

An assessment of the status of spotted seatrout in Florida waters through 2005

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Executive Summary

This assessment report covers the spotted seatrout fisheries found in each of the northern and southern management regions on the Atlantic and gulf coasts of Florida. Spotted seatrout population dynamics were estimated for the period 1950-2005 utilizing all available information on catch, effort, relative abundance, and age composition.

Annual commercial landings of spotted seatrout in Florida during 1950-2005 were highest in 1952 at about 3.5 million fish. After a secondary peak in landings in 1965 at about 3.2 million fish, landings steadily declined through 1994 before rapidly dropping to near-current levels of nearly 40,000 fish by 2000.

During the period when estimates were available directly from the fishery, 1982-2005, the total recreational harvest generally declined through the 1980's and much of the 1990's in all regions. After 1995 there has been a general increase in landings in the two southern regions. Both northern regions showed a period of relative stability in the landings during the late 1990's and early 2000's but have recently trended upward. Statewide recreational harvest was over 3.4 million fish in 2005.

The estimated numbers of fishing trips made by anglers fishing for spotted seatrout has increased since 1996. The numbers of estimated trips was variable but without trend during the 1980's and early 1990's, except in the Northeast region where the number of angler trips actually declined during the 1980's and early 1990's. There has been no significant trend in the median total-catch rate for spotted seatrout during 1991-2005 in the Northwest, Southwest or Southeast regions; however, in the Northeast region there was a significant decline.

Overall fishing mortality rate estimates for spotted seatrout in Florida were higher through most of the 1980's than they have been since 1990. During 2003-2005 fishing mortality rates have remained relatively low except for a rebound in female fishing mortality rates in the Northwest region.

Estimates of age-0 spotted seatrout abundance during the period 1982-2005 showed variability but no long-term trend for either sex in the two southern regions. In the northern regions, female young-of-the-year spotted seatrout showed a long-term significant decrease in abundance.

Overall population abundance of spotted seatrout in Florida was estimated to be 37.6 million fish at the beginning of 2005, with most being male, 19.7 million. In the southern regions, estimated abundance has increased during 1982-2005. In the northern regions estimated abundance of females has declined but male abundance has not changed significantly in the Northwest region and has increased in the Northeast region.

Estimates for transitional spawning potential ratio (tSPR) in 2005 for spotted seatrout in each region exceeded the Commission's target of 35%. On the gulf coast estimates for 2005 were 38% and 44% in the Northwest and Southwest regions, respectively. On the Atlantic coast, the northern and southern region estimates are 51% and 62%. Recent trends in year-specific, static SPR estimates indicate that near-term future tSPR will continue to fluctuate closely around its current levels in the gulf coast regions but will decline somewhat on the Atlantic coast.

1.0 Introduction

1.1 Management Unit Definition

The Florida Fish and Wildlife Conservation Commission has divided the spotted seatrout resource within its jurisdiction into northern and southern recreational management units. In this assessment we provide separate, detailed population analyses for the gulf and Atlantic coast regions within each of these units. These regions are defined as the Northwest, Pasco through Escambia counties; the Southwest, Monroe through Pinellas counties; the Southeast, Volusia through Dade counties; and the Northeast, Nassau through Flagler counties. Together, the four regional populations considered within this assessment include all spotted seatrout found within and closely adjacent to state of Florida waters including federal jurisdictions.

1.2 Regulatory History

Prior to November 1990 there were few restrictions to the harvest of spotted seatrout in Florida besides a 12-inch fork length minimum size limit for most areas of the state. In late 1989, the first significant “modern” changes in restrictions to harvest were enacted, including a 14-inch total length minimum size limit, the addition of a recreational 24” maximum size limit with the allowed take of one fish over this size per day, and a 10-fish recreational bag limit. Commercial fishing was restricted using minimum mesh size, regional harvest quotas and daily vessel limits. Beginning in 1996, seasonal closures, more restrictive bag and size limits, and more restrictive commercial vessel limits were added. The commercial fishery was also significantly impacted by the ban on the use of entangling nets in Florida waters beginning in 1996. Finally in July 2000, the northern and southern recreational management units were created with unit-specific bag limits and season closures and a statewide 15” total length minimum size limit and 20” maximum size limit with allowance for the take of one larger fish.¹

1.3 Assessment History

The status of spotted seatrout in Florida waters has previously been assessed within an age structured population analysis framework four times (Muller and Murphy 1995; Muller *et al.* 1997; Murphy *et al.* 1999; Murphy 2003). The first three assessments utilized sequential population analysis configured for a backward solution (FADAPT, Restrepo 1996) in combination with an independent separable virtual population analysis run to determine the selectivity in the last year. The Muller and Murphy (1995) and Muller *et al.* (1997) analyses utilized angler catch rates and commercial fishers landings rates as indices of spotted seatrout abundance. In 1999, the commercial landings rates were dropped as indices because numerous regulatory actions led to complex changes in the efficiency of that fishery. Except for Muller and Murphy (1995) when only one assessment was conducted for the Atlantic coast, all historic assessments have provided sex-specific analyses for the same four regions used in this assessment. The last assessment (Murphy 2003) was the first to integrate the analyses using a forward-solution statistical-catch-at-age approach. That approach has been continued in the current assessment; however, the data time-frame used by Murphy (2003) began in 1986 whereas

¹ The evolution and more specific aspects of these rules can be found at the FWC web site under <http://myfwc.com/marine/history/SEATROUT.htm>.

here I attempt to utilize historic data to capture the dynamics of the fishery and population beginning in 1950. The 2003 assessment also only utilized fishery-independent-based indices of abundance in years when these data were available and downweighted or restricted the number of years where fishery-dependent data indices were used. This assessment includes equal weighting for all indices developed from either fishery-independent or fishery-dependent data sources.

As the assessments for spotted seatrout in Florida have become more comprehensive, our understanding of the life history and fisheries dynamics for spotted seatrout in Florida has improved. Some of the more important improvements have to do with the understanding of female reproductive biology, i.e., age at maturity for females and annual fecundity, observation-based information on the maximum expected age in an unfished state, and the dynamics of the patterns of fishery selectivity across age. In this assessment we have moved from using the biomass of mature female spotted seatrout as a proxy for annual egg production to estimates of annual egg production based on information on batch fecundity, spawning frequency, and length of the spawning season. We have also collected a short time-series of data on the sizes of spotted seatrout released alive by anglers, often a significant portion of the harvest due to post-release mortality.

Results reported in the last assessment (Murphy 2003) indicated that recruitment of age-0 spotted seatrout appeared to be stable in the Southeast region, declining slowly in the Southwest region, and variable but stable in the Northeast and Northwest regions. Transitional spawning potential ratios (tSPR) had increased since 1986 in all regions, most rapidly after 1989. Given the estimated precision of the estimates, the estimated tSPR in 2001 for each region, in terms of mature spawning biomass per recruit, had either exceeded or was not significantly different from the 35% management target set by the Commission for spotted seatrout.

The temporal window for this new assessment update is the period 1950-2005, though most of the dynamics of the population reported here are restricted to the period of more complete data observations, 1982-2005. This report follows the Assessment Report outline recommended by the Atlantic States Marine Fisheries Commission (2005) for benchmark assessments.

2.0 Life History

2.1 Age

Annual ages of adult spotted seatrout have been determined mostly from recognizable markings on scales or on sectioned otoliths. Scales or scale impressions have been used to determine the ages of spotted seatrout in Texas (Pearson 1929; Miles 1950), Louisiana (Arnoldi 1985; Wakeman and Ramsey 1985), Florida (Moody 1950; Klima and Tabb 1959; Moffett 1961; Stewart 1961; Tabb 1961; Rutherford *et al.* 1982; Cottrell 1990), Georgia (Music and Pafford 1984, Woodward *et al.*, 1990), South Carolina (Wenner *et al.* 1990), North Carolina (Brown 1981; Ihde 2000), and Virginia (Brown 1981). Otolith sections have been used to determine the ages of adult spotted seatrout in Texas (Maciena *et al.* 1987; Colura *et al.* 1994), Louisiana (Wieting 1989), Mississippi (Warren 1995), Florida (Cottrell 1990; Murphy and Taylor 1994; DeVries *et al.* 1997), South Carolina (Daniel 1988; Wenner *et al.* 1990), and Virginia (Ihde 2000).

Although scales have often been used to determine the ages of adult spotted seatrout, marks seen on otolith sections are the most reliable indicators of age. Age-determination using scales seems to be accurate for many adult fishes, but readers using scales to age older fish seem to increasingly underestimate ages as the true age of the fish increases (Carlander 1987). Wenner *et al.* (1990) found that the mean number of annuli on thin sections of spotted seatrout otoliths was significantly greater than the mean number counted on scale impressions from the same fish, with the number of discrepancies increasing dramatically after age 2. These results were supported by a study comparing techniques for determining ages of spotted seatrout collected from Chesapeake Bay, where scales over-aged age-1 fish and under aged fish older than age 2 (Ihde 2000). However, Cottrell (1990) found that when using scales to age spotted seatrout collected from the Indian River Lagoon, Florida, ages were often overestimated by one year, and occasionally by two when compared to ages determined using otolith sections. In all studies that used both scales and otolith sections, the results support Ihde's (2000) findings that there is less precision in using scales to determine the ages of adult spotted seatrout than there is in using otolith sections. Finally, the comparison of scales, otolith sections, whole otoliths, dorsal-fin spine sections, and pectoral-fin ray sections clearly showed that sectioned otoliths were the preferred structure to use in aging adult spotted seatrout in Chesapeake Bay (Ihde 2000) and probably throughout their range.

The maximum reported ages for adult spotted seatrout in a given area generally range from 4 to 12 years for males and females (Welsh and Breder 1923; Moody 1950, Klima and Tabb 1959; Moffett 1961; Stewart 1961; Tabb 1961; Brown 1981; Rutherford *et al.* 1982; Arnoldi 1985; Maciena 1987; Cottrell 1990; Wenner *et al.* 1990; Woodward *et al.* 1990; Murphy and Taylor 1994). Although females always appear to be more abundant than males at older ages, the oldest individual spotted seatrout observed in many studies is a male (Moffett 1961; Maciena *et al.* 1987; Colura *et al.* 1994; Murphy and Taylor 1994; DeVries *et al.* 1997). Bourgeois *et al.* (1996) concluded that spotted seatrout in the northern parts of their range, either within the Gulf of Mexico or along the Atlantic coast, live longer than the southern populations do. In fact, in Chesapeake Bay, Virginia (Brown 1981) and Galveston Bay, Texas (Maciena *et al.* 1987), observed maximum ages were higher than seen elsewhere, --12 years. However, other maximum ages reported from the northern Gulf of Mexico were much lower (4-5 years in coastal Mississippi and Louisiana [Colura *et al.* 1984; Wieting 1989; Warren 1995]) than the maximum ages reported for spotted seatrout in the southern U.S. Gulf of Mexico (8-9 [Colura *et al.* 1994; Murphy and Taylor 1994]). Because the observed maximum age in a sample of fish is directly related to the number of fish examined, it may be that there is actually little real difference in the maximum age of spotted seatrout over the species' geographic range (Ihde 2000).

2.2 Growth

The analysis of the growth of larval and juvenile spotted seatrout can be summarized by a model fit to the observed length-at-age data. A linear model of age on length was determined for small juvenile spotted seatrout (8-50 mm SL) in Charleston Harbor, South Carolina:

$$A = 1.319 L + 16.245, n = 30, r^2 = 0.86,$$

where A is daily age and L is standard length in millimeters (Daniel 1988). McMichael and Peters (1989) found that growth was described well for spotted seatrout in the early larval to juvenile stages (up to 50 mm SL) in Tampa Bay, Florida, by the linear model of length on age

$$L = 0.509 A, n = 50, r^2 = 0.96$$

or by the quadratic model of age on length:

$$A = 2.476L - 0.012 L^2, n = 50, r^2 = 0.96.$$

The daily ages of larger juveniles in Tampa Bay, Florida, were fit almost as well by the two equations:

$$L = 0.448 A + 0.0002 A^2, n = 98, r^2 = 0.86, \text{ and}$$
$$A = 12.472 + 1.836 L - 0.005 L^2, n = 98, r^2 = 0.88.$$

Growth of adult spotted seatrout has most often been determined using the predicted sizes of fish at annulus formation, i.e., by back calculating lengths-at-age. Back-calculation involves estimating the size of each fish at the time each annulus was formed. However, estimations of these sizes have been made using different methods, which would account for some of the observed differences in growth. In older studies, a direct proportionality formulation was used to estimate fish size from scale measurements (Klima and Tabb 1959; Moffett 1961; Stewart 1961; Iverson and Tabb 1962; Sutter and McIlwain 1983). More recent studies also directly relate scale or otolith section radius to body length, but use a correction for a nonzero y-intercept (Rutherford *et al.* 1982; Maciena *et al.* 1987; Cottrell 1990; Wenner *et al.* 1990; Murphy and Taylor 1994; Ihde 2000). These differences may partly explain why early studies found smaller sizes at age, especially for young fish, than the most recent studies have. If direct proportionality is used when a ‘correction factor’ is appropriate, then the calculated sizes at younger ages are always too small (“artificial” Lee’s phenomenon; Ricker 1975). Even if the correct back-calculation method is used, Vaughan and Burton (1994) suggested that there was less bias only if the back-calculated length for the most recently formed annulus was used in the growth analysis.

In addition to these potential sources of bias, the use of back-calculated length-at-age data has led to the development of growth models that predict smaller sizes at age than are likely to occur in nature. This may be because of the temporal offset between the time of annulus formation and the protracted spawning season (Maciena *et al.* 1987; Murphy and Taylor 1994). For any individual spotted seatrout, an annulus can be formed any time up to about seven months prior to the anniversary of its hatching. Only early-spawned fish (April) would be likely to form an annulus on the anniversary of their hatching date (Maciena *et al.*, 1987). Most specimens will be younger because they were spawned later in the spawning season. Adjusting the ages associated with these back-calculated lengths to correct for the time between the median hatching date and the period of annulus formation yields more realistic sizes at age.

Differences in growth rates between sexes have been reported for adult spotted seatrout. When differences between sexes were observed, females were generally found to grow more quickly than males (Mercer 1984). Spotted seatrout of both sexes generally grow at the fastest rate during their first year. Fish reach about 200 to 250 mm TL by the end of

their first winter; grow less than 100 mm in the second year, and then growth less than 75 mm per year thereafter.

In studies that used sagittal otolith thin sections to determine age for spotted seatrout, back-calculated sizes-at-age found in the northern regions of the Gulf of Mexico and along the Atlantic coast were generally larger than those found in southern sections of the U.S. Gulf of Mexico. Size-at-age for males were largest in Galveston Bay; coastal Mississippi; Perdido Bay, St. Joseph Bay, and Apalachicola Bay in Florida in the gulf; and in the Chesapeake Bay on the Atlantic coast. Colura *et al.* (1994) estimated sizes-at-age for males in Galveston Bay which were not as large as those of Maciena *et al.* (1987) for the same system. Slower-growing young males were found along the peninsular Florida gulf coast, although after age 5, males there reached sizes similar to those seen in some from northern gulf and the U.S. South Atlantic studies. Male spotted seatrout from the central and southern Texas coast generally grew slower than did those in other areas. The average back-calculated sizes across all studies in which otolith sections from samples of at least 50 fish were used show that male spotted seatrout were largest on the Atlantic coast, followed by males in the northern Gulf of Mexico, eastern Gulf of Mexico, then western Gulf of Mexico. As with males, females were larger at age in the northern areas of the Gulf of Mexico -- Galveston Bay; Texas; coastal Mississippi; and Pensacola Bay, St. Joseph Bay, and Apalachicola Bay in Florida -- than off southern Texas or along the peninsular gulf coast of Florida. Female spotted seatrout along the Atlantic coast reached larger sizes-at-age than did females in all other areas, except the Indian River Lagoon, Florida (Cottrell 1990). Because the results of Cottrell's (1990) study comparing the precision of determining fish ages by using scales and by using otolith sections were quite different from the results of others who compared these modes of aging (see above), we have excluded his findings from further discussion of spotted seatrout growth. The average back-calculated size across all studies in which otoliths from samples of at least 50 fish were used show that female spotted seatrout were also largest in Atlantic coast waters and smallest in the western Gulf of Mexico.

There has been little work on temporal changes in spotted seatrout growth within an area. Lassuy (1983) speculated that year-to-year differences may also be a source of the observed high degree of variation in growth seen between studies conducted in the same areas. Interestingly, Colura and Vickers (1998) examined the otoliths of spotted seatrout recovered from layers of sediment dating to 5,000 to 800 years before present. They found that growth rates of these fish appeared to be slower than the current growth rates for spotted seatrout in Texas, possibly because of selective fishing for smaller spotted seatrout. If these are valid differences, it could be argued that spotted seatrout growth may change in response to long time scale changes in fish densities, intra- and interspecific competition, or even climate.

2.3 Reproduction

The spotted seatrout has a protracted spring through fall spawning season with a peak in April-July in the Gulf of Mexico. Spawning in southwest and east-central Florida occurs year-round with a peak in April and May (Murphy and Taylor, FWC-FMRI unpublished data). Crabtree and Adams (unpublished manuscript, FWC-FMRI) found that the most intense period of spawning in the Indian River Lagoon was May through August. In Apalachicola Bay, the spawning season is more discrete occurring during the

period March-September, with peak activity in May. In Tampa Bay, McMichael and Peters (1989) found that spotted seatrout spawned from early April through late October with major seasonal peaks in spring and summer. Lesser peaks in spawning apparently coincided with full moon phases. Males generally mature earlier in the season than females (Hein and Shepard 1979). In Barataria Bay, Louisiana, spotted seatrout spawning occurred throughout the bay regardless of water depth or substrate. Spawning seemed to occur later in the northern portion of the bay than in the southern. Spawning apparently occurs from sunset to 3 or 4 hours after sunset in Texas, where egg densities at a spawning site declined from 100 eggs/m³ during spawning to 1 egg/m³ the following afternoon (Brown-Peterson *et al.* 1988, Holt *et al.* 1985).

Spotted seatrout spawning occurs in near shore and estuarine waters. The distribution of small larvae in Tampa Bay suggested that spawning occurred between the middle bay and near shore coastal waters (McMichael and Peters 1989). In the Indian River Lagoon spawning apparently occurs in deeper channels immediately adjacent to shallow, grassy bays (Tabb 1961, Mok and Gilmore 1983).

Spotted seatrout are multiple (indeterminate) spawners as evidenced by the persistent recruitment of vitellogenic and fully yolked oocytes in ovaries throughout the spawning season (Brown-Peterson *et al.* 1988). The batch fecundity of spotted seatrout in Texas was related to ovary-free body weight as:

$$\text{Batch Fecundity} = 459 (\text{Weight}) - 56,066,$$

which did not vary significantly with collection month during the spawning season (Brown-Peterson *et al.* 1988). Wieting (1989) estimated batch and total fecundity in Louisiana but her fecundity equations are not included because they produced fractional numbers of eggs and the text did not present the appropriate scaling factor. Crabtree and Adams (unpublished manuscript, FWC-FMRI) presented batch fecundity relations with total length, age, and body weight. These relations found for spotted seatrout collected from the Indian River during 1995-98 were:

$$\begin{aligned} \text{Batch Fecundity} &= -41,6965 + 1,531 \text{ TL (mm)} \\ \text{Batch Fecundity} &= 120,788 + 45,585 \text{ Age (years)} \\ \text{Batch Fecundity} &= 5,663 + 307.8 \text{ Weight (gonad free, g)}. \end{aligned}$$

Batch fecundity relationships reported for Tampa Bay spotted seatrout during 1999-2003 Barbieri (2004) were:

$$\begin{aligned} \text{Batch Fecundity} &= -896,814 + 3,110 \text{ TL (mm)} \\ \text{Batch Fecundity} &= -43,139 + 669.6 \text{ Weight (gonad free, g)}. \end{aligned}$$

The average interval between spawnings, as determined from the inverse of the fraction of fish in imminent spawning condition, i.e. with hydrated oocytes, was once every 3.6 days in South Texas (Brown-Peterson *et al.* 1988), once every 3.2 days in the Indian River Lagoon, Florida (Crabtree and Adams unpubl. ms), and once every 4.9 days in Tampa Bay (Barbieri 2004). Observations from captive seatrout suggest a longer period between spawns of about 21 days (Tucker and Faulkner 1987, Wisner *et al.* 1996). Using the observations of post-ovulatory follicle as evidence of spawning Barbieri (2004) also estimated a longer average period between spawns of 8.9 days. Given a 6-month

spawning season, spotted seatrout females may spawn between 9 and 60 times during a spawning season. Colura *et al.* (1993) collected data on the percentage of spotted seatrout caught using experimental gill nets and hook and line that contained oocytes undergoing final oocyte maturation (lipid coalescence, germinal vesicle migration or hydration). All fish collected from April through August (n=183) had vitellogenic ova; evidence of final oocyte maturation was found for 37.7% (range 19.1-44.9% per month). Assuming the overall proportion with final oocyte maturation observed occurred each day, then inverting 37.7% spawning per day gives the interval of 2.6 days between spawns. Over the observed period of active spawning this indicated that spotted seatrout spawned 51 times during April-August 1991. Therefore, a one-kilogram spotted seatrout can spawn about 3-20 million oocytes in a spawning season.

In Florida, there is evidence that older spotted seatrout contribute more to the total egg production than do younger fish because they may spawn more frequently. The interval between spawns ranged from about 4 days for age-0 and -1 female spotted seatrout to about 2 days between spawns for age-5 and -6 females (Crabtree and Adams unpubl. ms, FMRI). They related total egg production to age using the relation:

$$\text{Total eggs produced (millions)} = \exp[1.804 + 0.4304 (\text{Age, years})].$$

In this assessment, we utilized the results of Barbieri (2004) to describe the maturity and annual fecundity of different-aged spotted seatrout. The annual fecundity vector with age was estimated assuming a 184-day spawning season and conservative age-specific spawning frequencies based on observed post-ovulatory follicles. Annual fecundities were: age-0, 0 eggs; age-1, 1,919,700 eggs; age-2, 5,854,464 eggs; age-3, 9,224,781 eggs; age-4, 15,701,400 eggs and; ages 5 and older, 18,048,054 eggs. This is different from the egg production estimates used in the previous assessment for spotted seatrout (Murphy 2003) and reflects the current state of knowledge about spotted seatrout reproduction in Florida (S. Barbieri, FWC-FMRI, per communication).

Most spotted seatrout become sexually mature at about the end of their first year when 300-400 mm TL, with males generally maturing at smaller sizes and younger ages (Murphy and Taylor, FWC-FMRI, unpublished data). Spawning in northwest Florida occurred from April through August. Fifty percent of the female spotted seatrout sampled were mature at 230 mm FL; virtually all were mature by 290-310 mm FL (DeVries *et al.* 1997). In Northwest Florida, all females sampled that were age 1 and older were found to be mature (DeVries *et al.* 1997). Males were mature at smaller sizes than females; all were mature down to the smallest fish sampled, 210 mm FL. All males were mature by age 2 and most by age 1. Additional information on early maturation comes from Colura *et al.* (unpublished manuscript) in an experiment that accidentally reared spotted seatrout from eggs or larvae introduced into ponds in April. During the following November a mature, 355-mm TL, 8-month-old female was observed.

Female maturity ogives utilized in this assessment used all available information about spotted seatrout reproduction in Florida. Since the assessment methodology uses a calendar-year time frame, the age groups referred to in the model represent a single year class of fish that is present during each calendar year. For instance, model-age 1 spotted seatrout are those fish in a year class that in January are probably about 3-9 months old and by December are 15-21 months old. In this scheme model age-0 fish are represented by fish that are likely less than 9 months old by the end of the model year (December).

All biological schedules based on the biological age were adjusted for this difference, including maturity schedules. For the current assessment we used a single maturity schedules for spotted seatrout in all Atlantic and Gulf coast regions. Of course, no model-age-0 spotted seatrout are likely to be mature but recent work on spotted seatrout reproduction indicates that 83% of female spotted seatrout reach maturity during their first spawning season after hatching and all are mature at older ages (S. Barbieri, FWC-FMRI, personal communication). This agrees with the findings of DeVries et al. (1997) presented above for Northwest Florida spotted seatrout. This is a slight deviation from the data used in the last assessments (Murphy 2003) where all females were considered mature from age one onward.

2.4 Stock Definitions

Spotted seatrout occur along the Atlantic and gulf coasts of the United States from Cape Cod, Massachusetts to Carmen Island in the lower Gulf of Campeche, Mexico (Mercer 1984). They are rare in and north of Delaware Bay (Welsh and Breder 1923).

Researchers have come to conflicting conclusions regarding the presence of spotted seatrout stock subdivisions in Florida and the Gulf of Mexico. Using early tagging and growth studies in Florida, Iverson and Tabb (1962) postulated that separate stocks of spotted seatrout occur in each of Florida's major estuaries. This was supported by electrophoretic studies (Weinstein and Yerger 1976) that showed seven independent stocks of spotted seatrout in Florida. Preliminary analysis of the shape characteristics of scales and otoliths also provide evidence that spotted seatrout in Texas bays were also separate stocks (Colura and King 1989). However, results from studies of electrophoretic patterns of proteins (Ramsey and Wakeman 1987, King and Pate 1988) and growth (Murphy and Taylor 1994) do not support the previously postulated subdivisions among spotted seatrout populations in Florida. In addition, preliminary mtDNA work (John Gold, Texas A&M University, personal communication) found extremely low levels of genetic variation in spotted seatrout among several areas in the Gulf of Mexico, without any consistent geographic pattern in the occurrence of mtDNA haplotypes.

A lack of distinct genetic populations does not necessarily mean that a high level of coast-wide mixing occurs or that local populations of spotted seatrout are affected by fishing pressure occurring in distant areas. The limited amount of bay-to-bay movement evidenced by tagging (Moffett 1961; Baker *et al.* 1986) supports the idea that spotted seatrout populations are almost exclusively affected by local fishing pressure. Inferences from an island isolate model suggested that since the genetic variability of spotted seatrout is quite low (Ramsey and Wakeman 1987, King and Pate 1988), an exchange of only 5% of the breeding population is needed among estuaries to maintain the observed genetic uniformity of spotted seatrout (Ramsey and Wakeman 1987).

Results from a re-analysis of spotted seatrout genetic structure in Florida show the presence of five genetic spotted seatrout stocks (Wilson *et al.* 2002). These stocks and their boundaries are: 1) a northeast stock located from approximately northern Volusia county to the Atlantic state border (and possibly beyond) 2) a southeast stock located from approximately southern Martin county north to Volusia county 3) a Biscayne Bay vicinity stock 4) several Florida Bay/ Keys stocks, in which a complex of populations subdivisions apparently exists, and 5) a gulf coast stock from Florida Bay through the Florida panhandle. These findings suggest the need for more localized assessments in

extreme South Florida and a gulf-coast-wide assessment that is broader geographically than we currently produce. The uncertainty about the temporal and spatial dynamics of the stock complexes in South Florida and their relatively small spatial scale make it impossible at this time to collect stock-specific information for assessments there. Along Florida's gulf coast where single genetic stock is found, there is little evidence for large-scale mixing among adults and the observed differences in life history characteristics between fish in the Northwest region and the Southwest region appears to justify the continued separate assessments for spotted seatrout in these gulf coast regions.

In this assessment we provide detailed population analyses for spotted seatrout populations within each of four regions: Northeast, Nassau through Flagler counties; Southeast, Volusia through Dade counties; Southwest, Monroe through Pinellas counties; and the Northwest, Pasco through Escambia counties. For the purposes of spotted seatrout management, Florida's Fish and Wildlife Conservation Commission has divided Florida into northern (our Northeast and Northwest regions) and southern (our Southeast and Southwest regions) recreational management units (see IV. Management, history of management section below). We continue to provide assessments of spotted seatrout within four regions because they approximate operational suggested by tagging, genetics, and life history studies.

Spotted seatrout may make local movements in response to changes in salinity, temperature, and in preparation for spawning. Movement from the shallow estuarine environments into deeper offshore areas in response to cold temperatures has been suggested for spotted seatrout (Pearson 1929; Tabb 1958, 1966; Fontinot and Rogillio 1970). Baker *et al.* (1986) found that tagged spotted seatrout in Texas appeared to move toward the gulf as winter or summer approached possibly to avoid temperature extremes. However, the pre-summer movement may also reflect a spawning migration to the gulf where conditions suitable for egg and larval development occur (Taniguchi 1980). In Louisiana, immature spotted seatrout were found in the seaward, high salinity areas of estuaries during the spring and summer then in upper estuarine low salinity waters during the fall/early winter (Helser *et al.* 1993). In contrast, mature spotted seatrout were evenly distributed in the estuary during the fall/early winter but congregated in lower estuarine waters during the spawning season (Helser *et al.* 1993).

2.5 Natural Mortality

Natural mortality of spotted seatrout in this assessment uses the same constant rate, $M = 0.3$ per year, as earlier studies. Justification for this rate has been based upon the observed spotted seatrout lifespan and comparison with other species such as weakfish, *Cynoscion regalis*. Estimated maximum age for spotted seatrout was assumed to be 12 years in this assessment. This appears reasonable because the oldest spotted seatrout known prior to the advent of modern fisheries, as determined using otoliths found in Texas contained in strata dating back to between 2500 B.C. and 1250 A.D., was age 9 (Colura and Vickers 1998). An age-specific vector of instantaneous natural mortality that provides the same cumulative mortality over ages 0 through 12 as did the constant mortality vector was estimated from the relationship of body weight to natural mortality (Lorenzen 1996). This gave estimated instantaneous natural mortalities (yr^{-1}) of: 0.73, 0.42, 0.36, 0.31, 0.29, 0.26, 0.25, 0.23, 0.22, 0.22, 0.21, 0.20, and 0.20 for ages 0 to 12, respectively.

3.0 Fishery Description

3.1 Brief Overview of Fisheries

The fisheries for spotted seatrout are characterized by the almost exclusive use of hook-and-line gear although some commercial landings are reported caught using cast nets. Catches and landings are made from throughout Florida's estuarine and adjacent near shore waters. Since at least 1982 when the first reliable recreational catch estimates became available, most landings come from the recreational hook-and-line fishery. In 2005, this fishery has accounted for nearly 99% of the total landings in weight. The annual combined recreational and commercial landings of spotted seatrout in Florida were about 3.68 million pounds in 2005 (Table 3.1.1). On the Atlantic coast, the total harvest averaged about 1.1 million pounds during the period 1982-89 but dropped to an annual average of less than 0.5 million pounds per year during 1996-2005. The combined recreational and commercial landings on the gulf coast show the same trend with an annual average of 6.5 million pounds landed over the period 1982-89 but averaged only about 1.1 million pounds per year during 1996-2005.

3.2 Current Status

The commercial fisheries landings for spotted seatrout have been reduced through regulation to a very small component of the overall catch. The highly regulated and much larger recreational fishery has increased in overall Florida landings and fishing effort since 1996. There has been no specific determination of the current status of these fisheries in terms of economics or social importance.

4.0 Habitat Description

4.1 Brief Overview of Habitat Requirements

Spotted seatrout larvae and post larvae have been collected in channels, passes, and sea grass beds in Florida, Louisiana, and Texas bays (Jannke 1971; King 1971; Sabins and Truesdale; 1974, McMichael and Peters 1989) and in the eastern Gulf of Mexico inside the 15-m isobath (Houde *et al.* 1979). Surface water temperatures for Tampa Bay collections containing spotted seatrout larvae ranged from 20.4-32.9 °C; surface salinities ranged from 18-32 o/oo (McMichael and Peters 1989). Few larval spotted seatrout have been reported collected on the Atlantic coast of the U.S., although Daniel (1988) collected post-larvae at riparian stations in Charleston Harbor, South Carolina.

Juvenile and pre-recruit (<355 mm total length [TL]) spotted seatrout are generally associated with sea grass beds, although some are found in non-vegetated backwaters and possibly channels (Tabb 1966; Mercer 1984; McMichael and Peters 1989). Most researchers have found that sea grass areas in bayous, lagoons, creeks, and shallow flats hold the highest densities of small (15-100 mm standard length [SL]) juvenile spotted seatrout (McMichael and Peters 1989). In Tampa Bay, certain backwater and marsh areas also appear to support a significant portion of the juvenile population (McMichael and Peters 1989). Tabb (1958) reported the suitable temperature range for spotted seatrout to be 15-27 °C. The minimum salinity stress for spotted seatrout occurs

at 20 o/oo and 28 °C and they can survive over a wide salinity range, 10-45 o/oo (Wohlschlag and Wakeman 1978).

Adult spotted seatrout are found over a wide range of estuarine habitats. Along the Gulf of Mexico coast, they are found in large areas of shallow, quiet, brackish water with extensive submerged vegetation, although they are also common around oyster bars, in deep holes, on sand bottom, along mangrove shorelines, and in areas where some sort of structure exists (Mercer 1984). The absence of sea grass beds in an area does not apparently preclude their presence there.

Copepods are the major prey item for larval spotted seatrout. In Tampa Bay, Peters and McMichael (1989) found that the calanoid copepod, *Acartia*, was the most frequently used food item. This is similar to other studies of the food habits of larval spotted seatrout (Houde and Lovdal 1984)

Small juvenile spotted seatrout tended to feed on mysids, shrimp, and fish (Pearson 1929; Moody 1950; Darnell 1958; Springer and Woodburn 1960; Odum 1971; Carr and Adams 1973; Dietz 1976; McMichael and Peters 1989; Mason and Zengel 1996; Llanso *et al.* 1998). A switch in diet from copepods to mysids and shrimp occurs at about 15-30 mm SL (McMichael and Peters 1989). There appears to be another dietary shift from caridean shrimp to fish and penaeid shrimp at about 150 mm SL (Moody 1950).

Adult spotted seatrout diet consists mainly of fish, such as anchovies, mullet, pinfish, menhaden, and silversides, and crustaceans, such as penaeid shrimp and crabs (Mercer 1984). Tabb (1961) suggested that seasonal food availability in Florida waters (with crustaceans available in summer and early winter and fish available in late winter-early spring) is the reason for seasonal changes in food preferences. Moody (1950) and Tabb (1961) also noted the occasional occurrence of small spotted seatrout in the stomachs of adults.

Fishes that prey on the various life history stages of spotted seatrout include snook, tarpon, barracuda, Spanish mackerel, king mackerel, bluefish, silver perch, spotted seatrout, gafftopsail catfish, common jack, and mangrove snapper (Klima and Tabb 1959). It is likely that avian predation occurs on juveniles that frequent shallow waters.

5.0 Data Sources

5.1 Commercial

Commercial harvest information was obtained from the FWC's Marine Fisheries Information System data and from Fisheries Statistics Division of the National Marine Fisheries Service (NMFS) for the years 1950-2005. These data include annual landings tallied from monthly dealer reports collected by the NMFS during the period 1950-85² and trip-specific commercial landings reported within the FWC trip ticket program during the period 1986-2005. Trip tickets included edited batches 1 – 913 and no spotted seatrout landings were found reported in the unedited batches 914 – 917 compiled through April 2006. The NMFS-developed Trip Interview Program (TIP) provided lengths of spotted seatrout sampled from the commercial landings. These data were available for the periods 1992-2004 on the Atlantic coast and 1991-2005 on the gulf

² See <http://www.st.nmfs.gov/st1/commercial/index.html>.

coast. Only TIP data available in the FWC-FWRI-maintained database were queried for this assessment.

5.1.1 Data Collection Methods

5.1.1.1 Survey Collection Methods

Prior to 1986, landings of spotted seatrout were reported to the NMFS through monthly dealer reports made by major fish wholesalers in Florida. Since 1986, information on what is landed and by whom in Florida's commercial fisheries comes from the FWC's Marine Resources Information System, commonly known as the trip-ticket program. Wholesale dealers are required to use trip tickets to report their purchase of saltwater products from commercial fishers. Conversely, commercial fishers must have Saltwater Products Licenses to sell saltwater products to licensed wholesale dealers. In addition, spotted seatrout became a "restricted species" in late 1989 so only fishers who have Restricted Species Endorsements on their Saltwater Products License qualify to sell spotted seatrout. Each trip ticket includes the Saltwater Products License number, the wholesale dealer license number, the date of the sale, the gear used, trip duration (time away from the dock), area fished, depth fished, number of traps or number of sets where applicable, species landed, quantity landed, and price paid per pound.

Biostatistical sampling methods for sampling spotted seatrout generally followed the Trip Interview Program protocol where sample weights and numbers, individual fish lengths and sex were recorded along with aspects of fishing effort. Information on whether the sample was sorted or not and in any way considered biased was also recorded. The samplers have a list of species of interest for sampling which can change but which has consistently included spotted seatrout.

5.1.1.2 Sampling Intensity

The commercial landings based on monthly dealer reports prior to 1986 came from a subset of dealers that included all the large wholesale dealers operating in Florida. The FWC trip ticket program greatly expanded the coverage of the fishery to include all wholesale dealers operating in Florida and to include all transactions where marine resource products are purchased from a licensed commercial fisher.

Biostatistical sampling intensity for commercially landed spotted seatrout had been high in all but the Northeast region prior to 1996 when the commercial season was reduced to three months (June, Jul, and August). Since then sampling has been sporadic on the gulf coast, extremely limited in the Northeast region and good until 2005 in the Southeast region.

5.1.1.3 Biases

The NMFS program to collect landings is seemingly most effective for fisheries where the majority of landings are made at the large-volume wholesale dealer outlets (fish houses). Spotted seatrout are landed in small amounts at both large and small fish houses so there is a potential negative bias in the early commercial landings. However during 1985 and 1986, when the two data collection systems operated concurrently, there were no consistent differences seen in annual number of pounds of spotted seatrout reported landed (Table 5.1.1.3.1). The general canvass recorded an average 7-15% more

landings in the Northwest and Southeast regions, 6% less in the Southwest, and the same average amount in the Northeast region.

Biases in the biostatistical sampling have probably increased in recent years as sampling events have dropped considerably. Considering the high correlation in lengths of spotted seatrout caught at one time with a particular gear, there is a high chance for bias in the sampled fish lengths ascribed to the commercial landings. Fortunately, the very small contribution of the commercial fishery to the overall landings of spotted seatrout in recent years has reduced the significance of this bias within the assessment.

5.1.1.4 Biological Sampling

Biological samples from the commercial fisheries for spotted seatrout were collected during sampling for a 1986-88 life history study (Murphy and Taylor 1994) and during Trip Interview Program (TIP) sampling between 1991 and 2005. Sampling was almost non-existent in the Northeast region but was frequent in the other regions during 1986-88 and again during 1991-95 (Table 5.1.1.4.1). Regulatory limits to the length of the fishing season, the number of spotted seatrout that could be landed and the type of fishing gear that could be used reduced sampling opportunities markedly after 1995. Despite this, frequent length samples were obtained from the Southeast region fishery through 2004.

5.1.1.5 Ageing Methods

Spotted seatrout ages were determined from well-established protocol for thin-sectioning and reading spotted seatrout sagittae. The ages of spotted seatrout in the commercial catch were estimated by converting the available regional information on the length- and sex-composition of spotted seatrout in the commercial landings to sex-specific age frequencies using regional age-length keys constructed from all sex-specific spotted seatrout length and age data available from the commercial and recreational fisheries and from fish collected by the FWC's fishery independent monitoring (FIM) program. This implies that the sex-specific age composition of spotted seatrout within each 1-inch total-length size class is assumed to be the same for spotted seatrout landed in the commercial fishery as for spotted seatrout captured from both fisheries and from FIM samples. Ages of spotted seatrout were by convention incremented on January 1 each year to align ages with other calendar-based statistics. This meant that spotted seatrout labeled as age 1 for the modeling exercise were actually about 3-9 months of age based on peak spawning in mid June.

5.1.1.6 Development of Estimates

The number of spotted seatrout landed by the commercial fisheries was estimated from the regional landings using regional mean weight information collected from the commercial landings during the 1986-88 life history study and the TIP program. When possible, the estimates were developed within each region within each gear category for each year, however some pooling of data was required when few or no spotted seatrout were available (Tables 5.1.1.6.1 and 5.1.1.6.2 summarize original data; Tables 5.1.1.6.3 and 5.1.1.6.4 summarize final pooled data). The protocol followed for pooling included: 1) if at least 20 fish were in the total annual sample within a gear category then no pooling was required, 2) for instances when less than 20 spotted seatrout were in the

annual weighed samples, the closest adjacent year or years of data were combined for a weighted mean, 3) pooling was avoided across years when the size limits changed, and 4) the estimated mean weight in the 'unknown' gear category was a weighted mean of the gear-specific mean spotted seatrout weights (weighted by the 'gear-specific' landings). For landings reported before information on the type of gear used was available the 'Unknown' gear category mean weight was used. In some instances fewer than 20 fish lengths were accepted as adequate because less than 20 lengths were available across all years and all regions, i.e. trawl fisheries, or because there were size-limit changes to consider, i.e. gill and trammel net fisheries in the Northwest region. No sizes of trap-caught spotted seatrout were available so these were assumed similar in size composition to trawl caught spotted seatrout. The final estimates of the mean number of fish per pound (Table 5.1.1.6.4) were used to convert landings weight to numbers within landings aggregated by available gear categories.

The length distribution of spotted seatrout landed by the commercial fishers was estimated using length information collected during the life history study and the TIP program. These length data sometimes overlapped with the data used to estimate mean weight but often included unweighed individuals from TIP samples or excluded some life-history-study collected fish (Table 5.1.1.6.5). Most often total length was measured for spotted seatrout sampled from the landings but occasional standard length was used and these were converted to total length using the appropriate length-length relation (Murphy and Taylor 1994). Like the estimation procedure for mean weight, a pooling strategy was devised that utilized a 20-fish minimum sample size, when possible. The effective sample size (includes results of pooling shown in Table 5.1.1.6.5) occasionally dropped below this minimum when the sum of all seen spotted seatrout landed by a particular gear was less than 20 fish (e.g., spotted seatrout caught with cast nets, trawls, or traps) or when few lengths were collected during a particular period of constant size limits (i.e. the most recent trammel net catches in the Northwest region).

The length distributions for spotted seatrout commercial landings were further divided into sex-specific distributions using annual length-class-specific sex ratios derived from all available data including fishery independent samples and samples from the commercial and recreational fisheries. An implicit assumption in this approach is that the sex-ratio within a length class is consistent across all capture methods. Sample sizes within each inch class each year were often small, especially for small or large spotted seatrout (Table 5.1.1.6.6). A complex pooling scheme that allowed for borrowing observations from adjacent size classes or years was employed to provide estimates of the proportion of females present in each one-inch total length size class (Table 5.1.1.6.7).

The number of spotted seatrout landed from each age group during 1982-2005 was estimated by applying age-length keys to estimated length frequencies to generate region-, sex-, and year-specific landings age frequencies. All age-length keys were developed from all appropriate individual spotted seatrout age-length data pairs available, including samples from both fisheries and from scientific sampling. Annual age-length keys were developed when sufficient samples were available however pooling across years, and occasionally regions, was necessary (Table 5.1.1.6.8) to maintain at least 200 data points in each age-length key (Table 5.1.1.6.9).

Estimates of the distribution of the annual number of pounds landed per trip were predicted using a generalized linear model that assumed landings were distributed as a

Poisson random variable. The model predicted the expected least square means of the \log_e of the number of pounds landed and its standard error. The multiple linear regression included terms for year, month, gear used, county, and the \log_e of hours fished. The distributions of the least squares means for the year effect were simulated using 500 randomly generated residuals from the mean; each residual was a random normal deviate times the least squares mean's standard error. These estimates were back-transformed to pounds and the distribution was described in term of percentiles and a median.

5.1.2 Commercial landings

Annual commercial landings of spotted seatrout in Florida during 1950-2005 were highest in 1952 at about 4.8 million pounds or an estimated 4.3 million fish. After a secondary peak in landings in 1965 at about 4 million pounds or 3.2 million fish, landings steadily declined through 1994 before rapidly dropping until reaching near-current levels of just over 50,000 pounds or nearly 40,000 fish by 2000 (Table 5.1.2.1). The sharp decline in statewide commercial landings of spotted seatrout observed since 1995 coincided with the implementation of the entangling net restrictions enacted in July 1995 and the restrictive vessel limits, open season, and size limits enacted in January 1996. This general long-term decline and the more recent sharp decline in commercial landings were seen on both coasts. The regional and sex-specific landings by number generally followed these same trends with the landings comprised mostly of females (Table 5.1.2.2.2).

The dominant commercial fishing gear used to capture spotted seatrout changed from gill nets during 1992-94 to hook-and-line gear during 1996-2005. Gill nets accounted for an annual average of 58-67% by weight and 43-60% by number of the commercial landings in each region during 1992-94 (Tables 5.1.2.3 and 5.1.2.4). Hook-and-line gear accounted for 7-33% to the regional landings during 1992-94, but this increased to over 90% in the Atlantic coast regions after 1995. On the gulf coast, the importance of hook-and-line fishing also increased but so too did cast-net landings, reaching about one-quarter of the landings, by weight, in each of the gulf coast regions during 1996-2005.

Commercial landings of spotted seatrout in Florida were made throughout most coastal counties during 2005. The greatest amounts (more than 10,000 pounds) were landed in Lee County in the Southwest region and Indian River County in the Southeast region where significant hook-and-line fisheries still exist (Figure 5.1.2.1). Significant landings (5,000-10,000 pounds) were also made in Duval County in the Northeast region and St. Lucie County in the Southeast region.

The length distribution of the commercial landings has become more concentrated around the 15-20 inch total length size classes since 1996, especially on the gulf coast. Except for a small number of 5-7 inch long spotted seatrout reported caught in traps, very few of the Northwest and Southwest region landings during 1996-2005 were smaller than 14 inches or larger than 21 inches long (Table 5.1.2.5). On the Atlantic coast, the Southeast region landings continued to include a high proportion of spotted seatrout exceeding 20 inches, though in lower numbers than seen prior to 1995. The estimated length-frequencies distributions of the Northeast region commercial landings show an abrupt contraction to 12-16 inches beginning in 1996. While this is based on available

data from that region, the data were probably too sparse to accurately capture the true size structure of the commercial landings (Table 5.1.1.6.5).

5.1.3 Commercial Discard/Bycatch

There are no monitoring programs to determine the amounts of spotted seatrout discarded from commercial fishing gear. Limited observations from the commercial fishery during the early 1990's suggest that commercial discarding was rare. Motta *et al.* (1993) found that only 2% of the spotted seatrout captured by commercial fishers using gill nets in Tampa Bay during 1992 were released because the mesh size used in the fishery effectively captured fish larger than the legal minimum. The occasional occurrence of under-sized spotted seatrout in samples taken from the commercial landings made during the late 1980's also suggests that discarding was limited. For this assessment, I made the assumption that commercial discard amounts were small enough, relative to the overall fishery landings, to ignore.

5.1.4 Commercial Catch Rates (CPUE)

The number of Saltwater Product License (SPL) holders that landed spotted seatrout has declined markedly since the early to mid-1990's (Table 5.1.4.1). On the gulf coast, the annual number of SPL-holders landing spotted seatrout in the Northwest region reached over 1,500 during 1988-89 but declined sharply during 1990-92, then again in 1995 and currently averages about 50 fishers a year. Similar drops, especially the large decline after 1995 occurred in other regions where the number of SPL-holders reporting spotted seatrout landings in 2005 were 75 in the Southwest region, 65 in the Southeast and 14 in the Northeast.

The reported annual commercial landings are correlated with the total number of fishing trips that reported spotted seatrout landings, especially in regions with sizeable landings in the past (Fig. 5.1.4.1). This positive relation can be seen for the data during 1986-95 when there was a wide dynamic range of numbers of trips. Correlation coefficients for landings to trips exceeded 0.97 in all regions.

The standardized commercial catch per unit effort (actually reported landings per trip) showed different trends in each of the regions though the values of many of the most recent estimates were more variable (Table 5.1.4.2, Fig. 5.1.4.2). All factors used in the generalized linear model standardization (i.e. county, month, gear, year, and \log_e of time fished) were significant except for gear in the Northwest region and county in the Northeast region. The Northwest region's standardized landings per trip increased significantly (H_0 : slope > 0 , 18 d.f., $t=6.7$, $P<0.05$) during 1986-2005, especially after 1995 with the landings rates reaching the highest level, of 73 pounds per trip in 2005. No significant linear trend was detected in the Southwest region ($P>0.05$), but landings rates displayed a parabolic shape with current landings rates trending upward. Landings rates in the Atlantic coast regions both showed significant linear declines (Northeast, H_0 : slope > 0 , 18 d.f., $t=4.2$, $P<0.02$; Southeast, H_0 : slope > 0 , 18 d.f., $t=2.1$, $P<0.03$) during 1986-2005.

5.1.5 Commercial Catch-at-Age

The commercial landings of spotted seatrout have consistently been comprised mostly of fish ranging from age 1 to age 4. However, prior to 1989 most of the landings were of age-1 and age-2 spotted seatrout and since then landings have shifted to older ages. In the Northwest region, the most dramatic change was the increase in the proportion of age-3 and age-4 spotted seatrout and even age-5 males in the landings during the period 1986-90. In the Southwest region the relative importance of age-1 fish in the landings has declined from about 15-25% during the mid to late 1980's to generally less than 5% since 1990-92 (Table 5.1.5.1). While these same trends can be seen in the Southeast region of the Atlantic coast there has been only a slight change in the age composition of the landings in the Northeast region. The proportion of age-1 spotted seatrout in the landings was 30-40%, depending on sex, during the mid 1980's and is 22-40% of the landings during the 2000's.

5.2 Recreational

Information on the recreational fishery in Florida comes from the Marine Recreational Fisheries Statistics Survey (MRFSS); since 1998, the angler interview information has been collected by FWC under contract with the National Marine Fisheries Service. The final estimates of coast-wide catch and all creel interview data were available for the period March 1981 through 2005, though we utilize only the full-years of data, 1982-2005. Significant changes in the survey design for sampling the for-hire charter sector occurred in 2000 on the gulf coast and in 2001 on the Atlantic coast. The effects of these changes were not investigated for this assessment but should be determined in the future.

5.2.1 Data Collection Methods

5.2.1.1. Survey Methods

The MRFSS estimates of recreational total catch, releases, and landings are developed in two stages. During the first stage, data are collected on a per trip basis through angler interviews. The interviews include questions about what kinds and how many fish are caught, angler demographics, and other trip characteristics. Angler interviews are chosen and made within strata, defined by coast, year, two-month period (wave), and fishing mode (shore, private/rental boat, or charter boat). During the second stage, estimates of the number of trips per stratum are made using telephone survey data. Since 2000 on the gulf coast and 2001 on the Atlantic coast, there has been a more narrowly directed phone survey to determine the fishing effort expended by the for-hire segment of the recreational fishery. Fish seen during angler interviews are identified, measured for midline length (converted to maximum "squeezed tail" total length for spotted seatrout), and weighed.

5.2.1.2 Sampling intensity

The total number of trip interviews conducted through the MRFSS in Florida increased abruptly after 1990 or 1991 in all regions. In the gulf coast regions, this increase in interview effort leveled off in 1999 and the number of interviews since then have averaged about 11,600 in the Northwest region and 17,200 in the Southwest region each year (Table 5.2.1.2.1). On the Atlantic coast the number of interviews continued to

increase through 2002 reaching about 19,100 before declining to 14,500 interviews in 2005. The number on interviews in the Northeast region has been declining since 1995, except for unusually high numbers of interviews in 2001 and 2002.

The number of trips sampled during 2003-2005 that were designated as ‘directed’ trips (meaning anglers caught or admitted targeting spotted seatrout) averaged about 2,000 trips in each of the gulf coast regions and 1,100 and 300 trips in the Southeast and Northeast regions on the Atlantic. The proportion of total trips that were ‘directed’ toward spotted seatrout has decreased significantly in both regions on the gulf coast during 1982-2005 (Student-*t* test, H_0 : slope <0 , both P 's <0.02). On the Atlantic coast in the Southeast region, there was a significant increase in the proportion of sampled trips that were directed for spotted seatrout. About 4.3% of trips sampled during the early 1980's were targeting spotted seatrout whereas about 7.1% were targeting spotted seatrout during 2003-2005. There was no significant change in the proportion of directed trips in the Northeast region, which averaged about 0.11 during 1982-2005.

5.2.1.3 Biases

Other than possible biases inherent with the MRFSS sampling design, e.g., no sampling at night and little sampling of anglers who access boats on private property, there are no obvious biases to the recreational data. A possible bias in the catch estimates may have been corrected recently with changes made to the estimation of fishing effort made for the charter and guide-boat fleets. The effect of this change should be investigated.

5.2.1.4 Biological Sampling

In both regions on the gulf coast and in the Southeast region on the Atlantic coast the number of spotted seatrout measured each year has increased significantly (Student-*t* test, H_0 : slope >0 , $P<0.05$) during 1982-2005 (Table 5.2.1.2.1). In the Northeast region the opposite trend was seen with the number of spotted seatrout measured dropping from about 145 fish per year during the mid 1980's to only 75 fish per year during 2003-05. Weight is also measured for most of the spotted seatrout sampled for length.

5.2.1.5 Ageing Methods

The age-determination methodology follows that described under section 5.1.1.5 for commercially sampled spotted seatrout. The exact numbers of ages determined for spotted seatrout that came from the recreational fishery is difficult to determine prior to 1989 when anglers were able to sell their fish to commercial fish houses. Since 2001, samples of otoliths have been collected from landings made by anglers interviewed during the MRFSS. Further, ages of spotted seatrout measured for length from angler catches were estimated using age-length keys constructed using all available length and age data, i.e. samples from both fisheries and from the FWC's fishery independent monitoring program. Ages of spotted seatrout were by convention incremented on January 1 each year to align ages with other calendar-based statistics. This meant that spotted seatrout labeled as age 1 for the modeling exercise were actually about 3-9 months of age based on peak spawning in mid June.

5.2.1.6 Development of Estimates

Estimates of the 1982-2005 landings and releases of spotted seatrout were taken directly from the estimates files provided by the National Marine Fisheries Service's Marine Recreational Fisheries Statistics Survey. Estimates were post-stratified into the estimates for each of the four regions used in this assessment. This requires the assumption that the coast-specific estimates of fishing effort could be proportionally allocated into these regions using the observed distribution of coastwide intercepted fishing trips between regions (Kline *et al.* 1994). I extended the total catch estimates back in time using the assumption that total spotted seatrout catch in Florida would be linearly related to Florida population size. The predicted estimates from this relation were partitioned into regional estimates using randomly drawn proportions from the 1982-88 observed regional contributions to the state total catch of spotted seatrout. These estimates were further divided into the landings and the number released alive using a random sample of the observed 1982-88 ratios of landings to numbers released alive.

The annual length composition of the observed recreational fisheries landings (MRFSS Type A estimates) were estimated using spotted seatrout lengths measured from the creel but weighted by the estimated annual observed landings estimates made within MRFSS strata (wave x mode fishing x area fished). Because the numbers of spotted seatrout measured in certain MRFSS strata each year were relatively low, I pooled some of the MRFSS strata to provide for more robust sample length frequencies to apply to strata-estimated landings to get landing length frequencies. Annual length-sample pooling was initiated by collapsing across waves for the gulf coast regions and within 'cold' (January, February and December) and 'warm' seasons in the Atlantic coast regions and combining all 'ocean'-fishing-area samples within each region each year. Further pooling occurred hierarchically when the observed length sample was below 40. At the first level when 40 spotted seatrout lengths were not available lengths from the different fishing modes were combined. Sequentially, if less than 40 spotted seatrout lengths resulted from the pooling then: 1) pooling occurred across areas fished, 2) pooling occurred across 'warm' and 'cold' seasons, 3) pooling occurred across areas fished, and 3) pooling occurred within management period (before 1990, 1990-95, 1996-2000, and 2001 onward). These length-frequencies for spotted seatrout observed in the landings were combined with the released-fish length frequencies (see below) to use as the proportional distribution for the unobserved (MRFSS Type B1) recreational landings.

The MRFSS provides estimates of the number of spotted seatrout caught by anglers and then released alive. A portion of these fish die after release. In order to develop estimated numbers of spotted seatrout killed this way I assumed that 8% of released spotted seatrout die (Murphy *et al.* 1995). The size structure of these fish was estimated using sizes collected during several studies: 1) a release mortality study conducted during 1992 in Tampa Bay, 2) and 2000-2001 reproductive study on spotted seatrout conducted in Tampa Bay, and 3) volunteer angler logbook data on the sizes of fish they released during 2002-2006. It was assumed that the hook-and-line fishing conducted for each of these studies was representative of the angling public. Angler-volunteered information on the sizes of spotted seatrout they release was collected using a one-day logbook distributed to anglers randomly chosen from Florida's licensed fishermen living in the Southeast and Southwest regions (Table 5.2.1.2.2). With large gaps in the temporal and spatial coverage of these data I had to assume that: 1) release length-frequencies were the same between regions on each coast, 2) 1982-89 length

frequencies on both coasts were the same as found in the hooking mortality study, 3) 1990-95 length frequencies on both coasts were the same as found in the reproduction study though deflected downward one inch to account for smaller minimum size limit than after 1996, 4) reproductive study length frequencies applied directly to release estimates during 1996-2000, and 5) coast-specific, and sometimes pooled, logbook data were applicable during 2001-2005.

The number of spotted seatrout landed (MRFSS Type A+B1) from each age group during 1982-2005 was estimated from the estimated annual length frequencies of the landings using the same sex-ratio at length matrix and same age-length keys as developed for the commercial landings (see Section 5.1.1.6). The same process was applied to estimated lengths of released spotted seatrout.

The Marine Recreational Fishery Statistics Survey (MRFSS) creel data for total-catch per trip were standardized using a Generalized Linear Model (GENMOD) that combined the analysis of the binomial information from catch versus no catch with the Poisson-distributed positive catch data (a delta model, Lo *et al.* 1987). Only trips that involved anglers that indicated a preference for spotted seatrout or who had caught spotted seatrout were used in the analyses. Sources of variation accounted for by the coast-specific models were: wave (2-month period), bay, mode of fishing, area fished, number of anglers on a trip, and number of hours fished. Final year-specific estimates and distributions of catch rate were used to determine the median catch rates whose \log_e values were used in the population models.

5.2.2 Recreational Landings

Two-month-specific estimates of the number of spotted seatrout landed or the number of spotted seatrout released alive show similar seasonal patterns within the two northern regions and within the two southern regions. Spotted seatrout landings are lowest during the cooler months (January and February) in the Northwest and Northeast regions (Table 5.2.2.1). In all regions the landings of spotted seatrout show a significant decline during 1982-2005 and this has been accompanied by a significant increase in the numbers of spotted seatrout released alive each year (Student-*t* test, all $P < 0.05$). Of course, the changes in the number released alive are reflected in increasing proportions of the total catch ending up released (Table 5.2.2.1).

Estimates of the number of spotted seatrout killed by anglers (landings and 8% of live releases) during the period 1950-2005 (Table 5.2.2.2, Fig. 5.2.2.1) all showed increases through 1981 when estimates were based on a relationship with the increasing population of Florida. During the period when estimates were available directly from the fishery, 1982-2005, the total kill generally declined through the 1980's and much of the 1990's in all regions. After 1995 there has been a general increase in landings in the two southern regions. Both northern regions showed a period of relative stability in the landings during the late 1990's and early 2000's but have trended upward since at least 2002.

The geographic distribution of recreational spotted seatrout landings includes all coastal areas of Florida. During 2005, the estimated spotted seatrout landings were greater than 500,000 fish in all but the region including St. Lucie south to Miami-Dade County waters and Monroe County (Fig. 5.2.2.2).

Lengths of most spotted seatrout landed by recreational fishermen in all regions during 2005 were 14-19" total length (TL). There was a substantial reduction in landings of small spotted seatrout (TL < 7") beginning in 1990 in all but the Northeast region where this change occurred in 1996 (Table 5.2.2.3). The landings of spotted seatrout at least 15" TL long averaged 81-87% of the landings (including released dead fish) during 1996-2005. The estimated length-frequency distributions of spotted seatrout released by anglers showed a wide range of from 3" to 28" (Table 5.2.2.4). The paucity of data on the sizes of released fish is reflected in the early size frequency truncated at no higher than 14" TL before 1990 and the similarity, because of pooling, of length distributions between many years during the late 1980's and 1990's and between regions.

The number of spotted seatrout kept during each fishing trip during 2001-2005 complied, for the most part, with the regional bag-limit restrictions. In northern regions where the bag limit was 5-fish during 2001-2005, only about 2% of the Northwest region anglers exceeded this, accounting for about 15% of the retained catch there and far fewer than 1% of the Northeast region anglers exceeded this limit accounting for about 2% of the catch. In southern regions where the bag limit was 4-fish during 2001-2005, only about 1% of the Southwest region anglers exceeded this accounting for 10% of the retained catch and less than 0.5% of the Southeast region anglers exceeded this limit accounting for 9% of the retained catch there (Table 5.2.2.5).

5.2.3 Recreational Discards/Bycatch

The number of spotted seatrout captured and released alive by anglers is much higher in recent years than during the 1980's and early 1990's. In the gulf coast regions the rate of increase in numbers released, while variable, has been exceptionally high since 2001 (Table 5.2.2.1). Prior to this the gulf region's rate of releases held fairly steady during 1991-2000, following a strong increase in the numbers released between 1982 and 1989. On the Atlantic coast, the number of releases in the Southeast region has been increasing exponentially since 1982. In the Northeast region, much like what occurred in the gulf coast regions, release rates showed rapid increases during 1988-91 and 2001-2005, but showed little overall change in the average proportion released during 1992-2000.

5.2.4 Recreational Catch Rates (CPUE)

The estimation procedure for recreational catch rates is different in this report compared to the procedure used in previous assessment reports (e.g., Murphy 2003). Until recently, I was unaware that the MRFSS had added variables to their dataset in 1991 that tracked the identify of each individual angler interview that comprised a specific trip. Using this information I have estimated catch rates using angler interview data that have been pooled to the individual trip level. Unfortunately, this also shortened the length of the time series of valid estimates from 24 years (beginning in 1982) to 15.

The estimated numbers of fishing trips made by anglers fishing for spotted seatrout were higher in the gulf coast regions than in the Atlantic coast regions (Fig. 5.2.4.1). The numbers of estimated trips was variable but without trend during the 1980's and early 1990's on the gulf coast but since 1996 the average number of trips per year has increased (Figure 5.2.4.1). While the same general overall trend is seen for the Southeast region's fishing effort, the angler fishing effort in the Northeast region actually declined

during the 1980's and early 1990's before increasing beginning in 1996. These catch rates were apportioned to male and female components using the estimated contribution of each sex to the estimated total catch and are presented in Section 6.2.1 Tuning Indices.

There has been a no significant trend in the median total-catch rate for spotted seatrout during 1991-2005 in the Northwest, Southwest (or Everglades National Park creel) or Southeast regions (Table 5.2.4.1). In the Northeast region, there was a significant decline in the median catch rate over time during 1991-2005 (Fig. 5.2.4.2; Student-*t* test, H_0 : slope <0 , $P<0.05$). Also, the Everglades National Park creel data are considered comparable during 1979-2005 and the long-term trend in median total-catch rates over this period shows a significant increase (Student-*t* test, H_0 : slope $=0$, $P<0.05$).

5.2.5 Recreational Catch-at-Age

There were general shifts in recreational fishery landings to older-age spotted seatrout in the all regions. On the gulf coast, the Northwest region landings of female spotted seatrout shifted from mainly 0- to 3-year-olds through 1986 to 1- and 2-year-old in 1987 and 1988 and then to 1- to 3-year-olds from 1989 to 2005 (Table 5.2.5.1). Landings of males in the Northwest region did not show this pattern but shifted from 1- and 2-year olds during 1982-89 to 2- to 4- year olds in 1990-2005. Males age 7⁺ also increased in abundance in landings beginning in 1999. In the Southwest region, landings of females shifted from mostly age-1 and age-2 fish during 1982-89 to ages 2 and 3 during 1990-95 then also included significant numbers of age-4 fish by 2000. The ages of males in the Southwest landings also shifted upward but from 1-3 year old fish to 2-4 years olds. On the Atlantic coast females in both regions followed similar patterns, which is not surprising given the pooling requirement needed to create the age-length keys for the Northeast region. Females in the landings were mainly ages 1 and 2 up through 1989 then ages 2 and 3 through 2000 and finally ages 2-4 through 2005. Males on the Atlantic coast showed this same pattern in the Northeast region. Male landings in the Southeast were mostly ages 1-3 during 1982-89 and ages 2-4 thereafter. On the Atlantic coast in the Southeast region both males and females appears in age 7⁺ landings in much higher proportions than previously beginning in the late 1990's (Table 5.2.5.1).

The information on the age composition of spotted seatrout released alive by anglers is somewhat limited and relies on significant assumptions required to apply the available data across regions and years. Given this, the ages of released fish was mostly age 0 and 1 in all regions but began to include older fish with time until even age-3 spotted seatrout of both sexes contributed to releases by the early 1990's (Table 5.2.5.2).

5.3 Fishery-Independent Survey Data

Fishery-independent-survey-based trends for spotted seatrout were derived from the FWC's Fishery Independent Monitoring programs stratified random survey conducted in Apalachicola Bay, near the Cedar Keys, Tampa Bay, Charlotte Harbor, the southern and northern Indian River Lagoon, and in the St. Johns River area. Separate indices were developed from catch rate data from 21.3-m center-bag seines and from 183-m haul seine sets.

5.3.1 Data Collection Methods

5.3.1.1 Survey Methods

The FWC's Fishery Independent Monitoring (FIM) program uses a stratified, random design to collect information on animal populations. Strata are primarily defined by depth, shore type (overhanging or not), and bottom vegetation (sea grass or not). This program also supplies length, weight, sex and material for the determination of age while monitoring abundance of young-of-the-year (age-0) and larger fishes. Young-of-the-year (spotted seatrout smaller than or equal to 100 mm standard length) indices were based on collections of spotted seatrout made using a 21.3-m center-bag seine deployed during peak recruitment seasons of May-November 1998-2005 in Apalachicola Bay, May-November 1996-2005 in Cedar Key, April-October 1989-2005 in Charlotte Harbor, April-October 1989-2005 in Tampa Bay, May-November 1990-2005 in the southern Indian River, and May-October 2001-2005 in the St Johns River/Nassua Sound region. Juvenile and adult spotted seatrout were collected using 183-m center-bag haul seines in Apalachicola Bay during 1998-2005, in Cedar Key during 1997-2005, in Tampa Bay during 1989-2005, in Charlotte Harbor during 1989-2005, in the northern and southern Indian River Lagoon during 1997-2005, and in the St Johns River/Nassua Sound region during 2001-2005.

5.3.1.2 Sampling Intensity

Individual area-specific monitoring programs were grouped into the four spotted seatrout assessment regions. During the various recruitment windows described above at least one hundred and forty 21.3-m bag seine sets were used in the analysis of young-of-the-year catch rates in each of the gulf coast regions with much higher levels of recent sampling effort (Table 5.3.1.2.1). In the Southeast region sampling expanded from 196 sets to 297 sets between 2000 and 2005. The number of sets used in the analysis in the Northeast region ranged from 164 in 2001 to 192 in 2005. Fewer sets were made each year prior to this in the Atlantic regions. Comparable numbers of sets of the 183-m haul seine were made in each region. All spotted seatrout captured by the haul seine were measured for total length and a subsampled were collected to determine sex and age (Table 5.3.1.2.1).

5.3.1.3 Biases

The stratified random sampling design used for both surveys should reduce the variance of the catch-rate estimates and should be unbiased if sampling is representative of the abundance of spotted seatrout in an area. Attempts were made to eliminate any known bias induced by changes in the survey design by utilizing only strata that have been consistently sampled over time (D. Adams, FWC-FWRI Melbourne Lab, pers. comm.).

5.3.1.4 Biological Sampling

Up to 20 spotted seatrout-per-size-class captured during 21.3-m bag seine sampling were measured for standard length (SL) and all were counted within each size class. When more than 20 spotted seatrout were encountered then length frequencies of the 20 fish were expanded to the total number caught to estimate the sample catch length frequency. All spotted seatrout used in the analysis from the young-of-the-year survey, 12.3-m bag seine, were less than or equal to 100 mm SL and were assumed to be age 0.

In the haul seine sets, if five or fewer spotted seatrout were captured they were retained and brought back to the lab where weights and lengths were measured, sex was determined and sagittae were removed for age determination. The numbers of spotted seatrout sampled for ages comprise the portion of the spotted seatrout samples used in the year-specific age-length keys (Tables 5.1.1.6.5 and 5.1.1.6.6).

Estimated annual length frequencies for spotted seatrout caught in the 183-m haul seine showed a wide size range was captured by the gear (Table 5.3.1.4.1). In the Northwest region most spotted seatrout captured using this gear were 5-8 inches TL, though fish as large as 18 or 19 inches were commonly caught during many years. In the Southwest region, the lengths of spotted seatrout captured using this gear was highly bimodal during 1996-2000, showing consistently higher sample abundance within 5-8 inch and 11-16 inch sizes. This bimodality was less apparent in later years. On the Atlantic coast, most captured spotted seatrout were between 6 and 16 inches TL in each region. The ages of spotted seatrout captured in haul-seine sets was mostly 1 to 3 year-olds, with occasional high numbers of age-0 fish (Table 5.3.1.4.2).

5.3.1.5 Ageing methods

Ageing methodology used for spotted seatrout sampled from the Fishery Independent Monitoring program followed that described above for the commercial and recreational fishery samples though for young-of-the-year samples spotted seatrout were simply assigned age 0 if less than 100 mm standard length.

5.3.1.6 Development of Estimates

Standardized catch rates for spotted seatrout were estimated from the FIM young-of-the-year data. For standardization, a General Linear Model was used to analyze \log_e abundance+1 data observed for the deployed 21.3-m seines. The median value for the distribution (generated through Monte Carlo simulation—see 5.1.1.6) of the back-transformed least-squares means provided annual indices of pooled-sex recruitment in each region over the time frame of available data. Sex- and age-specific indices of abundance for age-1, age-2, and age-3 spotted seatrout were derived, when possible, from the random subsamples of ages of male and female spotted seatrout captured with 183-m haul seines deployed in the Northwest region (Cedar Key, 1998-2005, no ages in 1997); Apalachicola Bay, 1998-2005), the Southwest region (Tampa Bay, 1996-2005; Charlotte Harbor, 1996-2005), the Southeast region (northern and southern Indian River Lagoon, 1997-2005), and the Northeast region (St Johns River/Nassau Sound, 2001-2005). Annual sex- and age-specific sample abundances were divided by the number of sets made each year to provide sex- and age-specific abundance indices for age 1, 2, and 3 males and females in the Northwest and Southwest regions. Sex-specific, age-aggregated indices were developed for the Atlantic coast regions because of the lower numbers of spotted seatrout in the 183-m haul seine subsamples made there.

5.3.2 Catch rates (Numbers)

The indices generated for young-of-the-year spotted seatrout indicate strong year-classes occurred periodically but the stronger of these occurred prior to 2000. In the Northwest region a strong year class was observed in 1998 and recruitment since then has been quite stable (Table 5.3.2.1, Fig. 7.1.3). In the Southwest region of the gulf coast, the

strongest year-classes recruited in 1991, 1995, and 1996 with a significantly weak year class in 2005. Along the Atlantic coast, the short Northeast region time series may show a relatively strong year class recruiting in 2002 whereas the Southeast region showed very strong year classes recruiting during several years in the early 1990's, especially 1991, followed by fairly stable but lower recruitment (Table 5.3.2.1, Fig. 7.1.3).

Sample sizes appeared adequate for sex- and age-specific estimates of haul-seine catch rates only in the Northwest and Southwest regions. In the Northwest region, there appeared to be almost no concordance among the age-1, age-2, and age-3 indices in terms of tracking similar cohort size changes across years (Table 5.3.2.2). For females, a more consistent set of indices appeared to show a consistently large-to-moderate-sized 1998 year class and consistently smaller 2000 year class and intermediate 2002 year class (Table 5.3.2.2, Fig. 7.1.4). In the Southwest region, there was again little concordance among age-specific male indices of abundance. Female indices, however, showed a consistently high to moderately abundant 1999 year class, with mixed signals among the other covered year classes.

On the Atlantic coast, too few spotted seatrout were caught and sampled for age to develop age-specific indices so pooled sex-specific ages 1-3 indices were developed. These were also highly variable in the suggested cohort abundances but appeared to show generally increasing abundances of males and females in the Southeast region but little trend in the short-term 2001-2005 Northeast region index (Fig. 7.1.4).

5.3.3 Length/Weight/Catch-at-age

The catch-at-age for the young-of-the-year survey is self-evident (Table 5.3.2.1) and the estimated total catch at age for the haul-seine survey were mostly age 1 through age-3 spotted seatrout (Table 5.3.1.4.2). Given the different levels of effort used to capture spotted seatrout each year (Table 5.3.1.2.1), these observed age frequencies reflect relative abundance among ages within each year only. Lengths-at-age, as used as an intermediate step to estimate ages, is provided in Section 5.3.1.4.

5.3.4 Abundance Indices (number-per-unit-effort)

The \log_e values for the fishery-independent survey catch rates provided in Section 5.3.2 were assumed to be linearly related to abundance. In addition the \log_e of the estimated MRFSS total-catch rates within each region and the \log_e of the estimated Everglades National Park total-catch rates were used as linear indices for the abundance of spotted seatrout ages 0 to 2 (see Section Tuning Indices 6.2.1).

5.3.5 Biomass Indices (biomass-per-unit-effort)

No indices of biomass were developed for spotted seatrout.

5.4 Uncertainty and Measures of Precision

The assessment model allows for the incorporation of estimates of observed variability for the input data as well as a variety of weighting schemes to capture the relative uncertainty between different observed data. The approach taken in this assessment was to standardize all deviations between the observed data and model predictions in terms of standard deviation units. The squared deviations of the observed and predicted total harvest, fishing effort, and abundance indices were divided by their

calculated variances obtained from simple linear regression models of these data on time (mean-squared error, Table 7.1.1). This eliminated the need to justify the ad hoc decisions about which relative weight to use for each observed data source in the model. The approximate variance of the multinomial distribution for the catch proportion-at-age was described using a weight that resulted in effective sample sizes close to the values of the square root of the observed-age sample sizes and a positive definite Hessian matrix in the solution. For observed data where estimates of measurement error were available each year, e.g. the proportional standard error of MRFSS catch estimates, there was no additional adjustment made because I assumed the process error captured by the linear regression was much larger than the estimated measurement error.

6.0 Methods

6.1 Models

With this assessment, we continue to use of a flexible statistical-catch-at-age model to estimate fishing mortality and abundance of spotted seatrout. These regional analyses link males and females in the same analysis and base the estimated recruitment each year on an estimated egg production occurring the previous year. Fishing mortality is modeled as a function of observed fishing effort, modified by fishing selectivity patterns, fishing release rates, and release mortality. This model provides a means to bring together the various datasets containing information on spotted seatrout population dynamics under a common statistical framework. As a check on this unreviewed model, the Northeast Fisheries Science Center's Fisheries Tool Box version of the Age Structured Assessment Program, ASAP, was also run using the female-specific data.

