



Stock Assessment Update

Progress to-date



- Data workshop (February 2024)
 - External researchers presented data
 - SAS and TC members presented data
- Assessment Workshop #1 (July 2024)
 - Progress on modeling
 - Updated data into basecase model
 - Progress in major improvements to coding
 - Updates on growth work
 - Incorporating new data
 - Examining new growth model and improvements to the existing growth matrices
 - Examination of environmental data series and work towards incorporating these into the 2025 assessment
 - Examination of options for VAST modeling to improve our understanding of spatial dynamics and change over time
- Ongoing calls and webinars, at least bi-weekly

Upcoming scheduled meetings



- Oct 29 – ½ day webinar, model-free indicators
- Dec TBD – at least ½ day webinar pre-workshop call
- Jan TBD – update on socio-economics work from U. Maine
- Feb 11 – 13 2025 (tentative) – Assessment Workshop #2

Timeline



- Data Workshop: February 15, 26-27 (virtual)
- Assessment Workshop 1: July 22-24 in New Bedford, MA
- Assessment Workshop 2: February 2025
- Peer Review Workshop: August 2025
- Present Assessment and Peer Review Reports to the Board: October 2025



QUESTIONS ?



2024 Lobster Data Update

Gulf of Maine / Georges Bank
Southern New England

Purpose



- Recommended during the 2020 Stock Assessment
- Monitor changes in abundance indicators in between assessments
- Indices:
 - Lobster young-of-year (YOY) index (SCUBA survey, states)
 - Signal of abundance for newly settled juveniles
 - Trawl survey recruit abundance (71-80 mm) (states & NEFSC)
 - Will molt into legal size range in the next year
 - Trawl survey encounter rate (states & NEFSC)
 - Information on how widely distributed lobsters are
 - Ventless Trap Survey (states)
 - Abundance index for lobsters > 53 mm (sex specific)

Status determination



- Trend-based
 - Looking at change over time
- Status is determined based on the most recent 5-year average, compared to the time series
 - Current status: 2019 - 2023
- We also compare current status to status from the 2020 Assessment

Indicator	< 25 th percentile	Between 25 th and 75 th percentile	> 75 th percentile
YOY settlement (larval or YOY)	Negative	Neutral	Positive
Trawl survey recruit abundance	Negative	Neutral	Positive
Trawl survey encounter rate	Negative	Neutral	Positive
Ventless trap survey abundance	Negative	Neutral	Positive

Quick summary



- GOM/GB stock was at record highs in the 2020 stock assessment
 - GOM indicators for recruits and adults have declined since the assessment, YOY indicators show improvement
 - GBK indicators have not been updated with 2023 data (NEFSC survey)
 - Update in 2022 indicated slight improvements since the stock assessment
- SNE stock was at record lows in the 2020 stock assessment
 - SNE indicators show continued unfavorable conditions, most at or near time series lows

GOM: YOY Indices



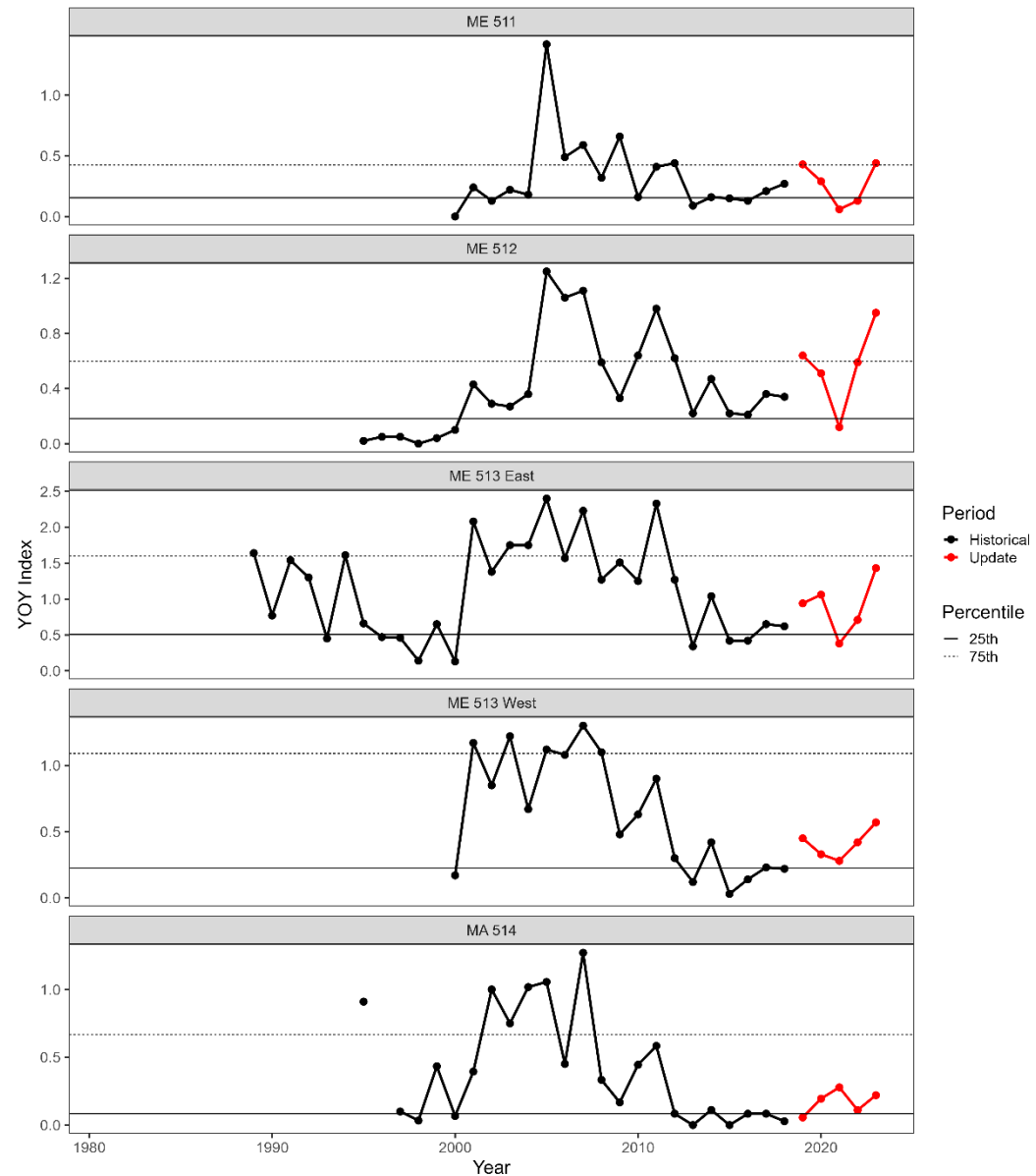
YOUNG-OF-YEAR INDICES

Survey	ME				MA
	511	512	513 East	513 West	514

2014-2018 mean	0.18	0.32	0.63	0.21	0.06
2019	0.43	0.64	0.94	0.45	0.06
2020	0.29	0.51	1.06	0.33	0.19
2021	0.06	0.12	0.38	0.28	0.28
2022	0.13	0.59	0.71	0.42	0.11
2023	0.44	0.95	1.43	0.57	0.22

2019-2023 mean	0.27	0.56	0.90	0.41	0.17
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25th median	0.16	0.18	0.51	0.23	0.08
75th	0.43	0.60	1.60	1.09	0.67



- Improvements since the SA
 - 5-yr means have all increased since SA, now all neutral
 - Increases for last 2 years in all ME indices since recent low in 2021
 - Reminder - Signals in YOY indicators won't be detected in recruit indicators for several years

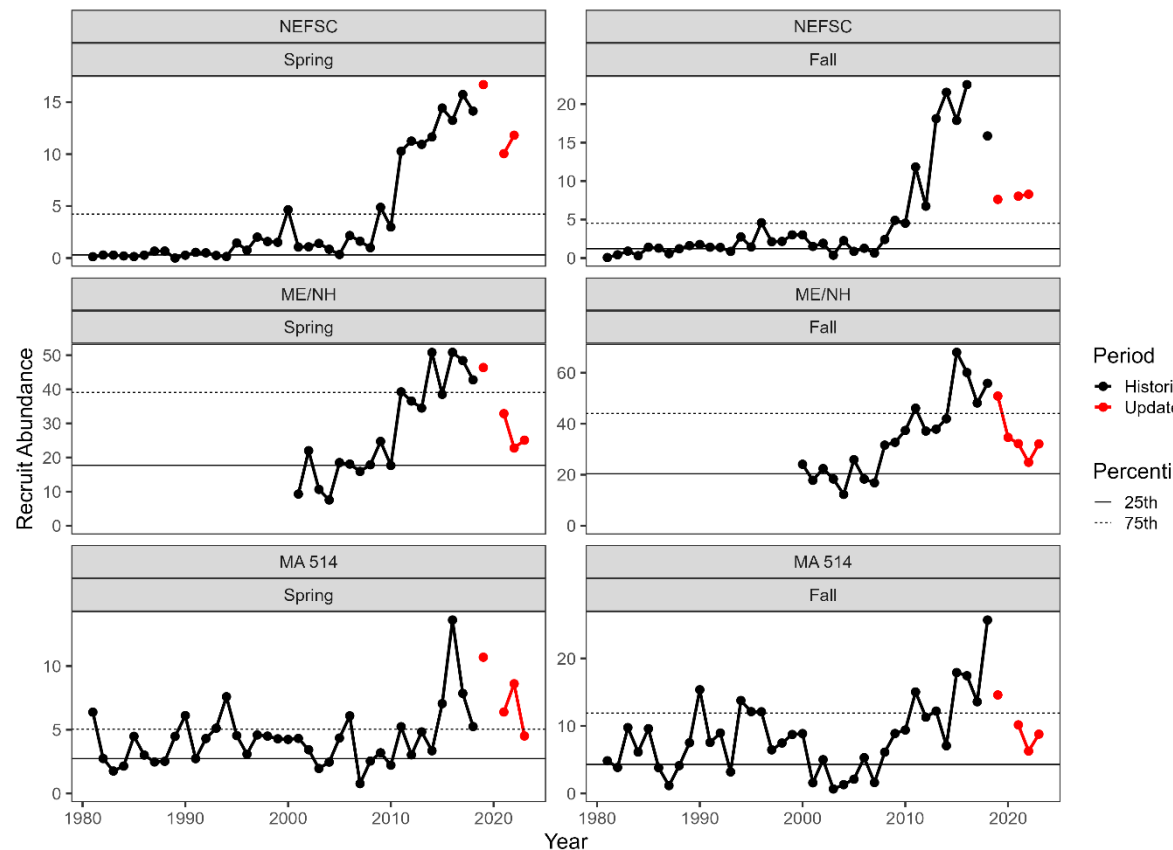
GOM: Recruit Abundance



RECRUIT ABUNDANCE (SURVEY)						
Abundance of lobsters 71 - 80 mm CL (sexes combined)						
Survey	NEFSC		ME/NH		MA 514	
	Spring	Fall	Spring	Fall	Spring	Fall

