

Investigation And Recommendation of the Mid-Atlantic Fishery Management Council's Summer Flounder Small Mesh and Flynet Exemption Programs

Briefing Document for December 2023 Council Meeting

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Small Mesh Exemption Program (SMEP)

Executive Summary

Since 1993, the Small Mesh Exemption Program (SMEP) has allowed 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 that is otherwise required under the summer flounder fishery management plan. If the Regional Director determines that vessels fishing seaward of the line are discarding more than 10% of their summer flounder catch, the exemption may be rescinded. An evaluation was conducted to assess potential changes to the small mesh exemption program, considering the current use and effectiveness of the exemption.

Approximately 75 vessels currently participate in this program. Approximately 6% of observed bottom trawl trips fishing east of the line are discarding more than 10% of their summer flounder catch in recent years as determined using methodology that has been used in the past. It is unknown whether observed trips can be extrapolated to the entire fishery and therefore, the total pounds landed and discarded during SMEP trips cannot be determined. The number of vessels participating and the relative number of observer trips meeting the SMEP criteria have remained stable over the past decade.

Feedback from the commercial fishing industry indicates that the SMEP has become a very important program to maintain the economic viability of their business. The primary recommendation from industry is to move the demarcation line approximately 5 miles landward to facilitate the conduct of their fishing operations in other fisheries (see specifics of proposal on page 5).

Issues identified are:

- Language differs between Amendment 3 and the regulations (50 CFR 648.108) for determining the rescission of the exemption and should be reconciled. This may impact the methodology used in these evaluations going forward.

- The methodology and data sources being used to calculate the impact of this program are the same as those available in 1993. More accurate and robust data should be available through systems that are in place today, but which were not available in the 1990s, which would improve the ability to evaluate the utilization and impacts of the SMEP and provide more accurate information on trips that are actually fishing under the SMEP rather than relying on the assumptions inherent in the observer datasets.
- The industry recommendation to move the demarcation line approximately 5 miles landward should be explored, including the potential impact on incidental catch and discarding of summer flounder.
- Some confusion exists about the requirement that “Vessels fishing under the LOA shall not fish west of the line.” GARFO should clarify this portion of the regulation.

Additional details of the current utilization of this exemption, industry recommendations, and recommendations are contained in this document.

Background

Since 1993, the Summer Flounder FMP has allowed for an exemption to the summer flounder minimum mesh regulations under the Small Mesh Exemption Program (SMEP). Summer flounder moratorium permitted vessels fishing east of longitude 72° 30.0'W (Figure 1), 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 a Letter of Authorization (LOA) obtained through the Greater Atlantic Regional Fisheries Office (GARFO). Vessels must be enrolled in the program for a minimum of 7 days and may not fish west (landward) of the line while enrolled in the program.

This exemption program was initially suggested by the New England Fishery Management Council and industry participants. It was 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 original demarcation line followed a yellowtail large mesh area at the northern end before following 72°20.0'W longitude to the south. This proved difficult for compliance and enforcement and was also not favored because of the way it bisected Hudson Canyon. Amendment 3 adjusted the line of demarcation to 72°30.0'W. It has remained unchanged since that time.

