

Mid-Atlantic Fishery Management Council

800 North State Street, Suite 201, Dover, DE 19901 Phone: 302-674-2331 | FAX: 302-674-5399 | www.mafmc.org P. Weston Townsend, Chairman | Michael P. Luisi, Vice Chairman Christopher M. Moore, Ph.D., Executive Director

MEMORANDUM

Date: November 29, 2023

To: Chris Moore

From: J. Didden, Staff

Subject: 2024-2025 Atlantic Mackerel Specifications

The Council plans to adopt final 2024-2025 Atlantic mackerel ("mackerel") specifications at the December 2023 Council Meeting (preliminary specifications were adopted in August 2023). Staff recommends adopting the new option, an averaged/constant ABC approach, endorsed in the SSC Report (3,200 metric tons), and pairing those ABCs with the associated trip limits detailed in the MSB Monitoring Committee Summary. The available options are still very restrictive, but those constant ABCs and trip limits should create a relatively stable 2024-2025 management regime for mackerel. While there is considerable uncertainty with mackerel rebuilding, staff notes that besides the 2018/2019 river herring/shad cap closures and the 2022/2023 Canadian mackerel closures, this fishery has been minimally quota restricted for much of its history.

The following supporting materials are included:

- -Mackerel, Squid, and Butterfish (MSB) Monitoring Committee Nov 2023 Summary
- -Scientific and Statistical Committee (SSC) Oct 2023 Report (see Committee Reports Tab)
- -Follow-up Oct 2023 Staff Acceptable Biological Catch (ABC) Memo
- -Initial July 2023 Staff Acceptable Biological Catch (ABC) Memo
- -Advisory Panel (AP) 2023 Fishery Performance Report
- -2023 Fishery Information Document
- -Submitted Comments

Supplemental Materials Links

- -Monitoring Committee Updated Trip Limit Analysis
- -SSC October 2023 Meeting Page (includes links to assessment materials)



Mackerel, Squid, and Butterfish (MSB) Monitoring Committee Meeting Summary

November 6, 2023 - Webinar

Overview: The Mid-Atlantic Fishery Management Council's (Council) Mackerel, Squid, and Butterfish (MSB) Monitoring Committee met on November 6, 2023 from 10 am to 10:30 am to develop recommendations for 2024-2025 Atlantic mackerel ("mackerel") specifications. The regulations guiding these recommendations are detailed in 50 CFR 648.22, but generally involve ensuring that the Annual Catch Limits (ACL) are unlikely to be exceeded – ACL overages may trigger pound-for-pound paybacks from a subsequent year.

Monitoring Committee Member Attendees: Jason Didden, Carly Bari, Daniel Hocking, Jessica Blaylock, and Kiersten Curti.

Other Attendees: Greg DiDomenico, Lise Kay (Canada DFO), Michael Pierdinock, Michelle Duval, Wes Townsend, Will Poston, and Albert Didden.

Summary

Jason Didden of Council staff gave an overview of the Scientific and Statistical Committee's (SSC) updated mackerel Acceptable Biological Catch (ABC) recommendations, which are binding catch limitations. During their October 2023 Meeting (see report at https://www.mafmc.org/ssc-meetings/october-30-2023), the SSC re-endorsed their previous year-specific 2024-2025 mackerel ABCs and also provided a near-averaged constant 2024-2025 ABC *option* of 3,200 metric tons (MT), per the table below. The Council can adopt either option (year-specific was preliminarily adopted last August and the Council requested the averaged option be considered by the SSC).

Table 1. 2024-2025 Atlantic mackerel ABCs

Projection	2024	2025
Year-specific (mt)	2,726	3,900
Averaged (mt)	3,200	3,200

Either option puts mackerel rebuilding back on track to be rebuilt by 2032, and both utilize a dampened estimate of the terminal year (2022) recruitment to compensate for recent projections under-performances (biomasses have been less than terminally-estimated, or projected).

The Monitoring Committee did not find cause to change from previous recommendations regarding deductions for Canadian catch (74 MT), U.S. commercial discards (115 MT), or U.S.

recreational catch (2,143 MT). The rationale for those deductions is detailed in a <u>previous</u> <u>Monitoring Committee summary</u> but generally, recent history suggests these deductions should approximately account for each respective source of catch. With the two different sets of ABCs however, different U.S. ABCs, Annual Catch Limits, and commercial landings quotas result (see Tables 2 and 3). Table 2, with the year-specific ABCs, was the option considered and adopted by the Council in August 2023.

Table 2. Original Year-Specific ABCs and Specifications (in MT)

2024	2025
2,726	3,900
74	74
2,652	3,826
115	115
2,143	2,143
394	1,568
	2,726 74 2,652 115 2,143

Table 3. New Option Averaged ABCs and Specifications (in MT)

Year	2024	2025
ABCs	3,200	3,200
Canada	74	74
US ABC/ACL	3,126	3,126
US Discards	115	115
US Rec Catch	2,143	2,143
Com Quota	868	868

At the August 2023 Council meeting, to constrain catch to the very low quotas while avoiding excessive discarding, the Council recommended setting an initial trip limit of 20,000 pounds for limited access permits and 1,000 pounds for open access permits. Once 80% of the quota was landed, trip limits would change to 5,000 pounds for limited access permits and stay at 1,000 pounds for open access permits. The goal is to limit directed fishing and minimize regulatory discarding.

