FISHERY MANAGEMENT PLAN UPDATE
SCUP NORTH OF CAPE HATTERAS
AUGUST 2023

STATUS OF THE FISHERY MANAGEMENT PLAN

Fishery Management Plan History

Original FMP Adoption: Incorporated into the Summer Flounder FMP through Amendment 8 in 1996

Amendments:		
	Amendment 8	1996
	Regulatory Amendment	1996
	Amendment 10	1997
	Amendment 11	1998
	Amendment 12	1999
	Framework 1	2001
	Addendum III	2001
	Addendum IV	2001
	Addendum V	2002
	Addendum VII	2002
	Framework 3	2003
	Framework 4	2003
	Addendum IX	2003
	Addendum X	2003
	Amendment 13	2003
	Framework 5	2004
	Addendum XI	2004
	Addendum XIII	2004
	Addendum XVI	2005
	Framework 7	2007
	Addendum XIX	2007
	Amendment 14	2007
	Amendment 16	2007
	Addendum XX	2009
	Amendment 15	2011
	Amendment 19	2013
	Amendment 17	2015
	Amendment 18	2015
	Framework 9	2016
	Amendment 20	2017
	Addendum XXIX	2017
	Framework 10	2017
	Framework 11	2018
	Framework 12	2018
	Framework 13	2018

Framework 14	2019
Framework 15	2020
Framework 16	2020
Amendment 22	2022
Framework 17 & Addendum XXXIV	2022/2023

Comprehensive Review: 2023

Because of their presence in, and movement between, state waters (0-3 miles) and federal waters (3-200 miles), the Mid-Atlantic Fishery Management Council (MAFMC) manages scup (*Stenotomus chrysops*) north of Cape Hatteras cooperatively with the Atlantic States Marine Fisheries Commission (ASMFC). The two management entities work in conjunction with the National Marine Fisheries Service (NMFS) as the federal implementation and enforcement entity. Scup went through preliminary FMP development from 1978-1993 by the MAFMC. In 1995 MAFMC and ASMFC adopted the scup FMP but sequentially NMFS requested that the scup regulations be incorporated into another FMP to reduce the number of separate fisheries regulations. As a result, the scup FMP was incorporated into the summer flounder FMP as Amendment 8.

Specific details for each Amendment include:

Amendment 8 incorporated scup into the Summer Flounder FMP; established scup management measures, including commercial quotas, recreational harvest limits, size limits, gear restrictions, permits, and reporting requirements.

Regulatory Amendment established seasonal quota periods of the commercial scup fishery.

Amendment 10 modified commercial minimum mesh requirements; continued commercial vessel moratorium permit; prohibited transfer of summer flounder at sea; established a special permit for the summer flounder party/charter sector.

Amendment 11 modified certain provisions related to vessel replacement and upgrading, permit history transfer, splitting, and permit renewal regulations.

Amendment 12 revised the Summer Flounder, Scup, and Black Sea Bass FMP to comply with the Sustainable Fisheries Act and established a framework adjustment process; established quota set-aside for research for summer flounder, scup, and black sea bass; established state-specific conservation equivalency measures; allowed the rollover of the winter scup quota; revised the start date for the scup summer quota period.

Framework 1 established quota set-aside for research for summer flounder, scup, and black sea bass.

Addendum III established recreational fishing specifications for 2001 for summer flounder and scup.

Addendum IV provided that upon the recommendation of the relevant monitoring committee and joint consideration with the Mid-Atlantic Fishery Management Council, the ASMFC's Summer

Flounder, Scup, and Black Sea Bass Management Board will decide the state regulations rather than forward a recommendation to the National Marine Fisheries Science Center; made states responsible for implementing the ASMFC's Summer Flounder, Scup, and Black Sea Bass Management Boards decisions on regulations.

Addendum V created state-specific shares of the summer period quota that will remain in place until the ASMFC's Summer Flounder, Scup, and Black Sea Bass Management Board takes direct action to modify them.

