

# Overview and Request for Feedback: Summer Flounder Minimum Mesh Size Requirements and Exemptions

#### Introduction

The Mid-Atlantic Fishery Management Council (Council) and Atlantic States Marine Fisheries Commission's Summer Flounder, Scup, and Black Sea Bass Board (Board) are considering several summer flounder mesh regulation issues at their December 2023 joint meeting. This document provides an overview of the three issues under review, and several discussion questions that we are seeking industry and stakeholder feedback on. The three issues include:

- 1. The appropriateness and equivalence of the current two allowable summer flounder trawl gear minimum mesh sizes (5.5-inch diamond or 6.0-inch square). As described below, there is some concern that the selectivity of the 6.0" square mesh is not equivalent to that of the 5.5" diamond mesh and the 6.0" square mesh may be retaining too many undersized summer flounder.
- 2. The **Small Mesh Exemption Program (SMEP),** which allows trawl vessels to obtain a Letter of Authorization (LOA) to land more than 200 pounds of summer flounder east of longitude 72° 30.0'W, from November 1 through April 30, using mesh smaller than 5.5" diamond or 6.0" square.
- 3. The **flynet exemption** to the minimum mesh size, which provides an exemption to the minimum mesh size requirements for vessels fishing with a two-seam otter trawl flynet.

This document provides background information and discussion questions to support a **public** webinar and written comment opportunity on these issues. The webinar will be held on Wednesday, November 1, 2023 from 2-5pm (<u>Click here to register for the webinar</u>). Written comments will be accepted until November 17, 2023 and can be submitted <u>via comment form</u> or emailed to Kiley Dancy (<u>kdancy@mafmc.org</u>) or Hannah Hart (<u>hhart@mamfc.org</u>).

# 1. Summer Flounder Minimum Mesh Size: 5.5" Diamond or 6.0" Square

## **Problem Summary**

Since 1993, the Fishery Management Plan (FMP) has specified two options for minimum mesh sizes for summer flounder trawl vessels: **5.5-inch diamond or 6.0-inch square**. At the time of Amendment 2 development, there was limited information about square mesh selectivity for summer flounder beyond a recognition that the square mesh equivalent should be larger than the adopted diamond mesh. A recent (2018) study indicated that the 6.0-inch square mesh does not appear to be equivalent to the 5.5-inch diamond mesh and may be retaining too many undersized summer flounder. **Industry feedback is needed to inform Council and Board discussion of whether a square mesh option is still needed, or whether modifications to the regulations may be needed (see questions below).** 

#### Background and Summary of New Information

Trawl vessels must use nets with a minimum mesh size of **5.5-inch diamond or 6.0-inch square** in the entire net when possessing more than 200 pounds of summer flounder in the winter (November 1-April 30) and more than 100 pounds in the summer (May 1-October 31). These mesh regulations were evaluated through Amendment 2 (1993). At the time of Amendment 2 approval, data were limited on the selectivity of a square mesh for summer flounder that would serve as an appropriate equivalent to a 5.5-inch diamond mesh. Mesh selectivity information for cod, haddock, and pollock demonstrated that for round fish, 5.5-inch diamond mesh has roughly the same selectivity as a 5.0-inch square mesh. However, little information was available on selectivity behavior for flatfishes like summer flounder.

The equivalency of 6.0-inch square mesh to 5.5-inch diamond, as documented in Amendment 2, was based on three sources: 1) information from Amendment 4 to the Northeast Multispecies FMP (NEFMC 1990) indicating that a 5.5" square mesh was roughly equivalent to a 5.0" diamond mesh; <sup>1</sup> 2) a selectivity study for winter flounder (Simpson 1989) indicating that diamond mesh selected for slightly larger fish than the equivalent square mesh; <sup>2</sup> and 3) A study (Cooper and Hickey 1989) which noted that for flounder, the diamond mesh cod ends always have higher 50% retention lengths and selection factors.<sup>3</sup>

In 2016-2017, a new mesh size selectivity study for summer flounder, scup, and black sea bass was funded by the Mid-Atlantic Fishery Management Council. The Hasbrouck et al. study report was presented to the Council in April 2018.<sup>4</sup> Results of this study indicated that the current minimum mesh sizes for summer flounder of 5.5-inch diamond or 6.0-inch square do not appear to be equivalent to each other in terms of selectivity. The 6.0-inch square mesh releases less than 50% of fish at or below the minimum size, and its selectivity appears more similar to a 5.0" diamond mesh (Figure 1).

The Monitoring Committee identified concerns with the amount of undersized summer flounder caught with the 6.0" square mesh and recommended further evaluation of potentially phasing out the use of 6.0" square mesh to reduce discards of undersized fish, including seeking feedback from industry on the use of and need for square mesh nets.

