

Scup Fishery Information Document

June 2023

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 2022. Data Sources for Fishery Information Documents are generally from unpublished National Marine Fisheries Service (NMFS) dealer, vessel trip report (VTR), permit, catch accounting and monitoring system (CAMS), Northeast Fisheries Observer Program (NEFOP) data, 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. An updated management track assessment will undergo peer review in late June 2023.
- Commercial landings decreased from 12.93 mil lbs. in 2021 to 12.12 mil lbs. in 2022.
- Price per pound and total ex-vessel value remained similar to 2021 and were about \$0.80 and \$9.68 million in 2022, respectively.
- Recreational landings increased from 16.62 mil lbs. in 2021 to 17.36 mil lbs. in 2022.
- The majority of scup harvested recreationally in 2022 was caught by private vessels (66%), followed by anglers fishing from shore (24%), 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 (Steimle et al., 1999).

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 (NEFSC 2015).

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) 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 (Steimle et al., 1999).

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 (Table 1; Figure 1; NEFSC 2021)

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 the 2019 year class representing the smallest in the time series (Figure 2; NEFSC 2021).

In 2022, the NEFSC provided a data update which included 2020 and 2021 landings information as well as NEFSC trawl survey data from 2021 through spring 2022 (2020-2021 dead discard estimates were not available at the time and no NEFSC trawl surveys were conducted in 2020 due to COVID). The NEFSC seasonal survey indices of scup had generally decreased since the 2015-2016 record highs. The spring survey index of scup stock biomass increased by 34% from 2019 to 2022; the fall index increased by 132% from 2019 to 2021. The NEFSC fall survey indices also suggest that a very large year class recruited to the stock in 2015 with below average recruitment during 2016-2021 (NEFSC 2022).

Note that updated stock assessment information will be available in late June/July 2023.

Table 1: Biomass and fishing mortality rate reference points and terminal year estimates for scup from the 2021 management track assessment.

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

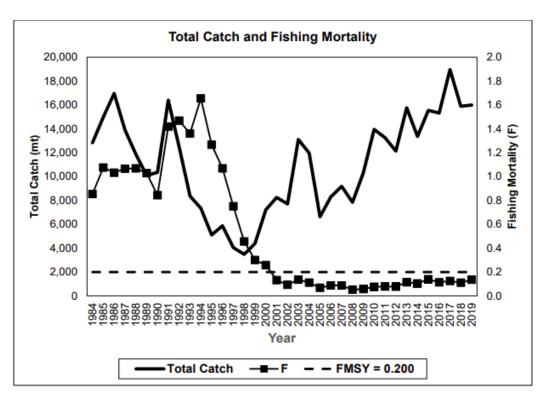


Figure 1:Total fishery catch and fishing mortality (F) for fully selected age 4 scup, 1984-2019. The horizontal dashed line is the fishing mortality reference point from the 2021 management track stock assessment. Overfishing is occurring when the fishing mortality rate exceeds this threshold. Source: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

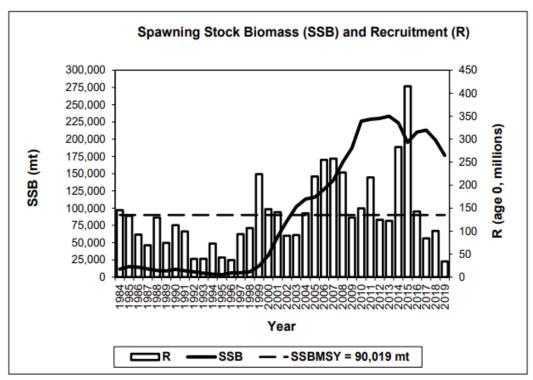


Figure 2: Scup spawning stock biomass and recruitment, 1984-2019. The horizontal dashed line is the biomass target. Source: NEFSC 2021.

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/.

