

## **River Herring Technical Expert Working Group (TEWG)**

### **Stock Status Subgroup Webinar/Conference Call**

**August 28, 2014**

**1:00 – 3:00 pm**

### **Summary**

#### **I. Overview**

The Stock Status Subgroup of the River Herring Technical Expert Working Group was established to “consider and test appropriate stock status methodologies to quantitatively assess river herring populations rangewide” in order to help contribute to the expected products of the TEWG. Kevin Sullivan and Michael Bailey, co-chairs of the Stock Status Subgroup, convened a call on August 28, 2014, to continue discussions and develop outcomes for the TEWG. The draft agenda for the meeting included topics such as: 1) review/discuss existing research priorities document and identify/discuss additional data gaps; and 2) review Ecosystem Integration Committee “Cross-cutting Issues” table. This meeting summary includes the primary discussion topics and outcomes to contribute to future TEWG discussions. The information provided below reflects individual expert opinion and not consensus.

#### **II. Key Topics**

Following is a list of individual expert opinion provided by Stock Status Subgroup members or the public on various overarching topics. Some ideas have been combined where appropriate.

- The co-chairs suggested that the subgroup review the research needs and data gaps identified to date (e.g., through ASMFC, NMFS, Councils) to obtain individual expert opinion on what may be missing, etc. They also discussed the possibility of obtaining individual scoring on the identified list in the future.
- Many members noted that the discussions for this subgroup should initially focus on looking forward (e.g., difficult to link catch to the stocks in the past). One member noted that if the subgroup wants to move away from data poor stock assessment approaches, it is important to better quantify the stock complexes. Data quality is a current limiting factor in conducting assessments. Standardized data collection (i.e., subsampling in U.S. and Canada) is important (e.g., run counts, targeted number of fish to sample, good age distribution, consider weighted age or length at age, scale versus otolith aging, consider scale and type of system, consider impacts of barriers and whether spawning). Many subgroup members noted that these are challenges but improved indices are important to determine best methods for obtaining data.

- Various sources of mortality should be considered in models (e.g., predation, fisheries). Additionally, information at both the river and stock level is needed.
- The recent ASMFC River Herring Ageing Workshop Report which establishes standards for consistent coastwide ageing techniques addresses one of the previously identified research needs, but should still be considered in the future.
- Obtaining a biologically-based cap is important to the Mid-Atlantic Fishery Management Council’s River Herring and Shad Committee.
- The subgroup discussed the importance of considering both U.S. and Canadian waters in their discussions, which also mirrors the larger TEWG charge.
- Adrian Jordaan (University of Massachusetts) is collaborating with others to develop coastwide models that look at how restoration efforts are impacting river herring populations in the future. An understanding of river herring biomass and stock status is needed before ecosystem models can be pursued.

### III. Key Outcomes

Below is a list of individual expert opinions provided by participants related to specific threats, data gaps, research projects, conservation actions, information to be considered and/or monitoring (i.e., the identified research projects and/or conservation actions). Some ideas have been combined where appropriate. These outcomes are listed in no particular order, and those related to other subgroups are also included in the “Cross-Cutting Issues” section below).

#### a. Data Gaps

- Please see Sullivan and Bailey’s Synopsis of Subgroup Suggestions

#### b. Research Projects

- Please see Sullivan and Bailey’s Synopsis of Subgroup Suggestions

#### c. Monitoring

- Please see Sullivan and Bailey’s Synopsis of Subgroup Suggestions

#### d. Information to be Considered:

- Research by Gary Nelson, Massachusetts Division of Marine Fisheries, and Desiree Tommasi, NOAA, to help consider productivity (see “Next Steps” for additional information).
- Multispecies model for Atlantic menhaden (e.g., Micah Dean, Massachusetts Division of Marine Fisheries)

### IV. Next Steps

The Stock Status Subgroup discussed the following next steps:

