



**Mid-Atlantic Fishery Management Council**  
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## MEMORANDUM

**Date:** November 2, 2016  
**To:** Summer Flounder, Scup, and Black Sea Bass Monitoring Committee and Advisory Panel  
**From:** Julia Beaty  
**Subject:** Scup Quota Period Framework Initial Impact Analysis

### Introduction

Management measures for the commercial scup fishery include an annual commercial quota which is divided into three quota periods. Each quota period is allocated a percentage of the annual quota. Different possession limits are in effect in each quota period (Table 1).

Since 2011, commercial scup landings have been 20-47% below the commercial quota. In recent years, a few advisors requested modifications to the dates of the quota periods with all other regulations related to the quota periods, including the allocations and possession limits, remaining unchanged. The requested changes are intended to allow higher possession limits for a longer period of time each year, thus increasing the likelihood that the commercial fishery will fully harvest the quota in the future.

In December 2015, the Council and Atlantic States Marine Fisheries Commission's (the Commission's) Summer Flounder, Scup, and Black Sea Bass Management Board (the Board) requested additional information on the potential biological and economic impacts of the changes requested by advisors. It may be possible to implement such a change through a framework adjustment and associated Commission addendum; however, if the impacts are expected to be significant, a Fishery Management Plan (FMP) amendment may be necessary. The Council and Board will discuss the possibility of initiating a framework/addendum or an amendment at their December 2016 joint meeting after considering the potential impacts of the changes, as well as additional input from the Monitoring Committee and the Advisory Panel.

This document summarizes an initial analysis of the potential impacts of two specific changes recommended by advisors: 1) move the month of October from the Summer

quota period to the Winter II quota period, and 2) move October from the Summer quota period to the Winter II quota period and move the first two weeks of May from the Summer quota period to the Winter I period.

## **Background**

The scup fishery is cooperatively managed by the Council and the Commission under the Summer Flounder, Scup, and Black Sea Bass FMP. The management unit for the FMP includes scup in U.S. waters in the western Atlantic Ocean from Cape Hatteras, North Carolina northward. The Council develops recommendations for regulations in Federal waters. NOAA's National Marine Fisheries Service (NMFS) reviews these regulations and implements them if they are deemed to be consistent with FMP objectives and other statutory requirements, including the Magnuson-Stevens Fishery Conservation and Management Act. NMFS also serves as the Federal enforcement agency. The Commission works with member states to develop regulations for scup fisheries in state waters.

Amendment 8 to what was then the Summer Flounder FMP was approved by NMFS in 1996 and established several coastwide management measures for the scup fishery. At the time, the scup stock was overexploited. Amendment 8 included several measures to rebuild the stock, including a coastwide commercial quota beginning on January 1, 1997. During development of amendment 8, the Council and Commission considered, but did not fully develop, a system of quota allocation and possession limits. They agreed to submit amendment 8 to NMFS before fully developing these measures so the other measures in amendment 8 could be implemented as quickly as possible and the rebuilding program could begin. However, without trip limits and seasonal allocations, the annual quota could be fully harvested early in the year, which could have economic implications for the entire fishery and created the potential for issues regarding equitable access to the fishery. Traditionally, larger vessels harvested scup offshore during the winter months and smaller vessels harvested scup inshore during the summer. If larger vessels harvested the full annual quota early in the year, smaller vessels would not be able to harvest scup in the summer. To address this issue, the Council and Commission developed three quota periods, each allocated a percentage of the annual commercial quota and each with different possession limits. These measures were first implemented in 1997 through a regulatory amendment to the FMP (MAFMC 1996; 62 Federal Register 27978, May 22, 1997).

The dates of the quota periods and the allocation percentages have not changed since they were first implemented. These measures include a Winter I period, lasting from January 1 through April 30 and allocated 45.11% of the annual quota; a Summer period, lasting from May 1 through October 31 and allocated 38.95% of the annual quota; and a Winter II quota period, lasting from November 1 through December 31 and allocated 15.94% of the annual commercial quota (Table 1).

The Summer quota period allocation is further divided into state shares. The state shares have been modified since they were first implemented. The current state shares are shown in Table 2. State shares were removed from the Council's FMP but are managed by the Commission through Addendum V (ASMFC 2002).

Commercial landings data from 1983 through 1992 were used to define the dates and allocations for the quota periods, including the state allocations for the Summer period. These years were chosen because they were thought to best represent historical participation in the fishery and included years when scup were abundant (though they have become far more abundant since then) and available to both northern and southern states (MAFMC 1996). There was some concern that these data underestimated harvests from state waters with some gear types, especially in Massachusetts. To address this concern, the state summer shares were modified in 2002 through Addendum V to the Commission's FMP (ASMFC 2002).

