



Atlantic States Marine Fisheries Commission

1050 N. Highland Street • Suite 200A-N • Arlington, VA 22201
703.842.0740 • 703.842.0741 (fax) • www.asmf.org

Atlantic Menhaden Stock Assessment Subcommittee Conference Call Summary

April 16, 2014

Stock Assessment Subcommittee members: Amy Schueller, Joe Smith, Matt Cieri, Joey Ballenger, Alexei Sharov, Jason McNamee, Micah Dean, Rob Latour, Behzad Mahmoudi

ASMFC Staff: Mike Waine, Genny Nesslage

Public: Mike Prager, Ron Lukens, Jeff Kaelin, Andre Buchheister, Bob O'Boyle, Benson Chiles, Erik Williams, Ken Hinman, Aaron Kornbluth

1. Review final bait landings and CAA (Amy)
 - a. 55-84 from ACCSP, 85-13 from state unless state indicated ACCSP was deemed better, 93-97 linear interpolation from VA snapper rigs
 - b. Received MA, NJ, RI, PRFC, NC, and VA snapper. Mike will follow up with NY, VMRC, and MDDNR. Need ASAP if they will be included in the assessment!
2. Review final maturity analyses and decisions (Amy)
 - a. 1957 & 1959 had fewer samples for ages other than 2s and 3s, driving a large proportion of the uncertainty around these curves
 - b. The committee discussed time-varying or static maturity.
 - c. Points from 1950s indicate maturity is a length-based process, but only two points in the time series, so proceed with caution.
 - d. Amy will provide logistic regression of %mature by length within each age class to support use of time-varying maturity based on lengths in the base run.
3. Review indices (Amy et al.)
 - a. Comparison across indices (Amy)
 - i. PRFC with and without zeros produced similar indices in recent periods when data were not summarized to month. Thus, used entire time series summarized.
 - ii. Preferable to use FI over FD in general, but they might give us less variability given they are setting when fish are available vs. surveys, which may hit them at odd times during the year.
 - iii. May be more correlated if account for ages in surveys and lag appropriately among state data.
 - iv. Reviewed new information on NJ gillnet survey – use 24hr soak by one individual or <5hrs and include more individuals? (Micah)
 1. Lack of evidence for saturation at soak time <5-6 hrs, declining catch with increasing soak time

2. Drop this index and MA from assessment because they represent only a few permits over time.
- v. VIMS YOY and adult indices (Genny)
 1. Jan-Feb peak ingress of larval menhaden, but spotty coverage of fish in winter months. VIMS suggests allowing them to grow more, thus a YOY vs. larval index. Not ideal given small bottom trawl.
 2. Use VIMS and ditch alt VIMS because largely represents larval fish not mid-year YOY.
- vi. GA adult index – fishery historically late March/early April and are probably 1s and 2s. Proceed with using this index.
- vii. NEFSC survey was problematic to work with. Not continuous, lots of missing years. Do not use.
- b. Review spatial extent of surveys (Joey)
 - i. A lot of coordinates fell on land, so compared with other GIS layers.
 - ii. Resolution of digital elevation maps of coastal relief affects calculation of area. End up overestimating area of those surveys with lower resolution.
 - iii. Will recalculate and use higher resolution NOAA data to avoid bias.
 - iv. Provide maps of individual surveys and coast.
 - v. Still missing VA shad gillnet, PRFC, VA striped bass seine survey.
- c. Will review initial weighted regional indices and discuss alternate methods for combining surveys across regions/coastwide on next call provided that all indices are available and area calculations are completed.
4. Natural mortality
 - a. Update on MSVPA (Matt) – waiting on length freq data, model is resolving now.
 - b. Update on tagging model (Amy)
 - i. Will reran tagging model without MSVPA-based prior and this had big effect on estimates
 - ii. Backup plan – scaled age-based Lorenzen using old tagging M estimate until we can get new estimates from tagging data/model and can resolve issue of using MSVPA-based prior
5. Model development update (Amy/Genny)
 - a. BAM
 - i. Typical coastwide model is up and running
 - ii. Built – 4 fleet model (fleets as areas model) with dummy data ready for replacement with real data
 - iii. A fleets as areas model with seasonal resolution and a spatial model (possibly with seasons) are possibilities for discussion at the assessment workshop.
 - b. SS3 – basic model in progress that incorporates all the length data. May build fancier spatial/tagging after June.
6. Review items for next agenda (**May 9, 9AM**):
 - a. CBL/ODU review of study on otolith microchemistry and larval transport (Tom Miller)
 - b. Natural mortality

- c. Regional/coastwide indices
 - d. Model development update
7. Public comment
- a. Jeff Kaelin: bait landings dropped in 2012/2013 due to regulatory constraints (down 50% or resource), so need to account for this in selectivity blocks. Fish dep data in truncated in sampling areas – states need to be put into place that cover more of the resource. Need to think more about climate change effects. Recommend research needs section in this assessment to begin sampling regimes designed for next 20 years.
 - b. Andre Bucheister: correlation analysis may be driven by peak years, may want to explore logging values when doing comparison. Time period for VIMS trawl survey (May/June) appropriate given they reflect surviving YOY (based on CBL research) even though winter catches are higher. The winter larvae don't all make it so agree it's best not to use winter month's index. Higher M estimates from tagging model at older ages is problematic – may want to look into that.
 - c. Ron Lukens: age at maturity schedule could affect reference points, but how is unclear

Bob O'Boyle: Maturity time-varying right decision based on pattern in maturity at length. Managing forward, not backward, so will need to decide on what regime is most reflective of current conditions.