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# MEMORANDUM

**Date:** November 29, 2023

To: Chris Moore

From: J. Didden, Staff

Subject: 2024-2026 Spiny Dogfish Specifications

The Council plans to adopt 2024-2026 Spiny Dogfish specifications at the December 2023 Council Meeting, with New England Fishery Management Council action following in January 2024 (the plan allows NMFS to resolve differences). Council staff supports the Joint Spiny Dogfish Committee recommendations, which are detailed in the first supporting document below:

-Spiny Dogfish Committee Nov 2023 Meeting Summary (with Committee recommendations)

-Spiny Dogfish Monitoring Committee Nov 2023 Summary

-Scientific and Statistical Committee (SSC) Oct 2023 Report (see Committee Reports Tab)

-Staff Oct 2023 Acceptable Biological Catch (ABC) Memo

-Advisory Panel (AP) 2023 Fishery Performance Report

-2023 Fishery Information Document

-Submitted Comments

#### Supplemental Material Links

-Preliminary 2023 Partial Year Discards

-SSC October 2023 Meeting Page (includes links to assessment materials)



# Spiny Dogfish Committee Meeting Summary

November 17, 2023 - Webinar

**Overview:** The Joint<sup>1</sup> Spiny Dogfish Committee met on November 17, 2023 from 9 am to 11:40 am and developed recommendations for 2024-2026 spiny dogfish specifications, detailed below. The regulations guiding these recommendations are detailed in 50 CFR 648.230-232, but generally involve ensuring that the Annual Catch Limit (ACL) is unlikely to be exceeded – any ACL overages trigger pound-for-pound paybacks from a subsequent year. The MAFMC and NEFMC will meet in the coming months to consider the Committee's recommendations and adopt specifications.

**Committee Member Attendees:** Sonny Gwin (Chair), Dan Farnham, Mark Alexander, Skip Feller, Daniel Salerno, Michael Luisi (ex-officio), Adam Nowalsky, Joe Grist, Wes Townsend (ex-officio), Eric Reid (ex-officio), Alan Tracy, Chris Batsavage, Jay Hermsen (NMFS), Nichola Meserve, Rick Bellavance, and Toni Kerns (ASMFC).

**Other Attendees:** Jason Didden, Alan Bianchi, Aubrey Church, Bob Blais, Cynthia Ferrio, David McCarron, Dvora Hart, James Fletcher, James Boyle, John Whiteside, Jonathan Auguste, Megan W, Michelle Passerotti, Paul Rago, Pierre Juillard, Renee Zobel, Roger Rulifson, Scott MacDonald, Didden2, and Mark Sanford.

#### **Background Discussion Summary**

Jason Didden of MAFMC staff first provided an overview of: the spiny dogfish assessment; the Scientific and Statistical Committee's (SSC) Acceptable Biological Catch (ABC) recommendations; the Advisory Panel's (AP) Fishery Performance Report; and the Monitoring Committee's recommendations (detailed supporting documents were provided and will also be available for the Councils' meetings). Several clarifying discussions preceded Committee deliberations including:

-The 54% target chance of not overfishing is a result of the MAFMC's risk policy.

-Uncertainties about data inputs are considered as part of assessment peer reviews.

-The large quota changes from, for example 2016 (about 40 million pounds), to 2024 (likely about 10 million pounds) are primarily the result of earlier overestimation of productivity. Follow-up by staff found that according to the current assessment, the 2016 quota should have been only around 11 million pounds (2016 landings were about 25 million pounds, still too high even though substantially below the 40-million pound quota). (Values are approximate given the assessment uses calendar years.)

<sup>&</sup>lt;sup>1</sup> The federal spiny dogfish fishery is managed with a joint plan by the Mid-Atlantic Fishery Management Council (MAFMC, lead) and the New England Fishery Management Council (NEFMC).

-Discard estimates were generated based on both the ratio of observed discards to kept fish and overall fishing activity as measured by landings (the discard ratio is applied to totaled landings by gear type to estimate discards). If there are less boats and less activity and less landings now than earlier, the lower activity/landings result in lower discard estimates (unless the discard rate increased to offset the lower fleet activity). The modeled future discards coming out of the assessment integrate the historic discard information as well as the trends in biomass forecasted by the model.

Summary of General Public Comments Provided During Background Discussion

- Fishermen do not see downward trends in either abundance or size of fish in landings.
- This is history repeating itself just like in 1999 we are once again begging you not to put us out of business unnecessarily.

#### **Committee Specifications Motion/Recommendation Summary**

The Committee passed the following motion regarding specifications:

Move to recommend that the Councils adopt 2024-2026 dogfish specifications that include the following deductions from the SSC-specified ABCs: the most recent estimate of Canadian landings (36 MT<sup>2</sup>); no buffer for management uncertainty (0 MT); the model-predicted year-specific discards (2,382 MT for 2024; 2,441 MT for 2025; and 2,494 MT for 2026); and the most recent 3-year average recreational landings (112 MT). This results in commercial quotas of 4,605 MT (10.15 mil. pounds) for 2024; 4,723 MT (10.41 mil. pounds) for 2025; and 4,831 MT (10.65 mil. pounds) for 2026. (Reflected in Table 3 of Monitoring Committee summary.) Meserve/Luisi, 14/1/1 Motion passes

Rationale for the motion included:

-The model-generated discards are objective and more likely to reflect actual discards than a recent three-year average or the most recent year (2022) estimate. It also is in between the amounts generated by those other two approaches, though closer to the 2022 estimate.

-Not using a management uncertainty buffer does not indicate a lack of uncertainty or zero risk of exceeding the Annual Catch Limit (ACL), but the model discard approach is more rigorous than last year's staff ad-hoc approach, and industry has again clearly indicated that they are willing to accept the higher risk of future paybacks given the current tenous existence of the spiny dogfish fishery. There have been no recent overages, and small future overages could be absorbed by the slight ABC increases in 2025 and 2026. The Atlantic States Marine Fisheries Commission (ASMFC) quota rollover provisions could increase the quota by potentially up to 600,000 pounds depending on 2023 fishing year performance (too soon to predict), but the state/regional allocations also add a de-facto buffer because states are unlikely to relinquish all of their quota through transfers.

-Overall this approach balances responsibility to the resource and needs of industry as best possible.

 $<sup>^{2}</sup>$  MT = metric ton. One metric ton equals about 2,204.6 pounds, so 100 MT equals about 220,000 pounds and 1,000 MT equals about 2.2 million pounds.

A motion to substitute the lower 2022 discard estimate of 2,134 MT failed on an 8/8/0 vote. The rationale for the failed substitute referenced the industry input, historical trends, socioeconomic impact (including the dogfish fishery's gap-filling role for many participants particularly January-April), and the various uncertainties involved. There was also concern about dogfish's impact on the ecosystem. It was noted the industry has clearly stated they are willing to risk future paybacks/disruptions if there are overages given the current tenuous state of the industry. Concern about the static nature (same discards for all three years) of this approach was noted given the predicted biomass increases. The NMFS representative noted they would not support the substitute motion,

During discussion of the substitute, it was clarified that if the two Councils adopt different measures, NMFS can implement either Council's measures or implement a modified version, but NMFS can't implement something that was rejected by both Councils. In recent years the ASMFC has mirrored the federal measures, but the ASMFC plan is not directly linked to the federal plan, and the ASMFC has adopted differing quotas in the past (NMFS will still close federal waters when the federal quota is reached). There was also discussion of whether specifications could just be set for one year and then reviewed. Staff noted that even if multi-year specifications are set, the specifications are reviewed each year by the SSC and MAFMC, and can be modified year to year. If the SSC changes the ABC(s) after review, then specifications would need to be modified. It was noted that the NEFMC may need to build in dogfish specifications review into its workload planning, depending on the nature of the review.