Analyses by the Monitoring Committee for the averaged option indicated that with higher 2024 quota (and lower 2025 quota), the following trip limits should constrain catch sufficiently: an initial trip limit of 20,000 pounds for limited access permits and 5,000 pounds for open access permits (these are the current emergency-action trip limits). Once 80% of the quota was landed,

trip limits would change to 10,000 pounds for limited access permits and 2,500 pounds for open access permits. With these trip limits, in 2021 landings would probably have gone a bit above the average option quota and in 2022, landings would not have reached the average option's 80% threshold. The analyses just replace applicable trips above the trip limits with the proposed trip limits so are approximations of what would have resulted had the new trip limits been in place. Fleet behavior changes of totally skipping some trips or adding other trips under new trip limits are assumed to cancel out. We don't know how these trip limits could affect expected discards (there could be more due to lower incidental trip limits or less due to less directed fishing) but discards are small enough that some moderate change would not have substantial impacts.

The Monitoring Committee also noted that if the Council stayed with the year-specific ABCs, there is enough quota in year 2025 that the trip limits considered above for the average option would likely be suitable for 2025. Arguments could perhaps be made to increase trip limits even more for 2025 under the year-specific option, but there is more uncertainty about performance under the very low 2024 year-specific quota so not pushing things too much for 2025 seems reasonable if the year-specific ABC option is maintained.

A public comment from Greg DiDomenico asked for clarification on what caused the overfishing determination to become "not overfishing" in 2022. The Monitoring Committee noted that biomass increased from 2021 to 2022 and catch decreased substantially as well, both of which appear to have lowered the fishing mortality to just below the overfishing threshold.

See Committee Reports Tab for Scientific and Statistical Committee (SSC) Report on Atlantic Mackerel Acceptable Biological Catches (ABCs)



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MEMORANDUM

Date: October 24, 2023

To: Chris Moore, Executive Director

From: Jason Didden, staff

Subject: 2024-2025 Atlantic Mackerel Acceptable Biological Catch (ABC)

Staff's perspective has not changed from its <u>July 2023 memo</u> in which we stated that the assessment projections have been over-predicting biomass/rebuilding, and that an approach that limits directed fishing without creating excessive regulatory discards appears to be the most reasonable. This was also the rationale behind staff's recommendation that the Council request emergency action last August to limit additional 2023 directed mackerel fishing. As a result of that request, <u>an emergency action was implemented effective October 12, 2023</u>. That emergency action should result in 2023 landings being 500-700 metric tons (MT) lower than what was assumed in the new projections.

Staff has noted to the Council that our current situation is the result of about 50 years of overfishing. Considering this overfishing and repeated inability to accurately project short term trends, it may take some time to "fix" mackerel's stock status and caution may be warranted if/when improving trends are first detected.

Given the variability observed in the sensitivity analyses associated with projections, staff's original ABC recommendation of 3,314 MT seems reasonable. Higher ABCs may not account for the recent trends observed in assessments. Lower ABCs may just increase discards rather than reduce catch. The effects of operating at generally incidental-level trip limits for the full year will also need to be regularly evaluated to ensure regulatory discarding does not become excessive.



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MEMORANDUM

Date: July 18, 2023

To: Chris Moore, Executive Director

From: Jason Didden, staff

Subject: Lower Atlantic Mackerel ABCs recommended for 2024-2025

Summary

1. Stock biomass has not increased as predicted.

2. Staff recommends an ABC of 3,314 metric tons (MT) for 2024 and 2025 to rebuild the stock and avoid excessive regulatory discards.

Current Measures and Review of Prior SSC Recommendations

The primary measures used in the mackerel fishery to control catch include set-asides for Canadian catch, recreational catch, and discards, as well as tiered limited access and weekly quota monitoring that is coupled to closure triggers and post-closure trip limits.

The 2023 Acceptable Biological Catch (ABC) of 8,094 metric tons (MT) was based on the mackerel rebuilding plan and a *fishing mortality rate* (F) of 0.12, which was predicted (based on the 2021 assessment) to have a 61% probability of rebuilding the mackerel stock by 2032. The rebuilding projections assume that future recruitment stays low near recent (now 2009-2022) median recruitment when spawning stock biomass (SSB) is low and then the projections assume that as SSB increases, future recruitment increases to near (but somewhat below) 1975-2022 median recruitment (which is what the stock's rebuilding goal is based on). Since the Canadians did not open their mackerel fishery in 2023, total 2023 catch now appears unlikely to exceed 5,953 MT (the potential Canadian catch stays set-aside).

Recent Catch and Landings

In 2022, U.S. commercial landings declined to the 2nd lowest amount since 1996 after being relatively stable since 2012. Recreational catch declined by 29% from 2021 to 2022 after being relatively stable from 2018-2021.

Stock Status and Biological Reference Points

Based on the 2023 management track stock assessment, the stock is still overfished – declining back to an all-time low in 2021 and increasing somewhat in 2022. Due to relatively low U.S. removals in 2022 and the near-total closure of the Canadian commercial fishery in 2022, overfishing (updated to $F_{msy-proxy} = 0.21$) appears to have ended for the first time in 35 years ($F_{2022} = 0.18$). However, the target biomass and maximum sustainable yield proxy catch continue to decline. The change in overfishing may require additional peer review of the draft assessment.

