



## Introduction

Along the continental shelf of the southeastern United States, areas of live bottom (sponge, soft coral, and algal growth) in depths from 60-150 ft provide habitat for the black sea bass (“blackfish”) populations that support important commercial and recreational fisheries. Juvenile black sea bass are found in coastal estuaries on oyster reefs, and around jetties and piers, but most fishing takes place on offshore natural and man-made reefs. From the “blackfish banks” on the inner shelf (60 ft), to the mid-shelf “snapper banks” (120 ft), and occasionally on the outer shelf (to 150 ft), black sea bass are one of the main targets of recreational anglers who fish on the bottom near artificial and natural reefs, and the species supports commercial hook-and-line and trap (sea bass pot) fisheries on natural reefs. Managed by federal fishery management agencies as part of the “Snapper-Grouper Complex”, black sea bass are subject to intense fishing pressure and were declared overfished and undergoing overfishing in 2005 by these federal agencies. Management restrictions to allow black sea bass to rebuild are being considered by federal management agencies.

## Commercial Fishery Harvest

Black sea bass have historically supported a regional offshore fishery with landings in South Carolina showing a cyclical pattern of 10-year periods of high catches (Figure 1), followed by declines. There appears however to be a steady decline in landings since last peak in the early 1980s. The value per pound has increased substantially since 1980, with fishermen being paid over \$1.50 per pound

in 2002-2003 with a slight decline in 2004. Although the landings have been cyclical, the steady decline in commercial landings since the last peak in 1990 indicates overfishing. Catches in 2004 and 2006 were the highest recorded in recent years.

## Recreational Fishery Harvest

Black sea bass are a favorite target of head boats (party boats that charge by the head for a full or half day fishing) and other recreational fishing boats on natural and artificial reefs. Recreational catches of black sea bass also have been cyclical, and the downward trend in catches since 1991 parallels that in the commercial sector (Figure 2), with resurgences in 2004 and 2006.

## Fishery Independent Sampling

Numbers of black sea bass in MARMAP (Marine Resources Monitoring, Assessment and Prediction) fish trap catches also seem to show a 10-year abundance cycle, with peaks in 1990 and around 2000, although too few decades have been sampled to confirm this. Catches in 2005 were near the 18-year average, and catches have increased since a low in 2003, when unusually cool seawater temperatures throughout the region were believed to have resulted in low catches of many species of reef fish. Catches in 2007 were still below the maximum reported in 1999, and continue a downward trend evident since 1990. Abundance throughout the sampling period is believed to be much lower than in the 1960s and 1970s.

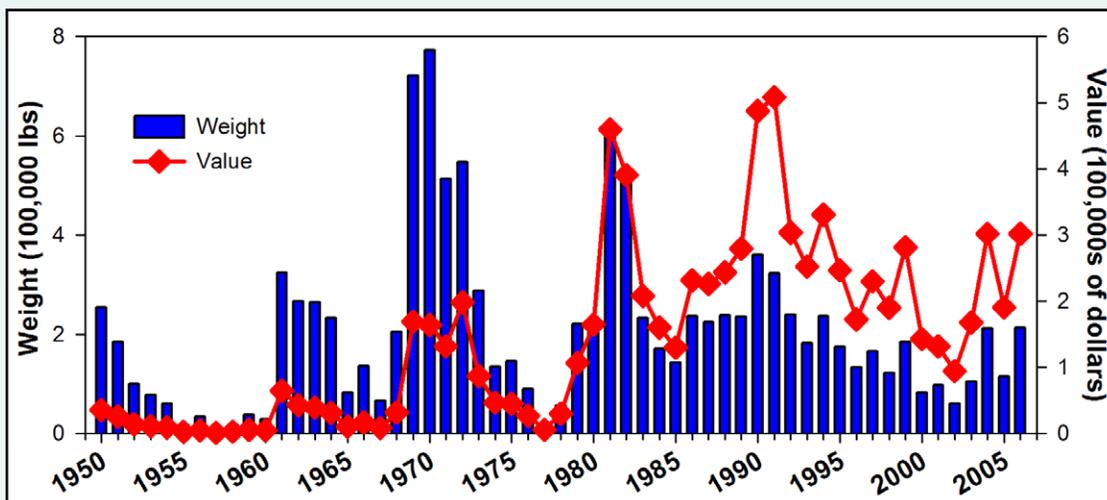


Figure 1. South Carolina commercial black sea bass landings in pounds and dollars.

