uniform random scenario mean prediction residuals age-2 age-3 age-1 age-4 age-5 age-6 IBTS_Q1_gam 8 6 Residual: (Obs - Pred)/sd(Pred) IBTS_Q3_gam model no misreporting random walk Residual catch 8 -6 · 1970 1980 1990 2000 2010 1970 1980 1990 2000 2010 1970 1980 1990 2000 2010 1970 1980 1990 2000 2010 1970 1980 1990 2000 2010 1970 1980 1990 2000 2010 year