The seasonal possession limits have been modified several times since they were first implemented. Current management measures include a 50,000 pound possession limit during Winter I. If 80% of the Winter I quota is harvested, the possession limit drops to 1,000 pounds for the remainder of the Winter I period. The initial Winter II possession limit is 12,000 pounds. If the Winter I quota is not fully harvested, unused quota may rollover to the Winter II period. If this occurs, the Winter II possession limit may increase up to a maximum of 18,000 pounds. There are no Federal waters possession limits during the Summer period; however, various state-specific possession limits are enforced in state waters. These possession limits are all much lower than the Winter I and Winter II possession limits (Table 3).

The Federal commercial scup fishery is closed coastwide when the allocation for a given quota period is reached. Any overages during a given quota period are subtracted from that period's allocation for the following year. If the Summer period quota is exceeded, overages from a given state during the Summer period are subtracted by the Commission from the state's Summer period share in a future year. If an individual state exceeds its Summer quota, but the overall Summer quota is not exceeded, deductions are not applied.

Although the dates of the quota periods have not been modified since their initial implementation, Framework Adjustment 3 to the FMP, implemented in 2003, allows landings during April 15-30 by state-only permitted vessels to be counted towards that state's Summer period allocation in years when the Winter I fishery closes before April 15 and when the state makes such a request in writing (68 Federal Register 62251, November 3, 2003).

## **Alternatives for Consideration**

If the Council and Board decided to initiate a framework/addendum or amendment to modify the dates of the commercial scup quota periods, staff recommend consideration of the following management alternatives, based on advisor recommendations:

### Alternative 1: No action/status quo

- Winter I: January 1 – April 30 (120 days)
- Summer: May 1 – October 31 (184 days)
- Winter II: November 1 – December 31 (61 days)

### Alternative 2: Move October to the Winter II period

- Winter I: January 1 – April 30 (120 days)
- Summer: May 1 – September 30 (153 days)
- Winter II: October 1 – December 31 (92 days)

### Alternative 3: Move October to the Winter II period and move the first two weeks of May to the Summer period

- Winter I: January 1 – May 15 (135 days)
- Summer: May 15 – September 30 (138 days)
- Winter II: October 1 – December 31 (92 days)

If alternatives which are significantly different from those previously considered or which could have substantial biological or economic impacts are added to this action, it may require that the action be implemented through an amendment rather than through a framework/addendum. Amendments usually take longer to develop than frameworks/addenda. Council staff recommend that Monitoring Committee and Advisory Panel members keep this in mind when considering the alternatives for this action.

## **Initial Analysis**

An initial analysis of the potential impacts of the changes to the quota period dates requested by advisors is presented in this section. If the Council and board decide to initiate a management action to consider such changes, additional analyses will be developed.

The figures and tables at the end of this document show scup landings by month (Figure 1, Table 4), scup prices by month (Figure 2, Table 5), and number of vessels landing scup by month (Figure 3, Table 6), as well as the importance of each month to scup landings in each state (Figure 4).

Although October is within the Summer quota period, it had similar average values to the Winter II quota period in terms of scup landings (Figure 1, Table 4), number of vessels landing scup (Figure 3, Table 6), and the size of vessels which landed scup

(Figure 5, Table 7) during 2011-2015. The month of May, which is currently in the Summer quota period, had values for scup landings and number of vessels which landed scup which were in between the months of April (Winter I quota period) and June (Summer quota period). In general, October appears to be more similar to the Winter II period than the Summer period. May appears to be more similar to the Summer period than the Winter I period in terms of the number of vessels landing scup per month, but in between Winter I and Summer in terms of scup landings and price.

If each month contributed equally to scup landings, 8% of annual landings would occur in each month. The month of October contributed to more than 8% of annual scup landings in the states of Rhode Island, New York, and Delaware. The month of May contributed to more than 8% of annual scup landings in the states of Massachusetts, Rhode Island, and New York (Figure 4).

At their July 2016 meeting, the Monitoring Committee discussed ideas for analyzing the impacts of modifying the scup quota period dates. One Monitoring Committee member suggested that if October were moved to the Winter II period, this would allow a higher commercial possession limit (on the order of 12,000 pounds) and if scup are close inshore during that time of year, this could potentially impact recreational fisheries which mostly operate in state waters. Data from the Marine Recreational Information Program (MRIP) includes recreational catches and landings by two-month periods known as waves. From a coast-wide perspective, waves 3 (May-June), 4 (July-August), and 5 (September-October) each contributed about one third of annual scup landings from 2013 through 2015. Wave 5 dominated the scup landings (i.e. greater than 50% of annual landings) for the states of Connecticut and New Jersey and was also important (i.e. greater than 40% of annual landings) for New York and Virginia (Table 7).

### **Initial Conclusions**

In conclusion, because October seems to be behaving similarly to the Winter II quota period, moving it to that period may not have substantial impacts on the economic aspects (e.g. landings, prices, participation) of the fishery. The month of May did show some differences from the Winter I quota period; therefore, moving half of May to the Winter I quota period may have some impacts on economic aspects of the fishery.

