

#### 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 Michael P. Luisi, Chairman | P. Weston Townsend, Vice Chairman Christopher M. Moore, Ph.D., Executive Director

## **MEMORANDUM**

**DATE**: July 20, 2021

TO: Chris Moore, Executive Director

FROM: Karson Coutre, Staff

SUBJECT: Scup Commercial Minimum Size and Winter I possession limits for 2022-2023

# **Background**

In June 2021, the Council received a request from Lund's Fisheries<sup>1</sup> to have the monitoring committee (MC) analyze increasing the scup commercial Winter I possession limit to 100,000 pounds (from the current 50,000) and analyze eliminating it entirely for 2022-2023. According to the request, this change would help Lund's continue to build their frozen markets for scup. The request further proposes that the MC analyze decreasing the commercial minimum fish size from 9 inches to 8 inches total length (TL), which would further support developing these frozen markets.

The MC will discuss these proposed changes during their July 27 meeting. This request was discussed briefly by advisory panel (AP) members during the June AP Fishery Performance Report meeting and will be discussed in more detail at their upcoming July 29 meeting discussing MC recommendations for 2022-2023.

At their June meeting and in related email comments, no advisors spoke in favor of an increase or removal of the Winter I possession limit in 2022-2023. Some advisors expressed concerns such as the potential for harming the fresh fish market and increasing commercial discards. One advisor spoke in favor of decreasing the minimum fish size to accommodate potential demand for smaller fish, while three advisors did not support moving to an 8-inch TL minimum size for reasons such as maturity concerns, no market, and increased discards due to targeting smaller fish. A summary of this discussion can be found in the Advisory Panel Fishery Performance Report and associated email comments.<sup>2</sup>

<sup>&</sup>lt;sup>1</sup> Available at <a href="https://www.mafmc.org/s/Lunds">https://www.mafmc.org/s/Lunds</a> scup request2021.pdf

<sup>&</sup>lt;sup>2</sup> Available at https://www.mafmc.org/s/SFSBSB FPR June-2021.pdf

## Scup biomass and recruitment

The 2021 assessment indicates that the scup stock was not overfished, and overfishing was not occurring in 2019 relative to the updated biological reference points calculated through the assessment. Spawning stock biomass was estimated to be about 389 million pounds (176,404 mt) in 2019, about 2 times the SSB<sub>MSY</sub> proxy reference point of 198.458 million pounds (90,019 mt). Fishing mortality on fully selected age 4 scup was 0.136 in 2019, about 68% of the F<sub>MSY</sub> proxy reference point of 0.200 in 2019. The 2017-2019 year classes are estimated to be below average, with the 2019 year class as the smallest in the time series at 34 million fish (Figure 1).

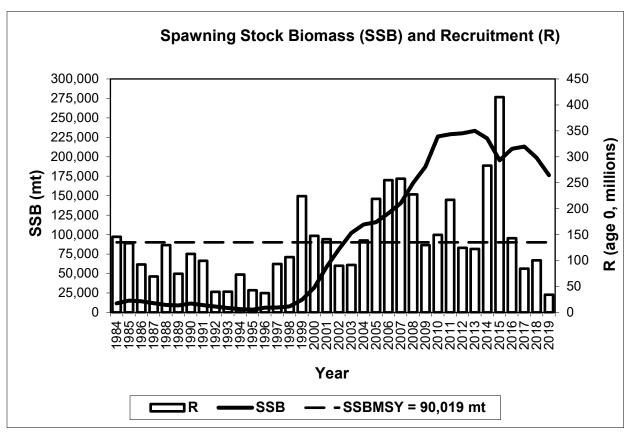


Figure 1: Scup SSB and recruitment at age 0, 1984-2019 from the 2021 management track stock assessment.

#### Size limit considerations and staff recommendation

The minimum size for retention of scup in the commercial fishery is 9 inches total length. This regulation applies to all commercial landings of scup in state and federal waters, including landings of incidental catch. This measure was first implemented in 1996, when scup were first managed by the Council and Commission. The Council and Board considered modifying this measure in 2005, 2012, and in 2015. After reviewing this measure in detail in 2015, the Monitoring Committee, Council, and Board all recommended no changes.<sup>3</sup>

<sup>&</sup>lt;sup>3</sup> The 2015 commercial measures review document is available at <a href="http://www.mafmc.org/s/Tab11\_SF-S-BSB-Commercial-Measures.pdf">http://www.mafmc.org/s/Tab11\_SF-S-BSB-Commercial-Measures.pdf</a>.

The scup commercial minimum size regulations are set using total length (TL). Northeast Fisheries Science Center (NEFSC) data estimate maturity by fork length (FL). Using the most recent FL to TL conversion equation (Maniscalco 2013), an 8 inch TL scup, which is the proposed decrease in minimum size, is approximately 7 inches long in FL. Scup caught in the NEFSC survey from 2018-2019 and were found to be 57% mature at 7 inches FL, 84% mature at 8 inches FL and 98% mature at 9 inches FL (Mark Terceiro, personal communication).