6.2 Model Calibration

The assessment model was designed to integrate information about spotted seatrout biology, the fishery, and estimates of relative abundance that were available over the time frame 1950-2005. The model was configured to allow for a change in selectivity between distinct periods of size-limit restrictions. Only landings data were available prior to 1982 so the age structure of the landings then were derived from an assumed selectivity vector for the earliest period of estimated selectivity. For the commercial fishery, selectivity was held constant during the periods 1950-95, 1996-2000, and 2001-2005. For the recreational fisheries, periods of constant selectivity were 1950-89, 1990-95, and 1996-05. A maximum size limit change occurred during 2001 in the Northwest region but it was assumed that the underlying total-catch selectivity did not change then and that changes in the age-specific release rates reflected the effect of this regulatory change. Input data also included defined periods of when catchability was assumed constant for years when fishing effort data were available: 1986-89, 1990-95, and 1996-2005 for the commercial fishery and 1982-2005 for the recreational fishery. Data necessary for this assessment and for calculating fishery benchmarks include: the annual numbers landed and the number released alive by sex and age within each fishery in each region, a release mortality rate, numbers of fish examined for age each year, an estimate of natural mortality by age, information on age-at-maturity and annual fecundity at age, and various indices of abundance.

6.2.1 Tuning Indices

The input data used in the current analyses includes standardized indices of abundance from FWC-FWRI fishery-independent surveys (D. Adams, FWC-FWRI, personal communication, see Section 5.3 above). Log_e values of estimated sex-specific catch-rate data were assumed to be linearly related to the abundance for specific-age spotted seatrout or to composites of age-groups (Table 5.3.2.2). Regional young-of-the-year abundance indices were available for combined male and female spotted seatrout in the Northwest region during 1996-2005, the Southwest region during 1989-2005, in the Southeast region during 1990-2005, and in the Northeast region during 2001-2005. In addition relative, abundance of adult spotted seatrout was estimated using standardized catch rates from 183-m seine data (see Section 5.3 above) for the Northwest region during 1997-2005, the Southwest region during 1996-2005, in the Southeast region during 1997-2005, and in the Northeast region during 2001-2005. These were apportioned by the observed sample sex ratio into male and female catch rates and further apportioned to age-specific rates. Data were judged adequate for sex-specific indices of age-1, age-2, and age-3 indices in the gulf coast regions but were used as age-combined 1-3 year old indices in the Atlantic coast regions. The total-catch rates estimated from the MRFSS survey (see Section 5.2.4) were deemed useful as indices of abundance and each year's median estimated total-catch rate was apportioned by the estimated sex ratio for the total catch of spotted seatrout to provide sex-specific indices of abundance for pooled ages 0-2 fish. Finally, in the Southwest region, total catch-rates from the Everglades National Park recreational fishery during 1979-2005 were used as an index of abundance for the combined-sex, pooled ages 0-2 index of abundance.

6.2.2 Input Parameter and Specifications

The model was configured to allow selectivity to be estimated using catch-at-age data for age 0 through age 7⁺. A restricted three-parameter gamma function was utilized as the selectivity function for age for each sex during each selectivity period. During each period, selectivities for each sex were scaled to the highest selectivity across sexes. An additional constraint was added so that the selectivity of males was modeled as flat-topped, with the reasoning that they would remain vulnerable to fishermen throughout their lives because of their slower growth. Selectivity for ages older than age 7 was set to the estimated selectivity for age 7⁺. Input parameters that require definition within the model include instantaneous natural mortality rate by age, maturity schedule, annual fecundity at age, release mortality, the time frame for constant catchability or selectivity, and steepness. No attempt was made to estimate the stock-recruitment parameter, steepness, and recruitment was allowed to vary around a Beverton-Holt stock-recruitment function defined with a steepness of 0.99. The instantaneous natural mortality rate (M) was assumed constant across time (see Section 2.5 Natural Mortality). A base value of M was set as constant across all ages at 0.3 yr⁻¹; however, an age-specific vector was estimated for sensitivity purposes, considering that spotted seatrout as old as 12 years are likely available in the fishable stocks. Maturity- and fecundity-at-age were taken from data collected from Tampa Bay spotted seatrout (see Section 2.3 Reproduction), and was applied to spotted seatrout from all regions. To account for mortality of spotted seatrout released alive by anglers, an 8% release mortality rate was assumed based on work by Murphy *et al.* (1995). Discard estimates for the commercial fishery were not available

and given the relatively small size of the modern fishery were considered insignificant in these analyses.

7.0 Output/Results

7.1 Goodness of Fit of Model Used

The final models showed overall good agreement with the observed data, especially the harvest and effort made by the recreational and commercial fisheries, female proportion-at-age for the catch, and, in some regions, the young-of-the-year indices (Table 7.1.1; Figs. 7.1.1, 7.1.2, 7.1.3). In all regions the total harvest and effort data contributed most to the model objective function and showed relatively close fits between the model predictions and the observed data. Exceptions to this occurred for recreational harvest of male spotted seatrout where model predictions were high in recent years in every region except the Southwest. In the Northwest region, the average fits to the proportion-at-age in the harvest were as close as or better than that of the total harvest and effort data based on the average fit (Figs. 7.1.1, 7.1.2). Among the indices there, the young-of-the-year index was very closely fit, the male and female MRFSS indices were fit well, and to a lesser extent the age-2 haul seine indices (Figs. 7.1.3, 7.1.4, 7.1.5). In the Southwest region, the proportion of females observed in the recreational harvest was fit very well (Table 7.1.1; Fig. 7.1.6), as was the Everglades National Park abundance index and the MRFSS female index. Several of the haul-seine-based indices were fit poorly, possibly reflecting the infrequent encounters with spotted seatrout by this gear. On the Atlantic coast, spotted seatrout the MRFSS indices of abundance were fit well in both the Northeast and Southeast regions. In addition, in the Northeast the proportion at age data and young-of-the-year indices were fit very closely. In the Southeast region, the young-of-the-year index and haul-seine indices of abundance were not fit as well as the fisheries-dependent indices.

7.2 Parameter Estimates

7.2.1 Exploitation Rates

Overall fishing mortality rate estimates for spotted seatrout in Florida were higher through most of the 1980's than they were since 1990. In the Northwest region the instantaneous fishing mortality rate dropped abruptly in 1990 from a 1982-89 average of 0.17 and 0.41 yr⁻¹ for males and females, respectively, to average levels of 0.05 and 0.15 yr⁻¹ during 1990-2001 (Table 7.2.1.1, Fig. 7.2.1.1). In more recent years male fishing mortality has remained relatively low whereas female fishing mortality rates have rebounded somewhat to an average 0.22 yr⁻¹ during 2003-05. In the other management regions, there has not been a noticeable rebound in fishing mortality rates in recent years. In the Southwest, fishing mortality declined from a 1982-89 average fishing mortality of 0.12 and 0.28 yr⁻¹ for males and females to a 1990-2005 average instantaneous fishing mortality rate of 0.06 and 0.12 yr⁻¹. On the Atlantic coast, 1990-2005 fishing mortality rates averaged 0.07 and 0.12 yr⁻¹ for males and females in the Southeast region and to 0.05 and 0.13 yr⁻¹ for males and females in the Northeast region. In neither of these regions was any strong rebound in fishing mortality rates noticed in recent years, though there's been an increase in the last year or two.

7.2.2 Abundance Estimates

Estimates of age-0 spotted seatrout abundance during the period 1982-2005 showed variability but no long-term trend for either sex in the two southern regions. In the northern regions, both showed long-term significant decreases (t-test of slope = 0, $P < 0.05$) in female recruits (Table 7.2.2.1, Fig. 7.2.2.1). The Northwest region showed declines in males also. In agreement with the young-of-the-year indices, a relatively strong year class was seen in the Northwest region in 1998 and relatively weak year classes were observed and predicted for the Southeast region in 1992 and 2000 in the Southeast region (Figs. 7.1.3, 7.2.2.1) and in 2005 in the Southwest region.

Population abundance of spotted seatrout ages 0 and older in Florida was estimated to be 37.6 million fish at the beginning of 2005, with most being male, 19.7 million. In the southern regions, estimated abundance of both male and female spotted seatrout has significantly increased during 1982-2005 (Fig. 7.2.2.2). In the northern regions estimated abundance of females has declined significantly whereas male abundance has not changed significantly along the gulf coast and has increased on the Atlantic coast.

7.2.3 Precision of Parameter Estimates

Estimates of the precision of the parameters in these models can technically be made but not all of the potential sources of variability are accounted for in the current model configuration. Without incorporating variability around important input parameters describing reproductive biology, natural mortality, selectivity, ageing error, and recreational harvest estimates the stated parameter uncertainties would underestimate the true uncertainty in each. Therefore these estimates are not presented.

7.3 Projection Estimates

This assessment was designed to determine, as best possible, the current status of spotted seatrout in Florida waters. Projections of stock status in the future were not attempted.

7.4 Sensitivity Analysis

7.4.1 Sensitivity of Model Configuration

Sensitivities analyses were conducted for the effect of age-specific estimates of natural mortality on the model results. These estimates were developed from the relationship of natural mortality with body weight as described by Lorenzen (1996). The final age-specific estimates were scaled such that the cumulative natural mortality associated with the assumed-constant annual instantaneous rate of 0.3 through age 12 was the same as the cumulative value of the age-specific rates through age 12.

The sensitivity of the analyses to a change in the starting year to 1986, similar to the previous assessment model for spotted seatrout in Florida, was conducted for each region. Since the current analysis includes both technical corrections to the 2003 assessment model and revisions to the input data, it was not deemed necessary to rerun the 2003 assessment model using the new data through 2005. Instead, the data used in the 2003 assessment were incorporated into the current updated model and run to investigate

the effects of the different model structures. In addition to these comparisons, a configuration of the Northeast Toolbox's ASAP model was run using the female-only data and the findings were compared with the current two-sex model.

A potential flaw to these sensitivity runs was how the external weighting for the proportion-at-age multinomial likelihood was kept constant among the runs without regard to how this changes the resultant effective sample size or the relative weight of the different datasets in the final model. It is unclear if this weighting should have been adjusted so that the estimated effective sample size for the age composition data was as similar to the observed data sample sizes in the sensitivity runs as it was in the base run where the value of the weight was chosen. For this reason the following is a discussion of the findings without the supporting tables of graphics and these findings are provisional until more work can be done to understand how the multinomial weighting should be handled.

7.4.2 Sensitivity of Input Data

Under the age-specific rates of M , the model estimated lower abundances and higher fishing mortality rates in all regions for both sexes. The resultant estimates of the biological benchmark used for spotted seatrout, transitional spawning potential ratio, was to depress it below the estimates given by the constant natural-mortality-at-age model.

The sensitivity of the analysis to using 1986 as the starting year rather than 1950 also tended to create lower model estimates of abundance and higher fishing mortality rates, except in the Southwest region where this change had little impact on the analysis. In these sensitivity runs the estimated tSPR's were lower than seen in the 1950-2005 model runs in the Northwest, Northeast, and Southeast regions but somewhat higher for the Southwest region.

7.5 Retrospective Analysis

A retrospective analysis was performed for each regional analysis back in time through 2001. Though a retrospective analysis generally involves inspection of the changes in fishing mortality rate and abundance resulting from successively shorter time-streams of data, I examined the retrospective effect on the transitional spawning potential ratios since these incorporate information on changes in selectivity and overall fishing mortality. The findings show that there is a striking increase in tSPR with the addition of the 2005 data to the analysis. In some regions there was occasionally little year-to-year retrospective pattern for a number of earlier terminal years then a strong jump in the tSPR estimates with the addition of only one more year's data. Again the effect of how the proportion-at-age data were weighted in the final objective function was an issue with this analysis that remains to be investigated.

7.6 Selectivity

The relative vulnerability of spotted seatrout to capture was described by a restricted three-parameter gamma function with a provision that male selectivity would not decrease with increasing age (flat-topped). The final vulnerability to harvest for spotted seatrout is modified by the reported release rates apportioned among sexes and ages. This generally created a linear to sigmoidal pattern in selectivity for males and a dome-shaped selectivity for females. On the gulf coast, male selectivity increases

exponentially through age 6 before leveling off or declining sharply at age 7⁺ (Fig. 7.6.1). There was a slight shift in selectivity toward older males between the 1991-93 period and the latter two periods, 1997-99 and 2003-2005. Atlantic coast males showed a similar pattern but reached peak selectivity at a younger age, age-4 or age-5, before leveling off or declining and there was no shift in selectivity in the Southeast region (Fig. 7.6.1). The vulnerability to harvest for females peaks at younger ages than for males and generally falls off to lower levels of vulnerability at older ages. The differences between male and female vulnerability to harvest is thought to be partially due to the effect of Florida's maximum size limit and to more rapid growth seen in females than in males. Recent female selectivity on the gulf coast peaks at age 3 and then declines to 60% or less by age 6. On the Atlantic coast vulnerability is fairly similar to the gulf coast in the Northeast region but much flatter in the Southeast. The vulnerability to harvest is much higher at younger ages than elsewhere and is a reflection of the high proportion of the harvest coming from spotted seatrout that are released alive that subsequently die.

8.0 Biological Reference Points

8.1 Overfishing Definition

At the current time the Florida Fish and Wildlife Conservation Commission has adopted a target spawning potential ratio of 35% for spotted seatrout. There is no definition confirming whether this is the static rate or the unweighted transitional spawning potential ratio, though our discussion here assumes it is the latter.

8.2 Stock Recruitment Analysis

The estimated spawning stock biomass of spotted seatrout was assumed to have little specific relation to recruitment in this analysis. The parameter steepness in the reparameterized Beverton-Holt spawner-recruit model was set to 0.99 (spawn stock on recruitment relation is essentially a horizontal line of constant recruitment) though deviations in recruitment were allowed about this line that could have showed a pattern if the analysis determined it was the best fit. These deviations were driven by the observed strong and weak year-class patterns seen within the indices of abundance and catch-at-age data.

The estimated recruitment generally varied about a constant level across a variety of annual egg production levels in the southern regions but appeared to be lower at high egg production levels in the northern regions (Fig. 8.2.1). In all regions except possibly the Northeast, the egg production levels clustered into a range of similar production during 1982-90 and a separate but higher range during about 1992-2004. In the Northeast region this trend was less apparent. There was no apparent gain in recruitment at higher spawning levels in the southern regions and a possible loss in recruitment in the northern regions.

No biological benchmarks in terms of the spawning stock needed to maximize recruitment (e.g., maximum sustainable yield) were estimated within the current model formulation.

8.3 Yield and SSB per Recruit

The yield-per-recruit of spotted seatrout under current recreational and commercial fishing selectivity patterns is maximized at fully-recruited instantaneous fishing mortality rates ranging 0.38-0.89 yr⁻¹ for females and 0.85-2.69 yr⁻¹ for males. A yield-per-recruit-based benchmark, $F_{0.1}$, provides a fishing level that achieves nearly maximum yields but guards against economic inefficiencies at very high levels of fishing effort. On the gulf coast under the overall selectivity patterns of the combined current commercial and recreational fisheries, the fully-recruited F at $F_{0.1}$ ranges from 0.44-0.60 yr⁻¹ for females and 0.51-0.61 yr⁻¹ for males (Table 8.3.1, Fig. 8.3.1). The Atlantic coast estimates of this benchmark level, $F_{0.1}$, are 0.66 and 0.34 for females in the Northeast and Southeast regions and 0.54 and 0.48 for males in these regions. If spotted seatrout were being managed for yield, increases in yield per recruit would be expected if the current rate of fishing mortality was allowed to increase on both sexes in all regions.

Transitional spawning potential ratios (tSPR) for spotted seatrout has trended strongly upward since about 1989 in all management regions. In the northern regions tSPR was relatively flat during much of the 1980's whereas in the southern management region tSPR was increasing slowly (Table 8.3.2, Fig. 8.3.2). In the Northwest region, tSPR increased across the 35% management threshold in 1997 and has fluctuated between 38 and 40% since then. In the Southwest region, the tSPR rose above 35% in 1993 and continued to increase through 1995 when it leveled off at about 46%. On the Atlantic coast, the tSPR's crossed the 35% management target in 1992 in the Southeast region and in 1997 in the Northeast region. In both areas tSPR continued to increase before leveling off in 1994 in the Southeast at about 49% (average for 1994-2005) and in 2002 in the Northeast at about 62% tSPR (2002-2005 average).

Estimates of static SPR, defined as the equilibrium level of the spawning potential ratio under 2005 fishing mortality rates, were similar to tSPR rates in 2005 on the gulf coast and were lower on the Atlantic coast. In the Northwest region static SPR has remained at 36-38% during 2003-2005 indicating that fishing mortality rates have remained fairly constant throughout that period (Table 8.3.2, Fig. 8.3.2). In the Southwest region, static SPR was similarly confined to a relatively narrow range during 2003-2005, 39-43%. On the Atlantic coast, the 2005 regional estimates of static SPR were markedly lower than estimates for 2003 or 2004; 0.50 in 2005 compared to about 0.63 in 2003 and 2004 in the Northeast and 0.38 in 2005 compared to 0.57-0.59 in 2003-2004 in the Southeast.

The annual estimates for tSPR from the previous assessment of spotted seatrout (Murphy 2003) were lower in all regions from the mid 1990's through 2001 (Fig. 8.3.3). There appears to be a variety of reasons for the differences between the current findings and those of Murphy (2003). There have been a number of input data changes that have affected the findings including: 1) the current 1950-2005 time frame compared to the 1986-2001 frame, 2) the current use of the complete time series of fisheries-dependent indices of abundance rather than restricting these to just years when no fisheries-independent indices were available, 3) the current use of annual fecundity as a measure of spawning rather than the proxy spawning biomass, 4) the current model's use of more complete and appropriate formulas for the various likelihoods in the objective function, 5) the current modification of the relationship of effort to fishing mortality that incorporates release probabilities and release mortality, and 6) the current inclusion of a parameter solved for the proportion of the age-0 recruits that are female. These changes

were either corrections to the last assessment model's structure or what is now considered the use of more appropriate data. For these reasons, I did not explore the effects that each of these changes had to the overall model performance. It should also be re-iterated as mentioned above (see Section 7.4.1 Sensitivity of Model Configuration) that comparisons between current model runs and alternate model configurations is complicated by the resultant natural reweighting of the input data, especially the proportion at age data.

The current findings and the observed high tSPR estimates from the ASAP model (Table 8.3.2, Fig. 8.3.3) support the general conclusion that while there is uncertainty about the model output the best estimates for the transitional spawning potential ratios in each region likely exceed the 35% target. It is possible that with adjustments to the weights for the proportion-at-age likelihood in the alternate configurations, e.g. shortened time-series, age-specific M, and retrospective analyses, such that the effective sample sizes are close to the observed sample sizes and the estimated Hessian matrix is positive definite (as done in the current full model) that estimated tSPR's would be more consistent with the current model results. This difficult and time consuming process was not attempted at this time.

8.4 Stock Production Model

No stock production model has been applied to the spotted seatrout stocks in Florida at this time.

8.5 Results

8.5.1 Overfishing Definition

The point estimates for tSPR in 2005 for spotted seatrout in each region exceeds the Commission's target of 35%. In the Northwest and Southwest region of the gulf coast estimates for 2005 are 38% and 44%, respectively. On the Atlantic coast the northern and southern region estimates are 51% and 62%. Recent trends in year-specific, static SPR estimates indicate that near-term future tSPR will continue to fluctuate closely around its current levels in the gulf coast regions but will decline somewhat in the Atlantic coast regions.

8.5.2 Overfished Definition

"Overfished" or now commonly referred to as "depleted" refers to an absolute value of abundance or biomass (or a proxy in relative terms) at which a dangerously unproductive, small population remains alive. While no "overfished" definition is available for spotted seatrout, examination of trends in young-of-the-year abundance indicates that recent levels in the two southern regions equal or exceed estimated abundances for past years. This evidence combined with the steady trend in tSPR since the mid 1990's suggests that spotted seatrout abundances remain at productive levels in these southern regions. In the northern regions, where there were significant long-term declining trends in young-of-the-year female spotted seatrout abundance, continued monitoring of the abundance of recruits is important, especially in the Northwest region where tSPR is just above the 35% target in 2005.

8.5.3 Control Rule

There are no control rules for the determination of the status of spotted seatrout in Florida

9.0 Recommendations and Findings

9.1 Evaluation of Current Status Based on Biological Reference Points

The spotted seatrout fisheries in each of the management regions appear to be operating at low enough fishing mortality rates that survival of female spotted seatrout is adequate to achieve the 35% tSPR management target. There is uncertainty to these findings based on alternate model runs made with age-specific natural mortality, that include different-length time series of data, or that were run as part of a retrospective analysis. Many of these alternative runs suggest that the current assessment over-estimates tSPR, though it is not clear if these results are from models with comparably weighted input data. Alternately, an analysis run on the female-only data using the peer-reviewed statistical catch-at-age model ASAP indicated that the current model's tSPR estimates were possibly under-estimated. Given the complexities of the highly parameterized statistical models further investigation of the uncertainties pointed out in this report should be a high priority for the next assessment of spotted seatrout.

9.2 Research Recommendations

Additional direct random samples of spotted seatrout sex and age composition from both the recreational and commercial landings in each region of Florida are needed. Included in this is the need for better estimates and characterization of the recreational and commercial discard. The effect of recent changes to the Marine Recreational Fisheries Statistics Survey methods for estimating catch for the charter and guide fisheries data needs to be investigated more thoroughly in future assessments.

10.0 Minority Report

This assessment was not thoroughly peer-reviewed within a framework that required a consensus or minority reports be issued. Simply members of the FWRI stock assessment group and members of FWC's Division of Marine Fisheries Management reviewed early summaries of the data and model runs, suggesting potential changes and these were incorporated into the final analyses when feasible. During the reviews several changes were made to improve the analyses. These included changes made to the likelihoods used in the model's objective function, the use of effective sample size calculations to determine the appropriate weights for the multinomial likelihood used to describe the age composition of the harvest, expanded diagnostics to determine how well age composition of the catch is captured by the two-stage, length and age-length key process, the addition of parameters to solve for sex-ratio of new recruits, and the use of sex-combined indices of abundance when for young-of-the-year indices and the Everglades National Park creel survey index.

10.1 Description of Opinions

Not Applicable.

10.2 Justification of Why Not Adopted

Not Applicable

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Table 3.1.1. Annual reported commercial landings, estimated recreational landings (Type A+B1 estimates), and combined landings of spotted seatrout on the gulf, Atlantic and both coasts of Florida during the period 1982-2005. All landings are reported in **pounds**. The FWC-FWRI Marine Fisheries Information System data included edited (batches 1-913) and unedited (batches 914-917) trip tickets. Earlier data are from the National Marine Fisheries Service's General Canvass of fish dealers.

	Commercial			Recreational			Combined		
	Gulf	Atlantic	Total	Gulf	Atlantic	Total	Gulf	Atlantic	Total
1982	2,009,364	732,278	2,741,642	3,357,425	660,295	4,017,720	5,366,789	1,392,573	6,759,362
1983	1,870,313	481,535	2,351,848	4,094,502	784,531	4,879,033	5,964,815	1,266,066	7,230,881
1984	1,550,898	367,541	1,918,439	6,126,744	866,077	6,992,821	7,677,642	1,233,618	8,911,260
1985	1,131,045	369,756	1,500,801	3,119,258	1,032,344	4,151,602	4,250,303	1,402,100	5,652,403
1986	1,263,669	304,523	1,568,192	7,088,001	695,168	7,783,169	8,351,670	999,691	9,351,361
1987	1,347,647	317,300	1,664,947	3,753,651	883,707	4,637,358	5,101,298	1,201,007	6,302,305
1988	1,362,966	315,947	1,678,913	5,801,546	453,063	6,254,609	7,164,512	769,010	7,933,522
1989	1,002,257	362,082	1,364,339	6,794,994	328,338	7,123,332	7,797,251	690,420	8,487,671
1990	768,385	236,466	1,004,851	1,943,156	475,045	2,418,201	2,711,541	711,511	3,423,052
1991	825,785	225,573	1,051,358	4,040,395	534,371	4,574,766	4,866,180	759,944	5,626,124
1992	665,204	259,095	924,299	2,822,552	543,491	3,366,043	3,487,756	802,586	4,290,342
1993	548,321	224,072	772,393	2,166,608	392,827	2,559,435	2,714,929	616,899	3,331,828
1994	643,509	247,651	891,160	2,407,981	357,441	2,765,422	3,051,490	605,092	3,656,582
1995	353,012	184,121	537,133	2,417,112	642,670	3,059,782	2,770,124	826,791	3,596,915
1996	22,804	48,254	71,058	1,774,196	249,898	2,024,094	1,797,000	298,152	2,095,152
1997	32,293	57,316	89,609	1,846,009	380,276	2,226,285	1,878,302	437,592	2,315,894
1998	40,704	41,556	82,260	2,244,730	329,793	2,574,523	2,285,434	371,349	2,656,783
1999	21,862	61,802	83,664	2,537,378	428,061	2,965,439	2,559,240	489,863	3,049,103
2000	20,897	45,392	66,289	2,757,869	545,202	3,303,071	2,778,766	590,594	3,369,360
2001	17,819	30,234	48,053	1,972,409	502,254	2,474,663	1,990,228	532,488	2,522,716
2002	17,712	44,640	62,352	2,520,041	353,693	2,873,734	2,537,753	398,333	2,936,086
2003	26,522	27,168	53,690	2,550,156	316,279	2,866,435	2,576,678	343,447	2,920,125
2004	10,338	29,615	39,952	2,918,815	388,164	3,306,979	2,929,153	417,779	3,346,931
2005	19,865	36,777	56,641	3,032,273	586,091	3,618,364	3,052,138	622,868	3,675,005

Table 5.1.1.3.1. The 1985 and 1986 landings in pounds of spotted seatrout in each of the four regions of Florida reported under the National Marine Fisheries Service's General Canvass (NMFS) of fish dealers and the Florida Fish and Wildlife Commissions trip ticket program (FWC). The annual and average proportion of the general canvass landings to the trip ticket landings is given.

Year	NW			SW			SE			NE		
	NMFS	FWC	%	NMFS	FWC	%	NMFS	FWC	%	NMFS	FWC	%
1985	475,413	427,957	111%	655,632	682,036	96%	329,624	279,060	118%	40,132	37,423	107%
1986	502,433	485,729	103%	715,189	777,940	92%	285,938	257,843	111%	43,601	46,680	93%
Average			107%			94%			115%			100%

Table 5.1.1.4.1. Number of spotted seatrout landed in the Northwest region's commercial fisheries that were sampled for lengths (by fishing gear), sex, and age. Prior to late 1989, some spotted seatrout sampled from the commercial landings may have come from anglers selling their catch.

Northwest	Lengths						Sex	Age
	Cast	Gill	Line	Seine	Trammel	Trawl		
1986	0	120	435	0	0	0	555	555
1987	0	120	430	0	0	0	550	550
1988	0	47	14	0	0	0	61	61
1989	0	0	0	0	0	0	0	0
1990	0	0	0	0	0	0	0	0
1991	0	32	0	0	0	0	0	0
1992	0	81	0	0	0	0	8	8
1993	0	1,111	97	0	18	0	20	20
1994	0	654	59	0	0	0	0	0
1995	0	184	10	0	0	0	24	24
1996	1	0	101	0	0	0	0	0
1997	0	0	117	0	0	0	0	0
1998	2	0	0	1	0	0	0	0
1999	0	25	0	0	0	0	0	0
2000	0	0	42	0	0	0	0	0
2001	0	0	108	1	0	0	0	0
2002	0	0	57	0	0	0	5	5
2003	0	0	1	0	0	0	1	0
2004	0	0	0	0	0	0	0	0
2005	0	0	0	0	0	0	0	0

Table 5.1.1.4.1 (con't). Number of spotted seatrout landed in the Southwest region's commercial fisheries that were sampled for lengths (by fishing gear), sex, and age. Prior to late 1989, some spotted seatrout sampled from the commercial landings may have come from anglers selling their catch.

Southwest	Lengths						Sex	Age
	Cast	Gill	Line	Seine	Trammel	Trawl		
1986	0	571	190	0	60	0	761	761
1987	0	514	272	0	98	0	786	786
1988	0	59	0	0	0	0	59	59
1989	0	0	0	0	0	0	0	0
1990	0	0	0	0	0	0	0	0
1991	0	756	0	0	148	0	0	0
1992	0	1,040	155	0	64	0	260	260
1993	0	92	1	0	56	0	6	12
1994	0	196	0	6	0	0	22	23
1995	0	123	0	9	0	0	117	117
1996	0	0	0	0	0	0	0	0
1997	0	0	71	0	0	0	0	0
1998	0	1	3	0	0	0	0	0
1999	0	0	48	0	0	0	0	0
2000	1	0	47	45	0	0	0	0
2001	0	0	0	3	0	0	0	0
2002	0	0	0	0	0	0	0	0
2003	0	0	73	3	0	0	0	0
2004	0	0	0	0	0	0	0	0
2005	0	0	36	0	0	0	0	0

Table 5.1.1.4.1 (con't). Number of spotted seatrout landed in the Southeast region's commercial fisheries that were sampled for lengths (by fishing gear), sex, and age. Prior to late 1989, some spotted seatrout sampled from the commercial landings may have come from anglers selling their catch.

Southeast	Lengths						Sex	Age
	Cast	Gill	Line	Seine	Trammel	Trawl		
1986	0	460	215	241	0	0	1,579	916
1987	0	566	88	204	0	0	1,529	858
1988	0	62	0	0	0	0	68	62
1989	0	0	0	0	0	0	0	0
1990	0	0	0	0	0	0	0	0
1991	0	96	0	0	124	0	0	0
1992	0	2,135	484	0	57	0	1,660	548
1993	0	991	335	0	13	0	1,117	1,017
1994	0	376	496	0	3	0	528	528
1995	2	497	181	0	7	0	516	516
1996	0	0	328	0	0	0	21	21
1997	8	0	607	0	0	0	277	303
1998	2	0	344	0	0	0	37	37
1999	2	0	630	0	0	0	0	0
2000	1	0	554	0	0	0	0	0
2001	0	0	264	0	0	0	0	0
2002	0	0	647	0	0	0	50	50
2003	0	0	285	0	0	0	0	0
2004	0	0	272	0	0	0	0	0
2005	0	0	0	0	0	0	0	0

Table 5.1.1.4.1 (con't). Number of spotted seatrout landed in the Northeast region's commercial fisheries that were sampled for lengths (by fishing gear), sex, and age. Prior to late 1989, some spotted seatrout sampled from the commercial landings may have come from anglers selling their catch.

Northeast	Lengths						Sex	Age
	Cast	Gill	Line	Seine	Trammel	Trawl		
1986	0	0	0	0	0	0	0	0
1987	0	0	0	0	0	0	0	0
1988	0	0	0	0	0	0	0	0
1989	0	0	0	0	0	0	0	0
1990	0	0	0	0	0	0	0	0
1991	0	0	0	0	0	0	0	0
1992	0	0	0	0	0	0	0	0
1993	0	0	0	0	0	0	0	0
1994	0	0	0	0	0	0	0	0
1995	0	4	40	0	0	0	4	0
1996	0	0	0	0	0	0	0	0
1997	0	0	0	0	0	0	0	0
1998	0	0	0	0	0	0	0	0
1999	0	0	0	0	0	0	0	0
2000	0	0	0	0	0	0	0	0
2001	0	0	0	0	0	0	0	0
2002	0	0	0	0	0	6	6	0
2003	0	0	0	0	0	0	0	0
2004	0	0	0	0	0	0	0	0
2005	0	0	0	0	0	0	0	0

Table 5.1.1.6.1. Number of spotted seatrout included in weighed subsamples taken from spotted seatrout landings reported captured by different commercial gears in the Northwest and Southwest regions of the gulf coast of Florida. These data were collected by FWC biologists conducting a life history study during 1986-1988 and conducting interviews for the NMFS Trip Interview Program during 1991-2005.

Northwest	Cast net	Gill net	Lines	Seine	Trammel	Trawl
1986		127	1,199			
1987		123	649			
1988		47	14			
1989						
1990						
1991						
1992		5				
1993		893	96		18	
1994		601	59			
1995		158				
1996			9			
1997			101			
1998	1			1		
1999		18				
2000			42			
2001			108	1		
2002			57			
2003			1			
2004						
2005						
Southwest	Cast net	Gill net	Lines	Seine	Trammel	Trawl
1986		597	197			60
1987		515	272			98
1988		59				
1989						
1990						
1991		363				75
1992		737	72			65
1993		92	1			56
1994		196		6		
1995		49				
1996						
1997			3			
1998		1	3			
1999			48			
2000	1		47	45		
2001				3		
2002						
2003			73	3		
2004						
2005			36			

Table 5.1.1.6.1 (con't). Number of spotted seatrout included in weighed subsamples taken from spotted seatrout landings reported captured by different commercial gears in the Southeast and Northeast regions of the Atlantic coast of Florida. These data were collected by FWC biologists conducting a life history study during 1986-1988 and conducting interviews for the NMFS Trip Interview Program during 1991-2005.

Southeast	Cast net	Gill net	Lines	Seine	Trammel	Trawl
1986		601	363	399		
1987		759	115	252		
1988		62				
1989						
1990						
1991		25			44	
1992		2,156	463		40	
1993		943	335		13	
1994		376	470		3	
1995	2	487	106		7	
1996			328			
1997	8		607			
1998	2		344			
1999	2		630			
2000	1		554			
2001			264			
2002			647			
2003			285			
2004			272			
2005						
Northeast	Cast net	Gill net	Lines	Seine	Trammel	Trawl
1986						
1987						
1988						
1989						
1990						
1991						
1992						
1993						
1994						
1995	4		40			
1996						
1997						
1998						
1999						
2000						
2001						2
2002						
2003						
2004						
2005						

Table 5.1.1.6.2. Calculated number of spotted seatrout per pound for weighed subsamples taken from spotted seatrout landings reported captured by different commercial gears and landed in the Northwest and Southwest regions of the gulf coast of Florida. These data were collected by FWC biologists conducting interviews for the NMFS Trip Interview Program.

Northwest	Cast net	Gill net	Lines	Seine	Trammel	Trawl
1986		0.80394	1.15758			
1987		0.83357	1.02563			
1988		0.38183	0.69136			
1989						
1990						
1991						
1992		0.66667				
1993		0.57717	0.52411		0.43902	
1994		0.58950	0.47390			
1995		0.52318				
1996			0.64286			
1997			0.52604			
1998	0.13514			0.50000		
1999		0.64286				
2000			0.72794			
2001			0.56633	0.50000		
2002			0.66480			
2003			0.23529			
2004						
2005						
Southwest	Cast net	Gill net	Lines	Seine	Trammel	Trawl
1986		0.69940	0.62424		1.04131	
1987		0.79258	0.70222		0.53735	
1988		0.98514				
1989						
1990						
1991		0.73544			0.92593	
1992		0.69148	0.81525		0.59633	
1993		0.54087	0.92343		0.67047	
1994		0.42702		0.60000		
1995		0.50000				
1996						
1997			0.45707			
1998		2.00000	0.34263			
1999			0.66362			
2000	0.22877		0.60841	0.57852		
2001				0.37500		
2002						
2003			0.55982	0.60000		
2004						
2005			0.72000			

Table 5.1.1.6.2 (con't). Calculated number of spotted seatrout per pound for weighed subsamples taken from spotted seatrout landings reported captured by different commercial gears and landed on the Southeast and Northeast regions of the Atlantic coast of Florida. These data were collected by FWC biologists conducting interviews for the NMFS Trip Interview Program.

Southeast	Cast net	Gill net	Lines	Seine	Trammel	Trawl
1986		0.51998	0.67698	0.60021		
1987		0.54912	0.60445	0.46401		
1988		0.49858				
1989						
1990						
1991		0.32468			0.26994	
1992		0.39947	0.65861		0.28369	
1993		0.42777	0.55381		0.37198	
1994		0.40825	0.65551		0.23077	
1995	0.68966	0.40856	0.74126		0.25926	
1996			0.57333			
1997	0.52373		0.54999			
1998	0.80000		0.53069			
1999	1.00000		0.56205			
2000	0.66667		0.57220			
2001			0.50536			
2002			0.56090			
2003			0.50425			
2004			0.61261			
2005						
Northeast	Cast net	Gill net	Lines	Seine	Trammel	Trawl
1986						
1987						
1988						
1989						
1990						
1991						
1992						
1993						
1994						
1995	1.333333		0.769231			
1996						
1997						
1998						
1999						
2000						
2001						3.096246
2002						
2003						
2004						
2005						

Table 5.1.1.6.3. Final number of fish, following data pooling, used to estimate the average number of spotted seatrout per pound for fish reported landed within different gear categories in the Northwest and Southwest regions on the gulf coasts of Florida during 1986-2005.

Northwest	Cast net	Gill net	Lines	Seine	Trammel	Trawl	Trap	Unknown
1986								1,562
1987								1,042
1988								1,523
1989								1,425
1990								1,450
1991	21	898	663	45	119	2	2	1,750
1992	21	898	96	45	105	2	2	1,169
1993	21	893	96	45	18	2	2	1,077
1994	21	601	59	45	18	2	2	748
1995	21	158	59	45	18	2	2	305
1996	21	18	59	45		2	2	
1997	21		101	45		2	2	207
1998	21	18	101	45	18	2	2	207
1999	21	18	42	45			2	148
2000	21	18	42	45		2	2	148
2001	21	18	108	45		2	2	
2002	21	18	57	45		2	2	
2003	21		58	45			2	
2004	21		58	45			2	
2005	21		58	45			2	

Southwest	Cast net	Gill net	Lines	Seine	Trammel	Trawl		Unknown
1986								1,854
1987								1,656
1988								744
1989								744
1990		363	72					594
1991	21	363	72	59	75	2	2	594
1992	21	737	72	59	65	2	2	958
1993	21	92	73	59	56	2	2	305
1994	21	196	73	59	56	2	2	409
1995	21	49	73	59	56	2	2	262
1996	21	49		59			2	243
1997	21	49	54	59			2	243
1998	21	49	102	59			2	291
1999	21		48	59			2	
2000	21	49	47	45			2	222
2001	21		47	51			2	
2002	21		73				2	
2003	21		73	51			2	
2004	21		109				2	
2005	21		36	51			2	

Table 5.1.1.6.3 (con't). Final number of fish, following data pooling, used to estimate the average number of spotted seatrout per pound for fish reported landed within different gear categories in the Southeast and Northeast regions on the Atlantic coast of Florida during 1986-2005.

Southeast	Cast net	Gill net	Lines	Seine	Trammel	Trawl	Trap	Unknown
1986								2,028
1987								1,987
1988								593
1989								593
1990								2,834
1991	21	2,181	463	59	44			2,772
1992	21	2,156	463	59	40	2	2	2,743
1993	21	943	335		23	2	2	1,385
1994	21	376	470		23		2	953
1995	21	487	106	59	23	2	2	700
1996	21	487	328	59				922
1997	21	487	607				2	1,201
1998	21	487	344				2	938
1999	21		630	59			2	1,224
2000	21		554					1,148
2001	21	487	264				2	
2002	21		647					
2003	21		285					
2004	21		272			2	2	
2005	21		272					

Northeast	Cast net	Gill net	Lines	Seine	Trammel	Trawl		Unknown
1986								2,028
1987								1,987
1988								593
1989								593
1990		2,243	40	59	44	2	2	2,411
1991		2,181	40	59	44	2	2	2,349
1992	21	2,156	40	59	40	2	2	2,320
1993	21	943	40	59	23	2	2	1,090
1994	21	376	40	59	23	2	2	523
1995	21	487	40			2	2	634
1996	21		40			2	2	
1997	21	487	40					
1998	21		40			2		634
1999	21		40				2	634
2000	21		40	59		2		
2001	21		40					
2002	21		40					
2003	21		40	59				
2004	21		40					
2005	21		40					

Table 5.1.1.6.4. Final estimated number of spotted seatrout per pound for landings made within different gears in the Northwest and Southeast regions on the gulf coast of Florida during 1986-2005. Estimates are shown for all gear-year categories that had reported landings.

Northwest	Cast net	Gill net	Lines	Seine	Trammel	Trawl	Trap	Unknown
1986								0.94355
1987								0.74344
1988								0.69085
1989								0.68087
1990								0.63805
1991	0.53920	0.57767	1.01857	0.57852	0.48770	3.09625	3.09625	0.59524
1992	0.53920	0.57767	0.52411	0.57852	0.42000	3.09625	3.09625	0.54899
1993	0.53920	0.57717	0.52411	0.57852	0.43902	3.09625	3.09625	0.56878
1994	0.53920	0.58950	0.47390	0.57852	0.43902	3.09625	3.09625	0.54265
1995	0.53920	0.52318	0.47390	0.57852	0.43902	3.09625	3.09625	0.51617
1996	0.53920	0.64286	0.47390	0.57852		3.09625	3.09625	
1997	0.53920		0.52604	0.57852		3.09625	3.09625	0.56401
1998	0.53920	0.64286	0.52604	0.57852	0.43902	3.09625	3.09625	0.56812
1999	0.53920	0.64286	0.72794	0.57852			3.09625	0.70637
2000	0.53920	0.64286	0.72794	0.57852		3.09625	3.09625	0.69160
2001	0.53920	0.64286	0.56633	0.57852		3.09625	3.09625	
2002	0.53920	0.64286	0.66480	0.57852		3.09625	3.09625	
2003	0.53920		0.65739	0.57852			3.09625	
2004	0.53920		0.65739	0.57852			3.09625	
2005	0.53920		0.65739	0.57852			3.09625	

Southwest	Cast net	Gill net	Lines	Seine	Trammel	Trawl	Unknown	
1986							0.74992	
1987							0.73085	
1988							0.84962	
1989							0.84962	
1990		0.73544	0.81525				0.78509	
1991	0.53920	0.73544	0.81525	0.56306	0.92593	3.09625	3.09625	0.78509
1992	0.53920	0.69148	0.81525	0.56306	0.59633	3.09625	3.09625	0.69785
1993	0.53920	0.54087	0.81673	0.56306	0.67047	3.09625	3.09625	0.61813
1994	0.53920	0.42702	0.81673	0.56306	0.67047	3.09625	3.09625	0.55298
1995	0.53920	0.50000	0.81673	0.56306	0.67047	3.09625	3.09625	0.62458
1996	0.53920	0.50000		0.56306			3.09625	0.63314
1997	0.53920	0.50000	0.63431	0.56306			3.09625	0.62794
1998	0.53920	0.50000	0.64896	0.56306			3.09625	0.63836
1999	0.53920		0.66362	0.56306			3.09625	
2000	0.53920	0.50000	0.60841	0.57852			3.09625	0.59840
2001	0.53920	0.50000	0.60841	0.56781			3.09625	
2002	0.53920	0.50000	0.55982				3.09625	
2003	0.53920	0.50000	0.55982	0.56781			3.09625	
2004	0.53920	0.50000	0.63991				3.09625	
2005	0.53920	0.50000	0.72000	0.56781			3.09625	

Table 5.1.1.6.4 (con't). Estimated number of fish per pound for spotted seatrout captured by different gears and landed in the Southeast and Northeast regions on the Atlantic coast of Florida during 1986-2005. Estimates are shown for all gear-year categories that had reported landings.

Southeast	Cast net	Gill net	Lines	Seine	Trammel	Trawl	Trap	Unknown
1986								0.58446
1987								0.57472
1988								0.54045
1989								0.54045
1990								0.51908
1991	0.53920	0.39861	0.65861	0.56306	0.26994			0.48522
1992	0.53920	0.39947	0.65861	0.56306	0.28369	3.09625	3.09625	0.48600
1993	0.53920	0.42777	0.55381		0.31926	3.09625	3.09625	0.47210
1994	0.53920	0.40825	0.65551		0.31926		3.09625	0.46720
1995	0.53920	0.40856	0.74126	0.56306	0.31926	3.09625	3.09625	0.49451
1996	0.53920	0.40856	0.57333	0.56306				0.57037
1997	0.53920	0.40856	0.54999				3.09625	0.55281
1998	0.53920	0.40856	0.53069				3.09625	0.53628
1999	0.53920		0.56205	0.56306			3.09625	0.56313
2000	0.53920		0.57220					0.56919
2001	0.53920	0.40856	0.50536				3.09625	
2002	0.53920		0.56090					
2003	0.53920		0.50425					
2004	0.53920		0.61261			3.09625	3.09625	
2005	0.53920		0.61261	0.56306				

Northeast	Cast net	Gill net	Lines	Seine	Trammel	Trawl		Unknown
1986								0.59474
1987								0.58119
1988								0.54967
1989								0.54967
1990								0.57438
1991		0.39861	0.76923	0.56306	0.26994	3.09625	3.09625	0.54323
1992	0.53920	0.39947	0.76923	0.56306	0.28369	3.09625	3.09625	0.54383
1993	0.53920	0.42777	0.76923	0.56306	0.31926	3.09625	3.09625	0.57090
1994	0.53920	0.40825	0.76923	0.56306	0.31926	3.09625	3.09625	0.52987
1995	0.53920	0.40856	0.76923	0.56306		3.09625	3.09625	0.63736
1996	0.53920		0.76923			3.09625	3.09625	
1997	0.53920	0.40856	0.76923					
1998	0.53920		0.76923			3.09625		0.79529
1999	0.53920		0.76923				3.09625	0.77447
2000	0.53920		0.76923	0.56306		3.09625		
2001	0.53920		0.76923					
2002	0.53920		0.76923					
2003	0.53920		0.76923	0.56306				
2004	0.53920		0.76923					
2005	0.53920		0.76923					

Table 5.1.1.6.5. Numbers of spotted seatrout measured for length that were taken from the Northwest and Southwest region commercial fisheries during 1986-2005.

Northwest	Cast net	Gill net	Lines	Seine	Trammel
1986		120	435		
1987		120	430		
1988		47	14		
1989					
1990					
1991		32			
1992		81			
1993		1,111	97		18
1994		654	59		
1995		184	10		
1996	1		101		
1997			117		
1998	2			1	
1999		25			
2000			42		
2001			108	1	
2002			57		
2003			1		
2004					
2005					

Southwest	Cast net	Gill net	Lines	Seine	Trammel
1986		571	190		60
1987		514	272		98
1988		59			
1989					
1990					
1991		756			148
1992		1,040	155		64
1993		92	1		56
1994		196		6	
1995		123		9	
1996					
1997			71		
1998		1	3		
1999			48		
2000	1		47	45	
2001				3	
2002					
2003			73	3	
2004					
2005			36		

Table 5.1.1.6.5 (con't). Numbers of spotted seatrout measured for length that were taken from the Southeast and Northeast region commercial fisheries during 1986-2005.

Southeast	Cast net	Gill net	Lines	Seine	Trammel	Trawl
1986		460	215	241		
1987		566	88	204		
1988		62				
1989						
1990						
1991		96			124	
1992		2,135	484		57	
1993		991	335		13	
1994		376	496		3	
1995	2	497	181		7	
1996			328			
1997	8		607			
1998	2		344			
1999	2		630			
2000	1		554			
2001			264			
2002			647			
2003			285			
2004			272			
2005						

Northeast	Cast net	Gill net	Lines	Seine	Trammel	Trawl
1986						
1987						
1988						
1989						
1990						
1991						
1992						
1993						
1994						
1995		4	40			
1996						
1997						
1998						
1999						
2000						
2001						
2002						
2003						
2004						
2005						

Table 5.1.1.6.5. Pooled-sample sizes for spotted seatrout lengths taken from the Northwest and Southwest region commercial fisheries that were used to distribute gear-specific estimates of the number of spotted seatrout landed each year across length categories. Numbers reflect the pooling scheme explained in the text.

Northwest	Cast net	Gill net	Lines	Seine	Trammel	Trawl	Trap	Unknown
1986								821
1987								854
1988								1,262
1989								1,262
1990								1,343
1991	19	41	444	68	272	9	9	862
1992	19	556	97	68	121	9	9	879
1993	19	1,111	97	68	87	9	9	1,400
1994	19	654	59	68	90	9	9	908
1995	19	184	69	68	97	9	9	455
1996	19	25	101	68		9	9	
1997	19		117	68		9	9	247
1998	19	25	117	68	3	9	9	250
1999	19	25	42	68			9	163
2000	19	25	42	68		9	9	172
2001	19	25	108	68		9	9	
2002	19	25	57	68		9	9	
2003	19		58	68			9	
2004	19		58	68			9	
2005	19		58	68			9	

Southwest	Cast net	Gill net	Lines	Seine	Trammel	Trawl	Trap	Unknown
1986								1,651
1987								1,734
1988								1,734
1989								1,734
1990		756	155					1,164
1991	19	756	155	68	148	9	9	1,164
1992	19	1,040	155	68	121	9	9	1,421
1993	19	92	156	68	56	9	9	409
1994	19	196	156	68	56	9	9	513
1995	19	123	156	68	56	9	9	440
1996	19	123	122				9	406
1997	19	123	122	68			9	350
1998	19	123	122	68			9	353
1999	19		48	68			9	
2000	19	123	47	45			9	252
2001	19		47	51			9	
2002	19		73				9	
2003	19		73	51			9	
2004	19		109				9	
2005	19		36	51			9	

Table 5.1.1.6.5 (con't). Pooled-sample sizes for spotted seatrout lengths taken from the Southeast and Northeast region commercial fisheries that were used to distribute gear-specific estimates of the number of spotted seatrout landed each year across length categories. Numbers reflect the pooling scheme explained in the text.

Southeast	Cast net	Gill net	Lines	Seine	Trammel	Trawl	Trap	Unknown
1986								1,454
1987								1,540
1988								532
1989								532
1990								871
1991	19	2,231	484	68	124			2,944
1992	19	2,135	484	68	57	9	9	2,781
1993	19	991	335		23	9	9	1,454
1994	19	376	496		23		9	1,000
1995	19	497	181	68	23	9	9	806
1996	19	497	328	68				953
1997	19	497	607				9	1,232
1998	19	497	344				9	949
1999	19		630	68			9	1,223
2000	19		554					1,156
2001	19	497	264				9	
2002	19		647					
2003	19		285					
2004	19		272			9	9	
2005	19		272	68				

Northeast	Cast net	Gill net	Lines	Seine	Trammel	Trawl	Trap	Unknown
1986								1,454
1987								1,540
1988								532
1989								532
1990								427
1991		2,231	484	68	124	9	9	2,944
1992	19	2,135	484	68	57	9	9	2,781
1993	19	991	484	68	23	9	9	1,603
1994	19	376	484	68	23	9	9	988
1995	19	497	484	68		9	9	1,109
1996	19		484			9	9	1,109
1997	19	497	484					1,109
1998	19		484			9		1,089
1999	19		484				9	1,077
2000	19		554	68		9		1,156
2001	19		554					1,156
2002	19		554					1,156
2003	19		554	68				1,147
2004	19		554					1,147
2005	19		554					1,147

Table 5.1.1.6.6. Number of spotted seatrout of known sex sampled within one-inch total length classes each year during 1986-2005 in the Northwest region. Sampled were pooled for those taken from fisheries landings and scientific sampling programs.

Northwest	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
5																				
6										4	1									
7										8	4									
8	7	4								15	11	1					3			
9	26	50								13	14	3					5			
10	138	72								4	6	3	2			1	4			
11	186	104	1							6	3	4	10	10	18	5	6	1	2	5
12	227	121								9	5	7	14	21	21	17	11	8	7	6
13	252	145	2					2		8	1	3	29	13	32	21	9	11	4	11
14	289	147	1				1	5		18	12	7	29	15	29	18	10	12	10	7
15	232	118	12				2			30	12	7	20	15	31	12	11	8	10	13
16	105	74	20				1	5		10	9	6	12	12	18	23	10	5	13	9
17	50	33	9				3	3		6	10	7	8	16	15	13	3	4	5	8
18	40	20	11					3		18	15	12	8	8	11	8	4	5	6	4
19	18	21	5				1	1		10	10	12	5	9	15	4	5	1	6	5
20	13	15	10							10	3	3	6	4	4	3	1	2	4	3
21	10	14	5							2	2	4	2	8	4	1	2	4	1	6
22	3	1	4							3	1	1		1	2	2	1	2	1	2
23		2	1							1			1	1	2	3		2		2
24		1						1		3			1	3	1	3	3	1	1	
25		1									1			1	1		1	1	1	1
26			1												1					
27		2																1		
28			1																	
29																				
30																				
Totals	1596	945	83	0	0	0	8	20	0	178	120	80	147	137	205	134	89	68	71	82

Table 5.1.1.6.6 (con't). Number of spotted seatrout of known sex sampled within one-inch total length classes each year during 1986-2005 in the Southwest region. Sampled were pooled for those taken from fisheries landings and scientific sampling programs.

Southwest	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
5																				
6																				
7												1								
8												5								
9							4					9				1	1			
10		1					1		1	14	4			1		4			1	
11	71	115	6				1	3	3	18	17	21	24	16	20	6	8		2	
12	558	533	49					1	2	1	5	47	54	47	42	29	19	31		6
13	631	585	46				2	1	5	3	16	42	43	37	40	37	22	36		12
14	517	465	39				33	8	6	7	14	40	32	42	33	25	40	36		21
15	397	262	10				48	1	8	11	6	17	40	36	25	19	12	13	24	16
16	206	120	6				57	1	4	10	3	9	28	35	20	11	17	10	20	8
17	125	80	3				43	2	2	13	2	6	32	19	13	3	7	8	12	6
18	77	52					30			20		8	19	25	2	5	8	6	7	5
19	52	49					19			15	1		20	14	3	3	3	5	4	3
20	37	34					12			15		4	7	10	9	4	4		6	3
21	21	30					6			14		3	6	1	1		2			2
22	22	15					2			15	1	1	5	1	1	2		1		2
23	11	13								7		1	3	2			2			1
24	8	3					5	2		7		1	2	1	1					
25	4	2					3			3			1							
26		1								1			1							
27										2			1							
28										1										
29																				
30																				
Totals	2737	2360	159	0	0	0	260	6	25	155	28	132	315	294	226	179	171	130	185	87

Table 5.1.1.6.6 (con't). Number of spotted seatrout of known sex sampled within one-inch total length classes each year during 1986-2005 in the Southeast region. Sampled were pooled for those taken from fisheries landings and scientific sampling programs.

Southeast	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
5																				
6													2							
7												2	5	1						
8												1	1				3	1		
9												8	10	5						
10												14	11	2		1		2		
11	6	14	1					1	2	5		4	3	4	3	1	9	6	5	4
12	102	103	8				23	3	33	21	1	15	1	2	1	6	6	13	10	13
13	238	264	10				171	36	51	36	1	60	5	3	6	2	4	11	4	11
14	257	265	8				208	121	77	31	1	68	5	1	5		4	2	3	5
15	232	194	3				155	133	57	43	1	76	5		3	2	3	5	2	2
16	175	155	4				123	142	57	53	4	46	8	1	4	4	1	1	4	1
17	157	107	4				115	177	56	64	3	35	4	1		2	1	2	1	1
18	119	101	14				84	144	47	86		20	3			1	1	3		1
19	90	82	6				129	99	47	64	3	15	2					2	1	2
20	46	59	1				167	89	41	48	4	9	3		2	1	1	2	1	
21	40	49	1				168	51	25	26	1	11	1			1	1		1	1
22	35	41	2				118	47	15	24	2	3	1		1			2		1
23	14	27					80	32	8	9		3	1		1				1	3
24	21	18					61	20	4	6		1	3			1				1
25	12	16	2				38	15	3				1		1					
26	8	11	2				8	4	1						1					1
27	11	7	2				5	2	2				1		1		1			
28	6	7					6	1	1					1						
29	7	3																1		
30	3	6					1													
Totals	1579	1529	68	0	0	0	1660	1117	528	516	21	391	76	21	29	22	35	53	33	47

Table 5.1.1.6.6 (con't). Number of spotted seatrout of known sex sampled within one-inch total length classes each year during 1986-2005 in the Northeast region. Sampled were pooled for those taken from fisheries landings and scientific sampling programs.

Northeast	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
5																				
6																				
7																				
8																1				
9										2										
10																3				
11										2						9	4	21	9	6
12															1	12	13	16	12	8
13																11	19	21	12	7
14															1	13	5	6	9	14
15																6	10	3	2	7
16																2	8	3	3	3
17																3	7	2	3	4
18																2	5	1		
19																	1			
20																		1	1	1
21																				
22																		1		
23																1			1	1
24																				
25																	1		1	
26																	1			
27																				
28																				
29																				
30									1											
Totals	0	0	0	0	0	0	0	0	1	4	0	0	0	0	2	63	74	75	53	51

Table 5.1.1.6.7. Final estimated proportion of spotted seatrout that is female within one-inch total length classes each year during 1986-2005 in the Northwest region.

Northwest	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
5	0.45	0.45	0.45	0.45	0.43	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41
6	0.45	0.45	0.45	0.45	0.43	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41
7	0.45	0.45	0.45	0.45	0.43	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41
8	0.57	0.25	0.25	0.25	0.33	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41
9	0.46	0.40	0.40	0.40	0.42	0.44	0.44	0.47	0.47	0.47	0.43	0.67	0.63	0.63	0.63	0.63	0.60	0.63	0.63	0.63
10	0.70	0.42	0.42	0.42	0.46	0.50	0.50	0.55	0.55	0.55	0.57	0.60	0.50	0.70	0.70	0.70	0.75	0.70	0.70	0.70
11	0.61	0.40	0.40	0.40	0.48	0.56	0.56	0.64	0.64	0.64	0.57	0.50	0.30	0.70	0.67	0.80	0.50	0.61	0.50	0.40
12	0.48	0.42	0.42	0.42	0.50	0.57	0.57	0.74	0.74	0.74	0.58	0.43	0.21	0.71	0.62	0.47	0.55	0.38	0.57	0.50
13	0.64	0.50	0.50	0.50	0.48	0.45	0.45	0.50	0.59	0.50	0.53	0.56	0.52	0.62	0.63	0.48	0.67	0.55	0.50	0.82
14	0.83	0.62	0.62	0.62	0.69	0.75	0.75	0.75	0.65	0.83	0.58	0.61	0.59	0.60	0.76	0.72	0.40	0.83	0.70	0.71
15	0.86	0.65	0.67	0.67	0.69	0.70	0.70	0.70	0.81	0.72	0.67	0.89	0.85	0.87	0.77	0.83	0.82	0.83	0.70	0.77
16	0.84	0.72	0.77	0.77	0.82	0.88	0.88	0.67	0.86	0.88	0.89	0.94	0.92	0.92	0.72	0.78	0.78	0.80	0.82	0.56
17	0.88	0.94	0.95	0.95	0.84	0.73	0.73	0.63	0.93	0.67	0.80	0.93	0.88	0.94	0.95	0.92	0.95	0.95	0.95	0.88
18	0.98	0.80	0.65	0.65	0.75	0.86	0.86	0.82	0.91	0.90	0.80	0.90	0.89	0.89	0.89	0.88	0.75	0.80	0.83	0.75
19	0.94	0.86	0.88	0.88	0.87	0.86	0.86	0.94	0.88	0.90	0.70	0.94	0.95	0.89	0.93	0.95	0.95	0.95	0.95	0.95
20	0.96	0.93	0.92	0.92	0.92	0.92	0.92	0.94	0.90	0.90	0.84	0.78	0.83	0.90	0.90	0.90	0.90	0.90	0.90	0.67
21	0.96	0.96	0.95	0.95	0.96	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
22	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
23	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
24	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
25	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
26	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
27	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
28	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
29	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
30	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97

Table 5.1.1.6.7 (con't). Final estimated proportion of spotted seatrout that is female within one-inch total length classes each year during 1986-2005 in the Southwest region.

Southwest	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
5	0.48	0.48	0.48	0.48	0.43	0.38	0.38	0.38	0.38	0.38	0.31	0.31	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38
6	0.48	0.48	0.48	0.48	0.43	0.38	0.38	0.38	0.38	0.38	0.31	0.31	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38
7	0.48	0.48	0.48	0.48	0.43	0.38	0.38	0.38	0.38	0.38	0.31	0.31	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38
8	0.48	0.48	0.48	0.48	0.43	0.38	0.38	0.38	0.38	0.38	0.31	0.31	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38
9	0.48	0.48	0.48	0.48	0.43	0.38	0.38	0.38	0.38	0.38	0.31	0.31	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38
10	0.48	0.48	0.48	0.48	0.43	0.38	0.38	0.38	0.38	0.38	0.31	0.31	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38
11	0.44	0.52	0.50	0.50	0.45	0.40	0.40	0.40	0.40	0.38	0.33	0.39	0.35	0.29	0.21	0.38	0.40	0.00	0.75	0.38
12	0.51	0.53	0.52	0.52	0.46	0.40	0.40	0.40	0.40	0.38	0.33	0.60	0.38	0.43	0.38	0.48	0.41	0.58	0.55	0.33
13	0.63	0.63	0.64	0.64	0.48	0.33	0.33	0.50	0.33	0.33	0.33	0.63	0.52	0.42	0.41	0.50	0.51	0.50	0.47	0.58
14	0.72	0.78	0.79	0.79	0.72	0.65	0.65	0.61	0.86	0.67	0.71	0.43	0.70	0.34	0.69	0.48	0.76	0.65	0.61	0.43
15	0.73	0.79	0.79	0.79	0.81	0.84	0.84	0.84	0.85	0.64	0.83	0.59	0.60	0.53	0.64	0.84	0.50	0.77	0.54	0.69
16	0.82	0.85	0.86	0.86	0.83	0.80	0.80	0.79	0.85	0.80	0.81	0.81	0.68	0.49	0.65	0.64	0.65	0.80	0.80	0.50
17	0.74	0.76	0.77	0.77	0.78	0.80	0.80	0.73	0.78	0.75	0.75	0.50	0.78	0.42	0.85	0.67	0.86	0.75	0.83	0.83
18	0.84	0.83	0.83	0.83	0.82	0.81	0.81	0.87	0.71	0.70	0.76	0.88	0.79	0.60	0.75	0.71	0.88	0.83	0.71	0.81
19	0.88	0.90	0.90	0.90	0.89	0.89	0.89	0.89	0.85	0.85	0.86	0.86	0.85	0.93	0.88	0.89	0.90	0.80	0.75	0.82
20	0.95	0.97	0.97	0.97	0.97	0.96	0.96	0.92	0.96	0.96	0.95	0.96	0.96	0.95	0.96	0.96	0.96	0.96	0.96	0.96
21	0.95	0.97	0.97	0.97	0.96	0.95	0.95	1.00	0.92	0.93	0.95	0.93	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
22	0.96	0.87	0.87	0.87	0.90	0.94	0.94	1.00	0.93	0.93	0.95	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
23	0.98	0.92	0.92	0.92	0.95	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
24	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
25	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
26	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
27	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
28	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
29	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
30	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98

Table 5.1.1.6.7 (con't). Final estimated proportion of spotted seatrout that is female within one-inch total length classes each year during 1986-2005 in the Southeast region.

Southeast	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
5	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
6	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
7	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
8	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
9	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
10	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
11	0.67	0.71	0.71	0.71	0.71	0.39	0.39	0.39	0.39	0.39	0.39	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07
12	0.53	0.64	0.64	0.64	0.64	0.70	0.70	0.67	0.61	0.67	0.63	0.60	0.56	0.69	0.69	0.69	0.55	0.64	0.63	0.60
13	0.57	0.67	0.67	0.67	0.67	0.77	0.77	0.50	0.55	0.69	0.46	0.45	0.45	0.45	0.45	0.45	0.63	0.51	0.53	0.56
14	0.59	0.56	0.56	0.56	0.56	0.82	0.82	0.69	0.64	0.87	0.54	0.54	0.56	0.67	0.67	0.67	0.57	0.63	0.62	0.61
15	0.63	0.67	0.67	0.67	0.67	0.75	0.75	0.75	0.74	0.88	0.69	0.70	0.70	0.69	0.69	0.69	0.42	0.60	0.57	0.53
16	0.71	0.66	0.66	0.66	0.66	0.81	0.81	0.84	0.84	0.92	0.66	0.67	0.65	0.61	0.61	0.61	0.57	0.60	0.59	0.59
17	0.75	0.72	0.72	0.72	0.72	0.76	0.76	0.90	0.88	0.94	0.79	0.80	0.82	0.88	0.88	0.88	0.60	0.78	0.75	0.71
18	0.85	0.75	0.75	0.75	0.75	0.89	0.89	0.92	0.94	0.93	0.95	0.95	0.96	0.80	0.80	0.80	0.40	0.67	0.62	0.56
19	0.87	0.83	0.83	0.83	0.83	0.88	0.88	0.89	0.91	0.97	0.94	0.86	0.94	0.50	0.50	0.50	0.80	0.60	0.63	0.68
20	0.80	0.81	0.81	0.81	0.81	0.89	0.89	0.92	0.93	0.96	0.85	0.78	0.75	0.57	0.57	0.57	0.75	0.63	0.65	0.68
21	0.78	0.88	0.88	0.88	0.88	0.93	0.93	0.94	0.93	0.96	0.75	0.73	0.75	0.67	0.67	0.67	0.67	0.67	0.67	0.67
22	0.86	0.93	0.93	0.93	0.93	0.97	0.97	0.87	0.88	0.99	0.80	0.67	0.75	0.87	0.87	0.87	0.87	0.87	0.87	0.87
23	0.93	0.93	0.93	0.93	0.93	0.94	0.94	0.94	0.88	0.99	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
24	0.81	0.94	0.94	0.94	0.94	0.98	0.98	0.95	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
25	0.83	0.94	0.94	0.94	0.94	0.97	0.97	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
26	0.88	0.95	0.95	0.95	0.95	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
27	0.98	0.98	0.98	0.98	0.98	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
28	0.98	0.98	0.98	0.98	0.98	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
29	0.98	0.98	0.98	0.98	0.98	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
30	0.98	0.98	0.98	0.98	0.98	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99

Table 5.1.1.6.7 (con't). Final estimated proportion of spotted seatrout that is female within one-inch total length classes each year during 1986-2005 in the Northeast region.

Northeast	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
5	0.45	0.45	0.45	0.45	0.43	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41
6	0.45	0.45	0.45	0.45	0.43	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41
7	0.45	0.45	0.45	0.45	0.43	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41
8	0.57	0.25	0.25	0.25	0.33	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41
9	0.46	0.40	0.40	0.40	0.42	0.44	0.44	0.47	0.47	0.47	0.43	0.67	0.63	0.63	0.63	0.63	0.60	0.63	0.63	0.63
10	0.70	0.42	0.42	0.42	0.46	0.50	0.50	0.55	0.55	0.55	0.57	0.60	0.50	0.70	0.70	0.67	0.75	0.70	0.70	0.70
11	0.61	0.40	0.40	0.40	0.48	0.56	0.56	0.64	0.64	0.64	0.57	0.50	0.30	0.70	0.41	0.41	0.41	0.41	0.41	0.41
12	0.48	0.42	0.42	0.42	0.50	0.57	0.57	0.74	0.74	0.74	0.58	0.43	0.21	0.71	0.39	0.39	0.39	0.39	0.39	0.39
13	0.64	0.50	0.50	0.50	0.48	0.45	0.45	0.50	0.59	0.50	0.53	0.56	0.52	0.62	0.40	0.40	0.40	0.40	0.40	0.40
14	0.83	0.62	0.62	0.62	0.69	0.75	0.75	0.75	0.65	0.83	0.58	0.61	0.59	0.60	0.60	0.60	0.60	0.60	0.60	0.60
15	0.86	0.65	0.67	0.67	0.69	0.70	0.70	0.70	0.81	0.72	0.67	0.89	0.85	0.87	0.68	0.68	0.68	0.68	0.68	0.68
16	0.84	0.72	0.77	0.77	0.82	0.88	0.88	0.67	0.86	0.88	0.89	0.94	0.92	0.92	0.79	0.79	0.79	0.79	0.79	0.79
17	0.88	0.94	0.95	0.95	0.84	0.73	0.73	0.63	0.93	0.67	0.80	0.93	0.88	0.94	0.68	0.68	0.68	0.68	0.68	0.68
18	0.98	0.80	0.65	0.65	0.75	0.86	0.86	0.82	0.91	0.90	0.80	0.90	0.89	0.89	0.89	0.88	0.75	0.80	0.83	0.75
19	0.94	0.86	0.88	0.88	0.87	0.86	0.86	0.94	0.88	0.90	0.70	0.94	0.95	0.89	0.93	0.95	0.95	0.95	0.95	0.95
20	0.96	0.93	0.92	0.92	0.92	0.92	0.92	0.94	0.90	0.90	0.84	0.78	0.83	0.90	0.90	0.90	0.90	0.90	0.90	0.67
21	0.96	0.96	0.95	0.95	0.96	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
22	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
23	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
24	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
25	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
26	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
27	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
28	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
29	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
30	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97

Table 5.1.1.6.8. Age-length key data pooling used between years and when necessary between regions.

Female	Northwest	Southwest	Southeast	Northeast
1986	1986	1986	1986	used SE ALK
1987	1987	1987	1987	used SE ALK
1988	1987+1988	1987+1988	1987+1988	used SE ALK
1989	1987+1988	1987+1988	1987+1988	used SE ALK
1990	1992+1993	1988+1992+1993	1992	used SE ALK
1991	1992+1993	1988+1992+1993	1992	used SE ALK
1992	1992+1993	1988+1992+1993	1992	used SE ALK
1993	1993	1992+1993+1994	1993	used SE ALK
1994	1994	1993+94+95+96+97	1994	used SE ALK
1995	1995	1993+94+95+96+97	1995	used SE ALK
1996	1996+1997	1993+94+95+96+97	1996	used SE ALK
1997	1996+1997	1993+94+95+96+97	1997	used SE ALK
1998	1998+1999	1997+1998	1998	used SE ALK
1999	1998+1999	1999	1998+1999+2000	used SE ALK+2000
2000	2000	2000	1998+1999+2000	used SE ALK+2000
2001	2001+2002	2001	2001+02+03+04+05	2001+02+03+04+05
2002	2001+2002	2002	2001+02+03+04+05	2001+02+03+04+05
2003	2002+2003	2003	2001+02+03+04+05	2001+02+03+04+05
2004	2003_2004	2004	2001+02+03+04+05	2001+02+03+04+05
2005	2004+2005	2004+2005	2001+02+03+04+05	2001+02+03+04+05

Male	Northwest	Southwest	Southeast	Northeast
1986	1986	1986	1986	used SE ALK
1987	1987	1987	1987	used SE ALK
1988	1987+1988	1987+1988	1987+1988	used SE ALK
1989	1987+1988	1987+1988	1987+1988	used SE ALK
1990	1993+1994	1992+93+94+95+96	1992+1993	used SE ALK
1991	1993+1994	1992+93+94+95+96	1992+1993	used SE ALK
1992	1993+1994	1992+93+94+95+96	1992+1993	used SE ALK
1993	1993+1994	1992+93+94+95+96	1992+1993	used SE ALK
1994	1994	1992+93+94+95+96	1994	used SE ALK
1995	1995	1992+93+94+95+96	1994+1995	used SE ALK
1996	1996+1997+1998	1992+93+94+95+96	1996	used SE ALK
1997	1996+1997+1998	1997+1998	1997	used SE ALK
1998	1996+1997+1998	1998+1999	1998+1999+2000	used SE ALK
1999	1998+99+2000+01+02+03+05	1998+1999	1998+1999+2000	used SE ALK
2000	1998+99+2000+01+02+03+05	2000	1998+1999+2000	used SE ALK
2001	1998+99+2000+01+02+03+05	2001	1998+99+2000+01+02+03+04+05	used SE ALK
2002	1998+99+2000+01+02+03+05	2002	1998+99+2000+01+02+03+04+05	used SE ALK
2003	1998+99+2000+01+02+03+05	2002+2003	1998+99+2000+01+02+03+04+05	used SE ALK
2004	1998+99+2000+01+02+03+05	2003+2004	1998+99+2000+01+02+03+04+05	used SE ALK
2005	1998+99+2000+01+02+03+05	2003+2004+2005	1998+99+2000+01+02+03+04+05	used SE ALK

Table 5.1.1.6.9. Number of **female** spotted seatrout of determined age sampled within one-inch total length classes each year during 1986-2005 in the Northwest region that were used in each year's age-length key. Sampled were pooled for those taken from fisheries landings and scientific sampling programs.

Northwest	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
5 and less	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	4	1	1	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	4	8	0	0	0	0	0	0	0	0	0	0
8	1	1	1	1	0	0	0	0	14	12	2	2	0	0	0	0	0	0	0	0
9	2	2	2	2	0	0	0	0	35	18	9	9	0	0	0	3	3	3	0	0
10	14	17	17	17	0	0	0	0	68	21	9	9	1	1	0	4	4	3	0	0
11	25	31	31	31	0	0	0	0	78	28	25	25	10	10	12	7	7	4	1	2
12	28	31	31	31	1	1	1	1	76	20	17	17	18	18	18	14	14	8	6	7
13	40	53	54	54	27	27	27	27	70	29	9	9	22	22	19	18	18	14	8	11
14	34	75	76	76	171	171	171	171	250	46	21	21	26	26	61	25	25	26	24	27
15	54	53	59	59	107	107	107	106	201	57	25	25	29	29	78	46	46	67	48	47
16	46	47	55	55	71	71	71	70	116	46	30	30	22	22	70	54	54	57	42	37
17	27	25	30	30	51	51	51	50	102	26	33	33	22	22	45	40	40	40	25	24
18	38	16	20	20	32	32	32	32	90	22	30	30	15	15	29	20	20	25	25	15
19	17	18	23	23	25	25	25	25	66	16	22	22	13	13	33	14	14	18	16	12
20	13	12	19	19	14	14	14	14	49	12	10	10	9	9	12	11	11	12	13	7
21	10	11	14	14	9	9	9	9	47	4	8	8	10	10	11	5	5	9	9	9
22	3	1	5	5	9	9	9	9	31	8	5	5	1	1	5	6	6	8	7	4
23	0	2	3	3	3	3	3	3	17	6	0	0	3	3	3	6	6	3	2	2
24	0	1	1	1	2	2	2	2	16	4	0	0	5	5	1	6	6	3	1	1
25	0	1	1	1	0	0	0	0	11	0	1	1	1	1	1	1	1	2	3	3
26	0	0	1	1	0	0	0	0	2	0	0	0	0	0	1	0	0	0	0	0
27	0	2	2	2	0	0	0	0	1	0	0	0	0	0	0	0	0	2	2	0
28	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
30 and more	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
Totals	352	399	446	446	522	522	522	519	1346	387	257	257	207	207	399	280	280	304	232	208

Table 5.1.1.6.9 (con't). Number of **male** spotted seatrout of determined age sampled within one-inch total length classes each year during 1986-2005 in the Northwest region that were used in each year's age-length key. Sampled were pooled for those taken from fisheries landings and scientific sampling programs.

