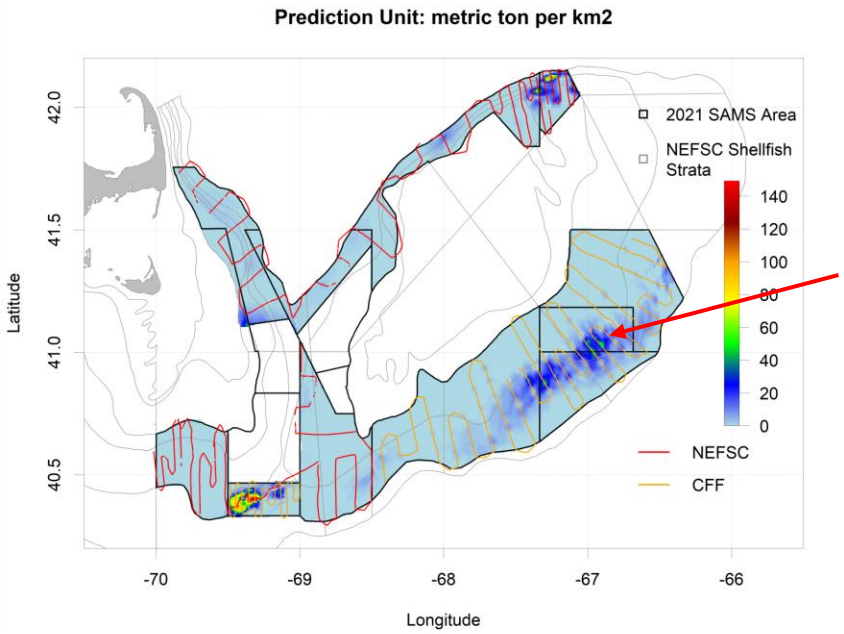
Scallop seed in CAII-SE.

Coonamessett Farm Foundation

Closed Area II Region

Sub-Area	Projection of Exploitable Biomass 2022	Year Classes in the Area	Recruitment?	PDT Recommendation
Closed Area II SE	8.3 Mil. Lbs. (3,776 mt)	2+ YCs	Yes	Closed
Closed Area II SW	15,639,593 Mil. Lbs. (7,094 mt)	One year class 5 years old, survey mean 103mm	No	Part of CAII access area.
Closed Area II Ext	26.3 Mil. Lbs (11,945 mt)	2+	Yes	Part of CAII access area.