#### Summary of Public Comments Provided During Motion Discussion

John Whiteside: The above motion's quota is too low and we need to consider the de-facto buffer created by the ASMFC's state/regional allocations. The risk of an overage is overshadowed by the risk of not having a viable business due to unnecessarily low quotas. The 2,134 MT 2022 discard estimate is more appropriate, and would give industry another 500,000 pounds of quota. At this point every little bit helps significantly, because European buyers are starting to explore other sources given uncertainty about supply from the US, and if we lose our market, this industry is over (the supply disruption from Virginia and inability to maintain year-round Massachusetts processing staff is already critically challenging).

Pierre Juillard: Agree with John. We are at a critical point and Europeans are starting to turn to local markets – we need every pound to have a chance of still being here in a few years.

Scott MacDonald: We need to listen to John and Pierre. I'm out of the fishery/packing because I could not re-sign a lease given all of this uncertainty. We will also lose Pierre/SeaTrade if we don't take this seriously.

# **Trip Limit Discussion Summary**

While no action is required regarding the federal trip limit (currently 7,500 pounds per trip), there was some discussion of how trip limits might relate to potential specifications changes and/or future performance. No rationale to change the federal trip limit emerged and no related motions were made. There was a question whether a relationship existed between trip limit changes and discard changes, but that question has not been examined in detail, and most

discards are not occurring in the directed fishery that is constrained by trip limits. Staff observed that in recent years the fishery has utilized higher trip limits quickly upon implementation.

#### Male Fishery Discussion Summary

A question was asked what the next steps might be for facilitating a male-focused spiny dogfish fishery. Staff responded that the recent assessments do estimate biomass by sex but had not had time to explore options for a mostly separate harvest of male fish. A next step would be for the NMFS Northeast Fisheries Science Center to conduct analyses that could evaluate higher male harvest, and then related management measures could be considered (associated ABC, times/areas where mostly males would likely be caught, female by-catch set aside, etc.). It is not yet clear whether markets could be established for the smaller males, but there is some persisting interest in at least allowing the potential for such a fishery.



# Spiny Dogfish Monitoring Committee Meeting Summary

#### November 6, 2023 - Webinar

The Mid-Atlantic Fishery Management Council's (Council) Spiny Dogfish Monitoring Committee met on November 6, 2023 from 12:30pm to 3:15pm to develop recommendations for 2024-2026 specifications. The regulations guiding these recommendations are detailed in 50 CFR 648.230-232, but generally involve ensuring that the Annual Catch Limit (ACL) is unlikely to be exceeded – any ACL overages trigger pound-for-pound paybacks from a subsequent year. A key theme was the tradeoff between maximizing the limited available quota for 2024-2026 versus avoiding ACL overages and paybacks that could be disruptive to future fishing years.

**Monitoring Committee Attendees:** Jason Didden, Angel Willey, Conor McManus, Cynthia Ferrio, David McCarron, Dvora Hart, John Whiteside, Melinda Lambert, Nichola Meserve, and Scott MacDonald (100% attendance).

**Other Attendees:** Sonny Gwin, Bob Blais, Chris Batsavage, Chris Rainone, James Fletcher, Jared Auerbach, Joe Grist, Pierre Juillard, Wes Townsend, and Daniel Salerno.

#### **Assessment Discussion**

Jason Didden began the meeting with a summary of the assessment and the Council's Scientific and Statistical Committee's (SSC) findings. The assessment concluded that 2022 biomass (measured as pups/spawning output) was just above its target despite being relatively low, and that relatively low future catches are needed to stay at the target (due to the stock's reduced productivity). The SSC utilized the assessment model's conclusions and projections to set the following Acceptable Biological Catches (ABCs): 2024: 7,135 metric tons (MT), 2025: 7,312 MT; 2026: 7,473 MT. The 2024 ABC of 7,135 MT is 8.4% lower than the 2023 fishing year ABC of 7,788 MT. Both the Monitoring Committee and Public first engaged in discussion regarding the assessment, summarized below:

John Whiteside noted that the SSC remarked that recent changes in growth/size/maturity/ maximum-observed-female-size cannot be explained by direct effects from fishing (unlike the changes seen in the 1990s during more intense size-selective fishing). Dvora Hart hypothesized that there may be an indirect effect occurring where the smaller surviving females from the 1980s-1990s have been producing smaller fish.

Pierre Juillard noted that the primary processor has seen similar sized fish for the last 3-4 years. Dvora Hart highlighted Figure 3 from the <u>SS3 assessment report</u> (at <u>https://www.mafmc.org/ssc-meetings/october-30-2023</u>), which indicated landings did show a relatively similar/stable proportion of larger females from 2020-2022 but also declines both during the initial 1980s/1990s directed fishery and after the more recent 2012 landings peak. Other data (the

NMFS spring bottom trawl survey and other commercial fleets' landings and discards) also show historical declines of larger females. There was substantial discussion on whether recent reduced portside sampling could create a distorted understanding of the landings' length composition used within the assessment. Given the likely seasonal and/or spatial variability, higher sample sizes would be worthwhile. Follow-up discussions with Northeast Fisheries Science Center (NEFSC) staff clarified that the length data for the gillnet landings (where most landings come from) stem from both portside sampling of gillnet trip landings and at-sea sampling of kept fish on observed gillnet trips (mostly observer trip data in recent years). Scott MacDonald noted that vessels have been using smaller gear inshore in recent years to minimize trip costs, which could influence the size of dogfish in the landings (this could potentially be examined with observer data in the future). He observed relatively larger dogfish during the most recent Virginia fishing season - late 2022/early 2023 (the current assessment includes data through 2022). Discussion noted that there are some large fish seen in landings data in recent years, but a lower proportion compared to the 1980s or the early 2010s. Having state samplers collect landings' length information was raised as a possible solution, as was the possibility of sampling at the Massachusetts processor since almost all spiny dogfish landings are shipped to one Massachusetts processor.

Scott MacDonald observed that catch limits must have been set way too high during recent overfishing (2011-2021), since recent catches were substantially below their respective Acceptable Biological Catches (ABCs). According to the new assessment, this is true. Scott suggested that we should be wary of destroying this fishery with lower quotas given the variability we've seen in ABC recommendations in recent years (indicating high uncertainty).

Chris Rainone highlighted that the erroneous yo-yo assessment/management is making it impossible to sustain participation, and putting portions of the fishery out of business. He stated we should have a gillnet survey to avoid being in such a data poor situation and need to better account for climate/ecosystem impacts. He and Scott MacDonald also questioned whether we know if this model is better than previous approaches. Dvora Hart followed-up that this is the first standard statistical model that has been produced for the U.S. Atlantic spiny dogfish stock, and one advantage of now having a statistical population model is that there should be improved interannual stability in population size estimates and projections moving forward.

#### Specifications Discussion and Recommendations<sup>1</sup>

The ABCs recommended by the SSC, which are binding catch constraints are: 7,135 metric tons (MT) for 2024, 7,312 MT for 2025, and 7,473 MT for 2026. These resulted from application of the Council's risk policy to address scientific uncertainty, which, for a stock slightly above its biomass target (as dogfish is predicted to be for these years) dictates about a 54% chance of not overfishing. On average for these years, about 663 MT (a little more in 2024 and a little less in 2026) is set aside from the estimated overfishing level catch estimate to achieve the slightly better than 50% chance of avoiding overfishing (i.e. the 54% chance goal). This equates to setting aside 8%-9% of each year's estimated overfishing level of catch to address scientific uncertainty (i.e. to be slightly more than 50% certain that overfishing is not occurring).

