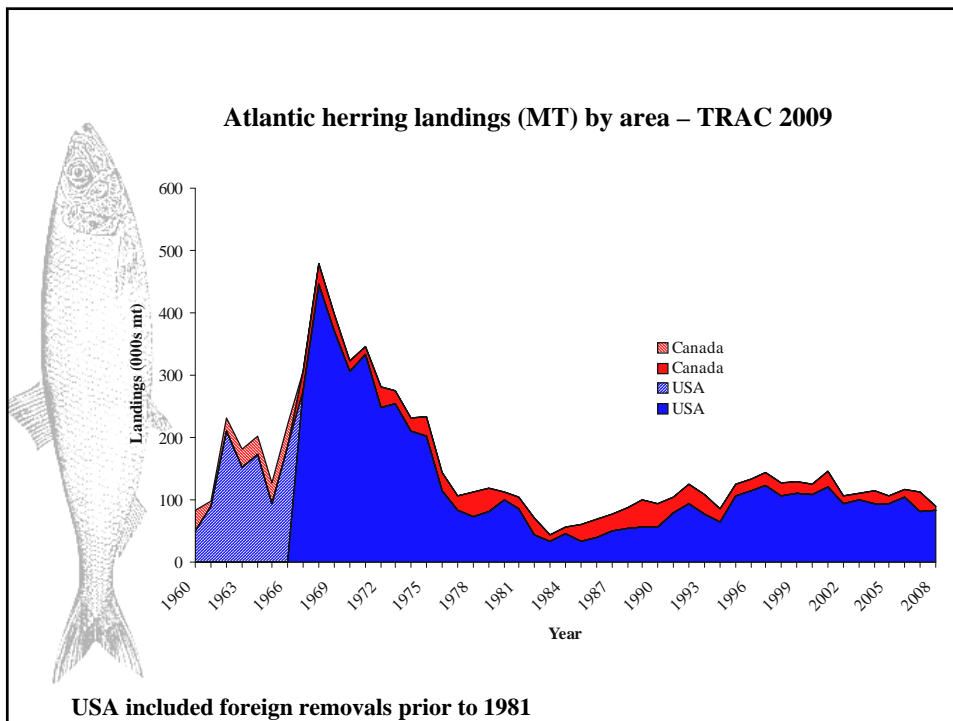
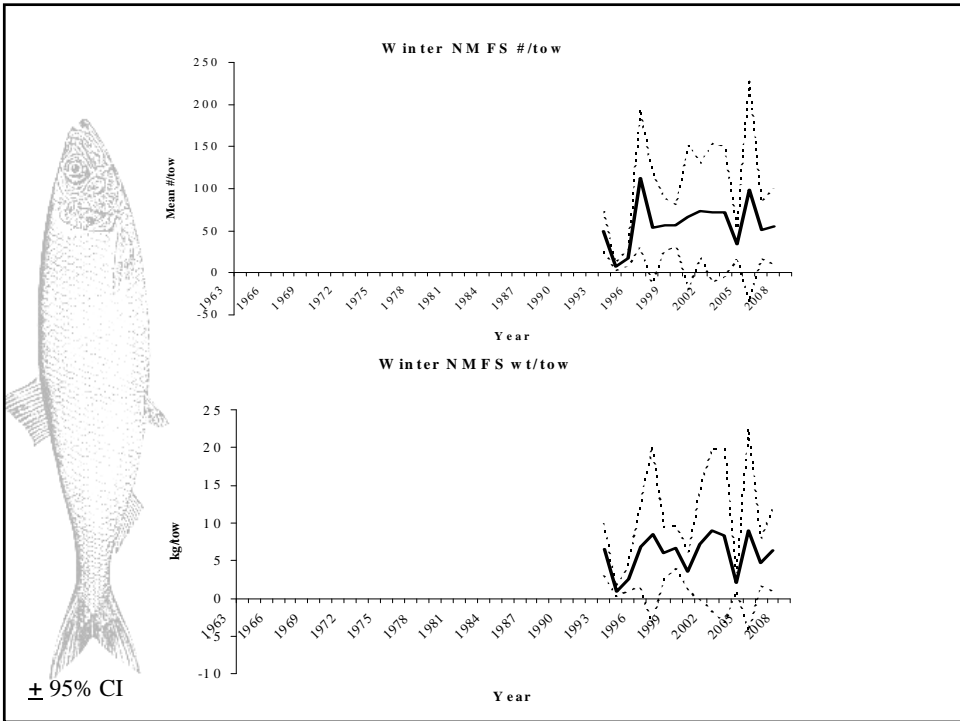