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- The recent ASMFC River Herring Ageing Workshop Report which establishes standards for consistent coastwide ageing techniques will be distributed to the subgroup. The report is available at:  
[http://www.asmfc.org/files/Science/RiverHerringAgeingWorkshopReport\\_August2014.pdf](http://www.asmfc.org/files/Science/RiverHerringAgeingWorkshopReport_August2014.pdf)
- Presentations provided by Gary Nelson, Massachusetts Division of Marine Fisheries, and Desiree Tommasi, NOAA, at the recent Climate Change Subgroup should be circulated and reviewed by the subgroup. They are both available at:  
<http://greateratlantic.fisheries.noaa.gov/protected/riverherring/tewg/climate/index.html>
- Genine Lipkey will inquire whether there is any Oxytetracycline (OTC) tagged hatchery fish with year from Maryland.
- The subgroup will continue to discuss model options on future calls (e.g., future ecosystem models and the type of data that would be needed).
- Creating an inventory of who is doing what and where is important. The Habitat Subgroup's template could be used as a model for a larger initiative, and should be distributed to the subgroup.
- A draft meeting summary including list of data gaps and research needs identified by the subgroup will be distributed and additional ideas/feedback can be provided.
- The subgroup will reconvene at least once before the end of the year. The subgroup discussed possible convening at least every two months and in between TEWG meetings.

## V. Cross-Cutting Subgroup Issues

The following cross-cutting subgroups issues were discussed and will be further considered by the TEWG and its Ecosystem Integration Committee.

- Members noted that fisheries bycatch analyses cross-cut many subgroups: Fisheries will consider how best to estimate catch; Genetics/Hybrids/Landlocked Subgroup will consider stock structure of catch samples; and Stock Status Subgroup will consider what the impact of the catch is.
- Members noted that standardized sampling is important to various subgroups and determining the best methods for obtaining data (e.g., Stock Status, Fisheries).
- Members noted that the Stock Status and Climate Change Subgroups overlap on issues related to climate change as this information is needed for a stock status model.
- Discussion of standardizing the following terms may be useful: catch, bycatch and incidental catch.
- Establishing a catalogue/central repository of available samples is important (e.g., scales, otoliths).

- Food habitats of river herring and Atlantic herring is an important discussion topic for the Species Interaction Subgroup as this would support Stock Status Subgroup discussions (e.g., river herring competition with Atlantic herring).
- Creating an inventory of who is doing what and where is important.
- Encourage studies to quantify and improve fish passage efficiency and support the implementation of standard practices. (Habitat Subgroup should consider.)
- Expand observer and port sampling coverage to quantify additional sources of mortality for alosine species, including bait fisheries, as well as rates of incidental catch in other fisheries. (Fisheries Subgroup should consider.)
- Develop and implement monitoring protocols and analyses to determine river herring population responses and targets for rivers undergoing restoration (dam removals, fishways, supplemental stocking, etc.). (Habitat Subgroup should consider.)

## VI. Participants

### a. Subgroup Members

The affiliation of each member can be found on the subgroup roster available at the TEWG Fisheries Subgroup website:

<http://www.nero.noaa.gov/protected/riverherring/tewg/fisheries/index.html>

Genine Lipkey

Diane Borggaard

Joe Hightower

Kevin Sullivan

Alan Weaver

Matthew Ogburn

Katie Drew

Adrian Jordaan

Jason Didden

Michael Bailey

Kiersten Curti

Kim de Mutsert

Jon Hare

### b. Public

Edith Carson

## VII. Meeting Materials

The following materials were provided to support the meeting. Additional information can be found at the TEWG Stock Status Subgroup website:

<http://www.nero.noaa.gov/protected/riverherring/tewg/stocks/index.html>

a. Draft Agenda

b. TEWG background document on previously identified data gaps

c. Stock Status Subgroup previously identified “Key Outcomes”

d. Ecosystem Integration Committee “Subgroup overlapping issues” table