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. Starting in 2023, the ABC is now allocated 65% to the commercial fishery and 35% to the recreational fishery. 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. ¹

Fishery Catch Summary

Table 2 shows scup total catch and catch limits from 2014 through 2023, as well as the overfishing limit (OFL) from which the ABC is derived. The ABC is set less than or equal to the OFL to account for scientific uncertainty. The OFL for scup was likely exceeded in 2022 (based on preliminary 2022 total catch estimates). The scup ABC was exceeded in 2017 and 2021, and likely again in 2022 (based on preliminary 2022 data; Table 2).

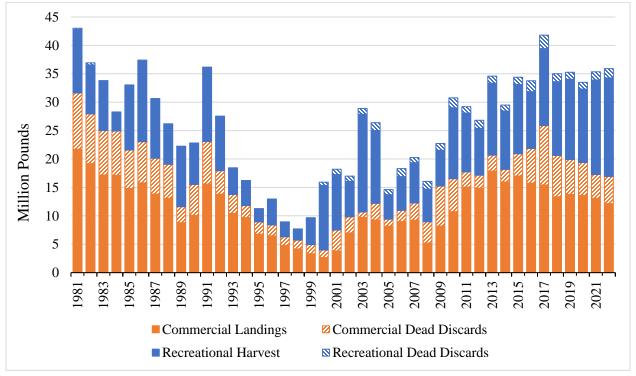
¹ For more information on these allocation revisions, see the fact sheet at: https://www.mafmc.org/s/SFSBSB-Allocation-FAQs.pdf.

Table 2: Total scup catch (i.e., commercial and recreational landings and dead discards) compared to the OFL and ABC. All values are in millions of pounds. Total catch calculations use "old" MRIP data through 2019, and "new" MRIP data for 2020-2022.

Year	Total	OFL	OFL	ABC	ABC
	catch ^a		overage/underage		overage/underage
2014	23.10	47.8	-52%	35.99	-36%
2015	25.85	47.8	-46%	33.77	-23%
2016	26.91	35.8	-25%	31.11	-14%
2017	32.20	32.09	0%	28.4	13%
2018	26.84	45.05	-40%	39.14	-31%
2019	26.55	41.03	-35%	36.43	-27%
2020	33.50	41.17	-19%	35.77	-6%
2021	35.35	35.3	0%	34.81	2%
2022	35.92	32.56	10%	32.11	12%
2023		30.09		29.67	

^a See Table 3 and Table 13 for the commercial and recreational data contributing to the total catch estimates.

Figure 3: Shows commercial and recreational landings and dead discards from 1993 through 2022. Total (commercial and recreational combined) scup catch during this time period peaked in 1981 and 2017, and in recent years has remained relatively constant. Source: unpublished CAMS data.



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 2022, commercial fishermen landed 12.12 million pounds of scup, about 59% of the commercial quota. Commercial catch has not exceeded the commercial ACL since 2017. Where commercial ACL overages have occurred, they are generally caused by higher-than-expected dead discards, as commercial fishery landings for scup are typically well controlled to the commercial quota (Table 3).

Table 3:Scup commercial landings, dead discards, and catch compared to the commercial quota

and commercial ACL, 2014-2023. All values are in millions of pounds.

Year	Com. landings ^a	Com. quota	Quota overage/ underage	Com. dead discards ^a	Com. catch ^a	ACL	ACL overage/ underage
2014	15.96	21.95 ^b	-27%	2.16	18.12	28.07	-35%
2015	17.03	21.23	-20%	3.79	20.82	26.35	-21%
2016	15.76	20.47	-23%	6.12	21.88	24.26	-10%
2017	15.45	18.38	-16%	10.43	25.88	22.15	+17%
2018	13.37	23.98	-44%	7.26	20.63	30.53	-32%
2019	13.78	23.98	-43%	6.13	19.91	28.42	-30%
2020	13.58	22.23	-39%	5.76	19.34	27.9	-31%
2021	12.93	20.5	-37%	4.18	17.11	27.15	-37%
2022	12.12	20.38	-41%	4.79	16.91	25.05	-33%
2023		14.01				19.29	

 $^{^{\}rm a}$ Commercial landings based on NMFS dealer data; commercial dead discards from NEFSC 2021 and M. Terceiro, personal communication, June 2023.