If the Council and Board initiate a framework/addendum during their December 2016 meeting, Council and Commission staff will work with the Monitoring Committee to perform additional analysis on the biological and economic impacts of the alternatives considered. For example, in July 2016 the Monitoring Committee recommended analysis of state trawl survey data to examine the distribution of scup in state and federal waters during the months of April and October. This analysis has not yet been completed.

## Tables and Figures

Table 1: Commercial scup quota period dates, percentage of annual quota allocated, and Federal waters possession limits.

Quota Period	Dates	% of annual quota	Possession limit
Winter I	Jan 1–Apr 30	45.11%	50,000 pounds
Summer	May 1–Oct 31	38.95%	State-specific (Table 2)
Winter II	Nov 1–Dec 31	15.94%	12,000-18,000 pounds depending on amount of unused quota from Winter I

Table 2: State allocations of commercial scup quota for the Summer quota period.

State	Share of summer quota
Maine	0.1210%
New Hampshire	0.0000%
Massachusetts	21.5853%
Rhode Island	56.1894%
Connecticut	3.1537%
New York	15.8232%
New Jersey	2.9164%
Delaware	0.0000%
Maryland	0.0119%
Virginia	0.1650%
North Carolina	0.0249%

Table 3: Commercial scup possession limits for trawl vessels in state waters during the Summer quota period (May 1 – October 31) in 2016.

State	Dates	Possession limit
Maine	May 1 – Oct 31	None
New Hampshire	May 1 – Oct 31	None (allocated no quota)
Massachusetts	May 1 – Oct 31	800 lb
Rhode Island	May 1 – Oct 31	10,000 lb per vessel per week
Connecticut <sup>a</sup>	May 1 – July 2	1,500 lb
	July 3 – November 1 <sup>b</sup>	750 lb
New York	May 1 – Oct 31	800 lb
New Jersey	May 1 – Oct 31	5,000 lb
Delaware	May 1 – Oct 31	None (allocated no quota)
Maryland	May 1 – Oct 31	None
Virginia	May 1 – Oct 31	None
North Carolina	May 1 – Oct 31	None

<sup>a</sup>Adjusted periodically to maintain consistent weekly landings rate, prevent in-season closure, and take 100% of summer period quota allocated to Connecticut.

<sup>b</sup>As of August 26, 2016. Possession limit may be further adjusted prior to end of Summer quota period.