2014-2018 mean	13.84	19.46	46.26	54.80	7.42	16.34
2019	16.69	7.62	46.37	50.85	10.69	14.59
2020				34.65		
2021	10.05	8.04	32.86	32.19	6.39	10.16
2022	11.82	8.29	22.78	24.86	8.61	6.27
2023			25.08	32.09	4.51	8.78
2019-2023 mean	12.85	7.98	31.77	34.93	7.55	9.95

25th median	0.30	1.21	17.72	20.37	2.73	4.30
75th	4.23	4.53	39.07	44.02	5.05	11.90



- Signs of decline in recruits (71-80 mm) since peaks observed during the SA
 - Three means changed from positive to neutral (all inshore)
 - No 2023 data for NEFSC (status remains positive)

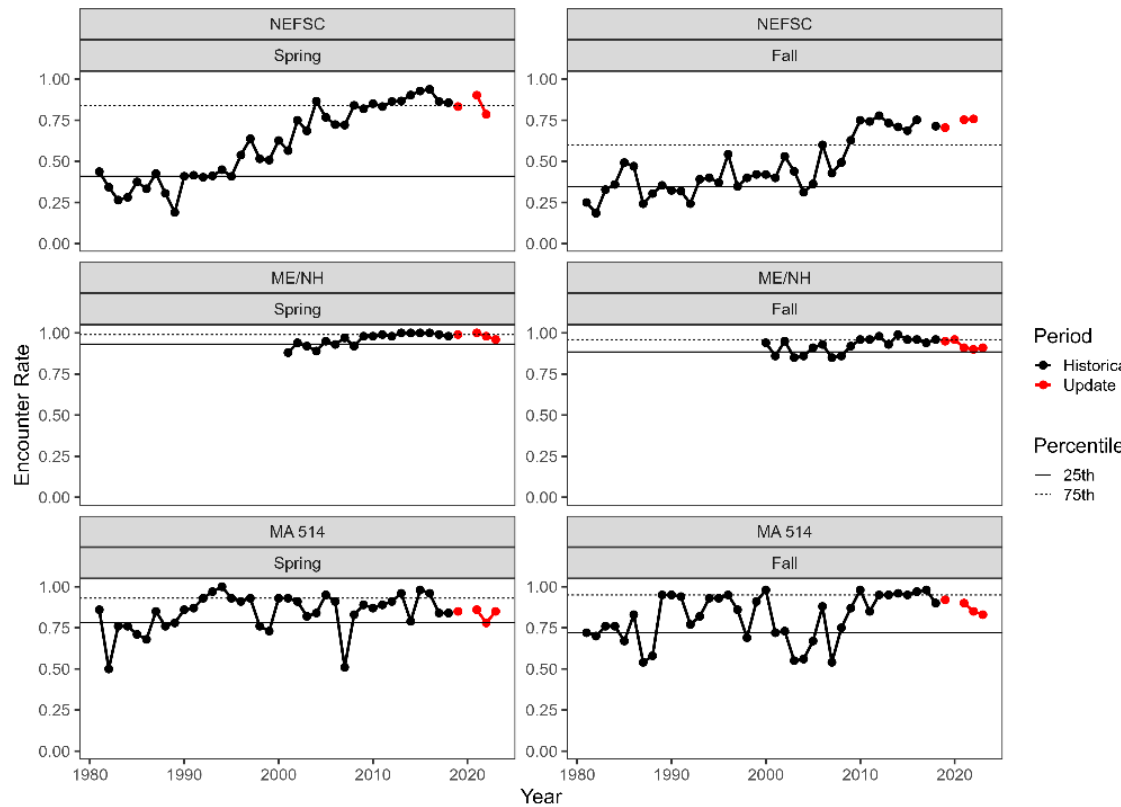
GOM: Encounter Rates



SURVEY LOBSTER ENCOUNTER RATE						
Proportion of positive tows						
Survey	NEFSC		ME/NH		MA 514	
	Spring	Fall	Spring	Fall	Spring	Fall

2014-2018 mean	0.90	0.72	0.99	0.96	0.88	0.95
2019	0.83	0.71	0.99	0.95	0.85	0.92
2020				0.96		
2021	0.90	0.75	1.00	0.91	0.86	0.90
2022	0.79	0.76	0.98	0.90	0.73	0.85
2023			0.96	0.91	0.85	0.83
2019-2023 mean	0.84	0.74	0.98	0.93	0.84	0.88

25th	0.41	0.35	0.93	0.89	0.78	0.72
median	0.60	0.42	0.98	0.94	0.87	0.86
75th	0.84	0.60	0.99	0.96	0.93	0.95

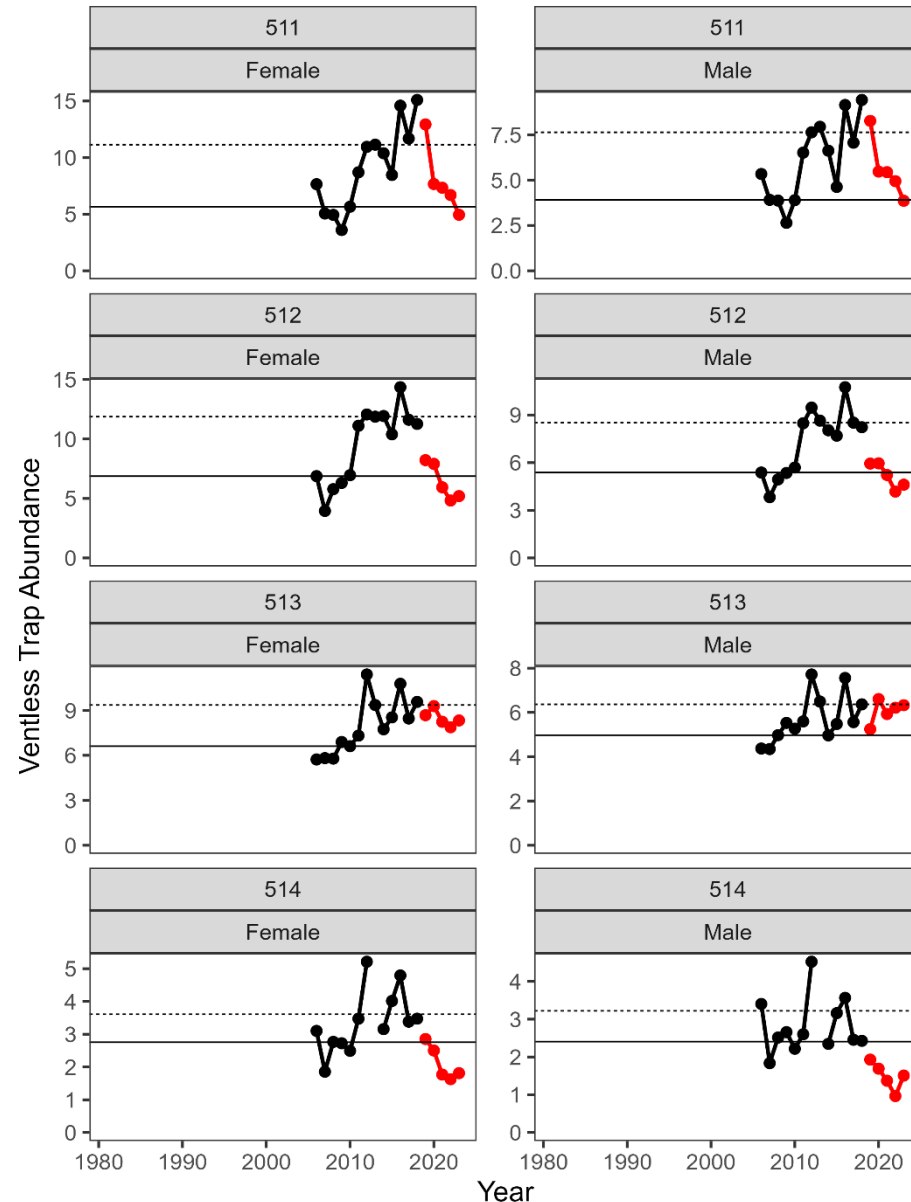


- Declines in inshore encounter rates since the SA
 - All inshore means neutral
 - No 2023 data for NEFSC (status remains positive)
 - ME/NH values remain relatively high & stable, 90% or more of tows are positive