Northwest	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
5 and less	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	6	6	6	6	6	2	4	4	4	0	0	0	0	0	0	0
8	0	2	2	2	23	23	23	23	23	12	11	11	11	3	3	3	3	3	3	3
9	3	5	5	5	38	38	38	38	38	23	11	11	11	2	2	2	2	2	2	2
10	15	27	27	27	81	81	81	81	81	29	11	11	11	2	2	2	2	2	2	2
11	34	46	47	47	87	87	87	87	87	23	19	19	19	24	24	24	24	24	24	24
12	36	39	39	39	104	104	104	104	104	41	35	35	35	45	45	45	45	45	45	45
13	39	46	47	47	67	67	67	67	61	15	33	33	33	53	53	53	53	53	53	53
14	31	33	33	33	134	134	134	134	77	22	36	36	36	52	52	52	52	52	52	52
15	24	30	32	32	96	96	96	96	52	23	14	14	14	43	43	43	43	43	43	43
16	16	21	22	22	63	63	63	63	44	13	8	8	8	34	34	34	34	34	34	34
17	6	2	2	2	38	38	38	38	22	6	9	9	9	6	6	6	6	6	6	6
18	1	4	11	11	23	23	23	23	12	3	7	7	7	10	10	10	10	10	10	10
19	1	3	3	3	17	17	17	17	11	2	5	5	5	4	4	4	4	4	4	4
20	0	1	2	2	12	12	12	12	8	4	2	2	2	2	2	2	2	2	2	2
21	0	0	1	1	8	8	8	8	5	4	0	0	0	0	0	0	0	0	0	0
22	0	0	0	0	2	2	2	2	2	1	0	0	0	0	0	0	0	0	0	0
23	0	0	0	0	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0
24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1
26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30 and more	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	206	259	273	273	800	800	800	800	634	225	205	205	205	281	281	281	281	281	281	281

Table 5.1.1.6.9 (con't). Number of **female** spotted seatrout of determined age sampled within one-inch total length classes each year during 1986-2005 in the Northwest region that were used in each year's age-length key. Sampled were pooled for those taken from fisheries landings and scientific sampling programs.

Southwest	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
5 and less	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0
7	0	0	0	0	0	0	0	0	1	1	1	1	1	0	1	2	4	0	0	0
8	0	0	0	0	0	0	0	0	7	7	7	7	7	2	1	4	8	0	0	0
9	0	0	0	0	0	0	0	3	15	15	15	15	9	7	13	24	19	1	0	0
10	0	0	0	0	1	1	1	4	15	15	15	15	13	9	20	41	47	5	0	0
11	15	38	39	39	1	1	1	11	22	22	22	22	16	18	37	55	43	2	6	7
12	43	44	48	48	4	4	4	2	5	5	5	5	23	51	93	91	58	19	16	20
13	51	91	99	99	19	19	19	17	29	29	29	29	43	42	109	129	90	26	16	24
14	55	81	90	90	54	54	54	52	31	31	31	31	40	42	113	123	111	48	31	44
15	64	56	60	60	66	66	66	72	43	43	43	43	40	38	83	118	122	92	59	92
16	53	56	62	62	56	56	56	59	37	37	37	37	31	28	47	65	105	85	56	76
17	44	43	46	46	28	28	28	32	30	30	30	30	33	18	47	49	76	76	32	55
18	47	40	40	40	29	29	29	34	31	31	31	31	22	19	23	45	75	49	29	40
19	34	36	36	36	24	24	24	24	17	17	17	17	17	18	20	30	30	39	22	37
20	35	27	27	27	14	14	14	14	23	23	23	23	11	11	20	26	28	13	25	32
21	20	20	20	20	12	12	12	13	16	16	16	16	9	5	10	15	15	9	4	7
22	22	13	13	13	4	4	4	4	15	15	15	15	6	3	5	20	7	9	3	6
23	11	11	11	11	2	2	2	4	11	11	11	11	5	2	5	5	4	6	2	3
24	8	3	3	3	6	6	6	7	12	12	12	12	3	1	2	3	2	3	0	2
25	4	2	2	2	3	3	3	3	2	2	2	2	1	0	1	1	0	2	1	2
26	0	1	1	1	0	0	0	0	2	2	2	2	1	0	1	0	0	0	0	0
27	0	0	0	0	0	0	0	1	2	2	2	2	1	0	0	0	0	0	0	0
28	0	0	0	0	0	0	0	0	1	1	1	1	0	1	0	0	0	0	0	0
29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30 and more	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	506	562	597	597	323	323	323	356	367	367	367	367	332	315	651	846	846	484	302	447

Table 5.1.1.6.9 (con't). Number of **male** spotted seatrout of determined age sampled within one-inch total length classes each year during 1986-2005 in the Northwest region that were used in each year's age-length key. Sampled were pooled for those taken from fisheries landings and scientific sampling programs.

Southwest	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
5 and less	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0
6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0
7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	2	0	0
8	0	0	0	0	0	0	0	0	0	0	0	2	1	1	0	5	7	7	0	0
9	0	0	0	0	6	6	6	6	6	6	6	11	7	7	9	32	23	23	0	0
10	0	1	1	1	5	5	5	5	5	5	5	19	12	12	24	42	52	61	10	10
11	25	38	43	43	13	13	13	13	13	13	13	31	41	41	57	95	108	126	20	21
12	55	66	72	72	4	4	4	4	4	4	4	41	68	68	68	134	175	190	30	34
13	58	71	76	76	24	24	24	24	24	24	24	37	58	58	68	117	94	110	36	41
14	48	58	65	65	67	67	67	67	67	67	67	26	48	48	35	72	64	93	45	58
15	52	36	37	37	87	87	87	87	87	87	87	24	37	37	23	32	55	88	59	71
16	22	18	18	18	76	76	76	76	76	76	76	13	25	25	12	23	47	74	38	49
17	26	19	19	19	48	48	48	48	48	48	48	13	23	23	4	10	13	34	28	30
18	12	9	9	9	52	52	52	52	52	52	52	5	14	14	0	4	11	19	13	13
19	6	5	5	5	38	38	38	38	38	38	38	3	4	4	1	4	7	10	6	6
20	2	1	1	1	31	31	31	31	31	31	31	0	0	0	0	1	3	6	3	3
21	1	1	1	1	25	25	25	25	25	25	25	0	0	0	0	0	0	1	2	2
22	0	2	2	2	18	18	18	18	18	18	18	0	0	0	0	0	0	1	1	1
23	0	1	1	1	11	11	11	11	11	11	11	0	0	0	0	0	0	0	0	0
24	0	0	0	0	15	15	15	15	15	15	15	0	0	0	0	0	0	0	0	0
25	0	0	0	0	5	5	5	5	5	5	5	0	0	0	0	0	0	0	0	0
26	0	0	0	0	2	2	2	2	2	2	2	0	0	0	0	0	0	0	0	0
27	0	0	0	0	2	2	2	2	2	2	2	0	0	0	0	0	0	0	0	0
28	0	0	0	0	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0
29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30 and more	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	307	326	350	350	530	530	530	530	530	530	530	225	338	338	301	572	664	848	291	339

Table 5.1.1.6.9 (con't). Number of **female** spotted seatrout of determined age sampled within one-inch total length classes each year during 1986-2005 in the Southeast region that were used in each year's age-length key. Sampled were pooled for those taken from fisheries landings and scientific sampling programs.

Southeast	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
5 and less	0	0	0	0	0	0	0	0	0	0	0	0	2	2	2	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	1	5	5	5	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	1	2	19	22	22	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	9	14	21	24	24	0	0	0	0	0
9	0	0	0	0	0	0	0	0	1	2	48	46	25	29	29	0	0	0	0	0
10	0	0	0	0	0	0	0	0	2	10	79	62	45	46	46	3	3	3	3	3
11	4	9	9	9	0	0	0	0	2	5	58	50	41	44	44	18	18	18	18	18
12	27	34	38	38	3	3	3	2	1	6	82	40	7	9	9	29	29	29	29	29
13	74	68	75	75	34	34	34	15	17	26	128	62	9	13	13	21	21	21	21	21
14	60	45	51	51	41	41	41	83	60	62	224	84	2	5	5	10	10	10	10	10
15	50	61	63	63	43	43	43	98	67	55	203	172	3	9	9	21	21	21	21	21
16	60	53	57	57	38	38	38	96	67	53	144	127	3	6	6	21	21	21	21	21
17	60	34	37	37	33	33	33	124	55	46	114	91	0	3	3	16	16	16	16	16
18	48	44	53	53	34	34	34	114	57	66	92	70	0	2	2	16	16	16	16	16
19	51	47	51	51	47	47	47	78	74	113	54	56	1	3	3	18	18	18	18	18
20	33	34	35	35	41	41	41	73	67	100	58	54	5	5	5	14	14	14	14	14
21	23	29	30	30	35	35	35	46	44	63	40	37	3	3	3	6	6	6	6	6
22	27	23	25	25	17	17	17	41	20	38	37	32	2	5	5	5	5	5	5	5
23	12	19	19	19	16	16	16	32	12	32	30	25	5	8	8	6	6	6	6	6
24	17	15	15	15	9	9	9	27	10	11	10	16	4	8	8	5	5	5	5	5
25	10	12	13	13	6	6	6	18	7	12	10	1	0	4	4	0	0	0	0	0
26	7	11	13	13	6	6	6	4	2	3	3	3	1	6	6	1	1	1	1	1
27	11	6	8	8	6	6	6	1	2	2	0	1	0	3	3	1	1	1	1	1
28	6	7	7	7	6	6	6	1	1	1	1	0	0	0	0	0	0	0	0	0
29	7	3	3	3	0	0	0	0	0	0	1	0	0	1	1	1	1	1	1	1
30 and more	3	6	6	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	590	560	608	608	415	415	415	853	568	706	1426	1046	203	265	265	212	212	212	212	212

Table 5.1.1.6.9 (con't). Number of **male** spotted seatrout of determined age sampled within one-inch total length classes each year during 1986-2005 in the Southeast region that were used in each year's age-length key. Sampled were pooled for those taken from fisheries landings and scientific sampling programs.

Southeast	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
5 and less	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	1	0	5	5	5	5	5	5	5	5
7	0	0	0	0	0	0	0	0	0	0	0	1	25	25	25	25	25	25	25	25
8	0	0	0	0	0	0	0	0	1	1	4	1	35	35	35	39	39	39	39	39
9	0	0	0	0	0	0	0	0	3	4	11	8	47	47	47	47	47	47	47	47
10	0	0	0	0	0	0	0	0	4	7	29	13	42	42	42	44	44	44	44	44
11	2	3	4	4	0	0	0	0	2	2	43	6	21	21	21	28	28	28	28	30
12	35	28	31	31	2	2	2	2	0	3	53	7	4	4	4	21	21	21	21	27
13	61	60	63	63	34	34	34	34	24	33	56	38	9	9	9	22	22	22	22	23
14	55	47	49	49	77	77	77	77	62	80	63	43	5	5	5	8	8	8	8	11
15	43	33	34	34	53	53	53	53	59	68	74	54	2	2	2	10	10	10	10	11
16	36	37	37	37	36	36	36	36	33	38	40	28	2	2	2	10	10	10	10	10
17	32	23	24	24	34	34	34	34	23	29	21	14	1	1	1	7	7	7	7	7
18	18	25	26	26	19	19	19	19	11	20	9	9	1	1	1	12	12	12	12	12
19	12	14	14	14	18	18	18	18	13	21	7	5	0	0	0	2	2	2	2	3
20	9	11	11	11	19	19	19	19	6	10	9	3	2	2	2	3	3	3	3	3
21	9	6	6	6	10	10	10	10	3	7	5	4	1	1	1	1	1	1	1	1
22	5	2	2	2	8	8	8	8	0	0	1	2	0	0	0	0	0	0	0	0
23	1	2	2	2	5	5	5	5	2	3	1	0	0	0	0	0	0	0	0	0
24	3	1	1	1	3	3	3	3	0	0	0	1	0	0	0	0	0	0	0	0
25	2	1	2	2	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0
26	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30 and more	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	324	294	307	307	319	319	319	319	246	326	427	237	202	202	202	284	284	284	284	298

Table 5.1.1.6.9 (con't). Number of **female** spotted seatrout of determined age sampled within one-inch total length classes each year during 1986-2005 in the Northeast region that were used in each year's age-length key. Sampled were pooled for those taken from fisheries landings and scientific sampling programs.

Northeast	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
5 and less	0	0	0	0	0	0	0	0	0	0	0	0	2	2	2	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0	1	5	5	5	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	1	2	19	22	22	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	9	14	21	24	24	0	0	0	0	0
9	0	0	0	0	0	0	0	0	1	2	48	46	25	29	29	0	0	0	0	0
10	0	0	0	0	0	0	0	0	2	10	79	62	45	46	46	2	2	2	2	2
11	4	9	9	9	0	0	0	0	2	5	58	50	41	44	44	19	19	19	19	19
12	27	34	38	38	3	3	3	2	1	6	82	40	7	10	10	24	24	24	24	24
13	74	68	75	75	34	34	34	15	17	26	128	62	9	13	13	27	27	27	27	27
14	60	45	51	51	41	41	41	83	60	62	224	84	2	6	6	28	28	28	28	28
15	50	61	63	63	43	43	43	98	67	55	203	172	3	9	9	17	17	17	17	17
16	60	53	57	57	38	38	38	96	67	53	144	127	3	6	6	15	15	15	15	15
17	60	34	37	37	33	33	33	124	55	46	114	91	0	3	3	13	13	13	13	13
18	48	44	53	53	34	34	34	114	57	66	92	70	0	2	2	8	8	8	8	8
19	51	47	51	51	47	47	47	78	74	113	54	56	1	3	3	1	1	1	1	1
20	33	34	35	35	41	41	41	73	67	100	58	54	5	5	5	3	3	3	3	3
21	23	29	30	30	35	35	35	46	44	63	40	37	3	3	3	0	0	0	0	0
22	27	23	25	25	17	17	17	41	20	38	37	32	2	5	5	1	1	1	1	1
23	12	19	19	19	16	16	16	32	12	32	30	25	5	8	8	3	3	3	3	3
24	17	15	15	15	9	9	9	27	10	11	10	16	4	8	8	0	0	0	0	0
25	10	12	13	13	6	6	6	18	7	12	10	1	0	4	4	2	2	2	2	2
26	7	11	13	13	6	6	6	4	2	3	3	3	1	6	6	1	1	1	1	1
27	11	6	8	8	6	6	6	1	2	2	0	1	0	3	3	0	0	0	0	0
28	6	7	7	7	6	6	6	1	1	1	1	0	0	0	0	0	0	0	0	0
29	7	3	3	3	0	0	0	0	0	0	1	0	0	1	1	0	0	0	0	0
30 and more	3	6	6	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	590	560	608	608	415	415	415	853	568	706	1426	1046	203	267	267	164	164	164	164	164

Table 5.1.1.6.9 (con't). Number of **male** spotted seatrout of determined age sampled within one-inch total length classes each year during 1986-2005 in the Northeast region that were used in each year's age-length key. Sampled were pooled for those taken from fisheries landings and scientific sampling programs.

Northeast	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
5 and less	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	1	0	5	5	5	5	5	5	5	5
7	0	0	0	0	0	0	0	0	0	0	0	1	25	25	25	25	25	25	25	25
8	0	0	0	0	0	0	0	0	1	1	4	1	35	35	35	39	39	39	39	39
9	0	0	0	0	0	0	0	0	3	4	11	8	47	47	47	47	47	47	47	47
10	0	0	0	0	0	0	0	0	4	7	29	13	42	42	42	44	44	44	44	44
11	2	3	4	4	0	0	0	0	2	2	43	6	21	21	21	28	28	28	28	30
12	35	28	31	31	2	2	2	2	0	3	53	7	4	4	4	21	21	21	21	27
13	61	60	63	63	34	34	34	34	24	33	56	38	9	9	9	22	22	22	22	23
14	55	47	49	49	77	77	77	77	62	80	63	43	5	5	5	8	8	8	8	11
15	43	33	34	34	53	53	53	53	59	68	74	54	2	2	2	10	10	10	10	11
16	36	37	37	37	36	36	36	36	33	38	40	28	2	2	2	10	10	10	10	10
17	32	23	24	24	34	34	34	34	23	29	21	14	1	1	1	7	7	7	7	7
18	18	25	26	26	19	19	19	19	11	20	9	9	1	1	1	12	12	12	12	12
19	12	14	14	14	18	18	18	18	13	21	7	5	0	0	0	2	2	2	2	3
20	9	11	11	11	19	19	19	19	6	10	9	3	2	2	2	3	3	3	3	3
21	9	6	6	6	10	10	10	10	3	7	5	4	1	1	1	1	1	1	1	1
22	5	2	2	2	8	8	8	8	0	0	1	2	0	0	0	0	0	0	0	0
23	1	2	2	2	5	5	5	5	2	3	1	0	0	0	0	0	0	0	0	0
24	3	1	1	1	3	3	3	3	0	0	0	1	0	0	0	0	0	0	0	0
25	2	1	2	2	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0
26	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
27	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30 and more	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	324	294	307	307	319	319	319	319	246	326	427	237	202	202	202	284	284	284	284	298

Table 5.1.2.1. Reported commercial landings in pounds and estimated numbers of spotted seatrout made on the gulf and Atlantic coasts of Florida during 1950-2005. Regional landings were not immediately available for the landings prior to 1978. Landings in pounds from 1950-1985 come the NMFS at <http://www.st.nmfs.gov/st1/commercial/index.html> and landings from 1986 onward are from the FWC's Marine Resources Information system of "trip ticket" program through edited batch 913.

In Pounds							
	gulf	Atlantic	Florida		gulf	Atlantic	Florida
1950	3,032,900	1,458,000	4,490,900	1978	2,015,559	402,954	2,418,513
1951	2,934,500	1,236,800	4,171,300	1979	2,085,718	475,809	2,561,527
1952	3,266,300	1,487,600	4,753,900	1980	1,955,735	558,817	2,514,552
1953	2,485,700	1,232,500	3,718,200	1981	1,972,651	736,026	2,708,677
1954	2,224,200	1,226,500	3,450,700	1982	2,009,364	732,278	2,741,642
1955	2,005,800	920,800	2,926,600	1983	1,870,313	481,535	2,351,848
1956	2,023,300	1,068,800	3,092,100	1984	1,550,898	367,541	1,918,439
1957	2,517,300	886,300	3,403,600	1985	1,131,045	369,756	1,500,801
1958	2,927,700	762,900	3,690,600	1986	1,263,669	304,523	1,568,192
1959	2,771,200	768,200	3,539,400	1987	1,347,647	317,300	1,664,947
1960	2,764,600	889,800	3,654,400	1988	1,362,966	315,947	1,678,913
1961	2,380,800	749,500	3,130,300	1989	1,002,257	362,082	1,364,339
1962	2,627,600	755,700	3,383,300	1990	768,385	236,466	1,004,851
1963	2,571,400	801,300	3,372,700	1991	825,785	225,573	1,051,358
1964	2,799,300	764,500	3,563,800	1992	665,204	259,095	924,299
1965	3,369,700	682,100	4,051,800	1993	548,321	224,072	772,393
1966	3,173,800	724,000	3,897,800	1994	643,509	247,651	891,160
1967	2,636,700	599,200	3,235,900	1995	353,012	184,121	537,133
1968	3,065,200	638,200	3,703,400	1996	22,804	48,254	71,058
1969	2,418,700	679,600	3,098,300	1997	32,293	57,316	89,609
1970	2,642,900	711,200	3,354,100	1998	40,704	41,556	82,260
1971	1,961,100	494,900	2,456,000	1999	21,862	61,802	83,664
1972	2,140,200	634,100	2,774,300	2000	20,897	45,392	66,289
1973	2,226,200	665,800	2,892,000	2001	17,819	30,234	48,053
1974	2,259,900	658,500	2,918,400	2002	17,712	44,640	62,352
1975	2,169,400	535,100	2,704,500	2003	26,522	27,168	53,690
1976	2,282,300	531,700	2,814,000	2004	10,338	29,615	39,952
1977	1,931,900	493,900	2,425,800	2005	19,865	36,777	56,641

Table 5.1.2.1 (con't). Reported commercial landings in pounds and estimated numbers of spotted seatrout made on the gulf and Atlantic coasts of Florida during 1950-2005. Regional landings were not immediately available for the landings prior to 1978. Landings in pounds from 1950-1985 come from the NMFS at <http://www.st.nmfs.gov/st1/commercial/index.html> and landings from 1986 onward are from the FWC's Marine Resources Information system of "trip ticket" program through edited batch 913.

In Numbers							
	gulf	Atlantic	Florida		gulf	Atlantic	Florida
1950	2,482,391	853,803	3,336,194	1978	1,632,308	236,186	1,868,494
1951	2,401,853	724,269	3,126,122	1979	1,685,843	278,721	1,964,564
1952	2,673,427	871,137	3,544,564	1980	1,561,801	327,239	1,889,040
1953	2,034,515	721,751	2,756,266	1981	1,573,852	430,744	2,004,596
1954	1,820,480	718,237	2,538,717	1982	1,621,544	428,996	2,050,540
1955	1,641,723	539,220	2,180,943	1983	1,493,269	282,060	1,775,329
1956	1,656,046	625,888	2,281,934	1984	1,268,353	215,310	1,483,663
1957	2,060,380	519,016	2,579,396	1985	940,246	216,520	1,156,766
1958	2,396,286	446,753	2,843,039	1986	1,041,700	178,461	1,220,161
1959	2,268,193	449,857	2,718,050	1987	993,918	182,752	1,176,670
1960	2,262,791	521,066	2,783,857	1988	1,040,331	171,290	1,211,621
1961	1,908,731	438,457	2,347,188	1989	761,599	196,232	957,831
1962	2,142,603	442,081	2,584,684	1990	542,857	161,828	704,685
1963	2,109,314	468,887	2,578,201	1991	556,176	114,665	670,841
1964	2,291,120	447,840	2,738,960	1992	415,514	128,469	543,983
1965	2,751,679	399,436	3,151,115	1993	323,163	110,317	433,480
1966	2,544,386	423,855	2,968,241	1994	351,598	118,617	470,215
1967	2,111,048	350,634	2,461,682	1995	202,401	96,976	299,377
1968	2,456,274	373,399	2,829,673	1996	13,630	28,804	42,434
1969	1,952,065	397,815	2,349,880	1997	19,834	32,753	52,587
1970	2,175,159	416,224	2,591,383	1998	25,246	22,952	48,198
1971	1,604,783	289,748	1,894,531	1999	14,626	35,583	50,209
1972	1,766,557	371,523	2,138,080	2000	13,086	26,666	39,752
1973	1,807,522	390,467	2,197,989	2001	10,491	17,300	27,791
1974	1,823,155	385,752	2,208,907	2002	10,643	25,523	36,166
1975	1,784,737	312,297	2,097,034	2003	15,869	14,657	30,526
1976	1,862,706	311,525	2,174,231	2004	6,995	18,481	25,476
1977	1,573,948	289,252	1,863,200	2005	13,258	23,402	36,660

Table 5.1.2.2. Estimated sex-specific and total commercial landings (numbers) of spotted seatrout made in the Northwest region on the gulf of Florida during 1950-2005.

	Female	Male	Total		Female	Male	Total
1950	745,863	267,527	1,013,390	1978	433,259	155,402	588,661
1951	721,664	258,848	980,512	1979	436,563	156,587	593,150
1952	803,261	288,115	1,091,377	1980	341,286	122,413	463,699
1953	611,293	219,260	830,553	1981	339,008	121,596	460,604
1954	546,984	196,193	743,177	1982	424,297	134,551	558,848
1955	493,274	176,929	670,203	1983	335,507	106,395	441,902
1956	497,578	178,472	676,050	1984	389,601	123,548	513,149
1957	619,064	222,047	841,112	1985	340,573	108,001	448,574
1958	719,992	258,248	978,239	1986	347,982	110,325	458,307
1959	681,504	244,443	925,948	1987	344,059	186,778	530,837
1960	679,881	243,861	923,742	1988	336,950	175,054	512,004
1961	441,667	158,418	600,085	1989	238,804	124,065	362,869
1962	617,247	221,396	838,643	1990	184,642	77,364	262,006
1963	700,707	251,331	952,037	1991	217,073	71,823	288,897
1964	689,879	247,447	937,326	1992	140,260	39,334	179,594
1965	805,827	289,036	1,094,863	1993	129,654	52,100	181,754
1966	589,329	211,382	800,711	1994	181,938	41,260	223,198
1967	479,140	171,859	650,999	1995	69,733	16,365	86,098
1968	565,297	202,762	768,058	1996	3,500	1,079	4,579
1969	495,801	177,835	673,636	1997	3,338	574	3,911
1970	604,391	216,784	821,175	1998	5,016	953	5,969
1971	481,644	172,757	654,401	1999	4,131	606	4,737
1972	579,713	207,932	787,645	2000	3,946	973	4,919
1973	495,183	177,613	672,796	2001	5,230	1,070	6,300
1974	512,732	183,908	696,640	2002	4,279	1,009	5,288
1975	566,160	203,071	769,231	2003	6,494	1,317	7,811
1976	542,052	194,424	736,476	2004	2,845	1,119	3,964
1977	449,533	161,240	610,773	2005	3,109	1,245	4,355

Table 5.1.2.2 (con't). Estimated sex-specific and total commercial landings (numbers) of spotted seatrout made in the Southwest region on the gulf of Florida during 1950-2005.

	Female	Male	Total		Female	Male	Total
1950	1,074,971	394,030	1,469,001	1978	763,709	279,938	1,043,647
1951	1,040,094	381,246	1,421,341	1979	799,599	293,093	1,092,693
1952	1,157,696	424,353	1,582,050	1980	803,558	294,544	1,098,102
1953	881,023	322,939	1,203,962	1981	814,641	298,607	1,113,248
1954	788,338	288,965	1,077,303	1982	764,035	298,661	1,062,696
1955	710,929	260,591	971,520	1983	755,889	295,477	1,051,367
1956	717,132	262,865	979,996	1984	542,961	212,244	755,204
1957	892,223	327,044	1,219,268	1985	353,492	138,180	491,672
1958	1,037,684	380,363	1,418,047	1986	419,436	163,957	583,393
1959	982,215	360,031	1,342,245	1987	348,046	115,035	463,081
1960	979,875	359,173	1,339,049	1988	398,299	130,028	528,327
1961	957,628	351,018	1,308,646	1989	300,598	98,132	398,730
1962	954,199	349,761	1,303,960	1990	181,853	98,998	280,851
1963	846,861	310,417	1,157,277	1991	183,963	83,316	267,279
1964	990,665	363,128	1,353,794	1992	175,247	60,673	235,920
1965	1,212,408	444,408	1,656,816	1993	108,685	32,724	141,409
1966	1,275,969	467,706	1,743,675	1994	103,464	24,936	128,400
1967	1,068,419	391,629	1,460,049	1995	87,911	28,391	116,303
1968	1,235,385	452,830	1,688,216	1996	7,184	1,867	9,051
1969	935,516	342,913	1,278,429	1997	10,956	4,968	15,923
1970	990,804	363,179	1,353,984	1998	14,003	5,275	19,277
1971	695,461	254,921	950,382	1999	5,170	4,720	9,889
1972	716,339	262,574	978,912	2000	6,076	2,092	8,167
1973	830,358	304,368	1,134,726	2001	3,132	1,059	4,191
1974	824,350	302,165	1,126,515	2002	4,023	1,332	5,355
1975	743,117	272,389	1,015,506	2003	6,175	1,883	8,058
1976	824,141	302,089	1,126,230	2004	2,273	758	3,031
1977	704,822	258,352	963,175	2005	5,984	2,919	8,903

Table 5.1.2.2 (con't). Estimated sex-specific and total commercial landings (numbers) of spotted seatrout made in the Southeast region on the Atlantic of Florida during 1950-2005.

	Female	Male	Total		Female	Male	Total
1950	582,960	174,600	757,560	1978	151,614	45,409	197,023
1951	494,516	148,111	642,627	1979	186,389	55,824	242,213
1952	594,795	178,145	772,940	1980	223,584	66,965	290,549
1953	492,797	147,596	640,393	1981	306,215	91,713	397,929
1954	490,398	146,877	637,275	1982	259,360	111,183	370,543
1955	368,168	110,269	478,437	1983	172,196	73,818	246,014
1956	427,344	127,992	555,336	1984	130,548	55,964	186,511
1957	354,374	106,137	460,511	1985	134,845	57,806	192,652
1958	305,034	91,360	396,394	1986	105,481	45,218	150,699
1959	307,154	91,994	399,148	1987	106,249	41,244	147,494
1960	355,774	106,556	462,330	1988	100,319	38,946	139,264
1961	322,648	96,635	419,284	1989	117,955	45,792	163,748
1962	326,767	97,869	424,636	1990	95,177	32,379	127,556
1963	335,877	100,597	436,474	1991	69,932	13,052	82,984
1964	300,239	89,923	390,163	1992	86,381	18,125	104,506
1965	271,870	81,427	353,296	1993	68,680	15,439	84,119
1966	293,560	87,923	381,482	1994	75,074	18,898	93,971
1967	248,930	74,556	323,486	1995	59,698	10,839	70,537
1968	266,085	79,694	345,779	1996	16,710	7,193	23,903
1969	281,182	84,216	365,398	1997	19,865	9,007	28,872
1970	290,931	87,136	378,067	1998	15,286	5,620	20,907
1971	202,058	60,517	262,575	1999	23,014	9,710	32,724
1972	244,023	73,086	317,109	2000	16,514	7,213	23,727
1973	244,554	73,245	317,799	2001	8,182	3,458	11,640
1974	258,412	77,396	335,808	2002	13,434	9,770	23,203
1975	208,396	62,416	270,812	2003	8,054	3,842	11,896
1976	205,694	61,607	267,300	2004	10,470	5,869	16,339
1977	193,704	58,016	251,720	2005	11,495	7,026	18,521

Table 5.1.2.2 (con't). Estimated sex-specific and total commercial landings (numbers) of spotted seatrout made in the Northeast region on the Atlantic of Florida during 1950-2005.

	Female	Male	Total		Female	Male	Total
1950	78,865	17,378	96,243	1978	32,092	7,071	39,163
1951	66,900	14,742	81,642	1979	29,916	6,592	36,508
1952	80,466	17,731	98,197	1980	30,065	6,625	36,690
1953	66,668	14,690	81,358	1981	26,890	5,925	32,815
1954	66,343	14,619	80,962	1982	47,409	11,044	58,453
1955	49,807	10,975	60,783	1983	29,236	6,810	36,046
1956	57,813	12,739	70,552	1984	23,358	5,441	28,799
1957	47,941	10,564	58,505	1985	19,358	4,509	23,868
1958	41,266	9,093	50,359	1986	22,517	5,245	27,762
1959	41,553	9,156	50,709	1987	24,365	10,893	35,258
1960	48,131	10,606	58,736	1988	21,705	10,321	32,026
1961	15,711	3,462	19,173	1989	22,015	10,469	32,484
1962	14,295	3,150	17,445	1990	24,010	10,262	34,272
1963	26,560	5,853	32,413	1991	23,161	8,520	31,681
1964	47,263	10,414	57,677	1992	18,163	5,800	23,963
1965	37,809	8,331	46,140	1993	18,829	7,369	26,198
1966	34,722	7,651	42,373	1994	19,132	5,514	24,646
1967	22,246	4,902	27,148	1995	19,634	6,805	26,439
1968	22,632	4,987	27,620	1996	3,115	1,786	4,901
1969	26,564	5,853	32,417	1997	2,815	1,067	3,881
1970	31,267	6,890	38,157	1998	1,376	669	2,045
1971	22,266	4,906	27,173	1999	2,063	795	2,859
1972	44,588	9,825	54,414	2000	1,711	1,228	2,939
1973	59,547	13,121	72,668	2001	3,444	2,216	5,660
1974	40,926	9,018	49,944	2002	1,413	907	2,320
1975	33,994	7,491	41,485	2003	1,686	1,075	2,761
1976	36,239	7,985	44,225	2004	1,304	838	2,142
1977	30,755	6,777	37,532	2005	2,973	1,908	4,881

Table 5.1.2.3. Gear-category-specific and total commercial landings (pounds) of spotted seatrout made in the Northwest and Southwest regions of the gulf coast of Florida during 1992-2005. The 'Unknown' category had no gear associated with the landings. Total landings may include small amounts that were landed from catches made using minor gear types.

Northwest	Cast Net	Gill Net	Hook&L	Haul seine	Trammel	Trawl	Trap	Unknown	Total
1992	7	171,052	25,683	440	81,870	3,091	129	29967	327,136
1993	107	211,807	25,161	191	58,812	1,367	1775	12918	319,551
1994	10	236,566	20,113	49	35,226	546	1686	3694	411,314
1995	5,480	92,281	13,613	2,595	6,472	742	629	946	166,803
1996	2,177	17	3,412	2,863		11	28		8,508
1997	806	0	5,462	486		61	26	94	6,935
1998	1,151	7	6,958	2,228		11	109	34	10,506
1999	632	131	5,758	155	10	0	4	26	6,706
2000	1,674	47	5,099	235		15	26	17	7,131
2001	2,318	6	8,205	72		4	112		10,732
2002	1,936	150	6,198	31		1	2		8,330
2003	3,355	0	8,573	56		0	108		12,091
2004	1,194	0	3,326	215		0	326		5,073
2005	2,839	0	3,728	128		0	96.5		6,792

Southwest	Cast Net	Gill Net	Hook& L	Haul seine	Trammel	Trawl	Trap	Unknown	Total
1992	372	224,164	42,112	1,128	37,960	208	21	32,103	338,068
1993	1,397	146,917	46,475	2,752	24,442	344	101	6,342	228,770
1994	1,330	141,559	43,921	2,883	40,102	146	454	1,800	232,195
1995	5,223	100,703	55,142	2,130	20,010	39	612	2,350	186,209
1996	1,691	45	12,413	0	0	0	61	86	14,296
1997	4,973	273	19,826	9	0	0	142	135	25,358
1998	6,417	183	23,250	133	0	0	173	42	30,198
1999	1,998	0	12,621	484	0	0	53	0	15,156
2000	3,226	83	10,288	5	0	0	39	8	13,767
2001	2,072	0	4,971	3	0	0	16	0	7,087
2002	2,479	0	6,843	0	0	0	61	0	9,382
2003	6,192	0	8,086	18	0	0	59	0	14,431
2004	2,444	0	2,653	0	0	0	5	0	5,265
2005	3,339	0	9,653	24	0	0	45	0	13,072

Table 5.1.2.3 (con't). Gear-category-specific and total commercial landings (pounds) of spotted seatrout made in the Southeast and Northeast regions of the Atlantic coast of Florida during 1992-2005. The 'Unknown' category had no gear associated with the landings. Total landings may include small amounts that were landed from catches made using minor gear types.

Southeast	Cast Net	Gill Net	Hook&L	Haul seine	Trammel	Trawl	Trap	Unknown	Total
1992	91	113,674	50,875	38	2,487	65	529	47,273	215,032
1993	245	120,219	46,042	0	2,012	6	702	8,956	178,182
1994	416	151,039	47,749	0	1,063	0	15	855	201,137
1995	3,611	104,858	30,321	184	672	387	180	2,426	142,639
1996	1,440	397	36,879	10	0	0	0	3,182	41,919
1997	3,029	18	48,479	0	0	0	71	631	52,228
1998	1,559	14	37,120	0	0	0	80	212	38,985
1999	1,687	0	56,182	28	0	0	40	174	58,111
2000	3,788	0	37,840	0	0	0	0	58	41,686
2001	1,744	2	21,122	0	0	0	8	0	22,876
2002	1,790	0	39,647	0	0	0	0	0	41,617
2003	463	0	23,096	0	0	0	0	0	23,559
2004	1,500	0	25,315	0	0	4	3	0	26,827
2005	1,319	0	29,071	1	0	0	0	0	30,408

Northeast	Cast Net	Gill Net	Hook& L	Haul seine	Trammel	Trawl	Trap	Unknown	Total
1992	10	25,340	13,120	1,680	216	232	52	3,413	44,063
1993	11	28,864	12,973	1,702	226	379	266	1,469	45,890
1994	56	32,168	11,981	1,267	20	290	102	630	46,514
1995	299	18,643	20,609	1,076	0	352	322	181	41,482
1996	60	0	6,257	0	0	16	2	0	6,335
1997	133	6	4,949	0	0	0	0	0	5,088
1998	36	0	2,472	0	0	32	0	31	2,571
1999	55	0	3,294	0	0	0	13	329	3,691
2000	6	0	3,582	73	0	45	0	0	3,706
2001	2	0	7,356	0	0	0	0	0	7,358
2002	22	0	3,001	0	0	0	0	0	3,023
2003	10	0	3,537	62	0	0	0	0	3,609
2004	10	0	2,778	0	0	0	0	0	2,788
2005	81	0	6,288	0	0	0	0	0	6,369

Table 5.1.2.4. Gear-category-specific and total estimated commercial landings (numbers) of spotted seatrout made in the Northwest and Southwest regions of the gulf coast of Florida during 1992-2005. The 'Unknown' category had no gear associated with the landings. Total landings may include additional small amounts that were landed from catches made using minor gear types.

Northwest	Cast Net	Gill Net	Hook&L	Haul seine	Trammel	Trawl	Trap	Unknown	Total
1992	4	98,811	13,461	255	40,642	9,570	399	16,452	179,594
1993	58	122,249	13,187	110	29,074	4,233	5,496	7,348	181,754
1994	5	139,457	9,531	28	65,261	1,691	5,220	2,005	223,198
1995	2,955	48,279	6,451	1,501	22,178	2,297	1,948	488	86,098
1996	1,174	11	1,617	1,656	0	34	87	0	4,579
1997	435	0	2,873	281	0	189	81	53	3,911
1998	621	5	3,660	1,289	4	34	337	19	5,969
1999	341	84	4,191	90	0	0	12	18	4,737
2000	902	30	3,712	136	0	46	81	12	4,919
2001	1,250	4	4,647	42	0	11	347	0	6,300
2002	1,044	96	4,120	18	0	3	6	0	5,288
2003	1,809	0	5,636	32	0	0	334	0	7,811
2004	644	0	2,187	124	0	0	1,009	0	3,964
2005	1,531	0	2,451	74	0	0	299	0	4,355

Southwest	Cast Net	Gill Net	Hook& L	Haul seine	Trammel	Trawl	Trap	Unknown	Total
1992	201	155,004	34,332	635	22,637	644	65	22,403	235,920
1993	753	79,464	37,957	1,550	16,388	1,065	313	3,920	141,409
1994	717	60,448	35,871	1,623	26,887	452	1,406	995	128,400
1995	2,816	50,352	45,036	1,199	13,416	121	1,895	1,468	116,303
1996	912	23	7,874	0	0	0	189	54	9,051
1997	2,681	137	12,576	5	0	0	440	85	15,923
1998	3,460	92	15,088	75	0	0	536	27	19,277
1999	1,077	0	8,376	273	0	0	164	0	9,889
2000	1,740	42	6,259	3	0	0	119	5	8,167
2001	1,117	0	3,024	2	0	0	48	0	4,191
2002	1,337	0	3,831	0	0	0	188	0	5,355
2003	3,339	0	4,527	10	0	0	183	0	8,058
2004	1,318	0	1,697	0	0	0	16	0	3,031
2005	1,800	0	6,950	13	0	0	139	0	8,903

Table 5.1.2.4 (con't). Gear-category-specific and total estimated commercial landings (numbers) of spotted seatrout made in the Southeast and Northeast regions of the Atlantic coast of Florida during 1992-2005. The 'Unknown' category had no gear associated with the landings. Total landings may include small amounts that were landed from catches made using minor gear types.

Southeast	Cast Net	Gill Net	Hook&L	Haul seine	Trammel	Trawl	Trap	Unknown	Total
1992	49	45,409	33,507	21	706	201	1,638	22,975	104,506
1993	132	51,426	25,499	0	642	19	2,174	4,228	84,119
1994	224	61,662	31,300	0	339	0	46	399	93,971
1995	1,947	42,840	22,476	104	215	1,198	557	1,200	70,537
1996	776	162	21,144	6	0	0	0	1,815	23,903
1997	1,633	7	26,663	0	0	0	220	349	28,872
1998	841	6	19,699	0	0	0	248	114	20,907
1999	910	0	31,577	16	0	0	124	98	32,724
2000	2,043	0	21,652	0	0	0	0	33	23,727
2001	941	1	10,674	0	0	0	25	0	11,640
2002	965	0	22,238	0	0	0	0	0	23,203
2003	249	0	11,646	0	0	0	0	0	11,896
2004	809	0	15,508	0	0	12	9	0	16,339
2005	711	0	17,809	1	0	0	0	0	18,521

Northeast	Cast Net	Gill Net	Hook& L	Haul seine	Trammel	Trawl	Trap	Unknown	Total
1992	5	10,123	10,092	946	61	718	161	1,856	23,963
1993	6	12,347	9,979	958	72	1,173	824	839	26,198
1994	30	13,133	9,216	713	6	898	316	334	24,646
1995	161	7,617	15,853	606	0	1,090	997	115	26,439
1996	32	0	4,813	0	0	50	6	0	4,901
1997	72	2	3,807	0	0	0	0	0	3,881
1998	19	0	1,902	0	0	99	0	25	2,045
1999	30	0	2,534	0	0	0	40	255	2,859
2000	3	0	2,756	41	0	139	0	0	2,939
2001	1	0	5,658	0	0	0	0	0	5,660
2002	12	0	2,309	0	0	0	0	0	2,320
2003	5	0	2,721	35	0	0	0	0	2,761
2004	5	0	2,137	0	0	0	0	0	2,142
2005	44	0	4,837	0	0	0	0	0	4,881

Table 5.1.2.5. Estimated total-length (inches) frequencies of the annual commercial landings made in the **Northwest** region of the gulf coast of Florida during 1986-2005.

	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
5	8,113	9,396	9,063	6,423	4,638	5,114	7,317	6,759	4,649	2,846	81	182	249	8	85	238	6	223	673	199
6	2,704	3,132	3,021	2,141	1,546	1,705	2,439	2,253	1,550	949	27	61	83	3	28	79	2	74	224	66
7	1,352	1,566	1,511	1,071	773	852	1,219	1,126	775	474	13	30	41	1	14	40	1	37	112	33
8	167	588	549	389	281	310	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	836	5,260	2,641	1,872	910	516	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	4,849	26,119	14,174	10,045	5,266	3,615	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	20,777	45,201	31,841	22,566	13,509	7,005	147	347	0	156	62	23	33	21	49	66	59	95	34	81
12	66,786	39,745	50,321	35,664	20,266	6,659	1,180	1,032	215	0	0	0	0	0	0	0	0	0	0	0
13	69,303	69,192	63,816	45,228	26,227	35,984	7,880	12,318	9,071	1,536	110	23	33	18	48	66	55	95	34	81
14	61,989	68,221	62,885	44,568	29,114	31,272	16,382	25,882	39,103	9,914	343	200	356	349	376	308	332	485	194	296
15	61,007	56,982	60,277	42,720	31,401	31,993	23,772	28,136	36,462	11,183	698	607	897	1,474	1,362	1,300	1,151	1,555	612	763
16	53,360	52,365	54,843	38,868	33,686	35,649	28,128	31,066	37,490	14,494	731	541	923	1,274	1,197	1,132	1,792	2,433	966	1,152
17	34,181	45,538	40,791	28,909	29,480	35,803	27,387	25,803	28,921	12,089	970	563	897	548	673	1,092	793	1,160	451	750
18	30,121	27,504	35,603	25,232	24,438	26,420	22,279	18,195	22,826	6,867	615	532	802	552	557	826	261	389	160	255
19	15,669	31,322	26,932	19,087	14,592	15,158	10,398	11,815	16,680	8,557	323	399	585	315	280	649	443	586	237	260
20	14,785	13,844	18,813	13,333	8,999	15,471	10,727	6,606	9,664	4,838	301	403	544	142	189	391	114	191	71	163
21	7,580	18,178	16,760	11,878	8,191	13,586	6,539	4,583	7,789	3,486	167	185	279	25	55	68	204	291	115	168
22	2,192	10,915	10,915	7,736	4,824	11,362	4,747	2,151	2,727	2,347	56	4	19	1	2	44	0	0	2	1
23	20	3,788	3,204	2,270	1,647	4,818	2,924	1,552	2,703	2,709	49	83	133	3	4	1	1	1	4	2
24	2,517	1,980	2,318	1,643	1,720	4,080	2,548	1,412	1,679	2,009	32	75	94	0	0	0	72	194	75	85
25	0	0	0	0	29	1,463	1,158	463	732	758	0	0	0	0	0	0	0	0	0	0
26	0	0	863	612	249	63	1,311	256	163	886	0	0	0	0	0	0	0	0	0	0
27	0	0	0	0	0	0	370	0	0	0	0	0	0	0	0	0	0	0	0	0
28	0	0	863	612	221	0	740	0	0	0	0	0	0	0	0	0	0	0	0	0
29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Table 5.1.2.5 (con't). Estimated total-length (inches) frequencies of the annual commercial landings made in the **Southwest** region of the gulf coast of Florida during 1986-2005.

	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
5	5,243	4,162	4,748	3,584	10,489	2,402	522	945	1,248	1,361	127	295	358	109	80	32	125	122	11	93
6	1,748	1,387	1,583	1,195	3,496	801	174	315	416	454	42	98	119	36	27	11	42	41	4	31
7	874	694	791	597	1,748	400	87	157	208	227	21	49	60	18	13	5	21	20	2	15
8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	28,108	21,962	25,057	18,910	71	16	12	41	349	150	48	142	182	57	92	59	70	176	69	95
12	75,495	54,887	62,621	47,260	23	1,222	329	888	311	0	0	0	0	0	0	0	0	0	0	0
13	80,083	56,563	64,532	48,703	108,892	46,061	21,926	10,039	6,010	6,533	48	142	182	57	92	59	70	176	69	95
14	74,649	58,386	66,612	50,272	67,407	73,528	59,415	18,440	25,877	16,803	162	389	497	141	317	182	141	352	154	383
15	76,549	60,924	69,508	52,458	35,915	48,979	48,416	27,051	25,681	14,853	1,786	2,987	3,600	3,290	2,052	1,019	770	1,097	528	2,701
16	55,500	40,635	46,361	34,989	21,019	32,320	38,978	27,441	22,841	16,041	2,046	3,405	4,106	2,624	1,387	697	1,085	1,470	590	2,317
17	50,422	40,950	46,720	35,260	9,944	27,886	21,544	22,613	18,904	11,739	2,175	3,871	4,708	2,133	1,487	803	1,314	2,110	805	2,116
18	40,448	37,401	42,671	32,204	3,552	11,050	13,235	8,615	8,556	9,749	1,074	1,858	2,245	673	856	440	508	787	279	578
19	25,349	26,805	30,582	23,080	15,062	12,181	11,737	9,601	6,153	8,029	846	1,362	1,626	199	538	258	525	621	171	195
20	25,742	18,141	20,696	15,620	917	3,807	8,228	7,098	3,928	7,432	294	612	750	121	588	311	508	786	248	190
21	14,138	14,650	16,714	12,614	1,183	2,651	5,737	1,750	1,427	6,885	311	572	691	418	496	252	123	238	85	95
22	13,400	13,729	15,663	11,821	379	1,858	1,733	1,663	3,206	6,699	68	119	135	4	138	64	52	62	16	0
23	6,055	5,125	5,847	4,413	730	893	1,253	1,185	1,523	2,816	1	7	7	8	2	0	0	0	0	0
24	6,313	3,757	4,286	3,235	23	1,222	1,379	1,490	1,279	3,387	1	8	5	0	2	0	0	0	0	0
25	2,665	2,159	2,464	1,859	0	0	494	1,189	484	1,486	1	3	2	0	1	0	0	0	0	0
26	153	286	327	247	0	0	391	0	0	415	0	1	1	0	0	0	0	0	0	0
27	204	143	163	123	0	0	165	888	0	829	0	2	1	0	1	0	0	0	0	0
28	51	143	163	123	0	0	165	0	0	415	0	1	1	0	0	0	0	0	0	0
29	153	95	109	82	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30	51	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31	0	95	109	82	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Table 5.1.2.5 (con't). Estimated total-length (inches) frequencies of the annual commercial landings made in the **Southeast** region of the Atlantic coast of Florida during 1986-2005. Landings of sixty-three 36-inch long fish in 1994 are not shown.

	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
5	0	0	0	0	0	0	1,572	1,539	31	1,191	0	148	166	83	0	17	0	0	14	0
6	0	0	0	0	0	0	524	513	10	397	0	49	55	28	0	6	0	0	5	0
7	0	0	0	0	0	0	262	256	5	198	0	25	28	14	0	3	0	0	2	0
8	0	0	0	0	0	98	136	0	0	0	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	59	82	0	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	88	0	0	0	0	0	0	0	0	0	0
11	860	977	1,200	1,411	430	2	3	117	557	1,837	49	87	45	48	108	50	51	13	43	37
12	12,459	17,854	23,629	27,783	4,032	795	1,021	353	3,662	4,912	216	445	58	0	0	40	0	0	0	0
13	23,231	23,201	21,554	25,343	12,435	8,004	9,595	3,308	8,084	8,272	820	2,399	333	48	108	50	51	13	100	103
14	18,901	13,234	12,500	14,697	17,144	12,718	15,256	9,417	13,775	6,007	4,424	4,710	2,105	2,410	1,468	786	858	271	199	206
15	15,110	15,498	8,047	9,462	13,898	10,619	12,502	10,696	9,910	7,073	6,592	6,488	4,984	6,885	5,968	1,797	4,157	2,151	3,278	3,742
16	15,256	15,791	11,463	13,478	10,731	7,237	8,607	10,146	10,925	6,912	4,223	4,843	4,235	6,334	4,442	2,040	5,017	2,274	3,905	4,462
17	14,128	8,455	7,010	8,242	9,505	6,360	7,773	12,207	10,998	7,489	2,590	3,591	3,319	5,469	3,620	2,076	3,914	2,040	2,878	3,237
18	12,712	11,696	17,848	20,986	11,699	5,084	6,290	9,457	9,734	9,299	1,096	2,043	2,048	4,170	2,290	1,272	3,298	1,252	2,537	2,890
19	11,022	15,169	15,171	17,838	10,356	6,479	8,071	6,674	8,445	6,018	1,068	1,513	1,037	2,716	1,918	1,011	2,165	1,389	1,311	1,506
20	7,426	5,536	3,422	4,023	8,787	7,158	9,177	6,416	7,645	4,702	1,291	842	953	1,806	1,624	948	1,339	721	826	926
21	4,285	8,043	5,659	6,654	4,758	5,933	7,819	3,713	4,404	2,641	542	710	621	1,004	969	656	944	463	556	627
22	4,420	3,283	3,133	3,684	3,216	4,244	5,783	3,457	2,297	2,241	356	267	288	905	548	566	722	613	342	393
23	1,854	2,860	748	880	5,520	3,313	4,173	2,529	1,411	811	352	311	346	302	470	243	447	368	228	262
24	3,071	1,795	3	4	8,557	2,340	2,632	1,771	699	448	211	222	173	503	157	81	172	204	114	131
25	1,353	967	2,378	2,796	1,836	1,106	1,499	1,089	659	0	70	178	58	0	0	0	69	41	0	0
26	1,023	691	2,378	2,796	1,225	615	816	244	165	0	0	0	0	0	39	0	0	82	0	0
27	1,525	552	2,377	2,795	2,078	379	418	164	329	0	0	0	58	0	0	0	0	0	0	0
28	867	552	1	1	371	320	407	55	165	0	0	0	0	0	0	0	0	0	0	0
29	850	139	1	1	853	39	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30	174	1,200	742	873	124	80	89	0	0	0	0	0	0	0	0	0	0	0	0	0
31	173	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Table 5.1.2.5 (con't). Estimated total-length (inches) frequencies of the annual commercial landings made in the **Northeast** region of the Atlantic coast of Florida during 1986-2005.

	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
5	110	140	127	129	83	126	635	1,375	820	1,397	37	0	67	29	93	0	0	0	0	0
6	37	47	42	43	28	42	212	458	273	466	12	0	22	10	31	0	0	0	0	0
7	18	23	21	22	14	21	106	229	137	233	6	0	11	5	15	0	0	0	0	0
8	0	0	0	0	0	17	26	0	0	0	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	10	15	0	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	15	0	0	0	0	0	0	0	0	0	0
11	145	111	129	131	52	0	0	26	37	224	2	4	1	2	0	0	1	0	0	2
12	2,653	6,047	6,190	6,279	1,060	663	379	322	694	706	120	95	48	70	69	141	58	68	53	121
13	4,804	5,319	4,795	4,864	5,046	4,629	2,619	2,242	2,486	3,164	844	670	338	489	482	990	405	476	374	849
14	3,746	2,299	2,089	2,119	10,227	9,682	5,338	5,066	5,104	6,466	1,808	1,435	724	1,047	1,038	2,122	867	1,024	802	1,818
15	2,587	2,976	2,025	2,054	8,028	7,662	4,184	4,283	3,893	5,521	1,447	1,150	579	838	832	1,698	694	821	642	1,456
16	2,742	3,660	2,970	3,012	3,658	3,417	2,254	2,972	2,804	2,929	605	484	243	351	355	707	290	349	268	609
17	2,297	1,572	1,328	1,347	530	526	930	2,204	1,731	1,113	10	23	6	10	8	0	4	8	2	14
18	2,245	3,005	3,430	3,479	1,091	576	947	1,914	1,622	1,421	3	8	2	3	6	0	1	5	1	5
19	1,892	4,677	4,335	4,397	883	772	1,191	1,384	1,516	993	0	0	0	0	4	0	0	3	0	0
20	1,458	1,249	949	963	788	980	1,431	1,262	1,477	774	3	8	2	3	2	0	1	2	1	5
21	567	2,172	1,774	1,799	379	844	1,272	713	884	451	2	4	1	2	2	0	1	2	0	2
22	717	576	527	535	327	679	1,003	652	471	332	0	0	0	0	1	0	0	1	0	0
23	364	527	277	281	524	439	638	447	305	156	0	0	0	0	1	0	0	1	0	0
24	465	194	2	2	933	310	374	338	107	77	0	0	0	0	0	0	0	0	0	0
25	253	105	246	250	209	178	260	219	142	0	0	0	0	0	0	0	0	0	0	0
26	155	76	246	250	103	64	100	39	35	0	0	0	0	0	0	0	0	0	0	0
27	267	60	246	249	206	24	27	39	71	0	0	0	0	0	0	0	0	0	0	0
28	72	60	1	1	0	13	23	13	35	0	0	0	0	0	0	0	0	0	0	0
29	141	15	1	1	103	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30	15	346	274	278	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31	14	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Table 5.1.4.1. The number of saltwater products license holders (SPLs) who reported annual commercial landings of spotted seatrout, the number of fishing trips reported and the annual landings in each region during 1986-2005.

	Northwest			Southwest			Southeast			Northeast		
	SPLs	Trips	Landings	SPLs	Trips	Landings	SPLs	Trips	Landings	SPLs	Trips	Landings
1986	540	10,752	485,729	739	27,675	777,940	245	8,202	257,843	87	1,715	46,680
1987	1,416	14,655	714,031	1,501	24,928	633,616	669	7,773	256,635	223	1,756	60,665
1988	1,518	14,669	741,126	1,666	23,603	621,840	744	8,702	257,683	210	1,640	58,264
1989	1,534	12,941	532,952	1,723	20,731	469,305	694	8,131	302,985	214	1,830	59,097
1990	1,125	10,844	410,636	1,352	19,771	357,749	513	6,169	200,044	145	1,346	36,422
1991	957	9,046	485,341	1,262	19,033	340,444	474	5,426	170,647	150	1,490	54,926
1992	685	5,335	327,136	1,211	18,105	338,068	438	6,489	215,032	126	1,723	44,063
1993	832	8,581	319,551	976	13,832	228,770	428	6,482	178,182	128	1,521	45,890
1994	732	7,927	411,314	938	12,061	232,195	432	5,730	201,137	145	1,720	46,514
1995	426	2,810	166,803	812	8,106	186,209	328	3,427	142,639	119	1,252	41,482
1996	86	274	8,508	191	1,088	14,296	123	943	41,919	32	182	6,335
1997	91	288	6,935	191	1,192	25,358	121	1,059	52,228	29	170	5,088
1998	101	362	10,506	171	1,186	30,198	122	1,021	38,985	20	87	2,571
1999	82	275	6,706	130	755	15,156	114	1,200	58,111	19	130	3,691
2000	80	320	7,130	138	755	13,768	96	967	41,685	19	116	3,706
2001	89	372	10,733	100	462	7,088	99	641	22,876	21	161	7,359
2002	72	320	8,330	99	420	9,383	97	1,005	41,617	20	87	3,024
2003	62	276	12,092	94	472	14,430	81	559	23,559	17	135	3,609
2004	47	187	5,074	64	254	5,265	78	560	26,827	10	119	2,788
2005	53	167	6,792	75	452	13,072	65	567	30,408	14	195	6,369

Table 5.1.4.2. Estimated standardized landings (pounds) of spotted seatrout per trip for the commercial fishery on the **gulf** coast of Florida during 1986-2004. The distribution of the landings rate (see Section 5.1.1.6 Development of Estimates) are summarized with the distribution's mean, median, 2.5-, 25-, 75-, and 97.5- percentiles. The number of trips indicates those with complete data that are used in the standardization analysis.

Northwest	Trips	Mean	2.5th	25th	Median	75th	97.5th
1986	10,752	25.29	24.90	25.16	25.29	25.42	25.68
1987	14,655	29.27	28.84	29.12	29.27	29.40	29.73
1988	14,669	25.10	24.74	24.98	25.09	25.22	25.49
1989	12,941	23.40	23.04	23.27	23.40	23.52	23.77
1990	10,844	20.03	19.73	19.93	20.03	20.13	20.32
1991	9,046	24.20	23.78	24.08	24.20	24.34	24.56
1992	5,335	22.56	22.23	22.44	22.56	22.68	22.88
1993	8,581	20.52	20.21	20.40	20.52	20.62	20.83
1994	7,927	26.54	26.13	26.39	26.55	26.69	26.95
1995	2,810	25.22	24.84	25.08	25.22	25.36	25.63
1996	274	42.83	41.76	42.48	42.83	43.23	43.93
1997	288	42.30	41.12	41.87	42.31	42.71	43.43
1998	362	52.42	51.09	52.02	52.43	52.84	53.80
1999	275	44.11	42.88	43.67	44.11	44.53	45.36
2000	320	40.01	38.86	39.62	39.99	40.41	41.14
2001	372	53.09	51.71	52.63	53.08	53.56	54.30
2002	320	49.28	47.98	48.83	49.24	49.74	50.66
2003	276	65.32	63.65	64.75	65.30	65.86	66.90
2004	187	43.05	41.62	42.55	43.01	43.52	44.59
2005	167	73.18	71.12	72.51	73.21	73.89	75.05

Southwest	Trips	Mean	2.5th	25th	Median	75th	97.5th
1986	27,675	28.98	28.82	28.92	28.98	29.04	29.14
1987	24,928	26.00	25.86	25.95	25.99	26.05	26.14
1988	23,603	27.02	26.85	26.96	27.01	27.07	27.17
1989	20,731	23.66	23.52	23.61	23.65	23.71	23.78
1990	19,771	19.31	19.20	19.27	19.31	19.35	19.42
1991	19,033	17.64	17.55	17.60	17.64	17.66	17.72
1992	18,105	17.84	17.76	17.81	17.84	17.87	17.93
1993	13,832	15.63	15.56	15.60	15.63	15.66	15.71
1994	12,061	16.45	16.38	16.43	16.45	16.48	16.53
1995	8,106	18.86	18.75	18.83	18.86	18.89	18.96
1996	1,088	13.43	13.20	13.36	13.43	13.51	13.67
1997	1,192	20.92	20.65	20.84	20.91	21.01	21.21
1998	1,186	24.42	24.12	24.32	24.42	24.52	24.72
1999	755	18.21	17.93	18.11	18.22	18.31	18.48
2000	755	17.97	17.64	17.86	17.96	18.07	18.30
2001	462	16.41	16.01	16.27	16.41	16.55	16.81
2002	420	22.27	21.81	22.12	22.27	22.44	22.76
2003	472	30.05	29.60	29.87	30.05	30.22	30.56
2004	254	22.87	22.27	22.64	22.89	23.10	23.49
2005	452	28.60	28.08	28.41	28.60	28.76	29.07

Table 5.1.4.2 (con't). Estimated standardized landings (pounds) of spotted seatrout per trip for the commercial fishery on the **Atlantic** coast of Florida during 1986-2004. The distribution of the landings rate (see Section 5.1.1.6 Development of Estimates) are summarized with the distribution's mean, median, 2.5-, 25-, 75-, and 97.5- percentiles. The number of trips indicates those with complete data that are used in the standardization analysis.

Southeast	Trips	Mean	2.5th	25th	Median	75th	97.5th
1986	8,202	18.82	18.66	18.76	18.81	18.88	18.99
1987	7,773	21.65	21.46	21.58	21.64	21.71	21.84
1988	8,702	18.59	18.42	18.53	18.59	18.65	18.75
1989	8,131	25.16	24.94	25.08	25.16	25.23	25.39
1990	6,169	22.37	22.15	22.29	22.37	22.44	22.59
1991	5,426	21.61	21.43	21.55	21.61	21.67	21.79
1992	6,489	23.23	23.08	23.17	23.23	23.28	23.38
1993	6,482	19.84	19.68	19.79	19.83	19.89	19.96
1994	5,730	23.39	23.23	23.33	23.39	23.45	23.57
1995	3,427	26.48	26.27	26.41	26.48	26.54	26.69
1996	943	17.34	17.14	17.27	17.33	17.41	17.53
1997	1,059	19.37	19.16	19.31	19.38	19.45	19.58
1998	1,021	15.55	15.38	15.48	15.55	15.61	15.72
1999	1,200	18.54	18.37	18.48	18.54	18.60	18.72
2000	967	17.61	17.40	17.55	17.60	17.68	17.82
2001	641	15.81	15.61	15.73	15.81	15.88	16.05
2002	1,005	18.35	18.15	18.27	18.34	18.42	18.56
2003	559	16.42	16.19	16.34	16.42	16.50	16.65
2004	560	18.59	18.32	18.50	18.59	18.68	18.83
2005	567	21.79	21.49	21.70	21.79	21.89	22.05

Northeast	Trips	Mean	2.5th	25th	Median	75th	97.5th
1986	1,715	20.99	20.43	20.80	20.99	21.19	21.59
1987	1,756	26.32	25.58	26.06	26.33	26.58	27.06
1988	1,640	26.91	26.15	26.64	26.92	27.16	27.61
1989	1,830	24.63	23.92	24.39	24.61	24.85	25.30
1990	1,346	16.89	16.41	16.73	16.89	17.05	17.35
1991	1,490	25.74	25.01	25.50	25.74	25.98	26.43
1992	1,723	17.19	16.72	17.06	17.20	17.35	17.65
1993	1,521	19.30	18.81	19.13	19.30	19.47	19.80
1994	1,720	18.77	18.31	18.59	18.79	18.95	19.23
1995	1,252	19.44	18.93	19.25	19.44	19.61	19.94
1996	182	21.27	20.48	20.97	21.26	21.55	22.03
1997	170	19.13	18.41	18.89	19.13	19.38	19.84
1998	87	18.52	17.73	18.20	18.50	18.81	19.36
1999	130	17.54	16.88	17.30	17.54	17.77	18.21
2000	116	19.44	18.69	19.20	19.44	19.69	20.29
2001	161	26.95	26.04	26.61	26.96	27.27	27.84
2002	87	20.80	19.91	20.51	20.81	21.09	21.75
2003	135	15.90	15.30	15.68	15.89	16.11	16.59
2004	119	13.98	13.38	13.75	13.97	14.22	14.64
2005	195	19.61	18.91	19.38	19.61	19.84	20.30

Table 5.1.5.1 Estimated age structure of the commercial landings of female and male spotted seatrout made in the Northwest region along Florida's gulf coast during 1982-2005. Numbers under each age are the proportions of each year's total landings, by number, in that age group.

	Females										Males								
	0	1	2	3	4	5	6	7 ⁺	Total landings		0	1	2	3	4	5	6	7 ⁺	Total landings
1982	0.0834	0.5015	0.3678	0.0360	0.0113	0.0000	0.0000	0.0000	424,297	1982	0.0726	0.3550	0.4062	0.1372	0.0250	0.0002	0.0031	0.0008	134,551
1983	0.0834	0.5015	0.3678	0.0360	0.0113	0.0000	0.0000	0.0000	335,507	1983	0.0726	0.3550	0.4062	0.1372	0.0250	0.0002	0.0031	0.0008	106,395
1984	0.0834	0.5015	0.3678	0.0360	0.0113	0.0000	0.0000	0.0000	389,601	1984	0.0726	0.3550	0.4062	0.1372	0.0250	0.0002	0.0031	0.0008	123,548
1985	0.0834	0.5015	0.3678	0.0360	0.0113	0.0000	0.0000	0.0000	340,573	1985	0.0726	0.3550	0.4062	0.1372	0.0250	0.0002	0.0031	0.0008	108,001
1986	0.0834	0.5016	0.3678	0.0360	0.0113	0.0000	0.0000	0.0000	347,982	1986	0.0726	0.3549	0.4063	0.1372	0.0250	0.0002	0.0031	0.0008	110,325
1987	0.0353	0.4075	0.3234	0.2128	0.0210	0.0000	0.0000	0.0000	344,059	1987	0.0377	0.4616	0.2456	0.1831	0.0592	0.0083	0.0032	0.0014	186,778
1988	0.0279	0.3798	0.3331	0.2186	0.0355	0.0000	0.0025	0.0025	336,950	1988	0.0339	0.4078	0.2619	0.2243	0.0596	0.0059	0.0053	0.0013	175,054
1989	0.0279	0.3798	0.3331	0.2186	0.0355	0.0000	0.0025	0.0025	238,804	1989	0.0339	0.4078	0.2619	0.2243	0.0596	0.0059	0.0053	0.0013	124,065
1990	0.0220	0.2511	0.4323	0.1991	0.0591	0.0293	0.0012	0.0058	184,642	1990	0.0429	0.1203	0.2862	0.2586	0.1772	0.0853	0.0214	0.0081	77,364
1991	0.0169	0.2387	0.3731	0.2313	0.0748	0.0559	0.0000	0.0094	217,073	1991	0.0444	0.1092	0.2385	0.2636	0.1916	0.1010	0.0359	0.0157	71,823
1992	0.0271	0.1853	0.3998	0.2412	0.0692	0.0521	0.0076	0.0178	140,260	1992	0.1004	0.0714	0.1711	0.2556	0.2104	0.1245	0.0487	0.0178	39,334
1993	0.0272	0.2669	0.4047	0.2059	0.0566	0.0317	0.0016	0.0054	129,654	1993	0.0701	0.0606	0.1707	0.2775	0.2341	0.1320	0.0462	0.0089	52,100
1994	0.0138	0.0466	0.4582	0.3011	0.1283	0.0372	0.0098	0.0051	181,938	1994	0.0607	0.0552	0.1680	0.1722	0.3024	0.1731	0.0463	0.0222	41,260
1995	0.0199	0.1237	0.2992	0.3690	0.0560	0.0895	0.0352	0.0074	69,733	1995	0.0911	0.0906	0.1989	0.2452	0.1505	0.1569	0.0253	0.0416	16,365
1996	0.0134	0.1974	0.3199	0.3095	0.1251	0.0142	0.0170	0.0034	3,500	1996	0.0426	0.1269	0.1824	0.2200	0.2328	0.1565	0.0326	0.0062	1,079
1997	0.0301	0.1710	0.2985	0.3141	0.1440	0.0155	0.0193	0.0075	3,338	1997	0.1812	0.1471	0.1491	0.1374	0.1236	0.2231	0.0265	0.0119	574
1998	0.0273	0.1340	0.3575	0.2911	0.1691	0.0073	0.0137	0.0000	5,016	1998	0.1490	0.1501	0.1679	0.1558	0.1683	0.1721	0.0255	0.0113	953
1999	0.0015	0.2057	0.5092	0.2098	0.0700	0.0003	0.0034	0.0000	4,131	1999	0.0091	0.0997	0.3007	0.2628	0.1550	0.0966	0.0486	0.0275	606
2000	0.0152	0.0819	0.5608	0.3039	0.0359	0.0020	0.0000	0.0003	3,946	2000	0.0519	0.0917	0.2439	0.2768	0.1606	0.1152	0.0331	0.0270	973
2001	0.0267	0.2830	0.2285	0.3336	0.0728	0.0465	0.0088	0.0001	5,230	2001	0.1288	0.1068	0.2250	0.2082	0.1447	0.1061	0.0433	0.0371	1,070
2002	0.0022	0.3256	0.2501	0.2964	0.0749	0.0458	0.0049	0.0000	4,279	2002	0.0071	0.0913	0.2634	0.2789	0.1719	0.1217	0.0365	0.0293	1,009
2003	0.0210	0.3239	0.3000	0.2132	0.0601	0.0747	0.0071	0.0000	6,494	2003	0.1002	0.1017	0.2123	0.2453	0.1601	0.1141	0.0341	0.0321	1,317
2004	0.1294	0.1058	0.3634	0.2713	0.0454	0.0761	0.0069	0.0017	2,845	2004	0.3455	0.1747	0.1837	0.1374	0.0789	0.0516	0.0143	0.0139	1,119
2005	0.0351	0.3168	0.3107	0.2163	0.0786	0.0376	0.0000	0.0050	3,109	2005	0.0962	0.0935	0.1978	0.2355	0.1724	0.1311	0.0301	0.0434	1,245

Table 5.1.5.1 (con't). Estimated age structure of the commercial landings of female and male spotted seatrout made in the Southwest region along Florida's gulf coast during 1982-2005. Numbers under each age are the proportions of each year's total landings, by number, in that age group.

	Females									Total landings	Males									Total landings
	0	1	2	3	4	5	6	7 ⁺	0		1	2	3	4	5	6	7 ⁺			
1982	0.0073	0.2661	0.4083	0.1612	0.1133	0.0365	0.0018	0.0054	764,035	1982	0.0237	0.1212	0.3376	0.2443	0.2192	0.0419	0.0074	0.0047	298,661	
1983	0.0073	0.2661	0.4083	0.1612	0.1133	0.0365	0.0018	0.0054	755,889	1983	0.0237	0.1212	0.3376	0.2443	0.2192	0.0419	0.0074	0.0047	295,477	
1984	0.0073	0.2661	0.4083	0.1612	0.1133	0.0365	0.0018	0.0054	542,961	1984	0.0237	0.1212	0.3376	0.2443	0.2192	0.0419	0.0074	0.0047	212,244	
1985	0.0073	0.2661	0.4083	0.1612	0.1133	0.0365	0.0018	0.0054	353,492	1985	0.0237	0.1212	0.3376	0.2443	0.2192	0.0419	0.0074	0.0047	138,180	
1986	0.0073	0.2661	0.4083	0.1612	0.1133	0.0365	0.0018	0.0054	419,436	1986	0.0237	0.1212	0.3376	0.2443	0.2192	0.0419	0.0074	0.0047	163,957	
1987	0.0088	0.1678	0.5460	0.1632	0.0764	0.0249	0.0120	0.0010	348,046	1987	0.0268	0.0848	0.3602	0.2351	0.1347	0.1341	0.0155	0.0088	115,035	
1988	0.0086	0.1547	0.5464	0.1767	0.0759	0.0248	0.0119	0.0010	398,299	1988	0.0271	0.0788	0.3423	0.2616	0.1350	0.1308	0.0155	0.0089	130,028	
1989	0.0086	0.1547	0.5464	0.1767	0.0759	0.0248	0.0119	0.0010	300,598	1989	0.0271	0.0788	0.3423	0.2616	0.1350	0.1308	0.0155	0.0089	98,132	
1990	0.0306	0.0216	0.5867	0.2995	0.0519	0.0092	0.0005	0.0000	181,853	1990	0.0855	0.0783	0.2635	0.3741	0.1440	0.0223	0.0288	0.0036	98,998	
1991	0.0062	0.0205	0.5222	0.3566	0.0750	0.0151	0.0045	0.0000	183,963	1991	0.0252	0.0561	0.2339	0.4241	0.1819	0.0391	0.0323	0.0075	83,316	
1992	0.0014	0.0210	0.4841	0.3682	0.0892	0.0274	0.0069	0.0018	175,247	1992	0.0075	0.0391	0.2030	0.4363	0.2099	0.0575	0.0327	0.0140	60,673	
1993	0.0041	0.0316	0.3952	0.4048	0.1071	0.0397	0.0175	0.0000	108,685	1993	0.0252	0.0306	0.1809	0.4102	0.2232	0.0736	0.0468	0.0096	32,724	
1994	0.0057	0.0402	0.3338	0.3692	0.1463	0.0890	0.0158	0.0000	103,464	1994	0.0437	0.0328	0.1639	0.3804	0.2166	0.0871	0.0540	0.0214	24,936	
1995	0.0073	0.0301	0.2177	0.2916	0.1974	0.2051	0.0439	0.0069	87,911	1995	0.0418	0.0279	0.1576	0.3817	0.2095	0.0962	0.0470	0.0382	28,391	
1996	0.0068	0.0182	0.2176	0.4402	0.2187	0.0901	0.0083	0.0000	7,184	1996	0.0661	0.0171	0.1228	0.3446	0.2367	0.1170	0.0686	0.0270	1,867	
1997	0.0104	0.0242	0.2027	0.4232	0.2283	0.0998	0.0113	0.0001	10,956	1997	0.0589	0.0147	0.1778	0.2142	0.2333	0.2289	0.0564	0.0158	4,968	
1998	0.0121	0.0355	0.3658	0.2692	0.2154	0.0764	0.0255	0.0001	14,003	1998	0.0603	0.0202	0.2105	0.3067	0.2345	0.1280	0.0323	0.0075	5,275	
1999	0.0189	0.0902	0.3124	0.4428	0.0834	0.0420	0.0000	0.0104	5,170	1999	0.0206	0.0081	0.2162	0.3389	0.2536	0.1295	0.0289	0.0043	4,720	
2000	0.0064	0.0170	0.1788	0.3734	0.2945	0.0919	0.0292	0.0089	6,076	2000	0.0351	0.0193	0.1494	0.3375	0.2986	0.0786	0.0183	0.0632	2,092	
2001	0.0050	0.0217	0.1391	0.3866	0.2617	0.1445	0.0260	0.0155	3,132	2001	0.0283	0.0125	0.0620	0.1702	0.1830	0.4053	0.0717	0.0669	1,059	
2002	0.0170	0.0169	0.1315	0.2863	0.3502	0.1476	0.0391	0.0114	4,023	2002	0.0823	0.0223	0.1523	0.2118	0.2774	0.1580	0.0846	0.0115	1,332	
2003	0.0106	0.0462	0.2328	0.3307	0.2005	0.1230	0.0469	0.0094	6,175	2003	0.0572	0.0422	0.2080	0.1850	0.2344	0.1780	0.0818	0.0134	1,883	
2004	0.0196	0.0430	0.2654	0.3362	0.2296	0.0721	0.0236	0.0105	2,273	2004	0.0125	0.0368	0.1869	0.2843	0.2117	0.1850	0.0537	0.0291	758	
2005	0.0086	0.0534	0.3494	0.3821	0.1522	0.0367	0.0149	0.0026	5,984	2005	0.0278	0.0269	0.2002	0.2999	0.2144	0.1756	0.0330	0.0222	2,919	

Table 5.1.5.1 (con't). Estimated age structure of the commercial landings of female and male spotted seatrout made in the Southeast region along Florida's Atlantic coast during 1982-2005. Numbers under each age are the proportions of each year's total landings, by number, in that age group.