Staff Recommendation

Considering the information below, an ABC of 3,314 MT is recommended by staff for both 2024 and 2025 because this ABC should A) facilitate continued rebuilding by 2032 with the Council's 61% probability target (remaining consistent with the overall rebuilding plan), B) avoid a scenario where regulatory discarding becomes excessive, C) account for potential recreational catches, and D) allow some continuous collection of fishery-dependent data for future assessments. An ABC of 3,314 MT would be substantially lower than the standard recalculated rebuilding projections from the direct assessment model outputs. Supporting information:

- 1. The Council's previous action was designed to have a 61% chance of rebuilding the Atlantic mackerel stock by 2032.
- 2. The last two assessments (2021, 2023) indicate the assessment model has been overpredicting both the terminal year biomass estimates and stock rebuilding rate.
- 3. The relatively high 2022 recruitment estimate is projected to cause a rapid increase in biomass that is inconsistent with experiences from recent assessments.
- 4. Staff requested a sensitivity analysis to examine the impact on projected rebuilding if once again the strong terminal year (2022) recruitment (Age 1 fish) does not result in the expected biomass gains. The analysis indicated that if the 2022 recruitment results in 65% less Age 2 fish than expected in 2023, a substantially lower F of 0.07 would be required to rebuild the stock by 2032 (with 61% confidence). Age 2 fish were reduced by 65% because recent median recruitment is 65% lower than the 2022 estimated recruitment, and modeling limitations would not allow just scaling down the 2022 recruitment estimate. The analysis illustrates the sensitivity of the standard projections to strong terminal year recruitments and assumed survival into older fish. An F of 0.07 would result in 2024-2025 ABCs of 2,726 MT and 3,900 MT (see spreadsheet on July 2023 SSC meeting page reporting results of staff-requested sensitivity analysis).
- 5. A mackerel moratorium or very low trip limits will create regulatory discards while further limiting the data for the next assessment in 2025.
- 6. 2022 recreational catch could be a low statistical outlier, and the previous recreational catch set-aside of 2,143 MT still seems reasonable. We do not yet have data on the impacts of the 20-fish possession limit implemented for 2023.
- 7. The U.S. assessment is generally consistent with the Canadian assessment. Given recent Canadian policy choices, it seems likely that Canadian commercial catches will stay low for the near future.
- 8. Staff conferred with NMFS quota monitoring staff, and based on 2021-2023 data, if limited access vessels were limited to 20,000 pounds per trip and open access vessels were limited to 5,000 pounds per trip, commercial U.S. mackerel landings (largely incidental) in 2024 and 2025 would not be expected to exceed 1,000 MT.
- 9. Combining expected Canadian catch (56 MT), recreational catch (2,143 MT), U.S. commercial incidental landings (1,000 MT) and discards (115 MT) would result in a catch of approximately 3,314 MT in 2024. (56+2,143+1,000+115 = 3,314)
- 10. Pending consultation with the Monitoring Committee, staff will likely recommend that the Council request NMFS take emergency action to close directed mackerel fishing for the remainder of 2023 given that the anticipated F from the SSB sensitivity analysis would lead to overfishing if the full quota is caught (predicted F_{2023} =0.23).



Atlantic Mackerel Fishery Performance Report July 2023

The Mid-Atlantic Fishery Management Council's (Council) Mackerel-Squid-Butterfish (MSB) Advisory Panel (AP) met via webinar to review the Longfin Squid and Atlantic Mackerel Fishery Information Documents and develop Fishery Performance Reports. Separate reports were created for each species/fishery. The primary purpose of the report is to contextualize catch histories for the Scientific and Statistical Committee (SSC) by providing information about fishing effort, market trends, environmental changes, and other factors. AP member comments are not consensus or majority statements — the summary below may represent the perspective of one or multiple AP members. Some staff follow-up information has been added and noted where applicable.

Advisory Panel members present: Dan Farnham Jr, Eleanor Bochenek, Emerson Hasbrouck, Greg DiDomenico, Jeff Kaelin, Katie Almeida, Meghan Lapp, Pam Lyons Gromen, Peter Kaizer, and Robert Ruhle

Others present: Jason Didden, Peter Hughes, Mark Holliday, Alissa Wilson, BB, Brad Schondelmeier, Carly Bari, Hannah Hart, Jessica Blaylock, Maria Fenton, and Mark Binsted.

Trigger questions posed to the AP to generate discussion:

- 1. What factors have influenced recent catch (markets, environment, regulations, etc.)?
- 2. Are the current fishery regulations appropriate? How could they be improved?
- 3. What would you recommend as research priorities?
- 4. What else is important for the Council to know?

Market/Economic Conditions

Mackerel demand has been strong for years – markets have not been a limiting factor. Persistent inability to supply product consistently will eventually lead to market problems for the U.S. industry.

Environmental Conditions

Nothing particularly unusual was reported; there are few reports of fish from more southern areas.

Management Issues

The New England Fishery Management Council's (NEFMC) inshore mid-water trawl buffer zone affected landings when in operation – the buffer zone started February 2021 and ended (court order) March 29, 2022. It was noted that the NEFMC is revisiting buffer zones.

The lack of herring RSA quota has limited mackerel landings later in the year in recent years – but trawl boats are allowed to catch herring in the third trimester in area 1A which does allow trawled herring/mackerel catch.

Horsepower restrictions, and resulting speed limitations, may be affecting the size of the fish that the commercial fishery can catch (larger fish are faster); also possible research topic.

