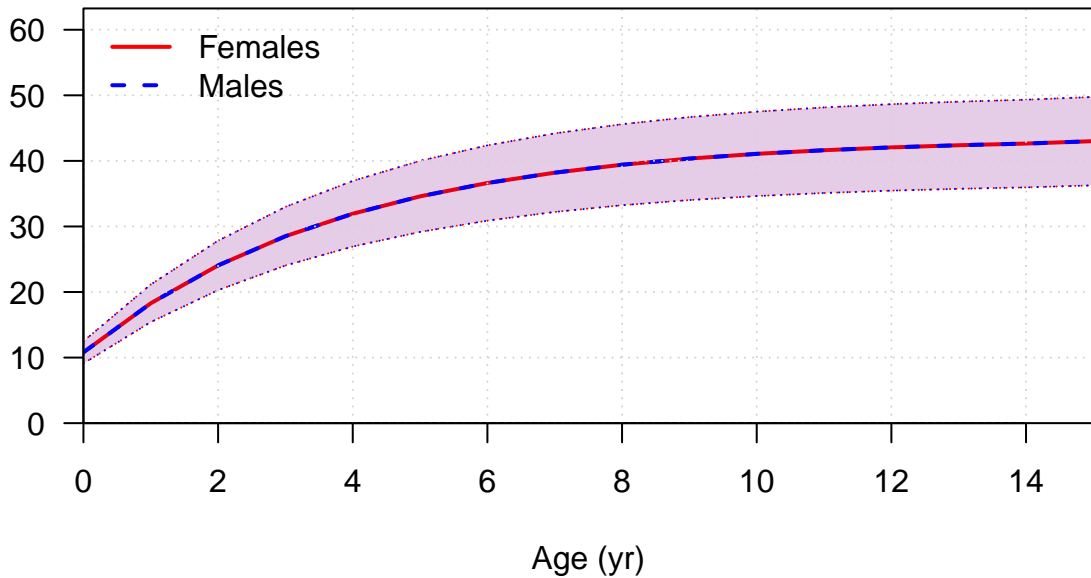
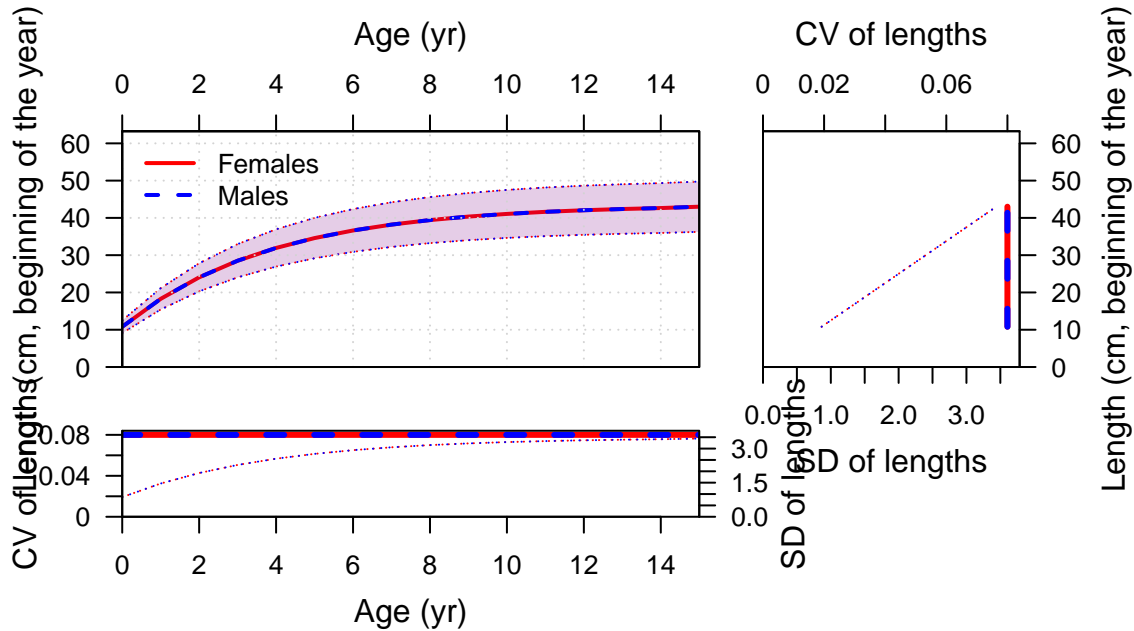
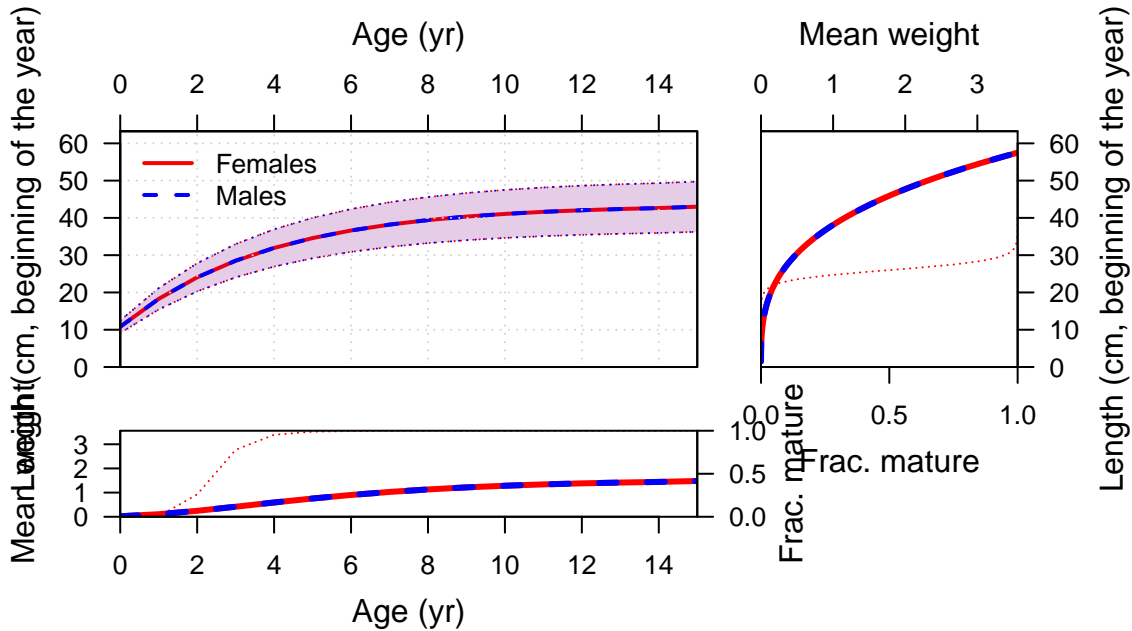