In 2022, about 4.79 million pounds of scup were discarded in commercial fisheries, representing a 12% increase from 2021. Commercial discards increased from 2014-2017, peaking at about 10.42 million pounds in 2017. This was the highest number of discards since 1981 and was likely attributed to the large 2015-year class, which was 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. Since 2017, commercial discards have decreased but have remained higher than years prior to 2015 (Figure 3; Table 3).

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 4). 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 5).

^b The 2014 commercial quota was adjusted for Research Set Aside (RSA). Quotas for 2015-2023 do not reflect an adjustment for RSA due to the suspension of the program in 2014. Commercial quotas also reflect deductions from prior year landings overages and discard-based Accountability Measures.

Table 4: Dates, allocations, and possession limits for the commercial scup quota periods. Winter period possession limits apply in both state and federal waters.

Quota Period	Dates	Commercial quota allocated (%)	Possession limit
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 ^a	38.95%	State-specific
Winter II	October 1 – December 31 ^a	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.

^a 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 5: State-by-state quotas for the commercial scup fishery during the summer quota period (May-September).

State	Share of summer quota
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 2022, 96% 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 accounted for less than 1% of the 2022 commercial scup landings.

Prior to 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 suggests that NMFS statistical areas 613, 537, 616, 539 and 611 were responsible for the largest percentage of commercial scup catch in 2022. Statistical area 539, off Rhode Island, had the highest number of trips which caught scup; however, statistical area 613 off of Long Island, NY accounted for the greatest amount of scup caught (Table 6, Figure 4).

Table 6: Statistical areas which accounted for greater than 5% of the total commercial scup catch (by weight based on VTR data) in 2022, with associated number of trips. Federal VTR data do not capture landings by vessels only permitted to fish in state waters.

Statistical area	Percentage of 2022 commercial scup catch	Number of trips
613	24%	1,377
537	20%	1,066
616	16%	346
539	10%	2,108
611	6%	1,139

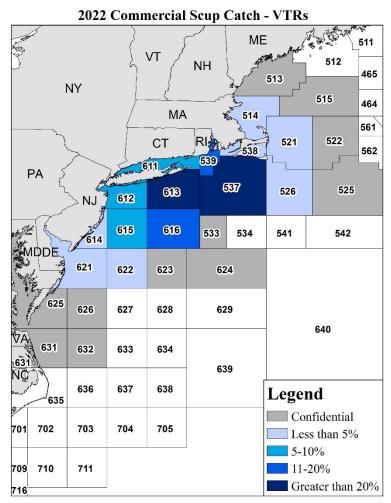


Figure 4: Proportion of scup catch by statistical area in 2022 based on federal VTR data. Statistical areas marked "confidential" are associated with fewer than three vessels and/or dealers. The amount of catch (landings and discards) that was not reported on federal VTRs (e.g., catch from vessels permitted to fish only in state waters) is unknown.

Over the past two decades, total scup ex-vessel revenue ranged from a low of \$5.39 million in 2001 to a high of \$13.77 million in 2015. In 2022, 12.12 million pounds of scup were landed by commercial fishermen from Maine through North Carolina. Total ex-vessel value in 2022 was \$9.68 million, resulting in an average price per pound of \$0.80 (Figure 5). All revenue and price values were adjusted to 2022 dollars to account for inflation.

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 likely influence price. The highest average price per pound over the past two plus decades was \$2.47 and occurred in 1998. The lowest average price per pound was \$0.69 and occurred in 2013.

Over 122 federally permitted dealers from Maine through North Carolina purchased scup in 2022. More dealers in New York purchased scup than in any other state (Table 7).

At least 100,000 pounds of scup were landed by commercial fishermen in 15 ports in 6 states in 2022. These ports accounted for approximately 92% of all 2022 commercial scup landings. Point

Judith, Rhode Island was the leading port, both in terms of landings and number of vessels landing scup (Table 8). Detailed community profiles developed by the Northeast Fisheries Science Center's Social Science Branch can be found at www.mafmc.org/communities/.

