

**2006 REVIEW OF THE FISHERY MANAGEMENT PLAN
FOR SPOTTED SEATROUT
(*Cynoscion nebulosus*)**

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The Spotted Seatrout Plan Review Team

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Board Approved: October 24, 2006

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I. Status of the Fishery Management Plan

The Atlantic States Marine Fisheries Commission (ASMFC) adopted the Fishery Management Plan (FMP) for spotted seatrout in 1984. The states of Florida through Maryland have a declared interest in the Commission's FMP for spotted seatrout. Amendment 1 to this FMP was approved by the ISFMP Policy Board in November 1991. This amendment added an objective of maintaining a spawning potential ration (SPR) of at least 20% to minimize the possibility of recruitment failure.

The goal of Amendment 1 to the spotted seatrout FMP is "to perpetuate the spotted seatrout resource in fishable abundance throughout its range and generate the greatest possible economic and social benefits from its harvest and utilization over time." The plan's objectives are to: 1) attain over time optimum yield; 2) maintain a spawning potential ratio of at least 20% to minimize the possibility of recruitment failure; 3) promote conservation of the stocks in order to reduce the inter-annual variation in availability and increase yield per recruit; 4) promote the collection of economic, social, and biological data required to effectively monitor and assess management efforts relative to the overall goal; 5) promote research that improves understanding of the biology and fisheries of spotted seatrout; 6) promote harmonious use of the resource among various components of the fishery through coordination of management efforts among the various political entities having jurisdiction over the spotted seatrout resource; and 7) promote determination and adoption of standards of environmental quality and provide habitat protection necessary for the maximum natural protection of spotted seatrout.

It has been the opinion of the Commission's original Advisory Committee and Spotted Seatrout Plan Review Team that the goal and objectives of the plan are still valid, but that full implementation of the FMP has not been achieved across the entire management unit.

II. Status of the Stock

Fluctuations in spotted seatrout landings (both commercial and recreational) have varied considerably during the last 20 years. Some states are accumulating catch/effort data, especially in regards to recreational fisheries, which should provide insight on stock status over time.

Florida, South Carolina, and Georgia have run age structured analyses on local stocks of spotted seatrout. Florida's spotted seatrout management plan has a goal of a 35% spawning potential ratio (SPR), while South Carolina and Georgia have adopted the ASMFC plan objective of maintaining an SPR of at least 20% to minimize the possibility of recruitment failure. The most recent estimates of transitional SPR for Florida are 57% in the northeast region north of Volusia County and 33% in the southeast region from Volusia County south, for 2001 (Murphy 2003). Analyses conducted in South Carolina and Georgia indicated that fishing mortality needed to be reduced approximately 20% to meet the plan objective of a 20% SPR (Wenner & Zhao 1995; Zhao *et al.* 1997). As a result, in 1998, South Carolina increased the minimum size from 12 to 13 inches TL and decreasing the bag limit from 15 to 10 fish per person, and Georgia increased the minimum size limit from 12 to 13 inches TL and decreased the daily creel limit from 25 to 15

fish. All the same, a 2002 Georgia DNR assessment report found evidence that spotted seatrout in state waters are both growth and recruitment overfished; however, the report also clearly states that the estimates of SPR (<20%) are unreliable due to data deficiencies and changing methodology (Foster 2002). South Carolina has an assessment under internal review that estimates SPR at between 15 and 18% depending on the model used (de Silva, unpublished). The report also states that the 20% SPR goal, being below F_{msy} , may be insufficient to maintain a sustainable population. Population analyses on other stocks within the region have not been conducted at this time.

III. Status of the Fishery

Both commercial and recreational fishermen regularly catch spotted seatrout from Maryland south through the east coast of Florida (except in South Carolina where spotted seatrout has been declared a gamefish and can only be taken by recreational means). Landings from states north of Maryland are minimal and/or inconsistently landed from year-to-year. Total recreational landings have surpassed total commercial landings every year since at least 1981 (Figure 1). The more northern fisheries experienced a winter mortality event in 2000/2001, which likely contributed to the sudden decline in commercial and recreational landings in 2001.

Commercial Fishery -

The NMFS compiles commercial spotted seatrout landings. The data are cooperatively collected by the NMFS and state fishery agencies from state mandated trip-tickets, landing weigh-out reports from seafood dealers, federal logbooks, shipboard and portside interviews, and biological sampling of catches. The NMFS data were not available for 2005 at the time of this report, thus the 2005 landings rely on preliminary data from the state fishery agencies.

Atlantic coast commercial landings of spotted seatrout (1960-2005) have ranged from 165,000 pounds to 1.4 million pounds (Table 1). During the early 1960's and early 1970's, commercial landings of spotted seatrout were sustained at or above the 1 million pound level. Whether this was related to resource abundance or effort is unknown. Commercial landings have generally declined since 1976 and remain well below 1 million pounds. During the 1980's, the majority of commercial landings (in pounds of fish landed) came from the east coast of Florida, while in the 1990's, the majority of commercial landings have come from North Carolina.

