

Joint Herring PDT/AP Meeting

NEFMC Staff

May 17, 2022



New England
Fishery Management Council

Agenda Items

1. Review Framework7 and discuss additional alternatives
2. Update on Industry Funded Monitoring Program
3. Review draft Herring PDT memo on GB haddock sub-ACL
4. Review and recommend annual herring research priorities
5. Other Business ?

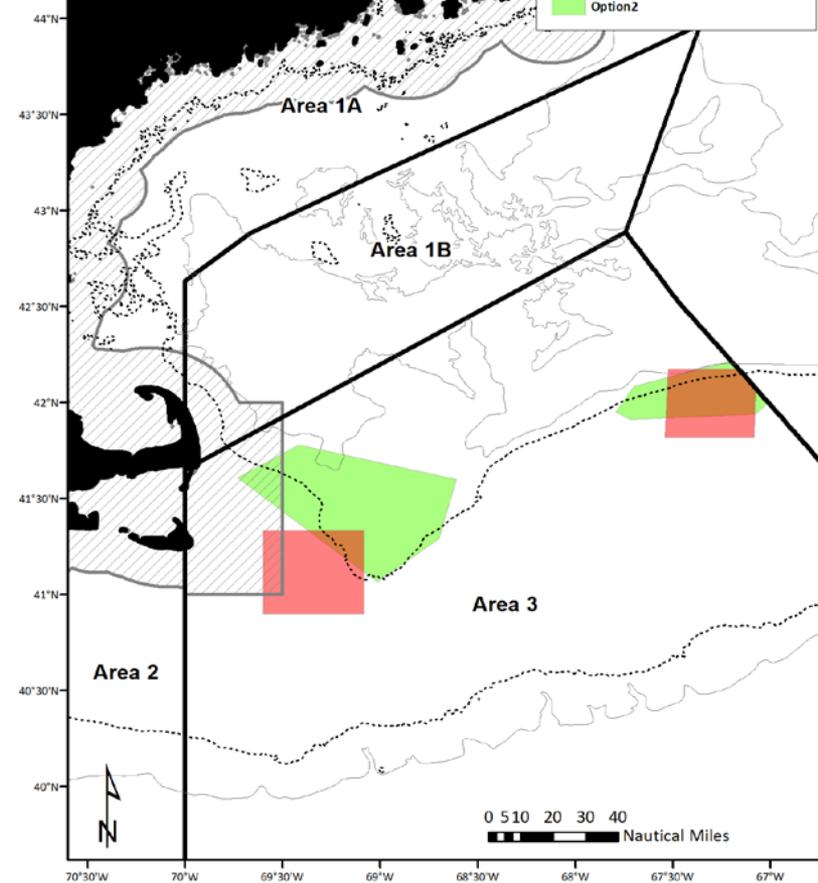


1. Framework 7 (Doc. #2)

- Last discussed in June 2021

Committee wanted to take more time to explore potential alternatives to default closure options (in-person meeting requested).

- Spawning closure on GB
 - 2 area, 2 season options, herring trips only
- Required review
- Spawning Tolerance – **more development needed**
- **TODAY** – brainstorm additional alternatives to consider



Framework 7 - Goals and Objectives

- The goal of this action is to protect **spawning adults** of Atlantic herring and/or Atlantic herring egg mats to increase overall herring biomass. The specific measurable action, or objective of this action is to **consider similar measures to ones in place in Area 1A** for other spawning components of this resource (i.e., Georges Bank and Nantucket Shoals).
- The goal specifically includes the term “and/or” before herring egg mats to clarify that if there is not enough information to support measures to protect adult herring or herring egg mats, the action could focus on just one. During development, the Council clarified that the scope of this action is to minimize potential impacts of the herring fishery on adult spawning aggregations only. Therefore, **the measures under consideration in this action are limited to the herring fishery only and will not include restrictions on other fisheries.** The Council may consider other measures to protect spawning of Atlantic herring and/or Atlantic herring egg mats from other fisheries in a separate action in the future.