<sup>&</sup>lt;sup>1</sup> Current 2023 fishing year specifications are detailed in Table 4.

#### Canadian Landings Set-Aside:

The Monitoring Committee has previously recommended the most recent available Canadian estimates for a set-aside. The Canadians updated their 2019 landings estimate to 36 MT (previously 37 MT). This value is now somewhat outdated but does not cause concern given the small magnitude of Canadian landings. Some recent years have been a bit higher and others a bit lower (1 MT-54 MT range 2015-2019). The Monitoring Committee recommended setting aside 36 MT to account for Canadian landings.

#### Recreational Set-Aside:

The Monitoring Committee recommended setting aside the most recent 3-year average of 112 MT to account for recreational landings, a small component of total catch. This is less than the 2021 estimate of 214 MT used to set the 2023 specifications. The assessment's 2020, 2021, and 2022 recreational harvest estimates of 101 MT, 215 MT, and 19 MT respectively have PSEs in the 30-50% range (i.e. PSE's which warrant a "caution" from NMFS in terms of precision).

#### Dead discard set-aside and management uncertainty buffer:

The specific charge of the Monitoring Committee to recommend measures that "*ensure*" overages do not occur would be impossible without very large buffers that result in very small commercial quotas and would regularly fail to catch optimum yield. Accordingly, in recent years the Monitoring Committee has taken the approach of making recommendations that would constitute a good faith effort to avoid substantial overages in typical years. This approach should enable optimum yield to be caught in most years but in any given year there will be a possibility of unexpectedly high discards (primarily from other fisheries), possibly causing substantial ACL overages and potentially disruptive pound-for-pound paybacks in future years (especially if the full landings quota is also attained).

The discard set-aside and management uncertainty buffer are linked because the primary management uncertainty issue that could cause ACL overages (and then paybacks) is the difficulty in setting aside an appropriate amount for dead discards. In the last ten years of the assessment (2013-2022) dead discards varied from about 7,400 MT (2014) to 2,100 MT (2022). Note the management track assessment report provides discard amounts before gear-specific discard mortality rates are applied (these rates have been reviewed and accepted but are likely imprecise). The trend since 2013 is downward, though much of the trend is driven by 2013-2014 being relatively high and 2022 being relatively low. Annual discards vary due to both trends in actual discards as well as estimation imprecision, though spiny dogfish discards are not particularly uncertain relative to other species in the region.

The ex-officio industry members of the Monitoring Committee (John Whiteside and Scott MacDonald) recommended that the 2022 discard estimate, 2,134 MT, be set-aside for 2024-2026 along with taking no deduction for a management uncertainty buffer (Table 1 below). Their rationale for using the 2022 discard estimate was that it is the most recent discard estimate and discards have been trending down. The 2022 discard estimate (2,134 MT) is close to what was set aside for 2023 (2,088 MT), so the scaling down approach taken last year appears to be working. Also. 2,134 MT would be a small increase from the current discard set aside. Their

rationale for not needing a management uncertainty buffer included that the state/regional landings allocations create an implicit massive buffer in landings versus the commercial quota to offset any theoretical issues with higher-than-expected discards. Also, it was noted that any catch overages could be offset by the planned increases in the ABC in 2025/2026. Finally, Scott MacDonald closed his business that previously bought almost all the dogfish landed in Virginia, and it is unclear whether another dealer will be able to facilitate similar annual volume from Virginia (averaging 4 million pounds). They noted the critical negative impact from sequestering potentially available quota at these low catch limits – there won't be an industry left if any potential quota is made uncatchable, forcing the last processor to close. John and Scott disagreed that the approaches (either "A" or "B" below) suggested by the rest of the Monitoring Committee were reasonable or appropriate, given their rationale described above and tenuous state of the industry at even the current 2023 quotas (12.0 million pounds). It was also suggested that federal dealers could be required to switch to daily reporting of landings to minimize any potential landings overages.

The rest of the Monitoring Committee was concerned that combining the lowest recent discard estimate with no management uncertainty buffer may not be objective and could lead to large ACL overages and paybacks/disruptions in future years. The low overall 2022 discard estimate was also unusually low for small mesh gear. There is also a possibility of landings over-running the commercial quota after a federal waters closure, but some states match the federal measures (including Virginia which typically harvests toward the latter part of the fishing year). Discussion noted that part of the rationale last year for a potential management uncertainty buffer was the ad-hoc approach used for discards, and the two approaches for discards suggested below may reduce the need for uncertainty buffers. Conversely, discards are primarily the result of activity in other (trawl) fisheries, and the model is not integrating potential future effort changes in other relevant fisheries. The Monitoring Committee did not recommend a specific buffer amount, but noted the same buffer trade-off evaluated in previous years: higher buffers provide less quota now but lower chances of overages/paybacks; lower buffers result in more quota now but greater chances of overages/paybacks. This group did reach consensus on two approaches that should avoid substantial ACL overages (though an unexpectedly very high discard estimate could still lead to substantial ACL overages):

- A) If a three-year average of discards is set aside (3,128 MT), that amount captures recent discard variability sufficiently such that a management uncertainty buffer would probably not be needed to avoid substantial overages. This would mean setting aside 3,128 MT for discards, which will substantially reduce commercial quotas from current levels even without any management uncertainty buffer. (Table 2 below)
- B) The assessment model generates expected discards for the projection period in an objective manner despite uncertainty as biomass slowly increases the model projects that discards will increase slowly as well. The Monitoring Committee noted that there is sensibility in using the model generated projected discards, just as is done by using the model generated ABCs. The projected amounts set aside for discards would be 2,382 MT for 2024, 2,441 MT for 2025, and 2,494 MT for 2026. The Monitoring Committee could not reach consensus on whether a management uncertainty buffer was needed if setting aside these model-generated discards, but did concur with the following statement: If the model-generated discard amounts are set-

aside, then the Committee may want to consider at least a small management uncertainty buffer given there is a 50% chance that realized discards will be higher (or lower) than those projected (due to the statistical nature of such estimates). Table 3 below describes the specifications using these discard amounts and zero uncertainty buffer, but staff will be able to illustrate varied management uncertainty buffers during the Committee meeting. Any management uncertainty buffer reduces the commercial quota by the same amount. A buffer amount therefore largely depends on the Councils' tolerances for potential overages and future paybacks, weighed against the immediate effect of reducing quota via a buffer.

#### Additional Public Comment

Pierre Juillard: The zero percent buffer is almost a necessity to get enough quota to keep processing beyond 2024. The peaks and valleys of quota have gotten us from four processors to just one.

Jared Auerbach: You can't decimate an industry where there's inexact science. Without a higher quota we're going to lose the current generation of participants as well as the next generation of entrepreneurs to invest in boats/processing/marketing.

Chris Rainone: The 30% discard mortality for gill nets is not believable given how we fish our gear for short soaks – the fish I released today out of Barnegat Light all swam away. If you put this quota below 10 million pounds we're in trouble as a fishery and we're already losing docks to wind – we won't have anywhere to go. You're going to put us out of business and yourselves because if there's no fishery to manage what are you going to do. At this rate you might as well put the nail in the coffin.

Daniel Salerno: I'm a little concerned about how you're looking at discards – if you take out 2013/2014 and 2022, discards were pretty flat from 2015-2021 and 2022 seems unnaturally lower than the previous 6-7 years. You may be underestimating the potential for higher dead discards occurring in 2024-2026.

