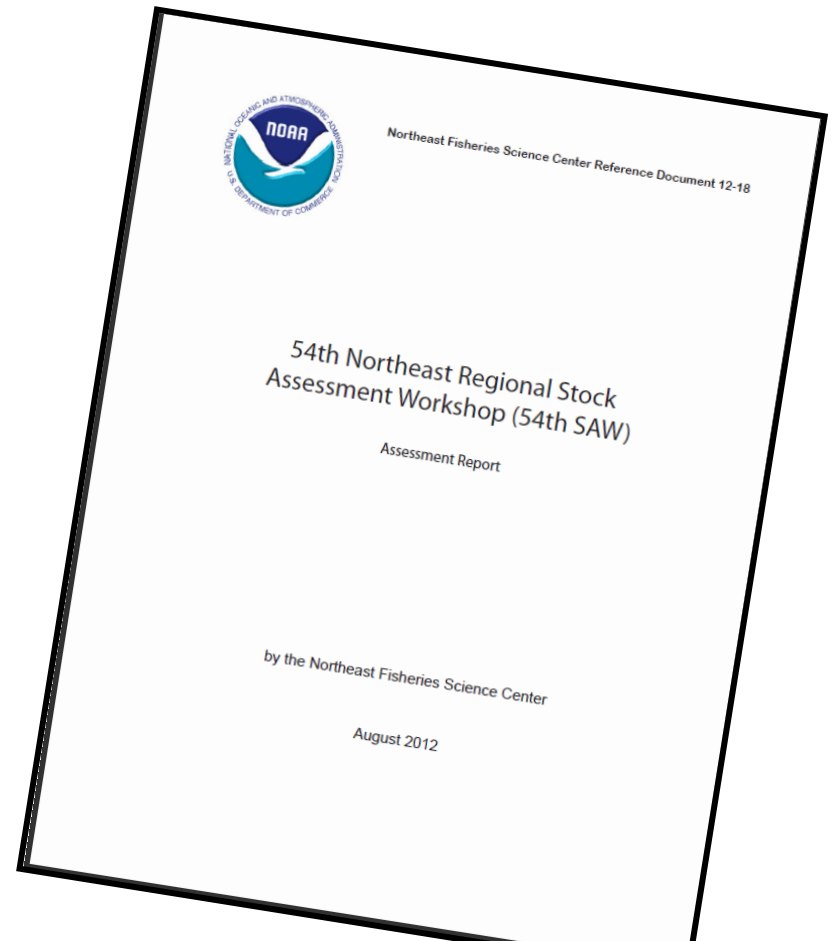


SSC Herring Report to NEFMC

Chris Legault
Scientific and Statistical Committee
26 September 2012
Plymouth, MA

Request to SSC

- ABC for FY2013-2015
- ABC control rule



Control Rules Provided by PDT

- 75%Fmsy
 - Apply 75%Fmsy in each of the three years
 - Catch varies with changes in stock
- Constant Catch
 - Solve for annual catch which results in at most 50% chance of overfishing in any of the three years
 - Risk of overfishing varies with changes in stock

Risks

- Herring stock expected to decline over next three years
 - 75%Fmsy rule higher risk of overfishing in 2013
 - Constant catch rule higher risk in 2014 and 2015
 - SSC considers these risks comparable
- Cannot “mix and match” catch from the two control rules

Scientific Considerations

- 2012 Benchmark assessment a major advancement
- Change in natural mortality to reduce retrospective pattern and more closely match consumption estimates
- F_{msy} approximately half of M
- Current stock abundance well above B_{msy}
- Indications of a strong year class entering fishery

Role of Herring in Ecosystem

(not a Term of Reference)

- Standard MSY reference points may not be appropriate for forage fish
- Both control rules result in $F < M$ and $B > B_{msy}$
 - Both meet ecosystem-based targets
- SSC requests guidance from Council
 - Manage herring as:
 - Typical MSY fishery
 - or
 - Reduced F and higher B targets because forage species

SSC Recommendations

- The SSC recommends the use of either the 75%Fmsy or the Constant Catch control rule for herring for the next three years. The overfishing limit (OFL) and acceptable biological catch (ABC) in units of thousand metric tons for FY2013-2015 under the two separate control rules are:

Control Rule	Catch	2013	2014	2015
75%Fmsy	OFL	169	127	104
	ABC	130	102	88
Constant Catch	OFL	169	136	114
	ABC	114	114	114