	Females									Total landings	Males									Total landings
	0	1	2	3	4	5	6	7 ⁺	0		1	2	3	4	5	6	7 ⁺			
1982	0.0027	0.3764	0.4487	0.1136	0.0296	0.0228	0.0029	0.0033	259,360	1982	0.0000	0.2152	0.4363	0.1954	0.0326	0.0732	0.0179	0.0294	111,183	
1983	0.0027	0.3764	0.4487	0.1136	0.0296	0.0228	0.0029	0.0033	172,196	1983	0.0027	0.3764	0.4487	0.1136	0.0296	0.0228	0.0029	0.0033	73,818	
1984	0.0027	0.3764	0.4487	0.1136	0.0296	0.0228	0.0029	0.0033	130,548	1984	0.0027	0.3764	0.4487	0.1136	0.0296	0.0228	0.0029	0.0033	55,964	
1985	0.0027	0.3764	0.4487	0.1136	0.0296	0.0228	0.0029	0.0033	134,845	1985	0.0027	0.3764	0.4487	0.1136	0.0296	0.0228	0.0029	0.0033	57,806	
1986	0.0027	0.3764	0.4487	0.1136	0.0296	0.0228	0.0029	0.0033	105,481	1986	0.0027	0.3764	0.4487	0.1136	0.0296	0.0228	0.0029	0.0033	45,218	
1987	0.0000	0.2244	0.5032	0.1803	0.0556	0.0231	0.0126	0.0007	106,249	1987	0.0000	0.2244	0.5032	0.1803	0.0556	0.0231	0.0126	0.0007	41,244	
1988	0.0000	0.2324	0.4777	0.1823	0.0656	0.0232	0.0159	0.0029	100,319	1988	0.0000	0.2324	0.4777	0.1823	0.0656	0.0232	0.0159	0.0029	38,946	
1989	0.0000	0.2324	0.4777	0.1823	0.0656	0.0232	0.0159	0.0029	117,955	1989	0.0000	0.2324	0.4777	0.1823	0.0656	0.0232	0.0159	0.0029	45,792	
1990	0.0000	0.0638	0.4259	0.2866	0.1278	0.0639	0.0159	0.0163	95,177	1990	0.0000	0.0638	0.4259	0.2866	0.1278	0.0639	0.0159	0.0163	32,379	
1991	0.0000	0.0640	0.4441	0.2856	0.1300	0.0555	0.0138	0.0069	69,932	1991	0.0000	0.0640	0.4441	0.2856	0.1300	0.0555	0.0138	0.0069	13,052	
1992	0.0002	0.0631	0.4338	0.2902	0.1341	0.0575	0.0142	0.0067	86,381	1992	0.0002	0.0631	0.4338	0.2902	0.1341	0.0575	0.0142	0.0067	18,125	
1993	0.0002	0.0263	0.3268	0.2789	0.2238	0.1016	0.0343	0.0081	68,680	1993	0.0002	0.0263	0.3268	0.2789	0.2238	0.1016	0.0343	0.0081	15,439	
1994	0.0000	0.0416	0.4651	0.3488	0.0989	0.0356	0.0062	0.0038	75,011	1994	0.0000	0.0416	0.4651	0.3488	0.0989	0.0356	0.0062	0.0038	18,897	
1995	0.0002	0.0837	0.3316	0.3256	0.2185	0.0349	0.0048	0.0007	59,698	1995	0.0002	0.0837	0.3316	0.3256	0.2185	0.0349	0.0048	0.0007	10,839	
1996	0.0000	0.1189	0.4314	0.3365	0.0773	0.0283	0.0063	0.0012	16,710	1996	0.0000	0.1189	0.4314	0.3365	0.0773	0.0283	0.0063	0.0012	7,193	
1997	0.0001	0.0368	0.4955	0.3245	0.1203	0.0201	0.0013	0.0013	19,865	1997	0.0001	0.0368	0.4955	0.3245	0.1203	0.0201	0.0013	0.0013	9,007	
1998	0.0000	0.0043	0.5355	0.2586	0.1733	0.0171	0.0033	0.0079	15,286	1998	0.0000	0.0043	0.5355	0.2586	0.1733	0.0171	0.0033	0.0079	5,620	
1999	0.0000	0.0744	0.5051	0.2923	0.0925	0.0207	0.0096	0.0054	23,014	1999	0.0000	0.0744	0.5051	0.2923	0.0925	0.0207	0.0096	0.0054	9,710	
2000	0.0000	0.0799	0.5190	0.2737	0.0931	0.0252	0.0068	0.0023	16,514	2000	0.0000	0.0799	0.5190	0.2737	0.0931	0.0252	0.0068	0.0023	7,213	
2001	0.0121	0.0610	0.2273	0.4110	0.1998	0.0829	0.0020	0.0039	8,182	2001	0.0121	0.0610	0.2273	0.4110	0.1998	0.0829	0.0020	0.0039	3,458	
2002	0.0093	0.0564	0.2229	0.4018	0.2134	0.0861	0.0038	0.0063	13,434	2002	0.0093	0.0564	0.2229	0.4018	0.2134	0.0861	0.0038	0.0063	9,770	
2003	0.0132	0.0472	0.2180	0.3912	0.2219	0.0910	0.0063	0.0113	8,054	2003	0.0132	0.0472	0.2180	0.3912	0.2219	0.0910	0.0063	0.0113	3,842	
2004	0.0057	0.0489	0.2503	0.4242	0.1965	0.0681	0.0021	0.0043	10,469	2004	0.0057	0.0489	0.2503	0.4242	0.1965	0.0681	0.0021	0.0043	5,857	
2005	0.0059	0.0490	0.2483	0.4214	0.1984	0.0703	0.0022	0.0045	11,495	2005	0.0059	0.0490	0.2483	0.4214	0.1984	0.0703	0.0022	0.0045	7,026	

Table 5.1.5.1 (con't). Estimated age structure of the commercial landings of female and male spotted seatrout made in the Northeast region along Florida's Atlantic coast during 1982-2005. Numbers under each age are the proportions of each year's total landings, by number, in that age group.

	Females									Total landings	Males									Total landings
	0	1	2	3	4	5	6	7 ⁺	0		1	2	3	4	5	6	7 ⁺			
1982	0.0025	0.4018	0.4469	0.1023	0.0252	0.0179	0.0017	0.0017	47,409	1982	0.0106	0.3130	0.4528	0.1590	0.0172	0.0320	0.0064	0.0090	11,044	
1983	0.0025	0.4018	0.4469	0.1023	0.0252	0.0179	0.0017	0.0017	29,236	1983	0.0106	0.3130	0.4528	0.1590	0.0172	0.0320	0.0064	0.0090	6,810	
1984	0.0025	0.4018	0.4469	0.1023	0.0252	0.0179	0.0017	0.0017	23,358	1984	0.0106	0.3130	0.4528	0.1590	0.0172	0.0320	0.0064	0.0090	5,441	
1985	0.0025	0.4018	0.4469	0.1023	0.0252	0.0179	0.0017	0.0017	19,358	1985	0.0106	0.3130	0.4528	0.1590	0.0172	0.0320	0.0064	0.0090	4,509	
1986	0.0025	0.4018	0.4469	0.1023	0.0252	0.0179	0.0017	0.0017	22,517	1986	0.0106	0.3130	0.4528	0.1590	0.0172	0.0320	0.0064	0.0090	5,245	
1987	0.0007	0.1933	0.5176	0.2054	0.0520	0.0183	0.0125	0.0004	24,365	1987	0.0065	0.1602	0.4566	0.2436	0.0811	0.0327	0.0170	0.0024	10,893	
1988	0.0007	0.1886	0.4960	0.2140	0.0645	0.0206	0.0143	0.0014	21,705	1988	0.0062	0.1530	0.4599	0.2354	0.0891	0.0333	0.0212	0.0019	10,321	
1989	0.0007	0.1886	0.4960	0.2140	0.0645	0.0206	0.0143	0.0014	22,015	1989	0.0062	0.1530	0.4599	0.2354	0.0891	0.0333	0.0212	0.0019	10,469	
1990	0.0004	0.1137	0.5937	0.1776	0.0711	0.0321	0.0055	0.0059	24,010	1990	0.0042	0.0146	0.3902	0.3628	0.1350	0.0661	0.0142	0.0129	10,262	
1991	0.0007	0.1139	0.5941	0.1804	0.0748	0.0295	0.0049	0.0017	23,161	1991	0.0083	0.0196	0.3787	0.3675	0.1315	0.0646	0.0167	0.0132	8,520	
1992	0.0039	0.0975	0.4865	0.2441	0.1094	0.0460	0.0095	0.0030	18,163	1992	0.0601	0.0527	0.3167	0.3253	0.1374	0.0706	0.0201	0.0172	5,800	
1993	0.0076	0.0787	0.3864	0.2450	0.1744	0.0779	0.0241	0.0060	18,829	1993	0.1015	0.0740	0.2472	0.3168	0.1537	0.0731	0.0197	0.0140	7,369	
1994	0.0044	0.0765	0.5006	0.3010	0.0800	0.0289	0.0054	0.0032	19,132	1994	0.0809	0.1194	0.3235	0.3159	0.0919	0.0577	0.0093	0.0014	5,514	
1995	0.0074	0.1018	0.5002	0.2413	0.1293	0.0172	0.0024	0.0004	19,634	1995	0.1138	0.1336	0.2835	0.2833	0.1279	0.0515	0.0041	0.0024	6,805	
1996	0.0016	0.2088	0.5667	0.2073	0.0142	0.0013	0.0000	0.0000	3,115	1996	0.0134	0.0333	0.2375	0.5916	0.0996	0.0209	0.0037	0.0000	1,786	
1997	0.0000	0.0642	0.6812	0.1990	0.0450	0.0084	0.0001	0.0021	2,815	1997	0.0000	0.0079	0.3495	0.3727	0.2092	0.0557	0.0050	0.0001	1,067	
1998	0.0002	0.0308	0.8009	0.1137	0.0542	0.0003	0.0000	0.0000	1,376	1998	0.0718	0.4081	0.2801	0.1439	0.0650	0.0305	0.0000	0.0006	669	
1999	0.0008	0.3200	0.4131	0.2464	0.0194	0.0001	0.0000	0.0000	795	1999	0.0428	0.4171	0.2742	0.1579	0.0703	0.0370	0.0000	0.0007	795	
2000	0.0015	0.3459	0.3849	0.2373	0.0303	0.0002	0.0000	0.0000	1,228	2000	0.0834	0.3441	0.2824	0.1193	0.1090	0.0610	0.0001	0.0006	1,228	
2001	0.0022	0.3956	0.3995	0.1760	0.0267	0.0000	0.0000	0.0000	2,216	2001	0.0026	0.2254	0.3635	0.2811	0.1129	0.0145	0.0000	0.0000	2,216	
2002	0.0022	0.3950	0.3994	0.1763	0.0270	0.0001	0.0000	0.0000	907	2002	0.0026	0.2251	0.3630	0.2809	0.1135	0.0147	0.0002	0.0000	907	
2003	0.0022	0.3938	0.3994	0.1770	0.0274	0.0002	0.0000	0.0000	1,075	2003	0.0026	0.2242	0.3620	0.2811	0.1147	0.0149	0.0005	0.0001	1,075	
2004	0.0022	0.3954	0.3995	0.1761	0.0268	0.0000	0.0000	0.0000	838	2004	0.0026	0.2253	0.3633	0.2810	0.1131	0.0146	0.0001	0.0000	838	
2005	0.0022	0.3943	0.3991	0.1767	0.0275	0.0003	0.0000	0.0000	1,908	2005	0.0026	0.2248	0.3623	0.2807	0.1145	0.0148	0.0004	0.0000	1,908	

Table 5.2.1.2.1 Number of trips, total and those directed at spotted seatrout, where anglers were interviewed by creel clerks in the Northwest and Southwest regions on gulf coast of Florida during 1982-2005. Numbers of spotted seatrout measured for length and sampled for otoliths during the interviews are also given for each year. A number of otoliths reported in Table 5.1.1.6.9 as sampled from the commercial fishery in early years may have come from the recreational fishery.

	Northwest Creel Survey				Southwest Creel Survey			
	Trips	Directed	No. Len.	No. Oto.	Trips	Directed	No. Len.	No. Oto.
1982	1,800	427	526		2,698	405	173	
1983	834	231	291		1,483	209	123	
1984	850	221	230		1,851	289	169	
1985	1,216	213	169		2,051	227	80	
1986	2,551	602	346		3,044	426	197	
1987	3,950	722	480		4,103	402	266	
1988	4,040	1,103	438		5,230	844	481	
1989	2,164	511	96		4,102	682	509	
1990	1,487	238	116		3,702	541	287	
1991	2,076	427	367		3,483	571	328	
1992	3,714	1,039	741		9,448	1,140	564	
1993	4,361	868	359		10,095	1,082	442	
1994	6,470	1,489	735		9,991	947	302	
1995	5,707	1,635	787		9,095	748	174	
1996	5,064	1,228	661		9,840	890	233	
1997	4,552	1,175	497		11,258	1,262	449	
1998	5,733	1,356	630		14,414	1,703	776	
1999	10,891	2,247	1112		18,306	1,866	983	
2000	12,381	2,010	1135		14,978	1,189	503	
2001	11,557	1,942	564		16,033	1,285	356	4
2002	11,902	2,111	1021	97	16,977	1,802	729	191
2003	11,278	1,966	1300	111	18,549	1,938	677	240
2004	12,818	2,235	1686	31	18,379	1,974	967	58
2005	10,706	2,049	1707	79	17,046	1,839	828	39

Table 5.2.1.2.1 (con't) Number of trips, total and those directed at spotted seatrout, where anglers were interviewed by creel clerks in the Northeast and Southeast regions on Atlantic coast of Florida during 1982-2005. Numbers of spotted seatrout measured for length and sampled for otoliths during the interviews are also given for each year. A number of otoliths reported in Table 5.1.1.6.9 as sampled from the commercial fishery in early years may have come from the recreational fishery.

	Northeast Creel Survey				Southeast Creel Survey			
	Trips	Directed	No. Len.	No. Oto.	Trips	Directed	No. Len.	No. Oto.
1982	856	83	79		3,421	147	140	
1983	1,241	207	65		2,629	114	75	
1984	1,947	250	143		2,466	112	96	
1985	1,706	144	142		2,308	116	50	
1986	1,302	229	121		3,611	195	135	
1987	1,254	219	175		3,425	151	105	
1988	1,153	156	35		4,939	166	37	
1989	1,063	141	61		4,332	180	35	
1990	1,167	130	62		3,907	122	39	
1991	1,773	159	81		4,261	150	54	
1992	2,488	243	81		8,985	272	106	
1993	2,689	283	118		10,726	333	51	
1994	3,314	324	111		11,850	333	81	
1995	2,678	220	63		11,372	417	107	
1996	2,352	102	32		9,408	321	77	
1997	2,569	151	48		9,678	337	103	
1998	2,248	142	30		11,443	478	71	
1999	2,327	171	41		15,730	1,091	359	
2000	2,177	271	67		14,902	1,236	227	
2001	2,996	276	89		16,757	1,333	225	
2002	3,126	243	62		19,093	1,345	238	14
2003	2,195	220	73		17,657	973	122	10
2004	2,036	300	66		14,193	1,009	129	3
2005	1,893	294	83		14,830	1,293	254	

Table 5.2.1.2.2. Length frequencies (inches total length) of spotted seatrout caught by hook-and-line gear during a hooking mortality study (HM), during a study on spotted seatrout reproduction (RS) and spotted seatrout caught and released as reported in volunteer angler logbooks available for 2002-2006.

Southwest	HM	RS	Volunteer angler logbooks				
			2002	2003	2004	2005	2006
4	3	0	0	0	0	0	0
5	6	3	0	2	0	0	0
6	13	6	0	0	0	1	0
7	18	13	0	1	0	2	0
8	92	25	0	3	3	3	0
9	109	95	1	2	3	4	0
10	79	166	1	15	11	5	0
11	57	241	1	13	10	9	0
12	52	363	5	29	35	15	1
13	17	286	4	48	26	15	2
14	9	240	12	69	45	41	3
15	0	91	17	66	58	48	14
16	0	62	20	86	99	51	20
17	0	38	8	76	86	48	11
18	0	32	5	22	30	23	4
19	0	2	2	18	14	15	3
20	0	23	2	13	8	15	5
21	0	11	2	15	7	5	0
22	0	16	1	7	7	4	3
23	0	5	0	5	8	0	3
24	0	3	0	2	3	2	1
25	0	1	2	2	2	4	0
26	0	1	0	1	4	3	0
27	0	1	0	2	0	4	0
28	0	1	0	0	0	0	0

Southeast	Volunteer angler logbooks				
	2002	2003	2004	2005	2006
0	0	0	0	0	0
2	0	0	0	0	0
3	0	0	0	0	0
4	0	0	0	0	0
5	0	0	0	0	0
6	0	0	0	1	0
7	0	0	1	1	0
8	0	1	2	1	0
9	0	1	2	1	0
10	0	2	4	3	0
11	0	2	2	8	0
12	0	3	3	4	2
13	0	3	5	4	2
14	0	3	7	3	0
15	0	1	2	3	2
16	0	6	8	2	1
17	0	2	5	1	0
18	0	1	1	0	0
19	0	0	1	0	0
20	0	0	1	0	0
21	0	0	1	0	0
22	0	0	1	0	0
23	0	0	0	0	1
24	0	0	0	0	0
25	0	0	0	0	0

Table 5.2.2.1. Estimated number of spotted seatrout landed (MRFSS Type A+B1) and number released alive (MRFSS Type B2) for each two-month period and for each year in the Northwest region of the **gulf** coast of Florida during 1982-2005. Blanks indicate periods when no estimates were available. The proportion of the total catch that was released alive is also given.

	Landings							Released Alive							Total Catch	Prop. Released
	Jan-Feb	Mar-Apr	May-Jun	Jul-Aug	Sep-Oct	Nov-Dec	Annual	Jan-Feb	Mar-Apr	May-Jun	Jul-Aug	Sep-Oct	Nov-Dec	Annual		
1982		61,056	129,873	416,177	241,149	708,273	1,556,528		50,356	99,911	205,951	110,752	269,740	293,741	1,850,269	0.159
1983	3,020	50,221	460,567	2,146,499	581,784	371,995	3,614,086	32,271	81,247	449,093	395,080	282,555	24,385	328,057	3,942,143	0.083
1984	75,559	48,230	601,601	118,236	668,200	2,832,136	4,343,962	14,411	101,282	524,087	251,596	49,600	209,381	2,542,664	6,886,626	0.369
1985	227,782	58,302	132,241	817,736	716,354	337,830	2,290,245	0	23,738	151,398	98,823	726,401	84,372	377,037	2,667,282	0.141
1986	21,709	173,309	597,117	409,951	1,014,116	1,029,118	3,245,320	0	111,480	687,720	756,399	787,265	603,864	1,410,451	4,655,771	0.303
1987	29,441	116,838	666,502	395,703	289,453	1,199,293	2,697,230	137,317	115,018	873,041	446,591	311,556	385,846	1,021,400	3,718,630	0.275
1988	283,598	396,718	723,490	365,600	519,964	1,689,480	3,978,850	106,272	231,513	872,277	387,612	279,455	812,670	1,864,675	5,843,525	0.319
1989	1,040,230	218,941	527,132	68,896	810,676	96,449	2,762,324	1,302,815	179,348	492,970	132,422	227,420	425,805	511,633	3,273,957	0.156
1990	48,912	94,720	279,807	131,813	12,220	144,348	711,820	96,226	519,448	593,159	194,938	154,101	202,343	218,954	930,774	0.235
1991	286,774	512,956	293,473	474,333	121,562	238,672	1,927,770	150,515	859,931	659,264	1,154,980	585,007	918,295	1,060,973	2,988,743	0.355
1992	121,906	225,576	157,221	99,667	206,262	283,249	1,093,881	83,744	638,201	368,661	527,732	547,648	303,491	318,133	1,412,014	0.225
1993	91,730	37,550	186,904	104,318	206,541	239,832	866,875	208,963	80,892	684,648	349,967	684,268	420,078	473,714	1,340,589	0.353
1994	127,056	205,552	188,209	112,292	298,975	298,634	1,230,718	242,901	495,592	796,688	489,340	675,650	591,544	673,429	1,904,147	0.354
1995	67,212	288,384	402,225	139,744	356,429	231,339	1,485,333	95,029	1,108,746	1,182,979	355,895	1,050,823	636,502	638,091	2,123,424	0.301
1996	31,314	80,689	82,312	119,628	325,463	167,246	806,652	78,364	339,682	396,642	406,223	719,661	374,698	395,820	1,202,472	0.329
1997	47,475	209,138	159,027	103,529	63,054	33,777	616,000	210,196	743,631	854,498	690,514	404,124	368,807	371,352	987,352	0.376
1998	19,881	88,379	222,453	56,032	154,600	190,465	731,810	114,267	463,297	730,363	375,883	601,591	784,389	809,856	1,541,666	0.525
1999	52,485	209,949	311,675	101,474	71,696	176,320	923,599	424,095	963,167	1,448,249	485,825	522,710	1,083,303	1,092,971	2,016,570	0.542
2000	58,577	160,104	322,008	202,451	110,387	124,141	977,668	358,648	770,881	1,407,887	800,978	703,041	824,804	842,619	1,820,287	0.463
2001	22,649	167,906	238,845	89,724	100,065	77,398	696,587	99,274	425,831	626,535	313,648	487,000	565,521	569,089	1,265,676	0.450
2002	47,511	198,873	250,504	87,527	167,396	101,131	852,942	327,197	723,709	1,021,287	702,278	735,038	573,725	576,652	1,429,594	0.403
2003	18,889	157,528	268,579	122,399	261,576	121,995	950,966	170,282	783,134	1,057,027	514,068	913,541	478,018	484,984	1,435,950	0.338
2004	120,347	135,990	180,576	171,227	136,623	253,377	998,140	212,653	587,593	722,097	893,938	574,961	913,805	934,602	1,932,742	0.484
2005	77,254	420,147	217,074	153,251	252,715	116,909	1,237,350	295,699	1,478,589	1,053,760	1,019,465	1,035,060	411,798	415,575	1,652,925	0.251

Table 5.2.2.1 (con't). Estimated number of spotted seatrout landed (MRFSS Type A+B1) and number released alive (MRFSS Type B2) for each two-month period and for each year in the Southwest region of the **gulf** coast of Florida during 1982-2005. Blanks indicate periods when no estimates were available. The proportion of the total catch that was released alive is also given.

	Landings							Released Alive							Total Catch	Prop. Released
	Jan-Feb	Mar-Apr	May-Jun	Jul-Aug	Sep-Oct	Nov-Dec	Annual	Jan-Feb	Mar-Apr	May-Jun	Jul-Aug	Sep-Oct	Nov-Dec	Annual		
1982	307,432	219,483	195,373	70,656	88,097	42,615	923,656	191,938	184,009	61,827	22,955	104,612	81,654	646,995	1,570,651	0.412
1983	0	15,730	72,623	334,185	118,042	365,807	906,387	0	55,128	102,325	304,020	103,026	217,824	782,323	1,688,710	0.463
1984	273,132	305,481	567,070	99,556	10,660	157,488	1,413,387	211,551	651,410	1,513,935	111,517	32,081	310,953	2,831,447	4,244,834	0.667
1985	368,868	32,080	111,832	32,610	10,339	33,298	589,027	39,692	51,710	206,923	88,294	96,584	226,026	709,229	1,298,256	0.546
1986	200,208	137,617	151,452	85,072	434,665	188,890	1,197,904	115,209	86,447	186,853	66,740	290,081	292,121	1,037,451	2,235,355	0.464
1987	190,017	127,431	37,923	80,881	68,268	195,564	700,084	225,457	298,669	44,175	130,515	101,097	346,368	1,146,281	1,846,365	0.621
1988	87,195	186,813	193,275	202,105	174,544	345,172	1,189,104	91,699	279,192	320,826	257,279	367,285	513,424	1,829,705	3,018,809	0.606
1989	362,248	186,444	297,988	183,328	330,365	153,667	1,514,040	799,147	385,283	636,311	567,556	817,406	1,104,201	4,309,904	5,823,944	0.740
1990	186,027	134,200	66,936	55,130	50,991	115,039	608,323	1,055,346	761,318	692,865	638,208	432,485	617,029	4,197,251	4,805,574	0.873
1991	89,876	95,102	166,316	95,408	234,990	95,609	777,301	597,292	275,768	1,030,891	471,655	1,259,400	713,877	4,348,883	5,126,184	0.848
1992	132,654	156,439	146,781	96,688	70,430	151,830	754,822	740,205	705,982	782,173	415,594	597,779	589,800	3,831,533	4,586,355	0.835
1993	132,731	186,696	140,326	66,118	78,568	75,233	679,672	725,541	663,199	551,134	467,136	732,765	695,587	3,835,362	4,515,034	0.849
1994	80,877	177,310	49,852	41,156	51,857	60,269	461,321	300,008	914,340	476,360	376,690	606,322	495,854	3,169,574	3,630,895	0.873
1995	86,407	69,464	69,012	27,107	19,658	69,521	341,169	509,413	450,030	431,481	318,987	111,070	299,688	2,120,669	2,461,838	0.861
1996	25,622	96,302	74,187	34,334	62,575	22,090	315,110	216,610	598,893	558,290	488,396	551,872	618,190	3,032,251	3,347,361	0.906
1997	120,923	89,990	156,553	100,473	83,927	17,910	569,776	1,009,676	716,787	991,330	853,957	801,050	733,776	5,106,576	5,676,352	0.900
1998	112,517	183,876	239,796	95,800	68,979	5,486	706,454	730,496	1,024,847	1,171,691	822,332	477,576	681,455	4,908,397	5,614,851	0.874
1999	189,452	176,789	98,346	45,764	58,459	1,818	570,628	1,255,011	1,084,922	748,409	492,219	481,643	461,088	4,523,292	5,093,920	0.888
2000	147,016	156,391	128,598	19,702	49,723	27,050	528,480	1,195,871	546,490	836,590	357,909	673,252	632,286	4,242,398	4,770,878	0.889
2001	54,282	84,243	93,489	55,644	52,683	11,449	351,790	472,147	513,177	577,581	643,781	671,714	645,361	3,523,761	3,875,551	0.909
2002	97,337	146,755	158,077	93,912	103,930	14,287	614,298	859,409	916,320	1,126,474	909,841	1,274,824	1,369,819	6,456,687	7,070,985	0.913
2003	110,897	184,073	118,701	71,489	160,765	9,091	655,016	952,571	1,286,877	1,016,233	1,085,319	1,437,536	681,556	6,460,092	7,115,108	0.908
2004	167,262	297,225	142,851	94,320	114,400	15,000	831,058	1,020,872	1,411,159	954,398	864,054	705,981	742,545	5,699,009	6,530,067	0.873
2005	221,256	154,847	209,816	61,197	40,115	8,887	696,118	1,578,987	1,096,270	1,542,945	853,890	545,130	488,405	6,105,627	6,801,745	0.898

Table 5.2.2.1 (con't). Estimated number of spotted seatrout landed (MRFSS Type A+B1) and number released alive (MRFSS Type B2) for each two-month period and for each year in the Southeast region of the **Atlantic** coast of Florida during 1982-2005. Blanks indicate periods when no estimates were available. The proportion of the total catch that was released alive is also given.

	Landings						Released Alive						Total Catch	Prop. Released		
	Jan-Feb	Mar-Apr	May-Jun	Jul-Aug	Sep-Oct	Nov-Dec	Annual	Jan-Feb	Mar-Apr	May-Jun	Jul-Aug	Sep-Oct			Nov-Dec	Annual
1982	7,367		56,040	31,270	35,424	69,498	199,599	0		4,381	23,590	15,704	86,622	130,297	329,896	0.395
1983	100,180	6,470	168,274	99,720	12,211	18,592	405,447	145,775	4,183	24,195	116,776	30,526	39,515	360,970	766,417	0.471
1984	3,384	78,840	1,782	35,192	25,643	82,036	226,877	0	25,771	0	10,700	0	11,090	47,561	274,438	0.173
1985	140,261	24,006	5,096	32,596	44,176	50,683	296,818	0	40,009	0	17,780	9,171	0	66,960	363,778	0.184
1986	94,376	10,790	15,646	1,473	18,402	125,068	265,755	0	0	4,890	0	0	22,663	27,553	293,308	0.094
1987	55,131	62,849	16,749	15,478	16,793	15,715	182,715	6,790	10,771	0	11,513	0	0	29,074	211,789	0.137
1988	4,591		26,543	42,297	23,760	142,154	239,345	23,180		55,739	27,497	12,608	309,758	428,782	668,127	0.642
1989	11,588	41,549	41,912	5,320	0	6,946	107,315	8,691	75,556	36,112	7,636	2,176	21,346	151,517	258,832	0.585
1990	32,509	7,494	6,673	49,695	1,900	37,846	136,117	18,136	0	0	70,619	5,699	82,101	176,555	312,672	0.565
1991	22,056	21,274	46,669	27,225	2,952	35,234	155,410	74,682	69,844	181,492	83,755	1,476	171,585	582,834	738,244	0.789
1992	36,697	18,830	14,158	5,940	8,624	27,688	111,937	112,569	208,710	43,982	0	24,969	128,692	518,922	630,859	0.823
1993	11,041	6,964	15,573	6,113	6,168	18,426	64,285	74,301	90,949	179,688	54,253	164,941	68,255	632,387	696,672	0.908
1994	20,326	18,521	9,876	16,696	12,455	19,630	97,504	67,725	69,810	37,815	138,721	92,850	49,693	456,614	554,118	0.824
1995	34,275	30,264	20,564	10,956	40,411	42,955	179,425	104,017	198,149	256,739	48,039	93,221	75,006	775,171	954,596	0.812
1996	24,906	15,191	17,243	29,787	10,258	0	97,385	48,494	119,236	226,509	241,668	91,886	136,264	864,057	961,442	0.899
1997	57,425	10,902	25,890	24,264	23,767	0	142,248	208,412	41,534	123,808	426,828	187,653	139,098	1,127,333	1,269,581	0.888
1998	14,735	12,307	24,207	18,889	70,066	1,806	142,010	50,219	206,158	178,424	196,651	76,158	121,288	828,898	970,908	0.854
1999	29,192	31,452	46,912	72,361	33,670	2,448	216,035	153,659	126,911	377,753	430,714	221,003	139,622	1,449,662	1,665,697	0.870
2000	18,971	19,410	26,241	83,644	55,790	2,295	206,351	328,599	193,023	227,600	658,036	503,447	134,912	2,045,617	2,251,968	0.908
2001	19,852	27,211	41,834	70,970	25,554	2,705	188,126	96,347	272,922	380,982	630,911	246,647	255,955	1,883,764	2,071,890	0.909
2002	52,109	27,780	31,616	27,830	19,902	3,127	162,364	672,032	324,584	185,447	466,933	256,995	237,700	2,143,691	2,306,055	0.930
2003	12,385	20,952	20,819	32,489	14,602	5,150	106,397	115,489	242,166	274,536	340,579	285,530	231,214	1,489,514	1,595,911	0.933
2004	24,851	20,246	48,019	24,559	19,696	3,459	140,830	176,864	230,781	351,408	259,099	330,272	324,368	1,672,792	1,813,622	0.922
2005	24,976	37,467	76,650	55,971	36,111	2,514	233,689	197,822	497,484	846,329	627,688	389,234	527,256	3,085,813	3,319,502	0.930

Table 5.2.2.1 (con't). Estimated number of spotted seatrout landed (MRFSS Type A+B1) and number released alive (MRFSS Type B2) for each two-month period and for each year in the Northeast region of the **Atlantic** coast of Florida during 1982-2005. Blanks indicate periods when no estimates were available. The proportion of the total catch that was released alive is also given.

	Landings							Released Alive							Total Catch	Prop. Released
	Jan-Feb	Mar-Apr	May-Jun	Jul-Aug	Sep-Oct	Nov-Dec	Annual	Jan-Feb	Mar-Apr	May-Jun	Jul-Aug	Sep-Oct	Nov-Dec	Annual		
1982	18,309	59,601	71,898	14,097	6,498	55,134	225,537	0	29,801	0	0	0	11,016	40,817	266,354	0.153
1983	90,701	41,231	6,836	35,881	44,452	15,818	234,919	0	3,458	0	0	0	4,133	7,591	242,510	0.031
1984	5,283	19,050	69,738	75,566	46,246	260,141	476,024	5,077	3,808	10,115	5,350	0	4,436	28,786	504,810	0.057
1985	55,297	155,289	29,228	59,020	18,792	257,385	575,011	0	0	0	0	0	0	0	575,011	0.000
1986	35,313	65,693	10,757	10,310	93,400	69,116	284,589	1,696	0	978	5,419	0	0	8,093	292,682	0.028
1987	33,950	53,793	22,963	54,424	125,395	272,774	563,299	3,880	0	0	2,093	0	6,344	12,317	575,616	0.021
1988	6,094	44,599	2,654	9,588	636	28,874	92,445	0	0	0	0	0	2,883	2,883	95,328	0.030
1989	2,897	3,559	3,363	17,453	28,395	35,057	90,724	2,897	0	0	0	0	32,993	35,890	126,614	0.283
1990		12,676	13,648	37,750	8,548	41,513	114,135		7,337	0	1,308	3,799	14,439	26,883	141,018	0.191
1991	3,899	5,572	26,694	22,787	47,035	125,042	231,029	0	0	22,726	33,674	40,214	110,331	206,945	437,974	0.473
1992	24,075	42,105	90,319	59,940	13,193	21,704	251,336	37,231	5,433	1,427	0	4,305	29,937	78,333	329,669	0.238
1993	11,676	3,109	13,571	14,059	27,256	140,036	209,707	4,302	3,886	6,320	6,749	6,118	120,810	148,185	357,892	0.414
1994	17,484	41,918	14,654	15,568	23,939	43,716	157,279	8,745	14,076	14,435	12,909	27,796	40,052	118,013	275,292	0.429
1995	39,067	18,766	2,102	1,470	52,714	88,341	202,460	71,621	21,716	3,138	10,956	41,505	150,572	299,508	501,968	0.597
1996	1,121	2,574	2,760	2,387	23,413	19,045	51,300	13,455	38,125	9,658	28,165	60,041	68,391	217,835	269,135	0.809
1997	3,049	656	17,604	10,187	24,595	29,708	85,799	45,236	18,103	99,362	35,076	35,785	88,382	321,944	407,743	0.790
1998	0	3,829	19,884	440	10,754	12,254	47,161	23,339	35,225	15,562	3,077	40,401	58,941	176,545	223,706	0.789
1999	819	3,102	3,211	4,517	7,505	5,858	25,012	21,799	10,457	4,597	19,177	18,186	53,500	127,716	152,728	0.836
2000	0	9,718	2,167	8,239	18,496	41,598	80,218	29,993	21,439	13,868	18,595	53,335	127,642	264,872	345,090	0.768
2001	988	9,580	8,118	10,302	11,271	22,609	62,868	10,641	19,137	8,465	11,041	18,700	43,888	111,872	174,740	0.640
2002	667	8,238	9,753	4,520	9,283	11,642	44,103	37,122	12,129	9,087	16,018	22,101	82,896	179,353	223,456	0.803
2003	2,087	4,277	4,897	5,236	15,130	29,709	61,336	29,713	20,465	11,123	10,587	36,331	94,918	203,137	264,473	0.768
2004	2,186	10,051	9,055	8,162	18,480	7,534	55,468	28,063	74,034	29,271	22,658	54,127	33,610	241,763	297,231	0.813
2005	12,803	6,606	11,054	5,954	31,781	27,540	95,738	46,533	47,860	8,454	25,624	114,314	82,436	325,221	420,959	0.773

Table 5.2.2.2. Estimated recreational kill (landings plus 8% or fish released alive) of spotted seatrout made on the gulf and Atlantic coast regions of Florida during 1950-2005. Regional landings prior to 1982 were estimated from a relation between Florida population size and the total catch of spotted seatrout during 1982-2004 (total catch = 0.88(FL population)-2087783; $r^2=0.51$). The 1982-2005 estimates were derived from recreational landings and release estimates made by the National Marine Fisheries Service Marine Fisheries Statistics Survey.

	Northwest	Southwest	Southeast	Northeast		Northwest	Southwest	Southeast	Northeast
1950	159,223	44,900	29,852	10,906	1978	2,869,373	503,860	497,546	182,084
1951	208,654	56,685	26,841	49,190	1979	2,588,709	1,232,161	65,595	286,395
1952	277,545	70,478	11,846	17,919	1980	2,972,172	664,174	267,822	630,078
1953	422,518	111,631	18,758	58,905	1981	1,946,150	1,048,894	282,214	345,389
1954	439,327	107,375	62,372	29,374	1982	1,615,465	975,416	210,023	228,802
1955	554,426	163,061	30,974	36,111	1983	3,715,256	968,973	434,325	235,526
1956	489,902	161,141	33,949	99,008	1984	4,435,991	1,639,903	230,682	478,327
1957	701,658	136,927	56,280	152,461	1985	2,377,024	645,765	302,175	575,011
1958	783,126	194,419	92,518	15,058	1986	3,481,058	1,280,900	267,959	285,236
1959	1,027,732	188,220	58,402	62,168	1987	2,878,780	791,786	185,041	564,284
1960	1,029,419	223,810	193,001	62,410	1988	4,194,034	1,335,480	273,648	92,676
1961	1,108,017	335,582	27,476	178,740	1989	2,983,186	1,858,832	119,436	93,595
1962	923,245	515,159	158,509	149,255	1990	852,637	944,103	150,241	116,286
1963	816,272	466,576	61,458	126,842	1991	2,274,009	1,125,212	202,037	247,585
1964	1,502,147	267,209	32,495	210,145	1992	1,291,439	1,061,345	153,451	257,603
1965	1,046,809	268,389	161,698	298,620	1993	1,061,180	986,501	114,876	221,562
1966	1,448,977	313,876	179,188	317,797	1994	1,494,055	714,887	134,033	166,720
1967	1,657,043	357,858	84,769	244,925	1995	1,839,731	510,823	241,439	226,421
1968	1,716,821	447,762	200,701	109,213	1996	991,874	557,690	166,510	68,727
1969	1,351,039	395,231	89,536	263,914	1997	877,742	978,302	232,435	111,555
1970	1,257,548	785,809	163,008	220,058	1998	977,393	1,099,126	208,322	61,285
1971	1,647,314	679,436	107,482	32,163	1999	1,317,787	932,491	332,008	35,229
1972	1,399,724	653,686	292,498	251,305	2000	1,366,967	867,872	370,000	101,408
1973	1,846,904	435,903	387,775	143,100	2001	898,012	633,691	338,827	71,818
1974	2,323,226	510,558	129,764	151,920	2002	1,179,601	1,130,833	333,859	58,451
1975	2,044,971	497,902	424,302	157,131	2003	1,264,252	1,171,823	225,558	77,587
1976	2,576,954	526,514	314,297	529,962	2004	1,310,544	1,286,979	274,653	74,809
1977	2,528,732	549,675	492,696	169,074	2005	1,660,900	1,184,568	480,554	121,756

Table 5.2.2.3. Estimated total length(inches) frequencies for the recreational landings (MRFSS Type A+B1) of spotted seatrout made in the Northwest region on the gulf coast each year during 1986-2005. Earlier length-frequencies are not shown due to space constraints but are available upon request.

	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	192	0	0
4	7,003	4,022	7,620	9,769	155	1,361	142	411	307	194	0	0	0	0	0	0	0	0	0	183
5	14,006	8,043	15,241	19,539	311	2,721	284	821	615	388	73	142	154	155	102	0	0	96	0	367
6	30,347	18,119	33,021	42,334	674	5,896	2,366	1,779	3,984	841	280	285	309	310	204	0	0	288	292	550
7	42,019	35,107	49,130	58,617	1,295	11,338	2,935	3,422	2,561	1,617	450	617	669	672	442	0	608	192	292	734
8	215,484	153,593	234,484	299,596	4,922	43,084	4,503	13,002	9,731	6,146	607	1,187	1,286	1,293	850	355	608	2,241	1,167	917
9	274,556	238,216	341,804	354,956	8,601	77,634	9,465	22,719	17,004	10,739	2,307	4,511	4,887	4,913	3,230	888	608	1,249	972	1,651
10	221,746	228,687	413,309	257,261	12,487	113,998	13,415	32,983	24,686	15,590	4,031	9,897	8,540	9,768	5,644	2,908	4,119	2,787	3,403	2,936
11	351,708	252,279	413,874	202,645	24,973	175,968	18,956	51,716	38,992	26,156	8,388	13,222	13,402	14,571	9,517	2,886	2,431	8,733	2,528	3,119
12	520,702	391,889	507,444	228,455	29,180	147,512	27,891	47,842	46,597	27,430	11,955	23,001	18,858	20,013	14,989	5,913	8,246	9,052	5,335	9,784
13	678,413	478,566	471,183	275,754	51,456	183,589	61,075	80,704	144,169	158,901	16,563	18,092	21,412	21,536	17,178	5,731	17,557	16,561	16,237	16,931
14	302,489	358,698	425,676	187,478	187,559	287,069	274,331	160,807	274,489	443,495	81,330	44,452	72,133	89,396	79,161	55,708	65,609	77,744	73,702	95,844
15	274,798	181,718	289,280	67,160	159,365	258,753	234,100	130,606	255,810	363,187	225,936	138,681	210,498	226,805	237,654	155,381	231,738	266,285	274,449	362,509
16	120,608	145,216	293,907	85,228	89,293	178,241	155,233	108,764	171,123	181,938	198,485	152,589	168,178	137,560	201,690	157,499	201,289	213,469	215,086	249,171
17	109,796	87,685	224,515	154,809	47,860	156,778	105,846	80,647	107,018	98,548	125,889	94,833	86,157	130,152	120,601	113,289	123,743	131,652	172,521	214,098
18	18,520	29,312	121,612	126,279	24,763	109,601	96,189	37,842	44,437	55,305	48,974	54,770	50,878	88,003	107,174	67,628	62,908	88,221	94,187	124,063
19	7,932	21,918	40,542	160,852	16,569	72,366	41,758	39,581	35,577	41,190	37,626	20,946	30,737	80,806	61,920	46,868	70,854	70,449	62,449	91,517
20	18,520	43,816	33,382	164,853	26,246	45,572	17,208	13,170	17,520	23,950	14,951	19,535	19,368	49,509	43,707	38,144	32,646	28,810	32,770	26,652
21	5,176	6,186	14,476	17,553	13,159	30,407	8,895	21,281	14,322	17,224	14,807	6,773	11,707	25,972	30,856	23,461	13,433	17,701	18,852	24,039
22	24,285	3,386	27,203	33,108	12,589	6,969	10,327	2,833	5,139	6,459	8,763	7,547	6,307	8,748	18,127	10,658	3,322	9,018	13,314	5,236
23	0	10,773	8,006	0	155	3,813	6,660	11,725	3,121	1,594	1,624	1,787	4,663	6,901	15,236	5,223	7,166	3,416	2,701	2,434
24	7,210	0	13,142	0	52	5,155	1,876	3,808	5,652	1,433	1,876	322	1,114	2,832	1,846	3,085	1,593	2,518	4,645	2,527
25	0	0	0	8,040	52	4,746	334	137	3,335	65	1,661	47	51	2,288	5,552	961	3,792	192	2,199	1,901
26	0	0	0	8,040	52	4,746	47	137	4,427	65	24	2,663	396	1,292	1,920	0	62	0	0	0
27	0	0	0	0	52	454	47	137	102	2,479	24	47	51	52	34	0	608	0	1,041	0
28	0	0	0	0	0	0	0	0	0	400	24	47	51	52	34	0	0	96	0	0
29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	189
30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Table 5.2.2.3 (con't).. Estimated total length(inches) frequencies for the recreational landings (MRFSS Type A+B1) of spotted seatrout made in the Southwest region on the gulf coast each year during 1986-2005. Earlier length-frequencies are not shown due to space constraints but are available upon request.

	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	438	0	0
4	1,834	1,018	1,356	892	71	69	173	168	126	205	0	0	0	0	0	0	0	0	0	144
5	3,668	2,036	2,711	1,783	141	138	346	336	251	409	179	263	187	116	151	0	0	219	0	288
6	7,947	4,412	5,875	3,864	306	299	750	729	545	887	357	526	374	232	302	0	0	657	632	432
7	11,003	9,056	8,134	5,350	589	575	1,442	1,401	1,047	3,195	774	1,140	810	993	654	0	780	438	632	575
8	65,833	32,694	50,164	27,345	2,237	2,184	5,481	5,324	3,980	6,479	1,489	2,192	1,559	967	1,258	607	780	3,287	2,528	719
9	90,618	50,067	49,258	38,675	6,828	3,817	9,578	9,304	6,954	11,320	6,067	8,330	6,817	3,770	4,782	2,950	780	2,849	2,106	1,295
10	62,684	46,682	44,323	29,868	20,502	6,434	13,905	13,510	10,096	16,435	10,295	14,556	10,435	6,843	8,356	2,625	3,985	6,355	7,373	3,299
11	111,405	59,227	57,721	64,780	15,529	9,239	23,068	20,345	17,361	24,755	14,866	21,133	15,900	10,257	14,645	3,340	5,953	10,519	6,662	4,441
12	175,699	94,641	205,752	285,240	18,123	23,966	25,132	22,159	15,623	20,994	21,721	31,831	23,934	14,036	19,190	3,491	13,013	17,563	10,248	9,511
13	187,690	113,946	246,593	255,637	72,271	50,697	46,183	45,894	40,993	23,819	18,816	30,819	27,232	15,338	20,220	10,736	20,429	19,572	20,076	16,634
14	141,815	67,409	135,067	321,930	176,636	258,481	180,413	161,064	109,240	73,042	29,916	65,316	58,578	40,807	40,438	19,621	53,783	60,093	70,192	53,081
15	107,645	63,238	142,277	149,509	135,720	180,238	187,899	151,032	76,653	62,348	63,467	117,941	163,498	145,434	109,742	73,373	159,341	167,113	201,300	183,123
16	86,347	48,519	106,577	69,045	69,147	77,846	97,844	96,885	75,441	42,191	48,545	114,467	148,102	106,005	107,446	72,058	125,253	125,329	190,364	149,314
17	38,377	18,413	27,662	92,131	33,995	58,811	52,010	50,864	22,106	19,211	35,858	69,537	97,888	97,627	84,032	65,347	92,031	83,583	137,960	112,231
18	26,287	26,374	32,299	54,511	24,212	35,876	36,624	36,724	24,198	12,272	22,404	34,416	60,244	42,333	45,794	33,006	56,072	82,950	70,381	63,927
19	28,782	26,998	18,956	39,723	11,794	24,243	22,628	33,305	18,923	9,021	14,131	12,806	32,910	34,088	33,130	31,274	32,726	40,973	42,556	40,100
20	9,594	13,868	16,666	18,103	2,967	15,100	19,951	11,906	10,455	3,732	12,299	20,286	18,838	27,267	17,682	9,177	17,464	13,476	40,553	20,981
21	14,391	16,850	16,069	6,961	377	8,330	14,306	6,881	10,241	4,073	3,128	5,651	22,637	12,658	10,971	10,959	11,864	12,540	13,554	17,646
22	4,797	3,350	9,393	25,448	6,889	18,015	5,986	280	2,504	4,813	3,561	10,068	9,769	5,853	6,818	6,321	6,188	2,697	8,508	6,589
23	16,693	1,283	5,824	5,564	4,305	2,850	7,319	5,623	10,286	1,695	1,704	1,853	3,553	3,596	914	3,098	4,347	2,250	3,633	9,510
24	0	0	3,237	3,754	24	23	3,612	5,279	709	68	1,554	4,785	2,937	1,077	525	2,063	3,602	219	1,800	701
25	0	0	0	9,987	4,258	23	58	56	2,210	68	2,393	88	62	532	50	312	2,423	438	0	1,575
26	0	0	3,190	3,936	24	23	58	543	709	68	1,466	1,595	62	722	1,278	1,432	2,607	243	0	0
27	4,797	0	0	0	24	23	58	56	42	68	60	88	62	39	50	0	780	995	0	0
28	0	0	0	0	0	0	0	0	0	0	60	88	62	39	50	0	97	219	0	0
29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
32	0	0	0	0	0	0	0	0	628	0	0	0	0	0	0	0	0	0	0	0
33	0	0	0	0	1,354	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Table 5.2.2.3 (con't).. Estimated total length(inches) frequencies for the recreational landings (MRFSS Type A+B1) of spotted seatrout made in the Southeast region on the Atlantic coast each year during 1986-2005. Earlier length-frequencies are not shown due to space constraints but are available upon request.

	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	5	4	161	108	21	15	19	21	28	127	0	0	0	0	0	0	0	0	0	0
5	10	7	642	392	41	29	39	41	57	254	34	58	75	40	26	0	0	0	0	0
6	22	16	1,018	643	90	63	84	90	123	549	67	115	151	80	51	0	0	0	0	0
7	31	21	3,203	1,883	173	122	162	172	237	1,057	146	250	327	173	111	0	0	0	0	635
8	158	110	4,945	3,305	2,074	463	615	2,709	3,906	4,015	280	481	629	332	213	216	276	275	428	635
9	188	130	5,859	3,915	1,997	809	1,397	3,199	1,573	7,015	1,064	1,829	3,128	1,261	808	539	690	687	643	635
10	136	94	5,204	3,367	2,515	1,174	1,560	1,662	3,286	10,185	1,859	3,195	4,176	2,204	1,411	647	1,428	1,626	857	635
11	98	1,566	13,283	7,700	4,775	4,491	3,827	3,531	5,445	15,341	3,087	4,639	6,063	3,200	3,477	1,186	2,717	1,511	1,714	1,905
12	241,475	166,443	107,218	59,629	7,646	4,116	4,161	8,136	7,720	13,082	20,296	14,336	10,608	4,820	3,800	863	1,104	1,099	857	5,915
13	16,871	8,980	23,587	13,151	9,314	12,059	6,631	4,736	8,287	13,129	6,087	9,031	8,805	6,445	5,394	1,828	2,276	3,253	2,552	6,764
14	309	682	16,743	9,313	30,403	52,169	26,318	10,899	14,889	35,704	10,955	6,090	9,258	19,289	14,989	5,419	8,242	5,265	14,186	13,257
15	589	2,487	16,286	9,008	21,129	22,081	23,956	6,591	13,613	17,554	9,674	28,968	36,570	44,705	37,167	38,884	41,325	23,809	27,114	47,612
16	4,097	672	13,093	7,242	13,874	16,519	16,548	4,371	12,383	8,575	6,853	17,947	11,086	41,158	36,228	35,948	26,784	18,679	20,850	45,753
17	0	0	9,261	5,122	9,295	11,046	3,994	4,330	7,317	10,313	11,578	19,952	18,532	31,805	26,119	33,796	34,416	13,003	21,211	31,840
18	294	1,498	5,109	2,826	9,939	8,177	4,767	4,123	10,038	10,040	9,014	10,257	10,331	14,789	12,761	16,151	16,331	8,439	17,503	18,168
19	0	0	5,429	3,003	4,413	2,835	2,459	3,240	2,222	6,945	4,156	6,505	2,398	7,762	14,814	20,930	5,018	10,790	5,494	16,256
20	294	0	3,193	1,767	6,031	5,498	5,846	1,103	2,109	10,421	6,889	5,674	4,537	12,716	11,599	6,858	6,629	5,989	5,926	12,311
21	294	0	1,597	883	2,663	5,522	1,903	2,164	1,153	1,672	2,536	5,032	4,972	9,757	12,575	10,321	4,490	4,612	4,471	7,127
22	0	0	319	176	4,288	2,747	2,987	1,061	2,052	5,189	179	308	2,013	2,432	4,464	1,954	4,014	2,698	3,284	8,722
23	294	0	319	176	2,006	15	2,329	1,048	28	3,114	56	1,566	1,736	4,915	1,657	4,038	2,798	1,077	3,284	4,585
24	294	0	958	530	1,424	5,449	1,162	7	9	2,033	1,282	1,528	1,686	1,895	2,659	3,836	2,276	1,463	6,332	5,061
25	0	0	638	353	858	5	6	1,034	1,011	42	11	1,489	3,245	2,124	7,841	1,603	952	661	1,590	1,671
26	0	0	0	0	574	5	6	7	9	2,033	1,259	19	25	652	2,866	534	600	802	2,532	2,528
27	0	0	319	176	291	5	1,162	7	9	42	11	1,489	1,635	1,559	2,046	1,196	0	661	0	1,671
28	0	0	0	0	0	0	0	0	0	0	11	1,489	25	919	3,276	1,196	0	0	0	0
29	294	0	319	176	0	0	0	0	0	0	0	0	0	0	0	180	0	0	0	0
30	0	0	638	353	284	0	0	0	0	996	0	0	0	1,005	0	0	0	0	0	0
31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Table 5.2.2.3 (con't).. Estimated total length(inches) frequencies for the recreational landings (MRFSS Type A+B1) of spotted seatrout made in the Northeast region on the Atlantic coast each year during 1986-2005. Earlier length-frequencies are not shown due to space constraints but are available upon request.

	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
3	0	0	450	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	3	17	788	39	3	35	4	29	20	121	0	0	0	0	0	0	0	0	0	0
5	5	34	2	79	5	70	8	58	40	243	3	9	3	4	5	0	0	0	0	0
6	11	73	117	170	12	152	17	125	86	526	5	18	6	8	9	0	0	0	0	0
7	16	101	1,131	236	22	292	33	240	165	1,011	12	39	12	18	20	0	0	0	0	10
8	81	517	2,616	1,205	85	1,110	125	912	625	3,842	23	75	23	34	38	44	35	48	210	10
9	96	820	1,611	1,428	148	2,988	219	1,593	1,093	6,714	86	286	89	131	144	111	88	121	315	10
10	69	444	363	1,035	215	2,816	23,329	2,313	2,395	9,747	379	870	365	332	1,426	133	105	145	419	10
11	6,139	320	1,705	747	3,955	41,924	20,202	3,483	6,442	14,682	218	725	226	332	364	245	193	266	839	30
12	54,433	38,481	13,394	22,567	7,519	23,139	43,532	16,887	30,264	13,673	1,469	2,941	1,385	1,019	549	178	140	193	419	2,710
13	30,535	62,125	14,732	8,977	5,662	5,949	17,591	29,565	15,636	11,813	6,647	11,214	6,117	3,301	2,783	1,653	210	1,993	726	1,375
14	26,281	73,511	12,256	13,392	20,058	73,773	27,676	75,629	52,754	64,761	7,290	12,184	6,701	3,550	7,416	5,975	4,511	416	2,592	5,485
15	65,790	148,516	15,175	13,131	20,033	28,416	32,955	34,109	9,462	31,995	16,055	26,157	14,709	7,395	30,727	26,232	14,483	19,235	18,534	34,553
16	35,407	98,944	8,993	7,295	16,379	27,087	23,061	18,219	17,409	9,962	4,848	7,952	4,445	2,266	8,323	12,603	10,679	14,641	12,280	31,114
17	20,185	36,924	5,508	0	20,006	9,264	16,479	12,814	6,020	16,038	5,283	8,618	4,840	2,441	12,989	11,014	4,049	11,769	7,078	6,602
18	22,311	72,384	6,857	17,508	5,450	10,147	32,876	3,203	5,822	4,294	4,136	6,752	3,790	1,913	9,453	289	3,081	2,867	2,583	5,600
19	10,976	21,578	3,260	0	5,469	1,317	3,318	3,405	151	3,036	1,143	1,854	1,046	522	3	1,475	2,889	4,381	4,163	4,110
20	5,239	4,360	1,236	1,458	3,642	129	6,589	2,607	2,368	445	706	1,179	648	343	3,561	22	1,427	2,577	1,648	1,315
21	4,819	2,076	675	0	5,463	2,283	21	737	4,157	4,860	1,151	1,881	1,055	535	2,368	1,419	1,436	887	157	164
22	0	0	562	0	4	58	7	48	2,328	2,308	243	418	224	126	24	44	35	48	1,753	1,315
23	0	0	113	0	3	35	4	3,113	20	121	461	755	422	215	8	44	35	48	1,753	1,315
24	2,195	0	113	0	1	12	3,289	593	7	40	231	379	212	108	5	0	705	0	0	10
25	0	2,076	225	0	1	12	1	10	7	40	457	743	419	209	2	0	0	1,702	0	0
26	0	0	225	1,458	1	12	1	10	7	2,146	230	373	210	105	2	1,386	0	0	0	0
27	0	0	113	0	1	12	1	10	7	40	1	3	1	1	2	0	0	0	0	0
28	0	0	225	0	0	0	0	0	0	0	1	3	1	1	2	0	0	0	0	0
29	0	0	0	0	0	0	0	0	0	0	229	370	209	104	0	0	0	0	0	0
30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Table 5.2.2.4. Estimated total length(inches) frequencies for the recreational live releases (MRFSS Type B2) of spotted seatrout made in the Northwest region on the gulf coast each year during 1986-2005. Earlier length-frequencies are not shown due to space constraints but are available upon request.

	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15,727	0	0
4	19,450	14,979	17,754	18,223	3,061	7,527	4,295	4,224	5,725	7,704	0	0	0	0	0	0	0	0	0	13,610
5	38,901	29,959	35,509	36,446	6,122	15,054	8,589	8,448	11,449	15,409	4,027	5,690	5,339	8,569	8,463	0	0	7,864	0	27,220
6	84,285	64,910	76,936	78,966	13,265	32,617	18,611	18,304	24,807	33,385	8,053	11,380	10,678	17,139	16,926	0	0	23,591	25,412	40,831
7	116,702	89,876	106,527	109,338	25,510	62,724	35,790	35,200	47,706	64,203	17,448	24,657	23,135	37,134	36,673	0	48,610	15,727	25,412	54,441
8	596,477	459,366	544,470	558,838	96,939	238,353	136,000	133,761	181,283	243,970	33,555	47,417	44,490	71,411	70,525	36,623	48,610	117,954	101,650	68,051
9	706,696	544,249	645,079	662,101	169,389	416,491	237,642	233,729	316,768	426,305	127,508	180,184	169,061	271,361	267,996	91,557	48,610	102,227	84,708	122,492
10	512,193	394,456	467,534	479,872	245,920	604,664	345,011	339,330	459,886	618,912	222,803	314,849	295,412	474,168	468,287	109,868	243,050	228,044	296,479	217,763
11	369,557	284,607	337,335	346,237	370,410	910,760	519,664	511,107	692,692	932,221	323,467	457,100	428,881	688,401	679,863	201,425	194,440	377,452	220,241	231,373
12	337,139	259,642	307,744	315,865	291,839	717,568	409,432	402,690	545,757	734,477	487,213	688,494	508,962	645,990	1,036,886	1,024,026	146,491	583,319	542,588	381,187
13	110,219	84,883	100,609	103,264	244,899	602,155	343,579	337,922	457,978	616,344	383,865	542,450	508,962	816,940	806,808	219,736	826,369	518,997	491,307	843,833
14	55,109	42,441	50,304	51,632	92,858	228,317	130,274	128,129	173,650	233,697	322,124	455,203	427,101	685,544	677,042	292,982	972,199	676,269	847,082	966,324
15	0	0	0	0	63,266	155,557	88,758	87,297	118,311	159,222	122,139	172,598	161,942	259,936	256,712	366,227	388,880	597,633	728,490	803,002
16	0	0	0	0	38,776	95,341	54,400	53,504	72,513	97,588	83,215	117,594	110,334	177,099	174,903	109,868	243,050	172,999	254,125	367,475
17	0	0	0	0	32,653	80,287	45,811	45,056	61,064	82,179	51,003	72,074	67,624	108,544	107,198	512,718	97,220	141,545	118,591	244,984
18	0	0	0	0	2,041	5,018	2,863	2,816	3,816	5,136	42,950	60,694	56,947	91,406	90,272	238,047	97,220	102,227	67,767	272,204
19	0	0	0	0	23,470	57,707	32,926	32,384	43,890	59,066	2,684	3,793	3,559	5,713	5,642	73,245	97,220	117,954	59,296	68,051
20	0	0	0	0	11,225	27,599	15,747	15,488	20,991	28,249	30,870	43,624	40,931	65,698	64,883	18,311	48,610	55,045	59,296	95,271
21	0	0	0	0	16,327	40,144	22,905	22,528	30,532	41,090	14,764	20,863	19,575	31,421	31,031	27,467	0	39,318	67,767	54,441
22	0	0	0	0	5,102	12,545	7,158	7,040	9,541	12,841	21,475	30,347	28,473	45,703	45,136	36,623	0	15,727	25,412	40,831
23	0	0	0	0	3,061	7,527	4,295	4,224	5,725	7,704	6,711	9,483	8,898	14,282	14,105	36,623	97,220	15,727	16,942	68,051
24	0	0	0	0	1,020	2,509	1,432	1,408	1,908	2,568	4,027	5,690	5,339	8,569	8,463	0	0	7,864	33,883	40,831
25	0	0	0	0	1,020	2,509	1,432	1,408	1,908	2,568	1,342	1,897	1,780	2,856	2,821	0	0	15,727	0	54,441
26	0	0	0	0	1,020	2,509	1,432	1,408	1,908	2,568	1,342	1,897	1,780	2,856	2,821	0	0	0	0	0
27	0	0	0	0	1,020	2,509	1,432	1,408	1,908	2,568	1,342	1,897	1,780	2,856	2,821	0	48,610	0	0	0
28	0	0	0	0	0	0	0	0	0	0	1,342	1,897	1,780	2,856	2,821	0	0	7,864	0	0
29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Table 5.2.2.4 (con't).. Estimated total length(inches) frequencies for the recreational live releases (MRFSS Type B2) of spotted seatrout made in the Southwest region on the gulf coast each year during 1986-2005. Earlier length-frequencies are not shown due to space constraints but are available upon request.

	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25,944	0	0
4	6,848	7,566	12,077	28,448	7,300	7,563	6,664	6,670	5,512	3,688	0	0	0	0	0	0	0	0	0	15,696
5	13,696	15,132	24,155	56,896	14,599	15,127	13,327	13,340	11,025	7,376	5,273	8,881	8,536	7,867	7,378	0	0	12,972	0	31,391
6	29,674	32,787	52,335	123,276	31,631	32,774	28,875	28,904	23,887	15,982	10,547	17,762	17,073	15,733	14,756	0	0	38,916	37,087	47,087
7	41,087	45,397	72,464	170,689	60,830	63,027	55,529	55,585	45,936	30,734	22,852	38,484	36,991	34,089	31,972	0	76,865	25,944	37,087	62,783
8	210,001	232,030	370,370	872,412	231,153	239,504	211,012	211,223	174,556	116,790	43,946	74,008	71,136	65,555	61,484	51,255	76,865	194,581	148,347	78,478
9	248,806	274,906	438,807	1,033,618	403,909	418,501	368,716	369,084	305,014	204,076	166,994	281,232	270,317	249,109	233,639	128,137	76,865	168,637	123,623	141,261
10	180,327	199,244	318,035	749,136	586,399	607,583	535,304	535,839	442,822	296,279	291,799	491,415	472,344	435,285	408,254	153,764	384,327	376,190	432,680	251,131
11	130,109	143,758	229,468	540,516	883,248	915,156	806,288	807,094	666,989	446,263	423,636	713,440	685,753	631,950	592,706	281,901	307,461	622,660	321,419	266,827
12	118,696	131,148	209,339	493,102	695,892	721,032	635,257	635,892	525,506	351,601	638,091	1,074,601	1,032,897	951,858	892,748	205,019	922,384	895,073	556,302	690,611
13	38,805	42,875	68,438	161,206	583,965	605,062	533,083	533,616	440,984	295,050	502,738	846,655	813,798	749,949	703,377	307,528	1,306,710	856,157	717,012	973,133
14	19,402	21,438	34,219	80,603	221,420	229,419	202,127	202,329	167,207	111,873	421,878	710,480	682,907	629,328	590,247	410,038	1,537,306	1,115,598	1,236,228	1,114,394
15	0	0	0	0	150,858	156,308	137,713	137,851	113,921	76,221	159,962	269,390	258,936	238,620	223,802	512,547	614,923	985,878	1,063,156	926,046
16	0	0	0	0	92,461	95,801	84,405	84,489	69,822	46,716	108,985	183,541	176,418	162,576	152,480	153,764	384,327	285,386	370,868	423,784
17	0	0	0	0	77,862	80,675	71,078	71,149	58,798	39,340	66,797	112,493	108,127	99,644	93,456	717,566	153,731	233,497	173,072	282,523
18	0	0	0	0	4,866	5,042	4,442	4,447	3,675	2,459	56,250	94,731	91,054	83,910	78,700	333,156	153,731	168,637	98,898	313,914
19	0	0	0	0	55,963	57,985	51,087	51,138	42,261	28,276	3,516	5,921	5,691	5,244	4,919	102,509	153,731	194,581	86,536	78,478
20	0	0	0	0	26,765	27,732	24,433	24,457	20,212	13,523	40,430	68,088	65,445	60,311	56,565	25,627	76,865	90,805	86,536	109,870
21	0	0	0	0	38,931	40,337	35,539	35,574	29,399	19,670	19,336	32,564	31,300	28,844	27,053	38,441	0	64,860	98,898	62,783
22	0	0	0	0	12,166	12,605	11,106	11,117	9,187	6,147	28,125	47,365	45,527	41,955	39,350	51,255	0	25,944	37,087	47,087
23	0	0	0	0	7,300	7,563	6,664	6,670	5,512	3,688	8,789	14,802	14,227	13,111	12,297	51,255	153,731	25,944	24,725	78,478
24	0	0	0	0	2,433	2,521	2,221	2,223	1,837	1,229	5,273	8,881	8,536	7,867	7,378	0	0	12,972	49,449	47,087
25	0	0	0	0	2,433	2,521	2,221	2,223	1,837	1,229	1,758	2,960	2,845	2,622	2,459	0	0	25,944	0	62,783
26	0	0	0	0	2,433	2,521	2,221	2,223	1,837	1,229	1,758	2,960	2,845	2,622	2,459	0	0	0	0	0
27	0	0	0	0	2,433	2,521	2,221	2,223	1,837	1,229	1,758	2,960	2,845	2,622	2,459	0	76,865	0	0	0
28	0	0	0	0	0	0	0	0	0	0	1,758	2,960	2,845	2,622	2,459	0	0	12,972	0	0
29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Table 5.2.2.4 (con't).. Estimated total length(inches) frequencies for the recreational live releases (MRFSS Type B2) of spotted seatrout made in the Southeast region on the Atlantic coast each year during 1986-2005. Earlier length-frequencies are not shown due to space constraints but are available upon request.

	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	182	192	2,830	1,000	307	1,014	902	1,100	794	1,348	0	0	0	0	0	0	0	0	0	0
5	364	384	5,661	2,000	614	2,027	1,805	2,200	1,588	2,696	1,503	1,961	1,442	2,521	3,558	0	0	0	0	0
6	788	832	12,264	4,334	1,331	4,392	3,911	4,766	3,441	5,842	3,005	3,921	2,883	5,042	7,115	0	0	0	0	0
7	1,091	1,151	16,982	6,001	2,559	8,447	7,521	9,165	6,618	11,234	6,512	8,496	6,247	10,925	15,416	0	0	0	0	78,122
8	5,577	5,885	86,794	30,670	9,723	32,098	28,578	34,827	25,147	42,691	12,523	16,338	12,013	21,010	29,647	27,400	31,181	21,666	37,803	78,122
9	6,608	6,973	102,832	36,337	16,990	56,087	49,937	60,856	43,941	74,596	47,586	62,085	45,650	79,836	112,657	68,501	77,952	54,164	56,705	78,122
10	4,789	5,054	74,530	26,336	24,667	81,428	72,499	88,351	63,794	108,299	83,150	108,485	79,767	139,504	196,854	82,201	93,543	64,997	75,606	78,122
11	3,455	3,646	53,775	19,002	37,153	122,649	109,199	133,076	96,088	163,123	120,717	157,500	115,806	202,532	285,794	150,701	171,495	119,161	151,213	234,365
12	3,152	3,326	49,058	17,335	29,272	96,632	86,036	104,848	75,705	128,521	181,827	237,230	174,429	305,059	430,469	109,601	124,724	86,663	75,606	624,975
13	1,031	1,087	16,038	5,667	24,564	81,090	72,198	87,984	63,529	107,850	143,258	186,909	137,429	240,350	339,158	164,401	187,086	129,994	113,410	468,731
14	515	544	8,019	2,834	9,314	30,747	27,375	33,361	24,088	40,893	120,216	156,846	115,325	201,692	284,608	219,202	249,448	173,325	189,016	468,731
15	0	0	0	0	6,346	20,948	18,651	22,729	16,412	27,861	45,582	59,471	43,727	76,475	107,914	274,002	311,810	216,657	264,622	253,896
16	0	0	0	0	3,889	12,839	11,431	13,931	10,059	17,076	31,056	40,519	29,792	52,104	73,524	82,201	93,543	64,997	75,606	351,548
17	0	0	0	0	3,275	10,812	9,626	11,731	8,471	14,380	19,034	24,834	18,260	31,935	45,063	383,603	436,534	303,319	302,425	214,835
18	0	0	0	0	205	676	602	733	529	899	16,029	20,913	15,377	26,892	37,948	178,101	202,676	140,827	170,114	78,122
19	0	0	0	0	2,354	7,771	6,919	8,432	6,088	10,336	1,002	1,307	961	1,681	2,372	54,800	62,362	43,331	37,803	0
20	0	0	0	0	1,126	3,717	3,309	4,033	2,912	4,943	11,521	15,031	11,052	19,329	27,275	13,700	15,590	10,833	18,902	0
21	0	0	0	0	1,638	5,406	4,813	5,866	4,235	7,190	5,510	7,189	5,286	9,244	13,045	20,550	23,386	16,249	28,352	0
22	0	0	0	0	512	1,689	1,504	1,833	1,324	2,247	8,014	10,456	7,688	13,446	18,974	27,400	31,181	21,666	37,803	0
23	0	0	0	0	307	1,014	902	1,100	794	1,348	2,505	3,268	2,403	4,202	5,929	27,400	31,181	21,666	37,803	0
24	0	0	0	0	102	338	301	367	265	449	1,503	1,961	1,442	2,521	3,558	0	0	0	0	78,122
25	0	0	0	0	102	338	301	367	265	449	501	654	481	840	1,186	0	0	0	0	0
26	0	0	0	0	102	338	301	367	265	449	501	654	481	840	1,186	0	0	0	0	0
27	0	0	0	0	102	338	301	367	265	449	501	654	481	840	1,186	0	0	0	0	0
28	0	0	0	0	0	0	0	0	0	0	501	654	481	840	1,186	0	0	0	0	0
29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Table 5.2.2.4 (con't). Estimated total length(inches) frequencies for the recreational live releases (MRFSS Type B2) of spotted seatrout made in the Northeast region on the Atlantic coast each year during 1986-2005. Earlier length-frequencies are not shown due to space constraints but are available upon request.

	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	53	81	19	237	47	360	136	258	205	521	0	0	0	0	0	0	0	0	0	0
5	107	163	38	474	94	720	272	515	410	1,042	379	560	307	222	461	0	0	0	0	0
6	231	352	82	1,027	203	1,560	590	1,117	889	2,257	758	1,120	614	444	921	0	0	0	0	0
7	321	488	114	1,421	390	2,999	1,135	2,148	1,710	4,341	1,642	2,426	1,330	962	1,996	0	0	0	0	8,233
8	1,638	2,493	584	7,265	1,481	11,397	4,314	8,161	6,499	16,495	3,157	4,666	2,559	1,851	3,839	1,627	2,609	2,955	5,464	8,233
9	1,941	2,954	691	8,607	2,587	19,915	7,538	14,260	11,357	28,822	11,997	17,730	9,723	7,034	14,587	4,068	6,522	7,387	8,195	8,233
10	1,407	2,141	501	6,238	3,756	28,912	10,944	20,703	16,488	41,844	20,963	30,981	16,989	12,290	25,489	4,882	7,826	8,864	10,927	8,233
11	1,015	1,545	362	4,501	5,657	43,548	16,484	31,183	24,834	63,027	30,434	44,979	24,665	17,843	37,005	8,950	14,348	16,251	21,854	24,700
12	926	1,409	330	4,106	4,457	34,311	12,987	24,569	19,566	49,658	45,840	67,748	37,151	26,875	55,738	6,509	10,435	11,819	10,927	65,868
13	303	461	108	1,342	3,740	28,792	10,899	20,617	16,419	41,671	36,117	53,378	29,271	21,175	43,915	9,763	15,653	17,728	16,391	49,401
14	151	230	54	671	1,418	10,917	4,132	7,817	6,226	15,800	30,308	44,792	24,563	17,769	36,852	13,018	20,870	23,638	27,318	49,401
15	0	0	0	0	966	7,438	2,815	5,326	4,242	10,765	11,492	16,984	9,313	6,737	13,973	16,272	26,088	29,547	38,245	26,759
16	0	0	0	0	592	4,559	1,726	3,264	2,600	6,598	7,830	11,571	6,345	4,590	9,520	4,882	7,826	8,864	10,927	37,050
17	0	0	0	0	499	3,839	1,453	2,749	2,189	5,556	4,799	7,092	3,889	2,813	5,835	22,781	36,523	41,366	43,709	22,642
18	0	0	0	0	31	240	91	172	137	347	4,041	5,972	3,275	2,369	4,914	10,577	16,957	19,206	24,586	8,233
19	0	0	0	0	358	2,759	1,044	1,976	1,574	3,993	253	373	205	148	307	3,254	5,218	5,909	5,464	0
20	0	0	0	0	171	1,320	500	945	753	1,910	2,904	4,293	2,354	1,703	3,532	814	1,304	1,477	2,732	0
21	0	0	0	0	249	1,919	727	1,374	1,095	2,778	1,389	2,053	1,126	814	1,689	1,220	1,957	2,216	4,098	0
22	0	0	0	0	78	600	227	430	342	868	2,021	2,986	1,638	1,185	2,457	1,627	2,609	2,955	5,464	0
23	0	0	0	0	47	360	136	258	205	521	631	933	512	370	768	1,627	2,609	2,955	5,464	0
24	0	0	0	0	16	120	45	86	68	174	379	560	307	222	461	0	0	0	0	8,233
25	0	0	0	0	16	120	45	86	68	174	126	187	102	74	154	0	0	0	0	0
26	0	0	0	0	16	120	45	86	68	174	126	187	102	74	154	0	0	0	0	0
27	0	0	0	0	16	120	45	86	68	174	126	187	102	74	154	0	0	0	0	0
28	0	0	0	0	0	0	0	0	0	0	126	187	102	74	154	0	0	0	0	0
29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Table 5.2.2.5. Summary information describing the numbers of spotted seatrout kept in the Northwest and Southwest region's angler creels that were inspected by the Marine Recreational Fishery Statistics Survey during 2001-2005.