GOM: VTS Indices



VENTLESS TRAP ABUNDANCE								
Abundance of lobsters ≥ 53 mm CL								
Survey	511		512		513		514	
	Female	Male	Female	Male	Female	Male	Female	Male
2014-2018 mean	12.05	7.38	11.90	8.65	9.02	5.99	3.76	2.79
2019	12.93	8.27	8.22	5.94	8.68	5.25	2.85	1.93
2020	7.66	5.47	7.91	5.96	9.29	6.61	2.50	1.69
2021	7.34	5.44	5.94	5.23	8.24	5.93	1.77	1.37
2022	6.69	4.95	4.83	4.18	7.88	6.21	1.63	0.96
2023	4.94	3.86	5.20	4.61	8.33	6.33	1.81	1.51
2019-2023 mean	7.91	5.60	6.42	5.18	8.48	6.06	2.11	1.49
25th median	5.66	3.91	6.87	5.38	6.61	4.97	2.76	2.41
75th	8.70	6.52	11.10	8.04	7.74	5.53	3.27	2.56
75th	11.14	7.64	11.87	8.52	9.36	6.37	3.61	3.22



- Declines since the SA
 - Four of eight means declined to negative status
 - 2023 values slight uptick relative to 2022 in all but 511, but still low compared to time series

GBK: Recruit Abundance

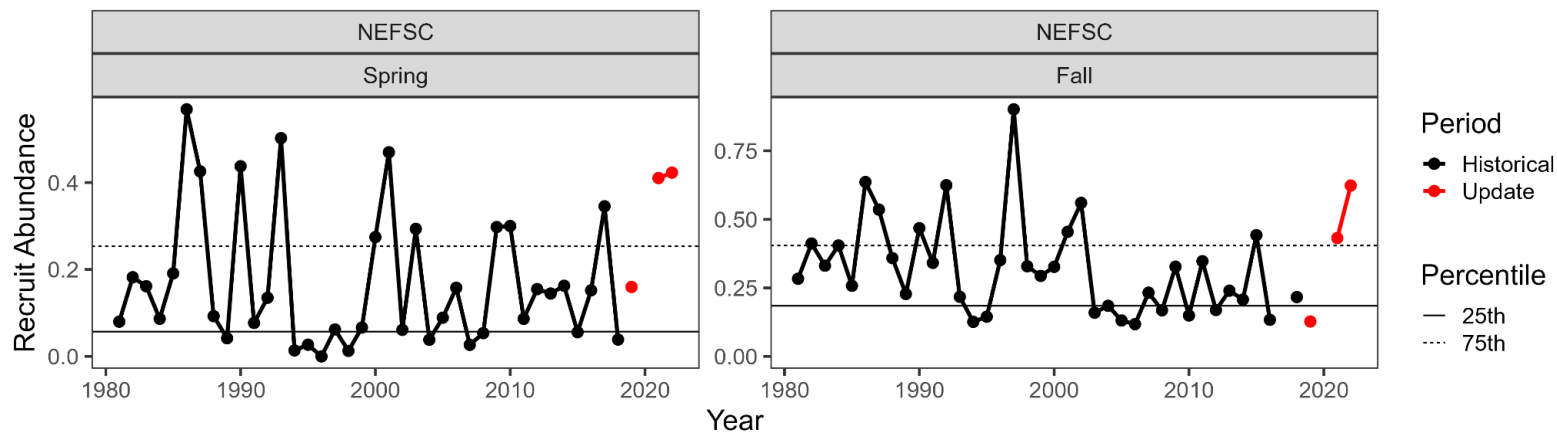


- Slight improvement since the SA
 - One 5-year mean changed status from neutral to positive
 - No 2023 data for NEFSC
 - 2021 & 2022 values were both relatively high

RECRUIT ABUNDANCE (SURVEY)		
Abundance of lobsters 71 - 80 mm CL (sexes combined)		
Survey	NEFSC	
	Spring	Fall

2014-2018 mean	0.15	0.25
2019	0.16	0.13
2020		
2021	0.41	0.43
2022	0.42	0.62
2023		
2019-2023 mean	0.33	0.39

25th median	0.06	0.18
75th	0.11	0.29
	0.25	0.40



GBK: Encounter Rates

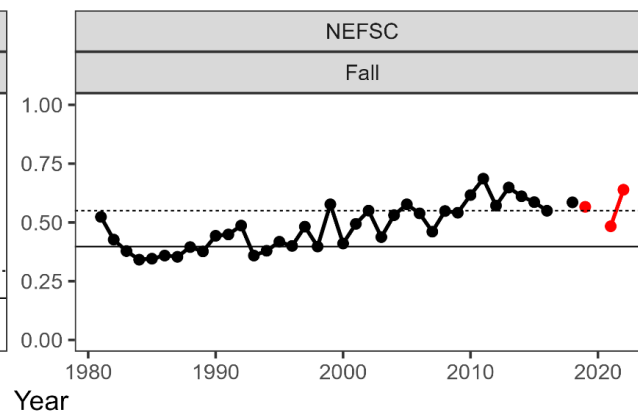
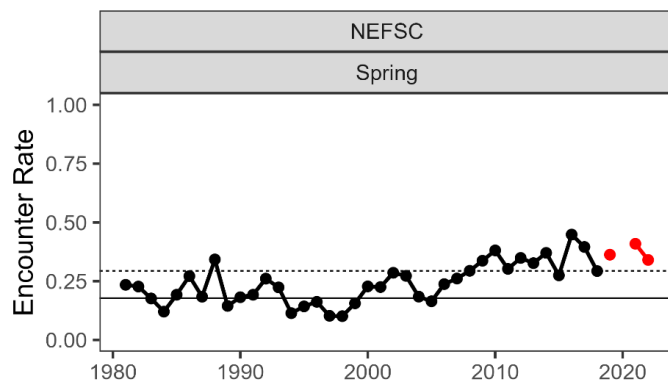


- Conditions similar to the SA
 - Means both remained positive
 - No 2023 data for NEFSC

SURVEY LOBSTER ENCOUNTER RATE		
Proportion of positive tows		
Survey	NEFSC	
	Spring	Fall

2014-2018 mean	0.36	0.58
2019	0.36	0.57
2020		
2021	0.41	0.48
2022	0.34	0.64
2023		
2019-2023 mean	0.37	0.56

25th median	0.18	0.40
75th	0.23	0.48
	0.29	0.55



Period

- Historical
- Update

Percentile

- 25th
- 75th

SNE: YOY Indices

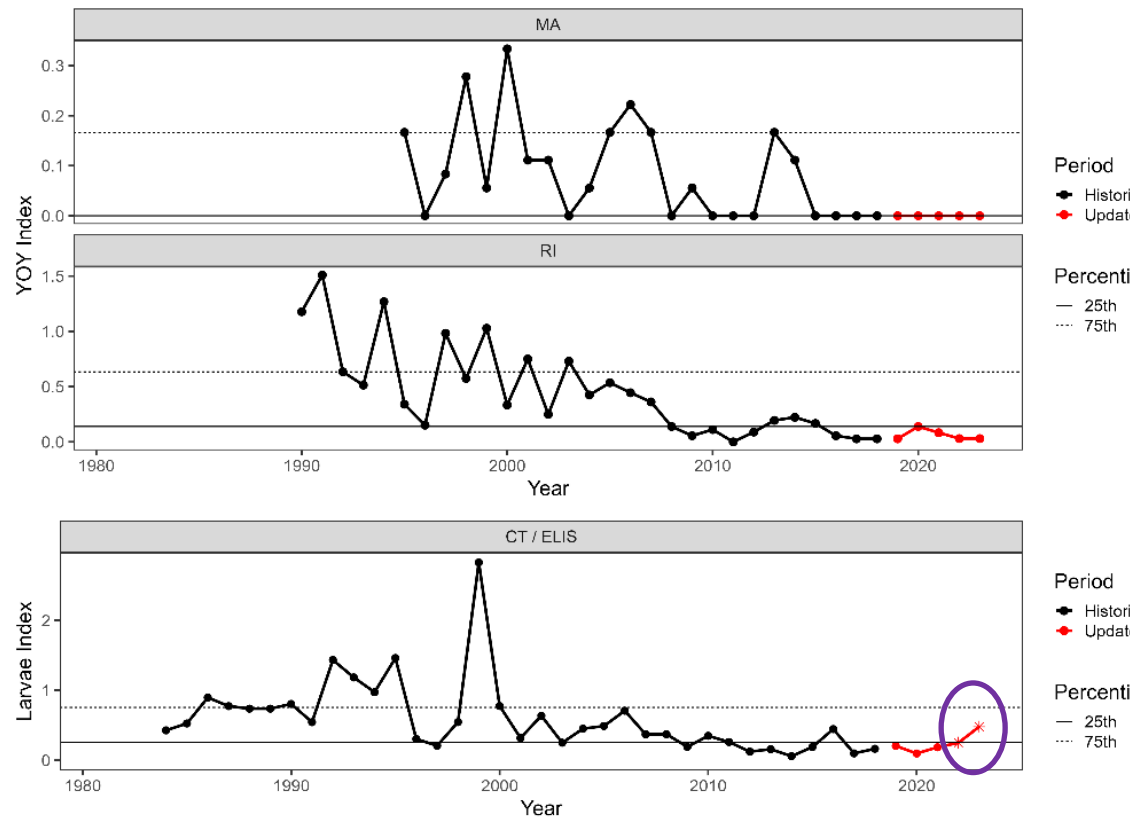


YOUNG-OF-YEAR INDICES

Survey	MA	RI	CT / ELIS Larvae
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2014-2018 mean	0.02	0.10	0.19
2019	0.00	0.03	0.21
2020	0.00	0.14	0.10
2021	0.00	0.08	0.19
2022	0.00	0.03	0.25
2023	0.00	0.03	0.48
2019-2023 mean	0.00	0.06	0.24

