

## **Chapter IV: CENTRAL AND SOUTHERN MANAGEMENT AREA RECREATIONAL FISHERY STATISTICS**

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## **PROGRAM NARRATIVE**

### **The Coastal Angling Program**

The mission of the Coastal Angling Program (CAP) is to systematically collect recreational fisheries data using the best available scientific methods to accurately quantify and describe recreationally important marine fisheries of North Carolina.

Effective fisheries management requires accurate information on the number and size distributions of fisheries stocks. The Magnuson-Stevens Fishery Conservation and Management Act (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. The MSFCMA also requires fishery management plans consider both recreational and commercial fisheries as well as their harvests.

The North Carolina Fisheries Reform Act of 1997 mandated the development of fishery management plans (FMPs) for fisheries of importance to North Carolina. The data collected and the estimates of finfish harvest and angler participation generated by CAP play a key role in the FMP development process. These data and estimates also play a critical role in DMF's compliance with the MSFCMA and the North Carolina Fisheries Reform Act.

To accomplish this mission, CAP oversees the following data collection initiatives:

- Marine Recreational Information Program
- Anadromous Creel Surveys
- Recreational Saltwater Activity Mail Surveys

### **Anadromous Creel Surveys**

Coastal Striped Bass populations have continuously provided a popular and economically important fishery in North Carolina. Despite past surveys covering a considerable area, data were lacking in the Central/Southern Management Area (CSMA) where the stock was listed as overfished in 2003. The 2004 North Carolina Estuarine Striped Bass Fishery Management Plan addressed this issue, calling for assessments of the fishery. A comprehensive creel survey was initiated in January 2004 to identify and estimate recreational Striped Bass effort and catch in the CSMA. In 2012, other anadromous fish (i.e., American and Hickory Shad) were included in the estimation process.

## SURVEY METHODOLOGY

### **Study Area**

The CSMA includes all internal coastal, joint, and contiguous inland waters of North Carolina south of a line from Roanoke Marshes Point, across to Eagle Nest Bay and to the South Carolina state line. The areas surveyed in the CSMA include the Neuse, Trent, Tar/Pamlico, Cape Fear, and Pungo rivers (*see Figure IV.1*). The Neuse River basin drains over 6,200 square miles of land with over 3,000 miles of streams and rivers. The mouth of the main channel is six miles across – the widest in the United States. Over 1.3 million residents reside within this river basin. Major tributaries include Crabtree, Swift, and Contentnea creeks, along with the Eno, Little, and Trent rivers. Survey points included 45 boat ramps and fishing access points from Millburnie Park in East Raleigh to Lee's Landing on Broad Creek. The river was divided into three segments: 1) all access points in Goldsboro and upstream were labeled as the upper zone, 2) sites on Contentnea Creek and downstream from Goldsboro to Core Creek were labeled the middle zone, and 3) the sites downstream from Core Creek were labeled the lower zone.

The Tar/Pamlico River watershed drains over 5,500 square miles with over 2,400 miles of streams and rivers. Major tributaries include Cokey Swamp, Swift, Fishing, and Tranters creeks, and the 30-mile Pungo River near Belhaven, North Carolina – the main tributary in the lower basin. Access points surveyed on the Tar/Pamlico River include 19 boat ramps and access sites from Battle Park in Rocky Mount to the Quarterdeck Marina in Bath, NC. This system was divided into upper and lower zones, with sites upstream of Greenville, NC considered the upper zone (*see Figure IV.1*). The Pungo River was surveyed at the Leechville ramp (NC-264 bridge), the Belhaven North Carolina Wildlife Resource Commission (NCWRC) ramp, the Highway 99 Ramp in Belhaven, Wright's Creek Wildlife Resource Commission Ramp, and Cee Bee Marina on Pungo Creek.

Beginning in 2012, sampling within the CSMA was expanded to include the upper reaches of the Tar/Pamlico and Neuse Rivers. Additionally, the southernmost rivers in the CSMA (White Oak, New, Cape Fear, and Shallotte rivers) were excluded from the study area due to comparatively low recreational Striped Bass catch, but the Cape Fear was included to target shad (American and Hickory) beginning in 2013.

### **Sampling Procedures**

Recreational fishing statistics from the CSMA were calculated through a non-uniform stratified access-point creel survey (Pollock et al. 1994) on the Neuse, Pamlico, and Pungo rivers from January to December. Site probabilities were set in proportion to the likely use of the site according to time of day, day of the week, and season. Probabilities for this survey were assigned based on observed effort from past years and direct observation by creel clerks. Morning and afternoon periods were assigned unequal probabilities of conducting interviews, with each period representing half a fishing day. A fishing day was defined as the period from one hour after sunrise until one hour after sunset. This is slightly different than in years prior to 2012 where the fishing day was defined as beginning 1.5 hours after sunrise. Monthly sampling periods for each

river and zone were stratified accordingly, and all weekend and holiday dates along with two randomly selected weekdays were chosen from each week for sampling.

Tar/Pamlico River anglers in the upper zone were interviewed throughout the spring months coinciding with anadromous species' spawning runs (January-May), while anglers in the lower zone were interviewed year-round based on the evidence of a year-round fishery and no seasonal closures. Two creel clerks were assigned to this river, with one surveying the upper zone January through May and one clerk surveying the lower zone from January through December. The three zones within the Neuse River were covered with one creel clerk per zone. The lower zone was surveyed from January to December while middle zone surveys were conducted January-May and the upper zone surveys from February to May to coincide with anadromous species' spawning runs. The Pungo River was surveyed throughout the year with one creel clerk.

Returning fishing parties were interviewed by a creel clerk at the selected access point to obtain information regarding party size, effort, total number of fish harvested and/or released, primary fishing method, and location. Harvested fish were identified, counted, measured to the nearest mm fork length (converted to centerline length and total length for appropriate species), and weighed to the nearest 0.1 kg, while information on discarded fish was obtained from the angler to acquire the number and status of discarded individuals. Scale collections were taken from available fish to determine age of catch. The age structures were given to the Fisheries Management section of the North Carolina Division of Marine Fisheries (NCDMF) for age determination. Creel clerks also obtained socioeconomic information from the angler, including age, state and county of residence, sex, ethnic background, trip information, and expenditures. The survey instrument used by creel clerks for interviews and assignment summary records are shown in Appendix IV.1 through Appendix IV.3.

## **Analyses**

### **Effort and Catch Estimations**

Samples were reduced to Striped Bass effort and catch only. Results were stratified by river, access point, and time of day. Catch was defined as the sum of harvested fish and discarded fish. Discarded fish equaled the sum of fish caught in excess of creel limits (over-creel), legal-sized fish caught and released, and sub-legal fish returned to the water. Daily effort and catch for each river were calculated by expanding observed numbers by the sample unit probability (time of day probability multiplied by access area probability). Total catch estimates for the CSMA and catch estimates for each zone and type of day were calculated based on the Horvitz-Thompson estimator for non-uniform probability sampling as such:

$$C = \sum_{i=1}^n (c_i / p_i)$$

where a sample of  $n$  units is taken, and the probability of the  $i^{th}$  unit being in the sample is denoted by  $p_i$  (Pollock et al. 1994). Total effort, in number of trips, over the CSMA and each individual zone and type of day were estimated in the same fashion, as were other extrapolated data. Targeted trips presented refer to trips where the angler explicitly identified their target species during the sampling interview. If multiple species were targeted, then a primary target species was

designated (1<sup>st</sup> target; see Appendix IV.1). Approximate standard errors (SE) of the catch and effort estimates within zone and type of day were calculated according to:

$$SE = \sqrt{N^2 \left( \frac{s^2}{n} \right)}$$

where  $s^2$  is the variance of the observations,  $n$  is the number of days sampled, and  $N$  is the number of days of that type available for sampling (Pollock et al. 1994). Percent standard errors (PSE) for the year are presented by river system and zone. Monthly PSEs within river system and zone are available upon request. Estimated catch per unit effort (CPUE) values were obtained by dividing estimated catch by estimated Striped Bass trips as well as angler hours (angler-h) in order to identify trends in fishing pressure and angler success. Size structure of Striped Bass in harvests was described for each zone using length-frequency distributions of observed samples. Fishing party characteristics and methods used during Striped Bass trips reported by anglers were documented by river and day type. The database was created using Access<sup>®</sup> and statistical analyses were performed with SAS 9.4<sup>®</sup>. Beginning in 2012, the NCWRC Portal Access to Wildlife Systems (PAWS) was used to house these data and estimate effort and catch. NCDMF and NCWRC staff have been verifying calculations to ensure consistency with the previous work.

*Please note: Estimates of catch and effort are expanded averages presented as whole numbers. Any inconsistency in the total catch and/or effort due to adding across rows or columns presented in this chapter is due to rounding.*

### **Angler Demographics and Economic Analysis**

The CSMA Creel Survey socioeconomic questionnaire (see Appendix IV.3) included questions to identify characteristics of the Striped Bass angling population. Demographics of anglers were reported according to age, residency, gender, and ethnic background, and are expressed as a percentage of the total angling population throughout the CSMA. Mean values were calculated for quantitative data. Results were further grouped by river and day type. Anglers were grouped as local, regional, or out-of-state residents. Local anglers resided within the county, while regional anglers resided elsewhere in North Carolina. The socioeconomic questionnaire also included questions regarding trip length, distance traveled, party size, and expenditures across lodging, food, ice, bait, equipment rental, and boat fuel and oil. Mean weighted expenditures per trip were reported by river and day type. Lodging and rental expenses were rarely encountered; therefore, they are not included within this report. The weighted mean of each expenditure was totaled to provide an average trip cost. The economic impact analysis can be found in Chapter VI.

### **LITERATURE CITED**

- Pollock, K. H., C. M. Jones, and T. L. Brown. 1994. Angler survey methods and their applications in fisheries management. American Fisheries Society. Special Publication 25, Bethesda, Maryland.

## **CONTACTS**

This project was funded under the Federal Aid in Sport Fish Restoration Program using state fishing license money and federal grant funds derived from federal excise taxes on fishing tackle and other fishing related expenditures.

Funds from the Sport Fish Restoration Program are used for aquatic education, fisheries research and management, and boating access facilities. This program is administered cooperatively by the NCDMF, the NCWRC, and the U.S. Fish and Wildlife Service. For additional information regarding the survey or for a complete report, please reach out to one of the contacts below:

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**Table IV.1 Measures of central tendency for lengths and weights of Striped Bass<sup>1</sup> (observed).**

Year	River	Length (inches)				Weight (pounds)		
		N	Min	Max	Mean	Min	Max	Mean
2019	Upper Neuse River	0	0	0	0	0	0	0
	Middle Neuse River	0	0	0	0	0	0	0
	Lower Neuse River	18	17.28	21.76	19.67	2.65	4.41	3.44
	Upper Tar River	1	26.26	26.26	26.26	6.61	6.61	6.61
	Lower Tar-Upper Pamlico River	8	14.98	19.46	17.72	1.54	3.53	2.62
	Pungo River	1	18.82	18.82	18.82	2.54	2.54	2.54
2018	Total	28	14.98	26.26	19.32	1.54	6.61	3.28
	Upper Neuse River	0	0	0	0	0	0	0
	Middle Neuse River	14	17.93	27.07	20.70	2.09	8.38	3.73
	Lower Neuse River	25	17.57	27.23	19.19	2.09	8.82	3.04
	Upper Tar River	1	19.22	19.22	19.22	3.53	3.53	3.53
	Lower Tar-Upper Pamlico River	101	16.47	22.16	18.94	1.65	4.41	3.03
2017	Pungo River	14	17.61	29.27	21.03	2.20	11.91	3.87
	Total	155	16.47	29.27	19.33	1.65	11.91	3.17
	Upper Neuse River	0	0	0	0	0	0	0
	Middle Neuse River	8	19.42	29.60	23.99	2.82	13.80	7.14
	Lower Neuse River	70	17.57	28.03	20.50	1.98	10.80	3.89
	Upper Tar River	19	17.44	22.24	19.82	2.18	5.95	3.60
2016	Lower Tar-Upper Pamlico River	88	17.32	26.18	20.10	2.20	8.82	3.61
	Pungo River	17	18.82	26.47	20.89	1.54	6.39	3.20
	Total	202	17.32	29.60	20.43	1.54	13.80	3.81
	Upper Neuse River	0	0	0	0	0	0	0
	Middle Neuse River	2	18.90	20.27	19.58	2.87	3.59	3.23
	Lower Neuse River	21	17.97	28.87	20.52	2.20	8.82	3.73
2015	Upper Tar River	16	17.49	32.96	21.40	2.31	9.48	3.81
	Lower Tar-Upper Pamlico River	81	17.57	27.47	19.72	2.20	7.94	3.61
	Pungo River	24	18.25	26.95	20.81	2.43	5.95	3.41
	Total	144	17.49	32.96	20.20	2.20	9.48	3.61
	Upper Neuse River	2	16.31	19.91	18.11	1.65	3.09	2.37
	Middle Neuse River	2	26.26	26.91	26.59	2.98	9.26	6.12
2014	Lower Neuse River	25	17.57	26.10	19.98	2.09	7.50	3.48
	Upper Tar River	3	19.62	21.64	20.38	3.75	4.85	4.19
	Lower Tar-Upper Pamlico River	41	17.69	24.26	20.37	1.76	15.43	3.78
	Pungo River	33	18.13	26.99	21.28	1.98	7.05	3.33
	Total	106	16.31	26.99	20.63	1.65	15.43	3.60
	Upper Neuse River	2	20.63	20.63	20.63	3.86	3.86	3.86
2013	Middle Neuse River	0	0	0	0	0	0	0
	Lower Neuse River	32	17.93	30.24	21.39	2.31	14.33	4.76
	Upper Tar River	0	0	0	0	0	0	0
	Lower Tar-Upper Pamlico River	64	18.45	27.39	19.94	2.76	9.48	3.69
	Pungo River	17	19.79	20.03	19.91	2.43	4.85	3.46
	Total	115	17.93	30.24	20.47	2.31	14.33	3.94

<sup>1</sup>From March 2019 onward, harvest of Striped Bass in the CSMA is prohibited, and no catch information was collected during this time.

**Table IV.2 Measures of central tendency for lengths and weights of American Shad (observed).**

Year	River	Length (inches)				Weight (pounds)		
		N	Min	Max	Mean	Min	Max	Mean
2023	Upper Neuse River	1	16.50	16.50	16.50	2.43	2.43	2.43
	Middle Neuse River	0	0	0	0	0	0	0
	Lower Neuse River	0	0	0	0	0	0	0
	Upper Tar River	11	13.98	17.99	15.85	0.88	3.53	1.92
	Lower Tar-Upper Pamlico River	0	0	0	0	0	0	0
	Pungo River	0	0	0	0	0	0	0
	Cape Fear River	38	14.09	20.67	17.25	1.65	3.97	2.57
2022	Total	50	13.98	20.67	16.93	0.88	3.97	2.41
	Upper Neuse River	3	13.39	16.89	15.17	1.10	2.65	1.93
	Middle Neuse River	5	16.06	17.01	16.63	1.54	2.20	1.87
	Lower Neuse River	0	0	0	0	0	0	0
	Upper Tar River	5	15.08	18.11	17.04	1.21	3.75	2.69
	Lower Tar-Upper Pamlico River	0	0	0	0	0	0	0
	Pungo River	0	0	0	0	0	0	0
2021	Cape Fear River	27	13.39	18.11	15.85	0.99	3.09	2.02
	Total	40	13.39	18.11	16.04	0.99	3.75	2.08
	Upper Neuse River	1	17.91	17.91	17.91	3.42	3.42	3.42
	Middle Neuse River	0	0	0	0	0	0	0
	Lower Neuse River	0	0	0	0	0	0	0
	Upper Tar River	9	13.94	18.23	16.83	1.43	3.42	2.61
	Lower Tar-Upper Pamlico River	0	0	0	0	0	0	0
2020	Pungo River	0	0	0	0	0	0	0
	Cape Fear River	93	11.10	19.29	16.66	1.10	5.40	2.50
	Total	103	11.10	19.29	16.69	1.10	5.40	2.52
	Upper Neuse River	7	14.76	17.09	15.87	1.50	2.65	1.93
	Middle Neuse River	7	9.61	17.99	15.24	0.55	3.53	2.20
	Lower Neuse River	0	0	0	0	0	0	0
	Upper Tar River	8	14.92	17.40	16.38	1.76	3.09	2.66
2019	Lower Tar-Upper Pamlico River	0	0	0	0	0	0	0
	Pungo River	0	0	0	0	0	0	0
	Cape Fear River	88	12.20	19.17	15.72	0.18	4.41	2.28
	Total	110	9.61	19.17	15.74	0.18	4.41	2.28
	Upper Neuse River	7	15.59	17.13	16.41	1.65	2.65	2.14
	Middle Neuse River	5	13.54	17.76	15.61	1.23	2.98	2.09
	Lower Neuse River	0	0	0	0	0	0	0
2018	Upper Tar River	19	13.43	17.40	15.35	0.99	2.76	1.73
	Lower Tar-Upper Pamlico River	0	0	0	0	0	0	0
	Pungo River	0	0	0	0	0	0	0
	Cape Fear River	148	11.89	19.45	15.36	1.10	4.41	2.50
	Total	179	11.89	19.45	15.41	0.99	4.41	2.39

**Table IV.2 Measures of central tendency for lengths and weights of American Shad (observed) (continued).**

Year	River	Length (inches)				Weight (pounds)		
		N	Min	Max	Mean	Min	Max	Mean
2018	Upper Neuse River	3	16.54	18.03	17.30	2.87	4.00	3.20
	Middle Neuse River	4	13.62	18.90	16.11	1.32	3.75	2.45
	Lower Neuse River	0	0	0	0	0	0	0
	Upper Tar River	13	16.93	20.47	18.29	1.54	3.53	2.32
	Lower Tar-Upper Pamlico River	0	0	0	0	0	0	0
	Pungo River	0	0	0	0	0	0	0
	Cape Fear River	210	12.76	19.41	16.43	0.44	3.97	2.34
Total		230	12.76	20.47	16.54	0.44	4.00	2.38
2017	Upper Neuse River	1	18.41	18.41	18.41	1.43	1.43	1.43
	Middle Neuse River	16	13.93	19.02	16.67	1.43	4.41	2.57
	Lower Neuse River	1	17.65	17.65	17.65	3.31	3.31	3.31
	Upper Tar River	13	14.98	19.02	17.09	1.21	3.97	2.41
	Lower Tar-Upper Pamlico River	0	0	0	0	0	0	0
	Pungo River	0	0	0	0	0	0	0
	Cape Fear River	75	13.97	22.61	19.38	1.10	4.41	2.78
Total		106	13.93	22.61	18.66	1.10	4.41	2.70
2016	Upper Neuse River	4	15.12	17.99	16.23	1.54	2.54	2.07
	Middle Neuse River	2	15.47	16.85	16.16	1.65	2.43	2.04
	Lower Neuse River	0	0	0	0	0	0	0
	Upper Tar River	6	11.85	19.49	15.45	1.32	3.06	1.82
	Lower Tar-Upper Pamlico River	0	0	0	0	0	0	0
	Pungo River	0	0	0	0	0	0	0
	Cape Fear River	369	5.63	22.05	16.54	0.66	4.19	2.24
Total		381	5.63	22.05	16.52	0.66	4.19	2.23
2015	Upper Neuse River	3	14.98	17.12	16.11	1.32	1.98	1.69
	Middle Neuse River	0	0	0	0	0	0	0
	Lower Neuse River	0	0	0	0	0	0	0
	Upper Tar River	14	15.59	22.61	20.03	1.32	3.75	3.24
	Lower Tar-Upper Pamlico River	0	0	0	0	0	0	0
	Pungo River	0	0	0	0	0	0	0
	Cape Fear River	131	13.32	20.47	17.87	0.99	4.30	2.74
Total		148	13.32	22.61	7.72	0.99	4.30	1.10
2014	Upper Neuse River	0	0	0	0	0	0	0
	Middle Neuse River	6	14.69	18.43	16.67	1.65	3.64	2.72
	Lower Neuse River	4	17.87	18.50	18.19	3.53	3.97	3.75
	Upper Tar River	0	0	0	0	0	0	0
	Lower Tar-Upper Pamlico River	0	0	0	0	0	0	0
	Pungo River	0	0	0	0	0	0	0
	Cape Fear River	175	14.88	22.28	19.90	0.99	4.85	3.15
Total		185	14.69	22.28	18.25	0.99	4.85	3.20

**Table IV.3 Measures of central tendency for lengths and weights of Hickory Shad (observed).**

Year	River	Length (inches)				Weight (pounds)		
		N	Min	Max	Mean	Min	Max	Mean
2023	Upper Neuse River	4	10.63	13.86	11.99	0.55	1.21	0.80
	Middle Neuse River	46	11.38	15.87	13.96	0.66	2.31	1.48
	Lower Neuse River	32	10.63	15.12	13.02	0.55	1.76	1.10
	Upper Tar River	0	0	0	0	0	0	0
	Lower Tar-Upper Pamlico River	0	0	0	0	0	0	0
	Pungo River	0	0	0	0	0	0	0
	Cape Fear River	0	0	0	0	0	0	0
2022	Total	82	10.63	15.87	13.50	0.55	2.31	1.30
	Upper Neuse River	15	11.42	15.28	14.14	0.66	2.20	1.40
	Middle Neuse River	154	10.67	16.97	14.30	0.22	2.87	1.58
	Lower Neuse River	23	11.73	16.10	14.26	0.77	2.54	1.59
	Upper Tar River	30	10.63	15.87	13.65	0.55	2.43	1.43
	Lower Tar-Upper Pamlico River	1	14.88	14.88	14.88	1.76	1.76	1.76
	Cape Fear River	0	0	0	0	0	0	0
2021	Total	223	10.63	16.97	14.20	0.22	2.87	1.55
	Upper Neuse River	59	10.24	15.63	13.04	0.44	1.87	1.06
	Middle Neuse River	91	9.49	16.54	13.46	0.44	2.31	1.25
	Lower Neuse River	25	10.98	16.50	13.40	0.66	2.54	1.25
	Upper Tar River	73	10.24	16.46	12.91	0.44	2.31	1.13
	Lower Tar-Upper Pamlico River	0	0	0	0	0	0	0
	Cape Fear River	1	14.84	14.84	14.84	1.32	1.32	1.32
2020	Total	249	9.49	16.54	13.20	0.44	2.54	1.17
	Upper Neuse River	8	10.98	15.28	13.44	0.57	1.90	1.26
	Middle Neuse River	151	10.24	16.50	13.89	0.44	2.54	1.38
	Lower Neuse River	14	10.98	15.31	14.19	0.77	2.09	1.56
	Upper Tar River	35	9.65	15.83	14.16	0.55	2.54	1.63
	Lower Tar-Upper Pamlico River	0	0	0	0	0	0	0
	Cape Fear River	0	0	0	0	0	0	0
2019	Total	208	9.65	16.50	13.94	0.44	2.54	1.43
	Upper Neuse River	2	12.87	13.19	13.03	0.99	1.10	1.05
	Middle Neuse River	102	10.98	15.75	13.59	0.71	2.54	1.27
	Lower Neuse River	37	10.91	16.02	13.62	0.66	2.43	1.38
	Upper Tar River	168	10.00	15.35	13.27	0.60	2.09	1.24
	Lower Tar-Upper Pamlico River	0	0	0	0	0	0	0
	Cape Fear River	0	0	0	0	0	0	0
	Total	309	10.00	16.02	13.42	0.60	2.54	1.26

**Table IV.3 Measures of central tendency for lengths and weights of Hickory Shad (observed) (continued).**

Year	River	Length (inches)				Weight (pounds)		
		N	Min	Max	Mean	Min	Max	Mean
2018	Upper Neuse River	4	12.99	13.58	13.25	1.10	1.32	1.21
	Middle Neuse River	179	10.31	16.73	13.38	0.55	2.54	1.28
	Lower Neuse River	22	10.59	16.02	13.17	0.55	2.20	1.26
	Upper Tar River	17	11.81	17.32	14.98	0.66	2.65	1.28
	Lower Tar-Upper Pamlico River	5	13.86	17.80	16.09	0.99	2.20	1.51
	Pungo River	0	0	0	0	0	0	0
	Cape Fear River	2	13.94	15.43	14.69	1.43	1.98	1.71
<b>Total</b>		<b>229</b>	<b>10.31</b>	<b>17.80</b>	<b>13.55</b>	<b>0.55</b>	<b>2.65</b>	<b>1.29</b>
2017	Upper Neuse River	10	12.34	16.80	14.76	0.66	1.32	1.03
	Middle Neuse River	168	10.43	17.28	13.66	0.55	4.19	1.20
	Lower Neuse River	17	11.49	16.60	14.06	0.77	2.20	1.31
	Upper Tar River	31	10.96	18.01	13.71	0.49	5.11	1.35
	Lower Tar-Upper Pamlico River	1	12.75	12.75	12.75	0.88	0.88	0.88
	Pungo River	0	0	0	0	0	0	0
	Cape Fear River	1	14.57	14.57	14.57	1.10	1.10	1.10
<b>Total</b>		<b>228</b>	<b>10.43</b>	<b>18.01</b>	<b>13.74</b>	<b>0.49</b>	<b>5.11</b>	<b>1.22</b>
2016	Upper Neuse River	18	10.67	14.76	12.42	0.55	1.76	1.00
	Middle Neuse River	116	10.55	15.39	12.72	0.55	1.87	1.04
	Lower Neuse River	7	11.30	14.96	13.67	0.66	1.54	1.29
	Upper Tar River	4	7.36	15.59	12.35	0.73	2.34	1.40
	Lower Tar-Upper Pamlico River	0	0	0	0	0	0	0
	Pungo River	0	0	0	0	0	0	0
	Cape Fear River	0	0	0	0	0	0	0
<b>Total</b>		<b>145</b>	<b>7.36</b>	<b>15.59</b>	<b>12.71</b>	<b>0.55</b>	<b>2.34</b>	<b>1.06</b>
2015	Upper Neuse River	35	8.44	15.22	13.02	0.33	1.76	0.96
	Middle Neuse River	108	10.64	15.42	13.21	0.55	1.65	1.03
	Lower Neuse River	1	13.97	13.97	13.97	1.43	1.43	1.43
	Upper Tar River	16	12.75	18.21	15.02	0.44	1.98	1.12
	Lower Tar-Upper Pamlico River	0	0	0	0	0	0	0
	Pungo River	0	0	0	0	0	0	0
	Cape Fear River	1	11.45	11.45	11.45	0.66	0.66	0.66
<b>Total</b>		<b>161</b>	<b>8.44</b>	<b>18.21</b>	<b>9.52</b>	<b>0.33</b>	<b>1.98</b>	<b>0.74</b>
2014	Upper Neuse River	28	10.43	14.69	12.63	0.55	1.54	1.01
	Middle Neuse River	236	10.16	14.61	12.51	0.55	1.76	1.06
	Lower Neuse River	66	10.71	15.16	12.87	0.55	1.87	1.17
	Upper Tar River	2	12.99	14.02	13.50	1.10	1.32	1.21
	Lower Tar-Upper Pamlico River	0	0	0	0	0	0	0
	Pungo River	0	0	0	0	0	0	0
	Cape Fear River	0	0	0	0	0	0	0
<b>Total</b>		<b>332</b>	<b>10.16</b>	<b>15.16</b>	<b>12.88</b>	<b>0.55</b>	<b>1.87</b>	<b>1.11</b>

**Table IV.4      Reported and observed catches (in numbers) by species and disposition.**

Year	Common Name	Harvest	Discards					Number of Fish	Percent Total
			Legal Sized	Over Creel	Sub- Legal	Slot- Limit	Over Sized		
2023	Bass, Black Sea	0	2	0	6	0	0	8	0.04
	Bass, Hybrid Striped	0	0	0	1	0	0	1	0.01
	Bass, Largemouth	12	2,057	0	87	0	0	2,156	10.80
	Bass, Spotted	0	9	0	0	0	0	9	0.05
	Bass, Striped	0	306	0	124	60	1	491	2.46
	Bluefish	31	318	31	4	0	0	384	1.92
	Bluegill	673	419	15	0	0	0	1,107	5.55
	Bowfin	0	70	0	0	0	0	70	0.35
	Bullhead, Black	0	1	0	0	0	0	1	0.01
	Bullhead, Brown	0	15	0	0	0	0	15	0.08
	Carp, Common	0	5	0	0	0	0	5	0.03
	Catfish Family, Freshwater	4	58	0	0	0	0	62	0.31
	Catfish, Blue	25	39	0	0	0	0	64	0.32
	Catfish, Channel	108	59	0	0	0	0	167	0.84
	Catfish, Flathead	3	21	0	0	0	0	24	0.12
	Crappie, Black	125	157	0	52	0	0	334	1.67
	Croaker, Atlantic	49	262	0	6	0	0	317	1.59
	Dolphin	0	2	0	0	0	0	2	0.01
	Drum, Black	8	6	0	47	0	0	61	0.31
	Drum, Red	94	164	53	755	0	23	1,089	5.46
	Eel, American	0	2	0	0	0	0	2	0.01
	Flounder, Lefteye Family	3	180	4	497	0	0	684	3.43
	Flounder, Southern	14	2	0	16	0	0	32	0.16
	Gar, Longnose	1	79	0	0	0	0	80	0.40
	Herring Family	0	1	0	1	0	0	2	0.01
	Mackerel, Spanish	44	6	0	70	0	0	120	0.60
	Menhaden, Atlantic	0	7	0	0	0	0	7	0.04
	Mullet Genus	0	1	0	0	0	0	1	0.01
	Mullet, Striped	4	22	0	0	0	0	26	0.13
	Perch, White	137	73	0	0	0	0	210	1.05
	Perch, Yellow	5	11	0	0	0	0	16	0.08
	Pickerel, Chain	0	39	0	0	0	0	39	0.20
	Pigfish	0	5	0	0	0	0	5	0.03
	Pinfish	0	119	0	25	0	0	144	0.72
	Pumpkinseed	6	16	0	0	0	0	22	0.11
	Ray, Cownose	0	7	0	0	0	0	7	0.04
	Seatrout, Spotted	1,940	2,336	913	3,623	0	0	8,812	44.16
	Shad, American	115	308	46	0	0	0	469	2.35
	Shad, Gizzard	1	5	0	0	0	0	6	0.03
	Shad, Hickory	234	833	20	0	0	0	1,087	5.45
	Shad, Misc	0	7	0	0	0	0	7	0.04
	Sheepshead	0	0	0	12	0	0	12	0.06
	Skate, Clearnose	0	11	0	0	0	0	11	0.06
	Spot	13	34	0	0	0	0	47	0.24
	Stingray Family	0	2	0	0	0	0	2	0.01

**Table IV.4      Reported and observed catches (in numbers) by species and disposition (*continued*).**

Year	Common Name	Harvest	Discards					Number of Fish	Percent Total
			Legal Sized	Over Creel	Sub- Legal	Slot- Limit	Over Sized		
2023	Stingray, Atlantic	0	3	0	0	0	0	3	0.02
	Sunfish Genus	26	1,302	185	0	0	0	1,513	7.58
	Sunfish, Redbreast	15	8	0	0	0	0	23	0.12
	Sunfish, Redear	85	58	0	0	0	0	143	0.72
	Toadfish, Oyster	0	1	0	0	0	0	1	0.01
	Unidentified Fish	0	4	0	0	0	0	4	0.02
	Warmouth	8	30	0	0	0	0	38	0.19
	Weakfish	9	3	0	1	0	0	13	0.07
Total		3,792	9,485	1,267	5,327	60	24	19,955	100.00