Northwest

Number of fish kept per angler	Numbers of years	Number of trips	Number of anglers	Average number of anglers per trip	Cumulative percentage of anglers	Number of fish		Cumulative percentage of fish	
						caught	retained	caught	retained
0	5	6,470	6,833	1.1	61.2	14,982	50	41.9	0.5
1	5	1,087	1,785	1.6	77.2	4,567	1,656	54.6	16.9
2	5	563	1,057	1.9	86.7	4,487	1,954	67.2	36.2
3	5	263	503	1.9	91.2	3,059	1,446	75.7	50.5
4	5	158	322	2.0	94.1	2,521	1,245	82.8	62.8
5	5	226	452	2.0	98.1	4,061	2,231	94.1	84.9
6	5	27	92	3.4	98.9	771	543	96.3	90.3
7	5	26	61	2.4	99.5	625	414	98.0	94.4
8	5	15	30	2.0	99.7	286	232	98.8	96.7
9	4	5	8	1.6	99.8	111	70	99.1	97.4
10	4	9	13	1.4	99.9	157	129	99.6	98.6
11	2	3	6	2.0	100.0	66	64	99.8	99.3
16	1	1	1	1.0	100.0	16	16	99.8	99.4
59	1	1	1	1.0	100.0	74	59	100.0	100.0
Totals		8,854	11,164			35,783	10,109		

Southwest

Number of fish kept per angler	Numbers of years	Number of trips	Number of anglers	Average number of anglers per trip	Cumulative percentage of anglers	Number of fish		Cumulative percentage of fish	
						caught	retained	caught	retained
0	5	9,289	9,713	1.1	74.2	31,992	60	64.6	1.0
1	5	1,171	1,731	1.5	87.4	5,488	1,627	75.7	27.2
2	5	493	814	1.7	93.6	4,441	1,505	84.7	51.4
3	5	239	415	1.7	96.8	2,958	1,171	90.6	70.2
4	5	191	318	1.7	99.2	3,373	1,232	97.5	90.1
5	5	45	75	1.7	99.8	871	364	99.2	95.9
6	5	11	13	1.2	99.9	139	78	99.5	97.2
7	3	5	6	1.2	99.9	86	41	99.7	97.8
8	4	7	9	1.3	100.0	103	71	99.9	99.0
9	2	2	2	1.0	100.0	18	18	99.9	99.3
17	1	1	1	1.0	100.0	18	17	99.9	99.6
28	1	1	1	1.0	100.0	28	28	100.0	100.0
Totals		11,455	13,098			49,515	6,212		

Table 5.2.2.5 (con't). Summary information describing the numbers of spotted seatrout kept in the Northeast and Southeast region's angler creels that were inspected by the Marine Recreational Fishery Statistics Survey during 2001-2005.

Northeast

Number of fish kept per angler	Numbers of years	Number of trips	Number of anglers	Average number of anglers per trip	Cumulative percentage of anglers	Number of fish		Cumulative percentage of fish	
						caught	retained	caught	retained
0	5	1,035	1,095	1.1	75.4	1,162	4	50.8	0.7
1	5	163	228	1.4	91.1	351	202	66.2	36.3
2	5	50	71	1.4	96.0	282	133	78.5	59.8
3	5	12	18	1.5	97.3	134	50	84.4	68.6
4	5	17	24	1.4	98.9	182	93	92.3	85.0
5	4	11	15	1.4	99.9	165	75	99.6	98.2
10	1	1	1	1.0	100.0	10	10	100.0	100.0
Totals		1,289	1,452			2,286	567		

Southeast

Number of fish kept per angler	Numbers of years	Number of trips	Number of anglers	Average number of anglers per trip	Cumulative percentage of anglers	Number of fish		Cumulative percentage of fish	
						caught	retained	caught	retained
0	5	6,293	6,460	1.0	85.0	15,768	17	76.7	1.0
1	5	562	764	1.4	95.1	2,274	698	87.8	42.2
2	5	151	217	1.4	98.0	1,167	402	93.5	65.9
3	5	57	82	1.4	99.0	618	237	96.5	79.9
4	5	35	49	1.4	99.7	464	191	98.7	91.2
5	4	12	18	1.5	99.9	176	91	99.6	96.5
6	1	1	2	2.0	100.0	20	12	99.7	97.2
8	1	1	1	1.0	100.0	23	8	99.8	97.7
10	2	2	2	1.0	100.0	26	20	99.9	98.9
19	1	1	1	1.0	100.0	19	19	100.0	100.0
Totals		7,115	7,596			20,555	1,695		

Table 5.2.4.1. Estimated standardized total number of spotted seatrout caught per trip for the recreational fishery in the Northwest and Southwest regions of the gulf coast of Florida during 1991-2004. The results of a Monte Carlo process followed to estimate the distribution of the catch rate (see text) are summarized with the distribution's mean, median, 2.5-, 25-, 75-, and 97.5- percentiles. The number of trips indicates those with complete data that are used in the proportion-positive binomial model used in the standardization analysis.

Northwest	Trip						
	Interviews	Mean	2.5th	25th	Median	75th	97.5th
1991	369	7.71	7.56	4.87	6.48	7.56	8.70
1992	698	5.04	5.03	3.92	4.59	5.03	5.41
1993	529	6.00	5.92	4.56	5.42	5.92	6.56
1994	952	4.87	4.85	3.97	4.53	4.85	5.19
1995	1,034	5.84	5.82	4.79	5.44	5.82	6.22
1996	810	4.58	4.56	3.65	4.23	4.56	4.91
1997	821	5.16	5.14	4.11	4.77	5.14	5.55
1998	856	5.97	5.93	4.66	5.45	5.93	6.43
1999	1,442	7.00	6.96	5.68	6.50	6.96	7.46
2000	1,191	5.11	5.09	4.15	4.74	5.09	5.44
2001	1,129	3.25	3.24	2.65	3.03	3.24	3.47
2002	1,314	5.12	5.11	4.13	4.75	5.11	5.46
2003	1,153	5.16	5.15	4.19	4.79	5.15	5.51
2004	1,224	5.51	5.49	4.57	5.13	5.49	5.86
2005	1,622	4.25	4.24	3.70	4.06	4.24	4.44

Southwest	Trip						
	Interviews	Mean	2.5th	25th	Median	75th	97.5th
1991	444	6.03	5.93	4.17	5.27	5.93	6.65
1992	1,035	5.01	4.95	3.90	4.56	4.95	5.43
1993	889	5.67	5.61	4.24	5.16	5.61	6.15
1994	771	5.47	5.42	4.24	4.93	5.42	5.95
1995	694	4.45	4.42	3.40	4.01	4.42	4.87
1996	876	5.07	4.99	3.88	4.54	4.99	5.51
1997	1,185	5.61	5.56	4.47	5.17	5.56	6.01
1998	1,511	5.58	5.56	4.42	5.14	5.56	5.99
1999	1,838	6.09	6.07	4.90	5.61	6.07	6.53
2000	1,207	4.99	4.95	3.87	4.55	4.95	5.41
2001	1,208	4.63	4.59	3.56	4.21	4.59	5.02
2002	1,623	6.33	6.29	5.03	5.81	6.29	6.82
2003	1,641	6.10	6.06	4.93	5.63	6.06	6.53
2004	1,701	5.54	5.50	4.48	5.08	5.50	5.97
2005	2,017	4.86	4.84	4.13	4.58	4.84	5.12

Table 5.2.4.1 (con't). Estimated standardized total number of spotted seatrout caught per trip for the recreational fishery in Everglades National Park in the Southwest region of the gulf coast of Florida during 1991-2004. The results of a Monte Carlo process followed to estimate the distribution of the catch rate (see text) are summarized with the distribution's mean, median, 2.5-, 25-, 75-, and 97.5- percentiles. The number of trips indicates those with complete data that are used in the proportion-positive binomial model used in the standardization analysis.

ENP	Trip Interviews	Mean	2.5th	25th	Median	75th	97.5th
1979	855	9.12	3.81	6.46	8.51	10.88	17.65
1980	1,745	9.43	3.97	6.72	8.82	11.39	18.43
1981	2,260	9.35	4.11	6.74	8.81	11.33	17.56
1982	2,801	11.26	5.25	7.99	10.47	13.46	22.46
1983	3,323	10.83	4.81	7.81	10.20	13.09	21.83
1984	4,290	10.74	5.03	7.97	9.91	12.89	21.16
1985	3,776	10.06	4.55	7.17	9.39	12.07	20.17
1986	4,350	10.52	4.93	7.70	9.77	12.47	20.95
1987	3,771	8.83	3.98	6.46	8.13	10.63	17.02
1988	2,311	8.44	3.69	6.22	8.03	10.20	16.46
1989	1,773	11.56	4.91	8.09	10.70	13.99	23.45
1990	3,803	12.62	5.61	9.14	11.69	15.14	25.97
1991	2,956	12.96	5.53	9.34	12.15	15.42	25.63
1992	1,585	13.07	5.44	9.23	12.20	15.71	25.51
1993	3,114	10.78	4.75	7.62	10.16	13.05	21.13
1994	3,532	11.07	4.85	8.02	10.18	13.27	21.90
1995	2,186	11.08	4.81	7.83	10.14	13.05	22.86
1996	2,898	11.85	5.37	8.57	11.10	14.24	23.37
1997	3,751	14.14	5.88	10.07	13.04	17.01	28.96
1998	2,691	11.14	4.76	7.91	10.19	13.20	23.85
1999	2,775	12.68	5.55	8.95	11.81	15.21	25.24
2000	2,719	15.60	6.57	11.22	14.53	19.07	31.06
2001	2,885	12.08	5.06	8.47	11.12	14.73	24.48
2002	2,255	11.18	4.73	7.95	10.25	13.28	22.68
2003	1,836	10.19	4.06	6.93	9.36	12.52	20.93
2004	1,872	11.59	4.00	7.69	10.45	14.18	24.79

Table 5.2.4.1 (con't). Estimated standardized total number of spotted seatrout caught per trip for the recreational fishery in the Southeast and Northeast regions of the Atlantic coast of Florida during 1991-2004. The results of a Monte Carlo process followed to estimate the distribution of the catch rate (see text) are summarized with the distribution's mean, median, 2.5-, 25-, 75-, and 97.5- percentiles. The number of trips indicates those with complete data that are used in the proportion-positive binomial model used in the standardization analysis.

Southeast	Trip						
	Interviews	Mean	2.5th	25th	Median	75th	97.5th
1991	107	3.98	3.84	2.27	3.23	3.84	4.56
1992	192	3.20	3.16	2.15	2.79	3.16	3.60
1993	257	3.09	3.04	2.19	2.72	3.04	3.41
1994	278	2.27	2.25	1.66	2.03	2.25	2.48
1995	364	2.48	2.47	1.85	2.23	2.47	2.69
1996	317	3.31	3.28	2.30	2.92	3.28	3.65
1997	333	3.55	3.53	2.58	3.17	3.53	3.88
1998	423	3.03	3.01	2.30	2.74	3.01	3.29
1999	946	3.11	3.10	2.56	2.88	3.10	3.31
2000	987	2.87	2.86	2.38	2.67	2.86	3.05
2001	979	3.11	3.10	2.60	2.92	3.10	3.30
2002	997	3.81	3.78	3.14	3.56	3.78	4.03
2003	789	2.62	2.62	2.13	2.42	2.62	2.80
2004	833	3.02	3.00	2.43	2.81	3.00	3.20
2005	1,403	2.94	2.94	2.57	2.80	2.94	3.07

Northeast	Trip						
	Interviews	Mean	2.5th	25th	Median	75th	97.5th
1991	98	2.02	1.98	1.17	1.64	1.98	2.36
1992	141	2.12	2.07	1.29	1.77	2.07	2.41
1993	168	1.86	1.82	1.24	1.60	1.82	2.08
1994	243	1.09	1.07	0.77	0.98	1.07	1.19
1995	188	2.31	2.26	1.57	2.01	2.26	2.57
1996	126	2.23	2.16	1.35	1.82	2.16	2.58
1997	133	2.53	2.49	1.48	2.10	2.49	2.91
1998	137	1.69	1.64	1.03	1.40	1.64	1.93
1999	171	1.24	1.22	0.80	1.03	1.22	1.42
2000	219	1.25	1.22	0.86	1.08	1.22	1.38
2001	202	0.95	0.94	0.65	0.83	0.94	1.07
2002	188	1.60	1.57	1.05	1.36	1.57	1.80
2003	172	1.47	1.43	0.96	1.25	1.43	1.65
2004	228	1.41	1.40	0.99	1.24	1.40	1.56
2005	286	1.11	1.11	0.83	0.99	1.11	1.22

Table 5.2.5.1. Estimated age structure of the recreational landings (MRFSS Type A+B1 estimates) of female and male spotted seatrout made in the Northwest region along Florida's gulf coast during 1982-2005. Numbers under each age are the proportions of each year's total landings, by number, in that age group.

	Females								Total landings		Males								Total landings
	0	1	2	3	4	5	6	7+			0	1	2	3	4	5	6	7+	
1982	0.1981	0.5624	0.2173	0.0150	0.0045	0.0000	0.0028	0.0000	1,079,124	1982	0.0939	0.5096	0.3041	0.0833	0.0074	0.0000	0.0013	0.0004	477,402
1983	0.1142	0.5550	0.2875	0.0334	0.0099	0.0000	0.0000	0.0000	2,611,782	1983	0.0735	0.4429	0.3656	0.1017	0.0124	0.0001	0.0030	0.0009	1,002,303
1984	0.2080	0.5375	0.2420	0.0104	0.0021	0.0000	0.0000	0.0000	2,893,611	1984	0.1024	0.5976	0.2243	0.0676	0.0077	0.0000	0.0003	0.0002	1,450,353
1985	0.1408	0.6228	0.2313	0.0051	0.0000	0.0000	0.0000	0.0000	1,585,411	1985	0.0725	0.5202	0.3152	0.0835	0.0087	0.0000	0.0000	0.0000	704,835
1986	0.2065	0.6165	0.1572	0.0125	0.0073	0.0000	0.0000	0.0000	2,114,106	1986	0.0865	0.5593	0.2910	0.0583	0.0041	0.0000	0.0002	0.0006	1,131,213
1987	0.0503	0.6495	0.2325	0.0597	0.0079	0.0000	0.0000	0.0000	1,393,238	1987	0.0447	0.6122	0.2178	0.1041	0.0201	0.0008	0.0002	0.0001	1,303,991
1988	0.0558	0.5752	0.2736	0.0784	0.0170	0.0000	0.0000	0.0000	2,131,906	1988	0.0481	0.6226	0.1925	0.1107	0.0245	0.0008	0.0005	0.0004	1,846,947
1989	0.0611	0.4659	0.2181	0.2324	0.0120	0.0052	0.0000	0.0052	1,511,948	1989	0.0703	0.6616	0.1389	0.0924	0.0305	0.0050	0.0009	0.0004	1,250,376
1990	0.0116	0.3957	0.3882	0.1454	0.0462	0.0126	0.0001	0.0002	497,201	1990	0.0160	0.1001	0.2838	0.2951	0.1931	0.0878	0.0180	0.0061	214,618
1991	0.0406	0.3365	0.4261	0.1376	0.0367	0.0168	0.0003	0.0054	1,305,185	1991	0.0423	0.1880	0.3319	0.2164	0.1353	0.0638	0.0183	0.0039	622,586
1992	0.0086	0.3657	0.4227	0.1414	0.0429	0.0175	0.0001	0.0012	815,620	1992	0.0133	0.0796	0.2504	0.3020	0.2133	0.1081	0.0276	0.0057	278,264
1993	0.0279	0.3568	0.4123	0.1363	0.0368	0.0264	0.0004	0.0031	600,359	1993	0.0269	0.1291	0.2675	0.2572	0.1878	0.0961	0.0297	0.0057	266,514
1994	0.0117	0.1291	0.5153	0.2514	0.0644	0.0189	0.0069	0.0024	928,445	1994	0.0179	0.1146	0.2547	0.1979	0.2559	0.1287	0.0233	0.0069	302,273
1995	0.0107	0.2649	0.3384	0.3418	0.0216	0.0144	0.0079	0.0003	1,126,796	1995	0.0153	0.1500	0.3114	0.2949	0.1381	0.0747	0.0083	0.0073	358,538
1996	0.0052	0.2731	0.3588	0.2755	0.0697	0.0077	0.0090	0.0010	605,542	1996	0.0091	0.1660	0.2216	0.2502	0.2386	0.0972	0.0141	0.0032	201,107
1997	0.0116	0.2678	0.3587	0.2718	0.0690	0.0101	0.0106	0.0004	522,358	1997	0.0311	0.2223	0.2683	0.1962	0.1616	0.0985	0.0170	0.0051	93,638
1998	0.0050	0.2445	0.4877	0.1823	0.0655	0.0107	0.0035	0.0007	592,562	1998	0.0236	0.2213	0.2684	0.2128	0.1819	0.0767	0.0111	0.0042	139,247
1999	0.0046	0.2258	0.4092	0.2317	0.1058	0.0142	0.0071	0.0016	788,552	1999	0.0386	0.1543	0.3158	0.2119	0.1295	0.0738	0.0405	0.0356	135,046
2000	0.0088	0.0889	0.5024	0.3151	0.0673	0.0022	0.0067	0.0085	801,150	2000	0.0192	0.1023	0.2606	0.2732	0.1562	0.1149	0.0356	0.0379	176,518
2001	0.0049	0.3079	0.2370	0.3068	0.0800	0.0471	0.0136	0.0029	588,080	2001	0.0103	0.0882	0.2643	0.2617	0.1715	0.1217	0.0383	0.0440	108,507
2002	0.0064	0.3293	0.2516	0.2917	0.0637	0.0418	0.0116	0.0039	684,023	2002	0.0101	0.1078	0.2987	0.2591	0.1431	0.1089	0.0417	0.0305	168,917
2003	0.0077	0.3375	0.3236	0.2106	0.0515	0.0584	0.0108	0.0000	797,583	2003	0.0198	0.1040	0.2649	0.2619	0.1489	0.1178	0.0485	0.0342	153,381
2004	0.0047	0.1109	0.4315	0.3148	0.0557	0.0642	0.0138	0.0043	809,044	2004	0.0103	0.1024	0.2968	0.2841	0.1441	0.0986	0.0354	0.0282	189,095
2005	0.0048	0.3567	0.3230	0.2212	0.0772	0.0122	0.0007	0.0041	930,152	2005	0.0086	0.0675	0.2467	0.2772	0.1836	0.1340	0.0448	0.0376	307,199

Table 5.2.5.1 (con't). Estimated age structure of the recreational landings (MRFSS Type A+B1 estimates) of female and male spotted seatrout made in the Southwest region along Florida's gulf coast during 1982-2005. Numbers under each age are the proportions of each year's total landings, by number, in that age group.

	Females								Total landings		Males								Total landings
	0	1	2	3	4	5	6	7+			0	1	2	3	4	5	6	7+	
1982	0.0318	0.3320	0.3771	0.1654	0.0619	0.0245	0.0027	0.0046	1,079,124	1982	0.0655	0.2773	0.2852	0.1903	0.1483	0.0274	0.0040	0.0020	316,953
1983	0.0141	0.4102	0.3808	0.1411	0.0405	0.0122	0.0000	0.0011	2,611,782	1983	0.0339	0.2870	0.3341	0.2073	0.1135	0.0191	0.0033	0.0018	340,323
1984	0.0985	0.4672	0.2337	0.1492	0.0321	0.0167	0.0000	0.0027	2,893,611	1984	0.1566	0.4490	0.2186	0.1186	0.0471	0.0082	0.0011	0.0007	631,918
1985	0.1316	0.5022	0.1882	0.1714	0.0062	0.0004	0.0000	0.0000	1,585,411	1985	0.1557	0.4934	0.2165	0.1006	0.0288	0.0041	0.0007	0.0003	283,862
1986	0.0469	0.3970	0.3552	0.1272	0.0474	0.0196	0.0016	0.0051	2,114,106	1986	0.0860	0.3145	0.2914	0.1812	0.1054	0.0174	0.0025	0.0017	450,414
1987	0.0457	0.2733	0.4798	0.1469	0.0436	0.0084	0.0023	0.0000	1,393,238	1987	0.0899	0.3022	0.3284	0.1483	0.0691	0.0550	0.0049	0.0021	240,758
1988	0.0273	0.2502	0.5625	0.1142	0.0299	0.0115	0.0044	0.0000	2,131,906	1988	0.0642	0.2173	0.3594	0.2070	0.0886	0.0557	0.0052	0.0026	391,835
1989	0.0162	0.2370	0.5763	0.1164	0.0299	0.0198	0.0043	0.0000	1,511,948	1989	0.0364	0.1600	0.3854	0.2391	0.0996	0.0714	0.0055	0.0025	467,226
1990	0.0041	0.0259	0.5687	0.3289	0.0459	0.0164	0.0100	0.0000	497,201	1990	0.0137	0.1581	0.2177	0.3766	0.1645	0.0378	0.0232	0.0085	173,903
1991	0.0017	0.0228	0.5354	0.3430	0.0748	0.0146	0.0076	0.0000	1,305,185	1991	0.0082	0.0893	0.2168	0.4242	0.1809	0.0476	0.0236	0.0094	220,767
1992	0.0045	0.0282	0.5107	0.3489	0.0756	0.0272	0.0048	0.0001	815,620	1992	0.0212	0.1476	0.2119	0.3677	0.1691	0.0482	0.0223	0.0120	214,305
1993	0.0059	0.0835	0.4594	0.3446	0.0775	0.0223	0.0061	0.0006	600,359	1993	0.0222	0.1449	0.2098	0.3717	0.1719	0.0494	0.0229	0.0072	198,883
1994	0.0041	0.0984	0.3719	0.3129	0.1197	0.0763	0.0139	0.0028	928,445	1994	0.0283	0.1932	0.2308	0.2930	0.1483	0.0597	0.0283	0.0183	116,841
1995	0.0111	0.1655	0.3559	0.2989	0.1060	0.0548	0.0076	0.0002	1,126,796	1995	0.0435	0.2390	0.2119	0.2999	0.1368	0.0410	0.0175	0.0103	134,143
1996	0.0042	0.0928	0.2873	0.3611	0.1467	0.0873	0.0172	0.0035	605,542	1996	0.0271	0.2255	0.2351	0.2682	0.1387	0.0628	0.0309	0.0117	95,628
1997	0.0035	0.1153	0.2825	0.3582	0.1423	0.0817	0.0141	0.0024	522,358	1997	0.0164	0.1158	0.2761	0.2140	0.1865	0.1537	0.0287	0.0087	206,005
1998	0.0045	0.0816	0.3966	0.2547	0.1744	0.0638	0.0242	0.0002	592,562	1998	0.0352	0.0710	0.2809	0.2919	0.1899	0.1002	0.0260	0.0049	223,015
1999	0.0145	0.1062	0.2766	0.4222	0.1053	0.0563	0.0045	0.0143	788,552	1999	0.0191	0.0429	0.2450	0.3288	0.2203	0.1117	0.0265	0.0056	260,587
2000	0.0064	0.0401	0.2305	0.3767	0.2481	0.0677	0.0191	0.0114	801,150	2000	0.0231	0.0808	0.2042	0.3336	0.2390	0.0546	0.0125	0.0522	164,755
2001	0.0015	0.0331	0.1514	0.4009	0.2482	0.1224	0.0219	0.0206	588,080	2001	0.0028	0.0414	0.0712	0.1978	0.1803	0.3817	0.0657	0.0591	97,360
2002	0.0021	0.0415	0.2227	0.2877	0.2839	0.1127	0.0293	0.0200	684,023	2002	0.0034	0.0414	0.1808	0.2664	0.2825	0.1565	0.0644	0.0046	187,500
2003	0.0059	0.0952	0.3284	0.3060	0.1508	0.0819	0.0273	0.0045	797,583	2003	0.0127	0.0811	0.2133	0.2260	0.2376	0.1589	0.0602	0.0102	165,678
2004	0.0119	0.0655	0.3115	0.3208	0.1878	0.0606	0.0322	0.0098	809,044	2004	0.0078	0.0710	0.1883	0.3062	0.2102	0.1550	0.0374	0.0241	239,686
2005	0.0035	0.0596	0.3179	0.3412	0.1838	0.0607	0.0233	0.0100	930,152	2005	0.0061	0.0562	0.2095	0.3042	0.2059	0.1610	0.0310	0.0262	223,433

Table 5.2.5.1 (con't). Estimated age structure of the recreational landings (MRFSS Type A+B1 estimates) of female and male spotted seatrout made in the Southeast region along Florida's Atlantic coast during 1982-2005. Numbers under each age are the proportions of each year's total landings, by number, in that age group.

	Females										Males								
	0	1	2	3	4	5	6	7+	Total landings		0	1	2	3	4	5	6	7+	Total landings
1982	0.0310	0.5372	0.3348	0.0663	0.0138	0.0110	0.0000	0.0058	122,710	1982	0.0269	0.3944	0.3810	0.1239	0.0160	0.0392	0.0071	0.0115	76,890
1983	0.0256	0.6334	0.3266	0.0136	0.0007	0.0000	0.0000	0.0000	219,863	1983	0.0515	0.4260	0.3821	0.1198	0.0085	0.0115	0.0007	0.0000	185,584
1984	0.1069	0.6657	0.2147	0.0117	0.0007	0.0002	0.0000	0.0000	131,323	1984	0.0141	0.5048	0.3598	0.1027	0.0051	0.0111	0.0015	0.0010	95,555
1985	0.0375	0.5357	0.4070	0.0142	0.0028	0.0028	0.0000	0.0000	160,106	1985	0.0474	0.5187	0.2834	0.1186	0.0093	0.0194	0.0016	0.0016	136,711
1986	0.0003	0.8947	0.0978	0.0041	0.0016	0.0012	0.0000	0.0003	142,466	1986	0.0009	0.4750	0.4314	0.0901	0.0007	0.0010	0.0004	0.0004	123,288
1987	0.0000	0.7658	0.2320	0.0018	0.0003	0.0000	0.0000	0.0000	117,397	1987	0.0012	0.3444	0.5006	0.1476	0.0042	0.0014	0.0006	0.0000	65,315
1988	0.0021	0.5061	0.4070	0.0578	0.0141	0.0079	0.0047	0.0003	146,151	1988	0.0457	0.3460	0.3878	0.1621	0.0369	0.0149	0.0055	0.0010	93,191
1989	0.0024	0.5083	0.4052	0.0574	0.0140	0.0078	0.0047	0.0003	81,484	1989	0.0516	0.3618	0.3745	0.1561	0.0355	0.0143	0.0053	0.0010	53,715
1990	0.0009	0.1302	0.5156	0.2191	0.0875	0.0334	0.0090	0.0043	89,340	1990	0.0285	0.1201	0.2832	0.3205	0.1437	0.0744	0.0173	0.0123	46,777
1991	0.0003	0.1181	0.5784	0.2057	0.0687	0.0255	0.0030	0.0005	122,863	1991	0.0186	0.0687	0.2760	0.3994	0.1369	0.0721	0.0193	0.0089	32,549
1992	0.0006	0.1149	0.5598	0.2025	0.0843	0.0254	0.0052	0.0072	86,365	1992	0.0354	0.1149	0.2574	0.3730	0.1304	0.0681	0.0143	0.0065	25,574
1993	0.0028	0.0741	0.3378	0.2771	0.2148	0.0625	0.0265	0.0044	42,189	1993	0.0684	0.2792	0.2682	0.2583	0.0725	0.0349	0.0101	0.0084	22,093
1994	0.0014	0.0842	0.5132	0.3217	0.0509	0.0224	0.0023	0.0039	65,392	1994	0.0441	0.2988	0.2291	0.3178	0.0676	0.0378	0.0047	0.0001	32,115
1995	0.0015	0.1378	0.3878	0.2348	0.1841	0.0428	0.0090	0.0021	130,001	1995	0.0749	0.3660	0.2139	0.2798	0.0417	0.0190	0.0027	0.0022	49,426
1996	0.0009	0.1511	0.3969	0.3396	0.0688	0.0362	0.0046	0.0020	65,985	1996	0.0029	0.1103	0.2817	0.4240	0.1171	0.0488	0.0145	0.0007	31,398
1997	0.0001	0.0598	0.4422	0.3120	0.1286	0.0234	0.0172	0.0167	95,826	1997	0.0021	0.1239	0.2811	0.2808	0.1781	0.0875	0.0300	0.0164	46,424
1998	0.0000	0.0197	0.5925	0.2158	0.1181	0.0230	0.0090	0.0219	92,903	1998	0.0137	0.1664	0.4727	0.0829	0.1361	0.1004	0.0058	0.0219	49,108
1999	0.0000	0.0942	0.5311	0.2322	0.0822	0.0297	0.0188	0.0118	147,567	1999	0.0066	0.1003	0.2790	0.0512	0.1577	0.3013	0.0195	0.0845	68,469
2000	0.0000	0.0894	0.4654	0.2283	0.1100	0.0565	0.0322	0.0182	142,564	2000	0.0058	0.0837	0.2553	0.0497	0.1753	0.3158	0.0332	0.0812	63,787
2001	0.0027	0.0587	0.2424	0.3835	0.2050	0.0651	0.0280	0.0145	131,665	2001	0.0011	0.0763	0.2052	0.1295	0.3695	0.0711	0.0306	0.1167	56,459
2002	0.0081	0.0717	0.2486	0.3871	0.1936	0.0703	0.0077	0.0128	88,565	2002	0.0008	0.0862	0.3144	0.1826	0.2816	0.0444	0.0640	0.0261	73,801
2003	0.0073	0.0784	0.2353	0.3788	0.2001	0.0727	0.0164	0.0110	67,398	2003	0.0024	0.1029	0.2673	0.1460	0.3030	0.0647	0.0325	0.0812	39,002
2004	0.0064	0.0823	0.2193	0.3680	0.1964	0.0784	0.0178	0.0314	92,137	2004	0.0016	0.1117	0.2725	0.1811	0.2720	0.0566	0.0559	0.0487	48,692
2005	0.0111	0.0844	0.2310	0.3665	0.1920	0.0780	0.0208	0.0164	147,334	2005	0.0022	0.1105	0.2617	0.1630	0.2931	0.0698	0.0449	0.0548	86,354

Table 5.2.5.1 (con't). Estimated age structure of the recreational landings (MRFSS Type A+B1 estimates) of female and male spotted seatrout made in the Northeast region along Florida's Atlantic coast during 1982-2005. Numbers under each age are the proportions of each year's total landings, by number, in that age group.

	Females								Total landings		Males								Total landings
	0	1	2	3	4	5	6	7+			0	1	2	3	4	5	6	7+	
1982	0.0381	0.4813	0.3794	0.0558	0.0187	0.0201	0.0000	0.0066	171,349	1982	0.0261	0.4437	0.3836	0.1133	0.0097	0.0164	0.0016	0.0056	54,187
1983	0.0254	0.4663	0.4440	0.0549	0.0081	0.0012	0.0000	0.0000	184,338	1983	0.0141	0.3476	0.4162	0.1785	0.0146	0.0239	0.0019	0.0032	50,581
1984	0.0074	0.5305	0.4307	0.0271	0.0027	0.0017	0.0000	0.0000	372,816	1984	0.0014	0.3364	0.4807	0.1503	0.0111	0.0175	0.0013	0.0013	103,209
1985	0.1160	0.5909	0.2513	0.0306	0.0040	0.0063	0.0008	0.0000	345,640	1985	0.1870	0.5902	0.1716	0.0437	0.0029	0.0033	0.0004	0.0010	229,373
1986	0.0088	0.5000	0.4396	0.0418	0.0071	0.0026	0.0000	0.0000	219,627	1986	0.0004	0.3450	0.4662	0.1555	0.0114	0.0177	0.0016	0.0022	64,963
1987	0.0008	0.1709	0.7307	0.0832	0.0119	0.0020	0.0004	0.0000	380,398	1987	0.0015	0.0769	0.4843	0.3074	0.0924	0.0229	0.0146	0.0000	182,902
1988	0.0181	0.2512	0.5947	0.1032	0.0236	0.0073	0.0012	0.0008	56,759	1988	0.0295	0.2161	0.4514	0.2158	0.0590	0.0162	0.0115	0.0005	35,687
1989	0.0104	0.2749	0.5874	0.0904	0.0321	0.0049	0.0000	0.0000	52,574	1989	0.0141	0.1908	0.4561	0.2230	0.0811	0.0179	0.0162	0.0008	38,150
1990	0.0007	0.0981	0.5768	0.2390	0.0631	0.0178	0.0032	0.0012	83,800	1990	0.0021	0.0158	0.3503	0.3813	0.1491	0.0726	0.0179	0.0108	30,336
1991	0.0070	0.2670	0.5476	0.1260	0.0377	0.0124	0.0020	0.0002	160,892	1991	0.0143	0.0493	0.3178	0.4815	0.0842	0.0409	0.0082	0.0038	70,138
1992	0.0005	0.2313	0.5209	0.1842	0.0465	0.0114	0.0048	0.0004	172,657	1992	0.0377	0.1199	0.3861	0.3012	0.0916	0.0433	0.0108	0.0094	78,680
1993	0.0046	0.0916	0.4826	0.2397	0.1368	0.0368	0.0067	0.0012	145,568	1993	0.0097	0.0452	0.3680	0.3590	0.1294	0.0609	0.0180	0.0099	64,141
1994	0.0051	0.1262	0.4484	0.3644	0.0419	0.0120	0.0001	0.0018	114,330	1994	0.0121	0.1595	0.3728	0.3585	0.0642	0.0294	0.0035	0.0000	42,951
1995	0.0136	0.2116	0.4650	0.1806	0.1145	0.0137	0.0006	0.0005	148,883	1995	0.0373	0.2140	0.2713	0.3250	0.1084	0.0392	0.0036	0.0011	53,576
1996	0.0006	0.1519	0.4558	0.2982	0.0544	0.0289	0.0034	0.0068	35,877	1996	0.0003	0.0381	0.2123	0.5515	0.1342	0.0421	0.0201	0.0014	15,427
1997	0.0003	0.0608	0.5332	0.2785	0.0977	0.0180	0.0007	0.0108	68,451	1997	0.0005	0.0385	0.3459	0.3284	0.1909	0.0760	0.0155	0.0043	17,348
1998	0.0000	0.0088	0.6635	0.1975	0.0989	0.0186	0.0028	0.0098	36,109	1998	0.0299	0.2709	0.3907	0.1168	0.1038	0.0414	0.0031	0.0432	11,050
1999	0.0021	0.1608	0.3815	0.2983	0.1131	0.0326	0.0078	0.0038	20,077	1999	0.0292	0.2875	0.3532	0.1247	0.1055	0.0479	0.0051	0.0468	4,937
2000	0.0008	0.1192	0.3787	0.3358	0.1312	0.0341	0.0001	0.0000	57,368	2000	0.0083	0.1110	0.4767	0.0483	0.2196	0.0845	0.0000	0.0517	22,851
2001	0.0012	0.1898	0.4169	0.2424	0.1178	0.0167	0.0001	0.0151	44,374	2001	0.0010	0.1090	0.2431	0.3209	0.2477	0.0589	0.0169	0.0026	18,494
2002	0.0014	0.1712	0.3665	0.2762	0.1300	0.0421	0.0043	0.0084	32,595	2002	0.0013	0.1048	0.2323	0.3141	0.2713	0.0426	0.0276	0.0060	11,507
2003	0.0013	0.1445	0.3569	0.2810	0.1448	0.0534	0.0182	0.0000	45,463	2003	0.0013	0.1015	0.2019	0.2928	0.3028	0.0626	0.0313	0.0058	15,875
2004	0.0104	0.1620	0.3503	0.2771	0.1490	0.0467	0.0046	0.0000	41,183	2004	0.0044	0.1239	0.2245	0.2969	0.2657	0.0540	0.0253	0.0052	14,286
2005	0.0040	0.1901	0.4041	0.2738	0.1013	0.0245	0.0021	0.0001	69,165	2005	0.0043	0.1175	0.2362	0.3037	0.2741	0.0390	0.0226	0.0027	26,572

Table 5.2.5.2. Estimated age structure of the recreational live releases (MRFSS Type B2 estimates) of female and male spotted seatrout made in the Northwest region along Florida's gulf coast during 1982-2005. Numbers under each age are the proportions of each year's total landings, by number, in that age group.

	Females								Total landings		Males								Total landings
	0	1	2	3	4	5	6	7+			0	1	2	3	4	5	6	7+	
1982	0.4075	0.5773	0.0151	0.0000	0.0000	0.0000	0.0000	0.0000	394,186	1982	0.1146	0.7725	0.1060	0.0068	0.0000	0.0000	0.0000	0.0000	342,525
1983	0.4075	0.5773	0.0151	0.0000	0.0000	0.0000	0.0000	0.0000	676,655	1983	0.1146	0.7725	0.1060	0.0068	0.0000	0.0000	0.0000	0.0000	587,974
1984	0.4075	0.5773	0.0151	0.0000	0.0000	0.0000	0.0000	0.0000	615,513	1984	0.1146	0.7725	0.1060	0.0068	0.0000	0.0000	0.0000	0.0000	534,845
1985	0.4075	0.5773	0.0151	0.0000	0.0000	0.0000	0.0000	0.0000	580,398	1985	0.1146	0.7725	0.1060	0.0068	0.0000	0.0000	0.0000	0.0000	504,333
1986	0.3903	0.5952	0.0145	0.0000	0.0000	0.0000	0.0000	0.0000	1,646,400	1986	0.1208	0.7603	0.1117	0.0072	0.0000	0.0000	0.0000	0.0000	1,300,328
1987	0.1589	0.8077	0.0335	0.0000	0.0000	0.0000	0.0000	0.0000	880,477	1987	0.0967	0.8018	0.0915	0.0093	0.0007	0.0000	0.0000	0.0000	1,388,893
1988	0.1588	0.8067	0.0345	0.0000	0.0000	0.0000	0.0000	0.0000	1,042,434	1988	0.0966	0.7992	0.0937	0.0098	0.0007	0.0000	0.0000	0.0000	1,647,366
1989	0.1588	0.8067	0.0345	0.0000	0.0000	0.0000	0.0000	0.0000	1,069,943	1989	0.0966	0.7992	0.0937	0.0098	0.0007	0.0000	0.0000	0.0000	1,690,838
1990	0.0920	0.7065	0.1350	0.0553	0.0079	0.0011	0.0011	0.0011	901,618	1990	0.0713	0.2879	0.4244	0.1384	0.0580	0.0164	0.0026	0.0010	858,597
1991	0.1183	0.3629	0.4430	0.0492	0.0163	0.0078	0.0010	0.0015	2,393,581	1991	0.0730	0.2896	0.4157	0.1390	0.0603	0.0179	0.0034	0.0011	1,934,409
1992	0.1183	0.3629	0.4430	0.0492	0.0163	0.0078	0.0010	0.0015	1,365,736	1992	0.0730	0.2896	0.4157	0.1390	0.0603	0.0179	0.0034	0.0011	1,103,741
1993	0.1154	0.3578	0.4586	0.0442	0.0149	0.0069	0.0015	0.0005	1,478,210	1993	0.0768	0.2932	0.4001	0.1361	0.0651	0.0224	0.0050	0.0012	950,605
1994	0.0777	0.4314	0.3397	0.1137	0.0253	0.0081	0.0034	0.0008	2,069,607	1994	0.0810	0.3005	0.4069	0.1172	0.0647	0.0241	0.0038	0.0019	1,222,109
1995	0.1640	0.3200	0.3724	0.1117	0.0115	0.0137	0.0065	0.0003	2,738,624	1995	0.1253	0.3493	0.3278	0.1457	0.0363	0.0115	0.0015	0.0026	1,691,350
1996	0.1064	0.4701	0.2358	0.1304	0.0332	0.0145	0.0086	0.0011	1,377,446	1996	0.1036	0.3307	0.3160	0.1516	0.0761	0.0178	0.0027	0.0014	937,823
1997	0.1086	0.4617	0.2398	0.1331	0.0331	0.0138	0.0087	0.0011	1,947,806	1997	0.0813	0.3426	0.3399	0.1540	0.0649	0.0145	0.0014	0.0014	1,323,965
1998	0.0670	0.6040	0.2058	0.0644	0.0323	0.0199	0.0049	0.0017	1,521,752	1998	0.0734	0.3533	0.3429	0.1539	0.0630	0.0113	0.0012	0.0011	1,548,037
1999	0.0557	0.6944	0.1603	0.0469	0.0238	0.0141	0.0036	0.0012	3,435,996	1999	0.1834	0.3446	0.3314	0.0956	0.0264	0.0110	0.0025	0.0051	1,491,353
2000	0.1171	0.4430	0.3091	0.1053	0.0208	0.0000	0.0016	0.0030	3,329,002	2000	0.1790	0.3568	0.3187	0.0943	0.0282	0.0145	0.0030	0.0056	1,537,238
2001	0.0733	0.3657	0.2164	0.2487	0.0554	0.0276	0.0068	0.0060	1,951,584	2001	0.1399	0.2487	0.3263	0.1413	0.0777	0.0342	0.0186	0.0132	566,226
2002	0.1077	0.4530	0.2142	0.1401	0.0286	0.0242	0.0107	0.0214	2,555,850	2002	0.0820	0.2886	0.4018	0.1437	0.0468	0.0234	0.0069	0.0069	1,527,385
2003	0.1500	0.4627	0.2156	0.0991	0.0302	0.0296	0.0128	0.0000	2,685,564	2003	0.1549	0.3350	0.3328	0.1092	0.0351	0.0190	0.0075	0.0065	1,230,505
2004	0.1204	0.2949	0.3529	0.1507	0.0235	0.0459	0.0101	0.0016	2,626,232	2004	0.1319	0.2804	0.3451	0.1552	0.0515	0.0245	0.0043	0.0070	1,278,815
2005	0.0854	0.5081	0.2103	0.1010	0.0496	0.0289	0.0047	0.0119	3,703,620	2005	0.1226	0.2584	0.3145	0.1478	0.0651	0.0531	0.0175	0.0209	1,590,749

Table 5.2.5.2 (con't). Estimated age structure of the recreational live releases (MRFSS Type B2 estimates) of female and male spotted seatrout made in the Southwest region along Florida's gulf coast during 1982-2005. Numbers under each age are the proportions of each year's total landings, by number, in that age group.

	Females									Total landings	Males									Total landings
	0	1	2	3	4	5	6	7+	0		1	2	3	4	5	6	7+			
1982	0.2032	0.5212	0.1030	0.1726	0.0000	0.0000	0.0000	0.0000	0.0000	314,188	1982	0.2258	0.5540	0.1515	0.0595	0.0083	0.0009	0.0000	0.0000	332,807
1983	0.2032	0.5212	0.1030	0.1726	0.0000	0.0000	0.0000	0.0000	0.0000	379,905	1983	0.2258	0.5540	0.1515	0.0595	0.0083	0.0009	0.0000	0.0000	402,418
1984	0.2032	0.5212	0.1030	0.1726	0.0000	0.0000	0.0000	0.0000	0.0000	1,374,983	1984	0.2258	0.5540	0.1515	0.0595	0.0083	0.0009	0.0000	0.0000	1,456,464
1985	0.2032	0.5212	0.1030	0.1726	0.0000	0.0000	0.0000	0.0000	0.0000	344,410	1985	0.2258	0.5540	0.1515	0.0595	0.0083	0.0009	0.0000	0.0000	364,819
1986	0.2032	0.5212	0.1030	0.1726	0.0000	0.0000	0.0000	0.0000	0.0000	503,798	1986	0.2258	0.5540	0.1515	0.0595	0.0083	0.0009	0.0000	0.0000	533,653
1987	0.2044	0.4866	0.1427	0.1663	0.0000	0.0000	0.0000	0.0000	0.0000	572,465	1987	0.2320	0.5400	0.1824	0.0359	0.0077	0.0020	0.0000	0.0000	573,816
1988	0.2049	0.4742	0.1513	0.1696	0.0000	0.0000	0.0000	0.0000	0.0000	909,850	1988	0.2311	0.5323	0.1767	0.0503	0.0079	0.0018	0.0000	0.0000	919,856
1989	0.2049	0.4742	0.1513	0.1696	0.0000	0.0000	0.0000	0.0000	0.0000	2,143,167	1989	0.2311	0.5323	0.1767	0.0503	0.0079	0.0018	0.0000	0.0000	2,166,736
1990	0.0537	0.0952	0.5617	0.2445	0.0308	0.0111	0.0024	0.0006	0.0006	2,142,417	1990	0.0864	0.4724	0.2704	0.1147	0.0325	0.0143	0.0078	0.0015	2,054,834
1991	0.0543	0.0967	0.5488	0.2491	0.0350	0.0127	0.0028	0.0006	0.0006	1,958,094	1991	0.0832	0.4617	0.2750	0.1217	0.0346	0.0140	0.0084	0.0014	2,390,788
1992	0.0543	0.0967	0.5488	0.2491	0.0350	0.0127	0.0028	0.0006	0.0006	1,725,156	1992	0.0832	0.4617	0.2750	0.1217	0.0346	0.0140	0.0084	0.0014	2,106,376
1993	0.0625	0.5074	0.2295	0.1506	0.0346	0.0112	0.0036	0.0006	0.0006	1,803,400	1993	0.0863	0.4739	0.2708	0.1143	0.0319	0.0151	0.0071	0.0005	2,031,963
1994	0.0424	0.5005	0.2615	0.1125	0.0466	0.0318	0.0041	0.0006	0.0006	1,461,878	1994	0.0849	0.4705	0.2767	0.1123	0.0309	0.0142	0.0086	0.0018	1,707,696
1995	0.0448	0.5153	0.2495	0.1047	0.0475	0.0332	0.0043	0.0006	0.0006	924,759	1995	0.0811	0.4550	0.2740	0.1268	0.0374	0.0152	0.0085	0.0021	1,195,910
1996	0.0181	0.3503	0.3428	0.1766	0.0579	0.0437	0.0088	0.0018	0.0018	1,414,038	1996	0.0453	0.3768	0.3146	0.1733	0.0529	0.0231	0.0118	0.0021	1,618,213
1997	0.0162	0.4329	0.3163	0.1403	0.0469	0.0378	0.0080	0.0016	0.0016	2,667,517	1997	0.0469	0.3000	0.3810	0.1478	0.0735	0.0432	0.0052	0.0025	2,439,058
1998	0.0363	0.3287	0.4389	0.1005	0.0587	0.0260	0.0093	0.0017	0.0017	2,482,758	1998	0.1399	0.2647	0.3688	0.1618	0.0451	0.0152	0.0037	0.0009	2,425,638
1999	0.0878	0.3551	0.3008	0.1849	0.0383	0.0218	0.0048	0.0067	0.0067	1,883,352	1999	0.1185	0.2396	0.3573	0.1965	0.0602	0.0220	0.0047	0.0012	2,639,941
2000	0.0570	0.2176	0.4276	0.1772	0.0714	0.0237	0.0132	0.0123	0.0123	1,979,305	2000	0.0808	0.2518	0.3643	0.2104	0.0816	0.0060	0.0016	0.0034	2,263,092
2001	0.0098	0.1374	0.2062	0.3410	0.1944	0.0790	0.0232	0.0089	0.0089	2,179,539	2001	0.0102	0.1770	0.1845	0.2392	0.1098	0.2107	0.0436	0.0249	1,344,222
2002	0.0214	0.2244	0.3917	0.1608	0.1137	0.0538	0.0228	0.0114	0.0114	3,839,306	2002	0.0232	0.1898	0.2968	0.2179	0.1978	0.0556	0.0170	0.0020	2,617,381
2003	0.0448	0.2650	0.3630	0.1709	0.0802	0.0449	0.0253	0.0058	0.0058	3,701,208	2003	0.0452	0.2404	0.3411	0.1632	0.1482	0.0466	0.0127	0.0025	2,758,885
2004	0.1031	0.2326	0.3672	0.1506	0.0765	0.0434	0.0213	0.0054	0.0054	3,374,443	2004	0.0468	0.2758	0.2520	0.2465	0.1176	0.0500	0.0056	0.0058	2,324,566
2005	0.0456	0.2067	0.3588	0.2001	0.1020	0.0441	0.0201	0.0226	0.0226	3,412,786	2005	0.0503	0.2415	0.2839	0.2468	0.1051	0.0557	0.0095	0.0072	2,692,840

Table 5.2.5.2 (con't). Estimated age structure of the recreational live releases (MRFSS Type B2 estimates) of female and male spotted seatrout made in the Southeast region along Florida's Atlantic coast during 1982-2005. Numbers under each age are the proportions of each year's total landings, by number, in that age group.

	Females										Males								
	0	1	2	3	4	5	6	7+	landings		0	1	2	3	4	5	6	7+	landings
1982	0.2501	0.6786	0.0699	0.0014	0.0000	0.0000	0.0000	0.0000	26,980	1982	0.1862	0.7597	0.0449	0.0089	0.0002	0.0002	0.0000	0.0000	103,317
1983	0.2501	0.6786	0.0699	0.0014	0.0000	0.0000	0.0000	0.0000	74,746	1983	0.1862	0.7597	0.0449	0.0089	0.0002	0.0002	0.0000	0.0000	286,225
1984	0.2501	0.6786	0.0699	0.0014	0.0000	0.0000	0.0000	0.0000	9,848	1984	0.1862	0.7597	0.0449	0.0089	0.0002	0.0002	0.0000	0.0000	37,713
1985	0.2501	0.6786	0.0699	0.0014	0.0000	0.0000	0.0000	0.0000	13,865	1985	0.1862	0.7597	0.0449	0.0089	0.0002	0.0002	0.0000	0.0000	53,095
1986	0.2501	0.6786	0.0699	0.0014	0.0000	0.0000	0.0000	0.0000	5,705	1986	0.1862	0.7597	0.0449	0.0089	0.0002	0.0002	0.0000	0.0000	21,848
1987	0.0436	0.8127	0.1426	0.0010	0.0000	0.0000	0.0000	0.0000	6,655	1987	0.1914	0.7496	0.0447	0.0130	0.0010	0.0003	0.0000	0.0000	22,419
1988	0.0436	0.7867	0.1673	0.0023	0.0000	0.0000	0.0000	0.0000	98,142	1988	0.1914	0.7360	0.0586	0.0128	0.0009	0.0003	0.0000	0.0000	330,641
1989	0.0436	0.7867	0.1673	0.0023	0.0000	0.0000	0.0000	0.0000	34,680	1989	0.1914	0.7360	0.0586	0.0128	0.0009	0.0003	0.0000	0.0000	116,836
1990	0.0080	0.4679	0.4288	0.0631	0.0218	0.0078	0.0014	0.0013	84,118	1990	0.1375	0.4475	0.1840	0.1837	0.0263	0.0124	0.0050	0.0037	92,437
1991	0.0084	0.3598	0.5193	0.0745	0.0259	0.0093	0.0015	0.0014	264,910	1991	0.1319	0.4283	0.1342	0.2766	0.0160	0.0074	0.0032	0.0024	317,925
1992	0.0084	0.3598	0.5193	0.0745	0.0259	0.0093	0.0015	0.0014	235,860	1992	0.1319	0.4283	0.1342	0.2766	0.0160	0.0074	0.0032	0.0024	283,062
1993	0.0093	0.2808	0.2463	0.2430	0.1885	0.0235	0.0067	0.0018	258,265	1993	0.1216	0.3968	0.1661	0.2778	0.0204	0.0087	0.0045	0.0040	374,123
1994	0.0121	0.2972	0.3077	0.3459	0.0271	0.0075	0.0015	0.0010	183,492	1994	0.1203	0.4518	0.1126	0.2845	0.0181	0.0116	0.0010	0.0000	273,123
1995	0.0061	0.4345	0.3915	0.0952	0.0611	0.0104	0.0009	0.0003	352,336	1995	0.0918	0.4414	0.1874	0.2604	0.0119	0.0063	0.0007	0.0001	422,836
1996	0.0058	0.2966	0.4775	0.1762	0.0258	0.0127	0.0043	0.0010	406,844	1996	0.0089	0.2704	0.3177	0.3406	0.0431	0.0134	0.0059	0.0001	457,212
1997	0.0009	0.2007	0.5962	0.1273	0.0566	0.0130	0.0025	0.0028	472,103	1997	0.0050	0.2764	0.3863	0.2400	0.0595	0.0249	0.0064	0.0016	655,230
1998	0.0000	0.0601	0.7073	0.1701	0.0494	0.0075	0.0026	0.0029	342,589	1998	0.0219	0.2620	0.5279	0.1391	0.0161	0.0275	0.0013	0.0043	486,310
1999	0.0000	0.2154	0.5926	0.1562	0.0216	0.0097	0.0032	0.0013	650,728	1999	0.0232	0.2507	0.5189	0.1426	0.0188	0.0327	0.0011	0.0120	798,934
2000	0.0000	0.2154	0.5926	0.1562	0.0216	0.0097	0.0032	0.0013	918,243	2000	0.0232	0.2507	0.5189	0.1426	0.0188	0.0327	0.0011	0.0120	1,127,375
2001	0.0065	0.1386	0.2497	0.3978	0.1650	0.0424	0.0000	0.0000	1,129,285	2001	0.0082	0.2085	0.4286	0.1782	0.1124	0.0149	0.0242	0.0249	754,479
2002	0.0077	0.1598	0.2441	0.3851	0.1579	0.0453	0.0000	0.0000	1,008,919	2002	0.0048	0.1677	0.4041	0.1964	0.1489	0.0111	0.0513	0.0157	1,134,774
2003	0.0068	0.1446	0.2482	0.3942	0.1630	0.0432	0.0000	0.0000	828,971	2003	0.0068	0.1923	0.4189	0.1854	0.1269	0.0134	0.0350	0.0213	660,544
2004	0.0091	0.1355	0.2432	0.3928	0.1705	0.0489	0.0000	0.0000	895,004	2004	0.0058	0.1901	0.4148	0.1823	0.1335	0.0159	0.0388	0.0189	777,787
2005	0.0084	0.2864	0.2807	0.3134	0.0542	0.0275	0.0098	0.0196	1,569,848	2005	0.0105	0.2976	0.3861	0.1857	0.0870	0.0192	0.0115	0.0025	1,515,964

Table 5.2.5.2 (con't). Estimated age structure of the recreational live releases (MRFSS Type B2 estimates) of female and male spotted seatrout made in the Northeast region along Florida's Atlantic coast during 1982-2005. Numbers under each age are the proportions of each year's total landings, by number, in that age group.

	Females										Males								
	0	1	2	3	4	5	6	7+	Total landings		0	1	2	3	4	5	6	7+	Total landings
1982	0.2693	0.6850	0.0451	0.0006	0.0000	0.0000	0.0000	0.0000	21,840	1982	0.1573	0.7547	0.0732	0.0145	0.0001	0.0001	0.0000	0.0000	18,977
1983	0.2693	0.6850	0.0451	0.0006	0.0000	0.0000	0.0000	0.0000	4,062	1983	0.1573	0.7547	0.0732	0.0145	0.0001	0.0001	0.0000	0.0000	3,529
1984	0.2693	0.6850	0.0451	0.0006	0.0000	0.0000	0.0000	0.0000	15,402	1984	0.1573	0.7547	0.0732	0.0145	0.0001	0.0001	0.0000	0.0000	13,383
1985	0.2693	0.6850	0.0451	0.0006	0.0000	0.0000	0.0000	0.0000	9,866	1985	0.1573	0.7547	0.0732	0.0145	0.0001	0.0001	0.0000	0.0000	8,573
1986	0.2610	0.6942	0.0442	0.0006	0.0000	0.0000	0.0000	0.0000	4,522	1986	0.1658	0.7416	0.0771	0.0153	0.0001	0.0001	0.0000	0.0000	3,571
1987	0.2359	0.6859	0.0776	0.0007	0.0000	0.0000	0.0000	0.0000	4,779	1987	0.1474	0.7448	0.0825	0.0235	0.0013	0.0005	0.0000	0.0000	7,538
1988	0.2361	0.6746	0.0880	0.0012	0.0000	0.0000	0.0000	0.0000	1,117	1988	0.1473	0.7104	0.1178	0.0229	0.0012	0.0005	0.0000	0.0000	1,766
1989	0.2361	0.6746	0.0880	0.0012	0.0000	0.0000	0.0000	0.0000	13,909	1989	0.1473	0.7104	0.1178	0.0229	0.0012	0.0005	0.0000	0.0000	21,981
1990	0.0716	0.4793	0.3524	0.0637	0.0225	0.0080	0.0013	0.0012	13,771	1990	0.0864	0.2952	0.2643	0.3049	0.0268	0.0115	0.0058	0.0051	13,113
1991	0.0694	0.4986	0.3422	0.0588	0.0211	0.0076	0.0012	0.0011	114,450	1991	0.0898	0.3006	0.2597	0.2956	0.0290	0.0124	0.0067	0.0060	92,495
1992	0.0694	0.4986	0.3422	0.0588	0.0211	0.0076	0.0012	0.0011	43,322	1992	0.0898	0.3006	0.2597	0.2956	0.0290	0.0124	0.0067	0.0060	35,011
1993	0.0661	0.4420	0.1680	0.1692	0.1332	0.0158	0.0045	0.0012	90,187	1993	0.0964	0.3265	0.2226	0.2910	0.0349	0.0148	0.0076	0.0062	57,998
1994	0.0820	0.4276	0.2090	0.2571	0.0177	0.0050	0.0010	0.0007	74,199	1994	0.1016	0.4152	0.1470	0.2938	0.0248	0.0166	0.0009	0.0001	43,815
1995	0.0468	0.5911	0.2511	0.0617	0.0409	0.0075	0.0007	0.0002	185,157	1995	0.0701	0.3915	0.2260	0.2605	0.0328	0.0174	0.0011	0.0005	114,351
1996	0.0189	0.3784	0.4173	0.1476	0.0223	0.0111	0.0037	0.0008	129,600	1996	0.0072	0.2131	0.3334	0.3807	0.0488	0.0103	0.0063	0.0002	88,237
1997	0.0063	0.3234	0.4986	0.1084	0.0471	0.0104	0.0038	0.0020	191,666	1997	0.0044	0.2133	0.4256	0.2714	0.0574	0.0236	0.0037	0.0005	130,279
1998	0.0003	0.1563	0.6158	0.1641	0.0518	0.0072	0.0021	0.0024	87,517	1998	0.0204	0.2754	0.5610	0.1195	0.0083	0.0087	0.0004	0.0063	89,028
1999	0.0112	0.3418	0.4096	0.1824	0.0392	0.0123	0.0026	0.0008	89,059	1999	0.0280	0.3235	0.4776	0.1356	0.0124	0.0131	0.0007	0.0090	38,655
2000	0.0112	0.3368	0.4011	0.1880	0.0429	0.0156	0.0034	0.0011	141,059	2000	0.0266	0.2793	0.5298	0.1212	0.0186	0.0182	0.0004	0.0059	123,814
2001	0.0263	0.2357	0.3171	0.2606	0.1242	0.0337	0.0024	0.0000	72,293	2001	0.0170	0.2821	0.2949	0.1979	0.1417	0.0392	0.0256	0.0015	39,579
2002	0.0290	0.2402	0.3186	0.2535	0.1229	0.0334	0.0025	0.0000	114,269	2002	0.0167	0.2657	0.2951	0.2020	0.1470	0.0382	0.0339	0.0014	65,083
2003	0.0274	0.2387	0.3180	0.2564	0.1234	0.0335	0.0024	0.0000	130,124	2003	0.0168	0.2736	0.2939	0.2002	0.1449	0.0386	0.0306	0.0015	73,012
2004	0.0294	0.2307	0.3104	0.2588	0.1282	0.0388	0.0037	0.0000	158,364	2004	0.0198	0.2766	0.2890	0.2028	0.1431	0.0381	0.0294	0.0013	83,400
2005	0.0246	0.3820	0.3356	0.1724	0.0368	0.0221	0.0088	0.0177	179,865	2005	0.0313	0.3475	0.3579	0.1611	0.0807	0.0119	0.0080	0.0017	145,356

Table 5.3.1.2.1. Number of hauls, number of spotted seatrout captured, all were measured for length, and number sampled for sex and age determination each year by the FWC's Fishery-Independent monitoring programs stratified random surveys operating on the gulf coast and using 12.3-m bag seines and 183-m haul seines. The 12.3-m bag seine sets and numbers of fish represent those sets made during the recruitment window (listed in text) in survey areas and counts of only spotted seatrout that were 100 mm standard length or shorter (assumed all young-of-the-year). All 183-m haul seine sets made each year were used and all fish captured were measured for length and a random subsample was collected for sex and age determination.

	Northwest					Southwest				
	12.3-m bag seine		183-m haul seine			12.3-m bag seine		183-m haul seine		
	hauls	No. fish	hauls	No. fish	Sex, Age	hauls	No. fish	hauls	No. fish	Sex, Age
1989						141	429			
1990						176	483			
1991						211	624			
1992						212	381			
1993						202	322			
1994						186	230			
1995						354	1,216			
1996	144	143				746	2,539	312	205	
1997	168	159	95	103		742	2,307	443	198	
1998	262	606	283	587	52	513	1,369	444	168	32
1999	266	168	480	690	78	525	896	444	317	48
2000	301	261	480	450	128	524	816	439	132	42
2001	483	299	408	308	68	525	1,008	444	220	31
2002	483	295	408	264	73	525	717	444	329	28
2003	476	252	408	318	50	524	1,263	444	350	18
2004	476	293	408	357	45	539	1,313	444	361	38
2005	476	302	407	332	54	602	792	444	138	32

Table 5.3.1.2.1 (con't). Number of hauls, number of spotted seatrout captured, all were measured for length, and number sampled for sex and age determination each year by the FWC's Fishery-Independent monitoring programs stratified random surveys operating on the Atlantic coast and using 12.3-m bag seines and 183-m haul seines. The 12.3-m bag seine sets and numbers of fish represent those sets made during the recruitment window (listed in text) in survey areas and counts of only spotted seatrout that were 100 mm standard length or shorter (assumed all young-of-the-year). All 183-m haul seine sets made each year were used and all fish captured were measured for length and a random subsample was collected for sex and age determination.

	Southeast					Northeast				
	12.3-m bag seine		183-m haul seine			12.3-m bag seine		183-m haul seine		
	hauls	No. fish	hauls	No. fish	Sex, Age	hauls	No. fish	hauls	No. fish	Sex, Age
1989										
1990	33	279								
1991	34	130								
1992	42	55								
1993	32	148								
1994	42	133								
1995	60	156								
1996	98	301								
1997	98	387	322	77						
1998	196	532	386	102	2					
1999	196	577	372	139	3					
2000	196	500	372	105	3					
2001	234	373	369	66	7	164	80	131	111	36
2002	238	431	374	176	2	168	111	192	225	14
2003	239	404	373	183	24	191	62	192	235	21
2004	295	485	374	210	8	191	92	192	112	9
2005	297	988	370	139	23	192	122	192	278	11

Table 5.3.1.4.1. Total lengths (inches) of spotted seatrout captured using the 183-m haul seine deployed during the Fishery-Independent monitoring program's stratified random sampling survey conducted in the Northwest region during 1997-2005 in the Cedar Key area and during 1998-2005 in the Apalachicola Bay area.

TL	Year								
	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	0	0	0	0	0	0	0	0	0
2	0	0	0	1	0	0	0	0	0
3	1	1	0	2	1	3	3	2	2
4	0	5	1	2	6	4	4	13	3
5	0	37	16	18	22	14	36	53	11
6	11	85	141	54	60	52	64	57	49
7	17	74	178	65	38	40	45	44	45
8	11	48	74	32	29	24	33	21	21
9	8	25	46	32	13	17	18	13	16
10	9	30	19	23	11	23	4	9	14
11	6	33	26	12	12	18	5	7	22
12	8	22	24	20	13	12	7	9	20
13	6	45	23	34	18	13	12	12	22
14	5	51	21	27	17	8	15	13	12
15	6	60	30	35	19	10	11	21	14
16	5	24	27	21	16	8	13	14	12
17	3	6	24	19	15	5	23	10	11
18	3	20	11	14	5	3	5	9	8
19	0	6	7	14	3	3	4	8	17
20	2	5	7	10	4	1	4	9	9
21	1	3	7	5	1	3	4	4	12
22	1	1	4	5	1	0	4	7	7
23	0	3	1	2	3	1	2	9	4
24	0	3	1	1	1	0	0	7	1
25	0	0	2	1	0	1	0	4	0
26	0	0	0	0	0	1	1	2	0
27	0	0	0	1	0	0	0	0	0
28	0	0	0	0	0	0	1	0	0
Totals	103	587	690	450	308	264	318	357	332

Table 5.3.1.4.1 (con't). Total lengths (inches) of spotted seatrout captured using the 183-m haul seine deployed during the Fishery-Independent monitoring program's stratified random sampling survey conducted in the Southwest region during 1996-2005 in the Tampa Bay area and during 1996-2005 in the Charlotte Harbor area.

TL	Year									
	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	0	0	0	0	0	0	0	0	0	0
2	8	0	0	2	0	0	1	3	1	1
3	5	2	2	0	2	3	3	7	3	3
4	4	1	4	2	0	2	2	3	4	6
5	13	3	7	4	5	7	10	16	11	13
6	29	21	27	23	29	17	34	31	42	40
7	25	37	26	23	13	15	33	41	35	18
8	5	12	13	12	4	15	25	22	18	3
9	4	7	7	11	5	27	25	13	26	2
10	6	9	8	9	2	21	35	22	29	2
11	4	10	5	15	9	30	30	23	34	4
12	9	16	7	38	8	16	14	27	18	5
13	12	16	19	43	9	28	33	35	30	6
14	18	15	12	29	10	18	30	30	25	13
15	17	14	8	27	14	6	17	22	39	9
16	20	11	8	21	7	8	12	26	28	6
17	11	5	7	13	6	1	5	15	12	3
18	7	6	3	12	2	1	13	10	6	1
19	3	3	3	9	1	2	5	2	0	1
20	5	5	2	5	3	0	0	1	0	1
21	0	3	0	7	2	1	0	0	0	0
22	0	2	0	8	1	1	0	1	0	0
23	0	0	0	1	0	0	1	0	0	1
24	0	0	0	2	0	1	1	0	0	0
25	0	0	0	1	0	0	0	0	0	0
26	0	0	0	0	0	0	0	0	0	0
27	0	0	0	0	0	0	0	0	0	0
28	0	0	0	0	0	0	0	0	0	0
Totals	205	198	168	317	132	220	329	350	361	138

Table 5.3.1.4.1 (con't). Total lengths (inches) of spotted seatrout captured using the 183-m haul seine deployed during the Fishery-Independent monitoring program's stratified random sampling survey conducted in the Southeast region during 1997-2005 in the northern and southern Indian River Lagoon areas.

TL	Year								
	1997	1998	1999	2000	2001	2002	2003	2004	2005
1	0	0	0	0	0	0	0	0	0
2	0	0	1	0	0	0	0	0	0
3	0	5	2	3	0	4	9	3	5
4	0	1	0	4	3	4	2	5	3
5	4	2	1	9	1	8	7	10	6
6	4	6	6	7	7	17	20	23	11
7	8	10	16	8	17	19	21	28	5
8	10	13	27	11	2	21	14	28	5
9	10	9	25	9	5	11	18	24	12
10	8	9	15	9	4	16	16	22	14
11	10	6	8	6	4	26	17	14	13
12	4	3	5	7	5	10	20	13	16
13	2	5	6	9	2	14	14	12	11
14	0	4	3	5	2	11	3	3	9
15	2	3	4	4	2	5	5	4	3
16	1	2	4	3	4	1	2	8	1
17	1	3	2	0	2	1	2	2	3
18	0	2	3	1	1	1	4	2	1
19	4	3	1	2	0	1	1	2	6
20	0	4	2	1	2	3	2	1	2
21	2	6	3	0	1	0	2	2	2
22	1	2	1	0	1	0	2	0	2
23	2	1	0	2	0	1	0	2	2
24	2	2	1	1	1	0	0	2	4
25	0	0	1	0	0	0	0	0	1
26	2	1	2	2	0	2	0	0	0
27	0	0	0	2	0	0	0	0	2
28	0	0	0	0	0	0	1	0	0
29	0	0	0	0	0	0	1	0	0
Totals	77	102	139	105	66	176	183	210	139

Table 5.3.1.4.1 (con't). Total lengths (inches) of spotted seatrout captured using the 183-m haul seine deployed during the Fishery-Independent monitoring program's stratified random sampling survey conducted in the Northeast region during 1997-2005 in the Lower St. Johns River and Nassau Sound area.

TL	Year				
	2001	2002	2003	2004	2005
1	0	0	0	0	0
2	0	0	0	0	0
3	0	0	0	0	0
4	0	0	0	0	1
5	0	3	5	4	8
6	5	13	13	9	7
7	6	11	16	13	9
8	11	5	18	5	11
9	5	13	22	5	24
10	13	22	22	3	56
11	11	30	57	14	51
12	18	26	31	11	25
13	13	38	30	17	25
14	11	22	9	9	29
15	11	16	4	10	12
16	1	13	3	4	7
17	2	5	2	5	7
18	3	5	1	0	2
19	0	1	0	0	1
20	0	0	1	1	1
21	0	0	0	0	0
22	1	0	0	0	1
23	0	0	1	1	0
24	0	0	0	0	0
25	0	2	0	1	0
26	0	0	0	0	0
27	0	0	0	0	1
28	0	0	0	0	0
29	0	0	0	0	0
Totals	111	225	235	112	278

Table 5.3.1.4.2. Randomly sampled age structure from the fishery-independent monitoring's 183-m haul seine catches of female and male spotted seatrout made in the Florida's gulf coast regions during 1982-2005. Numbers under each age are the proportions of each year's total sample size, by number, in that age group.

NW	Females									Total sample	Males									Total sample
	0	1	2	3	4	5	6	7+	0		1	2	3	4	5	6	7+			
1998	0.0303	0.6364	0.1818	0.0606	0.0909	0.0000	0.0000	0.0000	33	0.0000	0.5789	0.3684	0.0000	0.0000	0.0526	0.0000	0.0000	19		
1999	0.0000	0.3235	0.2647	0.2353	0.1324	0.0147	0.0294	0.0000	68	0.0000	0.2000	0.5000	0.2000	0.0000	0.1000	0.0000	0.0000	10		
2000	0.0091	0.3091	0.3364	0.2545	0.0636	0.0000	0.0091	0.0182	110	0.0000	0.1667	0.2222	0.2778	0.1667	0.0556	0.0556	0.0556	18		
2001	0.0192	0.2308	0.3269	0.2692	0.0962	0.0577	0.0000	0.0000	52	0.0000	0.1875	0.4375	0.2500	0.0625	0.0000	0.0625	0.0000	16		
2002	0.1633	0.4286	0.1837	0.1020	0.0612	0.0408	0.0204	0.0000	49	0.3750	0.1250	0.2500	0.1667	0.0417	0.0417	0.0000	0.0000	24		
2003	0.0000	0.2308	0.3846	0.0769	0.0000	0.1795	0.1026	0.0256	39	0.0000	0.1818	0.4545	0.1818	0.0909	0.0000	0.0909	0.0000	11		
2004	0.0286	0.0857	0.4000	0.3143	0.0571	0.0857	0.0000	0.0286	35	0.0000	0.1000	0.6000	0.3000	0.0000	0.0000	0.0000	0.0000	10		
2005	0.0000	0.2927	0.1707	0.2439	0.2439	0.0244	0.0000	0.0244	41	0.0000	0.2308	0.3077	0.2308	0.2308	0.0000	0.0000	0.0000	13		

SW	Females									Total sample	Males									Total sample
	0	1	2	3	4	5	6	7+	0		1	2	3	4	5	6	7+			
1998	0.0000	0.0435	0.7391	0.1304	0.0435	0.0435	0.0000	0.0000	23	0.0000	0.0000	0.5556	0.3333	0.1111	0.0000	0.0000	0.0000	9		
1999	0.0000	0.6154	0.1154	0.1923	0.0769	0.0000	0.0000	0.0000	26	0.0000	0.2273	0.3636	0.2727	0.1364	0.0000	0.0000	0.0000	22		
2000	0.0385	0.1538	0.5385	0.1538	0.0769	0.0000	0.0000	0.0385	26	0.0000	0.1875	0.2500	0.4375	0.1250	0.0000	0.0000	0.0000	16		
2001	0.0000	0.3158	0.4211	0.2105	0.0000	0.0000	0.0526	0.0000	19	0.0000	0.2500	0.5833	0.1667	0.0000	0.0000	0.0000	0.0000	12		
2002	0.0000	0.3333	0.1667	0.3333	0.1111	0.0556	0.0000	0.0000	18	0.0000	0.0000	0.5000	0.1000	0.4000	0.0000	0.0000	0.0000	10		
2003	0.0000	0.2308	0.2308	0.1538	0.3077	0.0769	0.0000	0.0000	13	0.0000	0.0000	0.4000	0.0000	0.2000	0.4000	0.0000	0.0000	5		
2004	0.0476	0.1429	0.4286	0.3810	0.0000	0.0000	0.0000	0.0000	21	0.0000	0.0588	0.1765	0.6471	0.1176	0.0000	0.0000	0.0000	17		
2005	0.0000	0.0667	0.5333	0.2000	0.0667	0.0667	0.0667	0.0000	15	0.0000	0.0000	0.2500	0.6250	0.0625	0.0625	0.0000	0.0000	16		

Table 5.3.1.4.2 (con't). Randomly sampled age structure from the fishery-independent monitoring's 183-m haul seine catches of female and male spotted seatrout made in Florida's Atlantic coast regions during 1982-2005. Numbers under each age are the proportions of each year's total sample size, by number, in that age group.

NE	Females								Total sample	Males								Total sample	
	0	1	2	3	4	5	6	7+		0	1	2	3	4	5	6	7+		
2001	0.1250	0.3750	0.3125	0.1250	0.0625	0.0000	0.0000	0	16	0.0000	0.3500	0.4000	0.2500	0.0000	0.0000	0.0000	0.0000	0.0000	20
2002	0.2000	0.2000	0.6000	0.0000	0.0000	0.0000	0.0000	0	10	0.0000	0.5000	0.2500	0.2500	0.0000	0.0000	0.0000	0.0000	0.0000	4
2003	0.0000	0.4000	0.4000	0.1000	0.1000	0.0000	0.0000	0	10	0.0000	0.3636	0.6364	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	11
2004	0.0000	0.5000	0.5000	0.0000	0.0000	0.0000	0.0000	0	4	0.0000	0.4000	0.6000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	5
2005	0.2000	0.6000	0.0000	0.0000	0.2000	0.0000	0.0000	0	5	0.0000	0.5000	0.0000	0.1667	0.1667	0.1667	0.0000	0.0000	0.0000	6

SE	Females								Total sample	Males								Total sample	
	0	1	2	3	4	5	6	7+		0	1	2	3	4	5	6	7+		
1998									0	0.0000	0.0000	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	2
1999	0.0000	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1	0.0000	0.5000	0.5000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	2
2000	0.0000	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1	0.5000	0.0000	0.0000	0.0000	0.0000	0.5000	0.0000	0.0000	0.0000	2
2001	0.0000	0.4286	0.2857	0.1429	0.1429	0.0000	0.0000	0.0000	7										0
2002	0.0000	0.0000	0.5000	0.0000	0.0000	0.0000	0.5000	0.0000	2										0
2003	0.0000	0.6667	0.2222	0.1111	0.0000	0.0000	0.0000	0.0000	9	0.0000	0.4000	0.4667	0.1333	0.0000	0.0000	0.0000	0.0000	0.0000	15
2004	0.0000	0.2000	0.4000	0.0000	0.4000	0.0000	0.0000	0.0000	5	0.0000	0.3333	0.3333	0.0000	0.3333	0.0000	0.0000	0.0000	0.0000	3
2005	0.0000	0.1333	0.2000	0.4000	0.2000	0.0000	0.0000	0.0667	15	0.0000	0.1250	0.5000	0.1250	0.2500	0.0000	0.0000	0.0000	0.0000	8

Table 5.3.2.1. Standardized median catch rates for young-of-the-year spotted seatrout (less than or equal to 100-mm standard length) captured by 12.3-m bag seines during the FWC fishery Independent Monitoring program each designated period of recruitment (see text).

