



Scup Stock Assessment Update

5 Things To Know

1. How do we assess the population? The information on scup was integrated into a useful mathematical model called an age-structured assessment program (ASAP). 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 scup 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 1963 from fish caught (recreational (since 1981) and commercial) and fish sampled in the ocean (taken on research surveys.) A simpler assessment approach was used in the past because the analytical models (like ASAP) did not work well when they were attempted previously. The ASAP model utilizes more sources of information on scup which indicate age-structure and recruitment have improved in recent years.

2. 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 scup. A working group of fishery scientists conducts a thorough evaluation of available data, methods and models, and selects those that best represent the scup 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.

3. Is the scup stock rebuilt? The December 2008 data poor stock peer review set the rebuilding goal as 203 million pounds of spawning stock biomass. The stock is no longer under a rebuilding program because the spawning stock biomass exceeded the rebuilding goal in the most recent five years, 2004-2009. The most recent stock assessment update indicated that the 2009 spawning stock size is about 170% of the biomass goal.

4. Are we overfished or overfishing? No, the stock is not considered overfished and is not currently experiencing overfishing.

5. 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 stated that, “rapid increases in quota to meet the revised MSY [maximum sustainable yields] would be unwarranted given uncertainties in recent recruitments” and, “a more gradual increase in quotas is a preferred approach reflective of the uncertainty in the model estimates and stock status”.