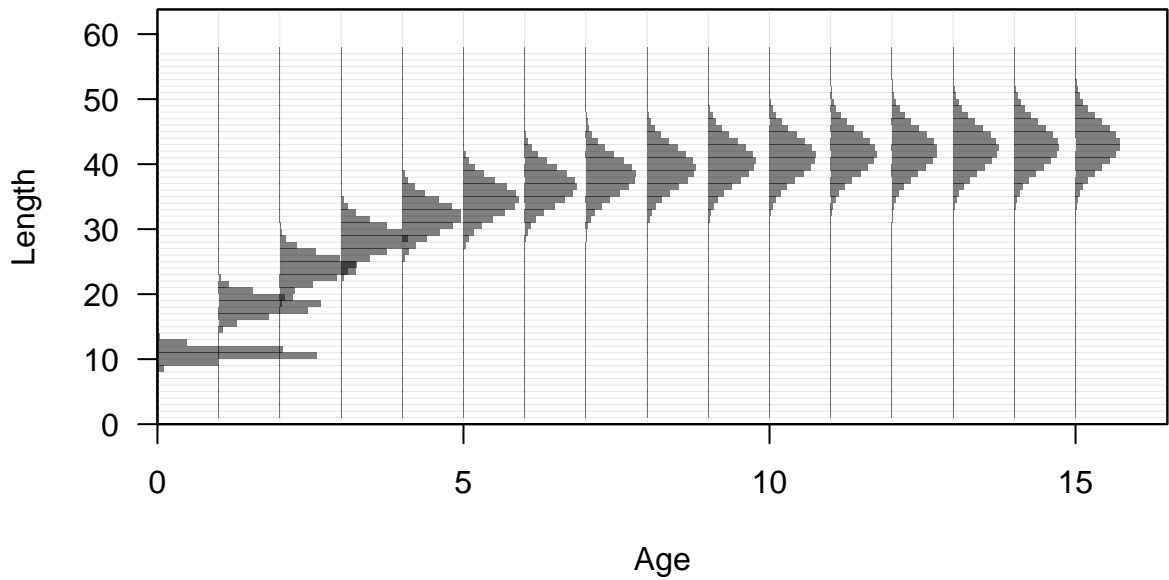
Plots created using the 'r4ss' package in R  
Stock Synthesis version: 3.30.19.0  
StartTime: Mon Aug 08 13:11:23 2022  
Data\_File: data.ss  
Control\_File: control.ss

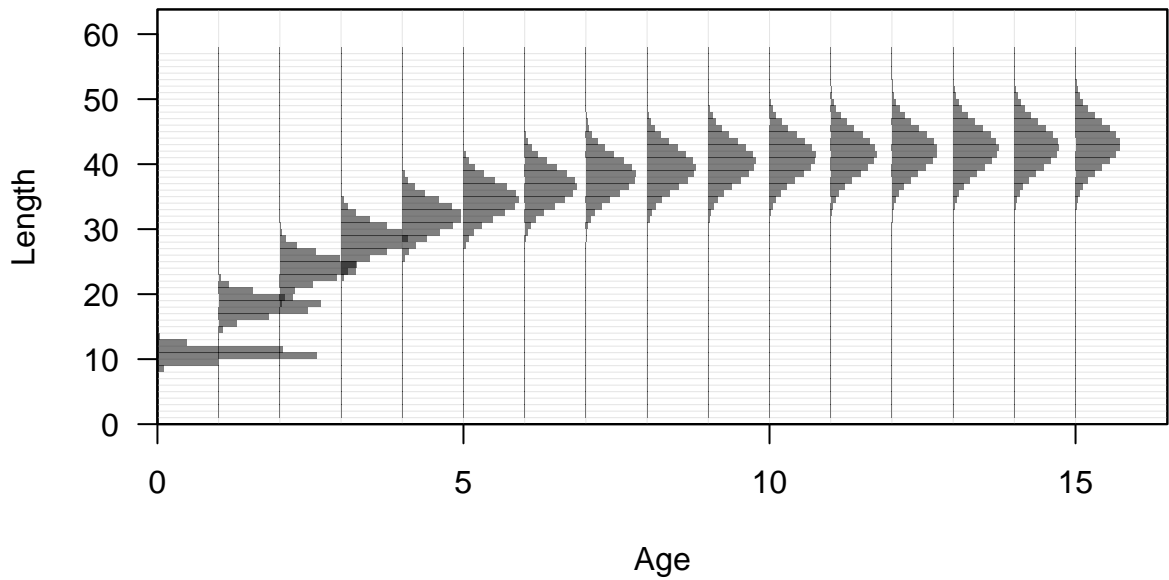
Length (cm, beginning of the year)

