

STATE MANAGED SPECIES – SHEEPSHEAD

FISHERY MANAGEMENT PLAN UPDATE SHEEPSHEAD AUGUST 2026

STATUS OF THE FISHERY MANAGEMENT PLAN

Fishery Management Plan History

Original FMP Adoption:	None
Amendments:	None
Revisions:	None
Supplements:	None
Information Updates:	None
Schedule Changes:	None
Comprehensive Review:	None

Sheepshead (*Archosargus probatocephalus*) was previously managed in the South Atlantic Fishery Management Council (SAFMC) Snapper Grouper Fishery Management Plan (FMP). The plan restricted recreational anglers to an aggregate 20 fish bag limit, no commercial trip limit, and no size limit. In state waters, North Carolina deferred management to the Council regulations. In April 2012, Sheepshead was removed from the SAFMC snapper grouper management complex through the Comprehensive Annual Catch Limit Amendment (Amendment 25; SAFMC 2011). Subsequently, the North Carolina Division of Marine Fisheries (DMF) Director proclamation authority for Sheepshead management via MFC Rule 15A NCAC 03M .0512 no longer applied as part of the North Carolina FMP for Interjurisdictional Fisheries or a Council managed species. In November 2012, the North Carolina Marine Fisheries Commission (MFC) requested a rule be developed for Sheepshead; and approved the rule in November 2013 that specifies the Director's proclamation authority, including the ability to implement size, bag, and trip limits, as well as season and gear restrictions (NCDMF 2013; MFC Rule 15A NCAC 03M .0521). In July 2014, the DMF began developing potential management measures for Sheepshead to present to the MFC (NCDMF 2015). In 2015, the Commission implemented new regulations that included size, bag, and trip limits to prevent overharvest, as well as to allow a greater number of fish to spawn before being harvested. Effective June 1, 2015 (Proclamation [FF-28-2015](#)), the DMF Director implemented a 10-in fork length (FL) minimum size limit for both sectors, a recreational bag limit of 10 fish per person per day, and gear specific commercial trip limits (none for pound nets; 10 fish per person per day or trip, if more restrictive, for gigs and spears; and 300 lb for all other gears).

In May 2023, a commissioner at the MFC business meeting requested more information on Sheepshead recreational bag limits, citing concerns that the current limit was too high. Additional information requests were received at both the February and May 2024 MFC business meetings. In August 2024, after receiving a presentation on Sheepshead during the annual FMP updates review, the MFC requested the division investigate trends in the Sheepshead data to determine if proactive management changes were needed. Internal discussions by division staff determined further evaluation on data trends for effort and landings shifts as well as sizes and ages of Sheepshead, was needed (NCDMF 2025). This information was presented to the Commission at their [August 2025 business meeting](#). After the comprehensive review of the data, the division recognized the need to take proactive steps to cap harvest on Sheepshead, and new regulations were implemented on March 1, 2026 (Proclamations [FF-14-2026](#) and [FF-16-2026](#)). New regulations included increasing the minimum size limit and changing the length measure to total length (TL), reducing the daily recreational bag limit, and implementing a trip limit on pound nets. There currently is no state or federal FMP for Sheepshead.

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Management Unit

North Carolina manages Sheepshead in state waters (Internal Joint and Coastal Fishing Waters which includes 0 to 3 mi in the Atlantic Ocean).

Goal and Objectives

None

DESCRIPTION OF THE STOCK

Biological Profile

Sheepshead are a relatively large, long-lived member of the porgy family that ranges from Nova Scotia, Canada to Florida and the Gulf of Mexico south to the Atlantic coast of Brazil. They are generally found year-round in coastal waters ranging from inshore brackish waters to offshore rocky bottoms (Hildebrand and Cable 1938; Sedberry and Van Dolah 1984). Juveniles are associated with shallow vegetated habitat as well as hard structures that offer protection (Parsons and Peters 1987; Froeschke et al. 2020; Johnson 2024). As Sheepshead grow larger, they move to typical adult habitat including oyster reefs, rocks, pilings, jetties, piers, and wrecks (Johnson 1978; Ogburn 1984; Schwartz 1990). While Sheepshead exhibit strong site fidelity and tend to stay in the same areas throughout much of the year, they migrate seasonally to spawn (Wiggers 2010; Lohman et al. 2023). Migration patterns based on mark-recapture studies have not documented large scale, north-south movements, but instead towards inlets during the fall and winter when adult Sheepshead migrate to ocean waters to spawn (Jennings 1985; Wiggers 2010; Lohman et al. 2023). Spawning occurs during the late winter and spring on the Atlantic coast and in the Gulf of Mexico (Jennings 1985; Render and Wilson 1992; McDonough et al. 2011; Heil 2017; Buckel and Morley 2023; Johnson 2024), though the highest proportion of spawning capable individuals are present off the Carolinas in April–May (McDonough et al. 2011; Buckel and Morley 2023; Johnson 2024).

Sheepshead are omnivores, eating plants as well as animals (barnacles, crabs, oysters; Jennings 1985). Sheepshead grow quickly up to age 6, after which their growth slows approaching an asymptotic length around 19.6 in (Beckman et al. 1991; Dutka-Gianelli and Murie 2001; McDonough et al. 2011). Fifty percent of Sheepshead are mature at 10-in FL (ages 1 and 2) with all fish mature by 15.7 in (ages 3 to 5; McDonough et al. 2011). In North Carolina, Sheepshead commonly reach a length of 20 to 25 in FL, with a maximum reported length of 30 in FL, and weight ranging from 5 to 15 lb. The maximum reported age in North Carolina is 34 years; only Virginia has reported a higher maximum age of 35 (Liao et al. 2009; Ballenger 2011), with states to the south having maximum ages ranging from 15 to 26 years (Beckman et al. 1991; Dutka-Gianelli and Murie 2001; McDonough et al. 2011; Winner et al. 2017).

Stock Status

The division is continuing to collect data from recreational, commercial, and independent sampling efforts to estimate trends in abundance of Sheepshead; age structure, maturity, and other biological information is also being collected. This information is used each year, during the annual species updates in August, to monitor stock conditions and identify data trends.

Stock Assessment

The U.S. Atlantic stock of Sheepshead is considered a single unit stock genetically (Seyoum et al. 2017), though analyses of growth patterns, tagging, and fisheries independent data provide evidence of stock structure within the U.S. Atlantic population (Adams et al. 2018; Teears 2023). There is not an approved stock assessment for Sheepshead in North Carolina; therefore, a benchmark stock assessment is needed to determine the stock status.

DESCRIPTION OF THE FISHERY

For more detailed trends in the commercial and recreational fisheries than what is provided below, see NCDMF 2025.

Current Regulations

In 2025, Sheepshead were managed under the regulations implemented through Proclamation [FF-28-2015](#). These include a 10-in FL minimum size limit for both recreational and commercial fisheries, a recreational bag limit of 10 fish per person per day or per trip (if a trip occurs over more than one calendar day), and commercial fishing operations are limited to 300 lb per trip with two exceptions; gig and spear operations are limited to 10 fish per person per day or trip (if a trip occurs over more than one calendar day), and pound net operations are exempt from the commercial trip limits.