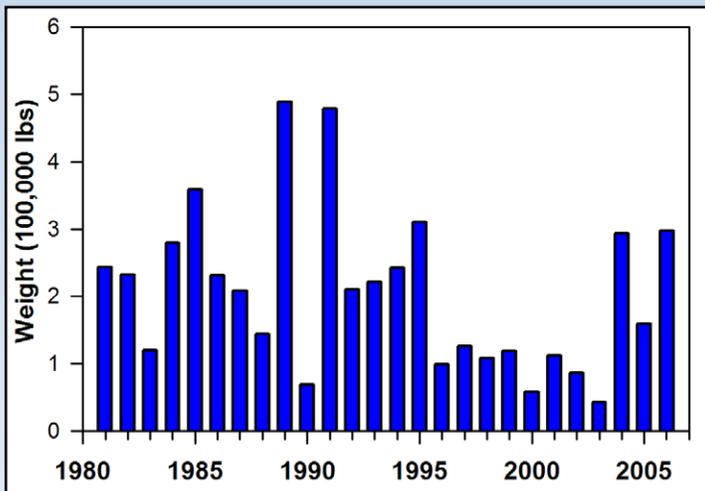


Figure 2. South Carolina recreational black sea bass landings in pounds.

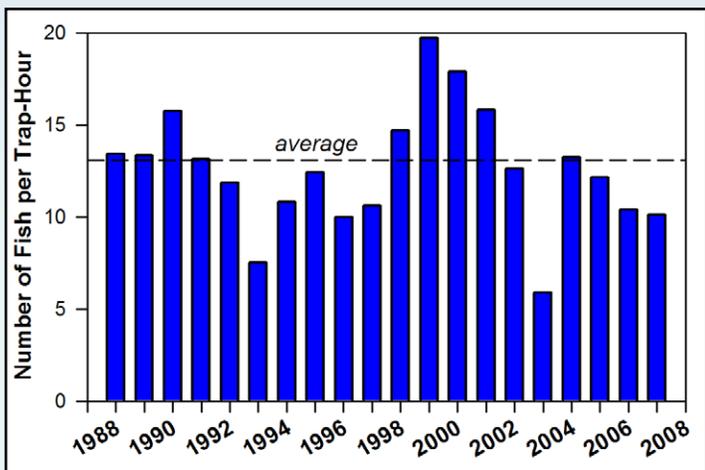
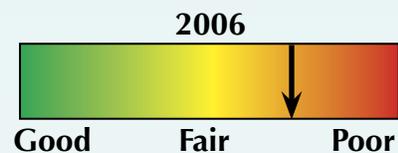


Figure 3. Number of black sea bass caught per trap hour in MARMAP fish trap surveys.

### Overall Condition of the Stock and Status of Management

The fishery-independent catches have been declining since a peak in 1999, and black sea bass is classified by federal fishery managers as overfished and undergoing overfishing. The most recent stock assessment found that while the biomass of black sea bass has been stable since around 1990, it is only about 25% of the amount in an unfished population. The population has therefore been overfished since about 1990. Long-term commercial landings data indicate that more recent catches are well below the catches recorded in the early 1970s.

The South Atlantic Fishery Management Council has proposed additional restrictions on the commercial fishery for black sea bass for the region from North Carolina to Florida. Current regulations set the following allocation of total catch; 423,000 lbs gutted weight, to be decreased to 309,000 lbs on June 1, 2008, until the stock recovers. Commercial regulations also require use of 2-inch mesh for the entire panel of black sea bass pots and the fishing year has changed to June 1 through May 31. Current regulations on the recreational fishery include a 15 fish per trip limit, and a minimum size of 12 inches, and a total catch of: 560,000 lbs to be decreased to 409,000 lbs on June 1, 2008, until the stock recovers. These regulations are expected to produce a 25-27% reduction in commercial harvest and a 46% reduction in recreational landings. It is believed that a 62% reduction in overall catch is needed to allow the stock to recover.



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