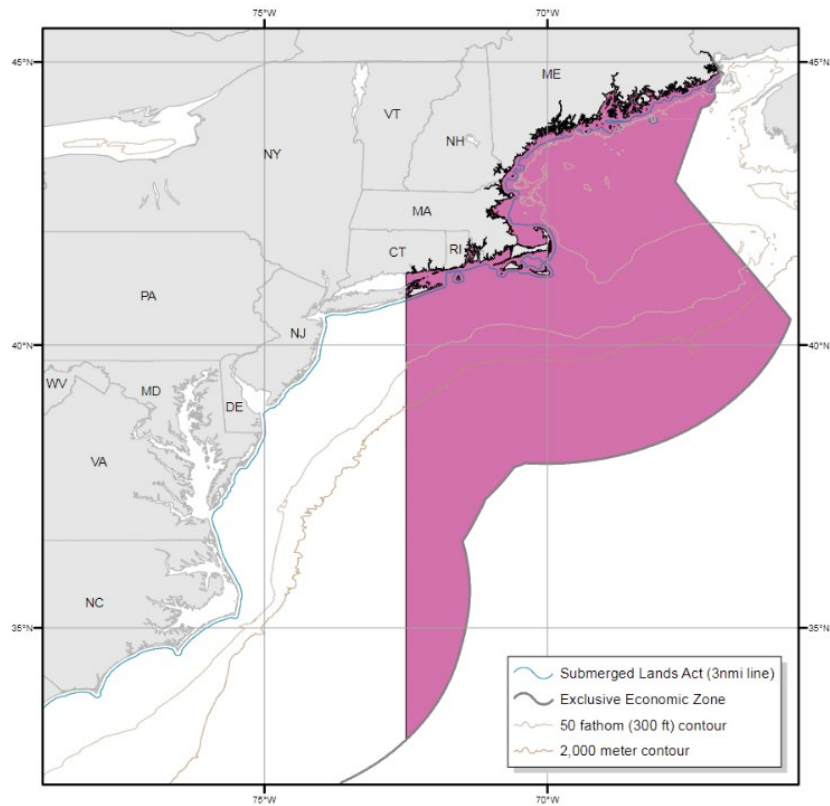


Figure 1: Summer flounder small mesh exemption area.

Amendment 3 also specified that “if the Regional Director determines after a review of Sea Sampling data that vessels fishing seaward of the line described above are discarding more than 10% of their summer flounder catch, the Regional Director may rescind the exemption.” 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 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.

Based on this analysis of observer coverage, 5.79% of trips fishing seaward of the line discarded more than 10% of their summer flounder catch in the most recent period evaluated (November 2021-April 2022). Since 2015, (excluding 2021 when observer coverage was diminished due to Covid), this percentage has ranged from 3.97%-6.18% (Table 1).

Table 1. Numbers of observed trips that meet specific criteria based on NEFOP data from November 1-April 30 for 2016 through 2022.

Criteria		Nov. 1, 2015 – April 30, 2016	Nov. 1, 2016 – April 30, 2017	Nov. 1, 2017 – April 30, 2018	Nov. 1, 2018 – April 30, 2019	Nov. 1, 2019 ~March 19, 2020 ^a	Nov. 1, 2020 – April 30, 2021	Nov. 1, 2021 – April 30, 2022
A	Observed bottom trawl trips over this time frame (Nov-April)	398	398	741	657	403	151	232
B	Observed trips with at least one catch record east of 72° 30' W Longitude	302	302	598	534	322	122	190
C	That met the criteria in row B <u>and</u> used small mesh at some point during their trip	177	177	271	261	145	33	99
D	That met the criteria in rows B-C <u>and</u> landed more than 200 pounds summer flounder on whole trip	67	67	90	114	63	22	50
E	That met the criteria in rows B-D <u>and</u> discarded >10% of summer flounder catch east of 72° 30' W Longitude	12	12	35	33	18	4	11
F	% of observed trips with catch east of 72° 30' W Longitude that also used small mesh, landed >200 pounds of summer flounder, and discarded >10% of summer flounder catch (row E/row B)	3.97%	3.97%	5.85%	6.18%	5.59%	3.28%	5.79%
G	Total summer flounder discards (pounds) from trips meeting criteria in B-E	10,992	10,992	22,798	9,925	6,547	1,605	4,775
H	Total summer flounder landings (pounds) from trips meeting criteria in B-E	10,523	10,523	44,711	23,038	13,340	9,165	20,080
I	Total catch (pounds) from trips meeting criteria in B-E	21,515	21,515	67,508	32,963	19,887	10,770	24,856

Summary of Industry Feedback

A webinar was held on November 1, 2023, to present the evaluation of the SMEP and solicit input from stakeholders on the current utilization of the program and recommended changes. Written comments were also accepted via email and web-based form. Follow up calls and/or virtual meetings were made to further clarify recommendations provided through submitted written comments and feedback received during the November 1 public input webinar. A full summary of the comments received is provided in the [public input summary](#).

Multiple participants noted the importance of the SMEP, particularly to southern New England fleets. Some noted the program has successfully reduced regulatory discards and, overall, maintaining the program was critical to industry. Nearly all participants who commented on this issue supported moving the SMEP line to the west to provide further flexibility for industry participating in multiple fisheries. Specifically, a proposal was made to move the line approximately 5 miles west to about $72^{\circ}37'W$ longitude, then dropping south to align with the northeast corner of the scup Southern Gear Restricted Area (GRA) at $39^{\circ}20'N$ and $72^{\circ}37'W$ and then follow along the eastern border of the southern scup GRA to about $37^{\circ}N$ latitude (Figure 2). The calculated additional area, excluding the deep sea coral zones, is 4,943 km.²