Preliminary estimates indicate commercial landings increased slightly in 2005 to about 187,000 pounds from 181,000 pounds in 2004. This is the third lowest annual total in the time series. The majority (~69%) of landings are reported from North Carolina where gill nets are the predominate gear. The east coast of Florida and Virginia are responsible for approximately 20% and 9% of commercial landings, respectively. The remaining 2% of the 2005 landings are from Maryland, Georgia, Connecticut, and Rhode Island.

Recreational Fishery -

Recreational catch statistics are collected by the NMFS in the Marine Recreational Fisheries Statistics Survey (MRFSS). Effort data is collected through telephone interviews. Catch expansions are based on angler interviews and biological sampling conducted by trained interviewers stationed at fishing access sites.

The recreational harvest of spotted seatrout (1981-2005) has ranged from 691,020 fish in 1996 to 2.4 million fish in 1991, averaging approximately 1.3 million fish per year (Table 2). Coastwide recreational harvest in 2005 was nearly 1.4 million fish (~1.9 million pounds) (Table 3). The estimated number of spotted seatrout released has generally increased since the mid-1980s, with a dramatic rise from 1990 to 1991 (Table 4, Figure 2). North Carolina, Florida (east coast), South Carolina, and Georgia together harvested over 97% of the 2005 total recreational landings by number of fish. The number of fish released has remained well over 1 million per year since that time, reaching an all-time high of 5.5 million in 2005, an increase of nearly 60% from 2004.

Figure 1. Commercial and recreational landings (pounds) of spotted seatrout, 1960-2005

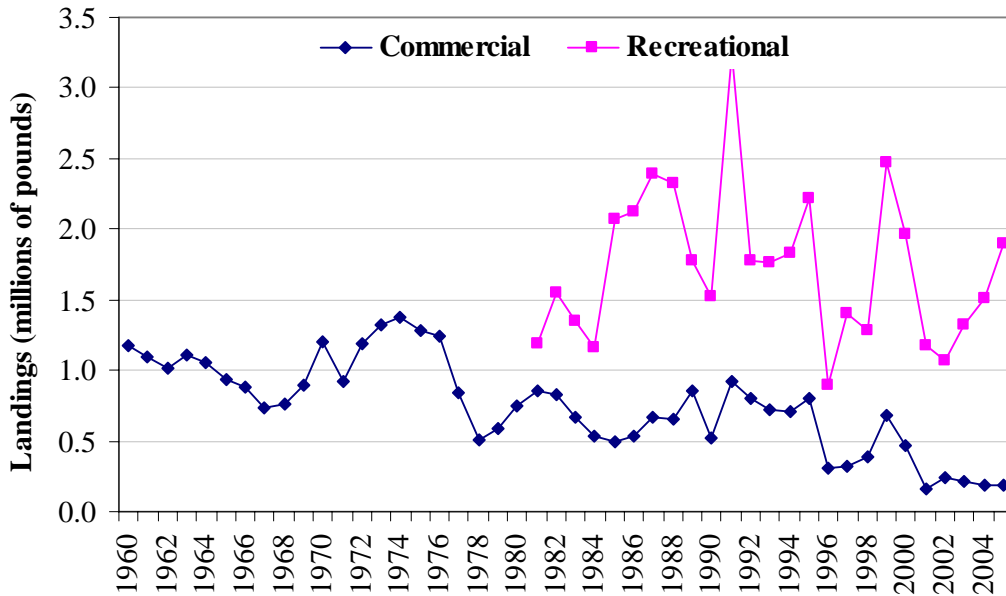
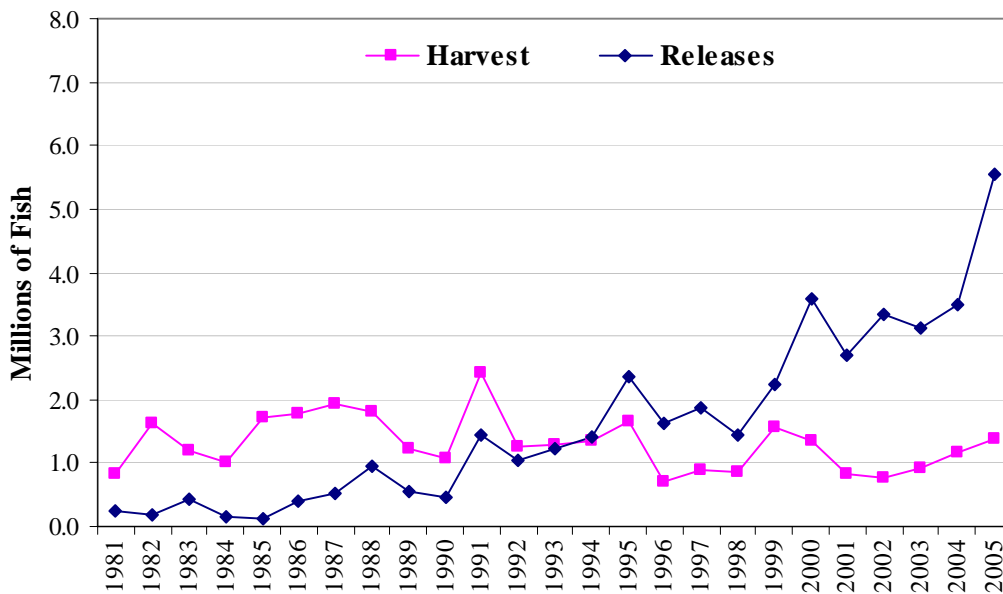