Framework 7 Alternatives

Actions	
4.1	Herring spawning closure on Georges Bank (GB) No Action, 2 sets of areas, 2 seasons (6 and 8 weeks)
4.2	Prohibit possession of spawning adult Atlantic herring <ul style="list-style-type: none">- Alt. 1 – No Action- Alt 2 - Individual spawning tolerance per vessel – needs development- Alt. 3 - Fleetwide spawning tolerance – needs development
4.3	Spawning avoidance program / In-season monitoring with trigger based spawning closure Needs Development
4.4	<i>Background Information – For discussion only</i>



Previous PDT discussion and recommendations

- Initial discussions with NMFS Enforcement et al. (4/27/21) – Multiple concerns raised: resources involved, logistics of monitoring long offloads, training for gonad sampling, etc.
 - Discussed potential use of NMFS federal biological sampling program (contracted port agents) vs. dockside samplers that are part of new IFM program (EFP for part of fishery only).
 - If goal is to protect spawning adults – closing areas real time likely more effective and in-line with objective compared to an individual spawning possession limit on every trip. Program should be designed to promote compliance and fishing behavior change to avoid spawning fish.
1. ***Remove tolerance by individual vessel alternative (Alt. 4.2.1).***
 2. ***If in-season monitoring feasible, fleetwide trigger of area closure based on GSI samples, not a possession limit threshold (20%) (Remove Alt. 4.2.2 and Alt. 4.2.3 – develop Alt. 4.3 using GSI threshold).***

4.2.2 Individual spawning tolerance (page 14)

- Any vessel may fish for, take, land, or possess “spawn” herring from or within the spawning tolerance area if such herring comprise less than 20% (by volume) of the herring possessed onboard at any time.
- “Spawn” herring shall be identified as Atlantic herring in ICNAF gonadal stages V and VI.
- **What is the spawning tolerance area?**
- Vessels can transit the area with fish in spawning condition if gear is stowed.
- An incidental bycatch allowance of up to 2,000 lbs. of herring per trip for non-directed fisheries – not subject to spawning tolerance if under 2,000 lbs.
- Note: The PDT recommends this alternative *not* be included in this action; multiple concerns raised about the feasibility of monitoring and enforcing an individual spawning possession limit.

4.2.3 Fleetwide spawning tolerance (page 15)

- Herring trips will be monitored in season and once NMFS determines that ??? [three or more offloads] have more than ??? [20%] of total herring in spawning condition an area will close to the herring fishery for the remainder of the spawning season.
- **Some questions to consider:**
 - What area? Same as options already developed?
 - What season? Same as options already developed?
 - Is three or more trips the most appropriate threshold?
 - Maybe 20% threshold is not the best trigger to use here?
 - What would the monitoring program look like? Would it have to be fleetwide, is it ok if all vessels and/or trips are not monitored?
 - Could the IFM program be expanded to include biological sampling of catch to estimate spawning condition? Could the federal port sampling program be expanded to monitor spawning condition of commercial catch? What is status of state funded monitoring program?



4.3 Spawning avoidance program / In-season monitoring with trigger based spawning closure (page 16)

- **More development needed.**
- Joint meeting tasking: the group should discuss feasibility of in-season monitoring as it relates to development of Framework 7 alternatives.
- One idea suggested for consideration is allowing vessels to fish in predefined spawning areas but require human observers to access the area during spawning (Sept 1 – October 31). During the fishing season if a specified number of trips are observed over the acceptable tolerance level than predefined spawning areas would close to the fishery for the remainder of the spawning season.



4.4 Background

- **GOM spawning closures in Area 1A (ASMFC)**

Determined by a GSI protocol.

Calculation of the gonad (ovary) mass as a proportion of total
Timing of closure based on 3 or more samples of herring,
either from fishery independent or dependent sources.

If insufficient samples available, a default closure date is used.

In 2019, ASMFC strengthened protocol to extend length of closure.

- **NEFMC spawning closures**

Approved in original Herring FMP, but NMFS disapproved.

Fixed dates, could be changed via framework.