Beginning March 1, 2026, Sheepshead are managed under regulations implemented through Proclamation [FF-16-2026](#). These include a 14-in TL minimum size limit for both recreational and commercial fisheries, a recreational bag limit of five fish per person per day or per trip (if a trip occurs over more than one calendar day), and commercial fishing operations are limited to 300 lb per trip with two exceptions; gig and spear operations are limited to 10 fish per person per day or trip (if a trip occurs over more than one calendar day) and commercial pound net operations are limited 1,500 lb per trip.

Commercial Fishery

Commercial Sheepshead landings have fluctuated from year to year, ranging from 50,414 lb in 1997 to 180,343 lb in 2013 (Figure 1). Landings have been trending up since 2020. In 2025, 157,816 lb of Sheepshead were landed in the commercial fishery, representing the highest landings value since management was implemented in 2015 (Table 1; Figure 1). The number of trips landing Sheepshead, a proxy for effort, has shown a general decline since 2013; though, have increased slightly since 2020 (Figure 1). It should be noted that effort in 2020 was a historic low, and while the number of trips increased after that year, the number of trips has been well below historic values.

Sheepshead are primarily caught incidentally in several of North Carolina's commercial fisheries (e.g., gill net, pound net, long-haul seine, trawls). However, Sheepshead have become a more desirable catch and more targeted fishing practices are occurring than have been seen historically (i.e., setting of pound nets classified as other finfish in the late fall). Estuarine gill nets and pound nets have made up greater than 50% of the landings for most of the time series (Table 2). A targeted spear fishery developed in the early 2000s, and the gig fishery also became more popular, though effort has decreased in recent years. While the long-haul fishery used to account for up to 20% of the landings, this fishery has accounted for less than one percent of the harvest in recent years. In 2025, 58% of commercial landings came from pound nets and gill nets (31%; primarily estuarine gill nets). Pound net and estuarine gill net landings doubled between 2022 and 2023. In 2025, estuarine gill net landings increased by 22% compared to 2024, while pound net landings increased by 11%. Landings in the spear and gig, ocean gill net, and trawl fisheries increased in 2025; however, these gears only landed 11% of the total commercial landings.

The increase in commercial landings over the last several years has been driven by higher-than-average landings in October and November (Figure 2). However, in 2025, increased landings were seen over several other months. Estuarine gill net landings in May through July increased by over 127% with slight increases in January, March, November, and December. Ocean gill net landings increased for all months, except April and September. Pound net landings remained static in October and November from 2024 to 2025; however, increased in April and May 2025. In May 2025, pound net landings were the highest on record. Similar to ocean gill nets, spear and gig landings increased most months (Figure 2).

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Table 1. Recreational harvest and releases and commercial harvest of Sheepshead from North Carolina, 1994–2025. Commercial landings are reported through the N.C. Trip Ticket Program and recreational landings through the Marine Recreational Information Program.

Year	Recreational			Commercial	Total Weight Landed (lb)
	Number Landed	Number Released	Weight Landed (lb)	Weight Landed (lb)	
1994	92,098	31,965	197,128	83,789	280,917
1995	157,769	39,779	407,729	91,198	498,927
1996	77,750	12,798	256,911	82,290	339,201
1997	209,662	55,258	308,381	50,414	358,795
1998	151,473	109,454	209,825	60,184	270,009
1999	255,885	124,676	758,153	60,895	819,048
2000	355,192	94,963	780,622	88,459	869,081
2001	183,781	66,594	654,527	64,522	719,049
2002	181,197	68,317	781,567	57,434	839,001
2003	294,989	85,877	983,640	53,361	1,037,001
2004	86,554	40,263	453,372	82,009	535,381
2005	87,504	65,863	340,227	53,259	393,486
2006	137,312	90,502	445,182	57,481	502,663
2007	433,872	334,014	1,456,396	77,173	1,533,569
2008	503,666	172,604	1,007,914	89,726	1,097,640
2009	362,439	299,221	577,311	132,390	709,701
2010	327,223	190,823	966,467	157,631	1,124,098
2011	196,844	78,821	522,896	120,976	643,872
2012	346,609	269,226	797,963	109,881	907,844
2013	784,747	391,809	1,220,357	180,343	1,400,700
2014	185,267	224,062	389,583	173,376	562,959
2015	181,554	160,447	520,382	124,850	645,232
2016	149,085	212,471	375,328	93,585	468,913
2017	282,480	910,841	810,633	128,608	939,241
2018	343,772	524,967	735,738	90,406	826,144
2019	221,419	312,479	590,150	86,406	676,556
2020	247,390	518,140	592,774	76,608	669,382
2021	324,540	873,080	928,130	85,452	1,013,582
2022	387,924	570,444	1,024,623	69,381	1,094,004
2023	263,328	734,253	619,265	114,751	734,016
2024	461,480	1,131,206	1,427,785	129,704	1,557,487
2025	328,003	747,406	776,407	157,816	934,223
Mean	268,838	298,207	684,918	96,386	781,304

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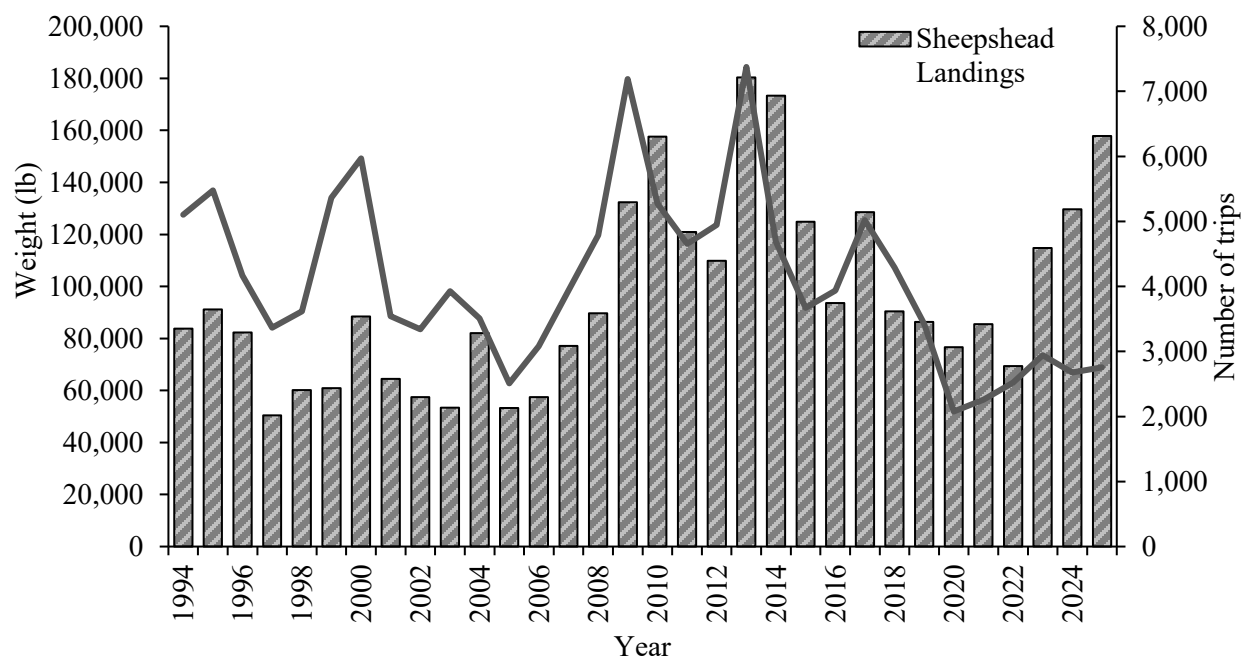


Figure 1. Annual commercial landings and number of trips for Sheepshead in North Carolina reported through the N.C. Trip Ticket Program, 1994–2025.