25th median	0.00	0.14	0.26
75th	0.06	0.34	0.45
75th	0.17	0.63	0.76



- Negative conditions across the stock with some decline since the SA
 - All 5-yr means are now negative
 - No YOY caught during MA survey for the last nine years
 - CT/ELIS survey methods changed in 2022; 2022 and 2023 values represent only one and two observed larvae, respectively (lowest ever)

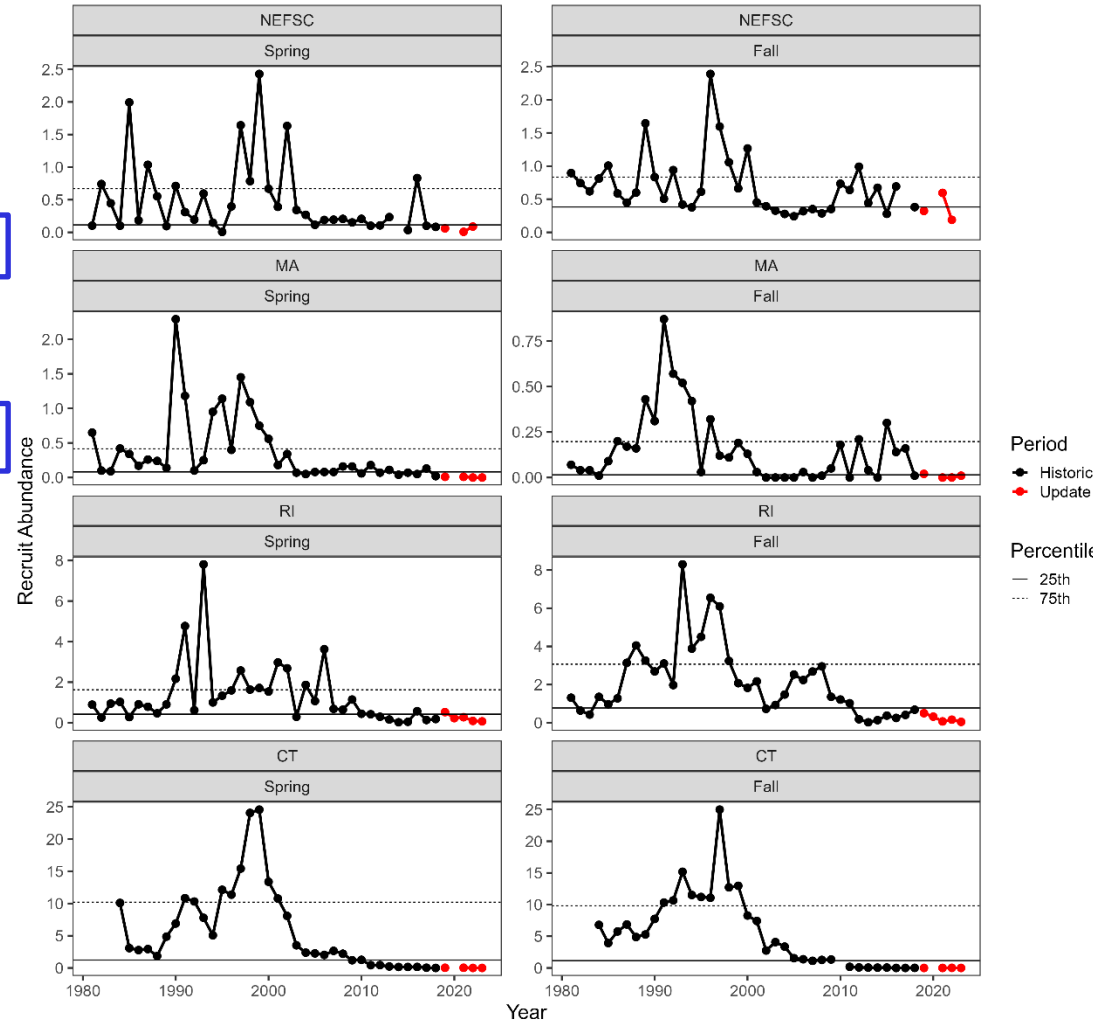
SNE: Recruit Abundance



RECRUIT ABUNDANCE (SURVEY)								
Abundance of lobsters 71 - 80 mm CL (sexes combined)								
Survey	NEFSC		MA		RI		CT	
	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall

2014-2018 mean	0.26	0.51	0.06	0.12	0.19	0.37	0.10	0.03
2019	0.06	0.32	0.01	0.02	0.52	0.50	0.03	0.00
2020					0.23	0.32		
2021	0.01	0.59	0.01	0.00	0.27	0.07	0.03	0.00
2022	0.09	0.19	0.00	0.00	0.09	0.16	0.00	0.01
2023			0.00	0.01	0.07	0.05	0.00	0.00
2019-2023 mean	0.05	0.37	0.01	0.01	0.24	0.22	0.01	0.00

25th median	0.11	0.38	0.08	0.02	0.42	0.78	1.23	1.16
75th	0.23	0.61	0.17	0.10	0.91	1.65	2.93	4.48
	0.67	0.83	0.42	0.20	1.62	3.07	10.20	9.81



- Declines since the SA
 - All 5-yr means are now negative
 - No 2023 data for NEFSC
 - No recruit lobsters were observed in 2022 or 2023 for three of the six inshore surveys

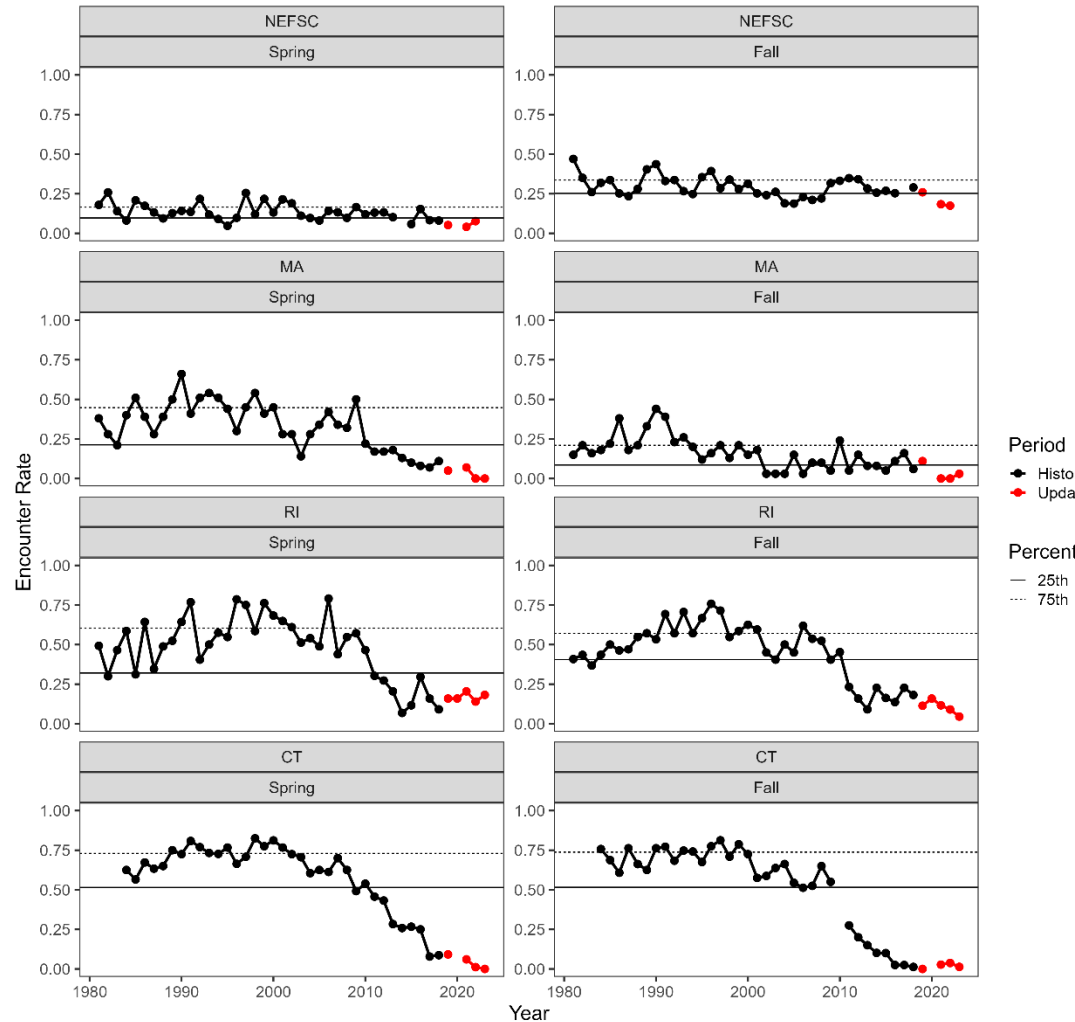
SNE: Encounter Rates



SURVEY LOBSTER ENCOUNTER RATE								
Proportion of positive tows								
Survey	NEFSC		MA		RI		CT	
	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall

2014-2018 mean	0.09	0.27	0.10	0.09	0.15	0.19	0.19	0.05
2019	0.05	0.26	0.05	0.11	0.16	0.11	0.09	0.00
2020					0.16	0.16		
2021	0.04	0.18	0.07	0.00	0.20	0.12	0.06	0.03
2022	0.08	0.17	0.00	0.00	0.14	0.09	0.01	0.04
2023			0.00	0.03	0.18	0.05	0.00	0.01
2019-2023 mean	0.06	0.21	0.03	0.04	0.17	0.10	0.04	0.02

