# WORKSHOP ON ATLANTIC HERRING ACCEPTABLE BIOLOGICAL CATCH CONTROL RULE MANAGEMENT STRATEGY EVALUATION

### May 16-17, 2016 Holiday Inn by the Bay

## Portland, Maine

## **REGISTRATION** – <u>http://www.nefmc.org/calendar/may-16-17-2016-herring-workshop</u>

### Introduction

The New England Fishery Management Council (Council) is currently developing Amendment 8 to the Atlantic Herring Fishery Management Plan. Through Amendment 8, the Council expects to establish a long-term control rule for specifying acceptable biological catch (ABC) for the Atlantic herring fishery. A control rule is a formulaic approach for establishing an annual limit or target fishing level that is based on the best available scientific information.

An objective of Amendment 8 is to develop and implement an ABC control rule that manages Atlantic herring within an ecosystem context and addresses the goals of Amendment 8, which are to:

- 1. To account for the role of Atlantic herring within the ecosystem, including its role as forage.
- 2. To stabilize the fishery at a level designed to achieve optimum yield.
- 3. To address localized depletion in inshore waters.

In January 2016, the Council approved conducting a Management Strategy Evaluation (MSE) to support the development of alternatives regarding the ABC control rule. MSE is a collaborative decision-making process, involving upfront public input and technical analysis than the normal amendment development process. MSE can take many forms, but here, the MSE will be used to help determine how a range of control rules may perform relative to potential objectives. An early step of this MSE will be a public workshop to develop recommendations for a range of potential objectives of the Atlantic herring ABC control rule, how these objectives may be tested (i.e., associated performance metrics), and the range of control rules that would undergo testing. A two-day workshop is necessary to develop a solid set of objectives, performance metrics, and control rules. Some introductory presentations are necessary, though the workshop will not be a symposium, but focus on active discussion.

Note, an ABC control rule is not designed to directly address concerns related to localized depletion. Thus, the workshop will not focus on localized depletion. However, the Council is developing alternatives related to this issue separately, but within Amendment 8.

### **Steering Committee**

Sarah Gaichas and Jon Deroba (Northeast Fisheries Science Center); Peter Kendall (Council Herring Committee Chairman); Carrie Nordeen (Greater Atlantic Regional Fisheries Office); Matt McKenzie (Council Herring Committee Vice-Chairman); and Deirdre Boelke and Rachel Feeney (Council staff). For additional information, contact Rachel Feeney (<u>rfeeney@nefmc.org</u>; 978-465-0492x110).

# **DRAFT Workshop Goals**

The Council is hosting this Management Strategy Evaluation workshop to:

- 1. Develop a common understanding of MSE.
- 2. Develop recommendations for a range of potential objectives of the Atlantic herring ABC control rule, associated performance metrics, and control rules to undergo testing.
- 3. Provide an opportunity for stakeholders of the Atlantic herring fishery to provide greater input than typically possible at Council meetings, in an environment that supports constructive and open dialogue between users of the resource, scientific experts, fishery managers, and other interested members of the public.

## **DRAFT Workshop Objectives**

- 1. Identify potential MSE objectives and their associated performance metrics that can undergo simulation testing.
- 2. Identify key uncertainties and model structures (e.g., stock-recruit function, predator dependence, shifting environmental conditions) that affect simulation testing; identify what is essential for the model to account for.
- 3. Identify a range of control rules to be evaluated and/or their general characteristics.
- 4. Foster collaboration and communication among user groups, scientists, fishery managers, and the general public.

### **Workshop Outcomes**

The workshop will produce potential objectives, performance metrics, and control rules to recommend to the Council. Reaching consensus at the workshop is not necessary, and recommendations to the Council will not be prioritized. At this stage of a MSE, it is acceptable for some objectives to seem in conflict or opposition. The MSE will examine to what degree various control rules are likely to meet various objectives.

### Next Steps after Workshop

Workshop outcomes will be vetted through the Herring Advisory Panel and Herring Committee prior to approval by the Council, likely at its June 2016 meeting. After Council approval, simulation testing of control rules will be conducted by a team of scientists at the Northeast Fisheries Science Center with the support of contractors. After the simulations, a subsequent public workshop is expected, likely in early fall 2016, to review preliminary results and make any further recommendations to the Council. After the MSE is complete, the outcomes will help the Council evaluate tradeoffs between ABC control rule objectives and which control rules would most likely meet the goals of Amendment 8 and form the range of alternatives.

