



Supplementary Figure 1. Estimated reference abundance (in millions of individuals) 1984–2013 for University of Maine Model scenarios corresponding to those in Table 1 (red trend lines) compared to the base case (black trend lines). Note that the scenarios in Table 1 are only applied after a regime shift at 2009. Pre-2009 for all Runs 2–7 are with base case data, whereas post-2009 for all Runs 2–7 are using the growth matrices and size-at-maturity values that correspond with scenarios 2–7 in Table 1. Shaded regions indicate years where the historical fishery status is different from that of the base case for the same year. Note the differences in vertical axes ranges between plots. The results from this analysis agreed with the results of non-time varying growth and size-at-maturity data (Figure 2).