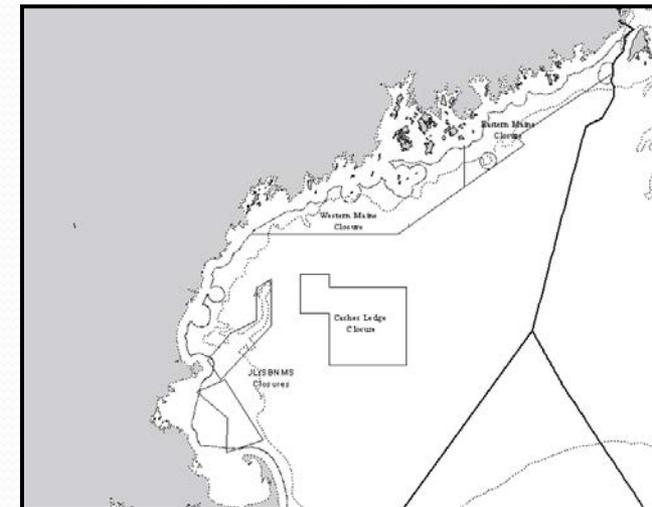
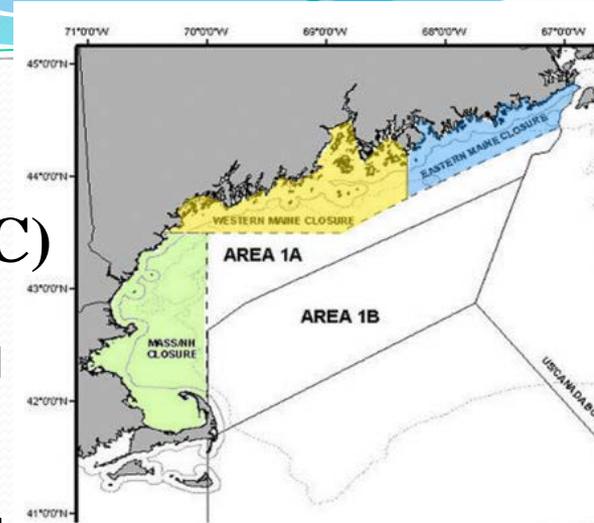
Spawning areas not developed for Area 2 or 3.

Disapproval – costs do not outweigh benefits,

Other gears still allowed that disturb spawning,

Conservation benefits uncertain,

Enforcement concerns about possession of herring allowed



TODAY – Additional feedback for alternatives still under development?

- Should individual spawning tolerance alternative remain in FW7?
- Should fleetwide spawning tolerance alternative remain in FW7?
- Further development of in-season monitoring of spawning fish with triggered closure? Is in-season monitoring of fishing on GB currently feasible?



2. Update on IFM Program

- Separate presentation – Document #4
- Sara Weeks (NEFSC) and Carrie Nordeen (GARFO) will present this update
- Council had similar update in April 2022 – request input from Herring Committee (meeting on June 10)
- **TODAY: Consider correspondence – Document #8**
- **TODAY: AP – specific input for Committee to consider for June 10 meeting?**



3. Atlantic Herring sub-ACL of GB Haddock (Doc. #5)

- 50 CFR 648.90(a)(4)(iii)(D)(2) **GB haddock sub-ACL Review.**
 - *Following an assessment of the total GB haddock stock, the Groundfish PDT will conduct a review of the sub-ACL and recommend to the Groundfish Committee and Council a sub-ACL for the midwater trawl Atlantic herring fishery of 1 and up to 2 percent of the GB haddock U.S. ABC.*
 - *The sub-ACL review should consider factors including, but not limited to, groundfish fishery catch performance, expected groundfish fishery utilization of the GB haddock ACL, status of the GB haddock resource, recruitment, incoming year-class strength, and evaluation of the coefficient of variation of the GB haddock incidental catch estimates for the midwater trawl Atlantic herring fishery.*

