



## Scup Fishery Information Document

June 2022

This Fishery Information Document provides a brief overview of the biology, stock condition, management system, and fishery performance for scup (*Stenotomus chrysops*) with an emphasis on 2021. Data Sources for Fishery Information Documents are generally from unpublished National Marine Fisheries Service (NMFS) dealer, vessel trip report (VTR), permit, and Marine Recreational Information Program (MRIP) databases and should be considered preliminary. For more resources on scup management, including previous Fishery Information Documents, please visit <http://www.mafmc.org/sf-s-bsb/>.

### Key Facts:

- A 2021 management track assessment using data through 2019 indicated that the scup stock was not overfished, and overfishing was not occurring in 2019.
- Commercial landings decreased from 13.58 mil lbs. in 2020 to 12.93 mil lbs. in 2021.
- Price per pound and total ex-vessel value remained similar to 2020 and were \$0.76 and \$9.8 million in 2021.
- Recreational landings increased from 12.91 mil lbs. in 2020 to 16.62 mil lbs. in 2021. The majority of scup harvested recreationally in 2021 was caught by private vessels (73%), followed by anglers fishing from shore (18%), and anglers fishing from for-hire vessels (9%).

### Basic Biology

Scup are a schooling, demersal (i.e., bottom-dwelling) species. They are found in a variety of habitats in the Mid-Atlantic. Scup essential fish habitat includes demersal waters, areas with sandy or muddy bottoms, mussel beds, and sea grass beds from the Gulf of Maine through Cape Hatteras, North Carolina. Scup undertake extensive seasonal migrations between coastal and offshore waters. They are found in estuaries and coastal waters during the spring and summer. In the fall and winter, they move offshore and to the south, to outer continental shelf waters south off New Jersey. Scup spawn once annually over weedy or sandy areas, mostly off southern New England. Spawning takes place from May through August and usually peaks in June and July.<sup>1</sup>

About 50% of scup are sexually mature at two years of age and about 17 cm (about 7 inches) total length. Nearly all scup older than three years of age are sexually mature. Scup reach a maximum age of at least 14 years. They may live as long as 20 years; however, few scup older than 7 years are caught in the Mid-Atlantic.<sup>2,3</sup>

Adult scup are benthic feeders. They consume a variety of prey, including small crustaceans (including zooplankton), polychaetes, mollusks, small squid, vegetable detritus, insect larvae, hydroids, sand dollars, and small fish. The Northeast Fisheries Science Center's (NEFSC's) food

habits database lists several predators of scup, including several shark species, skates, silver hake, bluefish, summer flounder, black sea bass, weakfish, lizardfish, king mackerel, and monkfish.<sup>1</sup>

**Status of the Stock**

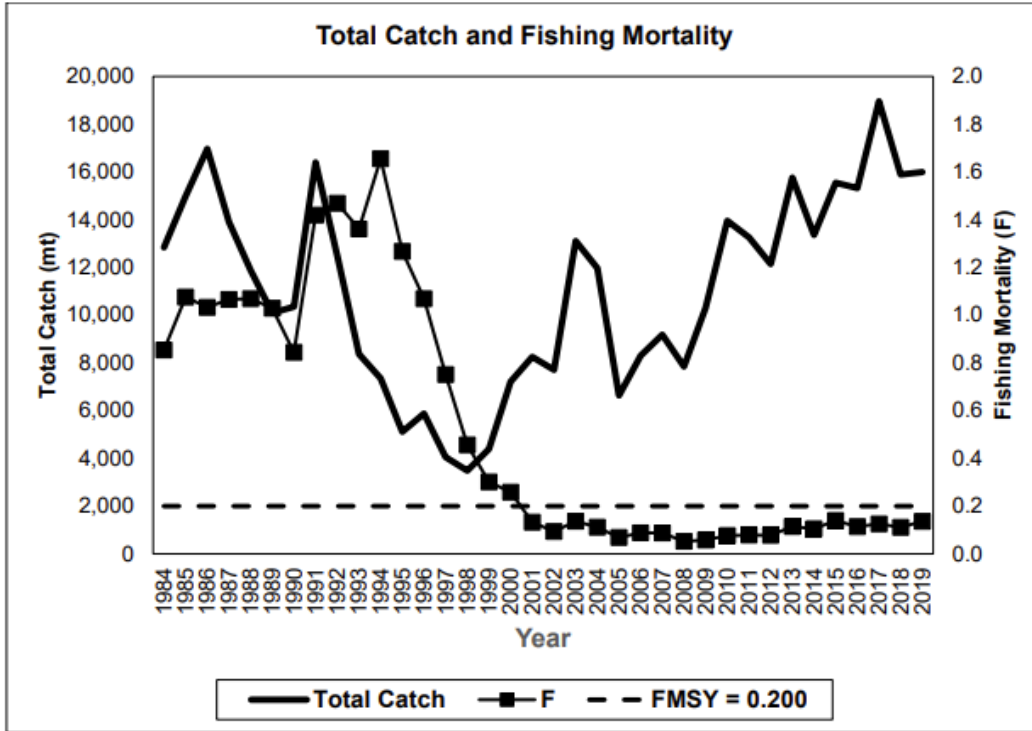
In June 2021, the NEFSC provided a management track assessment for scup which used commercial and recreational fishery data and fishery-independent survey data through 2019. Given data gaps for 2020 related to COVID-19 and the time required to address those gaps where possible, 2020 data could not be incorporated into this update.