25th	0.10	0.25	0.21	0.09	0.32	0.40	0.52	0.52
median	0.13	0.28	0.34	0.16	0.51	0.49	0.65	0.64
75th	0.17	0.34	0.45	0.21	0.60	0.57	0.73	0.74



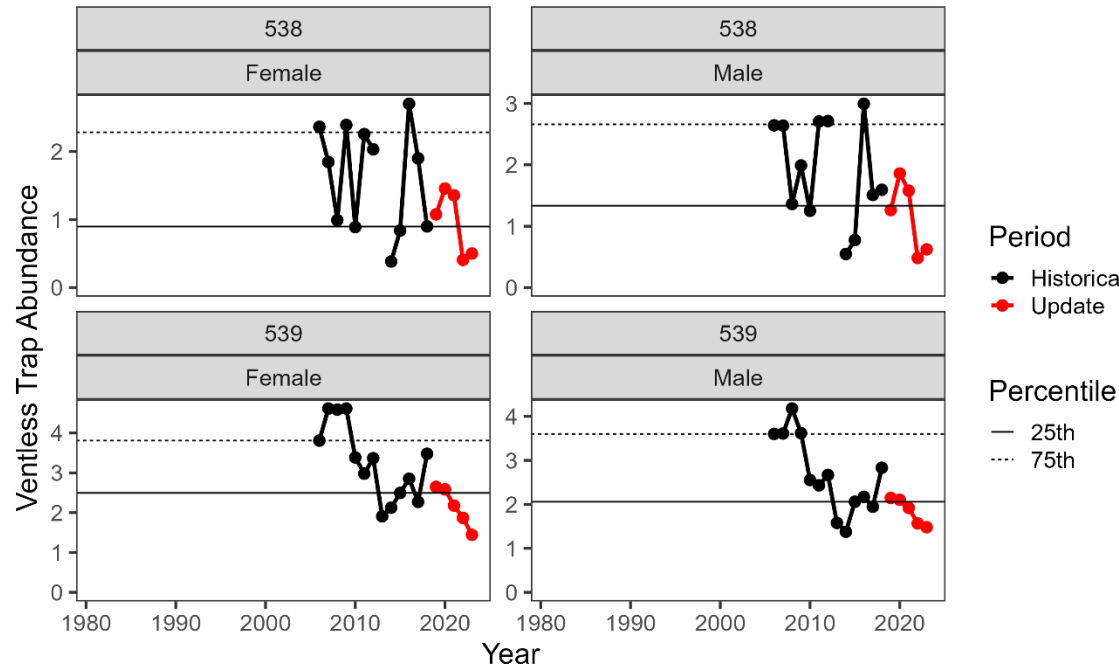
- Declines since the SA
 - All 5-yr means are now negative
 - No 2023 data for NEFSC
 - No lobsters of any size were observed in 2022 or 2023 for two of six inshore surveys

SNE: VTS Indices



VENTLESS TRAP ABUNDANCE				
Abundance of lobsters \geq 53 mm CL				
Survey	538		539	
	Female	Male	Female	Male
2014-2018 mean	1.34	1.48	2.64	2.08
2019	1.08	1.26	2.65	2.14
2020	1.46	1.86	2.58	2.10
2021	1.36	1.58	2.18	1.92
2022	0.41	0.48	1.87	1.57
2023	0.50	0.62	1.44	1.48
2019-2023 mean	0.96	1.16	2.14	1.84

25th	0.90	1.33	2.49	2.06
median	1.87	1.79	3.37	2.55
75th	2.28	2.66	3.81	3.60



- Declines since the SA
 - Three of the 5-yr means changed from neutral to negative
 - Annual values for both sexes in 2022 and 2023 values were all negative



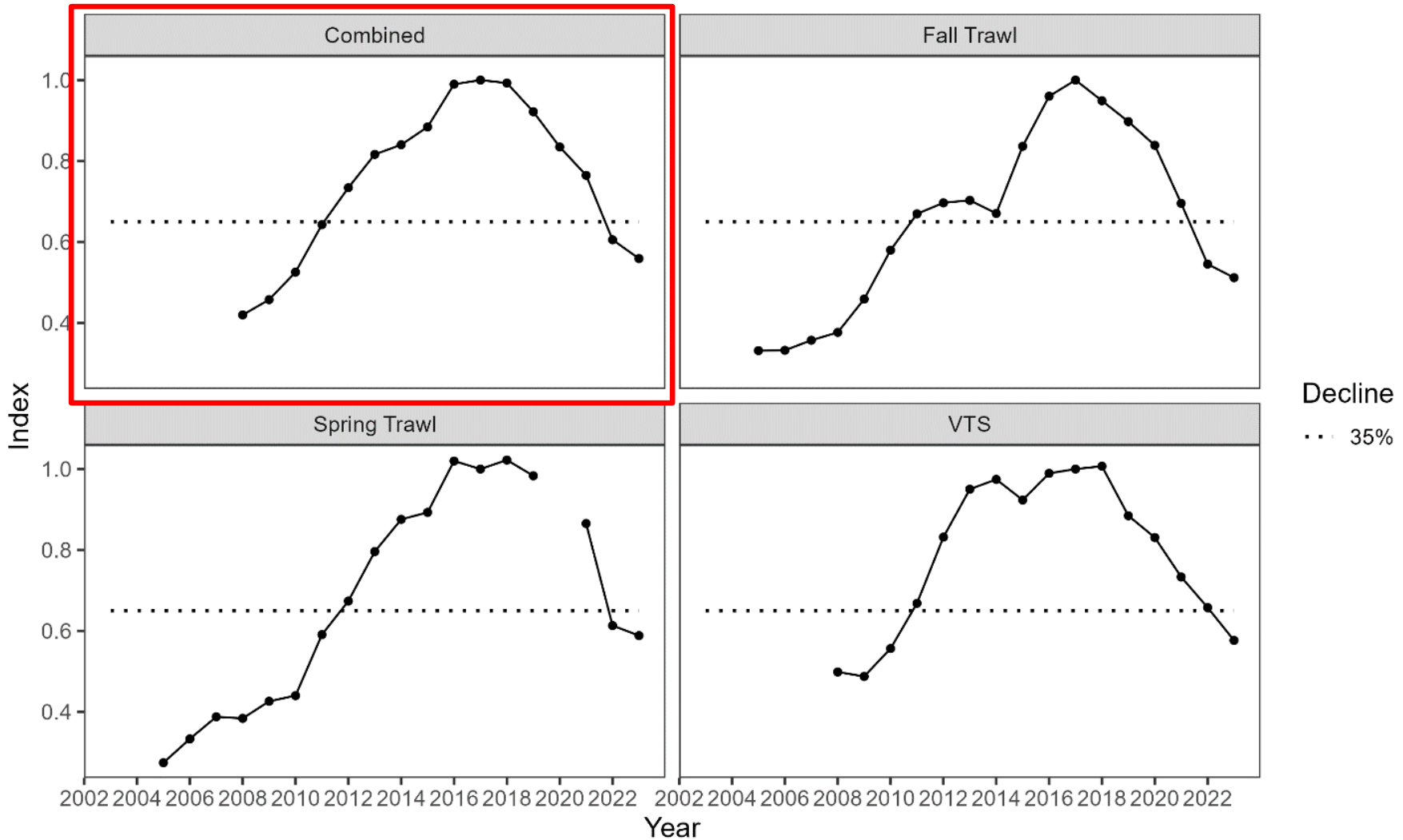
Questions?

Addendum XXVII – Trigger Index



- Component of Addendum XXVII
 - Provided managers with a mechanism on which to fix a specific management action in response to changing stock conditions
 - Definition of the index and the threshold to initiate action were all part of Addendum XXVII
 - Represents change in conditions for the GOM/GB stock since the 2020 stock assessment (specifically recruit abundance)
- Calculated based on combination of inshore surveys
 - VTS, spring and fall trawl surveys (ME/NH and MA)
- Each value represents a running 3-yr average of the underlying indices
 - Most recent value is the 2021-2023 average
 - Using the average makes the index less sensitive to interannual variations
- Addendum XXVII has passed
 - Trigger index no longer has policy action attached to it
 - Addendum XXXI to delay implementation date is on today's agenda
- Presenting the updated index here in response to multiple requests

Addend. XXVII - Trigger Index



NOTE – the NEFSC survey is not included in the index, so the lack of 2023 data from that survey is not impacting calculation of the index

American Lobster Draft Addendum XXXI

Postponing Measures of Addendum XXVII



American Lobster Management Board
October 2024

Outline



1. Background
2. Addendum Timeline
3. Addendum Objective
4. Proposed Management Options
5. Public Comment Summary
6. Advisory Panel Report
7. Next Steps

Background



- Addendum XXVII (2023) for increasing protection of GOM/GBK spawning stock
 - established a trigger mechanism to implement a series of gauge and vent size changes when a trigger is reached
- Trigger = 35% decline in the trigger index from the reference period (2016-2018)
 - Trigger index declined by 39% with inclusion of 2022 data
- Board delayed implementation of Addendum XXVII measures to January 1, 2025

Addendum XXVII Measures



Changes to Management Measures Initiated When 35% Trigger Level is Reached

Area	LCMA 1	LCMA 3	OCC
Current Measures (Year 0)	Min gauge: 3 ¼" Max gauge: 5" Vent size: status quo	Min gauge: 3 ¹⁷ / ₃₂ " Max gauge: 6 ¾" Vent size: status quo	Min gauge: 3 3/8" Max gauge: 6 ¾" (state), none (fed) Vent size: status quo
Measures for Year 1 (Jan 1, 2025)	Min gauge size: 3 5/16" (84 mm)	Status quo	Status quo
Measures for Year 3 (Jan 1, 2027)	Min gauge size: 3 3/8" (86 mm)	Status quo	Status quo
Measures for Year 4 (Jan 1, 2028)	Vent size: 2 x 5 3/4" rectangular; 2 5/8" circular	Status quo	Status quo
Measures for Year 5 (Jan 1, 2029)	Status quo	Max gauge size: 6 ½"	Max gauge size: 6 ½"

Addendum XXX (August 2024)



- Magnuson-Stevens prohibits import/sale of whole, live lobsters smaller than the minimum possession size in effect under the Commission FMP (Mitchell Provision)
- Commission recommends imports from other countries be restricted to the smallest LCMA minimum size in effect
 - $3 \frac{5}{16}$ " in 2025, and $3 \frac{3}{8}$ " in 2027
 - Minimum size of live lobster coming into the US would not be any smaller than smallest lobster that can be legally landed by US industry

Addendum XXXI



- Draft Addendum XXXI considers further delaying the biological measures (size limits and v-notch definitions) an additional six months to July 1, 2025
- Aims to reduce negative impacts to the US and Canadian lobster industries in 2025 and allow Canada more time to consider implementing complementary management measures.

