



## Black Sea Bass Stock Assessment Update

### 6 Things To Know

1. How do we assess the population? The limited information on black sea bass was integrated into a useful mathematical model called a statistical catch at length model (SCALE). Using this framework, the population is modeled, much as the U.S. Census Bureau models human populations using similar data—population size at age, growth rates, age at maturity, reproductive potential and success, life span, and removals by deaths. This black sea bass stock assessment model uses widely-accepted and commonly-used fishery science principles to analyze the population size. The data used have been collected annually since 1968 from fish caught (recreational (since 1981) and commercial) and fish sampled in the ocean (taken on research surveys). Information from a tagging study and age data led to the conclusion that natural mortality was higher than previously modeled. Additionally, the interpretation of historical landings concluded that landings taken in the 1950s were not at sustainable levels.

2. Is black sea bass no longer considered a data poor stock? No. Despite the applied modeling approach (SCALE) which better integrates limited information to analyze the black sea bass population, it is still considered a “data poor” stock. There are still gaps in critical life history information for black sea bass life and the current sampling gear may not be optimal to assess the population; these issues will need to be addressed through improved data collection and fish sampling programs and research.

3. How do we "check" the models? By conducting a peer review of the assessment such as the December 2008 Northeast Data Poor Stocks Peer Review for black sea bass. A working group of fishery scientists conducts a thorough evaluation of available data, methods and models, and selects those that best represent the black sea bass population. This work is then “peer reviewed” by a group of independent experts. The peer reviews have validated assessment results and helped improve stock assessment methods and modeling. Stock assessment updates are conducted in the years between peer reviews. Updates include the most recent data, but apply the exact same methods that were validated by the peer-review. The 2010 stock assessment update included data through 2009.

4. Is the black sea bass stock rebuilt? The December 2008 data poor stock peer review set the rebuilding goal as 27.6 million pounds of spawning stock biomass. The stock exceeded the goal in 2003 and 2004; therefore it is no longer under a rebuilding program. The most recent stock assessment update indicated that the 2009 spawning stock size is about 104% of the biomass goal.

5. Are we overfished or overfishing? No, the stock is not considered overfished and is not currently experiencing overfishing based on a review of the most recent year’s data (2009) in the stock assessment update.

6. Have harvest quotas and limits been set too low in the past? No. The quotas and limits have been set consistent with the scientific advice. The Data Poor Stocks Peer Review Panel recommended that, “the Science and Statistical Committee recognize and allow for the sizable uncertainty in stock status when establishing catch limits”.