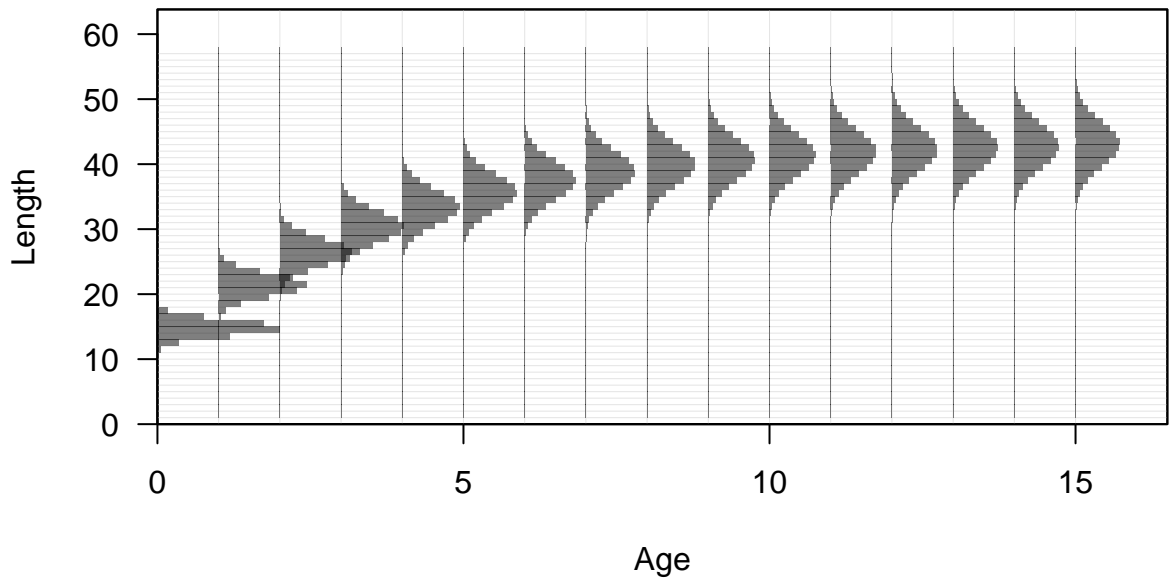


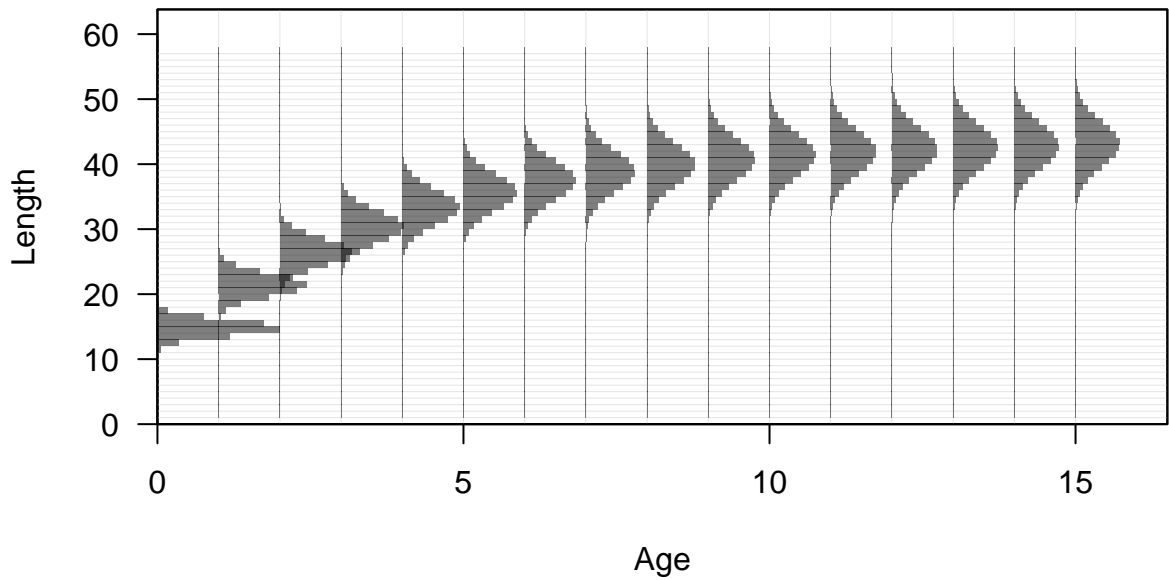






















Fecundity



Fecundity



Spawning output

3

2

1

0

0

10

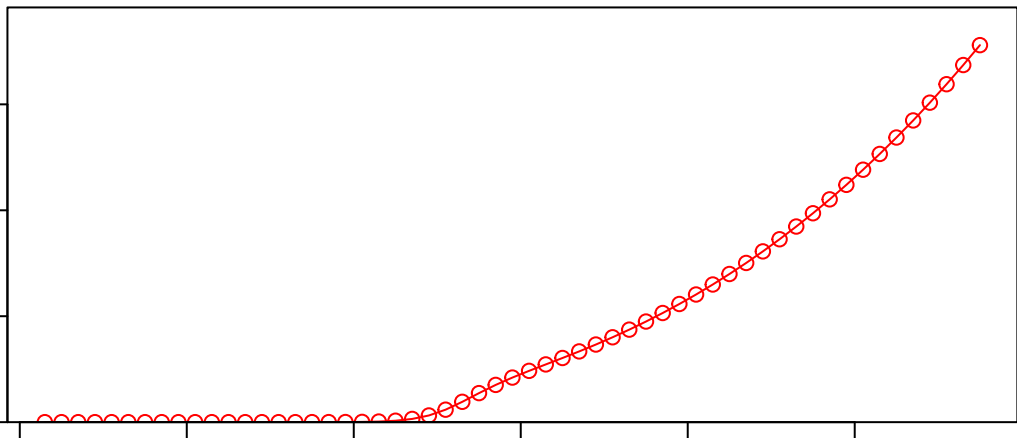
20

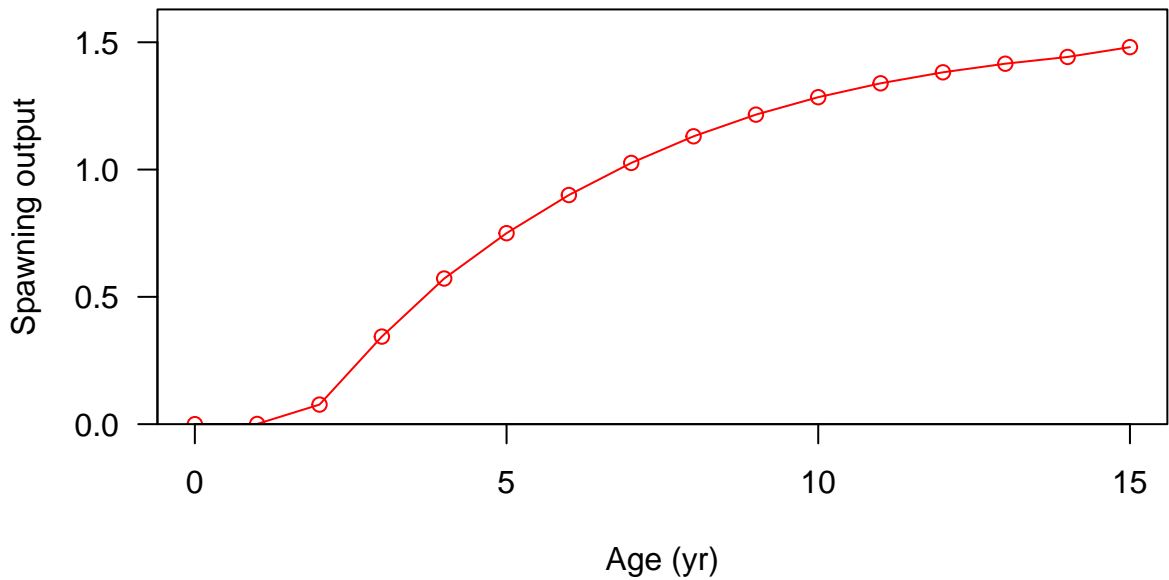
30

40

50

Length (cm)







