

Chapter III : MARINE RECREATIONAL FISHERY STATISTICS

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PROGRAM NARRATIVE

Information on commercial fisheries has long been collected by the National Oceanic and Atmospheric Administration (NOAA) Fisheries, formerly the National Marine Fisheries Service (NMFS). However, data on marine recreational fisheries were not collected in a systematic manner by NOAA Fisheries on a continuing basis until 1979. The purpose of the NOAA Fisheries Marine Recreational Information Program (MRIP) is to establish a reliable database for estimating the impact of marine recreational fishing on marine resources.

Effective fisheries management requires information on the number and size distributions of each species caught in every state, sub-region, or finer sub-unit. The North Carolina Fisheries Reform Act of 1997 mandated the development of fishery management plans (FMPs) for fisheries of importance to North Carolina. The estimates of finfish harvest and angler participation provided by the MRIP play a key role in the FMP development process. The MRIP helps meet the goals of the Magnuson-Stevens Fishery Conservation and Management Act (MSFCMA). The MSFCMA mandates a national program for management of fishery resources in the ocean zone known as the Exclusive Economic Zone (EEZ), or the area between 3 to 200 miles from shore. MSFCMA also requires that fishery management plans consider both recreational and commercial fisheries as well as their harvests.

Due to the MRIP survey's inability to provide reliable catch statistics for fisheries management of some species at the state level due to low sample size, the North Carolina Division of Marine Fisheries (NCDMF) increased the annual number of anglers interviewed by approximately six times (1,400 to 8,000) beginning in 1987. A target sample size of 15,000 angler intercepts was later established to further improve precision of catch estimates, which improved dramatically. The NCDMF also implemented quality control measures needed to improve estimates of catch.

The NCDMF receives approximately 700 data requests for information from MRIP each year. This chapter is designed to help understand how the data are collected and what types of data are available within this program. This summary should also allow individuals to more precisely choose the information that is most applicable to their specific needs.

SURVEY METHODOLOGY

Marine Recreational Information Program (MRIP)

MRIP is a national program that uses several surveys to obtain catch and effort data for marine finfish at the regional level. MRIP evolved from the Marine Recreational Fisheries Statistics Survey (MRFSS) and included improvements in survey and estimation methodologies to remove sources of bias. Prior to 2018, MRIP consisted of two complementary surveys: 1) the Coastal Household Telephone Survey (CHTS), a random-digit-dialing landline telephone survey within the coastal zones of each state to determine the number of fishing households and the numbers of fishing trips taken and 2) the Access Point Angler Intercept Survey (APAIS) for obtaining catch rates and species composition from anglers fishing in shore-based, charter boat, and private boat fishing modes. The data from the two surveys were combined to provide estimates of the total number of fish caught, released, and harvested; weight of the harvest; total number of trips; and the number of people participating in marine recreational fishing. The National Research Council (NRC) identified under-coverage, inefficiency and bias issues within the MRFSS survey and estimation methodologies (NRC 2006). These deficiencies spurred the development of MRIP as an alternative data collection program to MRFSS.

The APAIS component of MRIP was improved in 2013 to sample throughout the day (24-hour coverage) and remove any potential bias by controlling the movement of field staff to alternative sampling sites. Before this improvement, samplers were allowed to move from their assigned site to more active fishing locations but could not statistically account for this movement when calculating estimates. MRIP also implemented the Fishing Effort Survey (FES) in 2018 to address the NRC concerns of under-coverage of the angling public, declining number of households using landline telephones, reduced response rates, and memory recall issues of the CHTS.

Now, MRIP consists of two complementary surveys: 1) a mail survey of households (FES) in coastal counties to obtain trip information and 2) an intercept survey of anglers (APAIS) at shore side access sites to obtain catch rates and species composition. The data from the two surveys are combined to provide estimates of the total number of fish caught, released, and harvested; the weight of the harvest; the total number of trips; and the number of people participating in marine recreational fishing. For-hire fishing effort is captured through telephone interviews of for-hire captains. All states on the Atlantic and Gulf coasts participate in the FES and APAIS with the exception of Texas and Louisiana.

Dockside Interviews

The intercept survey gathers catch and demographic data from marine recreational anglers who have just completed fishing in one of five fishing modes (the type of place or platform from which marine recreational fishing occurred):

- Charter boat
- Private/rental boat
- Beach/bank
- Man-made structure
- Headboat

The intercept survey in North Carolina continuously samples angler catches throughout the year. Intercept sampling is separated by mode and wave (two-month time period).

A complete statewide list of access sites for marine recreational fishing is continuously updated (<https://www.st.nmfs.noaa.gov/msd/html/siteRegister.jsp>). Sites are chosen for interviewing by randomly selecting from access sites that are weighted by estimates of expected fishing activity. The sites are weighted to ensure that each angler trip has a representative probability of being included in the sample. Sampling is distributed among weekdays, weekends, and holidays.

Anglers are intercepted, screened, and interviewed at assigned access sites upon completion of their fishing trips. Data are recorded on standard APAIS coding forms (Appendix 2). A small number of interviews (less than five percent) are conducted with beach/bank shore mode anglers who have not completed their trip. At heavy use sites, every attempt is made to intercept and interview all anglers. If that is not possible, angler counts are obtained to augment interviews. In 2005, NCDMF began routine sampling of headboats to obtain length data from discards.

Each intercept interview consists of:

- an introduction to the survey,
- an oral interview concerning the fishing trip just completed,
- thorough examination of the respondent's catch (visually inspect for correct species identification), and
- measurement of lengths and weights from all of the fish in the respondent's catch (or if necessary, a random sample).

Interview procedures vary slightly among fishing modes:

- Private/rental/charter boat anglers are interviewed at boat ramps, marina slips, and hoists while they are leaving their boats or dockside while they are cleaning their boats.
- Anglers fishing from natural shorelines can be widely distributed along beaches and banks with multiple access points. Samplers often have to move from angler to angler within the defined boundaries of the site to obtain interviews.
- Man-made structures commonly have a single exit point where samplers can easily intercept departing anglers.
- Headboat sampling is conducted onboard the vessel at sea.

Interviewing procedures have been developed to allow separate recording of information on:

- catch unavailable for identification (Type B catch),
- available catch that cannot be easily subdivided among anglers,
- catch obtained during multiple-day boat trips, and
- at-sea discards from headboats.

Fish that are available for identification, enumeration, weighing, and measuring by the interviewers are called landings or Type A catch. Fish not brought ashore in whole form but used as bait, filleted, discarded dead, or are otherwise unavailable for inspection are called Type B1 catch.

Finally, fish released alive are called Type B2 catch. Type A and Type B1 together comprise harvest, while all three types (A, B1, and B2) represent total catch.

Species such as Flounder and Kingfish are morphologically ambiguous and cannot be reliably identified to the species level by the angler. As such, discards are identified to the nearest taxonomic category and estimates of released catch are produced at the genus level. Because there are no sources of information with an appropriate timeline or area resolution that can be used to partition the released estimates of ambiguous congener species into their constituent species, Type A catch is used to delineate between them. For example, a ratio of Southern Flounder, Summer Flounder, and Gulf Flounder to total flounder observed is determined from the Type A catch at the estimation level (i.e., state, year, wave, area). These proportions of Southern, Summer, and Gulf Flounder are applied to the estimates of left-eyed flounder released (unobserved Type B2) catch to produce estimates of discards for each of the specific flounder species. An identical approach is applied to Kingfish (e.g., Gulf, Southern, Northern) as well as Spotted Seatrout and Weakfish.

For the Type B catch (fish not available for the interviewer's examination), information is only recorded for individual anglers. Beginning in 2005, headboat anglers were sampled at sea, allowing accurate identification of Type B catch for the first time. For the Type A catch (fish available for inspection), grouped catch is allowed, except when in beach/bank mode. This is a concession to the fact that multiple anglers often will keep all their catch in a single container and, at the end of the trip, they are not sure who caught which fish.

Fishing Effort Survey

The FES mail survey employs a dual-frame design with two non-overlapping frames: 1) state residents sampled from the United States Postal Service computerized delivery sequence file (CDS) and 2) non-residents sampled from state-specific lists of licensed saltwater anglers. Non-residents are defined as individuals who were licensed to fish in one of the target states but lived in a different state. Sampling from the CDS uses a stratified design in which households with licensed anglers are identified prior to data collection. The address frame for each state is stratified into coastal and non-coastal strata defined by geographic proximity to the coast. For each wave and stratum, a simple random sample of addresses are selected from the CDS and matched to addresses of anglers who are licensed to fish within their state of residence. Non-resident anglers were sampled directly from state license databases. The sample frame for each of the targeted states consisted of unique household addresses that were not in the targeted state but had at least one person with a license to fish in the targeted state during the wave.

The FES mail survey (Appendix 3) collects fishing effort data for all household residents, including the number of saltwater fishing trips by fishing mode (shore and private boat). The FES is a self-administered mail survey, administered for six, two-month reference waves annually. The initial survey mailing is sent one week prior to the end of the reference wave so that materials are received right at the end of that wave. This initial mailing is delivered by regular, first-class mail and includes a cover letter stating the purpose of the survey, a survey questionnaire, a postage-paid return envelope, and a \$2 cash incentive. One week after the initial mailing, a follow-up, thank you and reminder postcard is mailed via regular first-class mail to all sampled addresses.

For addresses that could be matched to a landline telephone number, an automated voice message is also delivered as a reminder to complete and return the questionnaire. Three weeks after the initial survey mailing, a final mailing is delivered to all addresses that have not yet responded to the survey.

Effort Estimates

In the MRIP, fishing effort is defined as the estimated number of fishing trips taken by individual anglers. The number of individual fishing trips is estimated for each state, coastal county, mode, and bimonthly wave. Total effort represents residents who are coastal, non-coastal, and out-of-state. Data from the mail survey of households are used to calculate the mean number of trips per household in each fishing mode during each wave.

The FES estimates fishing effort by residents of sampled states in number of angler-trips. The basic approach uses a Horvitz-Thompson total estimator with sample weights that reflect sample inclusion probabilities, a nonresponse adjustment, and a post-stratification adjustment to known population totals. A final adjustment that accounts for non-resident (i.e., out of frame) fishing activity is applied to estimate total effort by fishing mode. This adjustment is derived from the APAIS.

After the final effort estimates are generated, they are stratified into primary fishing areas to produce effort estimates by state, mode, wave, and area. An area is defined by the distance offshore where the fishing took place. The areas are inland, ocean ≤ 3 miles, and ocean > 3 miles, although this can vary from state to state (*see Appendix III.4 for complete definitions and discussion*). Within each state, wave, and mode, trips are allocated to a primary fishing area in proportion to the number of interviewed anglers in that state, wave, and mode who made trips in that area. The intent is to produce effort estimates at a level that is suitable for multiplication with catch per angler trip estimates from the intercept survey.

Catch Estimates

The catch of each finfish species is estimated for each sub-region, state, fishing mode, primary fishing area, and wave. The total number of fish caught in a particular fishing mode and area of fishing is estimated from:

- the estimated number of fishing trips taken in that state, wave, mode, and area; and
- the mean number of fish caught per trip taken in that state, wave, mode, and area.

All fish that are caught by intercepted anglers are not available for the interviewer's inspection. The intercept interview and the estimation procedures distinguish between those fish brought ashore in whole form, and those not brought ashore in whole form:

- Fish that are available for identification, enumeration, weighing and measuring by the interviewers are called landings or Type A catch.
- Fish not brought ashore in whole form but used as bait, filleted, or discarded dead are called Type B1 catch (Type A and Type B1 together comprise harvest).
- Fish released alive are called Type B2 catch.

Catch per trip estimates and expanded catch estimates are made for these three types of catch. Total Catch is the sum of Type A catch, Type B1 catch, and Type B2 catch. The purpose is to distinguish between those species identified and measured by trained interviewers, and those species reported to the interviewers by anglers. Anglers occasionally misidentify species; therefore, their reported measurements are subject to several types of bias.

As noted above, only individual interviews are allowed for Type B catch, while for Type A catch some amount of clustering is allowed and accounted for in the estimation. Self-weighting estimators of catch per trip were used, meaning that the site selection methodology (giving sites with more anglers a higher probability of being sampled) ensures all angler trips have an equal probability of being included in the sample.

Lengths and weights are obtained by sampling the fish caught and brought ashore in whole form by intercepted anglers. Therefore, estimated weights can only be calculated directly for Type A catch fish. Since the size composition of the remainder of the total catch (Type B1 catch and Type B2 catch) is unknown and may differ from that of the fish represented in Type A catch, estimating the weight of the remainder of the catch is not possible without assumptions.

In estimating the weight of harvested fish (Type A and B1 catch), we assume that the mean weight of the Type B1 catch is equal to that of the Type A catch for each sub-region, state, mode, primary area, wave, and species.

Most of the trips sampled in the intercept survey are completed trips with anglers being interviewed only at the end of the fishing trip. Some incomplete trips are sampled in the shore mode which are converted into complete trips by multiplying the recorded catch per hour by the anticipated total trip length. Once catch per trip estimates have been produced for each sub-region, state, wave, mode, area, species, and catch type, they can be multiplied by the appropriate effort estimate to produce estimates of total catch. For estimates of total harvest weight, these total catch estimates are in turn multiplied by the average weight per measured fish in the appropriate mode and area.

Catch estimates are obtained using information from both the dockside interviews and mail/telephone surveys using the following formula:

$$(\text{Angler Trips}) * (\text{Average Catch Per Angler Trip}) = \text{Total Catch}$$

where trips equal the total number of finfish trips by mode and area, average catch per trip is the mean catch by species, mode, and area, and total catch is the total of each species by mode and area.

Catch estimates calibrated using the FES are presented for the last 20 years. However, data back to 1981 were also calibrated and are available upon request (see Contacts on page III-12).

Precision of Estimates

The numbers and pounds presented are estimates, not actual counts; therefore, the level of precision varies. Precision refers to the estimate's variability. Statistical comparison between numbers must include this variability.

Precision refers to the dispersion of the sample measurements used to calculate an estimate and the resultant variability in the estimate. The square root of the estimate of sampling variance is an estimate of the standard error of the estimate and is almost universally used in sample surveys as a measure of precision.

The standard error is necessary for calculating confidence intervals around an estimate. The width of a confidence interval is a function of the probability level selected and is determined from the Student's t-distribution or the normal distribution. Using the normal distribution, the most commonly used confidence interval (a 95% confidence interval) is given by:

$$\text{estimate} \pm 1.96 \times (\text{estimate of standard error}).$$

Confidence intervals provide another indication of the precision of the estimated total catch. At the same confidence level, a broad interval relative to the estimate indicates a less precise estimate than does a narrow interval. The 95% confidence interval indicates a 95% certainty that the actual total catch is between the upper and lower confidence limits.

The standard error is also used to calculate the proportional standard error (PSE). The PSE expresses the standard error as a percentage of the estimate (standard error/estimate). It provides an alternative measure of precision and is useful in comparing the relative precision of two estimates.

A small PSE indicates a more precise estimate than does a large PSE. A PSE of 20% or less is generally considered acceptable in fisheries data. An alternative way of expressing a 95% confidence interval, in terms of percentages, would be:

$$\text{estimate} \pm (1.96 \times \text{PSE}) \text{ percent}.$$

SURVEY LIMITATIONS

Rare Event and Pulse Species

Species that seldom occur in recreational catches are referred to as rare event species. They include such species as Tripletail, Tarpon, Swordfish, Gulf Flounder, etc. Pulse fisheries target species such as Cobia that are highly migratory and only occur seasonally in North Carolina waters, as well as species such as Red Snapper which have a very limited recreational season. For both rare event and pulse fishery species, samplers are unable to intercept enough anglers with these species in their catch to produce precise estimates of catch.

Anadromous Species

The MRIP is only conducted in saltwater and brackish water areas, along with tidal portions of sounds, bays, and rivers. Freshwater areas are not included in the survey. Alternative methods for assessing recreational catch of freshwater resident species and anadromous species such as American Shad, Hickory Shad, and Striped Bass must be considered. See chapter IV.

CONTACTS

The MRIP is administered by the NOAA Fisheries Office of Science & Technology, Fisheries Statistics Division. Several states, including North Carolina, manage the dockside sampling portion of the survey. Catch and effort estimates by year and species are available back to 1981. In North Carolina, this project is supported, in part, by the US Fish and Wildlife Service through the Sport Fish restoration Program, Grant F-31. For additional information regarding the survey or to request data not presented in this report, please contact:

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Table III.1 North Carolina marine recreational finfish harvest by species.

Species	Number Harvested		Pounds Harvested	
	2020	2019	2020	2019
Amberjacks	10,714	4,236	212,826	81,769
Barracudas	7,694	1,661	72,196	15,529
Bass, Sea	133,096	151,999	195,098	220,377
Bass, Striped ¹	0	9	0	26
Bluefish	2,108,296	2,752,589	2,124,224	3,011,480
Bonito, Atlantic	52,337	35,874	179,803	122,931
Cobia	15,067	10,090	407,883	254,963
Croaker, Atlantic	673,377	651,268	223,685	224,337
Dolphin	262,372	458,086	2,149,038	3,147,384
Drum, Black	213,320	156,401	612,932	404,452
Drum, Red	413,419	97,186	1,758,789	436,219
Flounder, Southern	152,244	163,045	398,769	387,203
Flounder, Summer	24,699	34,895	37,935	52,872
Groupers	5,464	10,245	25,393	104,455
Grunts	57,258	89,057	83,906	91,273
Jacks	22,914	14,269	148,307	54,844
Kingfishes	3,865,039	3,370,636	452,569	881,104
Mackerel, King	146,423	184,962	1,376,229	1,446,939
Mackerel, Spanish	1,286,131	1,478,890	1,843,314	1,694,247
Perch, Silver	21,049	32,444	3,838	7,520
Pigfish	454,825	432,005	147,533	146,570
Pinfish	869,751	955,550	170,160	217,718
Pompano, Florida	441,569	1,734,862	406,980	769,603
Porgies	6,514	8,975	11,485	9,311
Puffers	1,186,892	2,501,094	507,458	1,016,972
Seatrout, spotted	2,053,354	1,937,250	3,632,315	3,334,163
Sharks	8,336	15,660	21,664	110,510
Sharks, Dogfishes	3,073	8,962	16,763	50,477
Sheepshead	247,390	221,419	592,774	590,150
Snappers	54,376	33,055	83,352	50,678
Spot	920,512	2,822,884	297,813	851,998
Tuna, Bluefin ²	17	70	4,513	23,921
Tuna, Yellowfin	83,766	44,864	2,429,665	1,190,484
Wahoo	19,055	17,098	462,937	454,391
Weakfish	82,124	39,061	105,729	43,252

¹ Striped Bass landings reflect Atlantic Ocean catches only.

² Landings for Atlantic Bluefin Tuna reflect the Highly Migratory Species fishing year (January 1 through December 31).

NOTE: The number and pounds of finfish listed represent estimated harvest; finfish released alive are not included. Recreational finfish catches from headboats are not included in this table. The National Marine Fisheries Service collected headboat data separately in 2017.

Table III.2 North Carolina marine recreational finfish overall harvest and released finfish.

Year	Number Harvested	Pounds Harvested	Number Released
2020	18,954,501	24,915,542	53,523,311
2019	22,991,602	23,819,357	58,780,769
2018	16,167,035	20,064,976	62,467,785
2017	24,992,736	27,434,020	73,343,486
2016	29,612,819	28,782,892	79,311,111
2015	32,029,176	29,382,094	76,359,197
2014	35,266,582	26,160,399	79,350,225
2013	37,097,386	28,539,154	71,387,944
2012	24,849,139	24,382,691	59,475,261
2011	28,913,465	31,138,553	61,538,383
2010	28,339,722	28,827,120	66,210,770
2009	28,373,054	32,386,251	58,585,443
2008	24,399,920	24,230,177	51,181,826
2007	32,030,305	36,948,737	49,000,158
2006	32,644,303	35,932,215	54,354,928
2005	31,216,078	37,847,540	40,759,376
2004	29,896,721	39,832,941	40,866,383
2003	33,999,152	31,081,963	37,896,160
2002	33,091,963	31,317,369	40,029,463
2001	29,434,712	35,002,246	41,169,692
2000	22,583,867	29,606,819	37,480,759
1999	18,797,344	24,025,603	30,867,860
1998	21,495,066	20,632,560	27,618,324
1997	17,611,273	25,667,654	24,463,398
1996	17,648,228	21,388,190	21,126,385
1995	20,285,155	21,318,710	21,402,764
1994	27,207,985	22,721,036	26,574,243
1993	19,959,266	18,892,022	18,868,785
1992	22,047,490	20,659,018	23,975,805
1991	25,513,630	23,226,188	21,896,152
1990	30,547,188	28,083,671	17,794,105
1989	31,860,381	29,324,818	14,661,067
1988	32,122,713	10,851,835	18,927,988
1987	27,869,954	32,592,416	12,701,702
1986	32,471,202	36,719,837	13,379,969
1985	43,539,768	31,751,840	12,912,223
1984	29,159,941	31,647,052	10,715,507
1983	33,420,274	36,416,585	8,248,603
1982	24,255,664	17,222,968	7,843,562
1981	40,960,641	32,560,880	16,030,869

Table III.3 North Carolina marine recreational fishing trip estimates by mode (numbers).

Year	Beach/Bank	Charter Boat	Manmade	Private Boat	Total
2020	5,542,658	214,822	5,228,098	5,413,655	16,399,233
2019	6,711,048	160,692	6,021,580	4,646,520	17,539,840
2018	6,879,419	148,004	5,317,495	4,279,389	16,624,306
2017	7,745,619	149,438	9,512,489	5,044,731	22,452,276
2016	10,187,550	140,575	5,970,329	4,860,391	21,158,845
2015	6,699,488	114,043	8,516,390	4,992,920	20,322,840
2014	7,919,735	96,432	6,014,374	4,895,957	18,926,498
2013	6,028,869	111,366	7,097,673	4,847,955	18,085,862
2012	7,156,627	159,160	6,184,923	5,054,638	18,555,348
2011	8,086,490	129,380	6,040,312	5,212,669	19,468,850
2010	7,877,619	138,577	7,174,395	4,982,732	20,173,323
2009	7,751,222	129,412	6,642,257	4,822,295	19,345,187
2008	8,489,916	170,428	6,067,854	4,599,900	19,328,098
2007	6,183,367	185,618	7,105,305	4,671,856	18,146,146
2006	7,199,224	201,368	7,671,720	4,542,632	19,614,943
2005	5,206,759	214,826	7,369,215	4,359,576	17,150,375
2004	6,695,734	183,039	6,245,702	4,276,395	17,400,870
2003	5,353,909	131,566	6,243,796	3,746,771	15,476,042
2002	5,501,125	142,644	5,913,968	3,539,123	15,096,859
2001	5,479,658	160,791	6,105,185	3,363,853	15,109,488
2000	5,687,088	164,116	6,088,224	3,388,516	15,327,944
1999	4,215,059	200,350	5,113,589	3,153,794	12,682,792
1998	3,677,092	189,664	4,435,131	2,806,930	11,108,817
1997	3,618,411	242,043	4,552,528	2,742,087	11,155,069
1996	3,851,521	204,608	3,895,335	2,471,857	10,423,321
1995	3,643,176	167,321	3,958,161	2,222,995	9,991,653
1994	3,874,950	177,061	4,246,772	2,231,472	10,530,255
1993	4,404,924	117,536	4,105,818	2,233,903	10,862,180
1992	4,403,691	87,352	5,097,113	2,277,847	11,866,004
1991	4,497,351	81,065	4,406,694	2,240,961	11,226,071
1990	5,338,764	83,234	4,526,403	2,164,387	12,112,788
1989	4,485,729	94,199	3,955,450	2,137,255	10,672,633
1988	4,444,539	65,320	3,960,772	2,009,639	10,480,270
1987	4,566,175	89,642	2,510,303	1,867,135	9,033,255
1986	4,260,280	101,447	2,733,767	2,076,308	9,171,802
1985	3,569,600	226,397	3,323,582	1,753,973	8,873,553
1984	3,335,089	226,710	4,027,935	1,798,108	9,387,842
1983	4,057,922	248,825	4,219,017	1,746,350	10,272,113
1982	2,789,810	97,074	2,253,604	1,721,703	6,862,191
1981	2,827,938	100,461	2,498,407	1,332,324	6,759,130

Table III.4 North Carolina Coastal Recreational Fishing Licenses¹ issued by residency.

Year	In-State	Out-of-State	Total
2020	320,373	177,734	498,107
2019	301,847	156,759	458,606
2018	277,698	151,232	428,930
2017	305,422	164,149	469,571
2016	306,718	160,986	467,704
2015	314,557	166,287	480,844
2014	319,069	167,218	486,287
2013	316,514	163,486	480,000
2012	304,840	155,457	460,297
2011	287,914	151,332	439,246
2010	294,163	159,356	453,519
2009	281,471	153,617	435,088
2008	267,062	144,819	411,881
2007	314,569	154,952	469,521

¹All lifetime inland state fishing licenses sold prior to 2007 were grandfathered into the new CRFL requirement on January 01, 2007. Lifetime CRFLs are not included in this table.

Table III.5 Directed trips for major species in North Carolina by year.

Year	Amberjack, Greater		Barracuda, Great		Bass, Black Sea		Bass, Striped ¹		Bluefish	
	Trips	PSE	Trips	PSE	Trips	PSE	Trips	PSE	Trips	PSE
2020	13,621	22.5	19,861	24.0	484,702	9.2	3,323	57.3	1,801,185	8.3
2019	10,645	31.4	25,651	38.0	596,924	9.3	28,365	25.7	2,699,198	9.7
2018	18,103	36.4	21,941	32.2	481,773	10.6	28,388	41.7	3,031,288	10.4
2017	16,026	21.6	16,193	35.4	1,001,694	9.3	32,116	35.9	3,392,266	13.3
2016	35,587	27.9	10,188	35.2	928,834	12.1	158,610	45.7	3,194,322	8.8
2015	32,110	26.9	15,801	40.1	781,023	9.4	4,586	93.9	3,126,972	10.3
2014	11,311	34.8	5,961	39.4	815,832	8.3	134,105	81.0	2,871,661	6.5
2013	23,982	32.3	7,505	48.7	641,876	7.8	50,006	40.7	2,769,469	6.3
2012	18,101	21.2	7,125	24.9	888,824	5.1	126,230	28.3	2,355,827	4.5
2011	9,951	25.5	7,640	31.9	663,994	7.5	228,198	18.6	3,264,390	5.1
2010	24,796	41.4	10,976	23.4	478,332	7.5	180,151	19.9	3,027,076	4.7
2009	36,383	24.1	15,559	32.3	542,005	15.3	316,463	21.9	2,760,641	6.9
2008	34,312	27.5	21,258	27.7	331,107	12.0	604,391	19.9	3,026,633	6.4
2007	5,271	72.4	6,884	40.9	425,856	9.0	736,232	18.2	2,931,252	6.5
2006	10,889	50.1	6,711	34.8	552,372	9.3	846,769	24.6	2,470,361	7.1
2005	8,613	50.0	18,925	31.7	575,805	11.7	540,379	17.7	2,458,978	7.5
2004	7,860	34.8	10,565	40.7	392,504	10.1	884,229	12.5	2,112,219	6.7
2003	10,342	29.2	8,236	27.1	275,489	10.3	185,658	13.6	1,682,375	6.3
2002	11,290	24.1	12,916	21.2	301,959	12.3	351,816	13.5	2,087,495	5.6
2001	7,780	26.2	10,676	23.2	309,948	8.4	328,790	11.5	2,301,022	6.2
2000	11,144	40.8	3,586	37.9	340,630	10.5	320,439	12.7	2,001,714	7.1
1999	3,876	41.8	5,780	38.4	337,942	10.6	201,568	10.5	1,474,837	6.7
1998	6,087	33.0	7,301	28.9	326,235	10.4	418,479	8.1	1,277,127	5.7
1997	7,077	31.0	6,321	31.1	265,191	9.0	401,702	8.6	1,555,442	5.2
1996	15,233	20.3	11,842	31.3	173,616	9.9	287,069	10.3	1,161,814	5.1
1995	8,333	24.5	13,122	26.8	241,714	10.0	135,019	13.6	1,173,475	5.4
1994	15,226	28.3	10,705	21.0	364,233	9.2	100,767	14.4	1,519,347	5.0
1993	11,018	23.5	12,933	29.6	217,874	10.9	41,223	30.1	2,027,758	5.8
1992	8,064	25.4	7,817	28.6	226,789	13.0	18,165	46.4	2,346,495	8.5
1991	56,414	48.9	6,118	29.5	263,291	18.1	74,635	40.4	2,284,363	6.6
1990	12,660	27.4	12,276	36.2	252,632	14.7	-	-	3,481,179	8.2
1989	16,320	30.7	6,856	37.1	323,702	17.3	-	-	3,213,455	7.7
1988	7,635	30.3	14,908	68.1	280,766	18.5	1,265	100.0	1,786,336	11.6
1987	16,159	38.8	3,441	39.3	268,246	32.9	-	-	2,321,227	9.6
1986	24,415	38.8	268	54.1	124,027	23.9	-	-	2,121,061	18.4
1985	9,069	35.7	-	-	376,187	18.5	-	-	2,573,654	10.6
1984	3,073	100.0	8,197	100.0	252,290	30.5	284	-	3,480,359	12.9
1983	4,161	15.8	1,878	100.0	454,617	31.5	-	-	3,508,131	17.0
1982	412	100.0	-	-	234,874	41.0	-	-	1,628,351	12.1
1981	752	98.3	-	-	269,318	28.0	-	-	1,727,585	8.7

¹ Striped Bass landings reflect Atlantic Ocean catches only.**NOTE:** Directed trips are defined as trips that either targeted or caught one of the listed species.

Table III.5 Directed trips for major species in North Carolina by year (continued).

Year	Bonito, Atlantic		Croaker, Atlantic		Cobia		Dolphin		Drum, Black	
	Trips	PSE	Trips	PSE	Trips	PSE	Trips	PSE	Trips	PSE
2020	24,858	40.7	1,045,317	14.8	309,191	29.7	125,263	13.0	470,616	9.6
2019	25,061	38.1	1,213,097	8.0	187,491	20.5	173,192	13.5	584,856	13.2
2018	18,257	28.0	1,093,754	8.8	294,837	16.9	245,040	13.3	773,315	14.3
2017	30,543	59.9	1,569,130	8.5	302,607	18.6	197,686	15.0	978,376	18.0
2016	15,679	33.8	1,542,439	9.6	349,360	15.3	282,195	14.4	927,876	17.1
2015	19,542	52.9	2,219,202	8.5	326,752	15.8	313,062	13.8	895,352	25.3
2014	28,278	31.9	1,924,556	7.6	244,098	16.4	172,691	20.2	564,678	18.0
2013	15,718	52.4	1,731,001	6.7	204,560	18.0	191,701	16.6	624,438	11.3
2012	14,514	27.3	1,250,115	5.6	154,376	12.2	222,284	10.7	573,675	9.3
2011	31,149	31.9	1,674,758	6.7	148,917	15.4	235,775	13.1	776,683	10.4
2010	9,984	33.2	1,470,467	7.6	187,077	11.0	221,856	21.0	535,406	10.4
2009	2,205	58.4	1,572,087	7.9	164,221	18.0	350,015	13.6	493,868	13.9
2008	13,758	47.0	1,157,184	8.7	61,094	21.5	172,004	11.1	742,385	11.0
2007	20,837	30.5	1,180,041	9.3	118,012	16.8	290,229	10.9	675,686	15.6
2006	5,845	40.5	1,789,975	10.4	193,578	17.6	235,063	12.6	348,977	14.3
2005	18,319	31.8	1,042,080	11.6	124,143	18.0	272,904	12.2	516,299	21.6
2004	31,923	42.0	1,120,097	13.5	97,748	16.8	198,813	13.3	392,042	15.9
2003	22,592	31.7	845,302	7.1	99,879	15.9	140,721	11.8	616,688	14.9
2002	18,446	55.8	724,894	10.9	106,282	19.1	156,100	9.9	456,367	12.9
2001	12,664	43.7	846,118	9.8	74,602	19.6	123,279	10.1	295,179	16.6
2000	6,665	40.7	1,055,737	7.5	62,698	20.5	177,393	11.4	240,526	13.2
1999	8,070	38.4	889,129	7.6	49,309	23.2	122,660	10.4	331,070	10.6
1998	15,700	42.1	751,538	7.0	41,978	16.6	77,099	9.0	126,968	13.3
1997	30,651	37.2	713,407	7.0	77,757	15.8	137,464	8.4	114,109	13.6
1996	4,685	35.8	816,678	6.2	54,930	15.4	97,631	11.8	316,253	13.9
1995	9,535	29.0	870,643	6.2	100,572	18.0	135,226	7.7	324,720	12.8
1994	17,210	33.2	1,112,262	6.3	80,223	14.9	158,189	12.0	91,207	24.7
1993	16,241	54.7	842,458	8.3	45,510	21.6	126,273	12.1	70,018	21.0
1992	10,521	28.3	992,747	9.7	65,703	18.7	66,367	10.3	54,890	41.5
1991	13,448	29.1	801,289	10.2	80,530	19.7	103,066	12.4	27,941	30.8
1990	11,975	29.2	929,210	12.0	65,450	31.1	59,901	12.1	12,504	45.5
1989	16,780	29.6	1,193,791	8.8	51,379	31.1	89,052	14.9	1,498	61.7
1988	39,833	72.5	897,527	23.5	18,513	28.7	54,797	55.5	16,764	36.0
1987	4,739	36.0	584,488	17.3	42,484	26.7	50,311	21.7	62,899	39.2
1986	368	100.0	472,694	15.4	133,472	32.2	39,528	9.3	48,258	48.0
1985	1,555	100.0	719,467	14.5	104,499	48.7	43,556	51.9	46,425	59.6
1984	6,557	100.0	1,137,932	24.0	51,144	64.3	12,954	57.8	-	-
1983	-	-	704,418	19.2	9,464	100.0	20,697	47.1	-	-
1982	11,272	41.0	432,806	17.3	24,803	61.8	18,613	71.7	16,880	68.2
1982	4,147	100.0	450,765	19.5	15,293	89.6	8,834	37.6	-	-

NOTE: Directed trips are defined as trips that either targeted or caught one of the listed species.

Table III.5 Directed trips for major species in North Carolina by year (continued).

Year	Drum, Red		Flounder		Gag		Groupers		Grunts	
	Trips	PSE	Trips	PSE	Trips	PSE	Trips	PSE	Trips	PSE
2020	3,235,205	8.7	1,675,588	13.3	2,792	70.7	37,968	21.6	22,779	22.3
2019	2,687,752	9.9	1,828,756	7.9	5,897	51.1	16,005	29.9	27,931	29.2
2018	3,478,377	13.8	1,710,890	7.3	1,703	49.5	6,475	28.1	20,808	41.2
2017	3,675,064	12.6	2,107,301	6.9	13,584	34.3	20,781	28.5	33,219	30.4
2016	3,693,885	11.9	2,420,326	6.2	25,335	34.9	37,721	29.1	47,810	44.4
2015	2,762,521	18.2	2,536,854	7.3	39,780	23.2	54,148	18.9	36,039	30.3
2014	2,995,433	9.0	2,685,072	6.1	22,148	37.3	37,348	28.0	16,808	37.7
2013	2,542,714	6.4	2,623,195	5.7	20,687	21.5	30,365	17.3	20,830	22.2
2012	2,557,094	4.9	2,552,146	3.8	45,908	25.5	64,985	19.4	29,517	19.6
2011	1,089,325	6.7	2,519,959	4.5	18,088	29.9	29,448	23.0	28,930	24.5
2010	1,755,179	7.0	2,900,583	4.0	22,767	22.8	44,583	17.2	24,308	24.6
2009	1,702,448	15.6	2,577,363	5.9	31,297	28.5	66,797	19.5	43,402	26.2
2008	1,491,162	14.2	2,405,131	5.3	41,495	23.1	70,685	16.1	23,929	25.2
2007	1,053,326	8.7	2,221,405	6.1	56,882	33.3	83,941	23.8	33,788	19.5
2006	916,020	8.9	2,379,590	7.9	24,216	26.3	40,651	21.2	32,203	27.1
2005	706,486	8.7	1,911,063	7.4	20,872	27.2	37,640	21.8	35,511	23.5
2004	522,126	9.6	2,078,666	5.3	27,153	27.4	33,386	23.2	30,995	25.0
2003	476,674	9.2	1,729,028	5.3	9,157	40.8	12,093	32.3	22,700	27.9
2002	902,697	8.4	1,958,411	5.3	10,398	43.8	12,477	37.3	15,726	26.3
2001	536,851	8.9	1,861,792	4.8	6,184	29.7	13,175	27.4	11,484	22.9
2000	711,051	7.6	2,121,537	5.3	4,161	59.8	10,723	46.6	12,243	46.3
1999	662,625	7.7	1,158,885	5.6	3,461	47.0	8,209	33.1	8,805	28.3
1998	521,028	8.4	1,428,756	5.1	9,169	41.0	13,725	33.8	13,161	31.5
1997	314,360	8.4	1,426,854	4.7	7,584	41.6	8,818	35.4	11,874	28.7
1996	364,726	9.9	1,126,979	4.9	9,485	49.7	14,768	35.8	16,037	28.2
1995	674,269	7.3	1,230,301	5.1	17,986	23.3	25,804	19.2	23,491	21.2
1994	621,918	8.2	1,834,545	4.6	19,431	31.4	49,759	21.6	70,363	14.8
1993	906,950	7.8	1,745,979	5.4	17,374	31.2	33,570	21.7	45,317	19.6
1992	716,307	12.8	1,597,931	6.3	9,518	28.8	18,182	23.3	31,180	18.5
1991	661,450	12.2	1,596,897	6.6	27,286	42.5	38,871	31.4	31,333	22.0
1990	538,581	19.1	1,531,247	9.6	27,696	30.2	60,090	32.3	49,428	43.9
1989	915,055	13.7	1,033,473	10.0	21,250	30.5	34,056	22.3	30,682	21.4
1988	409,391	35.0	1,359,163	18.2	12,490	27.0	19,914	21.5	22,183	19.8
1987	681,645	23.9	1,090,007	16.0	7,469	60.4	12,655	38.2	14,085	26.1
1986	216,931	18.0	1,204,201	13.8	1,302	100.0	1,651	81.6	350	100.0
1985	398,397	28.1	1,799,421	13.7	15,641	44.6	21,132	37.1	2,392	67.4
1984	513,880	23.2	1,807,897	15.6	25,313	40.7	25,412	40.6	67,464	30.0
1983	775,248	18.4	1,678,640	15.1	-	-	8,984	100.0	41,734	100.0
1982	181,019	34.3	1,412,465	11.3	11,172	70.9	12,343	64.7	521	100.0
1981	103,166	36.3	1,052,629	14.1	22,562	89.8	22,571	89.7	34,118	64.4

NOTE: Directed trips are defined as trips that either targeted or caught one of the listed species.

Table III.5 Directed trips for major species in North Carolina by year (continued).

Year	Jacks		Kingfish		Mackerel, King		Mackerel, Spanish		Pigfish	
	Trips	PSE	Trips	PSE	Trips	PSE	Trips	PSE	Trips	PSE
2020	88,836	24.7	1,771,176	12.5	490,789	12.5	1,042,729	9.4	245,524	13.6
2019	82,919	25.3	2,208,088	10.5	384,858	12.1	1,320,690	11.1	461,144	12.4
2018	74,771	21.9	1,660,341	12.1	417,690	14.9	1,072,569	10	492,024	10.9
2017	120,189	39.1	2,361,137	10.7	409,587	12.7	1,065,266	13.6	676,968	15.3
2016	217,866	18.4	2,741,476	12.0	271,754	14.3	984,307	10.2	848,240	10.8
2015	204,853	26.7	2,842,692	12.1	390,806	11.3	915,635	8.2	985,857	9.8
2014	118,156	27.9	2,538,697	9.8	375,929	13.0	1,073,559	8.5	902,261	10.3
2013	104,820	19.1	2,910,094	6.0	320,144	12.7	781,315	7.8	719,546	10.9
2012	137,269	21.6	2,443,663	5.1	325,194	10.4	832,918	6.3	743,921	6.4
2011	130,946	17.5	2,005,965	6.2	259,299	12.8	875,873	8.4	864,320	8.4
2010	55,491	26.8	2,614,698	5.8	287,082	9.7	858,946	8.0	728,441	7.5
2009	46,004	32.0	2,421,670	7.5	501,252	10.4	953,259	10.7	626,307	11.7
2008	156,608	35.5	1,742,848	8.5	340,646	10.7	721,131	7.7	700,737	16.2
2007	37,127	22.9	1,791,749	8.1	475,140	9.2	583,273	9.2	591,424	14.4
2006	22,983	33.7	1,605,005	9.4	386,012	12.5	592,208	11.1	443,494	15.0
2005	49,323	23.3	1,260,798	11.0	464,675	8.7	562,428	11.9	632,464	23.4
2004	14,489	31.1	1,513,388	9.6	395,324	10.9	693,660	16.7	738,709	12.5
2003	41,348	46.7	1,044,531	8.6	283,193	8.3	557,305	11.4	834,218	10.5
2002	41,353	24.1	843,478	10.9	353,673	12.5	652,877	11.1	596,590	12.1
2001	27,930	47.1	1,046,464	8.5	317,006	9.4	573,249	12.4	557,787	10.6
2000	29,057	55.1	1,310,049	9.1	296,502	11.7	668,735	12.5	651,759	9.8
1999	22,995	31.2	719,508	8.5	190,705	11.5	490,881	10.7	651,697	9.6
1998	15,315	33.6	653,069	8.5	195,413	14.7	361,670	10.9	645,435	8.6
1997	63,352	25.3	622,487	7.1	256,783	8.4	553,133	7.9	730,699	7.4
1996	14,258	37.8	699,179	8.4	223,974	10.2	398,041	8.6	738,252	7.4
1995	23,208	24.0	783,545	7.2	356,003	7.8	390,306	7.8	588,935	8.2
1994	13,088	24.3	1,027,407	7.9	385,404	8.7	569,538	7.3	591,972	8.7
1993	68,709	26.7	871,255	10.0	362,612	8.5	624,360	8.6	494,231	9.8
1992	36,892	40.7	987,809	16.3	355,767	8.0	750,273	8.9	581,256	12.5
1991	36,436	23.1	1,073,637	11.2	413,152	7.6	718,947	6.3	444,929	14.3
1990	78,219	54.8	1,008,142	13.8	418,747	11.9	702,445	10.9	487,082	20.1
1989	65,613	49.6	558,414	14.8	394,667	11.6	784,182	14.5	666,410	12.6
1988	73,835	80.4	1,109,114	17.3	248,979	14.8	301,053	10.6	659,073	15.6
1987	55,371	34.7	688,396	18.4	371,986	14.2	360,764	13.0	643,854	23.7
1986	231,679	27.6	721,770	40.5	333,622	31.1	601,408	33.2	297,118	24.3
1985	51,813	39.9	419,946	17.3	377,973	24.5	151,263	28.2	460,697	20.2
1984	64,734	55.1	542,411	20.8	231,800	23.7	153,734	37.0	581,449	30.8
1983	15,449	43.0	476,653	25.8	291,067	24.3	39,648	81.4	589,457	23.5
1982	23,770	49.7	563,925	19.4	202,767	15.9	146,127	26.6	363,663	43.2
1981	48,433	34.7	508,287	42.5	148,966	14.8	93,494	30.9	466,924	49.8

NOTE: Directed trips are defined as trips that either targeted or caught one of the listed species.

Table III.5 Directed trips for major species in North Carolina by year (continued).

Year	Pompano, Florida		Porgies		Puffers		Seatrout, Spotted		Sharks	
	Trips	PSE	Trips	PSE	Trips	PSE	Trips	PSE	Trips	PSE
2020	492,896	28.6	4,901	39.1	517,301	15.8	2,365,291	5.2	365,434	15.4
2019	688,384	17.8	15,841	37.4	1,280,586	13.2	2,867,512	6.5	511,794	13.1
2018	631,684	15.1	5,225	42.8	490,330	28.4	1,606,853	10.9	666,385	14.7
2017	713,133	17.9	40,115	39.5	812,904	11.8	2,851,053	11.9	884,258	10.8
2016	637,011	18.0	37,693	55.1	1,427,536	14.8	2,322,627	7.5	710,368	10.6
2015	782,738	17.6	34,494	37.6	1,770,078	19.5	2,537,677	7.1	756,270	10.5
2014	670,968	15.1	16,996	48.9	395,524	16.8	2,154,879	8.1	1,019,887	9.2
2013	1,011,337	12.9	15,630	25.5	576,049	11.3	2,233,881	6.6	1,196,233	7.3
2012	799,938	8.7	25,548	20.3	1,261,061	7.0	2,365,291	5.2	747,153	7.8
2011	941,780	10.5	10,658	34.5	872,144	10.3	1,689,106	5.7	900,423	8.5
2010	661,895	10.0	11,989	30.4	839,916	13.2	1,716,486	7.3	1,166,218	7.3
2009	571,454	11.5	23,759	28.8	360,375	14.6	1,873,557	8.5	946,103	10.7
2008	475,820	13.0	26,882	26.9	562,782	15.8	1,444,238	11.2	1,542,448	16.4
2007	443,393	14.6	21,491	23.2	317,421	35.4	1,116,323	8.8	922,787	13.8
2006	507,279	25.5	11,129	37.0	287,797	23.7	1,077,306	9.1	700,664	12.5
2005	489,171	19.1	27,794	24.9	339,008	26.2	967,636	13.3	770,996	12.8
2004	646,943	17.1	112,539	38.3	413,765	13.3	537,440	8.8	555,017	12.1
2003	480,255	17.4	11,038	31.3	507,955	18.2	400,109	12.0	390,571	11.1
2002	314,426	20.6	8,557	28.3	538,354	14.9	548,358	17.2	346,327	13.6
2001	348,006	17.3	11,777	26.2	543,238	9.9	374,519	11.4	349,263	9.5
2000	416,598	19.5	29,190	45.1	513,484	10.3	534,790	13.5	227,924	18.1
1999	196,917	14.0	7,823	38.1	418,583	12.0	615,015	9.9	143,802	15.5
1998	190,193	13.0	12,108	32.7	178,079	13.2	461,677	10.0	145,660	14.8
1997	171,752	11.8	19,903	23.2	298,694	12.1	545,032	10.4	113,808	12.8
1996	187,919	14.6	12,181	30.9	384,447	12.6	530,593	10.7	119,383	15.2
1995	227,195	13.7	22,499	19.7	225,761	12.4	760,843	7.8	114,017	14.3
1994	213,126	11.7	70,481	19.9	375,140	10.0	728,875	9.6	152,028	12.1
1993	408,236	13.3	33,920	21.3	439,314	14.3	676,541	10.5	111,593	16.8
1992	219,503	21.8	30,629	19.0	1,053,038	14.2	874,396	11.0	148,656	34.5
1991	348,669	12.7	44,751	18.0	353,515	13.8	838,924	9.6	145,234	13.1
1990	652,897	22.7	58,652	37.0	498,454	19.1	638,272	10.1	61,378	26.5
1989	364,538	24.9	38,329	26.0	500,525	16.5	979,095	14.0	134,702	15.7
1988	111,867	28.0	32,995	20.0	422,304	23.5	489,668	16.4	203,031	27.6
1987	343,262	30.2	20,878	23.0	227,546	40.4	1,078,367	18.8	157,013	27.0
1986	287,193	11.7	9,137	61.8	403,119	43.9	709,774	11.3	75,662	46.7
1985	349,226	28.4	22,099	67.7	140,717	35.9	728,712	20.4	123,994	26.8
1984	288,244	30.8	78,651	28.2	118,171	50.4	584,669	24.6	40,428	39.6
1983	145,619	67.8	138,433	53.2	88,165	40.9	512,877	24.7	142,888	48.7
1982	130,581	23.0	66,862	62.0	237,109	56.5	444,128	23.6	37,163	38.9
1981	140,295	39.9	27,359	75.1	62,083	35.9	486,814	15.2	105,716	45.5

NOTE: Directed trips are defined as trips that either targeted or caught one of the listed species.

Table III.5 Directed trips for major species in North Carolina by year (continued).

Year	Sharks, Dogfishes		Sheepshead		Snappers		Spot		Tuna, Yellowfin	
	Trips	PSE	Trips	PSE	Trips	PSE	Trips	PSE	Trips	PSE
2020	59,681	11.5	295,566	12.0	29,624	20.4	798,337	11.1	59,761	23.9
2019	175,593	43.8	311,630	14.3	23,442	30.9	1,062,156	10.1	48,751	23.3
2018	82,102	33.7	350,785	14.2	6,474	36.4	948,789	10.1	54,138	27.0
2017	64,930	32.6	486,805	16.0	39,089	39.1	1,333,257	12.6	89,469	17.0
2016	150,573	29.4	266,617	17.9	29,989	58.1	892,716	11.0	120,076	20.1
2015	178,189	39.6	321,035	14.6	21,563	45.0	1,788,190	10.7	40,563	25.3
2014	235,315	28.5	255,414	17.0	15,585	43.3	2,125,494	8.6	42,991	22.2
2013	257,897	36.9	371,139	10.5	6,860	31.8	2,385,900	7.1	45,804	26.7
2012	84,192	22.2	405,546	8.8	22,615	22.7	1,636,385	5.9	52,846	20.0
2011	225,852	18.3	308,075	12.5	9,117	33.6	2,343,254	7.3	45,558	28.5
2010	149,586	16.5	285,820	12.9	9,729	24.8	1,978,044	7.0	38,146	27.3
2009	59,569	39.7	317,796	13.7	21,756	28.7	2,334,320	7.6	63,104	48.7
2008	273,811	47.6	281,738	13.7	22,634	31.7	1,860,288	8.5	32,264	23.0
2007	105,601	29.9	340,505	19.9	13,744	27.5	1,920,093	10.6	155,576	15.5
2006	79,737	28.6	215,691	23.6	5,630	41.2	3,190,948	11.5	163,653	15.3
2005	159,265	56.1	147,013	19.2	18,910	28.6	2,504,785	12.4	154,860	17.3
2004	320,230	16.8	160,973	25.8	18,795	29.7	2,308,073	8.3	138,284	17.4
2003	44,501	38.1	210,037	11.8	6,257	44.5	2,096,846	8.6	105,434	13.0
2002	63,077	29.6	174,010	13.1	9,934	34.3	1,575,172	10.9	115,054	26.6
2001	97,601	22.5	169,511	13.7	10,556	33.4	1,873,118	9.9	106,870	10.8
2000	50,092	24.2	243,234	15.2	4,230	37.7	1,565,541	8.4	97,501	10.2
1999	29,834	35.8	176,898	12.7	7,356	34.1	1,418,188	8.2	100,951	8.1
1998	29,574	39.1	122,528	15.9	3,772	53.5	1,551,639	8.5	57,984	7.4
1997	20,978	26.2	112,257	16.6	14,520	27.5	1,155,445	6.7	105,601	12.8
1996	32,907	22.1	66,671	15.2	15,439	34.8	1,621,884	6.6	123,884	14.3
1995	50,972	23.3	112,359	12.7	23,673	19.7	1,428,803	6.3	67,313	10.2
1994	51,154	17.2	126,838	14.4	31,616	22.0	1,912,005	6.7	76,311	10.4
1993	39,754	24.4	164,875	17.7	17,726	25.8	1,687,428	7.4	44,841	9.7
1992	181,964	23.8	139,232	21.6	17,846	19.8	1,766,448	10.8	36,731	16.0
1991	153,145	20.1	102,231	14.7	17,883	22.9	2,128,269	8.3	38,878	22.8
1990	273,474	23.9	94,796	19.0	27,746	46.2	1,856,343	10.3	14,489	19.7
1989	137,176	22.9	104,468	21.6	27,194	33.5	1,709,410	8.9	64,830	22.0
1988	200,154	30.7	66,494	23.2	15,648	24.6	1,582,830	16.8	38,024	41.3
1987	246,125	43.6	53,816	36.4	14,843	34.4	1,250,216	13.6	48,460	26.4
1986	176,010	47.7	46,832	38.3	4,272	84.9	1,207,328	12.2	82,895	21.9
1985	145,998	31.1	13,672	76.6	29,306	78.1	2,320,914	14.2	24,825	53.8
1984	238,585	31.7	52,395	42.4	41,603	20.8	1,851,069	15.5	1,011	100.0
1983	57,410	37.0	8,770	75.9	53,003	85.8	1,893,659	12.0	11,435	45.0
1982	28,559	38.3	42,268	40.5	-	-	1,393,111	11.8	-	-
1981	160,422	68.8	62,091	45.4	671	10.0	1,304,798	27.3	4,405	92.7

NOTE: Directed trips are defined as trips that either targeted or caught one of the listed species.

Table III.5 Directed trips for major species in North Carolina by year (continued).

Year	Wahoo		Weakfish	
	Trips	PSE	Trips	PSE
2020	69,753	23.6	142,443	23.9
2019	43,329	19.4	112,100	18.0
2018	47,725	20.3	97,928	23.7
2017	74,721	19.3	147,138	16.8
2016	83,613	22.6	275,045	15.6
2015	99,224	24.3	449,929	21.8
2014	70,998	26.2	226,756	15.2
2013	47,999	24.2	164,120	13.5
2012	62,680	15.0	198,691	12.1
2011	51,715	21.4	122,784	14.5
2010	43,944	18.0	231,359	12.9
2009	51,309	24.0	187,203	15.7
2008	50,932	18.2	151,787	15.6
2007	56,232	19.9	211,544	13.9
2006	64,976	25.9	385,571	14.9
2005	58,120	25.8	297,007	12.0
2004	40,833	20.2	368,146	12.6
2003	35,915	27.1	246,707	12.3
2002	53,204	18.2	249,751	13.4
2001	32,951	19.2	387,690	15.5
2000	55,387	20.5	290,012	12.5
1999	36,787	17.0	323,706	10.4
1998	19,552	12.2	325,912	13.2
1997	46,756	15.4	284,957	9.6
1996	41,899	15.9	215,012	10.3
1995	46,288	11.3	199,328	11.1
1994	35,247	13.5	297,732	10.6
1993	22,211	16.9	247,237	14.2
1992	21,221	18.5	156,607	18.1
1991	16,358	17.5	193,545	20.1
1990	17,041	18.7	118,139	18.2
1989	20,862	18.9	214,618	17.0
1988	5,366	22.7	238,449	27.0
1987	14,075	26.9	417,768	31.1
1986	35,658	26.5	538,707	30.1
1985	6,322	97.2	207,516	29.5
1984	1,637	100.0	321,962	21.3
1983	11,083	64.2	172,911	34.6
1982	577	100.0	87,418	33.4
1981	4,599	75.2	406,485	43.4

NOTE: Directed trips are defined as trips that either targeted or caught one of the listed species.

Table III.6 Amberjack, Greater recreational catch in North Carolina by year.

Year	Harvest Number	PSE (num)	Harvest Pounds	PSE (lb)	Mean Length (inches)	Mean Weight (lb)	Released Number	PSE (release)
2020	10,714	34.9	212,826	35.0	34.0	19.9	12,326	42.6
2019	4,236	38.6	81,769	40.8	32.9	19.3	4,980	50.3
2018	11,742	43.1	227,441	40.4	34.2	19.4	2,243	55.6
2017	6,653	26.8	157,091	28.4	35.1	23.6	6,229	31.7
2016	18,608	32.8	305,372	32.9	32.0	16.4	31,318	42.5
2015	16,436	23.0	360,417	24.9	34.3	21.9	10,128	84.3
2014	5,004	35.5	94,629	32.8	33.3	18.9	1,935	56.3
2013	19,275	31.9	428,664	33.9	34.6	22.2	21,209	53.3
2012	12,412	23.8	216,938	24.1	32.2	17.5	3,379	50.1
2011	6,810	33.2	142,570	35.7	34.2	20.9	9,295	94.5
2010	20,377	31.2	455,278	29.4	35.7	22.3	4,773	55.3
2009	25,670	30.1	686,583	30.6	37.8	26.7	9,226	50.3
2008	18,446	27.4	422,220	29.5	35.5	22.9	17,393	54.7
2007	5,789	67.2	90,525	60.5	30.7	15.6	-	-
2006	14,023	67.9	289,118	68.2	33.3	20.6	3,289	99.1
2005	2,956	70.0	78,610	55.7	34.8	26.6	4,612	77.3
2004	1,949	33.8	40,556	33.6	34.6	20.8	3,261	72.6
2003	6,198	43.3	139,546	43.2	34.5	22.5	6,676	58.8
2002	5,733	32.0	137,296	33.3	35.2	23.9	18,266	48.0
2001	4,274	31.0	110,990	33.6	36.1	26.0	3,186	46.9
2000	6,214	42.2	136,075	43.7	33.5	21.9	4,026	62.2
1999	1,908	69.3	27,491	50.3	24.4	14.4	1,245	83.2
1998	3,084	34.8	84,655	38.7	36.9	27.4	2,972	63.9
1997	3,179	51.8	105,041	55.7	40.5	33.0	5,984	43.2
1996	8,554	30.2	252,047	32.9	38.2	29.5	8,859	40.6
1995	4,164	36.1	115,585	38.6	37.2	27.8	2,089	45.9
1994	6,191	24.2	134,337	25.3	34.5	21.7	2,178	55.7
1993	4,332	32.3	110,583	37.7	36.4	25.5	11,056	35.6
1992	1,948	34.7	49,742	36.7	36.3	25.5	4,681	37.0
1991	30,734	72.5	91,707	45.3	12.0	3.0	161,944	72.9
1990	9,340	36.2	229,048	40.6	33.8	24.5	6,073	62.1
1989	10,688	42.9	482,794	45.3	46.3	45.2	4,073	41.3
1988	7,010	58.6	15,374	88.8	45.2	2.2	1,920	54.2
1987	9,471	31.3	318,731	36.4	40.4	33.7	1,919	48.5
1986	11,315	38.3	214,814	38.5	32.4	19.0	3,331	69.9
1985	11,526	62.0	161,809	54.1	29.5	14.0	7,824	98.7
1984	754	101.3	26,826	101.3	43.3	35.6	-	-
1983	659	100.5	7,985	100.5	27.0	12.1	-	-

Table III.6 Amberjack, Greater recreational catch in North Carolina by year (*continued*).

Year	Harvest Number	PSE (num)	Harvest Pounds	PSE (lb)	Mean Length (inches)	Mean Weight (lb)	Released Number	PSE (release)
1982	399	101.6	16,352	101.6	44.5	40.9	-	-
1981	772	120.9	807	120.2	10.0	1.0	-	-

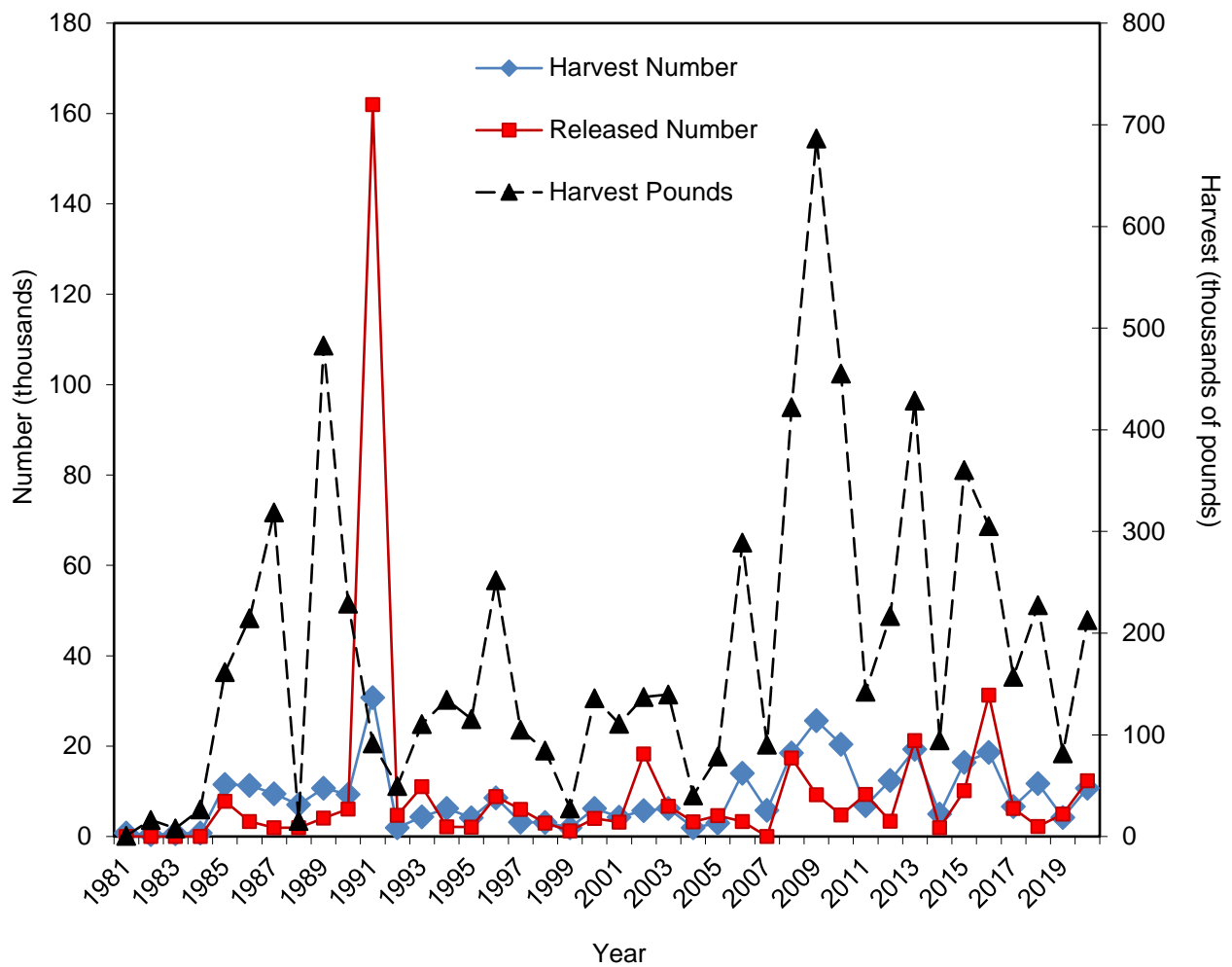


Figure III.1 Amberjack, Greater recreational catch in North Carolina by year.