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Table 2. Commercial landings (lb) and number of trips for Sheepshead by gear type reported through the N.C. Trip Ticket Program, 2016–2025. Other gears include fyke nets, crab pots, long-haul seine, and hook and line. Spear and gig landings are combined due to data confidentiality.

Year	Spear and Gig		Estuarine Gillnet		Ocean Gillnet		Pound Net		Trawls		Other		Total	
	Landings	Trips	Landings	Trips	Landings	Trips	Landings	Trips	Landings	Trips	Landings	Trips	Landings	Trips
2016	14,761	648	30,851	2,003	2,509	165	36,839	727	7,140	304	1,485	91	93,585	3,938
2017	10,720	558	33,770	3,024	1,677	142	74,246	960	7,047	235	1,149	100	128,608	5,019
2018	9,076	529	25,722	2,455	2,895	168	50,429	968	1,012	61	1,272	110	90,406	4,291
2019	13,858	557	25,309	1,914	3,437	189	36,496	555	5,567	96	1,740	121	86,406	3,432
2020	7,391	131	16,942	1,119	1,965	139	47,445	536	1,600	71	1,266	81	76,608	2,077
2021	8,960	144	18,255	1,360	3,761	128	48,842	439	2,850	85	2,784	102	85,452	2,258
2022	6,497	191	16,950	1,542	1,615	127	38,936	495	1,101	47	4,282	119	69,381	2,521
2023	5,847	199	33,642	1,810	2,834	157	70,599	635	316	46	1,514	94	114,751	2,941
2024	5,235	240	35,018	1,502	3,181	132	82,728	614	878	69	2,665	121	129,704	2,678
2025	10,458	313	42,881	1,569	5,837	158	91,994	495	1,557	108	5,089	111	157,816	2,754
Mean	9,280	351	27,934	1,830	2,971	151	57,855	642	2,907	112	2,325	105	103,272	3,191

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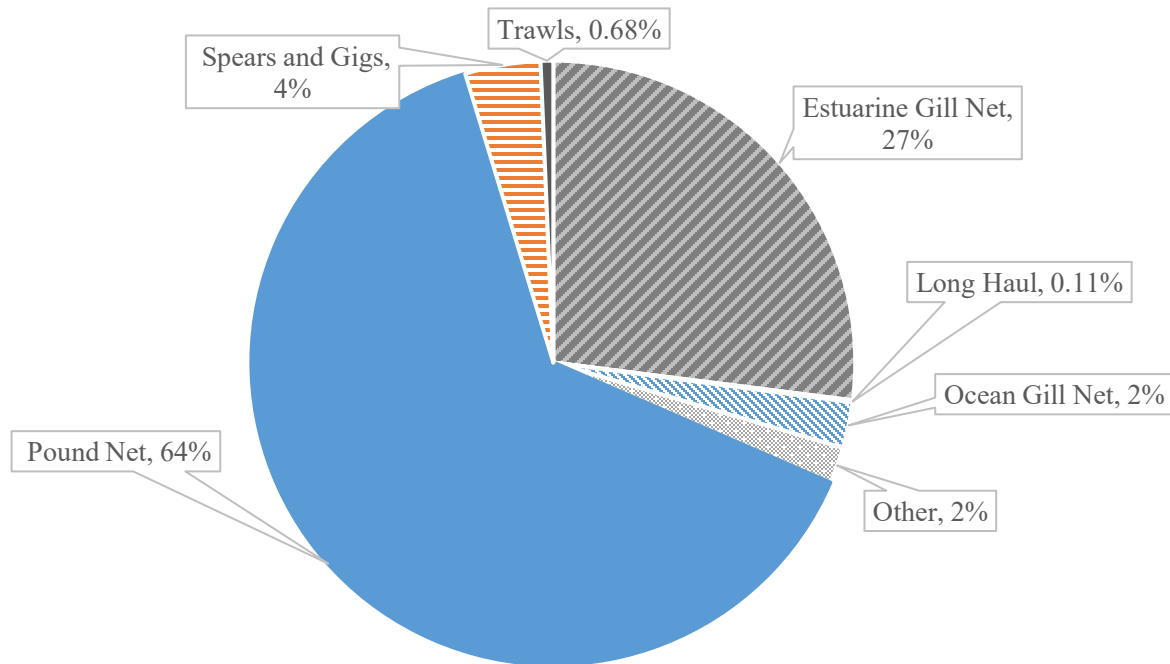


Figure 2. Annual Sheepshead commercial landings by gear type reported through the N.C. Trip Ticket Program, 2022–2025. Other gears include fyke nets, long haul, and hook and line. Spear and gig landings are combined due to data confidentiality.

Recreational Fishery

The recreational fishery is primarily a hook and line fishery. Recreational harvest estimates have been available since 1981. Recreational estimates across all years have been updated and are now based on the Marine Recreational Information Program (MRIP) new Fishing Effort Survey-based calibrated estimates. For more information see <https://www.fisheries.noaa.gov/topic/recreational-fishing-data>.

On average, recreational harvest accounts for 88% of North Carolina total harvest (lb) from 1994 to 2025. In 2025, recreational harvest accounted for 83% of the total harvest (Table 1). Like commercial harvest, recreational landings have fluctuated annually, with a low of 197,128 lb harvested in 1994 and a high of 1,456,396 lb in 2007 (Table 1). In 2024, 1,427,785 lb of Sheepshead were landed recreationally; the second highest value in the time series, and the highest since management was implemented in 2015. Recreational landings decreased by 46% from 2024 to 2025; 776,407 lb were landed in 2025. Recreational releases, likewise, decreased in 2025 though were still some of the highest in the time series. Since 2016, a larger targeted fishery has developed for this species. Recreational catch (harvest and releases, numbers) has increased since 2019, potentially the result of normal fluctuations in availability or possibly the result of increased regulations for other species such as southern flounder. Directed trips for Sheepshead (trips where anglers indicated Sheepshead were the primary or secondary target species) averaged 200,000 trips per year until 2021; directed trips increased 119% from 2020 to 2021. Directed trips for Sheepshead have remained high through 2025 (Figure 3). In 2025, 497,835 directed trips for Sheepshead were made by recreational anglers, the second highest value in the time series.

