



Atlantic Sturgeon: Management Action to Reduce Bycatch in Monkfish and Spiny Dogfish Gillnet Fisheries

Joint Action of the NEFMC and MAFMC

April 10, 2024 Council Meeting



Meeting Outline and Objectives

Review:

1. Alternatives and rationale
2. Draft impact analyses
3. FMAT/PDT recommendations
4. AP recommendations
5. Committee Recommendations

Decision Points:

1. Final Action: Select preferred alternatives for spiny dogfish and monkfish

Reminder: Why this Action?

- 2021 Biological Opinion (BiOp) and its Action Plan required some action to reduce catch in large mesh gillnet.
- New BiOp reinitiated and under development - bycatch takes exceeded 2021's BiOp Incidental Take Statement (ITS = take allowance)
 - Mortality also increased in recent years
 - New BiOp will consider all new info (including 2024 sturgeon assessment and this action) to determine if other measures are necessary.
 - More anticipated reduction now = less chance for a jeopardy finding and less chance of more stringent measures in near future
 - Could be Council-led or NMFS-led

Summary: Alternatives

1. The Council previously endorsed evaluation of 4 packages of action alternatives (Alts 2-5) to facilitate analyses/comparisons.
2. Alts 2-4 use time/area closures and time/area gear restrictions.
3. Alt 5 uses only time/area gear restrictions.

Summary: Impacts

1. Time/area closures are not as effective as anticipated because sturgeon risk is more spread out (based on modeling work; caveats noted in literature)
2. Amount of gear removed or displaced from closures appeared relatively low on a coast-wide basis but may still have high regional impacts.
3. Costs to industry from gear restrictions could be substantial but allow more flexibility for industry to adapt practices and keep fishing (vs. closures).

Atlantic Sturgeon Population Status

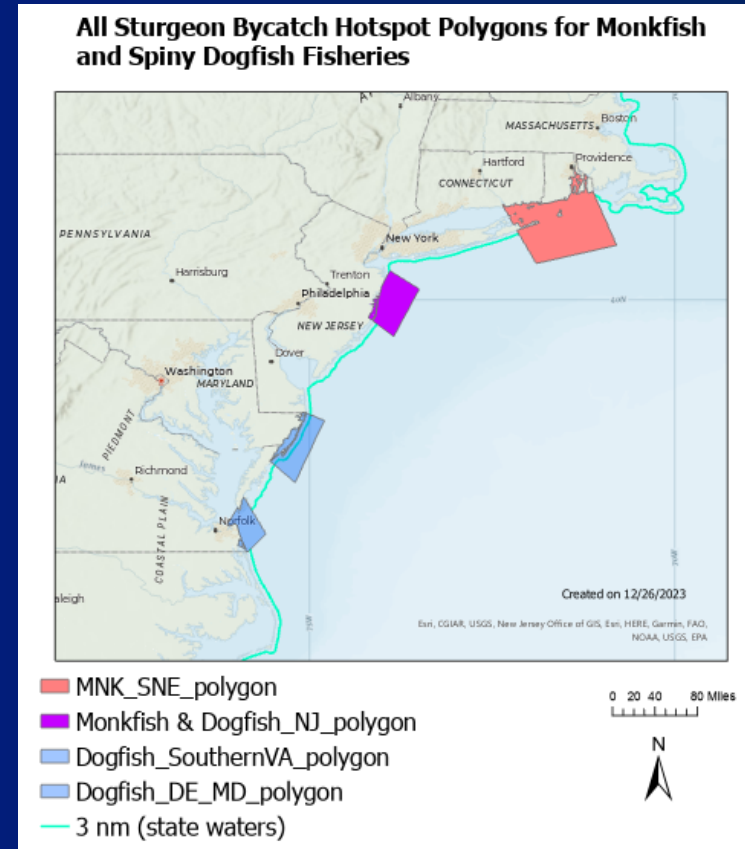
- All 5 distinct population segments are listed as endangered under ESA except GOM DPS which is listed as threatened
- 2017 assessment report (ASMFC): Atlantic sturgeon is depleted coastwide
- 2024 assessment:
 - **Assessment update only** → no external peer review; addition of recent years of data
 - **Spring**: Stock Assessment Subcommittee and Technical Committee meetings will be open to the public
 - **May**: Technical Committee will review draft assessment report
 - **Mid-July**: Assessment report publicly available
 - **August**: ASMFC August Board meeting

New Biological Opinion

- Since recent bycatch exceeded Incidental Take Statement numbers, NMFS conducting new Biological Opinion
 - Expected January 2025
 - Will consider new assessment and this Joint Council action
 - May trigger need for more bycatch reduction
- Note: BREP testing low-profile gear from MA to VA → results could help inform use of gear beyond NJ (current recommendation)