The 2021 management track assessment indicates that the scup stock was not overfished and overfishing was not occurring in 2019 (Figures 1 and 2). Spawning stock biomass (SSB) was about 2 times the target level in 2019, and there was a notable increasing trend since the early 2000s; however, in recent years stock has declined (Figure 2, Table 1).<sup>3,4</sup>

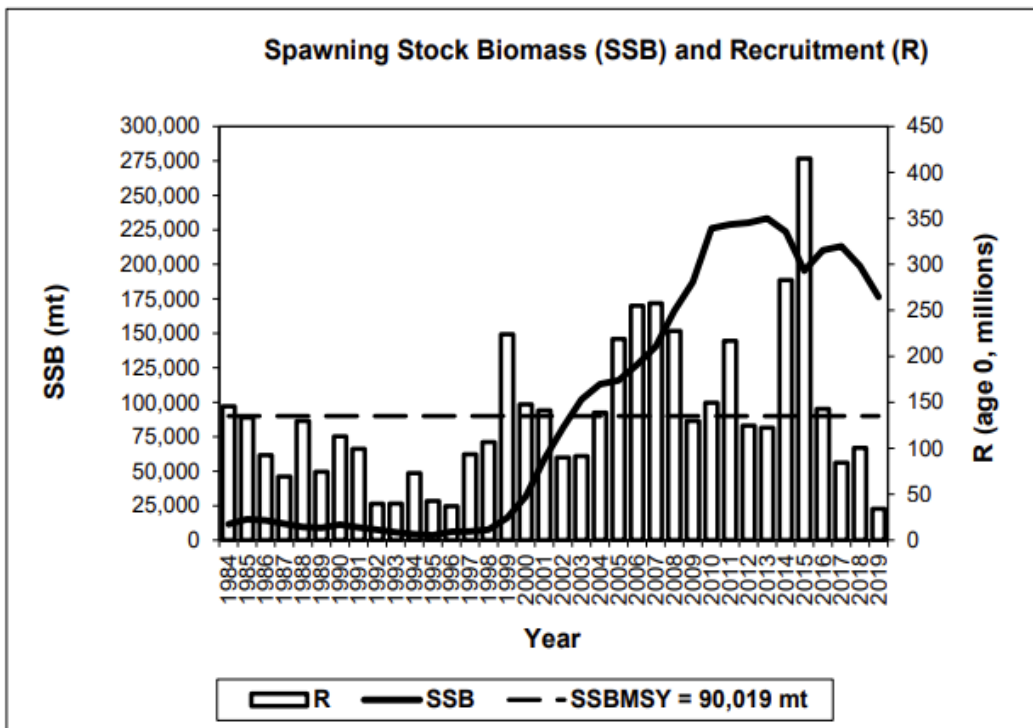
Overfishing was not occurring in 2019. Fishing mortality in 2019 was 32% below the threshold level that defines overfishing (Figure 1). The 2015 year class (i.e., the scup spawned in 2015) is estimated to be the largest in the time series at 415 million fish, while the 2017-2019 year classes are estimated to be below average, with 2019 year class the smallest in the time series (Figure 2).<sup>4</sup>

**Table 1:** Scup biological reference points from the 2021 management track stock assessment.

	<b>Spawning stock biomass</b>	<b>Fishing mortality rate (F)</b>
<b>Terminal year estimate (2019)</b>	388 mil lbs. (176,404 mt)	0.136
<b>Target</b>	198.46 mil lbs. (90,019 mt)	N/A
<b>Threshold</b>	99.230 mil lbs. (45,010 mt)	0.200
<b>Status</b>	<b>Not overfished</b>	<b>Not overfishing</b>



**Figure 1:** Total fishery catch and fishing mortality rate (F) for fully selected age 4 scup, 1984-2019. The horizontal dashed line is the fishing mortality reference point from the 2021 management track stock assessment. Overfishing is occurring when the fishing mortality rate exceeds this threshold.<sup>4</sup>



**Figure 2:** Scup spawning stock biomass and recruitment, 1984-2019. The horizontal dashed line is the biomass target from the from the 2021 management track stock assessment.<sup>4</sup>

## Management System and Fishery Performance

### *Management*

The Mid-Atlantic Fishery Management Council (Council) and the Atlantic States Marine Fisheries Commission (Commission) cooperatively develop fishery regulations for scup off the east coast of the United States. The National Marine Fisheries Service (NMFS) serves as the federal implementation and enforcement entity. This cooperative management endeavor was developed because a significant portion of the catch is taken from both state waters (0-3 miles offshore) and federal waters (3-200 miles offshore). The management unit for scup includes U.S. waters from Cape Hatteras, North Carolina to the U.S./Canadian border.

The federal Fishery Management Plan (FMP) for scup has been in place since 1996, when scup were incorporated into the Summer Flounder FMP through Amendment 8. Amendment 8 established gear restrictions, reporting requirements, commercial quotas, a moratorium on new commercial scup permits, recreational possession limits, and minimum size restrictions for scup fisheries. The Council has made several adjustments to the FMP since 1996. The FMP and subsequent amendments and framework adjustments can be found at: [www.mafmc.org/sf-s-bsb/](http://www.mafmc.org/sf-s-bsb/).

The Council's Scientific and Statistical Committee (SSC) recommends annual Acceptable Biological Catch (ABC) levels for scup. The annual ABC is divided into commercial and recreational Annual Catch Limits (ACLs), based on the allocation percentages prescribed in the FMP. Through 2022 the allocation was 78% commercial, 22% recreational. In December 2021, the Council and Commission revised the allocations to 65% commercial and 35% recreational. These changes are pending review by NMFS and if approved, are expected to be effective January 1, 2023 (see <https://www.mafmc.org/s/SFSBSB-Allocation-FAQs.pdf> for more detail). Both ABCs and ACLs are catch-based limits, meaning they account for both landings and discards. Projected discards are subtracted to determine the commercial quota and recreational harvest limit (RHL), which are landings-based limits.