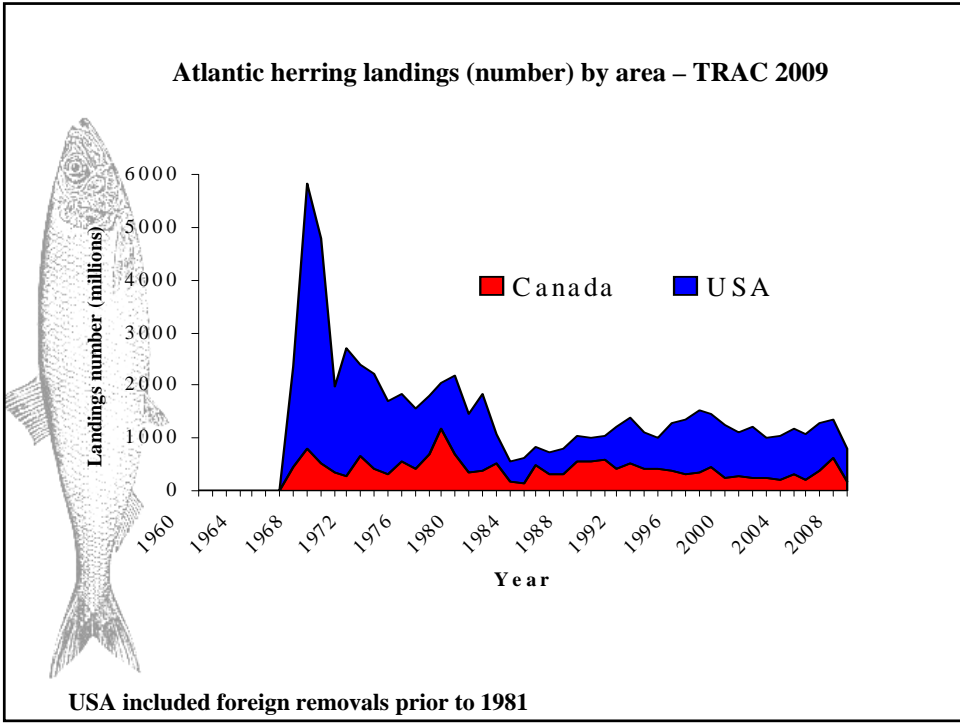
