1-step Forecasts (a) mean (b) AR(1) 200000 -2e+05 -Recruitment Recruitment 150000 -100000 -1e+05 -50000 0 -0e+00 -1980 2010 1980 1990 1970 1990 2010 2000 1970 2000 Year Year (c) Beverton-Holt (d) simplex 200000 -3e+05 -Recruitment Recruitment 150000 -2e+05 -100000 -1e+05 -50000 0 -0e+00 1980 2010 1990 1970 1990 1970 1980 2010 2000 2000 Year Year (e) HMM (f) PELT 200000 -Recruitment 2e+05 -Recruitment 150000 -100000 -1e+05 -50000

0 -

1970

1980

1990

Year

2010

2000

0e+00 -

1980

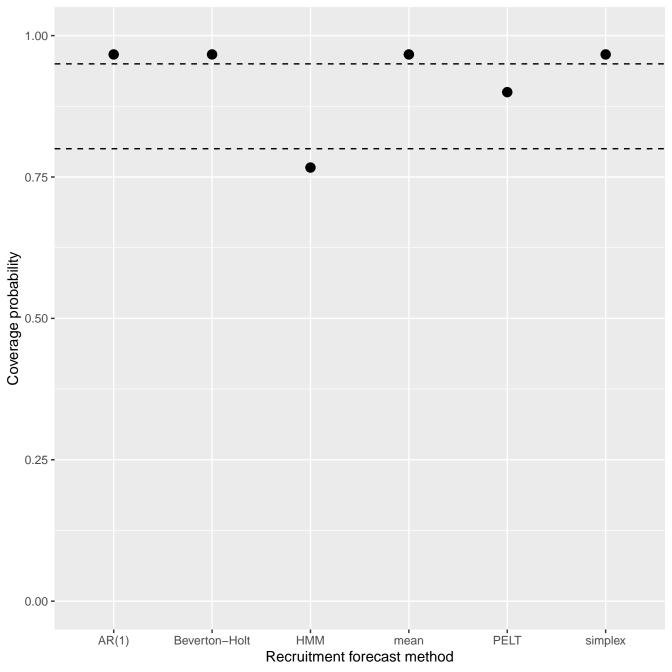
1970

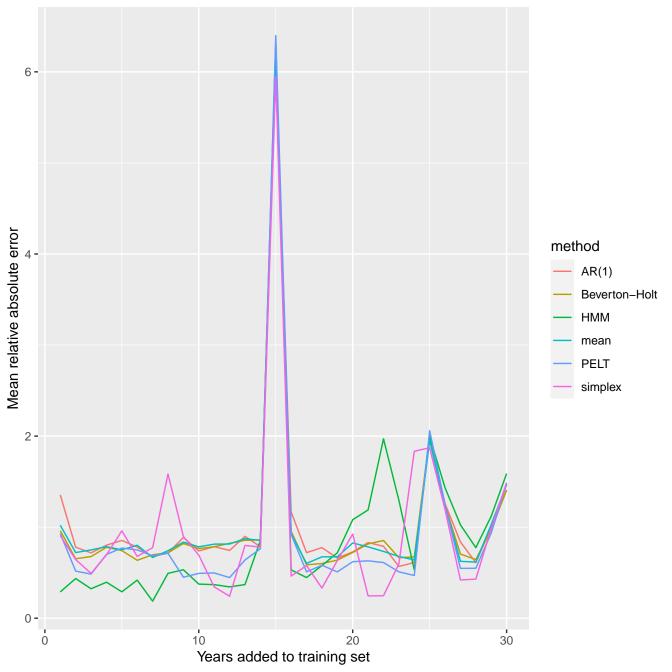
1990

Year

2000

2010





200000 -200000 -Recruitment Recruitment 150000 -150000 -100000 -100000 -50000 50000 0 -0 -1980 2010 1970 1980 1990 2010 1990 2000 1970 2000 Year Year (c) Beverton-Holt (d) simplex 200000 -3e+05 -150000 -2e+05 -

5-step Forecasts

(b) AR(1)

(a) mean