# **Trip Limits**

The Monitoring Committee also discussed trip limits, noting that trip limits (pounds per trip) have increased sequentially over the last decade (3,000 in 2009-2012, 4,000 in 2013, 5,000 in 2014-2015, 6,000 in 2016-2021, 7,500 in 2022-2023). Given recent performance, it's not clear whether the current 7,500-pound trip limit may cause early closures of the fishery, but all else being equal the quota will be utilized faster at higher trip limits compared to lower trip limits (many trips land right at the trip limit). Depending on fishery performance at the expected lower quotas, consideration of trip limit modifications may be warranted in the future. Scott MacDonald also mentioned that lowering the trip limits can make it harder to pack a truckload for shipment to the Massachusetts processor and lowering the trip limit could hurt vessels given high fuel prices. Thus, the Monitoring Committee did not see justification for recommending changes to the federal trip limit at this time.

Specifications	2024 (pounds)	2024 (mt)	Basis
OFL (from SSC)	17,235,719	7,818	SS3 Assessment
ABC (from SSC)	15,729,964	7,135	SSC / Risk Policy
Canadian Landings	79,366	36	= 2019 estimate, most recent
Domestic ABC	15,650,597	7,099	= ABC – Canadian Landings
ACL	15,650,597	7,099	= Domestic ABC
Mgmt Uncert Buffer	0.0%	0.0%	See discussion
Amount of buffer	0	0	See discussion
ACT	15,650,597	7,099	= ACL - mgmt uncert buffer
U.S. Discards	4,704,659	2,134	=2022 estimate
TAL	10,945,938	4,965	ACT – Discards
U.S. Rec Landings	246,917	112	2020-2021-2022 avg
Comm Quota	10,699,021	4,853	TAL – Rec Landings
Specifications	2025 (pounds)	2025 (mt)	Basis
OFL (from SSC)	17,570,821	7,970	SS3 Assessment
ABC (from SSC)	16,120,181	7,312	SSC / Risk Policy
Canadian Landings	79,366	36	= 2019 estimate, most recent
Domestic ABC	16,040,815	7,276	= ABC – Canadian Landings
ACL	16,040,815	7,276	= Domestic ABC
Mgmt Uncert Buffer	0.0%	0.0%	See discussion
Amount of buffer	0	0	
ACT	16,040,815	7,276	= ACL - mgmt uncert buffer
U.S. Discards	4,704,659	2,134	=2022 estimate
TAL	11,336,156	5,142	ACT – Discards
U.S. Rec Landings	246,917	112	2020-2021-2022 avg
Comm Quota	11,089,239	5,030	TAL – Rec Landings
Specifications	2026 (pounds)	2026 (mt)	Basis
OFL (from SSC)	17,905,924	8,122	SS3 Assessment
ABC (from SSC)	16,475,125	7,473	SSC / Risk Policy
Canadian Landings	79,366	36	= 2019 estimate, most recent
Domestic ABC	16,395,759	7,437	= ABC – Canadian Landings
ACL	16,395,759	7,437	= Domestic ABC
Mgmt Uncert Buffer	0.0%	0.0%	See discussion
Amount of buffer	0	0	
АСТ	16,395,759	7,437	= ACL - mgmt uncert buffer
U.S. Discards	4,704,659	2,134	=2022 estimate
TAL	11,691,100	5,303	ACT – Discards
U.S. Rec Landings	246,917	112	2020-2021-2022 avg
Comm Quota	11,444,182	5,191	TAL – Rec Landings

Table 1. Whiteside/MacDonald Recommended Specifications

Specifications	2024 (pounds)	2024 (mt)	Basis
OFL (from SSC)	17,235,719	7,818	SS3 Assessment
ABC (from SSC)	15,729,964	7,135	SSC / Risk Policy
Canadian Landings	79,366	36	= 2019 estimate, most recent
Domestic ABC	15,650,597	7,099	= ABC – Canadian Landings
ACL	15,650,597	7,099	= Domestic ABC
Mgmt Uncert Buffer	0.0%	0.0%	Coordisquestion
Amount of buffer	0	0	See discussion
ACT	15,650,597	7,099	= ACL - mgmt uncert buffer
U.S. Discards	6,896,051	3,128	2020-2021-2022 avg
TAL	8,754,546	3,971	ACT – Discards
U.S. Rec Landings	246,917	112	2020-2021-2022 avg
Comm Quota	8,507,629	3,859	TAL – Rec Landings
Specifications	2025 (pounds)	2025 (mt)	Basis
OFL (from SSC)	17,570,821	7,970	SS3 Assessment
ABC (from SSC)	16,120,181	7,312	SSC / Risk Policy
Canadian Landings	79,366	36	= 2019 estimate, most recent
Domestic ABC	16,040,815	7,276	= ABC – Canadian Landings
ACL	16,040,815	7,276	= Domestic ABC
Mgmt Uncert Buffer	0.0%	0.0%	See discussion
Amount of buffer	0	0	
АСТ	16,040,815	7,276	= ACL - mgmt uncert buffer
U.S. Discards	6,896,051	3,128	2020-2021-2022 avg
TAL	9,144,764	4,148	ACT – Discards
U.S. Rec Landings	246,917	112	2020-2021-2022 avg
Comm Quota	8,897,846	4,036	TAL – Rec Landings
Specifications	2026 (pounds)	2026 (mt)	Basis
OFL (from SSC)	17,905,924	8,122	SS3 Assessment
ABC (from SSC)	16,475,125	7,473	SSC / Risk Policy
Canadian Landings	79,366	36	= 2019 estimate, most recent
Domestic ABC	16,395,759	7,437	= ABC – Canadian Landings
ACL	16,395,759	7,437	= Domestic ABC
Mgmt Uncert Buffer	0.0%	0.0%	See discussion
Amount of buffer	0	0	
АСТ	16,395,759	7,437	= ACL - mgmt uncert buffer
U.S. Discards	6,896,051	3,128	2020-2021-2022 avg
TAL	9,499,708	4,309	ACT – Discards
U.S. Rec Landings	246,917	112	2020-2021-2022 avg
Comm Quota	9,252,790	4,197	TAL – Rec Landings

Table 2. Specifications using 3-year average discards and no management uncertainty buffer.

Specifications	2024 (pounds)	2024 (mt)	Basis
OFL (from SSC)	17,235,719	7,818	SS3 Assessment
ABC (from SSC)	15,729,964	7,135	SSC / Risk Policy
Canadian Landings	79,366	36	= 2019 estimate, most recent
Domestic ABC	15,650,597	7,099	= ABC – Canadian Landings
ACL	15,650,597	7,099	= Domestic ABC
Mgmt Uncert Buffer	0.0%	0.0%	
Amount of buffer	0	0	See discussion
ACT	15,650,597	7,099	= ACL - mgmt uncert buffer
U.S. Discards	5,251,405	2,382	Assessment Predicted
TAL	10,399,193	4,717	ACT – Discards
U.S. Rec Landings	246,917	, 112	2020-2021-2022 avg
Comm Quota	10,152,275	4,605	TAL – Rec Landings
Specifications	2025 (pounds)	2025 (mt)	Basis
OFL (from SSC)	17,570,821	7,970	SS3 Assessment
ABC (from SSC)	16,120,181	7,312	SSC / Risk Policy
Canadian Landings	79,366	36	= 2019 estimate, most recent
Domestic ABC	16,040,815	7,276	= ABC – Canadian Landings
ACL	16,040,815	7,276	= Domestic ABC
Mgmt Uncert Buffer	0.0%	0.0%	Con diamatica
Amount of buffer	0	0	See discussion
ACT	16,040,815	7,276	= ACL - mgmt uncert buffer
U.S. Discards	5,381,477	2,441	Assessment Predicted
TAL	10,659,338	4,835	ACT – Discards
U.S. Rec Landings	246,917	112	2020-2021-2022 avg
Comm Quota	10,412,420	4,723	TAL – Rec Landings
Specifications	2026 (pounds)	2026 (mt)	Basis
OFL (from SSC)	17,905,924	8,122	SS3 Assessment
ABC (from SSC)	16,475,125	7,473	SSC / Risk Policy
Canadian Landings	79,366	36	= 2019 estimate, most recent
Domestic ABC	16,395,759	7,437	= ABC – Canadian Landings
ACL	16,395,759	7,437	= Domestic ABC
Mgmt Uncert Buffer	0.0%	0.0%	See discussion
Amount of buffer	0	0	See discussion
АСТ	16,395,759	7,437	= ACL - mgmt uncert buffer
U.S. Discards	5,498,322	2,494	Assessment Predicted
TAL	10,897,437	4,943	ACT – Discards
U.S. Rec Landings	246,917	112	2020-2021-2022 avg
Comm Quota	10,650,519	4,831	TAL – Rec Landings

Table 3. Specifications using modeled discards and no management uncertainty buffer.