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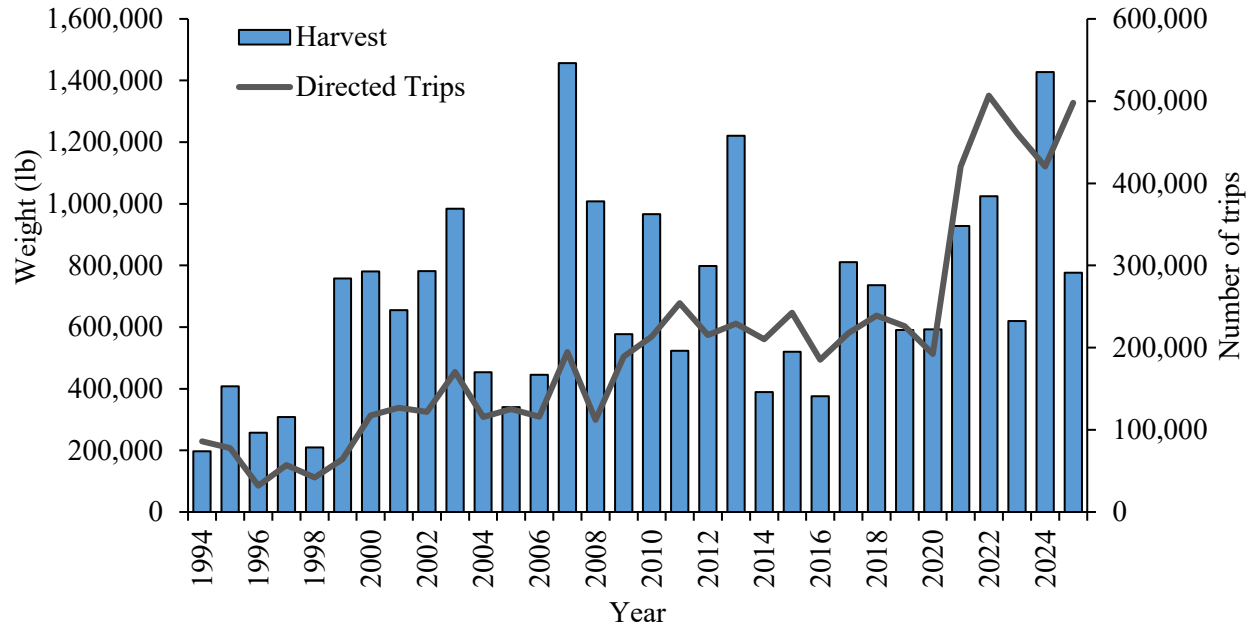


Figure 3. Annual recreational landings and directed trips for Sheepshead in North Carolina reported through the Marine Recreational Information Program, 1994–2025.

Most Sheepshead caught recreationally are from state Internal Coastal Fishing Waters followed by the Atlantic Ocean within 0-3 nm. Sheepshead are landed year-round with most catches in the late spring (May) and summer (June–August; NCDMF 2025). Since 2016, there is some evidence that landings have shifted into early spring (March–April) and late fall (November; NCDMF 2025). There are resident populations of Sheepshead on offshore structures, including nearshore reefs, all year (DMF, unpublished data); however, large aggregations are seen in specific locations as Sheepshead move from estuarine waters into the ocean to spawn in late winter/early spring. Significant increases in landings on these resident populations and on spawning aggregations could negatively affect the stock. Overall, Sheepshead landings from the Atlantic Ocean are highly variable across years without a clear trend (Figure 4). The division has examined recreational landings by two-month intervals (MRIP wave) and location (Internal Coastal Fishing Waters, Atlantic Ocean 0-3 nm, Atlantic Ocean >3 nm) to examine if there have been shifts in effort across time and space. However, when the data are broken down into this fine resolution, the confidence intervals increase such that any trends should be interpreted with caution.

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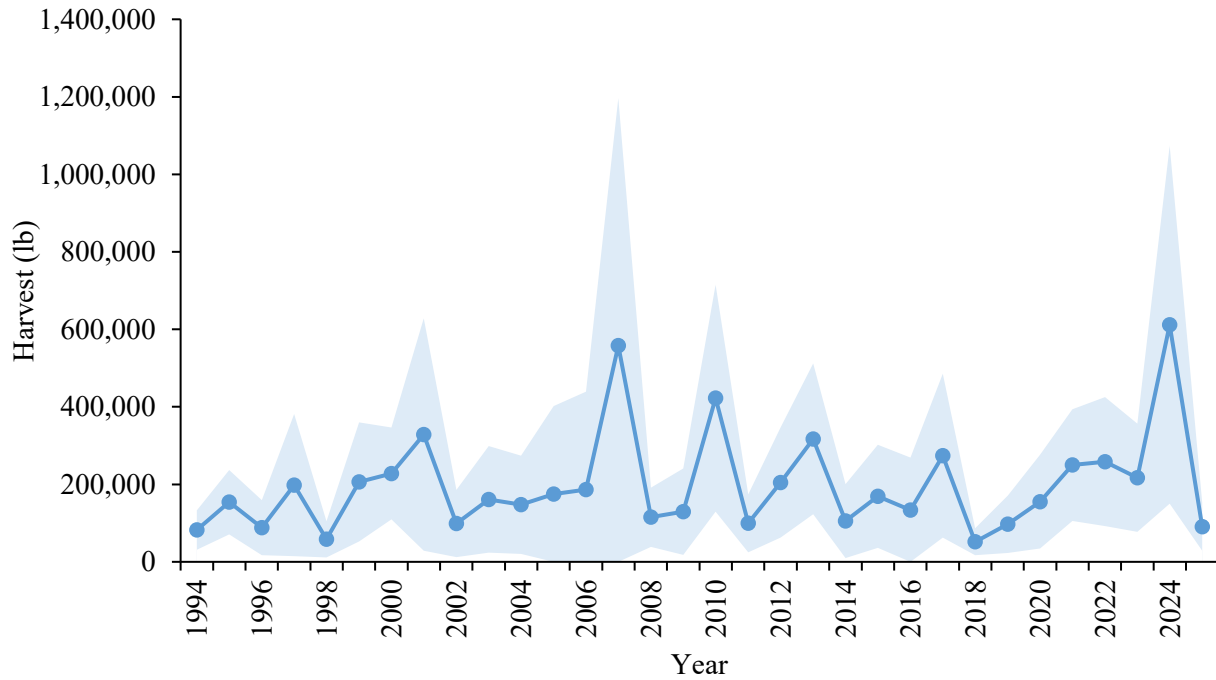


Figure 4. Annual recreational Sheepshead harvest from the Atlantic Ocean reported through the Marine Recreational Information Program, 1994–2025. The shaded area represents $\pm 95\%$ confidence interval.

The DMF offers award citations for exceptional catches of Sheepshead. Since 1991, approximately 3,500 citations for Sheepshead have been issued. From 1994 to 2007, the number of award citations was under 50 citations per year. From 2008 through 2014, the number of award citations increased steadily but then started to decrease (Figure 5). Between 2021 to 2023, the number of citations increased, and citations issued in 2022 and 2023 represent a 170% increase from 2021. In 2025, citations for Sheepshead awarded increased 166% from 2024 to the highest number on record; 524 citations were issued, 34 of which were released fish. Historically, citations for Sheepshead were for landed fish but as of 2024 a release category was added along with a minimum size requirement. Citations are awarded for Sheepshead that are greater than 8 lb or 23-in TL. On average, releases accounted for 13% of Sheepshead citations in 2024 and 2025.