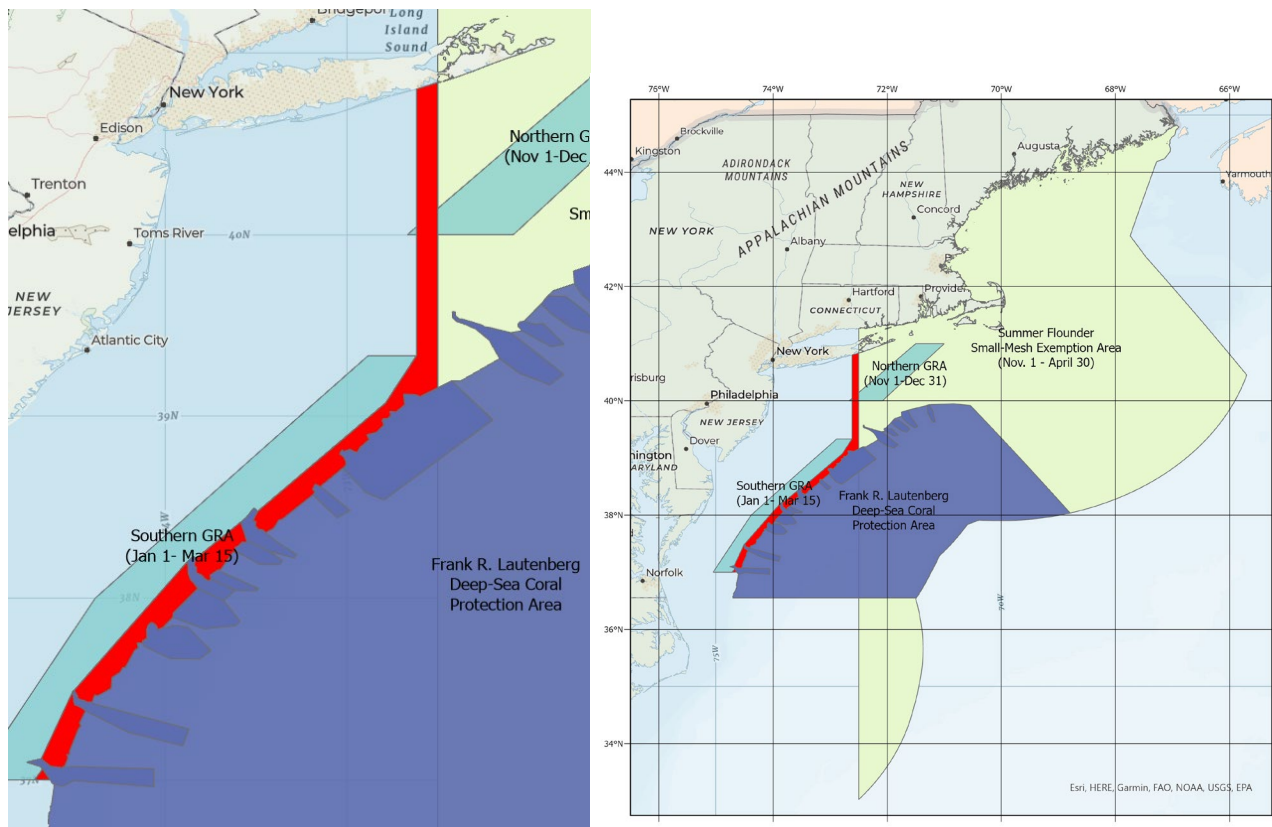


Figure 2: Industry proposal for the expansion of the SMEP (in red). Maps: Tori Kenter, MAFMC staff.

Monitoring Committee Recommendations

The Monitoring Committee discussed industry's recommendation to move the SMEP line further west. The Committee was supportive of further evaluating this recommendation, specifically noting that investigation of the potential biological impacts of expanding the SMEP area was needed, including how it may affect the size of summer flounder caught and/or discarded. At the time of the meeting, a map of the proposed revision was not available, and the Committee suggested mapping and calculating the additional area represented by the industry's request (see Figure 2 developed in response). The Committee noted that, depending on Council and Board direction, it may be beneficial to form a subgroup to explore potential analyses to investigate such impacts.