	Northwest	Southwest	Southeast	Northeast
1989		0.8258		
1990		0.5860	0.9874	
1991		1.0229	1.4438	
1992		0.5908	0.2065	
1993		0.6277	0.7519	
1994		0.6226	0.9311	
1995		0.9614	0.8708	
1996	0.5804	0.9480	0.5782	
1997	0.6070	0.7194	0.3790	
1998	0.7679	0.7194	0.3029	
1999	0.4650	0.5844	0.4470	
2000	0.4777	0.4879	0.1607	
2001	0.5282	0.6206	0.2426	0.3505
2002	0.5547	0.5071	0.4769	0.3943
2003	0.4538	0.7289	0.4112	0.3171
2004	0.4982	0.7154	0.5019	0.2838
2005	0.5047	0.4131	0.5058	0.3500

Table 5.3.2.2. Observed indices of abundance for spotted seatrout in the Northwest and Southwest regions of the **gulf** coast of Florida. The headings HS and YOY indicate the findings from the Fishery Independent Monitoring program's young-of-the-year and 183-m haul-seine indices. The total-catch prorates Marine Recreational Fishery Statistics Survey indices are given for female and male spotted seatrout.

NW Year	Age-1 HS		Age-2 HS		Age-3 HS		YOY	Ages-0-2 MRFSS	
	female	male	female	male	female	male		female	male
1991								3.09	4.47
1992								1.95	3.08
1993								2.19	3.74
1994								1.64	3.22
1995								2.02	3.80
1996							0.580	1.66	2.89
1997							0.607	1.87	3.27
1998	0.074	0.039	0.021	0.025	0.007	0.000	0.768	2.63	3.30
1999	0.046	0.004	0.038	0.010	0.033	0.004	0.465	1.94	5.03
2000	0.071	0.006	0.077	0.008	0.058	0.010	0.478	1.49	3.60
2001	0.029	0.007	0.042	0.017	0.034	0.010	0.528	0.68	2.56
2002	0.051	0.007	0.022	0.015	0.012	0.010	0.555	1.75	3.35
2003	0.022	0.005	0.037	0.012	0.007	0.005	0.454	1.46	3.68
2004	0.007	0.002	0.034	0.015	0.027	0.007	0.498	1.64	3.85
2005	0.029	0.007	0.017	0.010	0.025	0.007	0.505	1.23	3.01

SW Year	Age-1 HS		Age-2 HS		Age-3 HS		YOY	Ages-0-2 MRFSS	
	female	male	female	male	female	female		female	male
1989							0.826	2.91	3.02
1990							0.586	2.45	2.51
1991							1.023	2.84	2.77
1992							0.591	2.70	2.72
1993							0.628	2.03	2.39
1994							0.623	2.44	2.56
1995							0.961	2.97	2.59
1996	0.000	0.000	0.000	0.000	0.000	0.000	0.948	2.94	2.62
1997	0.000	0.000	0.000	0.000	0.000	0.000	0.719	2.61	3.45
1998	0.002	0.000	0.038	0.011	0.007	0.007	0.719	2.43	2.52
1999	0.036	0.011	0.007	0.018	0.011	0.014	0.584	2.88	1.71
2000	0.009	0.007	0.032	0.009	0.009	0.016	0.488	3.80	2.50
2001	0.014	0.007	0.018	0.016	0.009	0.005	0.621	3.57	2.49
2002	0.014	0.000	0.007	0.011	0.014	0.002	0.507	3.34	2.16
2003	0.007	0.000	0.007	0.005	0.005	0.000	0.729	2.77	2.08
2004	0.007	0.002	0.020	0.007	0.018	0.025	0.715	2.91	3.02
2005	0.002	0.000	0.018	0.009	0.007	0.023	0.413	2.45	2.51

Table 5.3.2.2 (con't). Observed indices of abundance for spotted seatrout in the Northeast and Southeast regions of the **Atlantic** coast of Florida. The headings HS and YOY indicate the findings from the Fishery Independent Monitoring program's young-of-the-year and 183-m haul-seine indices. The total-catch prorates Marine Recreational Fishery Statistics Survey indices are given for female and male spotted seatrout.

NE Year	Ages-1-3 HS		YOY	Ages-0-2 MRFSS	
	female	male		female	male
1991				1.24	0.73
1992				1.36	0.71
1993				1.20	0.62
1994				0.73	0.34
1995				1.51	0.76
1996				1.33	0.83
1997				1.59	0.90
1998				0.91	0.73
1999				0.87	0.35
2000				0.70	0.52
2001	0.437	0.410	0.351	0.63	0.31
2002	0.622	0.550	0.394	1.03	0.54
2003	0.585	0.639	0.317	0.95	0.48
2004	0.293	0.290	0.284	0.94	0.46
2005	0.784	0.664	0.350	0.65	0.45

SE Year	Age-1-3 HS		YOY	Ages-0-2 MRFSS	
	female	male		female	male
1989				2.02	1.82
1990			0.987	1.61	1.54
1991			1.444	1.31	1.73
1992			0.207	1.01	1.24
1993			0.752	1.25	1.22
1994			0.931	1.61	1.67
1995			0.871	1.58	1.95
1996			0.578	1.35	1.66
1997	0.062	0.177	0.379	1.49	1.62
1998	0.084	0.180	0.303	1.35	1.51
1999	0.082	0.292	0.447	1.89	1.21
2000	0.078	0.204	0.161	1.80	1.98
2001	0.048	0.131	0.243	1.47	1.15
2002	0.097	0.374	0.477	1.63	1.37
2003	0.115	0.375	0.411	1.52	1.42
2004	0.108	0.454	0.502	2.02	1.82
2005	0.127	0.249	0.506	1.61	1.54

Table 7.1.1. Sample size, variance or mean square error (MSE), residual sum of squares (RSS), and negative log likelihood for components of the objective function from the model run for Northwest spotted seatrout. Also given are the external weights, the objective function component value and average model fit defined as the RSS/n. The contributions made to the overall objective function by the transient high fishing mortality penalty, the recruitment deviation penalty, and the penalty for a proportion female differing from 50% in the first age group are listed.

Components	Category	n	MSE	RSS	neg-log(L)	weight	Wt object.	Ave Fit
Total Harvest	com, male	56	1.093	2.020	674.17	1	674.17	0.036
	com,female	56	0.763	1.119	725.87	1	725.87	0.020
	rec, male	56	0.254	1.527	749.29	1	749.29	0.027
	rec, female	56	0.139	0.494	769.26	1	769.26	0.009
	Totals	224			2,918.59		2,918.59	
Effort	com	20	0.536	0.227	159.42	1	159.42	0.011
	rec	24	0.054	0.098	318.41	1	318.41	0.004
	Totals	44			477.83		477.83	
Proportion at age	com, male	128		1.167	37.52	0.0265	0.99	0.009
	com,female	136		0.955	54.02	0.0265	1.43	0.007
	rec, male	128		2.439	76.90	0.0265	2.04	0.019
	rec, female	136		1.197	50.15	0.0265	1.33	0.009
	Totals	528			218.59		5.79	
Index	YOY	10	0.020	0.037	-15.73	1	-15.73	0.004
	male, one	8	0.518	4.251	-12.63	1	-12.63	0.531
	female, one	8	0.322	2.558	-1.86	1	-1.86	0.320
	male, two	8	0.127	0.544	-14.92	1	-14.92	0.068
	female, two	8	0.241	0.373	-6.57	1	-6.57	0.047
	male, three	8	1.881	12.464	-12.03	1	-12.03	1.558
	female, three	8	0.692	2.591	-5.03	1	-5.03	0.324
	MRFSS male	15	0.030	0.299	11.17	1	11.17	0.020
	MRFSS female	15	0.084	0.708	7.64	1	7.64	0.047
	Totals	88			-49.97		-49.97	
Penalties	Rec deviations	23		1.731			1.73	
	High initial F	1		0.000			0.00	
	part N ₀ female	56		0.293			0.29	
	Totals	80		2.024			2.02	
Total Obj Fctn							3,354.26	

Table 7.1.1 (con't). Sample size, variance or mean square error (MSE), residual sum of squares (RSS), and negative log likelihood for components of the objective function from the model run for Southwest spotted seatrout. Also given are the external weights, the objective function component value and average model fit defined as the RSS/n. The contributions made to the overall objective function by the transient high fishing mortality penalty, the recruitment deviation penalty, and the penalty for a proportion female differing from 50% in the first age group are listed.

Components	Category	n	MSE	RSS	neg-log(L)	weight	Wt object.	Ave Fit
Total Harvest	com, male	56	0.435	1.830	669.38	1	669.38	0.033
	com,female	56	0.429	1.011	729.36	1	729.36	0.018
	rec, male	56	0.095	0.566	680.88	1	680.88	0.010
	rec, female	56	0.127	0.555	714.04	1	714.04	0.010
	Totals	224			2,793.65		2,793.65	
Effort	com	20	0.309	0.416	169.54	1	169.54	0.021
	rec	24	0.050	0.210	318.16	1	318.16	0.009
	Totals	44			487.70		487.70	
Proportion at age	com, male	136		1.410	60.11	0.022	1.32	0.010
	com,female	136		2.780	121.85	0.022	2.68	0.020
	rec, male	136		2.081	100.58	0.022	2.21	0.015
	rec, female	136		0.774	36.92	0.022	0.81	0.006
	Totals	544			319.46		7.03	
Index	YOY	17	0.052	0.453	-12.03	1	-12.03	0.027
	male, one	8	12.606	77.329	-27.64	1	-27.64	9.666
	female, one	8	0.932	6.107	-10.05	1	-10.05	0.763
	male, two	8	0.153	0.318	-17.64	1	-17.64	0.040
	female, two	8	0.556	2.957	-7.55	1	-7.55	0.370
	male, three	7	0.851	7.236	-6.19	1	-6.19	1.034
	female, three	8	0.223	0.538	-16.64	1	-16.64	0.067
	MRFSS male	15	0.021	0.184	2.97	1	2.97	0.012
	MRFSS female	15	0.021	0.129	3.33	1	3.33	0.009
	ENP	27	0.014	0.159	35.79	1	35.79	0.006
Totals	121			-55.66		-55.66		
Penalties	Rec deviations	23		0.442		1	0.44	
	High initial F	1		0.000		1	0.00	
	part N ₀ female	1		0.305		1	0.31	
	Totals	25					0.75	
Total Obj Fctn							3,233.47	

Table 7.1.1 (con't). Sample size, variance or mean square error (MSE), residual sum of squares (RSS), and negative log likelihood for components of the objective function from the model run for Southeast spotted seatrout. Also given are the external weights, the objective function component value and average model fit defined as the RSS/n. The contributions made to the overall objective function by the transient high fishing mortality penalty, the recruitment deviation penalty, and the penalty for a proportion female differing from 50% in the first age group are listed.

Components	Category	n	MSE	RSS	neg-log(L)	weight	Wt object.	Ave Fit
Total Harvest	com, male	56	0.122	1.360	596.61	1	596.61	0.024
	com,female	56	0.116	1.073	656.17	1	656.17	0.019
	rec, male	56	0.190	3.377	636.08	1	636.08	0.060
	rec, female	56	0.121	1.618	641.15	1	641.15	0.029
	Totals	224			2,530.01		2,530.01	
Effort	com	20	0.147	0.342	155.16	1	155.16	0.017
	rec	24	0.122	1.174	305.71	1	305.71	0.049
	Totals	44			460.86		460.86	
Proportion at age	com, male	136		1.127	42.26	0.132	5.58	0.008
	com,female	136		1.012	72.66	0.132	9.59	0.007
	rec, male	136		1.523	53.36	0.132	7.04	0.011
	rec, female	136		3.358	141.43	0.132	18.67	0.025
	Totals	544			309.71		40.88	
Index	YOY	16	0.308	4.394	0.93	1	0.93	0.275
	male, 1-3	9	0.133	1.347	12.53	1	12.53	0.150
	female, 1-3	9	0.061	0.274	-3.48	1	-3.48	0.030
	MRFSS male	15	0.031	0.258	-1.84	1	-1.84	0.017
	MRFSS female	15	0.032	0.118	-4.08	1	-4.08	0.008
	Totals	64			4.07		4.07	
Penalties	Rec deviations	23		1.212		1	1.21	
	High initial F	1		0.000		1	0.00	
	part N ₀ female	56		0.338		1	0.34	
	Totals	80					1.55	
Total Obj Fctn							3,037.38	

Table 7.1.1 (con't). Sample size, variance or mean square error (MSE), residual sum of squares (RSS), and negative log likelihood for components of the objective function from the model run for Northeast spotted seatrout. Also given are the external weights, the objective function component value and average model fit defined as the RSS/n. The contributions made to the overall objective function by the transient high fishing mortality penalty, the recruitment deviation penalty, and the penalty for a proportion female differing from 50% in the first age group are listed.

Components	Category	n	MSE	RSS	neg-log(L)	weight	Wt object.	Ave Fit
Total Harvest	com, male	56	0.376	0.585	512.10	1	512.10	0.010
	com,female	56	0.435	0.712	582.90	1	582.90	0.013
	rec, male	56	0.335	2.151	620.35	1	620.35	0.038
	rec, female	56	0.298	0.811	659.33	1	659.33	0.014
	Totals	224			2374.68		2,374.68	
Effort	com	20	0.430	0.553	133.48	1	133.48	0.028
	rec	24	0.154	0.685	294.26	1	294.26	0.029
	Totals	44			427.74		427.74	
Proportion at age	com, male	40		0.258	19.16	0.39	7.47	0.006
	com,female	40		0.065	11.08	0.39	4.32	0.002
	rec, male	40		0.344	20.34	0.39	7.93	0.009
	rec, female	40		0.099	9.20	0.39	3.59	0.002
	Totals	160			59.78		23.31	
Index	YOY	5	0.017	0.003	-10.98	1	-10.98	0.001
	male, 1-3	5	0.185	0.574	10.17	1	10.17	0.115
	female, 1-3	5	0.158	0.540	9.67	1	9.67	0.108
	MRFSS male	15	0.098	0.288	-8.97	1	-8.97	0.019
	MRFSS female	15	0.066	0.108	-5.47	1	-5.47	0.007
	Totals	45			-5.58		-5.58	
Penalties	Rec deviations	23		1.810		1	1.81	
	High F	1		0.000		1	0.00	
	part N ₀ female	56		0.105		15	1.57	
	Totals	80					3.38	
Total Obj Fctn							2,823.53	

Table 7.2.1.1. Estimated age-specific and aggregate fishing mortality rates for female and male spotted seatrout in the Northwest region on the gulf coast of Florida during 1982-2005. The aggregate fishing mortality for ages 1-7⁺ was solved iteratively by applying the standard catch equation using the pooled beginning-of-the-year abundances for ages 1-7⁺ and pooled catches for these age groups.

Females	0	1	2	3	4	5	6	7 ⁺	1-7 ⁺
1982	0.273	0.438	0.580	0.591	0.598	0.604	0.609	0.609	0.312
1983	0.182	0.323	0.427	0.433	0.437	0.440	0.442	0.442	0.552
1984	0.265	0.453	0.572	0.584	0.592	0.600	0.606	0.606	0.517
1985	0.444	0.598	0.737	0.752	0.763	0.773	0.782	0.782	0.318
1986	0.208	0.376	0.490	0.499	0.506	0.512	0.516	0.516	0.437
1987	0.237	0.379	0.581	0.593	0.603	0.611	0.618	0.618	0.258
1988	0.174	0.338	0.511	0.521	0.528	0.534	0.539	0.539	0.561
1989	0.270	0.443	0.663	0.676	0.687	0.696	0.703	0.703	0.315
1990	0.187	0.290	0.504	0.514	0.522	0.529	0.535	0.535	0.109
1991	0.029	0.116	0.236	0.229	0.267	0.285	0.081	0.086	0.289
1992	0.084	0.258	0.297	0.447	0.406	0.387	0.171	0.171	0.131
1993	0.034	0.202	0.222	0.337	0.320	0.294	0.073	0.073	0.114
1994	0.040	0.151	0.165	0.271	0.244	0.274	0.091	0.091	0.190
1995	0.050	0.130	0.309	0.359	0.369	0.347	0.320	0.370	0.214
1996	0.046	0.230	0.270	0.471	0.375	0.274	0.285	0.278	0.117
1997	0.050	0.135	0.228	0.266	0.264	0.129	0.185	0.168	0.123
1998	0.057	0.110	0.186	0.220	0.222	0.125	0.164	0.090	0.114
1999	0.050	0.097	0.246	0.266	0.229	0.113	0.132	0.097	0.132
2000	0.058	0.087	0.253	0.342	0.327	0.151	0.217	0.176	0.154
2001	0.070	0.090	0.250	0.343	0.355	0.675	0.391	0.329	0.129
2002	0.060	0.164	0.190	0.203	0.221	0.240	0.259	0.119	0.160
2003	0.062	0.152	0.199	0.271	0.280	0.244	0.188	0.081	0.174
2004	0.061	0.159	0.237	0.284	0.253	0.272	0.171	0.171	0.219
2005	0.064	0.125	0.236	0.313	0.333	0.253	0.248	0.248	0.256

Males	0	1	2	3	4	5	6	7 ⁺	1-7 ⁺
1982	0.031	0.110	0.348	0.509	0.558	0.588	0.607	0.607	0.113
1983	0.022	0.076	0.233	0.345	0.388	0.418	0.437	0.437	0.181
1984	0.031	0.115	0.385	0.535	0.576	0.598	0.611	0.611	0.259
1985	0.050	0.193	0.497	0.695	0.746	0.774	0.790	0.790	0.115
1986	0.024	0.095	0.303	0.439	0.478	0.501	0.515	0.515	0.160
1987	0.026	0.104	0.351	0.537	0.575	0.594	0.606	0.606	0.148
1988	0.020	0.094	0.297	0.474	0.536	0.560	0.573	0.573	0.201
1989	0.028	0.133	0.392	0.628	0.703	0.729	0.743	0.743	0.167
1990	0.022	0.090	0.245	0.472	0.552	0.572	0.583	0.583	0.044
1991	0.006	0.013	0.030	0.082	0.158	0.195	0.215	0.209	0.112
1992	0.018	0.034	0.065	0.153	0.292	0.360	0.418	0.365	0.049
1993	0.008	0.015	0.036	0.116	0.233	0.289	0.319	0.279	0.057
1994	0.009	0.017	0.036	0.101	0.197	0.236	0.266	0.248	0.054
1995	0.010	0.022	0.047	0.131	0.311	0.355	0.374	0.313	0.064
1996	0.010	0.025	0.062	0.158	0.349	0.436	0.417	0.309	0.041
1997	0.004	0.011	0.019	0.044	0.087	0.146	0.179	0.119	0.028
1998	0.004	0.008	0.013	0.023	0.045	0.103	0.172	0.090	0.034
1999	0.004	0.007	0.012	0.023	0.048	0.102	0.148	0.091	0.033
2000	0.005	0.009	0.017	0.038	0.083	0.129	0.236	0.163	0.037
2001	0.005	0.010	0.022	0.062	0.122	0.191	0.281	0.222	0.019
2002	0.005	0.011	0.023	0.054	0.083	0.140	0.130	0.168	0.038
2003	0.005	0.010	0.019	0.042	0.079	0.130	0.185	0.158	0.031
2004	0.005	0.009	0.020	0.052	0.098	0.157	0.198	0.180	0.036
2005	0.005	0.011	0.024	0.054	0.094	0.151	0.259	0.187	0.055

Table 7.2.1.1 (con't). Estimated age-specific and aggregate fishing mortality rates for female and male spotted seatrout in the Southwest region on the gulf coast of Florida during 1982-2005. The aggregate fishing mortality for ages 1-7⁺ was solved iteratively by applying the standard catch equation using the pooled beginning-of-the-year abundances for ages 1-7⁺ and pooled catches for these age groups.

Females	0	1	2	3	4	5	6	7 ⁺	1-7 ⁺
1982	0.139	0.229	0.709	0.740	0.761	0.762	0.761	0.761	0.238
1983	0.144	0.254	0.824	0.782	0.804	0.806	0.805	0.805	0.295
1984	0.138	0.243	0.833	0.750	0.771	0.772	0.772	0.772	0.386
1985	0.117	0.180	0.468	0.497	0.511	0.511	0.511	0.511	0.195
1986	0.100	0.207	0.777	0.714	0.736	0.737	0.737	0.737	0.286
1987	0.077	0.122	0.469	0.408	0.420	0.421	0.420	0.420	0.180
1988	0.085	0.151	0.669	0.517	0.532	0.533	0.532	0.532	0.334
1989	0.067	0.134	0.799	0.528	0.544	0.545	0.545	0.545	0.337
1990	0.130	0.144	0.197	0.187	0.160	0.131	0.155	0.061	0.145
1991	0.130	0.160	0.242	0.235	0.231	0.142	0.160	0.059	0.170
1992	0.112	0.136	0.188	0.188	0.183	0.146	0.108	0.051	0.165
1993	0.103	0.101	0.245	0.212	0.167	0.125	0.092	0.070	0.131
1994	0.080	0.081	0.153	0.172	0.132	0.101	0.091	0.097	0.112
1995	0.075	0.071	0.114	0.130	0.093	0.065	0.053	0.029	0.075
1996	0.005	0.029	0.117	0.209	0.210	0.160	0.137	0.136	0.057
1997	0.007	0.043	0.175	0.341	0.334	0.241	0.187	0.169	0.106
1998	0.007	0.049	0.220	0.428	0.415	0.326	0.290	0.078	0.120
1999	0.006	0.039	0.161	0.292	0.288	0.242	0.122	0.189	0.081
2000	0.005	0.033	0.124	0.284	0.328	0.257	0.154	0.121	0.101
2001	0.005	0.033	0.119	0.165	0.154	0.148	0.099	0.159	0.066
2002	0.007	0.042	0.145	0.277	0.298	0.234	0.156	0.184	0.117
2003	0.008	0.057	0.211	0.336	0.308	0.263	0.171	0.146	0.125
2004	0.007	0.053	0.216	0.396	0.382	0.242	0.219	0.241	0.131
2005	0.007	0.054	0.214	0.336	0.309	0.231	0.182	0.118	0.135

Males	0	1	2	3	4	5	6	7 ⁺	1-7 ⁺
1982	0.023	0.051	0.129	0.234	0.407	0.567	0.713	0.713	0.105
1983	0.021	0.057	0.151	0.272	0.472	0.664	0.839	0.839	0.101
1984	0.032	0.065	0.142	0.261	0.526	0.798	1.015	1.015	0.161
1985	0.023	0.048	0.097	0.167	0.288	0.410	0.513	0.513	0.089
1986	0.023	0.050	0.131	0.241	0.439	0.626	0.798	0.798	0.121
1987	0.013	0.028	0.073	0.152	0.266	0.413	0.524	0.524	0.093
1988	0.015	0.033	0.100	0.204	0.375	0.573	0.731	0.731	0.122
1989	0.013	0.028	0.099	0.223	0.454	0.756	0.973	0.973	0.129
1990	0.016	0.029	0.059	0.157	0.272	0.259	0.334	0.462	0.085
1991	0.016	0.029	0.064	0.182	0.314	0.332	0.370	0.370	0.072
1992	0.014	0.024	0.050	0.135	0.239	0.264	0.284	0.284	0.065
1993	0.013	0.022	0.047	0.134	0.245	0.250	0.305	0.305	0.060
1994	0.010	0.018	0.034	0.079	0.151	0.186	0.200	0.200	0.040
1995	0.010	0.016	0.030	0.073	0.128	0.145	0.155	0.155	0.035
1996	0.012	0.016	0.022	0.037	0.059	0.073	0.084	0.125	0.031
1997	0.017	0.024	0.038	0.065	0.109	0.159	0.237	0.185	0.051
1998	0.017	0.023	0.041	0.079	0.157	0.241	0.291	0.258	0.056
1999	0.013	0.017	0.032	0.063	0.120	0.172	0.214	0.194	0.061
2000	0.013	0.017	0.026	0.050	0.085	0.189	0.204	0.204	0.045
2001	0.013	0.017	0.024	0.039	0.065	0.082	0.088	0.110	0.031
2002	0.016	0.023	0.037	0.062	0.083	0.141	0.195	0.151	0.060
2003	0.019	0.026	0.039	0.067	0.089	0.157	0.220	0.203	0.057
2004	0.018	0.025	0.046	0.075	0.112	0.184	0.323	0.253	0.068
2005	0.018	0.026	0.046	0.073	0.115	0.171	0.214	0.228	0.074

Table 7.2.1.1 (con't). Estimated age-specific and aggregate fishing mortality rates for female and male spotted seatrout in the Southeast region on the Atlantic coast of Florida during 1982-2005. The aggregate fishing mortality for ages 1-7⁺ was solved iteratively by applying the standard catch equation using the pooled beginning-of-the-year abundances for ages 1-7⁺ and pooled catches for these age groups.

Females	0	1	2	3	4	5	6	7 ⁺	1-7 ⁺
1982	0.142	0.481	0.618	0.722	0.836	0.948	1.029	1.029	0.288
1983	0.123	0.455	0.665	0.864	1.089	1.309	1.467	1.467	0.508
1984	0.136	0.356	0.467	0.573	0.696	0.817	0.904	0.904	0.333
1985	0.133	0.372	0.517	0.662	0.834	1.003	1.125	1.125	0.263
1986	0.052	0.311	0.431	0.577	0.747	0.914	1.035	1.035	0.214
1987	0.045	0.236	0.319	0.408	0.513	0.616	0.690	0.690	0.245
1988	0.052	0.208	0.326	0.469	0.597	0.722	0.812	0.812	0.275
1989	0.058	0.230	0.345	0.474	0.600	0.723	0.811	0.811	0.156
1990	0.058	0.136	0.198	0.227	0.223	0.216	0.216	0.203	0.108
1991	0.043	0.107	0.165	0.214	0.203	0.196	0.171	0.099	0.115
1992	0.042	0.098	0.140	0.178	0.180	0.166	0.170	0.170	0.119
1993	0.049	0.079	0.118	0.109	0.105	0.132	0.143	0.123	0.088
1994	0.044	0.089	0.154	0.124	0.149	0.164	0.129	0.129	0.108
1995	0.073	0.098	0.153	0.212	0.217	0.227	0.262	0.244	0.145
1996	0.040	0.061	0.097	0.136	0.134	0.122	0.067	0.094	0.077
1997	0.049	0.064	0.118	0.195	0.163	0.129	0.216	0.206	0.101
1998	0.056	0.063	0.116	0.138	0.161	0.163	0.159	0.159	0.092
1999	0.051	0.103	0.172	0.214	0.286	0.237	0.286	0.286	0.146
2000	0.074	0.124	0.181	0.236	0.388	0.382	0.439	0.439	0.183
2001	0.109	0.106	0.150	0.154	0.159	0.163	0.151	0.151	0.137
2002	0.127	0.091	0.132	0.147	0.141	0.138	0.125	0.125	0.107
2003	0.097	0.073	0.093	0.099	0.099	0.103	0.095	0.095	0.089
2004	0.091	0.083	0.102	0.110	0.109	0.115	0.106	0.106	0.091
2005	0.203	0.114	0.160	0.190	0.304	0.251	0.200	0.128	0.179
Males	0	1	2	3	4	5	6	7 ⁺	1-7 ⁺
1982	0.032	0.098	0.303	0.496	0.653	0.740	0.800	0.800	0.199
1983	0.056	0.126	0.406	0.605	0.796	0.923	1.029	1.029	0.258
1984	0.035	0.128	0.272	0.409	0.523	0.600	0.660	0.660	0.124
1985	0.077	0.164	0.329	0.479	0.609	0.705	0.786	0.786	0.152
1986	0.022	0.180	0.309	0.426	0.521	0.612	0.689	0.689	0.143
1987	0.015	0.095	0.210	0.299	0.366	0.424	0.472	0.472	0.096
1988	0.022	0.048	0.187	0.301	0.417	0.490	0.547	0.547	0.163
1989	0.026	0.057	0.204	0.318	0.427	0.498	0.555	0.555	0.117
1990	0.012	0.032	0.138	0.257	0.370	0.384	0.346	0.343	0.089
1991	0.010	0.023	0.104	0.159	0.364	0.385	0.321	0.261	0.048
1992	0.009	0.022	0.083	0.131	0.286	0.304	0.232	0.190	0.046
1993	0.011	0.025	0.071	0.108	0.183	0.196	0.158	0.155	0.041
1994	0.010	0.028	0.095	0.132	0.233	0.224	0.258	0.252	0.045
1995	0.019	0.041	0.097	0.167	0.303	0.286	0.325	0.325	0.058
1996	0.002	0.018	0.074	0.107	0.163	0.197	0.171	0.171	0.042
1997	0.003	0.022	0.083	0.125	0.206	0.233	0.279	0.279	0.056
1998	0.003	0.023	0.088	0.094	0.355	0.241	0.273	0.292	0.049
1999	0.003	0.030	0.108	0.122	0.517	0.550	0.713	0.495	0.078
2000	0.004	0.038	0.136	0.158	0.642	0.662	1.064	0.559	0.094
2001	0.004	0.039	0.139	0.197	0.411	0.510	0.263	0.508	0.073
2002	0.004	0.038	0.141	0.190	0.270	0.403	0.241	0.270	0.090
2003	0.003	0.029	0.101	0.134	0.220	0.324	0.156	0.289	0.055
2004	0.003	0.031	0.104	0.150	0.213	0.289	0.191	0.248	0.069
2005	0.005	0.047	0.178	0.240	0.452	0.477	0.500	0.500	0.114

Table 7.2.1.1 (con't). Estimated age-specific and aggregate fishing mortality rates for female and male spotted seatrout in the Northeast region on the Atlantic coast of Florida during 1982-2005. The aggregate fishing mortality for ages 1-7⁺ was solved iteratively by applying the standard catch equation using the pooled beginning-of-the-year abundances for ages 1-7⁺ and pooled catches for these age groups.

Females	0	1	2	3	4	5	6	7 ⁺	1-7 ⁺
1982	0.019	0.225	0.861	0.837	0.537	0.362	0.267	0.267	0.250
1983	0.023	0.229	0.956	0.915	0.536	0.316	0.201	0.201	0.241
1984	0.018	0.295	1.316	1.257	0.712	0.398	0.234	0.234	0.502
1985	0.034	0.299	1.327	1.268	0.713	0.394	0.227	0.227	0.464
1986	0.017	0.215	0.918	0.877	0.506	0.291	0.178	0.178	0.389
1987	0.015	0.363	1.586	1.513	0.868	0.497	0.301	0.301	1.059
1988	0.016	0.160	0.611	0.588	0.365	0.236	0.166	0.166	0.166
1989	0.007	0.112	0.533	0.526	0.327	0.211	0.149	0.149	0.126
1990	0.005	0.149	0.436	0.467	0.449	0.430	0.419	0.391	0.136
1991	0.009	0.203	0.600	0.659	0.616	0.586	0.569	0.238	0.226
1992	0.004	0.183	0.471	0.515	0.488	0.455	0.477	0.312	0.259
1993	0.007	0.113	0.544	0.487	0.434	0.509	0.453	0.402	0.271
1994	0.007	0.136	0.541	0.507	0.550	0.536	0.135	0.135	0.157
1995	0.009	0.107	0.432	0.505	0.485	0.418	0.306	0.306	0.227
1996	0.001	0.025	0.085	0.115	0.120	0.120	0.067	0.067	0.059
1997	0.002	0.031	0.147	0.229	0.201	0.178	0.056	0.056	0.118
1998	0.001	0.014	0.098	0.105	0.127	0.141	0.100	0.100	0.067
1999	0.001	0.015	0.044	0.059	0.076	0.070	0.072	0.088	0.043
2000	0.002	0.048	0.167	0.235	0.287	0.241	0.041	0.040	0.109
2001	0.010	0.083	0.183	0.161	0.116	0.051	0.011	0.011	0.078
2002	0.007	0.044	0.100	0.101	0.071	0.049	0.036	0.036	0.060
2003	0.009	0.054	0.131	0.135	0.100	0.074	0.081	0.081	0.084
2004	0.018	0.059	0.134	0.136	0.102	0.065	0.040	0.040	0.088
2005	0.019	0.077	0.214	0.256	0.237	0.096	0.026	0.013	0.149

Males	0	1	2	3	4	5	6	7 ⁺	1-7 ⁺
1982	0.013	0.085	0.414	0.765	0.925	0.960	0.968	0.968	0.155
1983	0.016	0.118	0.500	0.906	1.043	1.072	1.078	1.078	0.093
1984	0.007	0.148	0.696	1.259	1.456	1.493	1.499	1.499	0.151
1985	0.032	0.179	0.707	1.275	1.472	1.508	1.515	1.515	0.331
1986	0.005	0.116	0.485	0.876	1.006	1.033	1.038	1.038	0.105
1987	0.013	0.166	0.841	1.518	1.746	1.791	1.799	1.799	0.351
1988	0.014	0.075	0.309	0.563	0.658	0.680	0.685	0.685	0.079
1989	0.006	0.035	0.250	0.484	0.587	0.603	0.607	0.607	0.074
1990	0.006	0.023	0.194	0.344	0.426	0.435	0.416	0.398	0.051
1991	0.011	0.035	0.237	0.472	0.576	0.599	0.441	0.335	0.105
1992	0.019	0.057	0.227	0.373	0.462	0.470	0.426	0.424	0.116
1993	0.008	0.030	0.236	0.384	0.515	0.527	0.478	0.433	0.110
1994	0.009	0.048	0.270	0.386	0.494	0.451	0.538	0.176	0.061
1995	0.012	0.039	0.154	0.280	0.422	0.375	0.423	0.372	0.081
1996	0.003	0.007	0.027	0.070	0.100	0.122	0.109	0.109	0.029
1997	0.004	0.010	0.041	0.087	0.151	0.149	0.171	0.171	0.035
1998	0.004	0.010	0.023	0.047	0.163	0.108	0.142	0.129	0.025
1999	0.003	0.007	0.016	0.030	0.093	0.063	0.089	0.075	0.012
2000	0.005	0.015	0.057	0.069	0.336	0.239	0.041	0.041	0.046
2001	0.005	0.018	0.049	0.109	0.179	0.167	0.110	0.110	0.032
2002	0.004	0.010	0.024	0.055	0.097	0.074	0.063	0.063	0.022
2003	0.005	0.012	0.030	0.071	0.138	0.121	0.094	0.094	0.028
2004	0.006	0.014	0.033	0.075	0.136	0.118	0.090	0.090	0.027
2005	0.007	0.017	0.041	0.112	0.242	0.238	0.221	0.165	0.046

Table 7.2.2.1. Estimated age-specific and total abundance (in thousands) of spotted seatrout in the Northwest region on the gulf coast of Florida during 1982-2005.

Females	0	1	2	3	4	5	6	7 ⁺	Total
1982	4,736.74	1,891.96	878.53	348.50	133.83	52.37	21.61	15.91	8,079.44
1983	4,788.34	2,926.24	1,014.48	424.83	167.43	64.06	24.99	17.86	9,428.21
1984	3,500.11	2,721.49	1,378.49	423.97	175.57	68.59	26.05	17.31	8,311.58
1985	4,881.41	1,663.33	1,108.98	488.47	148.07	60.62	23.45	14.69	8,389.01
1986	4,522.33	2,937.38	846.02	503.10	219.62	66.14	26.92	16.86	9,138.36
1987	1,962.77	2,643.78	1,490.15	350.43	205.96	89.06	26.60	17.48	6,786.24
1988	4,230.53	1,221.84	1,397.20	662.09	154.23	90.00	38.68	19.05	7,813.62
1989	4,554.86	2,391.99	581.28	533.17	249.38	57.50	33.26	21.17	8,422.61
1990	3,072.22	2,798.51	1,326.46	260.04	236.18	109.62	25.11	23.63	7,851.76
1991	4,822.77	2,211.38	1,845.94	776.32	153.19	133.91	61.08	33.22	10,037.81
1992	2,923.58	3,285.58	1,266.01	1,015.67	367.89	75.63	67.34	58.87	9,060.56
1993	2,787.41	2,093.39	1,989.28	750.97	536.94	197.83	41.75	86.95	8,484.52
1994	2,962.59	1,983.69	1,333.02	1,249.47	424.45	311.67	111.42	87.01	8,463.33
1995	2,299.05	2,087.02	1,290.11	724.88	646.19	217.40	163.13	104.49	7,532.27
1996	2,283.87	1,627.10	1,228.81	729.63	335.25	329.06	122.49	149.45	6,805.66
1997	3,353.09	1,609.44	1,052.81	724.78	414.44	190.70	214.35	168.99	7,728.60
1998	4,844.92	2,347.15	1,067.72	647.32	430.89	245.97	124.70	249.17	9,957.83
1999	1,986.56	3,415.67	1,578.12	618.28	367.64	253.86	162.72	248.56	8,631.42
2000	1,604.80	1,388.99	2,320.41	907.94	325.29	196.32	161.64	251.36	7,156.74
2001	2,639.70	1,108.18	940.09	1,338.81	477.31	168.98	74.04	214.98	6,962.09
2002	2,870.33	1,841.55	696.82	575.73	809.31	283.47	98.44	183.73	7,359.37
2003	1,269.64	1,998.25	1,171.69	423.08	325.23	453.00	164.55	185.99	5,991.43
2004	2,536.30	885.18	1,263.00	684.81	235.93	187.02	255.73	218.96	6,266.94
2005	2,412.52	1,761.93	578.74	738.80	370.84	125.28	107.62	274.49	6,370.23

Males	0	1	2	3	4	5	6	7 ⁺	Total
1982	3,741.72	1,903.91	1,263.09	653.99	280.09	112.45	44.45	31.42	8,031.11
1983	2,820.83	2,710.50	1,307.77	741.08	343.04	140.74	54.83	36.31	8,155.10
1984	4,003.67	2,026.87	1,789.01	659.50	321.45	142.87	57.32	36.64	9,037.33
1985	5,216.52	2,822.37	1,238.52	805.96	243.87	112.91	48.81	31.59	10,520.56
1986	6,457.86	3,771.81	1,900.83	677.59	384.93	112.04	50.68	35.58	13,391.32
1987	4,921.60	4,660.78	2,517.52	991.09	293.48	160.52	45.81	34.87	13,625.67
1988	2,531.03	3,573.41	3,141.93	1,386.29	457.22	127.19	67.95	33.68	11,318.71
1989	3,170.14	1,822.79	2,316.70	1,572.60	548.33	167.68	45.47	35.81	9,679.52
1990	3,284.24	2,297.60	1,233.91	1,343.56	726.98	233.88	70.12	33.61	9,223.89
1991	3,322.29	2,417.39	1,679.36	886.99	916.61	459.93	142.54	62.10	9,887.21
1992	1,566.34	2,416.96	1,731.66	1,166.10	563.99	507.33	237.74	101.46	8,291.58
1993	3,978.21	1,151.58	1,763.36	1,236.96	769.37	330.94	281.40	184.87	9,696.69
1994	2,757.94	2,921.04	838.46	1,259.61	828.13	468.05	193.62	266.62	9,533.47
1995	1,406.09	2,022.19	2,116.94	592.46	818.87	449.50	243.14	243.02	7,892.22
1996	3,291.37	1,031.66	1,461.58	1,474.02	374.83	427.81	215.23	250.97	8,527.47
1997	3,012.81	2,428.86	756.26	1,062.46	1,044.68	254.63	273.84	298.34	9,131.87
1998	2,378.12	2,222.03	1,784.99	553.01	769.13	739.93	170.20	372.88	8,990.29
1999	3,137.73	1,754.83	1,633.85	1,306.08	400.19	542.82	495.19	360.90	9,631.58
2000	2,828.64	2,313.80	1,288.93	1,189.79	931.18	272.85	353.60	517.00	9,695.79
2001	2,334.64	2,084.44	1,697.23	934.24	828.31	610.36	166.98	504.72	9,160.93
2002	2,932.47	1,721.72	1,528.04	1,228.25	655.79	564.90	393.27	424.77	9,449.21
2003	2,869.50	2,161.94	1,263.42	1,111.21	872.42	449.09	367.43	510.99	9,605.99
2004	2,619.57	2,115.46	1,586.98	917.59	781.66	585.70	284.40	539.27	9,430.62
2005	2,489.03	1,930.78	1,549.83	1,147.34	644.35	526.89	373.25	493.95	9,155.41

Table 7.2.2.1 (con't). Estimated age-specific and total abundance (in thousands) of spotted seatrout in the Southwest region on the gulf coast of Florida during 1982-2005.

Females	0	1	2	3	4	5	6	7 ⁺	Total
1982	3,601.71	1,497.68	804.85	224.88	88.68	32.07	12.80	8.81	6,271.47
1983	1,406.45	2,321.94	882.70	293.30	79.51	30.71	11.09	7.48	5,033.18
1984	2,253.34	902.39	1,334.06	286.82	99.39	26.35	10.16	6.15	4,918.66
1985	2,512.21	1,453.78	524.08	429.83	100.41	34.06	9.02	5.59	5,068.97
1986	2,523.89	1,655.65	899.83	243.23	193.63	44.64	15.13	6.49	5,582.49
1987	2,782.27	1,691.31	997.42	306.55	88.20	68.72	15.82	7.67	5,957.97
1988	1,407.89	1,907.51	1,108.86	462.29	150.96	42.94	33.43	11.43	5,125.30
1989	3,189.95	957.72	1,215.32	420.58	204.22	65.69	18.67	19.51	6,091.66
1990	3,162.03	2,209.63	620.60	405.02	183.75	87.80	28.21	16.40	6,713.45
1991	2,302.64	2,057.56	1,417.83	377.59	249.00	115.95	57.08	29.32	6,606.96
1992	2,357.77	1,498.03	1,298.82	824.28	221.07	146.43	74.50	56.51	6,477.40
1993	2,757.67	1,561.23	968.94	797.09	505.92	136.34	93.73	89.31	6,910.22
1994	1,668.52	1,843.86	1,045.37	561.84	477.64	317.08	89.15	125.02	6,128.48
1995	1,827.29	1,140.91	1,259.12	664.61	350.53	309.98	212.25	144.32	5,909.00
1996	3,094.46	1,256.00	787.13	832.22	432.53	236.61	215.20	252.99	7,107.15
1997	1,837.95	2,281.43	903.87	518.68	500.04	259.63	149.31	302.56	6,753.46
1998	2,599.09	1,351.98	1,618.48	561.87	273.27	265.14	151.12	281.11	7,102.07
1999	2,303.18	1,911.94	953.54	961.90	271.23	133.65	141.77	276.45	6,953.65
2000	1,661.24	1,696.51	1,362.21	601.64	532.07	150.58	77.73	262.56	6,344.54
2001	3,517.37	1,224.35	1,215.69	891.26	335.45	283.94	86.25	221.74	7,776.05
2002	2,283.77	2,592.22	877.86	799.25	559.56	213.00	181.42	197.95	7,705.03
2003	2,590.54	1,680.60	1,840.99	562.37	448.64	307.81	124.86	237.09	7,792.90
2004	2,982.35	1,904.16	1,175.62	1,103.94	297.66	244.20	175.29	229.63	8,112.85
2005	1,557.58	2,193.19	1,337.73	702.08	550.46	150.56	142.01	238.07	6,871.67

Males	0	1	2	3	4	5	6	7 ⁺	Total
1982	2,795.64	1,384.96	962.09	605.29	336.91	153.10	61.61	38.08	6,337.68
1983	2,692.49	2,024.36	974.61	626.44	354.96	166.18	64.32	36.19	6,939.56
1984	2,647.66	1,952.60	1,416.48	620.77	353.65	164.02	63.36	32.19	7,250.74
1985	1,880.50	1,899.56	1,356.11	910.78	354.28	154.79	54.71	25.65	6,636.38
1986	2,174.42	1,361.38	1,341.68	911.44	571.06	196.70	76.09	35.64	6,668.40
1987	912.97	1,574.38	959.20	871.69	530.43	272.83	77.91	37.26	5,236.66
1988	2,475.88	667.48	1,133.75	660.43	554.73	301.12	133.73	50.53	5,977.63
1989	3,103.53	1,806.42	478.55	759.72	399.05	282.50	125.81	65.73	7,021.31
1990	1,546.45	2,269.83	1,301.54	321.15	450.30	187.82	98.27	53.61	6,228.97
1991	3,949.36	1,127.94	1,632.85	909.20	203.39	254.20	107.36	77.15	8,261.46
1992	2,363.12	2,879.28	811.71	1,134.95	561.25	110.09	135.08	94.44	8,089.92
1993	2,171.68	1,726.57	2,081.43	572.05	734.98	327.39	62.65	128.02	7,804.77
1994	2,761.39	1,587.91	1,250.64	1,471.87	370.50	426.31	188.85	104.15	8,161.61
1995	2,831.89	2,025.06	1,155.86	895.94	1,007.50	236.06	262.32	177.71	8,592.34
1996	2,449.71	2,077.44	1,476.11	831.33	616.89	656.43	151.31	279.21	8,538.43
1997	3,277.84	1,793.53	1,515.06	1,069.86	593.57	430.69	451.98	285.51	9,418.04
1998	2,397.38	2,386.35	1,297.50	1,080.72	742.45	394.27	272.17	440.00	9,010.84
1999	3,062.02	1,745.77	1,727.36	922.15	739.44	469.97	229.65	402.59	9,298.94
2000	2,584.42	2,239.71	1,271.23	1,238.95	641.68	486.07	293.12	382.94	9,138.12
2001	1,291.29	1,890.44	1,630.83	917.69	873.30	436.58	298.12	408.53	7,746.78
2002	2,357.71	944.32	1,377.17	1,179.38	654.10	606.54	298.03	473.40	7,890.64
2003	2,515.56	1,718.28	683.76	982.69	821.10	446.08	390.11	483.17	8,040.74
2004	1,945.94	1,828.19	1,239.94	486.93	680.92	556.69	282.47	523.94	7,545.02
2005	1,974.61	1,416.45	1,320.41	876.88	334.73	450.87	343.20	452.80	7,169.95

Table 7.2.2.1 (con't) Estimated age-specific and total abundance (in thousands) of spotted seatrout in the Southeast region on the Atlantic coast of Florida during 1982-2005.

Females	0	1	2	3	4	5	6	7+	Total
1982	952.08	460.58	210.68	88.95	35.93	12.71	3.76	1.36	1,766.04
1983	187.39	612.08	210.97	84.11	32.01	11.53	3.65	1.36	1,143.10
1984	537.38	122.78	287.70	80.38	26.26	7.99	2.31	0.86	1,065.65
1985	881.52	347.57	63.69	133.61	33.57	9.69	2.61	0.95	1,473.21
1986	644.57	571.77	177.49	28.15	51.06	10.80	2.63	0.86	1,487.32
1987	302.54	453.18	310.25	85.45	11.72	17.92	3.21	0.92	1,185.18
1988	515.15	214.29	265.02	167.00	42.11	5.20	7.17	1.53	1,217.47
1989	884.24	362.47	128.88	141.77	77.42	17.18	1.87	2.86	1,616.69
1990	1,149.66	618.46	213.42	67.64	65.37	31.49	6.18	1.56	2,153.77
1991	828.97	803.74	400.03	129.75	39.94	38.76	18.79	4.63	2,264.60
1992	451.18	588.27	534.97	251.24	77.58	24.16	23.61	14.85	1,965.87
1993	498.00	320.45	395.22	344.52	155.73	48.00	15.16	24.05	1,801.13
1994	536.06	351.20	219.34	260.25	228.95	103.82	31.18	25.48	1,756.28
1995	682.09	379.97	237.99	139.25	170.32	146.09	65.26	36.88	1,857.85
1996	587.35	469.84	255.12	151.27	83.41	101.55	86.21	58.59	1,793.34
1997	614.30	418.02	327.63	171.52	97.76	54.05	66.57	99.22	1,849.07
1998	543.67	433.12	290.52	215.70	104.58	61.53	35.19	99.55	1,783.85
1999	685.24	380.69	301.35	191.74	139.15	65.97	38.74	85.15	1,888.02
2000	379.30	482.60	254.30	187.92	114.62	77.45	38.58	68.97	1,603.74
2001	1,088.75	261.02	315.88	157.13	109.96	57.59	39.15	51.38	2,080.86
2002	719.08	722.98	173.88	201.37	99.80	69.46	36.27	57.69	2,080.53
2003	562.48	469.07	489.11	112.90	128.85	64.21	44.84	61.45	1,932.91
2004	1,003.99	378.09	323.00	330.28	75.77	86.46	42.91	71.63	2,312.12
2005	440.37	679.34	257.71	216.10	219.09	50.32	57.09	76.35	1,996.36

Males	0	1	2	3	4	5	6	7+	Total
1982	565.05	306.21	202.61	104.05	46.32	19.53	7.39	4.24	1,255.39
1983	632.39	405.25	205.65	110.85	46.96	17.86	6.90	3.87	1,429.73
1984	647.10	442.78	264.69	101.47	44.83	15.70	5.26	2.85	1,524.68
1985	647.23	463.03	288.60	149.42	49.95	19.69	6.38	3.10	1,627.40
1986	488.16	443.76	291.13	153.87	68.57	20.13	7.21	3.20	1,476.02
1987	468.55	353.85	274.61	158.33	74.46	30.16	8.08	3.87	1,371.92
1988	325.70	342.10	238.42	164.97	87.01	38.27	14.62	5.52	1,216.60
1989	352.30	236.14	241.66	146.47	90.41	42.49	17.37	8.63	1,135.48
1990	451.27	254.18	165.19	145.98	78.92	43.72	19.14	11.06	1,169.44
1991	956.83	330.24	182.37	106.56	83.63	40.38	22.07	15.84	1,737.92
1992	478.93	701.76	239.02	121.71	67.36	43.07	20.35	20.90	1,693.10
1993	738.66	351.54	508.60	162.99	79.13	37.50	23.55	24.76	1,926.74
1994	570.35	541.42	253.90	351.03	108.37	48.82	22.83	30.60	1,927.32
1995	597.78	418.14	389.97	171.05	227.82	63.60	28.90	30.69	1,927.97
1996	831.58	434.47	297.42	262.07	107.25	124.67	35.41	31.90	2,124.77
1997	785.40	614.65	316.03	204.61	174.51	67.52	75.81	42.02	2,280.56
1998	660.63	580.22	445.30	215.46	133.78	105.23	39.63	66.04	2,246.28
1999	655.14	488.04	419.89	302.16	145.29	69.49	61.24	58.89	2,200.14
2000	610.39	483.64	350.73	279.34	198.18	64.18	29.70	48.82	2,064.98
2001	633.48	450.26	344.82	226.90	176.64	77.26	24.53	28.28	1,962.16
2002	1,054.53	467.59	320.71	222.30	138.05	86.72	34.39	26.56	2,350.84
2003	468.01	778.45	333.49	206.24	136.23	78.10	42.94	35.03	2,078.49
2004	585.67	345.71	560.18	223.40	133.63	80.96	41.85	46.65	2,018.05
2005	922.57	432.63	248.39	373.85	142.46	80.00	44.93	52.58	2,297.41

Table 7.2.2.1 (con't). Estimated age-specific and total abundance (in thousands) of spotted seatrout in the Northeast region on the Atlantic coast of Florida during 1982-2005.

Females	0	1	2	3	4	5	6	7+	1-7+
1982	661.71	301.38	152.94	17.65	1.98	1.47	2.25	6.45	1,145.85
1983	428.90	481.05	178.37	47.91	5.66	0.86	0.76	4.94	1,148.44
1984	485.95	310.61	283.34	50.77	14.22	2.46	0.46	3.45	1,151.27
1985	525.83	353.72	171.38	56.29	10.71	5.17	1.22	2.30	1,126.61
1986	237.39	376.65	194.41	33.66	11.74	3.89	2.58	2.08	862.40
1987	223.58	172.82	224.98	57.48	10.38	5.24	2.15	2.89	699.53
1988	289.06	163.12	89.08	34.12	9.38	3.23	2.36	2.76	593.11
1989	365.62	210.83	103.02	35.82	14.04	4.82	1.89	3.22	739.26
1990	504.73	268.98	139.66	44.78	15.69	7.50	2.89	3.26	987.48
1991	453.27	371.96	171.72	66.89	20.80	7.42	3.62	3.04	1,098.72
1992	309.75	332.83	224.93	69.78	25.64	8.32	3.06	3.29	977.60
1993	243.07	228.50	205.29	104.09	30.90	11.66	3.91	3.19	830.61
1994	615.95	178.89	151.17	88.32	47.38	14.83	5.19	3.42	1,105.15
1995	333.48	453.35	115.72	65.20	39.41	20.25	6.43	5.58	1,039.41
1996	335.48	244.90	301.75	55.64	29.16	17.97	9.88	6.55	1,001.33
1997	186.99	248.19	176.98	205.36	36.73	19.15	11.81	11.39	896.61
1998	192.71	138.25	178.33	113.16	120.98	22.26	11.88	16.25	793.82
1999	217.09	142.61	100.98	119.77	75.46	78.90	14.32	18.85	768.00
2000	230.37	160.65	104.05	71.57	83.63	51.83	54.51	22.66	779.27
2001	281.43	170.24	113.45	65.21	41.90	46.50	30.17	54.89	803.78
2002	285.68	206.46	116.07	69.97	41.14	27.63	32.72	62.30	841.96
2003	218.73	210.08	146.31	77.79	46.85	28.37	19.49	67.93	815.56
2004	188.68	160.59	147.47	95.07	50.37	31.40	19.52	59.72	752.81
2005	192.22	137.33	112.11	95.56	61.50	33.69	21.79	56.41	710.60
Males	0	1	2	3	4	5	6	7+	1-7+
1982	291.08	134.03	84.28	24.31	3.05	0.42	0.10	0.04	537.32
1983	395.13	212.90	91.17	41.28	8.38	0.90	0.12	0.04	749.92
1984	415.86	288.20	140.15	40.97	12.36	2.19	0.23	0.04	900.00
1985	403.52	306.07	184.15	51.76	8.62	2.14	0.36	0.04	956.67
1986	255.15	289.57	189.59	67.25	10.72	1.46	0.35	0.07	814.15
1987	264.12	188.11	190.95	86.47	20.75	2.90	0.39	0.11	753.79
1988	309.86	193.15	117.99	61.03	14.04	2.68	0.36	0.06	699.18
1989	356.15	226.44	132.79	64.18	25.74	5.39	1.01	0.16	811.84
1990	423.84	262.37	161.96	76.58	29.29	10.60	2.18	0.47	967.29
1991	331.24	312.19	190.00	98.79	40.22	14.17	5.08	1.30	993.00
1992	270.55	242.71	223.37	111.03	45.66	16.74	5.77	3.11	918.94
1993	256.67	196.70	169.83	131.82	56.66	21.31	7.75	4.30	845.05
1994	475.93	188.55	141.39	99.38	66.55	25.08	9.32	5.63	1,011.83
1995	366.01	349.42	133.09	79.96	50.05	30.08	11.83	7.52	1,027.97
1996	292.82	267.83	248.96	84.52	44.76	24.31	15.32	9.58	988.11
1997	246.75	216.34	196.95	179.55	58.36	30.01	15.94	16.54	960.45
1998	208.76	182.14	158.67	140.05	121.91	37.17	19.16	20.27	888.12
1999	258.84	153.97	133.55	114.89	99.03	76.71	24.71	25.51	887.20
2000	240.02	191.23	113.29	97.39	82.58	66.83	53.37	34.27	878.98
2001	279.94	176.93	139.53	79.25	67.34	43.72	38.97	62.33	887.99
2002	311.28	206.37	128.73	98.47	52.66	41.70	27.40	67.22	933.82
2003	271.98	229.74	151.38	93.10	69.01	35.39	28.68	65.81	945.10
2004	275.84	200.58	168.09	108.87	64.22	44.53	23.24	63.73	949.10
2005	363.95	203.03	146.47	120.52	74.85	41.51	29.32	58.85	1,038.52

Table 8.3.1. Estimated biological benchmarks for spotted seatrout females and males in each region on the on the **Atlantic** and **gulf** coasts of Florida exploited under their current (2005) selectivity schedules. The apical instantaneous fishing mortality, yield per recruit (lbs), and, for females, static spawning potential ratio (*s*SPR) are given for the current estimated apical fishing mortality mortalities (F_{2005} defined as the apical fishing mortality in 2005), under maximum yield per recruit (F_{max}), under the classic $F_{0.1}$ level, and for females under fishing mortalities associated with 20% and 35% *s*SPR, $F_{20\%}$ and $F_{35\%}$, respectively.

Females						
Benchmark	Northwest			Northeast		
	F	YPR	<i>s</i> SPR	F	YPR	<i>s</i> SPR
F_{2005}	0.33	0.52	0.38	0.26	0.42	0.53
F_{max}	0.55	0.55	0.25	0.83	0.59	0.18
$F_{0.1}$	0.44	0.54	0.30	0.66	0.58	0.24
$F_{20\%}$	0.66	0.54	0.20	0.77	0.59	0.20
$F_{35\%}$	0.37	0.53	0.35	0.45	0.54	0.35

Benchmark	Southwest			Southeast		
	F	YPR	<i>s</i> SPR	F	YPR	<i>s</i> SPR
F_{2005}	0.34	0.41	0.46	0.30	0.51	0.40
F_{max}	0.89	0.49	0.21	0.38	0.52	0.33
$F_{0.1}$	0.60	0.47	0.29	0.34	0.52	0.36
$F_{20\%}$	0.92	0.49	0.20	0.60	0.48	0.20
$F_{35\%}$	0.48	0.46	0.35	0.36	0.52	0.35

Males				
Benchmark	Northwest		Northeast	
	F	YPR	F	YPR
F_{2005}	0.26	0.23	0.24	0.26
F_{max}	2.69	0.34	1.56	0.35
$F_{0.1}$	0.61	0.31	0.54	0.33

Benchmark	Southwest		Southeast	
	F	YPR	F	YPR
F_{2005}	0.23	0.25	0.50	0.40
F_{max}	1.41	0.34	0.85	0.41
$F_{0.1}$	0.51	0.31	0.48	0.40

Table 8.3.2. Estimates of the static (sSPR) and transitional spawning potential (tSPR) ratios from this assessment using the unreviewed statistical catch-at-age model (2006), the tSPR estimates from Murphy (2003), and the tSPR estimates made using the Northeast Fisheries Science Center's Age-Structured Assessment Program (ASAP) model for spotted seatrout in the Northwest and Southwest regions on the **gulf** coast of Florida during 1982-2005. Estimates were made using calculated age-specific average annual fecundities for this assessment and ASAP whereas Murphy (2003) used spawning biomass.

	Northwest				Southwest			
	2006 sSPR	2006 tSPR	2003 tSPR	ASAP tSPR	2006 sSPR	2006 tSPR	2003 tSPR	ASAP tSPR
1982	0.197	0.128		0.209	0.148	0.119		0.293
1983	0.128	0.140		0.146	0.132	0.126		0.272
1984	0.077	0.127		0.071	0.135	0.130		0.239
1985	0.164	0.119		0.059	0.218	0.151		0.223
1986	0.139	0.125	0.170	0.075	0.153	0.161	0.257	0.209
1987	0.170	0.135	0.179	0.098	0.261	0.179	0.263	0.221
1988	0.114	0.137	0.181	0.112	0.198	0.197	0.276	0.235
1989	0.177	0.140	0.187	0.111	0.187	0.195	0.263	0.232
1990	0.429	0.173	0.239	0.141	0.439	0.232	0.275	0.248
1991	0.269	0.218	0.264	0.180	0.388	0.285	0.310	0.262
1992	0.366	0.251	0.272	0.216	0.452	0.330	0.324	0.285
1993	0.428	0.293	0.309	0.283	0.448	0.367	0.333	0.327
1994	0.319	0.317	0.301	0.339	0.526	0.399	0.352	0.386
1995	0.290	0.318	0.264	0.359	0.610	0.440	0.389	0.454
1996	0.408	0.328	0.273	0.383	0.554	0.469	0.436	0.523
1997	0.463	0.362	0.310	0.420	0.438	0.467	0.449	0.555
1998	0.438	0.389	0.333	0.455	0.383	0.444	0.428	0.555
1999	0.382	0.395	0.329	0.482	0.469	0.436	0.424	0.565
2000	0.325	0.373	0.318	0.492	0.484	0.448	0.433	0.581
2001	0.416	0.376	0.332	0.501	0.584	0.477	0.451	0.584
2002	0.398	0.391		0.507	0.475	0.495		0.559
2003	0.376	0.392		0.501	0.426	0.482		0.516
2004	0.361	0.382		0.482	0.393	0.455		0.475
2005	0.360	0.379		0.442	0.430	0.440		0.438

Table 8.3.2 (con't). Estimates of the static (sSPR) and transitional spawning potential (tSPR) ratios from this assessment using the unreviewed statistical catch-at-age model (2006), the tSPR estimates from Murphy (2003), and the tSPR estimates made using the Northeast Fisheries Science Center's Age-Structured Assessment Program (ASAP) model for spotted seatrout in the Northeast and Southeast regions on the **Atlantic** coast of Florida during 1982-2005. Estimates were made using calculated age-specific average annual fecundities for this assessment and ASAP whereas Murphy (2003) used spawning biomass.

	Northeast				Southeast			
	2006 sSPR	2006 tSPR	2003 tSPR	ASAP tSPR	2006 sSPR	2006 tSPR	2003 tSPR	ASAP tSPR
1982	0.163	0.108		0.280	0.122	0.128		0.173
1983	0.151	0.128		0.265	0.115	0.118		0.118
1984	0.106	0.122		0.213	0.163	0.128		0.105
1985	0.103	0.113		0.175	0.147	0.141		0.102
1986	0.161	0.123	0.252	0.176	0.186	0.151	0.286	0.114
1987	0.084	0.111	0.209	0.127	0.251	0.177	0.289	0.150
1988	0.245	0.129	0.221	0.128	0.240	0.205	0.297	0.184
1989	0.288	0.173	0.281	0.192	0.230	0.221	0.304	0.220
1990	0.270	0.213	0.336	0.253	0.417	0.258	0.297	0.254
1991	0.200	0.222	0.350	0.276	0.473	0.315	0.284	0.289
1992	0.247	0.225	0.338	0.280	0.499	0.367	0.279	0.338
1993	0.254	0.234	0.319	0.282	0.574	0.421	0.291	0.404
1994	0.250	0.242	0.318	0.301	0.532	0.466	0.308	0.472
1995	0.278	0.250	0.291	0.321	0.439	0.477	0.313	0.512
1996	0.674	0.305	0.315	0.376	0.599	0.490	0.346	0.547
1997	0.557	0.384	0.355	0.454	0.516	0.506	0.394	0.587
1998	0.657	0.452	0.392	0.522	0.540	0.515	0.425	0.618
1999	0.756	0.529	0.471	0.597	0.421	0.502	0.438	0.627
2000	0.510	0.562	0.538	0.640	0.359	0.455	0.396	0.603
2001	0.602	0.573	0.570	0.649	0.475	0.446	0.333	0.560
2002	0.707	0.599		0.662	0.498	0.467		0.526
2003	0.627	0.619		0.672	0.587	0.491		0.519
2004	0.635	0.629		0.673	0.565	0.516		0.519
2005	0.501	0.620		0.659	0.378	0.507		0.489

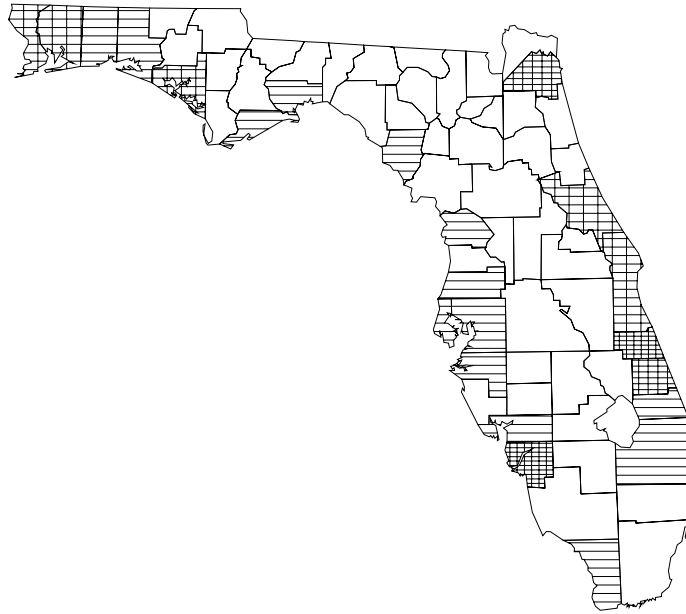


Figure 5.1.2.1. The distribution of commercial landings of spotted seatrout by county in Florida during 2005. The landings legend is: more than 50,000 pounds – black, 10,001-50,000 pounds – very dense cross-hatch (like Lee county); 5,001-10,000 pounds – medium density cross-hatch (like Duval county); 1,001-5,000 pounds – low density crosshatch (like Bay county), and 1-1,000 pounds horizontal lines (like Monroe county).

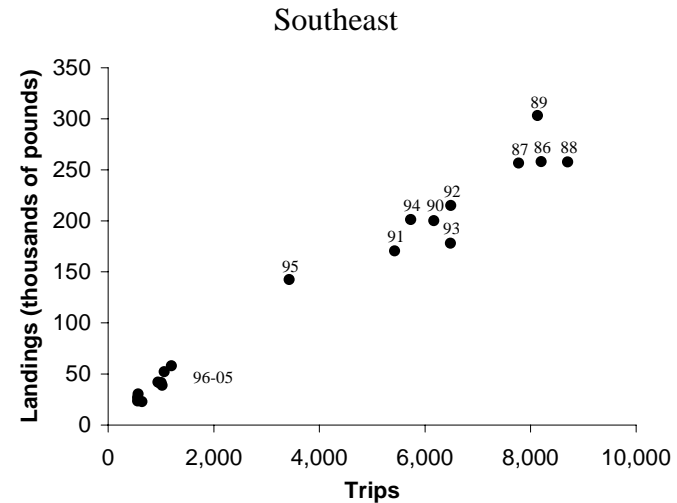
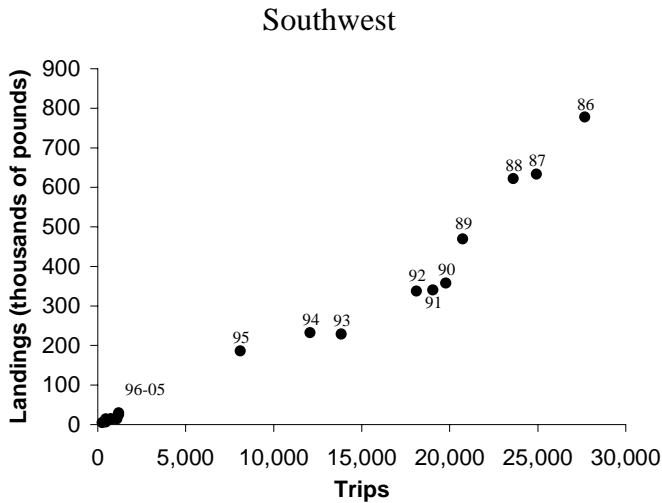
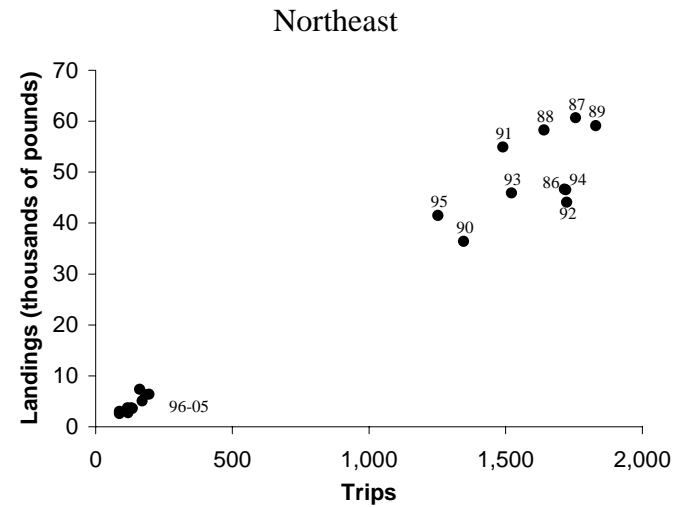
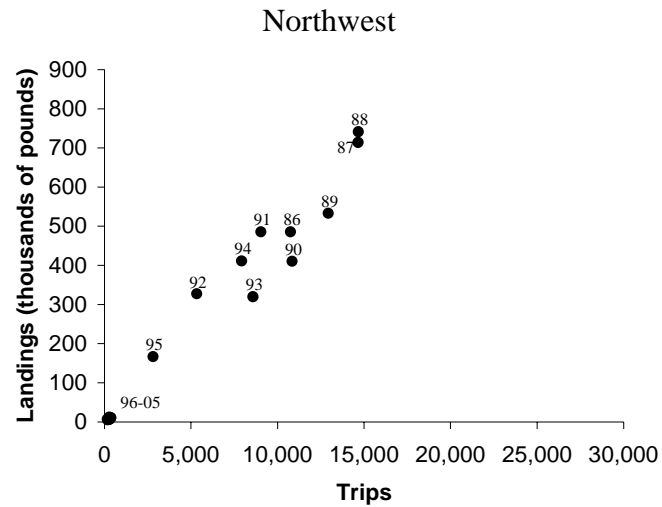


Figure 5.1.4.1. Annual reported commercial landings (lbs) and number of fishing trips made for spotted seatrout in the Northwest and Southwest regions on the gulf coast and the Northeast and Southeast regions on the Atlantic coast of Florida during 1986-2005. Values for the years 1996 through 2005 are clustered tightly in the lower left-hand corner.

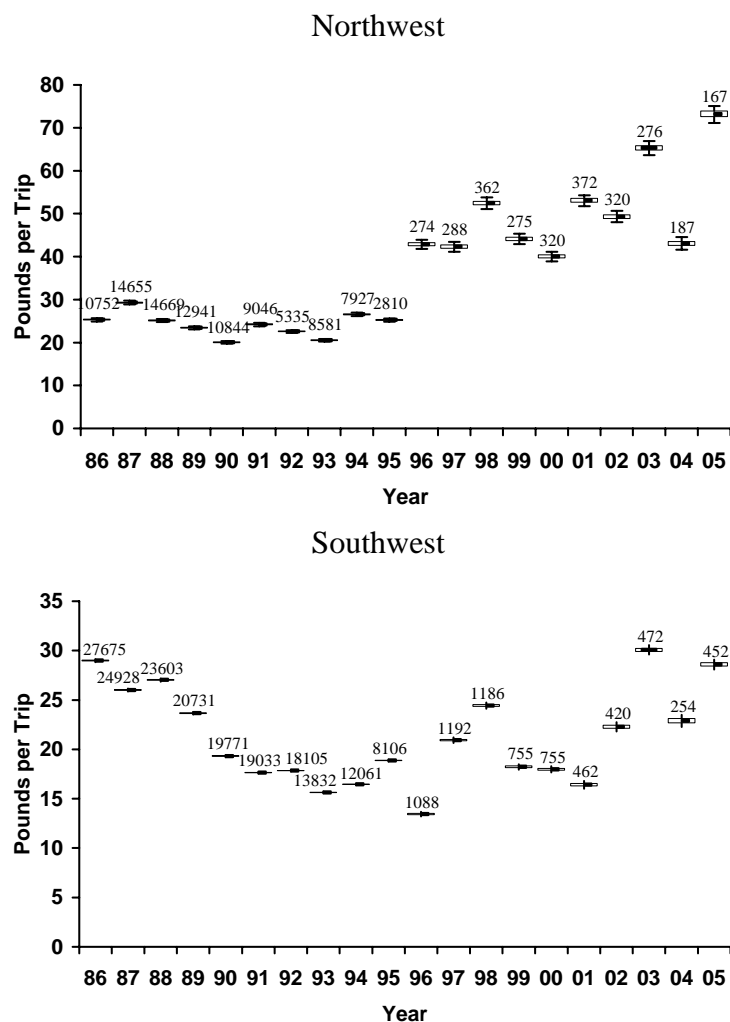


Figure 5.1.4.2. Standardized commercial landings per trip for those trips reporting spotted seatrout landings within each region during 1986-2005. The dark dash represents the median, the box represents the 25th-75th percentiles and the vertical whiskers extend from the 2.5th-97.5th percentiles. Numbers of trips used are shown above the upper whisker.