**Table IV.4      Reported and observed catches (in numbers) by species and disposition (*continued*).**

Year	Common Name	Harvest	Discards					Number of Fish	Percent Total
			Legal Sized	Over Creel	Sub- Legal	Slot- Limit	Over Sized		
2022	Bass, Hybrid Striped	0	9	0	0	25	0	34	0.13
	Bass, Largemouth	17	2,748	0	74	0	0	2,839	10.77
	Bass, Striped	0	608	0	339	217	8	1,172	4.45
	Bass, White	0	1	0	0	0	0	1	<0.01
	Bluefish	22	294	0	0	0	0	316	1.20
	Bluegill	699	597	0	0	0	0	1,296	4.92
	Bowfin	0	287	0	0	0	0	287	1.09
	Bullhead, Brown	0	12	0	0	0	0	12	0.05
	Carp, Common	0	2	0	0	0	0	2	0.01
	Catfish Family, Freshwater	30	93	0	0	0	0	123	0.47
	Catfish, Blue	85	31	0	0	0	0	116	0.44
	Catfish, Channel	192	117	0	0	0	0	309	1.17
	Catfish, Flathead	12	15	0	0	0	0	27	0.10
	Crappie Genus	0	9	0	30	0	0	39	0.15
	Crappie, Black	141	184	15	94	0	0	434	1.65
	Croaker, Atlantic	38	137	0	14	0	0	189	0.72
	Drum, Black	22	7	1	22	0	0	52	0.20
	Drum, Red	156	153	68	1,222	0	141	1,740	6.60
	Eel, American	0	1	0	0	0	0	1	<0.01
	Flounder, Lefteye Family	12	266	94	958	0	0	1,330	5.05
	Flounder, Southern	46	13	0	37	0	0	96	0.36
	Flounder, Summer	0	4	0	0	0	0	4	0.02
	Gar, Longnose	0	150	0	0	0	0	150	0.57
	Herring Genus	0	10	0	0	0	0	10	0.04
	Kingfish Genus	0	1	0	0	0	0	1	<0.01
	Ladyfish	0	2	0	0	0	0	2	0.01
	Lizardfish, Inshore	0	4	0	0	0	0	4	0.02
	Mackerel, Spanish	57	2	0	22	0	0	81	0.31
	Menhaden, Atlantic	0	16	0	0	0	0	16	0.06
	Mullet Genus	0	19	0	0	0	0	19	0.07
	Mullet, Striped	13	17	0	0	0	0	30	0.11
	Perch, Silver	0	4	0	0	0	0	4	0.02
	Perch, White	315	137	0	0	0	0	452	1.72
	Perch, Yellow	7	17	0	0	0	0	24	0.09
	Pickerel, Chain	1	153	0	0	0	0	154	0.58
	Pigfish	0	3	0	0	0	0	3	0.01
	Pinfish	0	104	0	0	0	0	104	0.39
	Pumpkinseed	4	5	0	0	0	0	9	0.03
	Ray, Cownose	0	9	0	0	0	0	9	0.03
	Seatrout Genus	0	10	0	0	0	0	10	0.04
	Seatrout, Spotted	2,376	2,370	1,223	3,949	0	0	9,918	37.64
	Shad Genus	2	422	0	0	0	0	424	1.61
	Shad, American	72	150	15	0	0	0	237	0.90
	Shad, Gizzard	11	46	0	0	0	0	57	0.22
	Shad, Hickory	479	1,269	80	0	0	0	1,828	6.94

**Table IV.4      Reported and observed catches (in numbers) by species and disposition (*continued*).**

Year	Common Name	Harvest	Discards					Number of Fish	Percent Total
			Legal Sized	Over Creel	Sub- Legal	Slot- Limit	Over Sized		
2022	Sheepshead	0	2	0	0	0	0	2	0.01
	Shiner, Golden	0	1	0	0	0	0	1	<0.01
	Skate, Clearnose	0	125	0	0	0	0	125	0.47
	Spot	15	49	0	0	0	0	64	0.24
	Stingray Family	0	13	0	0	0	0	13	0.05
	Stingray, Atlantic	0	3	0	0	0	0	3	0.01
	Sunfish Genus	48	1,512	265	0	0	0	1,825	6.93
	Sunfish, Green	4	33	0	0	0	0	37	0.14
	Sunfish, Redbreast	31	50	0	0	0	0	81	0.31
	Sunfish, Redear	130	76	0	0	0	0	206	0.78
	Weakfish	9	1	0	17	0	0	27	0.10
Total			5,046	12,373	1,761	6,778	242	149	26,349 100.00

**Table IV.4      Reported and observed catches (in numbers) by species and disposition (*continued*).**

Year	Common Name	Harvest	Discards					Number of Fish	Percent Total
			Legal Sized	Over Creel	Sub-Legal	Slot-Limit	Over Sized		
2021	Bass, Hybrid Striped	0	1	0	0	1	0	2	0.01
	Bass, Largemouth	44	3,980	11	116	0	0	4,151	15.71
	Bass, Striped	0	655	0	366	86	0	1,107	4.19
	Bass, White	0	0	0	1	0	0	1	<0.01
	Bluefish	19	50	0	0	0	0	69	0.26
	Bluegill	681	522	0	0	0	0	1,203	4.55
	Bowfin	4	154	0	0	0	0	158	0.60
	Bullhead, Brown	0	1	0	0	0	0	1	<0.01
	Carp, Common	1	3	0	0	0	0	4	0.02
	Catfish Family, Freshwater	19	134	0	0	0	0	153	0.58
	Catfish, Blue	46	38	0	0	0	0	84	0.32
	Catfish, Channel	94	87	0	0	0	0	181	0.69
	Catfish, Flathead	6	9	0	0	0	0	15	0.06
	Catfish, White	0	6	0	0	0	0	6	0.02
	Crappie, Black	353	481	0	208	0	0	1,042	3.94
	Crappie, White	1	1	0	1	0	0	3	0.01
	Croaker, Atlantic	45	177	0	0	0	0	222	0.84
	Drum, Black	4	1	0	1	0	0	6	0.02
	Drum, Red	110	119	24	969	0	54	1,276	4.83
	Eel, American	0	7	0	0	0	0	7	0.03
	Flounder, Lefteye Family	86	215	6	864	0	0	1,171	4.43
	Flounder, Southern	48	40	0	156	0	0	244	0.92
	Gar, Longnose	0	52	0	0	0	0	52	0.20
	Herring Genus	0	5	0	0	0	0	5	0.02
	Ladyfish	0	9	0	0	0	0	9	0.03
	Mackerel, Spanish	7	8	0	31	0	0	46	0.17
	Mullet Genus	10	3	0	0	0	0	13	0.05
	Mullet, Striped	1	8	0	0	0	0	9	0.03
	Perch, Silver	0	3	0	0	0	0	3	0.01
	Perch, White	156	121	0	0	0	0	277	1.05
	Perch, Yellow	8	25	0	0	0	0	33	0.12
	Pickerel, Chain	1	171	0	0	0	0	172	0.65
	Pinfish	0	45	0	0	0	0	45	0.17
	Pumpkinseed	30	30	0	0	0	0	60	0.23
	Ray, Cownose	0	21	0	0	0	0	21	0.08
	Seatrout, Spotted	2,134	1,244	1,250	2,153	0	0	6,781	25.67
	Shad Genus	12	316	0	0	0	0	328	1.24
	Shad, American	198	448	136	0	0	0	782	2.96
	Shad, Gizzard	20	4	0	0	0	0	24	0.09
	Shad, Hickory	499	1,320	82	0	0	0	1,901	7.20
	Sheepshead	0	1	0	2	0	0	3	0.01
	Skate, Clearnose	0	10	0	0	0	0	10	0.04
	Spot	47	60	0	0	0	0	107	0.40
	Stingray Family	0	6	0	0	0	0	6	0.02
	Sunfish Genus	190	3,864	167	0	0	0	4,221	15.98

**Table IV.4      Reported and observed catches (in numbers) by species and disposition (*continued*).**

Year	Common Name	Harvest	Discards					Number of Fish	Percent Total
			Legal Sized	Over Creel	Sub- Legal	Slot- Limit	Over Sized		
2021	Sunfish, Green	5	36	0	0	0	0	41	0.16
	Sunfish, Redbreast	15	11	0	0	0	0	26	0.10
	Sunfish, Redear	218	108	0	0	0	0	326	1.23
	Unidentified Fish	0	5	0	0	0	0	5	0.02
	Weakfish	5	0	0	3	0	0	8	0.03
Total		5,117	14,615	1,676	4,871	87	54	26,420	100.00

**Table IV.4      Reported and observed catches (in numbers) by species and disposition (*continued*).**

Year	Common Name	Harvest	Discards					Number of Fish	Percent Total
			Legal Sized	Over Creel	Sub- Legal	Slot- Limit	Over Sized		
2020	Bass, Black Sea	0	0	0	1	0	0	1	0.01
	Bass, Largemouth	9	1,175	0	36	0	0	1,220	10.10
	Bass, Striped	0	150	0	175	50	0	375	3.11
	Bluefish	13	0	0	0	0	0	13	0.11
	Bluegill	222	180	58	0	0	0	460	3.81
	Bowfin	1	56	0	0	0	0	57	0.47
	Catfish, Blue	7	7	0	0	0	0	14	0.12
	Catfish, Channel	21	28	0	0	0	0	49	0.41
	Catfish, Flathead	1	1	0	0	0	0	2	0.02
	Catfish, Freshwater Family	29	41	0	0	0	0	70	0.58
	Crappie, Black	341	88	32	75	0	0	536	4.44
	Croaker, Atlantic	24	5	0	0	0	0	29	0.24
	Drum, Black	25	1	0	0	0	0	26	0.22
	Drum, Red	145	35	6	276	0	2	464	3.84
	Eel, American	0	2	0	0	0	0	2	0.02
	Flounder, Lefteye Family	9	12	0	106	0	0	127	1.05
	Flounder, Southern	44	0	0	8	0	0	52	0.43
	Flounder, Summer	0	0	0	2	0	0	2	0.02
	Gar, Longnose	1	28	0	0	0	0	29	0.24
	Herring Family	0	20	0	0	0	0	20	0.17
	Kingfish Genus	2	0	0	0	0	0	2	0.02
	Mackerel, Spanish	28	0	0	0	0	0	28	0.23
	Menhaden, Atlantic	0	10	0	0	0	0	10	0.08
	Mullet, Striped	77	1	0	0	0	0	78	0.65
	Perch, White	225	96	0	0	0	0	321	2.66
	Perch, Yellow	44	44	0	0	0	0	88	0.73
	Pickeral, Chain	0	48	0	0	0	0	48	0.40
	Pumpkinseed	15	2	0	0	0	0	17	0.14
	Ray, Cownose	0	3	0	0	0	0	3	0.02
	Seatrout, Spotted	2,290	319	40	762	0	0	3,411	28.24
	Shad Genus	0	559	74	0	0	0	633	5.24
	Shad, American	128	235	33	0	0	0	396	3.28
	Shad, Hickory	616	1,328	79	0	0	0	2,023	16.75
	Spot	59	85	0	0	0	0	144	1.19
	Sunfish Genus	295	924	45	0	0	0	1,264	10.47
	Sunfish, Redbreast	19	0	0	0	0	0	19	0.16
	Sunfish, Redear	23	5	0	0	0	0	28	0.23
	Toadfish, Oyster	0	1	0	0	0	0	1	0.01
	Warmouth	0	14	0	0	0	0	14	0.12
	Weakfish	1	0	0	0	0	0	1	0.01
	Total	4,714	5,503	367	1,441	50	2	12,077	100.00

**Table IV.4      Reported and observed catches (in numbers) by species and disposition (*continued*).**

Year	Common Name	Harvest	Discards					Number of Fish	Percent Total
			Legal Sized	Over Creel	Sub- Legal	Slot- Limit	Over Sized		
2019	Bass, Largemouth	126	1,856	5	979	0	0	2,966	11.37
	Bass, Striped	38	533	39	1,449	155	0	2,214	8.49
	Bluefish	10	25	0	0	0	0	35	0.13
	Bluegill	620	465	0	0	0	0	1,085	4.16
	Bowfin	3	474	0	0	0	0	477	1.83
	Carp, Common	0	3	0	0	0	0	3	0.01
	Catfish, Blue	40	38	0	0	0	0	78	0.30
	Catfish, Brown Bullhead	6	0	0	0	0	0	6	0.02
	Catfish, Channel	82	85	0	0	0	0	167	0.64
	Catfish, Flathead	11	9	0	0	0	0	20	0.08
	Catfish, Freshwater Family	107	191	0	0	0	0	298	1.14
	Catfish, White	2	0	0	0	0	0	2	0.01
	Crappie, Black	539	295	15	276	0	0	1,125	4.31
	Croaker, Atlantic	12	143	0	0	0	0	155	0.59
	Drum, Black	32	5	0	22	0	0	59	0.23
	Drum, Red	13	60	1	2,275	0	26	2,375	9.10
	Eel, American	0	5	0	0	0	0	5	0.02
	Flounder, Lefteye Family	1	55	0	731	0	0	787	3.02
	Flounder, Southern	66	7	0	85	0	0	158	0.61
	Flounder, Summer	16	5	0	13	0	0	34	0.13
	Gar, Longnose	2	84	0	0	0	0	86	0.33
	Herring Genus	0	8	0	0	0	0	8	0.03
	Herring, Blueback	0	1	0	0	0	0	1	<0.01
	Kingfish Genus	1	0	0	0	0	0	1	<0.01
	Ladyfish	0	2	0	0	0	0	2	0.01
	Mackerel, Spanish	11	1	0	32	0	0	44	0.17
	Manhaden, Atlantic	0	20	0	0	0	0	20	0.08
	Mullet Genus	0	1	0	0	0	0	1	<0.01
	Mullet, Striped	1	1	0	0	0	0	2	0.01
	Perch, Silver	0	7	0	0	0	0	7	0.03
	Perch, White	297	143	0	0	0	0	440	1.69
	Perch, Yellow	23	96	0	0	0	0	119	0.46
	Pickerel, Chain	2	114	0	0	0	0	116	0.44
	Pinfish	0	24	0	0	0	0	24	0.09
	Pumpkinseed	62	25	0	0	0	0	87	0.33
	Ray, Cownose	0	6	0	0	0	0	6	0.02
	Seatrout, Spotted	1,996	926	401	3,305	0	0	6,628	25.41
	Shad Genus	4	184	125	0	0	0	313	1.20
	Shad, American	194	238	0	0	0	0	432	1.66
	Shad, Gizzard	0	3	0	0	0	0	3	0.01
	Shad, Hickory	489	1,465	43	0	0	0	1,997	7.65
	Shiner, Golden	1	0	0	0	0	0	1	<0.01
	Skate, Clearnose	0	1	0	0	0	0	1	<0.01
	Spot	65	170	0	0	0	0	235	0.90
	Sunfish Genus	794	2,396	15	0	0	0	3,205	12.29

**Table IV.4 Reported and observed catches (in numbers) by species and disposition (*continued*).**

Year	Common Name	Harvest	Discards					Number of Fish	Percent Total	
			Legal Sized	Over Creel	Sub- Legal	Slot- Limit	Over Sized			
2019	Sunfish, Green	12	0	0	0	0	0	12	0.05	
	Sunfish, Redbreast	5	13	0	0	0	0	18	0.07	
	Sunfish, Redear	103	96	0	0	0	0	199	0.76	
	Unidentified Fish	0	4	0	0	0	0	4	0.02	
	Warmouth	3	23	0	0	0	0	26	0.10	
	Weakfish	0	1	0	0	0	0	1	0.00	
Total			5,789	10,307	644	9,167	155	26	26,088	100.00

**Table IV.4      Reported and observed catches (in numbers) by species and disposition (*continued*).**

Year	Common Name	Harvest	Discards					Number of Fish	Percent Total
			Legal Sized	Over Creel	Sub- Legal	Slot- Limit	Over Sized		
2018	Bass, Hybrid Striped	0	4	0	0	0	0	4	0.02
	Bass, Largemouth	50	1,479	0	518	0	0	2,047	10.42
	Bass, Striped	219	566	82	2,244	121	2	3,234	16.47
	Bass, White	0	7	0	0	0	0	7	0.04
	Bluefish	10	141	0	0	0	0	151	0.77
	Bluegill	559	569	0	0	0	0	1,128	5.74
	Bowfin	23	289	0	0	0	0	312	1.59
	Carp, Common	1	4	0	0	0	0	5	0.03
	Catfish Family	59	232	0	0	0	0	291	1.48
	Catfish, Blue	72	67	0	0	0	0	139	0.71
	Catfish, Brown Bullhead	4	0	0	0	0	0	4	0.02
	Catfish, Channel	71	76	0	0	0	0	147	0.75
	Catfish, Flathead	12	10	0	0	0	0	22	0.11
	Catfish, White	6	0	0	0	0	0	6	0.03
	Catfish, Yellow Bullhead	2	0	0	0	0	0	2	0.01
	Crappie, Black	603	214	20	309	0	0	1,146	5.84
	Croaker, Atlantic	2	63	0	0	0	0	65	0.33
	Drum, Black	31	1	0	4	0	0	36	0.18
	Drum, Red	23	18	0	88	3	21	153	0.78
	Eel, American	1	28	0	0	0	0	29	0.15
	Flounder, Lefteye Family	6	16	10	759	0	0	791	4.03
	Flounder, Southern	55	0	0	0	0	0	55	0.28
	Gar, Longnose	2	95	0	0	0	0	97	0.49
	Herring Family	0	9	0	0	0	0	9	0.05
	Herring, Blueback	2	0	0	0	0	0	2	0.01
	Mackerel, Spanish	0	0	0	6	0	0	6	0.03
	Mullet Genus	0	46	0	0	0	0	46	0.23
	Mullet, Striped	2	0	0	0	0	0	2	0.01
	Perch, Silver	0	2	0	0	0	0	2	0.01
	Perch, White	604	169	0	0	0	0	773	3.94
	Perch, Yellow	68	59	0	0	0	0	127	0.65
	Pickerel, Chain	1	85	0	0	0	0	86	0.44
	Pinfish	0	35	0	0	0	0	35	0.18
	Pumpkinseed	32	17	0	0	0	0	49	0.25
	Ray, Cownose	0	13	0	0	0	0	13	0.07
	Seatrout, Spotted	62	135	0	845	0	0	1,042	5.31
	Shad Genus	0	204	16	0	0	0	220	1.12
	Shad, American	289	383	86	0	0	0	758	3.86
	Shad, Gizzard	0	3	0	0	0	0	3	0.02
	Shad, Hickory	939	2,682	390	0	0	0	4,011	20.42
	Shiner, Golden	1	0	0	0	0	0	1	0.01
	Skate, Clearnose	0	1	0	0	0	0	1	0.01
	Spot	24	86	0	0	0	0	110	0.56
	Stingray Family	0	11	0	0	0	0	11	0.06
	Stingray, Atlantic	0	2	0	0	0	0	2	0.01

**Table IV.4      Reported and observed catches (in numbers) by species and disposition (*continued*).**

Year	Common Name	Harvest	Discards					Number of Fish	Percent Total
			Legal Sized	Over Creel	Sub- Legal	Slot- Limit	Over Sized		
2018	Sunfish Genus	306	1,789	108	0	0	0	2,203	11.22
	Sunfish, Redbreast	12	21	0	0	0	0	33	0.17
	Sunfish, Redear	102	59	0	0	0	0	161	0.82
	Tarpon	0	1	0	0	0	0	1	0.01
	Warmouth	8	52	0	0	0	0	60	0.31
Total		4,263	9,743	712	4,773	124	23	19,638	100.00

**Table IV.4      Reported and observed catches (in numbers) by species and disposition (*continued*).**

Year	Common Name	Harvest	Discards					Number of Fish	Percent Total
			Legal Sized	Over Creel	Sub- Legal	Slot- Limit	Over Sized		
2017	Bass, Hybrid Striped	2	2	0	1	0	0	5	0.02
	Bass, Largemouth	86	2,296	0	995	0	0	3,377	11.65
	Bass, Spotted	0	2	0	0	0	0	2	0.01
	Bass, Striped	304	853	59	5,020	83	6	6,325	21.83
	Bass, White	0	0	0	2	0	0	2	0.01
	Bluefish	6	44	0	0	0	0	50	0.17
	Bluegill	752	588	0	0	0	0	1,340	4.62
	Bowfin	5	466	0	0	0	0	471	1.63
	Catfish, Black Bullhead	0	2	0	0	0	0	2	0.01
	Catfish, Blue	52	67	0	0	0	0	119	0.41
	Catfish, Brown Bullhead	0	1	0	0	0	0	1	<0.01
	Catfish, Channel	72	84	0	0	0	0	156	0.54
	Catfish, Flatfish	8	14	0	0	0	0	22	0.08
	Catfish, Freshwater Family	53	135	0	0	0	0	188	0.65
	Crappie, Black	681	251	31	370	0	0	1,333	4.60
	Croaker, Atlantic	34	184	0	0	0	0	218	0.75
	Drum, Black	38	0	0	13	0	0	51	0.18
	Drum, Red	93	77	20	838	1	6	1,035	3.57
	Eel, American	0	13	0	0	0	0	13	0.04
	Flounder, Lefteye Family	16	9	0	1,046	0	0	1,071	3.70
	Flounder, Southern	90	5	0	7	0	0	102	0.35
	Gar, Longnose	3	109	0	0	0	0	112	0.39
	Herring Family	0	25	0	0	0	0	25	0.09
	Herring, Blueback	1	0	0	0	0	0	1	<0.01
	Mackerel, Spanish	1	0	0	1	0	0	2	0.01
	Mullet Genus	1	50	0	0	0	0	51	0.18
	Mullet, Striped	0	6	0	0	0	0	6	0.02
	Perch, Silver	0	11	0	0	0	0	11	0.04
	Perch, White	828	354	0	0	0	0	1,182	4.08
	Perch, Yellow	64	106	18	0	0	0	188	0.65
	Pickerel, Chain	6	217	0	0	0	0	223	0.77
	Pinfish	0	53	0	0	0	0	53	0.18
	Pumpkinseed	78	29	0	0	0	0	107	0.37
	Ray, Cownose	0	7	0	0	0	0	7	0.02
	Seatrout, Spotted	657	320	42	2,686	0	0	3,705	12.78
	Shad Genus	0	199	0	0	0	0	199	0.69
	Shad, American	118	413	6	0	0	0	537	1.85
	Shad, Gizzard	1	7	0	0	0	0	8	0.03
	Shad, Hickory	680	2,330	198	0	0	0	3,208	11.07
	Skate, Clearnose	0	9	0	0	0	0	9	0.03
	Spot	59	170	0	0	0	0	229	0.79
	Stingray Family	0	8	0	0	0	0	8	0.03
	Sunfish Genus	2	2,393	162	0	0	0	2,557	8.82
	Sunfish, Green	1	0	0	0	0	0	1	<0.01
	Sunfish, Redbreast	27	71	0	0	0	0	98	0.34

**Table IV.4 Reported and observed catches (in numbers) by species and disposition (*continued*).**

Year	Common Name	Harvest	Discards					Number of Fish	Percent Total
			Legal Sized	Over Creel	Sub- Legal	Slot- Limit	Over Sized		
2017	Sunfish, Redear	175	84	0	0	0	0	259	0.89
	Tarpon	210	0	0	0	0	0	210	0.72
	Warmouth	19	76	0	0	0	0	95	0.33
	Weakfish	0	1	0	5	0	0	6	0.02
Total		5,223	12,141	536	10,984	84	12	28,980	100.00

**Table IV.4    Reported and observed catches (in numbers) by species and disposition (*continued*).**

Year	Common Name	Harvest	Discards					Number of Fish	Percent Total
			Legal Sized	Over Creel	Sub- Legal	Slot- Limit	Over Sized		
2016	Bass, Black Sea	0	0	0	1	0	0	1	0.01
	Bass, Hybrid Striped	11	0	0	1	1	0	13	0.18
	Bass, Largemouth	51	305	2	180	0	0	538	7.44
	Bass, Spotted	0	1	0	0	0	0	1	0.01
	Bass, Striped	260	80	1	468	67	14	890	12.30
	Bass, White	4	3	0	0	0	0	7	0.10
	Bluegill	475	76	2	1	0	0	554	7.66
	Bowfin	25	101	0	1	0	0	127	1.76
	Catfish, Blue	96	21	0	0	0	0	117	1.62
	Catfish, Brown Bullhead	1	0	0	0	0	0	1	0.01
	Catfish, Channel	61	9	0	0	0	0	70	0.97
	Catfish, Flathead	21	7	0	0	0	0	28	0.39
	Catfish, Freshwater Family	12	46	0	4	0	0	62	0.86
	Catfish, White	3	0	0	0	0	0	3	0.04
	Crappie, Black	499	72	1	34	0	0	606	8.38
	Croaker, Atlantic	32	36	0	2	0	0	70	0.97
	Drum, Black	51	1	0	9	0	0	61	0.84
	Drum, Red	19	10	0	153	0	0	182	2.52
	Eel, American	1	4	0	0	0	0	5	0.07
	Flounder, Lefteye Family	22	3	0	112	0	0	137	1.89
	Flounder, Southern	55	0	0	0	0	0	55	0.76
	Gar, Longnose	0	36	0	0	0	0	36	0.50
	Ladyfish	0	1	0	0	0	0	1	0.01
	Mackerel, Spanish	0	0	0	1	0	0	1	0.01
	Menhaden, Atlantic	0	0	0	1	0	0	1	0.01
	Mullet Genus	0	2	0	0	0	0	2	0.03
	Mullet, Striped	0	2	0	1	0	0	3	0.04
	Perch Yellow	13	29	0	1	0	0	43	0.59
	Perch, Silver	0	2	0	0	0	0	2	0.03
	Perch, White	712	88	0	14	0	0	814	11.25
	Pickerel, Chain	3	81	0	2	0	0	86	1.19
	Pinfish	3	6	0	0	0	0	9	0.12
	Pinfish, Spottail	0	1	0	0	0	0	1	0.01
	Pumpkinseed	25	9	0	1	0	0	35	0.48
	Ray, Cownose	0	2	0	0	0	0	2	0.03
	Seatrout, Spotted	234	11	1	134	0	0	380	5.25
	Shad Genus	0	5	5	0	0	0	10	0.14
	Shad, American	492	54	12	10	0	0	568	7.85
	Shad, Gizzard	288	9	0	1	0	0	298	4.12
	Shad, Hickory	418	67	4	0	0	0	489	6.76
	Shad, Threadfin	137	2	0	0	0	0	139	1.92
	Skate, Clearnose	0	3	0	0	0	0	3	0.04
	Spot	6	8	0	4	0	0	18	0.25
	Stingray Family	0	1	0	0	0	0	1	0.01
	Sunfish Genus	352	146	3	14	0	0	515	7.12

**Table IV.4    Reported and observed catches (in numbers) by species and disposition (*continued*).**

Year	Common Name	Harvest	Discards					Number of Fish	Percent Total	
			Legal Sized	Over Creel	Sub- Legal	Slot- Limit	Over Sized			
2016	Sunfish, Green	0	2	0	0	0	0	2	0.03	
	Sunfish, Redbreast	45	16	0	1	0	0	62	0.86	
	Sunfish, Redear	135	18	0	1	0	0	154	2.13	
	Unidentified Fish	0	0	0	1	0	0	1	0.01	
	Warmouth	9	19	0	0	0	0	28	0.39	
	Weakfish	2	1	0	0	0	0	3	0.04	
Total			4,573	1,396	31	1,153	68	14	7,235	100.00

**Table IV.4      Reported and observed catches (in numbers) by species and disposition (continued).**

Year	Common Name	Harvest	Discards					Number of Fish	Percent Total
			Legal Sized	Over Creel	Sub- Legal	Slot- Limit	Over Sized		
2015	Bass, Hybrid Striped	11	1	0	3	0	0	15	0.26
	Bass, Largemouth	61	244	0	182	0	0	487	8.50
	Bass, Striped	151	71	2	263	23	21	531	9.27
	Bass, White	0	3	0	0	0	0	3	0.05
	Bluefish	0	5	0	0	0	0	5	0.09
	Bluegill	745	91	0	0	0	0	836	14.59
	Bowfin	3	77	0	0	0	0	80	1.40
	Carp, Common	0	4	0	0	0	0	4	0.07
	Catfish, Black Bullhead	1	0	0	0	0	0	1	0.02
	Catfish, Blue	128	26	0	0	0	0	154	2.69
	Catfish, Brown Bullhead	4	0	0	0	0	0	4	0.07
	Catfish, Channel	67	24	0	0	0	0	91	1.59
	Catfish, Flathead	7	6	0	0	0	0	13	0.23
	Catfish, Freshwater Family	14	43	0	0	0	0	57	0.99
	Catfish, White	1	0	0	0	0	0	1	0.02
	Crappie, Black	462	48	0	29	0	0	539	9.40
	Croaker, Atlantic	10	28	0	6	0	0	44	0.77
	Drum, Red	2	10	1	28	0	1	42	0.73
	Eel, American	1	4	0	1	0	0	6	0.10
	Flounder, Lefteye Family	8	4	1	101	0	0	114	1.99
	Flounder, Southern	70	1	0	6	0	0	77	1.34
	Flounder, Summer	29	9	0	16	0	0	54	0.94
	Gar, Longnose	0	34	0	0	0	0	34	0.59
	Mackerel, Spanish	0	0	0	2	0	0	2	0.03
	Mullet, Striped	4	1	0	0	0	0	5	0.09
	Perch, Silver	2	2	0	0	0	0	4	0.07
	Perch, White	623	55	0	24	0	0	702	12.25
	Perch, Yellow	29	16	0	1	0	0	46	0.80
	Pickerel, Chain	1	39	0	0	0	0	40	0.70
	Pinfish	0	12	0	0	0	0	12	0.21
	Pumpkinseed	57	6	0	0	0	0	63	1.10
	Ray, Cownose	0	6	0	0	0	0	6	0.10
	Seatrout, Spotted	93	10	1	92	0	0	196	3.42
	Shad Genus	0	15	0	0	0	0	15	0.26
	Shad, American	169	25	4	0	0	0	198	3.45
	Shad, Gizzard	4	6	0	0	0	0	10	0.17
	Shad, Hickory	428	65	9	0	0	0	502	8.76
	Shad, Threadfin	22	1	0	0	0	0	23	0.40
	Shiner, Golden	0	1	0	0	0	0	1	0.02
	Spot	74	17	0	3	0	0	94	1.64
	Stingray Family	0	2	0	0	0	0	2	0.03
	Sunfish Genus	300	138	1	11	0	0	450	7.85
	Sunfish, Redbreast	58	15	0	0	0	0	73	1.27
	Sunfish, Redear	63	12	0	0	0	0	75	1.31
	Unidentified Fish	0	2	0	0	0	0	2	0.03
	Warmouth	10	8	0	0	0	0	18	0.31
	Total	3,712	1,187	19	768	23	22	5,731	100.00