Groundfish FW	Sub-ACL
FW59	2%
FW56	1.5%
FW46	1%



Table 1. Herring sub-ACL, catches, and % utilized by herring management area

Year	Area	sub-ACL (mt)	Catch (mt)	% Utilized
2017	1A	32,115	28,682	89%
2017	1B	4,825	2,639	55%
2017	2	31,227	3,617	12%
2017	3	43,873	14,134	32%
2018	1A	28,038	24,861	89%
2018	1B	2,639	2,211	84%
2018	2	8,200	7,071	86%
2018	3	11,318	9,7636	86%
2019	1A	5,223	4,916	94%
2019	1B	628	159	25%
2019	2	4,062	4,750	117%
2019	3	5,700	3,254	57%
2020	1A	4,244	4,353	103%
2020	1B	483	831	172%
2020	2	3,120	353	11%
2020	3	4,378	4,054	93%
2021*	1A	2,579	2,884	112%
2021*	1B	239	0	0%
2021*	2	652	220	34%
2021*	3	2,181	2,222	102%

Source: NMFS

*Preliminary data pulled May 5, 2022

Note: Shaded rows indicate overages

Figure 1. Herring sub-ACL use by month and herring management area

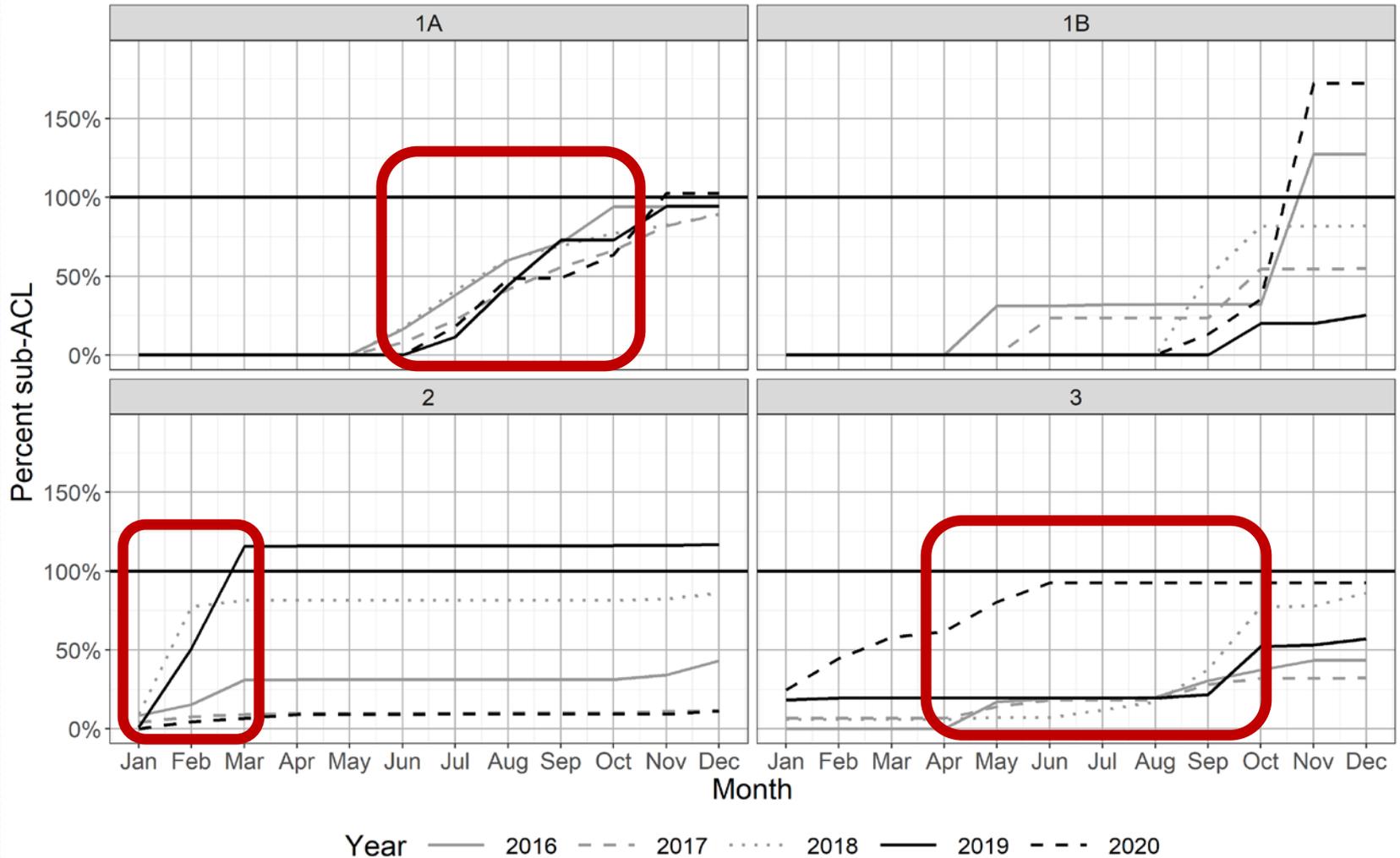
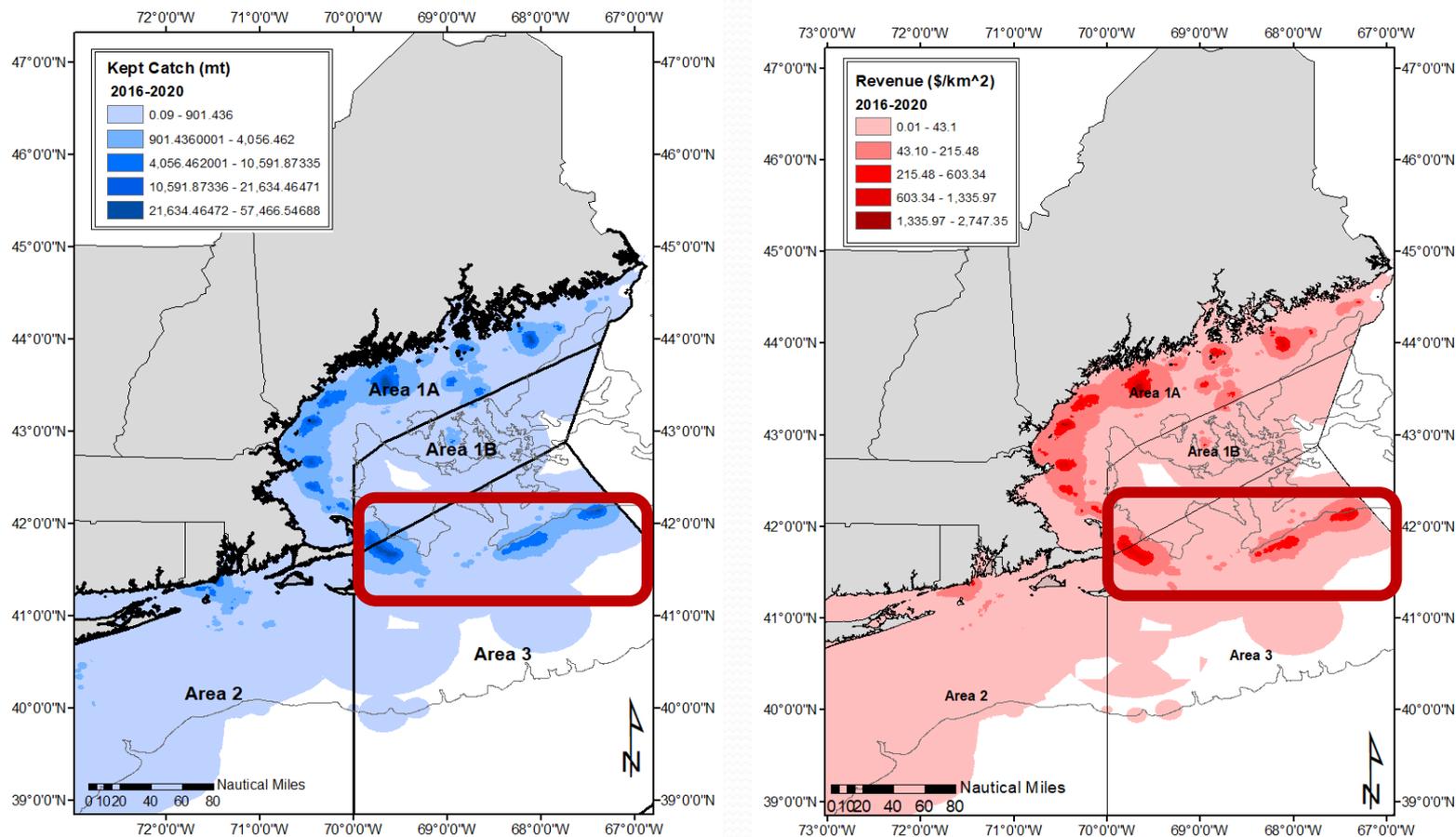