An 89 MT river herring and shad (RH/S) cap would have substantially impacted mackerel landings in 2023 at the observed RH/S interaction rates early in the year. An 89 MT RH/S cap would also have degraded the estimation protocols in terms of getting enough observer trips to use representative in-season data. (Staff note: the fishery looked likely to close earlier this year due to the RH/S cap before additional observer data reduced the RH/S cap ratio and cap estimates.)

A lower RH/S cap may have incentivized a change in 2023 behavior, making it hard to predict what might have happened in 2023 at a lower RH/S cap in terms of potential closures.

The criticism of the mackerel fishery has made the creation of a fishery performance report moot – in the current situation we can't catch the quota we have, and therefore can't provide fishery-dependent information which will increase assessment uncertainty.

Other Issues

Recreational catch and its precision and impact on biomass remain a concern. There was discussion regarding the 29% drop (totals of 10.7 million fish to 7.6 million fish) in mackerel catch from 2021 to 2022 after relative stability from 2018-2021. Follow-up examination of MRIP estimates indicates that while catches declined across private/rental boat modes in Maine, Massachusetts, and New Hampshire (this group accounts for most mackerel catch each year), about 2/3 of the total decline occurred in the Massachusetts private/rental boat mode group. The numbers of angler trips for this estimate stayed about the same, so angler effort does not appear to have been the cause of the decline in catch. For the Massachusetts' private/rental boat mode estimates, observed harvests (MRIP type As) were similar in 2021 and 2022 with most of the decline represented by lower rates (catch per angler trip) for *reported but not observed harvests* (MRIP B1s) and *reported discards* (MRIP B2s). There was also discussion whether state permitting may shift some reported catch from the recreational sector to the commercial sector, but that should only potentially affect 2023 and future catches.

The potential use of size limits and US-Canada alignment remains a concern. The bulk of use of the available mackerel quota should be dedicated to more selective gear (e.g. purse seining).

With Industry-Funded Monitoring in the Herring Fishery suspended, we also get less mackerel observer coverage to support RH/S cap monitoring. The program was suspended due to the inability of the Agency to pay for its portion of the program. The current observer case at the Supreme Court may impact the ability of the Agency to require industry-funded observer coverage outside of the North Pacific (which is also revenue capped), foreign fishing, and/or

limited access privilege programs (aka ITQs). It's regrettable that the voluntary bycatch avoidance program is no longer in operation – the program was important re: RH/S avoidance. It's worth exploring potentially using Standardized Bycatch Reporting Methodology (SBRM) modifications to direct more observer coverage to fleets relevant for RH/S.

Research Priorities

Research priorities were reviewed, but no related input was provided.

Additional Public Input:

No additional input was provided.



Atlantic Mackerel Fishery Information Document July 2023

This Fishery Information Document provides a brief overview of the biology, stock condition, management system, and fishery performance for Atlantic mackerel ("mackerel" hereafter), with an emphasis on 2022. Data sources for Fishery Information Documents include unpublished National Marine Fisheries Service (NMFS) survey, dealer, vessel trip report (VTR), permit, and Marine Recreational Information Program (MRIP) databases and should be considered preliminary. For more resources, including previous Fishery Information Documents, please visit http://www.mafmc.org/msb.

Key Facts

- Mackerel began a rebuilding program on November 29, 2019. A revised rebuilding plan was implemented in 2023, based on catches that had a predicted 61% probability of rebuilding the stock by 2032.
- The 2023 rebuilding Acceptable Biological Catch (ABC) is 8,094 metric tons (MT); the predicted 2024 rebuilding ABC was 9,274 MT.
- The results of the 2023 mackerel management track assessment are not yet available.
 NMFS Northeast Fisheries Science Center staff will use those results to project catches that have a 61% probability of rebuilding by 2032
- The 2023 Canadian assessment showed a continued decline in spawning stock size estimates from 2020 to 2021/2022. Canadian Spawning stock size estimates are at an alltime low.
- The mackerel fishery was not constrained by its river herring and shad (RH/S) cap in 2021 or 2022.

Basic Biology

Mackerel is a semi-pelagic/semi-demersal (may be found near the bottom or higher in the water column) schooling species, primarily distributed historically between Labrador (Newfoundland, Canada) and North Carolina. The stock is considered to comprise two spawning contingents: a northern contingent spawning primarily in the southern Gulf of St. Lawrence and a southern contingent spawning in the Mid-Atlantic Bight, Southern New England and the western Gulf of Maine. The two contingents mix during winter months on the Northeast U.S. shelf. The Canadian fishery likely primarily catches the northern contingent while the U.S. fishery appears to catch both contingents.

Mackerel spawning occurs during spring and summer and progresses from south to north as surface waters warm. Atlantic mackerel are serial, or batch spawners. Eggs are pelagic. Post-larvae gradually transform from planktonic to swimming and schooling behavior at about 30-50 mm. Almost all fish are mature by age 3 in most years. Age 2 maturity appears to vary between around 50% to nearly 100%. Atlantic mackerel are opportunistic feeders that can ingest prey either by individual selection of prey organisms or by passive filter feeding. See https://www.nefsc.noaa.gov/nefsc/habitat/efh/ for more life history information.