Table III.7 Amberjack, Greater recreational catch by state, 2020.

State	Harvest Number	PSE (num)	Harvest Pounds	PSE (lb)	Mean Length (inches)	Mean Weight (lb)	Released Number	PSE (release)
North Carolina	10,714	34.9	212,826	35.0	34.0	19.9	12,326	42.6
Florida	24,751	30.1	457,109	30.9	33.4	19.8	40,426	43.7
Georgia	76	49.5	1,077	49.5	30.3	14.2	25,379	100.3
South Carolina	4,845	68.0	75,893	70.1	30.8	15.7	783	72.1
Virginia	256	101.0	-	-	-	-	27	40.2

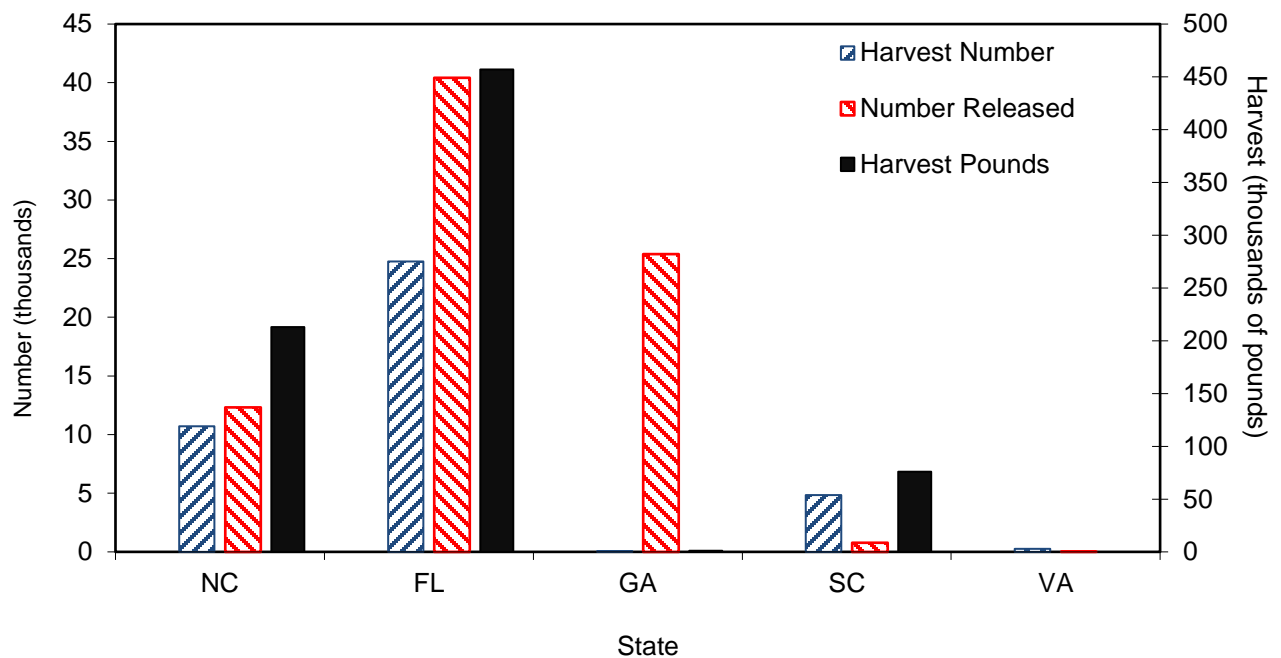


Figure III.2 Amberjack, Greater recreational catch by state, 2020.

Table III.8 Barracuda, Great recreational catch in North Carolina by year.

Year	Harvest Number	PSE (num)	Harvest Pounds	PSE (lb)	Mean Length (inches)	Mean Weight (lb)	Released Number	PSE (release)
2020	7,694	34.5	72,196	33.7	33.9	9.4	15,723	38.9
2019	2019	1,661	28.8	15,529	31.2	9.4	30,700	43.4
2018	5,848	37.2	52,304	34.8	33.0	8.9	19,937	55.0
2017	2,771	58.5	76,501	79.6	47.0	27.6	15,683	39.6
2016	2,420	55.0	27,950	53.7	35.7	11.6	5,599	42.3
2015	3,844	45.6	22,806	40.3	27.5	5.9	9,561	41.6
2014	2,564	80.5	36,960	83.6	41.3	14.4	2,358	58.4
2013	365	74.9	2,183	72.9	28.9	6.0	7,722	51.8
2012	972	44.5	11,601	40.0	36.6	11.9	5,781	38.1
2011	1,100	40.0	12,375	37.7	36.1	11.2	5,286	50.3
2010	2,127	38.9	17,803	40.0	32.2	8.4	6,152	36.0
2009	2,500	41.9	21,007	40.8	33.1	8.4	20,831	47.5
2008	10,877	59.7	103,655	57.3	33.8	9.5	17,468	36.6
2007	823	76.6	7,288	73.1	33.3	8.9	4,989	55.0
2006	158	54.6	1,446	51.9	32.8	9.1	8,240	50.9
2005	5,883	59.1	60,348	55.2	34.2	10.3	13,186	55.5
2004	9,691	62.2	103,666	67.7	35.5	10.7	8,522	83.4
2003	6,562	34.1	90,668	41.3	35.3	13.8	4,213	47.5
2002	7,887	33.8	88,024	32.7	33.1	11.2	8,573	33.1
2001	6,214	42.8	82,942	42.9	36.2	13.3	9,001	28.2
2000	423	54.6	6,597	60.6	39.9	15.6	3,231	42.8
1999	1,457	56.6	30,464	58.7	45.5	20.9	3,767	46.1
1998	1,650	37.0	20,126	32.5	38.0	12.2	2,120	38.6
1997	2,403	45.3	39,968	46.0	38.0	16.6	2,032	41.5
1996	5,384	39.9	51,592	38.4	32.5	9.6	3,401	35.7
1995	4,748	57.8	60,388	55.6	38.5	12.7	5,728	29.1
1994	1,862	33.0	32,936	31.9	40.9	17.7	6,120	35.2
1993	2,935	27.6	42,887	28.2	38.6	14.6	1,501	41.1
1992	1,250	32.9	14,768	31.9	35.6	11.8	4,151	45.8
1991	2,325	32.5	36,054	33.5	37.0	15.5	1,957	73.6
1990	4,326	51.2	38,065	52.8	32.7	8.8	26,819	93.0
1989	2,276	49.2	34,490	47.3	39.1	15.2	4,303	53.2
1988	2,316	49.8	765	83.4	32.6	0.3	11,982	89.1
1987	1,641	51.2	51,309	67.6	48.6	31.3	127	73.9
1986	152	86.0	1,686	85.2	34.5	11.1	115	104.0
1985	-	-	-	-	-	-	-	-
1984	1,639	127.5	6,144	127.5	20.9	3.7	1,639	127.5
1983	1,640	108.1	19,045	108.1	39.0	11.6	-	-

Table III.8 Barracuda, Great recreational catch in North Carolina by year (continued).

Year	Harvest Number	PSE (num)	Harvest Pounds	PSE (lb)	Mean Length (inches)	Mean Weight (lb)	Released Number	PSE (release)
1982	-	-	-	-	-	-	-	-
1981	-	-	-	-	-	-	-	-

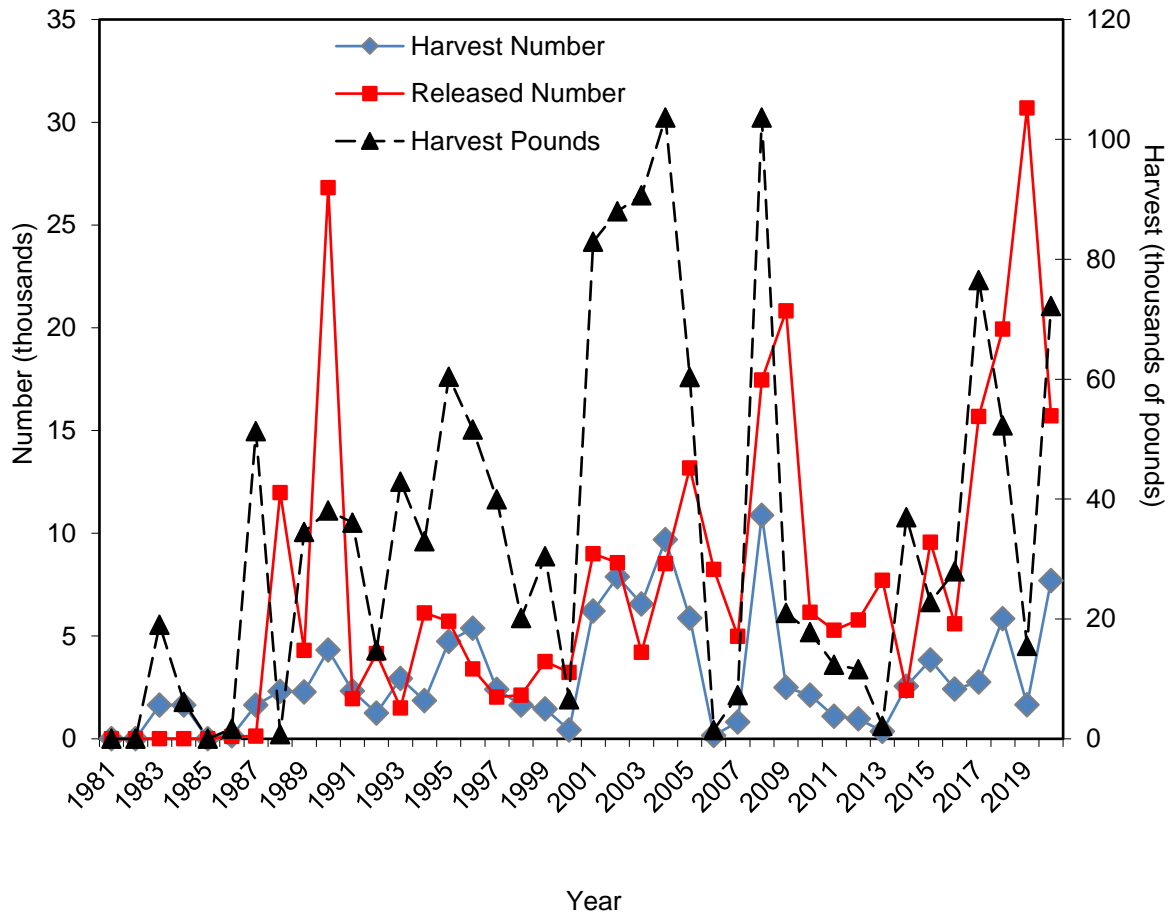


Figure III.3 Barracuda, Great recreational catch in North Carolina by year.

Table III.9 Barracuda, Great recreational catch by state, 2020

State	Harvest Number	PSE (num)	Harvest Pounds	PSE (lb)	Mean Length (inches)	Mean Weight (lb)	Released Number	PSE (release)
North Carolina	7,694	34.5	72,196	33.7	33.9	9.4	15,723	38.9
Florida	142,401	44.7	522,259	29.6	24.4	4.5	607,439	30.0
Georgia	176	92.9	2,309	99.0	40.0	13.1	8,797	54.7
South Carolina	849	45.4	9,490	41.8	35.9	11.2	33,810	57.5

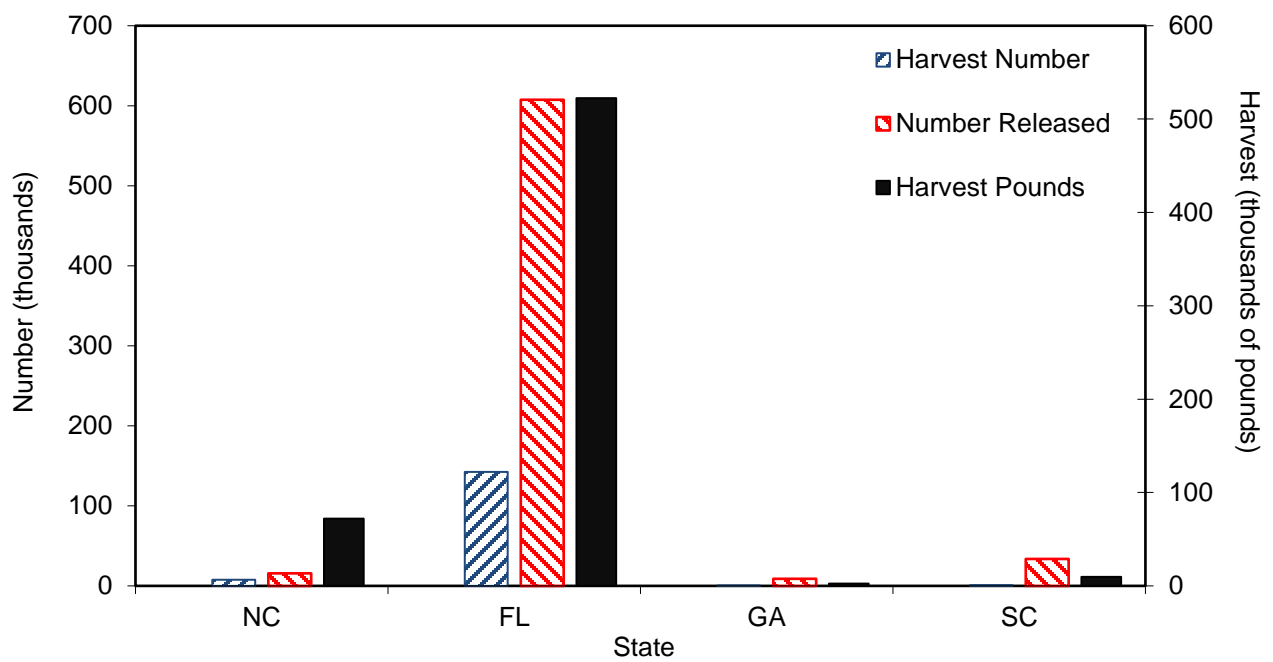


Figure III.4 Barracuda, Great recreational catch by state, 2020.

Table III.10 Bass, Black Sea recreational catch in North Carolina by year.

Year	Harvest Number	PSE (num)	Harvest Pounds	PSE (lb)	Mean Length (inches)	Mean Weight (lb)	Released Number	PSE (release)
2020	133,096	27.0	195,098	27.3	13.9	1.5	2,438,922	11.0
2019	151,999	50.2	220,377	51.6	14.3	1.4	2,802,990	18.0
2018	86,153	32.9	116,825	32.1	13.6	1.4	2,223,800	17.0
2017	316,925	29.3	539,910	30.9	14.7	1.7	6,190,501	13.5
2016	194,512	31.4	302,925	31.9	14.5	1.6	5,536,050	13.7
2015	319,653	32.9	455,100	32.5	14.0	1.4	5,036,500	18.8
2014	332,594	32.2	563,662	31.6	14.7	1.7	5,022,908	15.6
2013	89,682	20.7	123,413	21.3	13.9	1.4	3,041,126	9.8
2012	134,124	18.2	228,090	19.8	14.4	1.7	4,650,495	8.4
2011	179,892	32.4	262,904	33.5	14.0	1.5	2,569,950	9.1
2010	184,479	26.1	231,236	26.5	13.3	1.3	2,223,822	16.9
2009	152,614	30.0	167,165	28.0	13.1	1.1	1,681,278	14.5
2008	91,097	30.8	119,530	30.4	13.6	1.3	1,056,171	14.0
2007	153,597	37.9	302,485	31.8	15.4	2.0	1,672,116	12.3
2006	190,962	27.6	201,508	30.4	12.3	1.1	2,162,091	11.9
2005	346,733	28.2	453,071	41.7	13.2	1.3	2,142,304	14.4
2004	547,651	33.1	509,890	30.4	11.7	0.9	1,942,630	15.7
2003	327,249	22.1	320,436	21.4	11.9	1.0	931,453	15.7
2002	153,335	22.6	202,496	21.2	13.1	1.3	1,023,629	13.5
2001	362,563	18.6	410,649	19.8	12.3	1.1	1,498,961	12.6
2000	327,651	30.9	386,856	39.6	12.8	1.2	1,652,835	19.8
1999	119,359	25.3	107,415	27.9	11.3	0.9	1,325,394	15.0
1998	229,050	24.5	180,338	21.0	10.4	0.8	1,279,363	15.5
1997	284,163	23.2	247,815	23.1	10.9	0.9	817,146	16.1
1996	264,846	22.2	237,846	24.1	11.5	0.9	438,088	19.2
1995	276,811	24.5	218,180	31.7	10.7	0.8	778,890	17.0
1994	343,688	21.5	270,682	24.8	10.9	0.8	1,000,020	13.4
1993	358,984	16.5	232,338	16.5	10.0	0.6	573,573	28.9
1992	574,463	23.7	564,382	34.0	11.5	1.0	567,693	19.1
1991	383,066	15.4	248,115	16.8	9.8	0.6	980,846	36.6
1990	480,936	29.1	354,530	28.0	10.5	0.7	264,212	17.7
1989	697,860	18.5	504,442	18.2	10.1	0.7	650,051	34.2
1988	514,347	25.0	243,317	63.7	10.3	0.5	810,675	29.5
1987	541,324	27.1	357,611	29.7	9.9	0.7	437,513	26.8
1986	417,742	39.0	178,493	31.0	9.4	0.4	372,066	43.6
1985	1,065,029	35.8	526,216	46.1	9.2	0.5	789,636	35.1
1984	776,382	32.2	547,252	30.3	10.8	0.7	324,343	28.7
1983	777,261	36.1	304,160	42.7	8.5	0.4	832,577	69.4

Table III.10 Bass, Black Sea recreational catch in North Carolina by year (continued).

Year	Harvest Number	PSE (num)	Harvest Pounds	PSE (lb)	Mean Length (inches)	Mean Weight (lb)	Released Number	PSE (release)
1982	476,112	16.4	313,693	17.5	9.0	0.7	86,527	33.6
1981	1,044,203	32.6	566,631	36.1	8.1	0.5	1,577,235	46.7

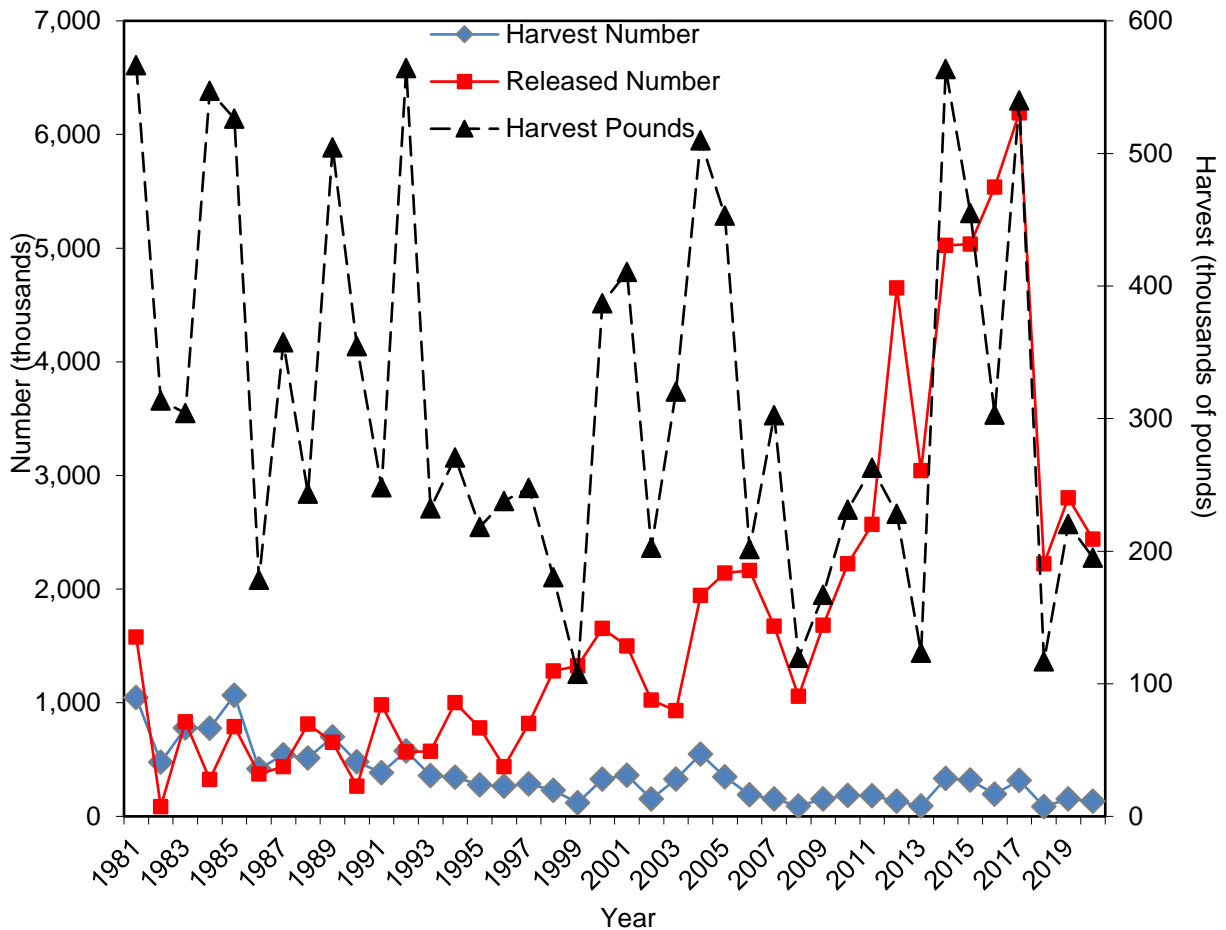


Figure III.5 Bass, Black Sea recreational catch in North Carolina by year.

Table III.11 Bass, Black Sea recreational catch by state, 2020.

State	Harvest Number	PSE (num)	Harvest Pounds	PSE (lb)	Mean Length (inches)	Mean Weight (lb)	Released Number	PSE (release)
North Carolina	133,096	27.0	195,098	27.3	13.9	1.5	2,438,922	11.0
Connecticut	407,300	16.2	905,144	16.0	17.1	2.2	2,859,076	15.1
Delaware	140,894	26.8	188,978	27.2	14.1	1.3	958,105	18.1
Florida	44,448	40.0	52,529	39.8	12.8	1.1	1,590,567	22.1
Georgia	45,380	45.0	47,245	45.4	12.8	1.0	891,461	48.0
Maryland	80,986	20.2	103,462	18.6	13.8	1.3	830,324	18.7
Massachusetts	575,802	20.9	1,537,990	23.7	18.7	2.7	1,920,008	14.0
New Hampshire	1,983	90.1	3,388	90.1	14.8	1.7	12,946	85.7
New Jersey	812,080	16.6	1,147,600	17.4	14.1	1.4	6,400,042	18.0
New York	1,274,047	11.9	2,808,725	13.2	17.1	2.2	11,366,678	15.3
Rhode Island	615,661	20.2	1,480,782	20.1	17.6	2.4	3,073,755	21.4
South Carolina	48,509	27.0	53,597	25.0	12.9	1.1	1,157,343	14.1
Virginia	274,629	32.5	796,053	38.1	18.1	2.9	2,361,214	21.3

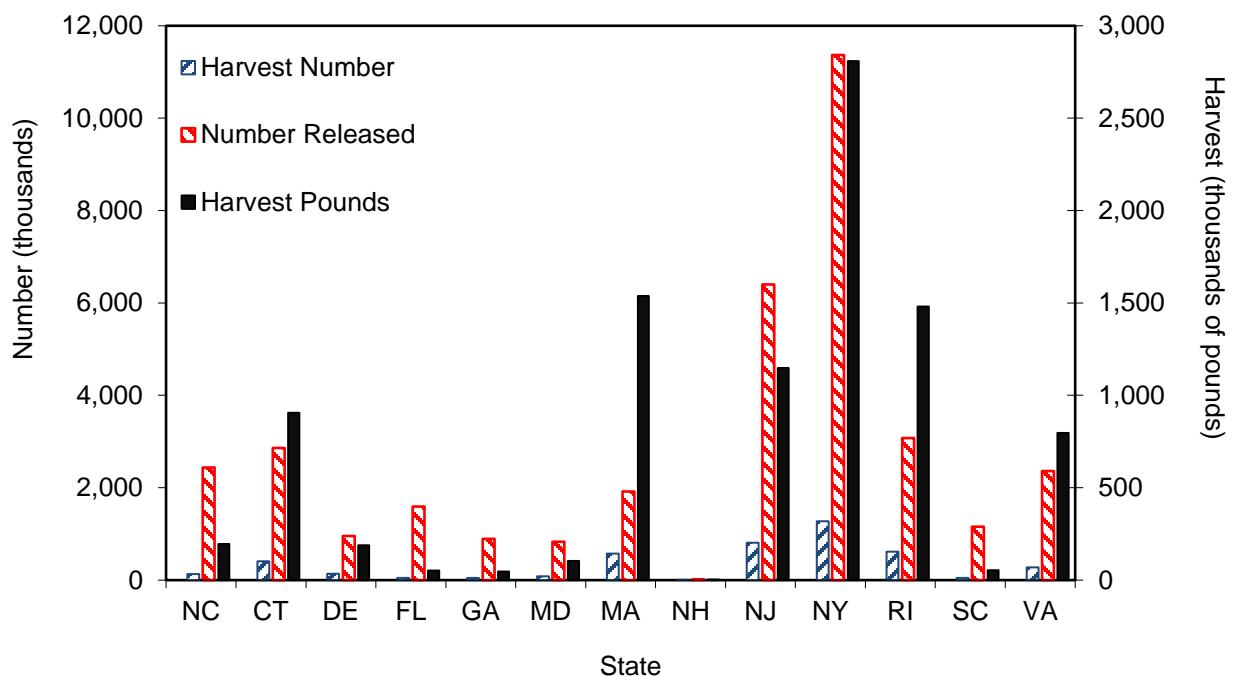


Figure III.6 Bass, Black Sea recreational catch by state, 2020.

Table III.12 Bass, Striped¹ recreational catch in North Carolina by year.

Year	Harvest Number	PSE (num)	Harvest Pounds	PSE (lb)	Mean Length (inches)	Mean Weight (lb)	Released Number	PSE (release)
2020	-	-	-	-	-	-	3,520	44.4
2019	-	-	-	-	-	-	4,521	52.6
2018	25	99.1	366	99.1	-	-	15,850	47.6
2017	-	-	-	-	-	-	48,410	43.1
2016	4,177	102.0	15,961	102.0	-	-	84,545	41.0
2015	-	-	-	-	-	-	-	-
2014	-	-	-	-	-	-	2,122	100.5
2013	-	-	-	-	-	-	5,840	63.6
2012	-	-	-	-	-	-	7,301	78.1
2011	207,610	20.1	4,467,159	19.9	35.9	21.5	234,250	27.7
2010	72,941	38.5	1,294,743	36.7	33.9	17.8	58,858	41.3
2009	6,548	46.8	186,729	45.6	39.6	28.5	16,857	66.7
2008	36,750	36.9	746,511	36.1	35.5	20.3	27,512	52.3
2007	79,668	33.9	1,921,009	34.3	38.3	24.4	28,088	40.4
2006	131,300	43.9	2,914,151	44.4	36.2	22.2	44,907	36.4
2005	200,468	23.0	4,112,555	23.9	35.8	20.3	210,903	37.3
2004	378,498	19.5	7,845,228	20.1	35.6	20.6	387,810	25.3
2003	53,733	38.5	1,004,754	42.6	36.0	19.2	59,799	35.2
2002	60,773	24.9	1,047,529	25.3	33.0	17.7	86,417	24.1
2001	104,177	32.0	1,762,856	36.5	34.0	17.9	77,728	39.5
2000	22,833	32.1	319,604	37.4	32.1	15.3	165,167	22.2
1999	49,221	25.1	610,480	25.3	31.1	12.9	276,663	21.5
1998	49,236	28.2	718,876	31.5	32.5	15.4	255,177	25.2
1997	73,215	25.1	935,719	25.8	32.5	14.4	201,296	19.0
1996	32,619	28.7	397,307	29.5	30.8	12.3	193,986	19.6
1995	16,428	32.6	231,306	32.3	32.2	14.1	28,169	57.3
1994	9,830	45.8	105,456	46.7	32.2	13.7	9,360	39.6
1993	531	100.1	6,084	100.1	31.6	11.5	3,041	60.4
1992	2,680	101.5	-	-	32.2	-	928	100.5
1991	1,032	100.0	10,240	100.0	27.0	9.9	833	97.2
1990	-	-	-	-	-	-	-	-
1989	-	-	-	-	-	-	-	-
1988	510	91.8	-	-	18.3	-	-	-
1987	-	-	-	-	-	-	-	-
1986	-	-	-	-	-	-	-	-
1985	-	-	-	-	-	-	-	-
1984	-	-	-	-	-	-	-	-
1983	-	-	-	-	-	-	-	-

¹ Includes Striped Bass harvested from the Atlantic Ocean during Waves 1 and 6 only.

Table III.12 Bass, Striped¹ recreational catch in North Carolina by year.

Year	Harvest Number	PSE (num)	Harvest Pounds	PSE (lb)	Mean Length (inches)	Mean Weight (lb)	Released Number	PSE (release)
1982	-	-	-	-	-	-	-	-
1981	-	-	-	-	-	-	-	-

¹ Includes Striped Bass harvested from the Atlantic Ocean during Waves 1 and 6 only.

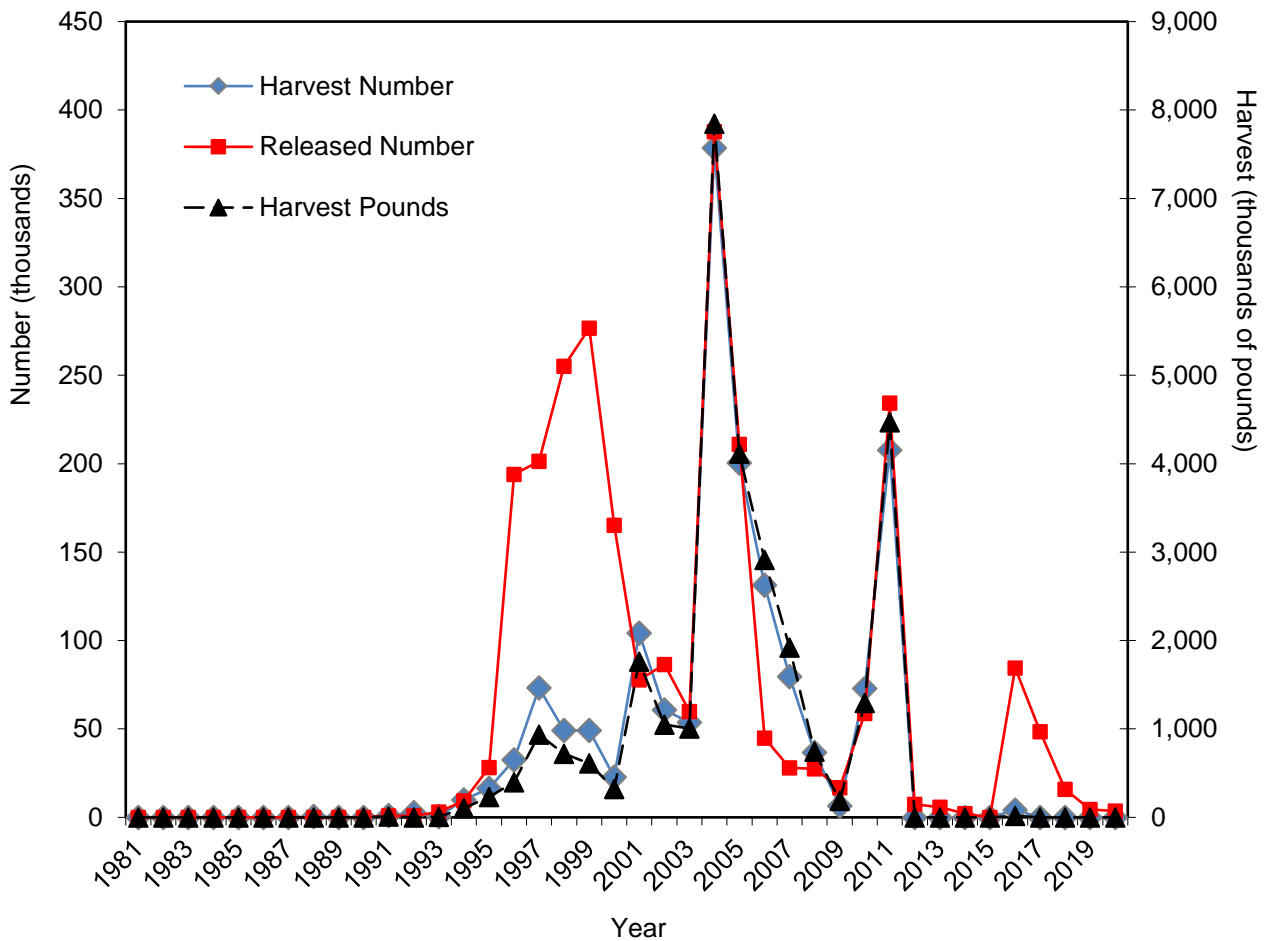


Figure III.7 Bass, Striped recreational catch in North Carolina from the Atlantic Ocean by year.

Table III.13 Bass, Striped¹ recreational catch by state, 2020.

State	Harvest Number	PSE (num)	Harvest Pounds	PSE (lb)	Mean Length (inches)	Mean Weight (lb)	Released Number	PSE (release)
North Carolina	-	-	-	-	-	-	3,520	44.4
Connecticut	5,664	64.5	66,096	52.2	-	-	136,720	47.6
Delaware	-	-	-	-	-	-	8,685	53.3
Maine	8,528	61.1	74,021	57.9	-	-	644,194	25.4
Maryland	-	-	-	-	-	-	3,062	77.1
Massachusetts	12,575	37.5	149,974	40.6	-	-	886,641	16.9
New Hampshire	1,546	66.1	14,188	65.4	-	-	156,790	25.5
New Jersey	247,314	25.4	3,037,004	26.7	30.1	12.9	1,683,958	24.0
New York	85,777	34.9	1,203,461	44.2	28.7	11.1	2,191,263	29.9
Rhode Island	31,719	57.7	416,399	57.1	26.2	7.9	850,206	25.1
South Carolina	-	-	-	-	-	-	138	42.0
Virginia	-	-	-	-	-	-	7,192	79.7

¹ Includes Striped Bass harvested from the Atlantic Ocean during Waves 1 and 6 only.

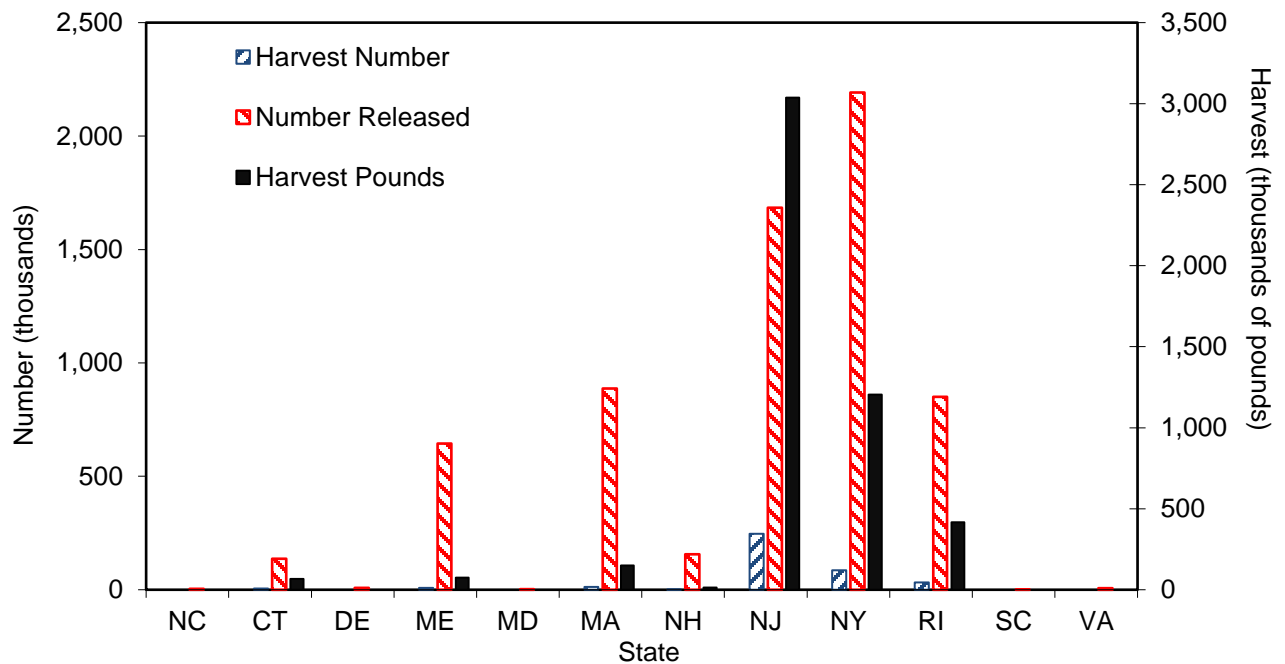


Figure III.8 Bass, Striped recreational catch from the Atlantic Ocean by state, 2020.

Table III.14 Bluefish recreational catch in North Carolina by year.

Year	Harvest Number	PSE (num)	Harvest Pounds	PSE (lb)	Mean Length (inches)	Mean Weight (lb)	Released Number	PSE (release)
2020	2,108,296	21.2	2,124,224	21.5	12.5	1.0	6,557,751	19.6
2019	2,752,589	23.0	3,011,480	22.4	11.3	0.8	7,162,431	22.0
2018	3,304,587	13.1	2,630,685	12.3	11.3	0.8	7,912,210	16.2
2017	3,173,218	18.3	3,634,502	28.0	12.3	1.1	8,255,510	29.8
2016	4,489,223	17.3	3,356,049	17.1	11.2	0.7	6,802,960	19.3
2015	4,123,461	14.5	3,754,577	14.4	11.9	0.9	6,356,252	15.4
2014	4,418,858	13.3	3,764,005	13.5	12.0	0.9	5,862,762	12.8
2013	4,287,526	11.8	3,517,233	11.8	11.4	0.8	7,050,725	11.4
2012	2,684,392	10.0	2,872,922	11.0	12.5	1.1	3,268,032	8.7
2011	3,613,883	12.0	3,158,287	14.6	11.7	0.9	7,150,476	10.9
2010	3,691,868	10.7	3,185,652	12.4	11.6	0.9	7,419,644	12.3
2009	3,190,313	13.2	3,566,768	15.1	12.7	1.1	6,447,822	12.5
2008	2,855,199	13.9	2,385,349	14.0	12.2	0.8	5,146,870	9.8
2007	3,749,514	13.7	3,616,359	12.5	12.3	1.0	6,740,155	12.4
2006	2,842,593	17.3	2,651,326	21.6	12.3	0.9	5,213,436	13.0
2005	3,004,921	14.6	2,938,814	16.6	12.4	1.0	4,417,822	11.2
2004	2,825,382	12.9	2,773,518	12.9	12.8	1.0	3,781,031	10.9
2003	2,161,780	11.2	1,843,018	11.3	12.4	0.9	3,432,547	12.9
2002	2,484,516	12.7	2,327,789	12.1	12.5	0.9	4,357,535	11.8
2001	3,410,135	11.3	3,048,743	11.3	12.7	0.9	6,756,435	13.9
2000	2,325,583	10.7	1,721,367	10.7	12.0	0.7	5,231,507	24.8
1999	1,774,946	14.9	1,232,827	14.8	11.7	0.7	2,749,327	11.3
1998	1,530,106	13.4	1,888,463	15.1	13.4	1.2	1,530,488	13.6
1997	1,476,271	9.5	2,366,435	12.2	14.0	1.6	2,286,439	11.3
1996	632,382	12.8	1,352,444	19.0	15.0	2.1	1,613,566	13.6
1995	660,979	11.7	770,490	13.1	13.5	1.2	2,345,163	17.3
1994	673,341	12.7	847,458	14.1	13.6	1.3	3,235,793	15.7
1993	1,620,184	14.3	1,991,395	16.8	12.8	1.2	1,825,095	12.8
1992	1,562,752	16.5	2,226,311	18.7	13.3	1.4	1,957,741	15.0
1991	2,423,772	21.0	4,627,434	24.9	13.8	1.9	1,478,829	19.5
1990	6,838,820	16.4	10,345,929	30.9	12.6	1.5	2,427,701	23.7
1989	4,843,723	14.8	7,123,822	19.7	12.1	1.5	2,314,161	22.4
1988	3,131,369	20.6	4,475,001	55.0	16.4	1.4	1,002,321	22.3
1987	3,248,002	13.8	8,542,577	18.4	15.3	2.6	1,402,327	22.9
1986	5,184,834	31.5	16,245,390	30.2	17.8	3.1	1,233,792	31.6
1985	3,706,930	19.6	7,001,181	36.9	13.4	1.9	1,281,466	24.1
1984	5,872,386	23.4	11,717,446	16.3	13.8	2.0	522,965	33.0
1983	8,857,165	29.7	23,116,137	45.8	13.8	2.6	1,609,202	33.3

Table III.14 Bluefish recreational catch in North Carolina by year (*continued*).

Year	Harvest Number	PSE (num)	Harvest Pounds	PSE (lb)	Mean Length (inches)	Mean Weight (lb)	Released Number	PSE (release)
1982	4,678,400	18.2	4,196,021	21.6	11.6	0.9	438,075	26.5
1981	7,121,155	13.0	6,391,900	10.6	11.1	0.9	3,498,306	20.1

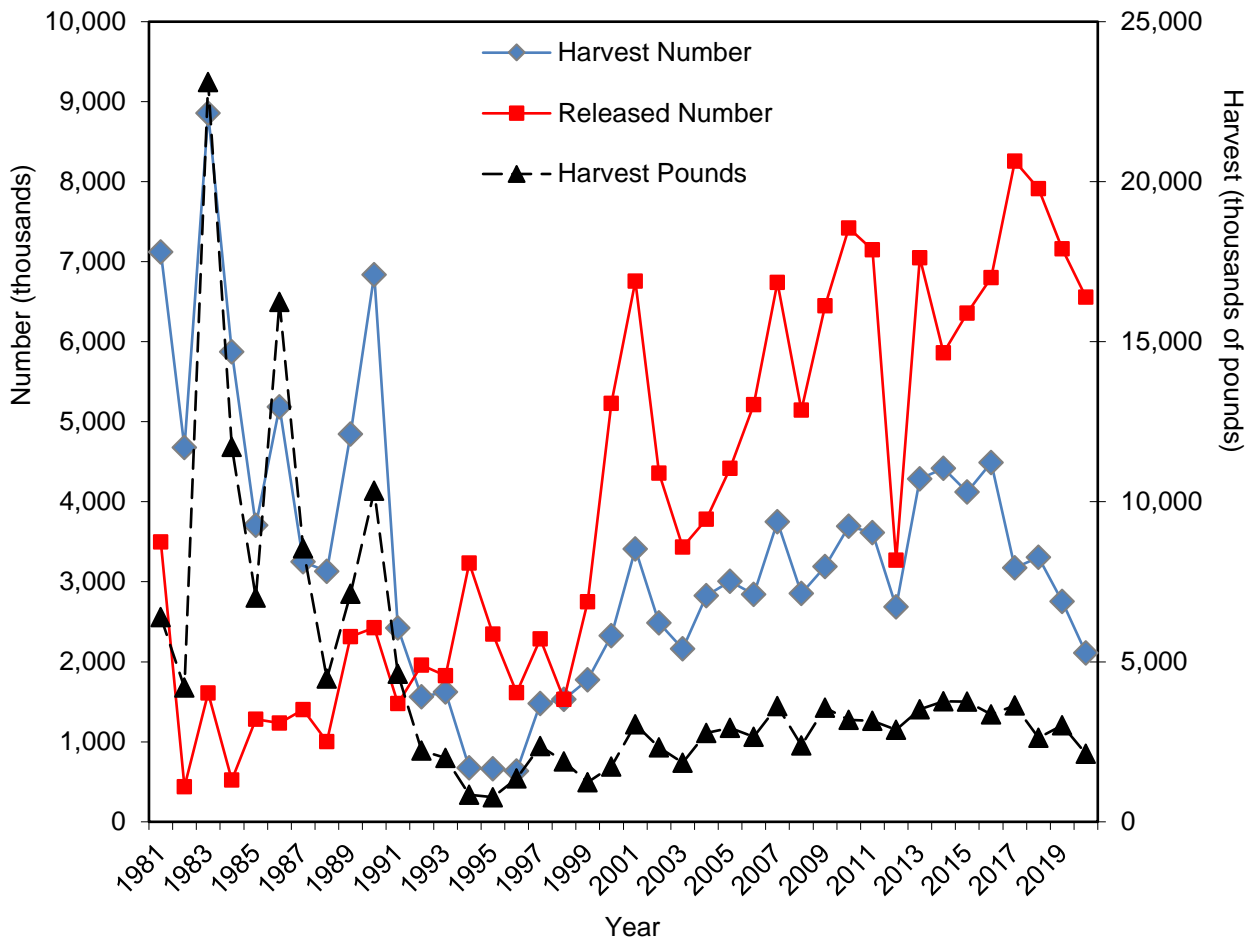


Figure III.9 Bluefish recreational catch in North Carolina by year.

Table III.15 Bluefish recreational catch by state, 2020.

State	Harvest Number	PSE (num)	Harvest Pounds	PSE (lb)	Mean Length (inches)	Mean Weight (lb)	Released Number	PSE (release)
North Carolina	2,108,296	21.2	2,124,224	21.5	12.5	1.0	6,557,751	19.6
Connecticut	298,383	25.5	594,546	30.4	13.7	2.0	1,109,347	20.8
Delaware	53,751	27.2	94,901	30.0	14.2	1.8	165,537	20.7
Florida	4,142,380	27.8	5,732,605	36.2	14.2	1.4	3,135,000	19.8
Georgia	10,795	43.7	9,902	39.2	11.9	0.9	176,477	28.4
Maryland	173,846	22.7	214,991	28.7	12.9	1.2	320,368	25.5
Massachusetts	162,128	24.4	553,242	21.0	19.2	3.4	744,141	29.0
New Hampshire	376	75.5	1,800	72.0	21.3	4.8	-	-
New Jersey	595,103	20.5	1,808,548	22.0	17.2	3.0	2,777,113	35.7
New York	885,517	21.6	1,478,719	18.7	12.7	1.7	2,815,957	20.4
Rhode Island	220,556	26.4	508,227	21.0	15.3	2.3	868,893	40.9
South Carolina	289,339	32.0	154,420	26.3	10.3	0.5	1,897,968	56.5
Virginia	395,751	39.7	305,092	33.8	11.4	0.8	777,052	37.1

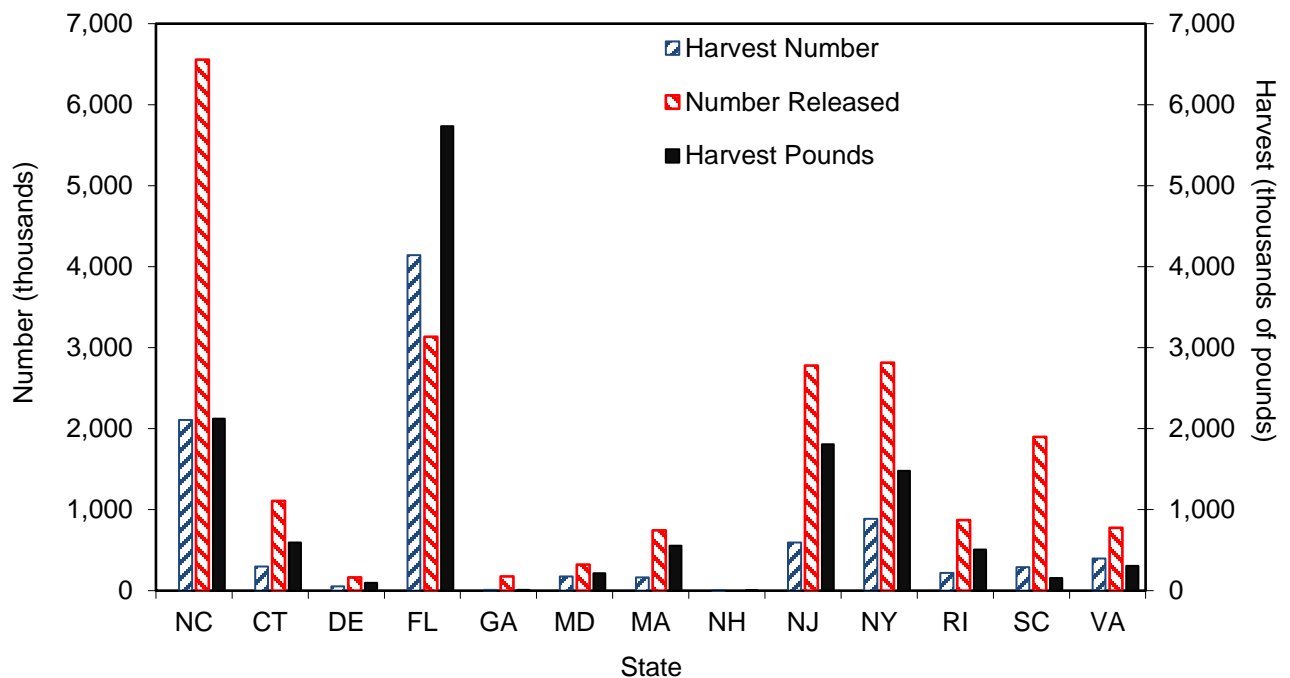


Figure III.10 Bluefish recreational catch by state, 2020.

Table III.16 Bonito, Atlantic recreational catch in North Carolina by year.

Year	Harvest Number	PSE (num)	Harvest Pounds	PSE (lb)	Mean Length (inches)	Mean Weight (lb)	Released Number	PSE (release)
2020	52,337	50.9	179,803	47.9	17.8	3.4	23,817	55.3
2019	35,874	66.6	122,931	48.6	17.1	3.4	24,033	66.1
2018	12,576	42.5	42,879	49.7	18.1	3.4	11,745	66.4
2017	1,999	45.6	9,578	53.0	18.8	4.8	40,094	75.6
2016	3,411	64.7	22,127	60.3	21.5	6.5	10,196	45.2
2015	16,973	44.8	102,408	42.8	21.6	6.0	1,325	60.8
2014	18,380	49.3	91,228	53.6	20.1	5.0	59,925	62.7
2013	19,182	59.9	99,252	55.4	20.4	5.2	4,609	41.3
2012	6,913	37.1	95,947	49.3	27.1	13.9	7,858	35.6
2011	21,235	73.1	287,458	66.4	27.1	13.5	28,618	42.1
2010	447	42.4	8,019	47.1	30.2	17.9	16,583	41.6
2009	1,379	71.8	13,799	85.4	24.4	10.0	2,561	92.2
2008	5,230	56.8	39,093	61.8	22.2	7.5	23,411	61.1
2007	7,685	48.1	34,693	46.3	20.4	4.5	4,523	41.8
2006	1,037	102.4	4,457	102.4	21.0	4.3	2,755	51.4
2005	2,102	76.6	9,388	73.8	21.5	4.5	42,363	98.6
2004	10,273	56.6	48,251	57.3	21.6	4.7	19,082	39.3
2003	2,275	58.8	6,685	51.2	16.6	2.9	12,968	50.9
2002	28,728	64.0	97,115	66.1	19.3	3.4	30,165	65.7
2001	7,722	48.2	23,602	50.7	17.4	3.1	5,001	56.1
2000	13,617	93.4	69,579	89.9	22.2	5.1	9,257	58.4
1999	6,045	44.8	38,657	44.2	22.2	6.4	2,682	73.0
1998	13,513	68.4	145,837	87.7	22.9	10.8	8,837	72.7
1997	31,090	41.4	162,980	41.8	21.0	5.2	29,817	52.7
1996	864	58.2	5,394	71.9	21.0	6.2	10,845	56.1
1995	10,528	73.8	41,312	80.6	19.2	3.9	2,407	49.2
1994	11,859	48.2	23,712	56.7	14.4	2.0	18,932	48.6
1993	8,936	61.0	49,289	54.5	19.8	5.5	1,690	49.0
1992	4,690	34.0	23,078	31.8	19.9	4.9	2,747	42.9
1991	17,567	40.0	94,896	44.8	20.9	5.4	9,622	80.4
1990	4,695	32.7	22,547	33.8	20.8	4.8	1,057	65.3
1989	39,759	52.4	116,392	58.8	17.2	2.9	4,214	64.0
1988	241,724	96.2	6,017	59.8	10.3	-	32,981	99.6
1987	2,195	38.8	14,910	49.7	22.7	6.8	1,609	59.0
1986	-	-	-	-	-	-	368	99.3
1985	1,555	104.3	8,910	104.3	21.3	5.7	-	-
1984	1,639	75.7	15,540	75.7	25.7	9.5	-	-
1983	-	-	-	-	-	-	-	-

Table III.16 Bonito, Atlantic recreational catch in North Carolina by year (*continued*).

Year	Harvest Number	PSE (num)	Harvest Pounds	PSE (lb)	Mean Length (inches)	Mean Weight (lb)	Released Number	PSE (release)
1982	9,033	52.6	83,807	54.8	23.2	9.3	-	-
1981	3,110	86.3	26,514	86.3	22.8	8.5	-	-

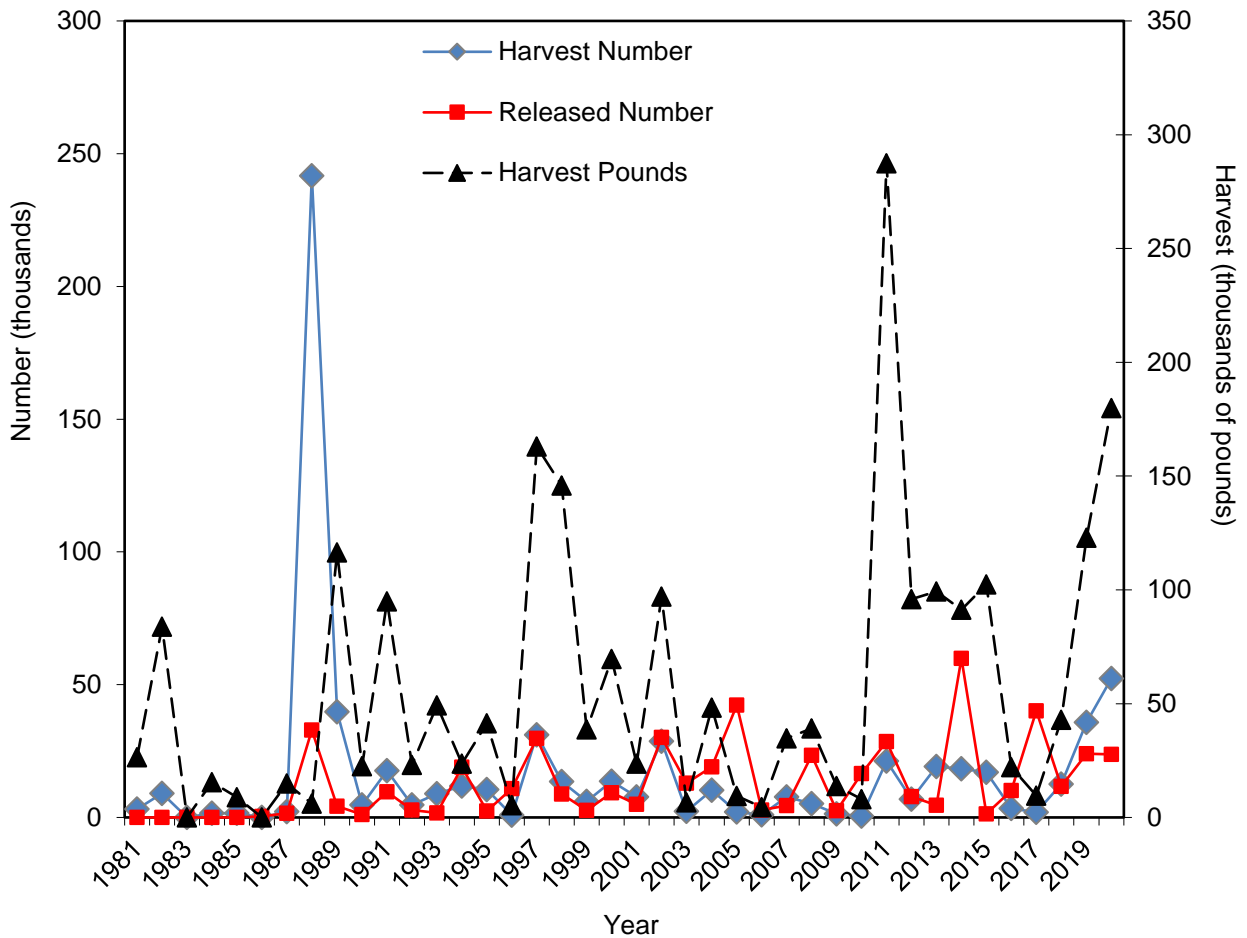


Figure III.11 Bonito, Atlantic recreational catch in North Carolina by year.

Table III.17 Bonito, Atlantic recreational catch by state, 2020.

State	Harvest Number	PSE (num)	Harvest Pounds	PSE (lb)	Mean Length (inches)	Mean Weight (lb)	Released Number	PSE (release)
North Carolina	52,337	50.9	179,803	47.9	17.8	3.4	23,817	55.3
Connecticut	5	103.7	17	103.7	18.1	3.3	-	-
Delaware	-	-	-	-	-	-	2	98.0
Georgia	119	98.0	146	94.3	13.8	1.2	15,362	74.2
Maryland	158	117.5	1,171	128.4	23.6	7.4	-	-
Massachusetts	27,580	39.3	133,208	39.5	20.3	4.8	20,509	40.6
New Hampshire	498	43.0	677	51.0	11.7	1.4	1,049	73.0
New Jersey	13,631	54.4	41,213	52.3	16.9	3.0	17,561	60.7
New York	3,769	64.0	14,406	72.5	18.5	3.8	9,448	84.6
Rhode Island	10,589	55.1	61,134	60.1	21.9	5.8	7,337	40.6
South Carolina	102	126.5	86	126.5	12.6	0.8	-	-
Virginia	1,931	58.7	3,387	62.5	14.9	1.8	-	-

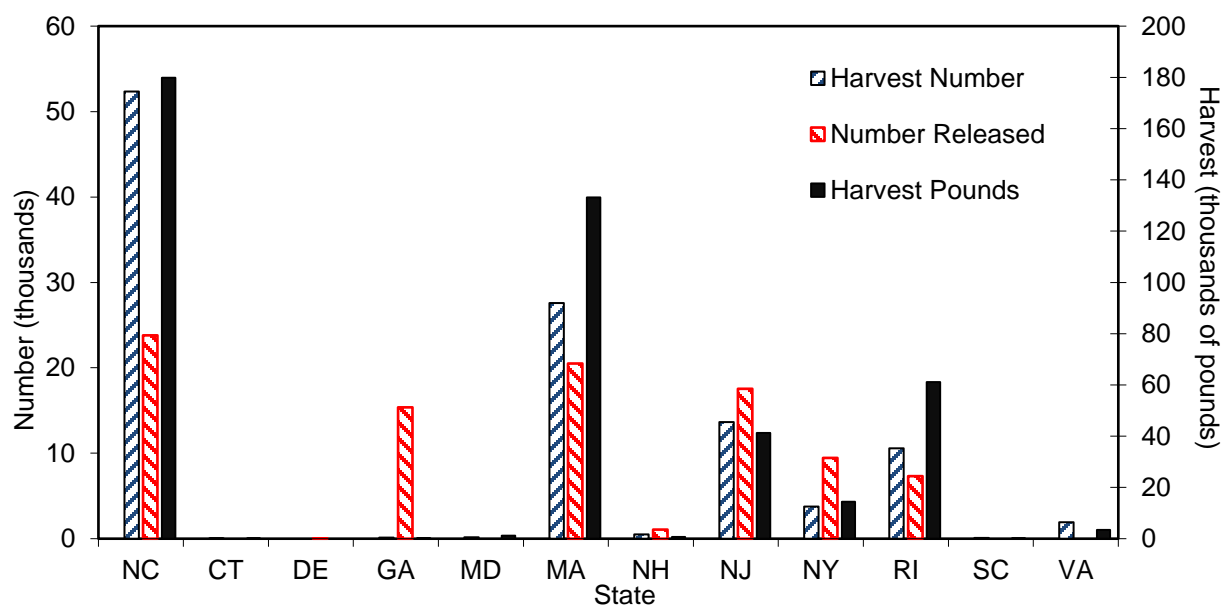


Figure III.12 Bonito, Atlantic recreational catch by state, 2020.