Since 1996, a moratorium permit has been required to fish commercially for scup. In 2022, 603 vessels held commercial moratorium permits for scup.

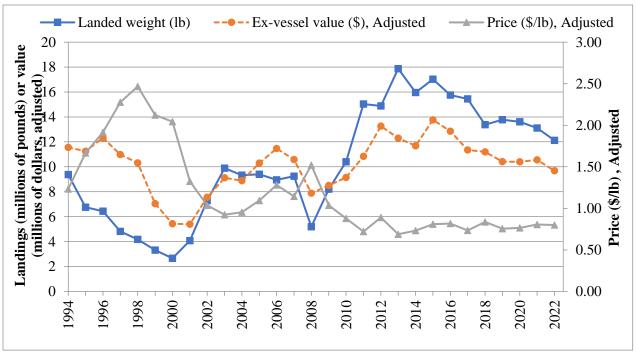


Figure 5: Landings, ex-vessel value, and price for scup from Maine through North Carolina, 1994-2022. Ex-vessel value and price are inflation-adjusted by the Gross Domestic Product Price Deflator indexed for 2022 (https://fred.stlouisfed.org). Source: NMFS unpublished dealer data.

Table 7: Number of dealers per state which reported purchases of scup in 2022.

State	MA	RI	CT	NY	NJ	DE	MD	VA	NC
Number of Dealers	31	30	13	45	15	3	5	5	8

Table 8: Ports reporting at least 100,000 pounds of scup landings in 2020, based on NMFS dealer data. C = Confidential. Source: NMFS Unpublished dealer data.

Port	Scup landings (lbs.)	% of total landings	Number of vessels
POINT JUDITH, RI	3,203,618	26%	125
MONTAUK, NY	2,802,648	23%	79
PT. PLEASANT, NJ	1,397,265	12%	30
CAPE MAY, NJ	964,646	8%	24
NEW BEDFORD, MA	712,476	6%	48
MATTITUCK, NY	С	С	С
NEW LONDON, CT	263,461	2%	4
STONINGTON, CT	229,225	2%	18
HAMPTON BAY, NY	224,861	2%	22
LITTLE COMPTON, RI	198,676	2%	9
EAST HAVEN, CT	134,752	1%	4
SHINNECOCK, NY	129,546	1%	16
GREENPORT, NY	124,745	1%	3
AMAGANSETT, NY	С	С	С
NEWPORT NEWS, VA	102,276	1%	14

The top non-target species in the commercial scup fishery were identified based on raw data from Northeast Fisheries Observer Program (NEFOP) observed trips from 2017-2022 where scup made up at least 75% of the landings by weight. Using this definition of a directed trip, the most common non-target species in the scup fishery include spiny dogfish, northern sea robin, little skate, summer flounder, and black sea bass (Table 9).

Table 9: Percent of non-target species caught in observed trawls where summer flounder made up at least 75% of the observed landings, 2017-2022. Only those non-target species comprising at least 1% of the aggregate non-target catch are listed.

Species	% of total catch on scup observed directed trips, 2017-2022 ^a
DOGFISH, SPINY	8.3%
SEA ROBIN, NORTHERN	3.6%
SKATE, LITTLE	3.1%
FLOUNDER, SUMMER (FLUKE)	2.6%
SEA BASS, BLACK	2.5%
HAKE, SILVER (WHITING)	1.2%
SKATE, WINTER (BIG)	1.0%
DOGFISH, SMOOTH	1.0%

^a Percentages shown are aggregate totals over 2017-2022 and do not reflect the percentages of non-target species caught on individual trips. This analysis describes only observed trips and has not been expanded to the fishery as a whole.

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: The Scup Gear Restricted Areas. 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 (Terceiro and Miller, 2014). As previously stated, commercial scup discards increased by 71% between 2016 and 2017, likely due to the large 2015-year class (NEFSC 2021). Although discards decreased by about 43% in 2022 compared with the record high discards in 2017, they remain above the total average annual discards from 2003-2022.

