

Atlantic States Marine Fisheries Commission & Mid-Atlantic Fishery Management Council
Summer Flounder, Scup, and Black Sea Bass Technical Committee/Monitoring Committee Meeting
Friday November 14th, 2014

Agenda

Decision Tree for standardization of state surveys for Assessment Indices (*J. McNamee*)

Summary: Jason went through the decision tree for standardization, highlighting the initial criteria used to determine which surveys to evaluate (listed below)

- Has less than 10 consecutive years of data (i.e. was sampling was intermittent or rare)
- Contains a small number of samples
- Covers a small geographic area that is not representative of the regional or coastwide stock unit
- Employed inconsistent methodologies

Followed by identifying the steps for standardization. These procedural steps included

- 1) Identifying response variables
- 2) How to construct young of the year (YOY) index
- 3) Identifying explanatory variables
- 4) Identifying a subset of other appropriate variables
- 5) Constructing a scatterplot of each potential covariate
- 6) Further evaluation of the data as needed (if two or more variables are highly or logically correlated, pick the one that makes the most sense biologically; and censoring data records if less than 5% of the catch or less than 5% of the proportion of positive trips occurs for categorical factors
- 7) Plot histogram of numbers of animals caught
- 8) Additional evaluation of data (Determine if there is a large gap between # of zeros and next highest bar; and If delta methods are not appropriate, identify what distributional assumptions might be) As well as
 - Run all submodels and select best model as one with lowest AIC (if all factors in the final model are not significant
 - Evaluate goodness-of-fit
 - Fit the model using bootstrapped data to provide a 95% confidence intervals (for providing a measure of uncertainty for the standardized index)

The group came to agreement on the using the following covariates:

- Year
- Month or Day (whatever makes the most sense given the survey)

- Season
- Station (unless random stratified survey)
- Strata (or whatever is defining the strata-depth, temp) (Judgment call)
- Depth
- Temperature
- Salinity
- Dissolved Oxygen
- Sea state (gear performance)
- Time of the day (day/night/twilight) could be broken into categories
- Latitude/Longitude

The group also agreed for the following individuals to take the lead on the state surveys

Mike Bednarski

Massachusetts-MA VTS (Ancillary, plot trend);MA Trawl (YOY, AGE 1, ADULT)

Maryland-MD Coastal Bays Trawl (YOY, AGE 1)

Jason McNamee

Rhode Island-RI Costal Ponds Survey (YOY); RI Monthly Trawl (YOY, AGE 1, ADULT);

RI VTS, URIGSO, RI Seasonal Trawl (Ancillary, plot trend)

Connecticut-CT Estuarine Seine (YOY); CT List (AGE 1, ADULT); Millstone Trawl (Ancillary)

John Maniscalco

New York-NY Peconic Bay (YOY, AGE 1)

Rich Wong

Delaware- DE 16 ft Trawl (YOY, AGE 1)

Sally Roman

New Jersey-NJ Ocean Trawl Survey (YOY, AGE 1, ADULT)

Virginia-VIMS (YOY, AGE 1); NEAMAP (YOY, AGE 1, ADULT)

Note: Gary said similar work had been done on the NEFSC trawl survey data.

Follow up on individual tasks

Mike Bednarski

-Has summarized BSB data for regions 4 & 5, will be providing more information

-Has done a comparison between smaller fish (<14”) and discards, but concerned that regulation/fishery differences makes the comparison too problematic to use.

Still to do

-Compare MA DMF age data with Gary’s ALKs and see if discrepancies are leading to poor age cohort tracking.

-Compare rec age 1+ MRIP index with MA DMF YOY

Jason McNamee

-Explored utility of fall season trawl survey and compared with monthly trawl, but not enough to include seasonal survey with other indices.

-Did a comparison of trend in CPUE with trawl survey vs RI lobster VTS. Found a definite trend

Greg Wojcik

-Has plotted trend in WTF seine and Millstone trawl ***please send to Kirby***

Sally Roman

-Looked at NEAMAP data regarding start & location (Fall starts in the north vs. Spring starts in the south) and effect on catchability, and found nothing significant.

-Showed preliminary work done on VIMS/NEAMAP data. Length cutoffs appeared to be very different than 14" which raised eyebrows. May be due to problems with VIMS ageing. An ageing workshop follow up study is being conducted by NEFSC/VIMS/ASMFC team and should be ready for reporting/review in early 2015.

Additional follow up tasks & next steps

- Kiley & Kirby follow up with John Boreman (with TC rep) during the week of Dec 1st
- Data Workshop (June 2015)
- FIG assignments due by early Feb 2015, with initial webinar review in Jan 2015
- GIS work assignments due before Data Workshop
- Data pull through 2013, with update 2014 midyear
- Review Gary's work on commercial samples for next meeting agenda
- Circulate around the assessment task list to the group
- Jason McNamee has been nominated as assessment lead
- Working group to be finalized (soon)
- Possible SSC/TC meeting late February/ March 2015