Figure 2 & 3. Fishing footprint for Atlantic herring fishery using model-based estimate of fishing location from VTR, observer and dealer data combined



DePiper et al, 2014

Table 3. Summary of recent catches (mt) of GB haddock by the MWT herring fishery, Groundfish FY 2010 – 2021 preliminary

Groundfish FY	Sub-ACL	Landings	Discards	Catch	Percentage of sub-ACL	CV on Catch	Observer Coverage % Trips
2010	84	69.2	0	69.2	82.3%		
2011	318	101.8	0	101.8	32.0%	17.6%	41.7%
2012	286	271.9	16.7	288.6	100.9%	12.3%	62.9%
2013	273	272.7	17.2	290	106.2%	21.3%	35.6%
2014	162	113.5	0	113.5	70.1%	20.5%	27.2%
2015	227	235.0	0.6	235.5	103.9%	61.4%	4.9%
2016	512	115.3	3.6	118.9	23.2%	42.9%	20.1%
2017	801	47.9	0	47.9	6.0%	63.7%	14.0%
2018	680	43.9	0	43.9	6.5%	91.0%	5.6%
2019	811	0.15	0	0.15	0.02%	114%	7%
2020	2,447	10	0	10	0.41%	3%	5%
2021*	1,539	0.6	0.002	0.6	0.04%	17%	45%

Source: Groundfish FY2010 – 2020 final year-end catch reports

*Initial in-season quota monitoring estimates as of April 21, 2022

Table 4. GB haddock catch cap summary FY 2011 – FY 2021 preliminary

Fishing Year	Fleet Trips	Observed trips	Obs. Coverage	Haddock Rate	CV (%)	KALL (mt)	Est. Haddock (mt) ¹	Catch Cap (mt)	Pct. Cap
2011	230	96	41.70%	0.002443	17.60%	41,323	101	318	31.70%
2012	237	149	62.90%	0.006675	12.30%	46,555	310.8	286	108.70%
2013	250	89	35.60%	0.00598	21.30%	48,857	292.2	273	107.00%
2014	202	55	27.20%	0.003063	20.50%	36,592	112.1	162	69.20%
2015	164	8	4.90%	0.008489	61.40%	28,018	237.8	227	104.80%
2016	179	36	20.1%	0.004731	42.9%	26,185	123.9	512	24.2%
2017	100	14	14.00%	0.003232	63.72%	15,318	49.5	801	6.2%
2018	89	5	5.62%	0.003632	90.96%	12,163	44.2	680	6.5%
2019	70	5	7%	0.0002	114%	6,068	0.1	811	0.02%
2020	64	3	5%	0.00149	3%	8,446	12.6	2,447	0.51%
2021*	11	5	45%	0.00012	17%	2,059	0.2	1,539	0.02%

Source: DMIS and OBDBS

*Initial in-season quota monitoring estimates as of April 21, 2022

¹Haddock estimate does NOT use replacement methodology and may not match GARFO quota monitoring reports.

Atlantic Herring sub-ACL of GB Haddock

TODAY: Is there anything the Herring PDT or AP would like added to the memo, or is it ready to forward to the Groundfish PDT?



4. Annual herring research priorities

- See Document # 6
- Dr. Rachel Feeney will lead this discussion
- **TODAY: PDT and AP suggestions for Committee to consider at June 10 webinar?**



5. Other Business