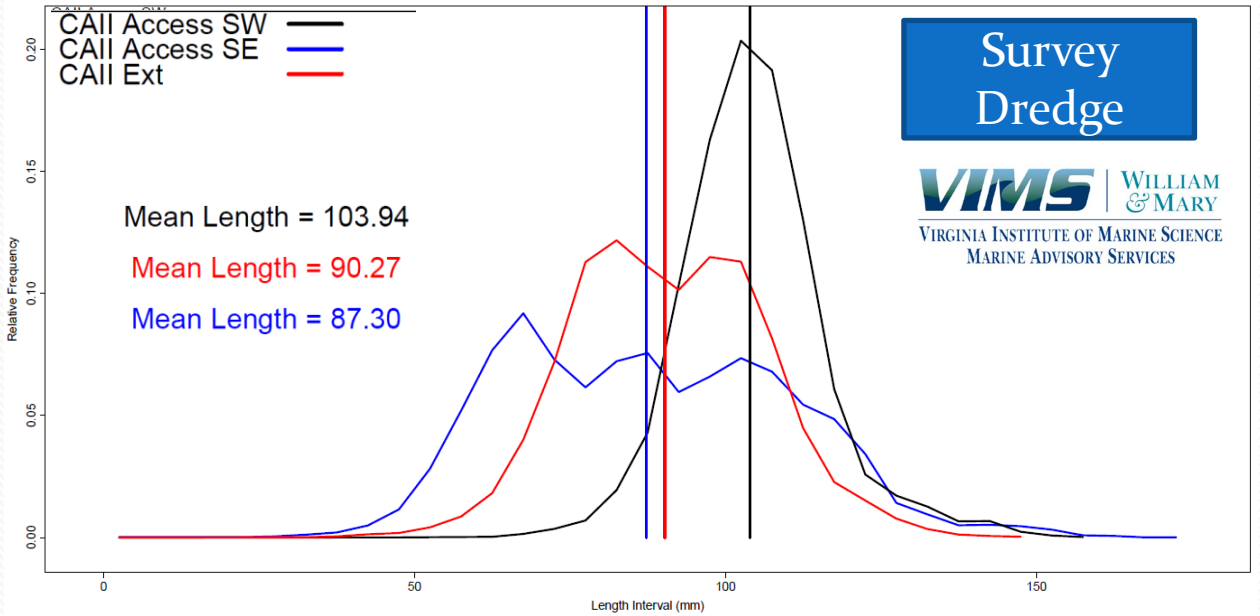


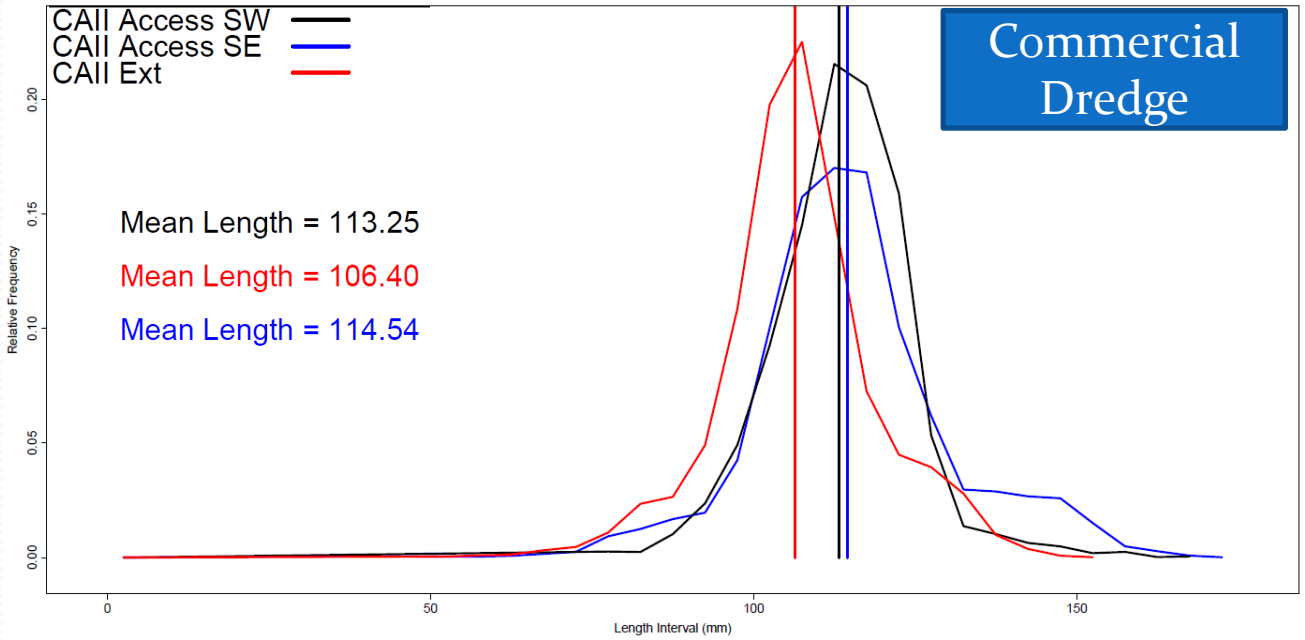


Scallops in CAII-SW area are concentrated in a relatively small area (high densities)

Closed Area II region

- 2021 Survey Data – Length frequencies
- PDT Input for 2021
  - Keep management of CAII region the same as FY2020:
    - CAII-SE closed protect recruitment and optimize yield (blue lines). Multiple YCs in this area.
    - 1.5 trips to CAII as currently configured, with EXT and SW open.