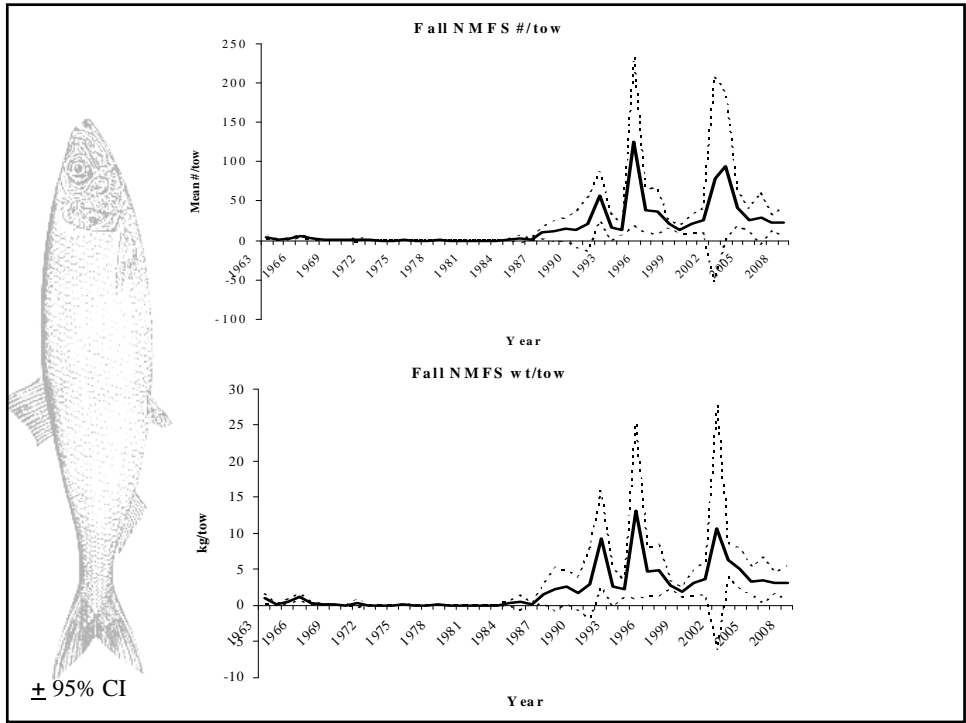
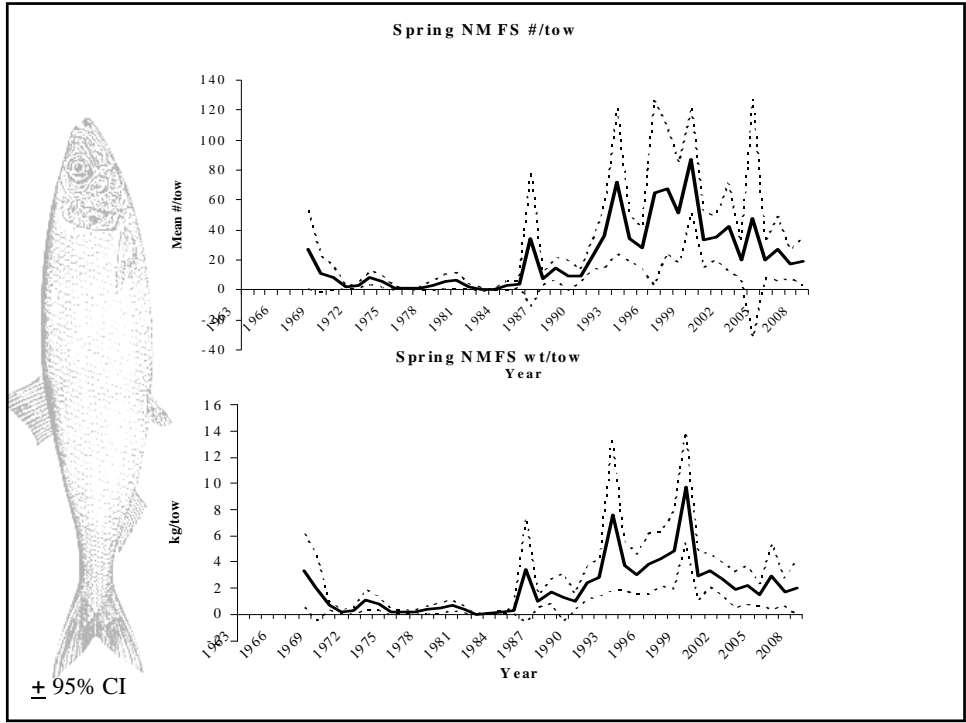