Sturgeon Alternative Packages

- Alternative 1: No action.
- Alternative 2: Higher impacts; time/area closures and gear restriction measures.
- Alternative 3: Intermediate; subset of Alt 2.
- Alternative 4: Lower impacts; subset of Alt 2.
- Alternative 5: Only gear restriction measures.
 - Sub-alternative exemptions from dogfish overnight soak prohibitions for vessels using <math><5.25''</math>



Alternative 1 – No Action

- Violates ESA - Would not satisfy 2021 Biological Opinion's mandate to reduce sturgeon interactions in large-mesh gillnet fisheries **by 2024**
- If Councils choose Alt. 1 No Action → NMFS would take action under ESA rule-making process

Alternative 2: High Impact Sturgeon Package

***most time/area closures & gear restrictions**

Federal vessels targeting monkfish in federal & state waters

Which polygon?	Type of measure?	When?
Southern New England	Closure	April 1 – May 31 & Dec. 1 – Dec. 31
New Jersey	Closure	May 1 – May 31 & Oct. 15 – Dec. 31
	Low-profile gillnet gear	June 1 – Oct. 14 & Jan. 1 – April 30 (when area is not closed)

Federal vessels targeting spiny dogfish in federal & state waters

Which polygon?	Type of measure?	When?
New Jersey	Closure	May 1 – May 31 & Oct. 15 – Dec. 31
DE / MD / VA	Closure	Nov. 1 – March 31

Alternative 3: Intermediate Impact Sturgeon Package

Federal vessels targeting monkfish in federal & state waters

Which polygon?	Type of measure?	When?
Southern New England	Closure	May 1 – May 31 & Dec. 1 – Dec. 31
New Jersey	Closure	Dec. 1 – Dec. 31
	Low-profile gillnet gear	Jan. 1 – Nov. 30 (when area is not closed)

Federal vessels targeting spiny dogfish in federal & state waters

Which polygon?	Type of measure?	When?
New Jersey	Closure	Nov. 1 – Dec. 31
	Overnight soak prohibition	May 1 – May 31
DE / MD / VA	Closure	Dec. 1 – Feb. 28

Alternative 4: Low Impact Sturgeon Package

***Less time/area closures & gear restrictions**

Federal vessels targeting monkfish in federal & state waters

Which polygon?	Type of measure?	When?
Southern New England	Closure	Dec. 1 – Dec. 31
New Jersey	Closure	Nov. 1 – Nov. 30
	Low-profile gillnet gear	Dec. 1 – Dec. 31

Federal vessels targeting spiny dogfish in federal & state waters

Which polygon?	Type of measure?	When?
New Jersey	Closure	Nov. 1 – Nov. 30
	Overnight soak prohibition	Dec. 1 – Dec. 31 & May 1 – May 31
DE / MD / VA	Closure	Dec. 1 – Jan. 31

Alternative 5: Gear-Only Sturgeon Package

Monkfish: low-profile gear Spiny dogfish: overnight soak prohibition

Federal vessels targeting monkfish in federal & state waters

Which polygon?	Type of measure?	When?
New Jersey	Low-profile gillnet gear	Year-round

Federal vessels targeting spiny dogfish in federal & state waters

Which polygon?	Type of measure?	When?
New Jersey	Overnight soak prohibition	May 1 – May 31 & Nov. 1 – Nov. 30
DE / MD / VA	Overnight soak prohibition	Nov. 1 – March 31

Alternative 5: Sub-Alternatives for dogfish

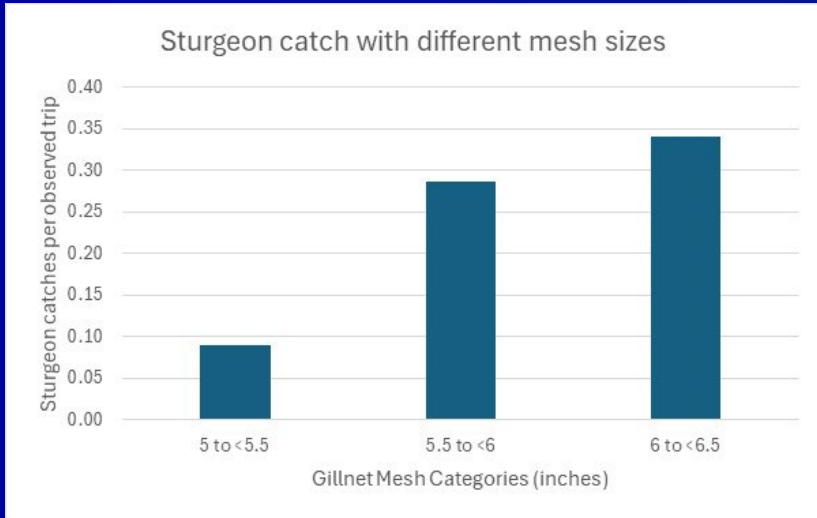
- Added by the MAFMC in February
- **Would apply to spiny dogfish overnight soak prohibition only**