### Landings by Month

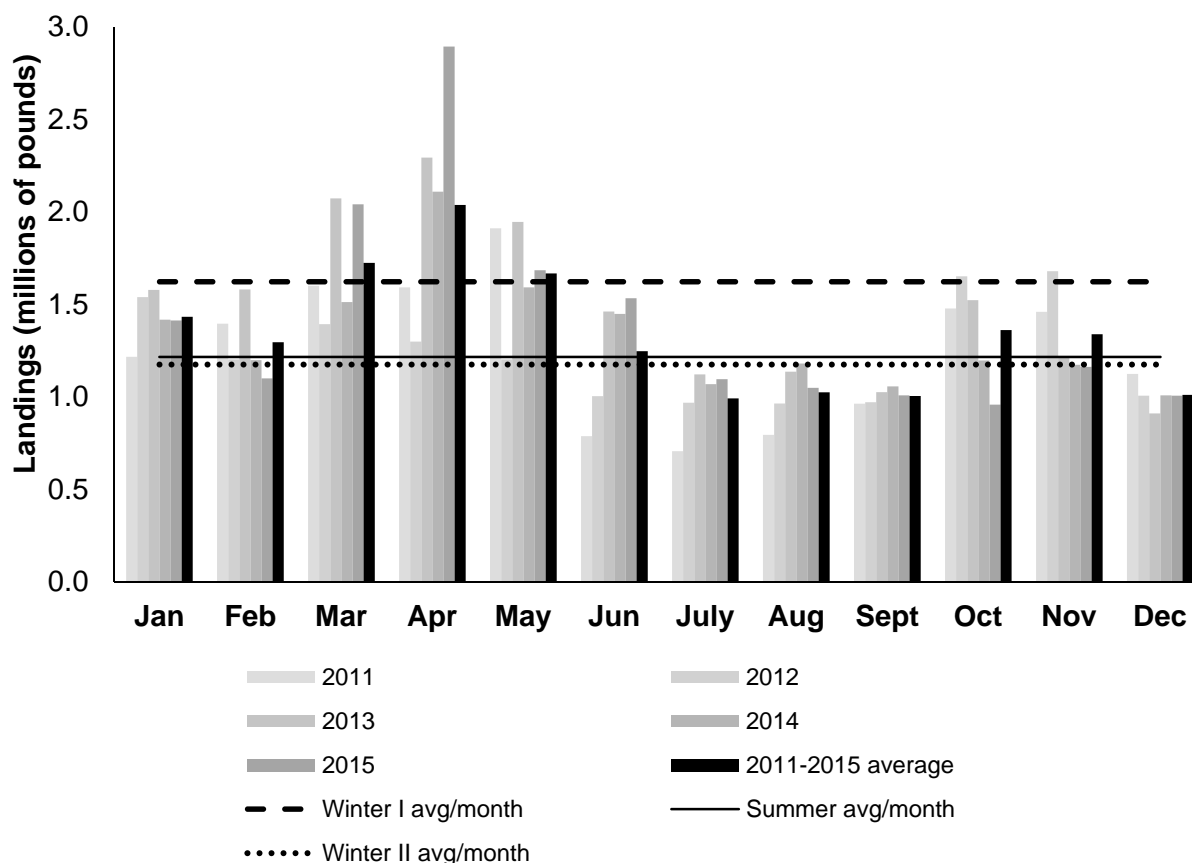


Figure 1: Commercial scup landings per month, 2011-2015 shown with average landings per month during the Winter I (January – April), Summer (May-October), and Winter II (November and December) quota periods.

Table 4: Commercial scup landings per month, 2011-2015 shown with average landings per month during the Winter I (January – April), Summer (May-October), and Winter II (November and December) quota periods.

Year	Landings (millions of pounds)											
	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sept	Oct	Nov	Dec
2011	1.22	1.40	1.60	1.59	1.91	0.79	0.71	0.79	0.96	1.48	1.46	1.12
2012	1.54	1.20	1.39	1.30	1.20	1.00	0.97	0.96	0.97	1.65	1.68	1.01
2013	1.58	1.58	2.07	2.29	1.95	1.46	1.12	1.14	1.03	1.52	1.22	0.91
2014	1.42	1.20	1.51	2.11	1.59	1.45	1.07	1.18	1.06	1.20	1.17	1.01
2015	1.41	1.10	2.04	2.89	1.68	1.53	1.10	1.05	1.01	0.96	1.16	1.01
<b>Total</b>	<b>7.17</b>	<b>6.48</b>	<b>8.62</b>	<b>10.19</b>	<b>8.34</b>	<b>6.24</b>	<b>4.96</b>	<b>5.13</b>	<b>5.03</b>	<b>6.81</b>	<b>6.70</b>	<b>5.06</b>
<b>Average</b>	<b>1.43</b>	<b>1.30</b>	<b>1.72</b>	<b>2.04</b>	<b>1.67</b>	<b>1.25</b>	<b>0.99</b>	<b>1.03</b>	<b>1.01</b>	<b>1.36</b>	<b>1.34</b>	<b>1.01</b>
Winter I avg/month	1.62											
Summer avg/month	1.22											
Winter II avg/month	1.18											