Action Timeline



Date	Action
August 2024	Board initiated Draft Addendum XXXI
	Draft Addendum developed
	Board approved Addendum for Public Comment
September – Oct 2024	Public hearing and comment period
October 2024	Board considers final approval of Draft Addendum XXXI



Proposed Management Options

Proposed Management Options



- **Option A**
 - Status Quo
- **Option B**
 - Postpone implementation of some Addendum XXVII measures until July 1, 2025

Option A: Status Quo



Addendum XXVII implementation dates

Area	LCMA 1	LCMA 3	OCC
Current Measures	Min gauge: 3 ¼" Max gauge: 5" Vent size: status quo	Min gauge: 3 ¹⁷ / ₃₂ " Max gauge: 6 ¾" Vent size: status quo	Min gauge: 3 ¾" Max gauge: 6 ¾" (<i>state</i>), none (<i>fed</i>) Vent size: status quo
January 1, 2025	Min gauge size: 3 5/16" (84 mm)	Status quo	Max gauge: 6 ¾" (state and federal)
January 1, 2027	Min gauge size: 3 3/8" (86 mm)	Status quo	Status quo
January 1, 2028	Vent size: 2 x 5 3/4" rectangular; 2 5/8" circular	Status quo	Status quo
January 1, 2029	Status quo	Max gauge size: 6 ½"	Max gauge size: 6 ½"

Option B: Postpone to July 1, 2025



New proposed implementation dates

Area	LCMA 1	LCMA 3	OCC
Current Measures	Min gauge: 3 ¼" Max gauge: 5" Vent size: status quo	Min gauge: 3 ¹⁷ / ₃₂ " Max gauge: 6 ¾" Vent size: status quo	Min gauge: 3 ¾" Max gauge: 6 ¾" (<i>state</i>), none (<i>fed</i>) Vent size: status quo
July 1, 2025	Min gauge size: 3 5/16" (84 mm)	Status quo	Max gauge: 6 ¾" (state and federal)
July 1, 2027	Min gauge size: 3 ¾" (86 mm)	Status quo	Status quo
July 1, 2028	Vent size: 2 x 5 ¾" rectangular; 2 5/8" circular	Status quo	Status quo
July 1, 2029	Status quo	Max gauge size: 6 ½"	Max gauge size: 6 ½"

Option B: Postpone to July 1, 2025



★ Option B would NOT postpone trap tag provision:

“No surplus trap tags for LCMA 1 and 3 will be automatically issued to permit holders for these areas until trap losses occur and are documented.”

- This would still be implemented January 1, 2025



Public Comments

Public Comment Summary



- Comment deadline: 11:59 PM, October 6
- One webinar public hearing
 - 26 public attendees
 - Attendee poll (15/19 supported Option B)
 - 5 comments
- 81 written comments submitted
 - 5 organizations
 - 76 individuals

Public Comment Summary



Total Comments Received	
Organization Letters	5
Individual Comments	76
Total Written Comments	81

Management Options	Public Hearing	Letters	Individual Comments	Total
Option A. Status Quo	2		2	4
Option B. Postpone Implementation	15	5	28	48
Oppose Gauge Change			42	42
Other			4	4

Support for Option A



- Increasing the measure is a good conservation idea
- Previous increase to the gauge size did not hurt the industry
- Science not emotion should dictate the actions necessary to protect a healthy lobster population
- Gulf of Maine warming and low recruitment rates

Support for Option B



- The minimum gauge size should change for Canada and the US at the same time
- More time needed to figure out marketing, enforcement, and give fisherman a chance to plan for how this will affect their businesses
- A delay will allow more data to be collected



Advisory Panel Report

Advisory Panel Comments



- The AP met via webinar September 23rd
- All advisors in attendance supported Option B, postpone implementation of the Addendum XXVII measures
 - Concerns about negative impacts of LCMA 1 gauge increase to industry if smaller lobster can come in from Canada
 - Want to see an economic analysis of impacts
 - Observing much higher abundances of sublegal lobsters
- Two advisors do not think the gauge size needs to change
- LCMTs should have been involved in developing management measures for the LCMAs

Next Steps



- Select Management Program
- Consider approval of Addendum XXXI



Questions?