Figure 2. Recreational landings (number A + B1 fish) and releases (number B2 fish), 1981-2005



IV. Status of Assessment Advice

A formal coastwide stock assessment of spotted seatrout has not been conducted and is impractical considering the biology and population dynamics of this species. Florida, South Carolina, and Georgia have performed age structured analyses on local stocks of spotted seatrout. The 2002 Georgia assessment was conducted as scheduled; however, results were highly questionable (Foster 2002). South Carolina has an assessment currently under review (de Silva, unpublished). North Carolina has scheduled a stock assessment on local spotted seatrout stocks to be completed in conjunction with the state's FMP process, scheduled to begin in 2007. Florida conducted assessments for Florida Atlantic spotted seatrout populations in 1993 and 1995, then for separate northern and southern Florida Atlantic coast populations in 1997, 1999, and 2003. The regional extent of recent assessments in Florida is supported by preliminary genetic work from Florida's Atlantic coast (Wilson et al. 2002). However, the northern extent of the spotted seatrout stock in northeast Florida remains unknown and genetics information appear to show a separate stock in extreme southeast Florida (Biscayne Bay). The 1984 FMP recognized the lack of biological and fisheries data necessary for stock assessment and effective management of the resource. Spotted seatrout life history information and fisheries data have generally been localized and conducted at different levels of population abundance. Detailed information on incidental bycatch, release mortality, and the size and age structure of releases has become a more important component of assessments of the condition of spotted seatrout populations.

V. Status of Research and Monitoring

Other than the fishery-dependent data (catch, landings, effort, length, weight, etc.) collected and/or compiled through the NMFS and MRFSS, some states have implemented fishery independent or additional fishery dependent monitoring programs.

The Florida Fish and Wildlife Conservation Commission (FWC) implemented a juvenile finfish monitoring program in the northern Indian River Lagoon in the spring of 1990 and in the estuarine reaches of the St. Johns, St. Marys, and Nassau Rivers in northeast Florida in the spring of 2001. Florida also initiated a stratified random sampling program in 1997 on the Atlantic coast that utilizes a 183 m haul seine to catch exploitable-sized fishes. This has been conducted in the northern Indian River and southern Indian River since initiation and in northeast Florida since 2001. Florida's fishery-dependent sampling includes commercial trip-ticket information and biostatistical sampling of the commercial and recreational catch. A voluntary angler logbook program is utilized to collect information on the lengths of spotted seatrout released alive by anglers. This is used in a quarterly random survey of Florida's licensed anglers. FWC researchers are studying the reproductive biology and ecology of spotted seatrout in Tampa Bay, including maturation schedules, fecundity, spawning season, and spawning location. Florida also investigated post-release mortality rates of spotted seatrout caught by gillnet and hook and line gears (Murphy *et al.* 1995).

Georgia collects additionally fishery-dependent data through a Marine Sportfish Carcass Recovery Program. A fishery-independent survey was implemented in 2003 to provide age and sex specific estimates of relative abundance in two Georgia estuaries to be used for stock assessments. Several years will be required to amass data needed to evaluate the survey and produce accurate estimates of biological reference points from assessments (GA CRD 2003).

South Carolina has an extensive directed research program on this species. Current project objectives include determining the size and age composition of the recreational catch by sampling independent angler and fishing tournament catches as well as a carcass program, and producing fisheries independent relative abundance estimates from trammel net surveys along the South Carolina coast. The latter is a stratified random sampling design and has been conducted monthly since 1991. Catch rates, size composition, and sub-samples of the catch on a bi-monthly basis are used for generating age-length keys for cohort specific indices of abundance. The reproductive dynamics of female spotted seatrout in South Carolina has been described (Roumillat and Brouwer 2004).