<sup>&</sup>lt;sup>1</sup> Amendment 4 to the Northeast Multispecies FMP:

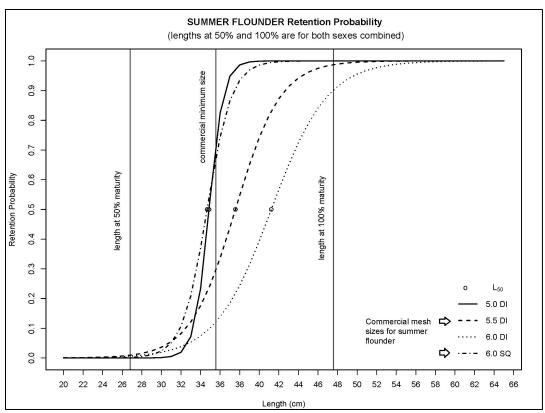
https://archive.nefmc.org/nemulti/planamen/Amend%204/amendment 4 combined.pdf

<sup>&</sup>lt;sup>2</sup> Simpson, D.G. (1989). Codend selection of winter flounder *Pseudopleuronectes americanus*. NOAA Technical Report NMFS 75: https://www.st.nmfs.noaa.gov/spo/SPO/tr75opt.pdf

<sup>&</sup>lt;sup>3</sup> Cooper, C.G. and W.M. Hickey. 1989. 1988 Selectivity Experiments Square Mesh Cod-Ends of 134, 140, and 155 mm. Fisheries Development

and Fishermen's Services Division. Project No. 154: https://waves-vagues.dfo-mpo.gc.ca/library-bibliotheque/253803.pdf

<sup>&</sup>lt;sup>4</sup> Hasbrouck et al. 2018 is available at: <a href="http://www.mafmc.org/s/Tab08">http://www.mafmc.org/s/Tab08</a> SFSBSB-Mesh-Selectivity-Study-Apr2018.pdf.



**Figure 1:** Logistic selective curve for summer flounder catches with 5 codends (4.5"diamond, 5" diamond, 5" diamond, 6" square). Additional details can be found in the study report (Hasbrouck et al., 2018).

#### **Industry Feedback Requested**

- 1. What are industry perspectives on the current mesh regulations for summer flounder? Are changes needed?
- 2. To what extent is 6.0-inch square vs. 5.5-inch diamond mesh used? What factors influence the choice of mesh?
  - a. Are there circumstances where square mesh is preferred?
  - b. Are there target species, regional factors, or other driving factors?
  - c. Are there differences in the cost or ease of acquiring these different net types?
- 3. Is a square mesh regulation still needed?
  - a. If so, does industry have perspectives on what square mesh would be closer in selectivity to 5.5-inch diamond?
  - b. Alternatively, should the 6.0-inch square mesh option be phased out? How long would an appropriate phase out period be?
  - c. If net regulations are modified, what is the current estimate of costs for any net replacements that may be needed?

## 2. Small Mesh Exemption Program

#### **Problem Summary**

Since 1993, the FMP has allowed for an exemption to the summer flounder minimum mesh regulations under the Small Mesh Exemption Program (SMEP), as described below. Participation in this exemption program requires a Letter of Authorization (LOA) from NMFS Greater Atlantic Regional Fisheries Office (GARFO), and the number of vessels participating has remained relatively stable over time. However, there is less information available to evaluate the extent of summer flounder harvest or discards using this exemption. The Monitoring Committee had previously flagged concerns with some years where a higher percentage of summer flounder discards were observed for trips presumed to be using the exemption; however, this was largely attributed to low quotas over that time period. A few managers and advisors have previously suggested potential modifications to the SMEP that might be considered in this review. Industry feedback is needed to inform Council and Board discussion of whether the regulations are still serving the original intent, whether there are problems with the exemption program, and if changes to this exemption program are warranted.

#### Background

Summer flounder moratorium permitted vessels fishing east of longitude 72° 30.0′W (Figure 2), from November 1 through April 30, and using mesh smaller than 5.5-inch diamond or 6.0-inch square, may land more than 200 pounds of summer flounder. Participation in this program requires an LOA obtained through GARFO. Vessels must be enrolled in the program for a minimum of 7 days and may not fish west (landward) of the line.

This exemption program was initially suggested by the New England Fishery Management Council and industry participants, and is designed to allow vessels to retain some bycatch of summer flounder while operating in other, small-mesh fisheries. The program was developed under Amendment 2 to the FMP in 1993 and modified under Amendment 3 (1993). At the time it was determined that the exemption would not pose an issue for the stock because the mesh size requirement was designed to protect smaller summer flounder, which largely were not being caught in these offshore areas in the winter months. The exemption was thus viewed as consistent with the conservation goals of the FMP while reducing discard waste in the summer flounder fishery.

The Monitoring Committee is responsible for reviewing observer data annually to evaluate whether vessels fishing under this exemption program are discarding more than 10% of their summer flounder catch. The GARFO Regional Administrator may rescind the exemption based on this review. The Committee may recommend adjustments to the exempted area and boundary in 30-minute intervals of latitude and longitude, and to the seasons in 2-week intervals.