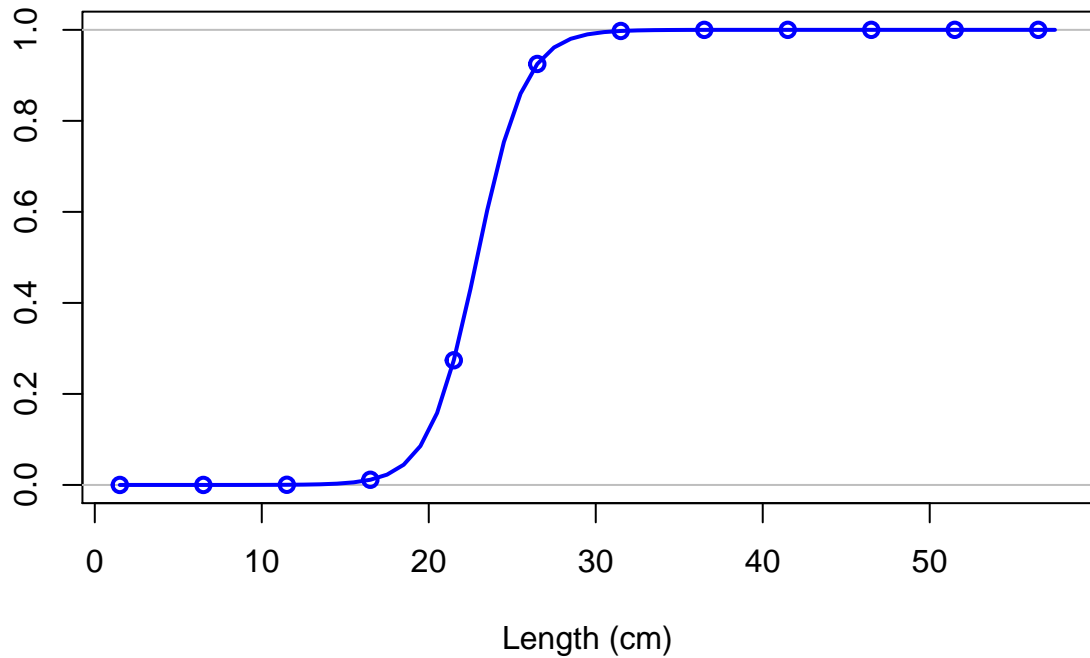
Hermaphroditism transition rate



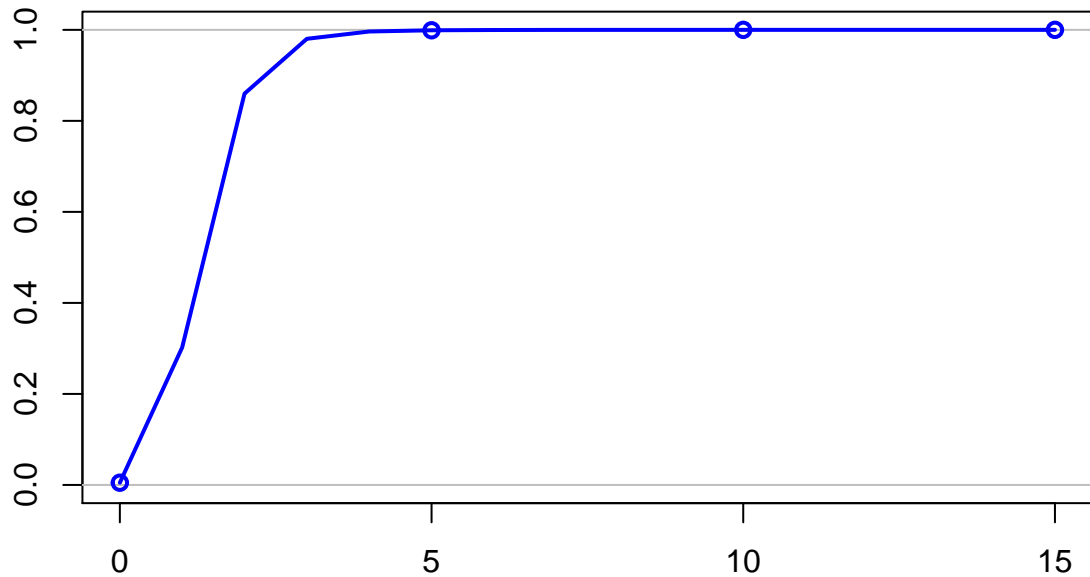
Fraction females by age at equilibrium



Selectivity

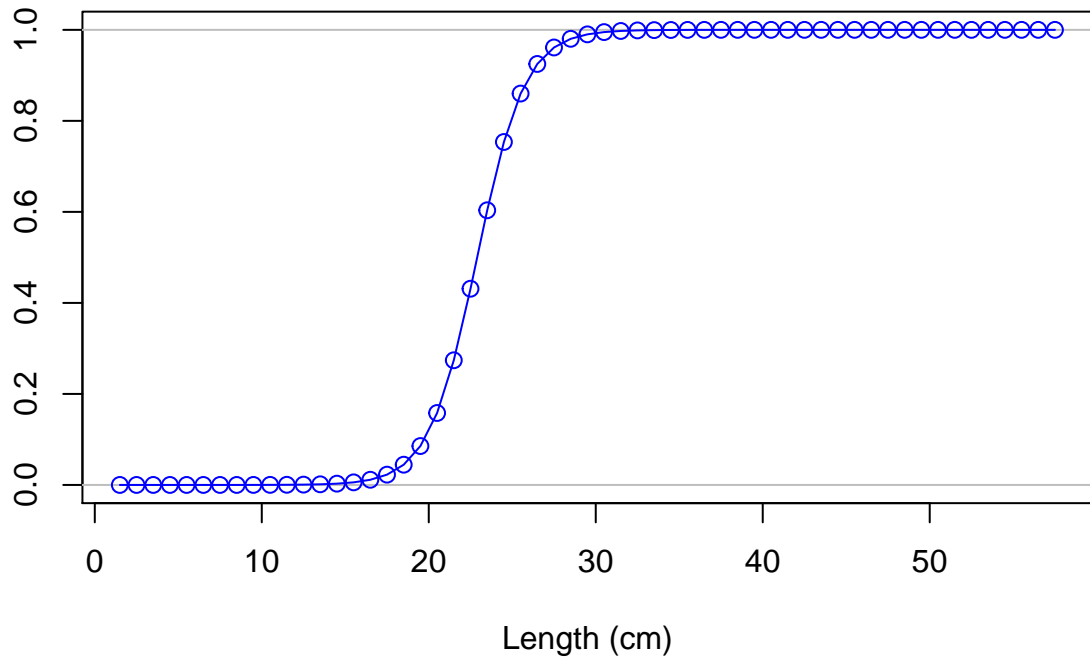


Selectivity

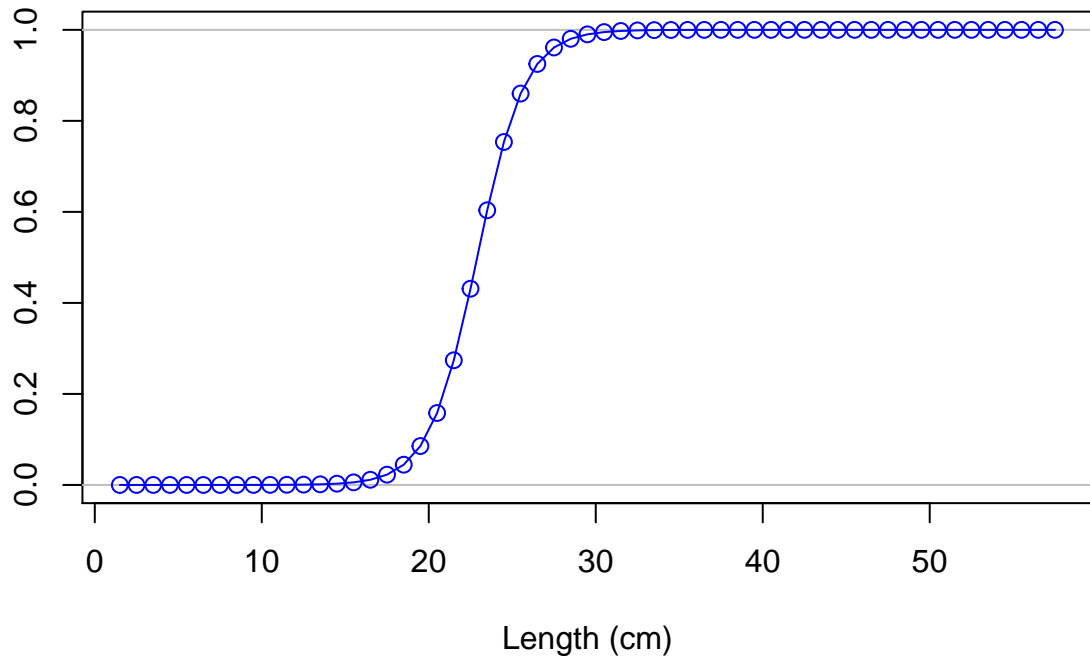


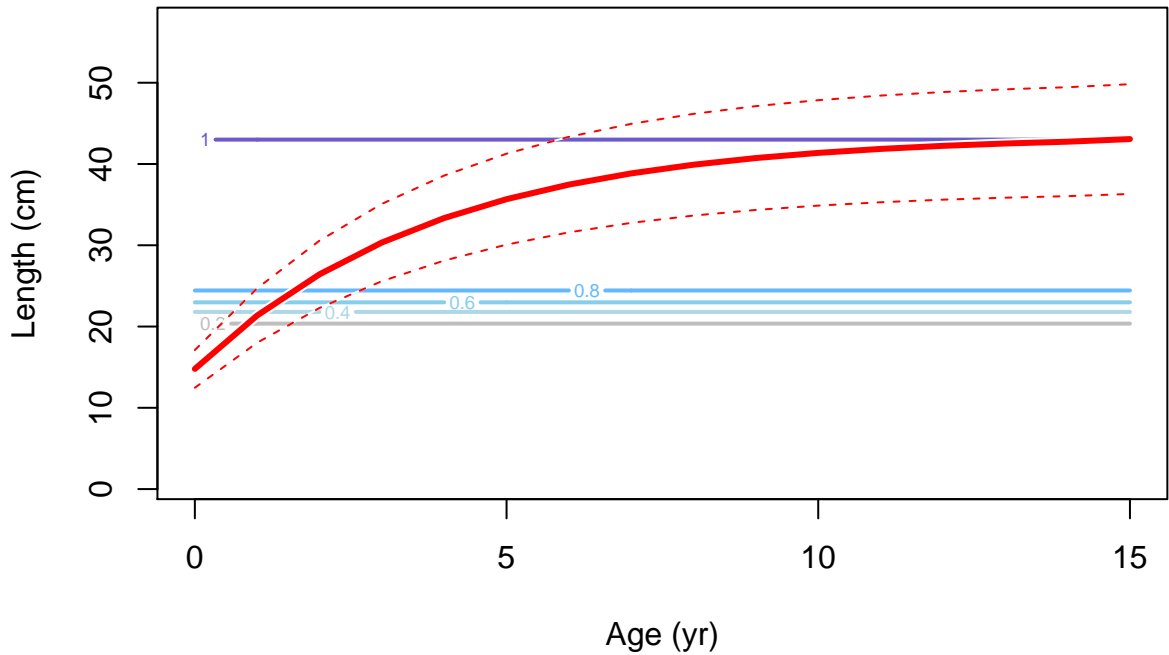
Age (yr)