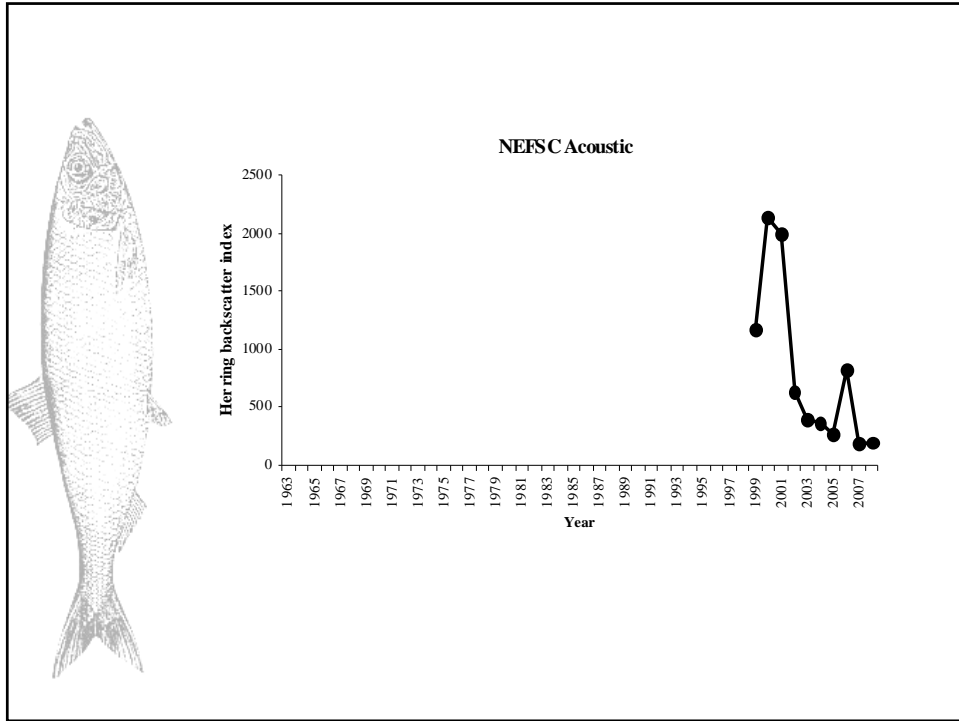
Gulf of Maine/Georges Bank Atlantic Herring Assessment Update – 2009