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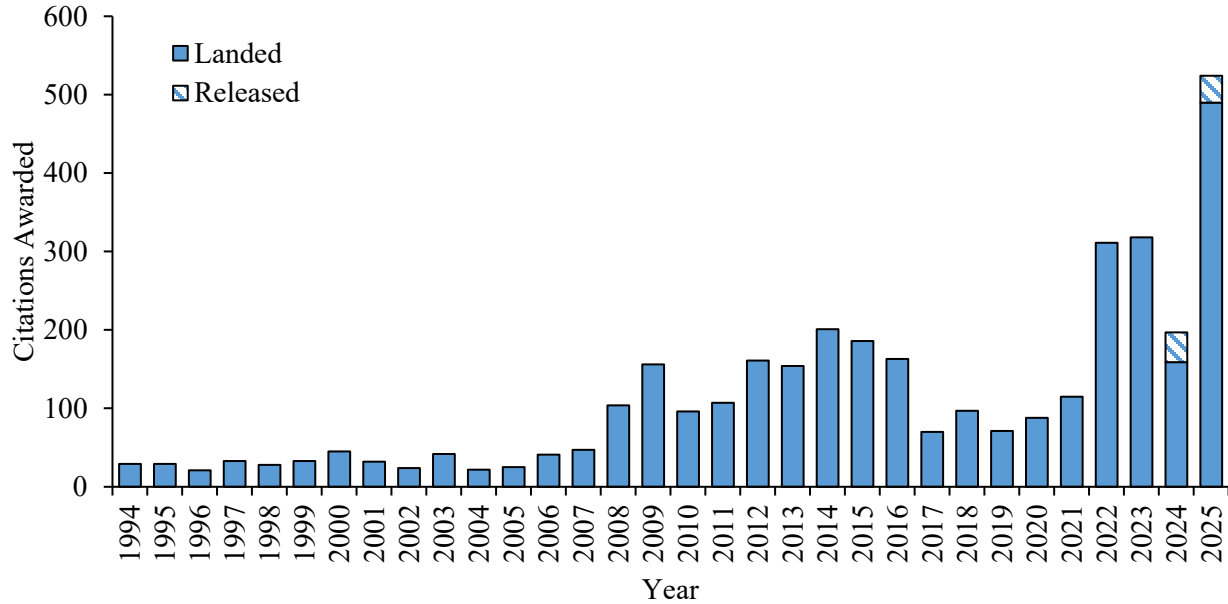


Figure 5. North Carolina Saltwater Fishing Tournament citations awarded for Sheepshead, 1994–2025. Citations are awarded for Sheepshead >8 lb or >23 in TL. Sheepshead release citations began in 2024.

MONITORING PROGRAM DATA

Fishery-Dependent Monitoring

Commercial fishing activity is monitored through fishery-dependent sampling programs conducted by DMF. Data collected in these programs allow the size and age distribution of Sheepshead to be characterized by gear and fishery. In 2025, 259 lengths were measured at fish houses or on the water, the majority of which came from the estuarine gill net, spear, and pound net fisheries. The mean length of commercial caught Sheepshead was 15 in FL (Table 3). This has varied from year to year (10 to 20 in FL), with the mean and minimum lengths being smaller when there was no size limit prior to 2015. The majority of Sheepshead landed in 2025 were between 14 and 19 in FL (Figure 6).

Similar to the commercial fishery, average size varies little from year to year in the recreational fishery (Table 3). In 2025, the average size recreational Sheepshead was 13 in FL (Table 3). The majority of Sheepshead landed in 2025 were between 10 and 19 in FL (Figure 7). The maximum length observed by MRIP in the recreational fishery was 25 in FL; however, fish up to 28 in FL were observed by the citation program in 2024.

In both fisheries, sublegal fish (<10 in FL) were still being harvested (Table 3; Figures 6 and 7). This is most likely due to fishermen confusing Sheepshead and Black Drum regulations. While the size limits differed in 2025, Black Drum were measured for TL and Sheepshead for FL; a 10-in TL Sheepshead would be just under 9 in FL. To better align Sheepshead regulations with Black Drum, the Sheepshead minimum size was increased to 14-in TL effective March 1, 2026 (Proclamation [FF-16-2026](#)). This change in size limit should help eliminate the harvest of sublegal fish.

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Table 3. Sheepshead length (FL, in) data from commercial fish house and Marine Recreational Information Program samples, 1994–2025.

Year	Commercial				Recreational			
	Mean Length	Minimum Length	Maximum Length	Total Number Measured	Mean Length	Minimum Length	Maximum Length	Total Number Measured
1994	12	10	18	9	7	13	21	179
1995	14	5	23	88	7	14	22	174
1996	15	7	22	137	15	9	26	79
1997	16	6	24	102	11	6	24	134
1998	13	6	24	330	11	6	23	191
1999	13	8	24	492	14	7	29	187
2000	16	8	28	1,305	13	8	24	239
2001	15	8	22	306	15	10	30	132
2002	13	8	24	412	16	10	23	56
2003	14	9	24	421	14	8	26	96
2004	16	8	23	305	17	9	24	54
2005	17	7	25	443	16	9	23	34
2006	16	8	24	467	15	7	24	55
2007	14	7	24	850	15	7	24	118
2008	13	6	24	1,420	12	7	21	108
2009	12	6	23	1,399	11	7	21	159
2010	13	7	24	1,743	14	8	26	221
2011	15	9	24	1,247	14	7	25	160
2012	13	7	23	1,161	13	6	23	254
2013	13	7	24	1,283	11	6	24	351
2014	14	7	23	1,296	13	8	25	99
2015	15	8	24	982	14	9	23	134
2016	15	8	24	964	14	8	25	106
2017	14	9	23	348	14	4	22	272
2018	14	8	23	694	13	9	23	386
2019	15	8	24	624	14	10	25	243
2020	14	9	22	426	13	8	25	260
2021	13	8	23	586	14	8	22	177
2022	13	8	22	431	14	8	25	222
2023	13	9	22	336	13	9	22	218
2024	14	10	24	235	15	9	24	118
2025	15	10	25	259	13	8	25	149

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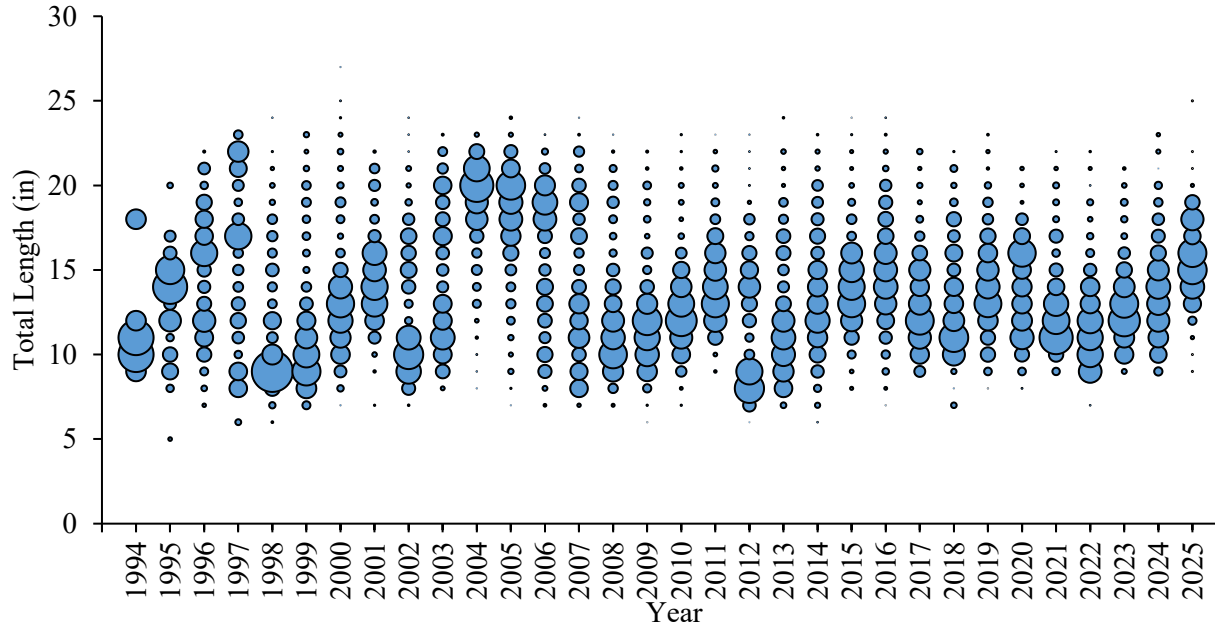


Figure 6. Commercial length frequency of Sheepshead harvested in North Carolina reported from commercial fish house sampling, 1994–2025. Bubbles represent fish at length and the bubble size is proportional to the number of fish at that length.

