



# Atlantic States Marine Fisheries Commission

1050 N. Highland Street • Suite 200A-N • Arlington, VA 22201  
703.842.0740 • 703.842.0741 (fax) • [www.asmfc.org](http://www.asmfc.org)

The Northern Shrimp Technical Committee (NSTC) met via conference call on September 11, 2012 to make modeling decisions for the new stock assessment model being developed, plan for upcoming NSTC related meetings, and elect a new NSTC chair. The following represents a summary of their discussions.

## **Attendees**

*NSTC: Maggie Hunter, Anne Richards, Kelly Whitmore, Jessica Fischer*

*Staff: Mike Waine, Katie Drew*

*Other: Chris Vonderweidt (ME DMR), Yong Chen (UME)*

## **New Assessment Model Decisions**

The NSTC discussed the question of whether the assessment model being developed for northern shrimp should be both length- and stage-structured. While including both length and stage would be more biologically realistic, the NSTC was not confident that the empirical data are sufficient to develop a length- and stage-structured transition matrix, particularly for length and stage combinations at the tails of the distribution (e.g., small females and large males).

Including both length and stage structure within the model would require a significant investment of time due to the complexity of model coding. Because of this and the uncertainty of whether a robust length- and stage-structured transition matrix can be resolved (an essential component for the model), the NSTC recommended that for the short-term, model development should focus on independent stage and length structured models. The NSTC will work with Y. Chen and his lab to develop both the stage-structured transition matrix and the length-structured transition matrix. The development of those matrices will help the NSTC evaluate the feasibility of creating a length- and stage-structured transition matrix.

The NSTC also recommended that because growth is determined by both size and stage, the development of a length- and stage-structured model should be a long term goal. However, the NSTC noted that our empirical data may not currently be able to support the combined model and would constrain model review for the 2013 SARC.

## **Planning for 2012 Stock Assessment Update**

The NSTC discussed the process for the 2012 stock assessment update. This is a turn of the crank assessment, meaning it consists of adding the most recent year(s) of data without changing the model type or structure. The NSTC noted that data from the summer survey are expected to be available the week of September 24. Given the time needed to complete tasks in updating the assessment, a workshop is tentatively scheduled for October 30. Pending his availability, Y. Chen will join the NSTC for a second day on October 31 to present on model development progress. Following that meeting an assessment report will be compiled and is expected to be distributed to the Section by November 9 (tentative) for their annual specification meeting sometime in mid-November.

## **Planning for Stock Assessment Workshop for Industry**

The NSTC also began planning for an upcoming Stock Assessment Workshop intended to provide the Northern shrimp industry with an overview of the assessment modeling process. The Workshop is tentatively scheduled for October 17 in Portland, ME and will be hosted by ASMFC staff and the NSTC. The following draft agenda briefly describes the topics to be discussed at the workshop.

### Draft Agenda

1. Overview of the Management & Assessment Process
2. Life History of N. Shrimp
3. Data Used in the Assessment
  - a. Landings & Bio-sampling
  - b. Fishery Independent Surveys
4. Overview of the CSA Model
5. Overview of the Quota Setting Process
6. Future Work and the 2013 SARC

### **NSTC Chair**

Kelly Whitmore (MA DMF) was elected as new NSTC chair. Both ASMFC and the NSTC thanked Maggie Hunter (ME DMR) for serving as chair for the last 11 years.