**Table IV.4      Reported and observed catches (in numbers) by species and disposition (*continued*).**

Year	Common Name	Harvest	Discards					Number of Fish	Percent Total
			Legal Sized	Over Creel	Sub- Legal	Slot- Limit	Over Sized		
2014	Bass, Black Sea	0	1	0	1	0	0	2	0.02
	Bass, Hybrid Striped	25	8	0	36	1	0	70	0.66
	Bass, Largemouth	40	467	3	545	0	0	1,055	9.99
	Bass, Spotted	0	1	0	2	0	0	3	0.03
	Bass, Striped	149	290	20	800	155	10	1,424	13.48
	Bass, White	0	6	0	2	0	0	8	0.08
	Bluefish	3	49	0	0	0	0	52	0.49
	Bluegill	699	111	1	0	0	0	811	7.68
	Bowfin	0	112	0	0	0	0	112	1.06
	Carp, Common	2	4	0	0	0	0	6	0.06
	Catfish, Blue	219	62	0	0	0	0	281	2.66
	Catfish, Brown Bullhead	7	0	0	0	0	0	7	0.07
	Catfish, Channel	36	43	0	0	0	0	79	0.75
	Catfish, Flathead	5	19	0	0	0	0	24	0.23
	Catfish, Freshwater Family	38	125	0	0	0	0	163	1.54
	Catfish, White	30	1	0	0	0	0	31	0.29
	Crappie, Black	386	67	2	89	0	0	544	5.15
	Croaker, Atlantic	92	117	0	0	0	0	209	1.98
	Drum, Black	0	10	0	2	0	0	12	0.11
	Drum, Red	13	65	6	558	0	2	644	6.10
	Eel, American	0	21	0	0	0	0	21	0.20
	Flounder, Lefteye Family	21	25	0	600	0	0	646	6.12
	Flounder, Southern	98	0	0	7	0	0	105	0.99
	Flounder, Summer	1	0	0	27	0	0	28	0.27
	Gar, Longnose	0	105	0	0	0	0	105	0.99
	Kingfish Genus	0	1	0	0	0	0	1	0.01
	Mackerel, Spanish	0	1	0	1	0	0	2	0.02
	Menhaden, Atlantic	0	3	0	0	0	0	3	0.03
	Mullet Genus	0	6	0	0	0	0	6	0.06
	Mullet, Striped	7	9	0	0	0	0	16	0.15
	Perch, Silver	3	2	0	0	0	0	5	0.05
	Perch, White	318	68	0	3	0	0	389	3.68
	Perch, Yellow	27	30	0	0	0	0	57	0.54
	Pickerel, Chain	1	81	0	0	0	0	82	0.78
	Pigfish	0	1	0	0	0	0	1	0.01
	Pinfish	8	69	0	0	0	0	77	0.73
	Pumpkinseed	113	17	0	0	0	0	130	1.23
	Ray, Cownose	0	17	0	0	0	0	17	0.16
	Seatrout Genus	1	2	0	5	0	0	8	0.08
	Seatrout, Spotted	300	158	24	844	0	0	1,326	12.55
	Shad Genus	0	68	20	1	0	0	89	0.84
	Shad, American	282	125	4	0	0	0	411	3.89
	Shad, Gizzard	27	17	0	0	0	0	44	0.42
	Shad, Hickory	351	255	6	0	0	0	612	5.79
	Shad, Threadfin	25	1	0	0	0	0	26	0.25

**Table IV.4      Reported and observed catches (in numbers) by species and disposition (*continued*).**

Year	Common Name	Harvest	Discards					Number of Fish	Percent Total
			Legal Sized	Over Creel	Sub- Legal	Slot- Limit	Over Sized		
2014	Sheepshead	0	1	0	0	0	0	1	0.01
	Shiner, Golden	0	1	0	0	0	0	1	0.01
	Skate, Clearnose	0	2	0	0	0	0	2	0.02
	Spot	68	57	0	0	0	0	125	1.18
	Stingray Family	0	9	0	0	0	0	9	0.09
	Sucker, White	1	0	0	0	0	0	1	0.01
	Sunfish Genus	153	417	14	8	0	0	592	5.60
	Sunfish, Green	0	1	0	0	0	0	1	0.01
	Sunfish, Redbreast	6	6	0	0	0	0	12	0.11
	Sunfish, Redear	47	12	0	0	0	0	59	0.56
	Unidentified Fish	0	3	0	0	0	0	3	0.03
	Warmouth	4	5	0	0	0	0	9	0.09
	Weakfish	0	0	0	3	0	0	3	0.03
Total		3,606	3,154	100	3,534	156	12	10,562	100.00

**Table IV.5 Percent of reported target species trips by year.**

Target Species	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014	Percent of All Years
Bass, Largemouth	12.72	14.74	19.52	12.24	18.05	18.75	16.56	14.24	13.79	11.40	15.55
Bass, Striped	1.80	2.77	3.49	2.31	7.39	19.13	21.65	25.39	18.25	20.10	11.37
Bass, White	0	0	0	0	0	0	0	0.05	0	0	<0.01
Bluefish	0.36	0.08	0	0.05	0	0.09	0	0	0	<0.01	0.06
Bluegill	0.21	0	0.12	0	0	0.60	0.76	0.63	0.97	0.70	0.40
Bowfin	0	0	0.08	0	0	0.09	0	0	0.19	0.10	0.04
Carp, Common	0	0	0	0	0.04	0.09	0	0	0	0	0.01
Catfish, Blue	0.10	0	0.41	0	0	0.19	0.09	0	0	0	0.09
Catfish, Channel	0	0	0.04	0	0	0	0.09	0	0	0	0.02
Catfish, Flathead	0.10	<0.01	0.08	0	0	0	0.09	0	0	0	0.03
Catfish, Freshwater Family	5.46	5.62	5.18	1.87	6.66	8.61	4.11	6.23	11.94	7.60	5.99
Crappie, Black	1.70	1.33	2.71	1.47	3.50	3.12	2.77	2.41	2.82	3.10	2.48
Croaker, Atlantic	0	0	0.16	0	0	0	0	0.16	0	0.20	0.09
Drum, Black	0.57	0	0.04	0	0	0	0.13	0.79	0	0.10	0.30
Drum, Red	6.59	7.15	4.27	6.34	2.15	2.19	2.63	0.73	0.58	0.80	3.59
Flounder, Lefteye Family	1.70	1.77	2.42	2.41	2.69	5.26	3.39	4.08	2.33	5.30	3.09
Flounder, Southern	0	0	0.04	0	0	0	0	0	0	0	<0.01
Flounder, Summer	0	0	0	0	0	0	0	0	0.97	0	0.06
Gar, Longnose	0.10	<0.01	0	0	0	0	0.09	0.05	0.10	0	0.07
Mackerel, Spanish	0.67	0	0.25	0.54	0.15	0	0	0	0	0.10	0.25
Mullet Genus	0	0	0.04	0	0	0	0.13	0	0	0	0.02
Mullet, Striped	0	<0.01	0	0	0	0	0	0	0.10	0	0.03
Perch, White	0.82	1.57	0.86	1.03	1.65	2.37	2.68	3.25	0.97	1.10	1.67
Perch, Yellow	0	0	0.12	0.05	0.15	0.14	0	0.05	0.19	0	0.07
Pumpkinseed sunfish	0	0	0	0	<0.01	0	0	0	0	0	<0.01
Seatrout, Spotted	50.72	41.06	35.76	50.66	32.24	8.28	22.01	15.08	6.99	18.70	29.72
Shad Genus	9.37	16.55	16.11	15.68	18.81	18.71	14.33	14.03	29.6	22.30	16.88
Shad, American	2.27	1.61	3.12	1.08	0.15	4.19	2.37	6.86	0.68	1.00	2.36
Shad, Gizzard	0	0	0.08	0	0	0	0	0.26	0.19	0.10	0.05
Shad, Hickory	0.21	0.24	0.29	0.25	0	1.77	1.07	0.42	0.58	0.40	0.55
Shad, Threadfin	0	0	0	0	0	0	0	0	0.10	0	<0.01
Spot	0.05	0.08	0.04	0.05	0.04	0	0.18	0.05	0.10	0.20	0.07
Sunfish Genus	4.33	3.98	4.40	3.10	5.04	5.44	4.42	4.97	8.35	6.50	4.83
Sunfish, Green	0	0	0.04	0	0	0	0	0	0	0	<0.01
Sunfish, Redbreast	0	0	0	0	0	0	0.09	0.05	0	0	0.02
Sunfish, Redear	0	0	0.21	0.05	0.08	0	0	0.05	0.10	0	0.05
Tarpon	0.05	0	0.08	0	0	0	0	0.16	0	0.20	0.09
Total Number of Trips	1,942	2,489	2,433	2,035	2,599	2,149	2,240	1,910	1,030	1,639	100.00

**Table IV.6    Estimated Striped Bass effort and catch in the CSMA.**

Year	Area	Month	Total Fishing Trips	Target Striped Bass Trips	Target Striped Bass Hours	Harvest		Discards (numbers)			Total Catch # Fish	
						Number	Pounds	Legal Sized	Under Sized	Over Creel		
2023	CSMA	Jan	6,695	123	722	0	0	843	1,497	0	72	2,411
		Feb	9,487	433	832	0	0	781	94	0	125	1,001
		Mar	11,346	473	2,374	0	0	474	653	0	224	1,352
		Apr	8,496	191	957	0	0	333	353	0	79	764
		May	6,380	136	514	0	0	754	162	0	0	916
		Jun	6,470	1,379	3,765	0	0	1,154	1,602	0	34	2,790
		Jul	5,483	259	1,614	0	0	934	44	0	51	1,030
		Aug	3,805	62	124	0	0	534	127	0	164	825
		Sep	4,703	16	28	0	0	28	32	0	16	76
		Oct	7,021	0	0	0	0	396	339	0	994	1,730
		Nov	6,398	13	40	0	0	19	226	0	0	245
		Dec	6,739	33	305	0	0	188	138	0	70	396
		Total	83,021	3,118	11,276	0	0	6,439	5,268	0	1,829	13,536
		PSE	6.78	41.20	27.70	-	-	23.69	42.01	-	52.82	26.68
2022	CSMA	Jan	6,527	92	525	0	0	1,016	487	0	0	1,503
		Feb	12,547	941	3,910	0	0	1,600	2,345	0	335	4,281
		Mar	12,362	293	968	0	0	397	803	0	97	1,296
		Apr	20,605	2,169	6,012	0	0	5,441	801	0	392	6,635
		May	16,276	1,083	3,509	0	0	1,064	1,086	0	1,829	3,979
		Jun	4,436	248	834	0	0	635	410	0	1,011	2,056
		Jul	5,345	34	201	0	0	384	764	0	9	1,157
		Aug	4,550	28	89	0	0	1,101	434	0	425	1,960
		Sep	6,216	113	824	0	0	641	263	0	33	936
		Oct	7,076	10	143	0	0	176	169	0	59	404
		Nov	11,319	115	391	0	0	945	2,001	0	122	3,068
		Dec	7,828	73	479	0	0	1,284	1,077	0	390	2,751
		Total	115,087	5,200	17,885	0	0	14,685	10,639	0	4,701	30,026
		PSE	7.27	27.24	26.40	-	-	24.33	24.56	-	39.97	19.93
2021	CSMA	Jan	4,144	365	1,370	0	0	959	460	0	0	1,419
		Feb	5,424	269	1,076	0	0	1,113	391	0	441	1,944
		Mar	22,471	1,086	4,508	0	0	417	218	0	240	875
		Apr	13,785	1,462	4,873	0	0	5,074	671	0	263	6,008
		May	14,740	421	1,259	0	0	610	3,596	0	14	4,220
		Jun	4,525	0	0	0	0	24	106	0	0	130
		Jul	7,586	619	2,192	0	0	1,096	1,286	0	167	2,548
		Aug	4,320	241	1,360	0	0	475	544	0	0	1,019
		Sep	7,861	37	83	0	0	346	336	0	240	921
		Oct	6,333	43	200	0	0	245	812	0	163	1,219
		Nov	8,373	101	646	0	0	544	395	0	181	1,120
		Dec	6,270	128	674	0	0	1,420	310	0	61	1,791
		Total	105,833	4,772	18,241	0	0	12,322	9,124	0	1,769	23,216
		PSE	6.1	17.57	18.00	-	-	26.23	39.89	-	28.78	

**Table IV.6    Estimated Striped Bass effort and catch in the CSMA (continued).**

Year	Area	Month	Total Fishing Trips	Target Striped Bass Trips	Target Striped Bass Hours	Harvest		Discards (numbers)			Total Catch # Fish	
						Number	Pounds	Legal Sized	Under Sized	Over Creel		
2020 <sup>1</sup>	CSMA	Jan	7,470	237	1,154	0	0	826	762	0	769	2,357
		Feb	10,417	285	1,016	0	0	755	572	0	100	1,427
		Mar	24,425	969	5,453	0	0	1,086	4,247	0	226	5,560
		Apr	0	-	-	-	-	-	-	-	-	-
		May	0	-	-	-	-	-	-	-	-	-
		Jun	6,528	260	1,284	0	0	784	616	0	54	1,454
		Jul	9,297	578	2,521	0	0	989	1,432	0	98	2,520
		Aug	5,465	75	295	0	0	1,248	641	0	0	1,889
		Sep	8,543	158	588	0	0	575	604	0	7	1,186
		Oct	10,062	40	104	0	0	401	468	0	19	887
		Nov	7,986	78	129	0	0	529	687	0	0	1,215
		Dec	4,347	166	728	0	0	383	410	0	131	925
		Total	94,541	2,846	13,272	0	0	7,575	10,440	0	1,406	19,420
		PSE	7.79	23.50	28.06	-	-	16.82	28.67	-	39.36	
2019	CSMA	Jan	4,702	1,856	6,453	500	1,777	325	3,563	651	206	5,244
		Feb	10,765	2,779	12,279	286	1,122	221	2,288	0	152	2,947
		Mar	14,704	1,595	9,530	152	524	1,177	2,407	274	1,548	5,559
		Apr	11,047	285	1,038	0	0	118	930	0	15	1,063
		May	9,126	227	1,236	0	0	302	2,471	0	183	2,956
		Jun	6,133	1,248	5,953	0	0	1,000	1,583	0	0	2,583
		Jul	8,460	209	785	0	0	212	1,241	0	0	1,453
		Aug	6,818	91	347	0	0	218	1,517	0	15	1,749
		Sep	9,076	89	311	0	0	109	2,930	0	57	3,096
		Oct	9,900	0	0	0	0	332	865	0	0	1,197
		Nov	5,298	131	1,159	0	0	2,591	3,636	0	0	6,226
		Dec	12,874	311	1,488	21	139	1,211	1,427	0	306	2,965
		Total	108,902	8,820	40,580	959	3,562	7,817	24,857	924	2,481	37,039
		PSE	5.13	14.85	16.82	38.86	36.95	23.51	14.65	73.67	48.46	
2018	CSMA	Jan	2,495	1,500	6,166	334	1,047	262	3,751	0	99	4,447
		Feb	17,733	4,617	21,561	1,116	3,560	490	3,549	0	270	5,425
		Mar	14,874	2,709	11,974	717	2,156	710	7,244	491	348	9,511
		Apr	14,300	1,729	7,266	835	2,814	210	2,224	168	134	3,571
		May	13,662	1,403	5,901	16	48	5,140	3,787	0	37	8,980
		Jun	7,019	620	1,914	0	0	1,253	2,166	0	524	3,943
		Jul	7,582	871	4,356	11	34	1,829	1,997	0	464	4,300
		Aug	4,816	684	2,147	0	0	1,306	1,616	0	0	2,922
		Sep	3,944	70	271	0	0	167	488	0	0	655
		Oct	3,980	566	2,553	15	54	52	1,340	0	0	1,407
		Nov	3,880	543	2,030	119	461	182	2,302	0	0	2,604
		Dec	3,102	1,081	3,778	206	709	630	3,664	212	15	4,727
		Total	97,386	16,394	69,917	3,371	10,884	12,232	34,128	871	1,890	52,492
		PSE	5.49	10.48	11.57	15.67	15.22	29.15	14.30	44.32	38.38	

<sup>1</sup>Creel sampling was suspended from March 18, 2020 through May 31, 2020, due to the State of North Carolina COVID-19 Safety Protocols.

**Table IV.6    Estimated Striped Bass effort and catch in the CSMA (continued).**

Year	Area	Month	Total Fishing Trips	Target Striped Bass Trips	Target Striped Bass Hours	Harvest		Discards (numbers)			Total Catch # Fish	
						Number	Pounds	Legal Sized	Under Sized	Over Creel		
2017	CSMA	Jan	3,236	2,055	7,876	158	593	88	14,351	0	73	14,670
		Feb	18,301	6,542	32,602	1,717	6,808	611	23,151	0	410	25,889
		Mar	22,784	5,208	22,649	1,290	4,765	856	11,610	0	986	14,742
		Apr	19,341	4,672	19,251	1,085	4,022	780	11,257	0	123	13,244
		May	4,894	210	748	0	0	82	1,765	0	0	1,847
		Jun	8,946	984	6,845	0	0	2,098	6,965	0	11	9,074
		Jul	8,582	629	2,932	0	0	6,197	4,525	0	348	11,070
		Aug	7,897	320	2,432	0	0	2,736	2,802	0	14	5,552
		Sep	9,630	124	649	13	48	10,238	12,062	0	107	22,420
		Oct	8,447	1,550	6,705	728	2,486	688	4,287	31	149	5,883
		Nov	8,600	2,241	9,662	1,135	4,074	792	5,623	450	0	8,000
		Dec	5,647	1,589	7,331	1,209	4,178	1,337	3,388	68	71	6,073
		Total	126,305	26,125	119,680	7,334	26,973	26,501	101,787	549	2,293	138,464
		PSE	8.90	8.44	10.27	15.76	15.49	25.55	11.52	55.40	23.35	
2016	CSMA	Jan	4,978	3,329	17,342	1,344	5,214	575	10,532	0	537	12,988
		Feb	5,749	1,108	4,569	262	943	61	2,082	0	93	2,498
		Mar	24,075	4,588	24,538	635	2,186	405	6,458	0	1,230	8,727
		Apr	20,965	7,426	34,657	3,193	12,042	464	5,389	203	3,523	12,772
		May	18,055	1,196	3,558	0	0	3,058	4,011	0	0	7,069
		Jun	6,759	287	850	0	0	659	1,083	0	0	1,742
		Jul	6,439	113	479	5	17	385	1,586	0	0	1,976
		Aug	5,648	580	1,725	0	0	1,661	897	0	179	2,737
		Sep	7,278	125	126	0	0	670	4,067	0	0	4,737
		Oct	4,718	1,660	7,823	139	495	438	4,652	0	36	5,264
		Nov	4,465	666	2,996	153	540	140	3,932	0	22	4,246
		Dec	6,159	2,597	11,790	966	3,824	2,076	13,199	0	1,159	17,400
		Total	115,289	23,675	110,453	6,697	25,260	10,593	57,886	203	6,779	82,157
		PSE	4.90	9.30	12.06	21.20	19.02	18.73	11.97	100.00	31.88	
2015	CSMA	Jan	5,169	2,917	11,748	709	2,613	883	3,113	0	54	4,155
		Feb	2,753	1,245	5,666	493	1,854	178	1,405	0	22	1,983
		Mar	15,489	1,422	7,253	585	2,062	1,961	564	0	115	1,532
		Apr	18,492	3,322	11,024	507	1,830	852	1,385	0	303	2,316
		May	19,476	514	1,455	56	211	391	36	0	107	743
		Jun	7,835	426	1,918	0	0	565	456	0	0	1,021
		Jul	7,397	335	1,583	0	0	2,012	388	0	19	3,877
		Aug	8,558	611	2,286	0	0	54	205	0	0	358
		Sep	5,359	414	1,718	0	0	513	1,442	0	0	2,630
		Oct	6,946	1,927	10,391	277	977	66	3,263	0	133	4,269
		Nov	6,207	1,964	9,682	526	1,904	577	3,930	0	13	4,576
		Dec	6,297	3,062	14,673	781	2,819	1,620	6,260	40	47	7,824
		Total	109,979	18,159	79,398	3,934	14,269	9,671	22,448	40	813	35,287
		PSE	5.50	8.94	10.62	20.26	19.55	32.37	13.92	73.74	26.99	

**Table IV.6    Estimated Striped Bass effort and catch in the CSMA (continued).**

Year	Area	Month	Total Fishing Trips	Target Striped Bass Trips	Target Striped Bass Hours	Harvest		Discards (numbers)			Total Catch # Fish		
						Number	Pounds	Legal Sized	Under Sized	Over Creel			
2014	CSMA	Jan	2,273	1,259	4,973	329	1,284	58	49	0	45	482	
		Feb	9,221	2,010	7,426	498	2,045	524	502	98	234	1,856	
		Mar	15,896	2,673	12,722	769	3,192	604	2,392	310	709	4,783	
		Apr	15,958	2,464	13,448	603	2,502	932	2,542	144	126	4,347	
		May	12,211	599	2,811	0	0	733	1,032	0	20	1,785	
		Jun	5,735	391	1,755	0	0	480	522	0	0	1,003	
		Jul	4,360	59	89	0	0	101	187	0	0	288	
		Aug	5,396	501	1,694	0	0	1,000	1,553	0	0	2,553	
		Sep	2,777	256	708	0	0	2,215	75	0	0	2,290	
		Oct	6,694	2,038	8,043	117	431	44	2,909	0	7	3,077	
		Nov	5,412	1,475	6,583	579	2,369	929	3,937	177	93	5,715	
		Dec	7,749	1,957	10,064	405	1,547	314	4,206	0	407	5,331	
		Total	93,684	15,682	70,316	3,301	13,368	7,934	19,905	728	1,641	33,510	
		PSE	5.60	10.08	13.09	20.38	21.53	22.73	20.10	48.97	40.28		

**Table IV.7      Estimated effort, harvest, and discards for Striped Bass in the Neuse River by month.**

Year	Area	Month	Striped Bass Trips	Striped Bass Hours	Harvest		Discards (numbers)				Total Catch # Fish
					Number	Pounds	Legal Sized	Under Sized	Over Creel	Slot	
2023	Upper	Jan	0	0	0	0	0	0	0	0	0
		Feb	0	0	0	0	0	0	0	0	0
		Mar	59	473	0	0	0	0	0	0	0
		Apr	0	0	0	0	0	0	0	0	0
		May	0	0	0	0	0	0	0	0	0
		Total	59	473	0	0	0	0	0	0	0
		PSE	100.00	100.00	-	-	-	-	-	-	-
	Middle	Jan	0	0	0	0	0	0	0	0	0
		Feb	0	0	0	0	0	0	0	0	0
		Mar	15	15	0	0	0	0	0	0	0
		Apr	0	0	0	0	0	0	0	0	0
		May	0	0	0	0	0	0	0	0	0
		Total	15	15	0	0	0	0	0	0	0
		PSE	100.00	100.00	-	-	-	-	-	-	-
	Lower	Jan	117	701	0	0	832	1,492	0	0	2,325
		Feb	36	109	0	0	0	14	0	42	56
		Mar	127	985	0	0	290	600	0	224	1,114
		Apr	178	894	0	0	301	329	0	79	709
		May	53	237	0	0	216	162	0	0	379
		Jun	1,363	3,666	0	0	1,116	1,602	0	34	2,752
		Jul	259	1,614	0	0	934	44	0	51	1,030
		Aug	62	124	0	0	517	127	0	164	808
		Sep	16	28	0	0	0	32	0	16	48
		Oct	0	0	0	0	396	166	0	994	1,557
		Nov	0	0	0	0	19	199	0	0	218
		Dec	33	305	0	0	162	93	0	37	292
		Total	2,244	8,663	0	0	4,784	4,862	0	1,641	11,288
		PSE	54.27	34.22	-	-	28.79	45.35	-	58.58	

**Table IV.7      Estimated effort, harvest, and discards for Striped Bass in the Neuse River by month  
(continued).**

Year	Area	Month	Striped Bass Trips	Striped Bass Hours	Harvest		Discards (numbers)				Total Catch # Fish
					Number	Pounds	Legal Sized	Under Sized	Over Creel	Slot	
2022	Upper	Jan	0	0	0	0	0	0	0	0	0
		Feb	0	0	0	0	0	0	0	0	0
		Mar	0	0	0	0	0	0	0	0	0
		Apr	241	483	0	0	2,173	0	0	0	2,173
		May	0	0	0	0	0	0	0	0	0
		Total	241	483	0	0	2,173	0	0	0	2,173
		PSE	100.00	100.00	-	-	100	-	-	-	-
	Middle	Jan	0	0	0	0	0	0	0	0	0
		Feb	0	0	0	0	86	48	0	0	134
		Mar	17	162	0	0	0	23	0	3	27
		Apr	29	58	0	0	113	0	0	0	113
		May	83	125	0	0	0	0	0	14	14
		Total	129	345	0	0	199	71	0	17	287
		PSE	69.46	61.60	-	-	47.23	45.11	-	82.30	-
	Lower	Jan	0	0	0	0	144	214	0	0	357
		Feb	292	1,550	0	0	164	1,789	0	6	1,959
		Mar	58	256	0	0	102	337	0	6	445
		Apr	76	209	0	0	371	553	0	187	1,111
		May	974	3,288	0	0	974	1,027	0	1,816	3,817
		Jun	248	834	0	0	448	380	0	802	1,630
		Jul	21	125	0	0	272	260	0	0	532
		Aug	28	89	0	0	1,092	414	0	425	1,931
		Sep	93	661	0	0	359	230	0	0	589
		Oct	0	0	0	0	26	145	0	17	188
		Nov	88	167	0	0	757	2,001	0	48	2,806
		Dec	37	275	0	0	1,083	1,049	0	256	2,388
		Total	1,917	7,454	0	0	5,790	8,398	0	3,563	17,752
		PSE	52.46	46.65	-	-	26.96	29.92	-	51.32	-

**Table IV.7      Estimated effort, harvest, and discards for Striped Bass in the Neuse River by month  
(continued).**

Year	Area	Month	Striped Bass Trips	Striped Bass Hours	Harvest		Discards (numbers)				Total Catch # Fish
					Number	Pounds	Legal Sized	Under Sized	Over Creel	Slot	
2021	Upper	Jan	0	0	0	0	0	0	0	0	0
		Feb	0	0	0	0	0	0	0	0	0
		Mar	101	370	0	0	27	0	0	0	27
		Apr	308	767	0	0	0	0	0	0	0
		May	0	0	0	0	0	0	0	0	0
		Total	408	1,137	0	0	27	0	0	0	27
		PSE	50.74	51.70	-	-	100.00	-	-	-	-
	Middle	Jan	0	0	0	0	0	0	0	0	0
		Feb	0	0	0	0	0	0	0	0	0
		Mar	41	166	0	0	0	0	0	12	12
		Apr	0	0	0	0	0	0	0	0	0
		May	49	255	0	0	0	0	0	0	0
		Total	91	421	0	0	0	0	0	12	12
		PSE	66.82	68.75	-	-	-	-	-	100.00	-
	Lower	Jan	248	798	0	0	274	211	0	0	485
		Feb	125	341	0	0	554	115	0	324	993
		Mar	570	2,081	0	0	340	10	0	69	419
		Apr	0	0	0	0	0	0	0	0	0
		May	148	407	0	0	0	113	0	0	113
		Jun	0	0	0	0	11	98	0	0	109
		Jul	576	2,057	0	0	991	1,225	0	167	2,383
		Aug	223	1,293	0	0	446	544	0	0	990
		Sep	37	83	0	0	38	249	0	211	498
		Oct	15	55	0	0	218	508	0	117	843
		Nov	28	73	0	0	165	113	0	79	356
		Dec	25	94	0	0	218	37	0	45	300
		Total	1,995	7,281	0	0	3,255	3,223	0	1,012	7,490
		PSE	37.06	38.08	-	-	29.26	31.74	-	39.63	-

**Table IV.7      Estimated effort, harvest, and discards for Striped Bass in the Neuse River by month  
(continued).**

Year	Area	Month	Striped Bass Trips	Striped Bass Hours	Harvest		Discards (numbers)				Total Catch # Fish
					Number	Pounds	Legal Sized	Under Sized	Over Creel	Slot	
2020 <sup>1</sup>	Upper	Jan	0	0	0	0	0	0	0	0	0
		Feb	0	0	0	0	0	0	0	0	0
		Mar	12	52	0	0	0	0	0	0	0
		Apr	-	-	-	-	-	-	-	-	-
		May	-	-	-	-	-	-	-	-	-
		Total	12	52	0	0	0	0	0	0	0
		PSE	100.00	100.00	-	-	-	-	-	-	-
	Middle	Jan	0	0	0	0	0	0	0	0	0
		Feb	0	0	0	0	76	0	0	0	76
		Mar	248	913	0	0	26	120	0	0	146
		Apr	-	-	-	-	-	-	-	-	-
		May	-	-	-	-	-	-	-	-	-
		Total	248	913	0	0	103	120	0	0	222
		PSE	76.60	63.72	-	-	61.12	45.67	-	-	-
	Lower	Jan	57	287	0	0	57	92	0	488	638
		Feb	32	57	0	0	151	343	0	63	557
		Mar	0	0	0	0	172	595	0	116	883
		Apr	-	-	-	-	-	-	-	-	-
		May	-	-	-	-	-	-	-	-	-
		Jun	93	544	0	0	234	453	0	54	741
		Jul	439	1,966	0	0	531	1,029	0	98	1,658
		Aug	0	0	0	0	235	147	0	0	382
		Sep	0	0	0	0	149	191	0	7	348
		Oct	0	0	0	0	0	320	0	11	330
		Nov	0	0	0	0	11	35	0	0	46
		Dec	69	389	0	0	46	188	0	13	248
		Total	691	3,242	0	0	1,587	3,393	0	852	5,831
		PSE	32.42	37.08	-	-	28.63	32.31	-	30.47	-

<sup>1</sup>Creel sampling was suspended from March 18, 2020 through June 1, 2020, due to the State of North Carolina COVID-19 Safety Protocols.