North Carolina has collected age, growth, and maturity data for spotted seatrout caught in fishery dependent and fishery independent sampling programs since 1991 (Burns 1996). A fishery-independent monitoring program was initiated in May 2001, supported by USFWS Sports Fish Restoration funds. The program utilizes a stratified random, multi-mesh size gill net survey along North Carolina's Outer Banks and the bays of western Pamlico Sound. Project objectives include calculating annual indices of abundance for target species (spotted seatrout included); supplementing samples for age, growth, and reproductive studies; evaluating catch rates and species distribution for identifying and resolving bycatch problems; and characterizing habitat utilization in Pamlico Sound. Additional areas of the Neuse and Pamlico-Pungo Rivers contribute to the Pamlico Sound area Independent Gill Net Survey, with common objectives and sampling design. Hydrophone work was conducted in North Carolina to characterize critical spawning habitats for spotted seatrout in Pamlico Sound (Luczkovich et al. 2000). Hook and-line and estuarine gill net discard mortality studies were conducted in North Carolina in 1998-2001, supported by the Atlantic Coastal Fisheries Cooperative Management Act funds (Gearhart 2002; Price *et al.* 2002).

VI. Status of Management Measures and Issues

All states which declared an interest in spotted seatrout have established a minimum size limit of at least 12 inches total length (TL) as called for in the FMP (Table 5). Collection of improved catch and effort data from the commercial and recreational fisheries has been initiated in all states as recommended in the FMP.

South Carolina has declared spotted seatrout a gamefish, imposed a creel limit of 10 fish per angler per day, a minimum size limit of 13" TL, and fish must be landed with head and fins intact. Florida has a commercial slot limit of 15-24" TL, a June-August open season, and a 75 fish daily possession limit; commercial harvest is limited to hook and line and cast nets. Florida has a recreational slot limit of 15 - 20" TL with one fish over 20" allowed per day. Florida's bag limits and closed seasons for spotted seatrout are regional with a 5-fish bag limit and February closed season north of Volusia county, and a 4-fish bag limit with a November-December closed season from Volusia County south. In 2006, Florida clarified the definition of total length to mean the squeezed-tail measure and not the relaxed-tail measure. Georgia has a daily bag limit of 15 fish, a minimum size of 13" TL, and fish must be landed with head and fins intact. North Carolina has a 12" TL minimum size limit and a 10 fish possession limit for recreational gears and commercial hook and line. Current North Carolina regulations require the attendance of small mesh gill nets (<5" stretched mesh) from May 1 through October 31 in primary and

secondary nursery areas, areas within 200 yards of any shoreline, and the extensive shallow water grass flat areas located behind North Carolina's Outer Banks. Virginia has a 14" TL commercial and recreational minimum size; commercial hook and line and recreational possession limit of 10 fish; and a commercial quota. Maryland has a 14" TL minimum recreational size and 10 fish possession limit; a 12" TL minimum commercial size limit and seasonal closures and mesh restrictions. Although not required to by the FMP, Delaware has a 12" TL commercial and recreational size limit, and New Jersey has a 13" recreational and commercial size limit (with an exception of 12" when taken by trawl between September and December).

VII. Implementation of FMP Compliance Requirements as of October 1, 2006

All states required to implement the minimum size limit of 12 inches total length (TL) have done so.

VIII. Recommendations of FMP Review Team

Management and Regulatory Recommendations

- Develop an amended Spotted Seatrout FMP with objective compliance criteria.
- Efforts should be continued towards achieving full implementation of the FMP.
- Collection of commercial and recreational landings data should be continued, and increased emphasis should be placed on obtaining complimentary effort data.
- Development and implementation of methodologies to monitor stock status such as pre-recruit indices and virtual population analyses should receive more attention as should effort data associated with catches and size composition data on catches.
- The Spotted Seatrout FMP should be reviewed periodically and updated to incorporate new data and research findings and to assess the status of stocks and the fisheries.

Prioritized Research Recommendations

High Priority

- Conduct state-specific stock assessments to determine the status of stocks relative to the plan objective of maintaining a spawning potential of at least 20%.
- Initiate fishery independent surveys of spotted seatrout.
- Emphasize collection of the biological data necessary to conduct stock assessments and to assist in drafting fishery management plans.
- Utilize age structure analyses by sex in stock assessments.
- Collect data on the size or age of spotted seatrout released alive by anglers and the size and age of commercial discards.
- Continue work to examine the stock structure of spotted seatrout on a regional basis, with particular emphasis on advanced tagging techniques.
- Expand MRFSS to assure adequate data collection for catch and effort data and for increased intercepts and state add-ons of social and economic data needs.

Medium Priority

- Identify essential habitat requirements.
- Evaluate effects of environmental factors on stock density.
- Continue collection and expansion of commercial and recreational landings data.