Concerns were expressed about the lack of data available to evaluate impacts of the SMEP on summer flounder catches. Currently, the analysis relies solely on observed trips identified using a series of assumptions indicating a presumed use of the SMEP. This provides a limited snapshot due to limited observer coverage and is not based on confirmed use of the LOA. The SMEP was put in place in the 1990s, when linking disparate datasets, (e.g., vessel trip reports, observer data, permits etc.) was more difficult. Advances in electronic reporting and data accessibility over the years may create opportunities to improve analysis of this exemption. The Monitoring Committee noted that if continued use of observer data for this analysis is necessary, the methodology used may need to be revisited.

For the full summary of the Monitoring Committee discussion see the Summer Flounder, Scup, and Black Sea Bass Monitoring Committee November 13-14 Meeting Summary Part 1.

Summary Observations and Recommendations

Based on feedback from industry, the SMEP has become a very important program to maintain the economic viability of their business. However, the recommendation that the demarcation line be moved approximately 5 miles landward needs to be thoroughly evaluated prior to action being taken. The existing line was established based on the relatively low number of undersized summer flounder being encountered to the east, thus maintaining the FMP objective to protect juvenile summer flounder. Additional data are needed to determine whether a shift of the line to the west would result in an increase in the number of small summer flounder being encountered and therefore being released due to being undersized.

Based on comments from stakeholders and discussions with GARFO staff, some confusion may exist about the requirement that "Vessels fishing under the LOA shall not fish west of the line." Does this requirement prohibit any vessel with an active LOA from fishing west of the line in any fishery, or just restrict a vessel fishing west of the line during a single trip in which they have participated in the SMEP? GARFO should clarify this portion of the regulation and consider whether it is still necessary.

Approximately 75 vessels currently participate in this program. Using consistent methodology applied in the past that is based solely on observer data, approximately 50 observed bottom trawl trips in November 2021 - April 2022 met the criteria characterizing a SMEP trip (fishing area, gear, and pounds of summer flounder landed) and are presumed to have been fishing under the SMEP. Of these, 11 trips discarded more than 10% of their summer flounder catch (representing approximately 6% of observed bottom trawl trips fishing east of the line in this time frame). It is unknown whether observed trips can be extrapolated to the entire fishery and therefore, the total

pounds landed and discarded during SMEP trips cannot be determined. However, the trigger for rescinding this exemption has never been reached using this analysis methodology (vessels fishing east of the line discarding more than 10% of summer flounder catch). The number of vessels participating and the relative number of observer trips meeting the SMEP criteria have remained stable over the past decade. 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 question was raised regarding the calculation of Row F in Table 1 that is used to determine the trigger for rescinding the SMEP. As has been calculated for at least the past 10 years (and likely longer), Row F is calculated by dividing the number of trips that fished east of the line, landed more than 200 pounds and discarded >10% of summer flounder catch (Row E) by the number of observed trips with at least one catch record east of the line (Row B). We assume that this methodology follows the original language contained in Amendment 3, which states:

“If the Regional Director determines after a review of Sea Sampling data that **vessels fishing seaward of the line** described above are discarding more than 10% of their summer flounder catch, the Regional Director may rescind the exemption.”

Row B contains the best estimate of “vessels fishing seaward of the line” and is thus the best estimate *from these data* to use for the denominator.

However, the language contained in the regulations varies slightly and could potentially change this calculation. 50 CFR 648.108 states:

“The Regional Administrator may terminate this exemption if he/she determines, after a review of sea sampling data, that **vessels fishing under the exemption** are discarding more than 10 percent, by weight, of their entire catch of summer flounder per trip.”

By definition “vessels fishing under the exemption” would include the area (seaward of the line) and landing more than 200 pounds of summer flounder, in which case the best data for the denominator would be row D (or potentially Row C).

Perhaps more importantly moving forward is the consideration of updating the data sources used in calculating the impact of the SMEP. At the time that the SMEP was implemented in the early 1990s, the ability to connect disparate datasets was more time consuming and difficult due to the technology at the time. Current day technology and reporting systems may avail themselves to obtaining more accurate information on trips that are actually fishing under the SMEP rather than rely on the assumptions inherent in Table 1 based on the observer datasets. Can observer coverage be tied to the LOAs that are issued for the SMEP through fields such as vessel ID to accurately determine which trips should be included in the analysis? If not, can the information collected in the process of issuing the LOAs be expanded to allow this? Is there value in tying LOAs to electronic Vessel Trip Reports which are now reporting trips within 48 hours of entering port? More accurate and robust data that should be available through systems that are in place today but which were not available in the 1990s would improve the ability to evaluate the utilization and impact of the SMEP.