Table III.18 Cobia recreational catch in North Carolina by year.

Year	Harvest Number	PSE (num)	Harvest Pounds	PSE (lb)	Mean Length (inches)	Mean Weight (lb)	Released Number	PSE (release)
2020	15,067	37.9	407,883	33.5	40.9	27.1	51,158	24.0
2019	10,090	38.6	254,963	36.8	40.3	25.3	38,285	23.3
2018	25,331	33.2	685,962	29.1	40.7	27.1	68,219	23.4
2017	25,025	46.1	872,861	45.4	43.5	34.9	125,251	44.5
2016	26,421	44.9	838,363	44.6	42.7	31.7	39,237	26.6
2015	47,110	28.3	1,925,762	29.8	44.2	40.9	44,254	31.4
2014	24,601	35.8	645,427	35.8	39.3	26.2	32,184	29.3
2013	37,617	31.2	980,541	33.0	38.7	26.1	35,398	32.2
2012	3,805	33.9	102,077	35.2	39.0	26.8	66,567	30.1
2011	10,711	40.4	399,192	43.1	41.5	37.3	47,151	25.0
2010	24,030	26.8	808,227	27.8	43.2	33.6	48,590	29.7
2009	12,823	40.7	320,075	45.4	37.9	25.0	55,374	27.3
2008	3,972	54.9	167,463	68.5	45.3	42.2	24,028	39.2
2007	6,262	46.9	218,447	45.0	43.6	34.9	12,695	32.7
2006	5,154	39.4	196,330	45.6	42.6	38.1	11,425	30.1
2005	18,491	48.7	401,557	46.2	37.4	21.7	19,083	43.5
2004	12,522	39.9	420,684	41.4	43.0	33.6	11,079	42.1
2003	6,948	30.4	223,508	37.4	41.6	32.2	21,722	28.4
2002	7,196	46.1	319,178	54.6	48.1	44.4	14,036	38.4
2001	3,548	33.1	121,751	37.9	43.0	34.3	18,500	32.2
2000	2,473	59.6	91,143	54.3	41.0	36.9	4,734	39.8
1999	2,399	64.3	101,465	71.9	47.0	42.3	18,498	65.0
1998	3,132	34.3	117,754	38.7	44.6	37.6	9,859	50.6
1997	4,115	30.6	129,299	30.6	41.9	31.4	13,723	38.3
1996	4,744	35.9	102,899	33.6	36.3	21.7	2,000	40.2
1995	9,530	29.2	302,745	32.3	43.1	31.8	4,817	32.0
1994	6,908	37.6	169,168	35.6	39.3	24.5	4,543	38.0
1993	6,346	47.7	168,142	47.4	41.3	26.5	2,778	70.6
1992	10,711	37.1	317,628	38.8	40.9	29.7	9,777	44.3
1991	11,524	30.4	266,633	40.0	34.6	23.1	22,522	51.6
1990	10,054	28.0	188,539	30.1	34.1	18.8	6,089	48.6
1989	9,872	27.6	208,259	37.4	33.7	21.1	2,262	71.7
1988	5,716	37.0	103,975	64.2	37.1	18.2	3,257	54.8
1987	6,959	30.4	81,833	36.7	27.2	11.8	592	69.7
1986	17,956	57.6	533,982	71.3	42.7	29.7	9,112	96.8
1985	1,763	101.2	2,720	101.2	19.9	1.5	8,471	91.8
1984	7,167	71.9	259,354	71.9	45.0	36.2	6,108	99.0
1983	-	-	-	-	-	-	9,464	91.4

Table III.18 Cobia recreational catch in North Carolina by year (*continued*).

Year	Harvest Number	PSE (num)	Harvest Pounds	PSE (lb)	Mean Length (inches)	Mean Weight (lb)	Released Number	PSE (release)
1982	6,257	90.3	8,430	90.3	15.7	1.3	-	-
1981	1,690	97.6	3,726	97.6	19.5	2.2	-	-

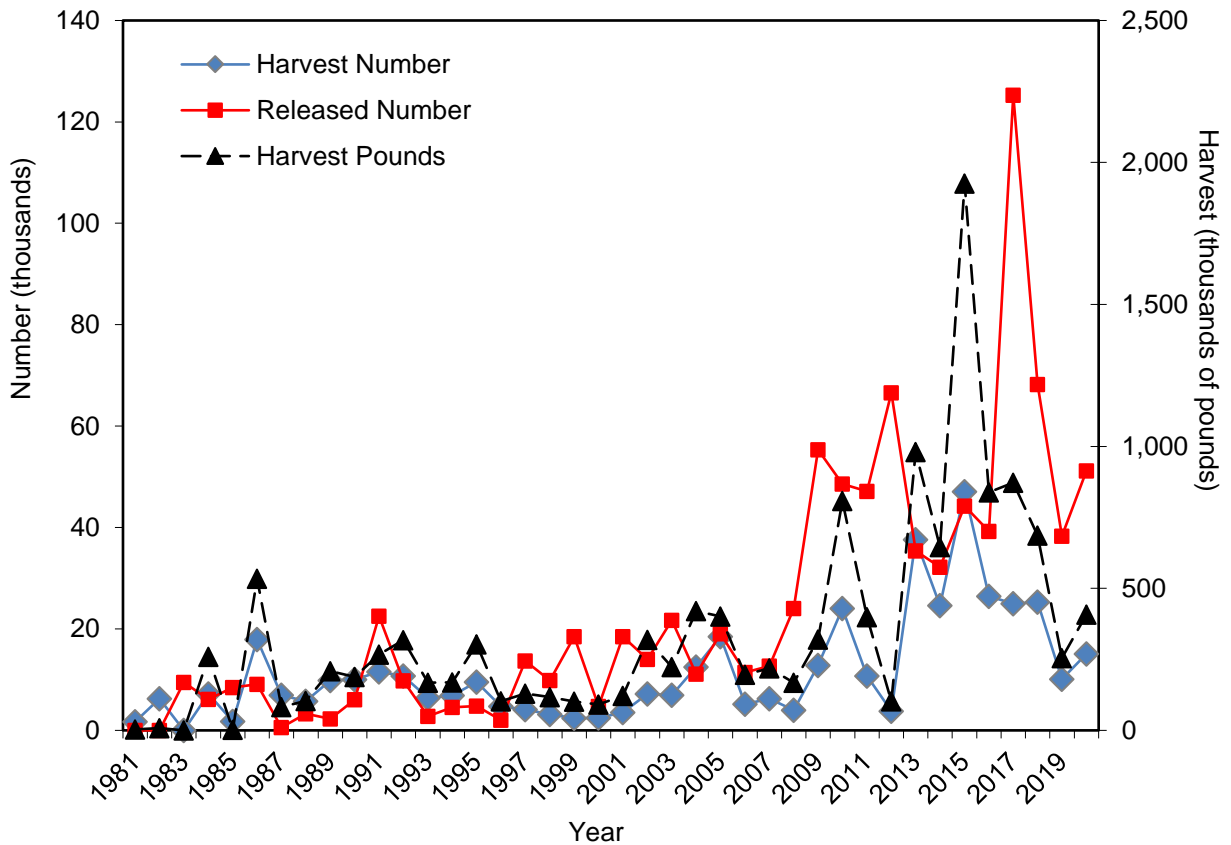


Figure III.13 Cobia recreational catch in North Carolina by year.

Table III.19 Cobia recreational catch by state, 2020.

State	Harvest Number	PSE (num)	Harvest Pounds	PSE (lb)	Mean Length (inches)	Mean Weight (lb)	Released Number	PSE (release)
North Carolina	15,067	37.9	407,883	33.5	40.9	27.1	51,158	24.0
Connecticut	219	102.7	1,595	102.7	27.6	7.3	-	-
Delaware	-	-	-	-	-	-	564	66.7
Florida	64,180	38.9	1,491,211	39.6	38.2	22.5	77,301	34.0
Georgia	2,203	92.4	44,976	88.3	36.3	20.4	15,091	49.2
Maryland	1,360	69.5	38,991	72.3	41.4	28.7	8,233	93.1
New Jersey	-	-	-	-	-	-	2,979	70.6
South Carolina	7,650	39.1	247,250	43.5	41.7	32.3	23,384	29.8
Virginia	50,287	25.0	1,541,393	27.8	41.1	30.7	146,913	22.4

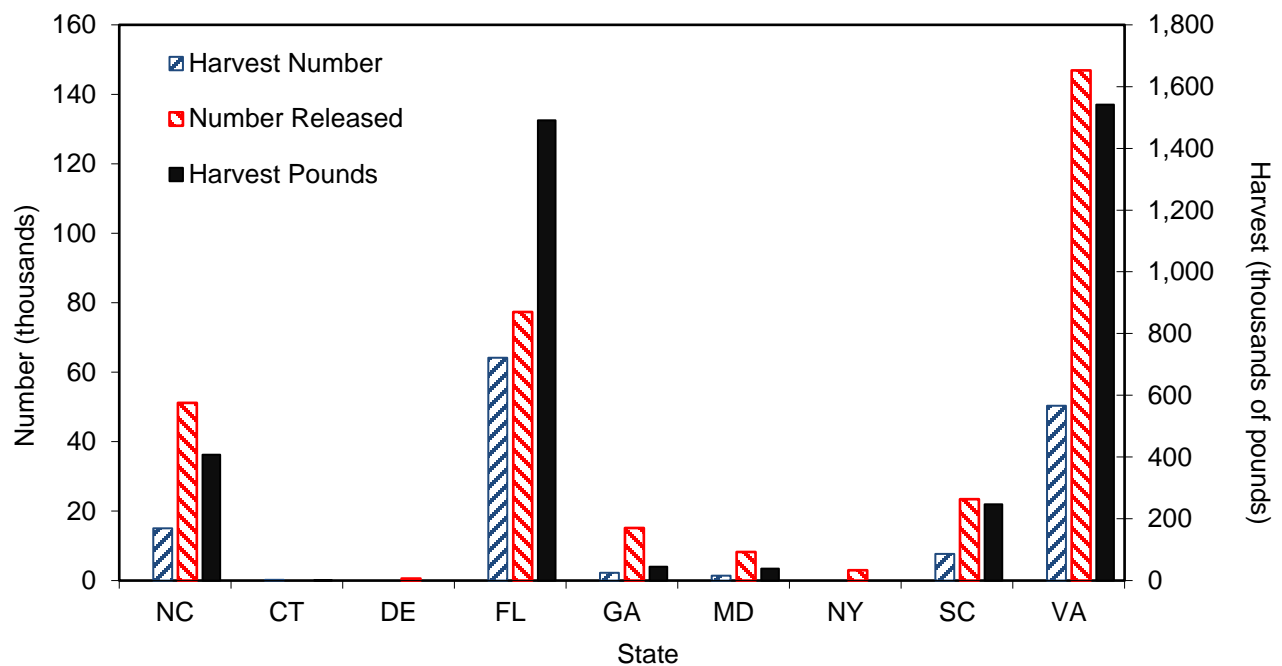


Figure III.14 Cobia recreational catch by state, 2020.

Table III.20 Croaker, Atlantic recreational catch in North Carolina by year.

Year	Harvest Number	PSE (num)	Harvest Pounds	PSE (lb)	Mean Length (inches)	Mean Weight (lb)	Released Number	PSE (release)
2020	673,377	22.5	223,685	20.6	8.9	0.3	5,560,605	13.5
2019	651,268	20.7	224,337	22.8	9.0	0.3	3,634,211	11.5
2018	472,917	16.0	164,644	16.1	8.9	0.3	4,311,368	13.2
2017	666,930	16.7	237,160	16.9	9.0	0.4	4,631,445	13.0
2016	1,109,570	16.2	443,728	16.8	9.3	0.4	7,254,382	14.9
2015	1,437,019	14.7	557,735	16.3	9.2	0.4	9,632,560	11.1
2014	1,935,961	21.6	758,751	16.9	9.1	0.4	10,347,332	13.8
2013	1,300,804	15.7	453,881	15.8	9.1	0.3	6,729,556	10.5
2012	848,495	12.1	307,338	12.6	9.2	0.4	3,878,710	8.7
2011	873,659	15.2	360,390	15.6	9.6	0.4	7,005,152	13.6
2010	1,280,446	16.0	638,817	15.7	9.8	0.5	4,571,287	9.8
2009	958,128	16.1	359,703	16.2	8.9	0.4	5,623,278	11.1
2008	678,638	14.8	275,052	15.4	9.5	0.4	3,274,873	11.6
2007	1,058,663	20.7	336,486	21.5	8.4	0.3	3,933,603	12.4
2006	1,376,403	23.9	498,741	23.3	8.8	0.4	6,381,434	11.9
2005	672,437	22.4	323,380	22.0	9.6	0.5	3,038,472	12.4
2004	1,218,206	26.1	683,113	24.1	10.1	0.6	3,407,280	14.0
2003	1,127,298	18.8	708,487	23.2	10.4	0.6	2,765,303	12.5
2002	1,265,031	18.8	651,611	17.3	9.7	0.5	2,218,039	23.8
2001	1,285,029	15.7	647,119	15.1	10.0	0.5	2,387,491	11.8
2000	860,246	14.5	394,037	14.8	9.6	0.5	3,475,554	12.5
1999	1,042,224	16.7	525,970	21.1	9.7	0.5	2,848,626	13.3
1998	865,487	14.0	376,255	14.8	9.3	0.4	2,038,932	11.6
1997	1,142,169	15.1	550,949	18.5	9.6	0.5	2,367,265	12.3
1996	1,224,357	17.9	564,016	19.3	10.0	0.5	2,051,175	10.7
1995	1,632,366	12.9	602,628	12.7	9.2	0.4	2,024,031	12.1
1994	1,921,848	13.6	557,403	12.1	8.6	0.3	4,302,429	11.2
1993	1,590,195	15.5	590,338	15.9	8.7	0.4	2,594,149	13.6
1992	1,836,941	15.6	556,026	15.1	8.5	0.3	2,565,212	14.6
1991	1,335,923	17.6	488,193	16.0	8.5	0.4	2,031,277	30.2
1990	2,298,692	16.1	722,352	16.0	8.4	0.3	3,298,860	24.0
1989	5,448,002	13.3	1,749,275	13.9	8.3	0.3	2,289,602	16.3
1988	3,318,868	24.6	217,743	39.0	9.4	0.1	1,673,140	18.0
1987	1,390,142	15.7	559,073	15.8	8.8	0.4	885,377	27.9
1986	1,298,595	24.4	453,024	28.0	9.3	0.3	578,593	36.0
1985	1,670,056	22.5	629,242	20.5	8.7	0.4	1,881,666	58.1
1984	4,439,243	30.5	1,223,695	26.2	8.7	0.3	2,503,282	21.5
1983	2,373,074	28.3	792,039	36.0	8.7	0.3	999,169	36.4

Table III.20 Croaker, Atlantic recreational catch in North Carolina by year (*continued*).

Year	Harvest Number	PSE (num)	Harvest Pounds	PSE (lb)	Mean Length (inches)	Mean Weight (lb)	Released Number	PSE (release)
1982	1,040,373	22.9	521,277	24.9	9.8	0.5	1,138,384	47.5
1981	3,178,177	50.0	1,703,800	52.7	9.5	0.5	1,803,849	42.5

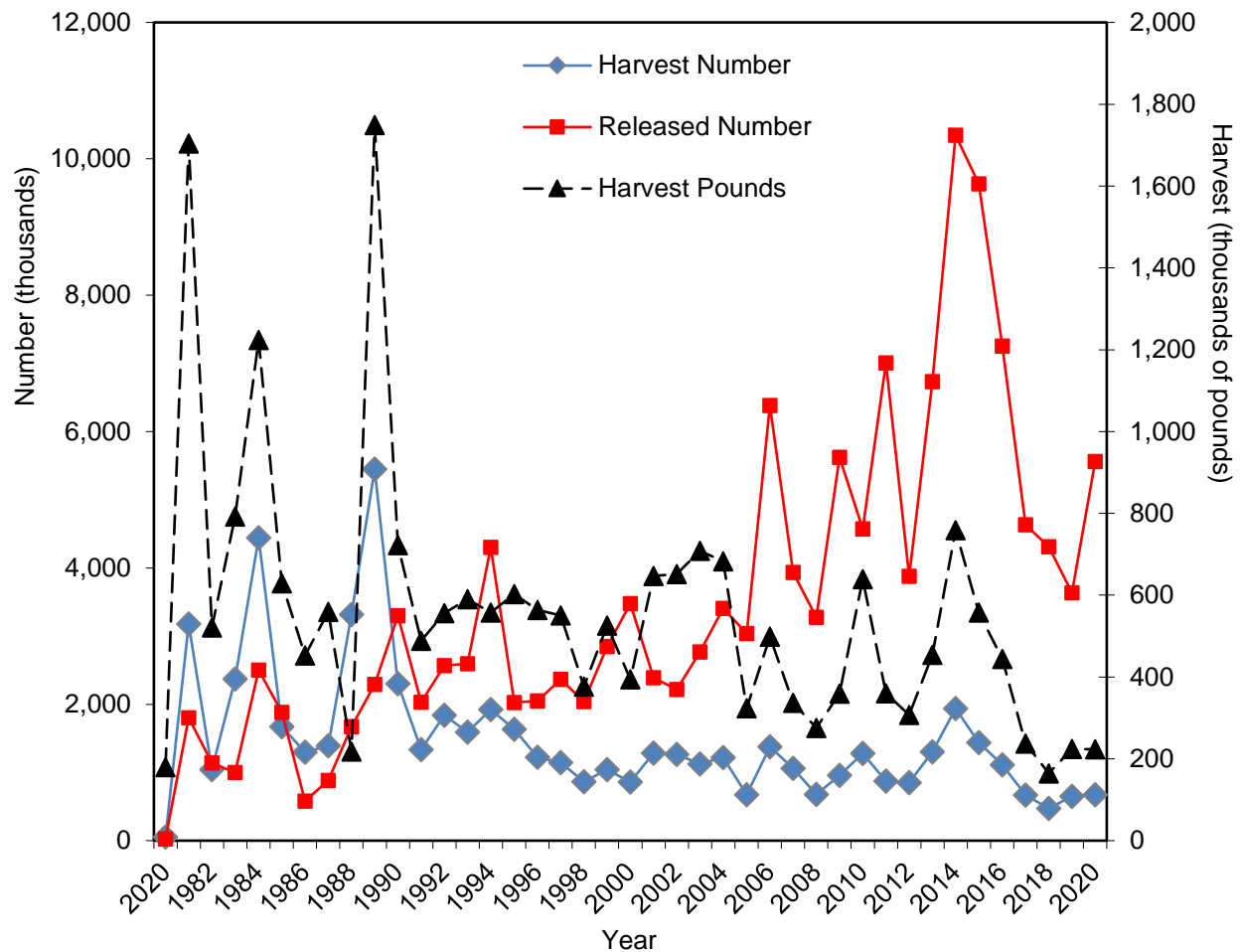


Figure III.15 Croaker, Atlantic recreational catch in North Carolina by year.

Table III.21 Croaker, Atlantic recreational catch by state, 2020.

State	Harvest Number	PSE (num)	Harvest Pounds	PSE (lb)	Mean Length (inches)	Mean Weight (lb)	Released Number	PSE (release)
North Carolina	673,377	22.5	223,685	20.6	8.9	0.3	5,560,605	13.5
Delaware	54,193	22.4	21,870	26.8	9.3	0.4	286,780	22.3
Florida	2,010,168	27.6	1,072,714	27.5	9.9	0.5	2,057,158	47.1
Georgia	232,535	40.0	77,876	41.4	8.9	0.3	1,696,852	22.7
Maryland	244,788	42.7	91,047	36.9	9.2	0.4	2,870,268	15.3
New Jersey	58,097	60.5	16,358	60.6	8.6	0.3	147,494	51.6
South Carolina	827,904	18.5	230,205	19.1	8.3	0.3	12,921,019	18.6
Virginia	6,529,494	18.9	2,410,612	20.2	9.0	0.4	6,223,025	13.9

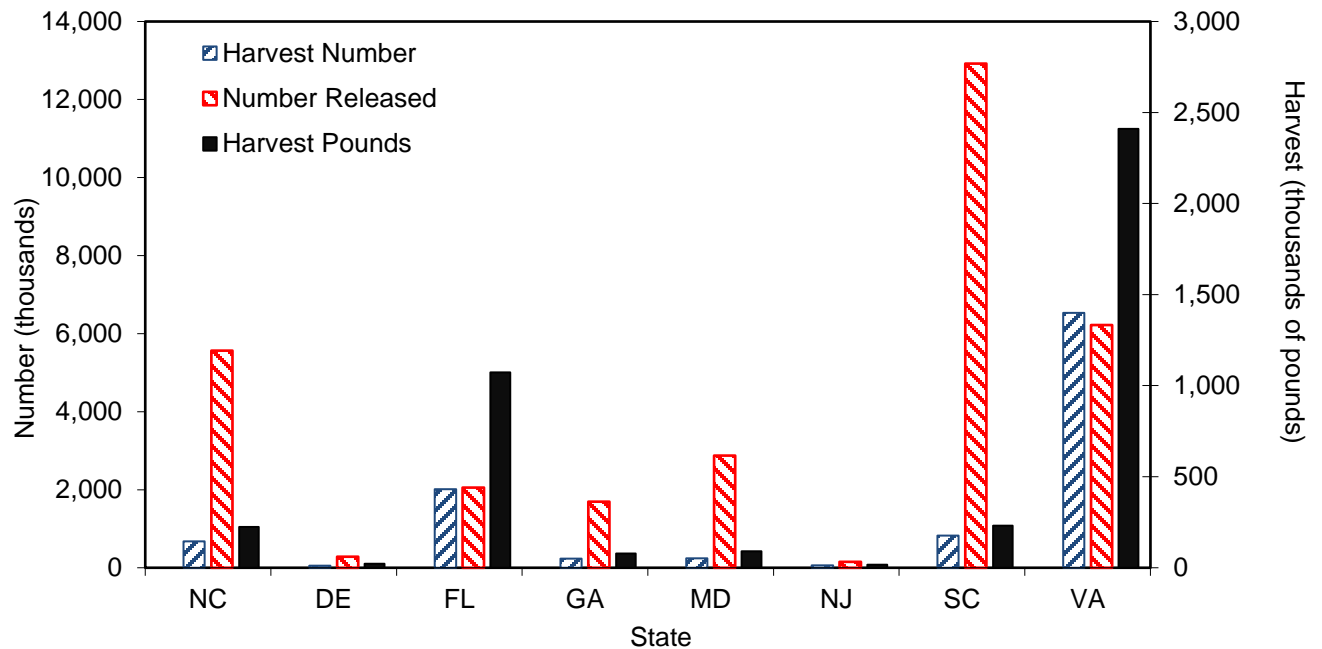


Figure III.16 Croaker, Atlantic recreational catch by state, 2020.

Table III.22 Dolphinfish recreational catch in North Carolina by year.

Year	Harvest Number	PSE (num)	Harvest Pounds	PSE (lb)	Mean Length (inches)	Mean Weight (lb)	Released Number	PSE (release)
2020	262,372	19.2	2,149,038	22.0	27.9	8.2	26,902	62.1
2019	458,086	18.9	3,147,384	20.4	25.7	6.9	35,286	50.6
2018	495,435	15.6	3,318,532	14.8	25.6	6.7	27,959	42.1
2017	279,932	20.7	2,223,509	21.1	28.0	7.9	3,035	39.1
2016	480,860	17.2	5,099,647	18.9	31.1	10.6	2,520	61.4
2015	740,023	23.0	5,610,008	24.8	27.0	7.6	73,872	79.8
2014	403,203	26.9	2,933,166	25.9	27.0	7.3	6,731	55.9
2013	322,769	18.4	2,277,519	16.5	26.6	7.1	5,315	55.0
2012	426,877	13.0	3,335,644	13.5	28.4	7.8	4,800	37.5
2011	638,543	15.3	4,950,235	16.7	27.7	7.8	16,217	87.8
2010	615,081	17.8	3,754,430	15.9	25.2	6.1	5,759	50.4
2009	595,967	17.4	6,380,552	18.3	32.0	10.7	4,480	51.7
2008	362,023	15.4	3,227,899	17.3	29.2	8.9	2,393	56.7
2007	591,835	14.3	5,729,879	15.6	30.4	9.7	6,908	53.2
2006	551,924	13.4	4,300,459	13.4	27.8	7.8	32,911	39.8
2005	634,260	17.1	5,664,028	17.8	29.2	8.9	3,264	66.7
2004	323,140	16.3	2,445,482	15.8	27.6	7.6	6,905	58.6
2003	245,651	19.4	3,029,205	22.0	31.9	12.3	13,985	57.1
2002	400,736	13.1	4,853,768	14.6	30.5	12.1	3,699	45.3
2001	344,865	17.2	4,669,172	20.7	31.9	13.5	4,781	44.8
2000	516,491	15.6	4,631,849	16.5	28.4	9.0	17,396	32.0
1999	395,167	17.7	3,280,273	19.7	28.3	8.3	10,406	55.2
1998	241,733	18.6	1,792,198	19.6	27.0	7.4	9,249	40.8
1997	372,989	14.5	3,400,820	15.0	28.8	9.1	6,320	35.2
1996	213,861	21.6	1,514,866	24.1	26.3	7.1	2,154	43.8
1995	295,178	13.7	2,324,560	14.4	27.5	7.9	9,620	34.3
1994	268,417	15.3	1,791,880	15.6	25.5	6.7	9,402	27.7
1993	291,297	16.1	1,527,078	16.3	22.9	5.2	3,190	30.7
1992	167,690	21.3	927,165	21.4	22.7	5.5	6,936	51.8
1991	254,975	18.7	1,298,933	18.7	23.0	5.1	7,025	33.2
1990	209,476	27.3	986,307	26.7	23.2	4.7	1,452	57.4
1989	231,953	29.1	1,653,574	24.6	25.3	7.1	1,696	67.2
1988	81,487	33.9	205,599	43.5	23.8	2.5	31,262	102.1
1987	93,044	26.0	489,338	24.8	22.7	5.3	79	73.7
1986	49,810	30.1	478,136	32.1	28.7	9.6	589	108.7
1985	19,155	59.6	246,722	60.1	33.8	12.9	-	-
1984	1,639	75.7	1,446	75.7	15.6	0.9	-	-
1983	21,325	57.0	196,959	51.2	28.0	9.2	-	-

Table III.22 Dolphinfish recreational catch in North Carolina by year (*continued*).

Year	Harvest Number	PSE (num)	Harvest Pounds	PSE (lb)	Mean Length (inches)	Mean Weight (lb)	Released Number	PSE (release)
1982	18,745	50.8	139,778	57.0	27.2	7.5	-	-
1981	28,065	85.7	195,755	83.6	26.2	7.0	-	-

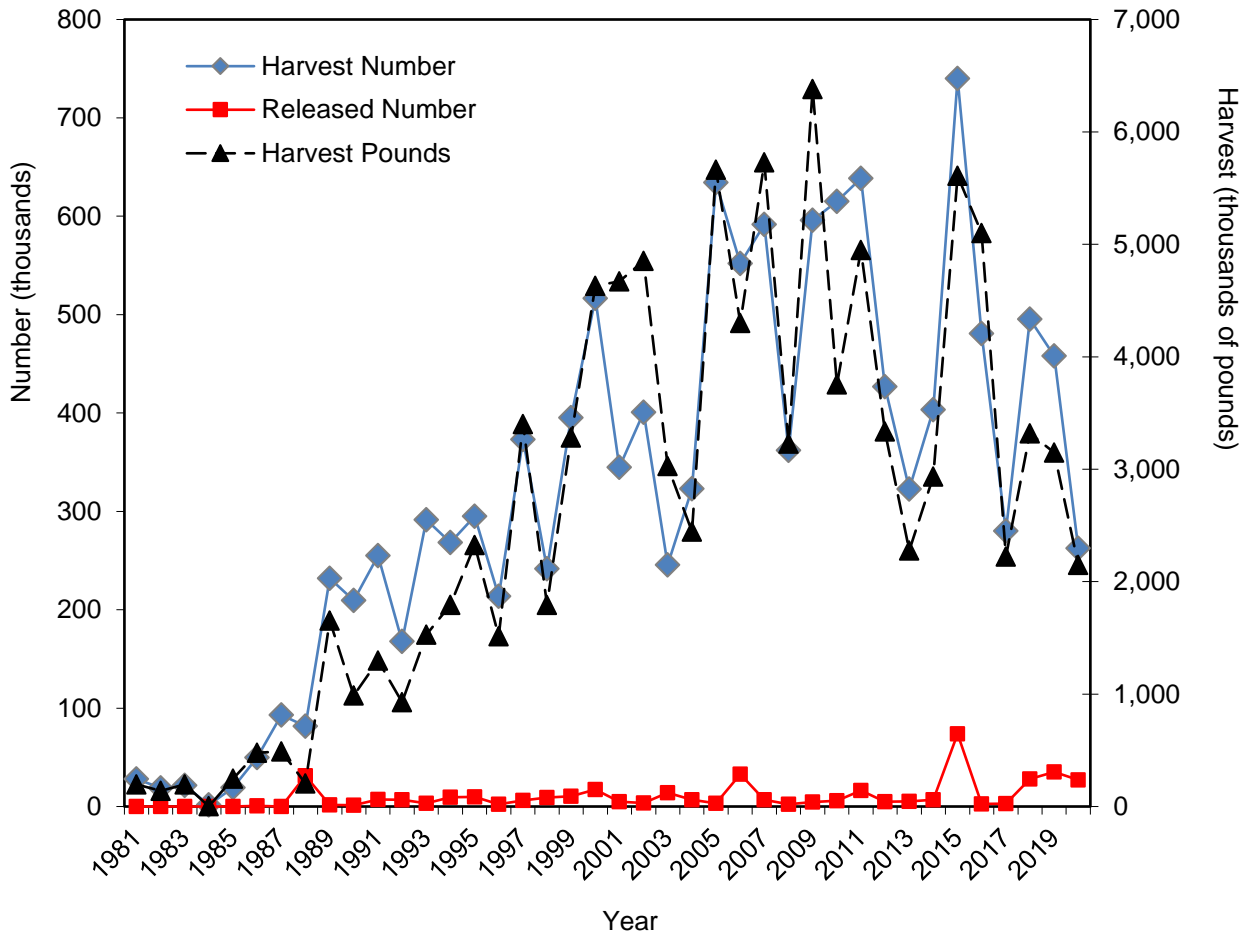


Figure III.17 Dolphinfish recreational catch in North Carolina by year.

Table III.23 Dolphinfish recreational catch by state, 2020.

State	Harvest Number	PSE (num)	Harvest Pounds	PSE (lb)	Mean Length (inches)	Mean Weight (lb)	Released Number	PSE (release)
North Carolina	262,372	19.2	2,149,038	22.0	27.9	8.2	26,902	62.1
Delaware	2,753	96.9	6,893	97.5	18.7	2.5	128	101.6
Florida	512,123	22.1	2,824,263	20.6	23.8	4.7	134,169	29.0
Georgia	450	106.1	1,636	106.1	21.9	3.6	-	-
Maryland	21,436	30.6	108,882	34.1	23.5	5.1	1,656	75.7
Massachusetts	2,079	99.1	-	-	-	-	1,283	100.6
New Jersey	110,316	49.6	219,092	58.1	16.9	2.0	27,297	57.7
New York	79,746	45.8	296,780	46.0	21.0	3.7	15,140	96.3
Rhode Island	849	98.6	-	-	-	-	656	95.9
South Carolina	63,611	67.4	678,295	67.3	31.3	10.7	9,366	66.0
Virginia	6,655	26.4	47,900	25.7	25.7	7.2	-	-

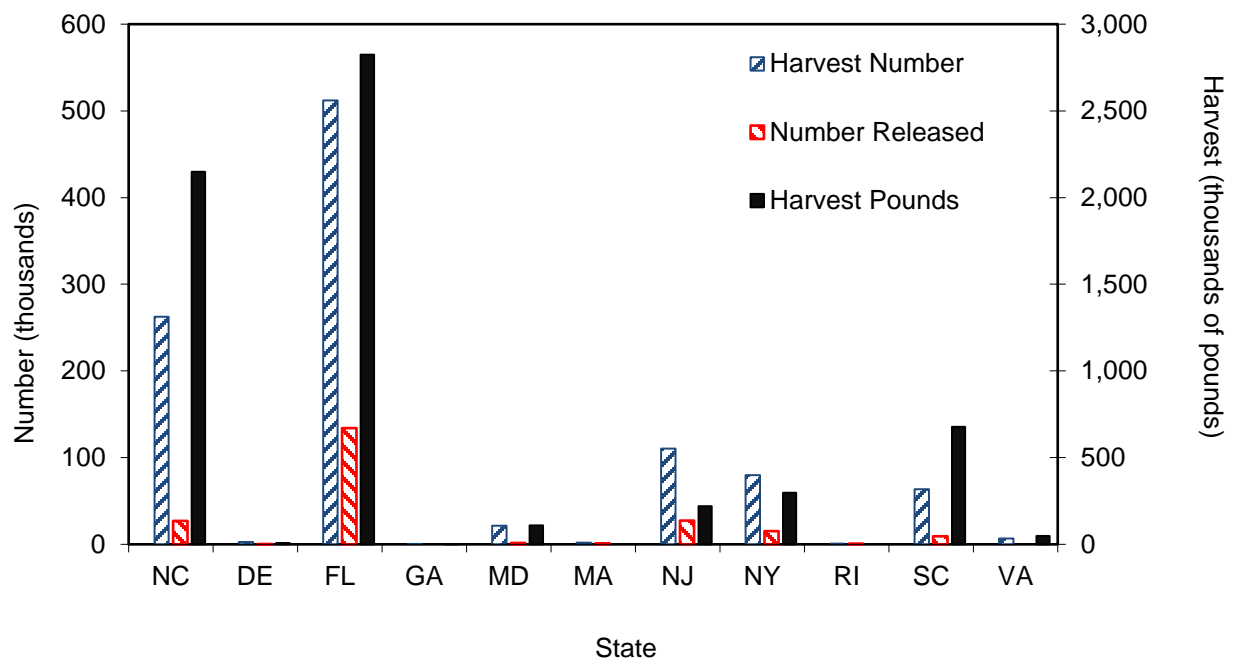


Figure III.18 Dolphinfish recreational catch by state, 2020.

Table III.24 Drum, Black recreational catch in North Carolina by year.

Year	Harvest Number	PSE (num)	Harvest Pounds	PSE (lb)	Mean Length (inches)	Mean Weight (lb)	Released Number	PSE (release)
2020	213,320	14.7	612,932	16.5	16.3	2.9	704,357	18.9
2019	156,401	19.9	404,452	20.1	15.7	2.6	756,749	16.6
2018	134,624	27.2	428,273	28.3	16.5	3.2	1,450,855	21.6
2017	355,544	47.8	856,081	46.9	16.1	2.4	2,336,352	22.1
2016	459,078	55.6	1,322,547	46.6	16.7	2.9	2,530,596	29.9
2015	276,126	20.1	780,876	18.6	16.9	2.8	1,791,758	21.9
2014	109,307	38.5	230,834	32.9	15.0	2.1	1,964,749	27.2
2013	1,511,995	17.6	2,709,269	25.8	12.9	1.8	497,334	27.7
2012	556,482	20.9	879,401	20.4	12.7	1.6	397,155	18.7
2011	1,259,216	20.9	823,423	18.3	10.0	0.7	711,755	23.1
2010	650,010	24.8	812,699	23.6	11.3	1.3	427,577	27.4
2009	449,901	26.5	421,788	21.2	10.6	0.9	411,358	28.3
2008	925,963	22.7	1,232,589	27.9	12.4	1.3	548,931	25.2
2007	876,178	24.9	697,822	19.7	10.7	0.8	832,132	25.6
2006	276,257	22.5	431,212	25.6	13.4	1.6	265,369	29.0
2005	465,076	29.4	509,328	30.8	10.5	1.1	376,363	25.6
2004	296,531	21.1	566,484	20.5	13.5	1.9	255,753	44.2
2003	1,265,995	42.6	1,926,671	32.3	11.1	1.5	481,742	21.2
2002	846,855	18.5	1,791,703	20.2	14.1	2.1	215,810	34.5
2001	400,983	29.5	446,202	24.8	11.2	1.1	325,234	32.2
2000	293,983	30.1	685,687	35.6	15.2	2.3	112,470	28.2
1999	374,245	16.7	561,678	18.4	12.9	1.5	267,723	25.4
1998	105,349	22.2	164,280	21.9	12.1	1.6	95,834	25.5
1997	106,854	19.8	277,316	22.9	15.5	2.6	62,498	26.7
1996	468,766	19.7	608,460	22.6	12.4	1.3	176,061	33.6
1995	931,269	25.8	713,652	22.8	10.6	0.8	227,608	21.1
1994	132,517	37.4	272,820	43.3	14.7	2.1	9,122	52.0
1993	98,091	27.4	90,014	24.5	10.7	0.9	15,780	41.4
1992	30,466	34.4	52,009	33.1	13.3	1.7	3,362	100.6
1991	18,451	36.4	24,452	33.9	11.4	1.3	4,026	48.9
1990	7,797	53.5	7,471	45.6	9.6	1.0	8,694	99.7
1989	649	71.2	3,459	86.2	18.0	5.3	398	100.5
1988	13,363	45.3	-	-	14.7	0.0	5,520	102.3
1987	90,119	57.4	91,522	40.1	10.8	1.0	1,528	78.4
1986	30,377	60.2	77,384	66.9	16.0	2.5	6,793	100.6
1985	17,735	58.4	12,217	59.9	10.4	0.7	-	-
1984	-	-	-	-	-	-	-	-
1983	-	-	-	-	-	-	-	-

Table III.24 **Drum, Black recreational catch in North Carolina by year (*continued*).**

Year	Harvest Number	PSE (num)	Harvest Pounds	PSE (lb)	Mean Length (inches)	Mean Weight (lb)	Released Number	PSE (release)
1982	2,699	98.5	662	98.5	4.7	0.2	-	-
1981	-	-	-	-	-	-	-	-

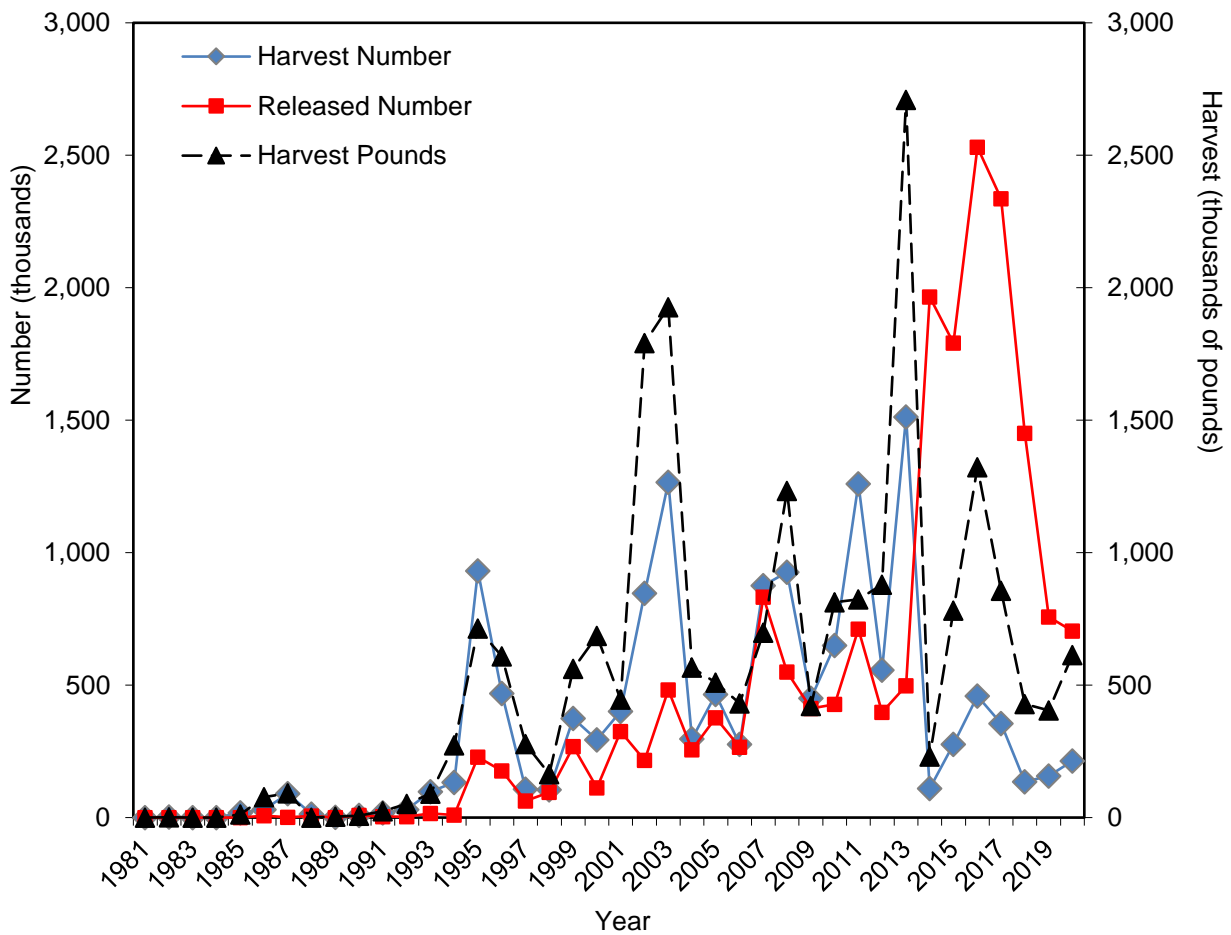


Figure III.19 **Drum, Black recreational catch in North Carolina by year.**

Table III.25 Drum, Black recreational catch by state, 2020.

State	Harvest Number	PSE (num)	Harvest Pounds	PSE (lb)	Mean Length (inches)	Mean Weight (lb)	Released Number	PSE (release)
North Carolina	213,320	14.7	612,932	16.5	16.3	2.9	704,357	18.9
Delaware	5,207	63.8	90,950	69.1	28.0	17.5	8,301	33.5
Florida	678,484	21.8	3,163,767	22.3	17.2	3.4	797,425	27.4
Georgia	100,973	27.4	298,894	31.8	16.3	3.0	239,371	46.2
Maryland	14,092	93.1	53,825	68.1	17.3	3.8	1,997	72.7
New Jersey	27,594	36.8	535,249	43.9	28.6	19.4	10,474	64.5
South Carolina	198,239	21.1	493,001	19.0	15.6	2.5	678,836	16.9
Virginia	17,000	49.0	251,724	60.7	24.5	14.8	142,394	48.4

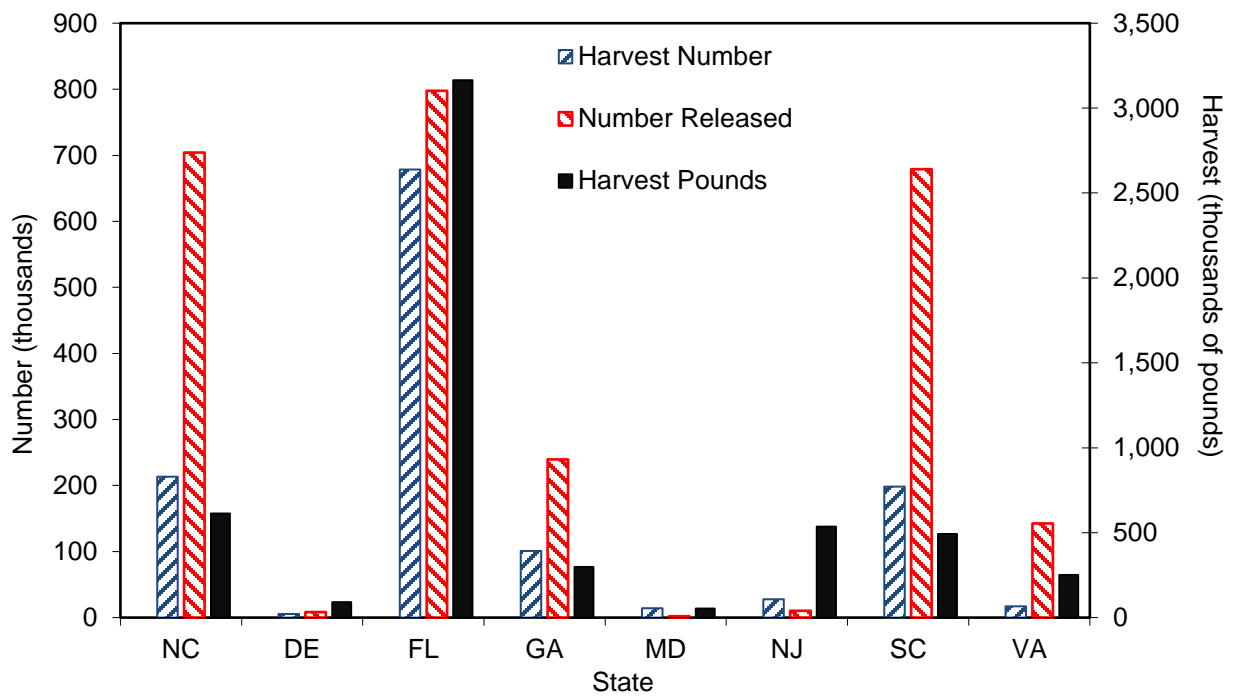


Figure III.20 Drum, Black recreational catch by state, 2020.

Table III.26 Drum, Red recreational catch in North Carolina by year.

Year	Harvest Number	PSE (num)	Harvest Pounds	PSE (lb)	Mean Length (inches)	Mean Weight (lb)	Released Number	PSE (release)
2020	413,419	11.3	1,758,789	11.8	21.2	4.3	2,686,150	12.9
2019	97,186	22.8	436,219	24.2	21.5	4.5	2,976,601	17.4
2018	299,577	19.1	1,452,358	18.6	22.7	4.8	1,729,260	15.3
2017	353,716	17.0	1,475,852	18.0	21.4	4.2	2,165,656	13.0
2016	169,195	22.1	633,496	18.4	20.1	3.7	3,203,452	30.5
2015	143,876	24.5	567,730	26.1	20.7	3.9	1,308,072	27.2
2014	324,303	18.8	1,674,595	18.2	22.9	5.2	1,086,967	13.3
2013	520,758	13.3	2,214,045	13.9	21.7	4.3	1,892,171	11.6
2012	152,005	13.1	648,342	12.6	21.1	4.3	4,939,534	11.4
2011	156,484	16.7	737,853	18.1	21.9	4.7	587,369	13.4
2010	179,828	12.2	835,143	12.8	22.0	4.6	1,670,693	10.1
2009	214,317	18.8	1,028,339	18.6	22.5	4.8	1,238,158	16.0
2008	112,938	17.4	523,607	18.6	22.0	4.6	1,510,133	14.4
2007	157,577	15.2	789,430	14.8	22.6	5.0	818,037	13.9
2006	127,412	17.5	569,699	18.9	21.2	4.5	1,042,564	15.2
2005	103,275	19.9	470,914	22.1	21.8	4.6	967,892	37.5
2004	58,543	26.0	245,163	29.7	21.1	4.2	369,326	13.3
2003	73,202	18.9	359,181	19.1	21.8	4.9	215,277	18.1
2002	127,559	19.6	571,102	21.0	21.4	4.5	1,515,679	17.2
2001	57,929	18.1	290,901	18.6	22.4	5.0	538,370	20.1
2000	127,165	16.1	655,251	16.9	22.4	5.2	443,747	18.6
1999	151,062	15.1	701,002	15.5	22.1	4.6	633,951	13.8
1998	164,693	15.3	843,571	16.2	22.5	5.1	388,288	14.3
1997	22,829	28.6	98,079	28.9	19.4	4.3	426,993	15.4
1996	90,177	24.3	391,364	19.7	20.2	4.3	97,663	22.9
1995	151,145	13.7	692,063	14.6	21.2	4.6	373,695	15.5
1994	72,245	29.4	349,317	22.5	21.2	4.8	185,906	18.6
1993	107,235	19.2	538,175	20.1	21.7	5.0	442,230	40.8
1992	48,099	26.4	233,100	27.0	22.2	4.8	140,866	25.1
1991	111,787	24.2	345,911	23.9	18.1	3.1	336,524	21.6
1990	98,374	33.4	261,688	31.9	17.0	2.7	46,812	49.0
1989	234,788	43.2	718,961	45.9	18.0	3.1	15,246	40.9
1988	532,944	52.3	163,965	28.1	15.6	0.3	98,940	65.4
1987	242,703	34.0	759,124	35.5	17.3	3.1	50,274	38.7
1986	310,934	50.7	648,779	51.1	16.1	2.1	-	-
1985	57,702	33.3	175,291	25.6	18.0	3.0	-	-
1984	420,096	23.2	5,942,933	28.2	30.2	14.1	7,719	99.2
1983	106,833	35.2	186,762	32.7	14.9	1.7	1,153	97.1

Table III.26 Drum, Red recreational catch in North Carolina by year (continued).

Year	Harvest Number	PSE (num)	Harvest Pounds	PSE (lb)	Mean Length (inches)	Mean Weight (lb)	Released Number	PSE (release)
1982	48,728	19.5	155,015	31.4	18.0	3.2	-	-
1981	37,380	53.5	98,426	61.1	15.9	2.6	10,497	96.8

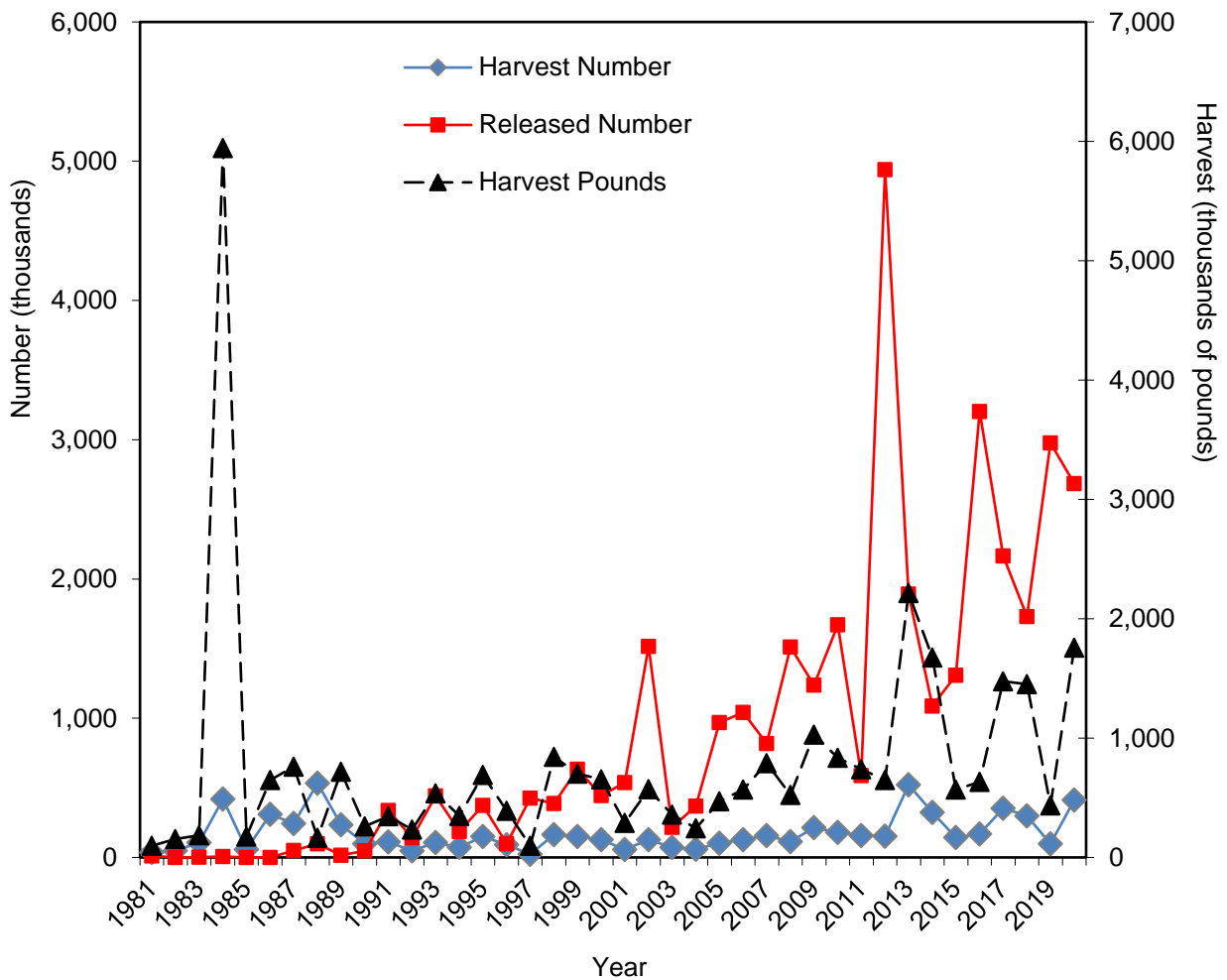


Figure III.21 Drum, Red recreational catch in North Carolina by year.

Table III.27 Drum, Red recreational catch by state, 2020.

State	Harvest Number	PSE (num)	Harvest Pounds	PSE (lb)	Mean Length (inches)	Mean Weight (lb)	Released Number	PSE (release)
North Carolina	413,419	11.3	1,758,789	11.8	21.2	4.3	2,686,150	12.9
Delaware	493	60.4	1,544	66.2	19.9	3.1	-	-
Florida	560,382	17.5	2,135,395	17.1	21.1	4.0	3,154,500	15.4
Georgia	230,026	18.9	535,674	19.1	17.3	2.3	393,368	18.4
Maryland	44,975	73.7	115,181	70.2	18.6	2.6	217,710	57.0
South Carolina	239,874	17.0	671,004	20.7	18.3	2.8	1,705,054	19.5
Virginia	214,069	32.5	610,001	30.8	18.6	2.8	716,277	19.7

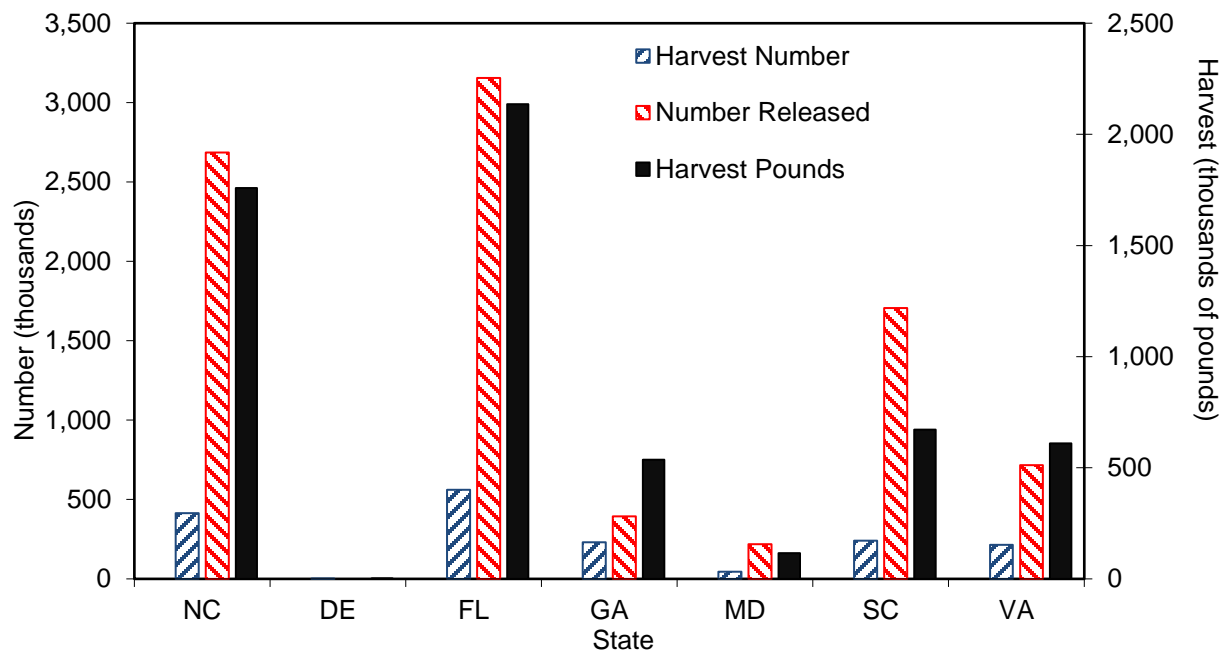


Figure III.22 Drum, Red recreational catch by state, 2020.

Table III.28 Flounder, Southern recreational catch in North Carolina by year.

Year	Harvest Number	PSE (num)	Harvest Pounds	PSE (lb)	Mean Length (inches)	Mean Weight (lb)	Released Number ⁶	PSE (release) ¹
2020	152,244	19.0	398,769	20.7	17.8	2.6	1,678,494	-
2019	163,045	19.1	387,203	23.3	17.6	2.4	1,353,286	-
2018	217,805	19.3	495,289	18.5	17.2	2.3	1,002,753	-
2017	221,321	18.7	451,126	16.8	16.0	2.0	1,988,000	-
2016	299,273	16.1	695,713	16.7	16.4	2.3	2,178,145	-
2015	249,166	18.5	558,303	17.7	15.8	2.2	1,709,189	-
2014	209,228	17.0	447,337	16.9	16.1	2.1	1,856,280	-
2013	374,215	23.7	869,223	22.1	16.6	2.3	2,357,529	-
2012	290,035	10.6	701,698	10.8	16.5	2.4	2,434,621	-
2011	388,647	13.1	942,373	13.2	17.6	2.4	2,087,604	-
2010	556,812	11.5	1,149,899	11.6	17.0	2.1	2,835,142	-
2009	329,117	15.9	692,704	14.7	16.4	2.1	1,889,921	-
2008	349,860	16.2	807,867	16.5	16.8	2.3	2,532,079	-
2007	279,916	18.2	572,064	16.9	17.2	2.0	1,075,735	-
2006	352,942	17.9	761,069	21.8	16.8	2.2	1,287,601	-
2005	298,307	16.2	675,856	17.3	16.7	2.3	997,132	-
2004	347,492	15.2	827,593	18.4	17.5	2.4	1,537,924	-
2003	293,793	15.4	621,985	15.7	17.5	2.1	860,052	-
2002	366,671	13.6	789,539	15.0	17.4	2.2	1,415,247	-
2001	304,791	13.5	567,568	13.7	17.0	1.9	990,335	-
2000	326,712	28.0	607,053	24.3	15.8	1.9	942,560	-
1999	78,321	29.5	184,969	31.9	16.4	2.4	209,956	-
1998	96,124	18.4	205,569	20.1	16.0	2.1	411,939	-
1997	209,038	14.1	560,323	14.5	16.9	2.7	873,901	-
1996	173,400	19.1	339,228	21.9	16.2	2.0	449,876	-
1995	127,106	17.2	271,703	19.2	16.3	2.1	459,800	-
1994	168,237	19.4	323,869	20.5	16.0	1.9	562,915	-
1993	83,811	25.4	127,860	22.6	15.2	1.5	370,372	-
1992	115,329	24.6	219,720	24.3	15.7	1.9	433,576	-
1991	257,319	14.9	489,865	21.1	15.4	1.9	791,778	-
1990	138,106	23.0	216,960	22.7	14.7	1.6	152,895	-
1989	119,047	30.6	199,850	36.0	15.1	1.7	125,192	-
1988	93,973	35.6	11,563	60.3	14.8	0.1	71,905	-
1987	180,600	34.0	251,316	39.1	14.1	1.4	131,915	-
1986	123,122	35.8	192,989	39.7	14.7	1.6	30,940	-
1985	216	99.2	206	99.2	10.8	1.0	-	-
1984	30,193	62.3	25,889	58.4	12.9	0.9	5,755	-

¹ Flounder releases are not recorded to species; released number was calculated by assigning a ratio of observed flounder by species to reported flounder genus release estimates. PSEs are not available for this analysis.

