

2015 Maryland FMP Report (August 2016)

Section 16. Scup (*Stenotomus chrysops*)

A coastwide assessment of the scup stock along the Atlantic Coast was completed in 2015. Relative to new biological reference points, the scup stock is not overfished and overfishing is not occurring (based on data through 2014). Current estimates of increased stock abundance are attributed to low fishing mortality (F) and higher levels of recruitment over the last twenty years.¹ Scup commercial harvest in Maryland was minimal and highly variable from the late 1960's through 2012 compared to other Atlantic Coast states. Commercial scup landings from the Maryland winter trawl fishery have been increasing in recent years, although preliminary estimates for 2015 indicate a decrease in landings. Scup are rarely caught by recreational anglers in Maryland offshore or inshore. However, scup is a major recreational fishery along the northeastern Atlantic coast.

Fishery Management Plans (FMPs)

No Chesapeake Bay Program fishery management plan (FMP) has been developed for scup. The Maryland Department of Natural Resources' authority to manage scup as a species in need of conservation was established in 1994.²

Scup are jointly managed by the Atlantic States Marine Fisheries Commission (ASMFC) and the Mid-Atlantic Fishery Management Council (MAFMC). The ASMFC manages scup fisheries in state waters (out to three miles) while the MAFMC manages scup fisheries in federal waters (3-200 miles offshore). Scup were incorporated into the ASMFC and MAFMC summer flounder FMPs in 1996. Since then, a series of amendments and addenda have been implemented to modify management measures.

ASMFC Addendum IV (2001) established procedures that simplified, clarified, and expedited the setting and implementation of fishery specifications. Addendum V (2002) established state-specific quota for the summer fishery. Addenda III (2001), VII (2002), IX (2003), XI (2004), and XIII (2004) implemented catch and minimum size limits

for recreational fisheries. Addendum XVI (2005) established measures to ensure prompt implementation of compliance requirements. Addendum XX (2009) clarified the procedures for state-to-state quota transfers. The MAFMC established an initial overfishing definition with Amendment 12 in 1999. In 2007, the MAFMC established a rebuilding plan with Amendment 14, established annual catch limits and accountability measures with Amendment 15 (2011), and modified the measures with Amendment 19 (2014). Several frameworks (addenda) have been implemented since 1996. Amendment 17 (2015) was approved by the MAFMC to comply with the standardized bycatch reporting methodology (SBRM) requirements of the Magnuson-Stevens Act. The amendment (1) explains the methods and processes by which bycatch is currently monitored and assessed for Greater Atlantic Region fisheries; (2) determines whether these methods and processes need to be modified and/or supplemented; (3) establishes standards of precision for bycatch estimation for all Greater Atlantic Region fisheries; and (4) documents the SBRMs established for all fisheries managed through the FMPs of the Greater Atlantic Region.³

Stock Status

The Scup Benchmark Stock Assessment Report was completed in August 2015. The ASMFC 2015 scup stock assessment determined scup are not overfished and overfishing is not occurring relative to the revised biological reference points (BRPs) and data through 2014.¹ The fishing mortality rate (F) was estimated to be 0.049, below the fishing mortality threshold reference point = FMSY = F40% = 0.177. Spawning Stock Biomass (SSB) was estimated to be 219,066 metric tons (MT) = 483 million lbs., above the biomass target reference point = SSBMSY = SSB40% = 92,044 MT = 203 million lbs.¹ New reference points were defined in the assessment and can be found at: <http://www.asmfc.org/uploads/file/55d238fb2015ScupBenchmarkStockAssessment.pdf>

Current Management Measures

The ASMFC/MAFMC determine an annual Acceptable Biological Catch (ABC) that is divided into an Annual Catch Limit (ACL) for the commercial and recreational fisheries (includes harvest and discards). The majority of coastwide scup harvest is allocated to the commercial fishery (78%). The remaining 22% of harvest is allocated to the recreational fishery.¹ Maryland's commercial fishery is open all year with a minimum size limit of 9" in state waters and 9" in federal waters.⁴ All commercial harvesters in federal waters must have a federal permit.

The annual coastwide commercial quota is divided among three fishing seasons: January-April (Winter I = 45%), May-October (Summer = 39%), and November- December (Winter II = 16%). Winter fisheries are managed with trip limits. Winter I is 50,000 pounds per trip until 80% of quota is caught at which point it will drop to 1,000 pounds per trip.⁵ Winter II landings were set at 18,000 pounds per trip.⁶ The summer fishery in state waters is managed by quota; Maryland's allocation is 0.012%.^{7,8} There are no state quotas for federal waters. Fishing gear mesh size and escape panel regulations have been implemented for the commercial fishery.