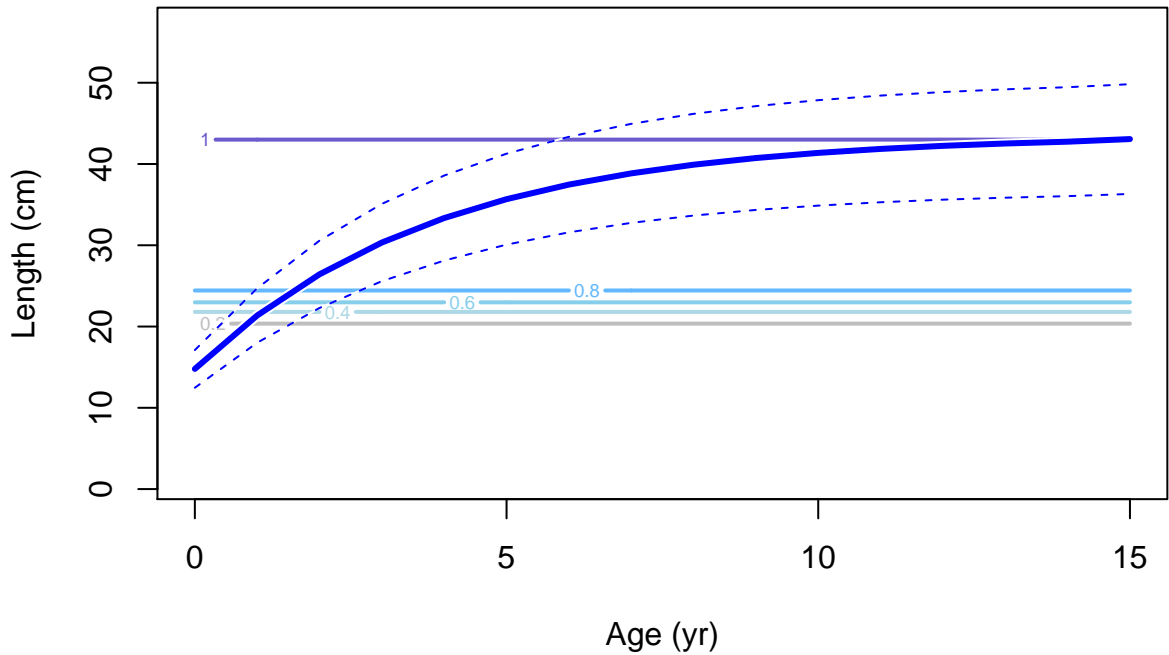
Selectivity



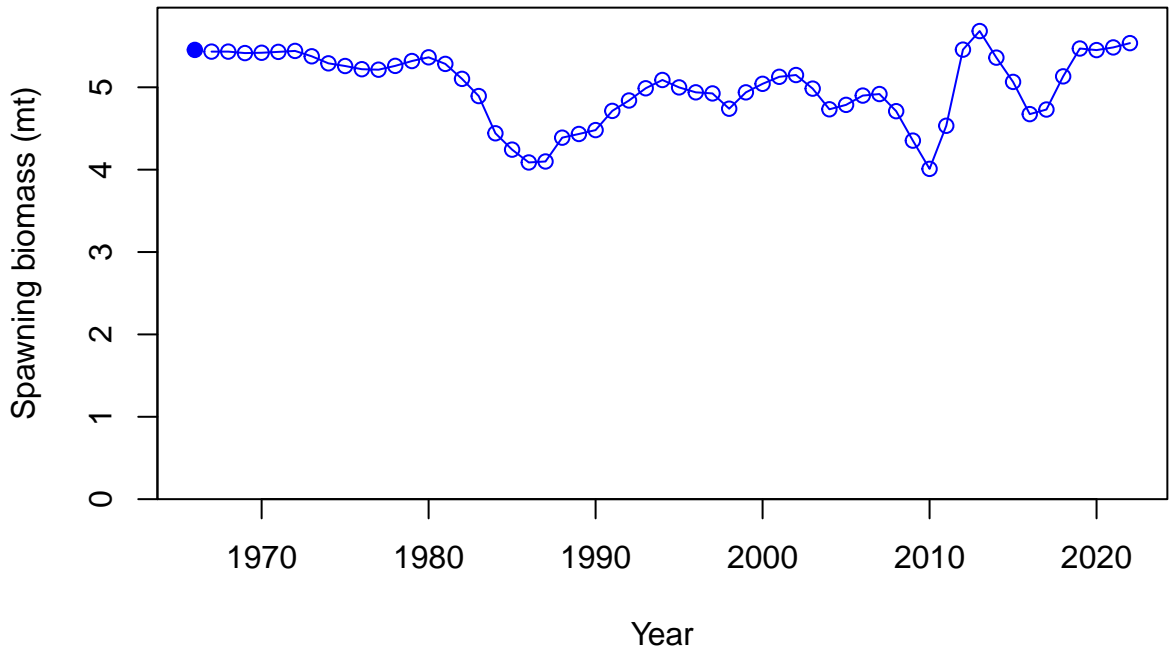
Selectivity



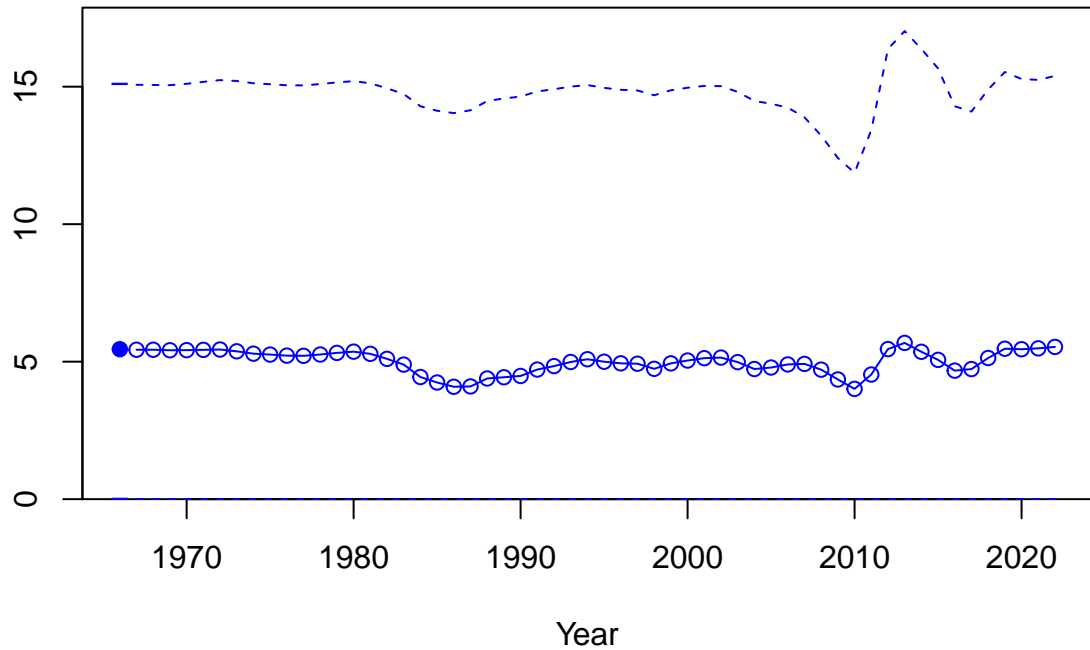