Presentation to the
New England Fishery Management Council
Gary Shepherd (NEFSC)
23 September 2009
Plymouth, MA









TRAC 2009 ASAP model

CAA ages 2- 6+

NMFS spring and fall surveys (winter and acoustic surveys dropped)

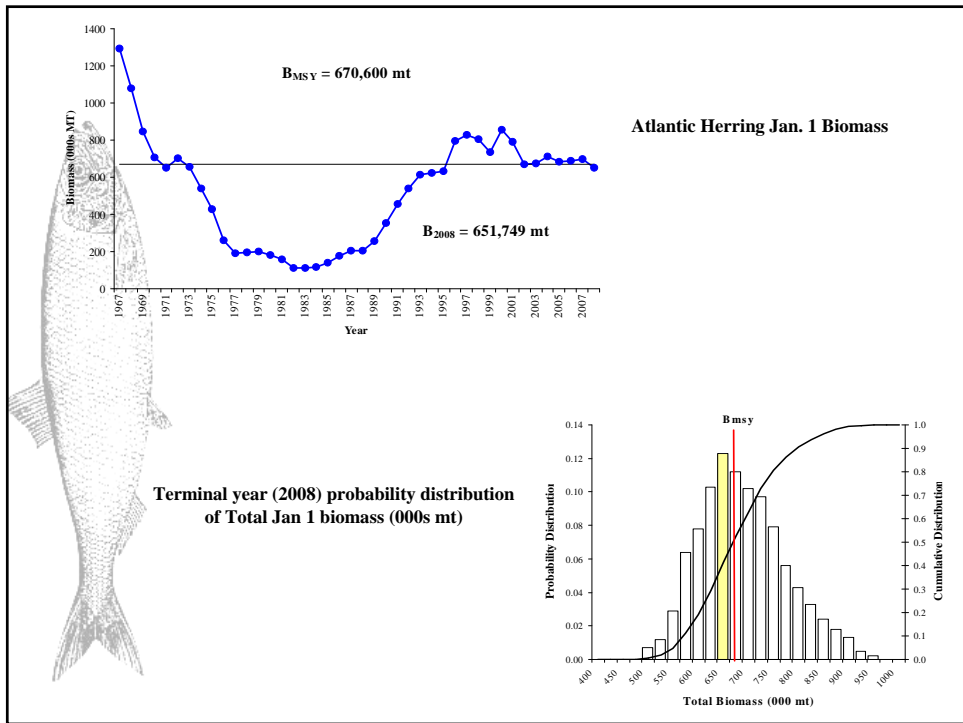
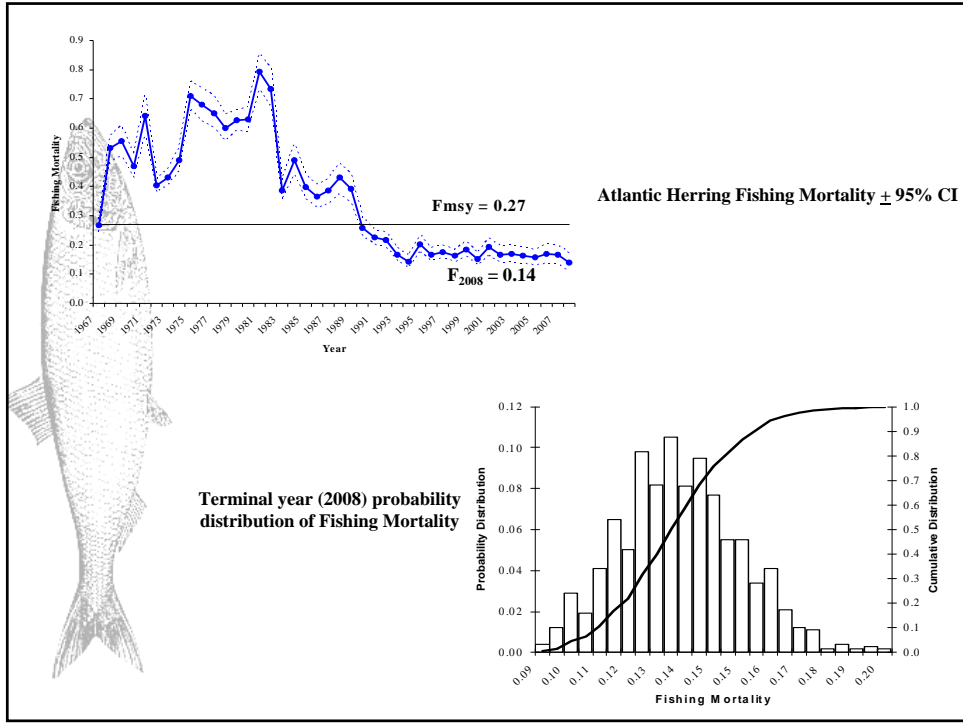
Split index series 1984-1985

