

## Purpose

The Fisheries Reform Act of 1997 requires the N.C. Division of Marine Fisheries to prepare fishery management plans for adoption by the N.C. Marine Fisheries Commission for all commercially and recreationally significant species or fisheries that comprise state marine or estuarine resources. The goal of these plans is to ensure long-term viability of these fisheries. Each plan must:

- a. Contain necessary information pertaining to the fishery, including management goals and objectives, status of the relevant fish stocks, stock assessments for multi-year species, fishery habitat and water quality considerations consistent with Coastal Habitat Protection Plans, social and economic impact of the fishery to the state, and user conflicts.
- b. Recommend management actions pertaining to the fishery or fisheries.
- c. Include conservation and management measures that will provide the greatest overall benefit to the state, particularly with respect to commercial and recreational opportunities, protection of marine ecosystems, and sustainable harvest.
- d. If the fishery is overfished, specify a time period, not to exceed 10 years from the date of the adoption of the plan, for ending overfishing and achieving a sustainable harvest. This requirement does not apply to a plan for a fishery where the biology of the fish or environmental conditions make ending overfishing and achieving a sustainable harvest within 10 years impracticable.

## Definitions

**Sustainable Harvest**-the amount of fish a fishery can take on a continuing basis without reducing the stock biomass of the fishery or causing the fishery to become overfished.

**Spawning Potential Ratio (SPR)**-the reproductive potential of females in a fished stock, as compared to the reproductive potential of females in an unfished stock.

**Overfishing**-fishing that causes a level of mortality that prevents a fishery from producing sustainable harvest.

**Overfished**-the condition of a fishery that occurs when the spawning stock biomass of the fishery is below the level that is adequate for the recruitment class (juveniles) of a fishery to replace the spawning class of the fishery.

# North Carolina Spotted Seatrout Fishery Management Plan Advisory Committee

## Recreational

**Mike Holleman — Morehead City**

[mholleman@ec.rr.com](mailto:mholleman@ec.rr.com)

**Brian Horsley — Nags Head**

[bhorsley@embarqmail.com](mailto:bhorsley@embarqmail.com)

**Ricky Kellum — Jacksonville**

[ricky@speckledspecialist.com](mailto:ricky@speckledspecialist.com)

**Hubert Parrott — Kinston**

[ncparrott@gmail.com](mailto:ncparrott@gmail.com)

## Commercial

**Rodney Cahoon — Beaufort**

**Jamey Copeland — Stella**

[jcopeland8@ec.rr.com](mailto:jcopeland8@ec.rr.com)

**Sammy Corbett — Hampstead**

**I.D. Midgett, Jr. — Salvo**

[bertiek@charter.net](mailto:bertiek@charter.net)

**William “Jerry” Warren — Grantsboro**

[jerrywarren42@yahoo.com](mailto:jerrywarren42@yahoo.com)

## Scientist

**Tim Ellis — Beaufort**

[taellis@ncsu.edu](mailto:taellis@ncsu.edu)

**Peter Finkelstein — Raleigh**

[petefink@earthlink.net](mailto:petefink@earthlink.net)

**Joseph “Lee” Stone — Washington**

[lee\\_stone@embarqmail.com](mailto:lee_stone@embarqmail.com)



North Carolina Division of Marine Fisheries

P.O. Box 769

3441 Arendell Street

Morehead City, NC 28557

(252) 726-7021

(800) 682-2632

NORTH CAROLINA  
DIVISION OF MARINE FISHERIES

## North Carolina Fishery Management Plans



painting by John Silver, John Silver Gallery, Manteo, NC

## The FMP Process

This document provides information concerning the upcoming Spotted Seatrout Fishery Management Plan (FMP). The FMP is being developed by the N.C. Division of Marine Fisheries (DMF), with the aid of an Advisory Committee (AC) consisting of representatives from the commercial and recreational fishing and scientific communities.

A draft of the FMP will include a list of issues surrounding the fishery, in addition to possible solutions to resolve those issues. A series of meetings will be held to provide the public opportunity to comment after the draft is completed. The DMF and AC will then review and incorporate comments received, as necessary, and produce a final draft of the FMP. The N.C. Marine Fisheries Commission will select preferred management options for the final FMP.

**Spotted Seatrout  
(Speckled Trout)**



## Management

Spotted seatrout or speckled trout, are included in the Interjurisdictional FMP, which defers to Atlantic States Marine Fisheries Commission (ASMFC) FMP compliance requirements. The ASMFC FMP for spotted seatrout was initially approved in 1984 and is reviewed every three years. Amendment 1 (1991) added the objective of maintaining a spawning potential ratio (SPR) of at least 20 percent to minimize the possibility of recruitment failure. The completion of the N.C. Spotted Seatrout FMP should determine if North Carolina's spotted seatrout regulations are sufficient to achieve a 20 percent SPR and will recommend potential management options.

The unit stock for the N.C. Spotted Seatrout Stock Assessment included fish captured in North Carolina and Virginia. The DMF based this decision on results of a Virginia spotted seatrout tagging study where 15 percent of the recaptured fish were recaptured in North Carolina. Since mixing of fish from North Carolina and Virginia was observed, the North Carolina stock assessment included harvest data from both states. An aged based stock assessment indicated the spotted seatrout population was overfished and overfishing was occurring. The stock assessment combined life history information with data from commercial and recreational fisheries and DMF surveys. Managers need to alter the current management regime to prevent overfishing and ensure long-term sustainability. Regulations developed for spotted seatrout in this FMP will be for fish caught in North Carolina.