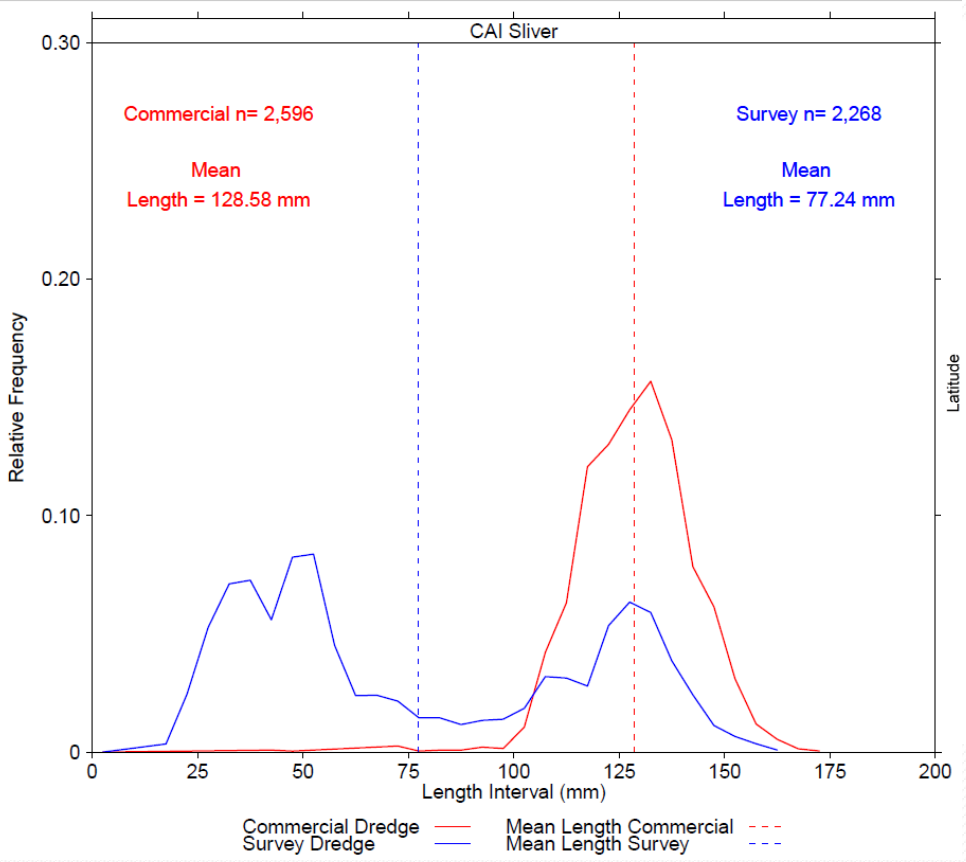


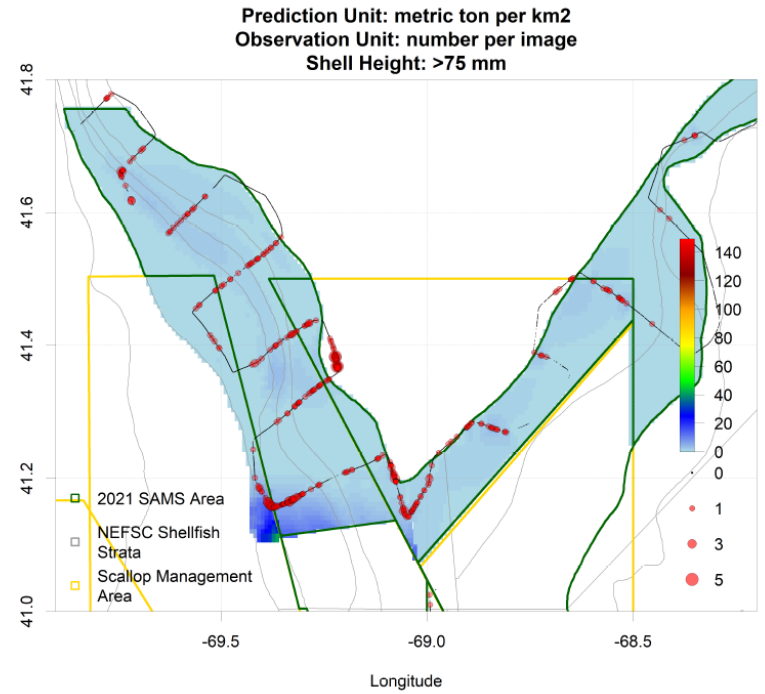
Closed Area I

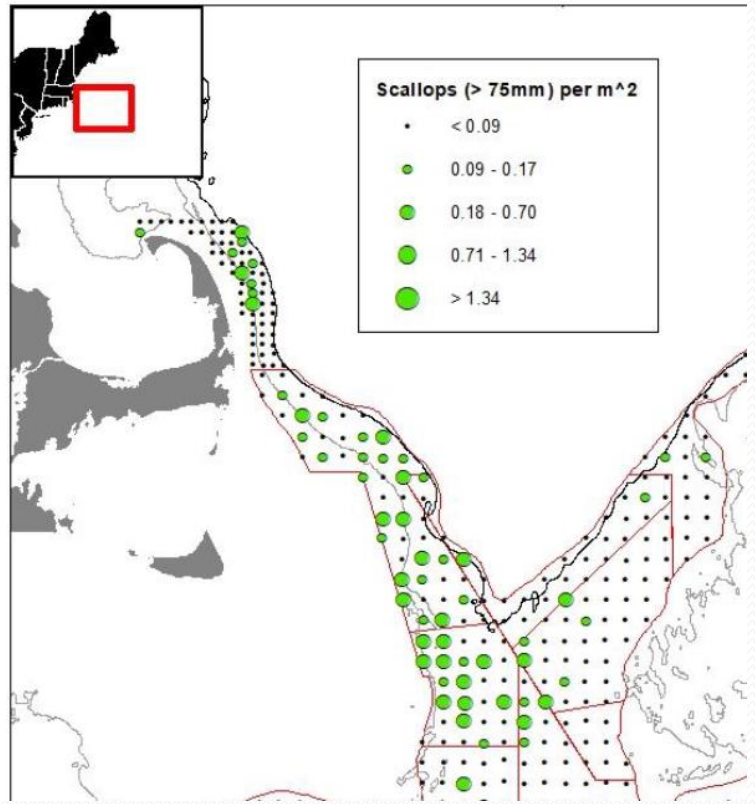
Sub-Area	Projection of Exploitable Biomass 2022	Year Classes in the Area	Recruitment?
Closed Area I Sliver	1.47 Mil. Lbs. (666 mt)	2	Yes
Closed Area I Middle	1.28 Mil. Lbs. (580 mt)		No

The AP and Committee should consider how this are would be fished FY2022.