Recreational harvest regulations differ between state and federal waters. In Maryland and states south of Delaware, the minimum size limit is 8" with a possession limit of 50 fish per person per day.⁶ In 2015, scup limits were 50 fish per day with a 9" size limit in federal waters.

The Fisheries

In Maryland, the commercial scup harvest occurs in winter as part of the mixed black sea bass/scup/summer flounder fishery. Scup are primarily harvested by trawl, although juveniles are often caught in black sea bass pots. Scup harvest can be highly variable among years (Figure 1). Commercial scup harvest was 54,200 pounds in 2011; 8,260 pounds in 2012; 315,400 pounds in 2013, 527,953 pounds in 2014 and 25,869 pounds in 2015 (Figure 1).⁹ However, available

commercial scup landings are limited because some of the data are confidential. The increase in harvest in 2013 and 2014 was the result of several boats from New Jersey landing in Maryland and does not indicate a change in local abundance of fish.

Recreational landings data are not available for much of the 1980s and 1990s (Figure 2). The Marine Recreational Information Program (MRIP) estimated that recreational anglers harvested 18 scup in 2010, 11 scup in 2011, and 0 scup through 2015¹⁰ (Figure 2). The mean proportional standard error (PSE) for these harvest data was 71. A PSE value greater than 50 indicates a very imprecise estimate.

Issues/Concerns

Maryland commercial scup harvest has not returned to pre-1970 levels. Scup harvest occurs offshore and is highly variable. The MAFMC has proposed modifying the southern scup gear restricted area (GRA). The proposal would modify the boundaries of the area and would increase access to traditional squid fishing areas while still protecting juvenile scup. Public comment on the proposal will be open until mid-September 2016. For more detail, go to : <http://www.mafmc.org/actions/scup-gear-restricted-areas-framework>

Shifts in the distribution of fish along the Atlantic coast have been due to increasing water temperature have been demonstrated. Scup exhibit more northerly trends in distribution in the spring. Changes in the center of biomass may have implications for the fishery especially in state quota management. Fish that were once available in one area may no longer be available in that area.¹¹

Figure 1. The commercial harvest of scup in Maryland since 1950.⁹ Harvest data is not available for the years 1996, 2001-2003, and 2006-2008. Data for 2015 is preliminary.

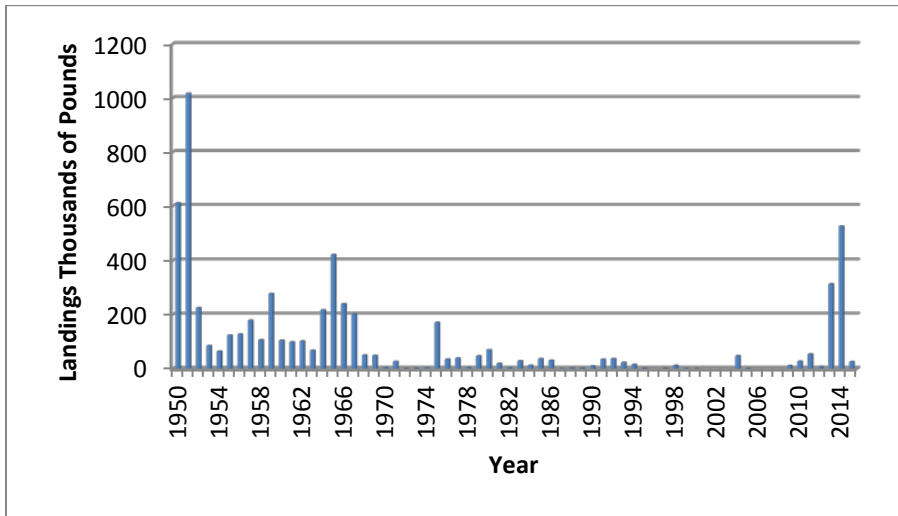
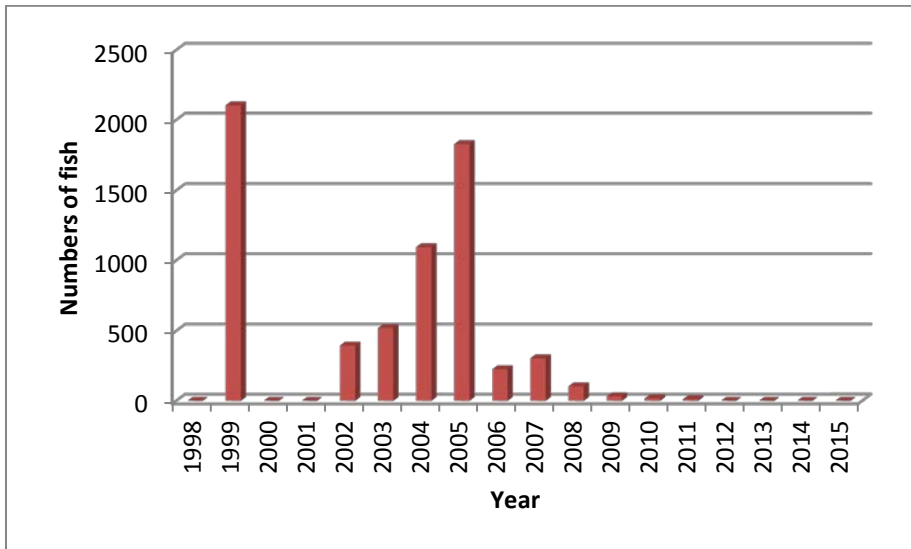