Addendum VII established recreational fishing specifications for scup for 2002.

Framework 3 allowed the rollover of winter scup quota; revised the start date for the summer quota period for the scup fishery.

Framework 4 established a system to transfer scup at sea.

Addendum IX established recreational specifications for scup in 2003.

Addendum X established quota rollover and quota period specifications for the commercial scup fishery.

Amendment 13 revised black sea bass commercial quota system; addressed other black sea bass management measures; established multi-year specification setting of quota for summer flounder, scup and black sea bass; established region-specific conservation equivalency measures for summer flounder; built flexibility into process to define and update status determination criteria for each plan species. Amendment 13 also removed the necessity for fishermen who have both a Northeast Region (NER) black sea bass permit and a Southeast Region (SER) snapper/grouper permit to relinquish their permits for a six-month period prior to fishing south of Cape Hatteras during the northern closure.

Framework 5 established multi-year specification setting of quotas for summer flounder, scup, and black sea bass.

Addendum XI proposed that the recreational scup fishery be constrained to the coastwide recreational harvest limit, allow states to customize scup recreational management measures to deal with burden issues associated with the implementation of coastwide measures, minimize the administrative burden when implementing conservation equivalency.

Addendum XIII modified the Summer Flounder, Scup, and Black Sea Bass FMP so that Total Allowable Landings for summer flounder, scup, and/or black sea bass can be specified for up to three years.

Addendum XVI established guidelines for delayed implementation of management strategies.

Framework 7 built flexibility into the process to define and update status determination criteria for summer flounder, scup, and black sea bass.

Addendum XIX continued the state-by-state black sea bass commercial management measures, without a sunset clause; broadened the descriptions of stock status determination criteria contained within the Summer Flounder, Scup, and Black Sea Bass FMP to allow greater flexibility in those definitions, while maintaining objective and measurable status determination criteria for identifying when stocks or stock complexes covered by the fishery management plan are overfished.

Amendment 14 established a rebuilding schedule for scup; scup gear restricted areas made modifiable through framework adjustment process.

Amendment 16 standardized bycatch reporting methodology.

Addendum XX set policies to reconcile commercial quota overages to address minor inadvertent quota overages; streamlined the quota transfers process and established clear policies and administrative protocols to guide the allocation of transfers from states with underages to states with overages; allowed for commercial quota transfers to reconcile quota overages after a year's end.

Amendment 15 established annual catch limits and accountability measures.

Amendment 19 modified the accountability measures for the MAFMC recreational fisheries.

Amendment 17 implemented standardized bycatch reporting methodology.

Amendment 18 eliminated the requirement for vessel owners to submit "did not fish" reports for the months or weeks when their vessel was not fishing; removed some of the restrictions for upgrading vessels listed on federal fishing permits.

Framework 9 modified the southern and eastern boundaries of the southern scup gear restricted area (in effect January 1-March 15).

Amendment 20 implemented management measures to prevent the development of new, and the expansion of existing, commercial fisheries on certain forage species in the Mid-Atlantic.

Addendum XXIX established new start and end dates for the scup commercial quota periods, moved first half of May to Winter I and October to Winter II.

Framework 10 implemented a requirement for vessels that hold party/charter permits for Council-managed species to submit vessel trip reports electronically (eVTRs) while on a trip carrying passengers for hire.

Framework 11 established a process for setting constant multi-year Acceptable Biological Catch (ABC) limits for Council-managed fisheries, clarified that the Atlantic Bluefish, Tilefish, and Atlantic Mackerel, Squid, and Butterfish FMPs will now automatically incorporate the best available scientific information in calculating ABCs (as all other Mid-Atlantic Council management plans do) rather than requiring a separate management action to adopt them, clarified the process for setting ABCs for each of the four types of ABC control rules.

Framework 12 modified the dates of the commercial scup quota periods, moving the month of October from the Summer Period to the Winter II period.

Framework 13 modified the accountability measures required for overages not caused by directed landings (i.e., discards) in the summer flounder, scup, and black sea bass fisheries.