### *Fishery Landings Summary*

Table 2 shows scup catch and landings limits from 2012 through 2023, as well as commercial and recreational landings through 2021. Total scup landings (commercial and recreational) from Maine to North Carolina peaked in 1981 at over 32 million pounds and reached a low of 6 million pounds in 1998. In 2021, about 29.55 million pounds of scup were landed by commercial and recreational fishermen (Figure 3).<sup>5,6</sup>

In July 2018, MRIP released revisions to their time series of recreational catch and landings estimates based on adjustments for a revised angler intercept methodology and a new effort estimation methodology (i.e., a transition from a telephone-based effort survey to a mail-based effort survey). The revised estimates of catch and landings are several times higher than the previous estimates for shore and private boat modes. All recreational estimates in this document reflect revised MRIP estimates except where otherwise noted.

Recreational harvest estimates for 2020 were impacted by temporary suspension of shoreside intercept surveys due to the COVID-19 pandemic. NMFS used imputation methods to fill gaps in 2020 catch data with data collected in 2018 and 2019. These proxy data match the time, place, and fishing mode combinations that would have been sampled had the APAIS continued uninterrupted. Proxy data were combined with observed data to produce 2020 catch estimates using the standard estimation methodology. NMFS previously indicated that 2020 data may be revised based on

potential incorporation of 2021 data into these imputation methods; as of completion of this document no updates have been made. Commercial landings reporting in 2020 continued uninterrupted; however, as of completion of this document discard data are currently unavailable due to COVID-19 related interruptions in observer coverage.

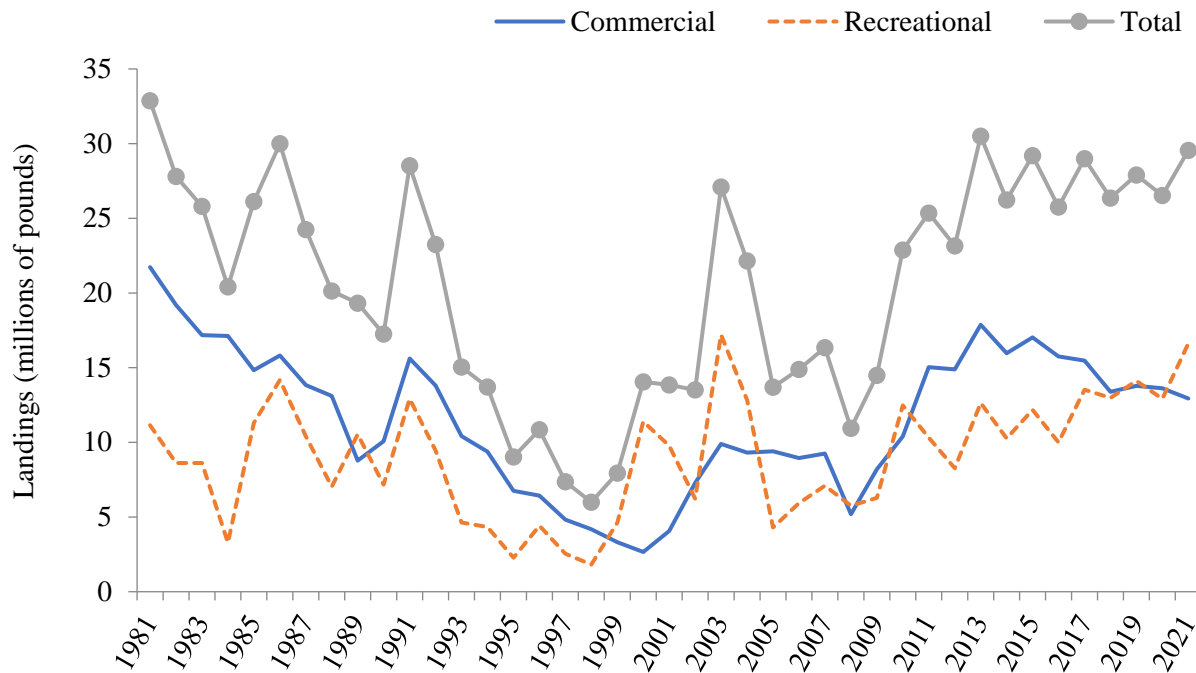
**Table 2:** Summary of scup catch limits, landings limits, and landings, 2012 through 2023. Values are in millions of pounds unless otherwise noted.

Measure	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023 <sup>c</sup>
<b>ABC</b>	40.88	38.71	35.99	33.77	31.11	28.4	39.14	36.43	35.77	34.81	32.11	29.67
<b>Com. ACL</b>	31.89	30.19	28.07	26.35	24.26	22.15	30.53	28.42	27.9	27.15	25.05	23.15
<b>Com. quota</b>	27.91	23.53	21.95	21.23	20.47	18.38	23.98	23.98	22.23	20.5	20.38	17.87
<b>Com. landings</b>	14.88	17.87	15.96	17.03	15.76	15.45	13.38	13.78	13.58	12.93	--	--
<b>% of com. quota landed</b>	53%	76%	72%	80%	77%	84%	55%	57%	61%	63%	--	--
<b>Rec. ACL</b>	8.99	8.52	7.92	7.43	6.84	6.25	8.61	8.01	7.87	7.66	7.06	6.53
<b>RHL<sup>a</sup></b>	8.45	7.55	7.03	6.8	6.09	5.5	7.37	7.37	6.51	6.07	6.08	5.41
<b>Rec. landings, old MRIP estimates</b>	4.17	5.37	4.43	4.41	4.26	5.42	5.61	--	--	--	--	--
<b>Rec. landings, new MRIP estimates</b>	8.27	12.64	10.27	12.17	10	13.53	12.98	14.12	12.91	16.62	--	--
<b>% of RHL harvested<sup>b</sup></b> <i>(2012-2019 based on old MRIP estimates; 2020 and beyond based on new MRIP estimates)</i>	49%	71%	63%	65%	70%	98%	76%	191%	198%	274%	--	--

<sup>a</sup> Commercial quotas and RHLs reflect the removal of projected discards from the sector-specific ACLs. For 2012-2014, these limits were also adjusted for Research Set Aside.