### Average Price by Month

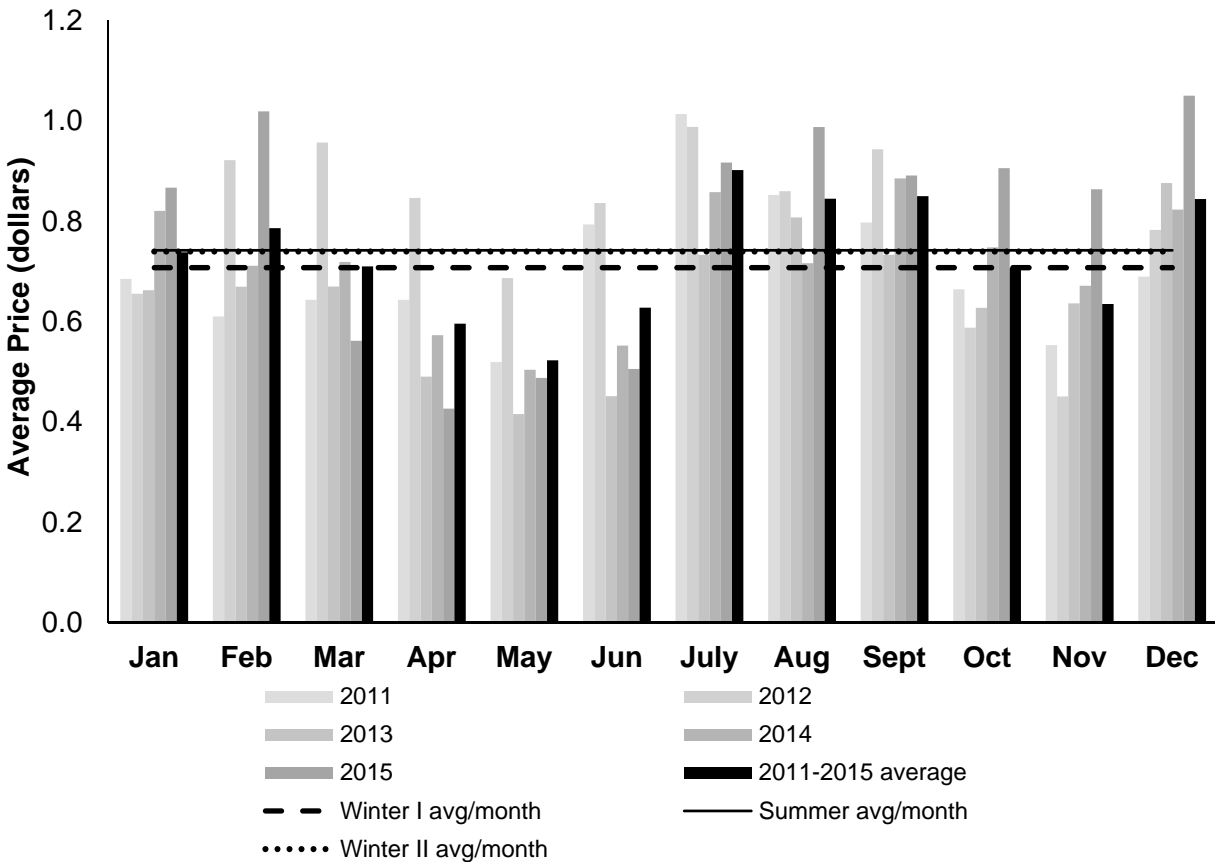


Figure 2: Average scup price per month, 2011-2015 shown with average price per month during the Winter I (January – April), Summer (May-October), and Winter II (November and December) quota periods.

Table 5: Average scup price (in dollars) per month, 2011-2015 shown with average price per month during the Winter I (January – April), Summer (May-October), and Winter II (November and December) quota periods.

Year	Average Price (Dollars)											
	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sept	Oct	Nov	Dec
2011	0.69	0.61	0.64	0.64	0.52	0.79	1.01	0.85	0.80	0.66	0.55	0.69
2012	0.66	0.92	0.96	0.85	0.69	0.84	0.99	0.86	0.94	0.59	0.45	0.78
2013	0.66	0.67	0.67	0.49	0.42	0.45	0.73	0.81	0.73	0.63	0.64	0.88
2014	0.82	0.71	0.72	0.57	0.50	0.55	0.86	0.72	0.89	0.75	0.67	0.82
2015	0.87	1.02	0.56	0.43	0.49	0.51	0.92	0.99	0.89	0.91	0.86	1.05
Average	0.74	0.79	0.71	0.60	0.52	0.63	0.90	0.84	0.85	0.71	0.64	0.84
Winter I avg/month	0.71											
Summer avg/month	0.74											
Winter II avg/month	0.74											