For vessels using < 5.25" gillnet mesh, would be exempt from overnight soak prohibition:

- Sub-alternative 5a: NJ polygon exemption
- Sub-alternative 5b: DE/MD/VA polygon exemption

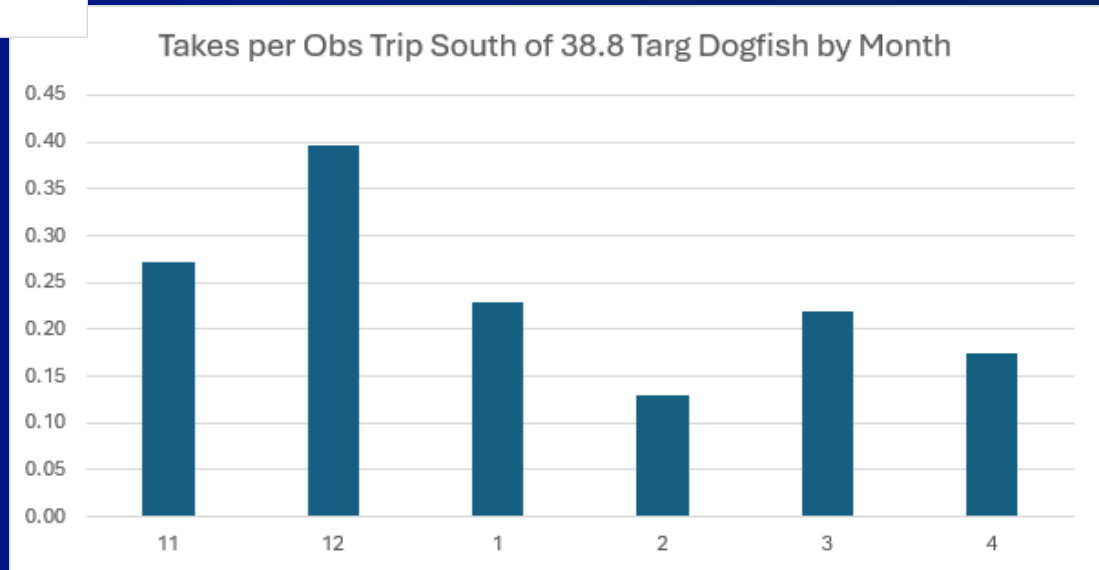
Trips targeting spiny dogfish below Lat 38.8 (Delmarva)

By mesh category:



Rationale for sub-alt 5b

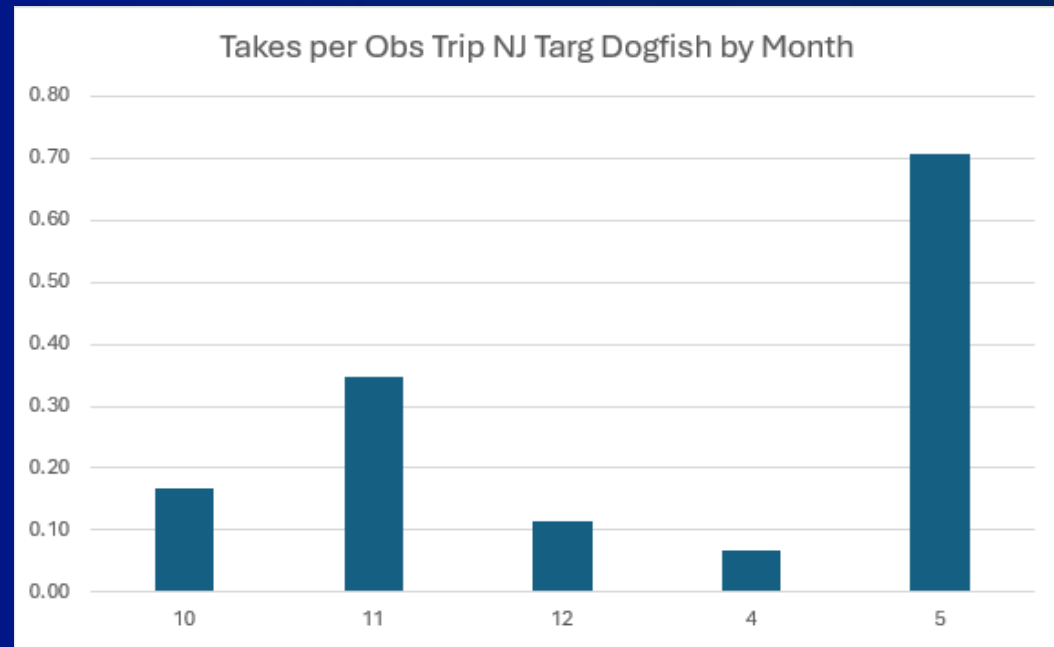
By month:



