

STRIPED MULLET

Stock Status - *Viable* - Overfishing is not occurring based on the threshold fishing mortality rate ($F_{25\%} = 1.25$) and has not been overfished since 1998. Landings occur mostly in the later half of the year, allowing females to mature before entering the fishery. The age structure of the stock indicates the majority of reproduction comes from the younger age classes. Most commercial exploitation targets roe-carrying females. Historically, the commercial fishery has had sustained landings similar in scope to current levels. Accurate recreational harvest estimates of striped mullet used for bait are difficult to obtain.

Average Commercial Landings and Value - 2000-2009 – 1,935,025 lbs./\$942,520

2009 Commercial Landings and Value - 1,685,615 lbs./\$715,265

Average Recreational Landings - The Marine Recreational Information Program (MRIP) is designed to sample anglers who use rod and reel as the mode of capture. Since the majority of striped mullet are caught with cast nets for bait, recreational harvest data are imprecise. Mullet are usually released by anglers before observation by creel clerks and therefore, cannot be identified to the species level.

Status of Fisheries Management Plan (FMP) - The N.C. Marine Fisheries Commission adopted the state FMP on April 27, 2006. There is no inter-jurisdictional management over the Atlantic coast striped mullet population. Review of the current FMP is scheduled to begin July 2010.

Data and Research Needs - Collect life history information regarding maturity, age-growth, identification of spawning locations, and larval and juvenile movements; continued improvements in estimating recreational hook and line and bait harvests; length and age compositions and catch-per-unit-effort of commercial, recreational, and recreational-commercial gear fisheries, as well as from all relevant fishery-independent surveys; improve and validate available juvenile abundance indices.

Current Regulations - There are no size restrictions, but as of July 1, 2006 there is a 200 mullet (white and striped aggregate) daily possession limit per person in the recreational fishery.

Harvest Season - There are no restrictions, except for area and season closures for the commercial stop-net beach seine fishery along Bogue Banks.

Size and Age at Maturity - Males: 11.2 inches fork length (FL)/2 years; Females: 13.4 inches FL/2 years

Current Maximum Age – Males: 7 years; Females: 11 years

Juvenile Abundance Index - Unknown; a research recommendation in the North Carolina FMP is to validate available juvenile abundance estimates.

Habits and Habitats - Striped mullet are found in a wide range of depths and habitats primarily in freshwater to estuarine environments, until a spawning migration into ocean waters occurs during the fall. Aside from its considerable economic importance, striped mullet also serve as an important ecological link between some of the smallest aquatic organisms and the highest-level predators in the marine food chain. Mullet feed on microorganisms such as bacteria, unicellular diatoms, and unicellular algae found on aquatic plants, in mud, silt, and sand, and in decaying plant material. In turn, striped mullet are prey to top predators such as birds, fish, sharks, and porpoises. Striped mullet are highly fecund

(upwards of 4 million eggs for a large female) and spawn in large aggregations near inlets to offshore areas. Spawning individuals have been reported from September to March; however peak spawning activity occurs from October to early December.

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