Table III.28 Flounder, Southern recreational catch in North Carolina by year (*continued*).

Year	Harvest Number	PSE (num)	Harvest Pounds	PSE (lb)	Mean Length (inches)	Mean Weight (lb)	Released Number ⁶	PSE (release) ¹
1982	142,311	55.8	114,267	50.2	11.1	0.8	5,393	-
1981	18,988	78.3	27,647	87.6	13.6	1.5	717	-

¹ Flounder releases are not recorded to species; released number was calculated by assigning a ratio of observed flounder by species to reported flounder genus release estimates. PSEs are not available for this analysis.

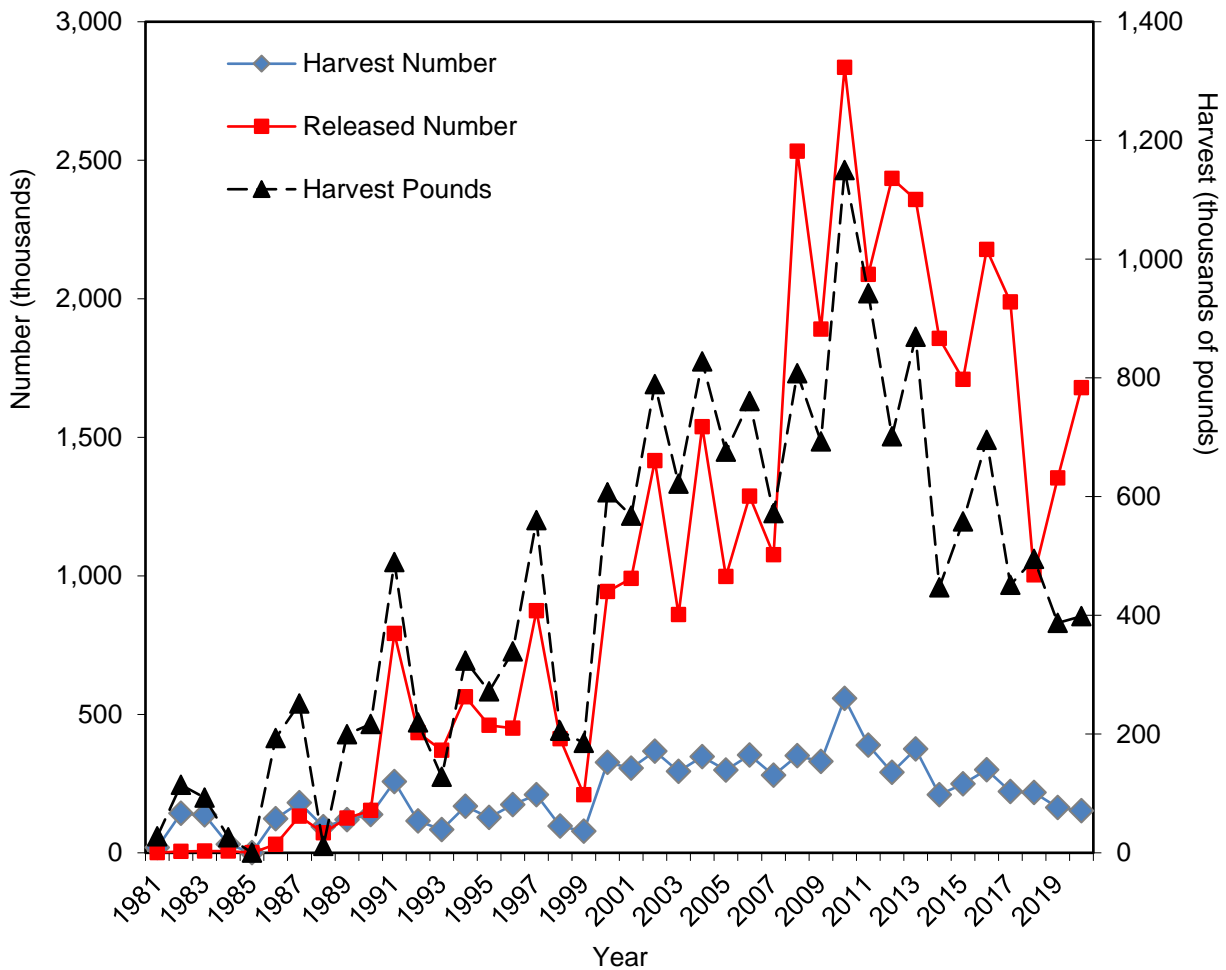


Figure III.23 Flounder, Southern recreational catch in North Carolina by year.

Table III.29 Flounder, Southern recreational catch by state, 2020.

State	Harvest Number	PSE (num)	Harvest Pounds	PSE (lb)	Mean Length (inches)	Mean Weight (lb)	Released Number ¹	PSE (release) ¹
North Carolina	152,244	19.0	398,769	20.7	17.8	2.6	-	-
Florida	865,988	28.7	1,237,660	35.2	15.2	1.5	-	-
Georgia	149,180	25.6	232,036	25.2	15.2	1.6	-	-
South Carolina	121,568	16.4	278,081	17.5	17.2	2.3	-	-
Virginia	329	77.6	819	81.8	17.8	2.5	-	-

¹ Released flounder are not always recorded to species level. Numbers released are not shown by state. PSEs are not available for this analysis.

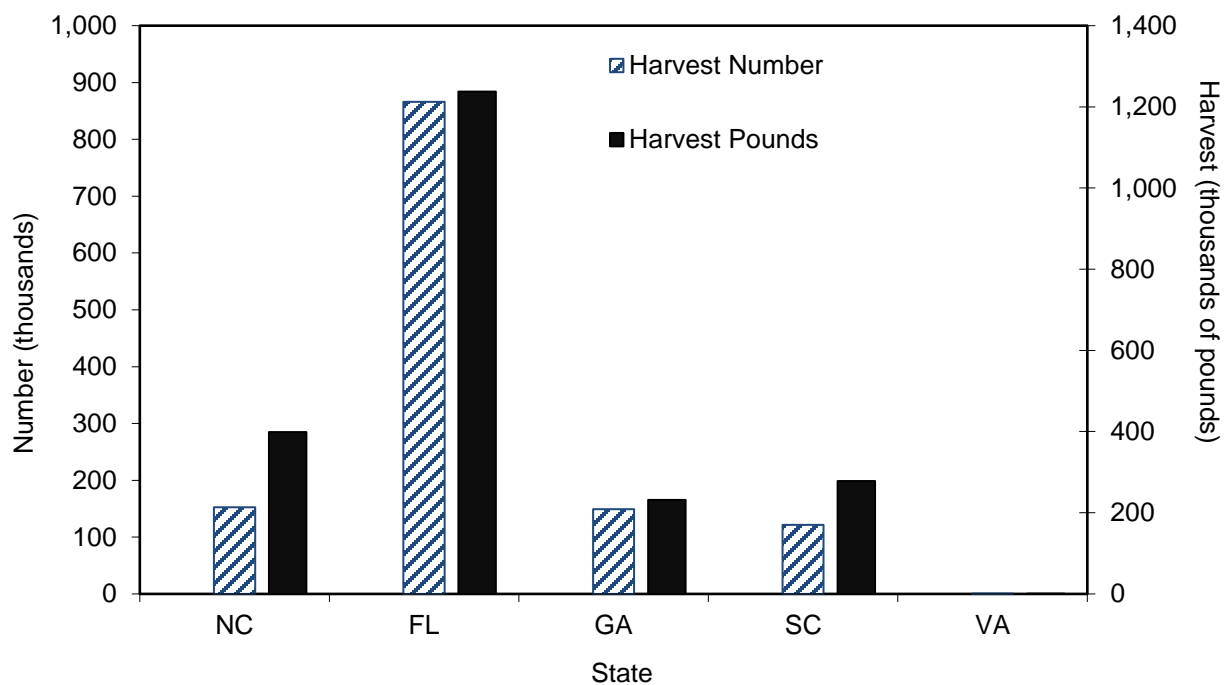


Figure III.24 Flounder, Southern recreational catch by state, 2020.

Table III.30 Flounder, Summer recreational catch in North Carolina by year.

Year	Harvest Number	PSE (num)	Harvest Pounds	PSE (lb)	Mean Length (inches)	Mean Weight (lb)	Released Number ¹	PSE (release) ¹
2020	24,699	31.3	37,935	29.6	15.5	1.5	705,247	-
2019	34,895	31.7	52,872	31.2	15.9	1.5	467,942	-
2018	57,913	25.6	92,032	25.4	15.9	1.6	300,195	-
2017	91,193	28.2	147,426	28.7	16.2	1.6	977,285	-
2016	65,494	27.2	110,392	27.1	16.2	1.7	664,388	-
2015	99,263	23.3	157,437	23.6	16.0	1.6	856,849	-
2014	150,201	21.3	215,294	21.6	15.7	1.4	1,478,527	-
2013	123,742	18.9	196,002	19.1	16.0	1.6	1,359,319	-
2012	176,553	16.5	287,522	16.4	16.3	1.6	1,452,828	-
2011	186,877	15.9	311,573	15.9	16.2	1.7	1,009,389	-
2010	245,839	14.8	341,310	14.2	15.5	1.4	1,486,980	-
2009	219,321	23.7	307,692	23.2	15.7	1.4	1,894,409	-
2008	88,501	17.5	132,743	18.0	15.7	1.5	939,708	-
2007	251,068	18.5	379,387	19.9	15.6	1.5	1,299,735	-
2006	254,653	18.3	326,684	17.5	15.3	1.3	977,039	-
2005	202,797	22.6	289,495	23.2	15.5	1.4	734,860	-
2004	318,632	22.2	467,869	26.0	15.7	1.5	1,283,788	-
2003	177,360	19.2	273,895	19.3	15.3	1.5	763,794	-
2002	366,467	14.4	435,113	14.1	14.7	1.2	1,376,069	-
2001	424,615	11.2	577,139	11.5	15.1	1.4	1,836,338	-
2000	611,081	13.2	780,211	13.0	15.2	1.3	2,007,411	-
1999	357,645	15.0	466,028	16.0	15.1	1.3	1,097,385	-
1998	599,776	13.1	780,861	13.3	15.1	1.3	2,942,394	-
1997	463,367	12.1	597,973	12.2	15.1	1.3	1,560,563	-
1996	486,480	15.7	582,987	15.9	15.1	1.2	1,243,934	-
1995	241,409	11.8	344,315	13.5	15.1	1.4	955,117	-
1994	767,804	20.2	947,445	21.5	15.2	1.2	2,094,265	-
1993	593,005	13.6	716,004	13.5	14.4	1.2	2,457,437	-
1992	458,311	16.7	562,855	16.5	14.4	1.2	1,868,903	-
1991	567,660	15.3	622,637	15.1	13.9	1.1	1,398,056	-
1990	1,112,750	22.4	1,236,371	25.3	14.0	1.1	2,293,475	-
1989	559,131	16.4	792,196	18.7	14.6	1.4	509,719	-
1988	1,469,995	17.9	138,242	26.2	13.2	0.1	1,895,950	-
1987	530,793	18.4	403,096	17.5	12.7	0.8	1,096,193	-
1986	3,228,832	65.4	3,753,337	79.5	14.2	1.2	688,243	-
1985	2,012,982	41.5	2,153,031	45.3	13.6	1.1	476,231	-
1984	1,695,404	29.7	2,025,350	52.4	13.8	1.2	736,472	-
1983	1,522,625	21.3	986,346	21.6	12.4	0.6	601,360	-

¹Flounder releases are not recorded to species; released number was calculated by assigning a ratio of observed flounder by species to reported flounder genus release estimates. PSEs are not available for this analysis.

Table III.30 Flounder, Summer recreational catch in North Carolina by year (continued).

Year	Harvest Number	PSE (num)	Harvest Pounds	PSE (lb)	Mean Length (inches)	Mean Weight (lb)	Released Number ¹	PSE (release) ¹
1982	2,263,184	22.3	2,028,678	28.5	13.0	0.9	1,240,516	-
1981	2,862,881	35.6	1,806,863	26.4	11.3	0.6	654,626	-

¹Flounder releases are not recorded to species; released number was calculated by assigning a ratio of observed flounder by species to reported flounder genus release estimates. PSEs are not available for this analysis.

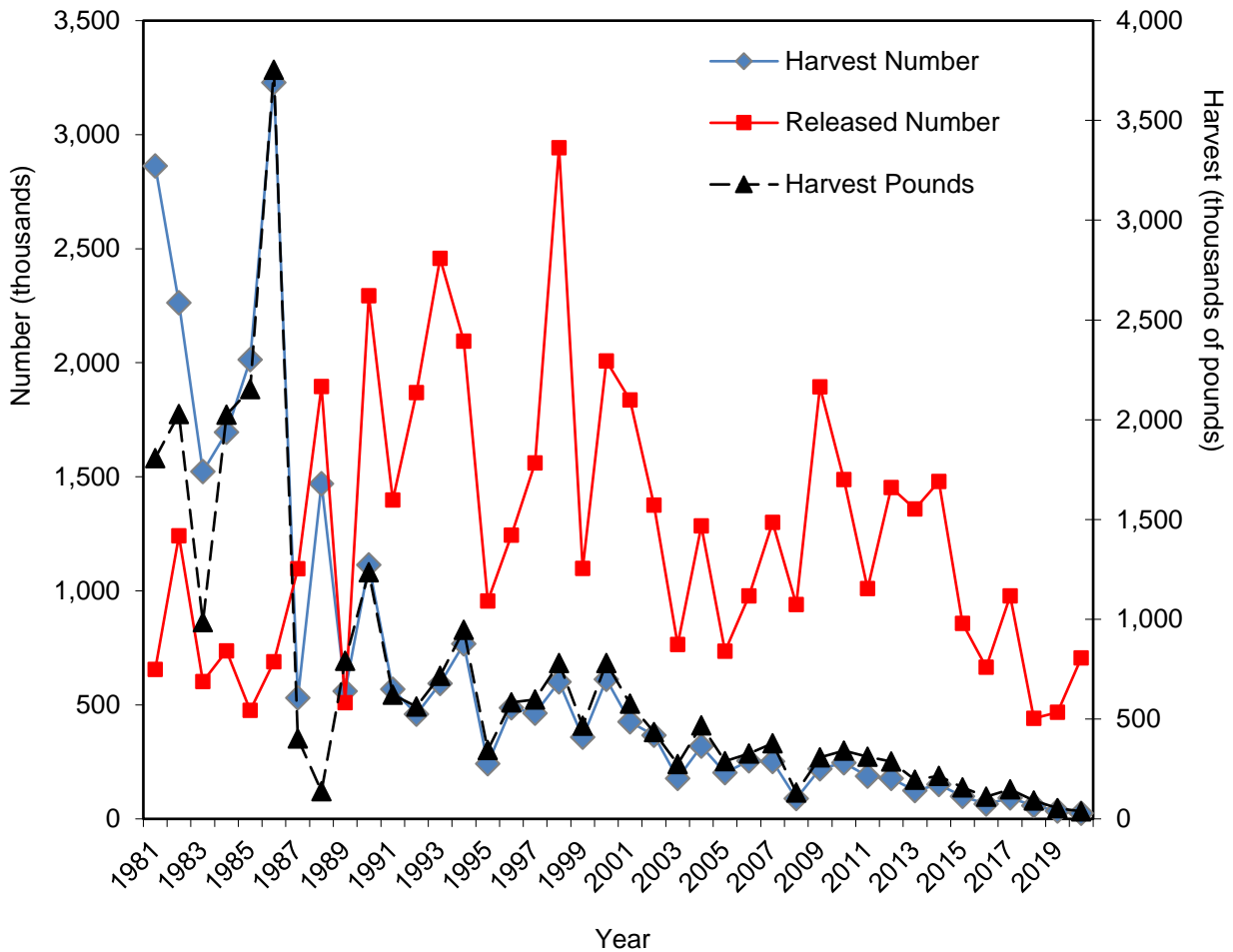


Figure III.25 Flounder, Summer recreational catch in North Carolina by year.

Table III.31 Flounder, Summer recreational catch by state, 2020.

State	Harvest Number	PSE (num)	Harvest Pounds	PSE (lb)	Mean Length (inches)	Mean Weight (lb)	Released Number ¹	PSE (release) ¹
North Carolina	24,699	31.3	37,935	29.6	15.5	1.5	-	-
Connecticut	126,836	27.2	387,741	22.8	19.8	3.1	-	-
Delaware	207,304	23.9	534,247	25.2	18.7	2.6	-	-
Florida	312	101.9	495	101.9	16.2	1.6	-	-
Georgia	56,607	74.2	73,728	80.6	14.9	1.3	-	-
Maryland	80,363	24.7	187,228	24.9	18.1	2.3	-	-
Massachusetts	69,680	34.5	175,590	33.5	18.7	2.5	-	-
New Jersey	1,990,207	17.3	5,491,680	18.5	19.3	2.8	-	-
New York	731,139	43.9	2,389,690	38.5	20.1	3.3	-	-
Rhode Island	120,413	33.5	479,590	30.8	21.0	4.0	-	-
South Carolina	5,458	57.4	7,761	58.0	15.4	1.4	-	-
Virginia	143,966	20.8	381,165	21.9	18.6	2.6	-	-

¹Released flounder are not always recorded to species level. Numbers released are not shown by state.

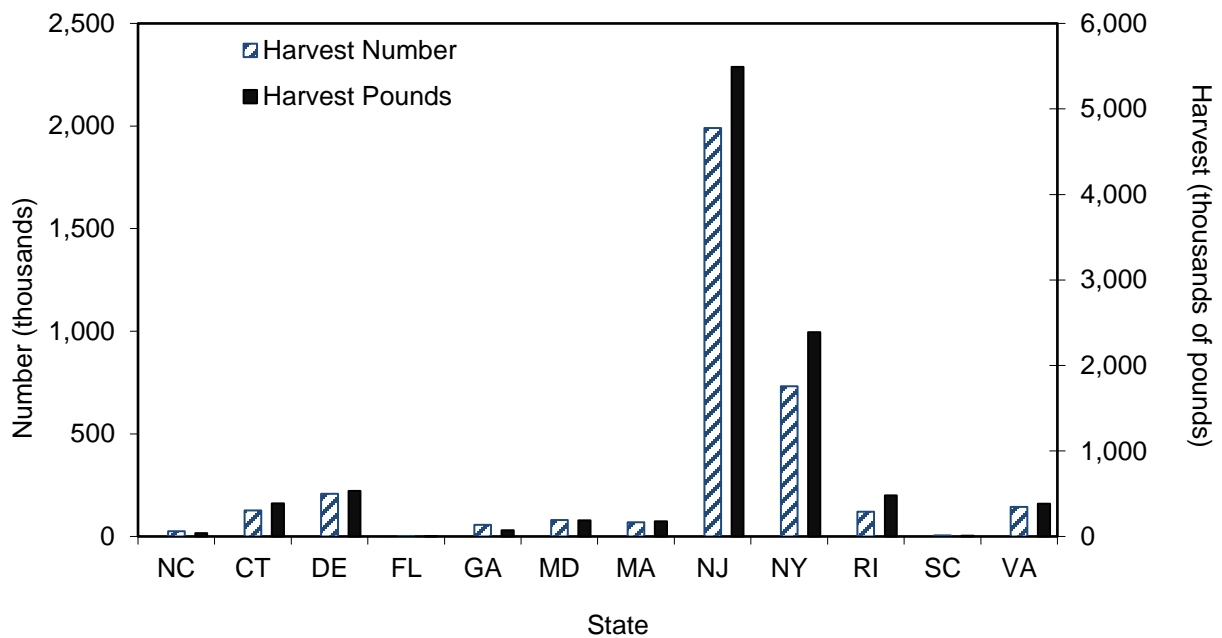


Figure III.26 Flounder, Summer recreational catch by state, 2020.

Table III.32 Grouper, Gag recreational catch in North Carolina by year.

Year	Harvest Number	PSE (num)	Harvest Pounds	PSE (lb)	Mean Length (inches)	Mean Weight (lb)	Released Number	PSE (release)
2020	950	47.3	7,194	38.1	25	7.6	18,694	35.4
2019	7,569	56.9	81,372	59.5	26.8	10.8	9,684	57.5
2018	171	53.5	1,326	54.0	25.4	7.8	1,070	75.1
2017	3,688	96.0	48,086	96.2	29.5	13.0	17,832	33.8
2016	3,890	62.1	52,660	72.8	29.9	13.5	27,599	39.0
2015	3,447	66.5	47,547	74.6	30.2	13.8	73,193	33.9
2014	1,484	59.8	14,596	55.2	27.3	9.8	23,751	42.5
2013	4,703	39.8	40,921	41.9	26.4	8.7	16,738	24.7
2012	13,194	27.3	155,017	27.6	27.9	11.7	45,047	29.1
2011	5,837	49.7	75,069	49.5	28.8	12.9	33,292	48.2
2010	6,183	42.0	80,042	43.3	29.1	12.9	39,103	39.4
2009	21,879	40.6	336,547	48.3	30.3	15.4	18,275	53.2
2008	12,483	41.2	172,429	39.4	30.2	13.8	45,233	29.9
2007	23,966	32.0	277,250	31.8	28.2	11.6	113,880	61.1
2006	25,243	35.6	372,020	37.0	30.8	14.7	9,972	43.2
2005	19,354	36.1	227,171	37.6	29.3	11.7	33,837	39.1
2004	28,327	48.9	399,365	60.0	29.4	14.1	20,902	46.8
2003	12,089	45.3	163,552	48.0	29.2	13.5	8,354	79.6
2002	7,772	55.0	103,079	61.4	28.8	13.3	32,289	77.0
2001	7,642	34.8	68,797	37.6	26.5	9.0	3,866	55.0
2000	4,503	56.3	30,367	56.8	24.1	6.7	1,284	95.4
1999	3,111	48.8	33,795	56.3	26.9	10.9	474	99.9
1998	5,369	54.4	56,007	61.3	27.1	10.4	1,390	97.4
1997	11,786	65.2	123,240	62.3	26.1	10.5	7,806	73.6
1996	3,533	32.0	33,776	32.1	26.8	9.6	3,300	50.4
1995	15,125	62.1	100,323	60.0	23.6	6.6	11,695	31.8
1994	17,517	36.5	116,292	34.6	23.8	6.6	6,644	44.9
1993	18,779	57.3	75,674	52.6	20.6	4.0	19,845	47.9
1992	8,514	47.4	81,785	47.4	25.5	9.6	5,510	51.0
1991	22,606	42.3	122,985	59.5	18.7	5.4	1,192	60.8
1990	37,994	37.5	194,360	45.6	19.0	5.1	-	-
1989	18,094	40.3	62,695	37.3	18.0	3.5	12,847	100.6
1988	11,053	45.6	15,396	73.9	19.6	1.4	-	-
1987	23,698	62.8	157,784	64.7	22.0	6.7	-	-
1986	-	-	-	-	-	-	1,302	96.8
1985	18,121	56.7	22,405	76.1	11.3	1.2	15,431	100.8
1984	22,176	67.3	128,967	73.9	21.4	5.8	-	-
1983	-	-	-	-	-	-	-	-

Table III.32 Grouper, Gag recreational catch in North Carolina by year (*continued*).

Year	Harvest Number	PSE (num)	Harvest Pounds	PSE (lb)	Mean Length (inches)	Mean Weight (lb)	Released Number	PSE (release)
1982	5,282	69.6	1,231	69.8	5.5	0.2	2,583	98.1
1981	23,261	102.4	53,332	102.4	14.4	2.3	17,894	99.4

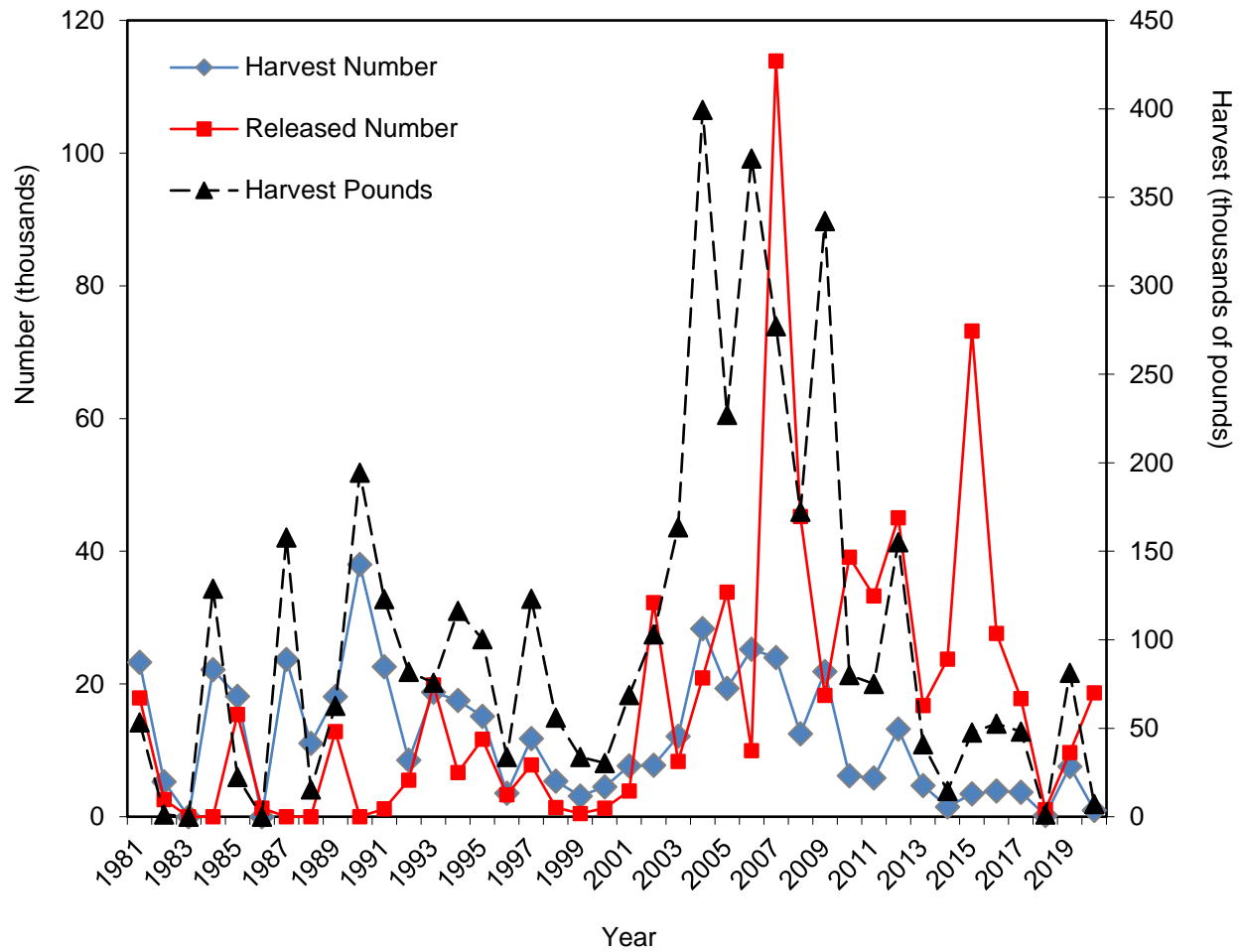


Figure III.27 Grouper, Gag recreational catch in North Carolina by year.

Table III.33 Grouper, Gag recreational catch by state, 2020.

State	Harvest Number	PSE (num)	Harvest Pounds	PSE (lb)	Mean Length (inches)	Mean Weight (lb)	Released Number	PSE (release)
North Carolina	950	47.3	7,194	38.1	24.9	7.6	18,694	35.4
Florida	7,763	48.6	171,307	47.1	26.3	9.0	24,264	37.7
Georgia	585	110.7	3,611	110.7	23.2	6.2	-	-
South Carolina	4,100	67.1	58,433	68.8	29.9	14.3	14,954	58.5
Virginia	-	-	-	-	-	-	16,758	103.9

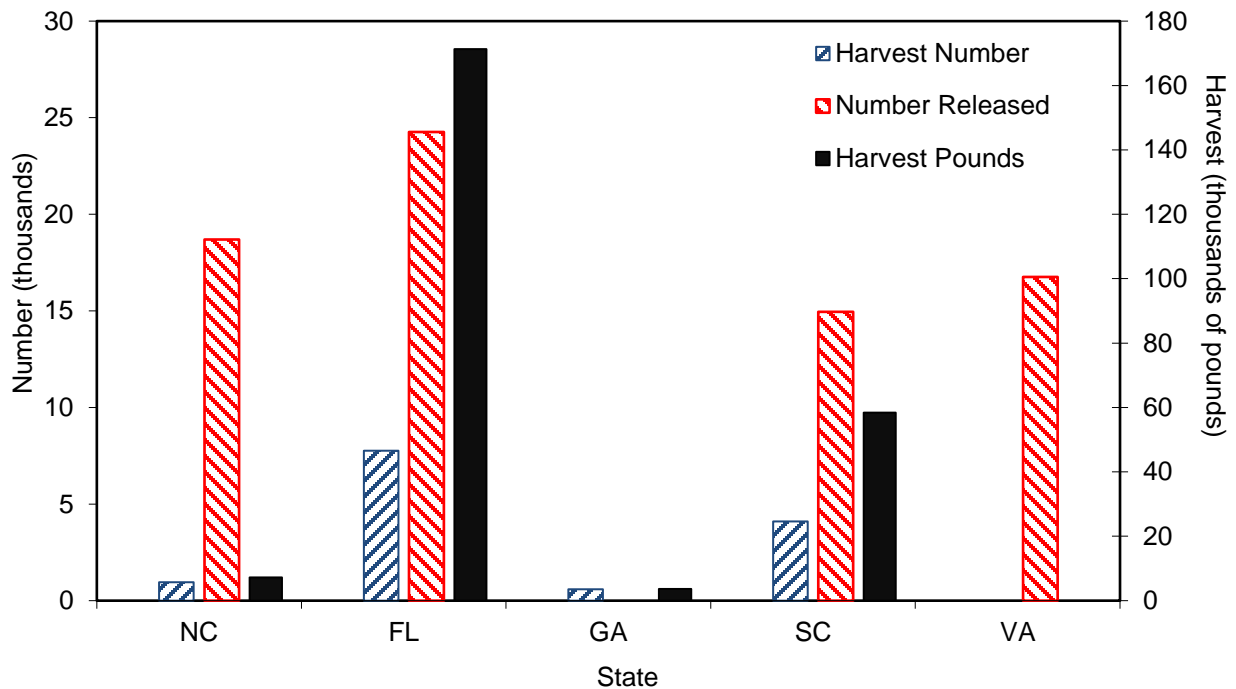


Figure III.28 Grouper, Gag recreational catch by state, 2020.

Table III.34 Grunt, White recreational catch in North Carolina by year.

Year	Harvest Number	PSE (num)	Harvest Pounds	PSE (lb)	Mean Length (inches)	Mean Weight (lb)	Released Number	PSE (release)
2020	54,012	44.8	82,979	47.6	12.2	1.5	32,186	53.6
2019	78,808	53.9	88,164	53.6	11.0	1.1	51,294	58.4
2018	11,486	33.2	16,551	34.0	12.0	1.4	6,551	38.9
2017	36,459	42.5	58,656	42.8	12.5	1.6	49,159	61.1
2016	49,190	38.9	85,197	40.8	12.7	1.7	72,791	66.6
2015	42,614	34.4	75,878	35.5	12.7	1.8	30,399	49.1
2014	48,030	58.9	85,941	59.8	13.4	1.8	4,406	51.6
2013	25,864	40.0	44,343	42.3	13.5	1.7	11,631	46.6
2012	102,155	30.9	169,755	30.3	12.9	1.7	19,332	65.0
2011	36,911	34.6	66,981	34.3	13.0	1.8	25,807	43.5
2010	52,062	47.6	81,365	46.7	12.4	1.6	14,384	44.2
2009	109,271	30.8	182,294	30.5	12.6	1.7	5,058	59.0
2008	204,033	32.3	302,233	32.9	12.4	1.5	17,906	82.9
2007	175,591	28.7	275,721	28.9	12.6	1.6	14,319	52.2
2006	151,440	39.2	235,456	40.6	12.6	1.6	31,998	71.0
2005	207,542	35.3	345,702	37.7	12.7	1.7	54,688	73.6
2004	184,996	29.3	264,518	30.6	11.9	1.4	45,327	70.6
2003	146,426	34.6	236,464	33.7	11.6	1.6	17,556	94.3
2002	167,107	29.8	337,495	31.5	13.4	2.0	-	-
2001	96,771	30.5	161,692	30.5	12.6	1.7	6,527	100.8
2000	10,024	84.3	9,287	85.2	10.2	0.9	525	99.4
1999	24,205	46.4	31,252	47.3	12.4	1.3	-	-
1998	21,867	55.0	35,638	63.8	13.1	1.6	6,237	65.0
1997	47,047	42.2	76,137	48.8	13.1	1.6	4,743	98.8
1996	59,115	32.3	77,026	33.9	12.3	1.3	4,334	71.6
1995	107,570	26.7	103,531	28.4	11.2	1.0	67,511	59.5
1994	374,511	25.3	390,128	25.9	11.6	1.0	91,513	81.1
1993	226,891	22.9	232,814	22.1	11.6	1.0	18,595	50.5
1992	103,421	23.9	162,891	25.0	12.4	1.6	44,852	47.2
1991	109,555	25.9	142,869	26.1	12.4	1.3	21,148	43.5
1990	619,517	77.0	1,043,097	82.1	12.8	1.7	-	-
1989	72,351	27.7	90,970	27.6	12.6	1.3	7,433	71.0
1988	56,397	43.9	41,990	59.1	14.2	0.7	2,964	80.8
1987	36,676	37.4	62,947	36.8	12.8	1.7	-	-
1986	-	-	-	-	-	-	-	-
1985	-	-	-	-	-	-	-	-
1984	191,040	74.6	196,511	87.5	12.0	1.0	-	-
1983	2,282	107.8	2,305	107.8	14.3	1.0	-	-

Table III.34 Grunt, White recreational catch in North Carolina by year (*continued*).

Year	Harvest Number	PSE (num)	Harvest Pounds	PSE (lb)	Mean Length (inches)	Mean Weight (lb)	Released Number	PSE (release)
1982	140	114.1	513	114.1	15.7	3.7	-	-
1981	33,023	73.5	40,930	69.1	11.2	1.2	639	100.6

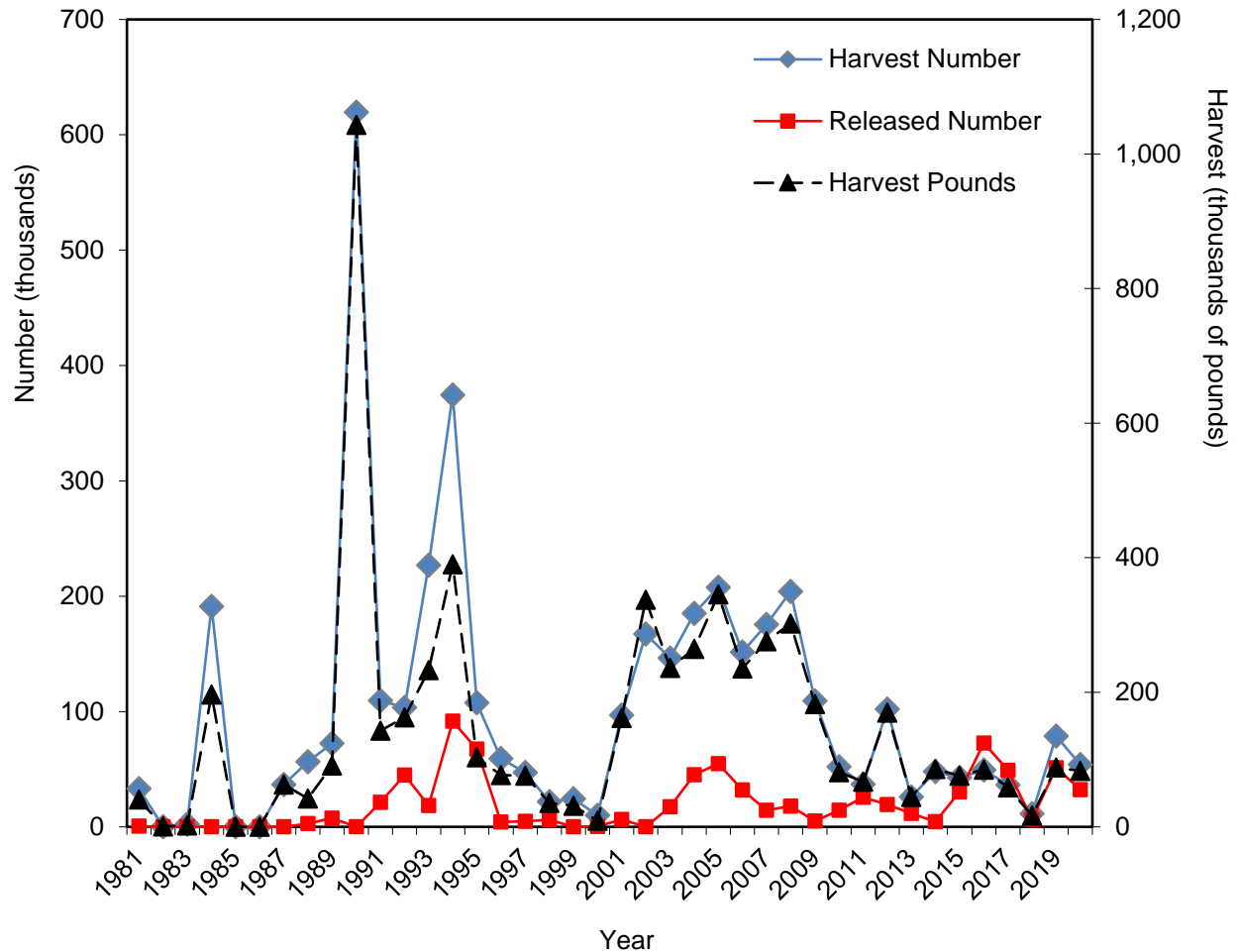


Figure III.29 Grunt, White recreational catch in North Carolina by year.

Table III.35 Grunt, White recreational catch by state, 2020.

State	Harvest Number	PSE (num)	Harvest Pounds	PSE (lb)	Mean Length (inches)	Mean Weight (lb)	Released Number	PSE (release)
North Carolina	54,012	44.8	82,979	47.6	12.2	1.5	32,186	53.6
Florida	109,821	38.7	62,664	42.9	10.0	0.8	247,904	43.1
Georgia	185	87.9	741	96.2	17.0	4.0	-	-
South Carolina	17,525	38.6	23,551	34.6	11.5	1.3	85,266	84.4

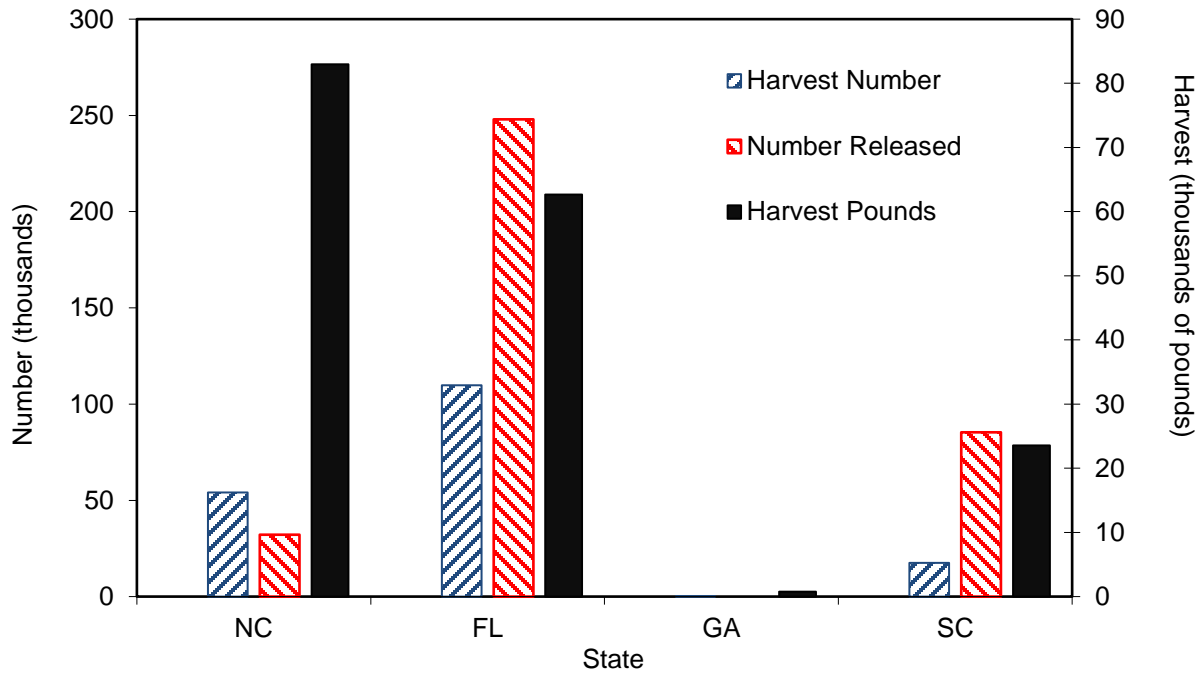


Figure III.30 Grunt, White recreational catch by state, 2020.

Table III.36 Kingfish, Gulf recreational catch in North Carolina by year.

Year	Harvest Number	PSE (num)	Harvest Pounds	PSE (lb)	Mean Length (inches)	Mean Weight (lb)	Released Number ¹	PSE (release) ¹
2020	144,127	26.9	109,237	31.7	12.1	0.8	1,114,081	-
2019	730,866	72.0	440,502	70.4	11.1	0.6	1,965,756	-
2018	247,241	39.1	161,101	38.2	11.6	0.7	854,041	-
2017	364,215	27.0	271,422	30.1	12.1	0.7	1,091,051	-
2016	504,926	37.3	262,512	35.2	10.8	0.5	1,448,848	-
2015	589,899	28.1	372,465	29.4	11.2	0.6	1,031,454	-
2014	852,684	27.7	550,685	32.7	11.4	0.6	2,348,027	-
2013	888,648	21.1	479,276	22.5	10.4	0.5	1,864,788	-
2012	1,025,099	15.2	541,883	15.2	10.4	0.5	1,947,002	-
2011	453,644	23.9	336,462	26.1	11.9	0.7	841,224	-
2010	863,479	17.0	493,400	18.2	10.8	0.6	1,485,368	-
2009	706,957	30.0	397,010	31.3	10.2	0.6	1,094,812	-
2008	580,344	18.2	290,414	18.8	10.4	0.5	866,656	-
2007	254,403	31.8	207,483	37.8	12.0	0.8	481,080	-
2006	125,527	45.7	78,755	51.5	11.2	0.6	207,277	-
2005	249,866	48.4	126,239	45.2	9.9	0.5	418,836	-
2004	717,508	35.0	463,847	41.3	11.2	0.6	973,597	-
2003	181,630	22.9	95,117	23.7	10.4	0.5	591,299	-
2002	182,540	31.9	74,139	32.3	9.7	0.4	223,538	-
2001	145,004	31.5	76,862	30.3	10.5	0.5	73,634	-
2000	69,305	39.1	40,405	41.2	10.1	0.6	54,619	-
1999	179,229	39.7	95,232	44.0	10.0	0.5	289,397	-
1998	185,792	35.8	120,728	38.0	10.7	0.6	240,290	-
1997	152,589	23.3	72,318	24.1	9.6	0.5	91,727	-
1996	171,754	28.0	78,418	31.2	9.8	0.5	201,896	-
1995	115,661	40.6	69,275	44.6	11.1	0.6	132,066	-
1994	109,292	43.7	33,563	33.6	8.8	0.3	73,681	-
1993	72,245	32.3	39,444	35.8	10.6	0.5	37,840	-
1992	39,043	46.0	17,831	49.2	10.2	0.5	29,296	-
1991	174,380	33.4	84,655	35.3	9.6	0.5	87,321	-
1990	9,274	63.6	2,627	59.4	9.2	0.3	5,549	-
1989	34,710	73.1	24,423	63.2	11.3	0.7	308	-
1988	532	100.9	-	-	11.6	-	13,042	-
1987	109,963	54.9	58,702	66.3	9.9	0.5	15,768	-
1986	74,570	56.7	51,288	59.8	11.2	0.7	-	-
1985	-	-	-	-	-	-	-	-
1984	-	-	-	-	-	-	-	-
1983	120,072	101.4	34,468	101.4	11.8	0.3	-	-

¹ Kingfish releases are not recorded to species; released number was calculated by assigning a ratio of observed kingfish by species to reported kingfish genus release estimates. PSEs are not available for this analysis.

Table III.36 Kingfish, Gulf recreational catch in North Carolina by year (*continued*).

Year	Harvest Number	PSE (num)	Harvest Pounds	PSE (lb)	Mean Length (inches)	Mean Weight (lb)	Released Number ¹	PSE (release) ¹
1982	-	-	-	-	-	-	-	-
1981	-	-	-	-	-	-	-	-

¹ Kingfish releases are not recorded to species; released number was calculated by assigning a ratio of observed kingfish by species to reported kingfish genus release estimates. PSEs are not available for this analysis.

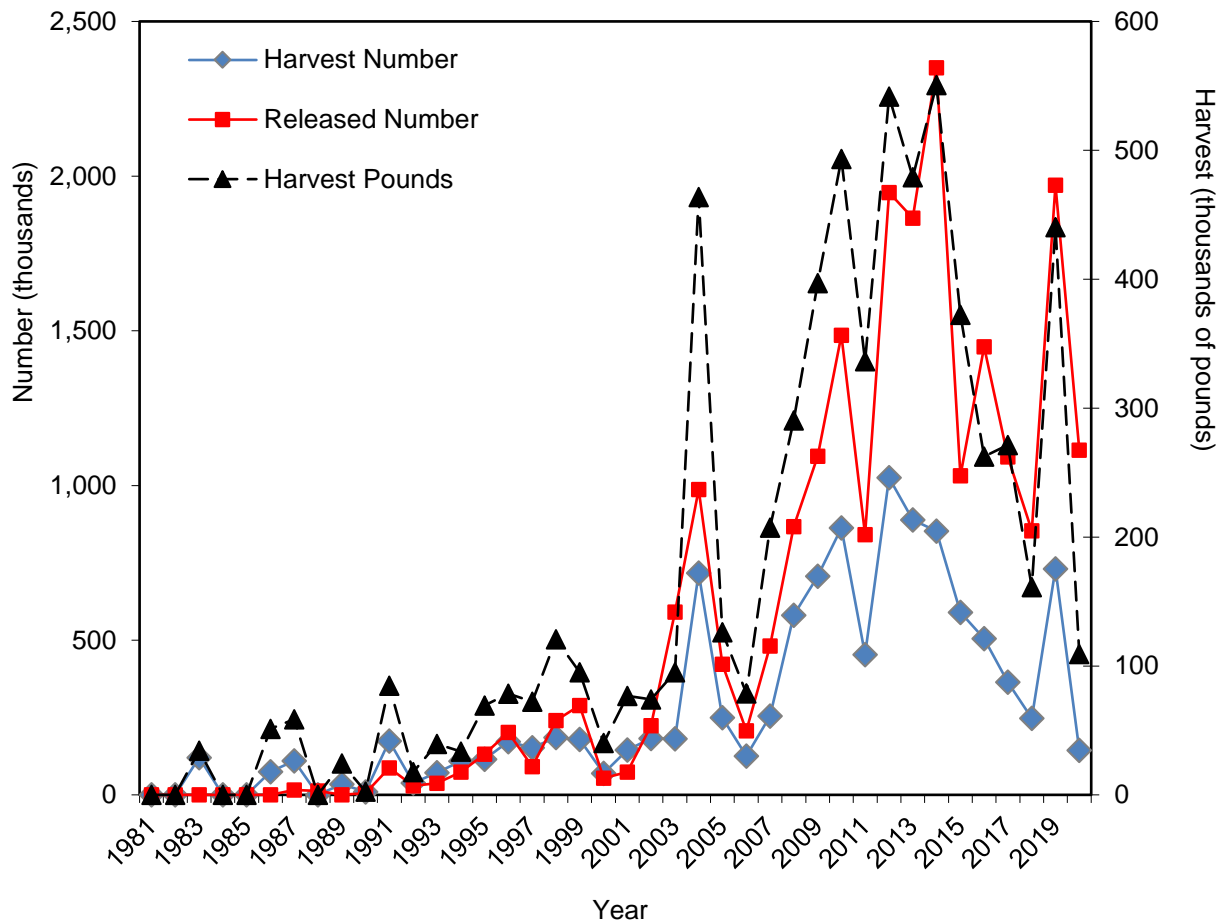


Figure III.31 Kingfish, Gulf recreational catch in North Carolina by year.

Table III.37 Kingfish, Gulf recreational catch by state, 2020.

State	Harvest Number	PSE (num)	Harvest Pounds	PSE (lb)	Mean Length (inches)	Mean Weight (lb)	Released Number ¹	PSE (release) ¹
North Carolina	144,127	26.9	109,237	31.7	12.1	0.8	-	-
Florida	522,897	49.5	291,579	45.4	11.3	0.6	-	-
Maryland	12,364	90.2	6,815	90.2	10.6	0.6	-	-
South Carolina	140,104	45.3	67,994	48.5	10.3	0.5	-	-

¹ Released kingfish are not always recorded to species level. Numbers released are not shown by state.

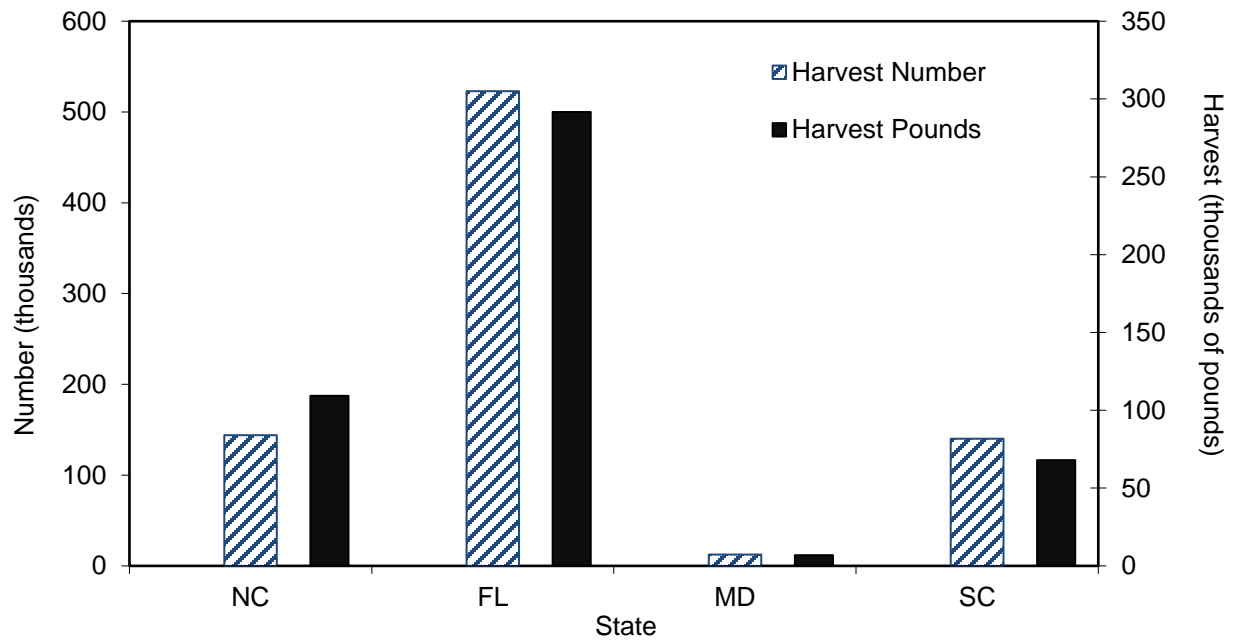


Figure III.32 Kingfish, Gulf recreational catch by state, 2020.

Table III.38 Kingfish, Northern recreational catch in North Carolina by year.

Year	Harvest Number	PSE (num)	Harvest Pounds	PSE (lb)	Mean Length (inches)	Mean Weight (lb)	Released Number ¹	PSE (release) ¹
2020	14,421	77.0	8,508	76.8	11.6	0.6	32,504	-
2019	2,381	102.7	1,050	102.7	10.9	0.4	2,983	-
2018	16,413	62.2	5,808	68.1	9.2	0.4	32,834	-
2017	59,267	46.3	59,681	50.4	13.2	1.0	143,968	-
2016	1,972	64.3	1,075	71.8	10.8	0.5	8,656	-
2015	16,981	64.9	9,085	54.9	10.9	0.5	47,636	-
2014	5,219	74.5	2,775	70.5	11.2	0.5	35,775	-
2013	50,344	38.0	22,997	36.2	10.9	0.5	116,394	-
2012	36,233	32.0	20,380	30.8	11.3	0.6	47,919	-
2011	139,736	29.4	95,818	34.3	12.2	0.7	183,329	-
2010	34,100	31.6	19,975	32.8	11.1	0.6	91,382	-
2009	143,485	54.5	71,909	56.0	10.6	0.5	201,994	-
2008	61,460	48.1	32,458	46.0	10.1	0.5	61,811	-
2007	642,696	23.5	396,193	22.3	11.3	0.6	724,674	-
2006	181,801	30.1	134,827	34.1	12.1	0.7	340,846	-
2005	44,175	38.2	23,100	35.0	11.0	0.5	67,243	-
2004	310,701	22.0	172,324	23.1	11.1	0.6	531,778	-
2003	372,700	27.8	249,726	30.2	11.8	0.7	283,462	-
2002	353,668	56.8	212,454	58.2	11.7	0.6	121,335	-
2001	420,398	24.5	287,564	24.7	12.0	0.7	160,446	-
2000	417,862	21.6	289,915	22.5	11.8	0.7	241,234	-
1999	383,272	28.9	238,571	27.0	10.7	0.6	299,884	-
1998	242,398	21.3	137,907	21.2	11.1	0.6	142,127	-
1997	842,731	30.0	469,791	25.3	11.1	0.6	159,132	-
1996	483,334	23.0	256,912	24.6	11.2	0.5	189,885	-
1995	411,338	23.7	212,476	19.7	10.6	0.5	309,653	-
1994	549,205	22.9	318,758	21.6	11.4	0.6	259,787	-
1993	549,598	21.6	373,909	20.8	11.1	0.7	155,593	-
1992	647,146	31.9	438,409	30.9	11.4	0.7	288,167	-
1991	742,323	19.8	420,489	20.9	10.5	0.6	243,595	-
1990	570,434	46.6	275,272	42.4	10.8	0.5	75,686	-
1989	265,905	22.7	140,012	27.1	10.0	0.5	167,986	-
1988	481,341	25.2	132,736	36.1	10.8	0.3	120,946	-
1987	223,179	44.7	133,461	55.9	10.6	0.6	23,463	-
1986	397,269	66.1	174,515	53.9	10.0	0.4	332,833	-
1985	649,491	45.4	248,958	41.3	9.5	0.4	122,044	-
1984	553,712	59.8	233,054	59.8	10.2	0.4	156,118	-
1983	362,227	29.9	126,473	26.6	9.6	0.3	131,928	-

¹ Kingfish releases are not recorded to species; released number was calculated by assigning a ratio of observed kingfish by species to reported kingfish genus release estimates. PSEs are not available for this analysis.

Table III.38 Kingfish, Northern recreational catch in North Carolina by year (*continued*).

Year	Harvest Number	PSE (num)	Harvest Pounds	PSE (lb)	Mean Length (inches)	Mean Weight (lb)	Released Number ¹	PSE (release) ¹
1982	1,456,919	27.6	517,808	30.4	9.0	0.4	152,822	-
1981	599,072	54.7	492,976	55.9	10.9	0.8	349,173	-

¹ Kingfish releases are not recorded to species; released number was calculated by assigning a ratio of observed kingfish by species to reported kingfish genus release estimates. PSEs are not available for this analysis.

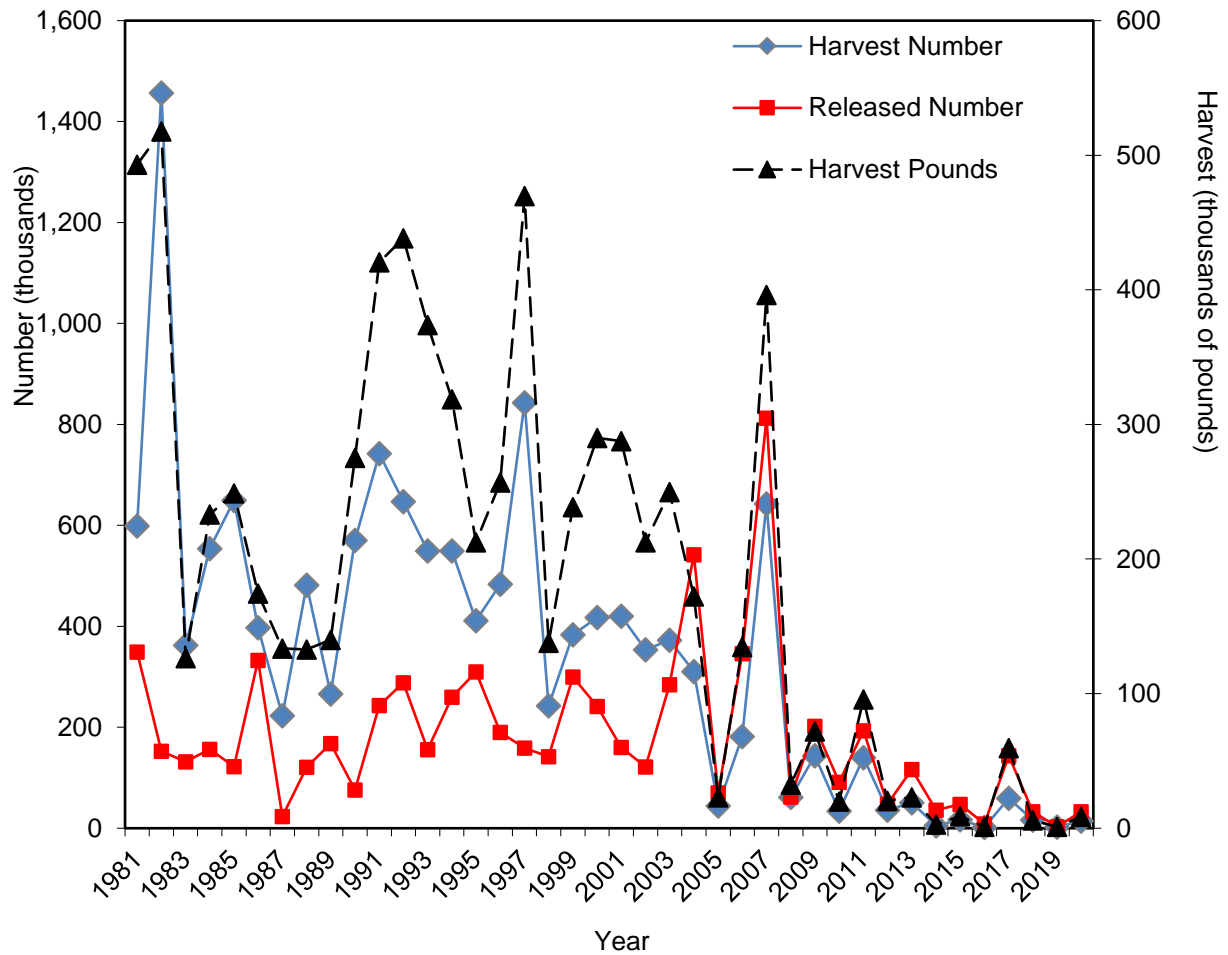


Figure III.33 Kingfish, Northern recreational catch in North Carolina by year.

Table III.39 Kingfish, Northern recreational catch by state, 2020.

State	Harvest Number	PSE (num)	Harvest Pounds	PSE (lb)	Mean Length (inches)	Mean Weight (lb)	Released Number ¹	PSE (release) ¹
North Carolina	14,421	77.0	8,508	76.8	11.6	0.6	-	-
Connecticut	22,466	105.9	32,194	105.9	14.3	1.4	-	-
Delaware	8,538	50.2	4,070	51.3	10.1	0.5	-	-
Maryland	37,047	65.9	20,486	71.2	10.6	0.6	-	-
New Jersey	47,402	57.6	29,695	58.9	11.7	0.6	-	-
New York	7,055	55.5	2,865	50.1	9.9	0.4	-	-
Rhode Island	8,437	87.7	7,381	91.7	12.8	0.9	-	-
South Carolina	900	98.1	642	98.1	12.2	0.7	-	-
Virginia	57,713	42.9	29,097	42.8	10.4	0.5	-	-

¹Released kingfish are not always recorded to species level. Numbers released are not shown by state.