Status of the Stock

Based on a 2018 assessment (NEFSC 2018, available at http://www.mafmc.org/ssc-meetings/2018/may-8-9), the mackerel stock was declared overfished, with overfishing occurring based on data through 2016. A 2021 management track assessment (MTA) indicated rebuilding from 2014 to 2018 but the stock was at only 24% of the biomass rebuilding target in 2019 (and still overfishing). However, the productivity of the stock appears to have declined - in the 2021 MTA, the estimated proxy for Maximum Sustainable Yield declined by 17% to 34,103 metric tons (MT) compared to the previous assessment.

Historical assessments (which used different methods and data) appear to have been substantially over-optimistic about the stock's productivity: the 1997 mackerel allowable biological <u>catch</u> was specified about <u>ten times higher than</u> what we now think the <u>total SSB</u> was in that year.

A 2023 MTA that uses data through 2022 is pending and will be posted to the relevant meeting pages as soon as possible. A 2023 Canadian assessment¹ showed the Northern Mackerel Contingent continued a decline from 2020 to 2021/2022 (to all-time lows). The Canadian and U.S. assessments share much of the same data but the U.S. assessment combines the Canadian egg data with egg data collected by a U.S. Ecosystem Monitoring survey conducted in late May and June.

Management System and Fishery Performance

Management

The Mid-Atlantic Fishery Management Council (the Council or MAFMC) established management of mackerel in 1978 and the management unit includes all federal East Coast waters. Expected Canadian landings are deducted from the total Acceptable Biological Catch (ABC) that is recommended by the Council's Scientific and Statistical Committee (SSC), but there is no formal sharing agreement. If Canada keeps its fishery closed, as occurred in 2022 and 2023, the fish set aside for expected Canadian catch remain set aside.

Access is limited with several tiers having different trip limits. Stricter trip limits are triggered when the quota is approached. Additional summary regulatory information is available at https://www.fisheries.noaa.gov/region/new-england-mid-atlantic.

After the initial rebuilding plan appeared infeasible due to slow stock growth, a revised rebuilding plan was implemented for 2023 to achieve a 61% probability of rebuilding the stock by 2032. The 2023 ABC is 8,094 MT. From the ABC, 2,197 MT was deducted for potential Canadian landings,

¹ https://waves-vagues.dfo-mpo.gc.ca/library-bibliotheque/41111126.pdf

2,143 MT was deducted for expected recreational catch, and 115 MT was deducted for expected commercial discards, resulting in a commercial quota of 3,639 MT. The initial series of rebuilding catches is provided in Table 1 with the 2024+ catches conditional on the expected increase in biomass.

Table 1. Revised rebuilding plan catch and initial biomass trajectory.

	Catch (MT)	Biomass (MT)
2023	8,094	80,745
2024	9,274	91,738
2025	10,540	103,756
2026	11,906	116,857
2027	13,408	131,291
2028	15,004	146,553
2029	16,631	162,239
2030	18,261	177,731
2031	19,814	192,045
2032	21,215	204,796

Fisheries

Figure 1 describes mackerel catches (all known sources) 1960-2019 and highlights the scale of the early foreign fishery in the late 1960s and 1970s. Figures 2-3 describe domestic landings, exvessel revenues, and prices (inflation adjusted) since 1996. Domestic landings dropped dramatically from 2006-2011 and have been relatively low since. Prices have shown an increasing trend since 2001 and the price jump in 2022 may have been associated with the complete Canadian fishery closure in 2022. Figure 4 describes preliminary weekly landings throughout the year for 2023 and 2022. Early season landings were higher in 2023 compared to 2022.

Table 2 describes 2022 commercial mackerel landings by state and Table 3 describes 2022 commercial mackerel landings by gear type. Table 4 describes 2021 and 2022 commercial mackerel landings by NMFS statistical area. While variable, the landings patterns are generally consistent with recent operation of the fishery.

Figure 5 describes 2018-2022 Atlantic mackerel recreational annual total catches (numbers of fish, VA-ME, all modes combined, all areas combined) and indicates stable catches from 2018-2021 with a decline in 2022. Most recreational catch is retained, most occurs in the private/rental mode, and most catch occurs in state waters (predominantly Massachusetts, New Hampshire, and Maine). Data after 2018 are not affected by calibrations that were applied to earlier data due to methods changes to the Marine Recreational Information Program (MRIP).

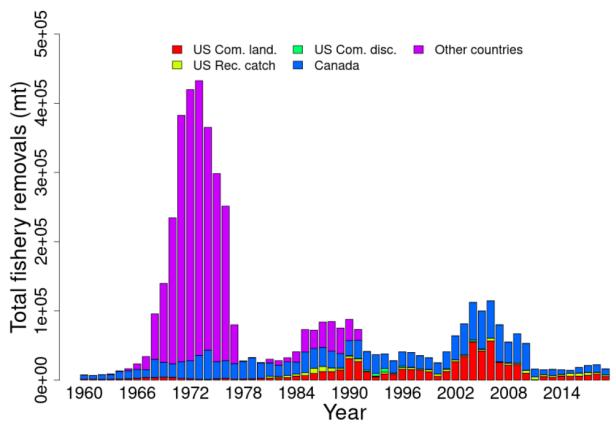


Figure 1. Total catch of northwest Atlantic mackerel between 1960 and 2019 by all known sources. U.S. recreational catch represents recreational landings plus discards, Canada represents Canadian landings (discards are not available), and other countries represents landings by all other countries.