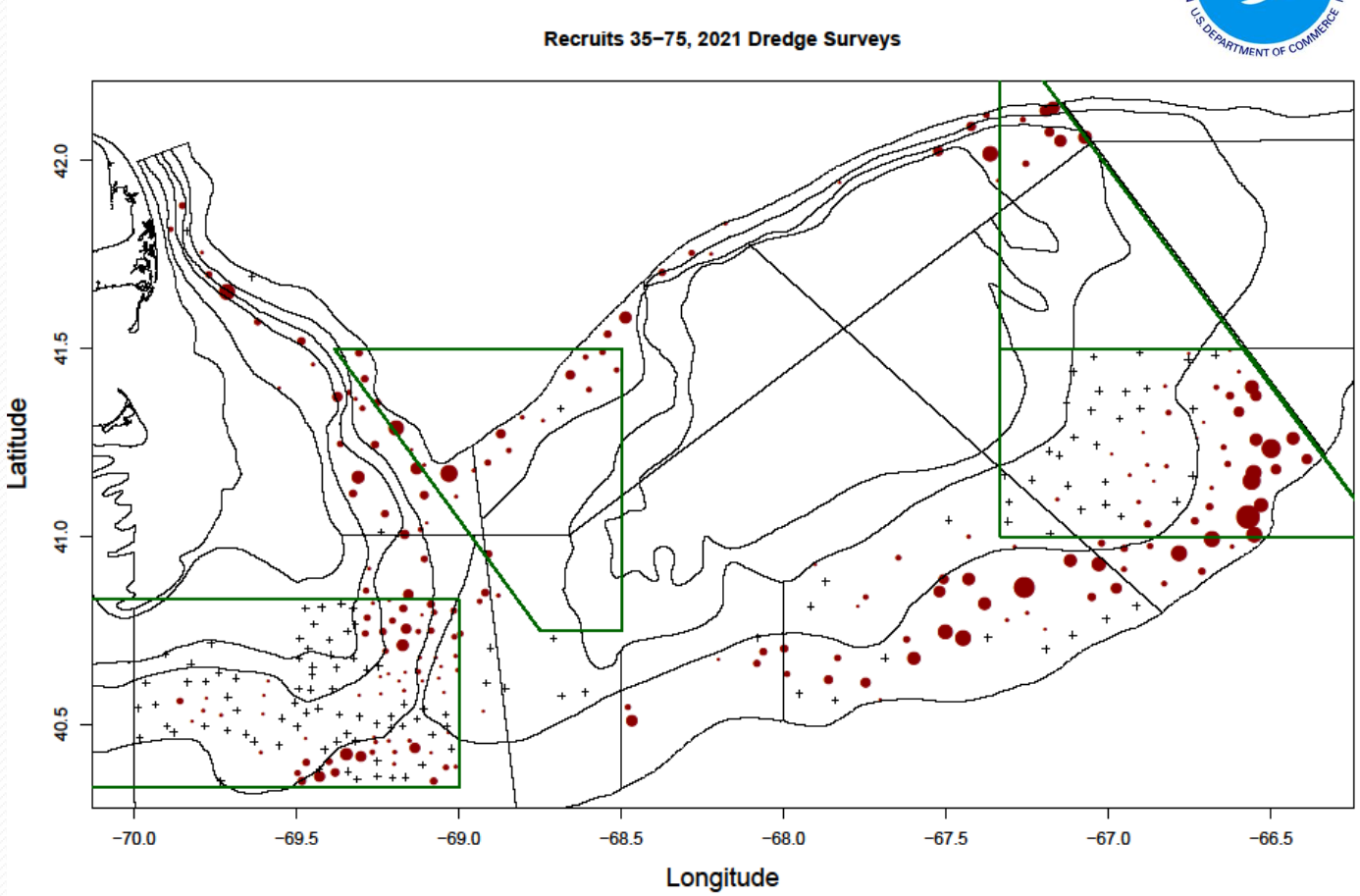
Currently: LAGC IFQ & RSA







Southern Flank and GSC



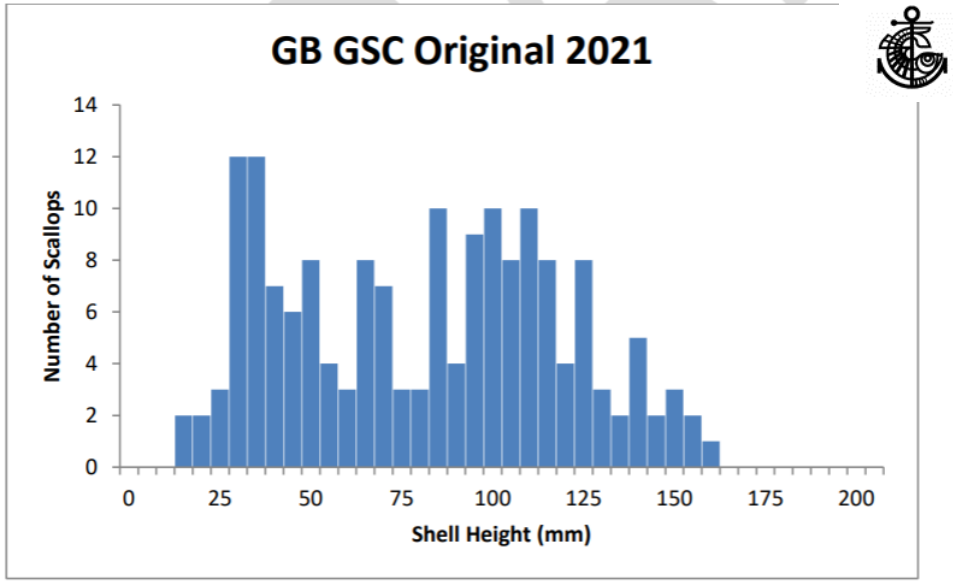
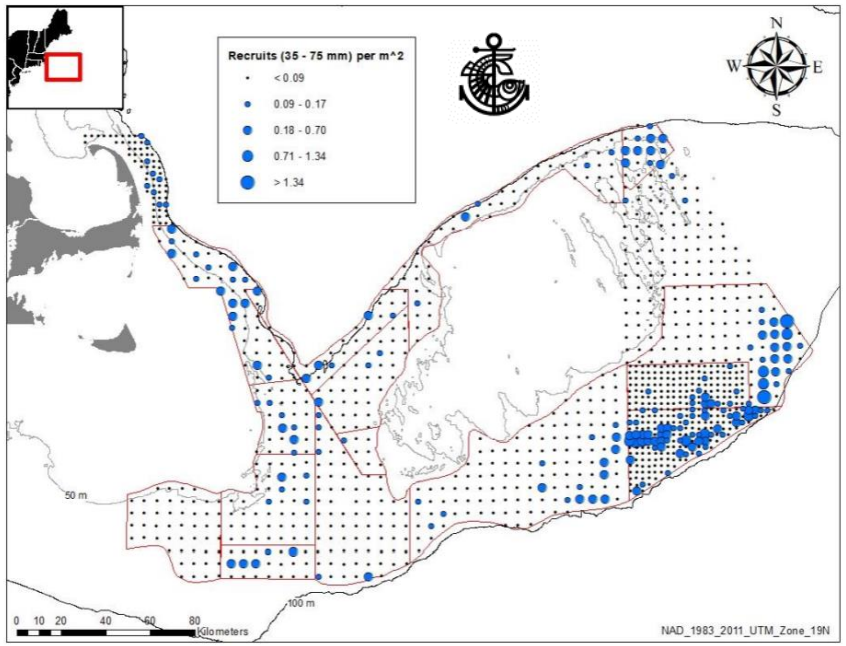


Figure 22. Shell height distribution of scallops in the GSC Original zone from the SMAST Drop Camera survey. The overall average shell height was 78.8 mm with 169 scallops measured.



Idea for a Run...

- 2.5 Access Area Trips (~15 million lbs landed from rotation)
  - 1.5 CAII (SW & Ext combined) @ 18,000lbs
  - 1 NLS-S @ 18,000lbs
- MAAA becomes open bottom, with a partial closured of NYB and HCS to improve YPR + source/sink
- DAS: Start at 24 (Status Quo) Closures in CAII-SE region to protect small scallops and optimize growth
- Closure of the NLS-West to protect pre-recruits.
- No FLEXing

Other specs related issues

- **PT trip allocations:** At a meeting earlier this year there was some concern about PT boats having to fish their CAII allocations in CAII. Do we want to see more flexibility with this – in some years the Council has allowed PT boats to pick the areas that they go to.
- **NLS-Triangle** – Some transplant work by industry…consider as a closure for another year?
- **Crew limits in the NLS-South** – This year boats were allowed to take up to 2 additional crew. Should we maintain this or think about changing it?
- **LAGC IFQ Access Area trips** – There is a possibility for access area fishing in CAII in 2022. Do we want consider moving those trips to other access areas?
- **Default access area allocations** – Discussion on whether it makes sense to try to allocate a default trip as part of the FW for FY 2022.
- **Options for where RSA compensation fishing can be done.** Could consider limiting it to only the MAAA, or perhaps allowing some in CAII if there is a trip that is allocated. Just looking for options for the Committee to consider right now.