Framework 14 gives the Mid-Atlantic Council the option to waive the federal recreational black sea bass measures in favor of state measures through conservation equivalency; implements a transit zone for commercial and recreational summer flounder, scup, and black sea bass fisheries in Block Island Sound; and allows for the use of a maximum size limit in the recreational summer flounder and black sea bass fisheries.

Framework 15 established a requirement for commercial vessels with federal permits for all species managed by the Mid-Atlantic and New England Councils to submit vessel trip reports electronically within 48 hours after entering port at the conclusion of a trip.

Framework 16 modified MAFMC's ABC control rule and risk policy. The revised risk policy is intended to reduce the probability of overfishing as stock size falls below the target biomass while allowing for increased risk and greater economic benefit under stock biomass conditions. This action also removed the typical/atypical species distinction currently included in the risk policy.

Amendment 22 revised the commercial and recreational sector allocations for all three species.

Framework 17/Addendum XXXIV Recreational Harvest Control Rule established a new process for setting recreational bag, size, and season limits (i.e., recreational measures) for summer flounder, scup, black sea bass, and bluefish. This action also modified the recreational accountability measures for these species.

Specific details for each Amendment under development include:

Summer Flounder, Scup, and Black Sea Bass Commercial/Recreational Allocation Amendment was jointly approved in December 2021 and selected preferred alternatives for each species. In 2022 the amendment was sent for submission to NMFS. For scup, this amendment allocates 65% of the acceptable biological catch (ABC) to the commercial annual catch limit and 35% to the recreational annual catch limit.

The Recreational Harvest Control Rule Framework/Addenda has been submitted to NOAA for review, approval, and implementation. The Addenda proposed different approaches for setting recreational measures. These differences have implications for how often measures would change and the magnitude of those changes. This Addenda will not implement any specific bag, size, or season limits but will modify the specification process for setting specific measures. The Council and Policy Board approved a range of alternatives, the selected management option is referred to as the "Percent Change Approach". This management option will be in place with an agreement to continue development of several other options for possible implementation by 2026. Under this selected approach, it will be determined whether recreational measures should be restricted, liberalized, or remain unchanged for the next two years. For further information on the Harvest Control Rule, refer to asmfc.org.

To ensure compliance with interstate requirements, North Carolina also manages this species under the North Carolina Fishery Management Plan for Interjurisdictional Fisheries (IJ FMP). The goal of the IJ FMP is to adopt fishery management plans, consistent with N.C. law, approved by the MAFMC, South Atlantic Fishery Management Council, or the ASMFC by reference and implement corresponding fishery regulations in North Carolina to provide compliance or compatibility with approved fishery management plans and amendments, now and in the future. These plans were established under the Magnuson-Stevens Fishery Conservation and Management Act (federal council plans) and the Atlantic Coastal Fisheries Cooperative Management Act (ASMFC plans) with the goal, like the Fisheries Reform Act of 1997, to "ensure long-term viability" of these fisheries (NCDMF 2022).

Management Unit

U.S. waters in the western Atlantic Ocean from Cape Hatteras northward to the U.S.-Canadian border.

Goal and Objectives

The objectives of the Scup FMP are to:

- Reduce fishing mortality in the scup fisheries to assure that overfishing does not occur.
- Reduce fishing mortality on immature scup to increase spawning stock biomass.
- Improve the yield from these fisheries.
- Promote compatible management regulations between state and federal jurisdictions.
- Promote uniform and effective enforcement of regulations.
- Minimize regulations to achieve the management objectives stated above.

The 2011 Omnibus Amendment contains Amendment 15 to the Summer Flounder, Scup and Black Sea Bass FMP. The amendment is intended to formalize the process of addressing scientific and management uncertainty when setting catch limits for the upcoming fishing year(s) and to establish a comprehensive system of accountability for catch (including both landings and discards) relative to those limits, for each of the managed resources subject to this requirement. Specifically: (1) Establish allowable biological catch control rules, (2) Establish a MAFMC risk policy, which is one variable needed for the allowable biological catch control rules, (3) Establish annual catch limits, (4) Establish a system of comprehensive accountability that addresses all components of the catch, (5) Describe the process by which the performance of the annual catch limit and comprehensive accountability system will be reviewed, (6) Describe the process to modify the above objectives (1-5) in the future.