Executive Summary

Since 1993, The flynet exemption in the Summer Flounder FMP, has provided an exemption to the minimum mesh size requirements for vessels fishing with a two-seam otter trawl flynet with specifications defined in regulation. No permits or special reporting are required to utilize this exemption. An evaluation was conducted of the original intention of the regulation and how that intent is being served today. Additionally, the extent to which 4-seam high rise nets are being used in relation to this exemption was explored.

The original intent of this exemption was to accommodate the use of a specifically defined gear in a specific fishery, concentrated in North Carolina and extending north to Cape Henlopen, Delaware. In that regard, available data provided by the state of North Carolina indicate that the flynet exemption is no longer being utilized today in that area/fishery and discussions with surrounding states indicate that few landings of summer using this gear type occur.

However, industry feedback indicates that the flynet exemption has become an important component of specific fisheries throughout the Greater Atlantic Region, although some of the net types being utilized under the flynet exemption do not comply with the specific regulatory definition of a flynet. The term “high rise” net appears to be regional terminology for a flynet. Those nets may not meet the definition specified in regulation for this exemption (particularly regarding the number of seams) but industry feedback indicated that, in their opinion, there was little difference in the fishing characteristics of 2-seam flynets and high-rise nets. The term “flynet” refers mainly to the way in which the net opens at the mouth. Recommendations from industry centered primarily on updating the definition of the term “flynet” (specific recommendations provided in the full discussion of industry feedback).

Industry feedback indicated that where the exemption is being used it provides important economic benefits by fostering flexibility in fishing practices. This exemption is very important to provide flexibility to switch between fisheries like summer flounder, scup, black sea bass, and squid. No data are available to evaluate the extent that this exemption is being used outside of North Carolina given that no permitting or reporting are required, but use of nets identified as “flynets” throughout the GARFO region is borne out by observer coverage. Prior to updating the definitions to codify an existing practice, an evaluation should be conducted to ensure that changes would not unintentionally incentivize an expansion of the use of this exemption. Additionally, this exemption, including any revisions to it, should be evaluated in the context of how the Flynet Exemption and Small Mesh Exemption programs interact in areas where their application overlap.

Finally, language differs in Amendment 3 and the regulation (50 CFR 648.108) for determining when this exemption should be rescinded based on the level of discards of summer flounder by vessels fishing under this exemption and should be reconciled. This is likely an administrative matter to be handled by GARFO.

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).

The flynet exemption was added to the FMP through Amendment 2 in 1993, as suggested by the South Atlantic Fishery Management Council and the State of North Carolina. At that time, flynets as defined were mostly used between Cape Henlopen, Delaware and North Carolina in the fall and winter. Atlantic croaker, weakfish, Atlantic mackerel, and bluefish were the dominant species in flynet catches in the mid- to late 1980s when the exemption was proposed. Limited amounts of summer flounder have been harvested by this gear. The exemption was intended to increase flexibility for fishermen while not negatively impacting the conservation objective of the FMP.

The FMP stipulates that 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. However, the language in the current federal regulations regarding this evaluation criteria for the exemption is inconsistent with the original FMP language and intent of the exemption. The current regulations refer to evaluating whether “vessels fishing under the exemption, on average, are discarding more than 1 percent of their entire catch of summer flounder per trip.”

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 (Table 2), 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.

Based on observer data from 2007-2022, about 325 observed trips were recorded using 2-seam “Flynets” in the GARFO region with fewer than five observed trips in each of the past three years. Additionally, about 197 observer trips recorded using 4-seam and 101 observed trips recorded “seams unknown” flynets (Figure 3). This information is based on the “net type” field in the observer data, which is recorded by the observer after consultation with the vessel’s captain. Many observed trips having missing information for net type.

Table 1: North Carolina flynet fishery summer flounder landings in pounds, as a percent of total North Carolina flynet landings, and as a percent of total North Carolina commercial summer flounder landings, 2005-2022. Some values are confidential but as denoted below are <2,000 pounds in those years.