### Number of Vessels by Month

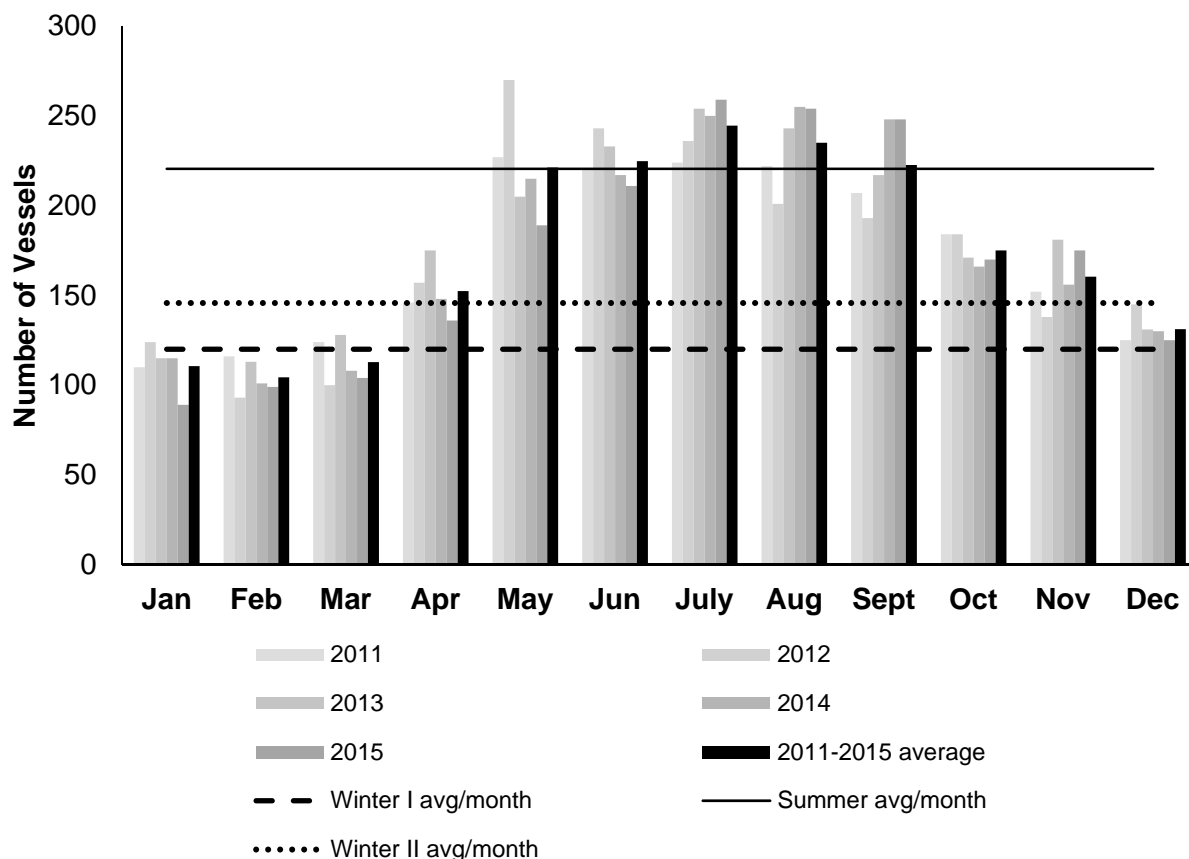


Figure 3: Number of commercial vessels which landed scup per month, 2011-2015 shown with average number of vessels per month during the Winter I (January – April), Summer (May-October), and Winter II (November and December) quota periods.

Table 6: Number of commercial vessels which landed scup per month, 2011-2015 shown with average number of vessels per month during the Winter I (January – April), Summer (May-October), and Winter II (November and December) quota periods.

Year	Number of Vessels											
	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sept	Oct	Nov	Dec
2011	110	116	124	146	227	220	224	222	207	184	152	125
2012	124	93	100	157	270	243	236	201	193	184	138	145
2013	115	113	128	175	205	233	254	243	217	171	181	131
2014	115	101	108	148	215	217	250	255	248	166	156	130
2015	89	99	104	136	189	211	259	254	248	170	175	125
<b>Average</b>	<b>111</b>	<b>104</b>	<b>113</b>	<b>152</b>	<b>221</b>	<b>225</b>	<b>245</b>	<b>235</b>	<b>223</b>	<b>175</b>	<b>160</b>	<b>131</b>
Winter I avg/month	120											
Summer avg/month	221											
Winter II avg/month	146											

### Landings by Month by State

Figure 4: Percent of annual scup landings by month by state. Confidential data representing fewer than three vessels and/or dealers are not shown. (0.0% refers to low, but not confidential, amounts of landings.)