American Lobster FMP Review for the 2023 Fishing Year

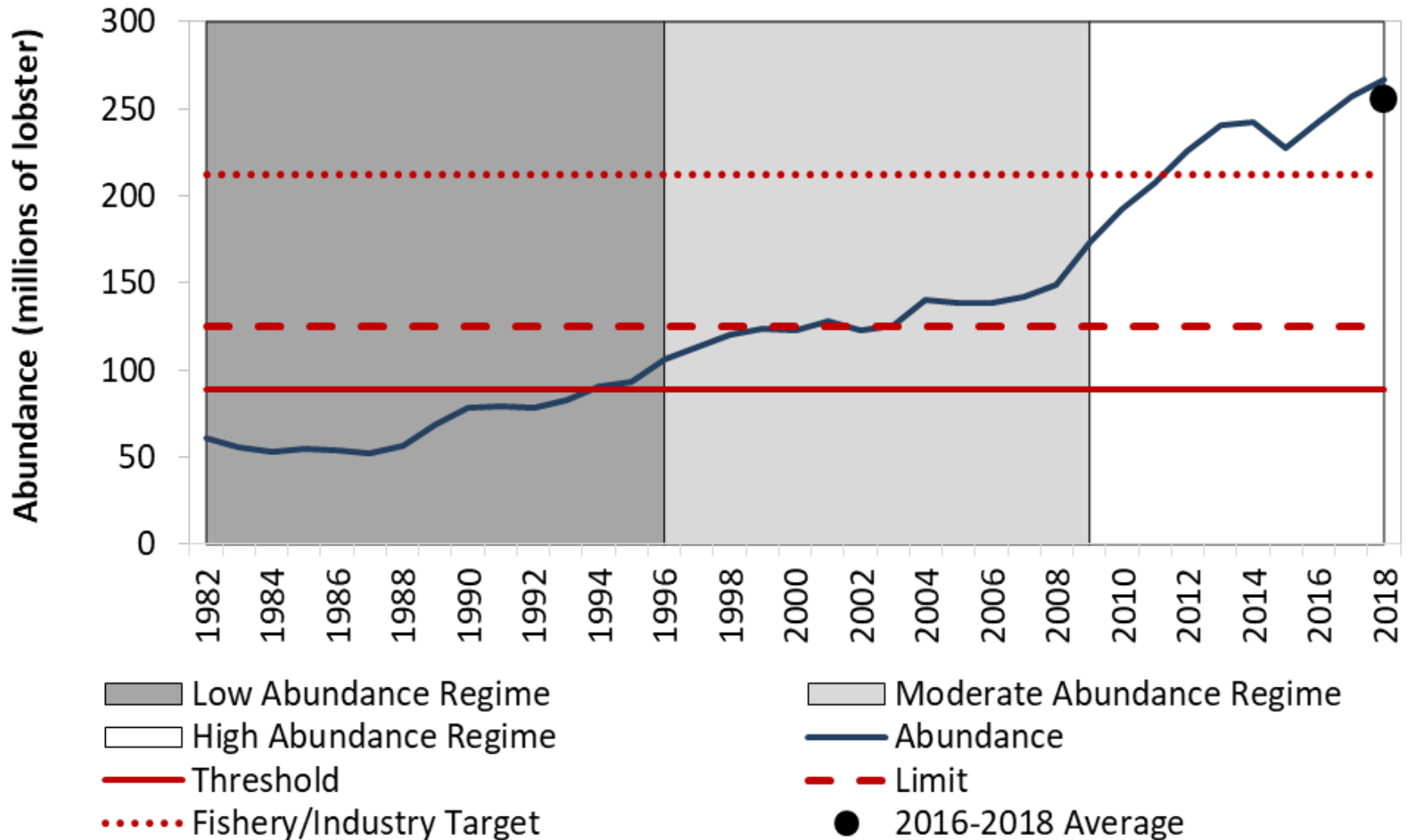


American Lobster Management Board
October 21, 2024

Status of the Stock



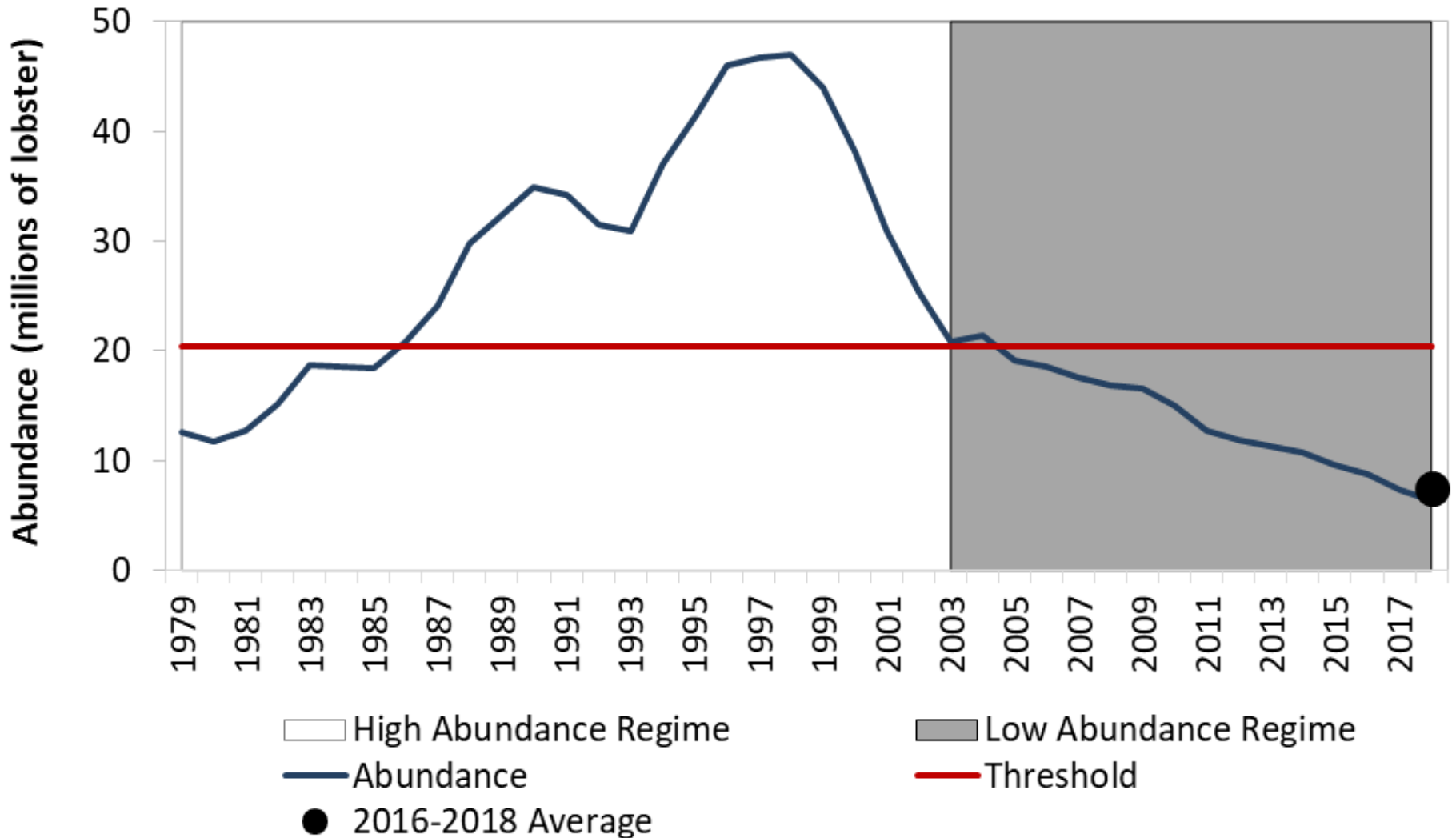
GOM/GBK



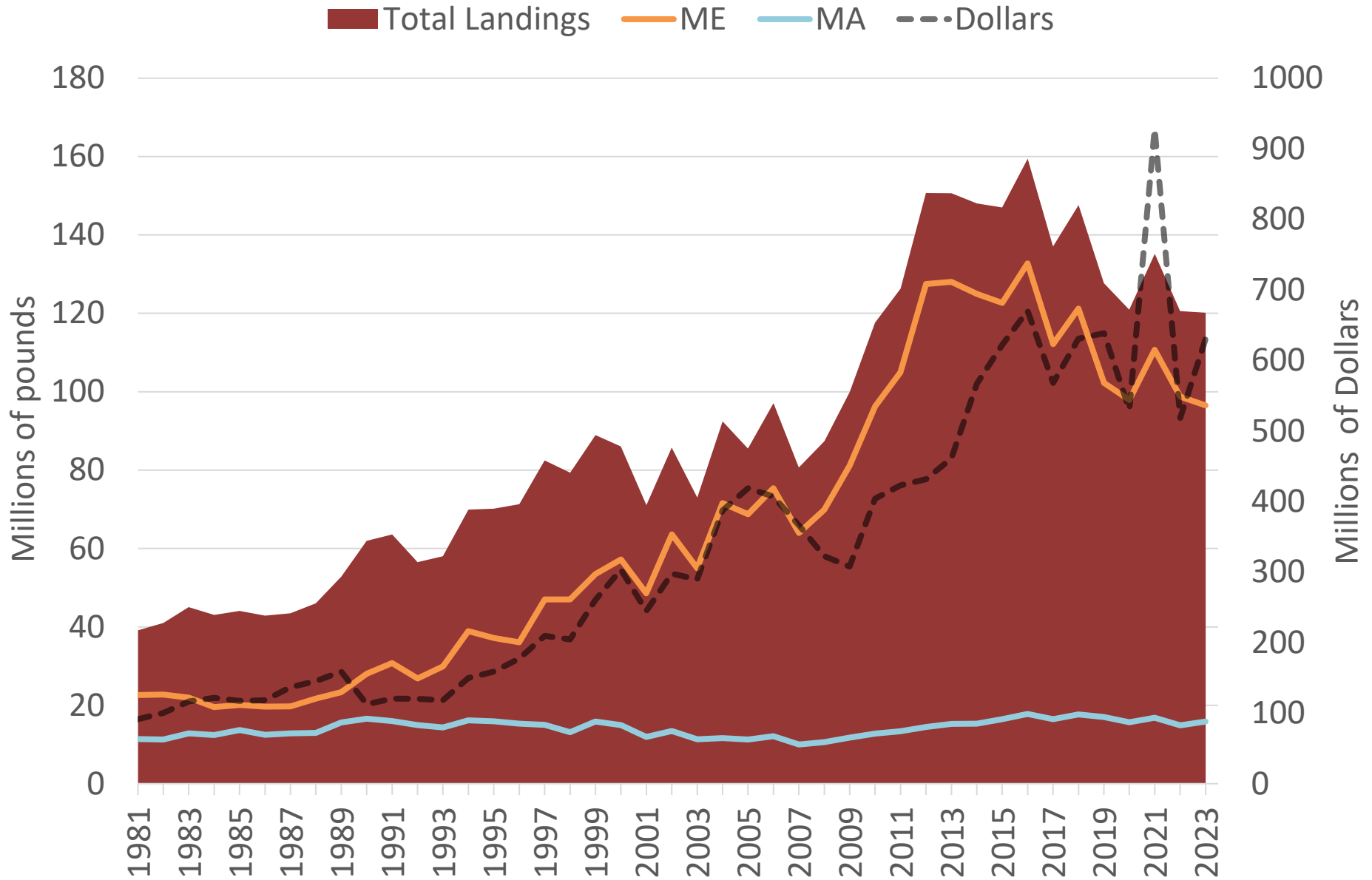
Status of the Stock



SNE



Commercial Landings



Status of Management



Addendum XXVI (2018)

- Implemented 100% harvester reporting in 2023

Addendum XXIX (2022)

- Vessel tracking requirements effective December 15, 2023

Addendum XXVII (2023)

- Established management trigger for gauge changes

State Compliance



- Rhode Island, Connecticut, and New Jersey and did not meet the Addendum XXVI minimum requirement of ten sea/port sampling trips
 - No trips completed for NJ and CT
 - 9 trips for RI
- Massachusetts did not provide all required data by August 1 deadline
- Otherwise, states in compliance with FMP

De Minimis



- Most recent 2 year average of commercial landings under 40,000 lbs
- Requests: DE, MD, VA
- All three states qualify