A21 - LAGC IFQ and Other Measures

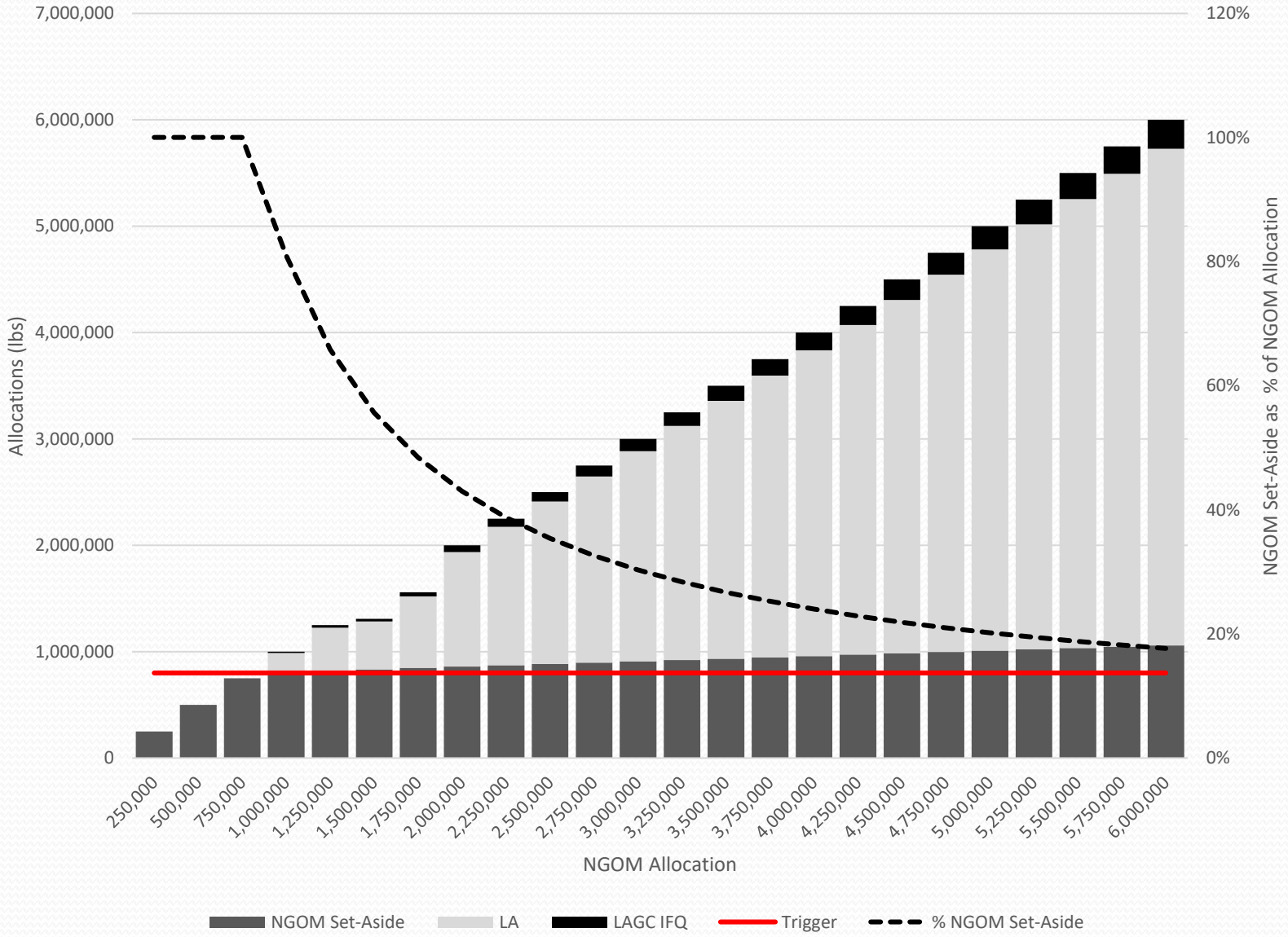
ACTION	FINAL PREFERRED ALTERNATIVE
Increase LAGC IFQ Possession Limit (Section 4.7 of EA)	Increase LAGC IFQ possession limits to 800 pounds for access areas and maintain the 600 pound possession limit for open area trips
Increase Observer Compensation for LAGC IFQ Vessels (Section 4.8 of EA)	Allow LAGC IFQ vessels to be eligible for additional compensation when carrying an observer on fishing trips longer than one day; daily compensation rate would be prorated at 12-hour increments for trips exceeding 24 hours up to 48 hours
One-Way Transfer of Quota from LA with IFQ to LAGC IFQ-Only (Section 4.9 of EA)	Allow temporary one-way transfers of quota from LA with IFQ to LAGC IFQ-only with no change to the pool of quota LAGC IFQ accumulation caps apply to (5% of APL)
Specifications and Framework Adjustment Process (Section 4.10 of EA)	The Council voted to support Alternative 2, which adds details about what kinds of changes could be made to the management of the NGOM and monitoring in future FW actions.

A21 - Northern Gulf of Maine Measures

ACTION	FINAL PREFERRED ALTERNATIVE
NGOM Catch Limits (Section 4.1 of EA)	Account for the scallop biomass in the NGOM as part of the legal limits in the fishery by adding biomass from the area into calculations of the overfishing limit (OFL) and acceptable biological catch (ABC), i.e., included in the "ABC flowchart"
NGOM Total Allowable Landings (Allocations) (Section 4.2 of EA)	Create a NGOM Set-Aside and a NGOM Set-Aside trigger of 800,000 pounds. When the NGOM TAL is over 800,000 pounds, pounds above the trigger would be shared with 5% for the NGOM Set-Aside and 95% for the NGOM APL (for the LA and LAGC IFQ).
Monitoring Directed Scallop Fishing in the NGOM (Section 4.3 of EA)	Expand the IFO program to include LAGC NGOM vessels, increase scallop observer set-aside with scallops from the NGOM; require call-in for all vessels fishing in the NGOM
Support Scallop Research Using Scallops from the NGOM (Section 4.4 of EA)	Allocate 25,000 pounds of the NGOM Allocation to increase the overall Scallop Research Set-Aside (RSA) to 1.275 million pounds and support RSA compensation fishing
NGOM Fishing Season (Section 4.5 of EA)	No Action. Maintains current measures for the number of landing days and sailings per day vessels are allowed in the NGOM, as well as maintaining a year-round opening of the NGOM management area unless an allocation is reached
Cumulative Maximum Dredge Width Fished in the NGOM (Section 4.6 of EA)	No Action. Maintains the provisions in the current Gulf of Maine dredge exemption program with no additional restrictions on maximum dredge width