DESCRIPTION OF THE STOCK

Biological Profile

Scup are a migratory, schooling species found primarily along the Atlantic coast from Cape Cod, Massachusetts to Cape Hatteras, North Carolina. However, a smaller southern stock is believed to

occur in North Carolina south of Cape Hatteras. Scup, north of Cape Hatteras, typically reach sexual maturity at age 2 to 3 or when they reach 7 inches fork length. Spawning for the northern stock typically occurs in estuaries and coastal waters during the months of May to August. They move offshore during the fall and winter. Extensive seasonal migration related to spawning is common for scup (north of Cape Hatteras). Scup have a maximum age of 14 years. Scup are bottom (benthic) feeders and prey on small crustaceans, mollusks, squid, sand dollars and fish (Steimle et al. 1999).

Stock Status

The 2020 scup operational stock assessment included data through 2018 and indicated that the stock was not overfished, and overfishing was not occurring in 2018. The 2021 management track stock assessment indicated that the scup stock status has not changed using data through 2019.

Stock Assessment

The 2020 scup operational stock assessment and the 2021 scup management track assessment both estimated fishing mortality and stock sizes using a statistical catch-at-age model calculated by using the Age Structured Assessment Program. Both assessments indicated that the fishing mortality rate was below the threshold reference point and the spawning stock biomass was above the target reference point, so the stock was not overfished, and overfishing was not occurring. Spawning stock biomass was estimated to be 2 times above biomass reference points. The 2020 and 2021 stock assessment reports can be found on the scup page on the ASMFC website for further information.

DESCRIPTION OF THE FISHERY

Current Regulations

Commercial: 9-inch fork length minimum size limit in Atlantic Ocean and internal coastal waters. Daily trip limits for the different harvest periods (Winter I, Summer, Winter II) are set by proclamation. Winter I and Winter II trip limits follow the coastwide measures, while the summer trip limit is designed to prevent exceeding North Carolina's summer quota allocation [see most recent North Carolina Division of Marine Fisheries (DMF) proclamation].

Recreational: 9-inch fork length minimum size, 50-fish creel limit in state Atlantic Ocean and internal coastal waters north of Cape Hatteras, season is year-round. Beginning in April 2023 the minimum size remains 9-inches and a lower creel limit of 40-fish. In Federal waters north of cape Hatteras the minimum size is 10-inches fork length, 40-fish creel limit, and a season shortened to May 1 – Dec 31.

Commercial Fishery

All scup landings are reported through the North Carolina Trip Ticket Program. Flounder trawl is the main gear landing scup from north of Cape Hatteras (Figure 1). Annual landings were variable from 1994 through 2022 with very low landings during 2012, 2013, 2020, and 2022 (Table 1, Figure 2). Landings in 2022 were lower in 2021 but there were also half as many trips in 2022.

Low landings in 2012 to 2013 were partly due to shoaling at Oregon Inlet limiting access to large vessels (such as trawlers) and the consequent landing of most of North Carolina's scup in Virginia and other states. During 2014 through 2022, ocean trawl vessels returned to North Carolina (mainly Beaufort and Washington areas) to land catches rather than landing in Virginia and other states.

Recreational Fishery

All scup harvest is reported through the National Oceanic and Atmospheric Administration (NOAA) Marine Recreational Information Program. Recreational estimates across all years have been updated and are now based on the new Marine Recreational Information Program (MRIP) Fishing Effort Survey-based calibrated estimates. For more information on MRIP see https://www.fisheries.noaa.gov/topic/recreational-fishing-data. Recreational harvest of scup north of Cape Hatteras was only reported in 1994, 2000, 2011, 2012 and 2015 (Table 1, Figure 2).