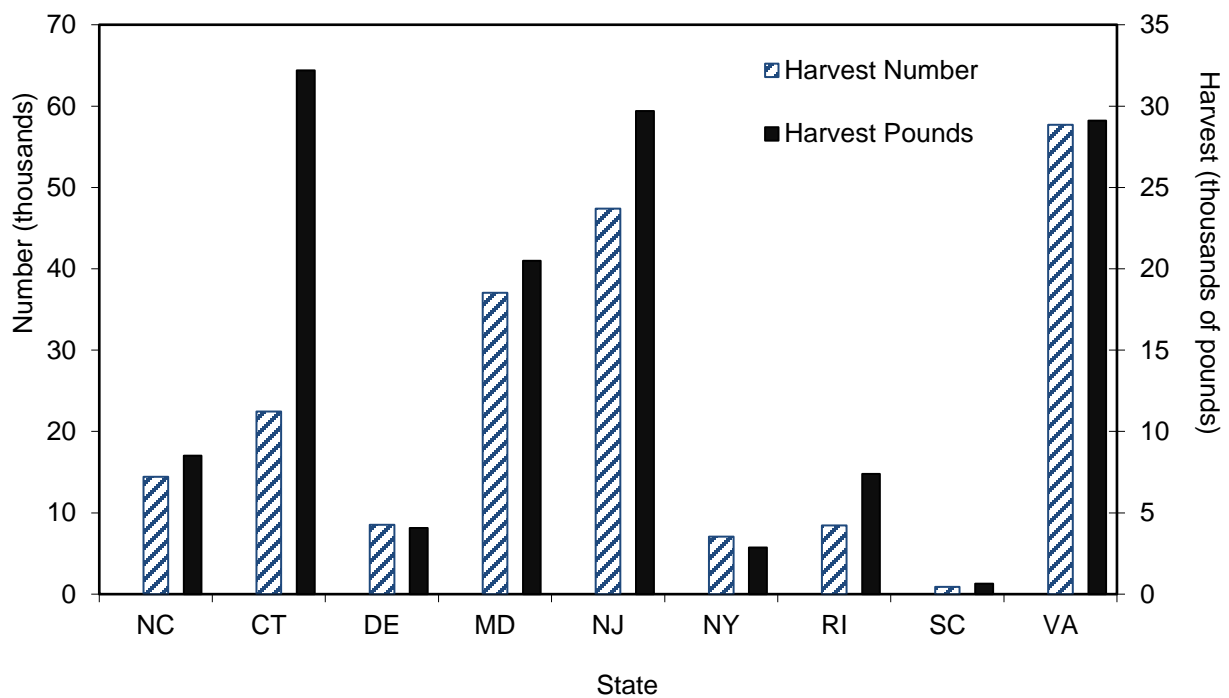


Figure III.34 Kingfish, Northern recreational catch by state, 2020.

Table III.40 Kingfish, Southern recreational catch in North Carolina by year.

Year	Harvest Number	PSE (num)	Harvest Pounds	PSE (lb)	Mean Length (inches)	Mean Weight (lb)	Released Number ¹	PSE (release) ¹
2020	553,204	19.3	334,824	19.8	11	0.6	2,314,505	-
2019	767,259	29.0	439,552	23.8	11	0.6	2,183,265	-
2018	497,134	19.8	312,829	20.0	12	0.6	1,293,857	-
2017	1,116,869	23.0	584,459	22.4	11	0.5	2,994,666	-
2016	1,422,584	26.8	771,534	26.5	11	0.5	2,765,072	-
2015	2,103,634	30.0	1,138,715	28.2	11	0.5	5,501,449	-
2014	2,477,383	44.1	1,544,862	46.3	12	0.6	4,003,170	-
2013	2,021,612	19.4	959,787	17.8	10	0.5	4,471,609	-
2012	1,255,035	14.6	695,368	15.4	11	0.6	1,670,729	-
2011	1,075,153	16.2	570,239	16.9	11	0.5	1,604,093	-
2010	1,660,599	15.1	1,003,198	16.2	11	0.6	2,888,773	-
2009	1,848,709	22.5	1,017,152	25.4	11	0.6	3,414,288	-
2008	1,127,632	17.6	623,055	17.9	11	0.6	1,416,166	-
2007	809,793	20.9	422,405	19.5	11	0.5	1,202,664	-
2006	1,110,253	28.8	511,690	27.2	11	0.5	1,960,933	-
2005	977,260	21.6	536,532	20.6	11	0.5	1,328,501	-
2004	969,985	23.2	625,932	22.5	11	0.6	1,023,307	-
2003	678,724	19.8	462,481	21.4	11	0.7	1,045,686	-
2002	913,852	21.0	595,860	21.5	12	0.7	623,815	-
2001	1,562,340	22.6	836,967	22.6	11	0.5	825,114	-
2000	1,961,242	17.8	1,287,295	19.7	11	0.7	1,648,043	-
1999	526,930	27.8	303,576	30.2	12	0.6	338,161	-
1998	309,630	22.1	179,739	20.8	11	0.6	216,917	-
1997	291,768	21.8	191,974	20.8	11	0.7	97,647	-
1996	818,201	53.5	442,030	53.4	11	0.5	268,505	-
1995	941,581	28.0	534,642	27.1	11	0.6	530,343	-
1994	717,391	21.3	336,757	21.9	10	0.5	375,427	-
1993	811,942	32.9	358,694	27.0	10	0.4	196,534	-
1992	1,014,172	38.0	473,074	37.3	10	0.5	365,828	-
1991	1,333,319	25.3	619,990	25.2	10	0.5	537,821	-
1990	1,491,941	27.6	730,594	29.4	10	0.5	746,283	-
1989	333,403	24.2	176,268	26.8	10	0.5	139,412	-
1988	2,364,330	33.2	767,747	51.1	10	0.3	361,760	-
1987	1,320,531	32.5	635,579	33.1	11	0.5	229,325	-
1986	1,332,830	45.9	557,581	47.5	10	0.4	1,090,924	-
1985	289,954	36.8	164,462	37.2	11	0.6	141,654	-
1984	359,602	30.7	131,531	31.8	10	0.4	11,955	-
1983	103,604	58.9	53,202	52.4	10	0.5	11,535	-

¹ Kingfish releases are not recorded to species; released number was calculated by assigning a ratio of observed kingfish by species to reported kingfish genus release estimates. PSEs are not available for this analysis.

Table III.40 Kingfish, Southern recreational catch in North Carolina by year (*continued*).

Year	Harvest Number	PSE (num)	Harvest Pounds	PSE (lb)	Mean Length (inches)	Mean Weight (lb)	Released Number ¹	PSE (release) ¹
1982	289,561	92.9	119,582	94.3	9	0.4	128,818	-
1981	313,835	38.8	122,272	34.8	8	0.4	121,871	-

¹ Kingfish releases are not recorded to species; released number was calculated by assigning a ratio of observed kingfish by species to reported kingfish genus release estimates. PSEs are not available for this analysis.

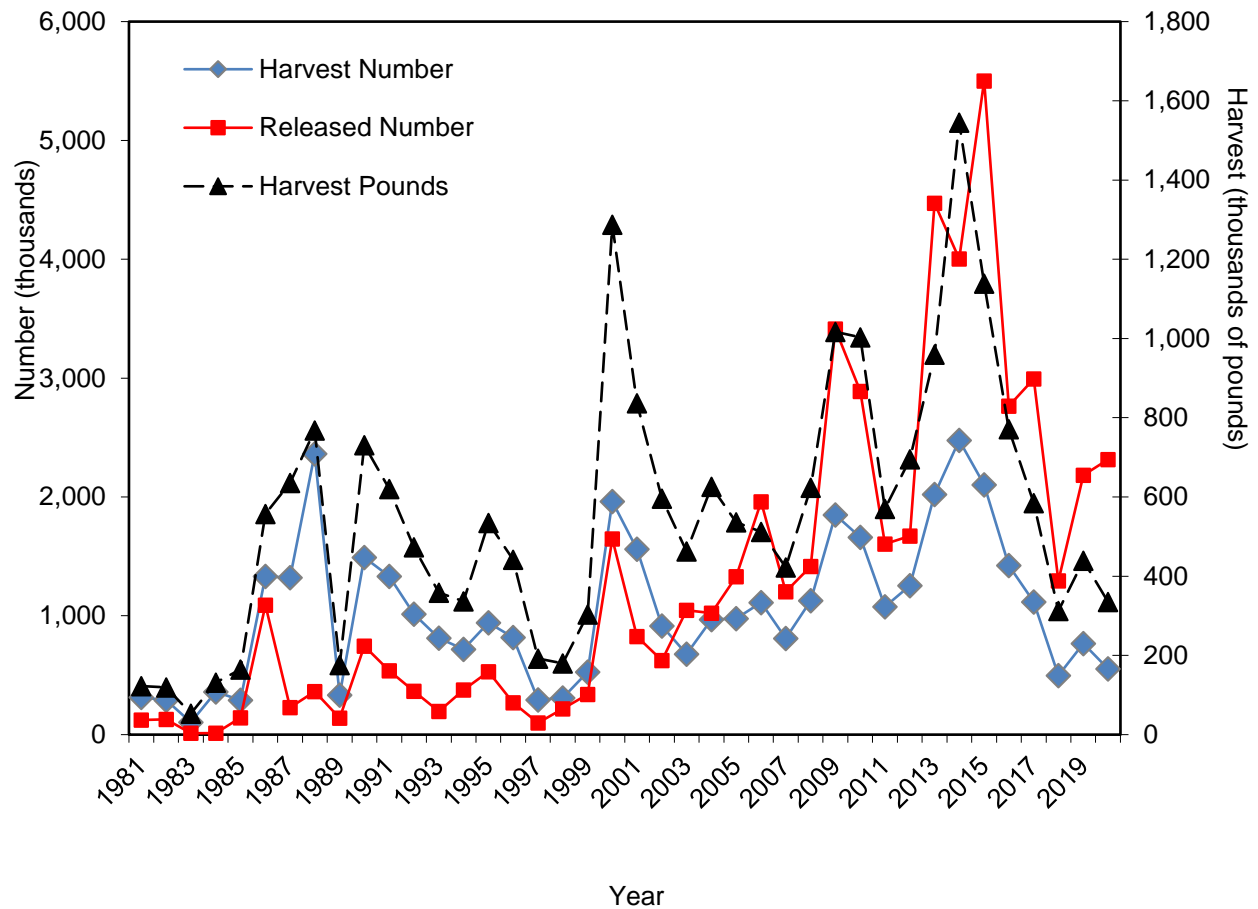


Figure III.35 Kingfish, Southern recreational catch in North Carolina by year.

Table III.41 Kingfish, Southern recreational catch by state, 2020.

State	Harvest Number	PSE (num)	Harvest Pounds	PSE (lb)	Mean Length (inches)	Mean Weight (lb)	Released Number ¹	PSE (release) ¹
North Carolina	553,204	19.3	334,824	19.8	11.2	0.6	-	-
Delaware	6,872	36.3	3,518	37.0	10.5	0.5	-	-
Florida	508,020	32.5	282,830	28.9	11.0	0.6	-	-
Georgia	2,131,910	17.6	984,033	18.1	10.3	0.5	-	-
Maryland	17,670	50.1	10,825	49.6	11.0	0.6	-	-
New Jersey	40,959	78.5	22,466	75.7	11.2	0.5	-	-
South Carolina	2,444,242	19.7	1,346,363	21.6	11.0	0.6	-	-
Virginia	1,222,514	19.2	639,403	21.4	10.5	0.5	-	-

¹Released kingfish are not always recorded to species level. Numbers released are not shown by state.

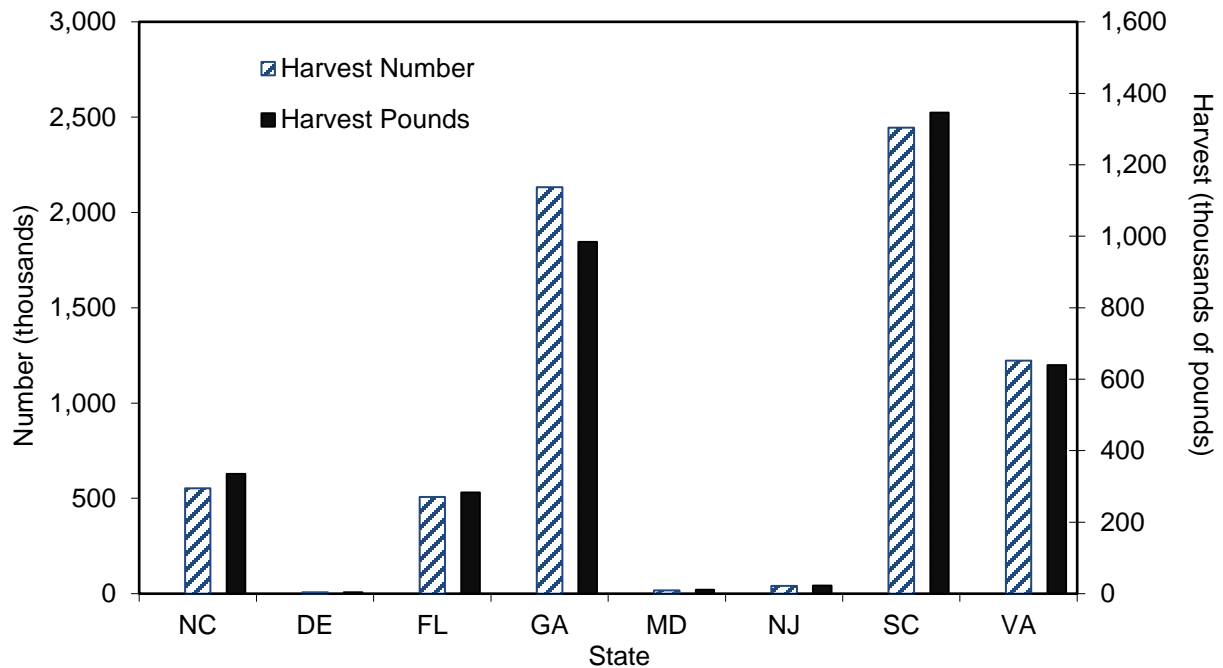


Figure III.36 Kingfish, Southern recreational catch by state, 2020.

Table III.42 Mackerel, King recreational catch in North Carolina by year.

Year	Harvest Number	PSE (num)	Harvest Pounds	PSE (lb)	Mean Length (inches)	Mean Weight (lb)	Released Number	PSE (release)
2020	146,423	20.2	1,376,229	20.3	31.6	9.4	155,593	31.8
2019	184,962	23.7	1,446,939	24.8	29.7	7.8	115,350	42.1
2018	102,675	19.0	1,018,459	30.1	30.3	9.9	75,614	32.6
2017	110,339	22.6	1,261,775	31.8	31.9	11.4	94,655	28.6
2016	108,151	43.4	963,139	41.7	30.4	8.9	43,909	31.6
2015	95,705	37.2	1,168,255	52.5	33.3	12.2	16,877	52.4
2014	72,288	22.7	1,213,096	22.9	38.7	16.8	35,075	92.8
2013	48,000	23.3	521,153	25.2	32.6	10.9	8,868	54.2
2012	55,529	24.5	613,903	25.3	32.9	11.1	6,385	38.1
2011	31,589	36.3	367,896	31.3	34.0	11.6	851	72.9
2010	58,311	23.8	580,505	23.4	32.5	10.0	9,734	36.0
2009	168,558	17.5	1,822,673	18.4	32.7	10.8	23,639	33.2
2008	164,719	18.7	1,379,450	19.0	30.1	8.4	41,283	43.9
2007	339,278	15.2	3,099,801	15.5	31.1	9.1	53,549	29.4
2006	177,369	17.9	1,805,814	22.3	32.0	10.2	45,568	29.1
2005	175,070	16.0	1,349,536	15.9	29.6	7.7	101,507	26.2
2004	191,584	17.7	2,276,035	22.9	32.2	11.9	184,384	38.7
2003	153,339	17.1	1,388,145	17.3	30.4	9.1	33,774	27.5
2002	104,631	40.7	1,242,058	42.4	33.0	11.9	20,811	49.1
2001	145,290	12.8	2,046,022	16.2	34.5	14.1	12,381	41.8
2000	196,979	20.8	2,250,512	17.9	32.0	11.4	26,009	41.1
1999	104,483	18.6	1,034,465	19.5	31.6	9.9	120,296	34.9
1998	112,383	17.5	1,163,739	18.2	31.5	10.4	9,155	43.0
1997	206,601	13.1	1,797,936	14.4	30.0	8.7	57,739	25.5
1996	119,418	23.2	1,097,226	19.6	31.0	9.2	15,465	48.8
1995	135,796	14.3	1,240,901	14.5	30.7	9.1	7,544	43.5
1994	177,608	20.7	1,709,740	17.4	31.6	9.6	5,792	55.8
1993	121,704	15.7	1,224,744	16.2	31.7	10.1	3,607	68.6
1992	165,568	13.8	1,435,826	15.2	30.2	8.7	2,933	39.6
1991	258,306	17.6	2,590,951	20.4	31.3	10.0	8,856	47.9
1990	273,144	22.3	2,502,999	25.9	29.6	9.2	4,295	71.1
1989	113,376	16.6	1,163,894	15.4	31.7	10.3	5,225	59.6
1988	162,764	15.1	521,744	26.7	30.9	3.2	8,186	50.4
1987	199,521	18.1	1,767,178	23.9	29.2	8.9	13,526	80.6
1986	173,390	28.9	1,593,772	31.2	32.3	9.2	102	103.8
1985	273,004	41.7	2,695,124	42.8	30.0	9.9	-	-
1984	131,026	36.8	1,228,325	39.8	30.9	9.4	-	-
1983	115,637	47.5	738,215	48.3	28.8	6.4	-	-

Table III.42 Mackerel, King recreational catch in North Carolina by year (*continued*).

Year	Harvest Number	PSE (num)	Harvest Pounds	PSE (lb)	Mean Length (inches)	Mean Weight (lb)	Released Number	PSE (release)
1982	177,616	26.4	1,477,554	24.8	29.3	8.3	-	-
1981	191,655	53.8	2,040,176	50.0	30.9	10.6	-	-

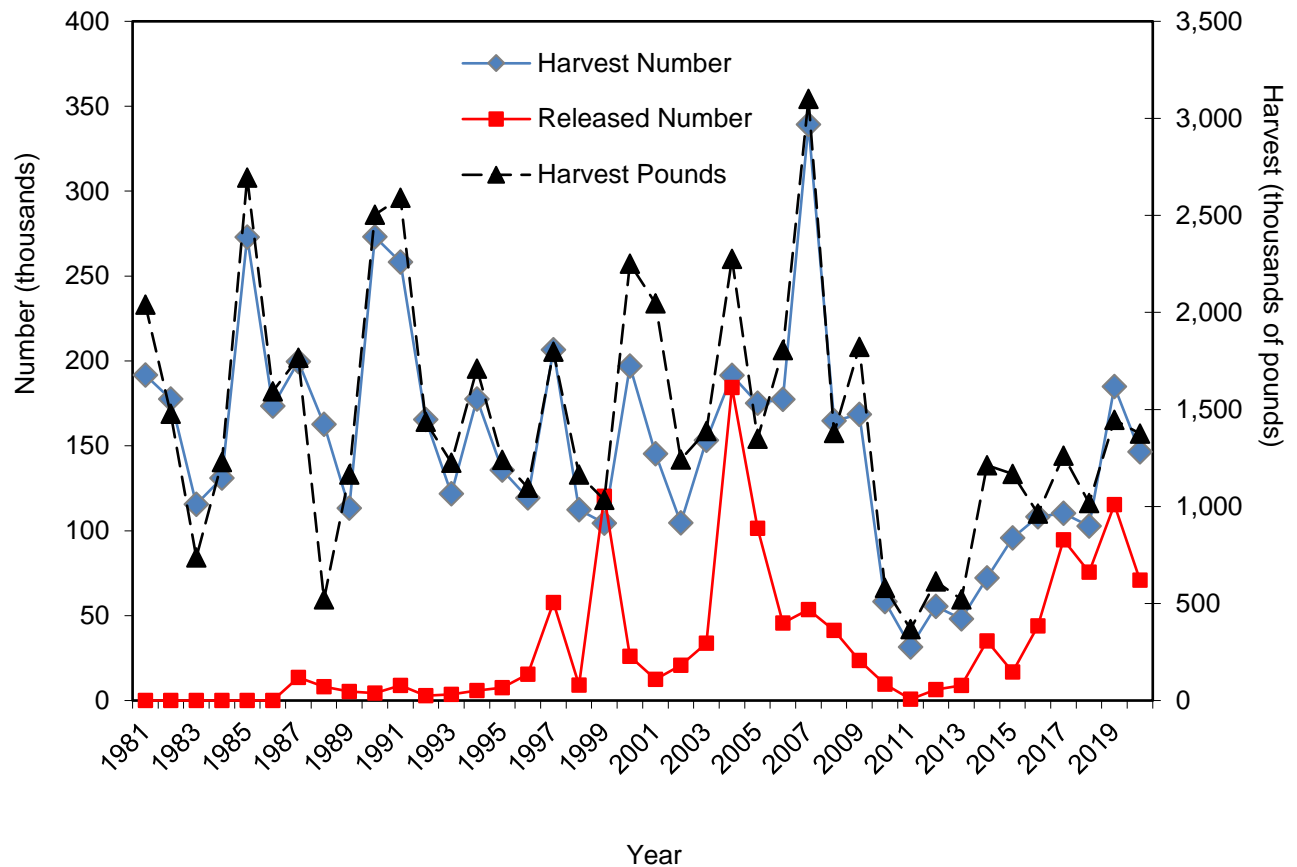


Figure III.37 Mackerel, King recreational catch in North Carolina by year.

Table III.43 Mackerel, King recreational catch by state, 2020.

State	Harvest Number	PSE (num)	Harvest Pounds	PSE (lb)	Mean Length (inches)	Mean Weight (lb)	Released Number	PSE (release)
North Carolina	146,423	20.2	1,376,229	20.3	31.6	9.4	70,879	31.8
Delaware	1,503	82.2	7,105	71.0	25.9	4.7	-	-
Florida	389,636	18.0	3,587,176	18.2	31.0	8.9	252,342	58.4
Georgia	19,471	42.6	273,361	53.4	35.0	14.0	6,251	60.4
Maryland	-	-	-	-	-	-	9,730	107.6
New Jersey	8,073	83.3	76,645	80.1	30.5	9.5	-	-
New York	24	99.9	242	99.9	31.1	9.9	-	-
South Carolina	33,801	32.2	448,270	32.7	35.9	13.3	57,392	82.4
Virginia	15	71.1	77	79.3	26.0	5.1	4	125.1

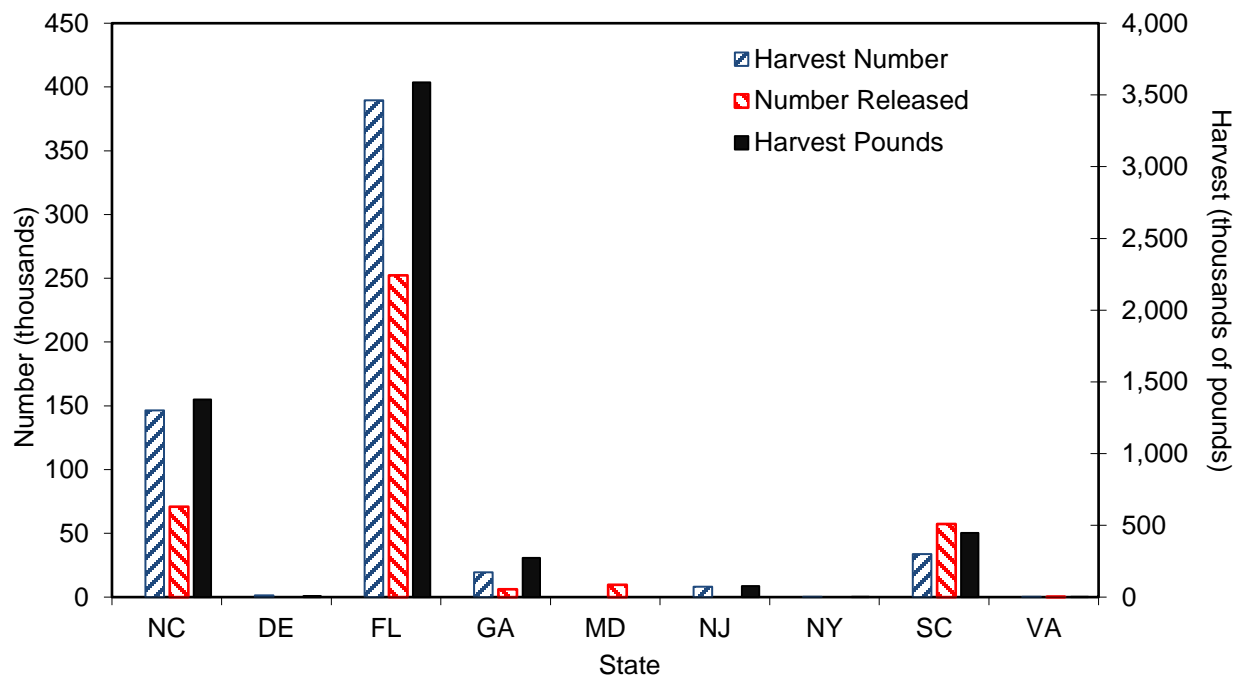


Figure III.38 Mackerel, King recreational catch by state, 2020.

Table III.44 Mackerel, Spanish recreational catch in North Carolina by year.

Year	Harvest Number	PSE (num)	Harvest Pounds	PSE (lb)	Mean Length (inches)	Mean Weight (lb)	Released Number	PSE (release)
2020	1,286,131	13.6	1,843,314	14.5	15.6	1.4	1,267,210	26.7
2019	1,478,890	19.6	1,694,247	22.4	15.0	1.1	1,340,366	21.8
2018	1,012,889	13.9	1,156,702	14.5	15.0	1.1	1,019,418	30.4
2017	995,706	18.0	1,094,778	18.3	14.8	1.1	688,062	21.4
2016	918,352	16.4	907,400	16.3	14.3	1.0	546,950	19.5
2015	835,011	14.3	981,867	15.6	14.7	1.2	514,714	17.7
2014	1,028,925	15.2	1,193,442	14.7	14.9	1.2	814,064	21.2
2013	994,599	15.2	1,242,029	16.5	15.1	1.2	685,692	26.1
2012	995,852	9.6	1,327,350	10.4	15.1	1.3	591,792	16.4
2011	854,554	15.0	1,100,110	20.0	15.0	1.3	479,586	15.5
2010	927,116	22.0	1,116,099	17.5	15.2	1.2	701,634	33.0
2009	1,480,931	13.5	2,155,692	19.4	15.8	1.5	752,806	20.7
2008	1,013,980	13.1	1,234,030	15.2	15.2	1.2	806,280	18.5
2007	604,518	15.2	799,263	16.5	15.4	1.3	340,027	16.5
2006	439,736	15.7	624,488	20.5	16.0	1.4	165,098	22.5
2005	561,073	16.1	526,054	16.6	14.6	0.9	303,641	19.9
2004	534,720	18.7	819,978	20.0	16.7	1.5	317,189	26.9
2003	540,399	15.3	641,024	14.5	14.8	1.2	266,887	17.1
2002	787,125	17.1	987,238	16.1	15.3	1.3	309,546	16.9
2001	942,500	25.0	1,155,788	24.7	15.5	1.2	338,918	37.0
2000	1,102,777	17.7	1,175,351	19.3	15.2	1.1	451,910	19.2
1999	891,001	14.7	1,035,943	16.6	14.8	1.2	253,317	17.0
1998	374,804	13.8	488,951	13.4	15.3	1.3	145,746	20.9
1997	956,589	12.5	1,444,907	13.1	16.0	1.5	304,629	38.7
1996	533,333	14.9	709,589	17.4	15.9	1.3	184,518	16.8
1995	397,190	12.9	492,096	14.3	14.9	1.2	239,972	17.6
1994	641,980	11.0	724,589	11.2	15.0	1.1	292,919	13.4
1993	720,907	14.8	1,107,430	16.6	15.9	1.5	104,879	21.2
1992	879,444	10.7	1,171,718	10.7	15.1	1.3	250,614	16.3
1991	1,119,245	15.9	1,695,569	11.6	14.9	1.5	238,694	20.8
1990	1,011,861	13.6	1,462,072	14.1	15.5	1.4	111,977	22.8
1989	1,374,008	33.5	1,594,616	26.0	14.7	1.2	140,141	44.2
1988	1,375,328	14.2	580,007	25.2	16.7	0.4	15,891	33.9
1987	974,840	22.2	1,323,352	18.1	14.9	1.4	35,412	39.9
1986	872,052	39.2	1,055,730	37.8	15.1	1.2	442,501	85.7
1985	441,051	38.9	819,680	40.7	18.5	1.9	36,482	95.4
1984	559,885	48.9	807,486	49.1	14.7	1.4	4,374	100.6
1983	10,275	47.0	25,641	47.3	19.7	2.5	-	-

Table III.44 Mackerel, Spanish recreational catch in North Carolina by year (*continued*).

Year	Harvest Number	PSE (num)	Harvest Pounds	PSE (lb)	Mean Length (inches)	Mean Weight (lb)	Released Number	PSE (release)
1982	889,793	55.5	1,411,461	53.6	15.5	1.6	-	-
1981	344,209	70.8	853,597	74.0	19.1	2.5	2,967	95.8

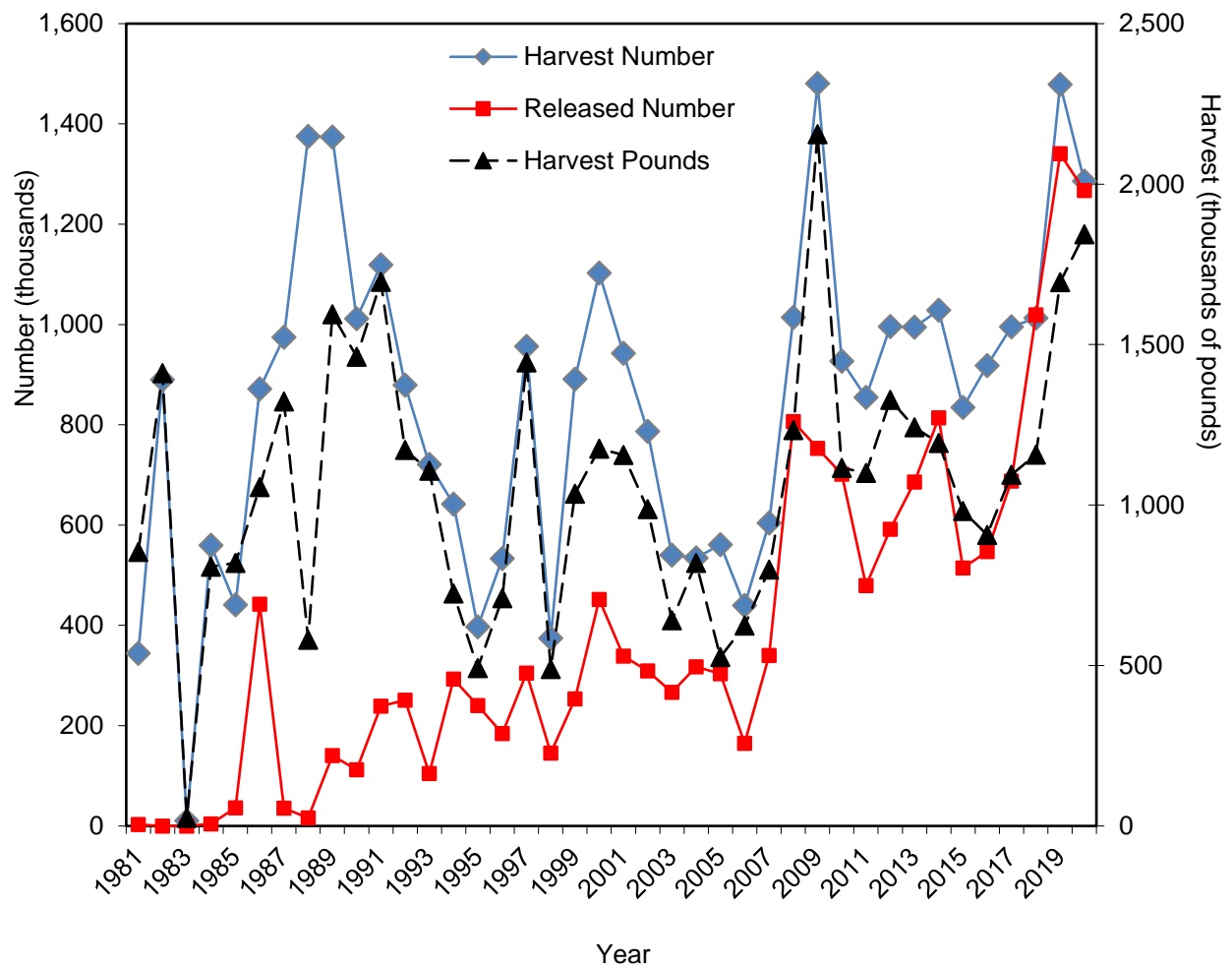


Figure III.39 Mackerel, Spanish recreational catch in North Carolina by year.

Table III.45 Mackerel, Spanish recreational catch by state, 2020.

State	Harvest Number	PSE (num)	Harvest Pounds	PSE (lb)	Mean Length (inches)	Mean Weight (lb)	Released Number	PSE (release)
North Carolina	1,286,131	13.6	1,843,314	14.5	15.6	1.4	1,267,210	26.7
Connecticut	6,254	89.0	10,821	90.5	17.0	1.7	17,419	74.2
Delaware	92	57.4	95	62.4	14.6	1.0	1,367	90.0
Florida	3,616,872	33.0	4,870,363	39.4	16.1	1.4	2,478,260	25.7
Georgia	72,308	36.9	232,439	41.9	21.2	3.2	15,301	48.1
Maryland	151,412	47.8	223,090	46.7	16.2	1.5	63,467	42.4
Massachusetts	-	-	-	-	-	-	23,153	98.0
New Jersey	3,985	89.4	4,123	86.1	14.5	1.0	79,458	105.8
New York	6,096	55.4	11,756	75.2	17.9	1.9	5,395	85.2
Rhode Island	3,016	99.0	3,991	98.9	16.5	1.3	-	-
South Carolina	861,349	32.3	556,882	29.9	12.3	0.6	1,060,185	29.0
Virginia	374,892	26.4	441,654	28.0	15.1	1.2	278,173	31.0

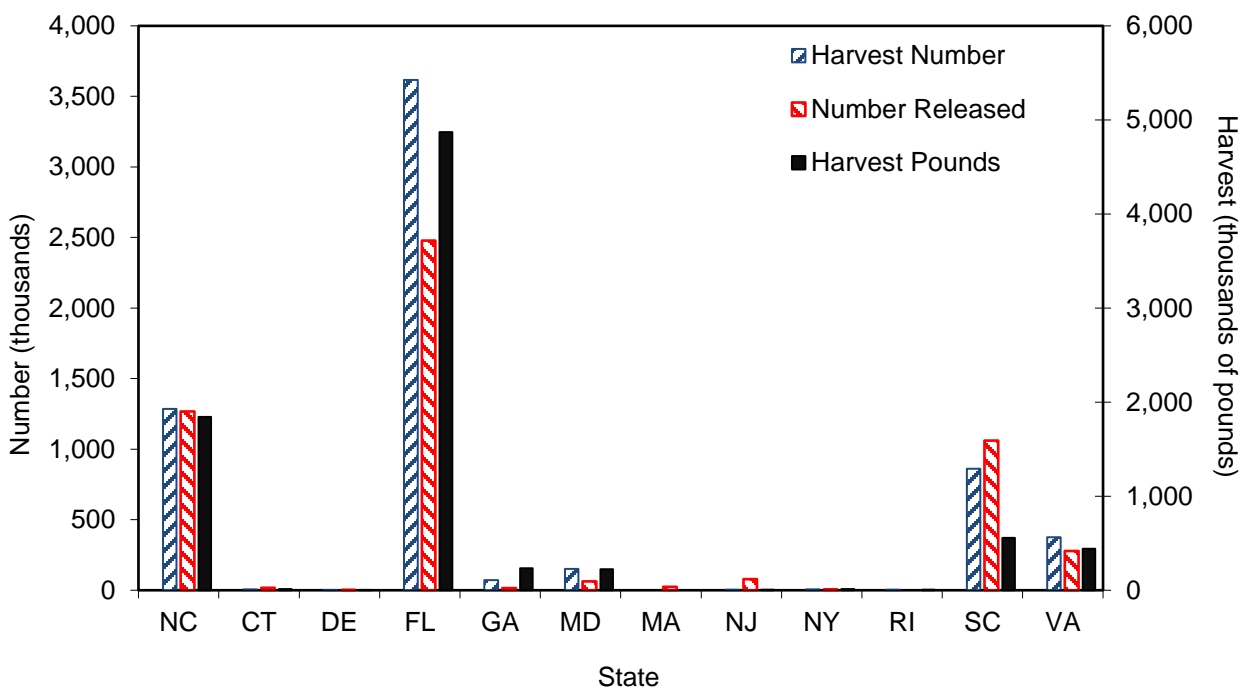


Figure III.40 Spanish Mackerel recreational catch by state, 2020.

Table III.46 Perch, Silver recreational catch in North Carolina by year.

Year	Harvest Number	PSE (num)	Harvest Pounds	PSE (lb)	Mean Length (inches)	Mean Weight (lb)	Released Number	PSE (release)
2020	21,049	55.6	3,838	54.0	7.1	0.2	85,350	30.7
2019	32,444	49.2	7,520	39.9	6.9	0.2	244,868	29.6
2018	6,595	54.9	1,594	53.7	7.4	0.2	84,721	38.8
2017	133,676	44.2	24,532	45.1	7.3	0.2	441,052	36.7
2016	55,040	46.5	11,275	47.5	7.5	0.2	499,616	25.7
2015	41,707	64.7	8,832	64.9	7.6	0.2	98,138	36.2
2014	91,219	57.8	19,567	56.0	7.1	0.2	561,115	55.5
2013	60,246	39.7	10,662	37.1	6.7	0.2	227,334	32.2
2012	115,122	46.6	17,358	40.8	7.1	0.2	297,961	22.8
2011	112,595	45.3	25,729	53.3	7.2	0.2	219,913	24.8
2010	28,366	43.7	7,800	43.9	7.6	0.3	337,774	31.6
2009	92,414	52.1	28,241	55.5	8.0	0.3	479,403	61.3
2008	28,028	42.4	5,911	43.8	8.0	0.2	101,691	42.2
2007	372,042	58.9	64,738	60.3	6.5	0.2	1,288,217	26.3
2006	96,074	42.3	17,550	43.3	7.4	0.2	469,055	29.5
2005	80,394	74.8	25,698	71.1	8.7	0.3	158,168	45.2
2004	23,639	35.3	5,642	35.6	8.1	0.2	124,740	48.8
2003	182,504	59.9	43,470	58.7	8.0	0.2	87,483	34.4
2002	73,418	51.0	15,470	52.9	7.2	0.2	99,484	37.2
2001	51,060	40.1	14,117	41.0	7.8	0.3	107,180	34.5
2000	176,755	55.2	39,011	51.7	8.0	0.2	528,300	66.8
1999	246,919	35.4	50,588	33.2	7.4	0.2	571,776	28.8
1998	175,440	29.5	46,470	27.5	7.9	0.3	217,906	39.2
1997	224,084	31.6	55,458	29.6	8.0	0.2	258,693	35.2
1996	230,966	24.1	51,531	23.4	8.0	0.2	307,523	21.0
1995	225,251	24.5	49,943	23.8	8.1	0.2	291,561	23.1
1994	403,651	43.3	89,842	42.9	7.6	0.2	471,018	28.7
1993	136,122	38.5	36,155	38.2	7.4	0.3	236,460	33.6
1992	695,140	79.6	152,844	78.2	7.4	0.2	788,602	71.2
1991	374,812	32.9	94,995	34.7	7.2	0.3	230,575	36.2
1990	246,418	34.8	61,496	32.6	7.9	0.2	138,308	45.3
1989	433,885	45.9	108,807	45.8	7.4	0.3	64,075	56.1
1988	111,393	56.7	2,167	45.6	7.7	0.0	13,867	46.2
1987	86,348	53.3	17,430	49.3	7.1	0.2	292,245	77.2
1986	-	-	-	-	-	-	-	-
1985	-	-	-	-	-	-	-	-
1984	6,453	104.6	1,660	104.6	6.9	0.3	-	-
1983	-	-	-	-	-	-	4,883	100.5

Table III.46 Perch, Silver recreational catch in North Carolina by year (*continued*).

Year	Harvest Number	PSE (num)	Harvest Pounds	PSE (lb)	Mean Length (inches)	Mean Weight (lb)	Released Number	PSE (release)
1982	133,240	51.8	29,496	53.0	6.6	0.2	9,143	96.4
1981	361,893	75.4	110,675	77.4	7.0	0.3	293,832	100.1

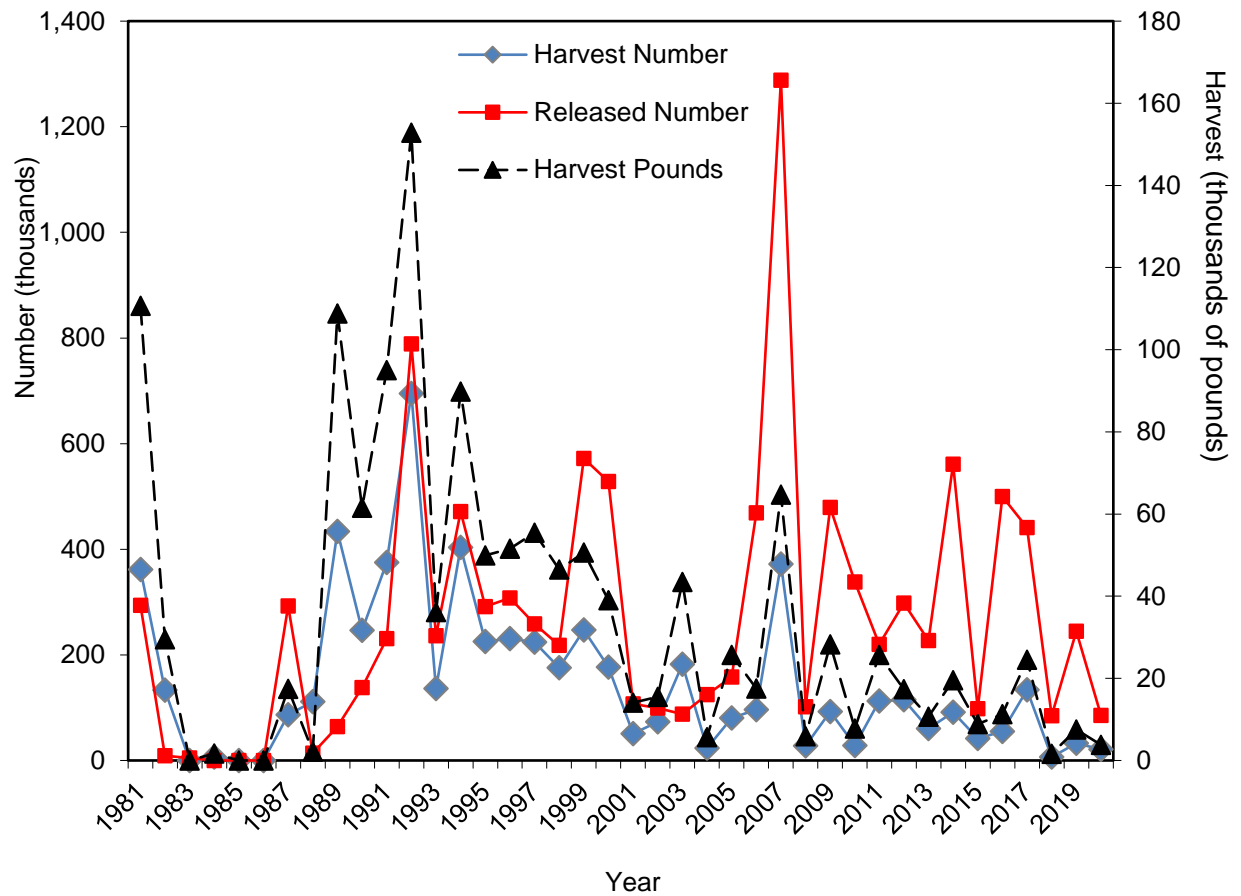


Figure III.41 Perch, Silver recreational catch in North Carolina by year.

Table III.47 Perch, Silver recreational catch by state, 2020

State	Harvest Number	PSE (num)	Harvest Pounds	PSE (lb)	Mean Length (inches)	Mean Weight (lb)	Released Number	PSE (release)
North Carolina	21,049	55.6	3,838	54.0	7.1	0.2	85,350	30.7
Florida	1,051	102.0	371	102.0	6.1	0.2	23,226	83.0
Georgia	413,770	73.2	59,995	70.0	6.5	0.1	971,537	37.6
Maryland	16,497	84.1	4,021	77.7	7.1	0.2	9,202	76.0
New Jersey	-	-	-	-	-	-	18,684	97.9
South Carolina	17,262	36.2	4,680	38.8	7.7	0.3	156,784	26.7
Virginia	1,972	67.8	226	65.7	6.4	0.1	7,810	64.8

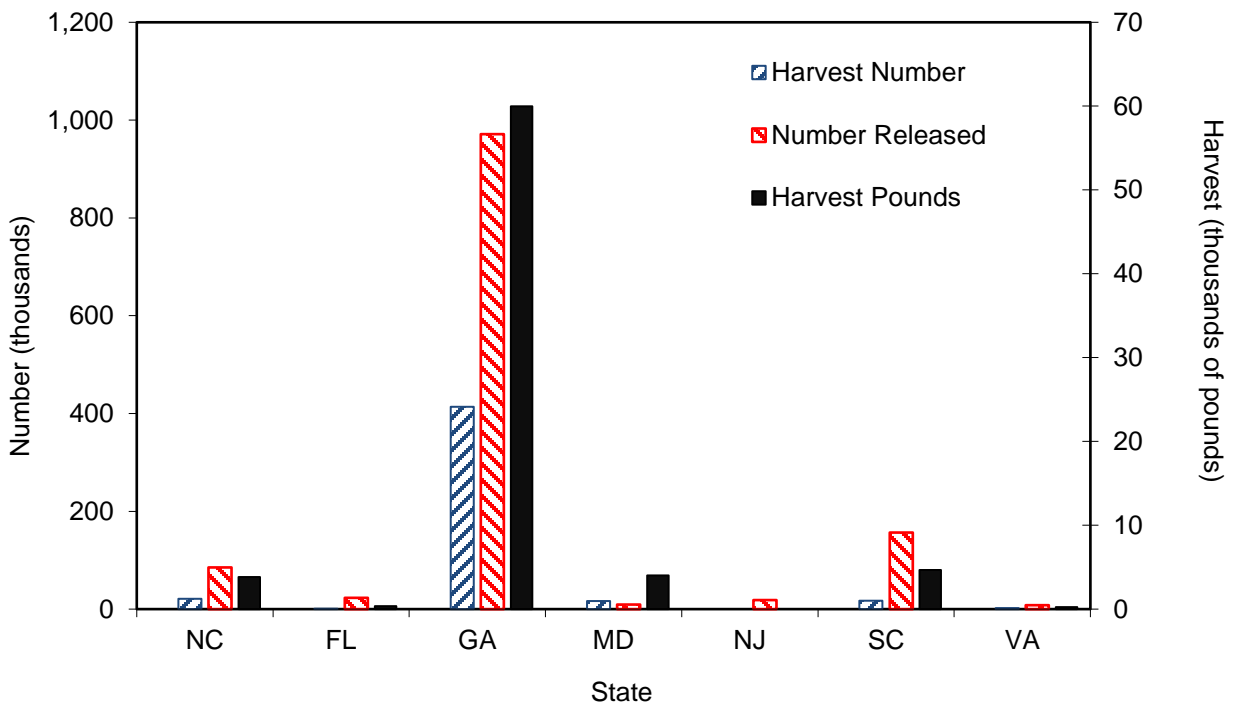


Figure III.42 Perch, Silver recreational catch by state, 2020.

Table III.48 Pigfish recreational catch in North Carolina by year.

Year	Harvest Number	PSE (num)	Harvest Pounds	PSE (lb)	Mean Length (inches)	Mean Weight (lb)	Released Number	PSE (release)
2020	454,825	22.1	147,533	23.1	7.9	0.3	855,547	17.5
2019	432,005	21.9	146,570	21.0	8.0	0.3	1,639,294	30.6
2018	418,174	21.5	163,686	21.4	8.3	0.4	1,385,059	15.4
2017	656,096	27.6	218,003	27.8	8.0	0.3	2,025,949	20.3
2016	1,316,198	22.8	443,062	23.7	8.0	0.3	2,452,668	14.2
2015	1,593,393	24.6	567,572	24.5	8.2	0.4	3,332,936	13.6
2014	1,278,934	26.7	354,667	24.1	7.2	0.3	2,764,971	16.8
2013	905,659	16.1	293,508	15.2	7.9	0.3	1,914,017	13.1
2012	1,098,940	18.8	417,432	18.3	7.9	0.4	1,793,064	9.8
2011	853,482	18.4	268,432	19.2	7.8	0.3	2,316,470	11.7
2010	552,530	17.8	180,599	18.2	7.8	0.3	2,394,225	13.3
2009	1,074,061	61.2	443,288	64.8	8.3	0.4	1,857,462	15.9
2008	478,273	21.6	141,247	24.0	7.8	0.3	1,502,518	23.5
2007	719,365	25.6	230,770	26.6	8.1	0.3	1,430,793	18.5
2006	662,750	23.8	265,398	23.6	8.2	0.4	968,477	19.1
2005	1,160,195	42.0	576,835	48.1	8.8	0.5	1,161,855	20.6
2004	696,142	26.1	282,523	25.3	8.9	0.4	1,739,120	16.9
2003	1,537,595	20.2	602,742	20.5	8.4	0.4	1,638,238	12.7
2002	1,039,007	32.8	361,066	39.5	8.2	0.3	1,363,433	25.0
2001	975,513	27.3	337,779	23.5	8.1	0.3	1,273,575	16.9
2000	1,381,170	42.3	638,461	42.7	8.6	0.5	1,511,814	12.1
1999	1,215,290	29.1	431,807	27.6	8.2	0.4	1,429,091	14.6
1998	1,105,932	17.8	417,500	20.6	8.1	0.4	1,467,194	11.0
1997	1,927,079	25.4	915,829	39.7	8.9	0.5	1,624,440	11.6
1996	1,205,209	14.4	531,526	34.6	8.6	0.4	1,687,914	11.7
1995	1,315,875	27.5	540,808	34.3	8.9	0.4	1,250,657	14.2
1994	986,517	20.3	288,078	21.8	7.9	0.3	1,437,191	12.7
1993	991,706	20.5	337,334	23.2	7.6	0.3	689,289	19.5
1992	1,223,061	19.6	454,908	21.3	8.1	0.4	1,047,346	21.6
1991	700,006	22.3	216,657	22.1	7.7	0.3	768,548	20.8
1990	1,204,166	37.8	370,588	36.9	7.4	0.3	614,860	22.0
1989	1,484,283	18.5	502,369	20.8	7.9	0.3	868,646	23.6
1988	2,159,214	21.0	212,347	29.4	9.9	0.1	1,314,408	20.6
1987	697,469	20.3	202,623	18.4	7.6	0.3	1,315,829	33.1
1986	291,274	21.8	70,893	24.2	7.6	0.3	361,666	45.7
1985	1,124,337	46.9	370,956	57.4	8.0	0.3	594,358	42.9
1984	388,380	27.8	90,817	27.8	7.2	0.2	316,711	32.5
1983	1,501,731	42.3	341,084	47.2	7.0	0.2	626,674	42.3

Table III.48 Pigfish recreational catch in North Carolina by year (*continued*).

Year	Harvest Number	PSE (num)	Harvest Pounds	PSE (lb)	Mean Length (inches)	Mean Weight (lb)	Released Number	PSE (release)
1982	332,049	27.4	91,970	29.7	7.1	0.3	314,248	41.2
1981	1,747,773	68.7	765,505	70.8	7.8	0.4	805,724	53.8

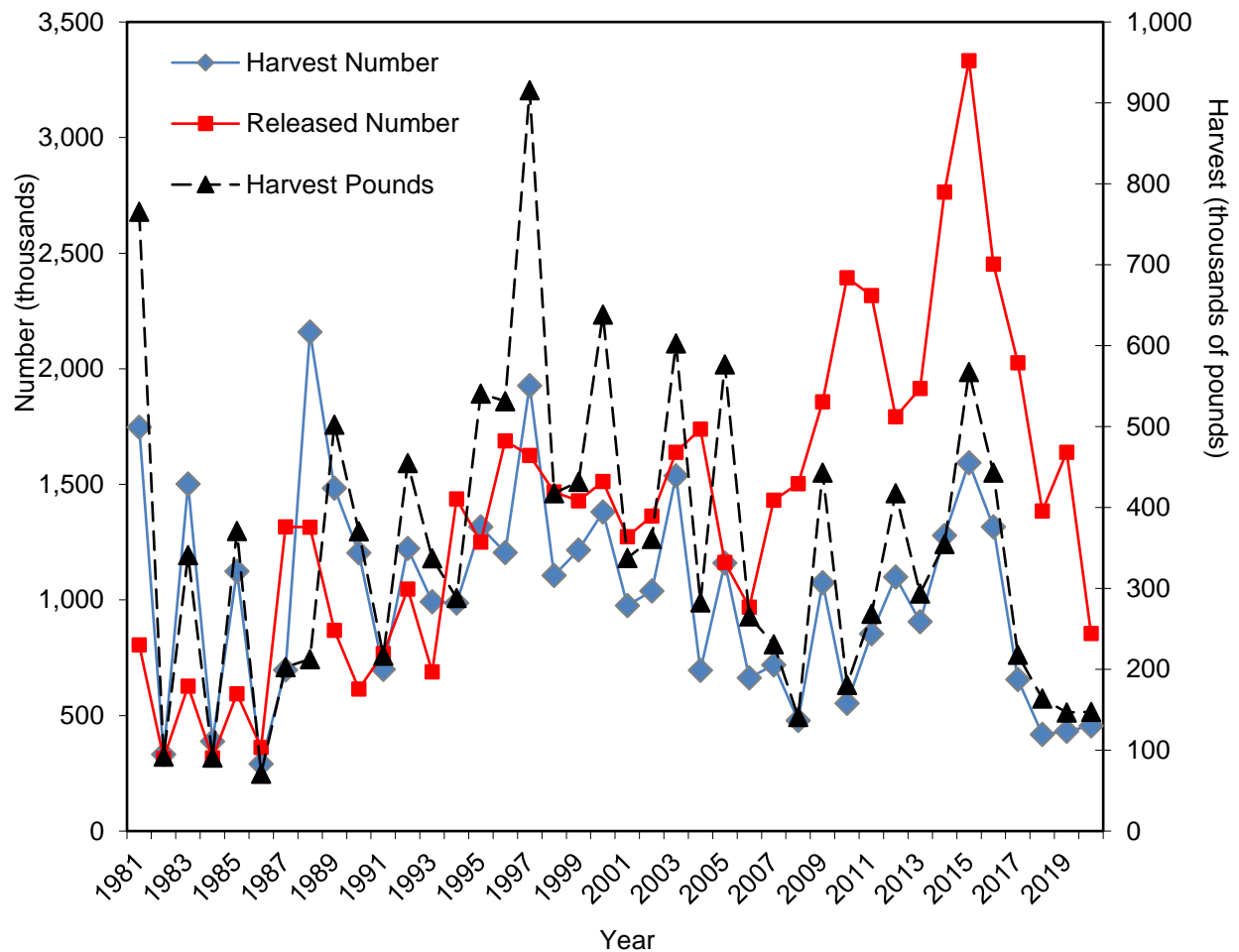


Figure III.43 Pigfish recreational catch in North Carolina by year.

Table III.49 Pigfish recreational catch by state, 2020.

State	Harvest Number	PSE (num)	Harvest Pounds	PSE (lb)	Mean Length (inches)	Mean Weight (lb)	Released Number	PSE (release)
North Carolina	454,825	22.1	147,533	23.1	7.9	0.3	855,547	17.5
Delaware	9	92.4	3	92.4	7.3	0.4	3,949	87.9
Florida	83,827	47.6	35,819	44.0	8.3	0.4	34,335	55.9
Georgia	4,096	53.5	1,955	56.1	9.1	0.5	20,212	49.5
Maryland	3	102.2	1	102.2	8.1	0.4	662	98.5
New Jersey	100	105.1	31	105.1	7.7	0.3	53	102.4
South Carolina	28,543	43.5	12,611	46.0	8.4	0.4	62,898	35.9
Virginia	49,335	63.0	10,017	69.9	7.2	0.2	369,501	42.6

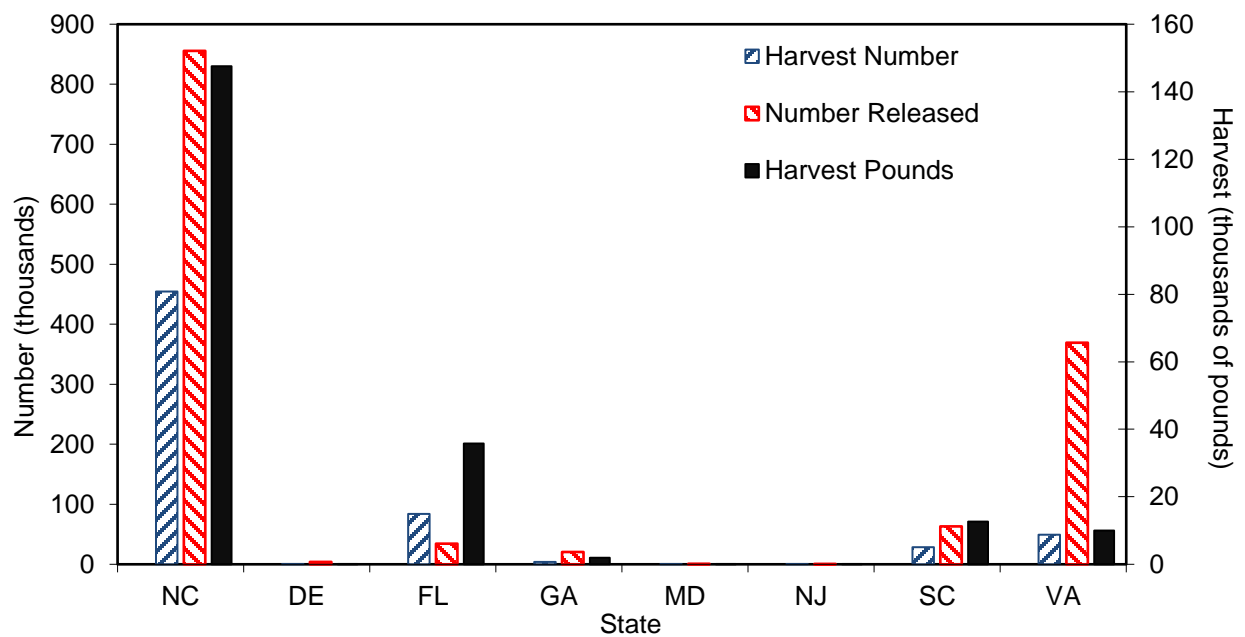


Figure III.44 Pigfish recreational catch by state, 2020.

Table III.50 Pinfish recreational catch in North Carolina by year.