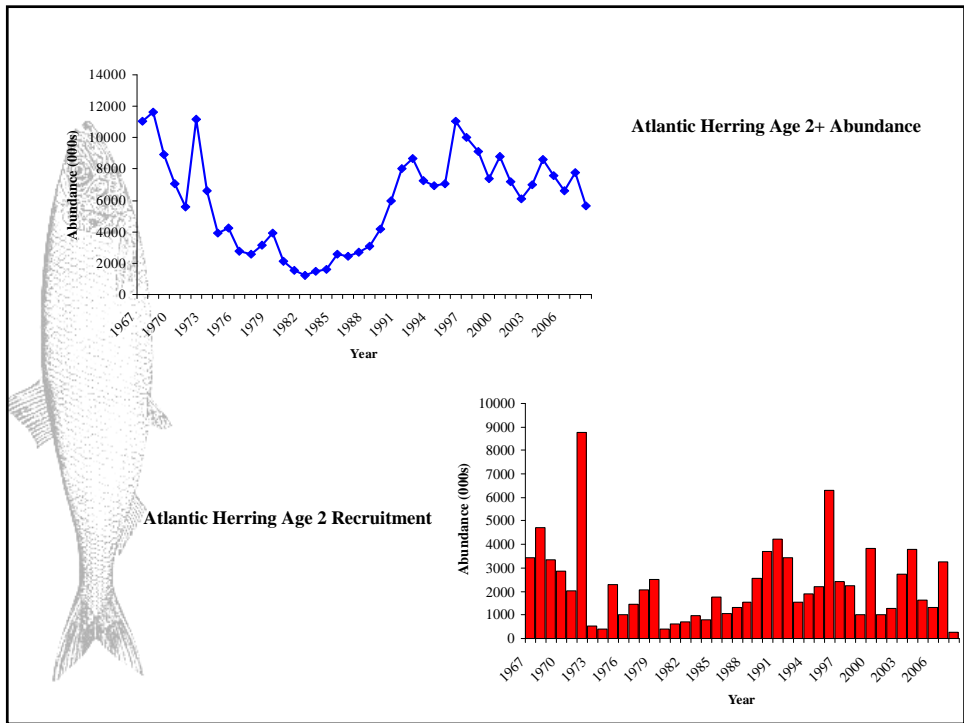
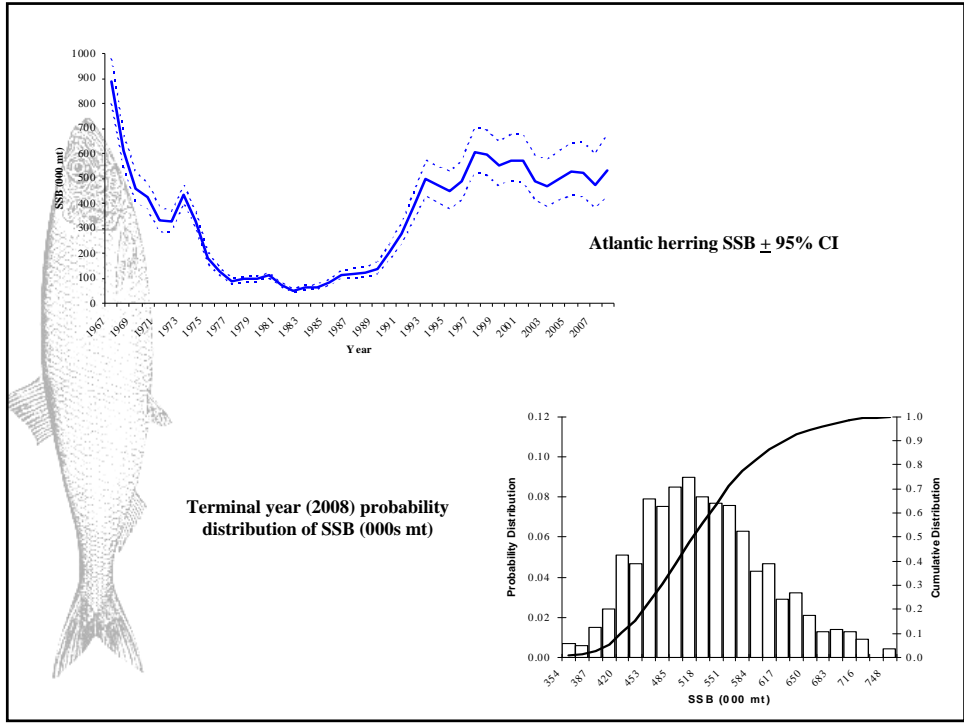
Fishery selectivity 1.0 ages 2-6+