### **Target Attendees**

The workshop will be open to all interested parties. Target attendees include: herring fishermen and fishery organizations, commercial and recreational groundfish and tuna fishermen, whale watch industry members, the lobster industry, interested members of the public, and members of the Herring Plan Development Team, Herring Advisory Panel and Herring Committee. Council members will be asked to be primarily in "listen-only" mode, to allow ample opportunity for public input at this phase.

#### **Registration and Logistics**

Advance registration is strongly encouraged through the Council website <u>http://www.nefmc.org/calendar/may-16-17-2016-herring-workshop</u>. Participants will be responsible for their own travel, with the exception of Council members and advisors (i.e., Advisory Panel or Plan Development Team members).

#### **Workshop Facilitators**

A facilitator is needed to run the workshop, though much of the preparatory work is being handled by the Steering Committee. Dr. Brian Irwin has been selected. He is an Assistant Unit Leader at the Georgia Cooperative Fish and Wildlife Research Unit and an adjunct faculty member of the Warnell School of Forestry and Natural Resources at the University of Georgia. He has participated in MSEs that use participatory scenario forecasting to support decision making, and he has taught courses and workshops in fisheries management, quantitative modeling, and structured decision making and adaptive management. He currently serves on the Scientific and Statistical Committee of the South Atlantic Fishery Management Council. Dr. Irwin will not be conducting the technical work (simulations), but may be contacted to help ensure that the work aligns with workshop outcomes. More information about Dr. Irwin is available at: http://www.coopunits.org/Georgia/People/Brian\_Irwin/

Depending on the number of attendees, there may be a need to have small group discussion. Thus, other facilitators may be necessary and are being planned for.

### **DRAFT Workshop Agenda**

### <u> May 16 – Day 1</u>

10:00 Welcome by Terry Stockwell, NEFMC Chairman

- 10:10 Workshop introduction by facilitator, Dr. Brian Irwin
  - Overview of the Management Strategy Evaluation process
  - Workshop goals, desired outcomes, roles, and expectations
- 10:40 Feedback and questions on workshop and MSE process
- 11:00 Presentation: Herring's role in the ecosystem as framed by the data, Dr. Sarah Gaichas
- 11:20 Plenary discussion: Herring's role in the ecosystem
- 12:00 Lunch on your own
- 1:00 Presentation: Introduction to control rule objectives, Dr. Brian Irwin
  - Objectives that could be addressed by a control rule
  - Measuring objectives

- Example objectives identified in other fisheries
- Small group discussion: Development of objectives
  - Identify both fundamental and means objectives
  - Identify which objectives could be addressed with a control rule.

### 2:45 Break

1:20

- 3:00 Small groups report out
- 3:30 Plenary discussion: Specifying and organizing multiple objectives
  - Identify commonalities and differences brainstormed
  - Categorizing objectives
  - Discuss how objectives would be measured
- 5:00 Adjourn

# <u>May 17 - Day 2</u>

- 9:00 Review Day 1 and charge for Day 2, Dr. Brian Irwin
- 9:10 Presentation: Introduction to performance metrics, Dr. Jon Deroba
  - Considerations for modeling: available data, types of uncertainties, etc.
  - Measuring the objectives developed on Day 1
- 9:40 Plenary discussion: Measurable performance metrics to evaluate control rule performance, given the objectives and likely model structures discussed
- 11:00 Break
- 11:15 Presentation: Introduction to control rules, Dr. Jon Deroba
- 12:00 Lunch
- 1:00 Small group discussion: Development of control rules
  - General characteristics
  - Specific control rules
- 2:00 Small groups report out
- 2:30 Break
- 2:45 Plenary discussion: Workshop outcomes and next steps
  - Summarize brainstormed list of potential objectives, performance metrics, and control rules to recommend to the Council.
  - Review the process for considering workshop outcomes by Council
  - Review plans for continued development of the MSE
- 4:00 Adjourn