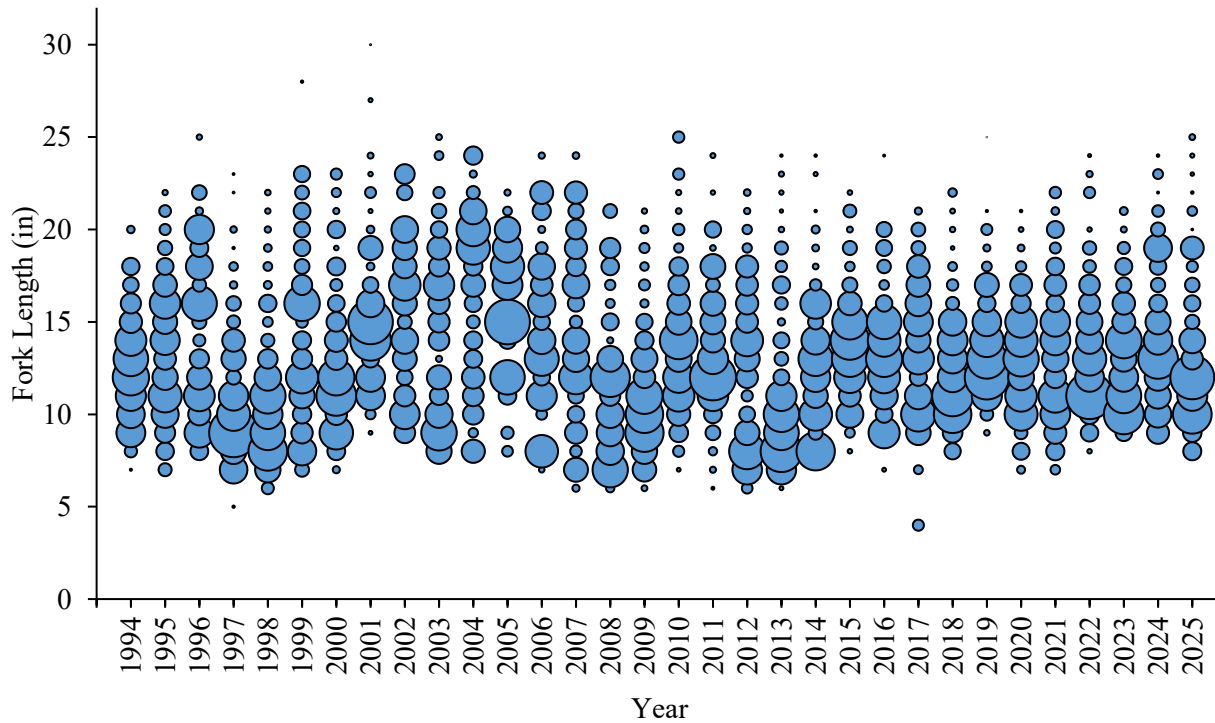


Figure 7. Recreational length frequency of Sheepshead harvested from North Carolina reported from the Marine Recreational Information Program, 1994–2025. Bubbles represent fish at length and the bubble size is proportional to the number of fish at that length.

Fishery-Independent Monitoring

In 2001, the DMF initiated a fishery-independent gill net survey in Pamlico Sound (Program 915). The objective of this project is to provide annual, independent, relative-abundance indices for key estuarine species in the nearshore Pamlico Sound. The survey employs a stratified random sampling design and utilizes multiple mesh gill nets (3.0-in to 6.5-in stretched mesh, by ½-in increments). By continuing a long-term database of age composition and developing a relative index of abundance for Sheepshead this survey will help managers assess the Sheepshead stock without relying solely on commercial and recreational fishery-dependent data. The relative index of abundance (number of Sheepshead per set) is calculated using samples from the east side of the Pamlico Sound from May to November annually. Sampling in this program was suspended in February 2020 due to COVID-19 restrictions and protected species interactions but resumed July 2021. Data from this survey was one of three sub-adult and adult indices of relative abundance used to assess Sheepshead in the southeast Atlantic (Teears 2023). While the assessment has not been approved for management, data from this survey will be critical in assessing the stock in the future.

Subadult and adult abundance has shown an increasing trend across years. During the first 12 years of the time-series (2001–2012), the relative abundance of Sheepshead was low. However, since 2012 relative abundance has increased. The annual index of abundance was 3.41 in 2025 and represents the highest relative abundance in the time series (Figure 8). Sheepshead between 7 and 22 in FL were collected, with lengths less than 16 in being the most common (Figure 9). The independent gill net survey uses nets of differing mesh sizes capable of catching Sheepshead across a wide range of lengths and ages, but not across the entire size range due to gear selectivity. Additionally, sampling locations may affect the number and size range of Sheepshead caught, as sets do not always occur on or adjacent to structure, which is the preferred habitat for the larger, older, and mature fish. The number of potentially immature and smaller fish may be eclipsing any increase in larger, mature fish encountered by the survey; however, similar patterns are seen in the recreational and commercial length frequencies.