Trips targeting spiny dogfish NJ

Regarding sub-alt 5a:

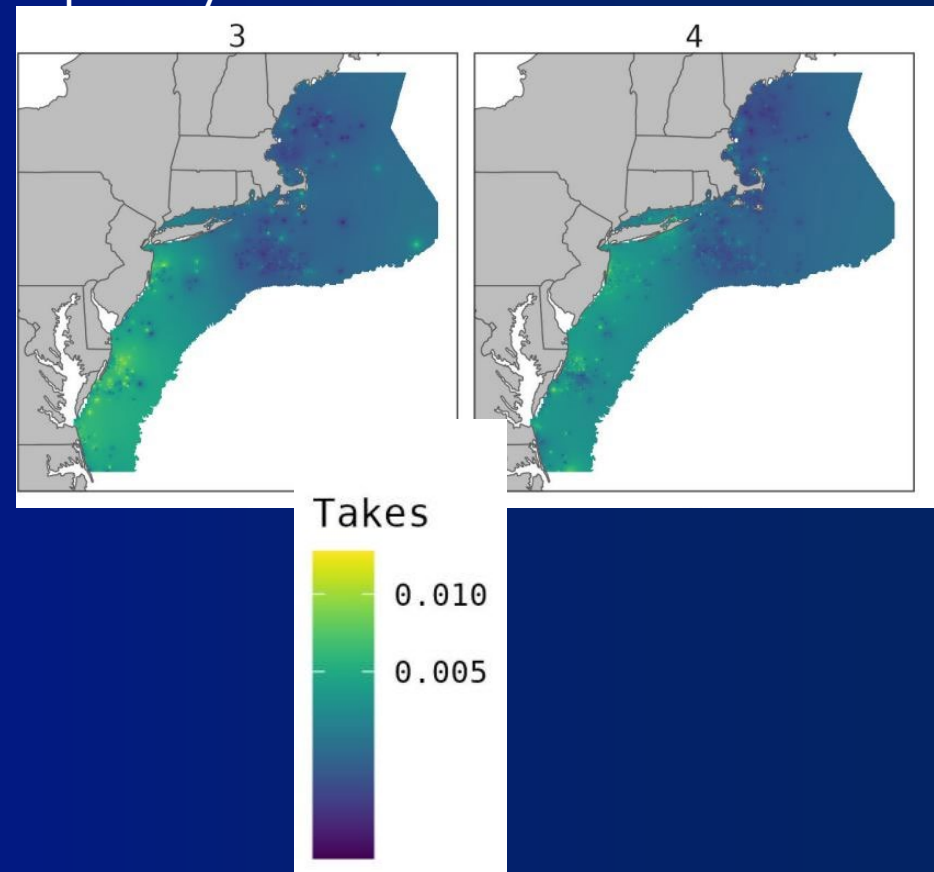
- Not enough observed trips with 5-inch mesh to evaluate differences in encounter rates for smaller mesh for NJ.
- November and May had the highest encounter rate – aligns with the two months proposed for no overnight soaks.