- Initiate collection of social and economic aspects of the spotted seatrout fishery.
- Improve precision of effort reporting through commercial trip ticket programs.

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Table 1. Commercial landings (in pounds) of spotted seatrout by state, 1960-2005
(NMFS 2005; State Fisheries Departments, pers. com. 2006)

| Year | CT | RI | NY | NJ | DE | MD | VA | NC | SC | GA | FLEC | Total |
|--------------|------------|--------------|------------|------------|-----------|----------------|----------------|-------------------|----------------|----------------|-------------------|-----------|
| 1960 | | | | | | | 54,900 | 171,200 | 53,000 | 1,000 | 889,800 | 1,169,900 |
| 1961 | | | | | | | 73,800 | 209,100 | 56,100 | 1,700 | 749,500 | 1,090,200 |
| 1962 | | | | | | | 28,400 | 204,700 | 27,200 | 1,000 | 755,700 | 1,017,000 |
| 1963 | | | | | | | 25,700 | 232,400 | 47,800 | 5,100 | 801,300 | 1,112,300 |
| 1964 | | | | | | | 23,400 | 204,800 | 59,600 | 1,900 | 764,500 | 1,054,200 |
| 1965 | | | | | | | 40,400 | 175,100 | 35,000 | 8,900 | 682,100 | 941,500 |
| 1966 | | | | | | | 11,800 | 115,900 | 24,500 | 3,200 | 724,000 | 879,400 |
| 1967 | | | | | | | 3,700 | 122,500 | 1,600 | 6,900 | 599,200 | 733,900 |
| 1968 | | | | | | | 5,800 | 97,200 | 11,900 | 1,700 | 638,200 | 754,800 |
| 1969 | | | | | | | 19,400 | 189,100 | 8,300 | 2,700 | 679,600 | 899,100 |
| 1970 | | | | | | | 65,900 | 404,600 | 9,100 | 10,000 | 711,200 | 1,200,800 |
| 1971 | | | | | | | 44,400 | 337,600 | 24,200 | 15,600 | 494,900 | 916,700 |
| 1972 | | | | | | | 12,800 | 502,800 | 18,100 | 26,200 | 634,100 | 1,194,000 |
| 1973 | | | | | | | 9,500 | 611,100 | 5,800 | 26,800 | 665,800 | 1,319,000 |
| 1974 | | | | | | | 26,200 | 670,200 | 8,900 | 16,100 | 658,500 | 1,379,900 |
| 1975 | | | | | | | 72,500 | 632,500 | 17,100 | 30,900 | 535,100 | 1,288,100 |
| 1976 | | | | | | | 39,000 | 637,600 | 5,800 | 30,000 | 531,700 | 1,244,100 |
| 1977 | | | | | | | 3,800 | 323,500 | 600 | 16,000 | 493,900 | 837,800 |
| 1978 | | | | | | | 6,100 | 97,304 | 119 | 2,470 | 402,954 | 508,947 |
| 1979 | | | | | | | 3,500 | 105,034 | 2,977 | 4,987 | 475,809 | 592,307 |
| 1980 | | | | | | | 1,000 | 171,334 | 8,137 | 4,250 | 558,817 | 743,538 |
| 1981 | | | | | | | 4,000 | 113,304 | | 629 | 736,026 | 853,959 |
| 1982 | | | | | | | 3,400 | 83,847 | 1,944 | 4,994 | 732,278 | 826,463 |
| 1983 | | | | | | | 4,400 | 165,360 | 4,479 | 5,795 | 481,535 | 661,569 |
| 1984 | | | | | | | 3,000 | 152,934 | 2,374 | 4,348 | 367,541 | 530,197 |
| 1985 | | | | | | | 8,302 | 109,048 | 1,770 | 7,149 | 369,756 | 496,025 |
| 1986 | | | | | | | 18,500 | 191,514 | 12,214 | 8,691 | 307,261 | 538,180 |
| 1987 | | | | | | | 13,300 | 315,380 | 11,941 | 10,739 | 317,044 | 668,404 |
| 1988 | | | | | | | 15,500 | 296,538 | 486 | 9,110 | 315,947 | 637,581 |
| 1989 | | | | | | | 18,500 | 451,909 | 33 | 10,565 | 361,973 | 842,980 |
| 1990 | | | | 20 | | | 21,435 | 250,634 | 1,095 | 5,942 | 236,453 | 515,579 |
| 1991 | | | | 171 | | 98 | 21,200 | 660,662 | | 7,380 | 225,812 | 915,323 |
| 1992 | | | | 165 | | 364 | 10,395 | 526,271 | | 11,310 | 247,189 | 795,694 |
| 1993 | | | | 87 | | 24 | 38,033 | 449,886 | | 8,550 | 223,841 | 720,421 |
| 1994 | | | | 142 | | 30 | 44,636 | 412,458 | | 5,112 | 247,666 | 710,044 |
| 1995 | 106 | | | 8 | | 182 | 28,722 | 574,404 | | 8,482 | 184,269 | 796,067 |
| 1996 | | | | | | 14,961 | 4,476 | 226,668 | | 7,501 | 48,254 | 301,860 |
| 1997 | | | | | | 15,688 | 11,711 | 232,579 | | 7,621 | 57,316 | 324,915 |
| 1998 | | | | | | 19,794 | 21,774 | 307,777 | | 2,845 | 41,556 | 393,746 |
| 1999 | | | | | | 36,365 | 38,513 | 546,775 | | 3,244 | 61,802 | 686,699 |
| 2000 | | | | | | 20,270 | 19,918 | 375,159 | | 1,997 | 45,393 | 462,737 |
| 2001 | | | | | | 24,754 | 3,773 | 105,797 | | | 30,236 | 164,560 |
| 2002 | | | | | | 11,771 | 9,308 | 175,609 | | 969 | 44,641 | 242,298 |
| 2003 | | | 856 | | | 902 | 5,310 | 181,529 | | | 27,172 | 215,769 |
| 2004 | | 2,002 | | 2 | 46 | 342 | 17,290 | 131,019 | | 828 | 29,616 | 181,145 |
| 2005* | 473 | 86 | | | | 2,339 | 17,307 | 129,595 | | < 500 | 36,777 | 187,123 |
| Total | 579 | 2,088 | 856 | 595 | 46 | 147,884 | 974,703 | 13,382,228 | 462,169 | 351,208 | 19,224,034 | |