	2023	2023	
Specifications	(pounds)	(mt)	Basis for 2023 Specifications
OFL (from SSC)	na	na	na
ABC (from SSC)	17,169,581	7,788	SSC
Canadian Landings	81,571	37	= 2019 estimate, most recent
Domestic ABC	17,088,010	7,751	= ABC – Canadian Landings
ACL	17,088,010	7,751	= Domestic ABC
Mgmt Uncert Buffer	0.0%	0.0%	Higher risk of ACL overages but minimizes
Amount of buffer	0	0	potential 2023 disruption to industry
АСТ	17,088,010	7,751	= ACL - mgmt uncert buffer
U.S. Discards	4,603,247	2,088	scaled down from 2017-2019 average
TAL	12,484,763	5,663	ACT – Discards
U.S. Rec Landings	471,789	214	= 2021 estimate
Comm Quota	12,012,974	5,449	TAL – Rec Landings

Table 4. 2023 Fishing Year Specifications.

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



# MEMORANDUM

**Date:** October 25, 2023

To: Chris Moore, Executive Director

From: Jason Didden, staff

Subject: 2024-2026 Spiny Dogfish Acceptable Biological Catches (ABCs)

# <u>Summary</u>

Based on the 2023 Management Track Assessment, the spiny dogfish stock was neither overfished nor experiencing overfishing in 2022.

The 2022 fishing year (May 1, 2022 to April 30, 2023) landings were about 19% higher than the prior year, but there has been a downtrend in landings since 2012.

The Mid-Atlantic Fishery Management Council (MAFMC) will meet in December 2023 to review the recommendations of the Advisory Panel (AP), the Scientific and Statistical Committee (SSC), the Monitoring Committee, the Spiny Dogfish Committee, and input from the public. The MAFMC will recommend catch and landings limits and other management measures. The New England Fishery Management Council will take similar action in January 2024, and the Atlantic States Marine Fisheries Commission will also meet in January 2024 to consider interstate measures.

Based on the SSC's evaluation of uncertainty, the Council's risk policy suggests Acceptable Biological Catches (ABCs) near or slightly above 7,000 metric tons (MT) for 2024-2026. Staff is concerned about the impact on industry and projection uncertainty. However, the Council's codified control rule and risk policy are designed to integrate such concerns with avoidance of overfishing - as such, staff recommends applying the control rule and risk policy to determine 2024-2026 ABCs (see ABCs in Table 1 and additional discussion under "Staff Recommendation," below).

# **Current Measures and Review of Prior SSC Recommendations**

The last setting of spiny dogfish specifications occurred in 2022 for the 2023 fishing year. The resulting 7,788 MT (17.2 million pounds) ABC and 5,449 MT (12.0 million pounds) quota was a result of the SSC scaling down the previous ABC based on the NEFSC spring survey trends:

"In absence of a stock assessment, the SSC developed an ad hoc approach that addresses the apparent recent decline in abundance pending confirmation in the upcoming assessment. The method reduced the previous ABC (defined in 2018) by first adjusting it to be consistent with the current Council Risk Policy. The adjusted ABC was then multiplied by the ratio of current average female spawning stock abundance (2021 and 2022) to the average for 2016 to 2018. The SSC recommended an ABC of 7,788 mt for the 2023 fishing year. This represents a 55% decrease from the 2022 ABC of 17,498 mt (MAFMC SSC September 2022)."

These specifications represented a 59% reduction in commercial quota for the spiny dogfish fishery from 2022. However, it is not yet clear whether the 2023 quota will be limiting for the 2023 fishing year. Once the coastwide quota is caught, federal waters will be closed for possession of spiny dogfish. If the Annual Catch Limit (ACL) is exceeded, overages are deducted as soon as possible from the ACL for the subsequent fishing year. In 2021, the Councils voted to increase the trip limit for spiny dogfish to 7,500 pounds, which was implemented for the 2022 fishing year.

#### **Recent Landings and Catch**

Recent landings peaked in the 2012 fishing year near 12,138 MT (26.8 million pounds) and declined to about 4,797 MT (10.6 million pounds) by 2021. 2022 landings rose to 5,730 MT (12.6 million pounds). The Fishery Performance Report documents industry perspectives on why recent landings have been low relative to quotas, including market constraints, quota disruptions, and other more attractive fishing opportunities. The closure of the primary Virginia spiny dogfish dealer may limit landings later in the 2023 fishing year. Discards (calendar year) accounted for 24%-43% of fishing mortality from 2013-2022. The Fishery Performance Report also notes the tenuous viability of this fishery given the relatively low price per pound, shrinking quotas in recent years, and other challenges.

# Stock Status and Biological Reference Points

Based on the Spiny Dogfish Management Track Assessment, which used the Stock Synthesis 3 (SS3) assessment model, the spiny dogfish stock was neither overfished nor experiencing overfishing in 2022. Biomass (spawning output) in 2022 was estimated to be at 101% of the reference point/target, despite being relatively near its all-time low. Fishing mortality in 2022 was 81% of the overfishing threshold (the first time in the last decade without overfishing).

# **Staff Recommendation**

The new assessment's ability to accurately project future biomass trends given various catch levels is untested, and the uncertainties associated with growth mean the biomass reference point/target has considerable uncertainty (note the large biomass reference point changes between the research track and management track assessments). These uncertainties and concerns about the status of the fishery led staff to consider recommending a status-quo ABC (7,788 MT) for 2024-2026. However, considering the successful peer review of the management track assessment, there is no justification to deviate from the Council's codified control rule and risk policy, especially given the recent overfishing and historical trends in both spawning output and total female biomass. The resulting projected ABCs are provided in a spreadsheet at <a href="https://www.mafmc.org/ssc-meetings/october-30-2023">https://www.mafmc.org/ssc-meetings/october-30-2023</a> and reproduced on the next page in Table 1. Depending on the SSC's assignment of uncertainty (100% or 150% coefficient of variation or "CV" for the calculated overfishing levels), the Council's risk policy suggests Acceptable Biological Catches (ABCs) near or slightly above 7,000 metric tons (MT) for the 2024-2026 fishing years.

Year	Overfishing Level (OFL)	ABC	Biomass - Spawning Output	Biomass/ Target (188)
	mt	mt	millions pups	
Assuming 100	0% CVs			
2024	7,818	7,135	202.8	1.08
2025	7,970	7,312	208.7	1.11
2026	8,112	7,473	213.3	1.13
Assuming 150	0% CVs			
2024	7,818	6,940	202.8	1.08
2025	7,975	7,130	208.9	1.11
2026	8,122	7,301	213.6	1.14

Table 1. Council Risk Policy-Based ABCs.