Analyses: impacts of closures

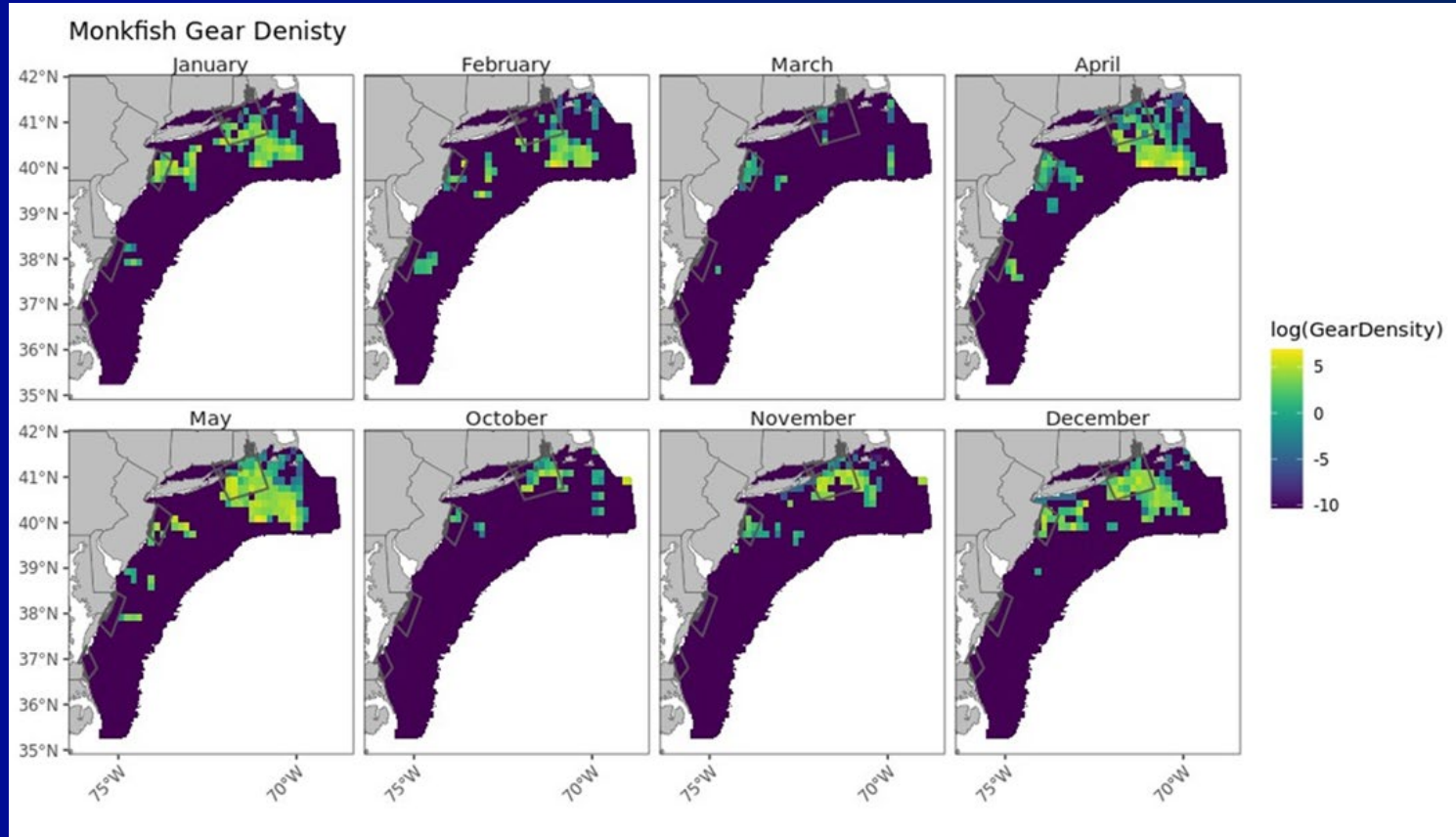
- Adapted the Atlantic Large Whale Take Reduction Team's Decision Support Tool for the Council's sturgeon action
 - **Overall result:** most gear is re-located adjacent to closed areas; some gear eliminated (more eliminated if a 20-mile max. relocation used)
 - Low overall change in sturgeon catch – the model that estimates catch has sturgeon bycatch risk less concentrated
 - Literature suggests focused risk
 - But data spot checked

Example: March and April expected takes per days fished.