<sup>b</sup> The percent of RHL harvested is based on a comparison of the RHL to the old MRIP estimates through 2018. The RHLs prior to 2020 did not account for the new MRIP estimates, which were released in July 2018 and were not incorporated into a stock assessment until 2019; therefore, it would be inappropriate to compare past RHLs to the revised MRIP estimates. The first year that the RHL was set using the new MRIP estimates was 2020.

<sup>c</sup> Previously adopted limits for 2023 will be reviewed in 2022 by the SSC, Monitoring Committee, and Council/Commission. Sector-specific limits including the commercial recreational ACLs, commercial quota, and RHL are expected to be revised given recently adopted changes to the commercial/recreational allocation, expected to be effective January 1, 2023.



**Figure 3:** Commercial and recreational scup landings, Maine - North Carolina, 1981-2021.

### *Commercial Fishery*

Commercial scup landings peaked in 1981 at 21.73 million pounds and reached a low of 2.66 million pounds in 2000 (Figure 3). In 2021, commercial fishermen landed 12.93 million pounds of scup, about 63% of the commercial quota.<sup>5</sup>

As previously mentioned, 2020 commercial discard data are currently unavailable due to COVID-19 related interruptions in observer coverage. In 2019, about 6.13 million pounds of scup were discarded in commercial fisheries, representing a 9% decrease from 2018. Commercial discards increased from 2014-2017, peaking at about 10.42 million pounds in 2017. This was the highest number of discards since at least 1981 and was likely mainly due to the large 2015 year class, which is the largest year class since 1984. In 2017, these scup were very abundant, but mostly too small to be landed in the commercial fishery due to the commercial minimum fish size of 9 inches total length.<sup>5</sup>

The commercial scup fishery operates year-round, taking place mostly in federal waters during the winter and mostly in state waters during the summer. A coast-wide commercial quota is allocated between three quota periods, known as the winter I, summer, and winter II quota periods. These seasonal quota periods were established to ensure that both smaller day boats, which typically operate near shore in the summer months, and larger vessels operating offshore in the winter months can land scup before the annual quota is reached. The dates of the summer and winter II periods were modified in 2018 (Table 3). Both winter periods are managed under a coastwide quota while the summer period quota is divided among states according to the allocation percentages outlined in the Commission’s FMP (Table 4).

**Table 3:** Dates, allocations, and possession limits for the commercial scup quota periods. Winter period possession limits apply in both state and federal waters.

<b>Quota Period</b>	<b>Dates</b>	<b>Commercial quota allocated (%)</b>	<b>Possession limit</b>
Winter I	January 1 – April 30	45.11%	50,000 pounds, until 80% of winter I allocation is reached, then reduced to 1,000 pounds.
Summer	May 1 – September 30 <sup>a</sup>	38.95%	State-specific
Winter II	October 1 – December 31 <sup>a</sup>	15.94%	12,000 pounds. If winter I quota is not reached, the winter II possession limit increases by 1,500 pounds for every 500,000 pounds of scup not landed during winter I.

<sup>a</sup> Prior to 2018, the summer period was May 1 - October 31 and the winter II period was November 1 - December 31, with the same allocations as shown above.

**Table 4:** State-by-state quotas for the commercial scup fishery during the summer quota period (May-September).

<b>State</b>	<b>Share of summer quota</b>
Maine	0.1210%
Massachusetts	21.5853%
Rhode Island	56.1894%
Connecticut	3.1537%
New York	15.8232%
New Jersey	2.9164%
Maryland	0.0119%
Virginia	0.1650%
North Carolina	0.0249%
Total	99.9908%

Once the quota for a given period is reached, the commercial fishery is closed for the remainder of that period. If the full winter I quota is not harvested, unused quota is added to the winter II period. Any quota overages during the winter I and II periods are subtracted from the quota allocated to those periods in the following year. Quota overages during the summer period are subtracted from the following year’s quota only in the states where the overages occurred.

A possession limit of 50,000 pounds is in effect during the winter I quota period. A possession limit of 12,000 pounds is in effect during the winter II period. If the winter I quota is not reached, the winter II possession limit increases by 1,500 pounds for every 500,000 pounds of quota not caught during winter I. During the summer period, various state-specific possession limits are in effect.



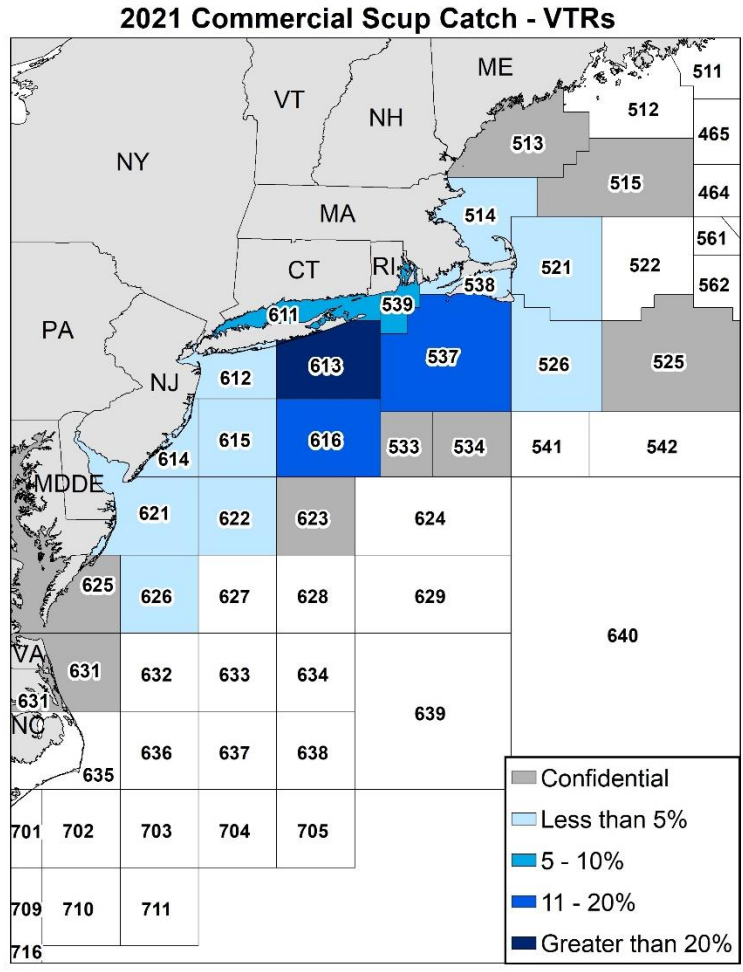
The commercial scup fishery in federal waters is predominantly a bottom otter trawl fishery. In 2021, 97% of the commercial scup landings (by weight) reported by federal VTR data were caught with bottom otter trawls. Pots/traps accounted for about 3% of landings, while all other gear types each accounted for less than 1% of the 2021 commercial scup landings.<sup>9</sup>