- The PRT recommends the Board approve the *de minimis* requests

Jonah Crab

FMP Review for the 2023 Fishing Year

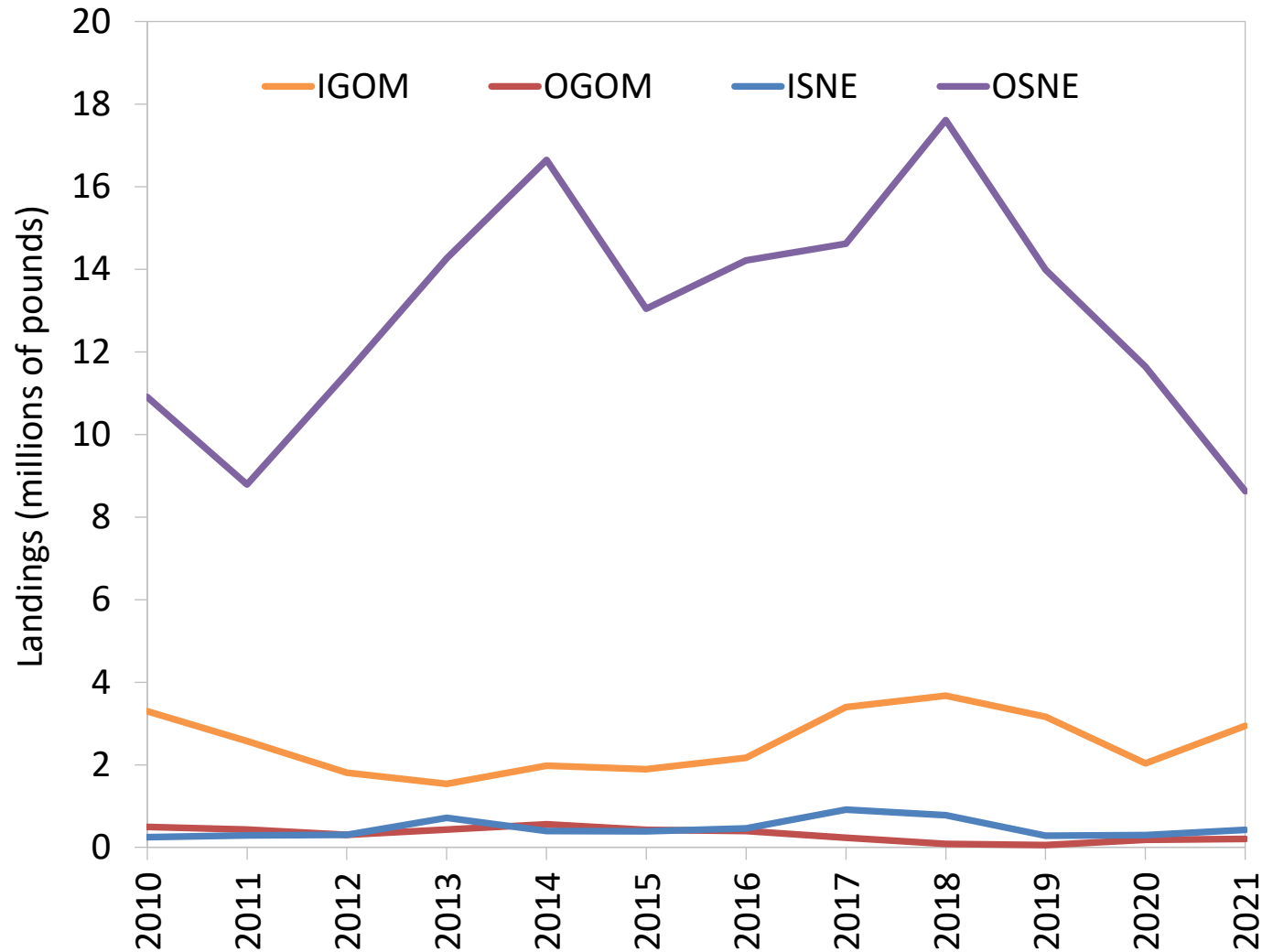


Status of the Stock



Jonah Crab Commercial Landings by Stock Area

Source: ASMFC Jonah Crab Benchmark Stock Assessment & Peer Review Report, 2023

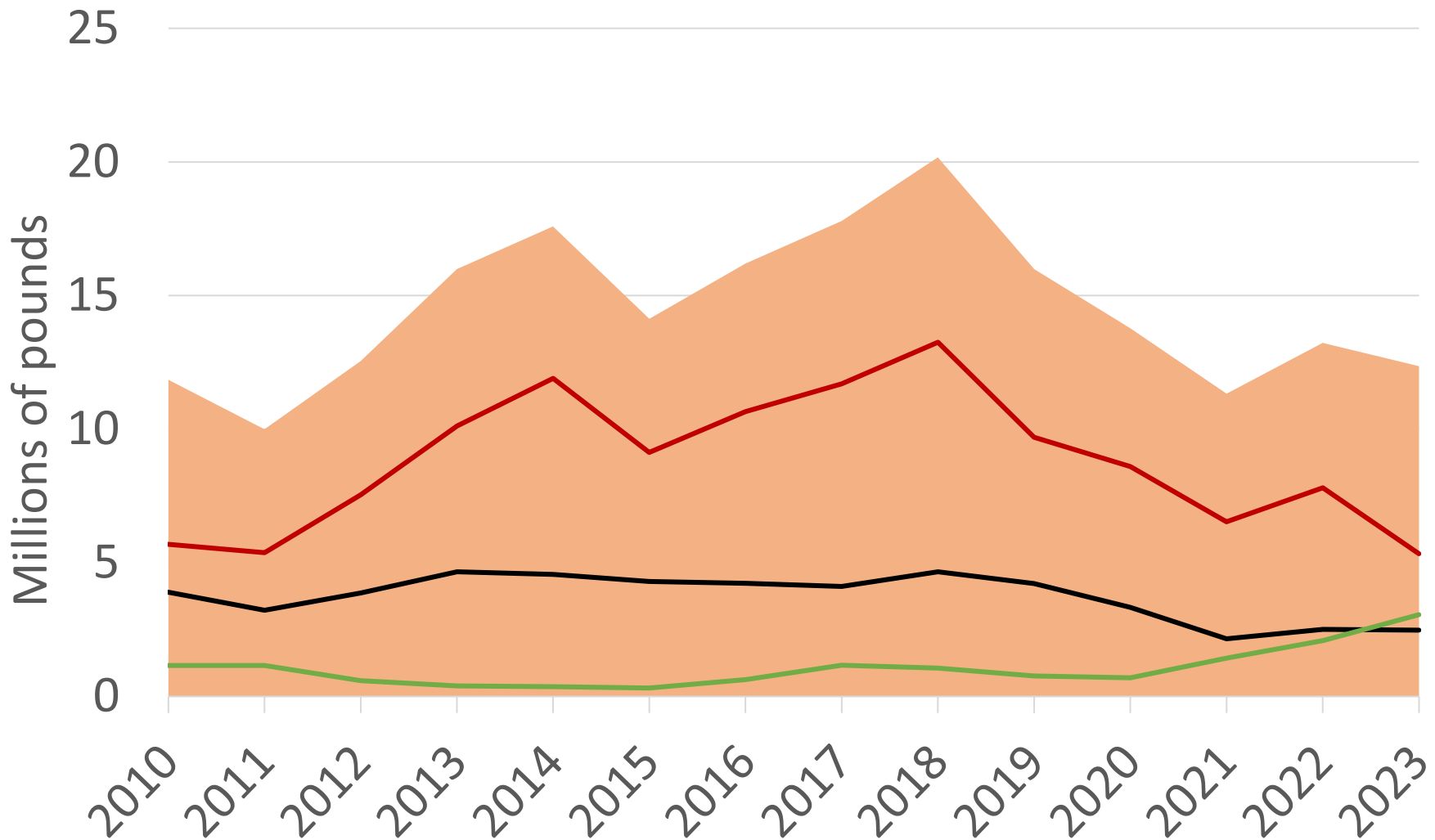


Stock Area	Status
IGOM	Not depleted
OGOM	Not depleted
ISNE	Unknown
OSNE	Not depleted

Commercial Landings



Coastwide Landings MA RI ME



Status of Management



FMP

- Permits and participation
- 4.75” minimum size, no tolerance
- Prohibition on retention of egg-bearing females
- 50 whole crab recreational limit

Addendum I

- 1,000 crab bycatch limit for non-trap gear and non-lobster trap gear

Addendum II

- Coastwide standard for claw harvest and definition of bycatch

Addendum III

- Improved harvester reporting and data collection

Addendum IV

- Vessel tracking requirement for federal permit holders

De Minimis



- States may qualify if, for the 3 preceding years, their average commercial landings constitute less than 1% of average coastwide commercial catch
- DE, MD, and VA apply and meet *de minimis* requirement
- The PRT recommends the Board approve the *de minimis* requests

State Compliance



- Massachusetts has been unable to meet the August 1 deadline for compliance reports for the last five years
- Rhode Island, Connecticut, and New Jersey were not able to complete the required sea and/or port sampling trips



Board Action:

- Consider approval of the Lobster and Jonah Crab FMP Reviews for the 2023 fishing year, state compliance reports, and *de minimis* status for DE, MD, and VA.



Questions?



American Lobster Vessel Tracking Work Group Report



August 2024

Background



- Board task to address privacy concerns with Addendum XXIX:
 - *Move to task the Addendum XXIX vessel tracking implementation workgroup, with input from the LEC, to investigate modifications to the 24/7 vessel tracking requirement which still ensure monitoring of fishing activity while acknowledging that fishermen also use boats for personal/non-fishing reasons. This should include a review of existing processes for when VMS devices can be turned off.*

Possible Modifications



- Geofencing
 - Defining an area or boundary within or beyond which the device ping rate changes
- “Snooze” function
 - Process for setting a device to not collect spatial data for a pre-determined period of time

Enforcement Concerns



- Permit holders should not have the ability to turn devices on/off themselves
 - Difficult to prove if a device failed or was turned off
- If trackers only have to be on while fishing, need to establish rules for defining non-fishing trips
 - What (e.g., gear, bait, or lobster on board) should be considered fishing vs not fishing?

LEC Meeting 10/1/24



- LEC tasked with thinking about definition of fishing as it relates to vessel tracking in the federal lobster fishery
- Different definitions for federal permits and states
- Magnuson-Stevens:
 - (A) the catching, taking, or harvesting of fish
 - (B) the attempted catching, taking, or harvesting of fish;
 - (C) any other activity which can reasonably be expected to result in the catching, taking, or harvesting of fish
 - (D) any operations at sea in support of, or in preparation for, any activity described in subparagraphs (A) through (C)

LEC Meeting 10/1/24



- How would enforcement show a fisher/vessel is engaged in the lobster/Jonah crab fishery?
 - Presence of bait, gear, targeted species on vessel
 - Working condition of vessel,
 - Working condition of captain/crew
- Trackers need visual indicator to see when it is on
- Who has the burden of proving whether vessel is fishing/not fishing?
- Hailing in/out of the fishery



Questions?