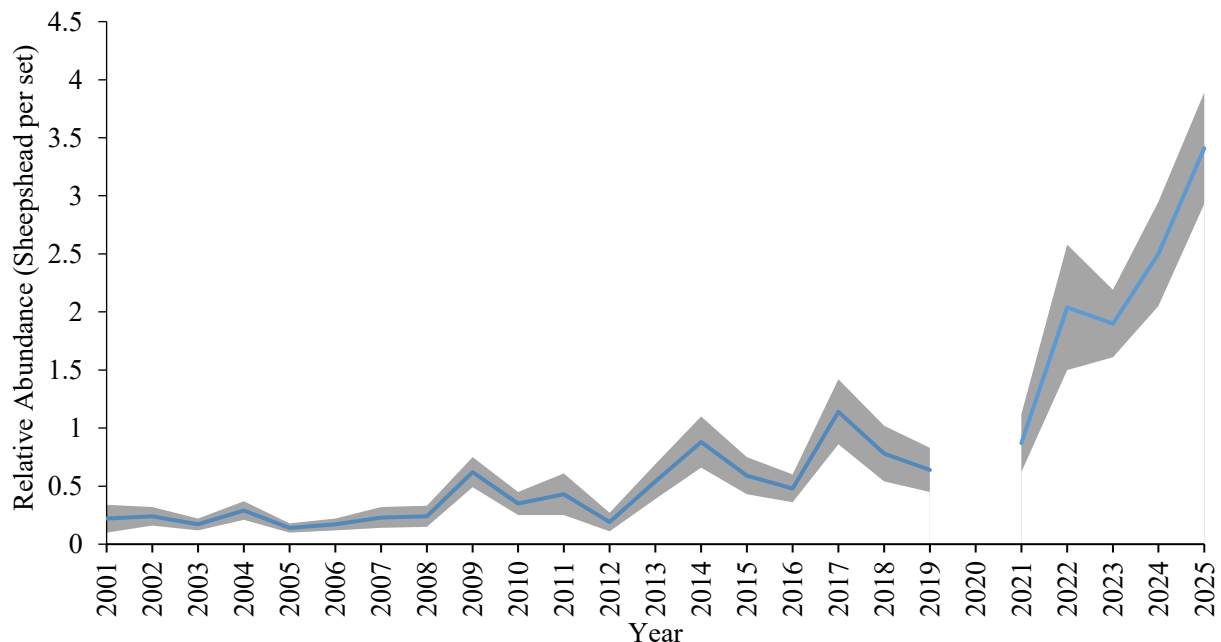


Figure 8. Annual index of relative abundance of Sheepshead from the DMF Fishery-Independent Gill Net Survey (Program 915) in the Pamlico Sound, 2001–2025. Shaded area represents ± 1 SE. Sampling in this program was suspended in February 2020 due to COVID-19 restrictions and protected species interactions but resumed July 2021.

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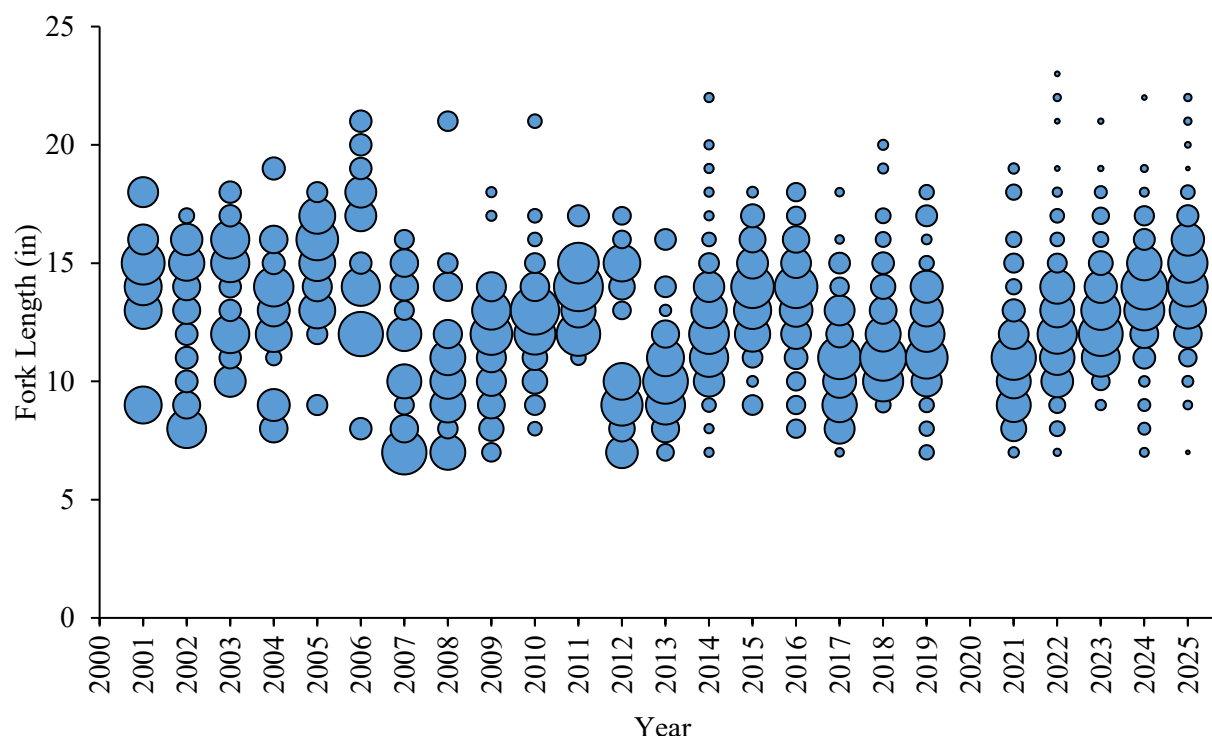


Figure 9. Length frequency of Sheepshead from the DMF Fishery-Independent Gill Net Survey (Program 915) in the Pamlico Sound, 2001–2025. Bubbles represent fish at length and the bubble size is proportional to the number of fish at that length. Sampling in this program was suspended in February 2020 due to COVID-19 restrictions and protected species interactions but resumed July 2021.

Data collected by Program 120 (Estuarine Trawl Survey) are used to calculate a relative Juvenile Abundance Index (JAI). Program 120 is a fishery-independent multispecies monitoring program that has been ongoing since 1971 in the months of May and June. One of the key objectives of this program is to provide a long-term database of annual juvenile recruitment for economically important species. This survey samples a fixed set of 104 core stations with additional stations as needed. The core stations are sampled from western Albemarle Sound south to the South Carolina border each year without deviation two times in the months of May and June. An additional set of 27 Spotted Seatrout (*Cynoscion nebulosus*) juvenile stations in Pamlico Sound and its major tributaries were added in 2004 and are sampled during the months of June and July. Data from the Spotted Seatrout specific stations are used to generate an index of relative abundance of age-0 Sheepshead, calculated as the average number of fish per tow; these sites are used as the habitat utilized by species is the same. The resulting relative abundance index for the time series is variable with no significant trend and peaks in 2008 and 2015 suggesting relatively higher recruitment in those years (Figure 10). No Sheepshead were caught in Program 120 in 2025.

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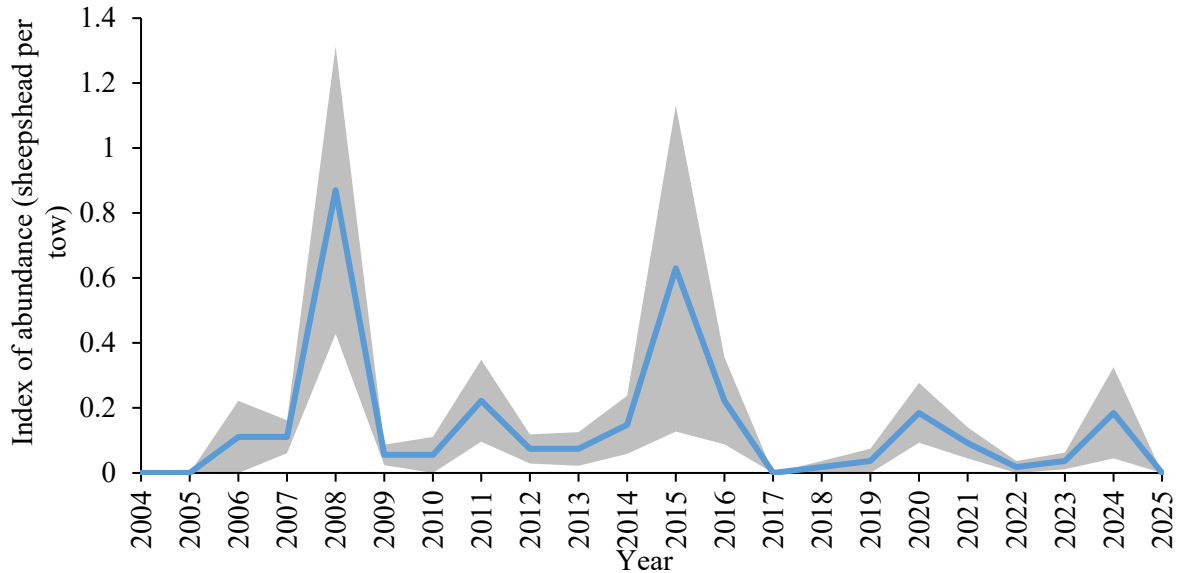


Figure 10. Annual juvenile index of abundance of Sheepshead from the DMF Estuarine Trawl Survey (Program 120), 2004–2025. Shaded area represents ± 1 SE.