MONITORING PROGRAM DATA

Fishery-Dependent Monitoring

Two DMF sampling programs collect biological data on commercial and recreational fisheries that catch scup north of Cape Hatteras. Program 433 (Ocean Trawl Fishery) is the primary program that collects harvest length data. Other commercial sampling programs focusing on fisheries that do not target scup rarely collect biological data. DMF sampling of the recreational fishery through the NOAA marine recreational information program collects harvest length data. There were no clear trends in commercial length data during 1994 through 2022. Annual mean lengths have been consistent since 2001 and 2022 was consistent with past years. The number of scup measured in 2022 decreased significantly than in prior years, which could be contributed to the low number of trips. (Table 2). Recreational harvest length data were only collected in 1994, 2000 and 2015 for scup north of Cape Hatteras. Only two fish in 1994, two fish in 2000, and one fish in 2015 were measured, very few scup are encountered in this fishery (Table 3). Age data have not been collected by DMF for scup north of Cape Hatteras as ASMFC has not requested it.

Fishery-Independent Monitoring

DMF currently does not have independent sampling programs in the Atlantic Ocean or internal estuarine waters north of Cape Hatteras that encounter scup.

RESEARCH NEEDS

Updated research needs from the 2015 60th Stock Assessment Workshop are provided below. The research needs listed below start with the most recent. Text in parentheses indicates known progress made to address needs.

- A standardized fishery dependent catch per unit effort for tows targeting scup, from either Northeast Fisheries Observer Program observer samples or the commercial study fleet, might

be considered as an additional index of abundance to complement survey indices in future benchmark assessments. — Progress unknown at this time

- Explore additional sources of length and age data from fisheries and surveys in the early parts of the time series to provide additional context for model results. — Progress unknown at this time
- Explore experiments to estimate the catchability of scup in NEFSC and other research trawl surveys (side-by-side, camera, gear mensuration, acoustics, etc.). — Progress unknown at this time
- Refine and update the Manderson et al. availability analysis when/if a new ocean model is available (need additional support). Explore alternative niche model parameterizations including laboratory experiments on thermal preference and tolerance. — Progress unknown at this time
- Explore study fleet data in general for information that could provide additional context and/or input for the assessment. — Progress unknown at this time
- A scientifically designed survey to sample larger and older scup would likely prove useful in improving knowledge of the relative abundance of these large fish. — Progress unknown at this time
- Improve estimates of discards and discard mortality for commercial and recreational fisheries. — Some progress has been made
- Evaluate indices of stock abundance from new surveys. — Some progress has been made
- Quantify the pattern of predation on scup. — Some progress has been made
- Conduct biological studies to investigate maturity schedules and factors affecting annual availability of scup to research surveys. — Some progress has been made
- Explore the utility of incorporating ecological relationships, predation, and oceanic events that influence scup population size on the continental shelf and its availability to resource surveys into the stock assessment mode. — Some progress has been made
- Evaluate alternate forms of survey selectivity in the assessment to inform indices of abundance at higher ages. — Some progress has been made
- Evaluation of indicators of potential changes in stock status that could provide signs to managers of potential reductions of stock productivity in the future would be helpful. — Some progress has been made
- A management strategy for evaluation of alternative approaches to setting quotas would be helpful. — Progress unknow at this time
- Current research trawl surveys are likely adequate to index the abundance of scup at ages 0 to 2. However, the implementation of new standardized research surveys that focus on accurately indexing the abundance of older scup (ages 3 and older) would likely improve the accuracy of the stock assessment. — Some progress has been made
- Continuation of at least the current levels of at-sea and port sampling of the commercial and recreational fisheries in which scup are landed and discarded is critical to adequately

characterize the quantity, length, and age composition of the fishery catches. — Progress has been made and research is ongoing