Year	Summer Flounder Flynet Landings (lbs.)	% of Total NC Flynet Landings	% of total NC commercial summer flounder landings
2005	4,102	0.05%	0.10%
2006	5,752	0.07%	0.15%
2007	7,067	0.13%	0.26%
2008	3,147	0.08%	0.07%
2009	2,842	0.05%	0.10%
2010	<2,000 lbs.	<0.05%	<0.06%
2011	<2,000 lbs.	<0.05%	<0.07%
2012	<2,000 lbs.	<0.05%	<0.18%
2013	0	0%	0.00%
2014	<2,000 lbs.	<0.05%	<0.07%
2015	0	0%	0.00%
2016	0	0%	0.00%
2017	0	0%	0.00%
2018	0	0%	0.00%
2019	0	0%	0.00%
2020	0	0%	0.00%
2021	0	0%	0.00%
2022	0	0%	0.00%

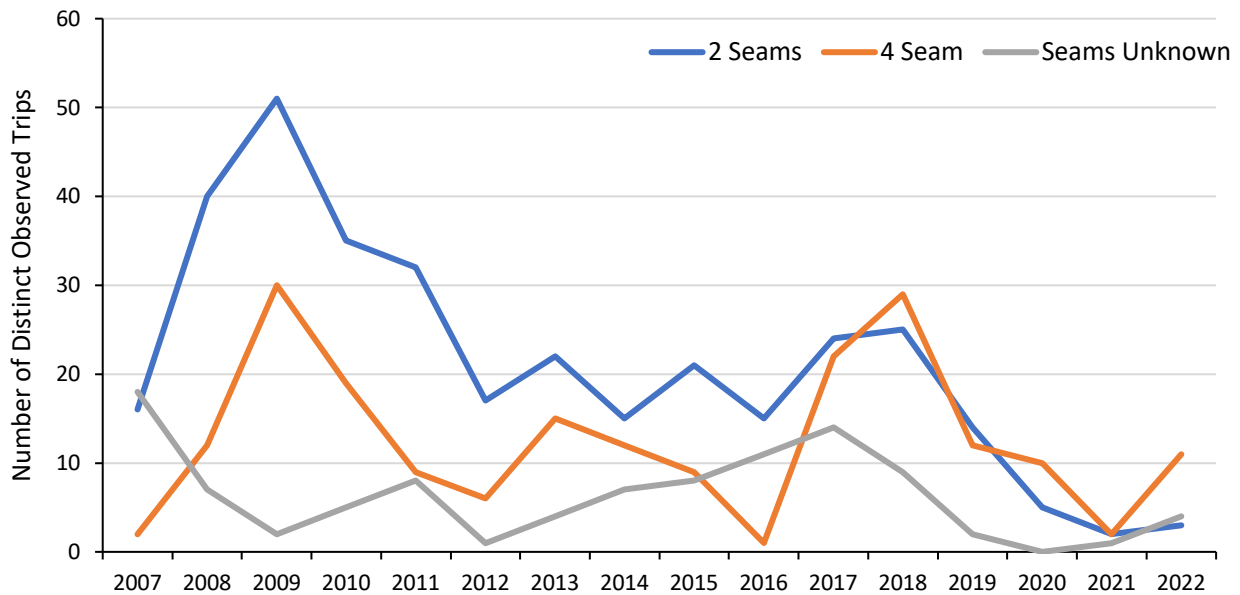


Figure 3: Number of distinct observed trawl trips using flynet gear, by seam number, 2007-2022 in the GARFO region.

Summary of Industry Feedback

A webinar was held on November 1, 2023, to present the evaluation of the SMEP and solicit input from stakeholders on the current utilization of the program and recommended changes. Written comments were also accepted via email and web-based form. Follow up calls and/or virtual meetings were made to further clarify recommendations provided through submitted written comments and feedback received during the November 1 public input webinar. A full summary of the comments received is provided in the [public input summary](#).

Participants who spoke on this issue strongly supported keeping the flynet exemption. It was noted that this exemption is very important to provide flexibility to switch between fisheries like summer flounder, scup, black sea bass, and squid.

All participants who spoke on the issue agreed that the term “high rise” net was regional terminology for a flynet, although those nets may not meet the definition specified in regulation for this exemption, particularly regarding to the number of seams. Industry feedback indicated that they felt that there was little difference in the fishing characteristics of 2-seam flynets and high-rise nets and that the term “flynet” referred mainly to the way in which the net opened at the mouth.

Industry input indicated that the definition of the term flynet should be updated to better reflect current gear use and fishing practices that, while technically not in compliance with the exemption, have become standard application in part due to the lack of permitting or reporting for using this exemption. Specific recommendations to modify the definition of flynet included:

- Rename exemption to “Flynet and Highrise” Exemption.
- A flynet/highrise must have “at least 2-seams” rather than specifying exactly 2-seams.
- The trawl consists of 8-inch mesh or greater throughout the mouth and the wings (without specifying an upper limit, currently 64”).
- Remove the criteria of 35 panels in the first belly section.