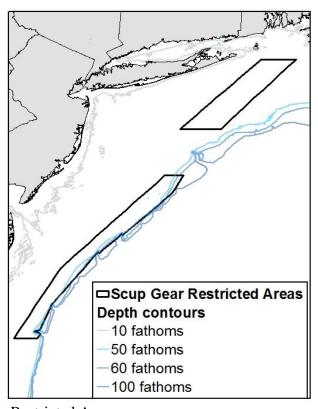


Figure 6: The Scup Gear Restricted Areas.

Recreational Fishery

The recreational scup fishery is managed on a coastwide basis in federal waters. Federal waters measures remained unchanged from 2015-2021, then in 2022 a 1-inch increase to the scup recreational minimum size was implemented (Table 10). A new approach for setting recreational management measures, referred to as the Percent Change Approach, was used to set scup measures in 2023. This approach required a 10% reduction in expected harvest in 2023. The Council and Commission proposed decreasing the recreation possession limit from 50 to 40 fish per person and modifying the season from open year-round to May 1 – December 31. Given these changes were not expected to achieve the full reduction in harvest required, the Council and Commission also agreed states would further modify state measures through the commission process to achieve the full coastwide harvest reduction required.

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, the scup recreational minimum size limit was increased by 1-inch in state waters of all states (Table 11). State measures were changed again in 2023, and measured changed varies by state (Table 12).

Table 10: Federal recreational measures for scup, 2005-2023.

Regulation	2005- 2007	2008- 2009	2010- 2011	2012	2013	2014	2015- 2021	2022	2023 ^a
Minimum size (total length)	10 in.	10.5 in.	10.5 in.	10.5 in.	10 in.	9 in.	9 in.	10 in.	10 in.
Possession limit	50	15	10	20	30	30	50	50	40
Open season	Jan 1 – Feb 28 & Sept 18 –Nov 30	Jan 1 – Feb 28 & Oct 1– Oct 31	Jun 6 – Sept 26	Jan 1 – Dec 31	May 1 – Dec 31				

^a Implementation pending final rule (*as of 6/13/2023*).

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² More information on the Percent Change Approach is available at https://www.mafmc.org/newsfeed/2022/mafmc-amp-asmfc-take-first-step-toward-recreational-management-reform-for-bluefish-sumer-flounder-scup-and-black-seabass

Table 11: State recreational fishing measures for scup in 2022.

Table 11: State recreational		•	
State	Minimum Size (inches)	Possession Limit	Open Season
MA (private & shore)	10	30 fish; 150 fish/vessel with 5+ anglers on board	April 13-December 31
MA (party/charter)	10	30 fish	April 13-April 30; July 1- December 31
		50 fish	May 1-June 30
RI (private & shore)	10		
RI shore program (7 designated shore sites)	9	30 fish	January 1-December 31
RI (party/charter)	10	30 fish	January 1-August 31; November 1-December 31
		50 fish	September 1-October 31
CT (private & shore)	10		
CT shore program (45 designed shore sites)	9	30 fish	January 1-December 31
CT (party/charter)	10	30 fish	January 1-August 31; November 1-December 31
		50 fish	September 1-October 31
NY (private & shore)	9	30 fish	January 1-December 31
NY (party/charter)	9	30 fish	January 1-August 31; November 1-December 31
		50 fish	September 1- October 31
NJ	10	50 fish	January 1- December 31
DE MD		50 fish	
VA	0	30 fish	I 1D 1 21
NC, North of Cape	9	50 11511	January 1-December 31
Hatteras (N of 35° 15'N)		50 fish	

Table 12: State recreational fishing measures for scup in 2023.