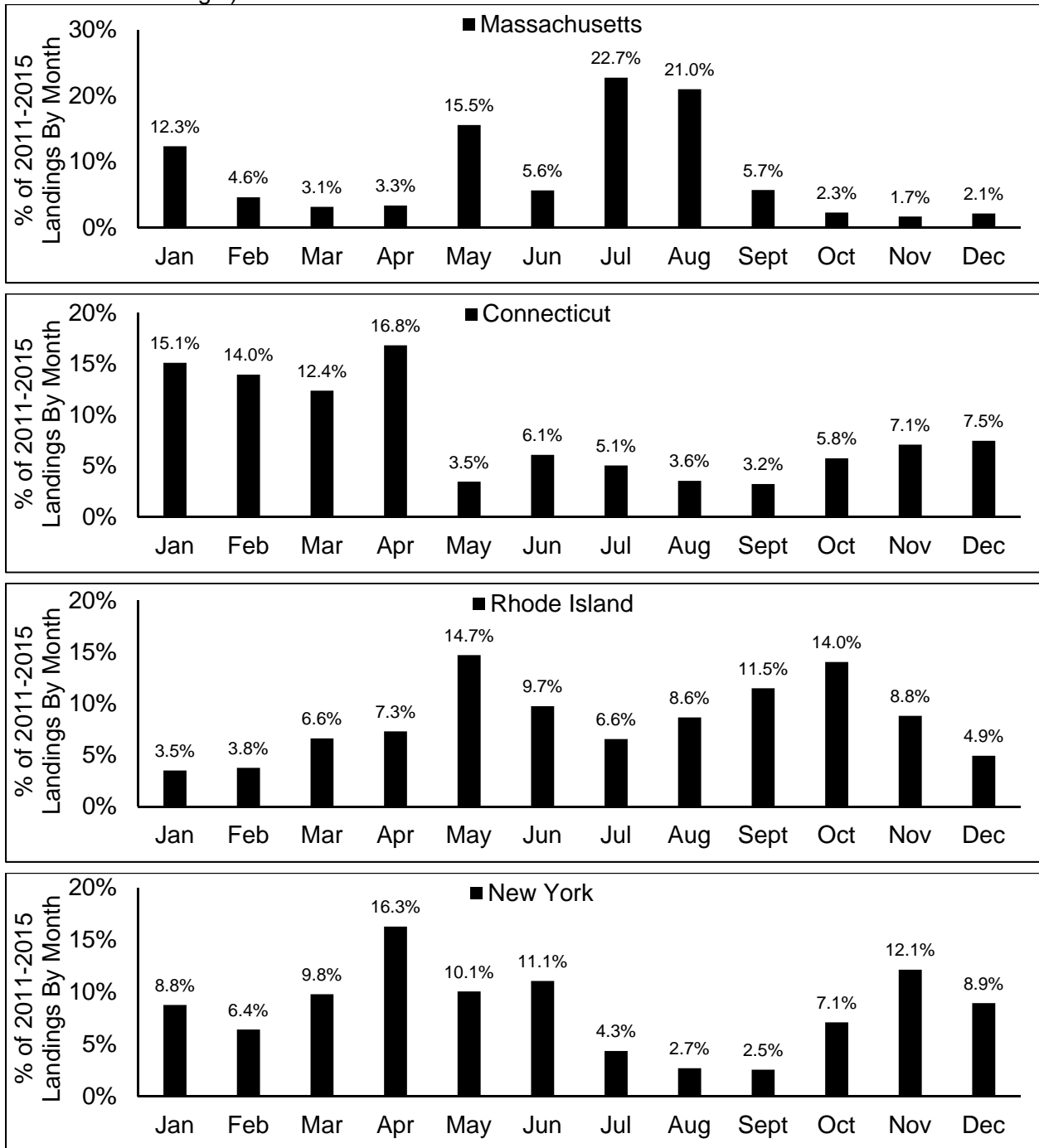
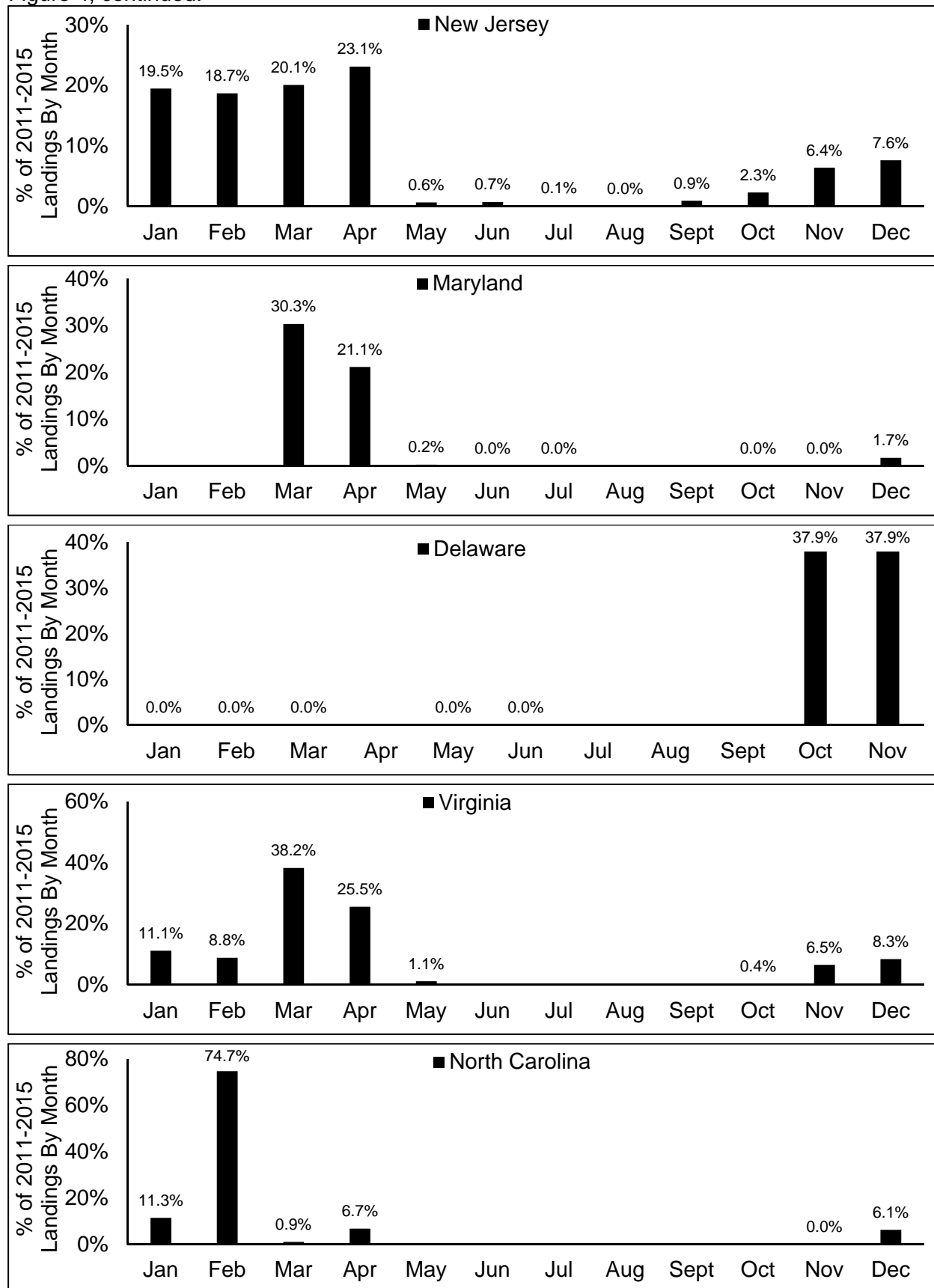


Figure 4, continued.