Until 2019, trawl vessels could not possess 1,000 pounds or more of scup during October - April, or 200 pounds or more during May - September, unless they use a minimum mesh size of 5-inch diamond mesh, applied throughout the codend for at least 75 continuous meshes forward of the terminus of the net. In 2019, another threshold period was added from April 15-June 15 with a 2,000-pound possession limit to allow for higher retention in the small-mesh squid fishery. Pots and traps for scup are required to have degradable hinges and escape vents that are either circular with a 3.1-inch minimum diameter or square with a minimum length of 2.25 inches on the side.

VTR data suggest that NMFS statistical areas 613, 616, 537, 539 and 611 were responsible for the largest percentage of commercial scup catch in 2021. Statistical area 539, off Rhode Island, had the highest number of trips which caught scup (Table 5, Figure 5).<sup>9</sup>

**Table 5:** Statistical areas which accounted for at least 5% of the total commercial scup catch (by weight based on VTR data) in 2021, with associated number of trips.<sup>9</sup> Federal VTR data do not capture landings by vessels only permitted to fish in state waters.

Statistical area	% of 2021 commercial scup catch	Number of trips
613	26%	1,103
616	17%	446
537	17%	839
539	10%	1,993
611	9%	1,500



**Figure 4:** Proportion of scup catch by statistical area in 2021 based on federal VTR data. Statistical areas marked “confidential” are associated with fewer than three vessels and/or dealers. The amount of catch (landings and discards) that was not reported on federal VTRs (e.g., catch from vessels permitted to fish only in state waters) is unknown.

Over the past two decades, total scup ex-vessel revenue ranged from a low of \$3.3 million in 2000 to a high of \$11.3 million in 2015. In 2021, 12.93 million pounds of scup were landed by commercial fishermen from Maine through North Carolina. Total ex-vessel value in 2021 was \$9.8 million, resulting in an average price per pound of \$0.76. All revenue and price values were adjusted to 2021 dollars to account for inflation.<sup>5</sup>

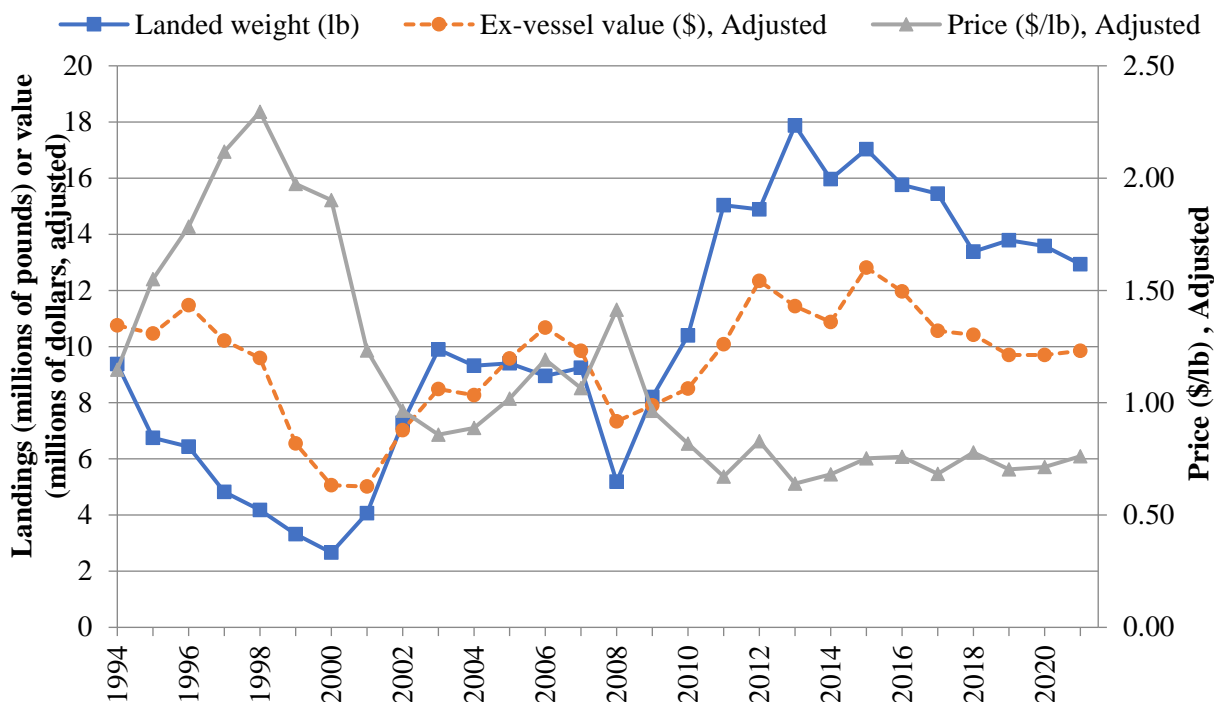
In general, the price of scup tends to be lower when landings are higher, and vice versa (Figure 5). This relationship is not linear and many other factors besides landings also influence price. The highest average price per pound over the past two decades was \$2.30 and occurred in 1998. The lowest average price per pound was \$0.64 and occurred in 2013.<sup>5</sup>