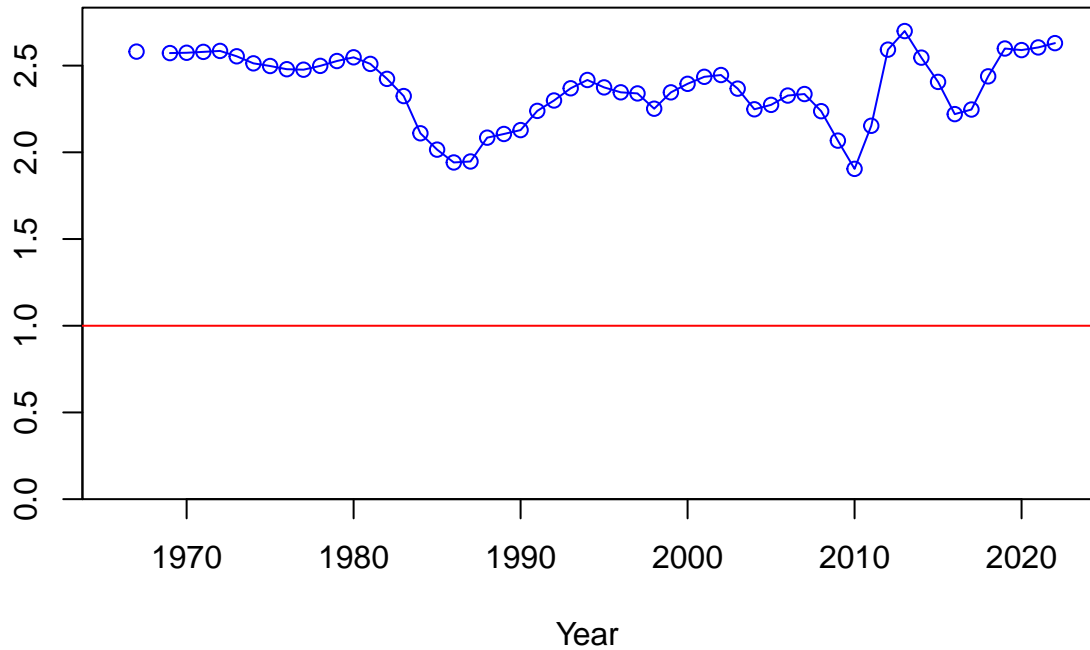




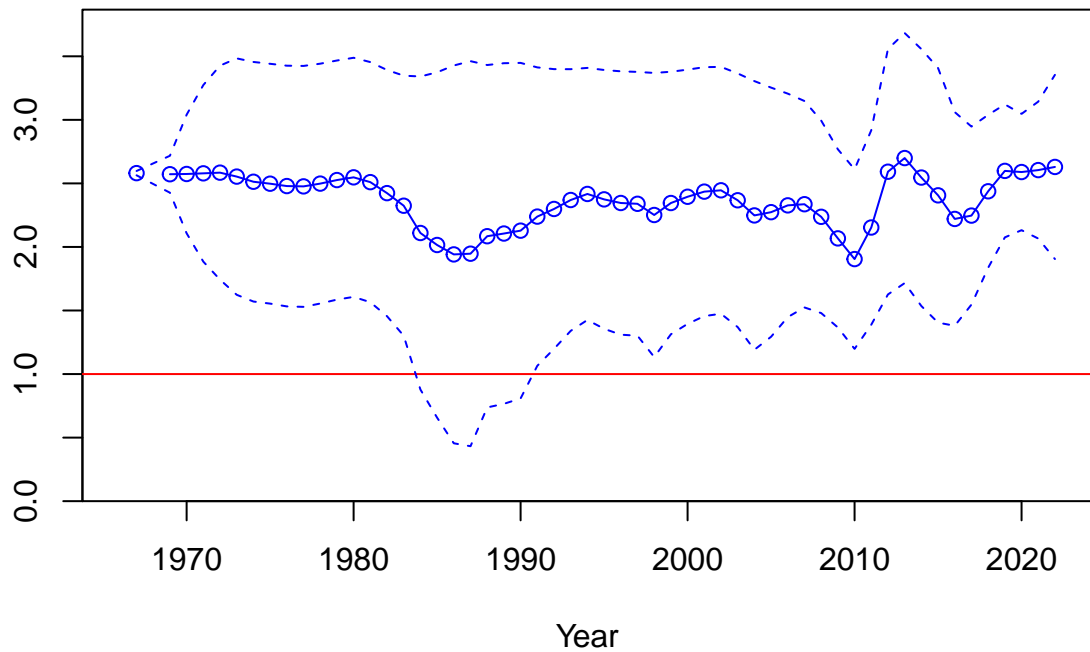
Spawning biomass (mt)