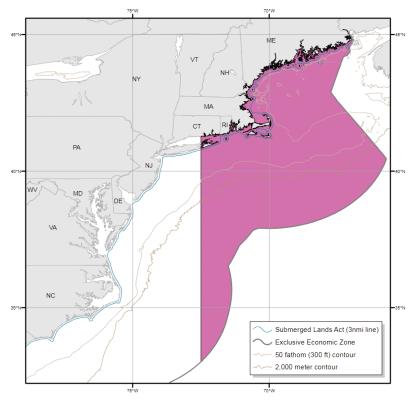


Figure 2: Summer flounder small mesh exemption area.

#### **Industry Feedback Requested**

- 1. What are industry perspectives on current use of the Small Mesh Exemption Program?
  - a. How are vessels using the exemption and in what fisheries?
  - b. Has the use of the exemption program changed over time (e.g., changes in target species, discard rates, timing or frequency of trips, etc.)?
  - c. Are current regulations still serving the original intent of reducing summer flounder discards in small mesh fisheries targeting other species within this timeframe and area?
- 2. What are industry perspectives and recommendations on the exemption program? Is there a need to change the details of this exemption or the requirements for participation (e.g., area, timing, possession limit, other)?

#### 3. Flynet Exemption Program

#### **Problem Summary**

Vessels fishing with a **two-seam otter trawl flynet** are exempt from the summer flounder minimum mesh size requirements. The Monitoring Committee typically reviews information from the flynet fishery in North Carolina, which historically has accounted for most of the known flynet fishery. However, in recent years, managers have identified the need to better understand if/to what extent the flynet exemption is being used in other states and whether this use is consistent with the regulatory intent. Industry comments have suggested that the flynet exemption is being used to fish with **high rise nets** in other states, many of which are four-seam nets that would not meet the regulatory definition of a flynet. At least one advisor has previously requested revising the regulatory definition to include four seam nets. The Monitoring Committee has identified this as a potential compliance and enforcement issue and/or indication of a potential need to revise the regulatory language. **Input from industry is needed on the use and configuration of different net types in different regions, patterns of use for this exemption, and whether changes to the <b>exemption or its regulatory text may be needed.** 

#### **Background**

Vessels fishing with a two-seam otter trawl flynet are exempt from the summer flounder minimum mesh size requirements. The regulatory definition of a fly net is a two-seam otter trawl with the following configuration:

- The net has large mesh webbing in the wings with a stretch mesh measure of 8" to 64".
- The first body (belly) section of the net consists of 35 meshes or more of 8" (stretch mesh) webbing or larger.
- In the body section of the net the stretch mesh decreases in size relative to the wings and continues to decrease throughout the extensions to the cod end, which generally has a webbing of 2" (stretch mesh).

This exemption was created through Amendment 2 in 1993 to accommodate flynet fisheries targeting other species and catching very limited amounts of summer flounder. The use of flynets at the time was noted to occur generally between Cape Henlopen, Delaware and North Carolina in the fall and winter, with dominant species caught including Atlantic croaker, weakfish, Atlantic mackerel, and bluefish. The exemption was intended to increase flexibility for fishermen while not negatively impacting the conservation objectives of the FMP. The NMFS Regional Administrator may withdraw the exemption if the annual average summer flounder catch in the flynet fishery exceeds 1% of the total flynet catch.

Typically, the Monitoring Committee reviews data from the North Carolina flynet fishery as the bulk of flynet landings in the Greater Atlantic region are thought to originate from North Carolina, though the flynet fishery in North Carolina is small. Landings in the North Carolina flynet fishery have generally declined over time, and little to no summer flounder have been landed in this fishery in recent years. Past discussions have suggested that other states such as Virginia, New Jersey, and Maryland may also have small amounts of flynet landings, but data are limited or unavailable for these states to accurately assess such landings.

Public comments from industry have suggested that the flynet exemption is being used to fish with "high rise" nets in states other than North Carolina. However, it is not clear if high rise nets meet the regulatory definition of flynets, pointing to potential compliance and enforcement issues and/or a need to revise the regulatory language. At least one advisor has requested a change in the definition of exempt flynet gear to include four-seam nets (in addition to two-seam nets) as well as some clarifying modifications to the regulatory language. In response to these issues, the Monitoring Committee has recommended exploration of the use of flynets that land summer flounder and to get a better understanding of the use and configuration of flynets verses high rise trawl nets as it relates to this exemption.

# **Industry Feedback Requested**

- 1. What does industry consider a flynet for the purpose of fishing under this exemption (2-seam net, 4-seam net, etc.)?
- 2. Is the flynet exemption widely used?
  - a. In what areas, and for which target species, is this exemption being used?
  - b. To what extent is industry using a 4-seam "high rise" otter trawl under this exemption program?
- 3. What is the difference between a flynet and a "high rise" otter trawl in terms of net handling characteristics and fishing efficiency?
- 4. What are industry recommendations on the flynet exemption? Is there a need to change or modify this exemption?