Over 138 federally-permitted dealers from Maine through North Carolina purchased scup in 2021. More dealers in New York purchased scup than in any other state (Table 6).<sup>5</sup>

At least 100,000 pounds of scup were landed by commercial fishermen in 15 ports in 6 states in 2021. These ports accounted for approximately 91% of all 2021 commercial scup landings. Point Judith, Rhode Island was the leading port, both in terms of landings and number of vessels landing

scup (Table 7).<sup>5</sup> Detailed community profiles developed by the Northeast Fisheries Science Center’s Social Science Branch can be found at [www.mafmc.org/communities/](http://www.mafmc.org/communities/).

Since 1996, a moratorium permit has been required to fish commercially for scup. In 2021, 589 vessels held commercial moratorium permits for scup.<sup>10</sup>



**Figure 5:** Landings, ex-vessel value, and price for scup from Maine through North Carolina, 1994-2021. Ex-vessel value and price are inflation-adjusted to 2021 dollars using the Gross Domestic Product Price Deflator.<sup>5</sup>

**Table 6:** Number of dealers per state which reported purchases of scup in 2021. C = Confidential.<sup>5</sup>

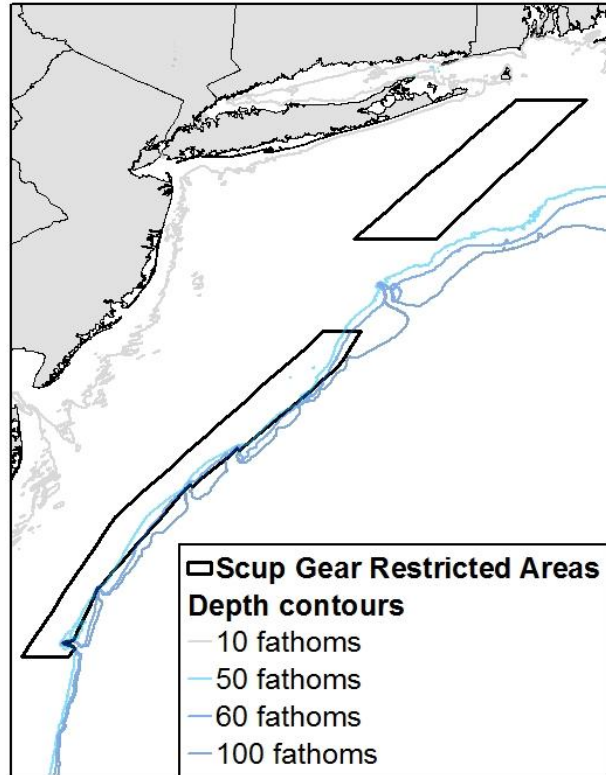
State	NH	MA	RI	CT	NY	NJ	DE	MD	VA	NC
Number of Dealers	C	27	19	12	38	17	C	5	9	9

**Table 7:** Ports reporting at least 100,000 pounds of scup landings in 2020, based on NMFS dealer data. C = Confidential.<sup>5</sup>

Port	Scup landings (lb)	% of total landings	Number of vessels
POINT JUDITH, RI	3,662,556	28.3197	128
MONTAUK, NY	2,807,098	21.7051	84
PT. PLEASANT, NJ	1,106,813	8.5581	32
CAPE MAY, NJ	1,104,045	8.5367	26
NEW BEDFORD, MA	581,622	4.4972	55
MATTITUCK, NY	538,703	4.1654	5
STONINGTON, CT	296,288	2.291	22
LITTLE COMPTON, RI	294,645	2.2783	8
NEW LONDON, CT	267,818	2.0708	4
HAMPTON, VA	262,377	2.0288	26
HAMPTON BAY, NY	250,693	1.9384	26
SHINNECOCK, NY	171,485	1.326	9
TIVERTON, RI	133,628	1.0332	5
AMMAGANSETT, NY	C	C	C

#### *Scup Gear Restricted Areas*

Two scup gear restricted areas (GRAs) were first implemented in 2000 with the goal of reducing scup discards in small-mesh fisheries. The GRA boundaries have been modified multiple times since their initial implementation. The current boundaries are shown in Figure 6. Trawl vessels may not fish for or possess longfin squid, black sea bass, or silver hake in the Northern GRA from November 1 – December 31 and in the Southern GRA from January 1 – March 15 unless they use mesh which is at least 5 inches in diameter. The GRAs are thought to have contributed to the recovery of the scup population in the mid- to late-2000s.<sup>8</sup> As previously stated, commercial scup discards increased by 71% between 2016 and 2017, likely due to the large 2015 year class.<sup>4</sup> Although discards decreased by about 41% in 2019 compared with the record high discards in 2017, they still remain well above average. Commercial discard data for 2020 and 2021 are not yet available for analysis. Further analysis is needed to evaluate the impact of the GRA modification on commercial scup discards in 2017-2021.