**Table IV.7      Estimated effort, harvest, and discards for Striped Bass in the Neuse River by month  
(continued).**

Year	Area	Month	Striped Bass Trips	Striped Bass Hours	Harvest		Discards (numbers)				Total Catch # Fish
					Number	Pounds	Legal Sized	Under Sized	Over Creel	Slot	
2019	Upper	Jan	0	0	0	0	0	0	0	0	0
		Feb	0	0	0	0	0	0	0	0	0
		Mar	0	0	0	0	0	0	0	0	0
		Apr	41	94	0	0	0	0	0	0	0
		May	85	739	0	0	0	118	0	0	118
		Total	126	833	0	0	0	118	0	0	118
		PSE	62.34	88.21	-	-	-	58.08	-	-	-
	Middle	Jan	0	0	0	0	0	0	0	0	0
		Feb	667	1,416	0	0	0	21	0	0	21
		Mar	39	100	0	0	4	31	0	0	35
		Apr	11	18	0	0	0	0	0	0	0
		May	0	0	0	0	0	0	0	0	0
		Total	716	1,533	0	0	4	52	0	0	56
		PSE	51.06	44.46	-	-	100.00	51.07	-	-	-
	Lower	Jan	635	2,637	481	1,662	6	682	651	206	2,026
		Feb	801	4,017	215	739	59	4	0	152	430
		Mar	745	5,884	152	524	929	269	274	1,548	3,172
		Apr	28	166	0	0	64	26	0	15	105
		May	0	0	0	0	166	0	0	183	349
		Jun	457	2,471	0	0	1,000	420	0	0	1,420
		Jul	81	272	0	0	143	367	0	0	510
		Aug	54	134	0	0	165	243	0	15	423
		Sep	89	311	0	0	109	906	0	57	1,072
		Oct	0	0	0	0	226	238	0	0	464
		Nov	0	0	0	0	522	2,167	0	0	2,689
		Dec	66	412	0	0	793	408	0	132	1,333
		Total	2,955	16,305	849	2,925	4,182	5,731	924	2,307	13,994
		PSE	23.81	29.93	43.39	43.42	25.40	30.47	73.67	51.76	-

**Table IV.7      Estimated effort, harvest, and discards for Striped Bass in the Neuse River by month  
(continued).**

Year	Area	Month	Striped Bass Trips	Striped Bass Hours	Harvest		Discards (numbers)				Total Catch # Fish
					Number	Pounds	Legal Sized	Under Sized	Over Creel	Slot	
2018	Upper	Jan	0	0	0	0	0	0	0	0	0
		Feb	0	0	0	0	0	0	0	0	0
		Mar	216	1,298	0	0	0	0	0	0	0
		Apr	76	218	0	0	0	0	0	0	0
		May	534	2,265	0	0	3,393	0	0	0	3,393
		Total	827	3,781	0	0	3,393	0	0	0	3,393
		PSE	57.65	56.90	-	-	95.00	-	-	-	-
	Middle	Jan	0	0	0	0	0	0	0	0	0
		Feb	840	4,727	133	496	0	90	0	113	336
		Mar	345	1,687	45	169	42	0	17	30	135
		Apr	83	342	46	171	0	10	0	19	75
		May	289	867	0	0	0	12	0	37	49
		Total	1,557	7,624	224	837	42	112	17	199	594
		PSE	33.04	34.30	41.70	41.70	87.66	81.96	100.00	63.27	-
	Lower	Jan	735	2,803	162	494	252	217	0	70	702
		Feb	543	2,182	151	460	75	767	0	137	1,131
		Mar	627	3,012	177	538	350	756	0	69	1,352
		Apr	216	948	245	744	81	241	0	33	600
		May	71	439	0	0	147	373	0	0	520
		Jun	92	282	0	0	655	310	0	0	965
		Jul	451	2,132	0	0	1,350	301	0	464	2,115
		Aug	475	1,766	0	0	811	174	0	0	984
		Sep	0	0	0	0	133	148	0	0	281
		Oct	76	247	6	17	0	0	0	0	6
		Nov	60	167	0	0	0	0	0	0	0
		Dec	346	843	0	0	6	60	0	15	80
		Total	3,692	14,823	741	2,253	3,861	3,347	0	788	8,736
		PSE	15.82	18.21	27.79	27.78	29.73	20.16	-	61.57	-

**Table IV.7      Estimated effort, harvest, and discards for Striped Bass in the Neuse River by month  
(continued).**

Year	Area	Month	Striped Bass Trips	Striped Bass Hours	Harvest		Discards (numbers)				Total Catch # Fish
					Number	Pounds	Legal Sized	Under Sized	Over Creel	Slot	
2017	Upper	Jan	0	0	0	0	0	0	0	0	0
		Feb	0	0	0	0	0	0	0	0	0
		Mar	457	944	0	0	0	0	0	0	0
		Apr	571	1,404	0	0	0	0	0	0	0
		May	0	0	0	0	0	0	0	0	0
		Total	1,028	2,349	0	0	0	0	0	0	0
		PSE	43.31	42.27	-	-	-	-	-	-	-
	Middle	Jan	0	0	0	0	0	0	0	0	0
		Feb	736	2,945	62	260	16	301	0	29	407
		Mar	902	5,026	46	195	0	163	0	86	296
		Apr	499	2,001	72	305	15	19	0	15	122
		May	0	0	0	0	0	0	0	0	0
		Total	2,137	9,972	180	761	31	483	0	131	825
		PSE	23.08	29.98	42.62	27.61	70.74	32.71	-	57.35	-
	Lower	Jan	550	1,386	111	430	56	366	0	73	605
		Feb	1,852	11,372	696	3,025	411	6,110	0	276	7,494
		Mar	1,022	5,950	402	1,565	576	1,663	0	537	3,178
		Apr	585	2,155	306	1,191	285	1,804	0	16	2,410
		May	70	189	0	0	0	48	0	0	48
		Jun	760	5,478	0	0	1,384	4,012	0	11	5,408
		Jul	629	2,932	0	0	5,439	2,912	0	288	8,639
		Aug	306	2,397	0	0	2,723	920	0	0	3,643
		Sep	65	386	0	0	4,131	5,393	0	107	9,631
		Oct	348	2,184	196	764	688	1,521	0	36	2,442
		Nov	830	2,554	709	2,676	401	1,716	450	0	3,277
		Dec	269	1,343	587	1,924	219	920	68	4	1,798
		Total	7,285	38,327	3,008	11,576	16,312	27,387	519	1,348	48,573
		PSE	16.74	21.35	25.80	24.54	26.40	21.05	60.41	34.49	-

**Table IV.7      Estimated effort, harvest, and discards for Striped Bass in the Neuse River by month  
(continued).**

Year	Area	Month	Striped Bass Trips	Striped Bass Hours	Harvest		Discards (numbers)				Total Catch # Fish
					Number	Pounds	Legal Sized	Under Sized	Over Creel	Slot	
2016	Upper	Jan	0	0	0	0	0	0	0	0	0
		Feb	0	0	0	0	0	0	0	0	0
		Mar	70	316	0	0	0	0	0	0	0
		Apr	536	1,576	0	0	0	0	0	72	72
		May	41	41	0	0	0	0	0	0	0
		Total	647	1,933	0	0	0	0	0	72	72
		PSE	28.11	29.81	-	-	-	-	-	75	
	Middle	Jan	0	0	0	0	0	0	0	0	0
		Feb	0	0	15	54	0	29	0	0	44
		Mar	83	679	20	72	39	20	0	20	98
		Apr	151	324	0	0	0	37	0	0	37
		May	108	273	0	0	0	38	0	0	38
		Total	341	1,276	34	126	39	123	0	20	216
		PSE	38.08	51.56	73.54	73.54	100.00	52.28	-	100.00	
	Lower	Jan	533	1,680	357	1,331	166	1,123	0	342	1,988
		Feb	456	1,755	21	78	61	1,062	0	42	1,186
		Mar	2,191	13,462	222	828	135	2,418	0	829	3,604
		Apr	806	3,203	783	2,923	35	1,695	0	439	2,952
		May	110	579	0	0	147	402	0	0	549
		Jun	142	482	0	0	533	121	0	0	654
		Jul	65	309	0	0	326	0	0	0	326
		Aug	444	1,093	0	0	1,483	413	0	179	2,076
		Sep	100	101	0	0	88	1,103	0	0	1,191
		Oct	530	1,776	27	99	398	1,361	0	0	1,786
		Nov	65	126	19	69	0	450	0	0	468
		Dec	677	2,648	44	165	187	515	0	265	1,011
		Total	6,119	27,213	1,472	5,493	3,560	10,665	0	2,096	17,793
		PSE	20.59	29.09	58.71	36.99	28.71	21.00	-	33.65	

**Table IV.7      Estimated effort, harvest, and discards for Striped Bass in the Neuse River by month  
(continued).**

Year	Area	Month	Striped Bass Trips	Striped Bass Hours	Harvest		Discards (numbers)				Total Catch # Fish
					Number	Pounds	Legal Sized	Under Sized	Over Creel	Slot	
2015	Upper	Jan	0	0	0	0	0	0	0	0	0
		Feb	0	0	0	0	0	0	0	0	0
		Mar	17	17	0	0	0	0	0	0	0
		Apr	292	625	171	612	0	0	0	0	171
		May	129	419	0	0	0	0	0	0	0
		Total	439	1,061	171	612	0	0	0	0	171
		PSE	45.81	39.72	75.46	75.46	-	-	-	-	-
	Middle	Jan	0	0	0	0	0	0	0	0	0
		Feb	0	0	0	0	0	0	0	0	0
		Mar	0	0	17	59	0	28	0	0	45
		Apr	118	583	33	118	0	0	0	69	102
		May	0	0	0	0	89	0	0	107	196
		Total	118	583	49	178	89	28	0	176	342
		PSE	65.58	73.29	33.40	33.40	100.00	100.00	-	50.17	-
	Lower	Jan	842	2,609	174	605	0	994	0	54	1,222
		Feb	369	1,610	33	114	0	87	0	22	142
		Mar	544	4,522	498	1,736	103	200	0	0	802
		Apr	465	1,122	0	0	0	127	0	0	127
		May	60	122	0	0	64	0	0	0	64
		Jun	197	426	0	0	0	431	0	0	431
		Jul	240	1,025	0	0	1,457	351	0	0	1,808
		Aug	542	2,236	0	0	99	32	0	0	131
		Sep	313	1,417	0	0	676	991	0	0	1,667
		Oct	922	3,401	15	51	581	448	0	102	1,145
		Nov	602	2,891	151	527	58	621	0	13	843
		Dec	862	4,722	282	981	58	594	0	21	954
		Total	5,959	26,103	1,153	4,015	3,096	4,876	0	211	9,336
		PSE	13.48	18.59	49.51	46.21	53.23	22.19	-	50.58	-

**Table IV.7      Estimated effort, harvest, and discards for Striped Bass in the Neuse River by month  
(continued).**

Year	Area	Month	Striped Bass Trips	Striped Bass Hours	Harvest		Discards (numbers)				Total Catch # Fish
					Number	Pounds	Legal Sized	Under Sized	Over Creel	Slot	
2014	Upper	Jan	0	0	0	0	0	0	0	0	0
		Feb	0	0	0	0	0	0	0	0	0
		Mar	28	28	0	0	0	0	0	0	0
		Apr	398	809	130	589	0	0	0	0	130
		May	199	398	0	0	0	0	0	0	0
		Total	624	1,235	130	589	0	0	0	0	130
		PSE	43.13	41.76	100.00	100.00	-	-	-	-	-
	Middle	Jan	0	0	0	0	0	0	0	0	0
		Feb	0	0	0	0	0	0	0	0	0
		Mar	132	468	0	0	0	37	0	0	37
		Apr	0	0	0	0	0	0	0	0	0
		May	0	0	0	0	0	0	0	0	0
		Total	132	468	0	0	0	37	0	0	37
		PSE	48.02	54.37	-	-	-	100.00	-	-	-
	Lower	Jan	583	2,605	64	292	38	33	0	38	173
		Feb	978	3,181	44	203	0	208	0	24	277
		Mar	1,345	6,802	492	2,242	534	1,907	0	679	3,612
		Apr	1,114	9,098	179	816	115	385	0	82	762
		May	224	1,595	0	0	439	840	0	0	1,278
		Jun	340	1,471	0	0	299	430	0	0	729
		Jul	59	89	0	0	69	34	0	0	103
		Aug	215	1,091	0	0	872	528	0	0	1,400
		Sep	116	326	0	0	51	0	0	0	51
		Oct	864	2,817	0	0	0	376	0	0	376
		Nov	674	2,325	276	1,260	481	415	0	0	1,172
		Dec	571	2,726	44	202	151	617	0	220	1,033
		Total	7,083	34,127	1,100	5,014	3,050	5,773	0	1,044	10,966
		PSE	16.84	23.18	46.59	46.59	37.54	29.22	-	60.71	-

**Table IV.8      Estimated effort, harvest, and discards for Striped Bass in the Tar/Pamlico River by month.**

Year	Area	Month	Striped Bass Trips	Striped Bass Hours	Harvest		Discards (numbers)				Total Catch # Fish
					Number	Pounds	Legal Sized	Under Sized	Over Creel	Slot	
2023	Upper	Jan	0	0	0	0	0	0	0	0	0
		Feb	0	0	0	0	0	0	0	0	0
		Mar	236	707	0	0	0	0	0	0	0
		Apr	9	45	0	0	31	0	0	0	31
		May	0	0	0	0	0	0	0	0	0
	Lower	Total	245	752	0	0	31	0	0	0	31
		PSE	96.41	94.24	-	-	71.37	-	-	-	-
		Jan	6	22	0	0	0	0	0	0	0
		Feb	65	455	0	0	621	29	0	0	650
		Mar	23	117	0	0	143	38	0	0	181
2022	Upper	Apr	4	19	0	0	0	0	0	0	0
		May	0	0	0	0	0	0	0	0	0
		Jun	15	99	0	0	38	0	0	0	38
		Jul	0	0	0	0	0	0	0	0	0
		Aug	0	0	0	0	0	0	0	0	0
	Lower	Sep	0	0	0	0	0	0	0	0	0
		Oct	0	0	0	0	0	0	0	0	0
		Nov	0	0	0	0	0	0	0	0	0
		Dec	0	0	0	0	0	30	0	0	30
		Total	113	712	0	0	802	97	0	0	899
	PSE	PSE	38.80	46.17	-	-	47.68	58.22	-	-	-
		Jan	0	0	0	0	0	0	0	0	0
		Feb	62	488	0	0	15	382	0	0	397
		Mar	193	499	0	0	132	64	0	0	195
		Apr	1,041	2,486	0	0	351	102	0	187	640
	Lower	May	0	0	0	0	0	0	0	0	0
		Total	1,296	3,473	0	0	498	547	0	187	1,232
		PSE	34.81	34.09	-	-	42.80	66.14	-	100.00	-
		Jan	92	525	0	0	797	274	0	0	1,071
		Feb	136	521	0	0	373	118	0	291	782
	Upper	Mar	25	50	0	0	0	79	0	0	79
		Apr	11	66	0	0	22	0	0	0	22
		May	0	0	0	0	0	0	0	0	0
		Jun	0	0	0	0	0	30	0	0	30
		Jul	0	0	0	0	74	504	0	0	578
	Lower	Aug	0	0	0	0	0	0	0	0	0
		Sep	20	164	0	0	282	0	0	0	282
		Oct	10	143	0	0	111	0	0	0	111
		Nov	0	0	0	0	142	0	0	0	142
		Dec	0	0	0	0	119	27	0	0	147
	PSE	Total	294	1,468	0	0	1,920	1,031	0	291	3,242
		PSE	46.11	46.34	-	-	38.18	51.33	-	100.00	-

**Table IV.8      Estimated effort, harvest, and discards for Striped Bass in the Tar/Pamlico River by month (*continued*).**

Year	Area	Month	Striped Bass Trips	Striped Bass Hours	Harvest		Discards (numbers)				Total Catch # Fish
					Number	Pounds	Legal Sized	Under Sized	Over Creel	Slot	
2021	Upper	Jan	0	0	0	0	0	0	0	0	0
		Feb	0	0	0	0	129	194	0	0	323
		Mar	169	829	0	0	0	48	0	0	48
		Apr	1,001	2,969	0	0	4,409	293	0	263	4,964
		May	224	597	0	0	610	3,455	0	14	4,079
		Total	1,394	4,395	0	0	5,147	3,990	0	277	9,414
	Lower	PSE	20.48	28.31	-	-	57.19	87.06	-	94.95	
		Jan	117	572	0	0	652	180	0	0	832
		Feb	122	684	0	0	418	61	0	0	479
		Mar	115	778	0	0	32	93	0	0	125
		Apr	56	576	0	0	596	0	0	0	596
		May	0	0	0	0	0	27	0	0	27
		Jun	0	0	0	0	0	0	0	0	0
		Jul	43	135	0	0	95	51	0	0	146
		Aug	18	67	0	0	0	0	0	0	0
		Sep	0	0	0	0	0	6	0	0	6
		Oct	0	0	0	0	0	0	0	0	0
		Nov	34	134	0	0	335	228	0	0	562
		Dec	81	476	0	0	1,190	236	0	0	1,425
		Total	586	3,421	0	0	3,318	882	0	0	4,199
		PSE	23.64	25.16	-	-	27.28	30.24	-	-	
2020 <sup>1</sup>	Upper	Jan	0	0	0	0	0	0	0	0	0
		Feb	16	64	0	0	62	62	0	0	123
		Mar	543	3,374	0	0	31	2,714	0	0	2,744
		Apr	-	-	-	-	-	-	-	-	-
		May	-	-	-	-	-	-	-	-	-
		Total	559	3,439	0	0	92	2,775	0	0	2,867
		PSE	91.27	93.11	-	-	74.60	96.49	-	-	
	Lower	Jan	180	866	0	0	731	640	0	281	1,651
		Feb	229	871	0	0	452	111	0	37	600
		Mar	166	1,114	0	0	858	804	0	0	1,661
		Apr	-	-	-	-	-	-	-	-	-
		May	-	-	-	-	-	-	-	-	-
		Jun	167	740	0	0	533	139	0	0	672
		Jul	139	555	0	0	451	378	0	0	829
		Aug	75	295	0	0	892	404	0	0	1,296
		Sep	23	180	0	0	403	91	0	0	493
		Oct	13	38	0	0	349	0	0	0	349
		Nov	78	129	0	0	72	169	0	0	242
		Dec	40	140	0	0	337	50	0	0	387
		Total	1,109	4,928	0	0	5,078	2,785	0	318	8,181
		PSE	25.41	26.01	-	-	22.75	24.33	-	52.25	

<sup>1</sup>Creel sampling was suspended from March 18, 2020 through June 1, 2020, due to the State of North Carolina COVID-19 Safety Protocols.

**Table IV.8      Estimated effort, harvest, and discards for Striped Bass in the Tar/Pamlico River by month (*continued*).**

Year	Area	Month	Striped Bass Trips	Striped Bass Hours	Harvest		Discards (numbers)				Total Catch # Fish
					Number	Pounds	Legal Sized	Under Sized	Over Creel	Slot	
2019	Upper	Jan	0	0	0	0	0	0	0	0	0
		Feb	600	2,853	29	102	0	474	0	0	503
		Mar	282	1,250	0	0	0	98	0	0	98
		Apr	92	285	0	0	0	262	0	0	262
		May	0	0	0	0	0	29	0	0	29
	Lower	Total	974	4,389	29	102	0	863	0	0	892
		PSE	47.22	49.76	100.00	100.00	-	52.94	-	-	-
		Jan	1,153	3,414	15	101	320	2,709	0	0	3,044
		Feb	561	3,131	42	282	162	1,685	0	0	1,890
		Mar	493	2,139	0	0	245	1,671	0	0	1,915
2018	Upper	Apr	89	382	0	0	24	26	0	0	50
		May	143	497	0	0	4	164	0	0	168
		Jun	30	91	0	0	0	269	0	0	269
		Jul	128	513	0	0	69	785	0	0	854
		Aug	0	0	0	0	17	77	0	0	94
		Sep	0	0	0	0	0	725	0	0	725
	Lower	Oct	0	0	0	0	18	233	0	0	251
		Nov	84	340	0	0	1,282	409	0	0	1,692
		Dec	246	1,077	21	139	346	657	0	174	1,197
		Total	2,927	11,583	78	521	2,486	9,411	0	174	12,149
		PSE	17.51	17.19	63.30	63.30	51.05	20.24	-	79.93	-
		Jan	0	0	0	0	0	0	0	0	0
	Upper	Feb	781	3,125	0	0	0	0	0	0	0
		Mar	568	1,816	0	0	67	47	0	0	114
		Apr	153	632	57	436	-	69	0	0	126
		May	187	1,317	0	0	372	0	0	0	372
		Total	1,688	6,890	57	436	439	116	0	0	612
		PSE	49.27	51.28	80.20	80.21	55.77	51.19	-	-	-
	Lower	Jan	737	3,141	133	404	10	3,509	0	28	3,681
		Feb	2,429	11,434	801	2,483	414	2,605	0	21	3,841
		Mar	809	3,385	401	1,086	238	4,597	474	249	5,960
		Apr	1,110	4,876	442	1,288	128	1,594	168	82	2,414
		May	303	933	16	48	1,079	3,215	0	0	4,311
		Jun	344	1,043	0	0	590	1,105	0	524	2,219
		Jul	381	2,126	11	34	200	450	0	0	661
		Aug	194	278	0	0	165	243	0	0	408
	Lower	Sep	70	271	0	0	34	33	0	0	67
		Oct	322	1,023	0	0	0	248	0	0	248
		Nov	291	814	0	0	104	1,478	0	0	1,582
		Dec	597	2,334	184	624	625	3,174	212	0	4,195
		Total	7,586	31,658	1,989	5,967	3,589	22,250	854	904	29,586
		PSE	15.28	17.97	23.20	23.20	25.89	20.11	45.16	58.15	-

**Table IV.8      Estimated effort, harvest, and discards for Striped Bass in the Tar/Pamlico River by month (*continued*).**

Year	Area	Month	Striped Bass Trips	Striped Bass Hours	Harvest		Discards (numbers)				Total Catch # Fish
					Number	Pounds	Legal Sized	Under Sized	Over Creel	Slot	
2017	Upper	Jan	0	0	0	0	0	0	0	0	0
		Feb	2,457	11,155	309	1,112	45	10,588	0	21	10,964
		Mar	1,912	7,542	705	2,534	70	1,652	0	303	2,730
		Apr	1,941	9,340	416	1,494	0	0	0	60	476
		May	53	149	0	0	10	0	0	0	10
		Total	6,363	28,187	1,430	5,141	126	12,240	0	385	14,181
		PSE	19.80	22.63	51.15	51.15	53.68	48.31	-	80.49	
	Lower	Jan	1,379	5,653	26	94	0	12,593	0	0	12,619
		Feb	1,402	6,736	650	2,410	124	5,229	0	84	6,087
		Mar	806	2,541	78	282	210	5,107	0	60	5,455
		Apr	974	3,942	237	857	467	5,493	0	24	6,221
		May	87	409	0	0	72	794	0	0	866
		Jun	224	1,367	0	0	702	1,454	0	0	2,156
		Jul	0	0	0	0	758	401	0	60	1,219
		Aug	15	35	0	0	13	747	0	14	775
		Sep	59	263	13	48	5,931	3,415	0	0	9,359
		Oct	1,085	3,862	485	1,572	0	1,704	0	113	2,302
		Nov	1,314	6,476	244	813	385	1,437	0	0	2,065
		Dec	929	4,373	333	1,349	736	719	20	63	1,849
		Total	8,273	35,656	2,065	7,425	9,396	39,094	20	418	50,973
		PSE	13.84	15.89	18.95	18.93	56.00	19.88	100.00	32.72	
2016	Upper	Jan	0	0	0	0	0	0	0	0	0
		Feb	0	0	0	0	0	0	0	0	0
		Mar	954	5,093	92	350	0	375	0	170	637
		Apr	4,928	24,501	2,109	8,036	336	1,432	203	2,707	6,786
		May	425	373	0	0	1,048	46	0	0	1,094
		Total	6,307	29,967	2,201	8,386	1,383	1,853	203	2,876	8,517
		PSE	22.67	28.61	40.13	40.13	36.33	30.03	100.00	67.85	
	Lower	Jan	2,533	14,617	949	3,750	409	6,632	0	196	8,184
		Feb	461	1,980	214	767	0	380	0	51	645
		Mar	959	3,687	276	849	196	2,295	0	212	2,979
		Apr	882	4,505	271	981	77	2,165	0	289	2,803
		May	317	1,382	0	0	1,187	1,595	0	0	2,781
		Jun	145	368	0	0	74	461	0	0	534
		Jul	48	169	0	0	0	110	0	0	110
		Aug	136	632	0	0	78	246	0	0	323
		Sep	0	0	0	0	527	2,506	0	0	3,033
		Oct	952	5,224	68	247	33	1,757	0	26	1,885
		Nov	555	2,605	0	0	0	290	0	0	290
		Dec	1,615	7,761	881	3,521	1,882	8,799	0	894	12,456
		Total	8,601	42,930	2,659	10,115	4,461	27,236	0	1,668	36,024
		PSE	12.17	14.69	26.11	27.13	33.57	21.66	-	35.99	

**Table IV.8      Estimated effort, harvest, and discards for Striped Bass in the Tar/Pamlico River by month (*continued*).**

Year	Area	Month	Striped Bass Trips	Striped Bass Hours	Harvest		Discards (numbers)				Total Catch # Fish
					Number	Pounds	Legal Sized	Under Sized	Over Creel	Slot	
2015	Upper	Jan	0	0	0	0	0	0	0	0	0
		Feb	0	0	0	0	0	0	0	0	0
		Mar	0	0	0	0	0	60	0	0	60
		Apr	1,380	5,231	175	630	0	382	0	194	751
		May	31	92	0	0	0	0	0	0	0
	Lower	Total	1,411	5,324	175	630	0	441	0	194	810
		PSE	32.54	47.04	60.03	60.03	-	41.90	-	60.17	
		Jan	1,983	8,828	499	1,886	278	1,818	0	0	2,595
		Feb	856	3,918	460	1,740	64	1,318	0	0	1,842
		Mar	690	1,922	70	267	143	276	0	115	604
2014	Upper	Apr	1,024	3,144	92	348	0	714	0	40	846
		May	215	722	56	211	391	0	0	0	446
		Jun	229	1,492	0	0	565	0	0	0	565
		Jul	95	558	0	0	2,004	38	0	19	2,060
		Aug	69	51	0	0	50	116	0	0	167
	Lower	Sep	100	301	0	0	455	89	0	0	544
		Oct	782	5,503	115	436	0	583	0	32	730
		Nov	1,197	6,183	277	1,048	17	2,380	0	0	2,675
		Dec	2,074	9,360	403	1,517	600	4,556	40	26	5,625
		Total	9,314	41,981	1,972	7,453	4,566	11,888	40	232	18,698
	PSE	13.99	15.00		26.27	26.28	44.06	22.20	73.74	53.37	
		Jan	0	0	0	0	0	0	0	0	0
		Feb	0	0	0	0	0	0	0	0	0
		Mar	0	0	0	0	0	0	0	0	0
		Apr	334	1,001	0	0	108	0	0	13	121
	Lower	May	0	0	0	0	0	0	0	0	0
		Total	334	1,001	0	0	108	0	0	13	121
		PSE	54.01	63.14	-	-	100.00	-	-	100.00	
		Jan	652	2,296	265	992	20	17	0	7	309
		Feb	1,021	4,208	453	1,842	524	294	98	210	1,579
	Upper	Mar	1,031	4,842	277	950	70	448	310	30	1,135
		Apr	480	1,707	276	1,033	0	1,453	144	31	1,904
		May	0	0	0	0	52	104	0	20	176
		Jun	0	0	0	0	0	44	0	0	44
		Jul	0	0	0	0	28	48	0	0	77
	Lower	Aug	286	602	0	0	103	982	0	0	1,085
		Sep	132	368	0	0	703	75	0	0	778
		Oct	1,003	4,461	87	326	44	2,401	0	0	2,533
		Nov	718	3,831	204	765	303	3,411	177	59	4,155
		Dec	1,289	6,814	336	1,256	95	3,516	0	162	4,108
	PSE	Total	6,612	29,130	1,898	7,163	1,944	12,793	728	518	17,882
		PSE	14.49	15.38	21.58	21.76	28.08	29.23	48.97	35.51	

**Table IV.9      Estimated effort, harvest, and discards for Striped Bass in the Pungo River by month.**

Year	Area	Month	Striped Bass Trips	Striped Bass Hours	Harvest		Discards (numbers)				Total Catch # Fish
					Number	Pounds	Legal Sized	Under Sized	Over Creel	Slot	
2023	Pungo	Jan	0	0	0	0	11	4	0	72	86
		Feb	332	268	0	0	161	51	0	83	295
		Mar	0	0	0	0	0	15	0	0	15
		Apr	0	0	0	0	0	24	0	0	24
		May	0	0	0	0	0	0	0	0	0
		Jun	0	0	0	0	0	0	0	0	0
		Jul	0	0	0	0	0	0	0	0	0
		Aug	0	0	0	0	17	0	0	0	17
		Sep	0	0	0	0	28	0	0	0	28
		Oct	0	0	0	0	0	173	0	0	173
		Nov	13	40	0	0	0	27	0	0	27
		Dec	0	0	0	0	27	15	0	33	74
		Total	345	308	0	0	243	309	0	187	739
		PSE	91.83	78.68	-	-	66.66	58.07	-	49.16	
2022	Pungo	Jan	0	0	0	0	75	0	0	0	75
		Feb	0	0	0	0	737	9	0	38	784
		Mar	0	0	0	0	164	300	0	88	551
		Apr	0	0	0	0	130	108	0	18	257
		May	0	0	0	0	71	59	0	0	130
		Jun	0	0	0	0	187	0	0	208	395
		Jul	13	75	0	0	38	0	0	9	47
		Aug	0	0	0	0	9	20	0	0	29
		Sep	0	0	0	0	0	33	0	33	66
		Oct	0	0	0	0	40	24	0	41	105
		Nov	27	224	0	0	47	0	0	73	120
		Dec	36	204	0	0	83	0	0	134	217
		Total	76	503	0	0	1,580	553	0	643	2,776
		PSE	48.67	53.95	-	-	39.06	56.39	-	40.10	
2021	Pungo	Jan	0	0	0	0	33	68	0	0	102
		Feb	21	51	0	0	11	21	0	117	149
		Mar	58	201	0	0	7	67	0	160	234
		Apr	0	0	0	0	69	69	0	0	139
		May	0	0	0	0	0	0	0	0	0
		Jun	0	0	0	0	13	8	0	0	21
		Jul	0	0	0	0	10	10	0	0	20
		Aug	0	0	0	0	29	0	0	0	29
		Sep	0	0	0	0	308	81	0	29	418
		Oct	28	146	0	0	26	304	0	46	376
		Nov	39	439	0	0	45	55	0	102	202
		Dec	22	105	0	0	13	38	0	16	66
		Total	167	942	0	0	564	721	0	469	1,754
		PSE	39.09	52.31	-	-	49.20	30.19	-	36.43	

**Table IV.9      Estimated effort, harvest, and discards for Striped Bass in the Pungo River by month  
(continued).**

Year	Area	Month	Striped Bass Trips	Striped Bass Hours	Harvest		Discards (numbers)				Total Catch # Fish
					Number	Pounds	Legal Sized	Under Sized	Over Creel	Slot	
2020 <sup>1</sup>	Pungo	Jan	0	0	0	0	37	30	0	0	68
		Feb	0	0	0	0	14	57	0	0	71
		Mar	0	0	0	0	0	15	0	110	125
		Apr	-	-	-	-	-	-	-	-	-
		May	-	-	-	-	-	-	-	-	-
		Jun	0	0	0	0	18	24	0	0	42
		Jul	0	0	0	0	7	25	0	0	33
		Aug	0	0	0	0	120	90	0	0	211
		Sep	136	408	0	0	23	322	0	0	345
		Oct	27	66	0	0	51	149	0	8	208
		Nov	0	0	0	0	445	482	0	0	927
		Dec	57	199	0	0	0	172	0	118	290
		Total	220	673	0	0	716	1,367	0	236	2,319
		PSE	65.66	64.48	-	-	38.00	25.58	-	48.55	
2019	Pungo	Jan	68	402	3	14	0	171	0	0	174
		Feb	149	861	0	0	0	103	0	0	103
		Mar	37	156	0	0	0	335	0	0	335
		Apr	0	0	0	0	30	201	0	0	231
		May	0	0	0	0	132	97	0	0	228
		Jun	760	3,390	0	0	0	894	0	0	894
		Jul	0	0	0	0	0	89	0	0	89
		Aug	38	213	0	0	36	1,197	0	0	1,233
		Sep	0	0	0	0	0	1,299	0	0	1,299
		Oct	0	0	0	0	89	393	0	0	482
		Nov	47	819	0	0	786	1,059	0	0	1,845
		Dec	0	0	0	0	72	362	0	0	435
		Total	1,099	5,842	3	14	1,146	6,200	0	0	7,349
		PSE	70.87	61.75	100.00	100.00	69.87	24.04	-	0	
2018	Pungo	Jan	28	222	39	149	0	26	0	0	64
		Feb	23	92	31	122	0	86	0	0	118
		Mar	127	740	94	363	13	1,844	0	0	1,950
		Apr	90	250	45	174	0	311	0	0	356
		May	12	55	0	0	9	187	0	0	196
		Jun	185	589	0	0	8	751	0	0	759
		Jul	39	97	0	0	278	1,246	0	0	1,523
		Aug	15	103	0	0	331	1,199	0	0	1,530
		Sep	0	0	0	0	0	307	0	0	307
		Oct	169	1,282	10	37	52	1,092	0	0	1,154
		Nov	192	1,048	119	461	78	825	0	0	1,022
		Dec	138	601	22	85	0	430	0	0	452
		Total	1,019	5,080	360	1,391	768	8,304	0	0	9,432
		PSE	28.03	26.69	31.47	31.47	34.45	21.95	-	-	

<sup>1</sup>Creel sampling was suspended from March 18, 2020 through June 1, 2020, due to the State of North Carolina COVID-19 Safety Protocols.

