

New England Fishery Management Council

50 WATER STREET | NEWBURYPORT, MASSACHUSETTS 01950 | PHONE 978 465 0492 | FAX 978 465 3116 E.F. "Terry" Stockwell III, *Chairman* | Thomas A. Nies, *Executive Director*

MEMORANDUM

DATE: February 23, 2015

TO: EBFM PDT

FROM: Andrew Applegate, PDT Chair

SUBJECT: Development of herring ABC control rule advice document

The PDT had a very productive discussion of issues and methods for developing advice on an Atlantic herring ABC control rule that explicitly accounts its role in the ecosystem and for forage needs. It took a while and a bit of effort, but I am finally getting a better picture of the deliverable that the PDT intends to develop. As outlined before, the qualitative and (to the extent possible) quantitative advice is scheduled for presentation at the June 16-18, 2015 Council meeting, but it will undergo external review at the SSC meeting scheduled for May 20-21. Between these two meetings, we will also schedule a joint EBFM and Herring Committee meeting that will consider the EBFM PDT advice and Amendment 8 scoping comments to make related recommendations (such as the goals and objectives that should be considered in a draft Amendment 8 document) to the Council.

Considering the above schedule, we would have to complete a preliminary final draft of our report by May 13, the mailing date for the SSC meeting. To this end, we are allowing some time for people to do work and prepare analyses with a meeting scheduled for mid-April, after the April 8-9 herring operational assessment meeting.

In the meantime, I am going to begin drafting an outline of the report. Based on our last meeting, I have identified some tasks and suggest some PDT members to take the lead and work on those tasks (see draft list below), results to be presented and discussed at our next meeting in April. Persons indicated in parentheses below might serve as helpers or reviewers or consultants on the task. Most of these tasks were discussed in more detail at our last PDT meeting, but if anyone has questions, please let me know.

- 1) General document development, outlining, and presentation Andy A. (Lori S.)
- 2) Summary description of various estimators of herring consumption, updated trends in consumption Mike F. or Sarah G., and Jon D.
- 3) General forage management guidance based on published regional or wide-ranging literature Peter A., Geret D., (Andy A.)

- 4) Evaluation of specific types of control rules using a reasonable range of parameters to increase herring biomass while minimizing reductions in yield and variation. Included are some variants of a biomass-based control rule and a proportional escapement type of control rule. Results are to be expressed in terms relative to B_{msy} (for managers) and B_0 (for use in multispecies models) Jon D. and Kiersten C. (Andy A.)
- 5) Evaluate the utility of using models like Kraken and Atlantis or others to evaluate the potential ecosystem effects of having various herring biomass outcome profiles derived from candidate control rules (see #4), using data expressed as a % of B₀. Mike F. and Sarah G. and Kiersten C.
- 6) Qualitative description of economic tradeoffs, including yield reduction and alternative bait availability, effects of consumption by managed fish species, tunas, and whales. Geret D. and Kiersten C (Min-Yang Lee, Herring PDT).