- Quantification of the biases in sampling of the catch and discards, including non-compliance, would help confirm the weightings used in the model. Additional studies would be required to address this issue. — Progress unknow at this time
- The commercial discard mortality rate was assumed to be 100 percent in this assessment. Experimental work to better characterize the discard mortality rate of scup captured by different commercial gear types should be conducted to more accurately quantify the magnitude of scup discard mortality. — Progress unknow at this time

MANAGEMENT STRATEGY

Scup stock assessments are completed by the NMFS Northeast Fisheries Science Center (NEFSC). Results from the 2020 stock assessment update are used to guide management. Data are analyzed from the previous year based on decisions made for the benchmark assessment. The Summer Flounder, Scup and Black Sea Bass Fishery Management Plan (FMP) and amendments use output controls (catch and landings limits) as the primary management tool, with landings divided between the commercial (78 percent) and recreational (22 percent) fisheries. Beginning in 2023, catch-based allocations will continue, and revised allocations will be implemented with 65 percent being commercial and 35 percent being recreational. The FMP also includes minimum fish sizes, bag limits, seasons, gear restrictions, permit requirements, and other provisions to prevent overfishing and ensure sustainability of the fisheries. Recreational bag and size limits and seasons are determined on a state-by-state basis using conservation equivalency in state waters and coastwide measures in federal waters. The commercial quota is coastwide during the winter seasons (January-April; October-December) and state specific during the summer season (May-September).

LITERATURE CITED

ASMFC (Atlantic States Marine Fisheries Commission). 2018. Fisheries Management, Scup. http://www.asmfc.org/species/scup.

MAFMC (Mid-Atlantic Fishery Management Council). 2018. Fisheries, Summer Flounder, Scup, Black Sea Bass. http://www.mafmc.org/sf-s-bsb/.

NMFS (National Marine Fisheries Service) Northeast Fisheries Science Center. 2015. Benchmark Stock Assessment of Scup. U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Northeast Fisheries Science Center.

NCDMF (North Carolina Division of Marine Fisheries). 2022. North Carolina Fishery Management Plan for Interjurisdictional Fisheries, 2022 Information Update. North Carolina Division of Marine Fisheries, Morehead City, North Carolina. 19 pp.

NCDMF. 2022. https://deq.nc.gov/about/divisions/marine-fisheries.

Steimle, F., C. Zetlin, P. Berrien, D. Johnson, and S. Chang. 1999. Scup, Stenotomus chrysops, Life History and Habitat Characteristics. National Oceanic and Atmospheric Administration. 48 pp.

TABLES

Table 1. Recreational harvest (number of fish landed and weight in pounds) and releases (number of fish) and commercial harvest (weight in pounds) of scup (north of Cape Hatteras) from North Carolina for the period 1994 – 2022. Note: * represents confidential data.

	Recreational			Commercial	
Year	Numbers Landed	Numbers Released	Weight Landed (lb)	Weight Landed (lb)	Total Weight (lb)
1994	827	1,231	365	304,350	304,715
1995	0	0	0	23,872	23,872
1996	0	1,267	0	58,559	58,559
1997	0	0	0	1,292	1,292
1998	0	0	0	14,718	14,718
1999	0	0	0	0	0
2000	165	0	169	0	169
2001	0	0	0	0	0
2002	0	0	0	*	*
2003	0	0	0	142,996	142,996
2004	0	0	0	523,554	523,554
2005	0	0	0	351,609	351,609
2006	0	0	0	139,420	139,420
2007	0	0	0	66,856	66,856
2008	0	0	0	205,703	205,703
2009	0	0	0	244,020	244,020
2010	0	0	0	102,745	102,745
2011	181	0	200	308,883	309,083
2012	521	0	516	3,903	4,419
2013	0	0	0	28,394	28,394
2014	0	0	0	160,399	160,399
2015	3,446	0	380	229,664	230,044
2016	0	0	0	111,901	111,901
2017	0	0	0	199,711	199,711
2018	0	0	0	78,944	78,944
2019	0	0	0	216,632	216,632
2020	0	0	0	38,719	38,719
2021	0	0	0	54,118	54,118
2022	0	0	0	18,275	18,275
Mean	177	86	56	125,859	125,915

Table 2. Scup (north of Cape Hatteras) length (fork length, inches) data from commercial fish house samples in North Carolina, 1994-2022.