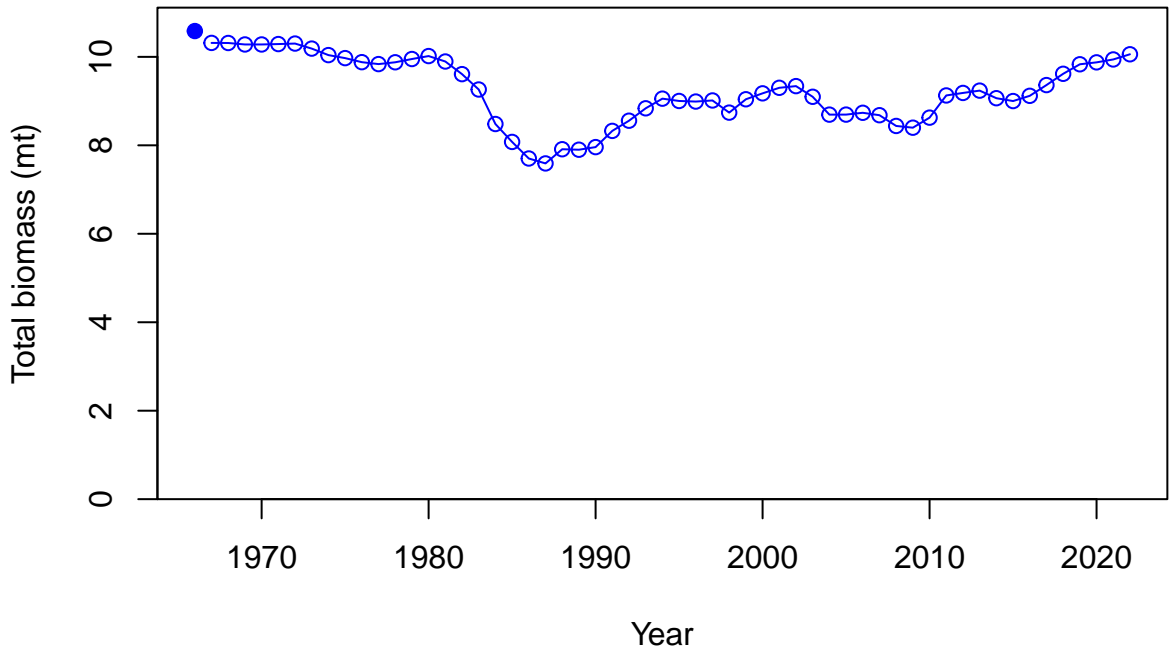


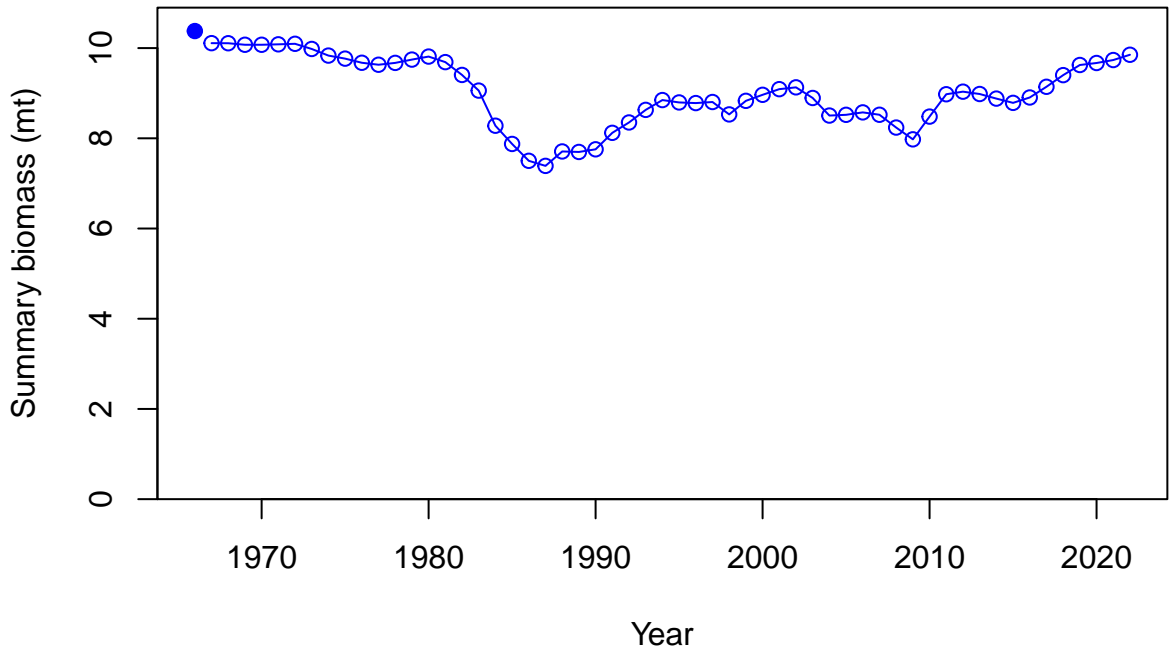
Relative spawning biomass:  $B/B_{MSY}$



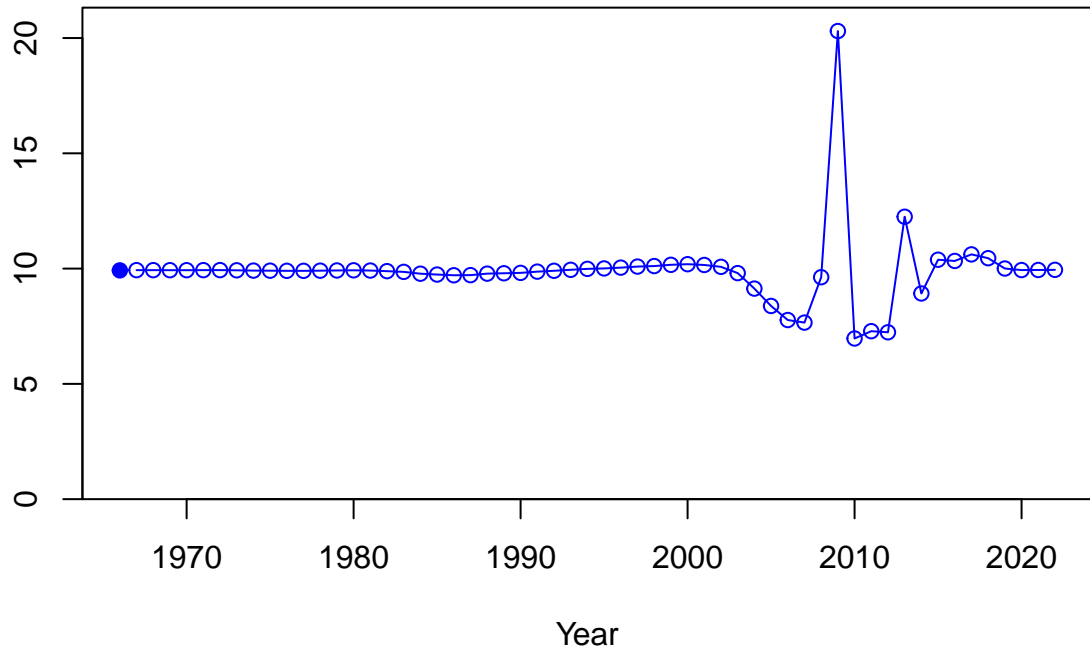
Relative spawning biomass:  $B/B_{MSY}$