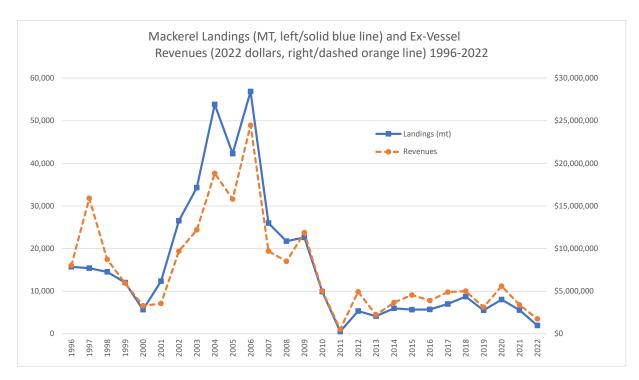


Figure 2. U.S. Mackerel Landings and Mackerel Ex-Vessel Values 1996-2022. Source: NMFS unpublished dealer data. [PRELIMINARY]

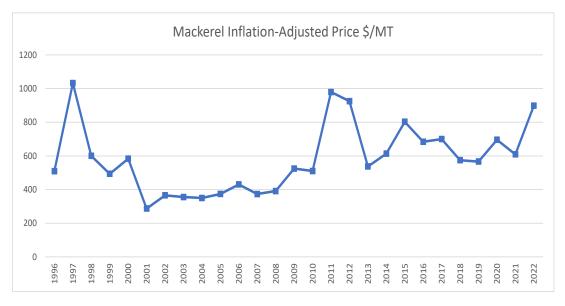


Figure 3. Ex-Vessel Mackerel Prices 1996-2022, Inflation-Adjusted to 2022 Dollars Source: NMFS unpublished dealer data. [PRELIMINARY]

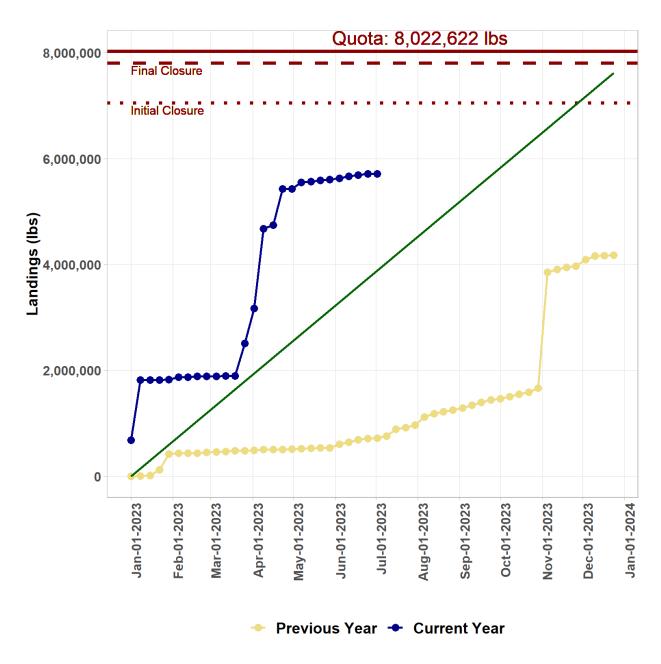


Figure 4. U.S. Preliminary Mackerel landings; 2023 in blue, 2022 in yellow-orange. As of July 6, 2023. Source: https://www.fisheries.noaa.gov/new-england-mid-atlantic/commercial-fishing/quota-monitoring-greater-atlantic-region.

Table 2. Commercial Mackerel landings (live weight) by state in 2022. Source: NMFS unpublished dealer data.

State	Metric_Tons
MA	1,530
ME	302
RI	88
NY	11
Other	17
Total	1,948

Table 3. Commercial Mackerel landings (live weight) by gear in 2022. Source: NMFS unpublished dealer data.

GEAR	МТ
TRAWL,OTTER,MIDWATER	1,155
HAND LINE, OTHER	249
LONGLINE, BOTTOM	247
UNKNOWN	165
TRAWL,OTTER,BOTTOM,FISH	90
Other	42
Total	1,948

Table 4. Commercial mackerel landings by statistical area in 2021 and 2022. Source: NMFS unpublished VTR data.

2021	2022

Stat Area	Metric Tons	Stat Area	Metric Tons
522	2,023	514	1,412
521	1,854	522	147
612	992	521	47
514	450	537	35
Other/CI	332	539	25
Total	5,652	611	22
	- ,	616	12
		Other/CI	27
		Total	1,725

Note: VTR expected to be lower than dealer database due to state landings.

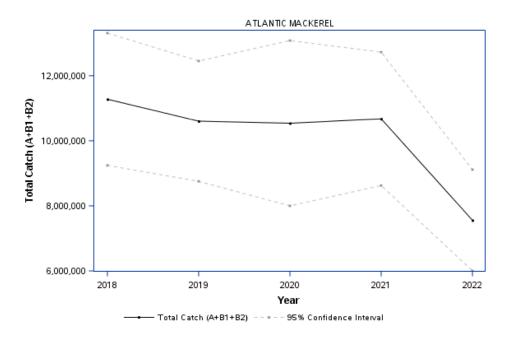


Figure 5. 2018-2022 Atlantic mackerel recreational total catches (numbers of fish), annual, VA-ME, all modes combined, all areas combined Source: NMFS MRIP query https://www.fisheries.noaa.gov/data-tools/recreational-fisheries-statistics-queries.