* Preliminary landings; total includes the maximum of 500 lbs from Georgia (exact amount is confidential)

Table 2. Recreational harvest (numbers of A + B1 fish) of spotted seatrout by state, 1981-2005
(NMFS 2006)

| Year | NJ | DE | MD | VA | NC | SC | GA | FLEC | Total |
|--------------|-------|-------|---------|-----------|-----------|-----------|-----------|-----------|-----------|
| 1981 | | | | | 30,037 | 20,934 | 189,080 | 576,847 | 816,898 |
| 1982 | | | | | 112,023 | 849,634 | 226,758 | 426,378 | 1,614,793 |
| 1983 | | | | | 91,956 | 121,940 | 325,655 | 645,120 | 1,184,671 |
| 1984 | | | | | 90,262 | 95,281 | 114,403 | 700,876 | 1,000,822 |
| 1985 | | | | | 263,878 | 347,851 | 251,764 | 866,162 | 1,729,655 |
| 1986 | | | 7,507 | 82,671 | 270,867 | 477,136 | 401,490 | 550,591 | 1,790,262 |
| 1987 | | | 29,295 | 17,415 | 320,977 | 392,329 | 439,782 | 744,330 | 1,944,128 |
| 1988 | | | 20,769 | 288,705 | 420,115 | 355,547 | 389,276 | 331,709 | 1,806,121 |
| 1989 | | | 151,986 | 66,033 | 181,149 | 174,011 | 448,767 | 198,617 | 1,220,563 |
| 1990 | | | 20,416 | 67,939 | 251,088 | 113,160 | 368,787 | 249,824 | 1,071,214 |
| 1991 | | 1,094 | 17,995 | 69,032 | 316,895 | 438,502 | 1,204,116 | 385,817 | 2,433,451 |
| 1992 | | 0 | 3,235 | 30,091 | 333,990 | 200,030 | 338,175 | 363,238 | 1,268,759 |
| 1993 | | | 7,038 | 103,131 | 206,523 | 222,144 | 463,702 | 274,118 | 1,276,656 |
| 1994 | | 179 | 33,511 | 115,025 | 457,636 | 139,551 | 337,965 | 255,216 | 1,339,083 |
| 1995 | | | 19,198 | 90,838 | 325,927 | 223,751 | 607,095 | 381,884 | 1,648,693 |
| 1996 | | | 35,765 | 46,098 | 151,380 | 137,530 | 171,676 | 148,571 | 691,020 |
| 1997 | 3,196 | 245 | 19,951 | 92,725 | 256,719 | 111,576 | 167,287 | 228,096 | 879,795 |
| 1998 | | 125 | 13,620 | 34,623 | 294,501 | 125,038 | 197,293 | 189,621 | 854,821 |
| 1999 | | | 2,112 | 138,492 | 410,321 | 101,260 | 655,407 | 241,096 | 1,548,688 |
| 2000 | | | 1,634 | 90,135 | 250,450 | 219,740 | 486,673 | 288,443 | 1,337,075 |
| 2001 | | | | 13,447 | 182,124 | 63,452 | 309,487 | 250,987 | 819,497 |
| 2002 | | | | 16,303 | 197,484 | 84,777 | 271,357 | 206,310 | 776,231 |
| 2003 | | | 2,091 | 102,484 | 106,415 | 123,027 | 425,993 | 168,314 | 928,324 |
| 2004 | | 635 | | 72,728 | 310,487 | 249,885 | 342,182 | 198,187 | 1,174,104 |
| 2005 | | 380 | 4,048 | 31,853 | 495,925 | 273,606 | 232,542 | 332,211 | 1,370,565 |
| Total | 3,196 | 2,278 | 390,171 | 1,569,768 | 6,329,129 | 5,661,692 | 9,366,712 | 9,202,563 | |