**Table IV.9      Estimated effort, harvest, and discards for Striped Bass in the Pungo River by month  
(continued).**

Year	Area	Month	Striped Bass Trips	Striped Bass Hours	Harvest		Discards (numbers)				Total Catch # Fish
					Number	Pounds	Legal Sized	Under Sized	Over Creel	Slot	
2017	Pungo	Jan	126	837	21	68	32	1,392	0	0	1,445
		Feb	69	236	0	0	0	923	0	0	923
		Mar	109	645	58	188	0	3,024	0	0	3,083
		Apr	102	408	54	175	13	3,941	0	7	4,015
		May	0	0	0	0	0	923	0	0	923
		Jun	0	0	0	0	12	1,498	0	0	1,510
		Jul	0	0	0	0	0	1,212	0	0	1,212
		Aug	0	0	0	0	0	1,135	0	0	1,135
		Sep	0	0	0	0	175	3,254	0	0	3,430
		Oct	118	658	46	149	0	1,062	31	0	1,139
		Nov	98	632	182	586	6	2,469	0	0	2,658
		Dec	392	1,615	289	905	383	1,749	0	4	2,426
		Total	1,013	5,031	652	2,070	622	22,582	31	11	23,898
		PSE	16.20	17.81	24.43	24.39	52.16	11.48	100.00	72.12	
2016	Pungo	Jan	263	1,045	39	132	0	2,777	0	0	2,816
		Feb	191	834	13	43	0	610	0	0	623
		Mar	153	551	25	87	24	1,337	0	0	1,387
		Apr	37	233	30	102	0	60	0	15	105
		May	68	512	0	0	88	1,930	0	0	2,018
		Jun	0	0	0	0	52	501	0	0	554
		Jul	0	0	5	17	60	1,475	0	0	1,540
		Aug	0	0	0	0	100	237	0	0	338
		Sep	26	25	0	0	56	458	0	0	514
		Oct	177	823	44	149	6	1,533	0	10	1,593
		Nov	46	265	134	471	140	3,192	0	22	3,488
		Dec	306	1,382	40	138	7	3,885	0	0	3,933
		Total	1,268	5,670	330	1,139	534	17,997	0	46	18,908
		PSE	18.01	19.14	29.26	29.45	34.08	15.57	-	60.47	
2015	Pungo	Jan	93	312	37	122	0	302	0	0	339
		Feb	20	138	0	0	0	0	0	0	0
		Mar	59	371	0	0	0	0	0	0	0
		Apr	24	137	37	122	122	0	0	0	158
		May	0	0	0	0	0	22	0	0	22
		Jun	0	0	0	0	0	25	0	0	25
		Jul	0	0	0	0	9	0	0	0	9
		Aug	0	0	0	0	4	57	0	0	60
		Sep	0	0	0	0	58	361	0	0	419
		Oct	223	1,488	147	490	15	2,232	0	0	2,394
		Nov	166	608	98	329	32	929	0	0	1,059
		Dec	126	592	96	321	39	1,110	0	0	1,246
		Total	711	3,644	414	1,383	279	5,038	0	0	5,731
		PSE	21.68	30.39	27.88	27.83	50.66	25.02	-	-	

**Table IV.9      Estimated effort, harvest, and discards for Striped Bass in the Pungo River by month  
(continued).**

Year	Area	Month	Striped Bass Trips	Striped Bass Hours	Harvest		Discards (numbers)				Total Catch # Fish
					Number	Pounds	Legal Sized	Under Sized	Over Creel	Slot	
2014	Pungo	Jan	24	71	0	0	0	0	0	0	0
		Feb	11	37	0	0	0	0	0	0	0
		Mar	0	0	0	0	0	0	0	0	0
		Apr	0	0	18	64	0	0	0	0	18
		May	14	70	0	0	120	71	0	0	191
		Jun	52	284	0	0	181	48	0	0	230
		Jul	0	0	0	0	3	104	0	0	107
		Aug	0	0	0	0	25	42	0	0	68
		Sep	8	14	0	0	1,460	0	0	0	1,460
		Oct	171	766	30	105	0	132	0	7	169
		Nov	83	427	99	344	145	111	0	34	388
		Dec	97	524	25	88	67	73	0	25	190
		Total	459	2,192	173	602	2,002	582	0	66	2,823
		PSE	25.29	26.86	41.83	36.19	56.26	26.48	-	56.38	

**Table IV.10      Estimated effort, harvest, and discards for Striped Bass in the Cape Fear River<sup>1</sup> by month.**

Year	Area	Month	Striped Bass Trips	Striped Bass Hours	Harvest		Discards (numbers)				Total Catch # Fish
					Number	Pounds	Legal Sized	Under Sized	Over Creel	Slot	
2023	Cape Fear	Jan	0	0	0	0	0	0	0	0	0
		Feb	0	0	0	0	0	0	0	0	0
		Mar	14	76	0	0	42	0	0	0	42
		Apr	0	0	0	0	0	0	0	0	0
		May	84	277	0	0	537	0	0	0	537
		Total	98	353	0	0	579	0	0	0	579
		PSE	79.15	78.07	-	-	87.62	-	-	-	
2022	Cape Fear	Jan	0	0	0	0	0	0	0	0	0
		Feb	450	1,351	0	0	225	0	0	0	225
		Mar	0	0	0	0	0	0	0	0	0
		Apr	771	2,711	0	0	2,282	38	0	0	2,320
		May	26	97	0	0	19	0	0	0	19
		Total	1,247	4,159	0	0	2,526	38	0	0	2,564
		PSE	67.35	67.95	-	-	85.25	100.00	-	-	
2021	Cape Fear	Jan	0	0	0	0	0	0	0	0	0
		Feb	0	0	0	0	0	0	0	0	0
		Mar	34	84	0	0	11	0	0	0	11
		Apr	98	561	0	0	0	309	0	0	309
		May	0	0	0	0	0	0	0	0	0
		Total	131	645	0	0	11	309	0	0	321
		PSE	52.05	57.34	-	-	100.00	46.67	-	-	
2020 <sup>2</sup>	Cape Fear	Jan	0	0	0	0	0	0	0	0	0
		Feb	8	25	0	0	0	0	0	0	0
		Mar	0	0	0	0	0	0	0	0	0
		Apr	0	0	0	0	0	0	0	0	0
		May	0	0	0	0	0	0	0	0	0
		Total	8	25	0	0	0	0	0	0	0
		PSE	100	100	-	-	-	-	-	-	
2019	Cape Fear	Jan	0	0	0	0	0	0	0	0	0
		Feb	0	0	0	0	0	0	0	0	0
		Mar	0	0	0	0	0	4	0	0	4
		Apr	24	94	0	0	0	415	0	0	415
		May	0	0	0	0	0	2,064	0	0	2,064
		Total	24	94	0	0	0	2,482	0	0	2,482
		PSE	100.00	100.00	-	-	-	82.01	-	-	

<sup>1</sup>A moratorium on harvest of Striped Bass in the Cape Fear River was implemented in 2012.

<sup>2</sup>Creel sampling was suspended from March 18, 2020 through June 1, 2020, due to the State of North Carolina COVID-19 Safety Protocols.

**Table IV.10      Estimated effort, harvest, and discards for Striped Bass in the Cape Fear River<sup>1</sup> by month (*continued*).**

Year	Area	Month	Striped Bass Trips	Striped Bass Hours	Harvest		Discards (numbers)				Total Catch # Fish
					Number	Pounds	Legal Sized	Under Sized	Over Creel	Slot	
2018	Cape Fear	Jan	0	0	0	0	0	0	0	0	0
		Feb	0	0	0	0	0	0	0	0	0
		Mar	18	35	0	0	0	0	0	0	0
		Apr	0	0	0	0	0	0	0	0	0
		May	7	26	0	0	140	0	0	0	140
		Total	24	61	0	0	140	0	0	0	140
		PSE	77.12	72	-	-	70.75	-	-	-	
2017	Cape Fear	Jan	0	0	0	0	0	0	0	0	0
		Feb	26	159	0	0	14	0	0	0	14
		Mar	0	0	0	0	0	0	0	0	0
		Apr	0	0	0	0	0	0	0	0	0
		May	0	0	0	0	0	0	0	0	0
		Total	26	159	0	0	14	0	0	0	14
		PSE	100.00	100.00	-	-	100.00	-	-	-	
2016	Cape Fear	Jan	0	0	0	0	0	0	0	0	0
		Feb	0	0	0	0	0	0	0	0	0
		Mar	179	750	0	0	10	12	0	0	22
		Apr	87	315	0	0	17	0	0	0	17
		May	126	399	0	0	588	0	0	0	588
		Total	391	1,464	0	0	616	12	0	0	628
		PSE	46.44	44.35	-	-	95.83	100.00	-	-	
2015	Cape Fear	Jan	0	0	0	0	0	0	0	0	0
		Feb	0	0	0	0	0	0	0	0	0
		Mar	110	422	0	0	22	0	0	0	22
		Apr	19	181	0	0	0	162	0	0	162
		May	79	100	0	0	0	15	0	0	15
		Total	209	702	0	0	22	176	0	0	199
		PSE	50.10	52.97	-	-	100.00	57.39	-	-	
2014	Cape Fear	Jan	0	0	0	0	0	0	0	0	0
		Feb	0	0	0	0	0	0	0	0	0
		Mar	138	582	0	0	0	0	0	0	0
		Apr	138	833	0	0	708	703	0	0	1,412
		May	161	748	0	0	122	17	0	0	139
		Total	438	2,164	0	0	830	721	0	0	1,551
		PSE	41.96	45.87	-	-	72.68	77.47	-	-	

<sup>1</sup>A moratorium on harvest of Striped Bass in the Cape Fear River was implemented in 2012.

**Table IV.11      Estimated shad effort and catch<sup>1</sup> (in numbers) by river in the CSMA.**

Year	River	Month	Shad		American Shad		Hickory Shad	
			Trips	Hours	Number	Released	Number	Released
2023	Upper Neuse River	Jan	0	0	0	0	0	0
		Feb	945	2,966	16	16	329	489
		Mar	187	346	0	14	37	171
		Apr	28	85	0	0	0	0
		May	0	0	0	0	0	0
		Total	1,160	3,398	16	30	366	660
	Middle Neuse River	Jan	0	0	0	0	0	0
		Feb	346	2,023	0	54	859	5,144
		Mar	1,075	6,529	139	814	1,878	7,089
		Apr	0	0	0	0	0	0
		May	0	0	0	0	0	0
		Total	1,422	8,553	139	867	2,737	12,233
	Lower Neuse River	Jan	121	304	0	0	0	0
		Feb	528	1,444	0	88	329	492
		Mar	426	937	0	24	526	1,037
		Apr	0	0	0	0	0	0
		May	83	41	0	0	0	0
		Total	1,157	2,726	0	115	855	1,573
	Upper Tar River	Jan	0	0	0	0	0	0
		Feb	204	430	25	324	0	398
		Mar	1,157	2,656	749	1,369	0	171
		Apr	247	401	47	205	0	0
		May	69	245	0	190	0	304
		Total	1,677	3,731	821	2,089	0	873
	Lower Tar/Pamlico River	Jan	0	0	0	0	0	0
		Feb	0	0	0	0	0	0
		Mar	0	0	0	0	0	0
		Apr	0	0	0	0	0	0
		May	0	0	0	0	0	0
		Total	0	0	0	0	0	0
	Cape Fear River	Jan	0	0	0	0	0	0
		Feb	0	0	0	0	0	0
		Mar	641	3,099	1,205	2,645	0	0
		Apr	533	2,240	584	2,016	0	0
		May	69	146	290	1,114	0	0
		Total	1,243	5,484	2,079	5,775	0	0
	CSMA Combined	Jan	121	304	0	0	0	0
		Feb	2,023	6,864	40	482	1,517	6,523
		Mar	3,485	13,567	2,092	4,866	2,441	8,467
		Apr	809	2,726	632	2,222	0	0
		May	221	432	290	1,304	0	304
		Total	6,659	23,892	3,055	8,877	3,959	15,338

<sup>1</sup>Catch of American Shad and Hickory Shad were calculated by assigning a ratio of observed shad by species to reported miscellaneous catch. PSEs are not available for shad.

**Table IV.11    Estimated shad effort and catch<sup>1</sup> (in numbers) by river in the CSMA (continued).**

Year	River	Month	Shad		American Shad		Hickory Shad	
			Trips	Hours	Number	Released	Number	Released
2022	Upper Neuse River	Jan	0	0	0	0	0	0
		Feb	753	2,156	0	5	51	314
		Mar	1,030	2,179	20	16	99	87
		Apr	118	533	0	0	0	0
		May	0	0	0	0	0	0
		Total	1,901	4,868	20	21	150	401
	Middle Neuse River	Jan	52	30	0	0	0	0
		Feb	1,519	6,417	9	77	1,446	2,104
		Mar	1,529	4,410	7	82	1,745	9,621
		Apr	16	49	0	0	0	0
		May	0	0	0	0	0	0
		Total	3,115	10,905	16	158	3,191	11,725
	Lower Neuse River	Jan	0	0	0	0	0	104
		Feb	745	1,109	0	0	620	650
		Mar	456	799	0	0	71	467
		Apr	0	0	0	0	0	0
		May	0	0	0	0	0	0
		Total	1,200	1,908	0	0	691	1,221
	Upper Tar River	Jan	0	0	0	0	0	0
		Feb	512	1,186	82	358	50	445
		Mar	3,508	4,488	69	318	811	3,538
		Apr	1,611	2,515	322	694	28	58
		May	0	0	0	0	0	0
		Total	5,631	8,189	473	1,370	888	4,042
	Lower Tar/Pamlico River	Jan	0	0	0	0	0	0
		Feb	14	34	0	0	9	0
		Mar	0	0	0	0	0	0
		Apr	0	0	0	0	0	0
		May	0	0	0	0	0	0
		Total	14	34	0	0	9	0
	Cape Fear River	Jan	0	0	0	0	0	0
		Feb	105	490	126	0	0	0
		Mar	94	275	38	54	0	0
		Apr	923	2,394	2,496	520	0	0
		May	136	839	6	378	0	0
		Total	1,257	3,998	2,666	953	0	0
	CSMA Combined	Jan	52	30	0	0	0	104
		Feb	3,646	11,392	217	440	2,176	3,514
		Mar	6,617	12,151	134	470	2,726	13,713
		Apr	2,669	5,490	2,818	1,214	28	58
		May	136	839	6	378	0	0
		Total	13,119	29,903	3,176	2,503	4,930	17,389

<sup>1</sup>Catch of American Shad and Hickory Shad were calculated by assigning a ratio of observed shad by species to reported miscellaneous catch. PSEs are not available for shad.

**Table IV.11    Estimated shad effort and catch<sup>1</sup> (in numbers) by river in the CSMA (continued).**

Year	River	Month	Shad		American Shad		Hickory Shad	
			Trips	Hours	Number	Released	Number	Released
2021	Upper Neuse River	Jan	0	0	0	0	0	0
		Feb	95	211	0	0	0	0
		Mar	1,599	5,333	12	55	1,810	2,078
		Apr	92	242	0	0	0	0
		May	0	0	0	0	0	0
		Total	1,785	5,786	12	55	1,810	2,078
	Middle Neuse River	Jan	0	0	0	0	0	0
		Feb	729	1,262	0	0	65	130
		Mar	2,371	8,461	13	14	4,490	15,462
		Apr	87	71	0	0	0	326
		May	0	0	0	0	0	0
		Total	3,187	9,794	13	14	4,555	15,919
	Lower Neuse River	Jan	0	0	0	0	0	0
		Feb	148	72	0	0	0	24
		Mar	1,330	3,395	11	0	1,124	2,328
		Apr	130	285	0	0	0	0
		May	0	0	0	0	0	0
		Total	1,608	3,752	11	0	1,124	2,352
	Upper Tar River	Jan	0	0	0	0	0	0
		Feb	599	511	0	0	0	19
		Mar	7,809	19,626	496	1,723	6,163	24,143
		Apr	1,837	3,293	302	3,652	29	213
		May	0	0	0	0	0	14
		Total	10,245	23,429	797	5,375	6,192	24,390
	Lower Tar/Pamlico River	Jan	0	0	0	0	0	0
		Feb	0	0	0	0	0	6
		Mar	0	0	0	0	0	0
		Apr	0	0	0	0	0	0
		May	0	0	0	0	0	0
		Total	0	0	0	0	0	6
	Cape Fear River	Jan	0	0	0	0	0	0
		Feb	0	0	0	0	0	0
		Mar	466	1,837	369	631	12	0
		Apr	920	4,812	2,164	5,259	0	0
		May	98	676	90	1,025	0	0
		Total	1,484	7,325	2,624	6,914	12	0
	CSMA Combined	Jan	0	0	0	0	0	0
		Feb	1,571	2,055	0	0	65	179
		Mar	13,575	38,652	901	2,423	13,599	44,012
		Apr	3,065	8,703	2,465	8,911	29	540
		May	98	676	90	1,025	0	14
		Total	18,309	50,085	3,457	12,358	13,693	44,745

<sup>1</sup>Catch of American Shad and Hickory Shad were calculated by assigning a ratio of observed shad by species to reported miscellaneous catch. PSEs are not available for shad.

**Table IV.11 Estimated shad effort and catch<sup>1</sup> (in numbers) by river in the CSMA (continued).**

Year	River	Month	Shad		American Shad		Hickory Shad	
			Trips	Hours	Number	Released	Number	Released
2020 <sup>2</sup>	Upper Neuse River	Jan	0	0	0	0	0	0
		Feb	640	1,614	0	0	0	0
		Mar	2,166	6,407	646	199	183	57
		Apr	-	-	-	-	-	-
		May	-	-	-	-	-	-
		Total	2,806	8,021	646	199	183	57
	Middle Neuse River	Jan	0	0	0	0	0	0
		Feb	1,433	5,253	39	326	3,327	2,606
		Mar	5,609	23,526	145	2,205	9,684	47,390
		Apr	-	-	-	-	-	-
		May	-	-	-	-	-	-
		Total	7,042	28,780	184	2,531	13,011	49,996
	Lower Neuse River	Jan	0	0	0	0	0	0
		Feb	326	654	0	0	628	296
		Mar	322	1,396	0	83	311	1,878
		Apr	-	-	-	-	-	-
		May	-	-	-	-	-	-
		Total	648	2,050	0	83	939	2,173
	Upper Tar River	Jan	0	0	0	0	0	0
		Feb	1,556	4,837	0	359	16	1,456
		Mar	4,319	15,037	209	376	721	14,146
		Apr	-	-	-	-	-	-
		May	-	-	-	-	-	-
		Total	5,876	19,875	209	736	738	15,602
	Lower Tar/Pamlico River	Jan	0	0	0	0	0	160
		Feb	38	296	0	0	0	32
		Mar	0	0	0	102	0	0
		Apr	-	-	-	-	-	-
		May	-	-	-	-	-	-
		Total	38	296	0	102	0	191
	Cape Fear River	Jan	0	0	0	0	0	0
		Feb	0	0	0	0	0	0
		Mar	1,050	4,453	3,582	3,740	0	0
		Apr	-	-	-	-	-	-
		May	-	-	-	-	-	-
		Total	1,050	4,453	3,582	3,740	0	0
	CSMA Combined	Jan	0	0	0	0	0	160
		Feb	3,992	12,654	39	685	3,971	4,390
		Mar	13,468	50,820	4,582	6,706	10,900	63,470
		Apr	-	-	-	-	-	-
		May	-	-	-	-	-	-
		Total	17,459	63,474	4,621	7,391	14,871	68,020

<sup>1</sup>Catch of American Shad and Hickory Shad were calculated by assigning a ratio of observed shad by species to reported miscellaneous catch. PSEs are not available for shad.

<sup>2</sup>Creel sampling was suspended from March 18, 2020 through June 1, 2020, due to the State of North Carolina COVID-19 Safety Protocols

**Table IV.11    Estimated shad effort and catch<sup>1</sup> (in numbers) by river in the CSMA (continued).**

Year	River	Month	Shad		American Shad		Hickory Shad	
			Trips	Hours	Number	Released	Number	Released
2019	Upper Neuse River	Jan	0	0	0	0	0	0
		Feb	653	204	0	0	0	0
		Mar	862	1,463	39	0	26	69
		Apr	194	792	111	0	0	0
		May	0	0	0	0	0	0
		Total	1,708	2,459	150	0	26	69
	Middle Neuse River	Jan	0	0	0	0	0	0
		Feb	1,541	5,970	33	6	676	1,279
		Mar	2,213	7,131	4	33	1,550	6,842
		Apr	367	1,442	28	25	146	524
		May	0	0	0	0	0	0
		Total	4,120	14,544	65	64	2,372	8,645
	Lower Neuse River	Jan	307	677	0	0	25	-
		Feb	820	2,822	0	59	499	466
		Mar	746	2,520	0	0	1,088	1,188
		Apr	15	70	0	0	108	46
		May	0	0	0	0	0	0
		Total	1,889	6,088	0	59	1,720	1,701
	Upper Tar River	Jan	0	0	0	0	0	0
		Feb	1,958	4,355	12	486	394	708
		Mar	3,187	7,661	171	2,277	3,533	9,446
		Apr	571	1,175	369	357	313	247
		May	0	0	0	0	0	0
		Total	5,716	13,191	552	3,120	4,240	10,401
	Lower Tar/Pamlico River	Jan	0	0	0	0	0	0
		Feb	0	0	0	0	0	0
		Mar	15	33	0	0	0	0
		Apr	0	0	0	0	0	0
		May	0	0	0	0	0	4
		Total	15	33	0	0	0	4
	Cape Fear River	Jan	0	0	0	0	0	0
		Feb	0	0	0	0	0	0
		Mar	311	805	634	806	0	0
		Apr	443	1,470	1,387	2,161	0	20
		May	244	680	250	441	0	0
		Total	999	2,955	2,271	3,408	0	20
	CSMA Combined	Jan	307	677	0	0	25	0
		Feb	4,973	13,352	46	551	1,569	2,453
		Mar	7,334	19,613	848	3,116	6,198	17,546
		Apr	1,590	4,948	1,894	2,543	567	837
		May	244	680	250	441	0	4
		Total	14,448	39,270	3,038	6,652	8,358	20,841

<sup>1</sup>Catch of American Shad and Hickory Shad were calculated by assigning a ratio of observed shad by species to reported miscellaneous catch. PSEs are not available for shad.

<sup>2</sup>Creel sampling was suspended from March 18, 2020 through June 1, 2020, due to the State of North Carolina COVID-19 Safety Protocols

**Table IV.11    Estimated shad effort and catch<sup>1</sup> (in numbers) by river in the CSMA (continued).**

Year	River	Month	Shad		American Shad		Hickory Shad	
			Trips	Hours	Number	Released	Number	Released
2018	Upper Neuse River	Jan	0	0	0	0	0	0
		Feb	2,655	3,038	30	0	30	0
		Mar	1,271	2,745	24	36	80	0
		Apr	24	84	0	0	0	0
		May	15	7	0	0	0	0
		Total	3,964	5,874	54	36	110	0
	Middle Neuse River	Jan	0	0	0	0	0	0
		Feb	5,145	20,422	36	218	9,573	32,053
		Mar	2,997	11,064	22	104	5,637	20,999
		Apr	574	970	0	0	319	399
		May	0	0	0	0	0	0
		Total	8,716	32,457	58	322	15,529	53,451
	Lower Neuse River	Jan	0	0	0	0	0	0
		Feb	87	342	0	0	234	56
		Mar	586	2,141	0	0	1,364	4,415
		Apr	0	0	0	0	32	21
		May	0	0	0	0	0	0
		Total	673	2,483	0	0	1,630	4,493
	Upper Tar River	Jan	0	0	0	0	0	0
		Feb	2,373	3,287	391	873	195	1,658
		Mar	2,496	6,896	138	391	487	4,060
		Apr	629	2,288	131	1,301	158	298
		May	151	343	25	202	-	25
		Total	5,648	12,814	685	2,767	840	6,041
	Lower Tar/Pamlico River	Jan	0	0	0	0	0	0
		Feb	14	15	0	0	0	30
		Mar	0	0	0	0	50	176
		Apr	34	73	0	0	34	56
		May	0	0	0	0	0	0
		Total	48	89	0	0	85	262
	Cape Fear River	Jan	0	0	0	0	0	0
		Feb	0	0	0	0	0	0
		Mar	737	2,774	676	1,298	12	53
		Apr	1,654	7,850	4,104	6,386	0	0
		May	217	899	585	243	0	0
		Total	2,608	11,523	5,365	7,927	12	53
	CSMA Combined	Jan	0	0	0	0	0	0
		Feb	10,274	27,105	457	1,091	10,033	33,797
		Mar	8,086	25,620	860	1,829	7,631	29,703
		Apr	2,915	11,266	4,235	7,687	544	773
		May	383	1,249	610	445	0	25
		Total	21,657	65,240	6,162	11,052	18,208	64,299

<sup>1</sup>Catch of American Shad and Hickory Shad were calculated by assigning a ratio of observed shad by species to reported miscellaneous catch. PSEs are not available for shad.

<sup>2</sup>Creel sampling was suspended from March 18, 2020 through June 1, 2020, due to the State of North Carolina COVID-19 Safety Protocols

**Table IV.11    Estimated shad effort and catch<sup>1</sup> (in numbers) by river in the CSMA (continued).**

Year	River	Month	Shad		American Shad		Hickory Shad	
			Trips	Hours	Number	Released	Number	Released
2017	Upper Neuse River	Jan	0	0	0	0	0	0
		Feb	0	0	0	0	0	0
		Mar	1,146	2,725	44	11	480	273
		Apr	560	1,103	0	0	0	0
		May	0	0	0	0	0	0
		Total	1,706	3,828	44	11	480	273
	Middle Neuse River	Jan	0	0	0	0	0	0
		Feb	4,037	14,512	204	782	3,871	13,230
		Mar	4,136	16,841	140	1,285	8,161	33,858
		Apr	549	3,008	19	96	557	3,880
		May	0	0	0	0	0	0
		Total	8,722	34,362	363	2,136	12,590	50,996
	Lower Neuse River	Jan	0	0	0	0	0	0
		Feb	1,104	5,957	1	0	402	426
		Mar	1,534	5,928	112	444	3,299	20,577
		Apr	0	0	0	0	0	0
		May	0	0	0	0	0	0
		Total	2,638	11,885	112	444	3,701	21,662
	Upper Tar River	Jan	0	0	0	0	0	0
		Feb	1,871	6,814	132	318	81	190
		Mar	3,576	9,190	677	1,848	1,550	6,711
		Apr	593	667	88	44	0	207
		May	60	77	1	0	50	1
		Total	6,101	16,748	897	2,210	1,680	7,108
	Lower Tar/Pamlico River	Jan	0	0	0	0	0	0
		Feb	22	160	0	7	0	0
		Mar	0	0	0	0	0	0
		Apr	52	129	1	0	15	16
		May	0	0	0	0	0	0
		Total	74	290	1	7	15	16
	Cape Fear River	Jan	0	0	0	0	0	0
		Feb	623	2,481	319	389	0	0
		Mar	427	1,647	617	2,147	14	0
		Apr	319	1,837	416	133	0	0
		May	0	0	0	0	0	0
		Total	1,368	5,965	1,352	2,669	14	0
	CSMA Combined	Jan	0	0	0	0	0	0
		Feb	7,656	29,926	656	1,496	4,354	13,846
		Mar	10,819	36,330	1,590	5,735	13,504	61,420
		Apr	2,073	6,744	524	273	572	4,104
		May	60	77	1	0	50	1
		Total	20,609	73,077	2,769	7,477	18,480	80,056

<sup>1</sup>Catch of American Shad and Hickory Shad were calculated by assigning a ratio of observed shad by species to reported miscellaneous catch. PSEs are not available for shad.

<sup>2</sup>Creel sampling was suspended from March 18, 2020 through June 1, 2020, due to the State of North Carolina COVID-19 Safety Protocols

**Table IV.11    Estimated shad effort and catch<sup>1</sup> (in numbers) by river in the CSMA (continued).**

Year	River	Month	Shad		American Shad		Hickory Shad	
			Trips	Hours	Number	Released	Number	Released
2016	Upper Neuse River	Jan	0	0	0	0	0	0
		Feb	172	144	0	0	0	0
		Mar	1,235	2,601	90	50	898	150
		Apr	643	1,174	102	282	0	0
		May	171	488	0	798	0	0
		Total	2,221	4,406	192	1,144	898	136
	Middle Neuse River	Jan	0	0	0	0	0	0
		Feb	1,191	2,783	0	0	505	249
		Mar	4,454	13,958	60	280	7,651	28,168
		Apr	151	27	0	0	0	0
		May	0	0	0	0	0	0
		Total	5,795	16,768	60	279	8,157	28,418
	Lower Neuse River	Jan	0	0	0	0	0	0
		Feb	362	996	0	0	21	42
		Mar	1,212	5,042	0	0	1,777	1,498
		Apr	0	0	0	0	0	0
		May	0	0	0	0	0	0
		Total	1,573	6,038	0	0	1,798	1,540
	Upper Tar River	Jan	0	0	0	0	0	0
		Feb	495	315	0	0	0	0
		Mar	2,748	9,309	492	1,043	1,186	11,531
		Apr	1,711	8,026	559	1,776	223	0
		May	241	282	0	0	0	0
		Total	5,195	17,932	1,051	2,820	1,409	11,531
	Lower Tar/Pamlico River	Jan	0	0	0	0	0	0
		Feb	8	35	0	0	0	0
		Mar	34	155	0	0	0	0
		Apr	0	0	0	0	0	0
		May	0	0	0	0	0	0
		Total	42	191	0	0	0	59
	Cape Fear River	Jan	0	0	0	0	0	0
		Feb	29	72	0	0	0	0
		Mar	2,321	10,072	5,157	4,114	0	0
		Apr	2,294	11,354	4,682	7,144	0	0
		May	406	1,009	405	129	0	0
		Total	5,050	22,507	10,244	11,388	0	0
	CSMA Combined	Jan	0	0	0	0	0	0
		Feb	2,257	4,345	0	0	526	291
		Mar	12,003	41,137	5,799	5,488	11,513	41,347
		Apr	4,799	20,581	5,343	9,203	223	0
		May	818	1,779	405	927	0	0
		Total	19,877	67,842	11,547	15,631	12,262	41,684

<sup>1</sup>Catch of American Shad and Hickory Shad were calculated by assigning a ratio of observed shad by species to reported miscellaneous catch. PSEs are not available for shad.