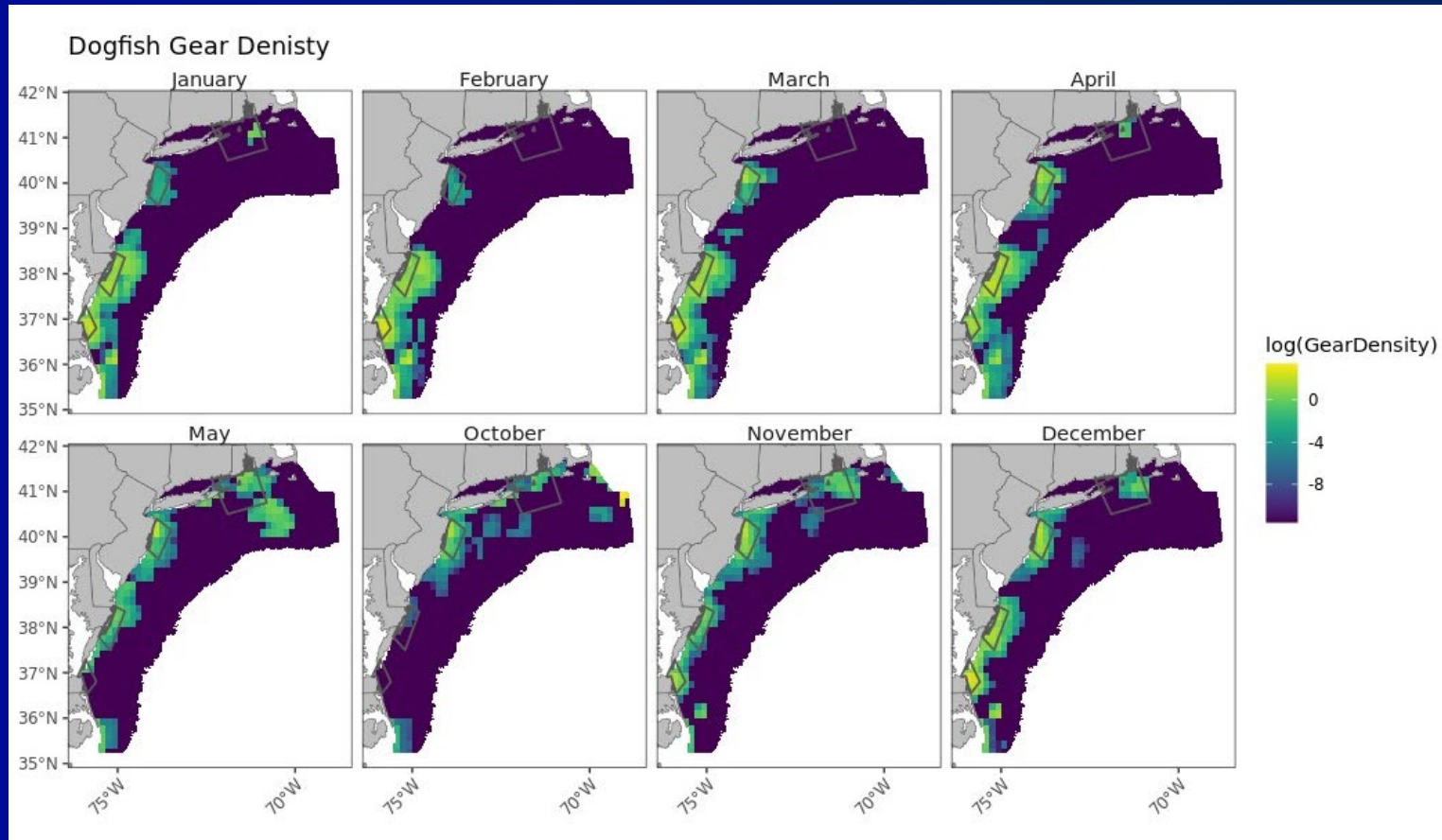
Current gillnet gear density for monkfish