In order to describe the age distribution of the harvest and indices, Sheepshead age structures are collected from various fishery independent and dependent sources throughout the year. Otolith collection for Sheepshead is relatively new, though there are samples going back to 2008. The collection of Sheepshead otoliths was not made a sampling priority until 2013. The majority of Sheepshead collected are between ages 1 and 8 (Table 4). The maximum reported age is 34 years. In 2025, 534 Sheepshead were aged, and ranged from age-0 to age-31. The age-length relationship is hard to predict as there is overlap in age for a given length (Figure 11).

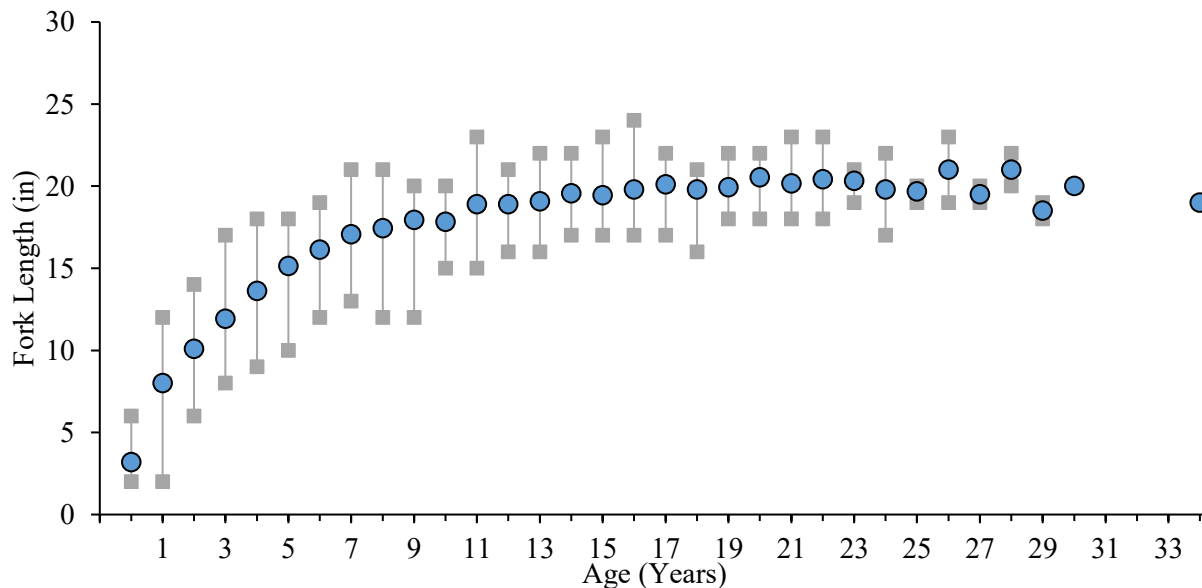


Figure 11. Sheepshead length at age based on all age samples collected from DMF fishery-dependent (commercial and recreational) and independent (survey) sources, 2008–2025. Blue circles represent the mean size at a given age while the grey squares represent the minimum and maximum observed size for each age.

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Table 4. Summary of Sheepshead age samples collected from both DMF fishery-dependent (commercial and recreational) and independent (survey) sources, 2008–2025.

Year	Modal Age	Minimum Age	Maximum Age	Total Number Aged
2008	2	2	8	10
2009		3	25	5
2010	6	3	18	10
2011	4	3	10	14
2012	1	1	27	8
2013	2	1	23	151
2014	3	1	24	241
2015	4	1	24	143
2016	5	0	30	212
2017	2	1	29	262
2018	2	0	28	228
2019	3	0	29	356
2020	1	1	34	200
2021	2	0	24	269
2022	3	1	26	439
2023	3	1	22	317
2024	4	1	23	389
2025	4	0	31	534

RESEARCH NEEDS

The following have been identified as research needs for Sheepshead in North Carolina.

- Initiate a Sheepshead tagging program to develop estimates of growth, natural mortality, fishing mortality, and track the movement of adults throughout the stock's range; include methods to estimate tag retention, reporting rate, and tagging-induced mortality.
- Conduct reproductive studies including spawning periodicity, age- and size-specific fecundity, update maturity schedule, and conduct spawning area surveys in North Carolina and throughout the stock's range.
- Expand discard sampling to collect information on gear, depth, location, and age and size distribution of discarded fish for the recreational and commercial sectors.
- Conduct studies on size- and age-specific selectivity by gear type.
- Determine the patterns and triggers of inshore-offshore migrations.

MANAGEMENT

See Table 5 for current management strategies and implementation status for Sheepshead.

Table 5. Summary of management strategies and their implementation status for Sheepshead.

Management Strategy	Implementation Status
Harvest management: Implement a minimum size limit of 10-in FL both sectors; recreational bag limit of 10 fish per person per day or trip, whichever more restrictive; 300-lb commercial trip limit for all gears except for spear and gig (10 fish per person per day or per trip) and pound nets (no limit)	Proclamation FF-28-2015

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Harvest management: Increase minimum size limit to 14-in TL for both sectors, decrease recreational bag limit to 5 fish per person per day or trip, and implement 1,500-lb commercial trip limit for pound nets. Maintain 300-lb commercial trip limit for all gears except for spear and gig, which remain at 10 fish per person per day or per trip

MANAGEMENT PERFORMANCE AND FISHERY MANAGEMENT PLAN SCHEDULE RECOMMENDATIONS

Landings have remained high for the recreational and commercial sectors since implementation of management measures in 2015, and some of the highest landings have occurred in the last several years. Directed recreational trips have doubled since 2020, after remaining steady for most of the time series. Recreational landings in most of the last 5 years represent some of the highest values in the time series. Commercial effort, the number of commercial trips landing Sheepshead, has increased since 2020 and the average pounds per trip is increasing. The majority of Sheepshead harvested by both sectors are immature fish with fewer larger and older fish being seen in the fishery and division sampling. A decline in older fish and increases in fishing pressure could lead to localized depletion of larger, older fish, which has implications for reproduction and population abundance. Due to these trends, in fall 2025 the DMF solicited public input about the need for Sheepshead management changes. After considering public input, the DMF issued a proclamation effective March 1, 2026, implementing management changes (see Current Regulations section). DMF will continue to monitor trends in data through the annual FMP Review to determine how the 2026 management measures are affecting landings and age structure.

The Division recognizes a stock assessment and Fishery Management Plan (FMP) for Sheepshead would provide additional information to guide future management. However, given the number of species currently prioritized for assessment and FMP review and the recent changes to Sheepshead management measures, the Division will consider the appropriate timing for these efforts as future assessment and FMP needs are evaluated.

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