<sup>2</sup>Creel sampling was suspended from March 18, 2020 through June 1, 2020, due to the State of North Carolina COVID-19 Safety Protocols

**Table IV.11 Estimated shad effort and catch<sup>1</sup> (in numbers) by river in the CSMA (continued).**

Year	River	Month	Shad		American Shad		Hickory Shad	
			Trips	Hours	Number	Released	Number	Released
2015	Upper Neuse River	Jan	0	0	0	0	0	0
		Feb	0	0	0	0	0	0
		Mar	2,378	4,123	28	16	1,562	172
		Apr	712	1,245	65	92	768	163
		May	41	154	0	0	0	0
		Total	3,131	5,522	94	107	2,330	335
	Middle Neuse River	Jan	0	0	0	0	0	0
		Feb	365	420	0	0	0	0
		Mar	3,259	10,237	0	17	5,299	9,882
		Apr	1,025	3,452	0	13	2,742	2,100
		May	0	0	0	0	0	0
		Total	4,649	14,109	0	30	8,040	11,981
	Lower Neuse River	Jan	0	0	0	0	0	0
		Feb	142	362	0	0	0	0
		Mar	95	286	0	0	48	0
		Apr	0	0	0	0	0	0
		May	0	0	0	0	0	0
		Total	237	648	0	0	48	0
	Upper Tar River	Jan	0	0	0	0	0	0
		Feb	121	302	0	0	0	0
		Mar	2,329	6,148	618	1,528	598	4,063
		Apr	1,183	2,842	363	188	266	720
		May	50	360	25	2,138	0	100
		Total	3,682	9,652	1,006	3,917	864	4,821
	Lower Tar/Pamlico River	Jan	0	0	0	0	0	0
		Feb	0	0	0	0	0	0
		Mar	0	0	0	0	0	0
		Apr	0	0	0	0	0	0
		May	0	0	0	0	0	0
		Total	0	0	0	0	0	0
	Cape Fear River	Jan	0	0	0	0	0	0
		Feb	0	0	0	0	0	0
		Mar	1,616	6,635	2,061	1,394	12	2
		Apr	1,488	6,405	1,860	4,993	0	0
		May	307	890	215	0	0	0
		Total	3,411	13,930	4,136	6,388	12	1
	CSMA Combined	Jan	0	0	0	0	0	0
		Feb	628	1,084	0	0	0	0
		Mar	9,677	27,431	2,707	2,954	7,518	14,118
		Apr	4,408	13,943	2,288	5,286	3,776	2,983
		May	398	1,403	240	2,138	0	100
		Total	15,111	43,861	5,235	10,442	11,293	17,138

<sup>1</sup>Catch of American Shad and Hickory Shad were calculated by assigning a ratio of observed shad by species to reported miscellaneous catch. PSEs are not available for shad.

<sup>2</sup>Creel sampling was suspended from March 18, 2020 through June 1, 2020, due to the State of North Carolina COVID-19 Safety Protocols

**Table IV.11 Estimated shad effort and catch<sup>1</sup> (in numbers) by river in the CSMA (continued).**

Year	River	Month	Shad		American Shad		Hickory Shad	
			Trips	Hours	Number	Released	Number	Released
2014	Upper Neuse River	Jan	0	0	0	0	0	0
		Feb	0	0	0	0	0	0
		Mar	1,740	4,616	0	616	402	737
		Apr	629	686	0	0	0	0
		May	0	0	0	0	0	0
		Total	2,369	5,302	0	616	402	737
	Middle Neuse River	Jan	0	0	0	0	0	0
		Feb	1,681	3,028	128	185	1,130	2,596
		Mar	4,307	11,318	0	73	5,219	11,347
		Apr	570	1,150	0	0	74	60
		May	0	0	0	0	0	0
		Total	6,558	15,495	128	261	6,424	14,000
	Lower Neuse River	Jan	0	0	0	0	0	0
		Feb	3,046	9,084	0	0	6,429	12,536
		Mar	1,542	3,389	285	120	2,024	775
		Apr	222	260	0	0	0	0
		May	0	0	0	0	0	0
		Total	4,810	12,733	285	120	8,453	13,311
	Upper Tar River	Jan	0	0	0	0	0	0
		Feb	425	1,378	0	0	0	0
		Mar	1,118	2,570	112	1,207	123	711
		Apr	1,011	2,949	56	107	218	1,340
		May	0	0	0	0	0	0
		Total	2,554	6,897	168	1,314	341	2,052
	Lower Tar/Pamlico River	Jan	0	0	0	0	0	0
		Feb	40	7	0	0	0	0
		Mar	37	132	0	0	0	0
		Apr	0	0	0	0	0	0
		May	0	0	0	0	0	0
		Total	78	138	0	0	0	0
	Cape Fear River	Jan	0	0	0	0	0	0
		Feb	0	0	0	0	0	0
		Mar	559	1,366	372	0	0	0
		Apr	1,898	9,161	5,400	9,719	0	0
		May	553	1,914	1,680	1,306	0	0
		Total	3,010	12,441	7,453	11,025	0	0
	CSMA Combined	Jan	0	0	0	0	0	0
		Feb	5,192	13,496	128	185	7,559	15,132
		Mar	9,303	23,390	768	2,017	7,768	13,571
		Apr	4,330	14,205	5,457	9,826	292	1,400
		May	553	1,914	1,680	1,306	0	0
		Total	19,378	53,006	8,034	13,337	15,619	30,100

<sup>1</sup>Catch of American Shad and Hickory Shad were calculated by assigning a ratio of observed shad by species to reported miscellaneous catch. PSEs are not available for shad.

<sup>2</sup>Creel sampling was suspended from March 18, 2020 through June 1, 2020, due to the State of North Carolina COVID-19 Safety Protocols

**Table IV.12      Estimated average Striped Bass<sup>1</sup> catch (harvest + discard) per unit effort in number from the CSMA by month.**

Year	Month	Harvests per Trip	Discards per Trip	Total Caught per Trip
2023	January	0	0.36	0.36
	February	0	0.11	0.11
	March	0	0.12	0.12
	April	0	0.09	0.09
	May	0	0.14	0.14
	June	0	0.23	0.23
	July	0	0.19	0.19
	August	0	0.22	0.22
	September	0	0.02	0.02
	October	0	0.25	0.25
	November	0	0.04	0.04
	December	0	0.06	0.06
2022	Annual	0	0.16	0.16
	January	0	0.23	0.23
	February	0	0.34	0.34
	March	0	0.10	0.10
	April	0	0.32	0.32
	May	0	0.24	0.24
	June	0	0.46	0.46
	July	0	0.22	0.22
	August	0	0.43	0.43
	September	0	0.15	0.15
	October	0	0.06	0.06
	November	0	0.27	0.27
2021	December	0	0.35	0.35
	Annual	0	0.26	0.26
	January	0	0.34	0.34
	February	0	0.36	0.36
	March	0	0.04	0.04
	April	0	0.44	0.44
	May	0	0.29	0.29
	June	0	0.03	0.03
	July	0	0.34	0.34
	August	0	0.24	0.24
	September	0	0.12	0.12
	October	0	0.19	0.19
2020	November	0	0.13	0.13
	December	0	0.29	0.29
2019	Annual	0	0.22	0.22
	January	0	0.34	0.34

<sup>1</sup> From March 2019 onward, harvest of Striped Bass in the CSMA is prohibited, and no harvest information was collected during this time.

<sup>2</sup> Creel sampling was suspended from March 18, 2020 through June 1, 2020, due to the State of North Carolina COVID-19 Safety Protocols.

**Table IV.12      Estimated average Striped Bass<sup>1</sup> catch (harvest + discard) per unit effort in number from the CSMA by month (*continued*).**

Year	Month	Harvests per Trip	Discards per Trip	Total Caught per Trip
2020 <sup>2</sup>	January	0	0.32	0.32
	February	0	0.14	0.14
	March	0	0.23	0.23
	April	-	-	-
	May	-	-	-
	June	0	0.22	0.22
	July	0	0.27	0.27
	August	0	0.35	0.35
	September	0	0.14	0.14
	October	0	0.09	0.09
	November	0	0.15	0.15
	December	0	0.21	0.21
Annual		0	0.21	0.21
2019	January	0.11	1.01	1.12
	February	0.03	0.25	0.27
	March	0.01	0.37	0.38
	April	0	0.10	0.10
	May	0	0.32	0.32
	June	0	0.42	0.42
	July	0	0.17	0.17
	August	0	0.26	0.26
	September	0	0.34	0.34
	October	0	0.12	0.12
	November	0	1.18	1.18
	December	<0.01	0.23	0.23
Annual		0.01	0.33	0.34
2018	January	0.13	1.65	1.78
	February	0.06	0.24	0.31
	March	0.05	0.59	0.64
	April	0.06	0.19	0.25
	May	0	0.66	0.66
	June	0	0.56	0.56
	July	0	0.57	0.57
	August	0	0.61	0.61
	September	0	0.17	0.17
	October	<0.01	0.35	0.35
	November	0.03	0.64	0.67
	December	0.08	1.66	1.73
Annual		0.03	0.51	0.54

<sup>1</sup> From March 2019 onward, harvest of Striped Bass in the CSMA is prohibited, and no harvest information was collected during this time.

<sup>2</sup> Creel sampling was suspended from March 18, 2020 through June 1, 2020, due to the State of North Carolina COVID-19 Safety Protocols.

**Table IV.12      Estimated average Striped Bass<sup>1</sup> catch (harvest + discard) per unit effort in number from the CSMA by month (*continued*).**

Year	Month	Harvests per Trip	Discards per Trip	Total Caught per Trip
2017	January	0.01	0.98	1.00
	February	0.07	0.92	0.98
	March	0.08	0.86	0.94
	April	0.08	0.91	0.99
	May	0	1.00	1.00
	June	0	1.00	1.00
	July	0	0.97	0.97
	August	0	1.00	1.00
	September	<0.01	0.99	1.00
	October	0.12	0.85	0.97
	November	0.13	0.81	0.95
	December	0.19	0.78	0.98
2016	Annual	0.05	0.93	0.98
	January	0.27	2.34	2.61
	February	0.05	0.39	0.44
	March	0.03	0.34	0.36
	April	0.15	0.46	0.61
	May	0	0.39	0.39
	June	0	0.26	0.26
	July	0	0.31	0.31
	August	0	0.48	0.48
	September	0	0.65	0.65
	October	0.03	1.09	1.12
	November	0.03	0.92	0.95
2015	December	0.16	2.67	2.82
	Annual	0.06	0.65	0.71
	January	0.14	0.67	0.80
	February	0.18	0.54	0.72
	March	0.04	0.06	0.10
	April	0.03	0.10	0.13
	May	0	0.04	0.04
	June	0	0.13	0.13
	July	0	0.52	0.52
	August	0	0.04	0.04
	September	0	0.49	0.49
	October	0.04	0.58	0.62
2014	November	0.08	0.65	0.74
	December	0.12	1.12	1.24
2013	Annual	0.04	0.29	0.32

<sup>1</sup> From March 2019 onward, harvest of Striped Bass in the CSMA is prohibited, and no harvest information was collected during this time.

<sup>2</sup> Creel sampling was suspended from March 18, 2020 through June 1, 2020, due to the State of North Carolina COVID-19 Safety Protocols.

**Table IV.12      Estimated average Striped Bass<sup>1</sup> catch (harvest + discard) per unit effort in number from the CSMA by month (*continued*).**

Year	Month	Harvests per Trip	Discards per Trip	Caught per Trip	Total
2014	January	0.14	0.07	0.21	
	February	0.06	0.15	0.21	
	March	0.05	0.25	0.30	
	April	0.04	0.23	0.27	
	May	0	0.15	0.15	
	June	0	0.17	0.17	
	July	0	0.07	0.07	
	August	0	0.47	0.47	
	September	0	0.81	0.81	
	October	0.01	0.37	0.39	
	November	0.11	0.97	1.08	
	December	0.05	0.64	0.69	
	Annual	0.04	0.32	0.35	

<sup>1</sup> From March 2019 onward, harvest of Striped Bass in the CSMA is prohibited, and no harvest information was collected during this time.

<sup>2</sup> Creel sampling was suspended from March 18, 2020 through June 1, 2020, due to the State of North Carolina COVID-19 Safety Protocols.

**Table IV.13 Number of observed anglers living in North Carolina by county of residency and river fished.**

Upper Neuse River	2023		2022		2021		2020		2019	
	Num	%								
<b>County</b>										
Beaufort	0	0	0	0	0	0	0	0	0	0
Bladen	0	0	0	0	0	0	0	0	1	0.97
Brunswick	0	0	0	0	0	0	0	0	0	0
Burke	0	0	0	0	0	0	0	0	0	0
Camden	0	0	0	0	0	0	0	0	0	0
Carteret	0	0	1	0.78	0	0	0	0	0	0
Chatham	0	0	0	0	0	0	0	0	0	0
Craven	0	0	0	0	1	0.8	0	0	0	0
Cumberland	0	0	0	0	0	0	0	0	0	0
Davidson	0	0	0	0	2	1.68	0	0	0	0
Duplin	3	6.52	1	0.78	1	1	1	1.33	2	1.94
Durham	0	0	0	0	1	0.84	1	1.33	0	0
Franklin	0	0	1	0.78	0	0	0	0	0	0.0
Graham	0	0	0	0	0	0	0	0	0	0
Granville	0	0	0	0	0	0	0	0	0	0
Greene	0	0	0	0	1	0.84	0	0	0	0
Guilford	0	0	0	0	0	0	0	0	0	0
Halifax	0	0	0	0	0	0	0	0	0	0
Harnett	0	0	0	0	0	0	1	1.33	2	1.94
Hyde	0	0	0	0	0	0	0	0	0	0
Johnston	7	15.22	21	16.28	28	23.53	22	29.33	12	11.65
Lenoir	0	0	1	0.78	2	1.68	0	0	1	0.97
Mecklenburg	0	0	0	0	0	0	0	0	0	0
Nash	0	0	0	0	1	1	0	0	0	0
New Hanover	0	0	0	0	0	0	0	0	0	0
Onslow	0	0	0	0	0	0	0	0	0	0
Orange	0	0	0	0	0	0	5	6.67	0	0
Pitt	0	0	2	1.55	0	0	0	0	0	0
Robeson	0	0	1	0.78	0	0	0	0	0	0
Sampson	5	10.87	9	6.98	5	4.20	8	10.67	2	1.94
Wake	10	21.74	27	20.93	45	37.82	11	14.67	42	40.78
Wayne	21	45.65	64	49.61	31	26.05	25	33.33	41	39.81
Wilson	0	0	1	0.78	1	0.84	1	1.33	0	0
Total	46	100.00	129	100.00	119	100.00	75	100.00	103	100.00

**Table IV.13 Number of observed anglers living in North Carolina by county of residency and river fished (continued).**

Upper Neuse River	2018		2017		2016		2015		2014	
	Num	%								
<b>County</b>										
Beaufort	0	0	1	1.39	0	0	0	0	0	0
Bladen	0	0	0	0	0	0	0	0	0	0
Brunswick	0	0	0	0	0	0	0	0	1	0.88
Burke	0	0	0	0	0	0	0	0	2	1.77
Camden	0	0	1	1.39	0	0	0	0	0	0
Carteret	0	0	0	0	0	0	0	0	0	0
Chatham	0	0	0	0	0	0	0	0	1	0.88
Craven	0	0	0	0	0	0	0	0	0	0
Cumberland	0	0	2	2.78	1	1.03	1	0.73	0	0
Davidson	0	0	0	0	0	0	0	0	0	0
Duplin	0	0	0	0	1	1.03	3	2.19	0	0
Durham	0	0	0	0	1	1.03	0	0	0	0
Franklin	1	1.05	0	0	0	0	3	2.19	0	0
Graham	0	0	0	0	0	0	0	0	1	0.88
Granville	0	0	0	0	0	0	1	0.73	0	0
Greene	0	0	0	0	0	0	0	0	0	0
Guilford	0	0	0	0	0	0	0	0	2	1.77
Halifax	0	0	0	0	0	0	1	0.73	0	0
Harnett	0	0	1	1.39	0	0	0	0	0	0
Hyde	0	0	0	0	0	0	1	0.73	0	0
Johnston	23	24.21	13	18.06	19	19.59	25	18.25	23	20.35
Lenoir	0	0	0	0	0	0	0	0	2	1.77
Mecklenburg	0	0	0	0	0	0	1	0.73	0	0
Nash	0	0	0	0	0	0	0	0	0	0
New Hanover	0	0	0	0	0	0	1	0.73	0	0
Onslow	0	0	0	0	0	0	2	1.46	0	0
Orange	1	1.05	0	0	0	0	0	0	0	0
Pitt	0	0	0	0	1	1.03	0	0	0	0
Robeson	0	0	0	0	1	1.03	0	0	0	0
Sampson	3	3.16	1	1	0	0	2	1.46	2	1.77
Wake	33	34.74	18	25.00	43	44.33	45	32.85	39	34.51
Wayne	33	34.74	35	48.61	30	30.93	49	35.77	40	35.40
Wilson	1	1.05	0	0	0	0	2	1.46	0	0
Total	95	100.00	72	100.00	97	100.00	137	100.00	113	100.00

**Table IV.13 Number of observed anglers living in North Carolina by county of residency and river fished (continued).**

Middle Neuse River	2023		2022		2021		2020		2019	
	Num	%								
<b>County</b>										
Beaufort	2	2.53	0	0	1	0.61	2	1.63	3	1.05
Bladen	0	0	0	0	0	0	1	0.81	0	0
Carteret	1	1.27	11	4.12	1	0.61	5	4.07	2	0.70
Catawba	0	0	0	0	0	0	0	0	1	0.35
Chatham	0	0	0	0	1	0.61	0	0	0	0
Craven	6	7.59	47	17.60	11	6.75	8	6.50	54	18.82
Cumberland	0	0	0	0	0	0	0	0	1	0.35
Davidson	0	0	0	0	0	0	0	0	0	0
Duplin	7	8.86	6	2.25	8	5	4	3	15	5
Edgecombe	0	0	3	1.12	0	0	1	0.81	1	0.35
Forsyth	0	0	0	0	0	0	0	0	0	0
Franklin	0	0	0	0	2	1.23	0	0	0	0
Gates	0	0	0	0	0	0	2	1.63	0	0
Granville	0	0	1	0.37	0	0	0	0	0	0
Greene	12	15.19	43	16.10	20	12.27	16	13.01	12	4.18
Guilford	0	0	0	0	0	0	0	0	0	0
Halifax	0	0	1	0.37	0	0	0	0	0	0
Harnett	1	1.27	2	0.75	0	0	1	0.81	2	0.70
Hoke	0	0	0	0	0	0	0	0	0	0
Hyde	0	0	0	0	0	0	0	0	0	0
Johnston	2	2.53	3	1.12	2	1.23	3	2.44	13	4.53
Jones	2	2.53	6	2.25	2	1.23	1	0.81	13	4.53
Lee	0	0	0	0	0	0	1	0.81	0	0
Lenoir	16	20.25	68	25.47	44	26.99	38	30.89	76	26.48
Martin	0	0	0	0	0	0	0	0	1	0.35
Nash	0	0	0	0	0	0	0	0	0	0
New Hanover	1	1.27	0	0	0	0	0	0	0	0
Onslow	2	2.53	6	2.25	8	4.91	3	2.44	6	2.09
Pamlico	0	0	0	0	0	0	0	0	3	1.05
Pasquotank	0	0	0	0	0	0	0	0	1	0.35
Pender	0	0	1	0.37	0	0	0	0	0	0
Perquimans	0	0	0	0	1	0.61	0	0	0	0
Person	0	0	0	0	0	0	0	0	1	0.35

**Table IV.13 Number of observed anglers living in North Carolina by county of residency and river fished (*continued*).**

<b>Middle Neuse River</b>	<b>2023</b>		<b>2022</b>		<b>2021</b>		<b>2020</b>		<b>2019</b>	
	Num	%								
<b>County</b>										
Pitt	16	20.25	44	16.48	53	32.52	24	19.51	53	18.47
Robeson	0	0	0	0	0	0	0	0	0	0
Transylvania	0	0	0	0	0	0	0	0	0	0
Sampson	0	0	1	0.37	2	1.23	4	3.25	5	1.74
Scotland	0	0	0	0	0	0	0	0	0	0
Wake	2	2.53	4	1.50	2	1.23	0	0	2	1
Washington	0	0	0	0	0	0	0	0	0	0
Wayne	9	11.39	19	7.12	4	2.45	9	7.32	22	7.67
Vance	0	0	1	0.37	0	0	0	0	0	0
Wilson	0	0	0	0	0	0	0	0	0	0
Total	79	100.00	267	100.00	163	100.00	123	100.00	287	100.00

**Table IV.13 Number of observed anglers living in North Carolina by county of residency and river fished (continued).**

Middle Neuse River	2018		2017		2016		2015		2014	
	Num	%								
<b>County</b>										
Beaufort	4	1.93	3	1.69	1	0.72	1	0.49	3	2.01
Bladen	0	0	0	0	0	0	0	0	0	0
Carteret	5	2.42	2	1.13	1	0.72	2	0.99	1	0.67
Catawba	0	0	0	0	0	0	0	0	0	0
Chatham	1	0.48	0	0	0	0	0	0	0	0
Craven	21	10.14	24	13.56	13	9.35	31	15.27	6	4.03
Cumberland	0	0	0	0	0	0	1	0.49	0	0
Davidson	1	0.48	0	0	0	0	0	0	0	0
Duplin	10	5	6	3	3	2	5	2.46	3	2
Edgecombe	2	0.97	1	0.56	1	0.72	0	0	0	0
Forsyth	0	0	1	0.56	0	0	0	0	0	0
Franklin	0	0	0	0	0	0	0	0	0	0
Gates	0	0	0	0	0	0	0	0	0	0
Granville	1	0.48	0	0	0	0	0	0	0	0
Greene	11	5.31	21	11.86	15	10.79	34	16.75	13	8.72
Guilford	1	0.48	1	0.56	0	0	0	0	0	0
Halifax	0	0	0	0	0	0	0	0	0	0
Harnett	1	0.48	1	0.56	1	0.72	1	0.49	0	0
Hoke	1	0.48	0	0	0	0	0	0	0	0
Hyde	0	0	1	0.56	0	0	0	0	0	0
Johnston	3	1.45	3	1.69	3	2.16	4	1.97	3	2.01
Jones	6	2.90	4	2.26	5	3.60	6	2.96	8	5.37
Lee	0	0	0	0	0	0	0	0	0	0
Lenoir	51	24.64	37	20.90	41	29.50	58	28.57	60	40.27
Martin	0	0	0	0	0	0	0	0	0	0
Nash	2	0.97	2	1.13	1	0.72	0	0	0	0
New Hanover	0	0	0	0	0	0	0	0	0	0
Onslow	8	3.86	2	1.13	1	0.72	4	1.97	1	0.67
Pamlico	1	0.48	0	0	0	0	0	0	0	0
Pasquotank	0	0	0	0	0	0	0	0	0	0
Pender	1	0.48	0	0	0	0	0	0	0	0
Perquimans	0	0	0	0	0	0	0	0	0	0
Person	0	0	0	0	0	0	0	0	0	0

**Table IV.13 Number of observed anglers living in North Carolina by county of residency and river fished (*continued*).**

Middle Neuse River	2018		2017		2016		2015		2014	
	Num	%								
<b>County</b>										
Pitt	45	21.74	39	22.03	39	28.06	38	18.72	36	24.16
Robeson	1	0.48	0	0	0	0	0	0	0	0
Transylvania	0	0	0	0	0	0	1	0.49	0	0
Sampson	0	0	0	0	1	0.72	0	0	0	0
Scotland	1	0.48	0	0	0	0	0	0	0	0
Wake	4	1.93	9	5.08	0	0	1	0.49	0	0
Washington	0	0	0	0	0	0	1	0.49	0	0
Wayne	25	12.08	18	10.17	11	7.91	14	6.90	15	10.07
Vance	0	0	0	0	0	0	0	0	0	0
Wilson	0	0	2	1.13	2	1.44	1	0.49	0	0
Total	207	100.00	177	100.00	139	100.00	203	100.00	149	100.00

**Table IV.13 Number of observed anglers living in North Carolina by county of residency and river fished (*continued*).**

Lower Neuse River	2023		2022		2021		2020		2019	
	Num	%								
<b>County</b>										
Alamance	0	0	0	0	0	0	1	0.17	2	0.23
Ashe	0	0	0	0	0	0	0	0	0	0
Beaufort	5	0.61	3	0.35	5	0.72	2	0.35	15	1.72
Bertie	0	0	0	0	1	0.14	0	0	0	0
Brunswick	3	0.36	2	0.23	2	0	0	0	0	0
Cabarrus	0	0	0	0	1	0.14	1	0.17	0	0
Carteret	23	2.79	22	2.54	15	2.17	6	1	16	1.84
Catawba	0	0	0	0	0	0	0	0	1	0.11
Chowan	0	0	0	0	0	0	0	0	0	0
Columbus	0	0	3	0.35	0	0	0	0	5	0.57
Chatham	1	0.12	0	0	2	0.29	1	0.17	0	0
Columbus	9	1.09	0	0	7	1.01	1	0.17	0	0
Craven	295	35.84	311	35.87	260	37.57	227	39.62	370	42.53
Cumberland	0	0	6	0.69	1	0.14	2	0.35	5	0.57
Currituck	0	0	0	0	0	0	0	0	1	0.11
Davidson	0	0	1	0.12	0	0	0	0	0	0
Dare	0	0	1	0.12	0	0	0	0	0	0
Duplin	33	4.01	30	3.46	19	2.75	17	2.97	17	1.95
Durham	1	0.12	0	0	0	0	0	0	1	0.11
Edgecombe	2	0.24	0	0	1	0.14	2	0.35	1	0.11
Franklin	0	0	0	0	0	0	0	0	2	0.23
Forsyth	1	0.12	1	0.12	1	0.14	1	0.17	0	0
Gaston	0	0	0	0	0	0	0	0	0	0
Granville	0	0	1	0.12	0	0	0	0	1	0.11
Greene	5	0.61	18	2.08	12	1.73	11	1.92	16	1.84
Guilford	0	0	2	0.23	0	0	0	0	2	0.23
Halifax	0	0	0	0	0	0	0	0	0	0
Harnett	2	0.24	5	0.58	0	0	1	0	1	0.11
Hertford	0	0	0	0	0	0	0	0	0	0
Johnston	13	1.58	19	2.19	9	1.30	11	1.92	8	0.92
Jones	79	9.60	67	7.73	55	7.95	35	6.11	62	7.13
Lee	1	0.12	1	0.12	0	0	0	0	0	0
Lenoir	59	7.17	83	9.57	59	8.53	55	9.60	61	7.01

**Table IV.13 Number of observed anglers living in North Carolina by county of residency and river fished (continued).**

Lower Neuse River	2023		2022		2021		2020		2019	
	Num	%								
<b>County</b>										
Lincoln	0	0	0	0	0	0	1	0.17	0	0
Martin	2	0.24	1	0.12	0	0	1	0	2	0.23
Mecklenburg	1	0.12	1	0.12	0	0	0	0	1	0.11
Moore	0	0	0	0	0	0	1	0.17	1	0.11
Nash	0	0	1	0.12	0	0	0	0	2	0.23
New Hanover	0	0	3	0.35	0	0	0	0	0	0
Northampton	0	0	1	0.12	0	0	0	0	0	0
Onslow	131	15.92	120	13.84	122	17.63	82	14.31	114	13.10
Orange	0	0	0	0	0	0	1	0.17	0	0
Pamlico	37	4.50	41	4.73	32	4.60	31	5.41	42	4.83
Pender	3	0.36	2	0.23	1	0.14	2	0.35	2	0.23
Pitt	50	6.08	49	5.65	43	6.21	36	6.28	59	6.78
Randolph	1	0.12	0	0	0	0	0	0	0	0
Rockingham	0	0	0	0	0	0	0	0	0	0
Robeson	0	0	0	0	0	0	0	0	0	0
Sampson	2	0.24	4	0.46	3	0.43	3	0.52	5	0.57
Stokes	1	0.12	1	0.12	0	0	0	0	0	0
Union	1	0.12	9	1.04	0	0	0	0	0	0
Wake	12	1.46	1	0.12	9	1.30	5	0.87	9	1.03
Warren	0	0	56	6.46	0	0	0	0	0	0
Watauga	1	0.12	1	0.12	0	0	0	0	0	0
Wayne	48	5.83	0	0	28	4.05	32	5.58	41	4.71
Wilson	1	0.12	0	0	4	0.58	3	0.52	5	0.57
Yadkin	0	0	0	0	0	0	1	0.17	0	0
Total	823	100.00	867	100.00	692	100.00	573	100.00	870	100.00

**Table IV.13 Number of observed anglers living in North Carolina by county of residency and river fished (continued).**

Lower Neuse River	2018		2017		2016		2015		2014	
	Num	%								
<b>County</b>										
Alamance	0	0	0	0	0	0	0	0	0	0
Ashe	0	0	1	0.12	0	0	0	0	0	0
Beaufort	0	0	5	0.58	4	0.73	4	0.76	2	0.47
Bertie	0	0	0	0	0	0	0	0	0	0
Brunswick	1	0.16	1	0.12	1	0.18	0	0	2	0.47
Cabarrus	1	0.16	0	0	0	0	0	0	0	0
Carteret	13	2.12	21	2.45	13	2.37	12	2.27	14	3.30
Catawba	0	0	0	0	0	0	0	0	0	0
Chowan	1	0.16	0	0	0	0	0	0	0	0
Columbus	4	0.65	11	1.28	5	0.91	4	0.76	1	0.24
Chatham	0	0	0	0	0	0	0	0	0	0
Columbus	0	0	0	0	0	0	0	0	0	0
Craven	252	41.04	339	39.56	225	40.98	233	44.05	200	47.17
Cumberland	2	0.33	0	0	0	0	2	0.38	1	0.24
Currituck	0	0	0	0	0	0	0	0	0	0
Davidson	0	0	1	0.12	0	0	0	0	1	0.24
Dare	0	0	0	0	0	0	0	0	0	0
Duplin	27	4.40	22	2.57	12	2.19	9	1.70	3	0.71
Durham	0	0	0	0	0	0	0	0	0	0
Edgecombe	2	0.33	1	0.12	0	0	0	0	2	0.47
Franklin	2	0.33	0	0	0	0	0	0	0	0
Forsyth	0	0	0	0	0	0	3	0.57	0	0
Gaston	0	0	2	0.23	0	0	0	0	0	0
Granville	0	0	2	0.23	0	0	0	0	0	0
Greene	3	0.49	21	2.45	12	2.19	7	1.32	10	2.36
Guilford	1	0.16	0	0	0	0	2	0.38	0	0
Halifax	0	0	1	0.12	0	0	0	0	0	0
Harnett	1	0.16	2	0	1	0.18	1	0.19	2	0.47
Hertford	0	0	0	0	1	0.18	0	0	0	0
Johnston	7	1.14	10	1.17	2	0.36	6	1.13	10	2.36
Jones	60	9.77	56	6.53	42	7.65	37	6.99	23	5.42
Lee	0	0	0	0	0	0	0	0	0	0
Lenoir	29	4.72	58	6.77	37	6.74	40	7.56	31	7.31