# Spiny Dogfish AP Fishery Performance Report September 20, 2023

The Mid-Atlantic Fishery Management Council's (Council) Spiny Dogfish Advisory Panel (AP) met via webinar on September 20, 2023 to review the Spiny Dogfish Fishery Information Document and develop the following Fishery Performance Report. The primary purpose of this 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. Trigger questions (see below) were posed to the AP to generate discussion of observations in the spiny dogfish fishery. Advisor comments described below are not necessarily consensus or majority statements.

Advisory Panel members attending: Chris Rainone, James Fletcher, Jeremy Hancher, John Whiteside, Kevin Wark, Roger Rulifson, Scott Curatolo-Wagemann, Scott MacDonald, and Mark Sanford.

**Others attending:** Jason Didden (Council staff lead), Sonny Gwin, Alan Bianchi, Angel Willey, Cynthia Ferrio, David McCarron, and Yan Jiao.

# **Trigger questions:**

The AP was presented with the following trigger questions:

1. What factors have influenced recent catch (markets/economy, environment, regulations, other factors)?

- 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**

Artificially low quota and low quota expectations are dampening demand. If you don't think you can maintain production you're not going to try. Increased fuel costs and dogfish prices also combine to keep landings low.

COVID-19 did not have a large impact on this fishery. Similar market issues persist as with previous years – demand has been low but stable recently – the market could support more landings than in the most recent year if participation/production at the vessel level increases.

Changing the name to Chip Fish would help with marketing/exports. We could sell these in the U.S. if we could change the name (like snakehead). No advisors were opposed but practical name-change challenges have been highlighted in the past.

There are no Southern processors – they were "burnt" by previous management and won't get back in without quota stability on a decadal timeframe. They would need to know that the quota won't go down for 5-10 years. Southern fishermen have to ship to MA. Previous reports have noted not having a processor also depresses NY landings. High fuel costs add to trucking costs, which is a substantial issue for this fishery given the processing situation.

Developing industrial markets, be it fertilizer, processed export, or pharmaceutical (livers), requires a higher trip limit for trawlers. Expanding use of liver components could increase overall value – several outreach efforts have occurred to pharmaceutical companies with no interest expressed back. Industrial uses could help develop a market for male dogfish.

Regarding the fin market – there are self-imposed bans by cargo lines that prohibit fin transport even from sustainable sources (i.e. this is beyond our control).

Better opportunities in other fisheries reduce spiny dogfish effort. For example, in Virginia, fishermen have calculated that oysters and shrimp can be better opportunities. It's hard to attract/pay/retain a crew, often must fish solo. Any disruption to this fishery will exacerbate these issues and make it impossible to sustain participation.

Cornell has tried to expand domestic consumption of spiny dogfish and other undervalued/underutilized/lesser-known species through chefs' sampler events, underserved communities/foodbanks, etc. See <a href="https://www.localfish.org/">https://www.localfish.org/</a>.

# **Environmental Conditions**

Environmental conditions are always a factor in terms of dogfish distribution and availability to fishermen.

In NJ, we see fluctuations in the spring and different behavior seasonally but no major swings in recent years and consistent fall availability.

In VA, also don't see a problem with dogfish – just like there wasn't a problem when we were first forced to "rebuild" dogfish in the 2000s. Science does not reflect our experiences.

Condition of NC and MA inlets makes it very difficult to get product into ports. NC trawl fishermen can't land spiny dogfish in VA due to state regulations. Fish houses continue to go out of business due to low seafood supply.

# **Management Issues**

There's no higher-perspective view of this fishery that you are going to eliminate it totally with further reductions given the likely impacts on the last remaining processor. We need a holistic approach to keep the fishery functioning given the financial impacts of low trip limits (given product is low value), and/or fishery closures. We are at a threshold where interest, and fishermen, will evaporate. Don't say we didn't tell you what the results of further reductions would be.

The artificially-low quota (flawed assessment and previous SSC decisions) broke the supply chain from the south, eliminating the primary southern fish house. The AP has been warning about the impacts on infrastructure of management decisions that are destroying this fishery with rollercoaster-style management and resulting shoreside gentrification. Industry needs managers to improve their awareness of the impacts of decisions. Loss of fish houses is a coast-wide issue – and the loss of infrastructure needs to be addressed to maintain a healthy fishery.

Regulations (especially the trip limit) do not allow a male fishery. State regulations do not allow new fishermen to participate. The current regulations are geared to keep price up and production limited and do not allow industrial production.

There was discussion whether state by state quotas should be reconsidered. (There are no Council-federal state/regional quota allocations but there are Atlantic States Marine Fisheries Commission (ASMFC) quota allocation measures in their inter-state plan.) Eliminating or modifying regional quotas could theoretically expand opportunities and encourage additional processors. There was concern however that eliminating regional allocations may disadvantage southern states given the seasonal rotation of landings regionally and the May 1 fishing year start. A trial of any changes would be warranted. There was also concern about creating more of a derby fishery and additional processing disruptions if quotas are very low and could potentially be landed quickly with less regional constraints. If quota was higher then there would be different considerations. The overall consensus conclusion was that allocation changes would be risky with the current quota situation, and not warranted at this time.

# **Other Issues**

The surveys are not representative of the biomass. Given the lack of an off-shelf survey and vertical water column usage by dogfish, we don't really know the population size. 1/10 of the needed area is surveyed. See Carlson AE, Hoffmayer ER, Tribuzio CA, Sulikowski JA (2014) The Use of Satellite Tags to Redefine Movement Patterns of Spiny Dogfish (Squalus acanthias) along the U.S. East Coast: Implications for Fisheries Management. PLoS ONE 9(7): e103384. <u>https://doi.org/10.1371/journal.pone.0103384</u>. Also see Garry Wright's thesis that concluded that the NEFSC trawl survey is not accurately representing spiny dogfish biomass.

The AP would like a meeting regarding the new assessment and an open discussion with the AP of how the new assessment model works and why it is improved from previous efforts that have been apparent failures.

Windfarm impacts squeeze the fishery from the ocean-side and shoreside gentrification squeezes from the land-side – both are critical stressors in terms of fishery survival.

Allowing dogfish populations to increase has hurt all other fish populations. We need better calculations regarding consumption by dogfish of other fish.

You should account for the continual nature of embryo development/pupping in the assessment.

Bigelow performance issues are doing a disservice to all the fisheries and fishermen. The repeated failure of the Bigelow since 2014 to complete its mission in terms of not fishing at a consistent time seasonally and not achieving planned stations eliminates our ability to have good information about spiny dogfish abundance, given the dependence on the survey for spiny dogfish abundance trends. This compounds uncertainty concerns and the Bigelow performance degrades the credibility of the resulting information (both regarding individual years and interpreting the time series). We have 2/10 years of full surveys in recent years. This affects all species' management. The Council should call in NEFSC's maritime operations manager to account for Bigelow performance issues.

There is concern whether the NEFSC is continuing wire/net measurements to ensure survey consistency. The timing of the survey is critical for spiny dogfish due to the observed migration patterns and not sampling the same areas consistently reduces the meaningfulness of the resulting data.

# **Research Priorities**

We need to utilize commercial fishermen more in developing indices of abundance (not just the Bigelow). Fishermen are losing trust in the process with constant changes and new models. The CPUE-type indices being developed for monkfish should be considered for dogfish.

Explore using 3-D printing technology to improve "fillet" production from spiny dogfish.

Consider whether/how electro-fishing surveys could be used.

To add fishery value, we should research the value and production of squalamine in spiny dogfish livers for medical use.

We should conduct research into the purposes of the horn/spine – is it offensive (weakening potential prey), or defensive?