Year	Harvest Number	PSE (num)	Harvest Pounds	PSE (lb)	Mean Length (inches)	Mean Weight (lb)	Released Number	PSE (release)
2020	869,751	30.3	170,160	33.6	6.1	0.2	6,926,966	12.3
2019	955,550	24.7	217,718	24.2	6.6	0.2	9,076,843	11.1
2018	886,712	18.7	188,046	18.6	6.4	0.2	9,646,310	10.7
2017	917,956	24.3	283,455	23.7	6.9	0.3	13,677,930	16.8
2016	1,236,741	19.9	246,720	19.7	6.4	0.2	16,905,448	13.6
2015	1,597,032	20.6	449,239	24.5	6.8	0.3	14,915,393	11.4
2014	1,453,062	17.2	281,547	15.8	6.1	0.2	19,323,896	10.7
2013	1,385,301	15.8	269,250	17.0	6.5	0.2	10,455,850	9.4
2012	1,015,905	14.6	165,384	13.9	5.7	0.2	11,864,052	8.7
2011	836,412	17.0	159,057	16.5	6.4	0.2	8,823,604	9.4
2010	757,425	14.8	122,854	14.3	6.0	0.2	10,754,559	8.6
2009	597,710	21.1	124,101	21.9	6.4	0.2	7,795,965	11.5
2008	640,886	22.5	142,016	21.2	6.6	0.2	6,799,842	10.6
2007	266,392	28.2	58,827	28.0	6.6	0.2	6,526,964	11.0
2006	435,252	28.2	94,334	25.1	7.0	0.2	9,116,690	15.1
2005	341,742	23.3	78,975	23.1	6.9	0.2	4,732,265	13.1
2004	593,170	51.9	140,151	53.1	6.3	0.2	7,921,980	11.3
2003	907,567	20.4	292,269	21.5	7.3	0.3	10,849,405	11.8
2002	935,556	20.6	208,331	20.5	6.9	0.2	11,286,432	11.5
2001	1,184,602	24.0	343,875	26.3	7.2	0.3	8,765,316	12.4
2000	1,538,661	23.7	507,292	25.6	7.1	0.3	8,768,301	9.8
1999	1,788,768	29.0	485,764	27.3	7.6	0.3	9,948,280	15.1
1998	745,818	18.3	198,105	17.6	7.3	0.3	10,298,769	11.5
1997	1,433,455	24.4	384,304	26.3	7.3	0.3	8,028,672	10.0
1996	1,153,500	20.3	312,611	19.4	7.7	0.3	5,918,281	11.1
1995	1,284,073	15.8	290,527	16.7	6.8	0.2	5,874,274	9.5
1994	839,191	14.8	234,871	18.0	7.3	0.3	4,554,486	8.7
1993	820,890	27.7	192,454	26.9	7.2	0.2	3,768,582	12.4
1992	1,279,980	19.7	306,380	18.6	6.4	0.2	5,201,693	14.8
1991	1,681,166	15.5	457,184	16.3	7.1	0.3	5,022,683	16.0
1990	1,088,540	35.4	269,299	31.2	6.9	0.2	1,767,177	17.9
1989	1,669,146	19.2	363,941	18.8	7.1	0.2	3,222,232	21.5
1988	1,003,998	22.5	39,987	43.4	7.8	0.0	2,164,666	17.9
1987	1,032,230	26.8	272,553	24.7	7.1	0.3	2,460,863	22.9
1986	2,027,283	32.4	441,510	33.2	7.1	0.2	1,521,360	27.5
1985	1,010,387	27.0	241,812	26.0	6.6	0.2	2,932,965	25.0
1984	890,149	42.8	200,568	43.3	6.3	0.2	552,524	43.3
1983	390,949	31.9	81,875	31.0	6.6	0.2	208,494	43.6

Table III.50 Pinfish recreational catch in North Carolina by year (*continued*).

Year	Harvest Number	PSE (num)	Harvest Pounds	PSE (lb)	Mean Length (inches)	Mean Weight (lb)	Released Number	PSE (release)
1982	708,080	32.3	161,258	31.4	6.0	0.2	845,785	65.8
1981	209,529	49.7	49,621	47.6	6.0	0.2	608,999	36.5

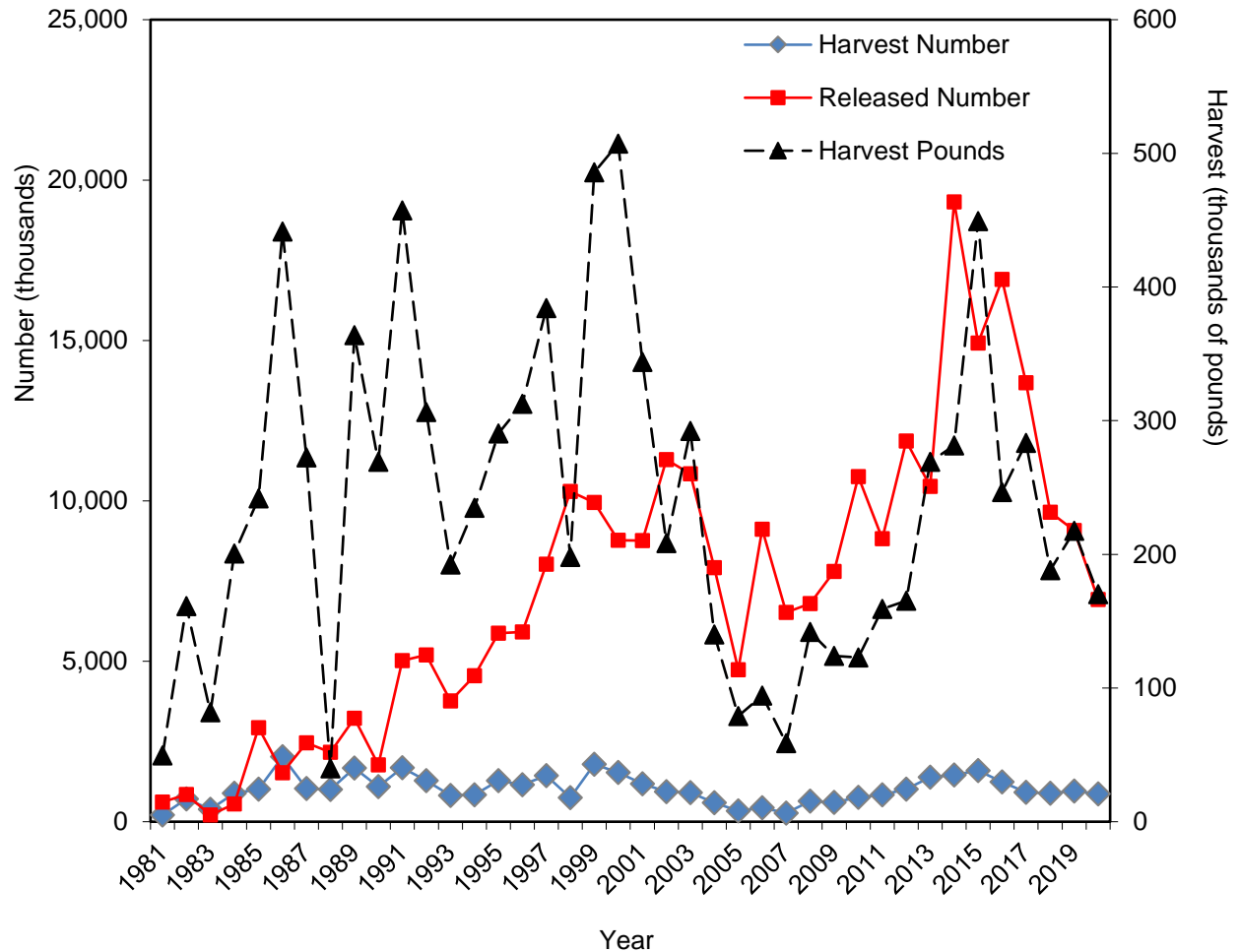


Figure III.45 Pinfish recreational catch in North Carolina by year.

Table III.51 Pinfish recreational catch by state, 2020.

State	Harvest Number	PSE (num)	Harvest Pounds	PSE (lb)	Mean Length (inches)	Mean Weight (lb)	Released Number	PSE (release)
North Carolina	869,751	30.3	170,160	33.6	6.1	0.2	6,926,966	12.3
Delaware	-	-	-	-	-	-	292	96.1
Florida	1,519,207	34.6	516,573	39.2	7.1	0.3	1,454,726	28.1
Georgia	6,883	57.7	2,002	59.0	7.1	0.3	251,601	34.5
Maryland	15	77.1	14	71.8	10.7	1.0	52	87.1
Massachusetts	49	101.1	27	101.1	8.9	0.6	-	-
New Jersey	-	-	-	-	-	-	84	97.6
New York	382	81.1	313	81.1	10.6	0.8	-	-
South Carolina	335,557	60.4	100,615	58.3	6.9	0.3	1,355,084	19.0
Virginia	25,856	71.6	7,440	74.0	6.7	0.3	266,002	44.5

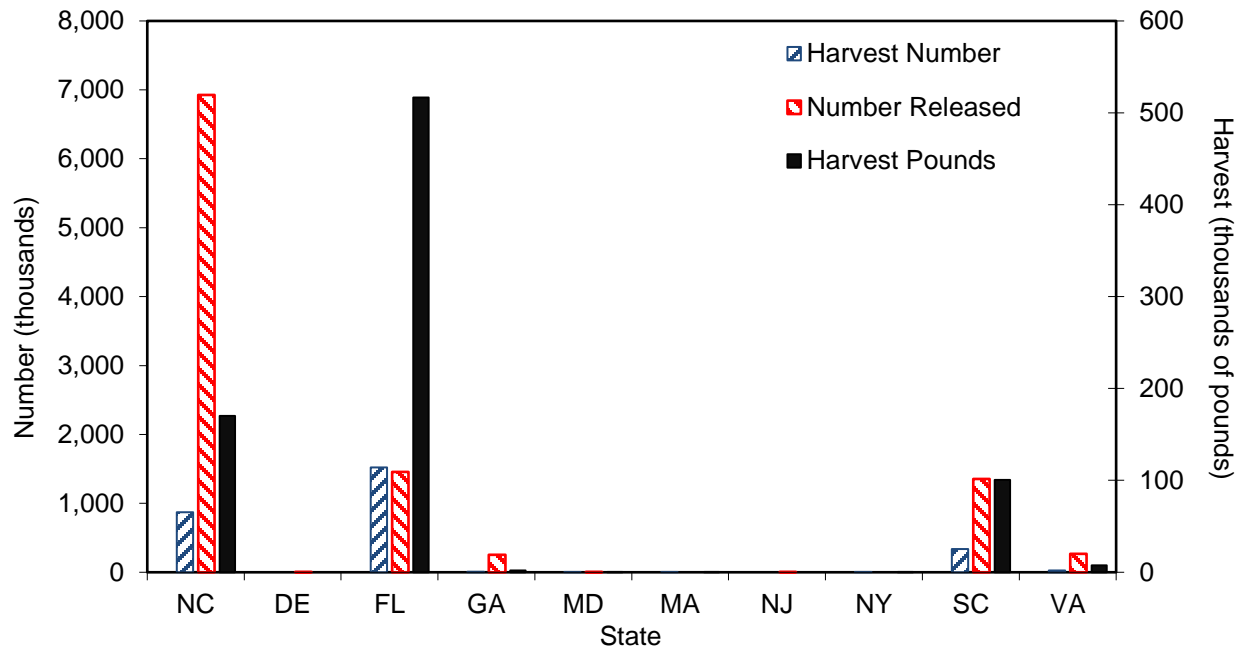


Figure III.46 Pinfish recreational catch by state, 2020.

Table III.52 Pompano, Florida recreational catch in North Carolina by year.

Year	Harvest Number	PSE (num)	Harvest Pounds	PSE (lb)	Mean Length (inches)	Mean Weight (lb)	Released Number	PSE (release)
2020	441,569	35.9	406,980	59.0	9.3	0.9	832,361	28.0
2019	1,734,862	50.3	769,603	46.1	7.8	0.4	1,668,678	35.0
2018	318,702	37.4	245,670	42.2	8.7	0.8	1,267,505	22.9
2017	730,412	54.4	290,660	54.5	7.4	0.4	1,681,692	31.7
2016	411,634	42.7	258,769	55.2	8.3	0.6	1,446,589	27.2
2015	722,558	36.0	306,213	42.8	7.1	0.4	883,312	25.9
2014	646,308	33.0	360,398	33.5	8.4	0.6	1,112,888	21.8
2013	1,978,916	25.3	735,833	21.4	7.3	0.4	2,967,947	20.8
2012	479,495	16.9	261,933	21.6	8.4	0.5	1,079,328	19.2
2011	698,273	18.4	275,846	17.6	7.5	0.4	1,421,287	17.1
2010	452,467	19.3	179,641	17.6	7.3	0.4	1,099,167	22.5
2009	580,096	20.6	257,813	20.9	8.0	0.4	755,251	18.8
2008	404,194	21.5	204,250	23.4	7.9	0.5	841,824	21.3
2007	259,331	27.4	121,883	23.8	8.2	0.5	757,063	22.9
2006	247,766	30.6	121,883	35.1	9.3	0.5	1,194,051	36.2
2005	407,705	26.5	211,710	32.8	7.9	0.5	719,238	26.7
2004	1,108,124	24.7	518,316	23.4	8.0	0.5	941,805	21.3
2003	770,738	24.9	483,289	21.6	8.3	0.6	946,984	31.7
2002	824,902	40.3	540,521	44.8	8.8	0.7	296,537	25.1
2001	684,843	38.2	236,463	39.7	7.6	0.3	611,086	35.0
2000	917,597	21.7	248,162	22.5	6.9	0.3	573,935	24.3
1999	279,252	31.5	118,669	35.2	8.7	0.4	134,019	18.1
1998	315,797	45.1	140,912	43.4	8.3	0.4	179,824	27.1
1997	191,428	21.7	106,688	21.7	8.4	0.6	180,314	25.1
1996	114,391	19.8	51,423	21.5	8.1	0.4	152,283	29.8
1995	236,431	25.3	84,051	24.6	7.8	0.4	229,570	33.9
1994	250,407	37.6	94,026	41.8	7.8	0.4	117,243	33.3
1993	634,341	33.0	232,975	34.6	7.3	0.4	406,586	26.3
1992	208,451	32.7	66,478	29.4	7.3	0.3	210,956	45.4
1991	375,936	18.6	166,520	19.2	7.6	0.4	254,900	38.0
1990	1,359,662	33.6	512,900	31.6	7.5	0.4	340,436	37.3
1989	255,632	28.7	146,074	30.8	7.8	0.6	108,002	44.3
1988	145,068	36.0	4,521	74.8	7.3	0.0	39,103	59.3
1987	304,243	22.9	126,931	23.0	8.2	0.4	37,598	69.5
1986	3,707,493	25.9	747,326	25.7	6.1	0.2	945,462	27.2
1985	872,182	44.5	240,533	42.5	7.0	0.3	299,428	53.2
1984	366,033	37.8	112,436	45.9	7.5	0.3	97,704	60.6
1983	218,848	75.7	38,848	76.3	6.4	0.2	10,145	84.5

Table III.52 Pompano, Florida recreational catch in North Carolina by year (*continued*).

Year	Harvest Number	PSE (num)	Harvest Pounds	PSE (lb)	Mean Length (inches)	Mean Weight (lb)	Released Number	PSE (release)
1982	318,425	37.2	151,214	43.8	8.1	0.5	25,630	97.2
1981	266,744	36.5	85,455	36.0	6.9	0.3	34,727	51.2

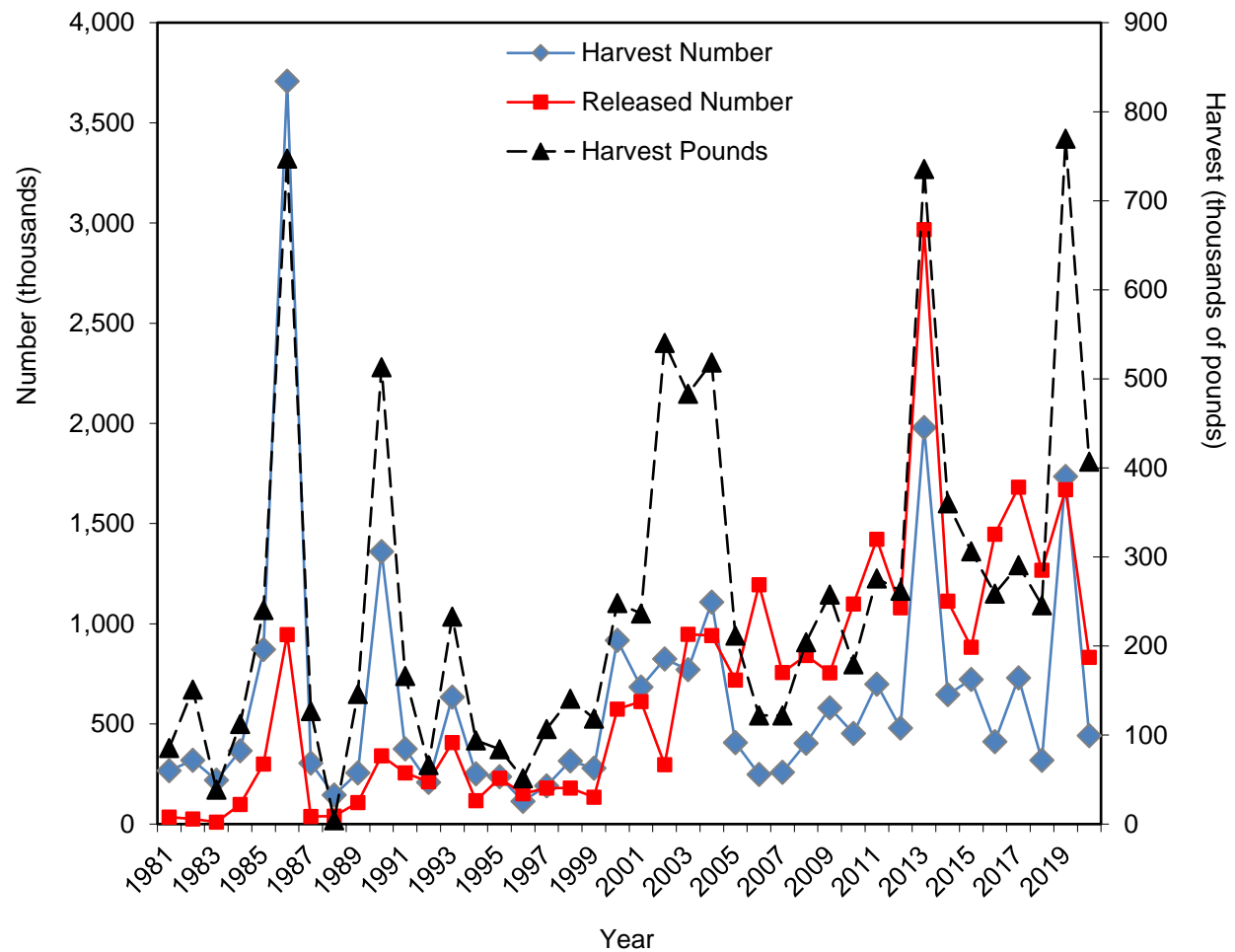


Figure III.47 Pompano, Florida recreational catch in North Carolina by year.

Table III.53 Pompano, Florida recreational catch by state, 2020.

State	Harvest Number	PSE (num)	Harvest Pounds	PSE (lb)	Mean Length (inches)	Mean Weight (lb)	Released Number	PSE (release)
North Carolina	441,569	35.9	406,980	59.0	9.3	0.9	832,361	28.0
Delaware	-	-	-	-	-	-	21,064	70.9
Florida	385,988	42.3	516,614	42.1	12.4	1.6	1,126,504	33.8
Georgia	18,456	67.6	24,790	71.3	11.8	1.3	204,340	48.7
Maryland	450	79.9	149	79.9	7.2	0.3	-	-
South Carolina	171,721	22.9	82,910	23.4	7.3	0.5	1,491,412	21.9
Virginia	5,304	66.6	3,364	69.1	9.0	0.6	121,704	61.7

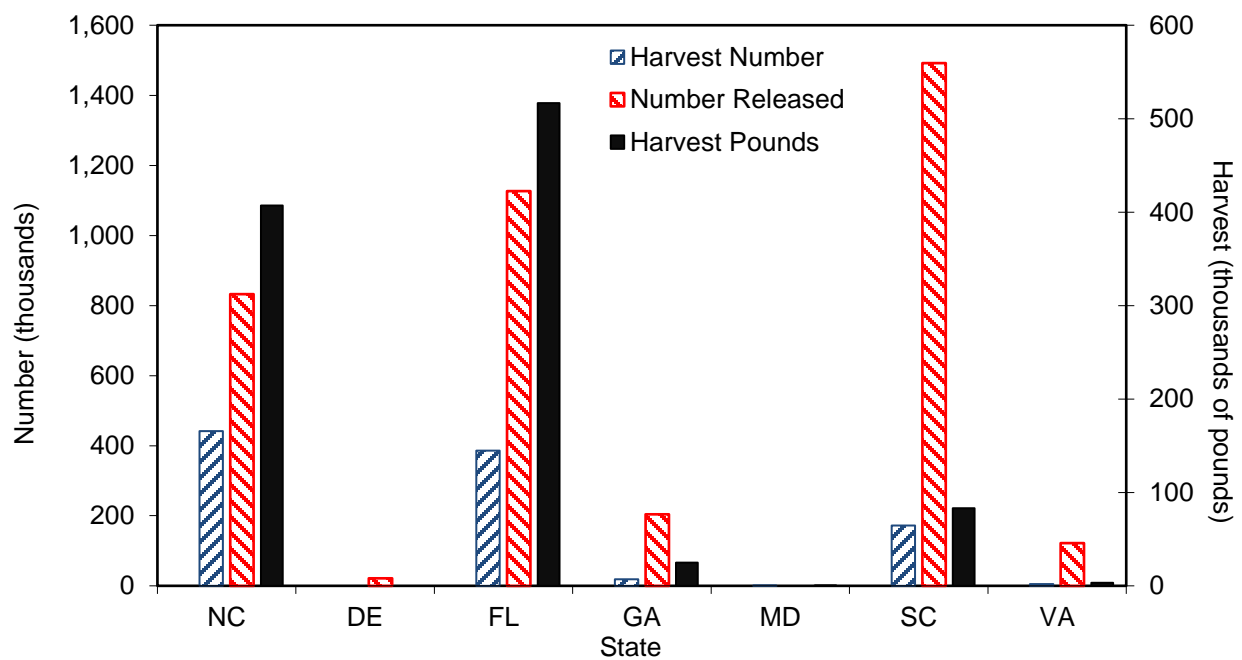


Figure III.48 Florida Pompano recreational catch by state, 2020.

Table III.54 Puffer, Northern recreational catch in North Carolina by year.

Year	Harvest Number	PSE (num)	Harvest Pounds	PSE (lb)	Mean Length (inches)	Mean Weight (lb)	Released Number	PSE (release)
2020	1,164,950	22.0	507,458	21.7	8.0	0.4	1,097,409	23.0
2019	2,394,588	29.5	1,016,972	29.9	7.8	0.4	2,240,965	19.3
2018	325,810	56.7	148,220	59.7	7.8	0.5	407,924	23.5
2017	518,342	26.7	258,605	24.7	8.3	0.5	1,878,428	41.1
2016	1,627,063	21.9	782,983	22.1	8.2	0.5	1,927,787	17.6
2015	2,752,120	31.1	1,334,104	28.1	8.1	0.5	3,645,599	18.1
2014	490,259	38.9	248,174	40.4	9.0	0.5	419,798	31.4
2013	899,150	37.3	449,032	28.6	8.3	0.5	347,152	32.1
2012	1,074,685	23.5	613,493	24.7	8.5	0.6	1,571,047	11.0
2011	923,100	22.4	579,923	24.0	9.0	0.6	1,220,673	17.9
2010	1,491,844	35.6	816,436	34.8	8.7	0.5	711,264	23.8
2009	194,158	32.3	108,035	31.1	8.6	0.6	40,466	35.1
2008	311,487	33.2	117,706	30.0	7.5	0.4	23,158	60.5
2007	153,264	41.3	93,648	42.7	9.1	0.6	33,626	52.7
2006	162,012	78.3	104,601	81.5	9.2	0.6	34,587	47.6
2005	237,213	49.3	147,256	53.7	9.0	0.6	195,199	53.3
2004	254,184	31.7	160,160	30.6	8.9	0.6	127,519	25.1
2003	800,863	55.3	660,167	58.5	9.5	0.8	51,113	43.5
2002	677,253	32.9	388,883	35.2	9.2	0.6	148,184	36.0
2001	589,195	20.6	397,663	21.3	9.1	0.7	134,411	28.3
2000	357,127	21.6	214,219	23.8	8.9	0.6	145,073	47.0
1999	317,116	33.2	221,457	32.7	9.4	0.7	23,021	43.3
1998	105,195	30.9	62,149	32.1	9.0	0.6	5,422	59.7
1997	270,814	23.7	190,897	28.7	9.0	0.7	138,325	42.5
1996	589,554	38.3	303,231	37.8	8.6	0.5	199,470	67.0
1995	205,423	43.8	113,401	43.6	9.0	0.6	80,369	38.9
1994	269,693	27.4	137,147	26.8	8.5	0.5	26,371	38.4
1993	550,285	25.3	314,595	23.8	8.6	0.6	157,392	26.5
1992	1,904,200	47.5	1,010,094	49.3	8.4	0.5	943,183	36.1
1991	203,294	22.0	112,519	23.6	8.3	0.6	323,876	20.2
1990	517,184	42.9	282,577	51.1	8.5	0.5	506,381	24.4
1989	617,918	25.9	392,438	27.9	8.4	0.6	370,925	20.4
1988	1,655,165	70.1	48,731	45.7	8.9	0.0	756,303	50.1
1987	87,707	40.2	37,047	38.0	8.0	0.4	323,750	76.0
1986	446,691	56.5	155,760	57.0	8.4	0.3	877,411	36.1
1985	166,909	80.0	93,993	84.5	8.3	0.6	178,786	46.3
1984	10,619	68.4	2,385	68.4	7.4	0.2	62,316	36.3
1983	16,404	66.9	4,662	70.0	8.7	0.3	96,363	60.1

Table III.54 Puffer, Northern recreational catch in North Carolina by year (*continued*).

Year	Harvest Number	PSE (num)	Harvest Pounds	PSE (lb)	Mean Length (inches)	Mean Weight (lb)	Released Number	PSE (release)
1982	83,764	39.0	37,737	45.4	7.8	0.5	67,046	43.3
1981	6,027	73.4	3,014	83.9	8.0	0.5	57,396	62.2

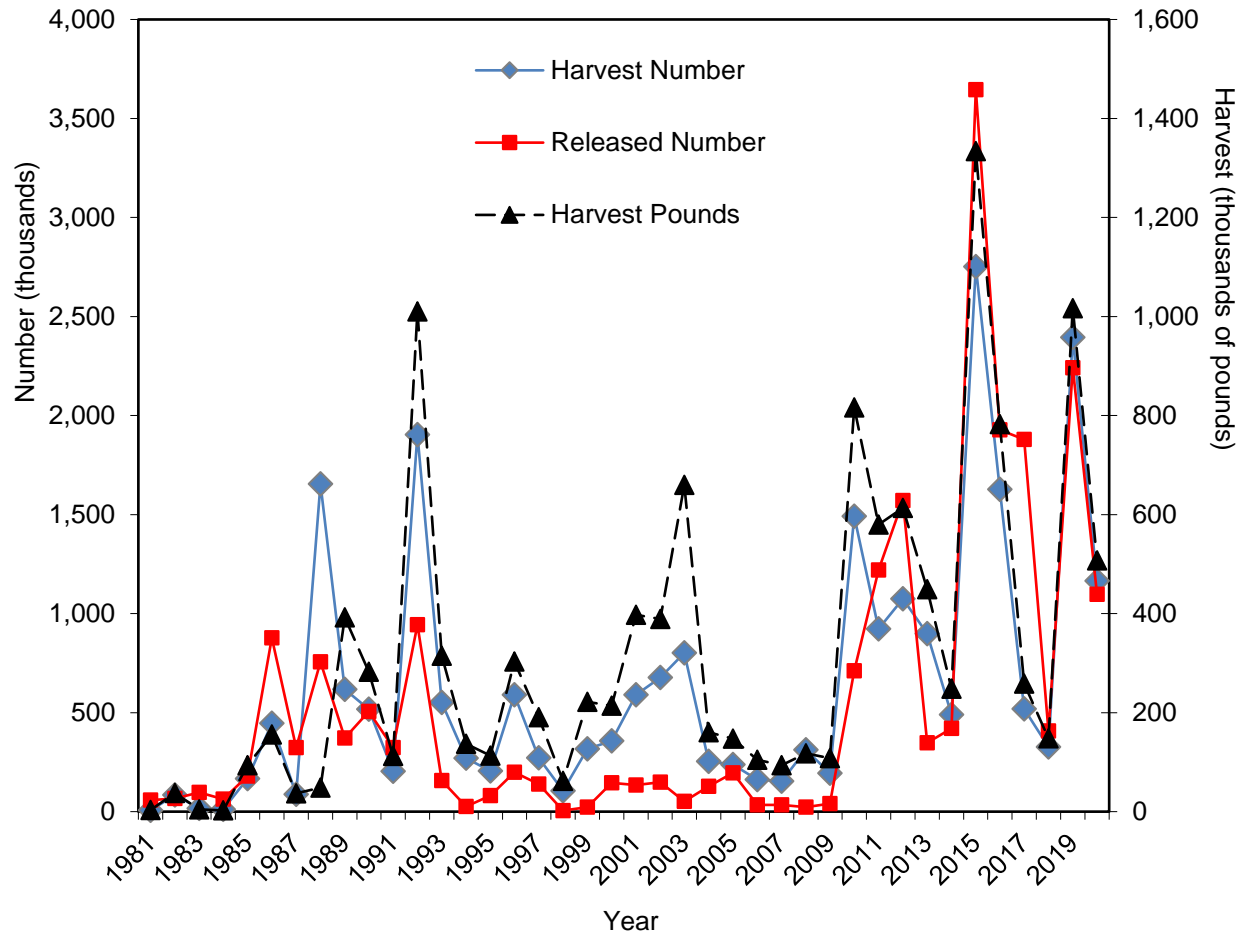


Figure III.49 Puffer, Northern recreational catch in North Carolina by year.

Table III.55 Puffer, Northern recreational catch by state, 2020.

State	Harvest Number	PSE (num)	Harvest Pounds	PSE (lb)	Mean Length (inches)	Mean Weight (lb)	Released Number	PSE (release)
North Carolina	1,164,950	22.0	507,458	21.7	8.0	0.4	1,097,409	23.0
Connecticut	-	-	-	-	-	-	50	72.4
Delaware	383	89.6	211	89.7	8.3	0.6	7,501	50.0
Georgia	-	-	-	-	-	-	620	104.4
Maryland	1,161	101.7	981	101.7	9.9	0.8	9,420	44.5
New Jersey	176,530	69.1	146,886	77.9	9.2	0.8	170,654	62.7
New York	193,457	60.3	97,984	63.4	8.1	0.5	761,921	76.1
Rhode Island	1,582	92.0	1,221	92.0	9.6	0.8	38,528	77.0
South Carolina	2,472	81.9	1,311	85.2	8.7	0.5	70,679	59.6
Virginia	173,382	63.4	77,969	55.3	8.3	0.4	140,829	32.7

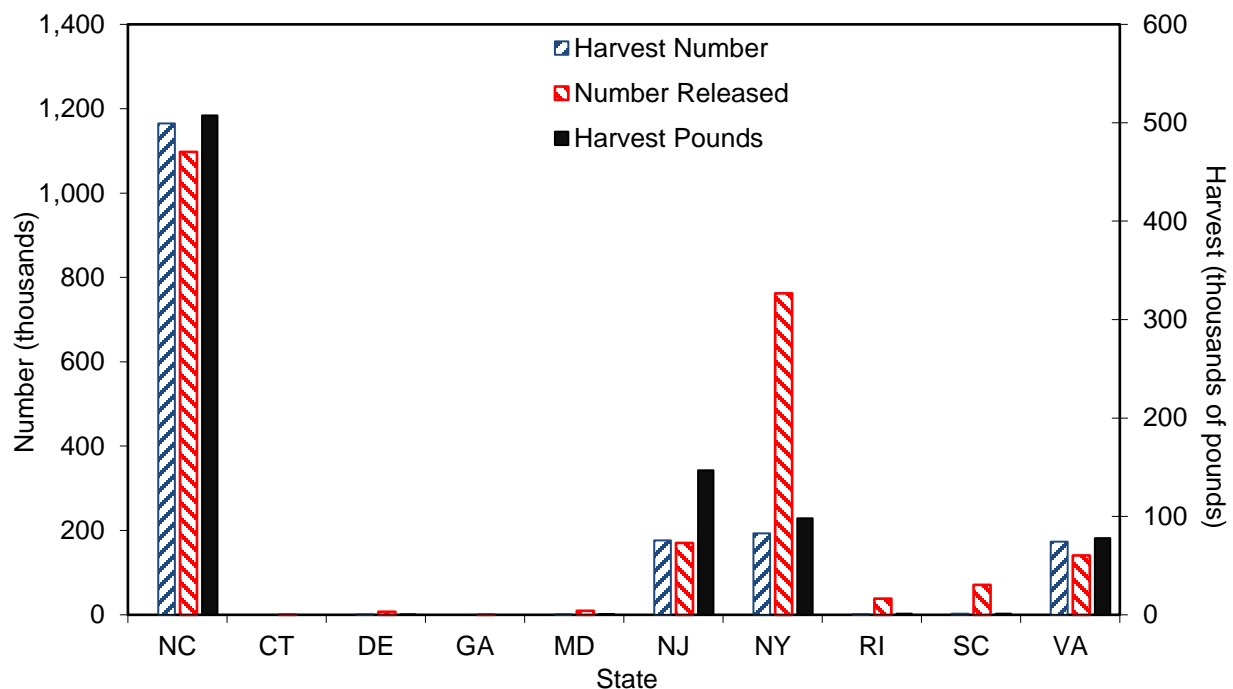


Figure III.50 Puffer, Northern recreational catch by state, 2020.

Table III.56 Seatrout, Spotted recreational catch in North Carolina by year.

Year	Harvest Number	PSE (num)	Harvest Pounds	PSE (lb)	Mean Length (inches)	Mean Weight (lb)	Released Number ¹	PSE (release) ¹
2020	2,053,354	11.1	3,632,315	11.4	17.0	1.8	6,215,778	-
2019	1,937,250	11.4	3,334,163	11.6	16.7	1.7	7,185,562	-
2018	449,473	18.6	658,555	18.4	15.7	1.5	15,245,249	-
2017	1,217,834	14.8	2,157,198	14.8	17.0	1.8	5,151,510	-
2016	978,624	13.1	1,724,492	14.5	16.8	1.8	6,533,887	-
2015	249,260	21.9	430,579	22.6	16.9	1.7	4,883,109	-
2014	725,086	13.9	1,451,592	16.1	17.6	2.0	3,950,447	-
2013	1,107,957	11.9	1,881,881	12.1	16.8	1.7	4,312,436	-
2012	1,602,836	10.4	2,720,028	12.0	16.5	1.7	4,967,987	-
2011	723,502	11.2	1,353,388	11.5	17.0	1.9	7,486,377	-
2010	630,748	26.5	1,277,174	28.0	17.5	2.0	8,034,670	-
2009	1,857,890	16.8	2,878,160	16.5	16.0	1.5	5,369,092	-
2008	1,372,973	14.3	2,114,130	16.5	15.6	1.5	4,509,440	-
2007	1,241,296	14.8	1,998,275	14.2	15.9	1.6	3,558,110	-
2006	1,444,778	16.6	2,034,469	16.7	15.5	1.4	2,722,351	-
2005	1,517,647	31.9	1,695,036	26.5	14.2	1.1	3,744,921	-
2004	560,834	20.2	728,027	21.3	15.3	1.3	934,206	-
2003	388,715	20.8	515,678	19.5	14.7	1.3	903,292	-
2002	746,908	26.6	957,824	23.2	14.9	1.3	1,829,880	-
2001	499,556	16.7	659,893	18.0	14.9	1.3	1,210,336	-
2000	728,906	21.9	1,095,729	22.3	15.5	1.5	645,107	-
1999	1,080,411	17.6	1,878,913	21.0	16.4	1.7	1,168,909	-
1998	702,274	16.8	1,125,898	18.3	16.4	1.6	351,114	-
1997	779,611	16.1	1,025,110	16.0	15.3	1.3	480,093	-
1996	575,357	27.4	699,078	23.0	14.6	1.2	1,028,974	-
1995	863,057	14.9	1,221,065	13.5	15.6	1.4	764,503	-
1994	798,937	13.9	1,207,520	14.8	16.0	1.5	601,148	-
1993	569,327	16.3	857,720	17.3	15.7	1.5	542,137	-
1992	908,233	19.4	1,390,746	21.9	15.6	1.5	476,405	-
1991	988,049	13.1	1,360,530	13.1	15.1	1.4	719,372	-
1990	385,413	32.9	424,443	19.7	14.2	1.1	235,091	-
1989	574,228	21.9	950,200	26.8	15.6	1.7	369,017	-
1988	828,913	36.7	81,667	41.9	13.2	0.1	196,066	-
1987	1,137,734	25.5	1,476,034	24.8	13.9	1.3	573,181	-
1986	954,354	19.0	1,022,380	25.1	13.6	1.1	63,506	-
1985	309,555	27.5	452,658	31.4	14.4	1.5	7,361	-
1984	154,750	41.9	103,514	35.8	12.6	0.7	42,465	-
1983	220,129	26.7	167,186	27.4	13.1	0.8	26,685	-

¹ Seatrout releases are not always recorded to species level; released number was calculated by assigning a ratio of observed seatrout by species to reported seatrout genus release estimates. PSE are not available for this analysis.

Table III.56 Seatrout, Spotted recreational catch in North Carolina by year (*continued*).

Year	Harvest Number	PSE (num)	Harvest Pounds	PSE (lb)	Mean Length (inches)	Mean Weight (lb)	Released Number ¹	PSE (release) ¹
1982	342,781	32.0	308,947	29.3	13	0.9	-	-
1981	132,606	42.6	235,405	44.4	16	1.8	2,031	-

¹ Seatrout releases are not always recorded to species level; released number was calculated by assigning a ratio of observed seatrout by species to reported seatrout genus release estimates. PSE are not available for this analysis.

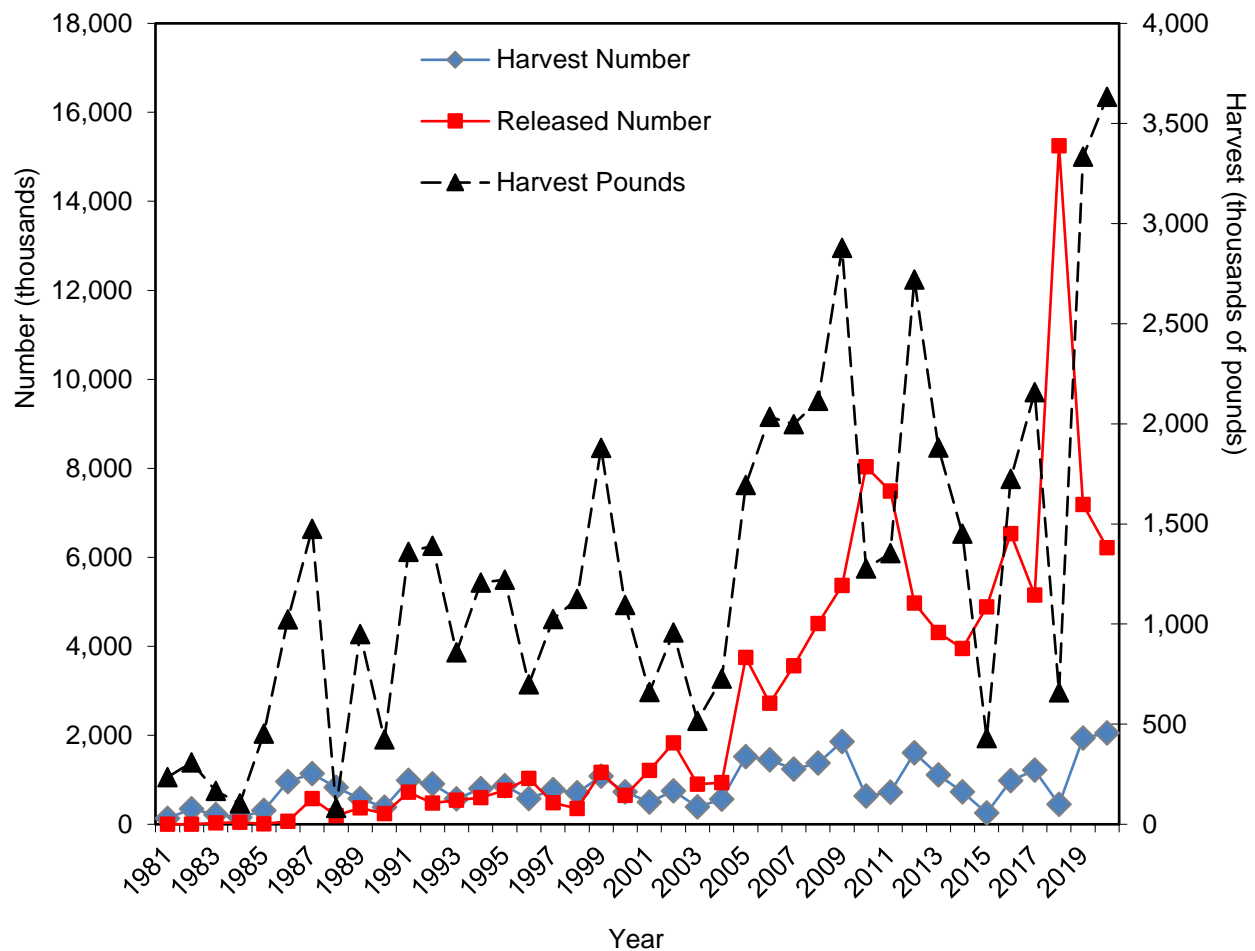


Figure III.51 Seatrout, Spotted recreational catch in North Carolina by year.

Table III.57 Seatrout, Spotted recreational catch by state, 2020.

State	Harvest Number	PSE (num)	Harvest Pounds	PSE (lb)	Mean Length (inches)	Mean Weight (lb)	Released Number ¹	PSE (release) ¹
North Carolina	2,053,354	11.1	3,632,315	11.4	17	1.8	-	-
Delaware	774	97.3	790	97.3	14.6	1.0	-	-
Florida	678,934	22.6	1,045,536	24.4	16.5	1.5	-	-
Georgia	830,771	22.5	1,196,591	29.8	15.4	1.4	-	-
Maryland	11,951	52.5	28,170	52.7	18.6	2.4	-	-
South Carolina	511,261	23.4	713,197	21.8	15.6	1.4	-	-
Virginia	591,624	23.3	1,375,062	24.1	18.5	2.3	-	-

¹Released seatrout are not always recorded to species level. Numbers released are not shown by state.

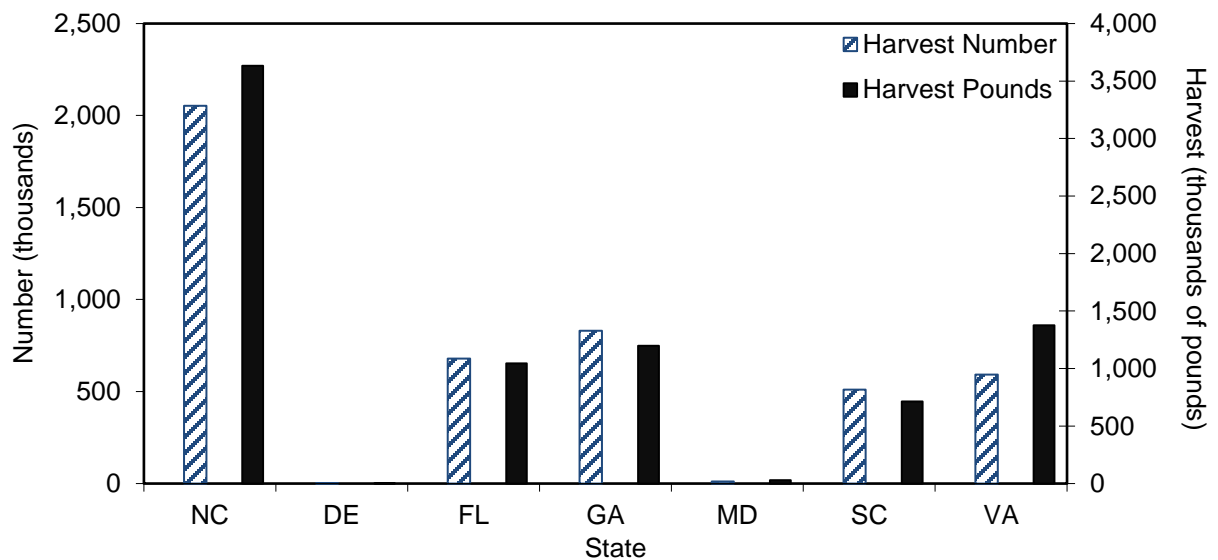


Figure III.52 Seatrout, Spotted recreational catch by state, 2020.

Table III.58 Shark, Dogfish family recreational catch in North Carolina by year.

Year	Harvest Number	PSE (num)	Harvest Pounds	PSE (lb)	Mean Length (inches)	Mean Weight (lb)	Released Number	PSE (release)
2020	3,073	60.3	16,763	65.0	-	-	533,257	44.6
2019	8,962	56.3	50,477	60.3	-	-	277,815	37.2
2018	7,514	74.1	43,732	80.5	-	-	237,213	62.4
2017	683	84.5	5,616	87.0	-	-	113,453	42.2
2016	33,490	63.0	359,844	64.0	-	-	181,165	30.9
2015	8,314	61.7	38,340	76.7	-	-	777,052	43.9
2014	1,992	88.2	11,978	90.4	-	-	709,206	29.4
2013	52,026	77.6	88,216	71.4	-	-	2,100,519	39.9
2012	1,600	75.7	10,522	82.4	-	-	197,177	33.4
2011	28,719	43.1	108,348	43.5	-	-	607,971	24.8
2010	8,859	46.0	26,626	45.5	-	-	362,012	22.0
2009	2,000	81.1	43,216	81.1	-	-	175,626	45.6
2008	20,340	69.2	17,414	66.5	-	-	405,531	55.6
2007	5,405	100.9	36,342	100.9	-	-	187,272	34.4
2006	5,775	56.6	71,369	65.1	-	-	150,924	27.1
2005	37,180	64.9	275,611	64.5	-	-	792,947	75.0
2004	2,574	78.8	31,524	75.2	-	-	919,204	33.2
2003	3,105	88.8	2,958	98.3	-	-	145,851	59.5
2002	8,675	87.3	22,922	83.4	-	-	115,577	30.5
2001	6,843	99.8	5,374	99.8	-	-	229,402	29.6
2000	1,151	88.2	9,693	87.6	-	-	109,351	33.0
1999	9,663	89.9	17,941	85.7	-	-	71,050	66.1
1998	3,373	53.0	22,939	54.6	-	-	79,758	47.2
1997	5,589	79.8	11,492	72.1	-	-	28,748	32.9
1996	9,125	42.4	22,267	46.4	-	-	35,227	29.6
1995	7,679	44.8	26,696	48.8	-	-	123,209	36.0
1994	12,774	32.2	37,456	35.2	-	-	61,539	27.0
1993	15,065	36.4	58,258	33.5	-	-	51,097	37.2
1992	26,865	48.0	144,564	56.1	-	-	262,281	33.9
1991	52,948	37.1	321,441	43.4	17.3	2.7	235,289	27.6
1990	57,110	46.0	476,110	57.2	25.6	2.5	568,100	26.6
1989	83,267	40.8	557,726	56.7	-	-	284,839	36.3
1988	121,457	38.4	300,069	76.2	26.9	3.9	254,187	34.2
1987	227,905	33.8	572,154	34.6	34.8	6.7	244,347	36.7
1986	66,439	29.1	151,531	36.4	-	-	338,364	69.4
1985	86,890	35.3	342,451	62.3	-	-	100,912	36.4
1984	144,554	34.1	436,508	67.1	-	-	395,503	56.2
1983	31,275	51.5	121,639	68.9	-	-	76,028	52.4

Table III.58 Shark, Dogfish family recreational catch in North Carolina by year (*continued*).

Year	Harvest Number	PSE (num)	Harvest Pounds	PSE (lb)	Mean Length (inches)	Mean Weight (lb)	Released Number	PSE (release)
1982	9,118	71.6	-	-	-	-	51,953	46.5
1981	90,299	77.1	91,705	83.3	-	-	478,085	58.9

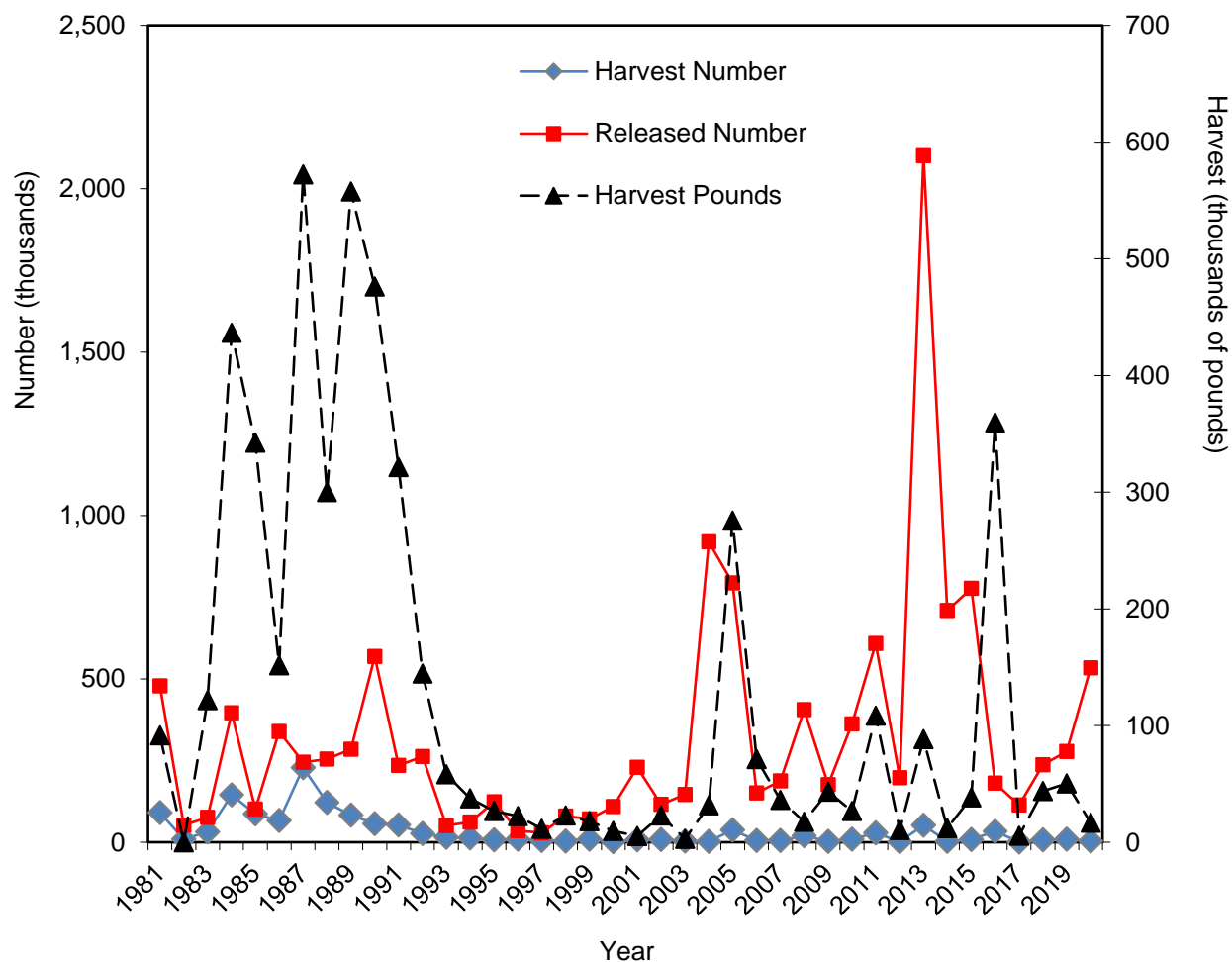


Figure III.53 Shark, Dogfish family recreational catch in North Carolina by year.

Table III.59 Shark, Dogfish family recreational catch by state, 2020.

State	Harvest Number	PSE (num)	Harvest Pounds	PSE (lb)	Mean Length (inches)	Mean Weight (lb)	Released Number	PSE (release)
North Carolina	3,073	60.3	16,763	65.0	-	-	533,257	44.6
Connecticut	10,746	67.1	5,611	56.1	-	-	210,314	37.9
Delaware	149	77.8	139	62.6	-	-	162,710	19.0
Georgia	-	-	-	-	-	-	1	106.7
Maine	109	29.6	579	33.8	-	-	16,932	45.6
Maryland	26	79.0	73	77.5	-	-	211,619	55.4
Massachusetts	2,690	67.6	4,318	57.9	-	-	112,856	23.7
New Hampshire	682	91.2	2,553	87.4	-	-	17,769	43.8
New Jersey	31,068	54.6	98,041	55.3	-	-	2,202,358	15.4
New York	61,311	46.9	269,443	50.3	-	-	971,126	21.3
Rhode Island	5,808	58.0	23,404	59.5	-	-	137,838	27.0
South Carolina	-	-	-	-	-	-	31,853	63.0
Virginia	831	94.6	6,732	97.7	-	-	28,071	52.6

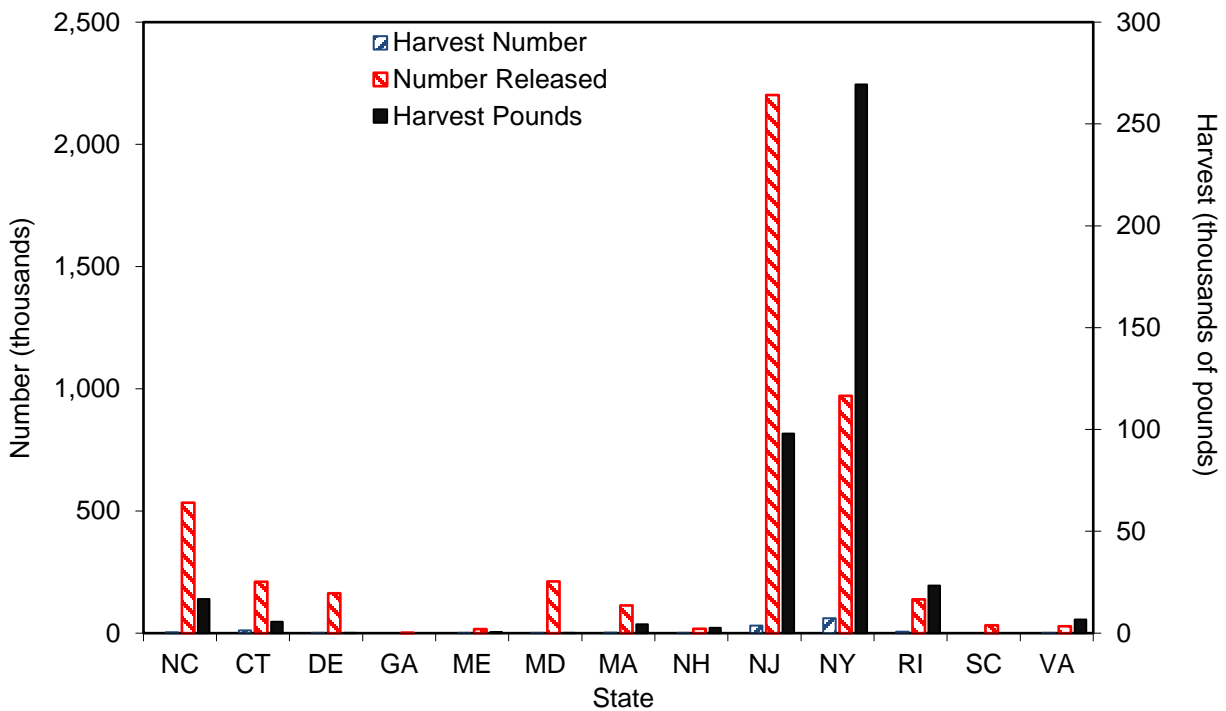


Figure III.54 Shark, Dogfish family recreational catch by state, 2020.

Table III.60 Shark, Pelagic recreational catch in North Carolina by year.

Year	Harvest Number	PSE (num)	Harvest Pounds	PSE (lb)	Mean Length (inches) ¹	Mean Weight (lb) ¹	Released Number	PSE (release)
2020	-	-	-	-	-	-	38	62.5
2019	-	-	-	-	-	-	888	65.7
2018	2,043	73.1	160,155	73.1	-	-	38	63.0
2017	66	64.1	4,917	62.2	-	-	33	86.2
2016	-	-	-	-	-	-	3,512	79.0
2015	5,097	76.1	479,443	75.9	-	-	987	91.8
2014	26	54.6	2,082	51.5	-	-	296	110.5
2013	28	100.8	1,219	100.8	-	-	1,865	97.1
2012	291	76.7	17,323	73.6	-	-	13	98.3
2011	78	76.4	4,803	68.0	-	-	-	-
2010	77	83.2	12,324	88.1	-	-	96	99.2
2009	91	58.8	8,123	57.5	-	-	-	-
2008	28	81.4	2,536	81.4	-	-	-	-
2007	78	74.3	7,223	74.9	-	-	151	109.9
2006	93	55.2	9,605	64.6	-	-	1,103	94.7
2005	3,052	97.6	231,185	96.9	-	-	1,049	89.1
2004	452	88.8	66,257	91.5	-	-	-	-
2003	31	101.3	2,418	101.3	-	-	-	-
2002	40	76.6	12,764	90.9	-	-	-	-
2001	182	44.0	27,610	43.0	-	-	107	100.4
2000	173	47.9	22,234	61.0	-	-	-	-
1999	41	100.9	1,607	100.9	-	-	-	-
1998	167	42.7	8,689	53.1	-	-	45	75.4
1997	119	61.4	19,477	60.6	-	-	-	-
1996	14	100.1	1,351	100.1	-	-	-	-
1995	126	44.2	4,892	57.0	-	-	-	-
1994	248	85.5	3,892	81.0	-	-	1,700	71.3
1993	31	72.1	3,910	92.1	-	-	-	-
1992	298	63.6	8,983	59.5	-	-	1,669	104.8
1991	143	46.1	26,514	66.2	-	-	-	-
1990	97	100.4	12,187	100.4	-	-	15,599	96.6
1989	310	77.3	6,243	77.3	-	-	1,449	77.5
1988	3,819	110.4	627,246	111.1	-	-	-	-
1987	1,374	91.1	115,089	98.8	-	-	-	-
1986	544	98.4	53,657	98.4	-	-	6	101.5
1985	8,595	82.0	716,914	84.4	-	-	-	-
1984	13,131	99.9	263,436	99.9	-	-	1,637	77.1
1983	-	-	-	-	-	-	-	-

¹ Multiple species of sharks are reported for this category, mean length and weight by individual species of shark are available upon request.

Table III.60 Shark, Pelagic recreational catch in North Carolina by year (*continued*).

Year	Harvest Number	PSE (num)	Harvest Pounds	PSE (lb)	Mean Length (inches) ¹	Mean Weight (lb) ¹	Released Number	PSE (release)
1982	-	-	-	-	-	-	-	-
1981	-	-	-	-	-	-	-	-

¹ Multiple species of sharks are reported for this category, mean length and weight by individual species of shark are available upon request.

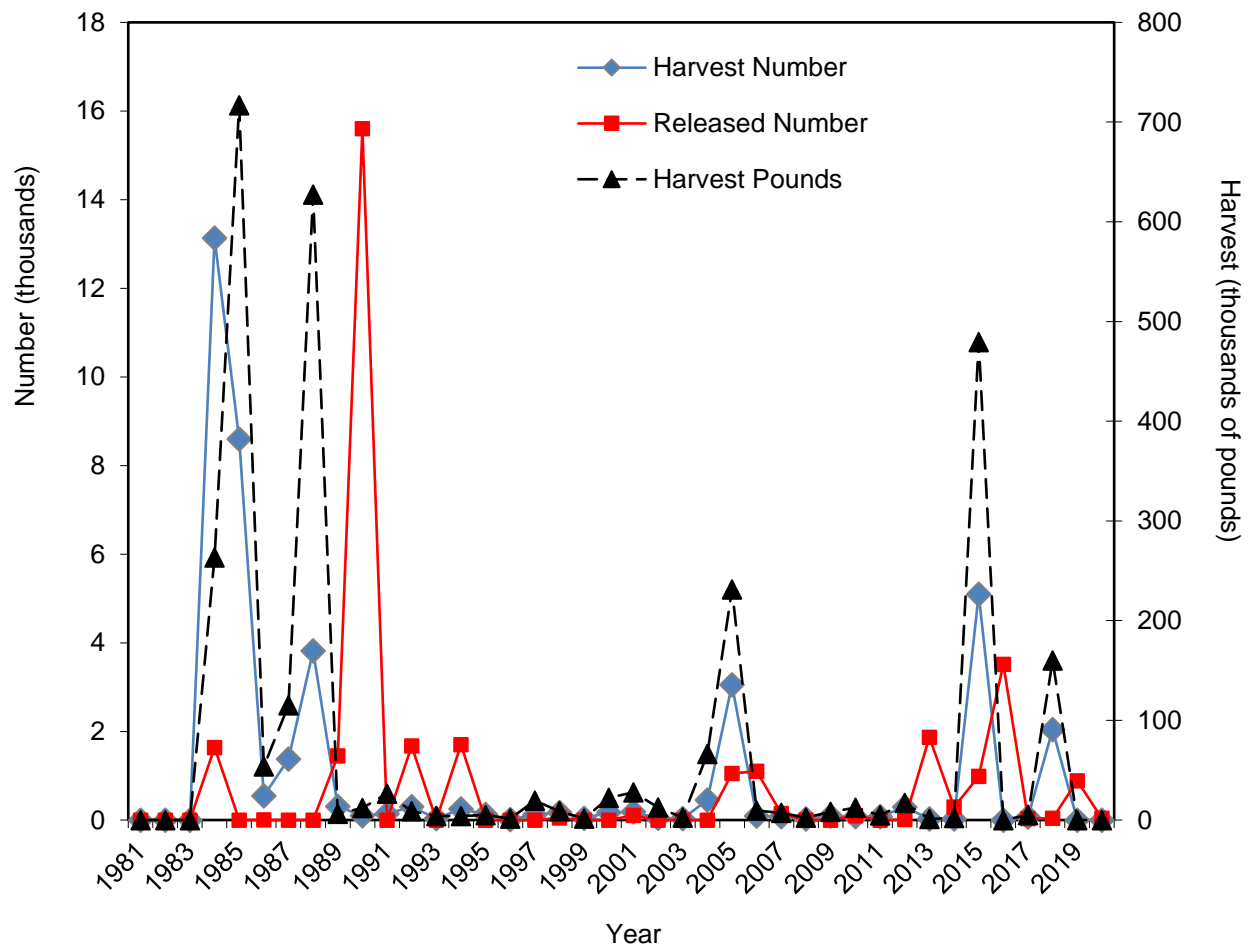


Figure III.55 Shark, Pelagic recreational catch in North Carolina by year.

