Atlantic Menhaden Advisory Panel Report October 29, 2003 Baltimore, MD

Meeting Summary

Meeting Participants:

AP Members: Bill Windley, Chair Brian Tarbox Louis LaChance Richard Souza

Ed Cherry Ken Hinman Jeff DeBlieu Richard J. Weisberg

Melissa Dearborn Richard H. Daiger Lyell Jett Jule Wheatley

ASMFC Staff and Technical Committee Membe	ers:
Nancy Wallace	Joseph Smith
Matt Cieri	Geoff White

Public: Niels Moore Sherman Baynard

Dick Russell James Price

Shaw Thacher Tom Langman

Summary of Meeting and Recommendations to the Atlantic Menhaden Board:

The Advisory Panel of the Atlantic States Marine Fisheries Commission (ASMFC) Menhaden Management Board met in Baltimore, Maryland on Wednesday, October 29th to discuss the: Commercial Landings Data for 2002 and 2003 to date, The 2003 Stock Assessment, and the SEDAR Peer Review of the 2003 Stock Assessment.

Joseph Smith from Beaufort Labs was on hand to present the commercial landings data for 2002 and 2003 to date. The data was presented and discussed.

Following the landings data Matt Cieri, Technical Committee Chairmen presented the 2003 stock assessment. There Advisory Panel (AP) discussed two significant changes in the 2003 assessment. The first regards the way that the model addresses natural mortality (M). In the past, the assessment model used a fixed value for M across all age groups. In the new model, an individual value for M is assigned to each year class. These estimates are derived from the Multi-Species Virtual Population Assessment (MSVPA}. Because there is significantly greater natural mortality in the youngest age groups, this approach provides a much clearer picture of the stock structure, thus yielding more accurate results.

The second change in the models deals with fecundity. Spawning potential in the past has been based on the estimated spawning stock biomass. In the 2003 assessment spawning potential is expressed in numbers of maturing ova thus allowing for differential

rates of maturity at age. This gives a clear picture of spawning potential and relates it to stock structure. The AP felt that both of these measures are an improvement to the model.

The results of the SEDAR Peer Review were presented by Geoff White. After a thorough discussion. The Panel reviewed the SEDAR Peer Review recommendations and commented on those thought to be within the realm of their experience.

- 1. Advisory Panel (AP) Discussion on the Peer Review Panel's recommendations
 - The AP agreed that the use of Age Specific Ms is a better approach than what has previously been used in past assessments.
 - The AP agreed with the peer review panel that the MSVPA should be more inclusive of predators (marine mammals, seabirds, other fish, etc.).
 - The AP agreed that the move from an SSB based benchmark to a fecundity based benchmark is a step in the right direction.
 - The AP supported the change in Fs recommended by the Technical Committee.
- 2. Discussion of Atlantic menhaden in terms of its ecological role and the issue of local depletion in Chesapeake Bay
 - In the 2003 peer review report it states that in the 1999 peer review "the panel concluded that until management had specified an allocation goal for menhaden as a forage fish or filter feeder, it will not be possible to develop a reference point to conserve menhaden's ecological function". The current panel recommended that management objectives be established before it can be determined what kind of scientific information will be useful for ecosystem-based management decisions.
 - The AP recommended that the Management Board task the technical committee to examine the impacts of localized depletion of menhaden as both a forage fish and filter feeder.
 - The AP recommended that the Board lay out clear goals and objectives in an addendum or amendment to address the ecological role of menhaden as both a forage fish and filter feeder.
 - The AP also recommended that if the Board initiates the addendum or amendment process as a result of the new targets and thresholds recommended by the TC, at the same time they should incorporate the issues of menhaden's ecological role into this process.
- 3. Future research recommendations
 - Examine why menhaden are no longer abundant in New England, which is part of their historical range.
 - Examine the role of menhaden as a filter feeder and its impacts on nutrient cycling in estuaries. Determine if significant natural mortality of menhaden occurs within the estuary, will the majority of that biomass be recycled to nitrogen compounds in a relatively short time scale.