SPOTTED SEATROUT
(06/03 ARCHIVE - NCDMF)

Stock Status—Viable. Spotted seatrout are one of the few species that depend on estuaries throughout their life cycle, resulting in concerns about environmental impacts on the stock. Variability in annual reported catch is typical for this species, and seems to parallel the climatic conditions of the preceding winter and spring, i.e., low catches following severe winters (Merriner 1978), with winter cold shock of juveniles and adults cited as a primary factor in local and coastwide declines in spotted seatrout (Merriner 1980). There are concerns about the impact a cold water shock event of winter 2002-2003 had on North Carolina's spotted seatrout population. It should also be noted that catastrophic mortalities of spotted seatrout have also been attributed to hurricanes, excessive fresh water, red tide, and supersaturated dissolved oxygen conditions (Perret et al 1980). Spotted seatrout populations could be directly dependent on the availability of sea grasses, particularly for early life stages, and fluctuations in fish stock may parallel the abundance of grass. It is possible that the effects of hurricane Floyd could have had an affect on the abundance of sea grasses as well as the abundance of spotted seatrout in North Carolina since 1999.

Average Commercial Landings/Value 1993-2002 –340,767 lbs / $405,485

2002 Commercial Landings/Value—175,422 lbs / $213,511

Average Recreational Landings 1993-2002- 395,836 lbs and 2002: 274,387 lbs

Average Number of Award Citations (≥ 4 lbs) 1993-2002: 339 and 2002: 353

Status of Fisheries Management Plan— The Atlantic States Marine Fisheries Commission (ASMFC) Fishery Management Plan (FMP) for Spotted Seatrout was approved in 1984, and the stock determined to be healthy. The FMP applies to all states from Florida through Maryland, and all are in compliance. The ASMFC plan review team agreed that since the spotted seatrout population appears to be comprised of several stocks throughout its range, it would be best to manage spotted seatrout through separate Estuarine Regional Management Plans, and not to continue towards achieving full implementation of the FMP. The FMP will be reviewed periodically (every 3 yrs) and updated to incorporate new data and research findings and to assess the status of stocks and the fisheries. Amendment Number 1, approved by the ASMFC Policy Board on November, 1991, added an objective of maintaining a spawning potential ratio (SPR) of at least 20% to minimize the possibility of recruitment failure.

Research and Data Needs— validated index of juvenile abundance, fishery independent data, commercial and recreational mortality estimates, stock assessment.

Current Minimum Size Limit—12" TL. Ten fish bag limit per person per day taken by hook and line.

Harvest Season— Open year round.

Size and Age at Maturity— 7-9 inches FL/ <1 year old.
Males mature at a younger age, smaller size, and earlier in the season than females.

Historical and Current Maximum Age— 12 years/ 9 years old.
Age composition of spotted seatrout sampled from recent archeological investigations indicate that a maximum age of 12 years is more approprate for use in calculating SPRs than 15 yrs.

Juvenile Abundance Indices— unknown

Habits/Habitats— Estuarine dependent member of the Sciaenidae family that includes kingfish, spot, croaker, red drum, black drum, and weakfish. Peak catches occur in the fall, although May and June are also productive months. Variability in annual reported catch is typical for this species and seems to parallel the climatic

conditions of the preceding winter and spring, i.e., low catches following severe winters, with winter cold shock of juveniles and adults cited as a primary factor in local and coastwide declines in spotted seatrout. Spotted seatrout "sub-stocks" generally remain within estuaries of respective state jurisdictions. However, populations north of North Carolina tend to leave the estuaries in early winter and return the next spring, and this may be true of spotted seatrout in northernmost areas of North Carolina. North Carolina spotted seatrout have a protracted spawning season which extends from late April through early October. Juveniles are dependent on estuarine habitat, as seagrass habitats are critical nursery areas.

For more information, see DMF Species Leads page