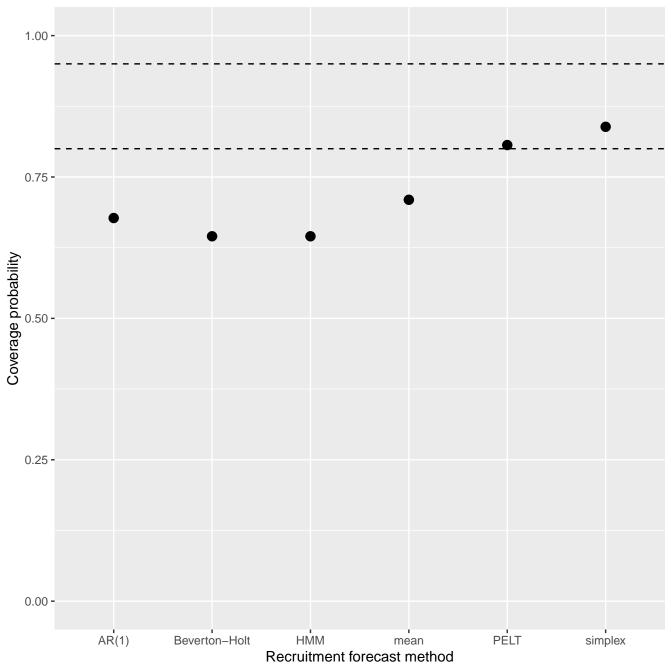
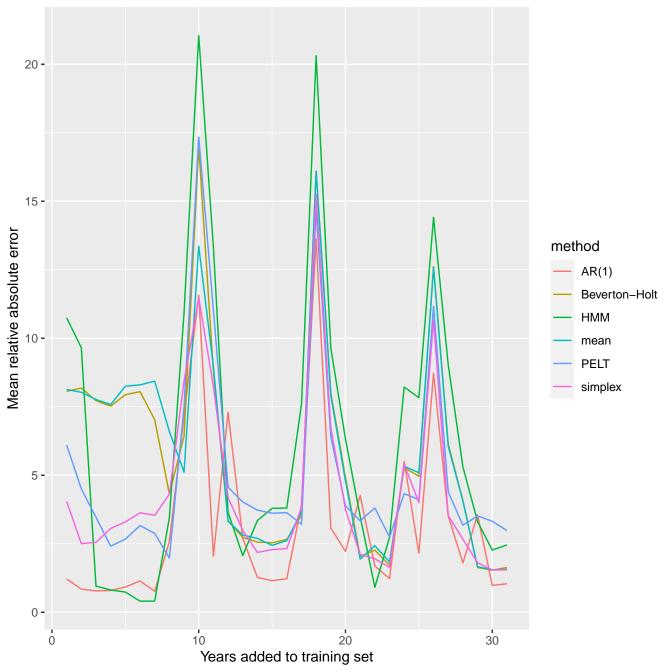
1-step Forecasts (a) mean (b) AR(1) 1500 -2000 -Recruitment Recruitment 1500 -1000 -1000 500 -500 -1970 1980 2000 1970 2000 2010 1980 1990 2010 1990 Year Year (c) Beverton-Holt (d) simplex 2000 -1500 -Recruitment Recruitment 1500 -1000 1000 500 -500 -1970 1980 2000 2010 1970 1980 2000 2010 1990 1990 Year Year (e) HMM (f) PELT 2000 -2000 -Recruitment Recruitment 1500 -1500 **-**1000 1000 500 -500 -1970 1980 1970 1990 1990 2000 2010 1980 2010 2000 Year Year





5-step Forecasts (a) mean (b) AR(1) 1600 -1500 -Recruitment Recruitment 1200 -1000 800 500 -400 -2000 2010 1980 2000 1970 1970 2010 1980 1990 1990 Year Year (c) Beverton-Holt (d) simplex 1500 **-**1500 -Recruitment Recruitment 1000 1000 500 -500 -1970 1980 2000 2010 1970 1980 2000 2010 1990 1990 Year Year (f) PELT (e) HMM 2000 -1500 -Recruitment Recruitment 1500 **-**1000 -1000 500 -500 -

1970

1980

1990

Year

2000

2010

1970

1980

1990

Year

2000

2010