Figure 2. The recreational scup harvest in Maryland since 1998.¹⁰



References

- ¹ Northeast Fisheries Science Center. 2015. 60th Northeast Regional Stock Assessment Workshop (60th SAW) Assessment Report. US Dept. Commer, Northeast Fish Sci Cent Ref Doc. 15-08; 870 p. doi: 10.7289/V5W37T9T. <http://nefsc.noaa.gov/publications/crd/crd1508/>
- ² Maryland Office of the Secretary of the State. COMAR 08.02.12.03. Retrieved July 25, 2011: <http://www.dsd.state.md.us/comar/comarhtml/08/08.02.12.03.htm>
- ³ Mid-Atlantic Fisheries Management Council 2015. Standardized Bycatch Reporting Methodology An Omnibus Amendment to the Fishery Management Plans of the Mid-Atlantic and New England Regional Fishery Management Councils
- ⁴ Doctor, S. 2016. Maryland's 2015 annual compliance report for scup. Maryland Department of Natural Resources. Stevensville, MD.
- ⁵ Mid-Atlantic Fishery Management Council. 2013. Scup Advisory Panel Information Document. <http://static.squarespace.com/static/511cdc7fe4b00307a2628ac6/t/52444638e4b0bb95409582fb/1380206136186/Scup%20AP%20FPR%20Info%20Doc%20August%202013.pdf>
- ⁶ Department of Commerce, National Oceanic and Atmospheric Administration, National Marine Fisheries Service. (2014). Fisheries of the Northeastern United States; Summer Flounder, Scup, and Black Sea Bass Fisheries; 2014 Summer Flounder Specifications; 2015 Summer Flounder, Scup, and Black Sea Bass Specifications; 2014 Research Set-Aside Projects (Federal Register No. 79(61)).
- ⁷ Atlantic States Marine Fisheries Commission. 2002. Addendum V to the scup fishery management plan: Summer period commercial scup allocation. Atlantic States Marine Fisheries Commission. Washington, DC.

⁸ Atlantic States Marine Fisheries Commission. 2009. Addendum XX to the summer flounder, scup, and black sea bass fishery management plan: Commercial quota transfer provisions for black sea bass and scup (summer period only). Atlantic States Marine Fisheries Commission. Washington, DC.

⁹ Personal communication from the NOAA Fisheries, Northeast Regional Office. March 23, 2016:
http://www.nero.noaa.gov/ro/fso/reports/reports_frame.htm

¹⁰ Personal communication from the National Marine Fisheries Service, Fisheries Statistics Division. March 23, 2016:
<http://www.st.nmfs.noaa.gov/recreational-fisheries/index>.

¹¹ Bell, R.J, Richardson, D.E., Hare, J. A., Lynch, P.D., and Fratantoni, P. S. 2015. Disentangling the effects of climate, abundance, and size on the distribution of marine fish: an example based on four stocks from the Northeast US shelf. ICES Journal of Marine Science, 72:1311-1322