

BAY SCALLOP

(06/09 ARCHIVE - NCDMF)

Stock Status - Recovering - In recent years, harvest has decreased to essentially no landings because of recruitment failure resulting from a red tide event in 1987, several hurricanes in the 1990s, fishing effort, and cownose ray predation. The main harvest season was not opened in January 2008 due to limited availability of scallops earlier in the year. Fishery independent sampling occurred for the first time in Pamlico Sound and showed improvements in Bogue, Back and Core Sounds later in 2008. The target index was reached in Core Sound in October 2008.

Average Commercial Landings and Value 1999-2008 - 8,669 lbs. of meat/ \$30,937

2008 Commercial Landings and Value - no open harvest season

Average Recreational Landings 1999-2008 - unknown, **2008** - no open harvest season

Status of Fisheries Management Plan (FMP) - The bay scallop FMP was adopted in November 2007. The FMP implemented an indefinite prohibited take period until an independent sampling indicator can determine re-opening with further measures in place before re-opening to ensure spawning is complete and the economic yield is at an optimum for fishermen. Target indices were established from fishery independent data collected before the red tide event in 1984 and 1985 in Core, Back, and Bogue sounds to determine re-opening the fisheries. Improving data collection on the biology, harvest, environment, and socioeconomic aspects relative to bay scallops is recommended throughout the FMP to provide more comprehensive information for assisting in future management decisions.

Data and Research Needs - Stock identification, recreational landings, recruitment, population abundance, and socioeconomic data, enhancement, cownose ray predation, habitat alterations and water quality impacts to bay scallop survival are recommended research items

Current Minimum Size Limit - none

Harvest Season - An open commercial or recreational harvest season will not be opened unless the 1984-85 fishery independent sampling target indices are reached in the main harvest areas.

Size and Age at Maturity - 1.5 inches, (shell height)/6 months

Historical and Current Maximum Age - 2 years/1.5 years

1984-85 Target Abundance Indices and Abundance Indices 2008 -

Core Sound (Oct) **1984-85** - 1.72 ln(scallops per min.), **2008** - 2.94 ln(scallops per min.)

Bogue Sound (Oct.) **1984-85** - 2.33 ln(scallops per min.), **2008** - 1.21 ln(scallops per min.)

Back Sound (Oct) **1984-85** - 2.02 ln(scallops per min.), **2008** - 1.41 ln(scallops per min.)

Pamlico Sound (Feb) **2008** - 2.70 scallops per 1-m² quadrant, first year of sampling

Habits and Habitats - Bay scallops are estuarine dependent mollusks found in grass beds. Bay scallops are hermaphroditic (contain both sex cells) bivalve and mature and spawn in a year. Their lifespan is only 12-26 months. In North Carolina, bay scallops spawn predominantly from August through January and again in March through May. The larvae go through several swimming stages before attaching to a suitable substrate such as seagrass. Upon reaching a size of approximately 1 inch (20-30 mm), bay scallops drop to the bottom. Although other benthic structures can be utilized for attachment, bay scallops utilize seagrass beds almost exclusively, and are therefore highly dependent on this habitat for successful recruitment. Bay

scallops are filter feeders and feed on benthic diatoms. Predators of the bay scallop include cownose rays, blue crabs, starfish, whelks, and herring gulls.

For more information, see [DMF Species Leads page](#).