Off the shelf sampling needs to occur to understand biomass. Why can't Bigelow do some deeper sampling? Could we send a drone to monitor?

East Carolina Univ has tagged 43,000+ spiny dogfish – trying to get graduate student to publish. Appears to be an availability gap from years 2-8/10 where if not caught in first few years fish are not caught for a number of years but then eventually show back up in commercial catches.

Updated bycatch mortality information could help us understand biomass trends.

Could there be electromagnetic energy being transferred to the trawl affecting survey catches?

Why are people opting out of this fishery? Greying of the fleet? Costs? Other fisheries? We need to understand the vast drop in participation and what is projected for future trends.

Spiny dogfish fishing could have an environmental justice component as a relatively low-priced seafood.



# Spiny Dogfish Fishery Information Document September 2023

This Fishery Information Document provides an overview of the biology, stock condition, management system, and fishery performance for spiny dogfish (*Squalus acanthias*) with an emphasis on recent data. Data sources for Fishery Information Documents are generally from 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 <u>http://www.mafmc.org/dogfish</u>.

# **Key Facts**

- 2022 fishing year landings were about 19% higher than the previous year, but still relatively low in the context of the most recent 10 years.
- The current 2023 fishing year quota is about 12.0 million pounds (59% lower than 2022).
- A peer review of the 2023 Management Track Assessment is pending the assessment uses data through 2022. Staff will summarize the peer review of the assessment at the Advisory Panel meeting on September 20, 2023.

# **Basic Biology**

Spiny dogfish is the most abundant shark in the western north Atlantic and ranges from Labrador to Florida, being most abundant from Nova Scotia to Cape Hatteras, North Carolina. Migrations are believed to primarily occur in response to changes in water temperature. Spiny dogfish have a long life, late maturation, a long gestation period, and relatively low fecundity, making them generally vulnerable to depletion. Fish, squid, and ctenophores dominate the stomach contents of spiny dogfish collected during the Northeast Fisheries Science Center (NEFSC) bottom trawl surveys, but spiny dogfish are opportunistic and have been found to consume a wide variety of prey. More detailed life history information can be found in the essential fish habitat (EFH) source document for spiny dogfish at: <u>https://www.fisheries.noaa.gov/region/new-england-mid-atlantic#science</u>.<sup>1</sup>

# Status of the Stock

A peer review of the 2023 Management Track Assessment is pending. While the 2023 Management Track Assessment and the 2022 Research Track Assessment both indicate recent declines in spiny dogfish biomass, the status of the stock is not yet clear.

#### Management System and Fishery Performance

#### Management

The Council established management of spiny dogfish in 2000 and the management unit includes all federal East Coast waters. Quotas are set based on the current science and Council's risk policy to avoid overfishing and rebuild stocks if/when necessary.

Access to the fishery is not limited, but a federal permit must be obtained to fish in federal waters and there are various permit conditions (e.g. trip limit and reporting). There is a federal trip limit of 7,500 pounds (increased from 6,000 for the 2022 fishing year). Some states mirror the federal trip limit, but states can set their own trip limits. The annual quota has been allocated to states through the Atlantic States Marine Fisheries Commission (http://www.asmfc.org/species/spiny-dogfish).

# Commercial Fishery (Recreational catch comprises a relatively low portion of fishing mortality)

Figure 1 and Table 1 illustrate spiny dogfish landings for the 2000-2022 fishing years relative to the quotas in those years. The Advisory Panel has previously noted that the fishery is subject to strong market constraints given weak demand. 2022 fishing year landings were about 19% higher than the previous year, but still relatively low in the context of the most recent 10 years.

Figure 2 provides inflation-adjusted spiny dogfish ex-vessel prices in "2022 dollars." Partial-year 2023 prices to-date are also provided (also in "2022 dollars").

Figure 3 illustrates preliminary landings from the 2023 and 2022 fishing years relative to the current quota. The last data point (2023) is typically the most incomplete.

Tables 2-4 provide information on landings in the 2020-2022 fishing years by state, season, and gear type. The seasonal periods were changed since the last document to maintain data confidentiality.

Table 5 provides information on the numbers of participating vessels that have at least one federal permit. State-only vessels are not included, but the table should still illustrate overall trends in participation.

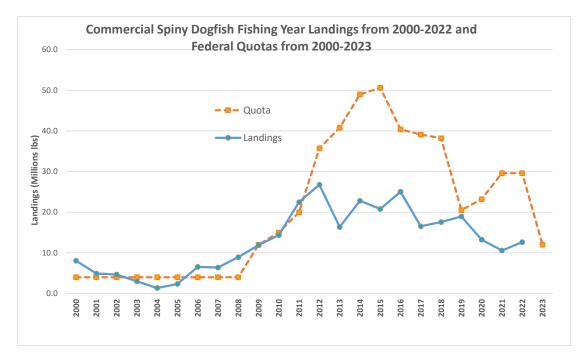


Figure 1. Annual spiny dogfish landings and federal quotas 2000-2023 Source: NMFS unpublished dealer data.<sup>2</sup>

Table 1. Annual spiny dogfish landings and federal quotas 2000-2023 Source: NMFS unpublished dealer data.  $^{\rm 2}$ 

Fishing year	Fed Quota (M lb)	Landings (M lb)
2000	4.0	8.1
2001	4.0	4.9
2002	4.0	4.7
2003	4.0	3.0
2004	4.0	1.3
2005	4.0	2.3
2006	4.0	6.6
2007	4.0	6.4
2008	4.0	8.9
2009	12.0	11.9
2010	15.0	14.4
2011	20.0	22.5
2012	35.7	26.8
2013	40.8	16.4
2014	49.0	22.8
2015	50.6	20.8
2016	40.4	25.0
2017	39.1	16.5
2018	38.2	17.6
2019	20.5	18.9
2020	23.2	13.3
2021	29.6	10.6
2022	29.6	12.6
2023	12.0	

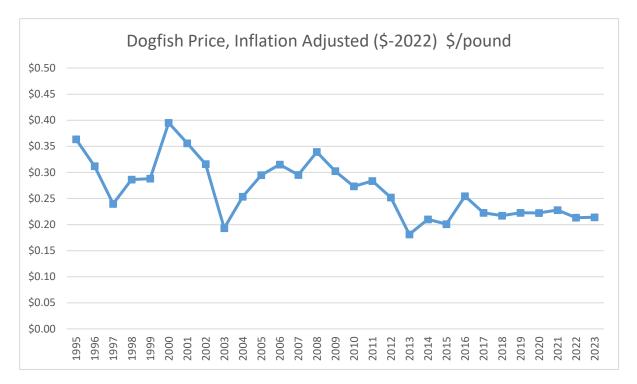


Figure 2. 1995-2023 fishing years' average prices of spiny dogfish in 2022 dollars per live pound (adjusted to "2022 dollars" using the GDP deflator). 2023 data is through early September only. Source: NMFS unpublished dealer data.<sup>2</sup>

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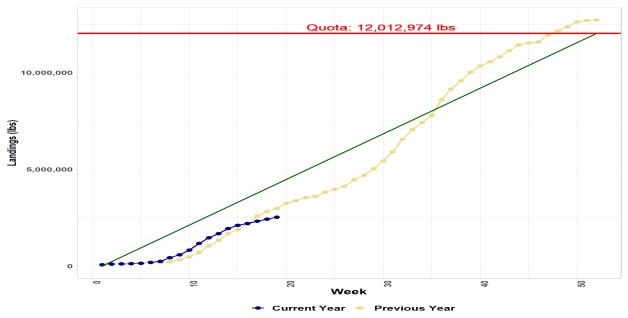