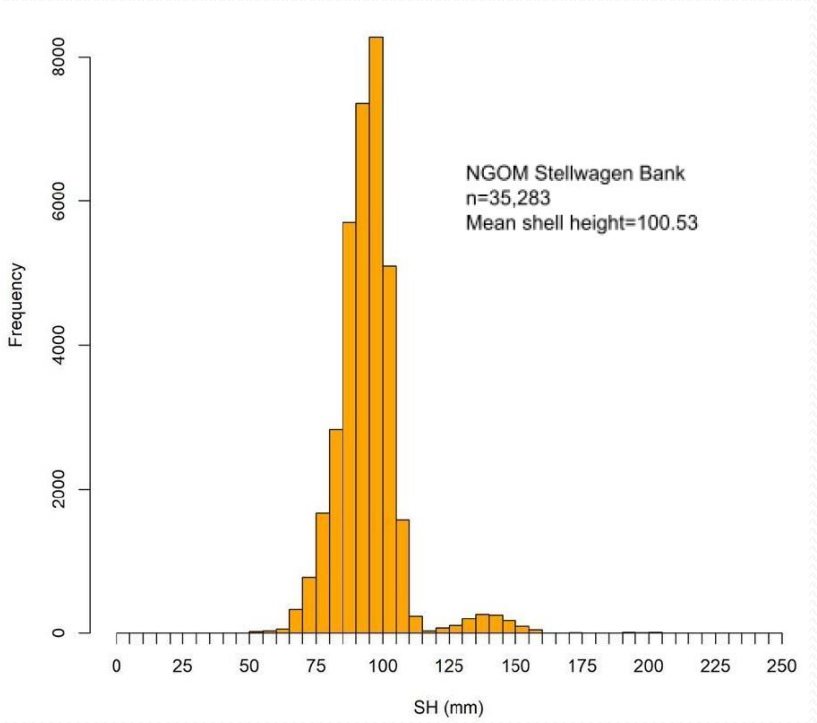
NGOM Set-Aside

- Final Action:
  - 800,000 lb trigger
  - 95% for LA/IFQ; 5% for the NGOM APL
- TOTAL BIOMASS in the Stellwagen area of interest is 3.6 million pounds.
  - TAL will be substantially lower.



Stellwagen Bank

- Majority of biomass in NGOM on Stellwagen Bank north of 42 20'.
- Area will stay closed until changed by a future action (FW34)
- PDT recommends setting 2022 & 2023 TALs based on projections from this area.



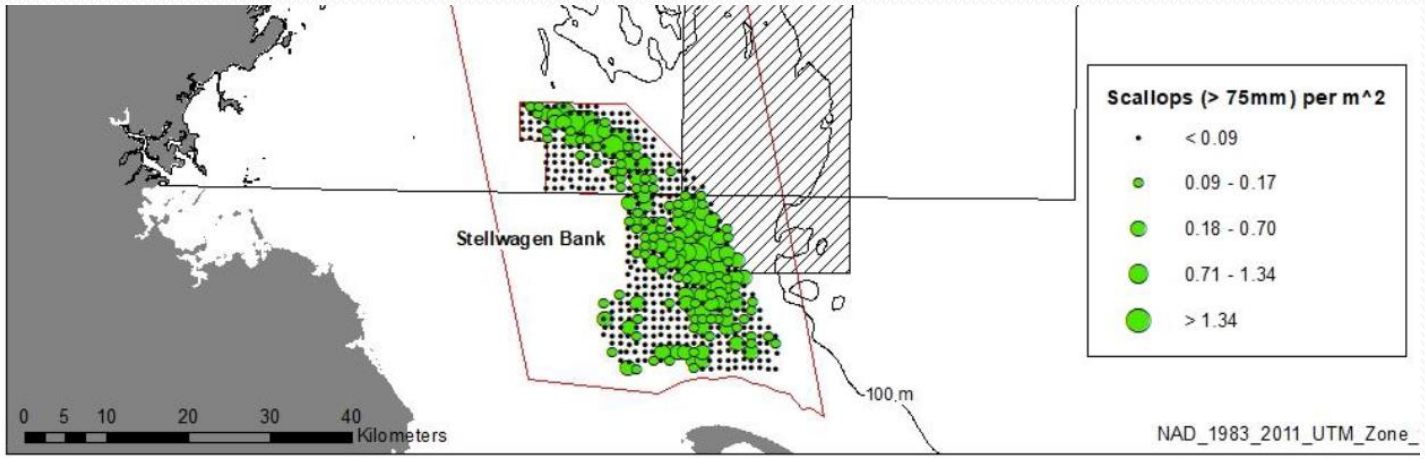
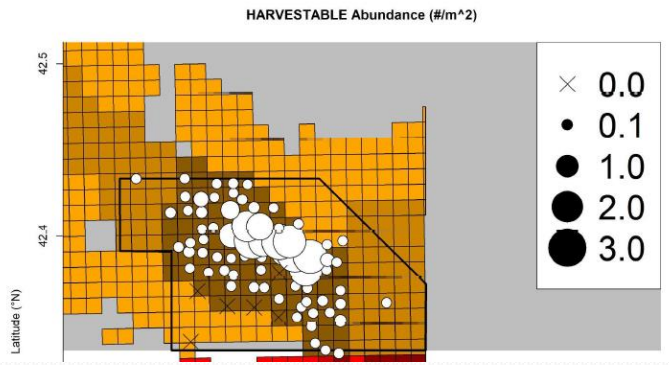


Figure 6. Scallop (> 75 mm) density from the 2021 SMAST Drop Camera survey.

NGOM Area of Interest Scallop Abundance Greater Than 75mm:



Northern Gulf of Maine

		Dredge				DropCam				Mean			
Subarea	Num	Bmsmt	SE	MeanWt		Num	Bmsmt	SE	MeanWt		Num	Bmsmt	SE	MeanWt
Stellwagen AOI	86	1427	668	21		112	1508	501	13.4		99.0	1468	418	14.8
Jeffreys						15	268	48	17.7		15	268	48	17.7
Platts						7	108	24	14.7		7	108	24	14.7
Ipswich						10	143	28	14.7		10	143	28	14.7
TOTAL	**86**	**1427**	**668**	**21**		**144.0**	**2027**	**505**	**14.1**		**131.0**	**1987**	**422**	**15.2**

- If A21 is approved as recommended by the Council:
  - Exploitable biomass from the NGOM will be part of the OFL and ABC.
  - New approach to determining landings limits for LAGC and LA.
  - Observers covering a portion of the LAGC trips.
- Need input on F rates to be used in projections, and confirm which areas used in the TAL.
  - Council recommended using F = 0.15 – 0.25 for setting the TAL.