According to discard estimates using otter trawl observer data from July 2018-June 2019, about 53.8% of scup discards were due to size regulation, 3.9% were due to quota, 36.5% were due to no market and 5.8% were discarded for poor quality or other reasons. Decreasing the minimum size has the potential to decrease a portion of the dead discards due to size regulations which could be beneficial to fishermen and reduce waste in the fishery. Decreasing the minimum size to 8 inches TL may also lead to increased utilization of the commercial quota which has had underages of 16-44% in the past five years.

However, as discussed by AP members and in the MC 2015 review of commercial measures, there are concerns with the potential for shifting the fishery selectivity to smaller or younger scup caught. The proposed decrease in minimum size to 8 in TL (~7 in FL) would allow for the harvest of scup at a size where about 57% are mature. At the current minimum size of 9 inches TL (~8 in FL), about 84% are mature. Harvesting more immature scup could cause a decline in yield-per-recruit and ultimately harm the spawning stock biomass. As described in the previous section, the stock biomass is on a declining trajectory and 2019 was the lowest recruitment in the time series (Figure 1). Because of this, ABCs are projected to decrease by 8% in 2022 and 15% 2023 compared with the 2021 ABC. Given the selectivity concerns, recent low recruitment, declining stock biomass, and lack of strong support among the AP, staff recommend that the commercial minimum size for scup remain at 9 inches TL.

#### Possession limit considerations and staff recommendation

Commercial possession limits are designed to help constrain landings to the seasonal period quotas. The Winter I possession limit is 50,000 pounds, which is the highest Winter I limit since possession limits went into place in 1999. After 80% of the Winter I quota is landed, the possession limit drops to 1,000 pounds. The Winter I quota period possession limit was last modified in 2012, when it increased from 30,000 to 50,000 pounds.

The commercial scup fishery has underutilized its annual quota and its Winter I quota in recent years (Table 1). The intent of increasing or eliminating the possession limit during Winter I would be to allow for increased Winter I landings and therefore higher utilization of the quota. However, from 2018-2020 less than 1% of scup trips in Winter I landed more than 20,000 pounds and no scup trips landed greater than 40,000 pounds (Table 2). This suggests that the

<sup>&</sup>lt;sup>4</sup>2020 SBRM Discard Estimation Report available at <a href="https://doi.org/10.25923/z0mw-9t57">https://doi.org/10.25923/z0mw-9t57</a>

<sup>&</sup>lt;sup>5</sup> Available at <a href="http://www.mafmc.org/s/Tab11\_SF-S-BSB-Commercial-Measures.pdf">http://www.mafmc.org/s/Tab11\_SF-S-BSB-Commercial-Measures.pdf</a>

<sup>&</sup>lt;sup>6</sup> Staff memo: 2022-2023 Scup ABC Recommendations available at <a href="https://www.mafmc.org/s/b">https://www.mafmc.org/s/b</a> Scup specs2022 2023memo.pdf

current possession limit of 50,000 pounds is not limiting harvest opportunities in Winter I and other factors such as market dynamics may play a bigger role in driving scup harvest.

Although it is difficult to predict future fishery dynamics, increasing or eliminating the possession limit may encourage more or larger capacity vessels to increase their targeting of scup that had previously targeted other species. As mentioned above, this could lead to better utilization of the Winter I quota. However, some advisors were concerned that this could cause prices to crash in the fresh fish market. In future years, if biomass continues to decline and market demand increases or stays the same, an increased or eliminated possession limit could lead to harvesting 80% of the quota more quickly in Winter I, triggering a possession limit drop to 1,000 pounds. This could lead to decreased harvest opportunity for some vessels or regions along the coast that may fish later in the Winter I period.

As mentioned above, the declining biomass and low recruitment in recent years remain a concern while discussing liberalizing commercial measures. The majority of scup trips have fallen well below the current Winter I possession limit of 50,000 pounds, providing room for larger poundage trips under the current limits. For these reasons, staff recommend no changes to the current commercial Winter I possession limit of 50,000 pounds in 2022-2023.

**Table 1:** Scup annual and Winter I commercial landings relative to quotas in millions of pounds, 2016-2020 (2020 values are preliminary).

Year	Com.	Com. quota	Quota underage	Winter I landings	Winter I quota	Winter I quota underage
2016	15.76	20.47	-23%	6.08	9.23	-34%
2017	15.44	18.38	-16%	5.92	8.29	-29%
2018	13.37	23.98	-44%	4.85	10.82	-55%
2019	13.78	23.98	-43%	5.55	10.82	-49%
2020	13.58	22.23	-39%	5.18	10.03	-48%

**Table 2.** The total number of scup trips during the winter I period from 2018-2020, and the number of trips landing greater than 10,000, 20,000, 30,000, and 40,000 pounds of scup as shown in NMFS dealer data. "C" refers to confidential data and a Winter I trip was defined as at least one pound of scup caught per trip from January through April.

Vaan	Total #	Number of trips landing more than:				
Year	Winter I trips	10,000 lb	20,000 lb	30,000 lb	40,000 lb	
2018	3,269	61	11	С	0	
2019	3,712	79	14	C	0	
2020	3,172	89	13	С	0	