(Data after 2018 not affected by calibrations that must be applied to earlier data due to methods changes.)

Non-Target Catches and Discards

Environmental Assessments for mackerel specifications developed by staff include tables of incidental catches using a directed fishery definition of at least 50% of retained catch being mackerel. Since the Standardized Bycatch Reporting Methodology focuses on discards of managed stocks rather than discards in managed fisheries, staff analyses of discards vary fishery by fishery depending on data availability and historical practices. Staff updated previous analyses using 2019-2022 data – 2020 data was severely impacted by Covid-19 but most observed mackerel trips would generally occur early in the year before 2020's disruptions. There were only 14 total observed mackerel trips (as defined) during this time period.

Using discard ratio data from these observed hauls and 2019-2022 average mackerel landings (5,267 MT), Table 5 below approximates annual catch/discards in the directed mackerel fishery from 2019-2022, for species with extrapolated catch of at least 10,000 pounds. The method used for the estimates in the table is a custom staff analysis, and is best considered as a relative indicator of species that may be affected by the fishery rather than precise amounts (especially given the low number of observed trips in this fishery). On the trips identified in this analysis, the 2019-2022 overall discard rate was 0.4 % (similar to previous analyses).

Preliminary weekly 2023/2022 river herring and shad (RH/S) cap performance is described in Figure 6 (next page).

The observer program creates individual records for some species of interest, mostly larger pelagics and/or less common sharks/rays, as well as tagged fish. However, on these trips only three unknown sharks and one bluefin tuna were noted.

Table 5. Mackerel Target/Non-Target Catches

NE Fisheries Science Center Common Name	Pounds Observed Caught	Pounds Observed Discarded	Of all discards observed, percent that comes from given species	Percent of given species that was discarded	Pounds of given species caught per mt mackerel Kept	Pounds of given species discarded per mt mackerel Kept	Rough Annual Catch (pounds) based on 4- year (2019-2022) average of mackerel landings (5,267 mt)	Rough Annual Discards (pounds) based on 4-year (2019- 2022) average of mackerel landings (5,267 mt)
MACKEREL, ATLANTIC	2,238,955	321	2%	0%	2,205	0	11,613,397	1,663
HERRING, ATLANTIC	930,524	1,022	7%	0%	916	1	4,826,604	5,302
BUTTERFISH	20,760	3	0%	0%	20	0	107,680	16
MENHADEN, ATLANTIC	15,492	2	0%	0%	15	0	80,354	8
DOGFISH, SPINY	14,132	9,316	66%	66%	14	9	73,301	48,321
HERRING, BLUEBACK	14,098	892	6%	6%	14	1	73,124	4,628
HAKE, SILVER (WHITING)	7,601	21	0%	0%	7	0	39,427	110
ALEWIFE	6,094	50	0%	1%	6	0	31,608	258
FISH, NK	2,441	2,281	16%	93%	2	2	12,661	11,831

Catch Cap	Quota (mt)	Cumulative Catch (mt)	Percent Quota Caught
Atlantic Mackerel River Herring/Shad	129	105.9	82%
150 -			
Quota: 129 mt			
7			
Street Herring/Shad			
50-			
į			
0 - Jan 2023 Apr 2023	Jul 2023 Date	Oct 2023	Jan 2024
Year —	2022	2023	

Figure 6. Preliminary Weekly RH/S Cap Monitoring; 2023 in blue, 2022 in yellow-orange. As of July 7, 2023. Source: https://www.fisheries.noaa.gov/new-england-mid-atlantic/commercial-fishing/quota-monitoring-greater-atlantic-region.

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The Commonwealth of Massachusetts Division of Marine Fisheries

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MAURA T. HEALEY Governor KIMBERLEY DRISCOLL Lt. Governor REBECCA L. TEPPER Secretary THOMAS K. O'SHEA Commissioner DANIEL J. MCKIERNAN Director

Dr. Chris Moore Executive Director Mid-Atlantic Fishery Management Council 800 North State St., Suite 201 Dover, DE 19901

RE: Atlantic Mackerel Possession Limits

Dear Dr. Moore:

As an epicenter of Atlantic Mackerel fishing, the Commonwealth of Massachusetts remains an interested partner in rebuilding a sustainable Atlantic mackerel fishery. Recently, the Commonwealth worked closely with the Council and our neighboring states to ensure sustainable regulation of recreational fishing for Atlantic mackerel in state waters. At its December meeting, the Mid-Atlantic Council will consider final Acceptable Biological Catch (ABC) and fishery specifications to limit directed Atlantic mackerel fishing without creating excessive regulatory discards. The Commonwealth of Massachusetts would like to express support for measures that best achieve this goal while most equitably distributing the consequent economic impacts.

Preliminary specifications set by the Mid-Atlantic Council call for a 5,000-lb incidental limit for limited access permit holders and a 1,000-lb year-round limit for open-access permit holders. While the 5,000-lb incidental limit established in FW12 was expected to constrain directed trawling for Atlantic mackerel, it has sustained a jig fishery; a fishery with little bycatch that is highly dependent on Atlantic mackerel. The preliminary proposal of 1,000-lb Atlantic mackerel possession limit for open access permit holders we believe would likely result in the shuttering of a few, small, highly dependent businesses engaged in the jig fishery here in Massachusetts. Moreover, it is strategic to retain these small-scale fisheries as we plan for future fisheries development in offshore wind development areas.