LAGC IFQ Access Area Trip Accounting

Overview

LAGC IFQ access area trip accounting

- Council priority for 2021, part of FW34
- Discussion related to increase in access area possession limit in FY2022 (A21) from 600 lbs to 800 lbs
- Higher trip limit = fewer trips → concern that access area fishing is underutilized in LAGC component based on current accounting method (see next slide)

Tasking needed today if measures are to be included in FW34.

IFQ Access Area Accounting

- Allocated fleet-wide number of trips to access areas
- Total trips per area = available allocation in pounds divided by IFQ trip limit
- Vessels can choose to fish quota in AAs, or in open areas (not required to fish in AAs)
- When GARFO projects that total trips have been taken, area closes to entire LAGC IFQ component

Progress to date

- Overview of FY2015-2020 fishery data at June 2021 meetings (see Doc.2d). *Key points*:
  - Majority of LAGC access area trips have been in 600-pound range.
  - Realized landings from LAGC access area trips are very close to potential landings when trip utilization is high (i.e., derby fishing), within ~2%
- PDT input: **Strong recommendation to stick with counting trips, not pounds**
  - Closure projections are more precise (i.e., no data lag in trip declarations, can track in real-time)
  - Easier for industry to monitor access area utilization
  - Avoids need for AMs (i.e., payback measures)

NGOM catch accounting

- NGOM performance tracked in pounds, not trips. Difficulty in NGOM closure precision due to data lag
  - ~1 week delay in dealer reports used to project NGOM performance/timing of closure
  - Work around: Available dealer data used to estimate average landings per trip, applied to number of trips taken in real-time (This was the approach used in the NGOM in 2021)
- Suggestion to consider if vessel monitoring system (VMS) pre-land reports could be used to track landings in real-time (see next slides)
  - Pre-land reports required for all LAGC trips – must be submitted after fishing has completed, before returning to port.
  - Pre-lands are unverified "best guess" at end of trip

VMS pre-landing reports for LAGC trips

Difference in dealer reported landings vs. VMS pre-land reports in pounds (top) and percent (bottom)

- Dealer reported landings consistently higher than pre-land reports
  - 31K lbs (14%) greater on average for IFQ access areas
  - 21K lbs (26%) greater on average for NGOM
- Number of dealer reports submitted greater than pre-lands (62 more dealer reports submitted on average).
  - Potential missing pre-land reports could increase uncertainty

Table 3 – The difference between dealer reported landings and pre-land reports for LAGC trips from FY2015-FY2020 in terms of pounds landed (dealer reported landings – pre-land reported landings).

FY	CAI	ET	MAAA	NGOM	NLS-S	NLS-N	NLS	NLS-W	OP
2015	0	0	107,898	36,533	0	0	0	0	122,464
2016	0	0	-2,310	11,491	0	0	-1,157	0	151,022
2017	0	133	21,526	7,680	0	0	19,860	0	202,565
2018	40,844	0	73,875	34,810	13,414	0	0	77,711	164,280
2019	45,730	0	132,986	32,297	0	0	0	1,677	136,403
2020	9,185	0	12,444	933	0	5,802	0	0	38,237

Table 4 - The relative difference (percent) between dealer reported landings and pre-land reports for LAGC trips from FY2015-FY2020 ((dealer reported landings – pre-land reported landings)/pre-land reported landings).

FY	CAI	ET	MAAA	NGOM	NLS-S	NLS-N	NLS	NLS-W	OP
2015			10%	61%					10%
2016			0%	13%			0%		7%
2017		0%	34%	16%			4%		15%
2018	18%		13%	33%	103%			19%	15%
2019	20%		16%	31%				8%	12%
2020	3%		2%	1%		2%			3%

Other considerations

- PDT recommendation: **stick with counting trips, not pounds**
- Possible improvement to current system: use more realistic assumption of pounds landed per trip (i.e., "max average" approach)
  - *Suggestion:* keep this approach in mind after 800-pound trip limit is implemented. Chance to see how things go with higher trip limit before making any changes.
- If there is interest in developing measures in FW34, please signal so now.
- Questions/Comments?

Scallop Work Priorities

Current List of Possible Scallop Priorities for 2022

This is the list that appears in the memo from Executive Director Tom Nies (Doc.3b).

Seeking only **ADDITIONS** to this list from the AP and Committee at Sept. meetings.

NOT Ranking at your Sept. meetings. Ranking will occur at October AP & CTE.

9/9/21 List in ExComm Memo (Nies)

- 21. FY2023/2024 (default) Specifications
- 22. Support action for access to Northern Edge HMA (Habitat)
- 23. Continue work of Scallop Survey Working Group
- 24. Evaluate Rotational Management
- 25. Conduct scoping or listening sessions on a LA DAS leasing program to assess the need for a leasing program and whether to move forward with developing an amendment
- 26. Develop limited access DAS and access area trip leasing suggested by the Scallopers Campaign
- 27. Complete ongoing actions (FW34)
- 28. Develop management and policy approaches for scallop seeding and grow out
- 29. LAGC IFQ program review (2016 – 2020)
- 29. Support the review of scallop sub-ACLs for GB YT and Southern Windowpane (Groundfish)
- 30. Develop long-term plan for managing scallop fishery
- 31. Develop measures to improve enforceability of landings limits (bag tags)
- 32. Staff: Participate in Spring 2023 management track review of projection model (2022 calendar year)
- 33. Staff: Estimating scallop, yellowtail, and windowpane flounder catches during the calendar year
- 34. Staff: Support annual scallop RSA process, including priority setting, and technical and management reviews

Current List of Possible Scallop Priorities for 2022

READ ME: Items shown in green are ongoing or regulatory requirements, and have been included in the multi-year timeline on the next page

There is opportunity to address some of the projects that are not highlighted in green in 2022.