**Table IV.13 Number of observed anglers living in North Carolina by county of residency and river fished (continued).**

Lower Neuse River	2018		2017		2016		2015		2014	
	Num	%								
<b>County</b>										
Lincoln	0	0	0	0	0	0	0	0	0	0
Martin	0	0	2	0.23	0	0	1	0.19	0	0
Mecklenburg	2	0.33	0	0	0	0	1	0.19	1	0.24
Moore	0	0	1	0.12	1	0.18	0	0	1	0.24
Nash	0	0	0	0	0	0	1	0.19	0	0
New Hanover	0	0	5	0.58	3	0.55	2	0.38	0	0
Northampton	0	0	0	0	0	0	0	0	0	0
Onslow	114	18.57	146	17.04	94	17.12	74	13.99	75	17.69
Orange	0	0	1	0.12	0	0	0	0	1	0.24
Pamlico	27	4.40	47	5.48	38	6.92	32	6.05	18	4.25
Pender	3	0.49	4	0.47	3	0.55	2	0.38	0	0
Pitt	32	5.21	54	6.30	28	5.10	28	5.29	9	2.12
Randolph	3	0.49	0	0	0	0	1	0.19	0	0
Rockingham	0	0	0	0	0	0	1	0.19	0	0
Robeson	0	0	1	0.12	0	0	0	0	0	0
Sampson	0	0	0	0	0	0	2	0.38	1	0.24
Stokes	0	0	0	0	1	0.18	0	0	0	0
Union	0	0	0	0	0	0	0	0	0	0
Wake	3	0.49	2	0.23	4	0.73	3	0.57	4	0.94
Warren	0	0	0	0	0	0	0	0	1	0.24
Watauga	0	0	0	0	0	0	2	0.38	0	0
Wayne	24	3.91	39	4.55	16	2.91	16	3.02	6	1.42
Wilson	0	0	1	0.12	6	1.09	3	0.57	5	1.18
Yadkin	0	0	0	0	0	0	0	0	0	0
Total	614	100.00	857	100.00	549	100.00	529	100.00	424	100.00

**Table IV.13 Number of observed anglers living in North Carolina by county of residency and river fished (continued).**

<b>Upper Tar River</b>	2023		2022		2021		2020		2019	
	Num	%								
<b>County</b>										
Beaufort	1	1.56	3	1.42	1	0.34	1	1.39	2	1.00
Bertie	0	0	1	0.47	1	0.34	0	0	1	0.50
Buncombe	0	0	0	0	0	0	0	0	0	0
Carteret	0	0	0	0	0	0	0	0	0	0
Chatham	0	0	0	0	1	0.34	0	0	0	0
Craven	1	1.56	0	0	0	0	0	0	0	0
Cumberland	0	0	0	0	0	0	0	0	2	1.00
Dare	0	0	0	0	0	0	0	0	0	0
Duplin	0	0	0	0	2	0.68	0	0	0	0
Durham	0	0	2	0.95	1	0	0	0	0	0
Edgecombe	35	54.69	74	35.07	117	39.66	26	36.11	74	37.00
Franklin	0	0	3	1.42	2	0.68	0	0	6	3.00
Granville	0	0	0	0	0	0	0	0	1	0.50
Greene	2	3.13	2	0.95	5	1.69	0	0	1	0.50
Guilford	0	0	3	1.42	1	0	0	0	1	0.50
Halifax	0	0	0	0	4	1.36	0	0	1	0.50
Harnett	0	0	0	0	0	0	0	0	0	0
Hertford	0	0	1	0.47	0	0	0	0	0	0
Hyde	0	0	0	0	0	0	0	0	0	0
Lee	0	0	0	0	0	0	0	0	0	0
Johnston	0	0	3	1.42	5	1.69	1	1.39	4	2
Jones	0	0	1	0.47	0	0	0	0	0	0
Lenoir	0	0	0	0	1	0.34	0	0	0	0
Martin	0	0	0	0	1	0.34	1	1.39	3	1.50
Nash	1	1.56	49	23.22	65	22.03	14	19.44	41	20.50
New Hanover	0	0	0	0	0	0	0	0	0	0
Northampton	0	0	2	0.95	1	0.34	0	0	0	0
Pender	0	0.0	0	0	1	0	0	0	1	0.50
Pitt	23	35.94	47	22.27	50	16.95	25	34.72	33	16.50
Randolph	1	1.56	0	0	0	0	0	0	0	0
Sampson	0	0	0	0	0	0	0	0	0	0
Wake	0	0	10	4.74	13	4.41	1	1.39	12	6.00
Washington	0	0	1	0.47	0	0	0	0	0	0
Wayne	0	0	1	0.47	2	0.68	1	1.39	1	0.50
Wilson	0	0	8	3.79	21	7.12	2	2.78	16	8.00
Total	64	100.00	211	100.00	295	100.00	72	100.00	200	100.00

**Table IV.13 Number of observed anglers living in North Carolina by county of residency and river fished (continued).**

Upper Tar River	2018		2017		2016		2015		2014	
	Num	%								
<b>County</b>										
Beaufort	1	0.61	0	0	0	0	0	0	1	1.52
Bertie	0	0	0	0	1	0.65	0	0	0	0
Buncombe	0	0	0	0	1	0.65	0	0	0	0
Carteret	2	1.21	0	0	0	0	0	0	0	0
Chatham	1	0.61	0	0	0	0	0	0	0	0
Craven	0	0	0	0	0	0	0	0	0	0
Cumberland	0	0	0	0	0	0	0	0	0	0
Dare	1	0.61	0	0	1	0.65	0	0	0	0
Duplin	0	0	0	0	0	0	0	0	0	0
Durham	0	0	1	0.87	0	0	0	0	0	0
Edgecombe	80	48.48	65	56.52	70	45.16	124	54.87	33	50.00
Franklin	2	1.21	1	0.87	0	0	2	0.88	0	0
Granville	0	0	0	0	0	0	0	0	0	0
Greene	0	0	0	0	0	0	6	2.65	0	0
Guilford	0	0	0	0	0	0	0	0	0	0
Halifax	0	0	1	0.87	2	1.29	0	0	0	0
Harnett	0	0	0	0	1	0.65	0	0	0	0
Hertford	0	0	0	0	0	0	0	0	0	0
Hyde	0	0	1	0.87	0	0	0	0	0	0
Lee	0	0	0	0	2	1.29	0	0	0	0
Johnston	3	1.82	3	2.61	0	0	2	0.88	0	0
Jones	1	0.61	0	0	0	0	0	0	0	0
Lenoir	0	0	0	0	0	0	0	0	0	0
Martin	0	0	1	0.87	2	1.29	2	0.88	0	0
Nash	51	30.91	16	13.91	44	28.39	64	28.32	15	22.73
New Hanover	0	0	0	0	0	0	2	0.88	0	0
Northampton	0	0	0	0	0	0	0	0	0	0
Pender	0	0	0	0	0	0	0	0	0	0
Pitt	7	4.24	12	10.43	18	11.61	6	2.65	7	10.61
Randolph	0	0	0	0	0	0	0	0	0	0
Sampson	0	0	2	1.74	0	0	0	0	0	0
Wake	4	2.42	4	3.48	5	3.23	8	3.54	3	4.55
Washington	0	0	0	0	0	0	0	0	0	0
Wayne	0	0	0	0	0	0	0	0	0	0
Wilson	12	7.27	8	6.96	8	5.16	10	4.42	7	10.61
Total	165	100.00	115	100.00	155	100.00	226	100.00	66	100.00

**Table IV.13 Number of observed anglers living in North Carolina by county of residency and river fished (continued).**

Lower Tar/ Upper Pamlico River	2023		2022		2021		2020		2019	
	Num	%								
<b>County</b>										
Beaufort	129	55.84	193	59.20	219	50.69	211	42.80	288	41.74
Bertie	0	0	0	0	1	0.23	4	0.81	3	0.43
Bladen	0	0	0	0	1	0.23	0	0	1	0.14
Burke	0	0	0	0	0	0	0	0	4	0.58
Carteret	0	0	1	0.31	0	0	2	0.41	0	0
Catawba	0	0	0	0	0	0	0	0	0	0
Chatham	0	0	0	0	0	0	0	0	0	0
Craven	0	0	6	1.84	4	0.93	0	0	0	0
Chowan	1	0.43	0	0	0	0	2	0.41	0	0
Columbus	0	0	0	0	0	0	3	0.61	3	0.43
Craven	0	0	0	0	0	0	7	1.42	18	2.61
Cumberland	1	0.43	0	0	0	0	3	1	1	0
Dare	0	0	0	0	0	0	0	0	0	0
Davidson	0	0	0	0	0	0	0	0	0	0
Duplin	0	0	0	0	2	0.46	0	0	2	0.29
Durham	0	0	0	0	0	0	1	0.20	0	0
Edgecombe	2	0.87	4	1.23	8	1.85	18	3.65	17	2.46
Franklin	0	0	1	0.31	0	0	0	0	1	0
Granville	0	0	0	0	0	0	0	0	0	0
Greene	3	1.30	6	1.84	9	2.08	12	2.43	9	1.30
Guilford	0	0	0	0	0	0	0	0	0	0
Halifax	0	0	0	0	0	0	1	0.20	0	0
Harnett	0	0	0	0	0	0	3	0.61	0	0
Haywood	0	0	0	0	1	0.23	0	0	0	0
Henderson	0	0	0	0	0	0	0	0	0	0
Hertford	0	0	0	0	0	0	1	0	4	0.58
Hoke	0	0	0	0	0	0	0	0	0	0
Hyde	0	0	0	0	0	0	0	0	2	0
Johnston	1	0.43	3	0.92	6	1.39	10	2.03	10	1.45
Jones	0	0	0	0	1	0.23	1	0.20	0	0
Lee	0	0	0	0	1	0.23	0	0	0	0
Lenoir	2	0.87	2	0.61	3	0.69	8	1.62	6	0.87
Martin	3	1.30	4	1.23	16	3.70	17	3.45	34	4.93

**Table IV.13 Number of observed anglers living in North Carolina by county of residency and river fished (continued).**

Lower Tar/ Upper Pamlico River	2023		2022		2021		2020		2019	
	Num	%								
<b>County</b>										
McDowell	0	0	0	0	0	0	1	0.20	0	0
Mecklenburg	0	0	0	0	0	0	0	0	0	0
Moore	0	0	0	0	0	0	0	0	1	0.14
Nash	0	0	3	0.92	3	0.69	4	0.81	8	1.16
New Hanover	0	0	0	0	1	0.23	0	0	2	0.29
Northampton	0	0	1	0.31	0	0	0	0	0	0
Onslow	0	0	1	0.31	15	3.47	8	1.62	13	1.88
Orange	0	0	0	0	0	0	0	0	0	0
Pamlico	2	0.87	0	0	0	0	1	0.20	0	0
Pasquotank	0	0	0	0	0	0	0	0	0	0
Pender	0	0	0	0	0	0	0	0	3	0.43
Perquimans	0	0	0	0	0	0	0	0	1	0.14
Pitt	84	36.36	83	25.46	129	29.86	155	31.44	218	31.59
Robeson	0	0	0	0	0	0	2	0.41	1	0
Rockingham	0	0	0	0	0	0	0	0	0	0
Sampson	0	0	0	0	0	0	0	0	1	0.14
Union	0	0	0	0	0	0	1	0.20	0	0
Wake	1	0.43	1	0.31	4	0.93	7	1.42	9	1.30
Washington	0	0	0	0	1	0.23	0	0	1	0.14
Watauga	0	0	0	0	0	0	0	0	0	0
Wayne	2	0.87	11	3.37	5	1.16	6	1.22	9	1.30
Wilson	0	0	6	1.84	2	0.46	4	0.81	20	2.90
Yadkin	0	0	0	0	0	0	0	0	0	0
Total	231	100.00	326	100.00	432	100.00	493	100.00	690	100.00

**Table IV.13 Number of observed anglers living in North Carolina by county of residency and river fished (continued).**

Lower Tar/ Upper Pamlico River	2018		2017		2016		2015		2014	
	Num	%								
<b>County</b>										
Beaufort	266	40.00	337	45.42	238	47.41	362	39.78	92	36.36
Bertie	7	1.05	7	0.94	1	0.20	6	0.66	0	0
Bladen	0	0	0	0	0	0	0	0	0	0
Burke	0	0	0	0	0	0	0	0	0	0
Carteret	7	1.05	1	0.13	0	0	1	0.11	0	0
Catawba	0	0	0	0	0	0	2	0.22	0	0
Chatham	2	0.30	0	0	0	0	0	0	0	0
Craven	0	0	0	0	5	1.00	0	0	0	0
Chowan	0	0	0	0	0	0	2	0.22	1	0.40
Columbus	3	0.45	1	0.13	0	0	2	0.22	0	0
Craven	23	3.46	12	1.62	0	0	14	1.54	3	1.19
Cumberland	0	0	2	0	0	0	4	0	2	0.79
Dare	0	0	0	0	0	0	0	0	1	0.40
Davidson	0	0	0	0	1	0.20	0	0	0	0
Duplin	0	0	1	0.13	0	0	1	0.11	0	0
Durham	0	0	0	0	0	0	1	0.11	0	0
Edgecombe	17	2.56	20	2.70	17	3.39	16	1.76	5	1.98
Franklin	0	0	2	0.27	0	0	1	0.11	0	0
Granville	1	0	0	0	0	0	0	0	0	0
Greene	11	1.65	9	1.21	19	3.78	34	3.74	11	4.35
Guilford	1	0	0	0	1	0.20	2	0.22	0	0
Halifax	1	0.15	3	0.40	0	0	2	0.22	1	0.40
Harnett	2	0.30	1	0.13	0	0	0	0	1	0.40
Haywood	0	0	0	0	0	0	0	0	0	0
Henderson	0	0	0	0	0	0	1	0.11	0	0
Hertford	3	0	0	0	0	0	0	0	0	0
Hoke	1	0.15	0	0	0	0	0	0	0	0
Hyde	0	0	1	0	0	0	0	0	0	0
Johnston	3	0.45	4	0.54	4	0.80	17	1.87	4	1.58
Jones	0	0	0	0	0	0	0	0	0	0
Lee	0	0	1	0.13	0	0	0	0	0	0
Lenoir	9	1.35	7	0.94	7	1.39	7	0.77	0	0
Martin	25	3.76	42	5.66	26	5.18	36	3.96	11	4.35

**Table IV.13 Number of observed anglers living in North Carolina by county of residency and river fished (continued).**

Lower Tar/ Upper Pamlico River	2018		2017		2016		2015		2014	
	Num	%								
<b>County</b>										
McDowell	0	0	0	0	0	0	0	0	0	0
Mecklenburg	0	0	0	0	0	0	0	0	1	0.40
Moore	0	0	0	0	0	0	0	0	0	0
Nash	8	1.20	11	1.48	7	1.39	12	1.32	6	2.37
New Hanover	0	0	2	0.27	0	0	1	0.11	0	0
Northampton	0	0	0	0	0	0	0	0	0	0
Onslow	21	3.16	9	1.21	3	0.60	44	4.84	1	0.40
Orange	0	0	1	0.13	1	0.20	0	0	0	0
Pamlico	0	0	0	0	0	0	1	0.11	0	0
Pasquotank	1	0.15	0	0	0	0	0	0	0	0
Pender	0	0	0	0	0	0	1	0.11	0	0
Perquimans	0	0	0	0	0	0	0	0	0	0
Pitt	219	32.93	229	30.86	147	29.28	268	29.45	98	38.74
Robeson	2	0.30	0	0	0	0	0	0	0	0
Rockingham	1	0.15	0	0	0	0	0	0	0	0
Sampson	0	0	0	0	0	0	0	0	0	0
Union	0	0	0	0	0	0	0	0	0	0
Wake	8	1.20	11	1.48	3	0.60	7	0.77	4	1.58
Washington	0	0	1	0.13	2	0.40	0	0	0	0
Watauga	0	0	0	0	1	0.20	0	0	0	0
Wayne	5	0.75	12	1.62	3	0.60	26	2.86	2	0.79
Wilson	18	2.71	14	1.89	16	3.19	39	4.29	9	3.56
Yadkin	0	0	1	0.13	0	0	0	0	0	0
Total	665	100.00	742	100.00	502	100.00	910	100.00	253	100.00

**Table IV.13 Number of observed anglers living in North Carolina by county of residency and river fished (continued).**

Pungo River	2023		2022		2021		2020		2019	
	Num	%								
<b>County</b>										
Alamance	0	0	0	0	1	0	0	0	0	0
Alexander	0	0	1	0.16	1	0.14	0	0	0	0
Ashe	1	0.15	0	0	1	0.14	0	0	0	0
Beaufort	199	30.71	212	33.44	250	35.06	214	37.74	135	30.89
Bertie	13	2.01	22	3.47	15	2.10	9	1.59	9	2.06
Bladen	0	0	0	0	0	0	1	0.18	0	0
Brunswick	0	0	0	0	2	0.28	1	0.18	0	0
Burke	0	0	0	0	0	0	0	0	1	0.23
Cabarrus	0	0	2	0.32	0	0	1	0.18	0	0
Caldwell	0	0	0	0	0	0	0	0	0	0
Camden	0	0	0	0	0	0	0	0	0	0
Carteret	3	0.46	1	0.16	0	0	1	0.18	0	0
Chatham	1	0.15	0	0	0	0	0	0	0	0
Chowan	7	1.08	3	0	7	0.98	5	0.88	5	1.14
Craven	4	0.62	3	0	6	0.84	3	0.53	2	0.46
Cumberland	0	0	2	0.32	1	0	1	0	1	0.23
Currituck	0	0	0	0	0	0	0	0	1	0.23
Dare	4	0.62	5	0.79	2	0.28	0	0	0	0
Davidson	0	0	0	0	1	0	0	0	1	0.23
Davie	0	0	0	0	0	0	0	0	0	0
Duplin	3	0.46	3	0.47	1	0.14	0	0	1	0.23
Durham	0	0	1	0.16	0	0	0	0	2	0.46
Edgecombe	48	7.41	52	8.20	57	7.99	46	8.11	35	8.01
Forsyth	1	0.15	0	0	0	0	0	0	0	0
Franklin	0	0	1	0.16	2	0.28	2	0.35	2	0.46
Gates	0	0	1	0.16	0	0	1	0.18	0	0
Granville	0	0	1	0	2	0.28	1	0	0	0
Greene	10	1.54	8	1.26	8	1.12	8	1.41	7	1.60
Guilford	4	0.62	1	0.16	1	0.14	1	0.18	0	0
Halifax	1	0.15	1	0.16	1	0.14	3	0.53	1	0.23
Harnett	1	0.15	1	0.16	1	0.14	0	0	0	0
Hertford	2	0.31	1	0.16	3	0.42	2	0.35	0	0
Hyde	6	0.93	6	0.95	0	0	3	0.53	1	0.23

**Table IV.13 Number of observed anglers living in North Carolina by county of residency and river fished (continued).**

Pungo River	2023		2022		2021		2020		2019	
	Num	%								
<b>County</b>										
Johnston	11	1.70	15	2.37	10	1.40	4	0.71	11	2.52
Jones	1	0.15	0	0	0	0	0	0	0	0
Lee	0	0	0	0	0	0	0	0	0	0
Lenoir	4	0.62	10	1.58	7	0.98	2	0.35	1	0.23
Martin	35	5.40	23	3.63	43	6.03	36	6.35	23	5.26
Mecklenburg	0	0	2	0.32	0	0	1	0.18	0	0
Moore	0	0	3	0.47	2	0.28	0	0	0	0
Nash	17	2.62	16	2.52	30	4.21	21	3.70	16	3.66
New Hanover	3	0.46	2	0.32	3	0.42	0	0	0	0
Northampton	0	0	1	0.16	0	0	0	0	0	0
Onslow	3	0.46	1	0.16	2	0.28	1	0.18	0	0
Orange	0	0	2	0.32	1	0.14	0	0	1	0.23
Pamlico	0	0	0	0	1	0.14	0	0	0	0
Pasquotank	0	0	0	0	1	0.14	1	0.18	0	0
Pender	0	0	2	0.32	1	0.14	0	0	1	0.23
Perquimans	2	0.31	2	0.32	0	0	0	0	1	0.23
Pitt	165	25.46	144	22.71	150	21.04	121	21.34	130	29.75
Randolph	0	0	0	0	1	0.14	0	0	1	0.23
Rockingham	0	0	0	0	1	0.14	0	0	0	0
Sampson	5	0.77	1	0.16	3	0	0	0	0	0
Stokes	0	0	0	0	0	0	2	0.35	0	0
Union	1	0.15	0	0	1	0.14	0	0	0	0
Vance	0	0	1	0.16	1	0.14	0	0	0	0
Wake	17	2.62	21	3.31	23	3.23	13	2.29	18	4.12
Washington	14	2.16	13	2.05	20	2.81	16	2.82	7	1.60
Watauga	0	0	0	0	1	0.14	0	0	0	0
Wayne	26	4.01	14	2.21	21	2.95	12	2.12	6	1.37
Wilson	36	5.56	33	5.21	26	3.65	34	6.00	17	3.89
Yadkin	0	0	0	0	1	0.14	0	0	0	0
Total	648	100.00	634	100.00	713	100.00	567	100.00	437	100.00

**Table IV.13 Number of observed anglers living in North Carolina by county of residency and river fished (continued).**

Pungo River	2018		2017		2016		2015		2014	
	Num	%								
<b>County</b>										
Alamance	1	0.33	0	0	0	0	1	0.30	0	0
Alexander	0	0	0	0	0	0	0	0	0	0
Ashe	0	0	0	0	0	0	0	0	0	0
Beaufort	107	34.97	157	38.48	164	43.97	110	33.03	63	41.18
Bertie	1	0.33	8	1.96	0	0	9	2.70	2	1.31
Bladen	0	0	1	0.25	0	0	0	0	0	0
Brunswick	1	0.33	0	0	0	0	0	0	0	0
Burke	0	0	0	0	0	0	0	0	0	0
Cabarrus	0	0	1	0.25	1	0.27	0	0	0	0
Caldwell	0	0	0	0	0	0	1	0.30	0	0
Camden	0	0	0	0	0	0	1	0.30	0	0
Carteret	0	0	0	0	1	0	0	0	0	0
Chatham	2	0.65	0	0	1	0.27	0	0	0	0
Chowan	0	0	0	0	3	0.80	0	0	2	1.31
Craven	3	0.98	5	1.23	0	0	2	0.60	1	0.65
Cumberland	0	0	0	0	2	0.54	1	0.30	0	0
Currituck	0	0	1	0.25	0	0	0	0	0	0
Dare	1	0.33	0	0	1	0.27	1	0.30	0	0
Davidson	0	0	0	0	0	0	0	0	0	0
Davie	1	0.33	2	0.49	0	0	0	0	0	0
Duplin	1	0.33	1	0.25	0	0	0	0	0	0
Durham	0	0	0	0	0	0	1	0.30	1	0.65
Edgecombe	21	6.86	34	8.33	28	7.51	37	11.11	15	9.80
Forsyth	0	0	0	0	0	0	2	0.60	0	0
Franklin	0	0	6	1.47	0	0	1	0.30	0	0
Gates	0	0	0	0	0	0	0	0	0	0
Granville	0	0	1	0.25	1	0.27	0	0	0	0
Greene	2	0.65	5	1.23	0	0	2	0.60	2	1.31
Guilford	2	0.65	2	0.49	0	0	0	0	0	0
Halifax	0	0	1	0.25	0	0	0	0	0	0
Harnett	1	0.33	0	0	0	0	0	0	0	0
Hertford	1	0.33	1	0.25	2	0.54	0	0	2	1.31
Hyde	2	0.65	6	1.47	4	1.07	6	1.80	0	0

**Table IV.13 Number of observed anglers living in North Carolina by county of residency and river fished (continued).**

Pungo River	2018		2017		2016		2015		2014	
	Num	%								
<b>County</b>										
Johnston	6	1.96	5	1.23	8	2.14	4	1.20	1	0.65
Jones	0	0	0	0	0	0	0	0	1	0.65
Lee	1	0.33	0	0	0	0	0	0	0	0
Lenoir	3	0.98	1	0.25	2	0.54	2	0.60	0	0
Martin	19	6.21	22	5.39	24	6.43	16	4.80	4	2.61
Mecklenburg	0	0	0	0	0	0	0	0	0	0
Moore	0	0	1	0.25	0	0	0	0	0	0
Nash	14	4.58	16	3.92	17	4.56	9	2.70	9	5.88
New Hanover	0	0	0	0	1	0.27	0	0	0	0
Northampton	0	0	0	0	0	0	0	0	0	0
Onslow	1	0.33	0	0	0	0	0	0	0	0
Orange	0	0	0	0	1	0.27	0	0	0	0
Pamlico	1	0.33	0	0	0	0	0	0	0	0
Pasquotank	0	0	1	0.25	0	0	0	0	0	0
Pender	0	0	0	0	0	0	0	0	0	0
Perquimans	0	0	1	0.25	3	0.80	1	0.30	0	0
Pitt	67	21.90	71	17.40	68	18.23	64	19.22	28	18.30
Randolph	0	0	0	0	1	0.27	0	0	0	0
Rockingham	0	0	0	0	0	0	0	0	0	0
Sampson	0	0	0	0	0	0	0	0	0	0
Stokes	0	0	0	0	0	0	0	0	0	0
Union	1	0.33	0	0	0	0	2	0.60	0	0
Vance	0	0	0	0	0	0	0	0	0	0
Wake	15	4.90	20	4.90	10	2.68	15	4.50	10	6.54
Washington	4	1.31	14	3.43	13	3.49	11	3.30	5	3.27
Watauga	0	0	0	0	0	0	0	0	0	0
Wayne	4	1.31	3	0.74	5	1.34	11	3.30	2	1.31
Wilson	23	7.52	21	5.15	12	3.22	23	6.91	5	3.27
Yadkin	0	0	0	0	0	0	0	0	0	0
Total	306	100.00	408	100.00	373	100.00	333	100.00	153	100.00

**Table IV.14 Mean<sup>1</sup> reported angler expenditures by river and expense type.**

Year	Expenditure	Cape	Upper	Middle	Lower	Upper	Lower Tar/ Pamlico		Upper Pungo	All CSMA
		Fear <sup>2</sup>	Neuse	Neuse	Neuse	Tar				
2023	Miles Traveled	22.63	13.88	29.88	35.90	13.92	17.18	57.00	36.60	
	Food Cost	\$6.94	\$6.11	\$8.19	\$7.59	\$3.55	\$2.07	\$17.40	\$8.79	
	Ice Cost	\$2.22	\$0.58	\$1.19	\$1.02	\$0.00	\$3.05	\$1.59	\$1.20	
	Bait Cost	\$7.83	\$4.19	\$1.01	\$1.93	\$3.17	\$2.81	\$0.43	\$1.90	
	Boat Fuel and Oil Cost	\$27.56	\$8.43	\$11.12	\$14.39	\$2.31	\$19.61	\$24.87	\$16.35	
	Total	\$44.55	\$19.32	\$21.51	\$24.93	\$9.03	\$27.54	\$44.29	\$28.22	
2022	Miles Traveled	16.25	12.88	26.91	37.81	19.66	28.99	62.98	35.97	
	Food Cost	\$8.83	\$4.72	\$6.79	\$7.81	\$6.19	\$7.06	\$22.55	\$9.45	
	Ice Cost	\$2.93	\$0.38	\$0.80	\$0.90	\$0.34	\$2.77	\$2.78	\$1.28	
	Bait Cost	\$7.00	\$2.61	\$1.91	\$1.78	\$0.69	\$5.94	\$1.21	\$2.07	
	Boat Fuel and Oil Cost	\$28.04	\$8.40	\$11.16	\$17.30	\$9.98	\$16.97	\$29.19	\$18.56	
	Total	\$46.80	\$16.10	\$20.65	\$27.80	\$17.19	\$32.75	\$55.74	\$31.36	
2021	Miles Traveled	35.53	17.02	27.67	33.05	8.77	30.91	50.11	35.10	
	Food Cost	\$16.86	\$4.89	\$9.53	\$5.68	\$0.00	\$7.91	\$8.18	\$7.01	
	Ice Cost	\$1.36	\$0.26	\$0.79	\$0.89	\$0.96	\$1.39	\$1.95	\$1.21	
	Bait Cost	\$2.36	\$2.40	\$0.04	\$1.76	\$0.00	\$2.72	\$3.10	\$2.14	
	Boat Fuel and Oil Cost	\$7.33	\$3.88	\$8.39	\$10.07	\$0.00	\$12.19	\$15.26	\$11.69	
	Total	\$27.90	\$11.42	\$18.75	\$18.40	\$0.96	\$24.22	\$28.49	\$22.05	
2020 <sup>3</sup>	Miles Traveled	35.53	17.02	27.67	33.05	8.77	30.91	50.11	35.10	
	Food Cost	\$16.86	\$4.89	\$9.53	\$5.68	\$0.00	\$7.91	\$8.18	\$7.01	
	Ice Cost	\$1.36	\$0.26	\$0.79	\$0.89	\$0.96	\$1.39	\$1.95	\$1.21	
	Bait Cost	\$2.36	\$2.40	\$0.04	\$1.76	\$0.00	\$2.72	\$3.10	\$2.14	
	Boat Fuel and Oil Cost	\$7.33	\$3.88	\$8.39	\$10.07	\$0.00	\$12.19	\$15.26	\$11.69	
	Total	\$27.90	\$11.42	\$18.75	\$18.40	\$0.96	\$24.22	\$28.49	\$22.05	
2019	Miles Traveled	36.01	12.21	25.14	28.35	18.81	29.27	51.65	30.87	
	Food Cost	\$7.04	\$1.37	\$8.10	\$7.49	\$3.11	\$5.09	\$7.83	\$6.50	
	Ice Cost	\$0.50	\$0.37	\$1.19	\$0.81	\$0.49	\$0.65	\$1.92	\$0.96	
	Bait Cost	\$0.83	\$2.42	\$1.57	\$4.47	\$2.36	\$4.68	\$0.93	\$3.19	
	Boat Fuel and Oil Cost	\$7.14	\$2.67	\$7.27	\$13.86	\$4.26	\$11.93	\$19.35	\$13.31	
	Total	\$15.51	\$6.83	\$18.13	\$26.63	\$10.21	\$22.35	\$30.03	\$23.96	
2018	Miles Traveled	28.08	11.62	27.74	25.39	16.77	27.92	52.08	29.18	
	Food Cost	\$6.44	\$0.53	\$6.99	\$5.85	\$0.71	\$6.21	\$8.76	\$5.93	
	Ice Cost	\$0.42	\$0.27	\$1.07	\$1.27	\$0.07	\$0.91	\$1.60	\$1.01	
	Bait Cost	\$1.68	\$3.97	\$1.08	\$2.93	\$0.23	\$3.41	\$1.63	\$2.41	
	Boat Fuel and Oil Cost	\$8.40	\$5.21	\$8.31	\$12.68	\$2.10	\$14.08	\$17.52	\$12.81	
	Total	\$16.93	\$9.98	\$17.45	\$22.73	\$3.11	\$24.61	\$29.52	\$22.16	

<sup>1</sup>Means reported include expenditures greater than or equal to zero dollars “\$0.00.” Lodging not included because of low response rate.