Table 3. Recreational harvest (pounds of A + B1 fish) of spotted seatrout by state, 1981-2005
(NMFS 2006)

| Year | NY | DE | MD | VA | NC | SC | GA | FLEC | Total |
|--------------|-------|-------|---------|-----------|-----------|-----------|------------|------------|-----------|
| 1981 | | | | | 63,036 | 14,808 | 138,720 | 967,921 | 1,184,485 |
| 1982 | | | | | 120,045 | 588,999 | 177,847 | 660,295 | 1,547,186 |
| 1983 | | | | | 96,359 | 138,442 | 323,889 | 784,531 | 1,343,221 |
| 1984 | | | | | 39,861 | 116,118 | 141,306 | 866,077 | 1,163,362 |
| 1985 | | | | | 288,088 | 509,551 | 234,704 | 1,032,344 | 2,064,687 |
| 1986 | | | 4,960 | 64,394 | 328,439 | 587,570 | 440,774 | 695,168 | 2,121,305 |
| 1987 | | | 22,511 | 38,495 | 366,442 | 592,612 | 491,317 | 883,707 | 2,395,084 |
| 1988 | | | 36,629 | 460,378 | 390,836 | 448,473 | 536,959 | 453,063 | 2,326,338 |
| 1989 | | | 184,318 | 112,344 | 259,726 | 277,489 | 608,009 | 328,338 | 1,770,224 |
| 1990 | | | 39,059 | 121,136 | 282,872 | 174,845 | 423,815 | 475,045 | 1,516,772 |
| 1991 | | 979 | 34,753 | 121,604 | 472,397 | 628,011 | 1,449,853 | 534,371 | 3,241,968 |
| 1992 | | 0 | 7,802 | 56,685 | 508,760 | 227,210 | 430,946 | 543,491 | 1,774,894 |
| 1993 | | | 12,800 | 201,562 | 307,151 | 268,055 | 586,426 | 392,827 | 1,768,821 |
| 1994 | | 243 | 26,764 | 175,184 | 679,996 | 183,343 | 412,392 | 357,441 | 1,835,363 |
| 1995 | | | 31,464 | 148,544 | 478,674 | 247,987 | 667,379 | 642,670 | 2,216,718 |
| 1996 | | 0 | 0 | 77,269 | 197,261 | 171,727 | 196,487 | 249,898 | 892,642 |
| 1997 | 4,052 | 584 | 32,963 | 261,911 | 311,891 | 163,771 | 242,506 | 380,276 | 1,397,954 |
| 1998 | | 317 | 37,189 | 61,888 | 444,441 | 151,718 | 262,896 | 329,793 | 1,288,242 |
| 1999 | | | 0 | 290,694 | 690,606 | 146,277 | 916,860 | 428,061 | 2,472,498 |
| 2000 | | | 2,972 | 195,544 | 385,190 | 267,297 | 565,903 | 545,202 | 1,962,108 |
| 2001 | | | | 26,733 | 213,438 | 58,885 | 369,083 | 502,254 | 1,170,393 |
| 2002 | | | | 28,882 | 274,100 | 111,954 | 302,559 | 353,693 | 1,071,188 |
| 2003 | | 0 | 3,494 | 218,061 | 145,936 | 140,276 | 502,278 | 313,990 | 1,324,035 |
| 2004 | | 908 | 0 | 130,404 | 377,776 | 231,928 | 380,635 | 388,164 | 1,509,815 |
| 2005 | | 3,770 | 11,378 | 77,379 | 606,803 | 332,683 | 264,140 | 595,817 | 1,891,970 |
| Total | 4,052 | 6,801 | 489,056 | 2,869,091 | 8,330,124 | 6,780,029 | 11,067,683 | 13,704,437 | |