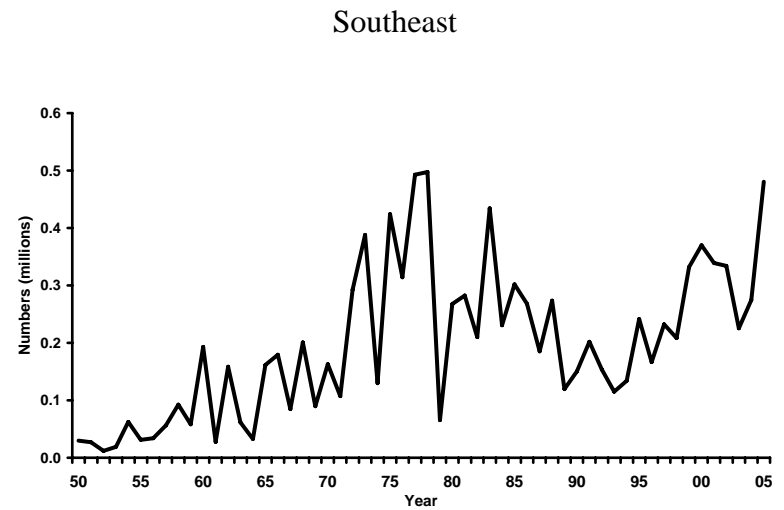
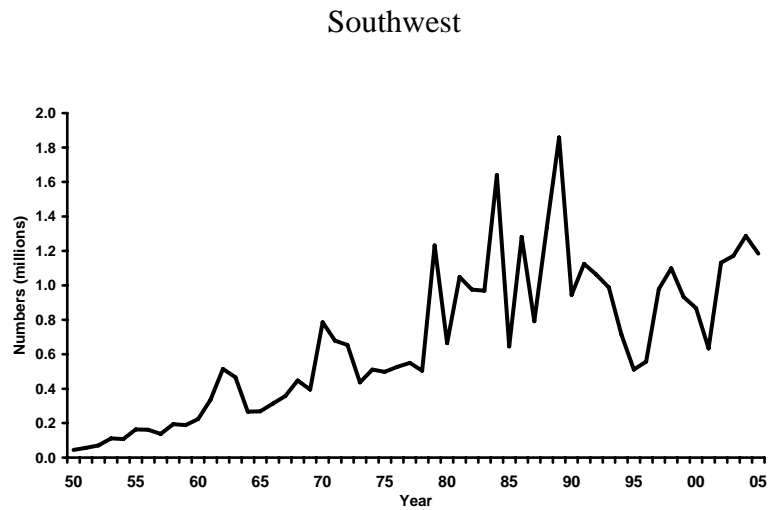
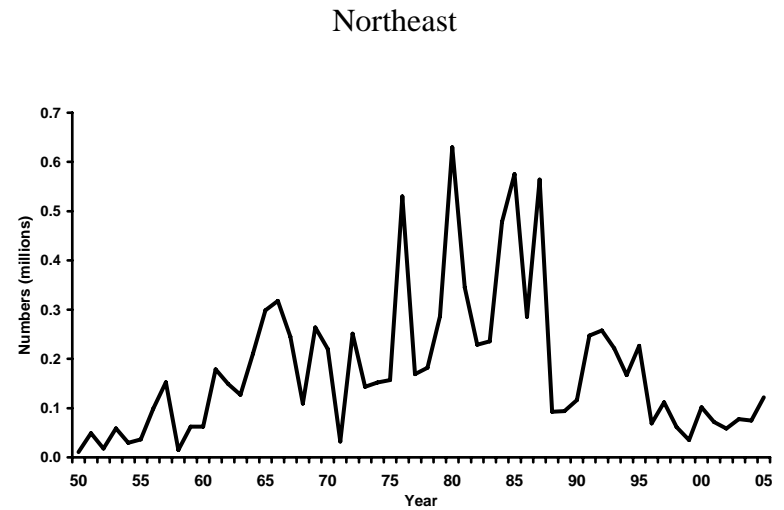
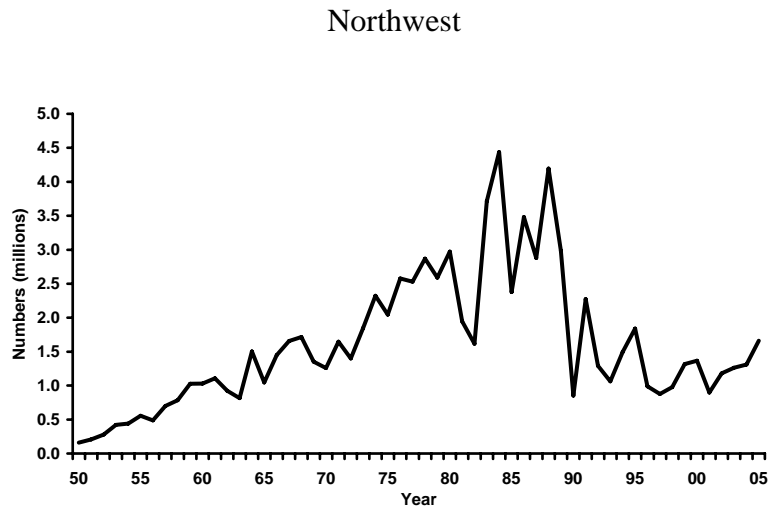


Figure 5.2.2.1. Estimated number of spotted seatrout killed by anglers in the Northwest and Southwest regions of the Florida Gulf coast and the Northeast and Southeast regions of the Florida Atlantic coast during 1950-2005.

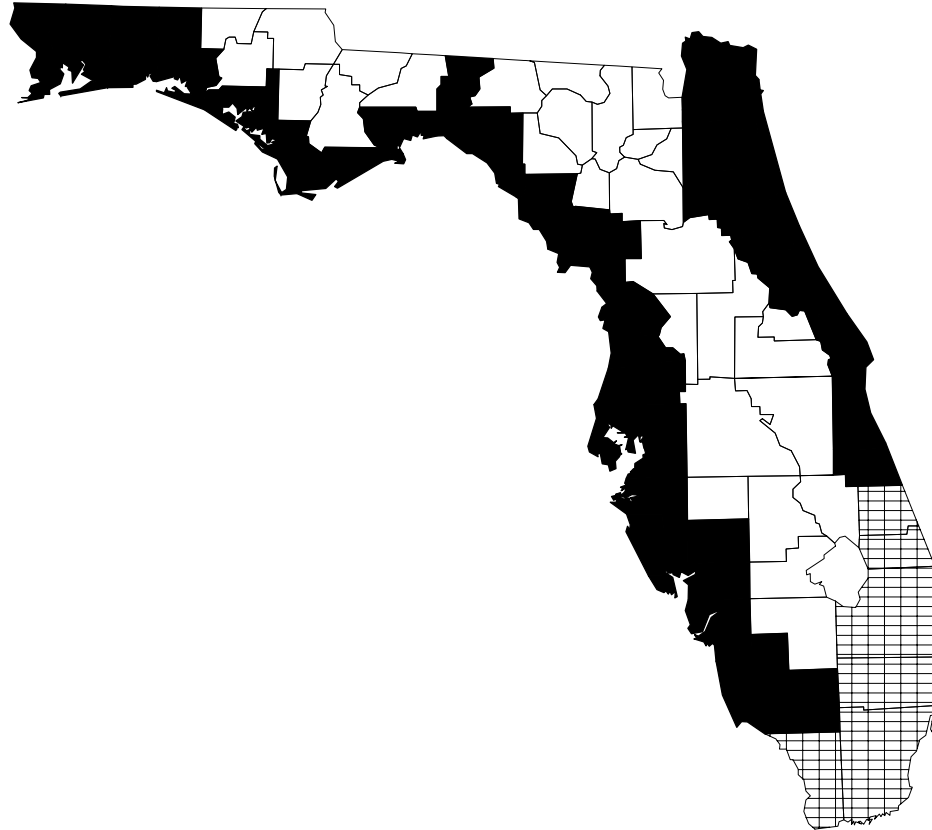


Figure 5.2.2.2. The distribution of recreational landings of spotted seatrout within five sub-regions in Florida during 2005. The five sub-regions used were: the Northwest, Escambia through Dixie counties; the Southwest, Levy through Collier counties; the Keys, Monroe county; Southeast, Dade through St. Lucie counties; and Northeast, Indian River through Nassau counties. The landings legends for the only symbols shown are: more than 100,000 pounds – black and 10,001-50,000 fish the open-crosshatch.

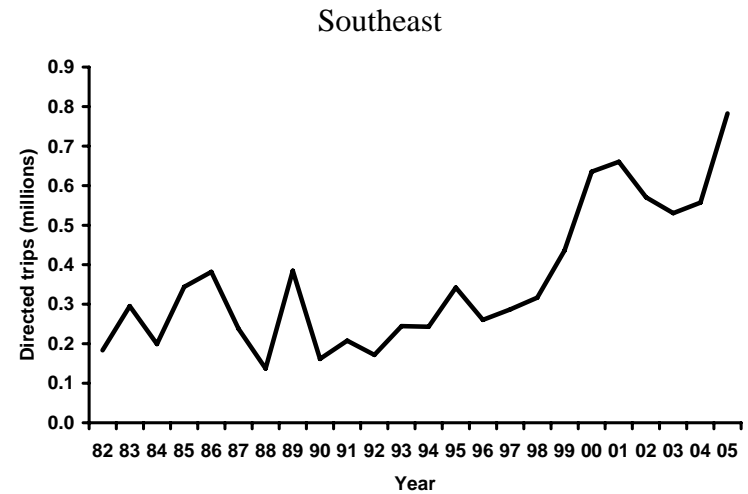
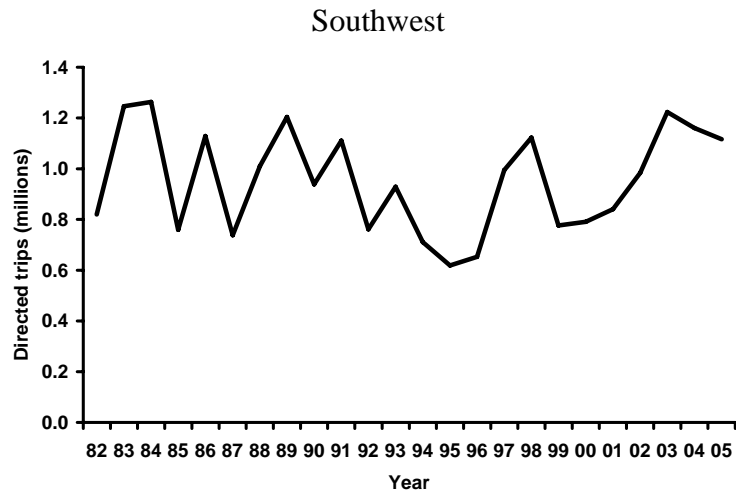
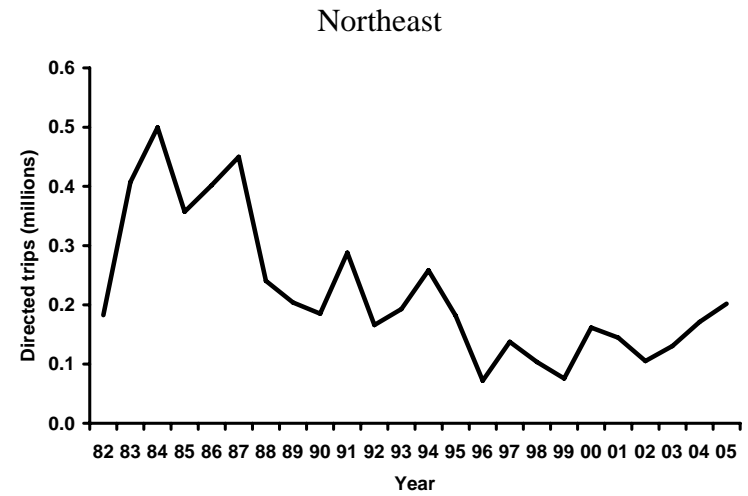
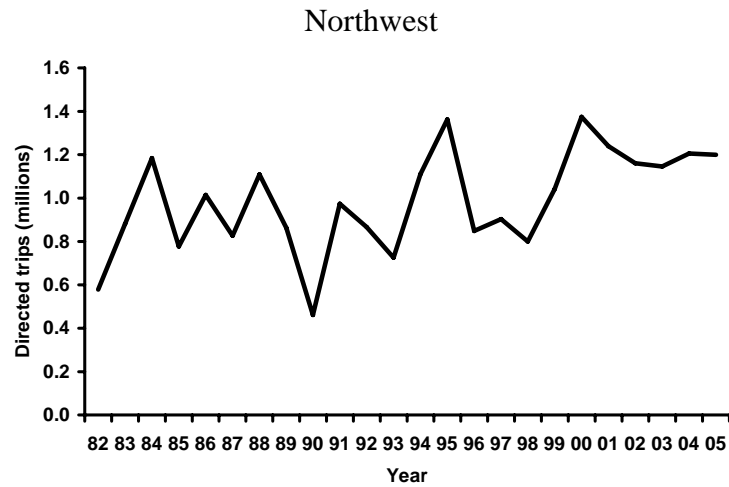
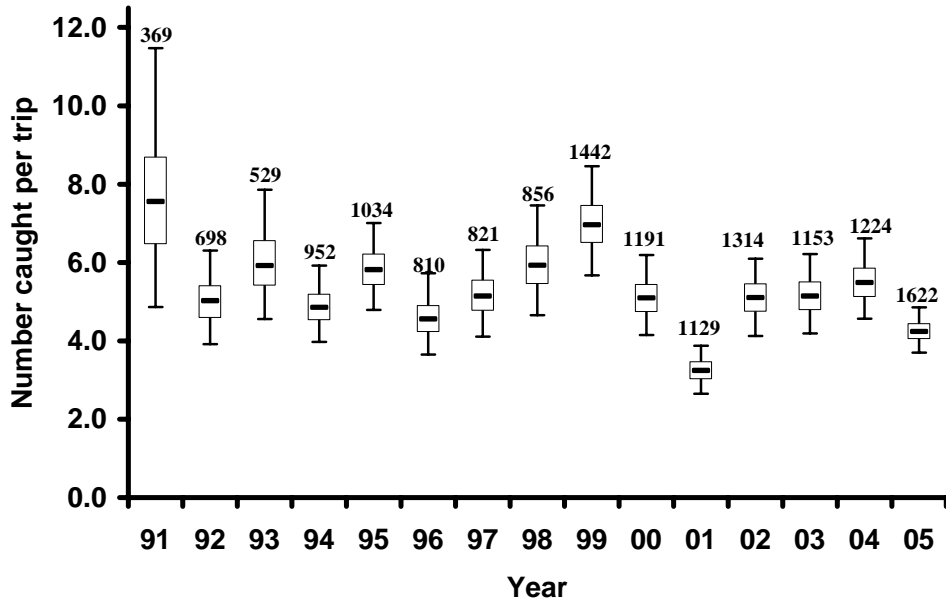


Figure 5.2.4.1. Estimated number of trips taken by anglers that were directed at catching spotted seatrout in each of the four regions within Florida's gulf and Atlantic coasts during 1982-2005.

Northwest



Southwest

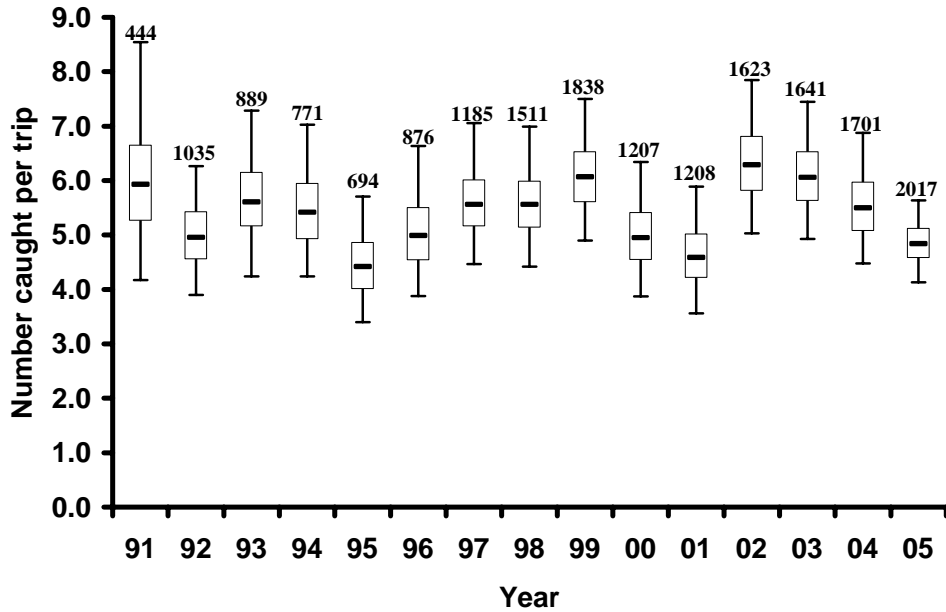
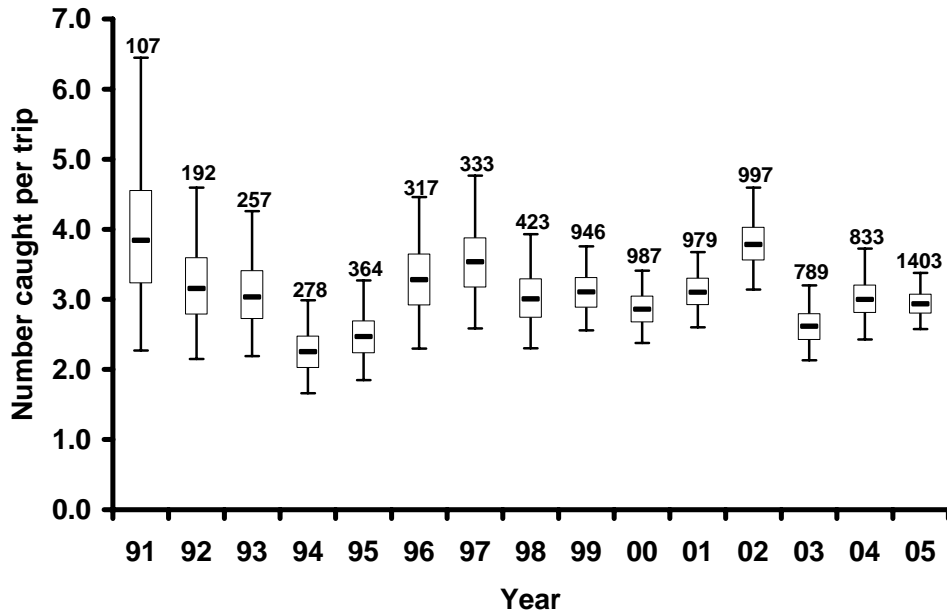


Figure 5.2.4.2. Standardized total-catch rate for anglers catching or targeting spotted seatrout in the Northwest and Southwest regions of the gulf coast of Florida during 1991-2005. The dark dash represents the median, the box represents the 25th-75th percentiles and the vertical whiskers extend from the 2.5th-97.5th percentiles. Numbers of trips observed are shown above the upper whisker.

Southeast



Northeast

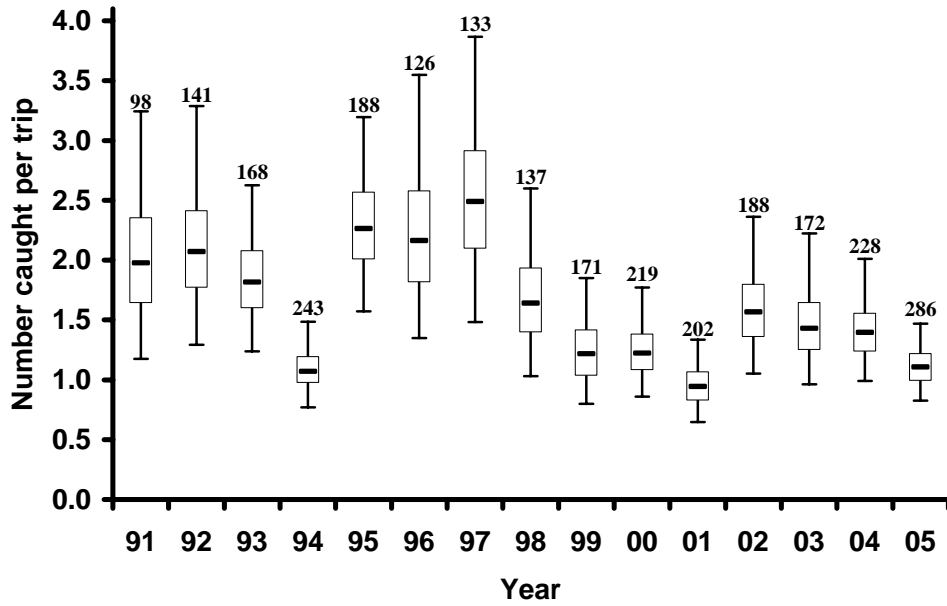


Figure 5.2.4.2 (con't). Standardized total-catch rate for anglers catching or targeting spotted seatrout in the Southeast and Northeast regions of the Atlantic coast of Florida during 1991-2005. The dark dash represents the median, the box represents the 25th-75th percentiles and the vertical whiskers extend from the 2.5th-97.5th percentiles. Numbers of trips observed are shown above the upper whisker.

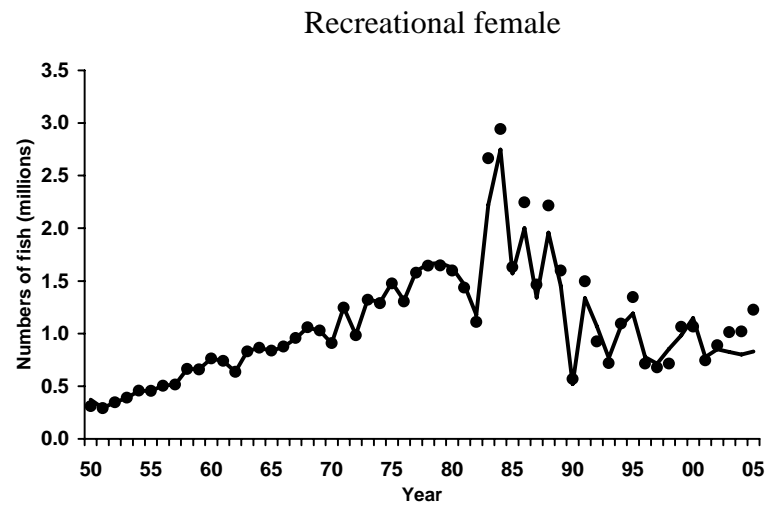
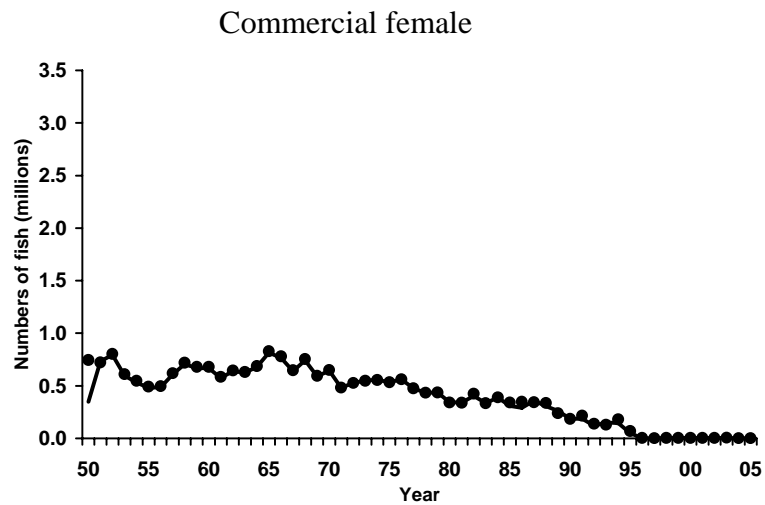
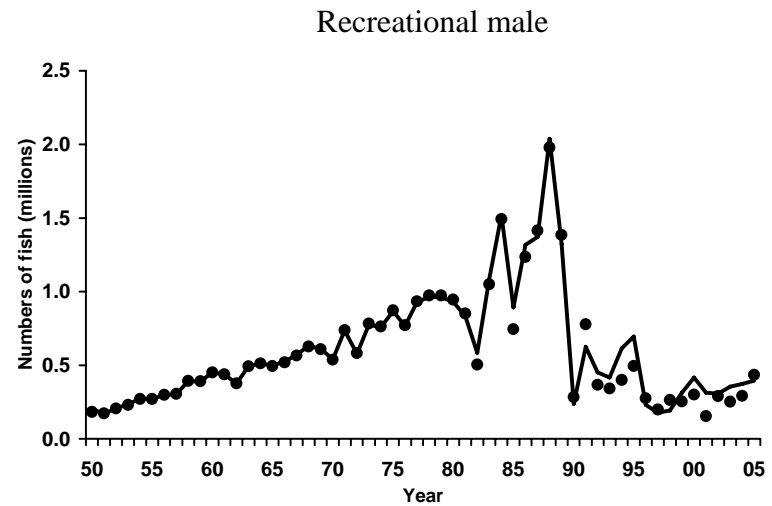
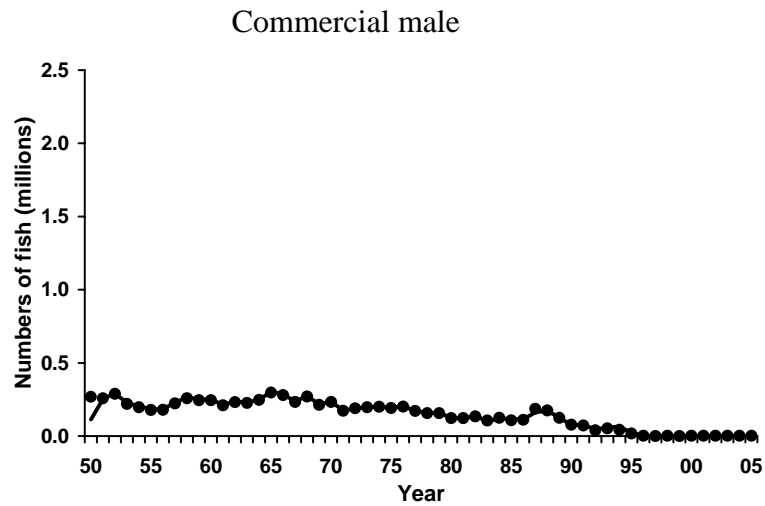


Figure 7.1.1. Estimated (filled circles) and model-predicted (line) annual commercial and recreational kill of male and female spotted seatrout in the Northwest region of Florida during 1950-2005.

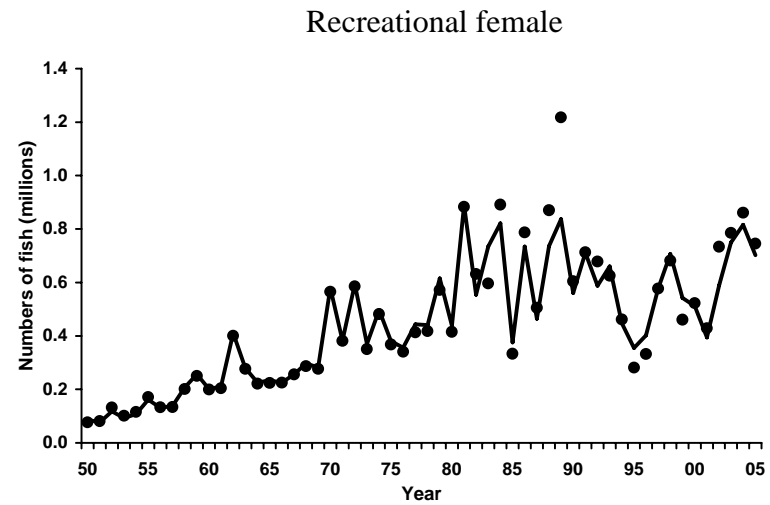
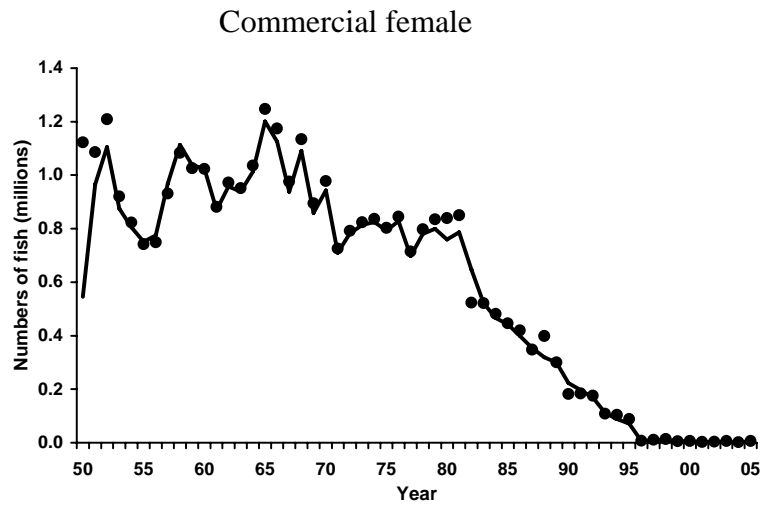
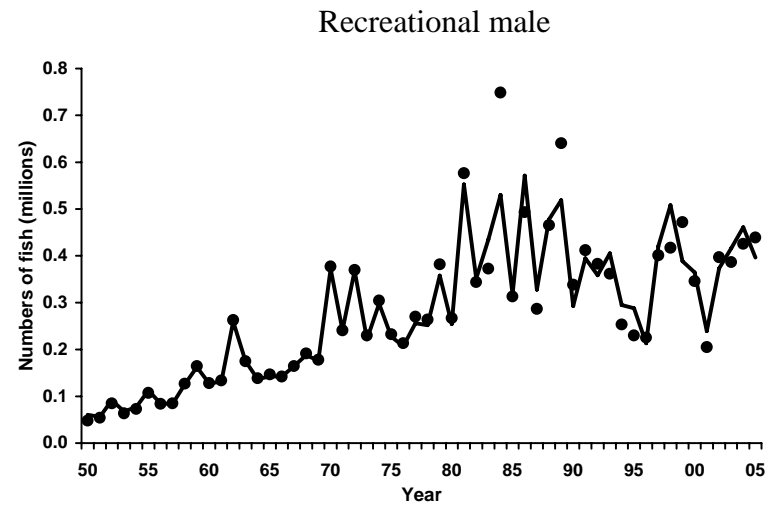
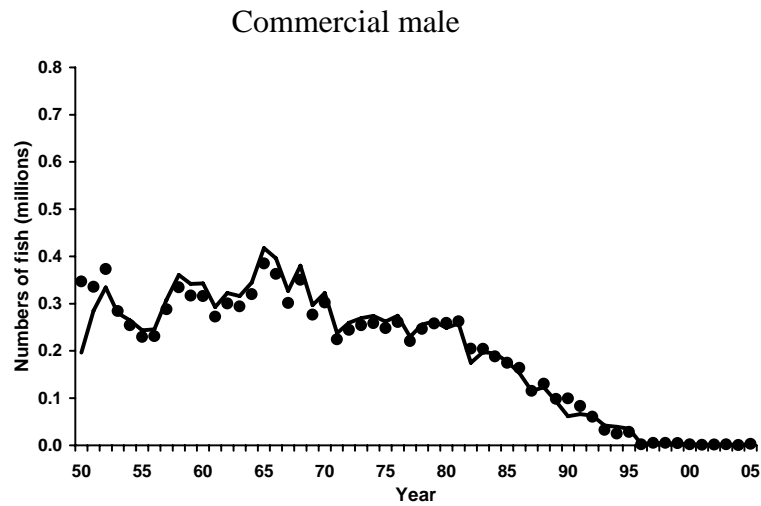


Figure 7.1.1 (con't). Estimated (filled circles) and model-predicted (line) annual commercial and recreational kill of male and female spotted seatrout in the Southwest region of Florida during 1950-2005.

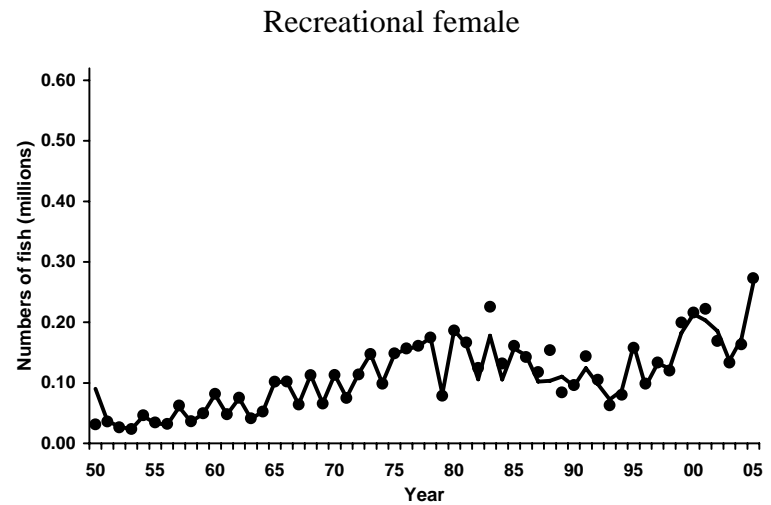
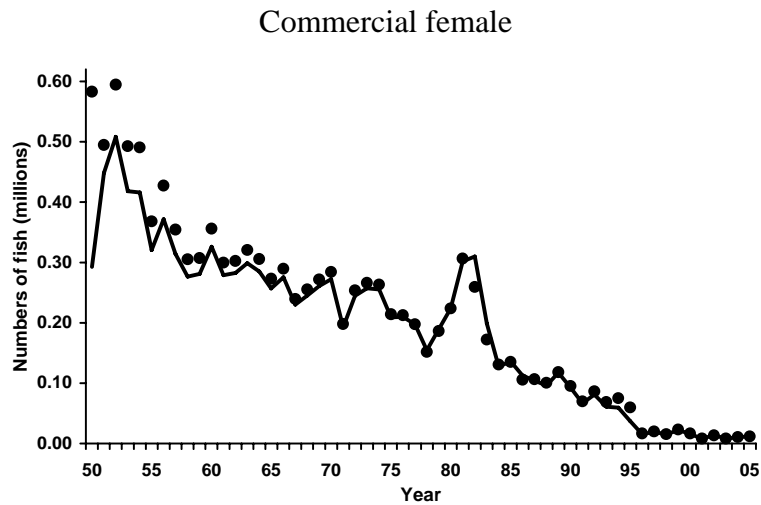
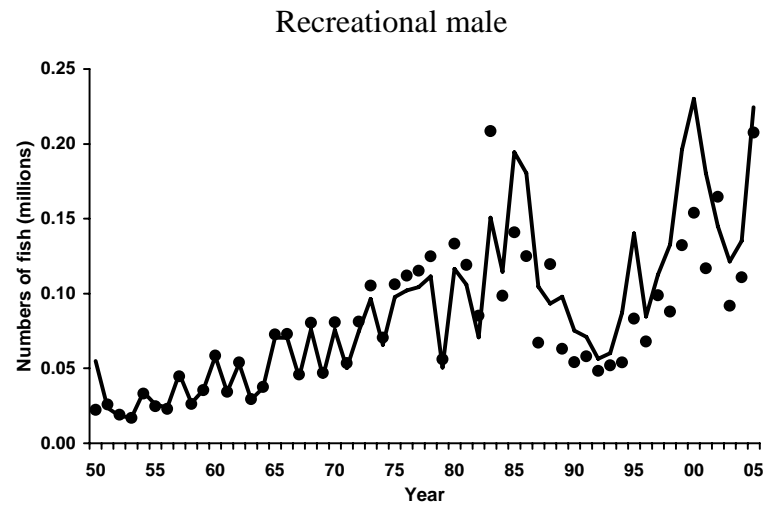
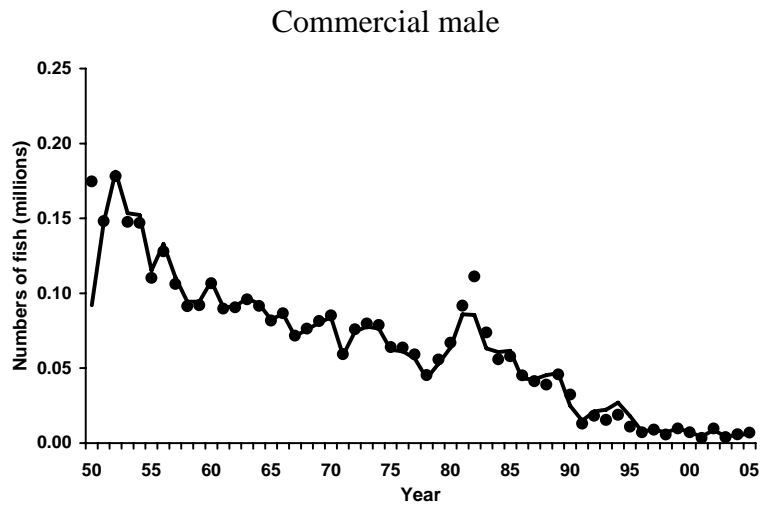


Figure 7.1.1 (con't). Estimated (filled circles) and model-predicted (line) annual commercial and recreational kill of male and female spotted seatrout in the Southeast region of Florida during 1950-2005.

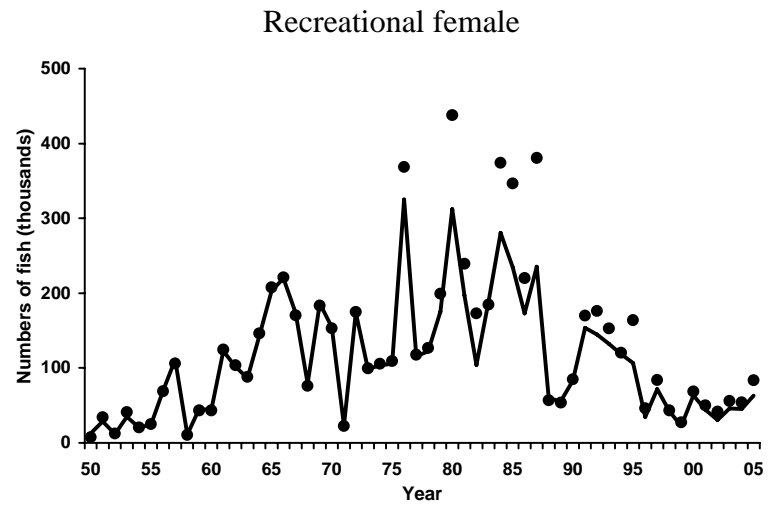
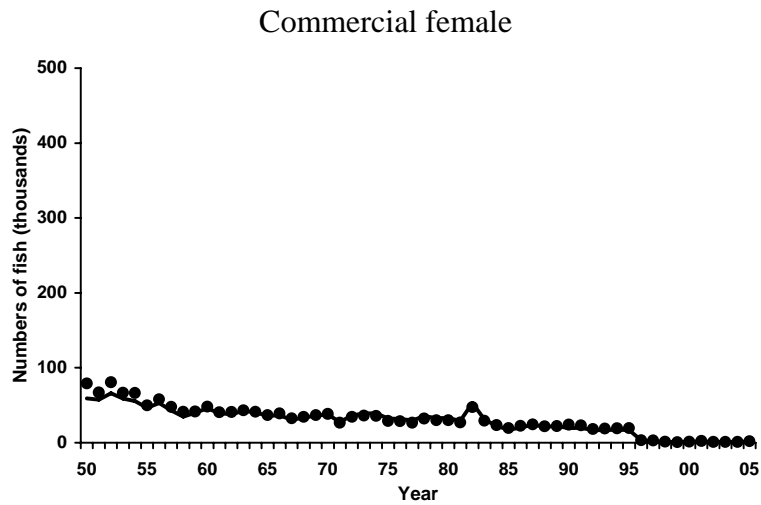
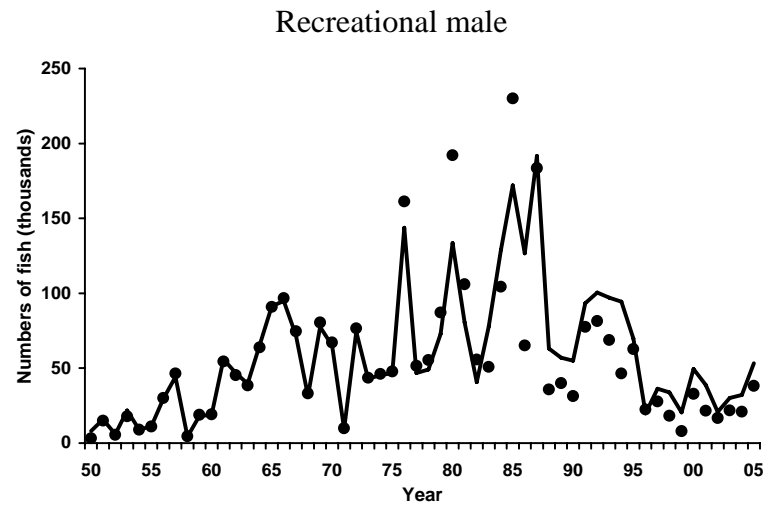
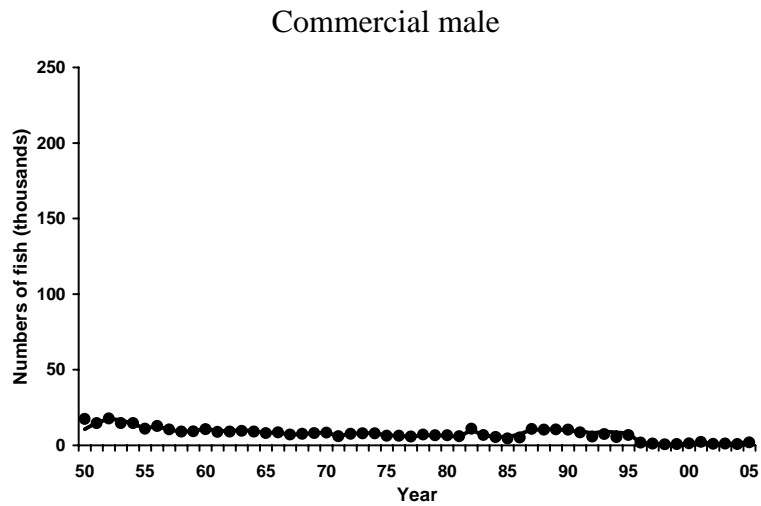


Figure 7.1.1 (con't). Estimated (filled circles) and model-predicted (line) annual commercial and recreational kill of male and female spotted seatrout in the Northeast region of Florida during 1950-2005.

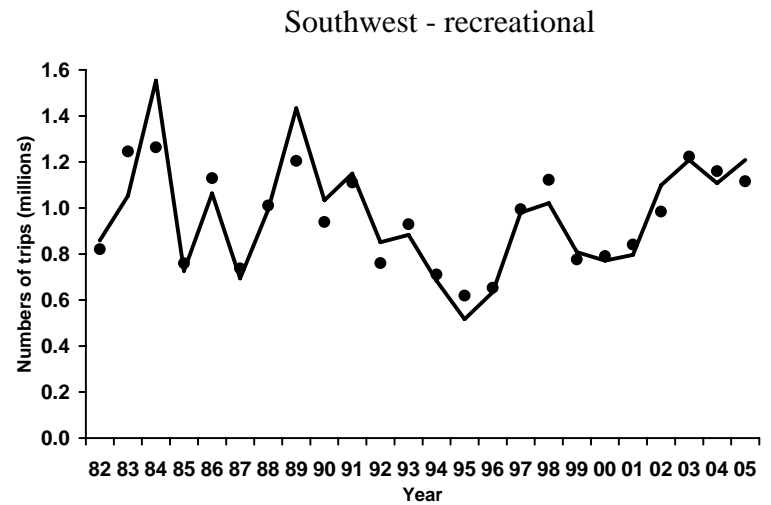
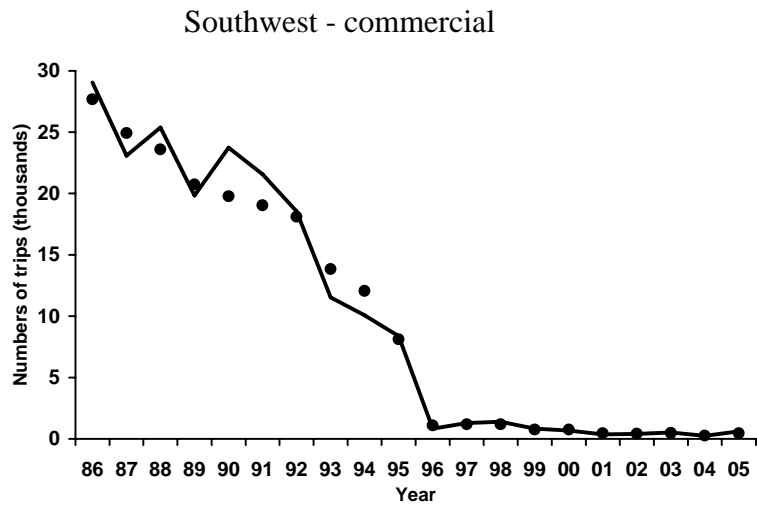
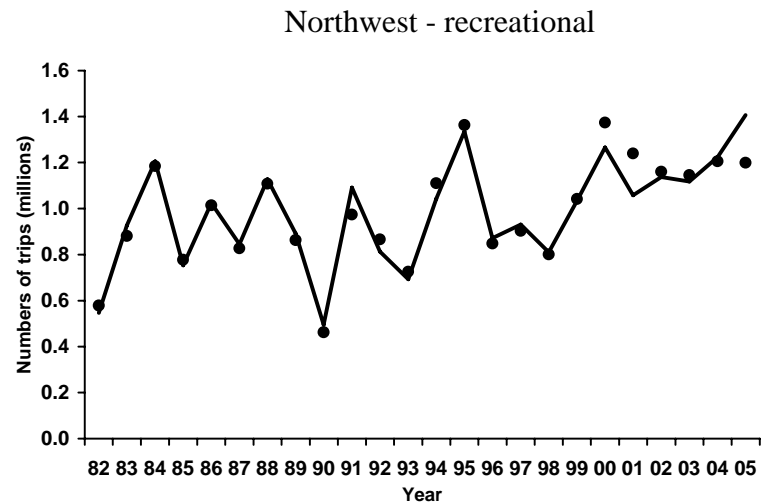
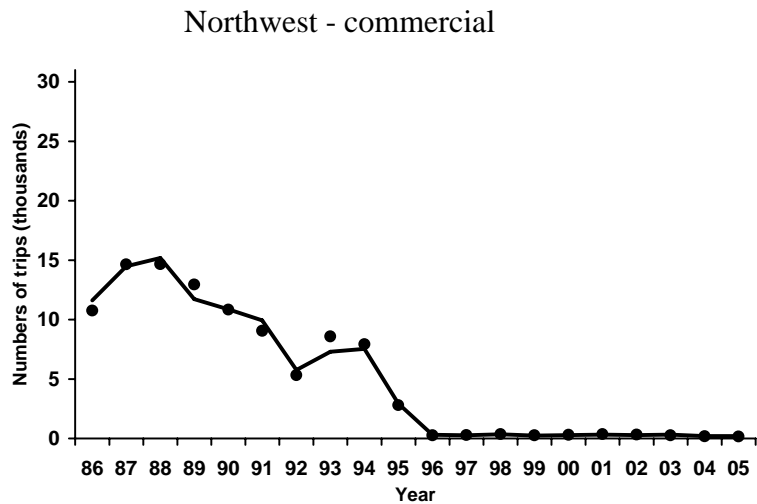


Figure 7.1.2. Observed (filled circles) and model-predicted (line) annual commercial fishing effort during 1986-2005 and recreational fishing effort during 1982-2005 for spotted seatrout in the Northwest and Southwest regions of Florida.

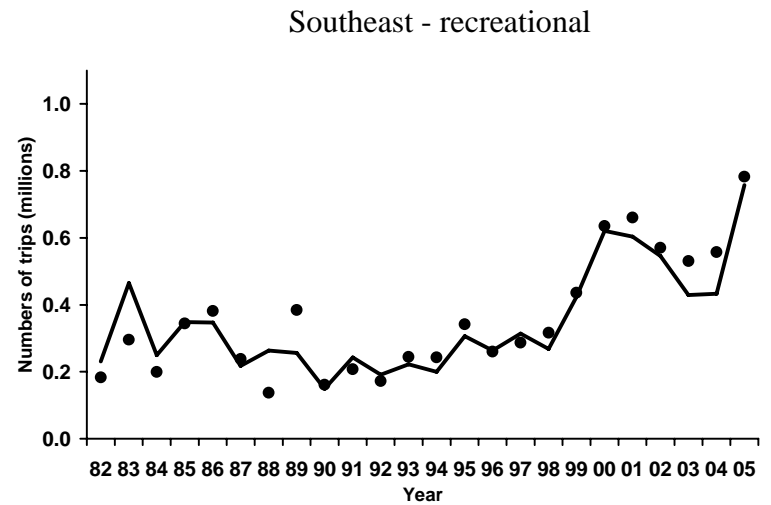
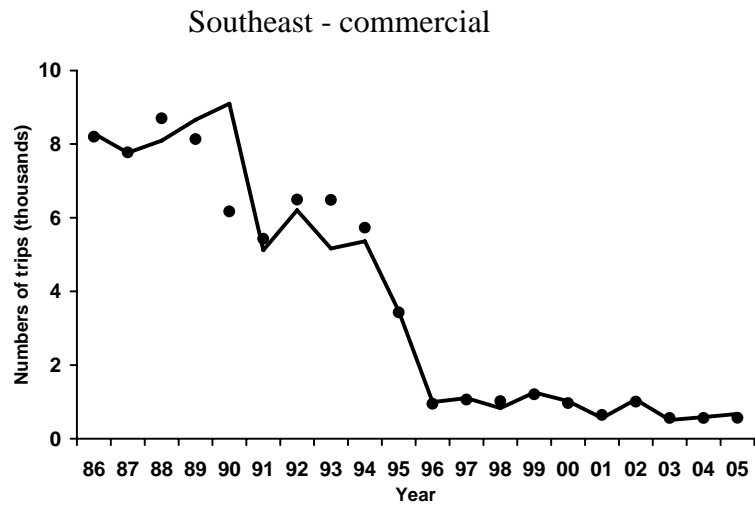
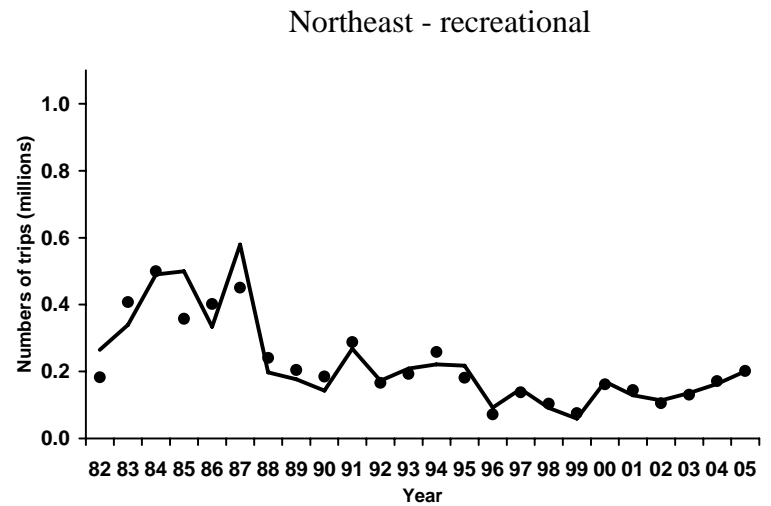
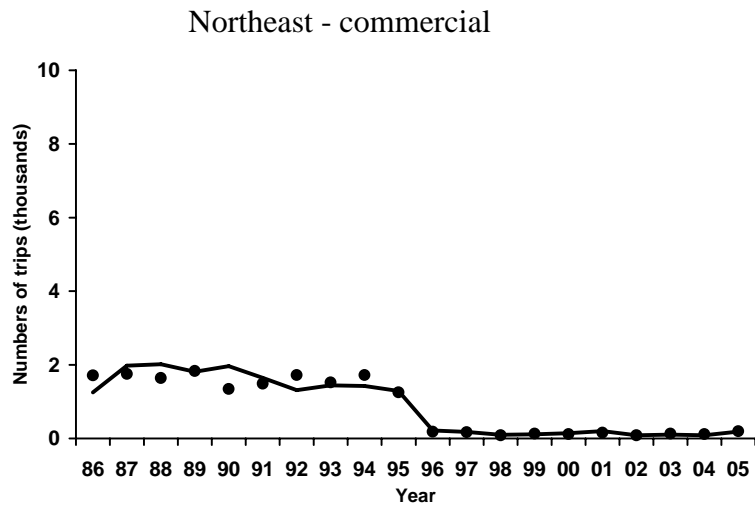


Figure 7.1.2 (con't). Observed (filled circles) and model-predicted (line) annual commercial fishing effort during 1986-2005 and recreational fishing effort during 1982-2005 for spotted seatrout in the Northeast and Southeast regions of Florida.

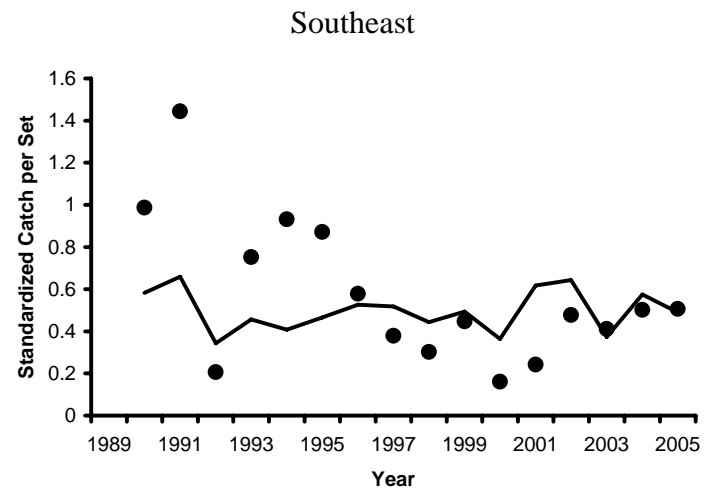
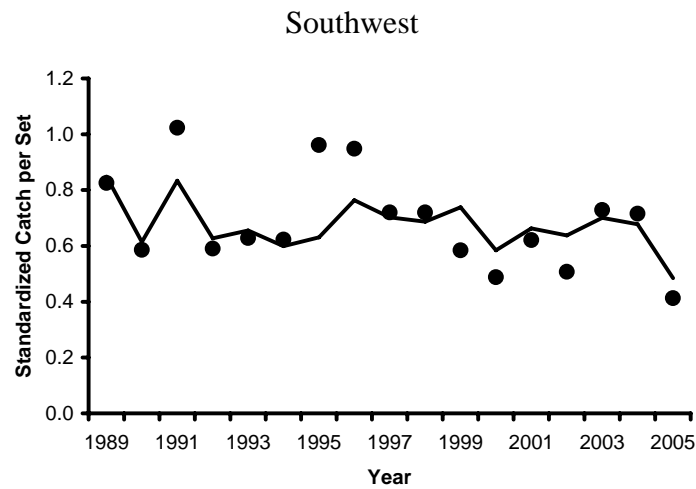
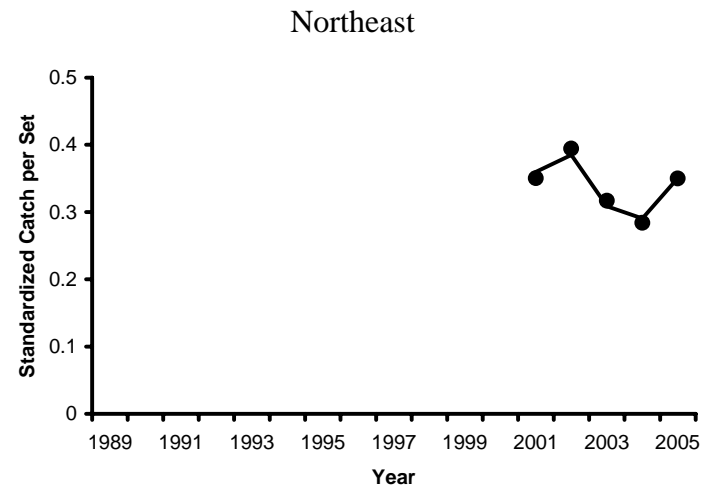
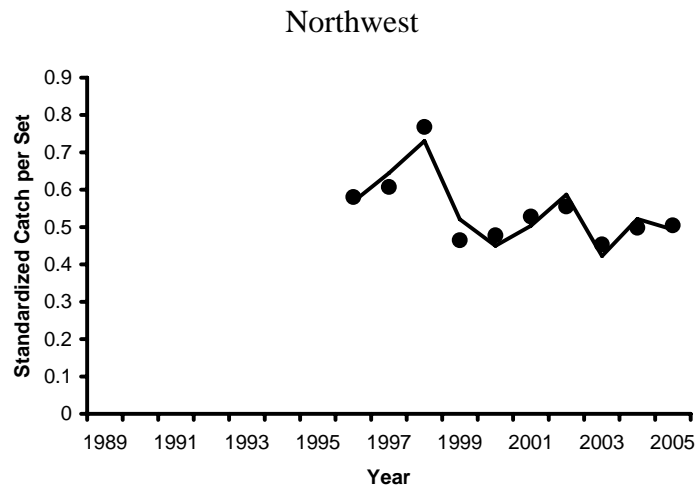


Figure 7.1.3. Observed (filled circles) and predicted (line) young-of-the-year spotted seatrout indices of abundance in each region of Florida during 1989-2005. Indices represent pooled abundances for both sexes.

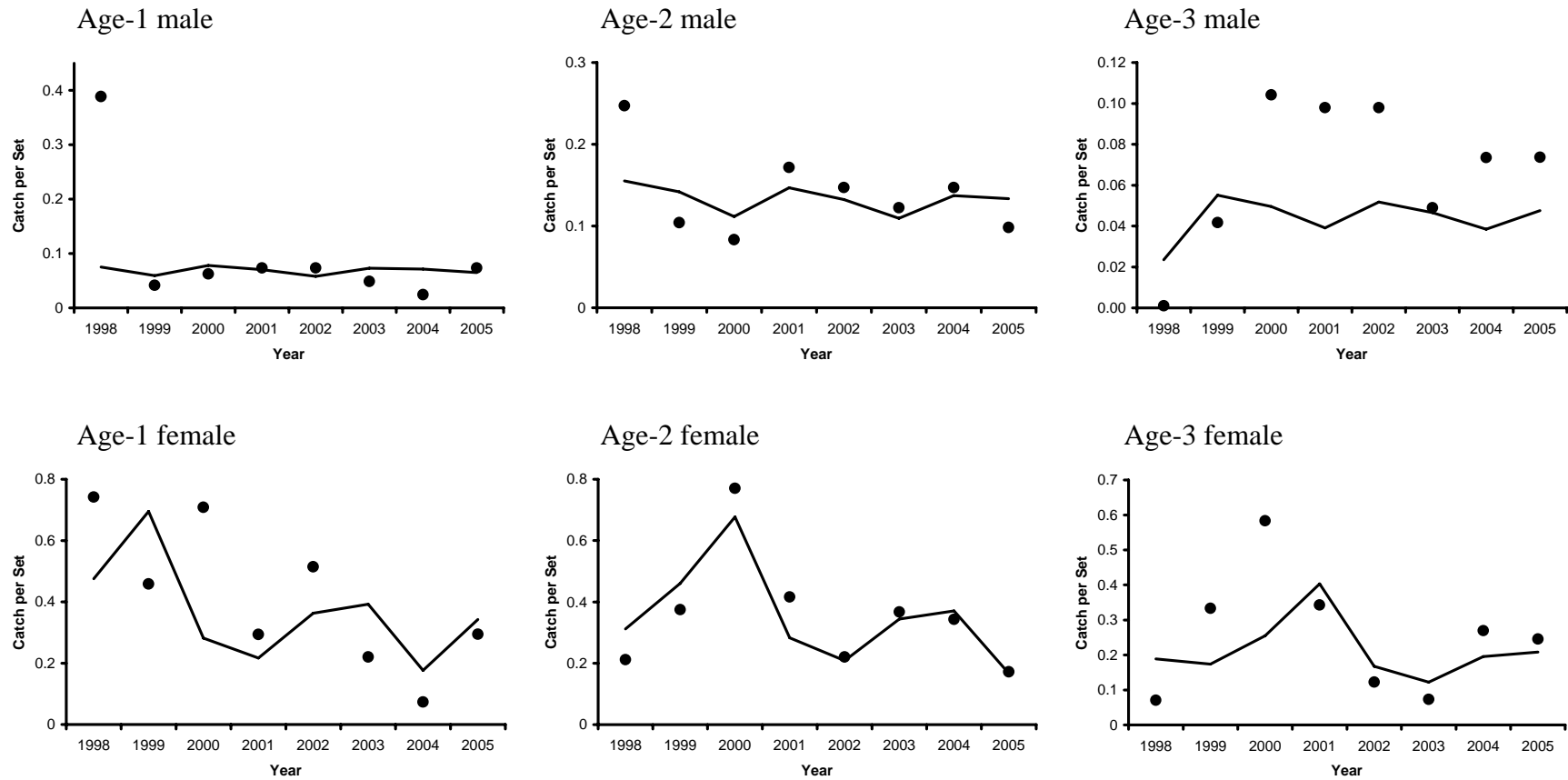


Fig. 7.1.4. Observed (filled circles) and predicted (line) indices of abundance for age-1, age-2, and age-3 male and female spotted seatrout in the Northwest region based on 183-m haul seine sets and randomly subsampled age and sex composition during 1998-2005.

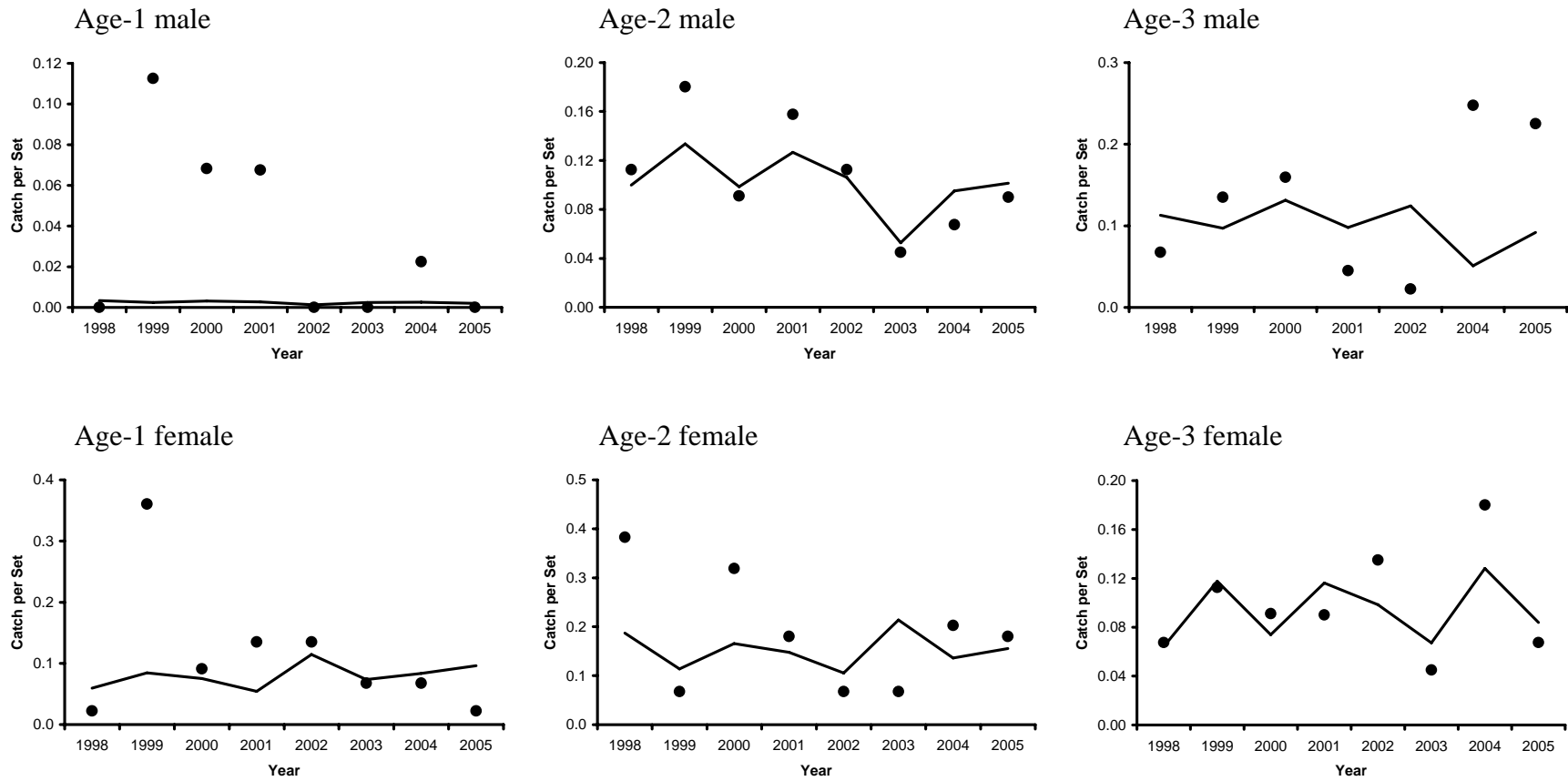


Fig. 7.1.4 (con't). Observed (filled circles) and predicted (line) indices of abundance for age-1, age-2, and age-3 male and female spotted seatrout in the Southwest region based on 183-m haul seine sets and randomly subsampled age and sex composition during 1998-2005.

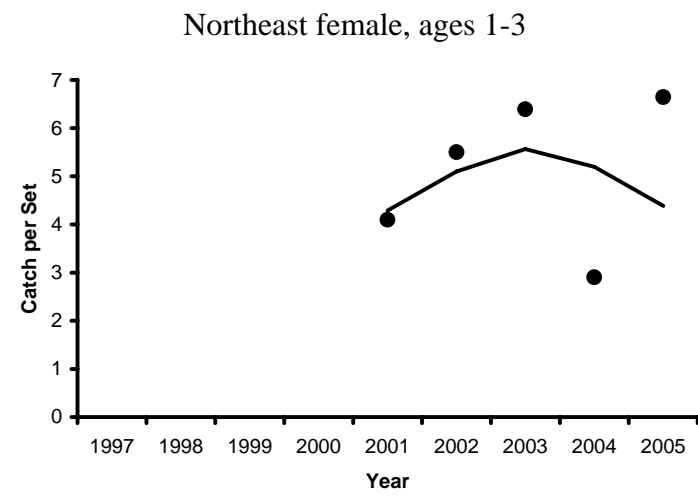
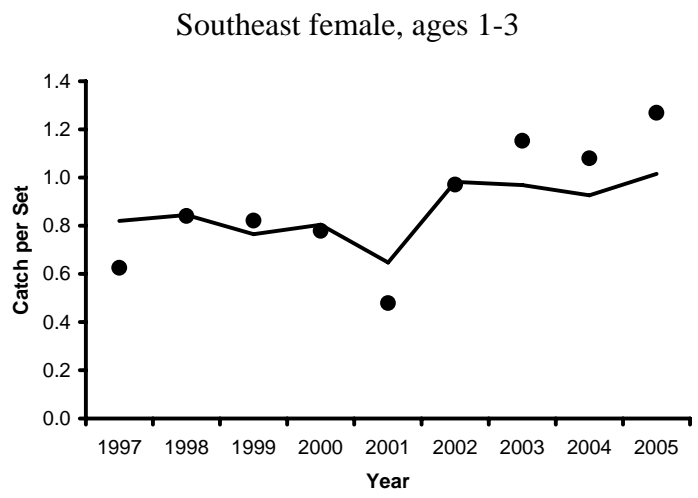
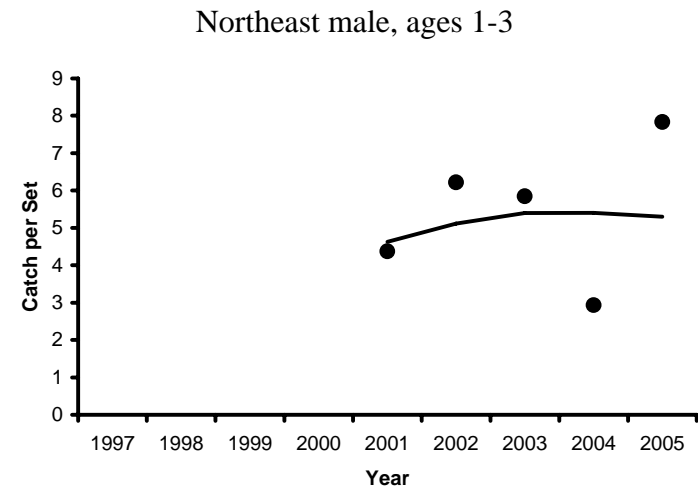
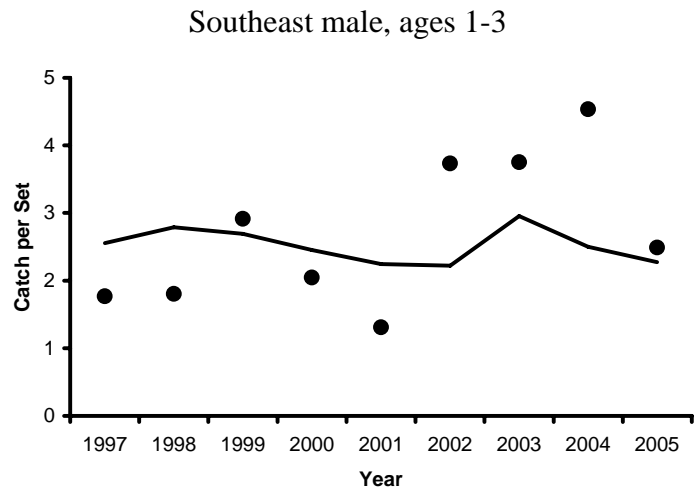


Fig. 7.1.4 (con't). Observed (filled circles) and predicted (line) indices of abundance for age 1-3 male and female spotted seatrout on the Atlantic coast region based on 183-m haul seine sets and randomly subsampled fish for age and sex composition during 1997-2005.

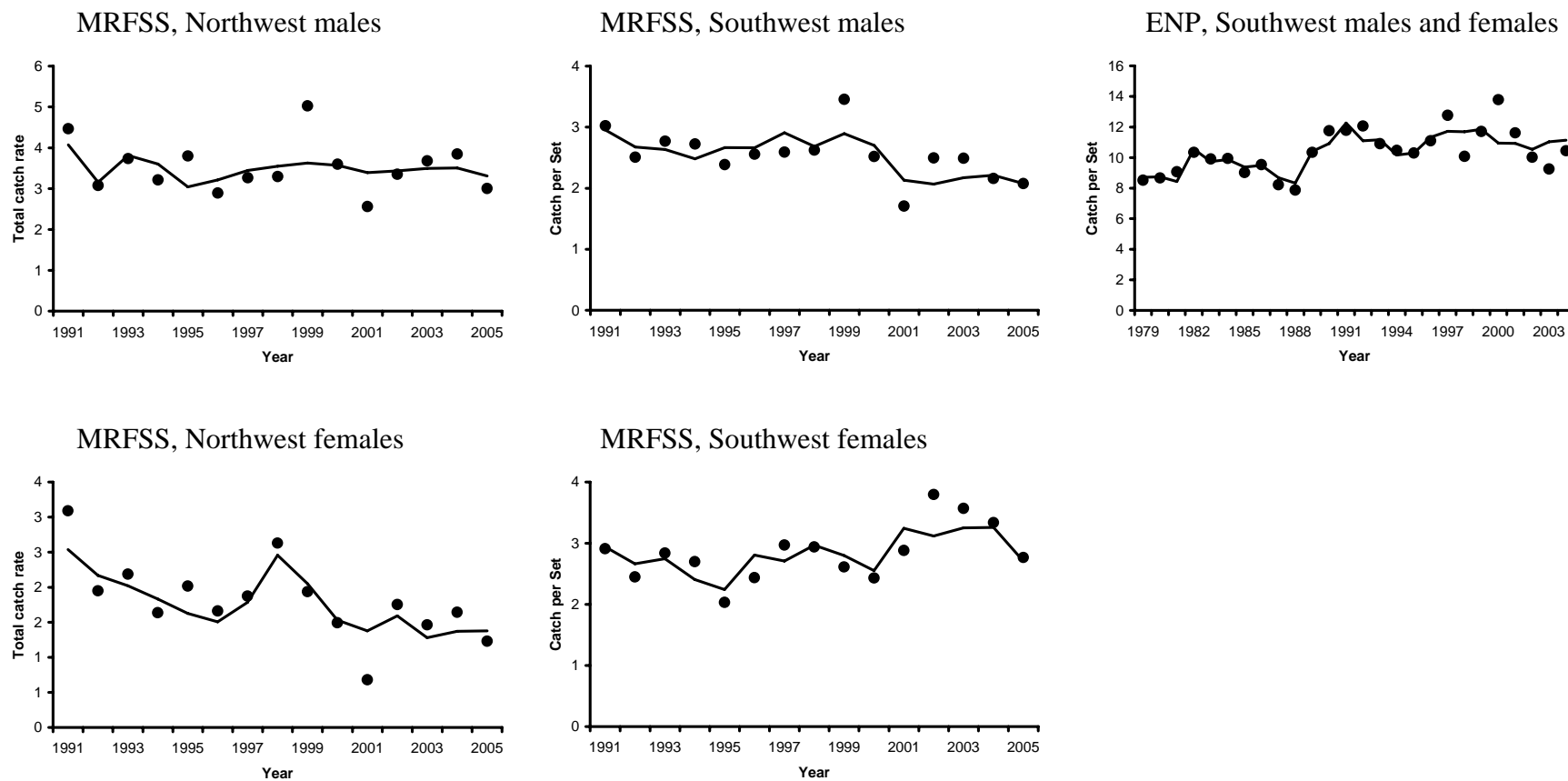


Fig. 7.1.5. Observed (filled circles) and predicted (line) indices of abundance for age 0-2 spotted seatrout in the Northwest and Southwest region based on fishery-dependent total-catch rates measured in the Marine Recreational Fisheries Statistics Survey (MRFSS) during 1991-2005 and in the Everglades National Park (ENP) creel survey during 1979-2005.

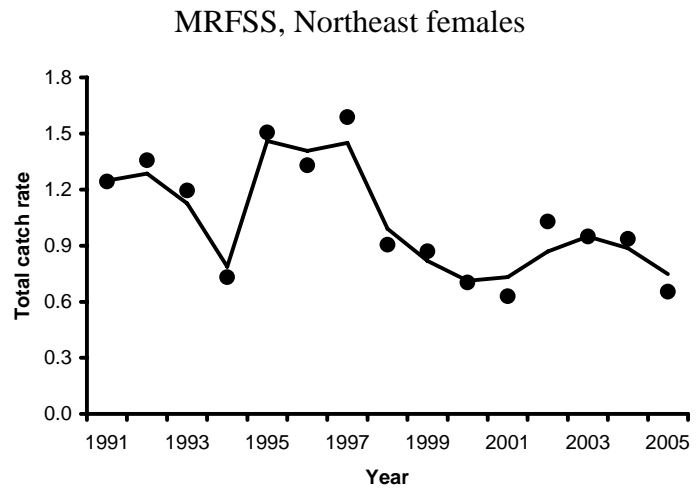
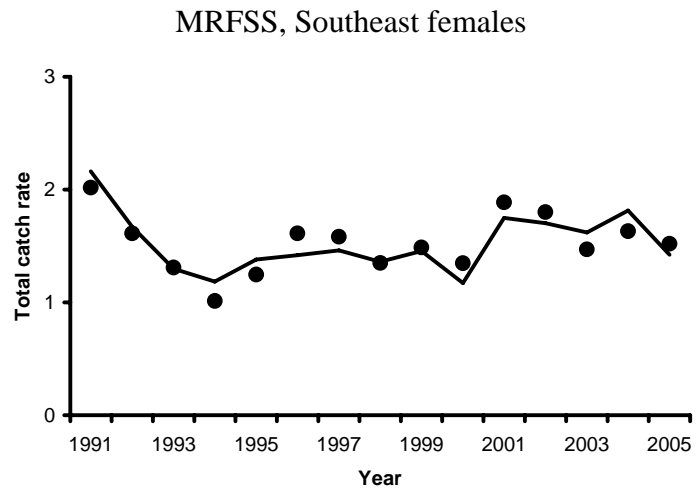
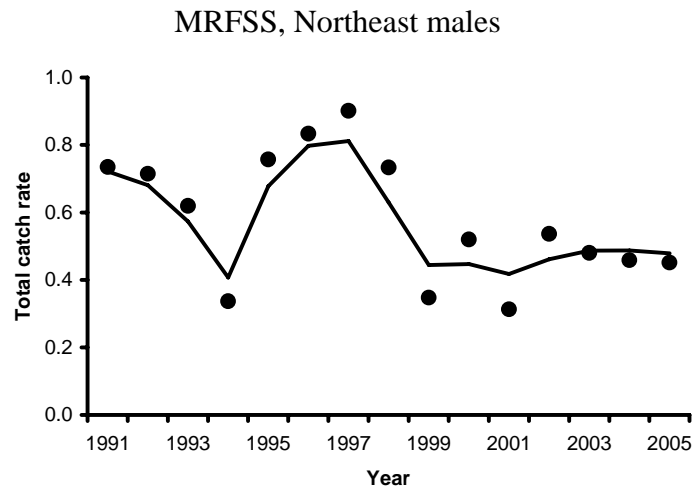
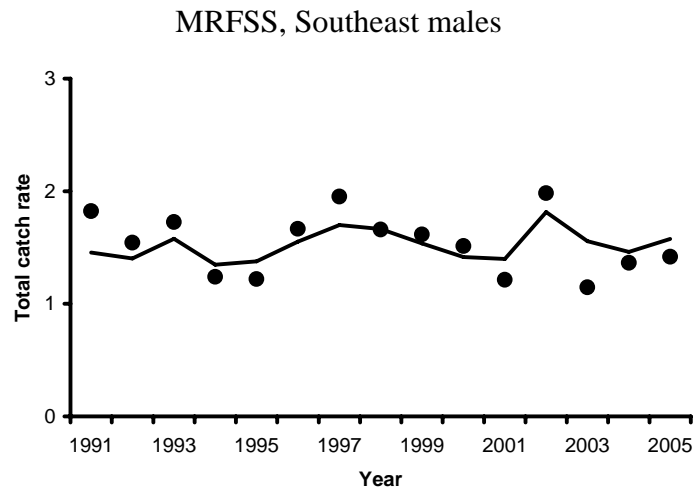


Figure 7.1.5 (con't). Observed (filled circles) and predicted (line) indices of abundance for age 0-2 spotted seatrout in the Southeast and Northeast regions based on fishery-dependent total-catch rates measured in the Marine Recreational Fisheries Statistics Survey (MRFSS) during 1991-2005.