<sup>2</sup>Cape Fear data only sampled from March–May.

<sup>3</sup>Creel sampling was suspended from March 18, 2020 through June 1, 2020, due to the State of North Carolina COVID-19 Safety Protocols.

**Table IV.14 Mean<sup>1</sup> reported angler expenditures by river and expense type (continued).**

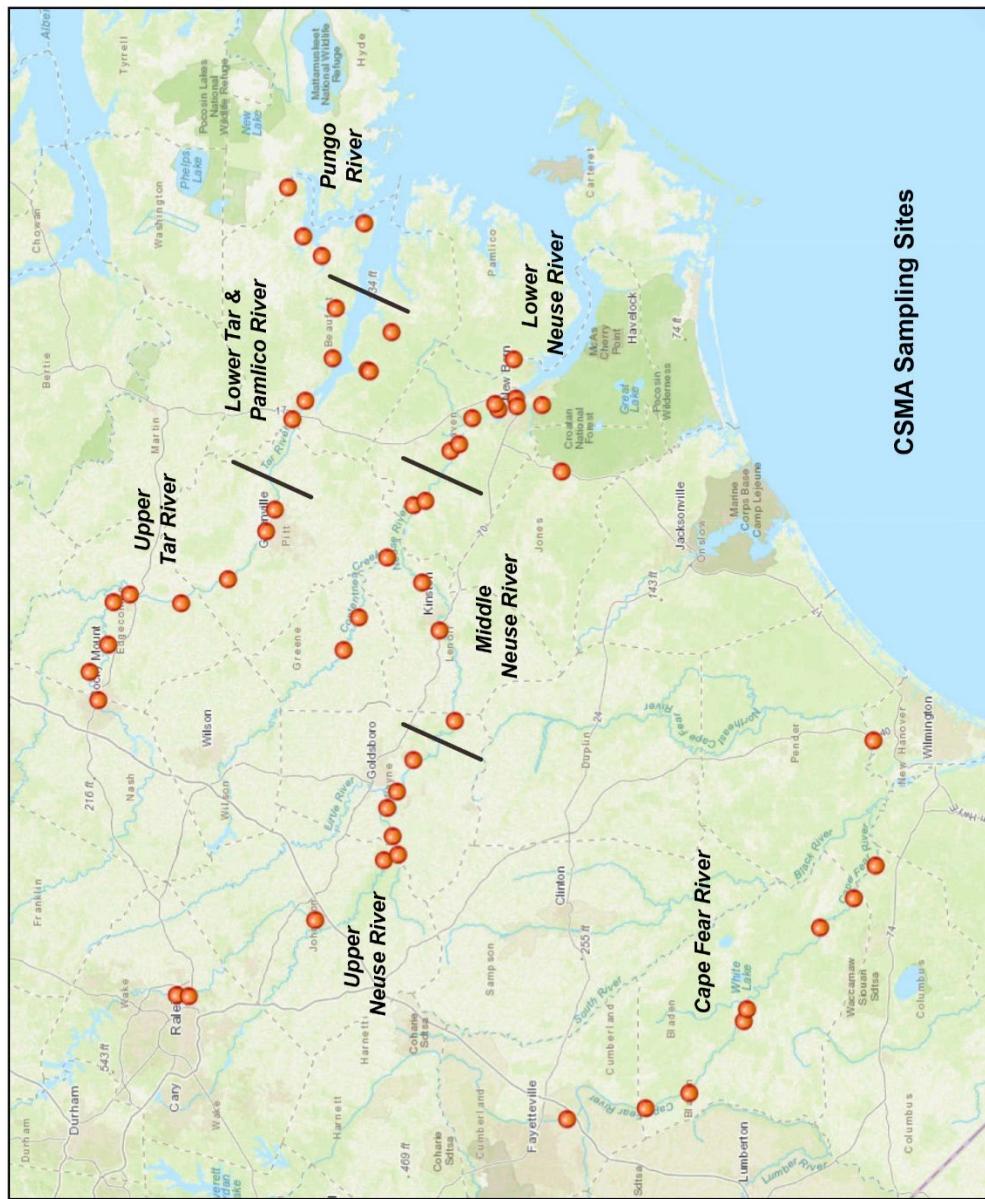
Year	Expenditure	Cape	Upper	Middle	Lower	Upper	Lower Tar/		
		Fear <sup>2</sup>	Neuse	Neuse	Neuse	Tar	Upper Pamlico	Pungo	All CSMA
2017	Miles Traveled	32.50	10.85	29.12	27.11	14.86	26.71	47.05	29.57
	Food Cost	\$4.48	\$5.27	\$8.80	\$6.20	\$1.50	\$6.76	\$11.55	\$7.14
	Ice Cost	\$0.56	\$0.89	\$0.89	\$1.00	\$0.30	\$0.95	\$1.61	\$1.03
	Bait Cost	\$3.83	\$2.38	\$1.13	\$2.51	\$2.00	\$4.89	\$2.14	\$2.92
	Boat Fuel and Oil Cost	\$10.48	\$3.64	\$7.33	\$11.15	\$6.79	\$11.29	\$16.50	\$11.64
	Total	\$19.35	\$12.17	\$18.15	\$20.85	\$10.59	\$23.89	\$31.80	\$22.74
2016	Miles Traveled	26.70	12.70	18.40	23.90	16.30	28.90	42.40	27.50
	Food Cost	\$7.25	\$4.34	\$5.79	\$4.78	\$3.90	\$5.94	\$9.82	\$6.25
	Ice Cost	\$1.06	\$0.35	\$0.53	\$0.76	\$0.67	\$0.87	\$1.53	\$0.92
	Bait Cost	\$5.89	\$0.98	\$3.00	\$3.32	\$0.69	\$3.13	\$0.59	\$2.63
	Boat Fuel and Oil Cost	\$8.70	\$2.85	\$6.31	\$9.28	\$15.24	\$11.25	\$14.01	\$10.80
	Total	\$22.90	\$8.53	\$15.63	\$18.13	\$20.50	\$21.19	\$25.94	\$20.59
2015	Miles Traveled	32.07	12.96	19.67	26.44	13.00	31.71	48.85	29.14
	Food Cost	\$12.70	\$3.36	\$5.57	\$5.13	\$1.40	\$7.58	\$9.55	\$6.46
	Ice Cost	\$2.14	\$0.28	\$0.78	\$0.82	\$0.35	\$1.03	\$1.53	\$0.94
	Bait Cost	\$11.43	\$1.42	\$4.73	\$3.74	\$0.51	\$2.61	\$0.87	\$2.74
	Boat Fuel and Oil Cost	\$12.10	\$6.53	\$8.35	\$9.11	\$4.66	\$13.72	\$12.70	\$11.46
	Total	\$38.37	\$11.59	\$19.43	\$18.81	\$6.91	\$24.93	\$24.65	\$21.60
2014	Miles Traveled	28.56	10.93	15.36	27.19	13.13	27.47	57.14	30.19
	Food Cost	\$5.14	\$5.09	\$5.45	\$5.60	\$0.59	\$7.32	\$19.62	\$8.16
	Ice Cost	\$0.73	\$0.42	\$0.49	\$0.82	\$0.00	\$0.80	\$2.25	\$0.98
	Bait Cost	\$2.64	\$1.62	\$0.71	\$3.78	\$0.17	\$1.76	\$1.59	\$2.34
	Boat Fuel and Oil Cost	\$9.71	\$6.47	\$8.83	\$16.14	\$2.20	\$12.96	\$20.16	\$14.92
	Total	\$18.22	\$13.60	\$15.49	\$26.34	\$2.96	\$22.85	\$43.61	\$26.40

<sup>1</sup>Means reported include expenditures greater than or equal to zero dollars "\$0.00." Lodging not included because of low response rate.

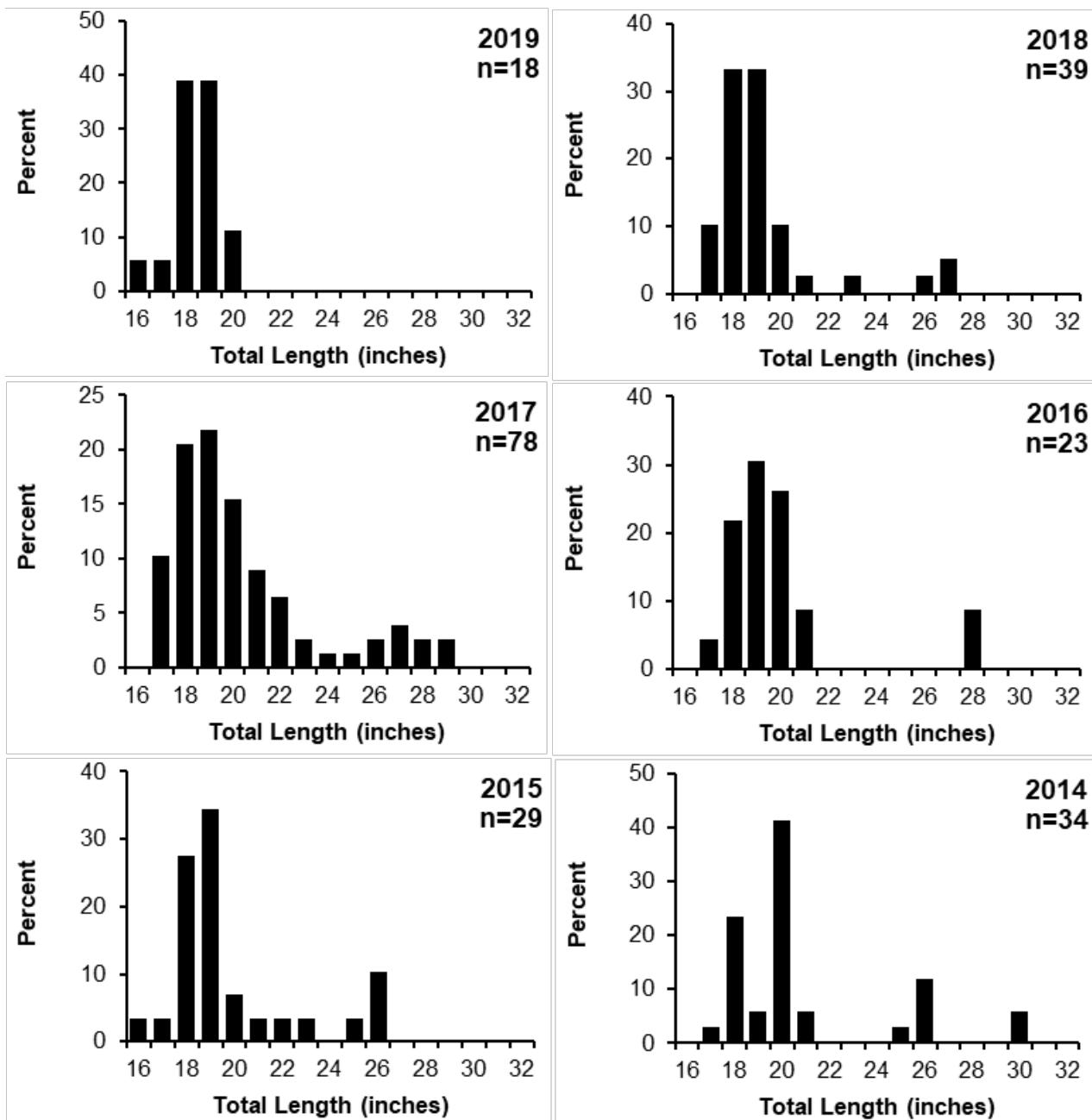
<sup>2</sup>Cape Fear data only sampled from March–May.

<sup>3</sup>Creel sampling was suspended from March 18, 2020 through June 1, 2020, due to the State of North Carolina COVID-19 Safety Protocols.

River Zones	Upper Tar River	Upper Neuse River	Middle Neuse	Lower Tar & Pamlico River	Pungo River	Cape Fear River
	Battle Park	Milburnie Park	Seven Springs	Tranter's Creek	Leechville	Lock and Dam 3
	Dunbar	Anderson Point Park	Kinston - HWY 70	Washington	Belhaven WRC	Tar Heel
	Bell's Bridge Tarboro	Smithfield	Kinston - Braxton Rd.	Dinah's Landing	CeeBee Marine	Lock and Dam 2
	River Bend Park Tarboro	Richardson's Bridge	Snow Hill	Quarter Deck	Wrights Creek	Elwell's Ferry
	Old Sparta	Williford Road	Hookerton	Durham's Creek	Glenburnie	Lock and Dam 1
	Falkland Ramp	Cox's Ferry	Grifton	Blounts Creek (Crisp Landing)	Bridgeton	Mitchell's Landing
	Hwy 97 Canoe Access (Pipe)	Steven's Mills Road	Maple Cypress	Cotton Patch Landing	Union Point	Castile Hayne
	Town Common	Goldsboro HWY 117	Core Creek		Pollocksville	Fayetteville
	Port Terminal	Goldsboro HWY 581			Bricel's Creek	
					Lawson's Creek	
					Lee's Landing	

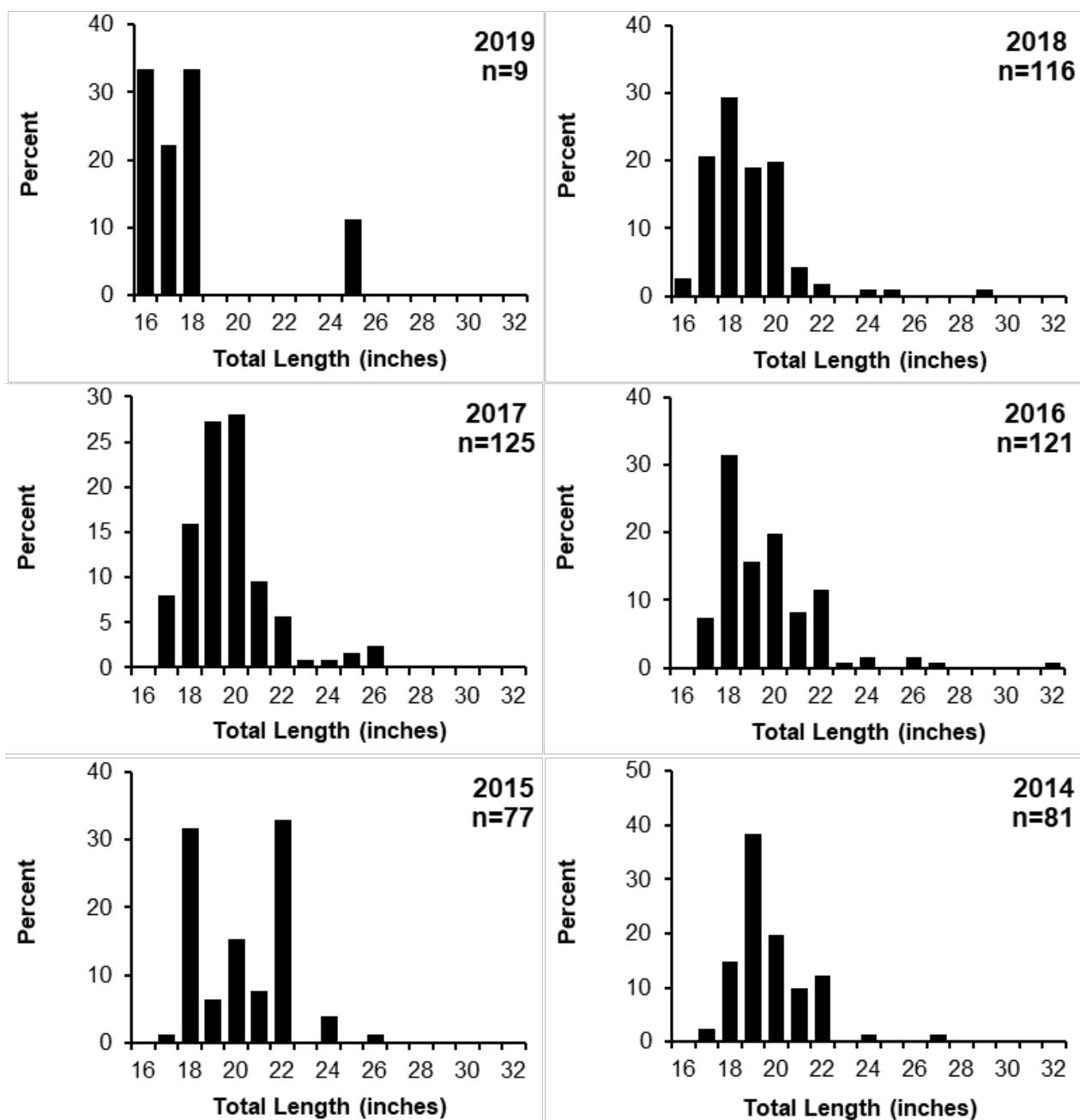


**Figure IV.1** Map of study area including sampling sites and description of upper and lower zones.



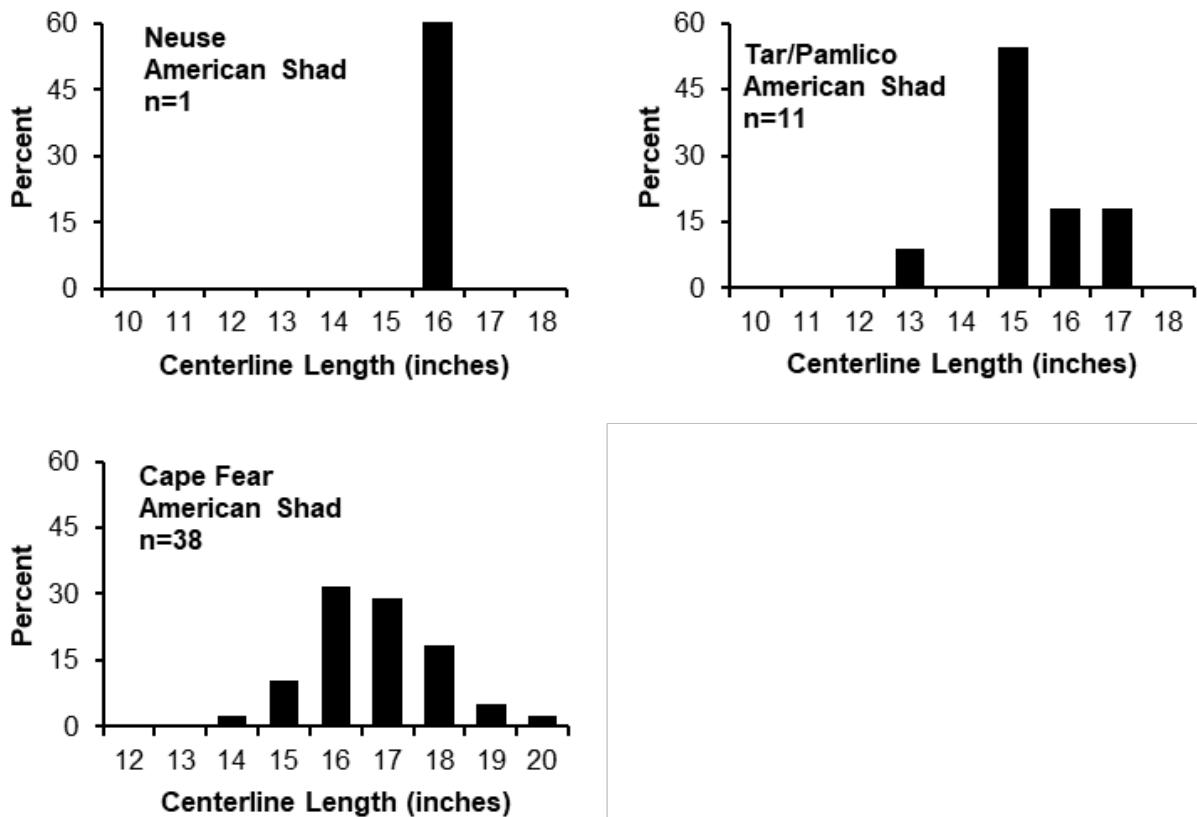
**Figure IV.2 Length frequencies by percent of total observed Striped Bass<sup>1</sup> from the Neuse River.**

<sup>1</sup>Beginning in March 2019, harvest of Striped Bass is prohibited in the CSMA. No length or weight data is available from 2020-present.

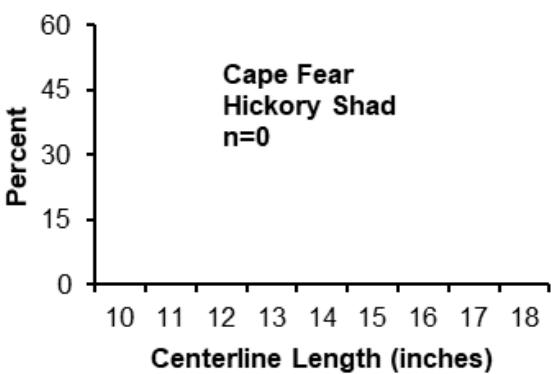
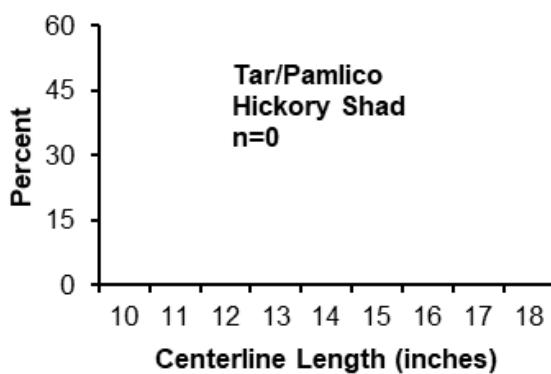
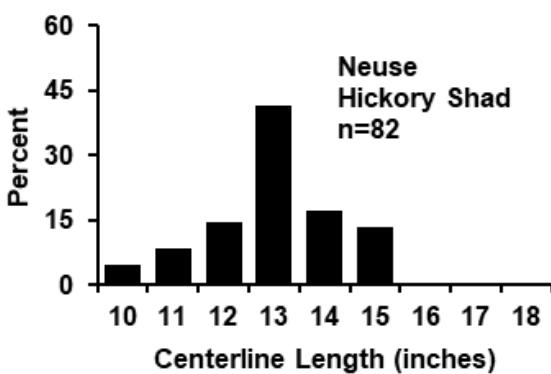


**Figure IV.3 Length frequencies by percent of total observed Striped Bass<sup>1</sup> from the Tar/Pamlico and Pungo rivers.**

<sup>1</sup>Beginning in March 2019, harvest of Striped Bass is prohibited in the CSMA. No length or weight data is available from 2020-present.



**Figure IV.4** Length frequencies by percent of total observed American Shad from the CSMA, 2023.



**Figure IV.5** Length frequencies by percent of total observed Hickory Shad from the CSMA, 2023.

**Appendix IV.1 CSMA creel survey interview form.**

# **2023 CSMA CREEL SURVEY**

## *Interview Form*

1. INTERVIEWER ID	<input type="text"/> <input type="text"/> <input type="text"/>	5. INTERVIEW TIME (use 2400 clock)	<input type="text"/> <input type="text"/> <input type="text"/>	8. PERIOD	<input type="text"/>
2. YR/MO/DAY	<input type="text" value="2"/> <input type="text" value="0"/> <input type="text" value="2"/> <input type="text" value="3"/> <input type="text"/> <input type="text"/>	6. FISHING TRIP	<input type="checkbox"/> Yes <input type="checkbox"/> No	9. REFUSAL	<input type="text"/>
3. INTERVIEW NUMBER	<input type="text"/> <input type="text"/>	4. TYPE OF DAY	<input type="text"/>	7. TIME FISHING BEGAN	<input type="text"/> <input type="text"/> <input type="text"/>
				10. SITE	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>

---

11. HOURS FISHED  .   
(Hours/Minutes)      12. PARTY SIZE

16. WERE YOU FISHING FOR ANY PARTICULAR KINDS OF  
FISH TODAY? IF YES, WHAT KINDS?

1st Target

2nd Target

13. WERE YOU FISHING FROM:

1  Private Boat    2  Charterboat    3  Shore

14. AREA FISHED (Specific waterbody)

15. WATERBODY CLASSIFICATION

1  Coastal    2  Joint    3  Inland

17. PRIMARY FISHING METHOD

1  Casting    2  Trolling    3  Cut Bait    4  Live Bait    5  Gill Net

**UNAVAILABLE CATCH.** Did you land any fish that are not here for me to look at? For example, any that you may have thrown back or used for bait?

**THROW BACKS**

- 1 \_\_\_\_\_
- 2 \_\_\_\_\_
- 3 \_\_\_\_\_
- 4 \_\_\_\_\_
- 5 \_\_\_\_\_

SPECIES CODE	DISP	# OF FISH
<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/>	<input type="text"/> <input type="text"/>
<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/>	<input type="text"/> <input type="text"/>
<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/>	<input type="text"/> <input type="text"/>
<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/>	<input type="text"/> <input type="text"/>
<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/>	<input type="text"/> <input type="text"/>

**DISPOSITION CODES**

- 1. Thrown back (legal fish)
- 2. Thrown back over bag limit
- 3. Thrown back under size limit
- 4. In slot (22-27)
- 5. Closed season, legal
- 6. Closed season, under size fish
- 7. Thrown back over the size limit

**AVAILABLE CATCH, COMPLETE TYPE 3 RECORD BY ASKING: May I look at your fish?**

KEPT	SPECIES CODE	# OF FISH	LENGTH (mm)	WEIGHT (kg)	SEX (male=1, female=2)	
					<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
1					<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
2					<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
3					<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
4					<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
5					<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
6					<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
7					<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
8					<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
9					<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
10					<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>

## **Appendix IV.2 CSMA creel survey socioeconomic questions.**

### **CSMA Creel Socioeconomic Questions**

- 1) How old were you on December 31, 2022? \_\_\_\_\_
- 2) What state do you live in? \_\_\_\_\_
- 3) If the state is NC, what county do you live in? \_\_\_\_\_
- 4) Are you,       Male       Female
- 5) What do you consider your ethnic background?  Hispanic/Latino (all races)       Asian-Pacific Islander  
 White/Caucasian       Native American  
 African-American/Black
- 6) How many years have you been recreational fishing? \_\_\_\_\_
- 7) How many fishing trips do you expect to take this year on this river for American shad, hickory shad, or striped bass? (if indicated as target species) \_\_\_\_\_

**The following questions ask you about this fishing trip. If you aren't sure of the exact answer, please give your best estimate.**

8) How many nights is the trip? (if none, skip questions 10 and 11).	
9) How many miles did you travel to get here?	
10) How many people who are on the trip are fishing?	
11) How much do you expect to pay for lodging per night on this trip?	
12) How much do you expect to pay for food on this trip?	
13) How much do you expect to pay for ice on this trip?	
14) How much do you expect to pay for bait on this trip?	
15) How much do you expect to pay for boat fuel and oil on this trip?	
16) How much do you expect to pay for vehicle fuel on this trip?	

- 17) Please rate your overall happiness with your fishing trip today on a scale of 1 to 10, with 1 being extremely unhappy and 10 being extremely happy. \_\_\_\_\_
- 18) Please rate your fishing success today on a scale of 1 to 10, with 1 being extremely unsuccessful and 10 being extremely successful. \_\_\_\_\_
- 19) The following is a hypothetical question, however, will help provide information to better understand the economic value of our fisheries resources. Please be as accurate as possible when providing an answer. Keeping in mind the total expenses that you just mentioned, what is the maximum amount of additional money that you would be willing to spend to be able to take this fishing trip today? \_\_\_\_\_
- 20) Out of the following income categories, would you be willing to provide your personal pre-tax annual income?  
Less than \$40,000    \$40,000 to \$80,000    \$80,001 to \$120,000    More than \$120,000

- 21) Will you be willing to participate in a follow-up survey?  Yes  No

First	MI	Last
Street		
City	ST	ZIP

**Appendix IV.3 CSMA creel survey assignment summary form.**

**2023 CSMA CREEL SURVEY  
ASSIGNMENT SUMMARY FORM**

1. INTERVIEWER ID	<table border="1" data-bbox="491 439 654 481"><tr><td> </td><td> </td><td> </td><td> </td></tr></table>					SCHEDULE NUMBER	<table border="1" data-bbox="1078 439 1241 481"><tr><td> </td><td> </td><td> </td><td> </td></tr></table>				
2. YR/MO/DAY	<table border="1" data-bbox="491 502 861 544"><tr><td>2</td><td>0</td><td>2</td><td>3</td><td> </td><td> </td><td> </td></tr></table>	2	0	2	3						
2	0	2	3								
3. PERIOD	<table border="1" data-bbox="368 566 425 608"><tr><td> </td></tr></table>										
4. TYPE OF DAY	<table border="1" data-bbox="442 629 491 671"><tr><td> </td></tr></table>										
5. SITE	<table border="1" data-bbox="352 692 556 734"><tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr></table>										
6. TIME ARRIVED	<table border="1" data-bbox="515 756 678 798"><tr><td> </td><td> </td><td> </td><td> </td></tr></table>					24 hr clock					
7. NUMBER TRAILERS Upon Arrival	<table border="1" data-bbox="678 819 752 861"><tr><td> </td><td> </td></tr></table>										
8. NUMBER TRAILERS Mid-Count	<table border="1" data-bbox="678 882 752 925"><tr><td> </td><td> </td></tr></table>										
9. NUMBER TRAILERS Upon Departure	<table border="1" data-bbox="678 946 752 988"><tr><td> </td><td> </td></tr></table>										
10. NUMBER On Bank When Arrived	<table border="1" data-bbox="678 1009 752 1051"><tr><td> </td><td> </td></tr></table>										
11. NUMBER On Bank Mid-Time Count	<table border="1" data-bbox="678 1072 752 1115"><tr><td> </td><td> </td></tr></table>										
12. NUMBER On Bank When Departed	<table border="1" data-bbox="678 1136 752 1178"><tr><td> </td><td> </td></tr></table>										
13. NUMBER Fishing Parties Missed	<table border="1" data-bbox="678 1199 752 1241"><tr><td> </td><td> </td></tr></table>										
14. NUMBER Fishing Parties Refused	<table border="1" data-bbox="678 1262 752 1305"><tr><td> </td><td> </td></tr></table>										
15. TIME DEPARTED	<table border="1" data-bbox="515 1284 678 1326"><tr><td> </td><td> </td><td> </td><td> </td></tr></table>					24 hr clock					

Comments