State	Minimum Size (inches)	Possession Limit	Open Season	
MA (private vessel)	10.5	30 fish	May 1 – December 31	
MA (shore)	9.5		Way 1 – December 31	
MA (party/charter)	10.5	40 fish	May 1 – June 30	
WIA (party/charter)	10.5	30 fish	July 1 – December 31	
RI (private vessel)	10.5	30 fish	May 1 December 21	
RI (shore)	9.5	50 HSH	May 1 – December 31	
RI (party/charter)	10.5"	30 fish	May 1 – August 31; November 1 – December 31	
·		40 fish	September 1 – October 31	
CT (private vessel)	10.5	30 fish	May 1 Dagamhar 21	
CT (shore)	9.5	30 HSn	May 1 – December 31	
CT (Authorized For-Hire	10.5	30 fish	May 1 – August 31; November 1 – December 31	
Monitoring Program Vessels)	10.3	40 fish	September 1 – October 31	
NY (private vessel)	10.5	20 £	Mary 1 December 21	
NY (shore)	9.5	30 fish	May 1 – December 31	
NY (party/charter)	10.5	30 fish	May 1 – August 31; November 1 – December 31	
		40 fish	September 1 – October 31	
NJ	10	30 fish	August 1 – December 31	
DE		40 figh		
MD		40 fish		
VA	9	30 fish	January 1 – December 31	
NC, North of Cape Hatteras (N of 35° 15'N)		40 fish	Sanday 1 December 31	

From 1981-2022, MRIP estimates indicate that 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. In 2022, recreational anglers from Maine through North Carolina caught an estimated 36.47 million scup and landed 18.04 million scup (about 17.36 million pounds; Figure 7; Table 13).

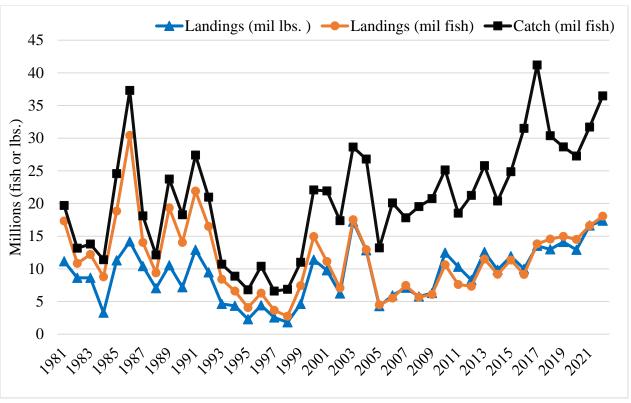


Figure 7: MRIP estimates of recreational scup landings in numbers of fish and pounds and catch in numbers of fish, ME - NC, 1981-2022.

Table 13: Scup recreational landings, dead discards, and catch compared to the RHL, projected recreational dead discards, and recreational ACL, 2014-2023. Information is provided in the "old" MRIP units for 2014-2019, and in the "new" MRIP units for 2020-2022. For scup, ACLs and RHLs did not account for the revised MRIP data until 2020. Therefore, overage/underage evaluations must be based in the old MRIP units through 2019 and the new MRIP units starting in 2020. All values are in millions of pounds.

Year	Version of MRIP data used	Rec. landings ^a	RH L	RHL over/ under	Rec. dead disc. ^a	Rec. catch	ACL	ACL over/ under
2014	Old MRIP (pre- revision)	4.43	7.03	-37%	1.06	5.49	7.92	-31%
2015		4.41	6.8	-35%	1.28	5.69	7.43	-23%
2016		4.26	6.09	-30%	1.90	6.16	6.84	-10%
2017		5.42	5.5	-1%	2.38	7.80	6.25	+25%
2018		5.61	7.37	-24%	1.42	7.03	8.61	-18%
2019	Old MRIP (provided by NEFSC)	5.41	7.37	-27%	1.23	6.64	8.01	-17%
2020 ^c	New	12.91	6.51	+98%	1.19	14.10	7.87	+79%
2021	MRIP	16.62	6.07	+174%	1.44	18.06	7.66	+136%
2022	(post-	17.36	6.08	+186%	1.63	18.99	7.06	+169%
2023	revision)		9.27				10.39	

^a Recreational harvest data from MRIP; recreational dead discards from NEFSC 2021 and M. Terceiro, personal communication, June 2023.