### Landings by Vessel Size

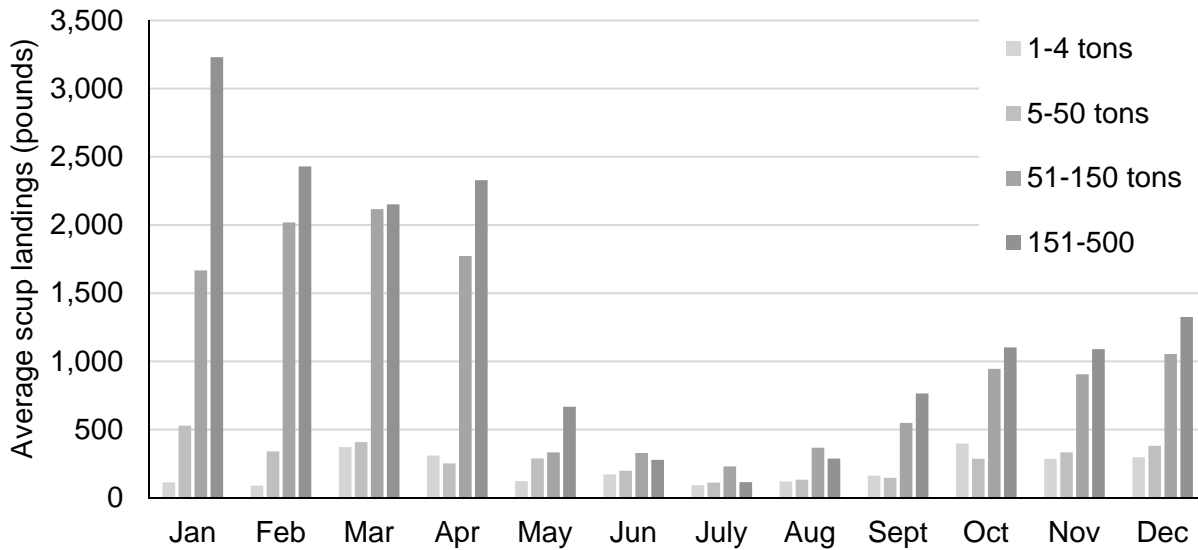


Figure 5: Average scup landings by month by vessel ton class, 2011-2015. Data for vessels greater than 500 tons are confidential and are not shown. Data from vessels with an unknown vessel class are also not shown.

Table 7: Average scup landings by month and by vessel ton class, 2011-2015. Vessels greater than 500 tons are grouped with vessels with an unknown ton class to protect confidential data.

Ton Class	Average scup landings per month, 2011-2015											
	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sept	Oct	Nov	Dec
1-4 tons	2%	1%	1%	6%	6%	13%	11%	11%	9%	13%	3%	9%
5-50 tons	9%	4%	1%	5%	14%	15%	14%	12%	8%	10%	4%	11%
51-150 tons	30%	23%	5%	35%	16%	24%	28%	33%	31%	32%	11%	32%
151-500 tons	58%	27%	5%	45%	31%	21%	14%	26%	43%	37%	13%	40%
Unknown or >500	1%	46%	89%	9%	34%	27%	33%	18%	10%	9%	68%	8%

## **Recreational Landings**

Table 8: Percent of annual landings by wave and by state, 2013-2015. (Source: MRIP data, downloaded Oct. 21, 2016).

<b>State</b>	<b>May/June</b>	<b>July/Aug</b>	<b>Sept/Oct</b>	<b>Nov/Dec</b>
MASSACHUSETTS	71%	15%	14%	0%
RHODE ISLAND	19%	53%	28%	0%
CONNECTICUT	3%	38%	59%	0%
NEW YORK	7%	49%	42%	2%
NEW JERSEY	0%	2%	98%	0%
DELAWARE	0%	5%	0%	95%
MARYLAND	0%	0%	0%	100%
VIRGINIA	0%	57%	43%	0%
NORTH CAROLINA	41%	25%	34%	0%
<b>Total</b>	<b>31%</b>	<b>35%</b>	<b>33%</b>	<b>1%</b>

## **References**

ASMFC (Atlantic States Marine Fisheries Commission). 2002. Addendum V to the Scup Fishery Management Plan: Summer Period Commercial Scup Allocation. Available at: <http://www.asmfc.org/species/scup>

MAFMC (Mid-Atlantic Fishery Management Council). 1996. Regulatory Amendment to the Fishery Management Plan for the Summer Flounder and Scup Fishery. Available at: <http://www.mafmc.org/fisheries/fmp/sf-s-bsb>

NEFSC (Northeast Fisheries Science Center). 2015. 60th Northeast Regional Stock Assessment Workshop (60th SAW) Assessment Report. U.S. Department of Commerce, Northeast Fisheries Science Center Reference Document 15-08. Available at: <http://www.nefsc.noaa.gov/saw/>