Table 4. Recreational releases (number of B2 fish) of spotted seatrout by state, 1981-2005
(NMFS 2006)

| Year | NJ | DE | MD | VA | NC | SC | GA | FLEC | Total |
|--------------|----|-------|---------|-----------|-----------|-----------|-----------|------------|-----------|
| 1981 | | | | | 0 | 5,522 | 36,853 | 209,059 | 251,434 |
| 1982 | | | | | 0 | 8,007 | 17,645 | 171,093 | 196,745 |
| 1983 | | | | | 16,579 | 32,860 | 12,038 | 367,881 | 429,358 |
| 1984 | | | | | 30,173 | 44,436 | 16,174 | 76,346 | 167,129 |
| 1985 | | | | | 16,578 | 6,409 | 22,917 | 66,960 | 112,864 |
| 1986 | | | 13,639 | 28,606 | 19,792 | 115,315 | 189,798 | 35,646 | 402,796 |
| 1987 | | | 0 | 30,070 | 136,104 | 130,253 | 176,415 | 41,391 | 514,233 |
| 1988 | | | 26,999 | 148,934 | 74,818 | 78,568 | 182,628 | 431,665 | 943,612 |
| 1989 | | | 52,859 | 11,977 | 82,909 | 54,279 | 167,025 | 187,406 | 556,455 |
| 1990 | | | 4,874 | 23,435 | 84,235 | 35,223 | 114,624 | 203,439 | 465,830 |
| 1991 | | 0 | 21,811 | 40,550 | 169,921 | 51,415 | 369,972 | 789,779 | 1,443,448 |
| 1992 | | 1,321 | 701 | 19,855 | 139,616 | 97,813 | 192,261 | 597,254 | 1,048,821 |
| 1993 | | | 0 | 65,605 | 149,744 | 92,101 | 146,665 | 780,573 | 1,234,688 |
| 1994 | | 0 | 32,466 | 243,463 | 207,262 | 220,941 | 125,421 | 574,629 | 1,404,182 |
| 1995 | | | 157,530 | 327,643 | 277,896 | 194,996 | 327,835 | 1,074,703 | 2,360,603 |
| 1996 | | 71 | 51,594 | 165,169 | 153,051 | 107,691 | 63,585 | 1,081,893 | 1,623,054 |
| 1997 | 0 | 292 | 4,826 | 168,964 | 98,377 | 89,147 | 61,148 | 1,449,278 | 1,872,032 |
| 1998 | | 1,095 | 49,460 | 74,569 | 73,024 | 151,935 | 100,059 | 1,005,443 | 1,455,585 |
| 1999 | | | 7,082 | 152,120 | 253,442 | 92,792 | 160,801 | 1,577,378 | 2,243,615 |
| 2000 | | | 4,805 | 264,550 | 90,070 | 368,332 | 547,765 | 2,310,491 | 3,586,013 |
| 2001 | | | | 110,308 | 194,982 | 38,709 | 365,140 | 1,995,635 | 2,704,774 |
| 2002 | | | | 136,265 | 385,162 | 147,962 | 357,953 | 2,326,420 | 3,353,762 |
| 2003 | | 279 | 0 | 207,270 | 131,619 | 314,642 | 737,730 | 1,732,789 | 3,124,329 |
| 2004 | | 237 | 9,367 | 291,176 | 296,974 | 337,226 | 601,017 | 1,946,373 | 3,482,370 |
| 2005 | | 1,452 | 4,472 | 277,023 | 803,379 | 403,837 | 679,040 | 3,379,968 | 5,549,171 |
| Total | 0 | 4,747 | 442,485 | 2,787,552 | 3,885,707 | 3,220,411 | 5,772,509 | 24,413,492 | |

Table 5. Summary of current state regulations for spotted seatrout

| State | Recreational | Commercial | Other |
|----------------|--|--|--|
| New Jersey | 13" TL; 8 fish | 13" TL; 12" TL when taken by otter trawl 9/1-12/31 | Weakfish regulations apply to spotted seatrout |
| Delaware | 12" TL | 12" TL | Gill net restrictions |
| Maryland | 14" TL; 10 fish | 12" TL; seasonal closures | Minimum mesh size restrictions for trawl (3-3/8" sq. or 3-3/4" diam.) and gill nets (3") |
| PRFC | 14" TL; 10 fish | 14" TL | |
| Virginia | 14" TL; 10 fish | 14" TL; hook & line: 10 fish limit | Commercial quota of 51,104 pounds. Pound net/haul seine allowed 5% <14" by weight |
| North Carolina | 12" TL; 10 fish | 12" TL; hook & line: 10 fish limit | |
| South Carolina | 13" TL; 10 fish | no commercial harvest or sale | gamefish status |
| Georgia | 13" TL; 15 fish | 13" TL; 15 fish | BRD requirement for trawl; gear mesh regulations. |
| Florida | 15-20" TL slot, 1 fish >20"; 5 fish in North Regions, 4 fish in South Region; regional seasonal closures | 15-24" TL; June 1-Aug. 31 season; 75 fish per day or vessel (the lesser); hook & line or cast net only | |