Year	Mean Length	Minimum Length	Maximum Length	Total Number Measured
1994	9	4	15	3,342
1995	9	7	12	169
1996	10	8	14	76
1997	5	4	16	176
1998	9	7	13	66
1999	6	5	7	3
2000	7	5	12	25
2001	10	8	14	35
2002	10	9	13	393
2003	11	4	16	1,210
2004	10	6	16	2,584
2005	11	4	15	1,817
2006	11	6	15	1,568
2007	11	7	16	1,659
2008	11	7	16	3,493
2009	11	6	16	1,740
2010	11	8	15	1,450
2011	11	8	16	1,076
2012	13	11	16	7
2013	10	8	15	261
2014	11	8	17	2,725
2015	11	5	17	2,998
2016	11	6	15	1,175
2017	11	8	16	2,879
2018	11	7	17	1,940
2019	11	6	17	3,037
2020	11	8	15	891
2021	11	7	16	1,628
2022	10	8	14	291

Table 3. Scup (north of Cape Hatteras) length (fork length, inches) data from NOAA Marine Recreational Information Program recreational samples in North Carolina, 1994-2022.

Year	Mean Length	Minimum Length	Maximum Length	Total Number Measured
1994	7	7	9	2
1995	0	0	0	0
1996	0	0	0	0
1997	0	0	0	0
1998	0	0	0	0
1999	0	0	0	0
2000	11	11	11	2
2001	0	0	0	0
2002	0	0	0	0
2003	0	0	0	0
2004	0	0	0	0
2005	0	0	0	0
2006	0	0	0	0
2007	0	0	0	0
2008	0	0	0	0
2009	0	0	0	0
2010	0	0	0	0
2011	0	0	0	0
2012	0	0	0	0
2013	0	0	0	0
2014	0	0	0	0
2015	4	4	4	1
2016	0	0	0	0
2017	0	0	0	0
2018	0	0	0	0
2019	0	0	0	0
2020	0	0	0	0
2021	0	0	0	0
2022	0	0	0	0

FIGURES

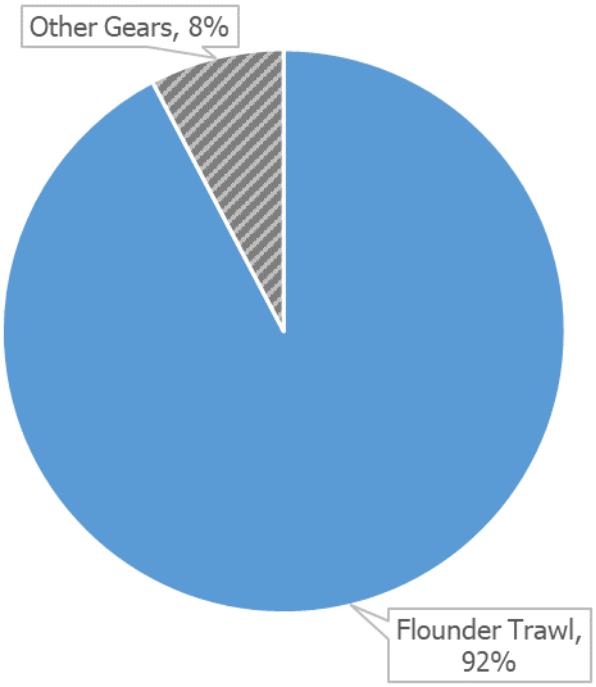

Figure 1. Commercial harvest of scup (north of Cape Hatteras) in North Carolina by gear type in 2022. Note: data for Other Gears are confidential data.

