Atlantic Menhaden Technical Committee March 16-17, 2006 Providence, RI

Technical Committee Meeting Summary

Meeting Participants:

Behzad Mahmoudi (Chair) Gary Nelson Matt Cieri Ellen Cosby Jason McNamee Clif Tipton Brandon Muffley

Guests:

Derek Orner Steve Meyers Amy Kenney Jeff Kaelin Kurt Gottschall Linda Barker Joseph Smith Douglas Vaughan Trish Murphy Nancy Wallace (Staff) Bill Windley, (AP Chair)

Niels Moore Jim Price Anthony Overton Bob Beal

Meeting Summary

Introduction

The Atlantic Menhaden Technical Committee met on March 16-17, 2006 in Providence Rhode Island. This meeting was a data workshop in preparation of the 2006 stock assessment. This stock assessment is an update from the 2003 peer reviewed assessment and will not be peer reviewed. It will use similar datasets and methodology as the 2003 assessment, updating the data from 2002 through 2005.

Behzad Mahmoudi, TC Chair, welcomed all the participants and guests and reviewed the agenda. At the last Menhaden Management Board meeting, the Board requested that Rob Latour from VIMS, give a presentation on striped bass diet studies in the Chesapeake Bay. Rob was unable to make this meeting and will present at a future TC meeting.

Clif Tipton from the USFWS gave an update on the progress of the LIDAR study in Chesapeake Bay. The study is expected to start in early September 2006. The researchers are still in need of a boat to conduct the ground truthing part of the study.

Derek Orner from the NOAA Chesapeake Bay Office gave an update on the research programs that his office is funding related to menhaden. He is planning to hold quarterly research reviews using web-conferencing to update participants on the progress of these studies. Dr. Anthony Overton from East Carolina State University gave a presentation on striped bass diet studies along the east coast and specifically in North Carolina. The TC discussed this presentation and said that it would be beneficial to revisit this study when updating the MSVPA model and they support more spatial diet data being collected.

Data Workshop

Fishery Dependent Data

Joe Smith from the NOAA Beaufort lab gave a presentation of the 2005 reduction fishery landings for menhaden. Landings were down about 20% from the previous year. This was mostly due to Beaufort Fisheries in North Carolina not fishing in 2005.

Joe described the fishery dependent data that is collected from the reduction fishery and how the fishery is sampled. Landings from the companies are reported on a monthly basis. The catch at age is by week by port.

Joe calculated both triggers that would be used in a non-assessment year to determine if a stock assessment was needed. Updating the 2005 landings set neither of these triggers.

The reduction fisheries landing data will be incorporated into the stock assessment using the same method as in 2003.

Brandon Muffley from the NJ Division of Fish and Wildlife gave an update on the 2005 menhaden bait landings. There were more landings in the northern states then there have been in many years. It was recommended that Maine, Massachusetts, Rhode Island, Maryland and New Jersey sample the bait landings for age and size data. Overall, bait landing increased by 8% from 2004 with VA, NJ, MD and PRFC comprising 94% of the bait landings.

In 2005, bait landings accounted for 20% of the total menhaden landings.

The Maryland pound net landings of menhaden doubled in 2005. Linda Barker from the MD DNR will investigate this further.

Some of the bait landings were still preliminary. All bait landings from states should be finalized by early April and sent to Doug Vaughan for inclusion in the stock assessment.

Fishery Independent Data

Doug Vaughan from the NOAA Beaufort lab went through the young of the years surveys that were used in the last assessment. These surveys include:

- 1. North Carolina Alosid seine survey
- 2. Virginia Striped Bass seine survey
- 3. Maryland Striped Bass seine survey

- 4. Connecticut River seine survey
- 5. Rhode Island Narragansett Bay survey

All surveys will be included in the stock assessment. The only change is in the North Carolina seine survey. The index will be based on sampling locations that were consistent throughout the time series. This is a very minor change because the model uses the trend of the survey and not the scale.

The annual Potomac River pound net catches of menhaden were used in the 2003 assessment as a biomass index based on the number of pound net licenses. This will be refined in the 2006 assessment using days fished as the effort rather than licenses issued.

The TC also discussed additional data sources that may be used in the next peer reviewed assessment. These included the VIMS trawl survey, the New Jersey seine survey, surveys in Long Island Sound, and impingement rates of menhaden.

Natural Mortality

Matt Cieri from Maine DMF, gave a presentation on the MSVPA model that recently went through peer review. The age specific natural mortality estimate for menhaden that was used in the 2003 assessment was a result of this model. The MSVPA has been updated from the 2003 assessment and the new natural mortality estimates for menhaden will be used in the 2006 assessment. The TC decided that entire time series would be used in the base run of the menhaden assessment and a sensitivity run would be conducted using the last 5 years of the MSVPA.

Research Recommendations

The TC discussed data needed for an improved peer reviewed assessment in 2009 and what research should be conducted to collect this data.

- 1. Menhaden productivity studies by area along the Atlantic Coast. The studies conducted by Dean Ahrenholz in the late 1970s should be updated using similar gear, locations and methodology. This study could be done in one year, sampling locations from Maine to Florida.
- 2. Conduct new size/age at maturity research by geographic regions along the Atlantic coast- already underway at the Beaufort lab.
- 3. Need a fishery independent adult index. There is a possibility this can be done using an aerial survey. Pilots in New England may be able to assist with this project. Rhode Island and North Carolina currently catch adult menhaden in their multi-panel gillnet surveys. This data should be investigated for possible inclusion in the next assessment. The Pilgrim Power Plant in Massachusetts also has data that may be useful.
- 4. Economic data for the commercial menhaden fishery (reduction and bait). The SAFIS system in Massachusetts and Rhode Island is already collected some of this data.

Follow up Tasks

Data needs:

- 1. Finalize bait landings- Brandon Muffley (by end of April).
- 2. Obtain size and age data from MD poundnet bait landings- Linda Barker
- 3. NJ seine data- Brandon Muffley
- 4. Doug will assemble an excel file with data input by end of April/early May

Sensitivity runs to be conducted at the Assessment Workshop:

- 1. Fill in missing VA bait landings in 1990s (check with Joe for years)
- 2. NJ Seine index included in coastwise JAI
- 3. Mean M over full time period (base) vs 5-yr average (alternate)
- 4. Change selectivity (make 2 selectivity periods- 1st- flat topped, 2nd dome shaped) for the reduction fishery.

The Assessment Workshop is scheduled July 18-20, 2006 in Beaufort, North Carolina.