Table III.61 Shark, Pelagic recreational catch by state, 2020.

State	Harvest Number	PSE (num)	Harvest Pounds	PSE (lb)	Mean Length (inches) ¹	Mean Weight (lb) ¹	Released Number	PSE (release)
North Carolina	-	-	-	-	-	-	38	62.5
Connecticut	-	-	-	-	-	-	461	92.2
Delaware	2	100.7	327	100.7	-	-	-	-
Maine	335	99.3	-	-	-	-	11,082	63.5
Maryland	96	104.1	19,997	104.1	-	-	98	104.1
Massachusetts	3	107.7	-	-	-	-	5,794	47.2
New Hampshire	457	100.0	-	-	-	-	1,485	66.4
New Jersey	1,496	68.0	506,434	77.1	-	-	10,487	64.2
New York	4,338	69.8	1,129,214	69.9	-	-	8,755	50.6
Rhode Island	43	99.5	-	-	-	-	1,061	31.5

¹ Multiple species of sharks are reported for this category, mean length and weight by individual species of shark are available upon request.

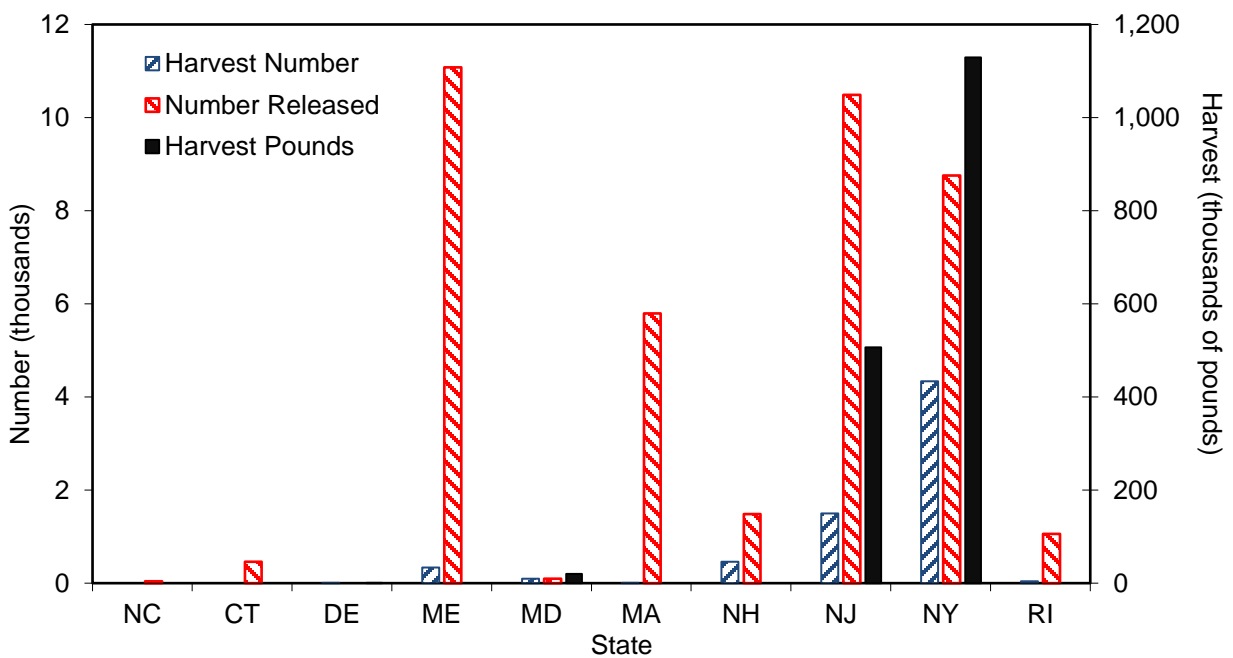


Figure III.56 Shark, Pelagic recreational catch by state, 2020.

Table III.62 Sheephead recreational catch in North Carolina by year.

Year	Harvest Number	PSE (num)	Harvest Pounds	PSE (lb)	Mean Length (inches)	Mean Weight (lb)	Released Number	PSE (release)
2020	247,390	23.9	592,774	21.2	13.4	2.4	518,140	20.8
2019	221,419	21.7	590,150	24.7	13.9	2.7	312,479	26.2
2018	343,772	22.5	735,738	20.1	12.8	2.1	524,967	17.7
2017	282,480	19.4	810,633	19.6	13.9	2.9	910,841	22.7
2016	149,085	26.2	375,328	25.3	13.8	2.5	212,471	23.2
2015	181,554	22.2	520,382	20.8	14.2	2.9	160,447	22.6
2014	185,267	20.4	389,583	20.8	12.6	2.1	224,062	20.4
2013	784,747	20.1	1,220,357	15.9	11.1	1.6	391,809	20.3
2012	346,609	15.8	797,963	19.3	12.7	2.3	269,226	23.2
2011	196,844	25.6	522,896	30.1	13.9	2.7	78,821	26.0
2010	327,223	17.6	966,467	19.5	14.4	3.0	190,823	22.3
2009	362,439	23.3	577,311	23.8	11.4	1.6	299,221	25.2
2008	503,666	30.2	1,007,914	33.8	11.9	2.0	172,604	22.4
2007	433,872	30.1	1,456,396	29.5	14.9	3.4	334,014	34.2
2006	137,312	32.8	445,182	33.4	14.8	3.2	90,502	45.3
2005	87,504	40.0	340,227	41.9	16.2	3.9	65,863	80.5
2004	86,554	23.8	453,372	26.4	16.9	5.2	40,263	44.6
2003	294,989	23.4	983,640	25.2	14.5	3.3	85,877	31.8
2002	181,197	23.2	781,567	25.0	16.0	4.3	68,317	24.4
2001	183,781	28.6	654,527	30.0	15.2	3.6	66,594	38.5
2000	355,192	21.0	780,622	20.6	13.1	2.2	94,963	28.2
1999	255,885	22.3	758,153	31.9	14.5	3.0	124,676	29.0
1998	151,473	21.2	209,825	23.0	11.0	1.4	109,454	38.4
1997	209,662	37.8	308,381	32.5	11.0	1.5	55,258	31.8
1996	77,750	22.9	256,911	25.5	14.9	3.3	12,798	30.8
1995	157,769	20.7	407,729	20.2	13.9	2.6	39,779	31.3
1994	92,098	20.1	197,128	22.1	13.1	2.1	31,965	29.4
1993	221,442	27.4	289,634	23.5	10.9	1.3	51,981	34.7
1992	206,241	37.7	434,509	39.2	12.4	2.1	48,565	44.1
1991	67,277	22.1	154,193	32.3	12.0	2.3	34,505	28.3
1990	103,041	32.0	161,180	27.5	11.0	1.6	18,679	38.4
1989	136,175	30.9	243,496	26.3	11.9	1.8	17,747	73.3
1988	152,971	41.6	50,046	53.3	13.1	0.3	7,766	84.2
1987	52,061	37.2	172,377	58.0	14.3	3.3	70,117	89.0
1986	132,061	62.0	399,925	59.8	15.0	3.0	8,283	100.2
1985	12,691	72.4	42,573	75.9	15.4	3.4	-	-
1984	21,156	93.9	32,152	93.9	11.4	1.5	-	-
1983	5,930	100.5	19,285	100.5	18.3	3.3	-	-

Table III.62 Sheephead recreational catch in North Carolina by year (*continued*).

Year	Harvest Number	PSE (num)	Harvest Pounds	PSE (lb)	Mean Length (inches)	Mean Weight (lb)	Released Number	PSE (release)
1982	61,765	74.8	183,768	69.6	15.4	3.0	-	-
1981	83,626	45.1	262,503	54.8	12.4	3.1	12,772	78.9

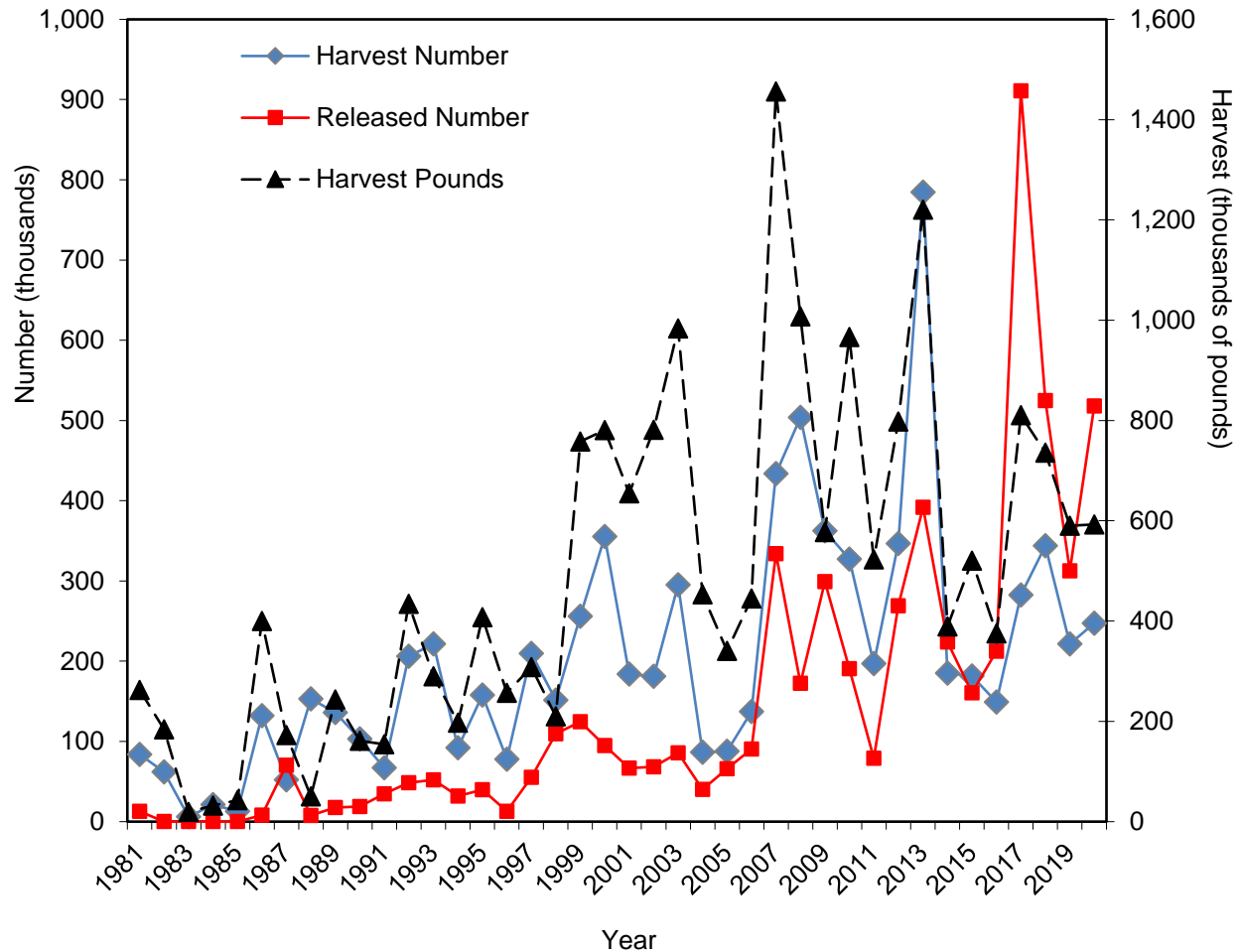


Figure III.57 Sheephead recreational catch in North Carolina by year.

Table III.63 Sheepshead recreational catch by state, 2020.

State	Harvest Number	PSE (num)	Harvest Pounds	PSE (lb)	Mean Length (inches)	Mean Weight (lb)	Released Number	PSE (release)
North Carolina	247,390	23.9	592,774	21.2	13.4	2.4	518,140	20.8
Delaware	5,643	54.5	31,554	58.4	18.1	5.6	9,121	44.8
Florida	1,507,778	24.5	3,473,968	28.4	13.3	2.2	2,793,441	19.3
Georgia	249,182	26.5	506,324	27.8	12.7	2.0	215,003	23.0
Maryland	2,582	74.8	8,453	74.5	15.7	3.3	11,826	64.8
New Jersey	6,057	85.7	23,551	84.6	15.3	3.9	7,697	82.5
South Carolina	135,481	21.0	504,660	20.2	15.9	3.7	410,796	30.6
Virginia	67,919	42.2	278,340	46.5	15.8	4.1	82,792	87.5

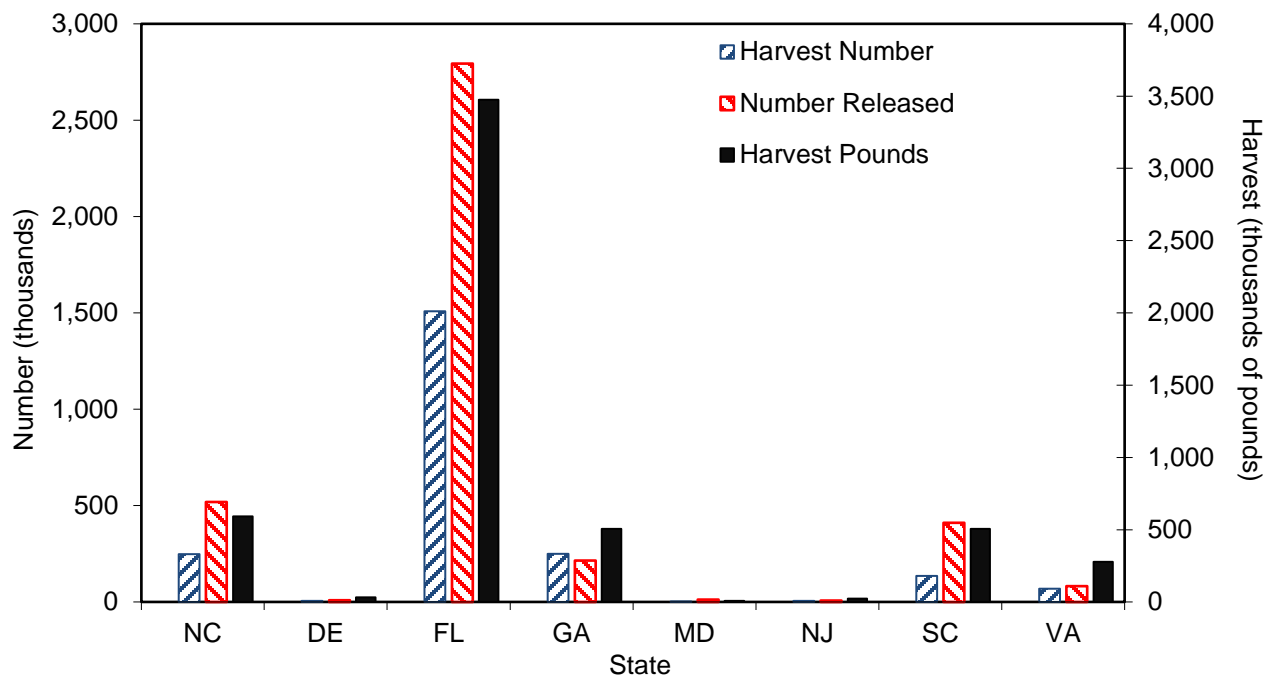


Figure III.58 Sheepshead recreational catch by state, 2020.

Table III.64 Spot recreational catch in North Carolina by year.

Year	Harvest Number	PSE (num)	Harvest Pounds	PSE (lb)	Mean Length (inches)	Mean Weight (lb)	Released Number	PSE (release)
2020	920,512	17.7	297,813	17.7	8.1	0.3	1,673,676	17.9
2019	2,822,884	27.6	851,998	27.7	7.7	0.3	2,356,120	27.3
2018	2,068,865	24.3	597,511	24.2	8.4	0.3	2,062,163	19.4
2017	2,418,331	44.8	909,796	50.8	8.1	0.4	1,902,281	28.2
2016	1,928,716	25.3	558,799	25.3	7.9	0.3	1,831,415	22.0
2015	2,572,738	19.6	833,390	20.6	8.1	0.3	2,984,629	15.3
2014	8,343,467	23.9	2,877,483	25.9	8.2	0.3	4,043,710	12.5
2013	6,120,985	15.7	1,789,251	17.5	7.9	0.3	5,513,732	12.1
2012	2,677,082	21.4	760,276	22.2	7.9	0.3	2,995,879	13.2
2011	6,480,714	19.5	2,201,947	20.7	8.2	0.3	4,993,544	11.5
2010	3,830,384	19.3	1,173,173	19.4	8.1	0.3	3,615,808	14.4
2009	4,197,640	20.3	1,427,956	20.1	8.4	0.3	4,847,202	12.6
2008	3,970,431	19.7	1,382,428	20.5	8.3	0.3	3,817,529	15.4
2007	8,728,295	21.3	2,737,144	20.9	9.1	0.3	4,049,250	17.3
2006	11,109,551	39.4	3,995,432	40.4	8.9	0.4	8,196,592	15.4
2005	10,105,205	19.2	3,652,186	19.8	8.4	0.4	4,407,100	16.2
2004	7,845,322	12.4	3,682,623	14.4	9.2	0.5	2,899,319	12.5
2003	9,717,824	17.7	4,220,534	17.3	8.7	0.4	2,970,990	13.0
2002	8,456,981	21.8	3,017,466	19.2	8.3	0.4	1,569,579	11.9
2001	10,043,845	15.1	4,519,545	15.9	8.8	0.4	2,804,349	16.2
2000	6,121,384	31.6	2,598,813	31.4	8.6	0.4	1,366,746	14.1
1999	5,736,185	21.9	2,565,546	22.5	9.1	0.4	2,343,795	15.8
1998	11,797,824	29.8	4,596,119	29.4	8.6	0.4	2,379,578	23.4
1997	4,529,620	15.3	2,129,481	15.8	8.7	0.5	1,110,650	12.3
1996	6,729,366	18	2,461,892	19.4	8.5	0.4	2,234,354	11.4
1995	8,199,743	21.4	3,214,061	20.2	8.5	0.4	2,214,819	15.1
1994	14,032,650	38.6	4,571,386	40.3	8.2	0.3	2,365,031	11.9
1993	6,877,688	25.9	2,879,162	30.8	8.4	0.4	1,445,961	21.0
1992	5,043,969	20.6	1,431,733	18.4	7.6	0.3	2,908,974	23.2
1991	9,894,562	17.8	3,066,857	18.3	7.6	0.3	3,454,466	20.8
1990	7,920,697	24.6	2,453,645	26.6	7.6	0.3	2,868,842	30.1
1989	10,246,429	18.8	3,566,280	19.7	7.9	0.4	1,995,653	23.5
1988	7,023,874	23.1	544,890	42.8	7.7	0.1	5,019,090	26.7
1987	6,206,621	23.9	2,251,362	25.1	8.0	0.4	1,549,262	33.1
1986	7,611,684	31.5	1,726,927	31.4	7.5	0.2	1,968,905	36.8
1985	25,539,489	29.9	8,830,039	32.3	8.2	0.3	1,456,600	29.3
1984	9,307,957	31.7	2,141,016	31.5	7.3	0.2	2,902,722	19.5
1983	12,396,777	20.3	4,362,435	22	7.7	0.4	1,754,638	37.7

Table III.64 Spot recreational catch in North Carolina by year (*continued*).

Year	Harvest Number	PSE (num)	Harvest Pounds	PSE (lb)	Mean Length (inches)	Mean Weight (lb)	Released Number	PSE (release)
1982	7,583,890	18.3	2,048,343	18.3	7.4	0.3	1,762,765	39.7
1981	17,992,817	72.1	5,983,808	68.8	7.4	0.3	2,771,801	66.1

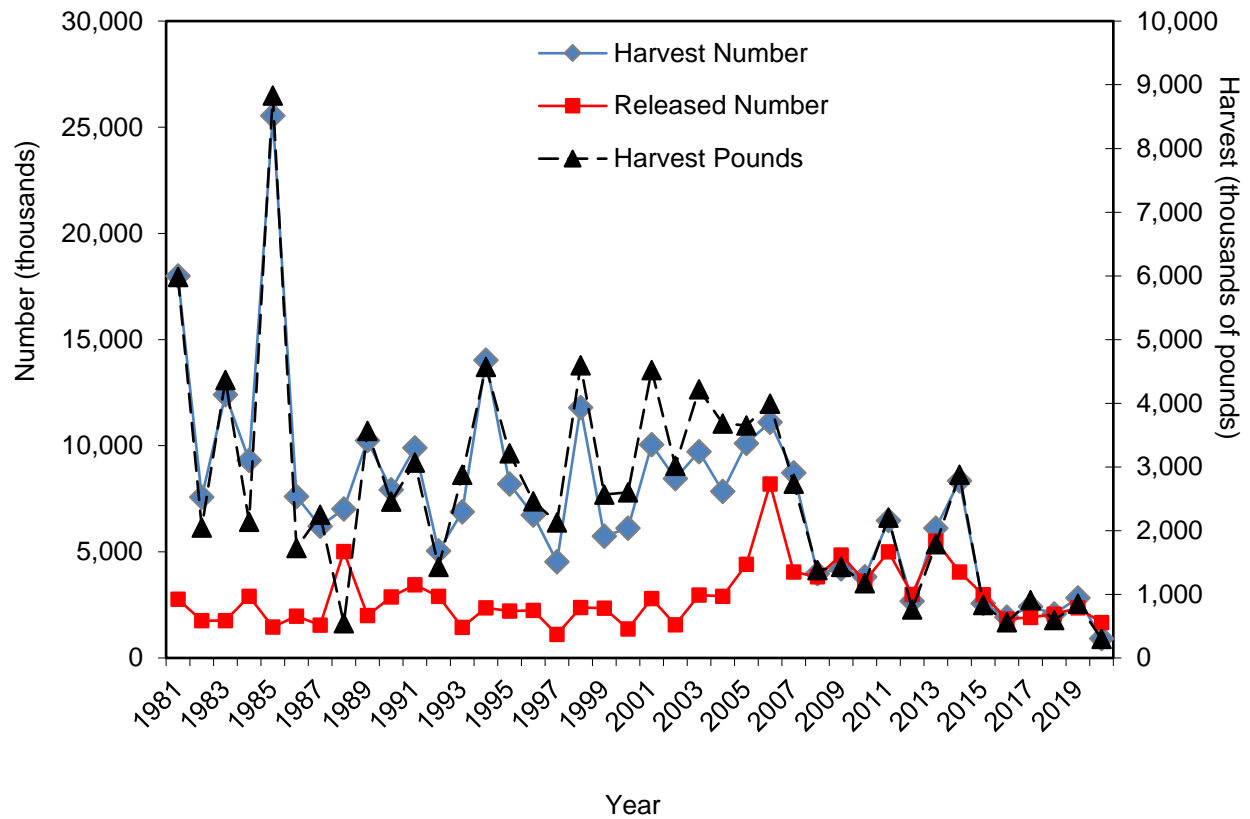


Figure III.59 Spot recreational catch in North Carolina by year.

Table III.65 Spot recreational catch by state, 2020.

State	Harvest Number	PSE (num)	Harvest Pounds	PSE (lb)	Mean Length (inches)	Mean Weight (lb)	Released Number	PSE (release)
North Carolina	920,512	17.7	297,813	17.7	8.1	0.3	1,673,676	17.9
Delaware	58,294	28.2	19,392	28.9	7.9	0.3	235,832	22.2
Florida	457,671	61.7	234,040	60.4	8.7	0.5	281,175	64.8
Georgia	24,225	48.0	7,377	52.8	8.4	0.3	115,347	36.3
Maryland	3,640,484	16.8	1,019,065	18.0	7.1	0.3	5,560,590	17.2
New Jersey	2,133	96.3	450	96.3	6.7	0.2	36,591	59.9
New York	6,046	101.6	1,000	101.6	6.3	0.2	-	-
South Carolina	391,450	28.3	131,952	32.0	8.0	0.3	384,252	19.7
Virginia	14,963,420	34.2	4,589,353	38.4	7.8	0.3	5,156,762	19.9

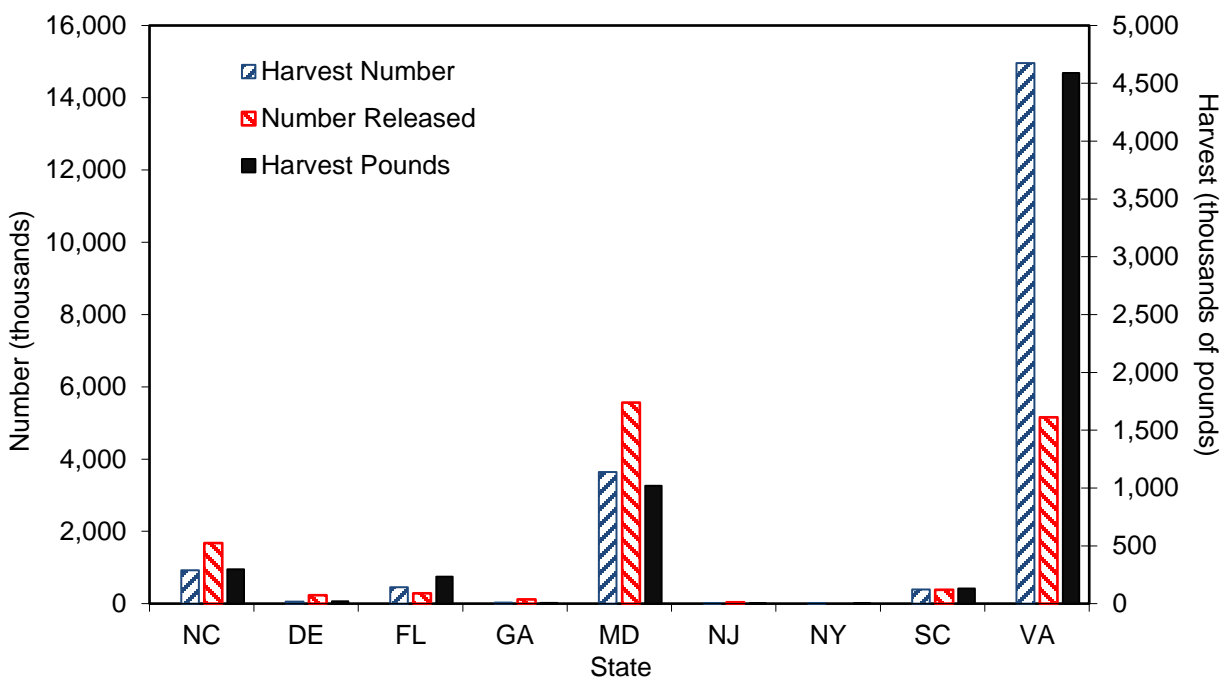


Figure III.60 Spot recreational catch by state, 2020.

Table III.66 Tuna, Yellowfin recreational catch in North Carolina by year.

Year	Harvest Number	PSE (num)	Harvest Pounds	PSE (lb)	Mean Length (inches)	Mean Weight (lb)	Released Number	PSE (release)
2020	83,766	17.9	2,429,665	17.7	35.1	29.0	32,574	84.3
2019	44,864	20.4	1,190,484	20.0	33.9	26.5	2,333	53.2
2018	61,171	31.3	1,977,741	27.1	36.2	32.3	3,739	46.0
2017	118,659	22.2	4,040,504	20.2	37.7	34.1	17,812	29.2
2016	80,458	23.2	3,164,911	24.1	39.3	39.3	28,643	63.7
2015	38,199	25.2	1,079,798	24.5	35.0	28.3	2,196	44.0
2014	44,151	24.8	1,392,966	24.8	36.5	31.6	7,460	36.7
2013	52,907	18.1	1,705,605	19.5	37.0	32.2	1,229	51.4
2012	70,288	24.2	1,929,343	23.8	34.8	27.4	8,975	49.5
2011	33,360	26.2	1,066,616	25.0	37.0	32.0	663	63.3
2010	41,652	28.4	1,521,261	29.5	39.6	36.5	767	56.8
2009	36,066	26.0	959,832	23.1	34.4	26.6	1,472	82.8
2008	21,824	31.9	610,660	31.1	34.5	28.0	65	74.1
2007	144,826	24.3	3,886,004	22.3	35.1	26.8	499	86.1
2006	244,825	18.2	7,182,919	18.3	35.6	29.3	16,727	33.8
2005	243,895	21.5	7,080,724	23.9	35.5	29.0	11,865	31.6
2004	209,747	22.0	5,379,213	19.5	33.8	25.6	10,183	29.0
2003	185,148	19.5	4,997,756	20.5	33.3	27.0	27,510	36.1
2002	149,407	27.0	3,396,466	25.5	32.2	22.7	8,926	67.8
2001	170,808	17.2	5,028,308	16.8	34.5	29.4	238	54.6
2000	175,812	17.5	5,110,592	17.7	35.2	29.1	4,245	40.8
1999	185,370	15.7	4,482,257	15.9	32.8	24.2	10,609	42.7
1998	88,710	18.4	2,206,272	18.8	33.1	24.9	15,688	26.9
1997	144,892	19.2	4,079,805	17.3	35.1	28.2	4,053	61.0
1996	219,086	15.5	5,406,658	15.4	33.0	24.7	2,045	33.8
1995	111,909	28.5	3,762,009	30.4	35.9	33.6	1,807	47.9
1994	160,109	22.9	3,094,021	21.3	30.8	19.3	1,605	38.1
1993	64,820	18.3	1,498,351	17.9	30.9	23.1	836	46.6
1992	29,986	27.9	1,500,482	40.1	36.2	50.0	10	100.7
1991	52,868	31.8	1,222,378	30.2	31.8	23.1	134	60.3
1990	14,551	35.7	352,193	37.3	31.1	24.2	686	55.2
1989	79,456	34.3	2,578,761	32.3	35.2	32.5	1,912	59.3
1988	27,842	27.5	341,534	40.3	30.9	12.3	78	76.8
1987	104,971	62.9	2,851,244	58.3	33.9	27.2	-	-
1986	79,904	38.0	2,065,681	34.3	33.4	25.9	-	-
1985	36,126	88.6	952,134	86.4	32.5	26.4	-	-
1984	-	-	-	-	-	-	-	-
1983	17,153	70.3	559,880	72.8	35.3	32.6	-	-

Table III.66 Tuna, Yellowfin recreational catch in North Carolina by year (*continued*).

Year	Harvest Number	PSE (num)	Harvest Pounds	PSE (lb)	Mean Length (inches)	Mean Weight (lb)	Released Number	PSE (release)
1982	-	-	-	-	-	-	-	-
1981	3,877	107.2	94,325	111.5	38.8	24.3	-	-

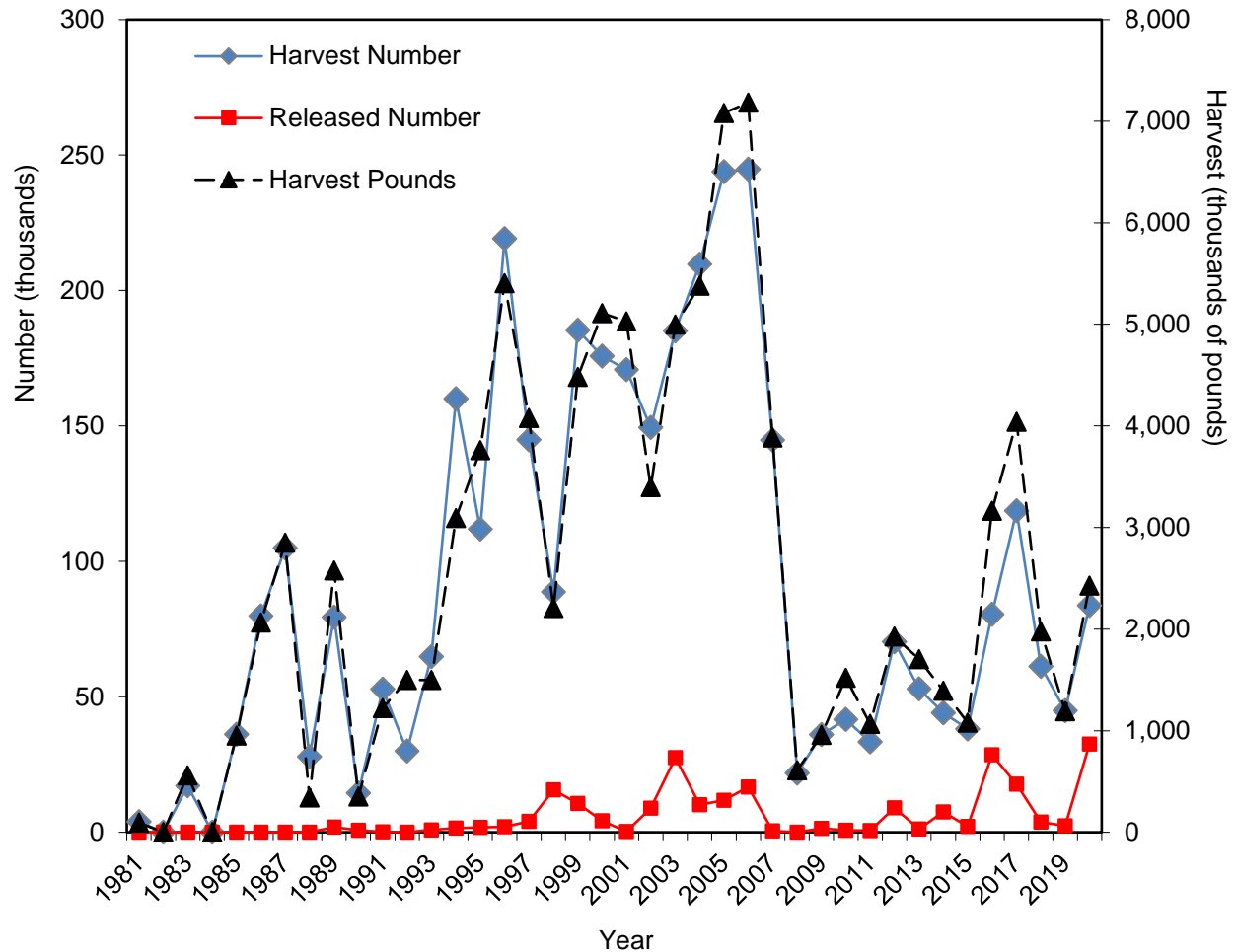


Figure III.61 Tuna, Yellowfin recreational catch in North Carolina by year.

Table III.67 Tuna, Yellowfin recreational catch by state, 2020.

State	Harvest Number	PSE (num)	Harvest Pounds	PSE (lb)	Mean Length (inches)	Mean Weight (lb)	Released Number	PSE (release)
North Carolina	83,766	17.9	2,429,665	17.7	35.1	29.0	2,333	53.2
Connecticut	282	101.6	-	-	-	-	8,768	84.4
Delaware	2,657	81.7	134,447	83.5	43.4	50.6	-	-
Maryland	52,047	36.9	1,491,965	32.2	34.7	28.7	19,885	62.4
Massachusetts	6,237	99.1	-	-	-	-	275	57.1
New Jersey	145,765	48.8	6,319,327	50.8	41.3	43.4	6,466	62.4
New York	68,035	70.4	2,045,813	68.7	35.2	30.1	7,706	67.7
Virginia	4,548	45.7	131,954	44.4	34.8	29.0	790	100.9

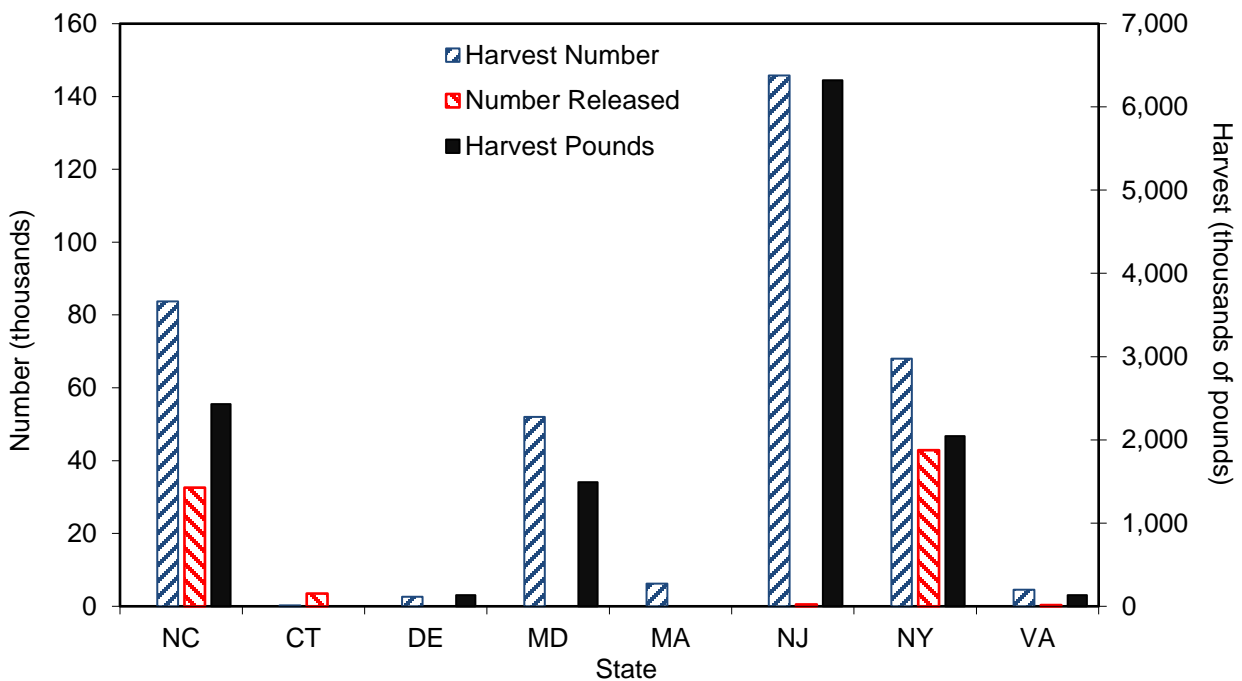


Figure III.62 Tuna, Yellowfin recreational catch by state, 2020.

Table III.68 Wahoo recreational catch in North Carolina by year.

Year	Harvest Number	PSE (num)	Harvest Pounds	PSE (lb)	Mean Length (inches)	Mean Weight (lb)	Released Number	PSE (release)
2020	19,055	22.9	462,937	19.9	46.9	24.3	87	99.3
2019	17,098	17.6	454,391	17.2	47.1	26.6	23	100.3
2018	10,690	26.3	280,644	25.3	47.7	26.3	182	94.2
2017	30,305	29.1	842,604	31.0	48.8	27.8	-	-
2016	39,565	21.9	1,056,969	22.8	48.1	26.7	5	110.2
2015	36,920	25.2	983,232	23.2	47.9	26.6	608	101.3
2014	29,362	26.9	804,473	27.5	48.2	27.4	22	103.4
2013	11,951	26.7	319,866	25.9	48.4	26.8	337	97.9
2012	37,423	14.9	994,195	15.0	48.2	26.6	12	99.7
2011	21,501	27.9	611,319	32.0	49.0	28.4	40	99.7
2010	19,703	23.1	571,575	26.4	49.0	29.0	2,532	69.6
2009	42,129	57.9	1,696,717	67.5	53.6	40.3	48	97.9
2008	21,777	26.4	527,736	25.5	46.1	24.2	-	-
2007	47,890	43.2	1,495,127	56.1	50.4	31.2	-	-
2006	21,834	21.8	490,904	23.1	45.0	22.5	594	63.8
2005	41,364	45.8	1,249,160	47.6	48.1	30.2	-	-
2004	61,153	51.0	2,220,765	55.8	52.3	36.3	-	-
2003	21,274	37.6	662,567	34.6	48.2	31.1	-	-
2002	32,783	20.6	1,056,010	25.0	48.0	32.2	398	99.9
2001	17,889	28.9	473,926	30.6	46.1	26.5	-	-
2000	18,183	24.7	412,824	25.6	44.9	22.7	1,126	97.4
1999	17,341	20.6	387,342	19.9	44.7	22.3	-	-
1998	11,195	19.0	253,128	19.0	46.0	23.0	51	-
1997	19,587	18.7	464,335	18.3	45.6	23.7	152	-
1996	15,259	19.0	397,335	19.0	48.0	26.0	1,300	-
1995	21,726	21.4	476,289	23.6	45.4	21.9	14	-
1994	12,182	17.0	308,986	18.1	47.0	25.4	1,286	-
1993	7,673	25.1	208,325	38.8	46.9	27.1	-	-
1992	6,326	20.7	1,726,842	86.3	53.9	273.0	1,061	70.1
1991	5,068	28.7	121,382	30.6	45.6	24.0	17	99.7
1990	5,290	28.3	114,060	29.3	44.5	21.6	-	-
1989	6,674	25.3	194,287	27.9	46.8	29.1	-	-
1988	2,043	33.9	14,342	59.7	47.9	7.0	-	-
1987	6,400	50.2	172,708	62.1	46.6	27.0	42	97.9
1986	11,085	31.8	474,402	30.7	53.2	42.8	-	-
1985	3,182	91.7	294,797	93.3	73.0	92.7	-	-
1984	1,637	77.1	21,298	77.1	44.1	13.0	-	-
1983	3,210	101.6	58,854	101.5	39.2	18.3	-	-

Table III.68 Wahoo recreational catch in North Carolina by year (continued).

Year	Harvest Number	PSE (num)	Harvest Pounds	PSE (lb)	Mean Length (inches)	Mean Weight (lb)	Released Number	PSE (release)
1982	-	-	-	-	-	-	-	-
1981	4,423	67.5	69,008	67.6	41.0	15.6	-	-

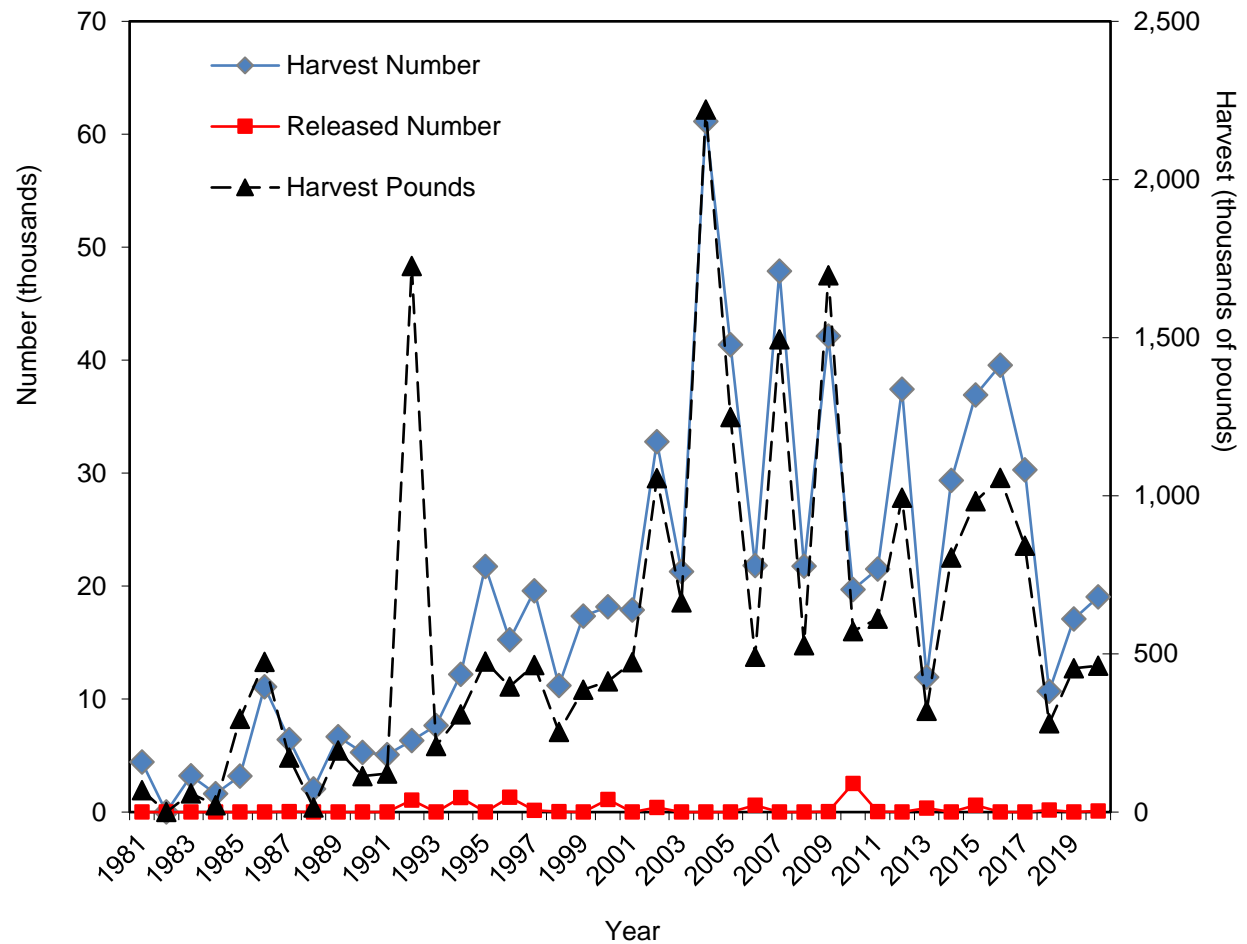


Figure III.63 Wahoo recreational catch in North Carolina by year.

Table III.69 Wahoo recreational catch by state, 2020.

State	Harvest Number	PSE (num)	Harvest Pounds	PSE (lb)	Mean Length (inches)	Mean Weight (lb)	Released Number	PSE (release)
North Carolina	19,055	22.9	462,937	19.9	46.9	24.3	87	99.3
Delaware	257	105.8	15,516	105.8	65.0	60.4	-	-
Florida	12,593	62.5	412,972	66.7	50.9	30.1	-	-
Maryland	219	86.8	9,563	86.8	58.5	43.6	-	-
South Carolina	1,181	56.5	20,886	58.7	43.5	17.7	-	-
Virginia	290	96.6	17,416	97.1	64.9	60.1	-	-

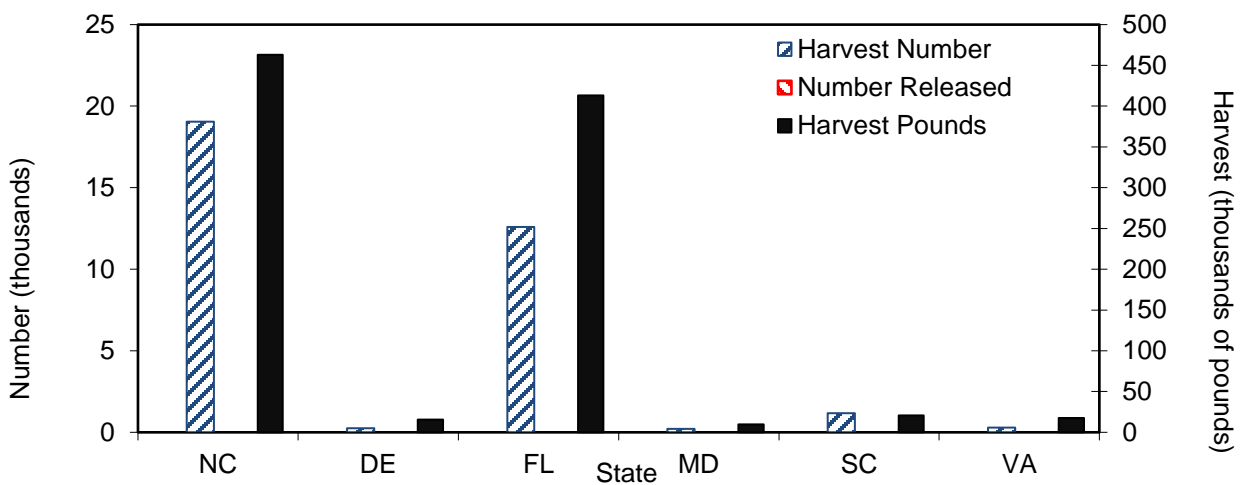


Figure III.64 Wahoo recreational catch by state, 2020.

Table III.70 Weakfish recreational catch in North Carolina by year.

Year	Harvest Number	PSE (num)	Harvest Pounds	PSE (lb)	Mean Length (inches)	Mean Weight (lb)	Released Number ¹	PSE (release) ¹
2020	82,124	32.4	105,729	35.3	15.0	1.3	386,364	-
2019	39,061	21.4	43,252	22.0	14.5	1.1	269,146	-
2018	30,935	39.5	29,924	40.5	13.4	1.0	299,496	-
2017	51,795	23.6	55,944	26.5	14.2	1.1	351,613	-
2016	77,341	25.8	83,702	26.3	14.0	1.1	1,097,615	-
2015	143,543	26.6	157,269	26.5	14.0	1.1	1,652,582	-
2014	71,912	24.8	70,988	24.5	13.8	1.0	1,067,344	-
2013	63,090	24.2	66,720	23.2	14.2	1.1	257,367	-
2012	96,947	26.4	95,952	22.0	13.8	1.0	396,620	-
2011	48,727	24.9	62,543	26.6	14.7	1.3	380,366	-
2010	110,770	16.9	103,903	17.4	13.6	0.9	914,004	-
2009	204,814	23.5	245,358	28.8	14.8	1.2	626,742	-
2008	203,779	22.0	209,470	22.8	13.8	1.0	470,805	-
2007	191,192	19.7	202,583	19.8	14.2	1.1	600,987	-
2006	343,092	18.1	302,775	19.6	13.6	0.9	1,047,135	-
2005	297,605	19.5	281,710	20.0	14.0	0.9	702,685	-
2004	395,268	18.5	428,627	18.4	14.5	1.1	614,762	-
2003	291,168	18.4	309,412	17.6	14.1	1.1	422,294	-
2002	214,040	21.8	215,402	23.8	13.9	1.0	917,803	-
2001	317,974	19.0	325,447	20.1	14.1	1.0	2,831,044	-
2000	147,397	19.2	179,599	20.1	14.8	1.2	852,262	-
1999	313,427	15.6	420,706	17.7	15.4	1.3	687,884	-
1998	450,645	21.8	487,884	25.3	14.3	1.1	669,125	-
1997	333,852	13.9	313,767	15.2	13.6	0.9	506,509	-
1996	138,577	18.0	121,291	18.4	14.0	0.9	361,153	-
1995	103,190	24.8	118,177	25.1	15.2	1.1	225,976	-
1994	336,188	18.1	276,435	18.3	13.2	0.8	477,521	-
1993	293,966	43.2	230,010	43.9	12.5	0.8	157,478	-
1992	72,064	27.2	53,214	24.9	12.3	0.7	69,585	-
1991	358,273	33.6	286,349	31.1	12.0	0.8	32,083	-
1990	149,508	20.4	104,761	19.4	12.2	0.7	30,295	-
1989	456,191	24.0	331,840	26.6	12.0	0.7	65,500	-
1988	650,224	24.3	175,178	53.0	12.7	0.3	175,284	-
1987	2,403,361	53.9	3,442,746	61.5	15.1	1.4	250,581	-
1986	2,049,746	28.9	1,455,912	27.1	13.0	0.7	694,759	-
1985	1,010,772	17.9	796,974	23.2	12.0	0.8	2,638	-
1984	555,640	38.3	252,873	29.0	10.9	0.5	35,101	-
1983	596,354	48.6	749,910	64.7	13.9	1.3	16,387	-

¹ Seatrout releases are not recorded to species; released number was calculated by assigning a ratio of observed seatrout by species to reported seatrout genus release estimates. PSEs are not available for this analysis.

Table III.70 Weakfish recreational catch in North Carolina by year (continued).

Year	Harvest Number	PSE (num)	Harvest Pounds	PSE (lb)	Mean Length (inches)	Mean Weight (lb)	Released Number ¹	PSE (release) ¹
1982	255,080	57.0	348,645	64.9	13.9	1.4	61,048	-
1981	1,623,557	17.6	1,130,066	21.6	11.8	0.7	78,196	-

¹ Seatrout releases are not recorded to species; released number was calculated by assigning a ratio of observed seatrout by species to reported seatrout genus release estimates. PSEs are not available for this analysis.

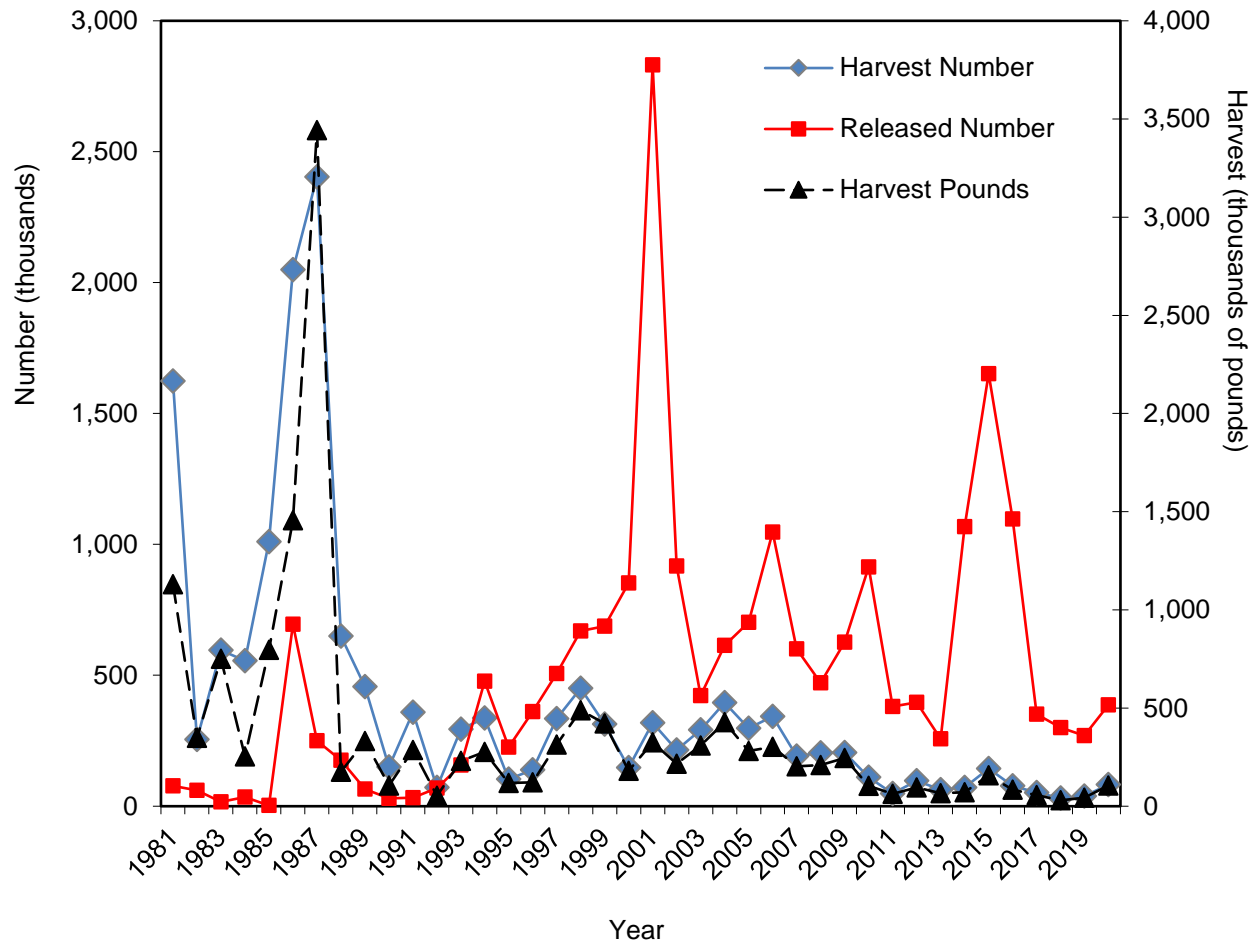


Figure III.64 Weakfish recreational catch in North Carolina by year.

Table III.71 Weakfish recreational catch by state, 2020.

State	Harvest Number	PSE (num)	Harvest Pounds	PSE (lb)	Mean Length (inches)	Mean Weight (lb)	Released Number ¹	PSE (release) ¹
North Carolina	82,124	32.4	105,729	35.3	15.0	1.3	-	-
Connecticut	174	87.3	528	94.8	21.2	3.0	-	-
Delaware	5,329	36.1	6,231	40.5	15.0	1.2	-	-
Florida	5,902	70.8	9,075	73.8	16.3	1.5	-	-
Georgia	8,305	49.1	10,897	50.4	15.3	1.3	-	-
Maryland	44	73.4	34	69.7	12.9	0.8	-	-
Massachusetts	3,584	92.4	8,692	92.4	17.1	2.4	-	-
New Jersey	10,157	47.3	14,716	43.8	15.3	1.4	-	-
New York	33,819	42.8	91,682	47.4	19.8	2.7	-	-
Rhode Island	6,840	55.5	20,575	55.0	21.6	3.0	-	-
South Carolina	155,637	52.0	191,454	52.3	14.9	1.2	-	-
Virginia	16,597	69.3	30,398	74.9	18.2	1.8	-	-

¹Released seatrout are not always recorded to species level. Numbers released are not shown by state.

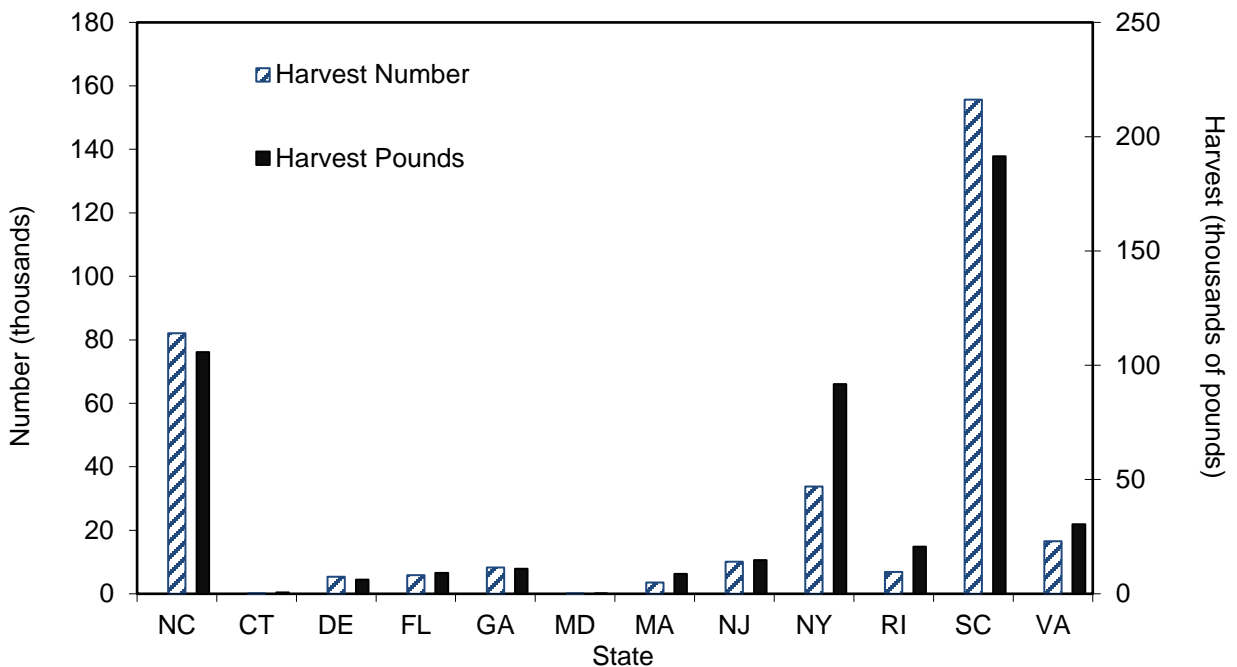
**Figure III.66 Weakfish recreational catch by state, 2020.**

Table III.72 Large coastal shark recreational catch in North Carolina by year.