- VTR and VMS data
- 2017-2020
- Compiled by Decision Support Team



Current gillnet gear density for dogfish

- VTR and VMS data
- 2017-2020
- Compiled by Decision Support Team



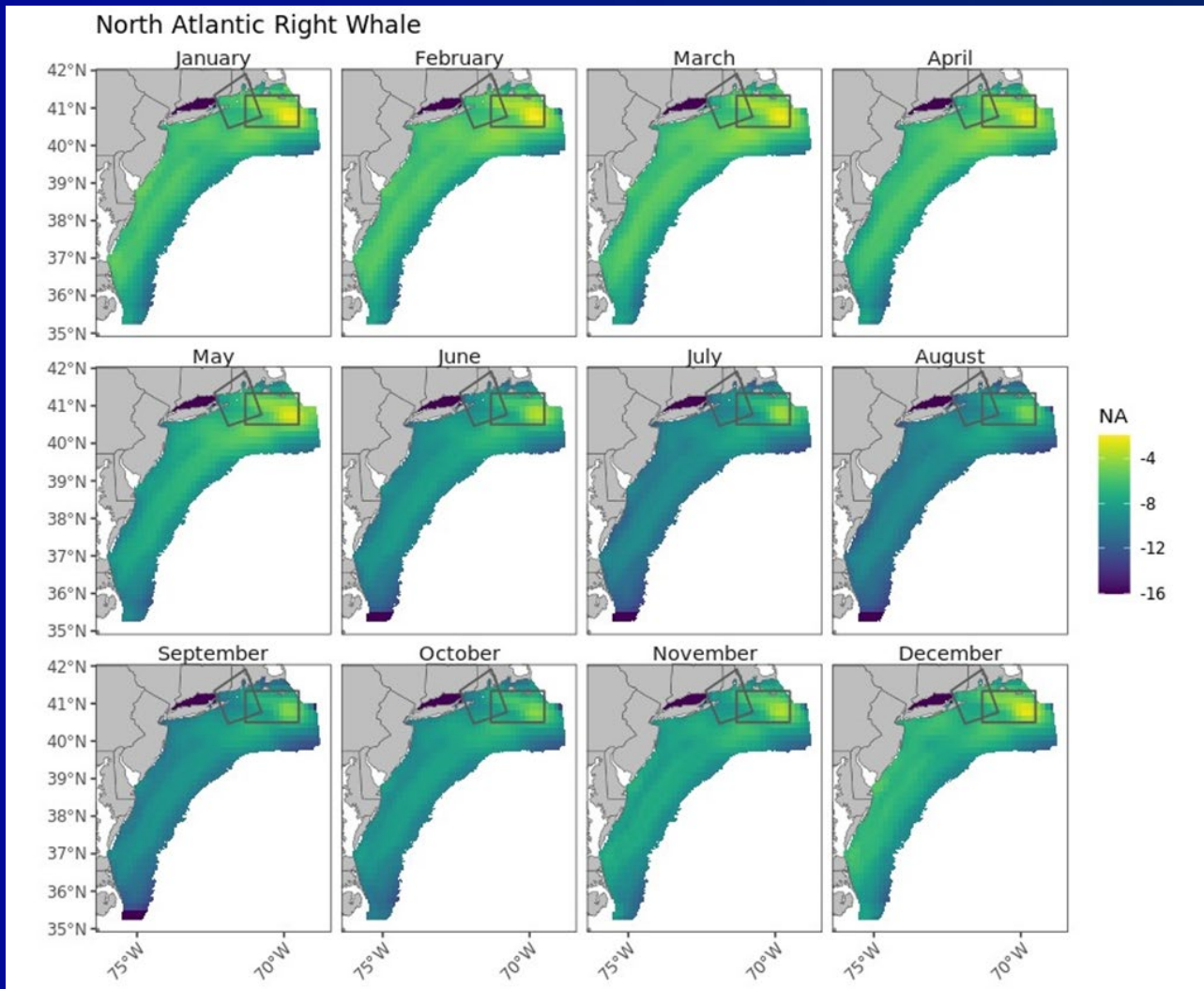
Expected changes in fishing effort

Table 1: Expected percent reduction of Atlantic Sturgeon takes by federally-permitted vessels using gillnet gears under various actions and behavior (max movement distance) scenarios. Action 1 is 'no action' and other alternatives not involving closures are also not listed.

Action	Max Distance Move (nm)	Percent Reduction
2	20	13.00%
2	50	4.20%
3	20	10.60%
3	50	3.20%
4	20	4.10%
4	50	1.90%

20-mile relocation distance: 4 – 13% reduction in sturgeon interactions from all time/area closures across both fisheries

North Atlantic right whale habitat relative to SNE polygon and South Island Restricted Area



Socioeconomic Impacts

Revenue Analyses for monkfish (monk) and spiny dogfish (spiny) in Appendix D

1. 2020-2022 Coast-wide average monthly revenues
2. Gear-based revenues
3. Gear-based revenues near the polygons (region)
 - SNE Monkfish: Landings into New York, Connecticut, Rhode Island, and Massachusetts ports below Cape Cod including New Bedford, Hyannisport, Harwich Port, Hyannis, and Westport
 - NJ Monkfish: Landings into New Jersey
 - NJ Spiny Dogfish: Landings into New Jersey
 - VA/MD Spiny Dogfish: Landings into Virginia/Maryland
4. Gear-based revenues from inside the polygons (regional impacts)

Socioeconomic Impacts

- Blank boxes no/low/confidential landings/revenues
- No huge surprises in terms of where/when impacts would occur.

Socioeconomic Impacts – Monkfish SNE

Table 4: Average monthly monkfish landings and revenue for 2020 - 2022 using gillnets within the southern New England proposed closure area.

Month	Landed (lb)	Revenue
1	38,644	\$43,220
2	9,632	\$10,683
3	24,570	\$31,856
4	29,824	\$36,526
5	407,034	\$388,354
6	495,853	\$456,386
7	35,750	\$32,050
8	3,741	\$4,645
9	311	\$238
10	3,822	\$3,215
11	13,566	\$14,404
12	17,126	\$21,316

Socioeconomic Impacts – Monkfish - NJ

Table 7: Average monthly monkfish landings and revenue for 2020 - 2022 using gillnets within the New Jersey proposed closure area.

Month	Landed (lb)	Revenue
1	61,552	\$82,096
2	7,596	\$11,360
3	2,830	\$4,371
4	2,779	\$3,884
5	28,464	\$29,845
6	19,874	\$18,286
7		
8		
9		
10		
11	3,011	\$5,174
12	65,345	\$94,141

Socioeconomic Impacts – Spinys - NJ

Table 12: Average monthly dogfish landings and revenue for 2020 -2022 using gillnets within the New Jersey proposed closure area.