## Commercial Landings

North Carolina's commercial landings have fluctuated from a high in 1991 (660,662 pounds) to a low in 2001 (105,714 pounds) and a recent five-year high in 2007 ([374,708 pounds] Figure 1). North Carolina spotted seatrout are primarily harvested by gill nets and, to a lesser extent, long haul seines and beach seines. Virginia's commercial landings are comparatively low.

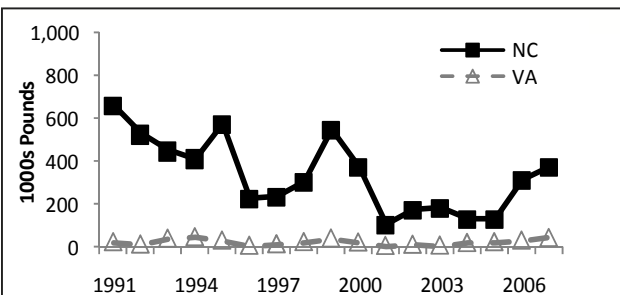


Figure 1. Spotted seatrout commercial landings in thousands of pounds from North Carolina and Virginia (1991-2007) based on the North Carolina Trip Ticket Program and the VMRC Mandatory Reporting Program.

# Spotted Seatrout

## North Carolina Fishery Management Plan

### Recreational Landings

North Carolina's recreational landings of spotted seatrout varied from 1991 to 2007 (Figure 2). The variability in recreational landings may be due, in part, to changes in recreational effort, population depletion, or cold stun events. North Carolina's recreational landings increased from an all time low in 2003 (175,521 pounds) to a record high in 2007 (961,167 pounds). The low catches in 1995, 2001, and 2003 followed winters with documented cold kill of spotted seatrout. The rapid increase since 2003 corresponded to milder winters when the overwinter mortality was likely decreased.

Virginia's recreational landings also varied from a low in 2001 (26,734 pounds) and in 2002 (28,882 pounds) to a high in 2007 (305,599 pounds), the highest recorded since 1991.

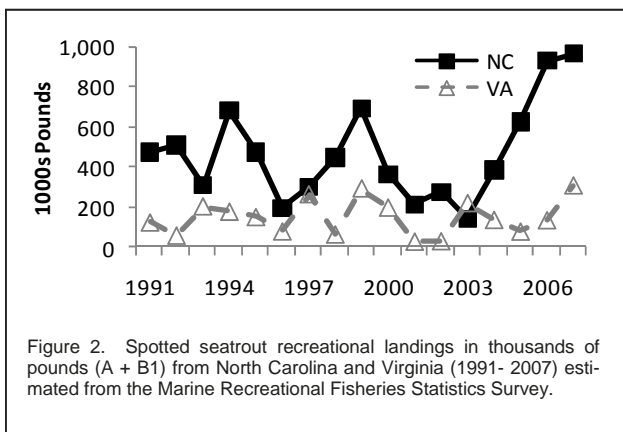


Figure 2. Spotted seatrout recreational landings in thousands of pounds (A + B1) from North Carolina and Virginia (1991- 2007) estimated from the Marine Recreational Fisheries Statistics Survey.

### Habitat and Environment

The association of juvenile and adult spotted seatrout with submerged aquatic vegetation (SAV) beds and wetlands is well documented. Spotted seatrout is one of the few targeted species managed by DMF that depends on estuaries throughout their life, resulting in concerns about loss or degradation of the SAV and wetland habitats.

Natural mortality rates for spotted seatrout heavily depend on environmental conditions. Variability in annual reported catch is typical for this species and seems to parallel climatic conditions of the preceding winter and spring. Low catches the following year tend to follow winter cold stun of juveniles and adults the previous year.

## Proposed Goals and Objectives

**Goal:** Determine the status of the stock and ensure long-term sustainability for the spotted seatrout stock in North Carolina.

### Objectives:

1. Develop an objective management program that provides conservation of the resource and sustainable harvest in the fishery.
2. Ensure the spawning stock is of sufficient capacity to prevent recruitment-overfishing.
3. Address socio-economic concerns of all user groups.
4. Restore, improve, and protect important habitats that affect growth, survival, and reproduction of the North Carolina spotted seatrout stock.
5. Evaluate, enhance, and initiate studies to increase understanding of spotted seatrout biology and population dynamics in North Carolina.
6. Promote public awareness regarding the status and management of the North Carolina spotted seatrout stock.

## Preliminary Issues

**Biological Issues:** Is the stock sustainable for the foreseeable future? Are there enough older age classes to buffer against a series of poor recruitment events?

**Management Options:** Given new information about its biological status, economic value, and social issues, how should the stock be regulated to maintain a sustainable harvest? How can data for spotted seatrout be improved? Is the current differentiation of inland and coastal waters appropriate?

**Environmental Issues:** How do cold stun events, pesticides, and endocrine disrupters affect the spotted seatrout population?

**Habitat Issues:** How are SAV and wetland habitats being affected by habitat alteration, dredging, dredge spoil placement, boating, point/nonpoint source pollution, sewage treatment and disposal, and hydrological modifications?

## What management issues are important to you?

Please send any suggestions to the following address:

Spotted Seatrout FMP  
North Carolina Division of Marine Fisheries  
P.O. Box 1965, Manteo, N.C. 27954  
(252) 473-5734 (ext. 221)

Beth.Burns@ncmail.net or Chip.Collier@ncmail.net