Year	Harvest Number	PSE (num)	Harvest Pounds	PSE (lb)	Mean Length (inches) ¹	Mean Weight (lb) ¹	Released Number	PSE (release)
2020	9	100.8	551	100.8	-	-	7,905	38.0
2019	60	72.1	3,745	72.1	-	-	26,010	44.0
2018	7	95.8	235	95.8	-	-	3,845	70.4
2017	910	79.6	27,367	83.4	-	-	43,041	43.7
2016	12	101.0	1,100	101.0	-	-	27,885	54.3
2015	25	72.8	2,667	101.3	-	-	139,486	66.1
2014	556	89.4	10,194	91.4	-	-	16,306	42.2
2013	59	113.4	11,128	113.4	-	-	7,976	39.7
2012	1,283	99.7	1,997	70.7	-	-	18,205	77.8
2011	474	100.0	732	100.0	-	-	14,797	88.8
2010	120	102.8	211	102.8	-	-	24,902	56.9
2009	-	-	-	-	-	-	5,837	96.3
2008	51	103.6	794	103.6	-	-	-	-
2007	2,543	68.0	30,985	69.7	-	-	32,680	45.0
2006	187	101.3	10,744	101.3	-	-	13,825	66.2
2005	859	95.6	50,494	95.6	-	-	10,540	50.2
2004	-	-	-	-	-	-	411	99.9
2003	863	67.0	8,931	65.3	-	-	1,177	70.2
2002	442	98.7	1,837	98.7	-	-	1,134	69.3
2001	2,166	87.6	28,312	56.8	-	-	163	87.2
2000	1,764	50.1	46,249	63.2	-	-	-	-
1999	2,495	54.2	95,377	83.2	-	-	965	98.3
1998	3,780	43.6	25,326	51.9	-	-	3,673	52.9
1997	721	58.2	87,789	94.6	-	-	32,999	38.4
1996	7,638	37.0	113,498	37.3	-	-	29,114	31.5
1995	8,985	31.3	124,592	38.7	-	-	64,271	36.0
1994	11,657	31.9	137,810	39.2	-	-	29,215	44.7
1993	4,052	45.5	37,634	36.3	-	-	57,695	41.0
1992	2,095	56.3	7,990	39.5	-	-	57,956	75.4
1991	15,670	34.5	102,246	36.5	-	-	57,550	54.8
1990	2,810	35.5	20,433	34.7	-	-	12,977	61.4
1989	16,585	33.9	168,845	54.7	-	-	9,815	46.6
1988	16,447	48.1	7,608	88.1	-	-	5,253	50.1
1987	6,119	44.4	93,844	57.3	-	-	99,971	56.1
1986	12,477	82.5	133,150	80.1	-	-	63,759	65.9
1985	11,400	59.2	379,366	87.6	-	-	49,198	54.8
1984	-	-	-	-	-	-	149,482	89.3
1983	2,152	107.2	7,116	107.2	-	-	.	.

¹ Multiple species of sharks are reported for this category, mean length and weight by individual species of shark are available upon request.

Table III.72 Large coastal shark recreational catch in North Carolina by year (continued).

Year	Harvest Number	PSE (num)	Harvest Pounds	PSE (lb)	Mean Length (inches) ¹	Mean Weight (lb) ¹	Released Number	PSE (release)
1982	1,974	68.5	376,725	83.5	-	-	10,495	107.9
1981	43,257	52.9	1,136,050	85.1	-	-	575,152	79.4

¹ Multiple species of sharks are reported for this category, mean length and weight by individual species of shark are available upon request.

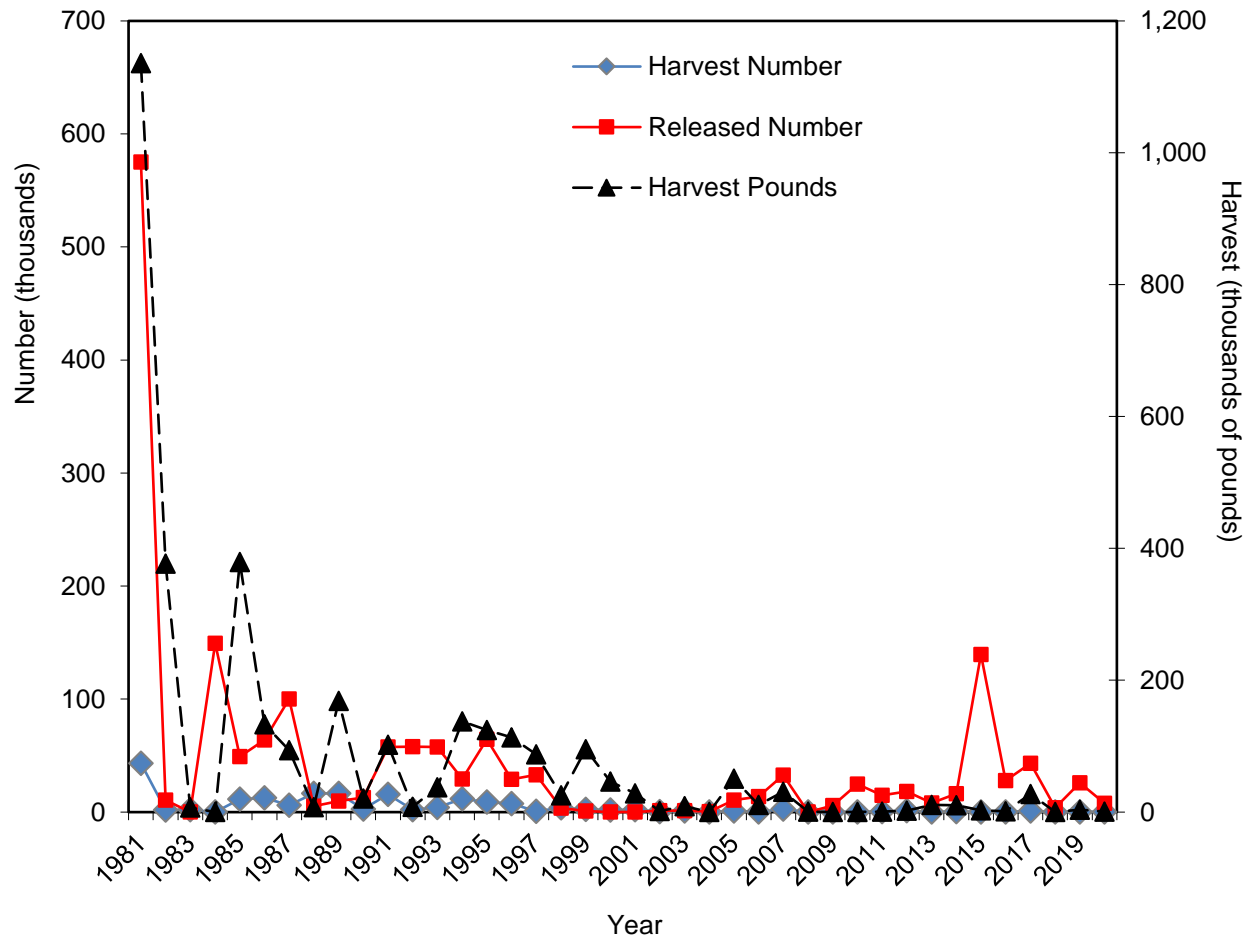


Figure III.66 Large coastal shark recreational catch in North Carolina by year.

Table III.73 Large coastal shark recreational catch by state, 2020.

State	Harvest Number	PSE (num)	Harvest Pounds	PSE (lb)	Mean Length (inches) ¹	Mean Weight (lb) ¹	Released Number	PSE (release)
North Carolina	9	100.8	551	100.8	-	-	7,905	38.0
Delaware	-	-	-	-	-	-	17,751	46.7
Florida	1,382	60.3	23,916	72.1	-	-	118,807	34.6
Georgia	-	-	-	-	-	-	165,204	36.6
Maryland	-	-	-	-	-	-	124,293	48.6
Massachusetts	-	-	-	-	-	-	8,296	76.1
New Jersey	-	-	-	-	-	-	50,925	43.2
New York	-	-	-	-	-	-	29,105	87.8
South Carolina	-	-	-	-	-	-	81,162	25.6
Virginia	237	100.6	-	-	-	-	28,083	72.1

¹ Multiple species of sharks are reported for this category, mean length and weight by individual species of shark are available upon request.

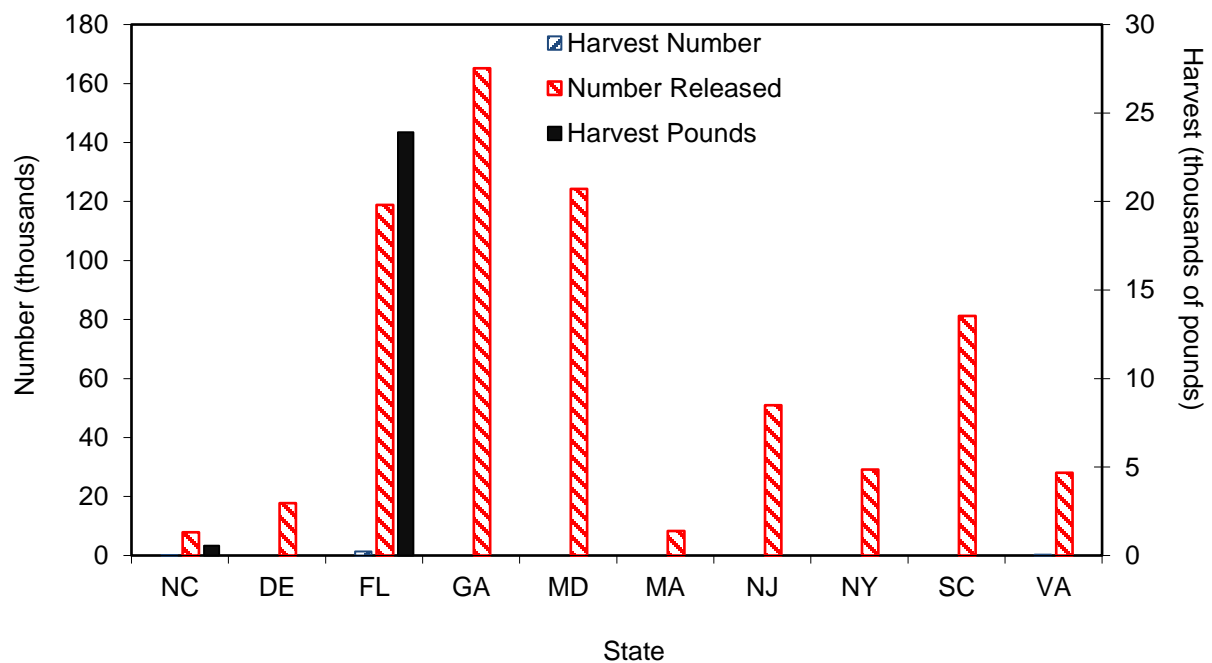


Figure III.67 Large coastal shark recreational catch by state, 2020.

Table III.74 Small coastal shark recreational catch in North Carolina by year.

Year	Harvest Number	PSE (num)	Harvest Pounds	PSE (lb)	Mean Length (inches) ¹	Mean Weight (lb) ¹	Released Number	PSE (release)
2020	5,074	70.2	21,114	56.0	-	-	16,563	50.9
2019	13,736	70.8	106,765	75.8	-	-	34,952	36.1
2018	1,678	38.9	9,097	40.9	-	-	4,496	39.5
2017	5,768	56.5	19,256	42.3	-	-	58,440	60.5
2016	514	66.6	2,545	63.4	-	-	133,214	57.0
2015	6,656	41.3	38,499	44.3	-	-	15,866	70.4
2014	7,420	56.7	24,060	43.9	-	-	2,043	57.5
2013	2,171	45.9	13,474	48.0	-	-	16,772	42.1
2012	2,082	47.5	11,804	48.4	-	-	7,733	43.5
2011	1,209	42.5	7,659	44.0	-	-	37,276	33.1
2010	4,654	46.5	21,878	37.1	-	-	107,135	66.6
2009	5,532	41.1	51,183	48.7	-	-	5,334	62.7
2008	5,421	62.9	30,675	60.8	-	-	-	-
2007	6,784	50.9	47,902	48.9	-	-	5,631	72.2
2006	7,640	69.9	51,377	68.8	-	-	58,571	38.8
2005	1,682	90.4	15,014	92.5	-	-	3,519	81.2
2004	3,291	58.0	24,421	59.8	-	-	-	-
2003	12,658	72.7	85,339	67.2	-	-	-	-
2002	2,184	46.7	16,620	48.9	-	-	-	-
2001	4,285	43.8	30,301	44.8	-	-	-	-
2000	2,428	73.8	9,193	65.6	-	-	-	-
1999	374	71.9	1,085	72.1	-	-	-	-
1998	7,565	63.2	6,855	45.0	-	-	-	-
1997	5,959	71.6	14,007	74.1	-	-	-	-
1996	-	-	-	-	-	-	-	-
1995	-	-	-	-	-	-	-	-
1994	3,226	66.3	57,075	82.0	-	-	-	-
1993	14	100.7	117	100.7	-	-	-	-
1992	2,898	56.8	22,658	56.4	-	-	-	-
1991	2,460	78.8	2,176	78.8	-	-	-	-
1990	728	62.1	1,665	72.9	-	-	402	96.3
1989	6,967	75.2	5,386	66.9	-	-	797	100.0
1988	919	101.6	8,476	101.6	-	-	-	-
1987	328	96.6	2,114	96.6	-	-	-	-
1986	-	-	-	-	-	-	-	-
1985	55	96.3	1,925	96.3	-	-	-	-
1984	-	-	-	-	-	-	-	-
1983	-	-	-	-	-	-	-	-

¹ Multiple species of sharks are reported for this category, mean length and weight by individual species of shark are available upon request.

Table III.74 Small coastal shark recreational catch in North Carolina by year (*continued*).

Year	Harvest Number	PSE (num)	Harvest Pounds	PSE (lb)	Mean Length (inches) ¹	Mean Weight (lb) ¹	Released Number	PSE (release)
1982	-	-	-	-	-	-	-	-
1981	-	-	-	-	-	-	-	-

¹ Multiple species of sharks are reported for this category, mean length and weight by individual species of shark are available upon request.

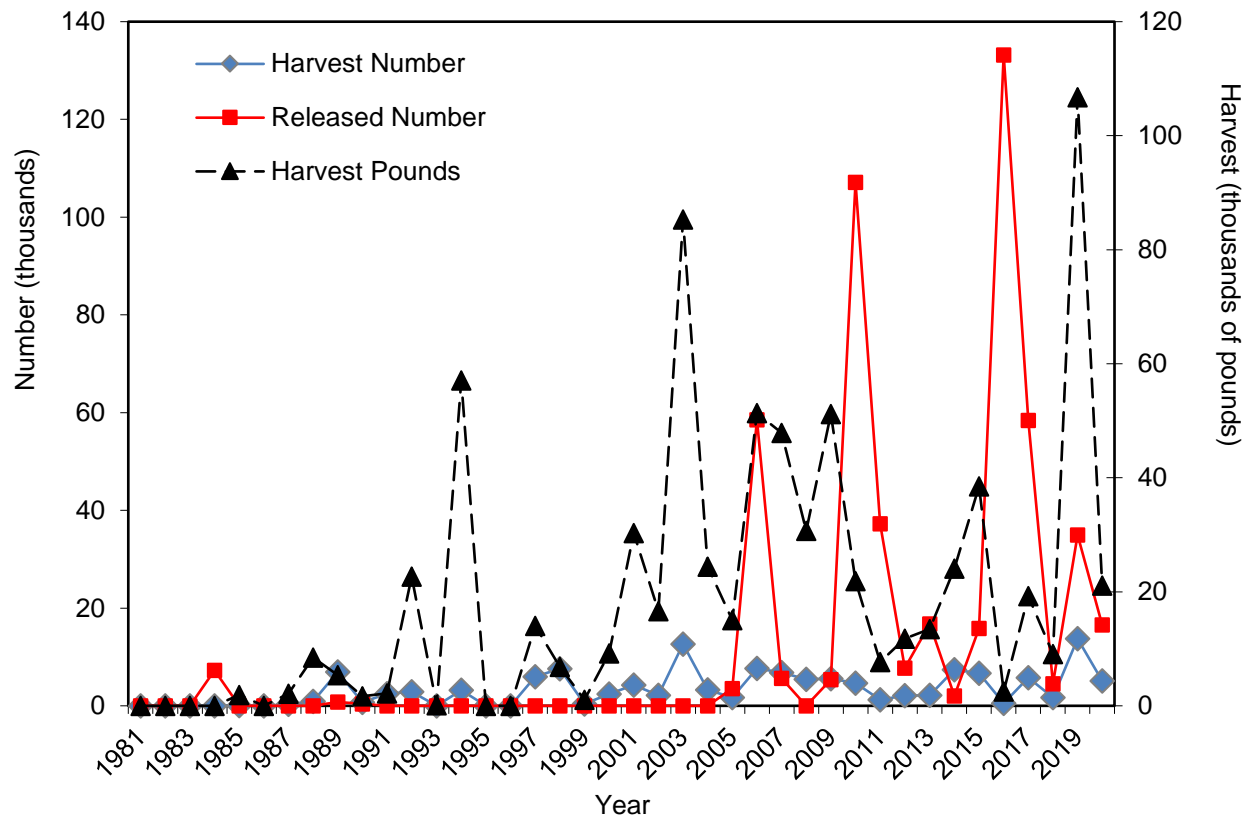


Figure III.68 Small coastal shark recreational catch in North Carolina by year.

Table III.75 Small coastal shark recreational catch by state, 2020.

State	Harvest Number	PSE (num)	Harvest Pounds	PSE (lb)	Mean Length (inches) ¹	Mean Weight (lb) ¹	Released Number	PSE (release)
North Carolina	5,074	70.2	21,114	56.0	-	-	16,563	50.9
Florida	2,429	39.5	36,904	32.8	-	-	337,690	31.1
Georgia	16,340	49.8	64,743	40.4	-	-	642,257	19.4
Maryland	1,436	57.0	11,247	57.0	-	-	3,342	107.1
South Carolina	31,088	28.8	155,616	29.4	-	-	105,174	21.8
Virginia	402	99.5	2,746	99.5	-	-	855	52.4

¹ Multiple species of sharks are reported for this category, mean length and weight by individual species of shark are available upon request.

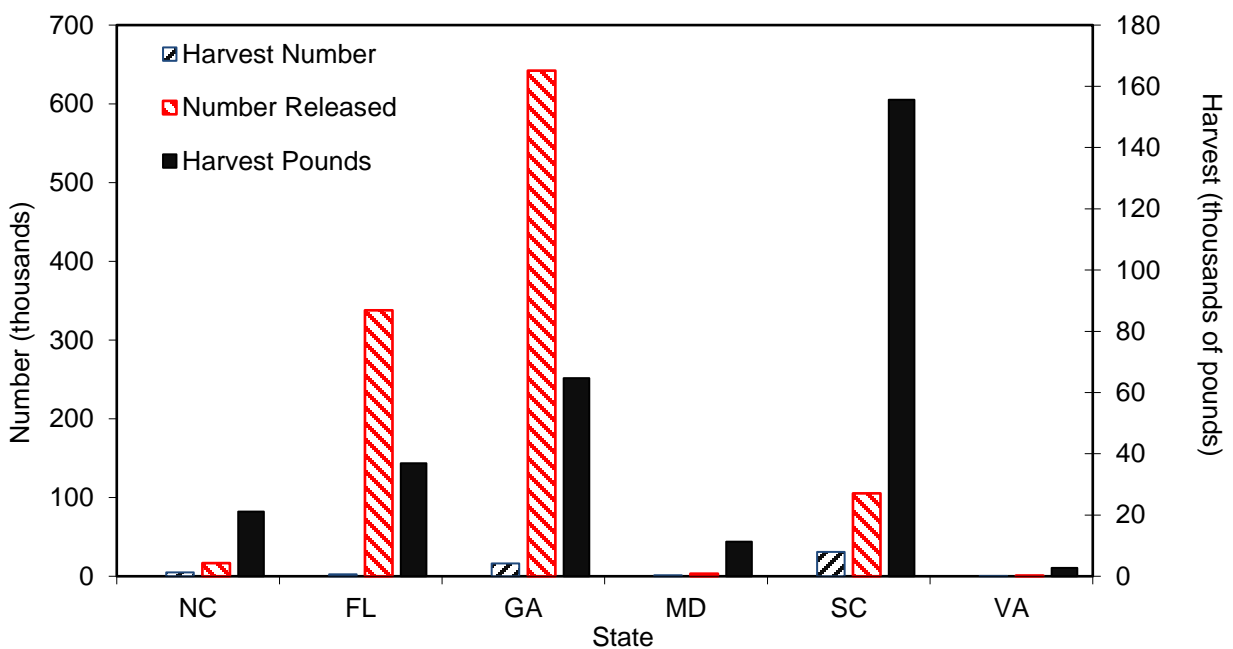


Figure III.69 Small coastal shark recreational catch by state, 2020

Table III.76 Reported North Carolina highly migratory species landings (numbers).

Year	Blue Marlin	White Marlin	Sailfish	Swordfish	Total
2020	21	1	5	12	39
2019	28	0	8	66	102
2018	28	1	9	10	48
2017	16	3	3	5	27
2016	23	0	4	6	33
2015	23	2	0	0	25
2014	15	0	0	0	15
2013	10	0	3	0	13
2012	20	0	0	1	21
2011	9	3	2	0	14
2010	14	2	1	0	17
2009	11	0	0	2	13
2008	24	1	0	0	25
2007	4	0	0	2	6
2006	12	0	0	0	12
2005	14	0	0	0	14
2004	8	0	0	0	8
2003	16	2	0	1	19

Table III.77 Reported North Carolina recreational Atlantic Bluefin Tuna landings¹ (numbers).

Year	Manteo/ Oregon Inlet	Hatteras	Ocracoke	Morehead City	Wilmington South	Call-In	Total
2020	12	2	0	0	0	3	17
2019	50	0	0	0	0	19	61
2018	32	0	0	0	0	1	33
2017	37	2	0	0	0	-	39
2016	62	10	0	0	0	2	74
2015	28	13	0	0	0	3	44
2014	62	3	0	2	0	2	69
2013	150	48	0	0	0	3	201
2012	143	40	1	0	2	3	189
2011	158	164	0	0	0	6	328
2010	378	193	0	0	0	8	579
2009	79	55	0	0	0	1	135
2008	72	51	0	8	0	1	132
2007	122	41	0	9	3	0	175
2006	0	13	0	13	5	0	31
2005	0	1	0	29	0	0	30
2004	0	0	0	19	0	1	20
2003	0	7	0	86	6	0	99
2002	1	10	4	64	3	0	82
2001	1	63	1	205	20	3	293
2000	0	339	8	147	87	9	590
1999	0	155	3	77	37	0	272

¹ Does not include trophy category.

Table III.78 Atlantic Coast saltwater fishing trips by state and mode, 2020.

State	Number of Trips					Total
	Shore ¹	Private & Rental	Charter	Man Made ¹	Beach/Bank ¹	
Connecticut	2,699,037	1,473,626	10,107	-	-	4,182,770
Delaware	1,387,130	716,347	1,866	-	-	2,105,344
Florida	51,274,578	30,176,415	1,182,771	-	-	82,633,764
Georgia	3,134,578	1,732,646	22,977	-	-	4,890,201
Maine	1,475,362	609,021	18,622	-	-	2,103,005
Maryland	4,315,931	3,439,540	198,823	-	-	7,954,294
Massachusetts	3,315,483	2,562,744	32,197	-	-	5,910,424
New Hampshire	577,908	297,479	8,731	-	-	884,118
New Jersey	10,191,706	5,701,552	30,757	-	-	15,924,014
New York	8,965,013	5,605,026	29,106	-	-	14,599,144
North Carolina	-	5,413,655	214,822	5,228,098	5,542,658	16,399,233
Rhode Island	1,772,362	1,036,260	21,283	-	-	2,829,906
South Carolina	6,007,160	2,629,643	96,886	-	-	8,733,689
Virginia	5,494,561	2,639,136	15,394	-	-	8,149,091

¹ Shore mode is separated into manmade and beach/bank in North Carolina only.

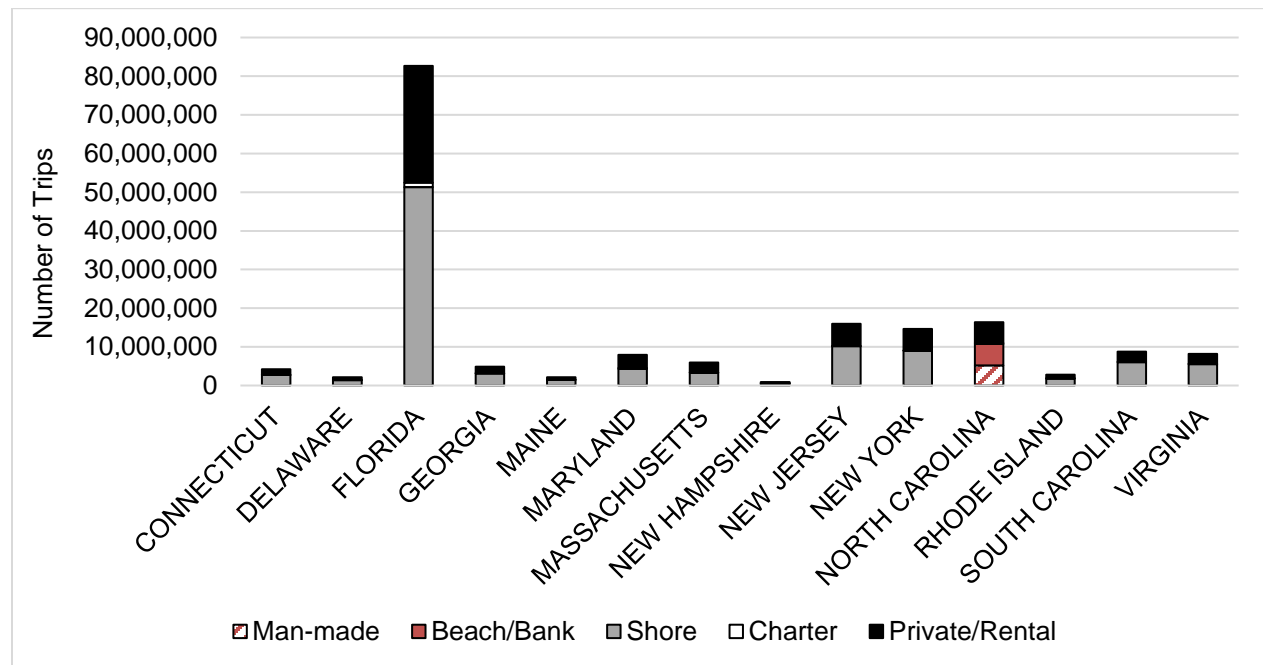


Figure III.70 Atlantic Coast saltwater fishing trips by state and mode, 2020.

Table III.79 Marine recreational fishing trips in North Carolina by mode.

Year	Number of Trips								
	Charter	PSE	Private & Rental	PSE	Man Made	PSE	Beach & Bank	PSE	Total
2020	214,822	5.1	5,413,655	6.6	5,228,098	7.8	5,542,658	10.3	16,399,233
2019	160,692	5.4	4,646,520	4.4	6,021,580	7.8	6,711,048	10.0	17,539,840
2018	148,004	6.0	4,279,389	5	5,317,495	7.1	6,879,419	12.5	16,624,306
2017	149,438	6.3	5,044,731	7.9	9,512,489	7.8	7,745,619	11.2	22,452,276
2016	140,575	6.5	4,860,391	5.8	5,970,329	6.4	10,187,550	8.7	21,158,845
2015	114,043	11.6	4,992,920	5.7	8,516,390	6.4	6,699,488	15.4	20,322,840
2014	96,432	6.1	4,895,957	5.1	6,014,374	6.1	7,919,735	7.3	18,926,498
2013	111,366	5.6	4,847,955	4.4	7,097,673	5.3	6,028,869	6.2	18,085,863
2012	159,160	9.1	5,054,638	4.2	6,184,923	5.0	7,156,627	3.5	18,555,347
2011	129,380	9.0	5,212,669	4.3	6,040,312	4.6	8,086,490	4.3	19,468,851
2010	138,577	5.1	4,982,732	3.8	7,174,395	4.2	7,877,619	3.9	20,173,322
2009	129,412	6.0	4,822,295	4.1	6,642,257	6.0	7,751,222	7.6	19,345,187
2008	170,428	7.2	4,599,900	3.8	6,067,854	6.5	8,489,916	6.3	19,328,098
2007	185,618	6.4	4,671,856	3.9	7,105,305	7.0	6,183,367	6.6	18,146,146
2006	201,368	6.1	4,542,632	3.7	7,671,720	7.4	7,199,224	7.1	19,614,943
2005	214,826	10.1	4,359,576	4.2	7,369,215	8.6	5,206,759	9.4	17,150,375
2004	183,039	6.4	4,276,395	4.4	6,245,702	8.3	6,695,734	5.8	17,400,870
2003	131,566	14.6	3,746,771	3.6	6,243,796	5.6	5,353,909	5.3	15,476,042
2002	142,644	12.3	3,539,123	4.1	5,913,968	5.7	5,501,125	5.0	15,096,860
2001	160,791	12.9	3,363,853	3.4	6,105,185	6.2	5,479,658	4.6	15,109,487
2000	164,116	12.4	3,388,516	3.8	6,088,224	5.7	5,687,088	3.8	15,327,944
1999	200,350	11.6	3,153,794	4.3	5,113,589	4.7	4,215,059	4.3	12,682,792
1998	189,664	11.5	2,806,930	4.1	4,435,131	5.3	3,677,092	4.3	11,108,817
1997	242,043	11.4	2,742,087	3.7	4,552,528	4.6	3,618,411	3.6	11,155,069
1996	204,608	11.5	2,471,857	3.6	3,895,335	5.4	3,851,521	3.9	10,423,321
1995	167,321	14.1	2,222,995	3.7	3,958,161	5.1	3,643,176	3.8	9,991,653
1994	177,061	13.3	2,231,472	3.6	4,246,772	5.4	3,874,950	4.8	10,530,255
1993	117,536	12.5	2,233,903	3.7	4,105,818	5.9	4,404,924	4.4	10,862,180
1992	87,352	14.8	2,277,847	3.9	5,097,113	6.2	4,403,691	5.6	11,866,004
1991	81,065	17.8	2,240,961	4.2	4,406,694	5.7	4,497,351	5.8	11,226,071
1990	83,234	21.4	2,164,387	3.8	4,526,403	8.7	5,338,764	7.0	12,112,788
1989	94,199	19.6	2,137,255	3.7	3,955,450	7.1	4,485,729	8.2	10,672,633
1988	65,320	44.2	2,009,639	4.1	3,960,772	9.8	4,444,539	15.3	10,480,270
1987	89,642	38.4	1,867,135	4.0	2,510,303	9.7	4,566,175	11.0	9,033,255
1986	101,447	27.6	2,076,308	5.4	2,733,767	10.0	4,260,280	16.4	9,171,802
1985	226,397	34.5	1,753,973	8.2	3,323,582	12.2	3,569,600	13.5	8,873,553
1984	226,710	30.5	1,798,108	6.1	4,027,935	13.5	3,335,089	14.4	9,387,842
1983	248,825	55.2	1,746,350	8.9	4,219,017	18.2	4,057,922	12.6	10,272,113

Table III.79 Marine recreational fishing trips in North Carolina by mode (*continued*).

Year	Number of Trips								Total
	Charter	PSE	Private & Rental	PSE	Man Made	PSE	Beach & Bank	PSE	
1982	97,074	43.9	1,721,703	6.6	2,253,604	12.4	2,789,810	13.7	6,862,191
1981	100,461	37.9	1,332,324	7.0	2,498,407	5.7	2,827,938	9.4	6,759,130

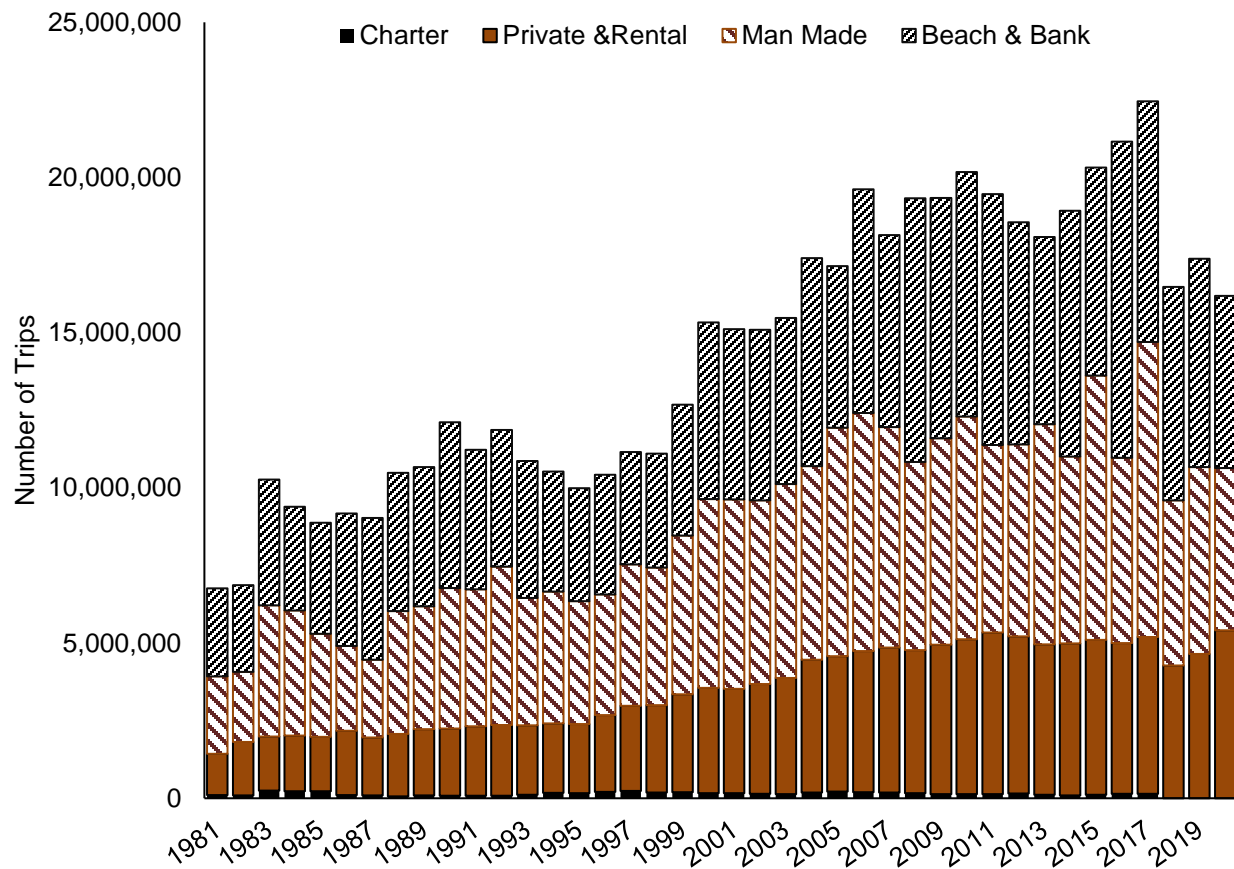



Figure III.71 Marine recreational fishing trips in North Carolina by mode.

Appendix III.1 NCDMF highly migratory species reporting stations.

Reporting Station	Location	Phone
Anchorage Marina	Atlantic Beach	252-928-6661
Captain Stacy's Fishing Center	Atlantic Beach	252-726-4675
Seawater Marina	Atlantic Beach	252-726-1637
Olde Towne Yacht Club	Beaufort	252-726-3066
Town Creek Marina	Beaufort	252-728-6111
Hurricane Fishing Center	Calabash	910-579-3660
Harker's Island Fishing Center	Harker's Island	252-728-3907
Hatteras Harbor Marina	Hatteras	252-986-2166
Oden's Dock	Hatteras	252-986-2555
Teach's Lair Marina	Hatteras	252-986-2460
Holden Beach Marina	Holden Beach	910-842-5447
Oregon Inlet Fishing Center	Manteo	252-441-6301
Pirates Cove	Manteo	252-473-3906
Shallowbag Bay Marina	Manteo	252-305-8726
Carolina Princess	Morehead City	252-726-5479
Portside Marina	Morehead City	252-726-7678
Ocean Isle Fishing Center	Ocean Isle	910-575-3474
Anchorage Marina	Ocracoke	252-726-4423
Southport Marina	Southport	910-457-9900
Outer Banks Marina	Wanchese	252-473-9991
Creekside Yacht Club	Wilmington	910-350-0023
Bridge Tender Marina	Wrightsville Beach	910-256-6550
DMF Technician	Mobile	N/A
DMF Call-in	Mobile	800-682-2632

Appendix III.2 North Carolina APAIS Intercept Form.

1. FORM 

2018 APAIS - Atlantic Intercept Form
OMB NO. 0648-0659
EXPIRES 03-31-2019

2. ASSIGNMENT NO.

3. INTERVIEWER ID

4. DATE: MM/DD

5. INTERCEPT NO.

6. INTERVIEW TIME Time this interview was completed

7. STATE CODE

8. COUNTY CODE

9. SITE CODE

10. INTERVIEW STATUS (Key Item = *)
1 ☐ Questionnaire Complete
2 ☐ Refused Non-Key Item
5 ☐ Refused Key Item

READ PRIVACY ACT: This study is being conducted in accordance with the privacy act of 1974. You are not required to answer any question that you consider to be an invasion of your privacy.

*11. Would you say you were fishing from ...
SHORE
0 ☐ Pier
2 ☐ Jetty, Breakwater
4 ☐ Other Man-made Structure (Specify) _____
BOAT
6 ☐ Headboat
8 ☐ Private Boat
1 ☐ Dock
3 ☐ Bridge, Causeway
5 ☐ Beach or Bank (Additional hours required in Q16)
7 ☐ Charterboat
9 ☐ Rental Boat

*12. Was most of your (specify mode) fishing effort today in the ... (Select only one)
1 ☐ Ocean/Gulf
2 ☐ Sound (Other than listed)
3 ☐ River (Other than listed)
4 ☐ Bay (Other than listed)
5 ☐ Other (Specify) _____
V ☐ Cape Cod Bay
A ☐ Narragansett Estuary
B ☐ Buzzard's Bay Estuary
C ☐ Long Island Estuary
D ☐ Hudson/Raritan Estuary
E ☐ Delaware Estuary
F ☐ Chesapeake Estuary
G ☐ Albemarle/Pamlico Estuary

*13. Was that ...
1 ☐ Three Miles or Less From Shore
2 ☐ More Than Three Miles
8 ☐ Waterbody Does Not Apply

13a. Were you fishing an artificial reef today?
☐ Yes If yes, enter Reef Code
☐ No If "Don't Know" = 998 If "Refused" = 999
Name: _____

14. What type of gear was primarily used? (Select one only)
01 ☐ Hook and Line
02 ☐ Dip Net, A-frame
03 ☐ Cast Net
04 ☐ Gill Net
05 ☐ Seine
06 ☐ Trawl
07 ☐ Trap
08 ☐ Spear
09 ☐ Hand
10 ☐ Other (Specify) _____
98 ☐ Unknown
99 ☐ Refused

15a. To the nearest half-hour, how many hours have you spent (specify mode) fishing today? That is, how many hours have you actually spent with your gear in the water?
 No. of Hours If "Don't Know" = 99.8 If "Refused" = 99.9

15b. (If on boat) To the nearest half-hour, how many hours have you spent on the boat, away from the dock, today?
 No. of Hours If "Don't Know" = 99.8 If "Refused" = 99.9
☐ Not Applicable - SH mode

16. [Ask, only if "Beach" or "Bank"] How many additional hours do you expect to fish from shore today? That is, how many more hours will you actually have your gear in the water?
 No. of Hours If "Don't Know" = 99.8 If "Refused" = 99.9
☐ Not fishing from Beach or Bank

17. What species were you primarily fishing for today?
☐ No Particular Species/Anything
1st Target
2nd Target

18. Not counting today, within the past 12 months, that is since (insert month) of last year, how many days have you gone saltwater sport finfishing in this state or from a boat launched in this state?
 No. of days 998 ☐ Don't Know 999 ☐ Refused

19. Not counting today, within the past 2 months, how many days?
 No. of days 98 ☐ Don't Know 99 ☐ Refused

*20. What is your state and county of residence? If county unknown, ask: What city or town do you live in?
State Code; Name: If foreign country code = 97
County Code; Name: If foreign country code = 997

21. What is the ZIP code of your residence?
 99997 ☐ Foreign Country 99998 ☐ Don't Know 99999 ☐ Refused

23. At which of the following types of addresses does your household currently receive mail? (Mark all that apply)
YES NO
☐ ☐ Street address with a house or building number
☐ ☐ Address with a rural route number
☐ ☐ U.S. Post Office Box (P.O. Box)
☐ ☐ Commercial mail box business (e.g., Mailboxes, Etc., UPS Store)
☐ Other (Specify) _____
☐ Don't Know
☐ Refused

23a. Gender (observed, do not ask)
☐ Male
☐ Female

23b. How old were you on your last birthday?
 Age
☐ Refused

Note: NCDMF stopped using paper surveys and transitioned to electronic methods in 2019.

III-136

Note: NCDMF stopped using paper surveys and transitioned to electronic methods in 2019.

Appendix III.3 North Carolina Fishing Effort Survey.

HOUSEHOLD MEMBER 4	HOUSEHOLD MEMBER 5
<p>11 What is this person's gender?</p> <p><input type="checkbox"/> Male</p> <p><input type="checkbox"/> Female</p>	<p>11 What is this person's gender?</p> <p><input type="checkbox"/> Male</p> <p><input type="checkbox"/> Female</p>
<p>12 How old is this person?</p> <p><i>If less than 1 year, mark 0 years</i></p> <p><input type="text"/> <input type="text"/> Age in years</p>	<p>12 How old is this person?</p> <p><i>If less than 1 year, mark 0 years</i></p> <p><input type="text"/> <input type="text"/> Age in years</p>
<p>13 Is this person of Hispanic, Latino, or Spanish origin?</p> <p><input type="checkbox"/> Yes, of Hispanic origin</p> <p><input type="checkbox"/> No, not of Hispanic origin</p>	<p>13 Is this person of Hispanic, Latino, or Spanish origin?</p> <p><input type="checkbox"/> Yes, of Hispanic origin</p> <p><input type="checkbox"/> No, not of Hispanic origin</p>
<p>14 What is this person's race? Mark one or more boxes.</p> <p><input type="checkbox"/> White</p> <p><input type="checkbox"/> Black, African-American</p> <p><input type="checkbox"/> Asian</p> <p><input type="checkbox"/> American Indian or Alaska Native</p> <p><input type="checkbox"/> Native Hawaiian or other Pacific Islander</p>	<p>14 What is this person's race? Mark one or more boxes.</p> <p><input type="checkbox"/> White</p> <p><input type="checkbox"/> Black, African-American</p> <p><input type="checkbox"/> Asian</p> <p><input type="checkbox"/> American Indian or Alaska Native</p> <p><input type="checkbox"/> Native Hawaiian or other Pacific Islander</p>
<p>Please think only about recreational <u>saltwater</u> fishing in <u>North Carolina</u>.</p>	<p>Please think only about recreational <u>saltwater</u> fishing in <u>North Carolina</u>.</p>
<p>15 How many days did this person go recreational <u>saltwater</u> fishing from the SHORE in <u>North Carolina</u>?</p> <p><i>The shore includes docks, bridges, causeways, beaches, banks, or any other shore-based place or area. Do not include freshwater fishing.</i></p> <p><input type="checkbox"/> Did not recreational saltwater fish from shore in last 12 months → Go to question 16</p> <p><input type="text"/> <input type="text"/> Number of days saltwater shore fishing in January and February of 2018</p> <p><input type="text"/> <input type="text"/> Number of days saltwater shore fishing in last 12 months, including January and February</p>	<p>15 How many days did this person go recreational <u>saltwater</u> fishing from the SHORE in <u>North Carolina</u>?</p> <p><i>The shore includes docks, bridges, causeways, beaches, banks, or any other shore-based place or area. Do not include freshwater fishing.</i></p> <p><input type="checkbox"/> Did not recreational saltwater fish from shore in last 12 months → Go to question 16</p> <p><input type="text"/> <input type="text"/> Number of days saltwater shore fishing in January and February of 2018</p> <p><input type="text"/> <input type="text"/> Number of days saltwater shore fishing in last 12 months, including January and February</p>
<p>16 How many days did this person go recreational <u>saltwater</u> fishing from a private or rental BOAT that returned to shore in <u>North Carolina</u>?</p> <p><i>Do not include freshwater trips or trips where a paid captain or crew helped locate and catch fish.</i></p> <p><input type="checkbox"/> Did not recreational saltwater fish from private boat in last 12 months</p> <p><input type="text"/> <input type="text"/> Number of days saltwater boat fishing in January and February of 2018</p> <p><input type="text"/> <input type="text"/> Number of days saltwater boat fishing in last 12 months, including January and February</p> <p>If you have more people in your household, continue to Household Member 5. If you have answered for all people in your household, please return your survey.</p>	<p>16 How many days did this person go recreational <u>saltwater</u> fishing from a private or rental BOAT that returned to shore in <u>North Carolina</u>?</p> <p><i>Do not include freshwater trips or trips where a paid captain or crew helped locate and catch fish.</i></p> <p><input type="checkbox"/> Did not recreational saltwater fish from private boat in last 12 months</p> <p><input type="text"/> <input type="text"/> Number of days saltwater boat fishing in January and February of 2018</p> <p><input type="text"/> <input type="text"/> Number of days saltwater boat fishing in last 12 months, including January and February</p> <p>Please return your survey in the enclosed postage-paid envelope.</p> <p>RTI International</p> <p>5265 Capital Boulevard, Raleigh NC 27690-1652</p>

North Carolina

Weather and Outdoor Activity Survey



Public reporting burden for this collection of information is estimated to average 10 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other suggestions for reducing this burden to Rob Andrews, NOAA Fisheries Service, 1315 East-West Hwy., Silver Spring, MD 20910.

No personally identifiable information will be collected through this survey. Responses will only be associated with a unique, randomly assigned identification code. Any public release of survey data will be without identification as to its source or in aggregate statistical form. All survey data will be stored on secured, password protected servers, and all transfer of survey data will utilize secure file transfer protocols.

Appendix III.3 North Carolina Fishing Effort Survey (continued).

This survey should be filled out by an adult member of the household. Complete and return this form even if no one in your household participates in any of these activities.

START HERE

Please carefully follow the steps below when completing this survey.

• Use only a blue or black ink pen that does not blot the paper

• Make solid marks inside the response boxes

• Do not make other marks on the survey

Example

RIGHT WAY: ☒ WRONG WAY: ☒

1 How do members of this household obtain information about the weather, including current weather conditions, forecasts, and warnings? Mark all that apply.

☐ Television
☐ Radio
☐ Newspaper
☐ Internet
☐ Other

2 During the past 12 months, has anyone in this household had to evacuate or seek shelter due to a severe weather event, such as a tornado, hurricane, or thunderstorm?

☐ Yes
☐ No

3 In your area, how often do the advanced warnings you get for severe weather events allow you enough time to prepare properly?

☐ All the Time
☐ Some of the time
☐ Rarely
☐ Never

4 During the past 12 months, has anyone in this household visited a public beach, national seashore, coastal state park, or other coastal nature reserve or protected area?

☐ Yes
☐ No

5 During the past 12 months, has anyone in this household been saltwater fishing in North Carolina?

☐ Yes
☐ No

6 During the past 12 months, has anyone in this household been saltwater fishing in North Carolina?

☐ Yes
☐ No

7 Which of the following best describes how your household receives telephone calls?

☐ All are received on cell phones
☐ Most are received on cell phones
☐ Some are received on cell phones and some on landline phones
☐ Most are received on landline phones
☐ All are received on landline phones
☐ No calls are received on cell phones or landline phones

8 Which of the following best describes this house, apartment, or mobile home?

☐ Owned with a mortgage or loan
☐ Owned (without a mortgage)
☐ Rented
☐ Occupied without payment or rent

9 How long have you lived at this address?

☐ 1 year or less
☐ Less than 5 years, more than 1 year
☐ 5 years or more

10 How many people, including all adults and children, live in this household?

Number of people

Please answer the next section for each member of your household, starting with yourself. Please answer for all people in your home, including people who fish and people who do not fish.

If you have more than 5 people living at this address, answer for the oldest members of the household.

Please use the calendars to help answer questions 15 and 16.

January							February							
S	M	T	W	T	F	S	S	M	T	W	T	F	S	
1	2	3	4	5	6							1	2	3
7	8	9	10	11	12	13	4	5	6	7	8	9	10	
14	15	16	17	18	19	20	11	12	13	14	15	16	17	
21	22	23	24	25	26	27	18	19	20	21	22	23	24	
28	29	30	31				25	26	27	28				

HOUSEHOLD MEMBER 1 (YOU)

11 What is your gender?

☐ Male
☐ Female

12 How old are you?

If less than 1 year, mark 0 years

Age in years

13 Are you of Hispanic, Latino, or Spanish origin?

☐ Yes, of Hispanic origin
☐ No, not of Hispanic origin

14 What is your race? Mark one or more boxes.

☐ White
☐ Black, African-American
☐ Asian
☐ American Indian or Alaska Native
☐ Native Hawaiian or other Pacific Islander

Please think only about recreational saltwater fishing in North Carolina.

15 How many days did you go recreational saltwater fishing from the SHORE in North Carolina?

The shore includes docks, bridges, causeways, beaches, banks, or any other shore-based place or area. Do not include freshwater fishing.

☐ Did not recreational saltwater fish from shore in last 12 months → Go to question 16

Number of days saltwater shore fishing in January and February of 2018

Number of days saltwater shore fishing in last 12 months, including January and February

16 How many days did you go recreational saltwater fishing from a private or rental BOAT that returned to shore in North Carolina?

Do not include freshwater trips or trips where a paid captain or crew helped locate and catch fish.

☐ Did not recreational saltwater fish from private boat in last 12 months

Number of days saltwater boat fishing in January and February of 2018

Number of days saltwater boat fishing in last 12 months, including January and February

If you have more people in your household, continue to Household Member 2. If you have answered for all people in your household, please return your survey.

HOUSEHOLD MEMBER 2

11 What is this person's gender?

☐ Male
☐ Female

12 How old is this person?

If less than 1 year, mark 0 years

Age in years

13 Is this person of Hispanic, Latino, or Spanish origin?

☐ Yes, of Hispanic origin
☐ No, not of Hispanic origin

14 What is this person's race? Mark one or more boxes.

☐ White
☐ Black, African-American
☐ Asian
☐ American Indian or Alaska Native
☐ Native Hawaiian or other Pacific Islander

Please think only about recreational saltwater fishing in North Carolina.

15 How many days did this person go recreational saltwater fishing from the SHORE in North Carolina?

The shore includes docks, bridges, causeways, beaches, banks, or any other shore-based place or area. Do not include freshwater fishing.

☐ Did not recreational saltwater fish from shore in last 12 months → Go to question 16

Number of days saltwater shore fishing in January and February of 2018

Number of days saltwater shore fishing in last 12 months, including January and February

16 How many days did this person go recreational saltwater fishing from a private or rental BOAT that returned to shore in North Carolina?

Do not include freshwater trips or trips where a paid captain or crew helped locate and catch fish.

☐ Did not recreational saltwater fish from private boat in last 12 months

Number of days saltwater boat fishing in January and February of 2018

Number of days saltwater boat fishing in last 12 months, including January and February

If you have more people in your household, continue to Household Member 3. If you have answered for all people in your household, please return your survey.

HOUSEHOLD MEMBER 3

11 What is this person's gender?

☐ Male
☐ Female

12 How old is this person?

If less than 1 year, mark 0 years

Age in years

13 Is this person of Hispanic, Latino, or Spanish origin?

☐ Yes, of Hispanic origin
☐ No, not of Hispanic origin

14 What is this person's race? Mark one or more boxes.

☐ White
☐ Black, African-American
☐ Asian
☐ American Indian or Alaska Native
☐ Native Hawaiian or other Pacific Islander

Please think only about recreational saltwater fishing in North Carolina.

15 How many days did this person go recreational saltwater fishing from the SHORE in North Carolina?

The shore includes docks, bridges, causeways, beaches, banks, or any other shore-based place or area. Do not include freshwater fishing.

☐ Did not recreational saltwater fish from shore in last 12 months → Go to question 16

Number of days saltwater shore fishing in January and February of 2018

Number of days saltwater shore fishing in last 12 months, including January and February

16 How many days did this person go recreational saltwater fishing from a private or rental BOAT that returned to shore in North Carolina?

Do not include freshwater trips or trips where a paid captain or crew helped locate and catch fish.

☐ Did not recreational saltwater fish from private boat in last 12 months

Number of days saltwater boat fishing in January and February of 2018

Number of days saltwater boat fishing in last 12 months, including January and February

If you have more people in your household, continue to Household Member 4. If you have answered for all people in your household, please return your survey.

Appendix III.4 Glossary of terminology in MRIP survey.

Avidity: The frequency of fishing activity, measured as number of days on which fishing trips were made.

Type A catch: Fish that were caught, were landed whole, and were available for identification and enumeration by the interviewers. In addition, the fish were potentially available for weighing and measuring.

Type B catch: Fish that were caught but were either not kept or not available for identification.

Type B1 catch: Fish that were caught and filleted, released dead, given away, or disposed of in some way other than Types A or B2.

Type B2 catch: Fish that were caught and released alive.

Total catch: The number of fish caught but not necessarily brought ashore, may be obtained by summing catch types A and B or by summing catch types A, B1, and B2. The total number of fish removed from the fishery resource may be obtained by summing catch types A and B1.

Coastal counties: All counties in the coastal states of the United States with some portion within 25 miles of the coastline were included in the Fishing Effort Survey. This boundary was extended to 50 miles in the South Atlantic and Gulf of Mexico from May through October. The boundary was extended further in North Carolina to 50 miles November through April and 100 miles May through October.

Coastal resident: An angler who lived in a coastal county included in the Fishing Effort Survey.

Coastal state: A state bordering on the Atlantic or Pacific Ocean, the Gulf of Mexico or the Caribbean Sea. State also includes a Territory or Commonwealth.

Congener: An organism of the same taxonomic genus as another.

EEZ (U.S. Exclusive Economic Zone): The MFCMA defines this zone as contiguous to the Territorial Sea of all the United States and its possessions and extending seaward 200 nautical miles measured from the baseline from which the Territorial Sea is measured.

Fishery Management Plan (FMP): A plan developed by a Regional Fishery Management Council and the Secretary of the Department of Commerce to manage a fishery resource pursuant to the Magnuson Fishery Conservation and Management Act of 1976.

Fishing access site: Fishing access site refers to the name and location of the place where anglers were intercepted. Each intercept site was given a unique name and code number. The fishing access site did not define the mode of fishing since anglers may have used more than one mode at any given site.

Fishing trip: Fishing during part or all of 1 day in one mode. An angler who fished from both a pier and a beach on the same day made one fishing trip since the pier and the beach are both in the shore mode. However, an angler who fished from a head boat in the morning and from a pier in the afternoon is counted as having made two fishing trips--a head boat trip and a shore trip.

Hours fished: The amount of time an angler actively fished in a mode with fishing gear in the water. If an angler spent time fishing at other sites on the same day, that time was also included provided the fishing was done in the same mode. Not included was the travel time in a boat or travel time between sites.

Household: A household consisted of all persons who occupied a housing unit. The unit must have been intended for year-round use, not seasonal or migratory use.

Intercept survey or creel census: Interviewing anglers and examining their catch upon completion of their fishing trip, or under certain circumstances, while they were still fishing.

Length and weight of fish: Length and weight measurements were obtained from a sample of fish brought ashore in whole form by intercepted anglers. If more than 10 fish of the same species were brought ashore in whole form, 10 fish were randomly selected to be weighed and measured. If 10 or less fish of the same species were brought ashore in whole form, each fish was weighed and measured. For fish with a forked tail, fork length was measured from the tip of the longest jaw or the snout, whichever was terminal with the mouth closed, to the center of the fork. For fish with a non-forked tail, total length was measured from the tip of the longest jaw or the snout, whichever was terminal with the mouth closed, to the tip of the caudal lobe or fin. Weight was measured to the nearest tenth of a kilogram (1 kilogram is approximately 2.2 pounds). Length was measured to the nearest millimeter (1 millimeter is approximately 0.039 inches).

Marine recreational anglers: Those people who fished in marine waters primarily for recreational purposes. Their catch was primarily for home consumption, although occasionally a part or all of their catch may have been sold and entered commercial channels. Specifically, for this survey, marine recreational anglers were defined as follows: In the telephone household survey, an angler was anyone who had been marine recreational fishing in the 12 months prior to telephone household contact, and an eligible angler was anyone who had been marine recreational fishing 2 months prior to the telephone household contact. In the intercept survey an eligible angler was anyone just completing a finfishing trip, or in certain cases, someone who was still fishing.

Marine recreational fishing: Fishing primarily with hook and line for pleasure, amusement, relaxation, or home consumption. If part or all of the catch was sold, the monetary returns constituted an insignificant part of the person's income.

Mode of fishing: The type of place or platform from which marine recreational fishing occurs. There are four modes:

1. **Shore:** A shore may be:

Pier, dock: A structure built over the water and supported by pillars.

Jetty: A kind of wall, usually made of rocks, built out into the water or parallel to the shore to restrain currents or protect a harbor.

Breakwater: An offshore structure used to protect a harbor or breach from the forces of waves.

Bridge: An elevated or raised way across wet ground or water.

Causeway: A connecting channel.

Beach: A level stretch of pebbles or sand beside a body of water, often washed by high water.

Bank: A stretch of rising land at the edge of a body of water not washed by high water, which could be rocks or an overhanging cliff.

2. **Private/Rental:** A boat belonging to an individual or one that is rented. No crew is provided; operated by the owner/renter.

3. **Headboat:** A boat operated by licensed captain usually carrying greater than seven anglers. Fees are paid on a per head (angler) basis.

4. **Charter Boat:** A boat operating under charter for a price, time, etc. It is operated by a licensed captain and crew and the participants are part of a pre-formed group of anglers. Thus, charters are usually closed parties. Note: Charter boats may make all-day or half-day trips.

Non-coastal resident: An angler who lived in a county of a coastal state that was not included in the telephone household survey.

Out-of-state resident: An angler who lived in a state other than the coastal state in which he fished.

Ocean: For the purposes of the survey, ocean is divided into two categories:

The ocean 3 miles or less from shore (Territorial Sea) and the ocean more than 3 miles from shore (Exclusive Economic Zone). However, the boundary for state and federal jurisdiction on the Gulf of Mexico coast of Florida is 3 marine leagues, or 10 miles, from shore. Not included are sounds, inlets, rivers, bays, etc.

Inland: Other bodies of saltwater besides the oceans. Included are sounds, inlets, and tidal portions of rivers, bay, estuaries, and other areas of salt or brackish water.

State of fishing access (State of intercept): The state in which the fishing or intercept site was located. For boat fishing, it was the state from which the boat departed the shoreline for fishing.

State of residence: The state in which the angler lived and maintained his permanent residence.

U.S. Territorial Sea: A zone extending 3 nautical miles from shore for all states except the Gulf coast of Florida where the seaward boundary is 3 marine leagues (approximately 10 statute miles).

Wave: A wave is one of the following 2-month intervals:

- January/February (Wave 1)
- March/April (Wave 2)
- May/June (Wave 3)
- July/August (Wave 4)
- September/October (Wave 5)
- November/December (Wave 6)

Appendix III.5 Data elements in MRIP survey.

Dockside Interviews

- State and county of residence
- Avidity level - trips per year
- Mode of fishing
- Primary area of fishing
- Number of anglers contributing to catch
- Number, weights, and lengths of fish caught by species

Fishing Effort Survey

- Gender
- Age
- Ethnicity
- Presence of marine recreational anglers in the household
- Number of anglers per household
- Fishing trips in 2-month period
- Fishing trips in 12-month period
- Mode of each trip

Intercept Data

- Date, location, and site of interview
- Mode of fishing
- Tournament fishing status
- Fishing location
- Gear type
- Hours of fishing time
- Targeted species
- Number of days fished in last year
- State and county of residence
- Sex and age of angler
- Number and types of Type 2 fish (unavailable catch)
- Number of contributors and people in fishing party
- Length and weight of Type 3 fish (available catch)

Expanded Data

- Estimated number of trips in a mode
- Percent of trips in a mode
- Number of trips in a specific mode and area
- Data on groups or types of fish caught in a mode or area
- Estimated numbers of Type A, B1, or B2 fishes caught or released (including variances)
- Estimated weights or lengths of specific types of fish (including variances)
- Number of interviews conducted in specific modes or sites by year, month, etc.
- Catch per trip (including variances)
- Mean weight and/or length of fish from a specific area, mode, etc.