Vessels carrying passengers for hire in federal waters must obtain a federal party/charter permit. In 2022, 828 vessels held scup federal party/charter permits. Many of these vessels also held party/charter permits for summer flounder and black sea bass.

Most recreational scup catch occurs in state waters during the warmer months when the fish migrate inshore. Between 2020 and 2022, on average 94% of recreational scup catch (in numbers of fish) occurred in state waters and about 6% occurred in federal waters (Table 14). New York, Connecticut, Rhode Island, Massachusetts, and New Jersey accounted for over 99% of recreational scup harvest in 2022 (Table 15).

About 66% of recreational scup landings (in numbers of fish) in 2022 were from anglers who fished on private or rental boats and about 24% were from anglers fishing from shore. Additionally, about 9% were from anglers fishing on party or charter boats (Table 16).

^b For 2014, the RHL was adjusted for Research Set Aside (RSA). RHLs for 2015-2023 do not reflect an adjustment for RSA due to the suspension of the program in 2014.

^c Recreational harvest estimates for 2020 were impacted by temporary suspension of shoreside intercept surveys due to COVID-19. NMFS used imputation methods to fill gaps in 2020 catch data with data collected in 2018 and 2019. For scup, the 2020 harvest estimate relied on approximately 25% imputed data. For more information on imputation methods see: https://www.mafmc.org/s/1-2020-Marine-Recreational-Catch-Estimates-QA-52121.pdf.]

Table 14: Estimated percent of scup landed by recreational fishermen in state and federal waters, Maine - North Carolina, 2013 - 2022. Percentages calculated based on numbers of fish.

Source: NMFS unpublished MRIP data.

Year	State waters	Federal waters
2013	95%	5%
2014	97%	3%
2015	99%	1%
2016	95%	5%
2017	97%	3%
2018	96%	4%
2019	97%	3%
2020	90%	10%
2021	96%	4%
2022	97%	3%
2013-2022 average	96%	4%
2020-2022 average	94%	6%

Table 15: Estimated percent of scup harvested by state, 2019 – 2022. Percentages calculated based on numbers of fish. Source: NMFS unpublished MRIP data.

State	2020	2021	2022	2020-2022 average
Maine	0%	0%	0%	0%
New Hampshire	0%	0%	0%	0%
Massachusetts	9%	22%	12%	15%
Rhode Island	11%	17%	16%	15%
Connecticut	25%	17%	10%	18%
New York	49%	42%	59%	50%
New Jersey	6%	1%	1%	3%
Delaware	0%	0.01%	0.01%	0.01%
Maryland	0%	0%	0.01%	0.01%
Virginia	0%	0.8%	0%	0.3%
North Carolina	0.01%	0.02%	0.02%	0.01%

Table 16: Proportion of scup harvest (calculated based on numbers of fish) by recreational fishing mode, Maine - North Carolina, 2013 – 2022. Note: percentages may not sum to 100% due to rounding. Source: NMFS unpublished MRIP data.

Year	Private/rental	Shore	Party/charter	Total number (number of fish)
2013	52%	34%	15%	11,487,157
2014	67%	20%	12%	9,164,521
2015	77%	17%	6%	11,330,115
2016	56%	34%	10%	9,143,577
2017	65%	24%	11%	13,820,251
2018	48%	43%	9%	14,545,138
2019	56%	29%	15%	14,952,142
2020	62%	28%	10%	14,491,967
2021	73%	18%	9%	16,592,493
2022	66%	24%	9%	18,038,052
2013-2022 average	62%	27%	11%	13,356,541
2020-2022 average	67%	23%	10%	16,374,171

The top non-target species in the recreational fishery were identified by a species guild approach that identifies species with the strongest associations on recreational trips from 2017-2021 (2021 MRIP data used here were preliminary and excluded wave 6). Black sea bass, sea robins, summer flounder, bluefish, and tautog were highly correlated with recreational scup catch. (J. Brust, personal communication March 2022).

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