



Mid-Atlantic Fishery Management Council

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Christopher M. Moore, Ph.D., Executive Director

MEMORANDUM

Date: October 25, 2023
To: Chris Moore, Executive Director
From: Jason Didden, staff
Subject: 2024-2026 Spiny Dogfish Acceptable Biological Catches (ABCs)

Summary

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 <https://www.mafmc.org/ssc-meetings/october-30-2023> 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.

Table 1. Council Risk Policy-Based ABCs.

Year	Overfishing Level (OFL)	ABC	Biomass - Spawning Output	Biomass/ Target (188)
	mt	mt	millions pups	
Assuming 100% 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% 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