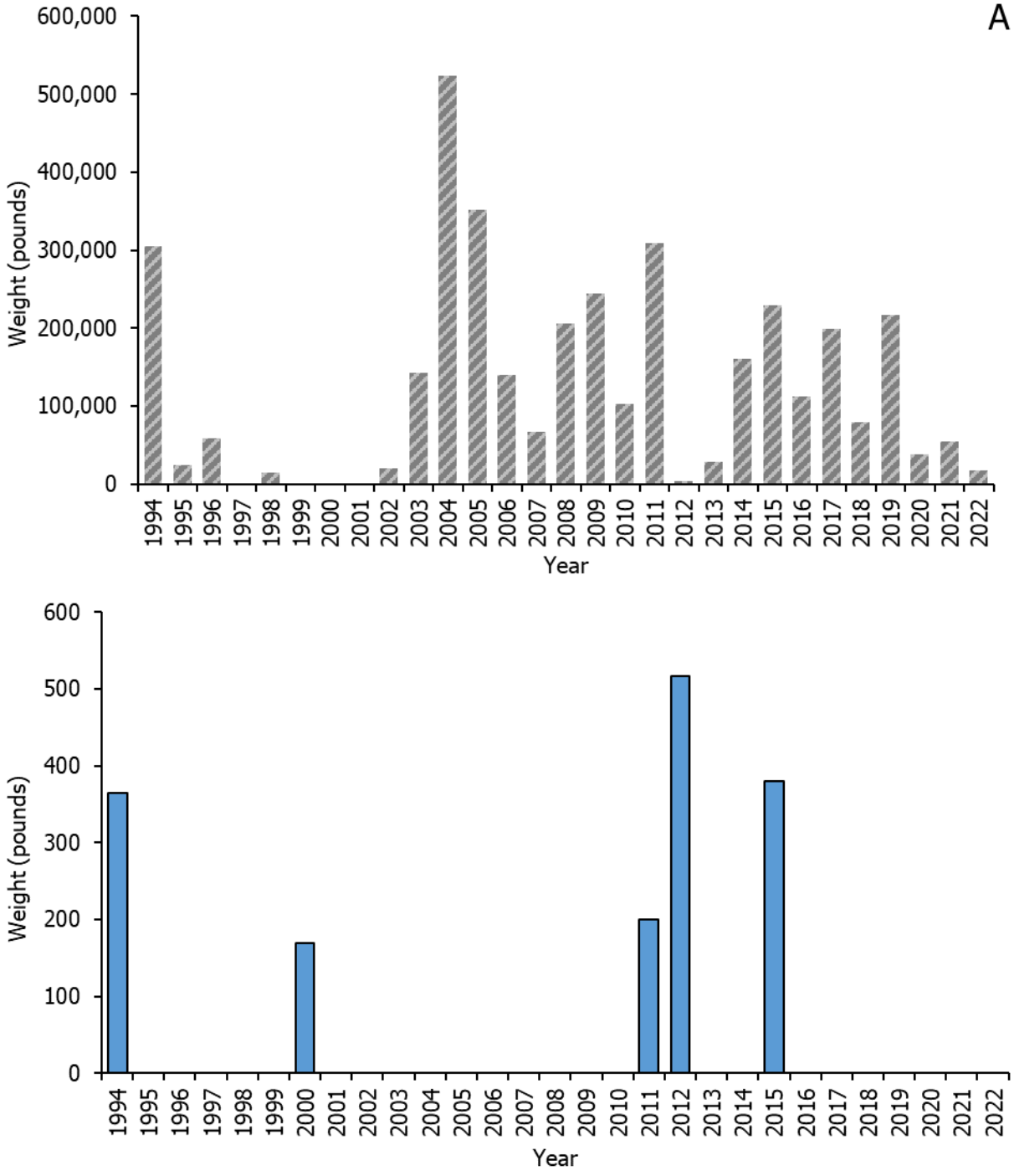

Figure 2. Annual commercial (A) and recreational (B) landings in pounds for scup (north of Cape Hatteras) in North Carolina from 1994-2022.