Figure 3. Preliminary Spiny dogfish landings; the 2023 fishing year (Starts May 1) is in blue (through September 13, 2023), and the 2022 fishing year is in yellow-orange. Source: <u>https://www.fisheries.noaa.gov/new-england-mid-atlantic/commercial-fishing/quota-monitoring-greater-atlantic-region.<sup>2</sup></u>

Table 2. Commercial Spiny Dogfish landings (live weight – millions of pounds) by state for 2020-2022 fishing years. Source: NMFS unpublished dealer data. <sup>3</sup>

Year	MA	VA	NJ	Other (ME, NH, RI, CT, NY, MD, NC)	Total
2020	6.6	3.3	2.0	1.4	13.3
2021	3.8	4.0	1.6	1.2	10.6
2022	3.8	6.0	1.7	1.1	12.6

Table 3. Commercial Spiny Dogfish landings (live weight – millions of pounds) by months for 2020-2022
fishing years. Source: NMFS unpublished dealer data. <sup>2</sup>

 0,				
Year	May-Aug	Sept-Dec	Jan-April	Total
2020	4.9	5.5	2.8	13.3
2021	2.9	4.6	3.1	10.6
2022	2.7	5.0	4.9	12.6

Table 4. Commercial Spiny Dogfish landings (live weight - millions of pounds) by gear for 2020-20	022
fishing years. Source: NMFS unpublished dealer data. <sup>2</sup>	

Year	GILL_NET_SIN KOTHER	LONGLINEB OTTOM	TRAWL_OTTE R_BOTTOM_F ISH	Unknown/Ot her	Total
2020	9.7	1.8	0.4	1.4	13.3
2021	9.2	0.5	0.3	0.6	10.6
2022	10.1	0.9	0.2	1.3	12.6

Table 5. Participation in fishing years 2000-2022 by federally-permitted vessels. State-only vessels are not included. Source: NMFS unpublished dealer data.<sup>2</sup>

YEAR	Vessels 200,000+	Vessels 100,000 - 199,999	Vessels 50,000 - 99,999	Vessels 10,000 - 49,999	Total with at least 10,000 pounds landings
2000	16	10	8	43	77
2001	4	12	10	33	59
2002	2	14	8	31	55
2003	4	5	3	17	29
2004	0	0	0	42	42
2005	0	0	1	67	68
2006	0	4	11	114	129
2007	1	2	21	72	96
2008	0	5	20	119	144
2009	0	11	42	166	219
2010	0	26	54	124	204
2011	1	48	73	135	257
2012	25	55	56	146	282
2013	10	27	45	87	169
2014	27	38	38	81	184
2015	31	33	36	59	159
2016	52	26	14	45	137
2017	28	27	24	32	111
2018	28	26	20	35	109
2019	29	25	21	29	104
2020	23	27	15	22	87
2021	15	27	11	26	79
2022	28	9	14	29	80

#### References

<sup>1</sup> Stehlik, Linda. 2007. Essential Fish Habitat source document: Spiny Dogfish, *Squalus acanthias*, Life History and Habitat Characteristics. NOAA Technical Memorandum NMFS-NE-203; 52 p.

<sup>2</sup> Unpublished NMFS dealer and/or Vessel Trip Report data.

#### END OF DOCUMENT

# EAST COAST SEAFOOD, LLC SEATRADE INTERNATIONAL

November 14, 2023

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

Re: Spiny Dogfish Quota 2024-26

Dear Dr. Moore:

I am the Chief Executive Officer of East Coast Seafood, LLC also known as Seatrade International. Seatrade is one of the original commercial dogfish processors and marketers of Spiny Dogfish dating back to the 1980's under the leadership of Steve Barndollar. I became affiliated with Seatrade in 1992 and have experienced the growth and slow demise of the industry. The industry has failed to attract any domestic interest in the species, the government has no purchase program, ocean carriers have refused to carry our cargo, governments have attempted to ban Spiny Dogfish, and there are fewer and fewer fishermen and offloaders with each passing season. To say the least, the fishery is very challenging.

As an original, and only remaining stakeholder in the sustainable certification of Spiny Dogfish, we are very supportive of sustainability measures. However, we need to keep in mind that we are protecting a predator and a nuisance fish formerly referred to as a "trash" fish, that if left unchecked will have a negative impact on North Atlantic fisheries. Nobody wants Dogfish to become extinct, but nobody should want the industry to become extinct either. The demise of the fishery will create new management concerns for the Councils as they attempt to find a way to compensate fishermen to harvest Dogfish to allow other species to flourish. Although dogfish is not a huge fishery, its extinction by implementing an unnecessarily low commercial quota would impact fishermen and fish houses from NH to NC, a New Bedford workforce, and many ancillary services including freezer, packaging, and transportation.

I do not believe that the science is as sound as the Science and Statistical Committee would have us believe. The Bigelow continues to fail to complete its surveys, observers tasked with measuring fish are spotty at best due to financial constraints, and the scientists are not surveying other areas like the Gulf of Maine. We hear from trawlers that vessels are forced to cut nets or move to in order to find targeted groundfish.

We recommend that the Dogfish committee put additional measures in place to increase the confidence in the science and Seatrade is pleased to assist in any way that we can. You should require additional surveys, including off the coast of Maine. The Committee should also require observers inspect dogfish one day per month at the only remaining production facility to measure fish, as this is the most efficient, cost effective and reliable means of completing this task. As previously mentioned, we are happy to make available our internal graded dogfish back reports that do not corroborate a measurable decline in the size of the species. We should work together on the possibility of a seasonal male dragger fishery to reduce the male population and sustain the industry. And jointly work on a government purchase program that will increase the price paid to fishermen.



East Coast Seafood LLC - 10 North Front St. - New Bedford MA 02740 Tel: +1 (774) 305-4948 Fax: +1 (508) 999-1291 Mid-Atlantic Fishery Management Council November 14, 2023 Page Two

As far as the quota is concerned, we are not asking the Committee and Councils to ignore that science that has been presented but use its powers to adopt certain measures that will give the industry a fighting chance. First of all, you can adopt a projected discard of 2,134 MT. The Science and Statistical Committee claims with certainty that the ABC is 7,135 MT but that 2023 discard projection of 2,088 MT could be understated!?

Secondly, you can adopt a management buffer of zero, as there are inherent buffers built into the fishery. It's impossible to catch 100% of the quota, with the quota divided between the north and south and then subsequently divided again by state. It's unrealistic to think that each state will either catch or relinquish its entire quota. We have also heard that there is instability with the loss of the largest offloader in the South and uncertainty if there is going to be a successful successor. In addition, it's unlikely that we will catch the 2023 TAL of 5.449 MT. Because of the inherent buffer, we were never expecting to catch the quota and currently anticipating a 2023 harvest of ~4,700 MT, barely enough for the industry to survive. With a TAL of 4,852 I expect a final harvest in the vicinity of 4.300 MT. And this leads me to my final observation, doesn't the balance add to the 2024 buffer?

In summary, I am asking the Councils to make the best of a bad situation by using its available powers to maximize the 2024 harvest by minimizing discard projection, adopting a zero buffer and consider rolling over remaining quota.

I would like to thank all of the members and councils for their dedication and service to US fisheries.

Sincerely

Philles

Bob Blais Chief Executive Officer

Cc: Dr. Cate O'Keefe, Executive Director New England Fisheries Management Council Sonny Gwin, Chair Joint Spiny Dogfish Committee Mid-Atlantic Fisheries Management Council Nichola Meserve, Vice Chair New England Fisheries Management Council Eric Reid, Chair NEFMC Wes Townsend, Chair MAFMC