**Figure 6:** The Scup Gear Restricted Areas.

*Recreational Fishery*

The recreational scup fishery is managed on a coast-wide basis in federal waters. Federal waters measures remained unchanged from 2015-2021 (Table 8). For the 2022 fishing year, the Council and Commission proposed a 1-inch increase to the scup recreational minimum size in state and federal waters. In federal waters, this results in a 10-inch total length minimum size limit. Collectively, the increased size limits in state and federal waters is expected to achieve an approximate 33% reduction in harvest for 2022 compared to the 2019-2021 average. The 2021 RHL overage will be discussed in development of 2023 recreational measures but is unlikely to impact the 2023 RHL and ACL given recent biomass estimates and the Council’s Accountability Measures.<sup>7</sup>

**Table 8:** Federal recreational measures for scup, 2005-2022.

<b>Regulation</b>	<b>2005-2007</b>	<b>2008-2009</b>	<b>2010-2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015-2021</b>	<b>2022<sup>a</sup></b>
<b>Minimum size (total length)</b>	10 in.	10.5 in.	10.5 in.	10.5 in.	10 in.	9 in.	9 in.	10 in.
<b>Possession limit</b>	50	15	10	20	30	30	50	50
<b>Open season</b>	Jan 1 – Feb 28 & Sept 18 – Nov 30	Jan 1 – Feb 28 & Oct 1 – Oct 31	Jun 6 – Sept 26	Jan 1 – Dec 31	Jan 1 – Dec 31	Jan 1 – Dec 31	Jan 1 – Dec 31	Jan 1 – Dec 31

<sup>a</sup> Revised based on publication of final rule ([2022-12450](#)) on June 8, 2022.

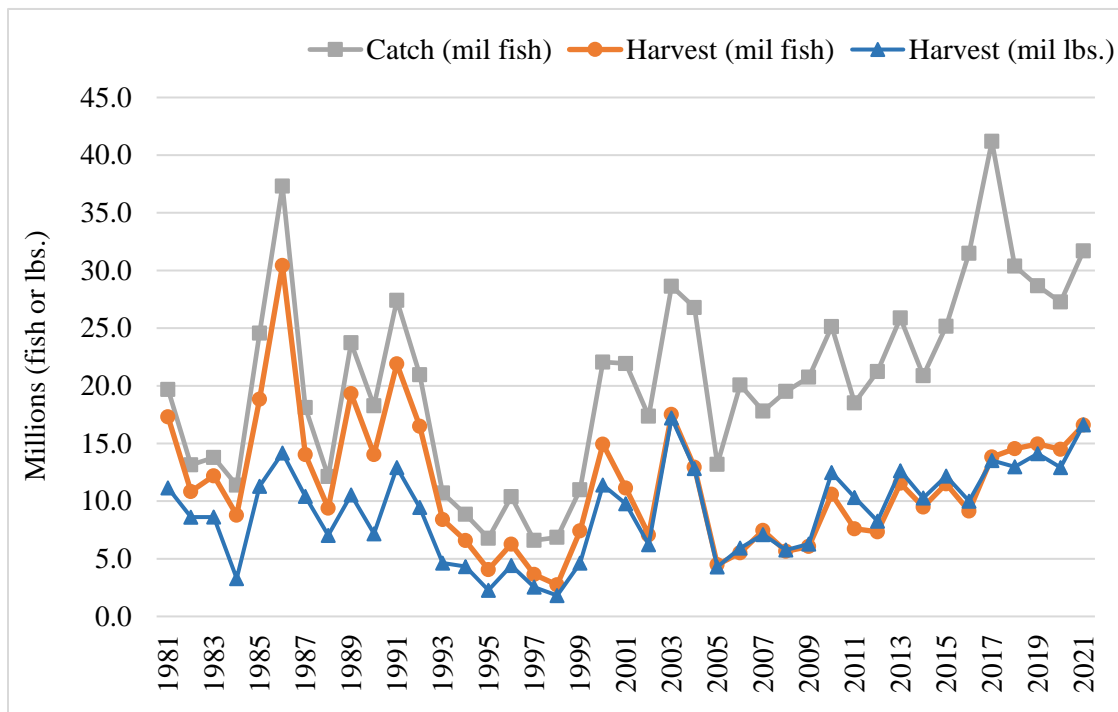
The Commission applies a regional management approach to recreational scup fisheries in state waters, where New York, Rhode Island, Connecticut, and Massachusetts develop regulations intended to achieve 97% of the RHL. The minimum fish size, possession limit, and open season for recreational scup fisheries in state waters vary by state. State waters measures remained unchanged from 2015 through 2017. Massachusetts through New Jersey liberalized their minimum size limits and/or seasons in 2018 compared to 2017, there were very minor changes in the state regulations from 2018 to 2019, and no changes to state measures from 2019 to 2021. In 2022, due to the Council and Commission’s proposed 1-inch increase in scup recreational minimum size limits, as of the completion of this document, most states updated the minimum size limits in state waters (Table 9).

**Table 9:** State recreational fishing measures for scup in 2021 and 2022. Note: the minimum size limit was the only regulation updated in 2022 and timing of implementation varied by state.

State	2021 Minimum Size (inches)	2022 Minimum Size (inches)	Possession Limit	Open Season
MA (private & shore)	9	10	30 fish; 150 fish/vessel with 5+ anglers on board	April 13-December 31
MA (party/charter)	9	10	30 fish	April 13-April 30; July 1- December 31
			50 fish	May 1-June 30
RI (private & shore)	9	10	30 fish	January 1-December 31
RI shore program (7 designated shore sites)	8	9		
RI (party/charter)	9	10	30 fish	January 1-August 31; November 1-December 31
			50 fish	September 1-October 31
CT (private & shore)	9	10	30 fish	January 1-December 31
CT shore program (45 designed shore sites)	8	9		
CT (party/charter)	9	10	30 fish	January 1-August 31; November 1-December 31
			50 fish	September 1-October 31
NY (private & shore)	9	9	30 fish	January 1-December 31
NY (party/charter)	9	9	30 fish	January 1-August 31; November 1-December 31
			50 fish	September 1- October 31
NJ	9	10	50 fish	January 1- December 31
DE	8	9	50 fish	January 1-December 31
MD	8	9	50 fish	January 1-December 31
VA	8	9	30 fish	January 1-December 31
NC, North of Cape Hatteras (N of 35° 15'N)	8	9	50 fish	January 1-December 31

Recreational data are available from MRIP. In July 2018, MRIP released revisions to their time series of recreational catch and landings estimates based on adjustments for a revised angler intercept methodology and a new effort estimation methodology, including a transition from a telephone-based effort survey to a mail-based effort survey. The RHLs and other management measures through 2019 were based on the old MRIP estimates. The new estimates of catch and landings are several times higher than the previous estimates for shore and private boat modes, substantially raising the overall scup catch and harvest estimates. Information presented in this section is based on the new estimates.