9/9/21 List in ExComm Memo (Nies)

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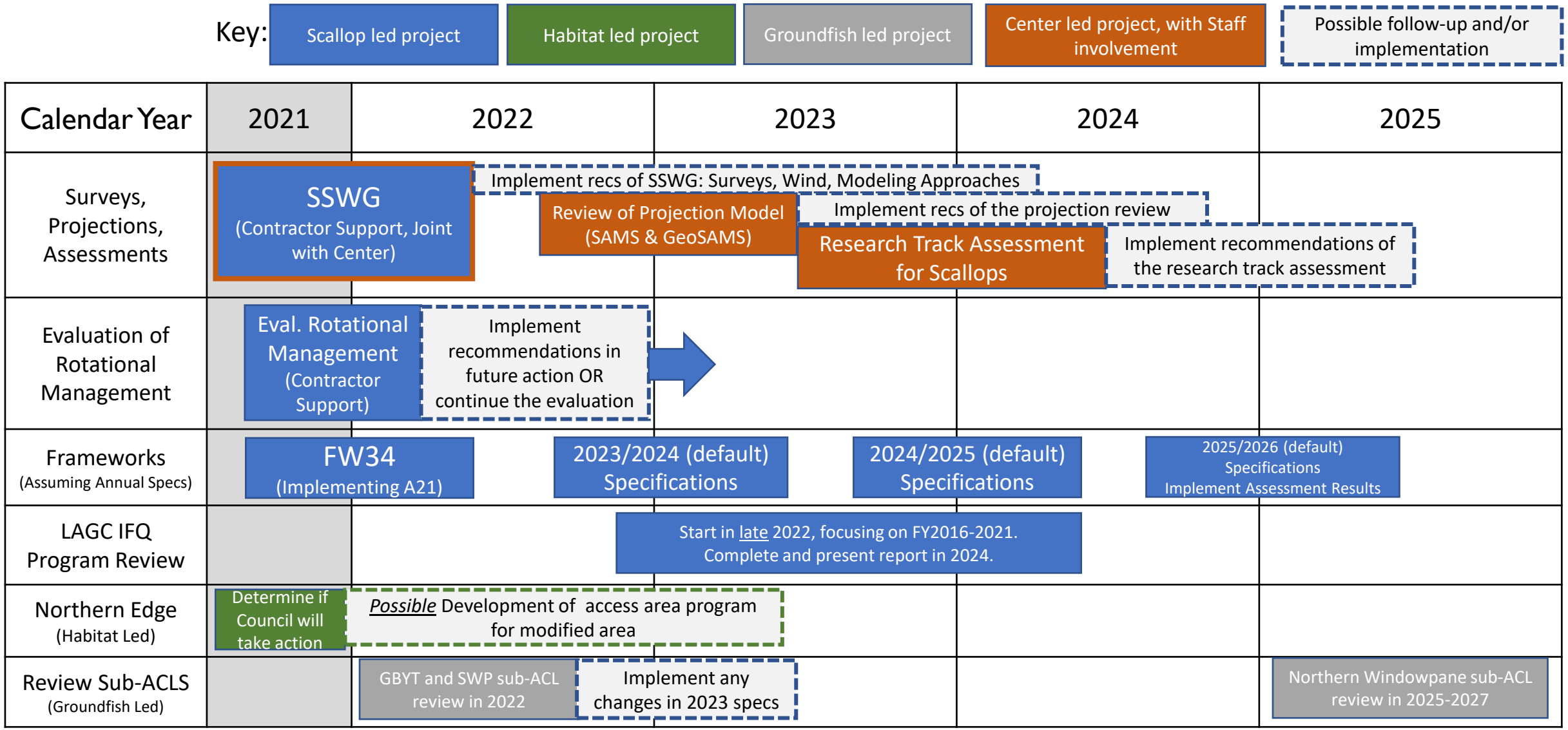
Planned Work and Multi-year Scallop FMP outlook



2022 Priorities – PDT and Staff input

PDT Input:

- Anticipate and budget time needed to implement recommendations of SSWG and the Evaluation of Rotational Management (shown in timelines).
- Evaluation of rotational management: Consider additional research and analyses beyond the scope of the current project plan.

Staff Input:

- Should be time to begin new projects in the 2022 calendar year, or to expand on ongoing efforts (ex: evaluation of rotational management).
- Contractor support for SSWG and evaluation of rotational management continue into 2022.
- Expect to begin addressing LAGC IFQ program review in November or December of 2022, with most of the work occurring in 2023/2024.
- Timelines on the next page indicate roughly when we expect to be working on each project. Time commitments will vary.

Scallop outlook by quarter in 2022 for ongoing and regulatory requirements.

Please note: There is opportunity to address additional projects that are not shown in this timeline in CY2022.

Key: Scallop led project | Habitat led project | Groundfish led project | Center led project, with Staff involvement | Possible follow-up and/or implementation

Calendar Year	Jan – Mar	Apr - Jun	July - Sept	Oct - Dec
Surveys, Projections, Assessments	SSWG (Contractor Support, Survey Group Involvement, Joint with Center)	Implement recs of SSWG: Surveys, Wind, Modeling Approaches		Review of Projection Model (SAMS & GeoSAMS)
Evaluation of Rotational Management	Eval. Rotational Management (Contractor Support)	Implement recommendations in future action OR continue the evaluation		
Frameworks (Assuming Annual Specs)	FW34 submission (Implementing A21)		2023/2024 (default) Specifications	
LAGC IFQ Program Review				Focusing on FY2016-2021. Complete and present report in 2024.
Northern Edge (Habitat Led)	*Dependent on 1) pursuing an action AND 2) schedule of the Habitat Committee* *Possible* Development of access area program for modified area			
Review Sub-ACLS (Groundfish Led)		*Dependent on GF priorities; schedule of the Groundfish Committee and PDT* GBYT and SWP sub-ACL review in 2022		Implement any changes in 2023 specs
Scallop RSA		Share Day and Set Priorities (Implement SSWG recs?)		Support RSA Program

Questions

- Letter from Ron Smolowitz in Committee correspondence
- https://www.nefmc.org/calendar/sep-22-2021-scallop-committee-meeting