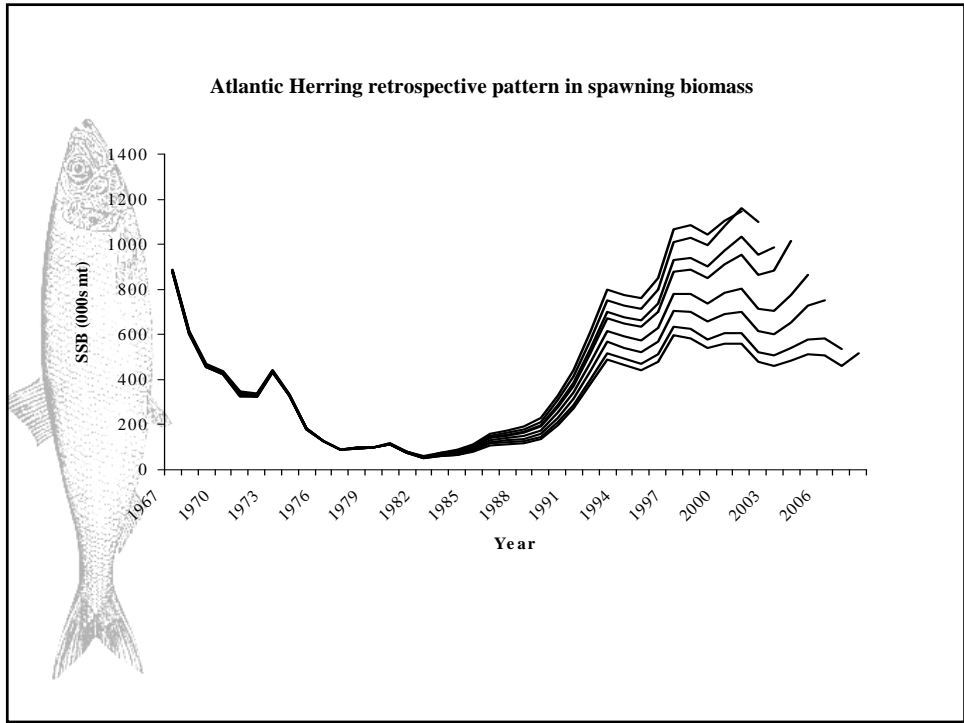
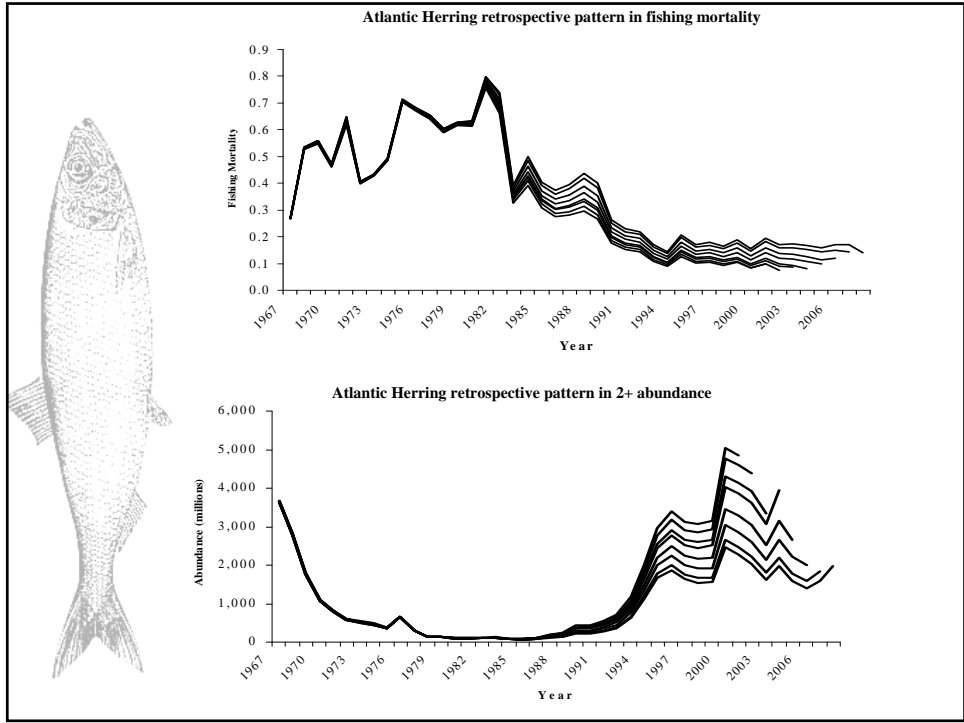
M=0.2

Total biomass calculated as # at age * Jan. 1 wt at age

SSB calculated for a fall spawning period







Atlantic Herring 2009 TRAC results summary:

$F_{2008} = 0.14$

$F_{MSY} = 0.27$

$Biomass_{2008} = 651.7$ (000s mt)

$B_{MSY} = 670.6$ (000s mt)

$SSB_{2008} = 515.6$ (000s mt)

$Catch_{2008} = 90.0$ (000s mt)

2004 and 2006 recruitment (age 2) below average

2005 recruitment above average

Overfishing is not occurring and biomass is not overfished