Industry feedback suggests that limited amounts of summer flounder are caught in these gear types by design, so biological impacts to the summer flounder stock may be low.

Monitoring Committee Recommendations

The Monitoring Committee agreed that the regulatory definition of a flynet might need to be updated to reflect changes in the fisheries and gear configurations that have occurred since the implementation of this exemption. At the time of the meeting, the only proposed revisions to the flynet definition were for removal of the reference to a 64-inch maximum mesh in the wings, and the expansion of the definition beyond two-seam nets.

The information reviewed by the Committee suggests that these changes may be more in line with modernizing the definition to capture evolution in the use of flynet-type gear. In particular, the Committee did not have any concerns with the proposal to remove “to 64 inches” from the definition and was generally supportive of removing the reference to “two-seam” nets but noted that there was less information available to determine whether this change may lead to changes in gear use or fishing practices. The Committee noted that this exemption was originally designed to accommodate a specific fishery at the southern end of the management unit, and that existing data make it difficult to evaluate the extent to which this exemption is being used beyond its original intent. The

Committee discussed whether there might be potential unintended consequences of updating the definition to include nets with greater than two seams. Given existing reporting, monitoring, and catch accounting practices, all catch of summer flounder should be appropriately accounted for or estimated, regardless of gear type or target species. As such, there should not be any summer flounder catch that would go “unaccounted for” under the current or modified definition of flynet-type gear. However, there is limited information to assess whether expanding the definition might change current fishing practices. While a definition change may simply reflect current practice, better data and analysis methods are needed to track patterns more comprehensively in the harvest and discards of summer flounder with these gear types.

Given the original intent of the exemption, the Monitoring Committee has typically evaluated North Carolina flynet fishery data to determine the extent of landings and discards in this fishery. The Committee noted that because the flynet fishery has not been very active off North Carolina recently and has not caught summer flounder in many years, there should be considerations to use of other data sets in the future. While the observer data analysis did not illuminate use of this exemption by state, observed flynet trips by statistical area indicate use of this gear type in statistical areas north of North Carolina. However, drawing assumptions solely based on observer data given the limitations of that data with regard to net type descriptions, and the relatively low number of observed trips reporting using the “flynet” gear type on an annual basis may be problematic.

For the full summary of the Monitoring Committee discussion see the Summer Flounder, Scup, and Black Sea Bass Monitoring Committee November 13-14 Meeting Summary Part 1.

Summary Observations and Recommendations

The original intent of the summer flounder flynet exemption was to accommodate the use of a specifically defined gear in a specific fishery, concentrated in North Carolina and extending north to Cape Henlopen. In that regard, available data indicates that the flynet exemption is no longer being utilized today in that area/fishery.

However, industry feedback indicates that the flynet exemption has become an important component of specific fisheries throughout the GARFO region, although the 4-seam, high rise and other types of nets that are considered flynets (and may fish similarly to the flynets as defined in regulation) do not comply with the specific regulatory definition. No data are available to evaluate the extent that this exemption is being used given that no permitting or reporting are required, but industry feedback indicated that where it is being used it provides important economic benefits by fostering flexibility in fishing practices. Use of nets identified as “flynets” is borne out by observer coverage.

The recommendation by industry to modify the definition of the term “flynet” should be considered but requires more thorough evaluation. In one sense, any summer flounder currently being landed by vessels using this exemption are being accounted for through normal reporting mechanisms (e.g., Vessel Trip Reports) and observer coverage. The decision to codify existing practices by changing the definition of the gear is one factor for the Council to consider, but revisions to the definition of flynet should also consider whether these changes would unintentionally incentivize targeting of summer flounder with smaller mesh gear types using this exemption, or otherwise modify retention and discarding patterns for summer flounder. The commercial fishing industry should be integrally involved in these evaluations. Additionally, revisions to this exemption should be considered in the

context of how the Flynet Exemption and Small Mesh Exemption programs interact in areas where their application overlap.

Communication between Council staff, contractors, and GARFO staff concluded that the discrepancy between language in the FMP and that in current regulations regarding the 1% evaluation criteria for rescinding this exemption was an administrative matter that should be addressed by GARFO.