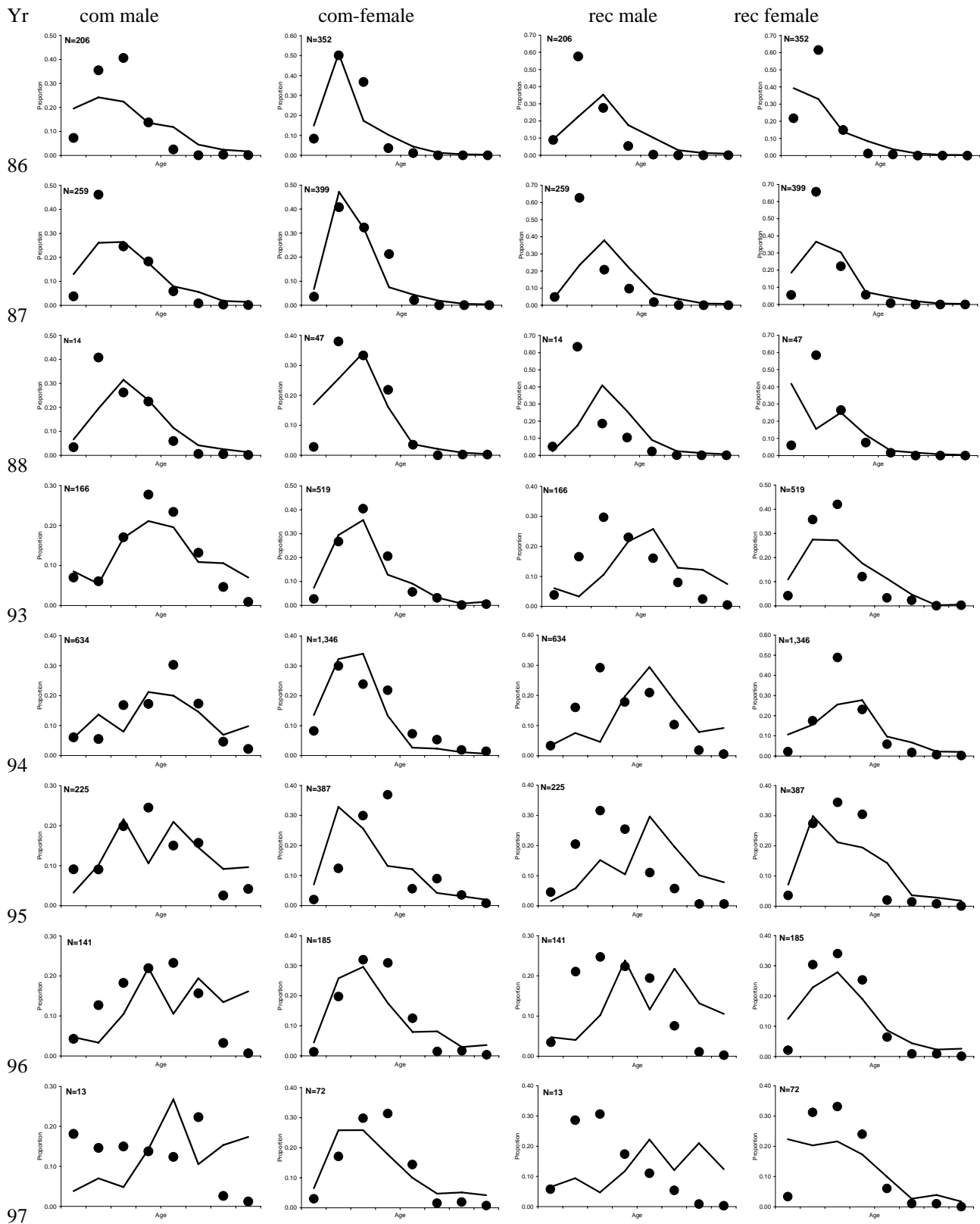


Figure 7.1.6. Observed (filled circle) and predicted (line) proportions of male and female spotted seatrout within ages 0-7⁺ in the commercial and recreational total take in the Northwest region during 1982-2005. Only years when observed data were available are given and the sample size is N.

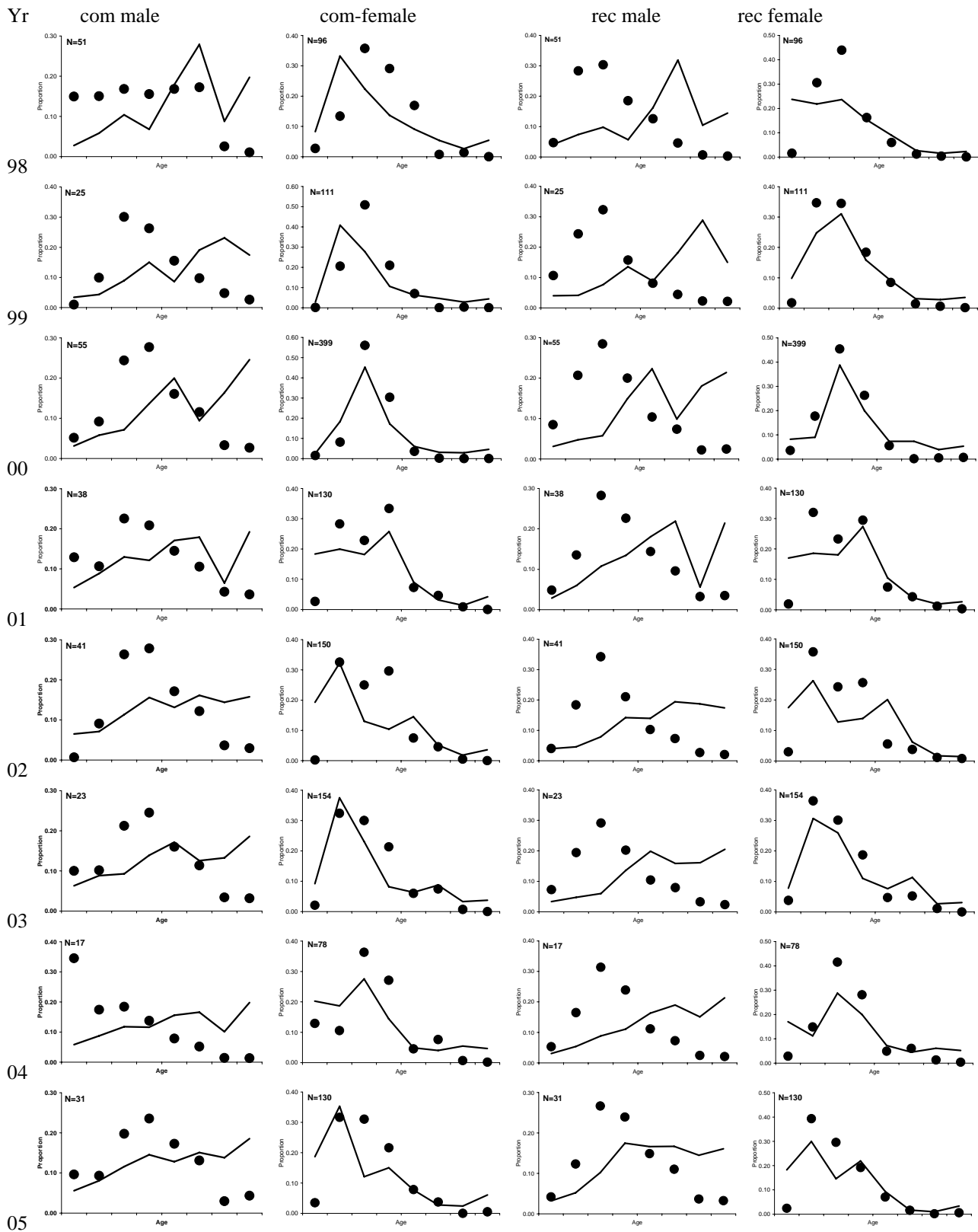


Figure 7.1.6 (con't). Observed (filled circle) and predicted (line) proportions of male and female spotted seatrout within ages 0-7+ in the commercial and recreational total take in the Northwest region during 1982-2005. Only years when observed data were available are given and the sample size is N.

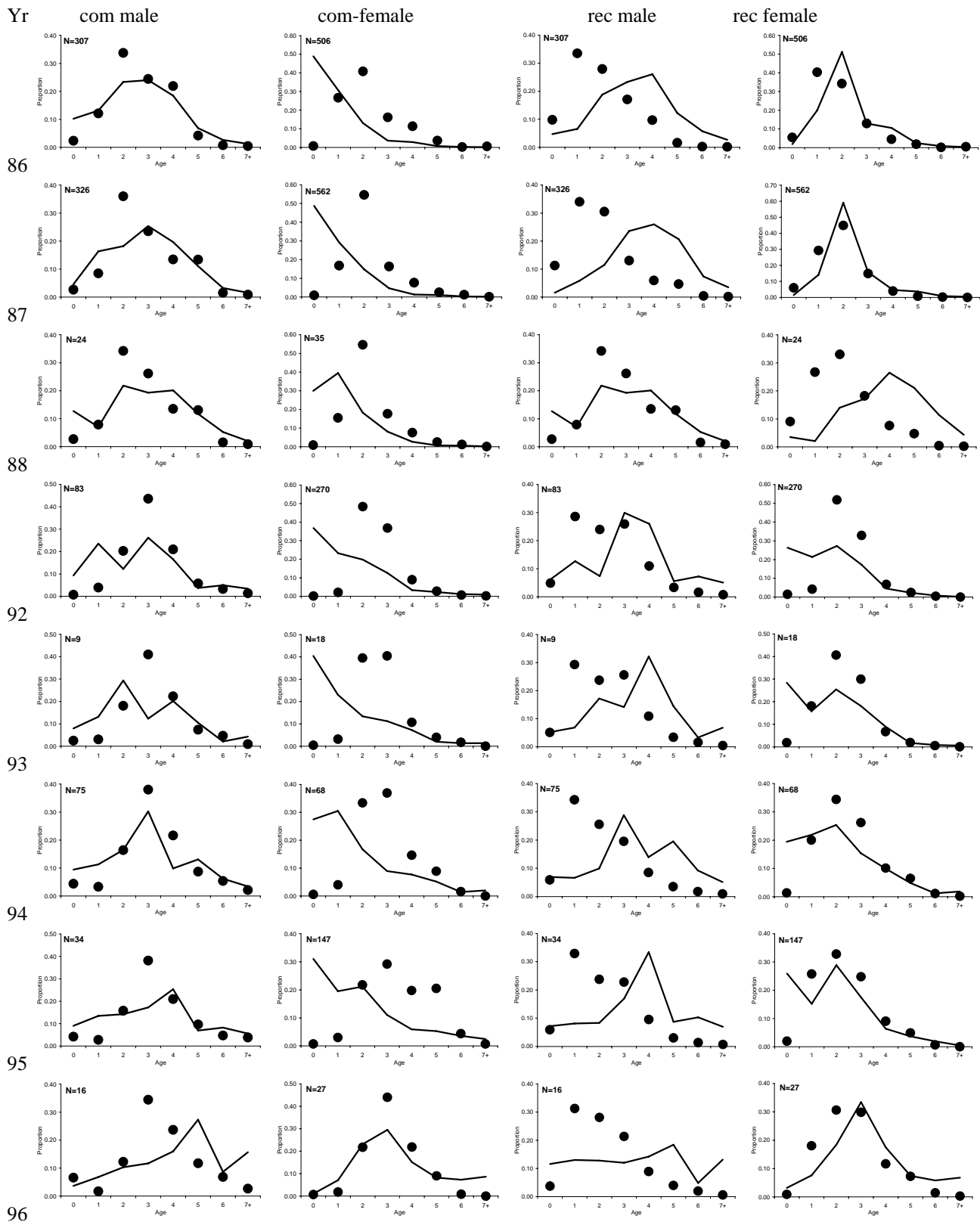


Figure 7.1.6 (con't). Observed (filled circle) and predicted (line) proportions of male and female spotted seatrout within ages 0-7⁺ in the commercial and recreational total take in the Southwest region during 1982-2005. Only years when observed data were available are given and the sample size is N.

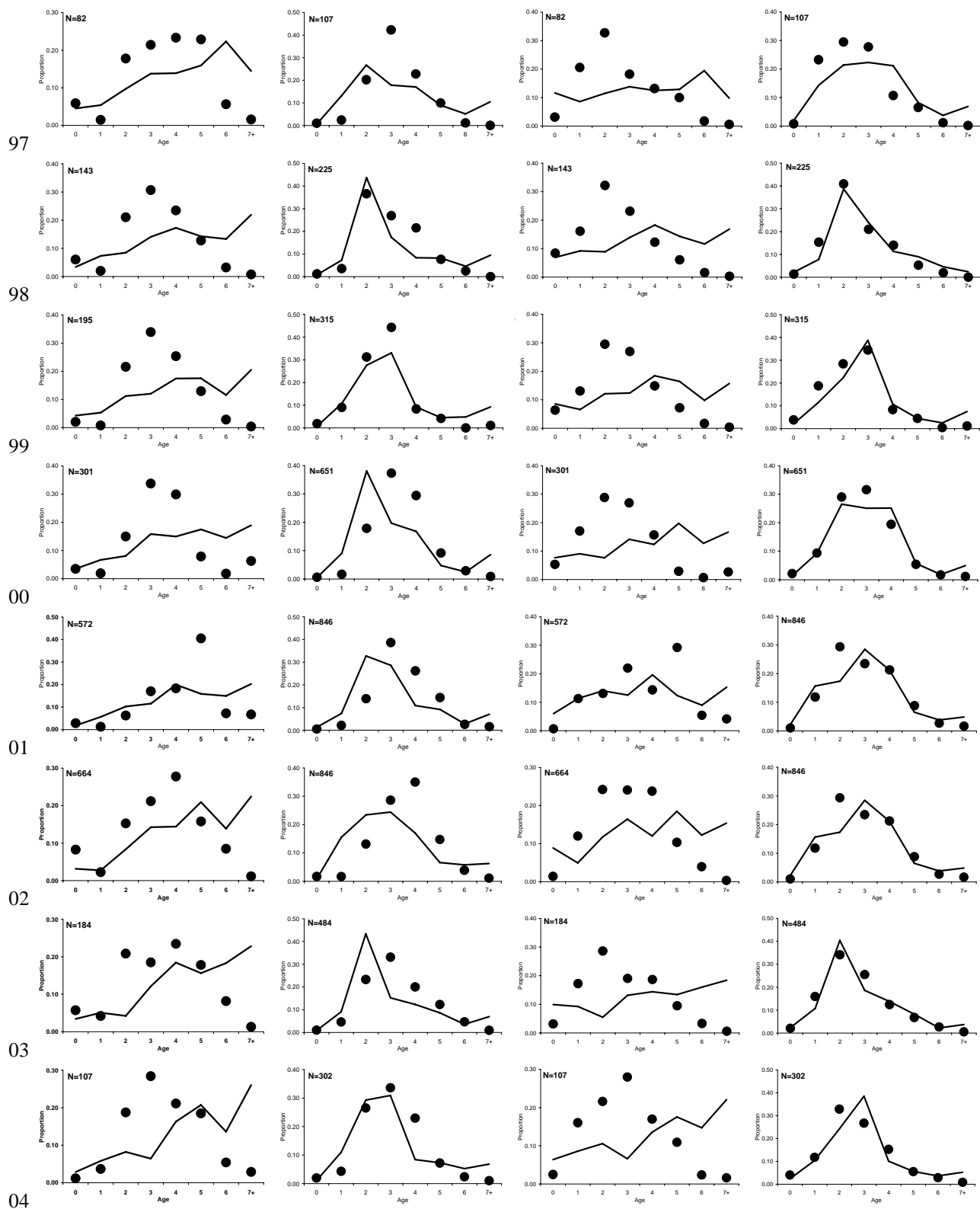


Figure 7.1.6 (con't). Observed (filled circle) and predicted (line) proportions of male and female spotted seatrout within ages 0-7⁺ in the commercial and recreational total take in the Southwest region during 1982-2005. Only years when observed data were available are given and the sample size is N.

05

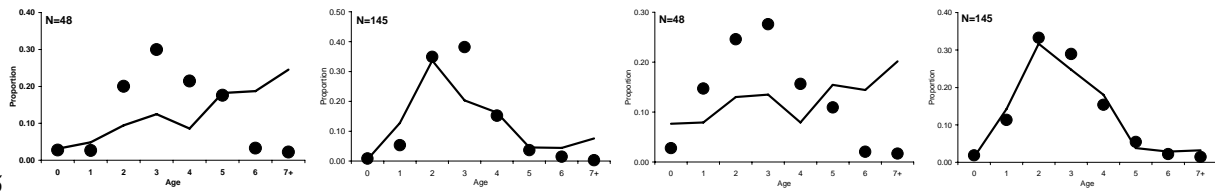


Figure 7.1.6 (con't). Observed (filled circle) and predicted (line) proportions of male and female spotted seatrout within ages 0-7⁺ in the commercial and recreational total take in the Southwest region during 1982-2005. Only years when observed data were available are given and the sample size is N.

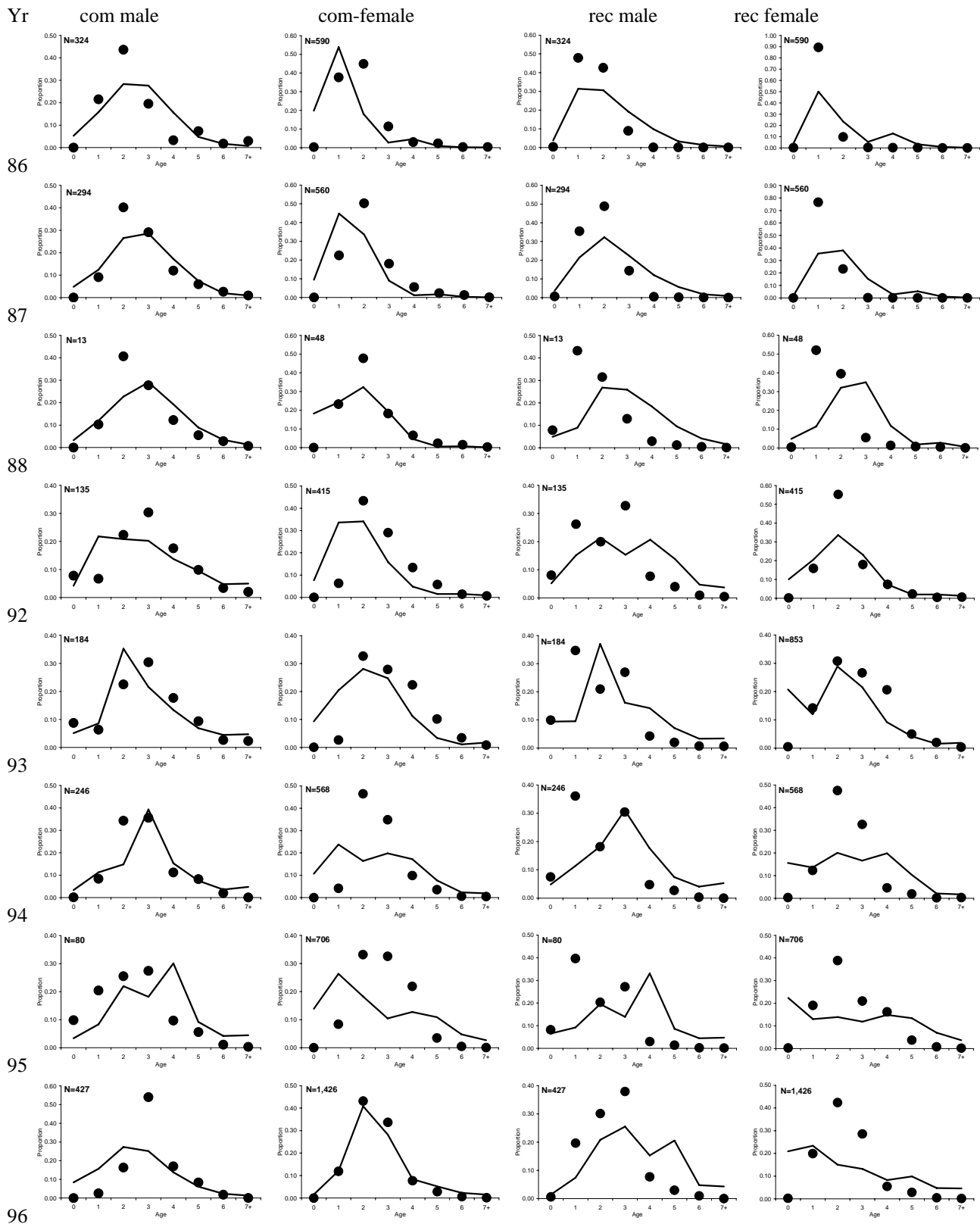


Figure 7.1.6 (con't). Observed (filled circle) and predicted (line) proportions of male and female spotted seatrout within ages 0-7⁺ in the commercial and recreational total take in the Southeast region during 1982-2005. Only years when observed data were available are given and the sample size is N.

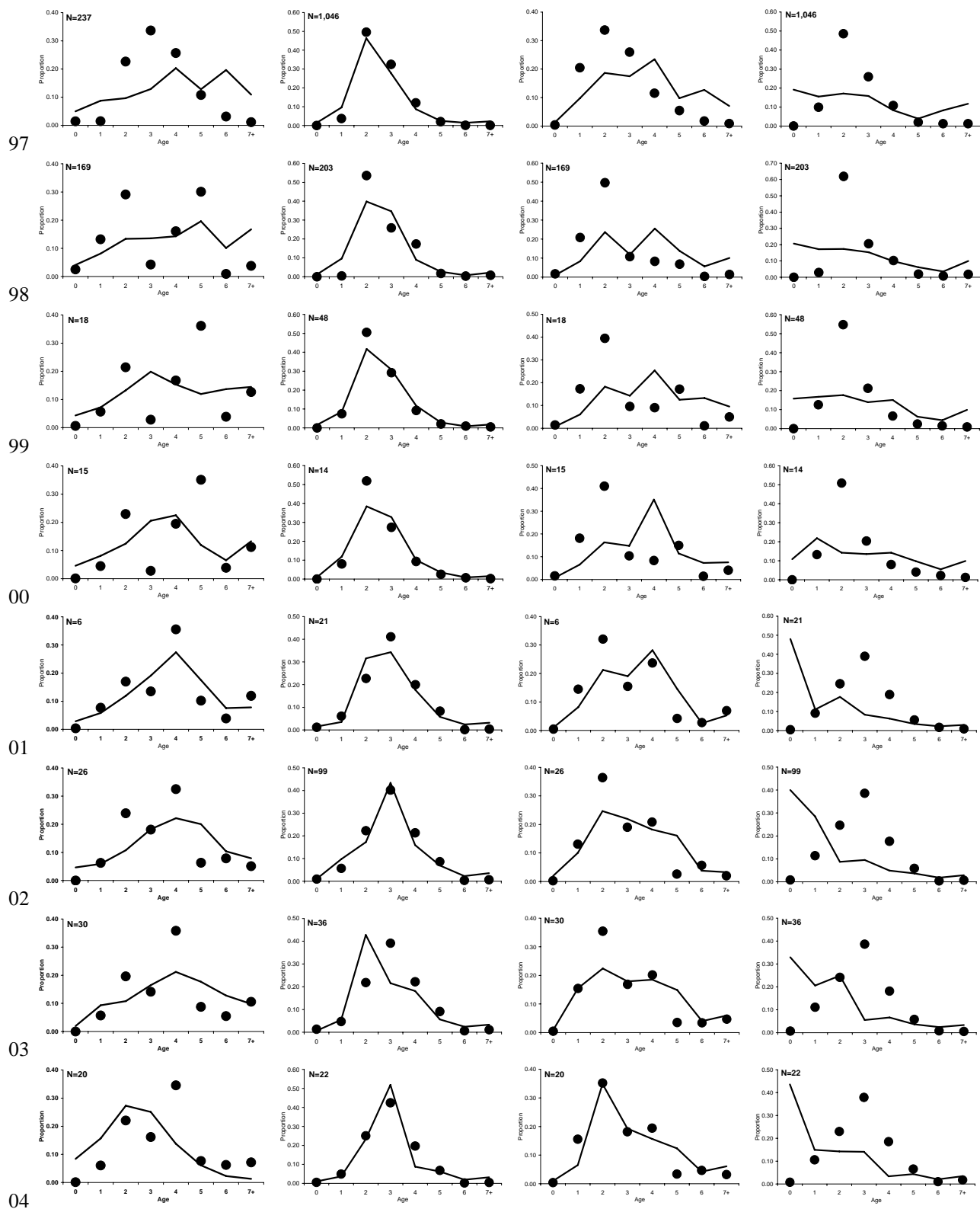


Figure 7.1.6 (con't). Observed (filled circle) and predicted (line) proportions of male and female spotted seatrout within ages 0-7⁺ in the commercial and recreational total take in the Southeast region during 1982-2005. Only years when observed data were available are given and the sample size is N.

05

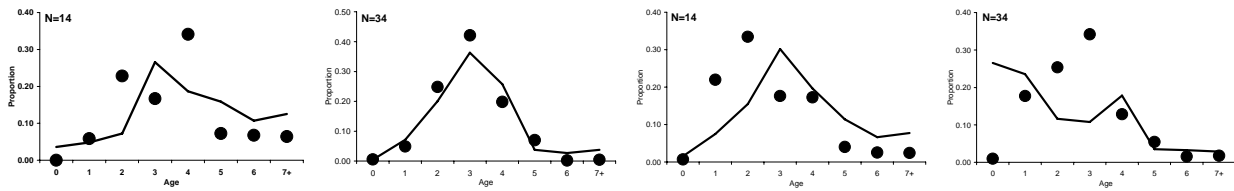


Figure 7.1.6 (con't). Observed (filled circle) and predicted (line) proportions of male and female spotted seatrout within ages 0-7⁺ in the commercial and recreational total take in the Southeast region during 1982-2005. Only years when observed data were available are given and the sample size is N.

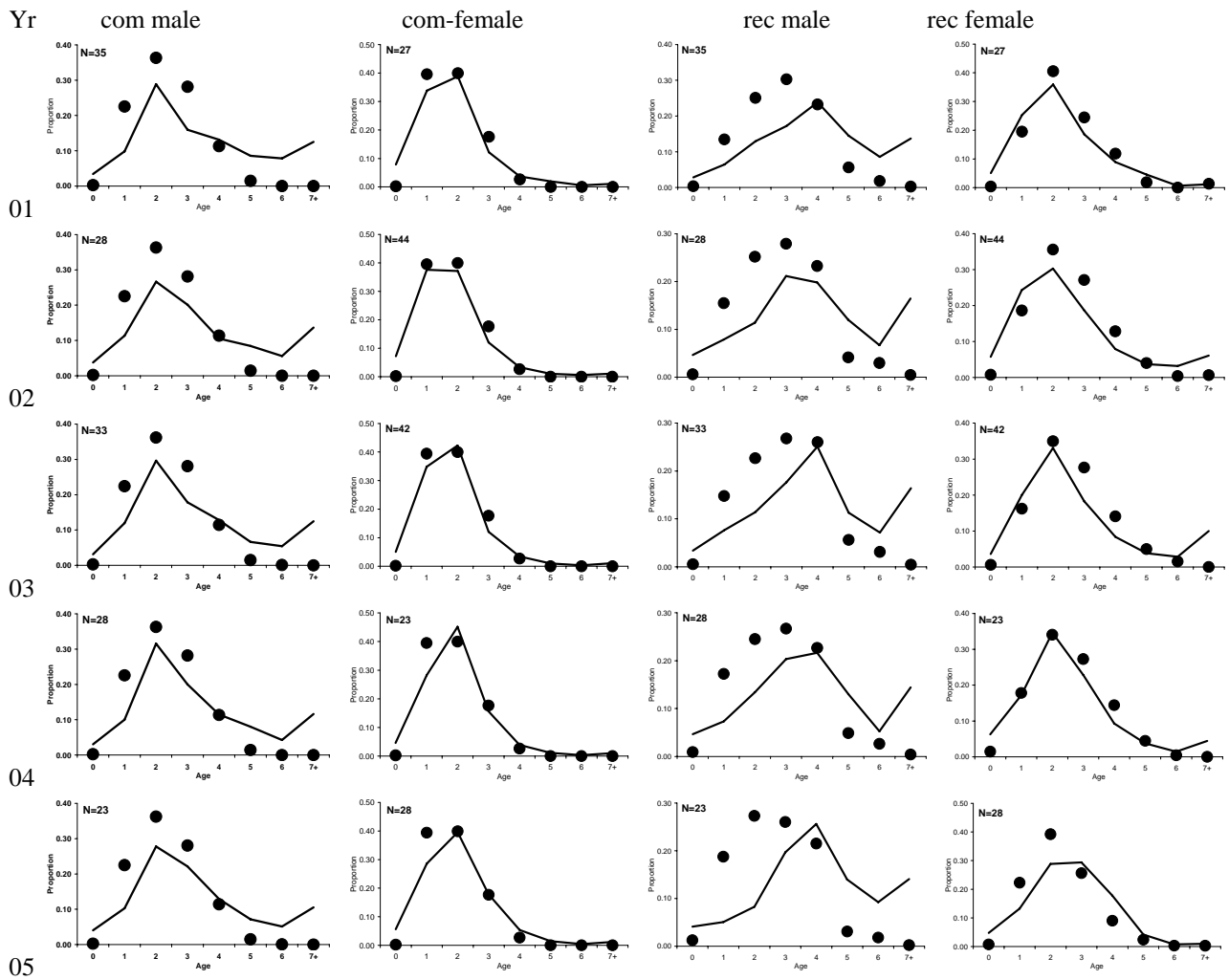


Figure 7.1.6 (con't). Observed (filled circle) and predicted (line) proportions of male and female spotted seatrout within ages 0-7⁺ in the commercial and recreational total take in the Northeast region during 1982-2005. Only years when observed data were available are given and the sample size is N. In this region, earlier years were also included in the proportion-at-age data but these were borrowed from the Southeast region and were individually weighted low.

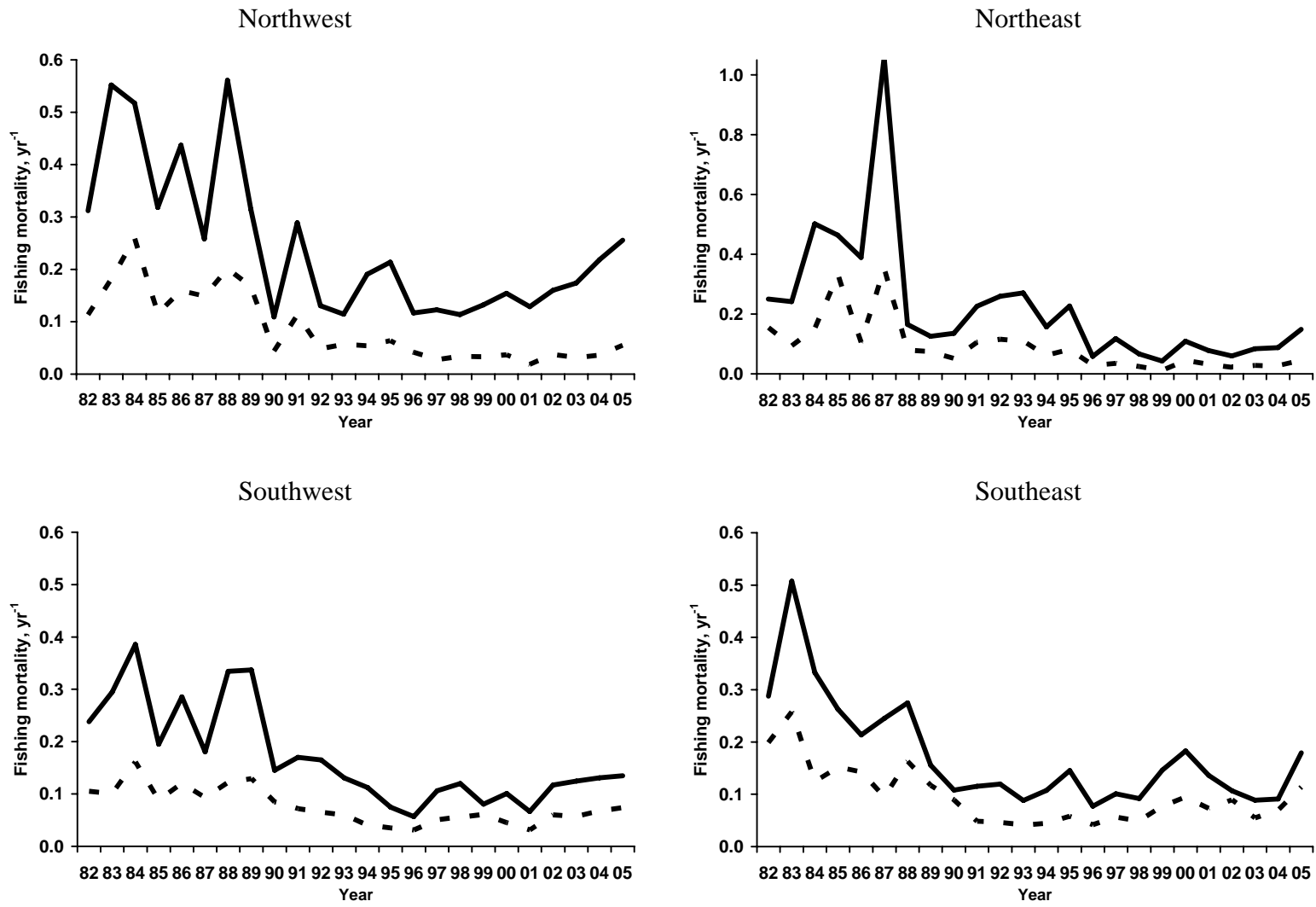


Figure 7.2.1.1. Estimated overall instantaneous fishing mortality rate (per year) for female (solid line) and male (dashed line) spotted seatrout in each of the four Florida management regions during 1982-2005. Note the different vertical scale for the Northeast region.

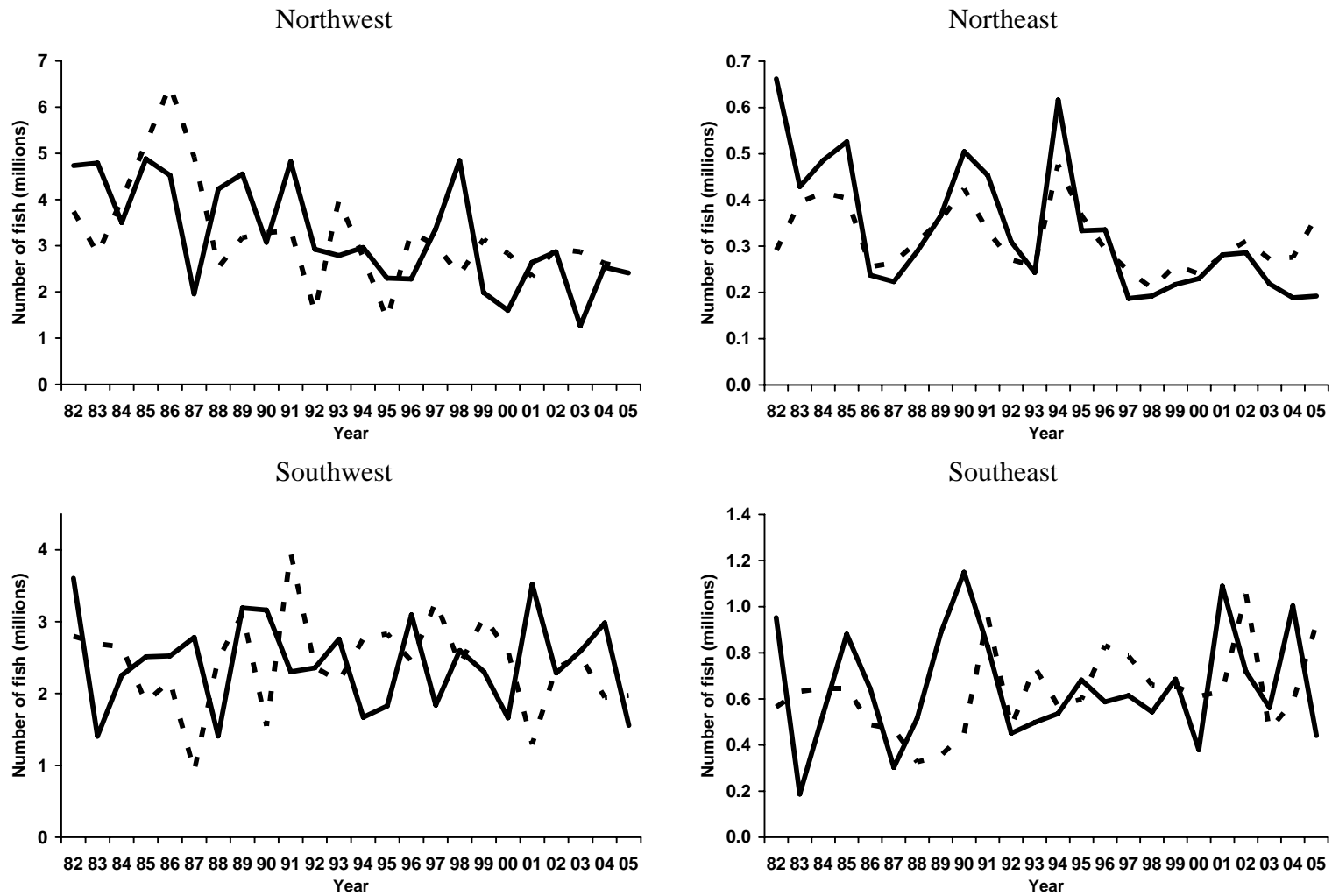


Fig. 7.2.2.1. Estimated abundance for young-of-the-year female (solid line) and male (dashed line) spotted seatrout in each of the four Florida management regions during 1982-2005. Note the different vertical scales for each region.

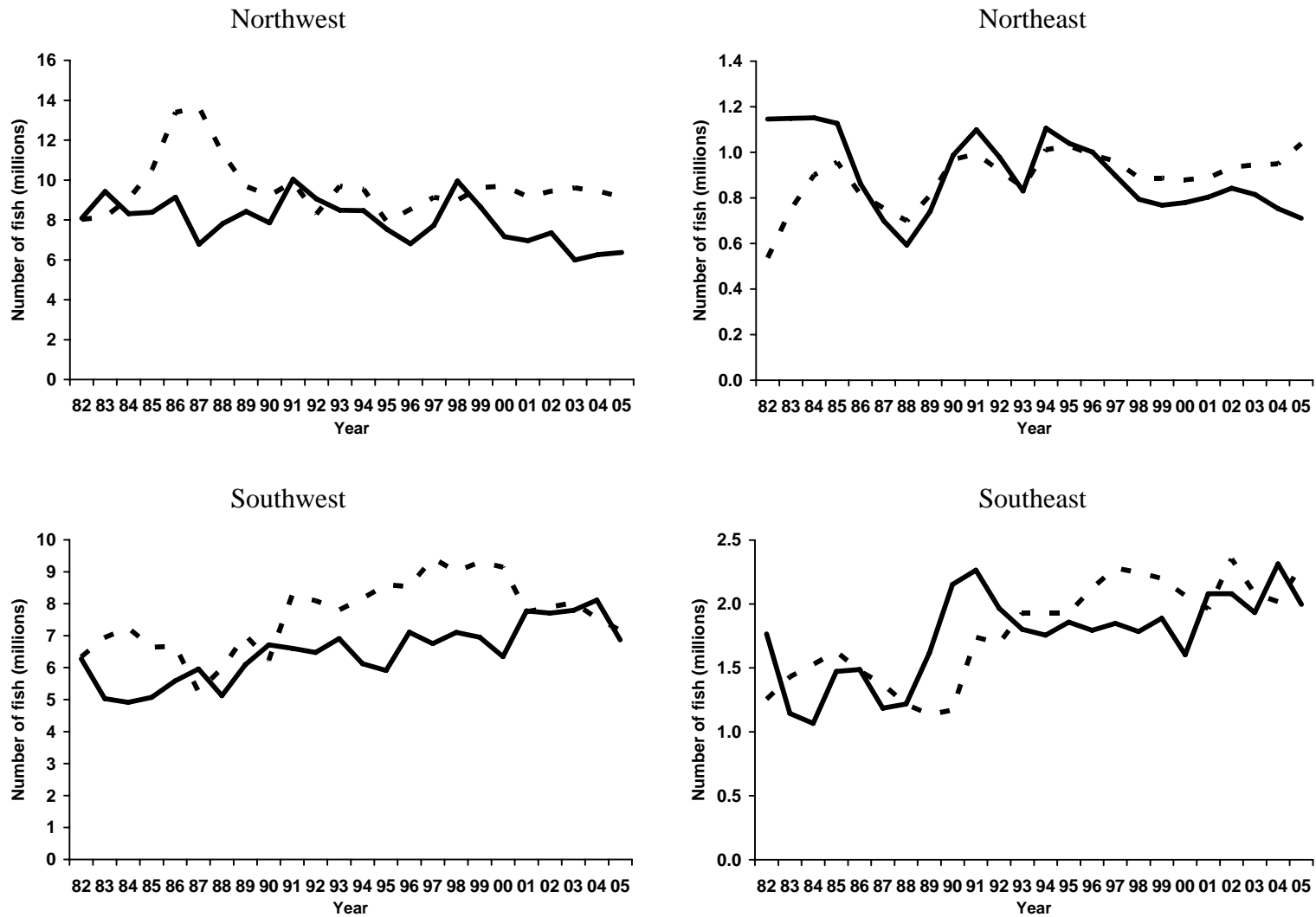


Fig. 7.2.2.2. Estimated beginning-of-the-year abundances for female (solid line) and male (dashed line) spotted seatrout in each of the four Florida management regions during 1982-2005. Note the different vertical scales for each region.

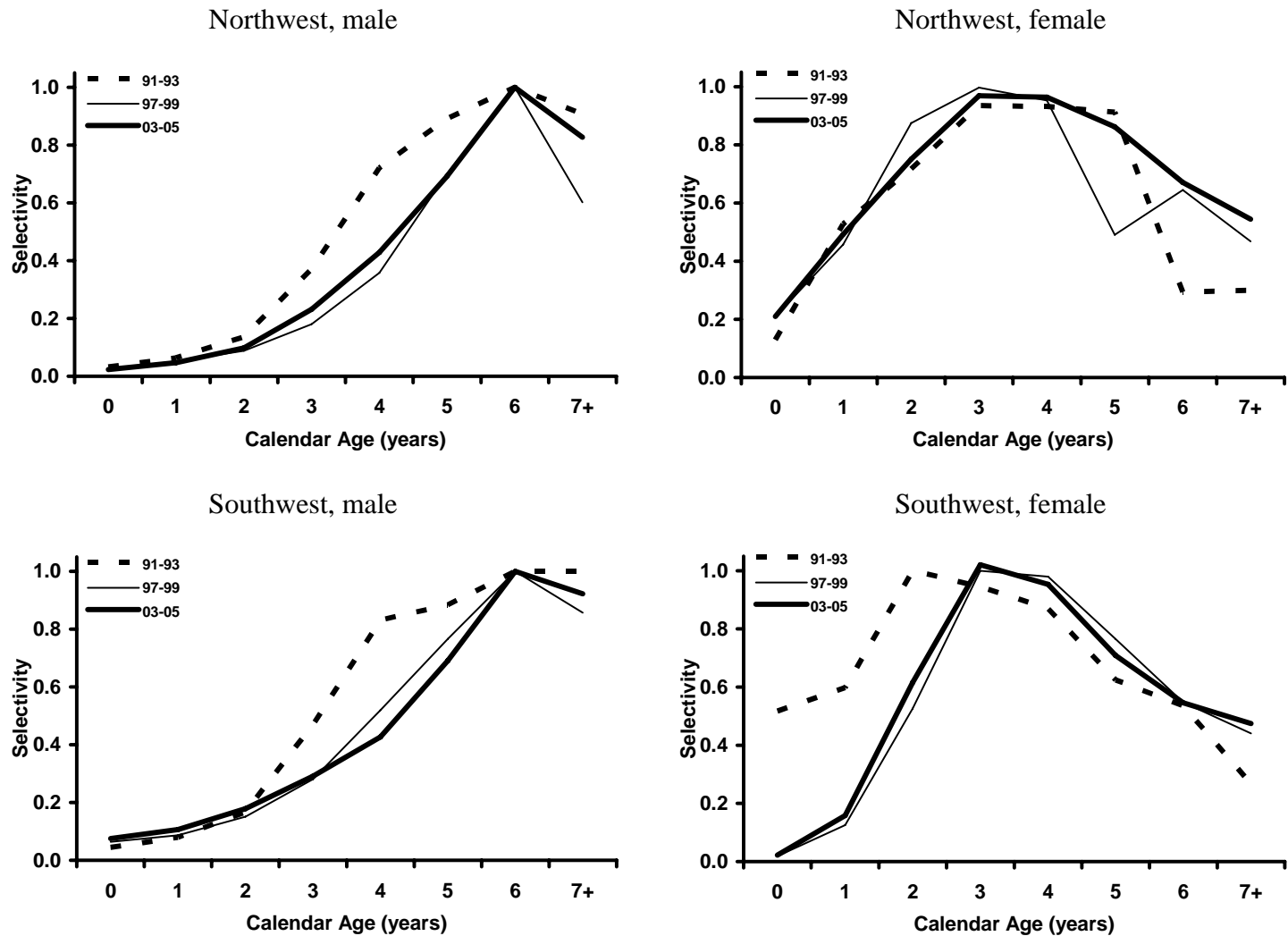


Figure 7.6.1. Average age-specific recreational fishery selectivities for male and female spotted seatrout in the Northwest and Southwest regions of the Gulf Coast of Florida during three periods of distinct management regulations, 1991-1993, 1997-1999, and 2003-2005.

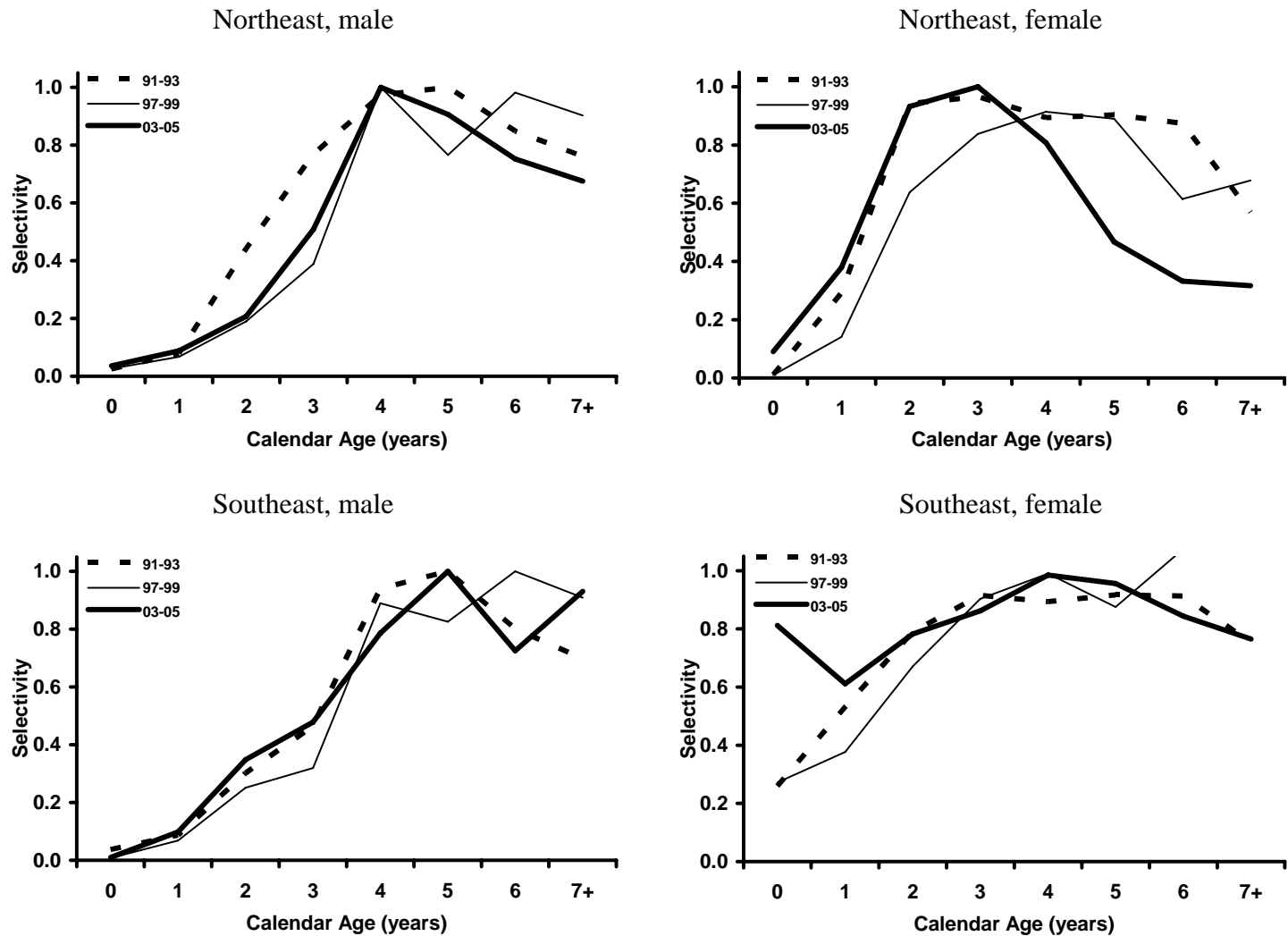


Figure 7.6.1 (con't). Average age-specific recreational fishery selectivities for male and female spotted seatrout in the Northeast and Southeast regions of the Atlantic coast of Florida during three periods of distinct management regulations, 1991-1993, 1997-1999, and 2003-2005.

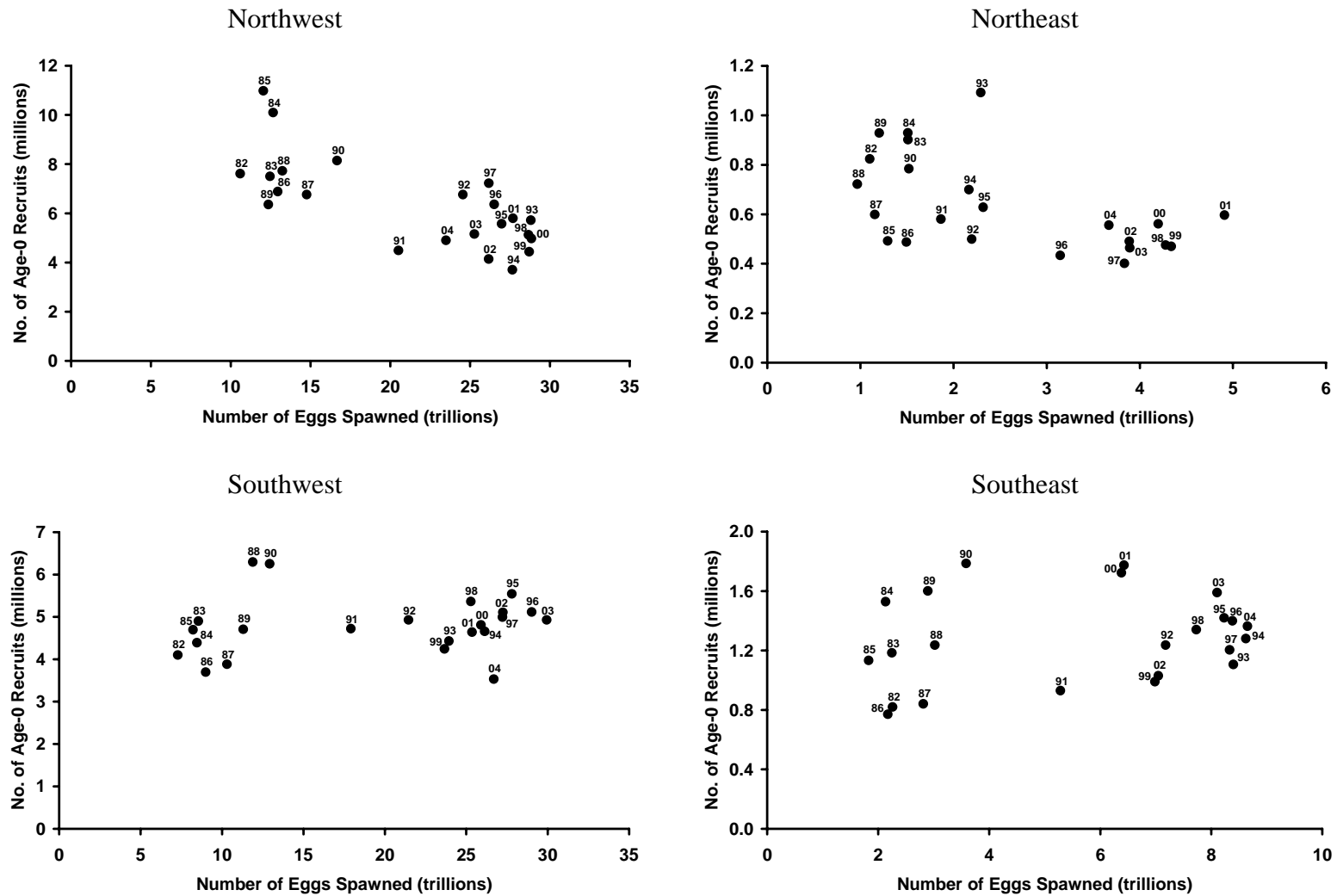


Figure 8.2.1. Estimates of next-year recruitment (number) of age-0 spotted seatrout produced by the estimated number of eggs spawned in a given year within each management region of Florida for the spawning seasons in 1982-2004.

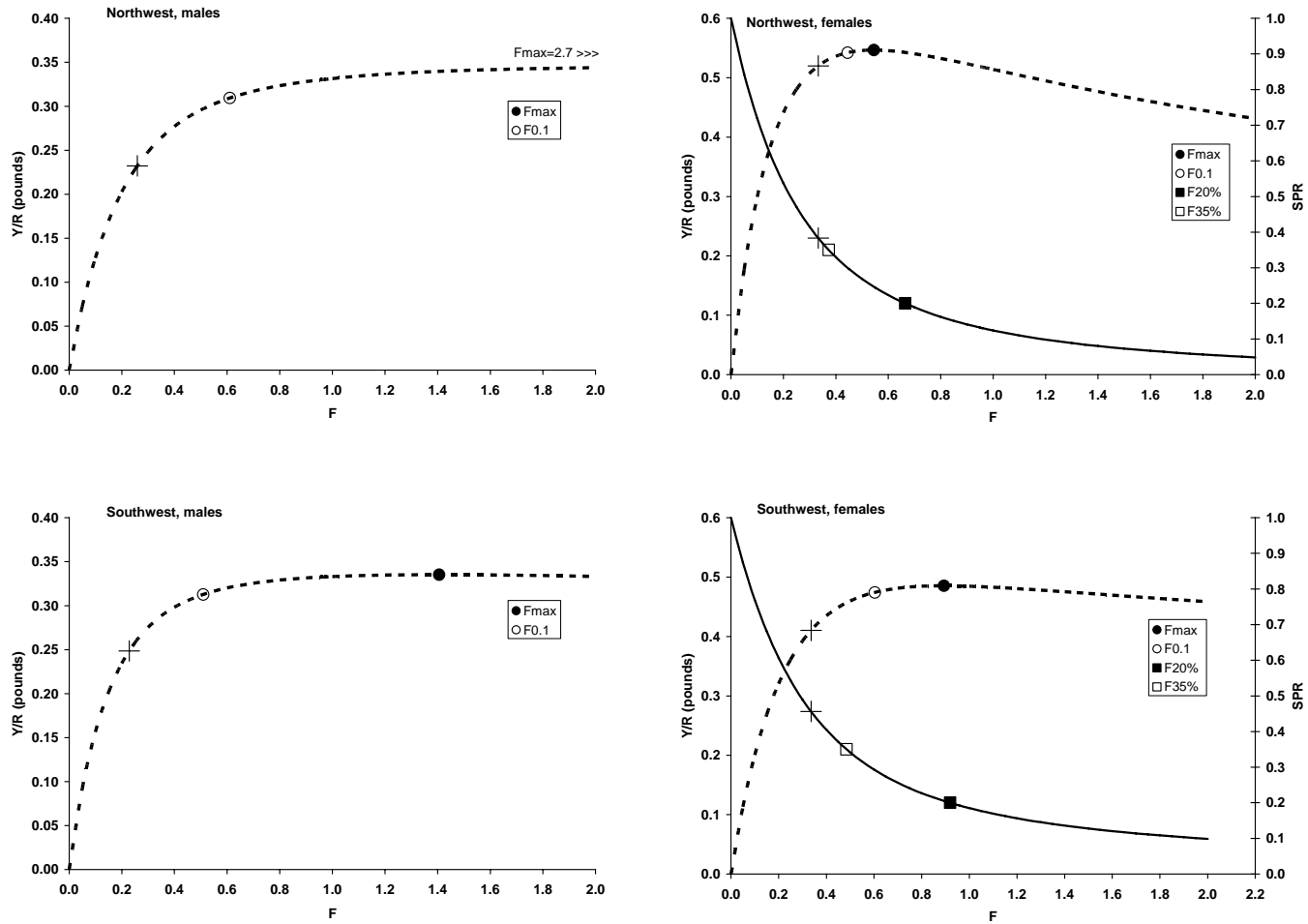


Figure 8.3.1. Plots of equilibrium yield-per-recruit (lbs; dashed line) and static spawning potential ratio (solid line) for the spotted seatrout fishery (combined commercial and recreational) operating under the estimated 2005 fishery selectivities for males or females in the Northwest and Southwest regions of Florida's Gulf coast. "Plus" symbols located on either curve represent the estimated levels in 2005. Also shown are the yield and apical fishing mortality at $F_{0.1}$ (open circle), and at maximum yield per recruit (F_{max} , filled circle), and the apical fishing mortality rates where the static spawning potential equals 20% ($F_{20\%}$, open square) and 35% ($F_{35\%}$, filled square).

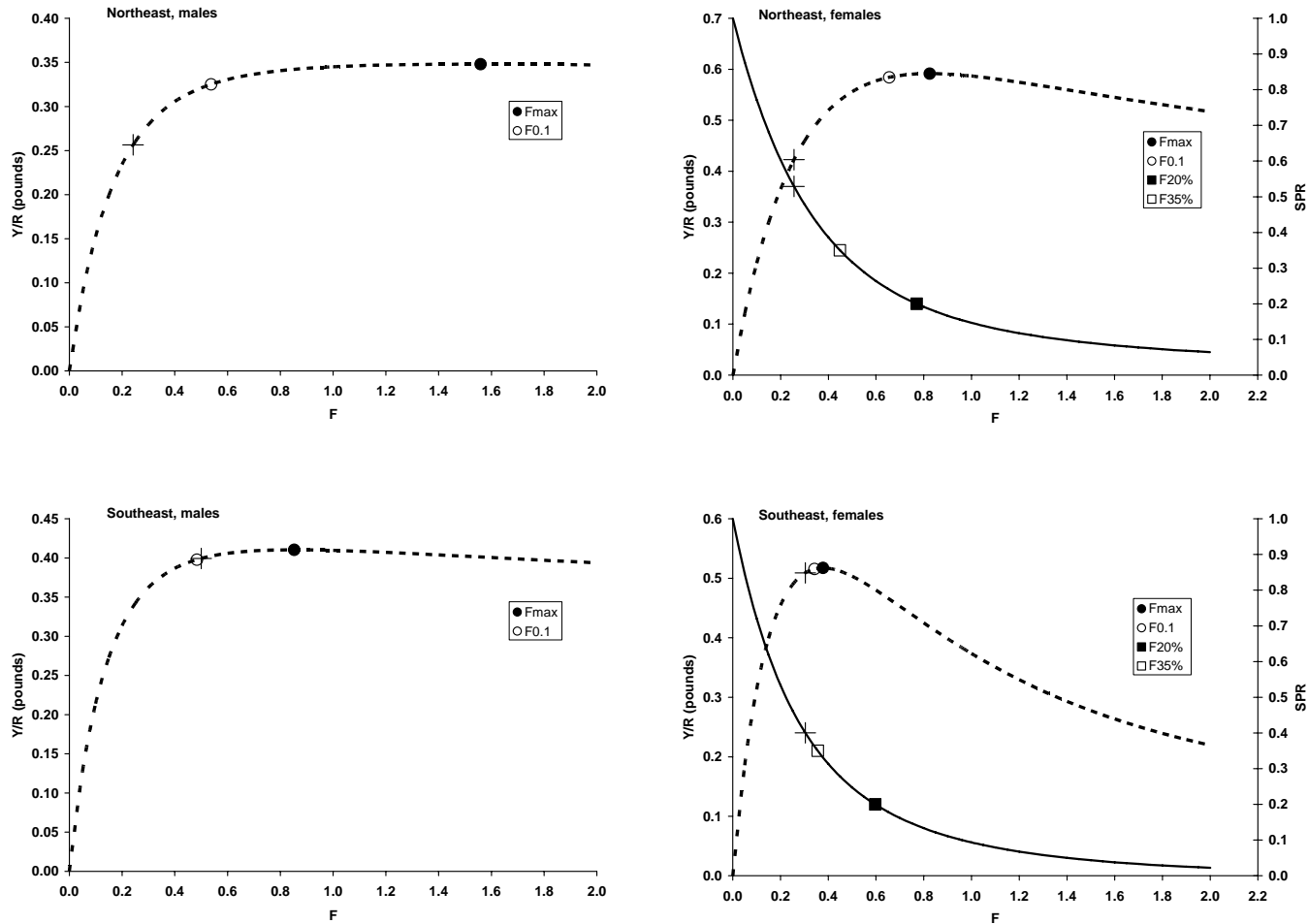


Figure 8.3.1 (con't). Plots of equilibrium yield-per-recruit (lbs; dashed line) and static spawning potential ratio (solid line) for the spotted seatrout fishery (combined commercial and recreational) operating under the estimated 2005 fishery selectivities for males or females in the Northeast and Southeast regions of Florida's Atlantic coast. "Plus" symbols located on either curve represent the estimated levels in 2005. Also shown are the yield and apical fishing mortality at $F_{0.1}$ (open circle), and at maximum yield per recruit (F_{max} , filled circle), and the apical fishing mortality rates where the static spawning potential equals 20% ($F_{20\%}$, open square) and 35% ($F_{35\%}$, filled square).

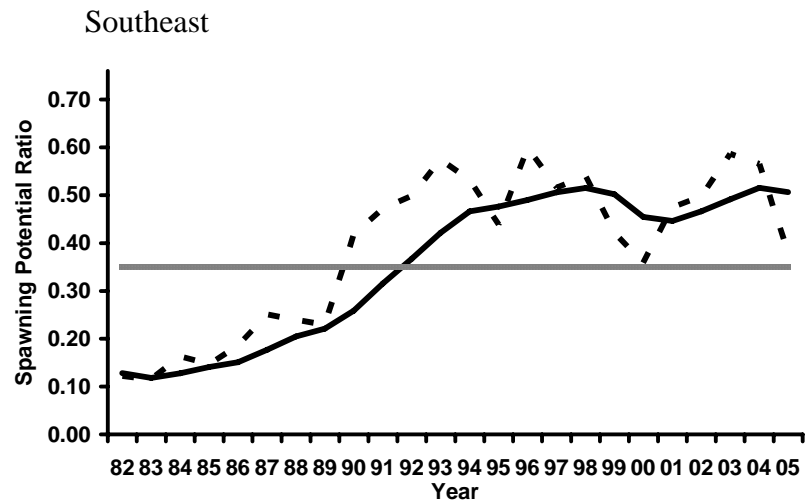
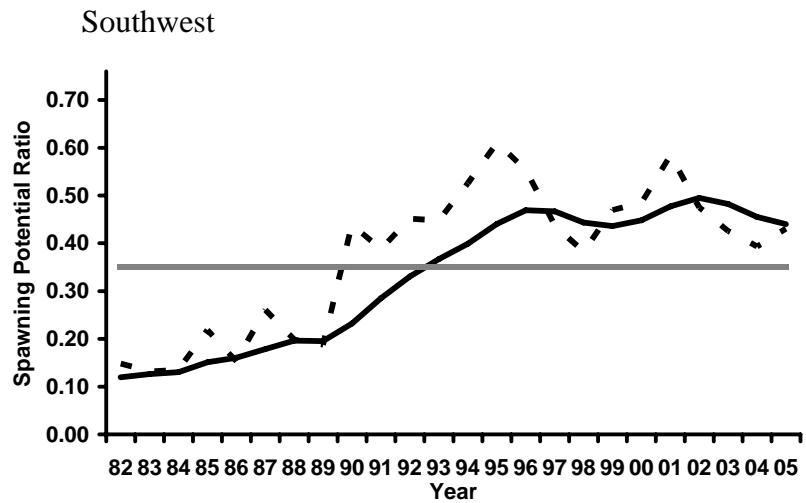
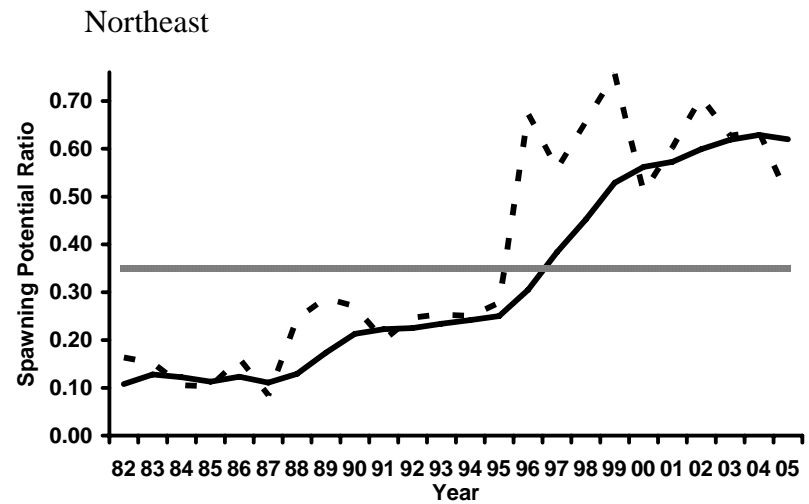
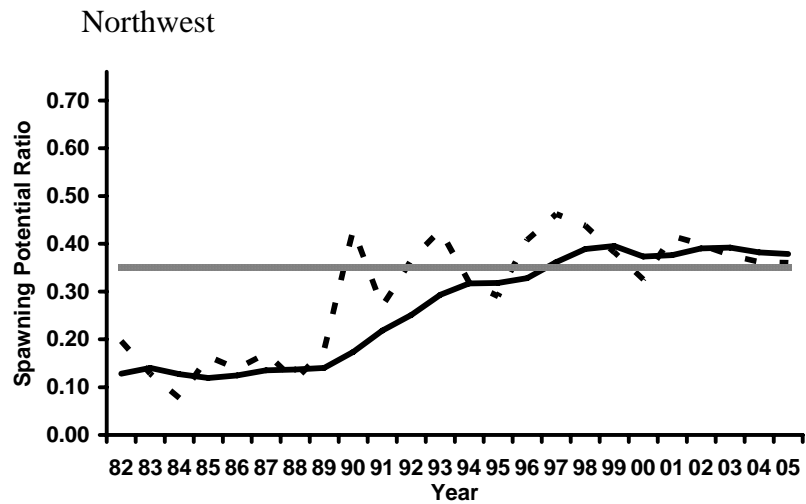


Figure 8.3.2. Static (dashed line) and transitional (solid line) spawning potential ratio estimated for spotted seatrout in each management region in Florida during 1982-2005.

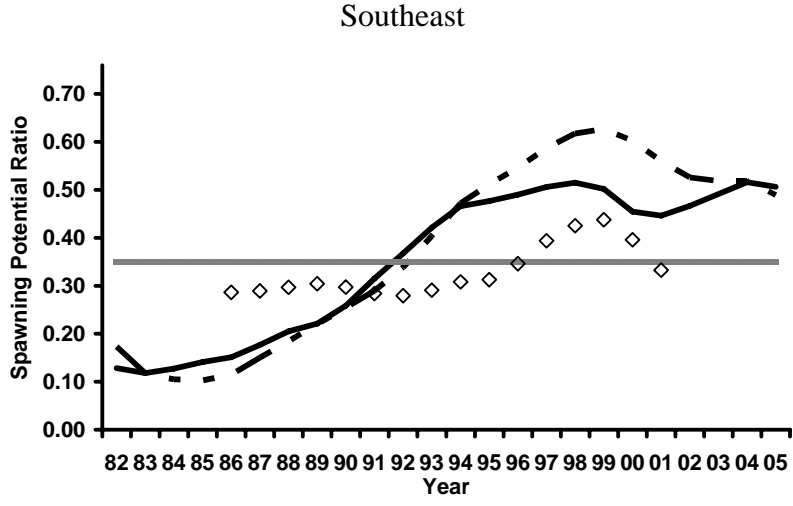
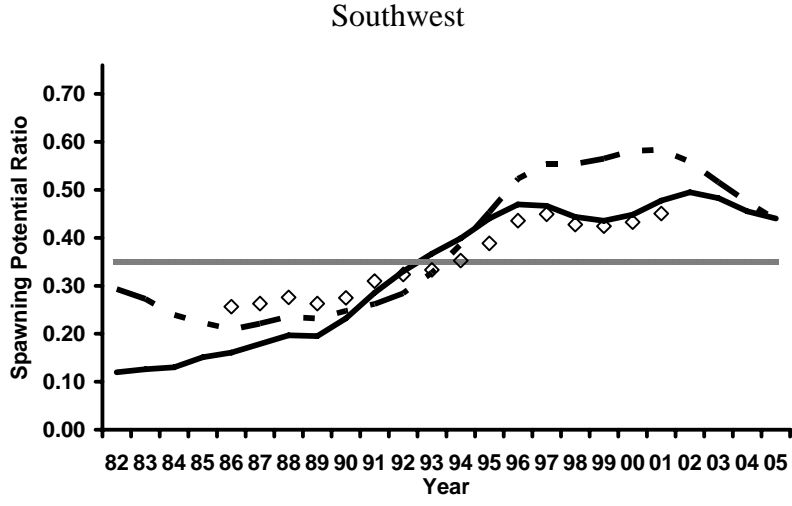
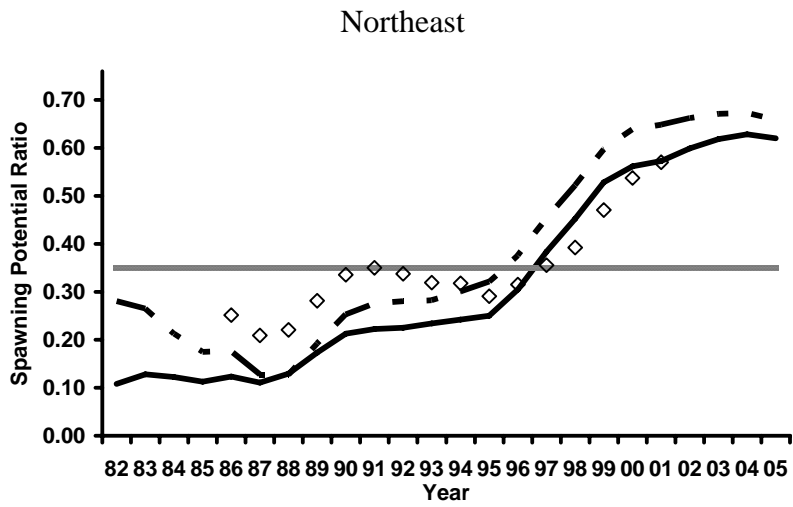
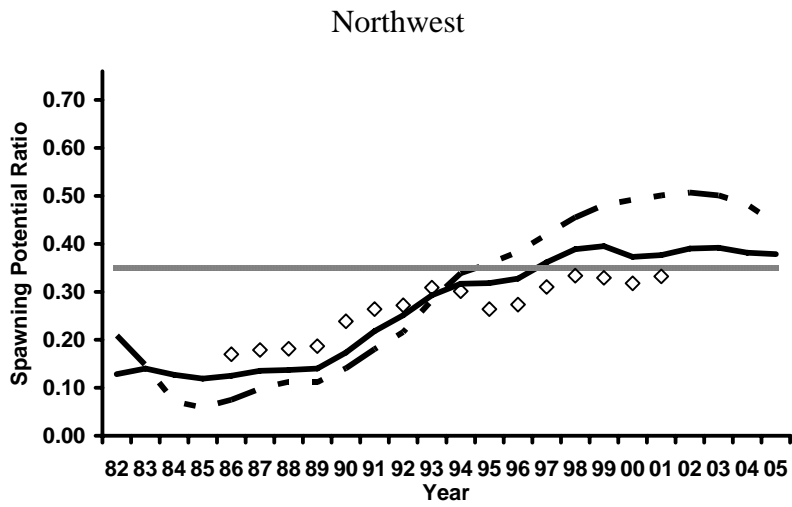


Figure 8.3.3. Transitional spawning potential ratios estimated for spotted seatrout using the current statistical catch-at-age model (solid line), the NMFS ToolBox model ASAP (dash-dot line), and the results from the 2003 assessment (diamonds). The current management target level of 35% tSPR is shown as a horizontal line.