Month	Landed (lb)	Revenue
1		
2		
3	26,650	\$4,808
4	125,942	\$22,838
5	12,847	\$3,894
6		
7		
8		
9		
10	36,695	\$6,829
11	380,811	\$73,154
12	185,485	\$34,833

Socioeconomic Impacts – Spinys – MD+VA

Table 15: Average monthly dogfish landings and revenue for 2020 - 2022 using gillnets within the Maryland-Virginia proposed closure area.

Month	Landed (lb)	Revenue
1	789,819	\$145,581
2	169,309	\$34,823
3	192,455	\$38,838
4	59,095	\$11,471
5		
6		
7		
8		
9		
10		
11	282,765	\$52,595
12	850,317	\$156,775

Monkfish Recommendations

■ Southern New England

- FMAT/PDT, Monk AP, Joint Cte: no measures
- Monk AP comments: no closures preferred, but, if necessary, avoid April, May, June (economically important months) & Nov most preferable then Dec

■ New Jersey

- FMAT/PDT, Monk AP, Joint Cte: year-round low-profile gear requirement (Alt. 5)
- Monk AP comments: no closures; low-profile only if action must be taken

Joint Cte comments for SNE and NJ: do not recommend closures (economic & right whale concerns); wait for assessment and new BiOp before requiring more measures

Dogfish Recommendations re-overnight soak prohibition

- New Jersey
 - FMAT/PDT: prohibition of overnight soaks (Alt. 5); no exemptions for <5.25" mesh due to limited observer data
 - Dogfish AP: Mixed opinions
 - Joint Cte: Overnight soak prohibition in May & November, exemption for mesh < 5.25"; observer data from DE/MD/VA can serve as proxy for NJ → expect fewer sturgeon interactions with smaller mesh

Dogfish Recommendations re-overnight soak prohibition

■ DE/MD/VA

- FMAT/PDT: prohibition of overnight soaks (Alt. 5); exemption for $<5.25''$ in all months except for potentially December (highest takes/trip)
- Dogfish AP: exemption for $<5.25''$ in all months; measure is equivalent to a closure → end the fishery
- Joint Cte: Overnight soak prohibition from Nov. through March, exemption for mesh $< 5.25''$; closure and overnight soak in area seems problematic; economic and protected species impacts should be balanced (as directed by Action Plan)

Other Recommendations

FMAT/PDT:

- More research needed to understand sturgeon bycatch and how to reduce interactions → uncertain if next BiOp will trigger need for additional measures
- Recognized need to avoid shifting effort from any closures to important North Atlantic Right Whale habitat

Monkfish AP:

- Managers should wait for sturgeon assessment results before making other recommendations
- More research on sturgeon tagging to inform new BiOp & additional gear modifications options

Dogfish AP:

- Measures would put people out of business, general lack of support for all alternatives, no support for closures, wait for sturgeon assessment
- More research on lighter twine sizes & ways to enforce longer soak times

Monk/Spiny Consensus Statement

- Recommends to MAFMC and NEFMC write a letter to NEFSC observer program to:
 - Develop and implement a carcass tagging program for dead sturgeon discards (similar to sea turtles and marine mammals)
 - Include a tagging program for live sturgeon discards.
 - Programs would apply to any fishery where sturgeon are caught regardless of gear type, area, etc.

Rationale: prevent the possibility of double-counting individual observed sturgeon takes.

Timeline

2023	
APR	Formation of FMAT/PDT; NEFMC - initiates Framework
APR-JUN	FMAT/PDT and Joint Dogfish and Monkfish Committee develop range of alternatives; Joint Dogfish and Monkfish AP input
JUN	MAFMC – FMAT/PDT tasking
JUN	NEFMC – approves range of alternatives for <u>monkfish only</u>
SEP	Joint Monkfish/Dogfish Committee with OLE/Coast Guard to refine alternatives
SEP	NEFMC – progress report, approve refined range of alternatives for monkfish, and range for dogfish
OCT	MAFMC – approve range of alternatives for dogfish & monkfish
Fall	FMAT/PDT continue to refine alternatives and begin analyzing alternatives
Fall	ASMFC meeting on alternatives
2024	
FEB	NEFMC – review, provide feedback on revised range of sturgeon alternative packages
FEB	MAFMC – review, provide feedback on revised range of sturgeon alternative packages
MAR	Joint AP meeting (March 5 th) and joint Committee meeting (March 13 th) to select preferred alternatives
★ APR	MAFMC and NEFMC final action
TBD	Staff submits framework to NMFS
TBD	NMFS publishes proposed rule; NMFS publishes final rule/Implementation

Decision Points

- Select preferred alternatives for spiny dogfish and monkfish
- Committee Recs:
 - Dogfish: Alternative 5, sub-alts 5a and 5b
 - Monkfish: Alternative 5
- Next steps:
 - NEFMC will select preferred alternatives for both fisheries next week (4/17)