From 1981-2020, recreational catch of scup (in number of fish) peaked in 2017 at 41.20 million scup and landings peaked in 1986 with an estimated 30.43 million scup landed by recreational fishermen from Maine through North Carolina. Recreational catch was lowest in 1998 when an estimated 6.86 million scup were caught and 2.74 million scup were landed. Recreational anglers from Maine through North Carolina caught an estimated 31.70 million scup and landed 16.56 million scup (about 16.62 million pounds) in 2021 (Figure 7).<sup>6</sup>



**Figure 7:** MRIP estimates of recreational scup harvest in numbers of fish and pounds and catch in numbers of fish, ME - NC, 1981-2021.

Vessels carrying passengers for hire in federal waters must obtain a federal party/charter permit. In 2021, 780 vessels held scup federal party/charter permits. Many of these vessels also held party/charter permits for summer flounder and black sea bass.<sup>10</sup>

Most recreational scup catch occurs in state waters during the warmer months when the fish migrate inshore. Between 2019 and 2021, on average 92.9% of recreational scup catch (in numbers of fish) occurred in state waters and about 7.1% occurred in federal waters (Table 10). New York,



Connecticut, Rhode Island, Massachusetts, and New Jersey accounted for over 99% of recreational scup harvest in 2021 (Table 11).<sup>6</sup>

About 73% of recreational scup landings (in numbers of fish) in 2021 were from anglers who fished on private or rental boats and about 18% were from anglers fishing from shore. Additionally, about 9% were from anglers fishing on party or charter boats (Table 12).<sup>6</sup>

**Table 10:** Estimated percent of scup caught by recreational fishermen in state and federal waters, Maine - North Carolina, 2012 – 2021. Percentages calculated based on numbers of fish<sup>6</sup>

<b>Year</b>	<b>State waters</b>	<b>Federal waters</b>
<b>2012</b>	99.7%	0.3%
<b>2013</b>	96.3%	3.7%
<b>2014</b>	96.5%	3.5%
<b>2015</b>	98.9%	1.1%
<b>2016</b>	93.5%	6.5%
<b>2017</b>	95.9%	4.1%
<b>2018</b>	96.2%	3.8%
<b>2019</b>	95.5%	4.5%
<b>2020</b>	88.6%	11.4%
<b>2021</b>	94.4%	5.6%
<b>2012-2021 average</b>	<b>95.6%</b>	<b>4.4%</b>
<b>2019-2021 average</b>	<b>92.9%</b>	<b>7.1%</b>

**Table 11:** Estimated percent of scup harvested by state, 2019 – 2021. Percentages calculated based on numbers of fish.<sup>6</sup>

<b>State</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>2019-2021 average</b>
<b>Maine</b>	0%	0%	0%	0%
<b>New Hampshire</b>	0%	0%	0%	0%
<b>Massachusetts</b>	14%	9%	23%	15%
<b>Rhode Island</b>	20%	10%	15%	15%
<b>Connecticut</b>	16%	23%	17%	19%
<b>New York</b>	49%	48%	43%	47%
<b>New Jersey</b>	1%	9%	1%	4%
<b>Delaware</b>	0%	0%	0%	0%
<b>Maryland</b>	0%	0%	0%	0%
<b>Virginia</b>	0%	0%	1%	0%
<b>North Carolina</b>	0%	0%	0%	0%

**Table 12:** Scup harvest (in numbers of fish) by recreational fishing mode, Maine - North Carolina, 2012 – 2021. Note: percentages may not sum to 100% due to rounding.<sup>6</sup>

<b>Year</b>	<b>Private/rental</b>	<b>Shore</b>	<b>Party/charter</b>	<b>Total number</b>
<b>2012</b>	69%	14%	16%	7,334,831
<b>2013</b>	51%	34%	15%	11,547,030
<b>2014</b>	65%	20%	15%	9,488,947
<b>2015</b>	76%	17%	8%	11,498,780
<b>2016</b>	56%	34%	10%	9,143,579
<b>2017</b>	65%	24%	11%	13,820,610
<b>2018</b>	48%	43%	9%	14,545,489
<b>2019</b>	56%	29%	15%	14,954,157
<b>2020</b>	62%	28%	10%	14,493,250
<b>2021</b>	73%	18%	9%	16,595,455
<b>2012-2021 average</b>	<b>62%</b>	<b>26%</b>	<b>12%</b>	<b>12,342,213</b>
<b>2019-2021 average</b>	<b>64%</b>	<b>25%</b>	<b>11%</b>	<b>15,347,621</b>

## References

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- <sup>5</sup> Unpublished NMFS commercial fish dealer data (i.e., “DERS”), which include both state and federal dealer data).
- <sup>6</sup> Personal communication from the National Marine Fisheries Service, Fisheries Statistics Division. Accessed May 3, 2022. Available at: <http://www.st.nmfs.noaa.gov/recreational-fisheries/index>.
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- <sup>8</sup> Terceiro, M., A. Miller. 2014. Commercial fishery scup discarding and the Gear Restricted Areas (GRAs). White paper for the Mid-Atlantic Fishery Management Council. 30 p.
- <sup>9</sup> Unpublished NMFS Vessel Trip Report data as of February 1, 2022.
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