In December, the Mid-Atlantic Council will receive final ABC advice from its Science and Statistical Committee and a full range of specification alternatives from its Monitoring Committee. That advice includes an option to set the ABC based on an average approach and corresponding trip limits as follows:

	2024	2025
ABC	868mt	868mt
Initial Trip Limits in pounds (Limited Access/Open Access)	20,000 /5,000	20,000/5,000
Trip Limit in pounds after 80% Catch Trigger (Limited Access/Open Access)	10,000/2,500	10,000/2,500

I strongly urge the Mid-Atlantic Council consider final specifications for 2024 and 2025 that establish an incidental possession limit no lower than 2,500-lb for the open access fishery. Staff analyses indicate these measures keep the fishery within the commercial quota and allow for the same 61% probability of rebuilding by 2032 as the year-specific ABCs and Council's initial trip limit recommendation. But unlike the initial recommendation, the average ABC approach and consequent trip limits benefit from avoiding an extremely low ABC in 2024 that could result in excessive regulatory discards. Constant catch advice for all gear types should help stabilize fishing operations over the next two years while avoiding disproportionate negative economic impacts to any one gear. And ultimately, these measures should support our shared goal of rebuilding a sustainable Atlantic mackerel fishery.

Thank you for your consideration.

Daniel M. Kerran

Sincerely,

Daniel J. McKiernan

Director, Massachusetts Division of Marine Fisheries

Cc: Peter Hughes, Chair MAFMC MSB Committee

Jason Didden, MAFMC

Cate O'Keefe, NEFMC Executive Director

Eric Reid, NEFMC Chair

MA Marine Fisheries Advisory Commission

----Original Message-----

From: Lisa Pratt <michaelpratt1@verizon.net> Sent: Sunday, October 15, 2023 3:47 PM To: Didden, Jason <jdidden@mafmc.org>

Subject: 2024 Mackerel

Hi Jason,

Thank you for the information you provided. My response to the council recommendations is as follows.

The effect of a 1,000 pound mackerel limit would be catastrophic for (3) three small hand gear fishermen. It would completely destroy my business to save a very minuscule amount of mackerel.

The small scale hook and line mackerel fishery is without a doubt the most sustainable fishery in the coast at present times - and we need a higher landing limit to remain viable.

I am hopeful that when the agency begins the decision making process that they will keep in mind that their own mission statement is: PROMOTE AND PRESERVE SUSTAINABLE FISHERIES.

Thank you, Michael Pratt

F/V Perfect C's Marshfield, MA 781-760-0718 michaelpratt1@verizon.net From: Lisa Pratt <michaelpratt1@verizon.net> Sent: Friday, October 20, 2023 7:55 PM

To: Moore, Christopher <cmoore@mafmc.org>; Didden, Jason <jdidden@mafmc.org>

Cc: Japatrican@gmail.com; cpfcharters@yahoo.com; Peterlibro@gmail.com

Subject: Proposed Open Access Mackerel Limit

Chris/Jason:

The effect of a 1,000 pound open access mackerel limit would be catastrophic for (3) three small hand gear fishermen including myself in Massachusetts. We represent such a small percentage of the quota, with little or no discards as compared to other user types that we cannot survive at a 1,000 lb. trip limit. If requested, I can provide the permits associated with the three vessels to assess recent and historical catch over time. As a result, we request an impact analysis of the of the open access vessels and/or three small hand gear vessels with a 2,500 or higher (<5,000 lbs.) trip limit. We suspect that ultimately our catch has negligible effect of less than 1% on the total quota and that such be considered to function as a viable business. We also request that the estimating of the ABC be considered over an average of two years to provide some additional quota relief.

The change in environmental conditions has moved mackerel into our waters for almost the entire season that previously was not the case approximately 5 plus year ago. I have fished for mackerel for more than 20 years now and have observed the change in distribution and timing of mackerel in or waters over time. We need continued access to the fishery to provide details concerning the spatial distribution and extent of mackerel in our waters. We are surprised of cuts if any with such a tremendous biomass of mackerel in our waters that was not the case a few years ago.

In 2023, we participated in a mackerel study conducted by the NEFSC in association with the Stellwagen Bank Charter Boat Association, providing mackerel to assess population genetics (US vs Canada) and to assess if fecundity (i.e. the # of eggs produced by an individual) is different between the fish that spawn in Canada versus the U.S. Samples from our waters were provided to the NEFSC from May to August 2023. The fish were present near shore in April and moved north or east into cooler waters as temperatures increased from the spring to the summer months of 2023. Results are still pending but there were a few ready to spawn fish and many were an early stage of development. Note the range of dates provided where the spawning stage was variable. The timing of the surveys to assess the stock may not be capturing the fish that may be present due to the change in environmental conditions resulting in a change to the spatial distribution and extent of the stock in our waters historically over time. This needs to be considered when developing the ABC.

Ultimately the three small hand gear vessels that includes myself are a clean fishery with little or no discards associated with this gear type where we suspect our annual catch is likely less than 1% with a negligible impact on the quota. For the reasons set forth above we need some relief with a daily bag limit greater than 1,000 lbs. or we will go out of business. Please confirm receipt of this email.

Thank You

Michael Pratt

F/V Perfect C's