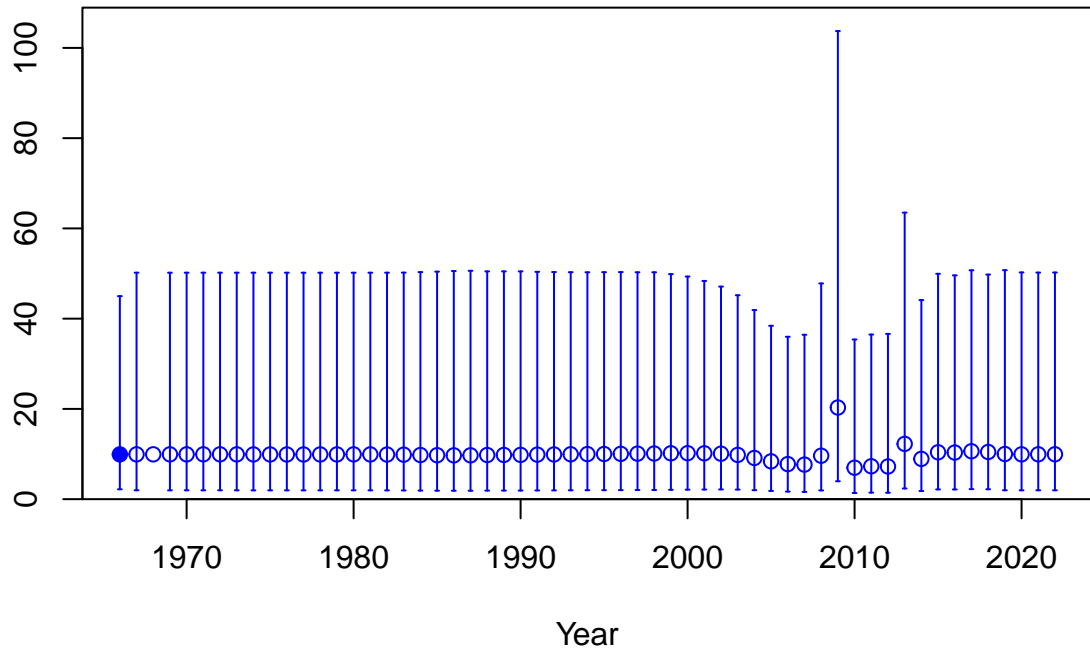




Age-0 recruits (1,000s)

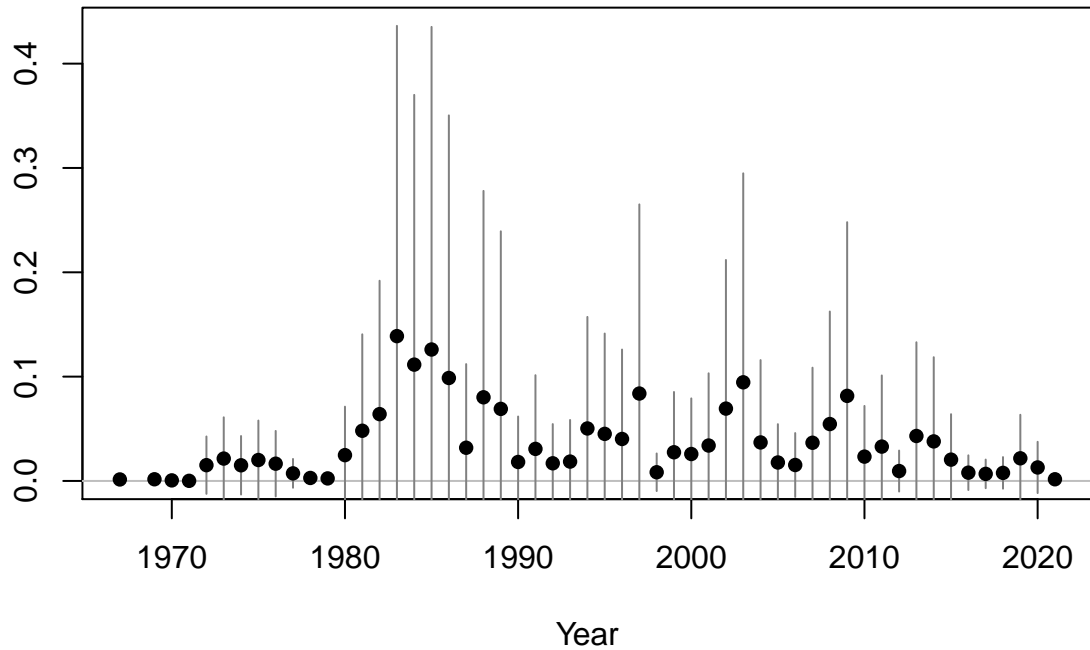


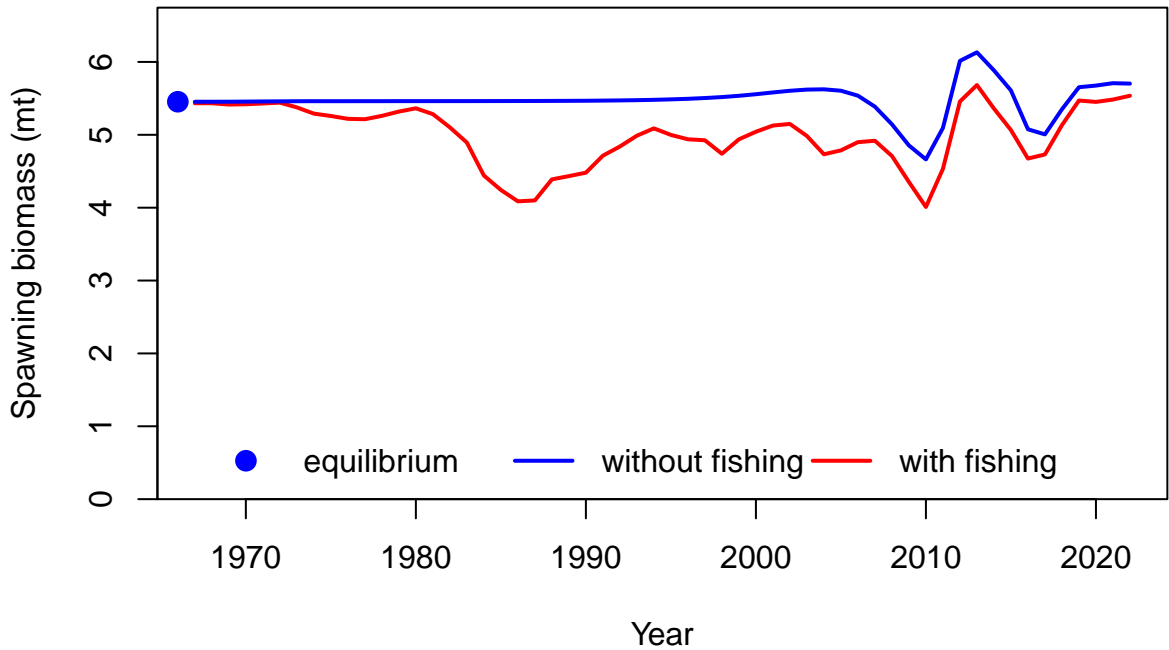
Age-0 recruits (1,000s)



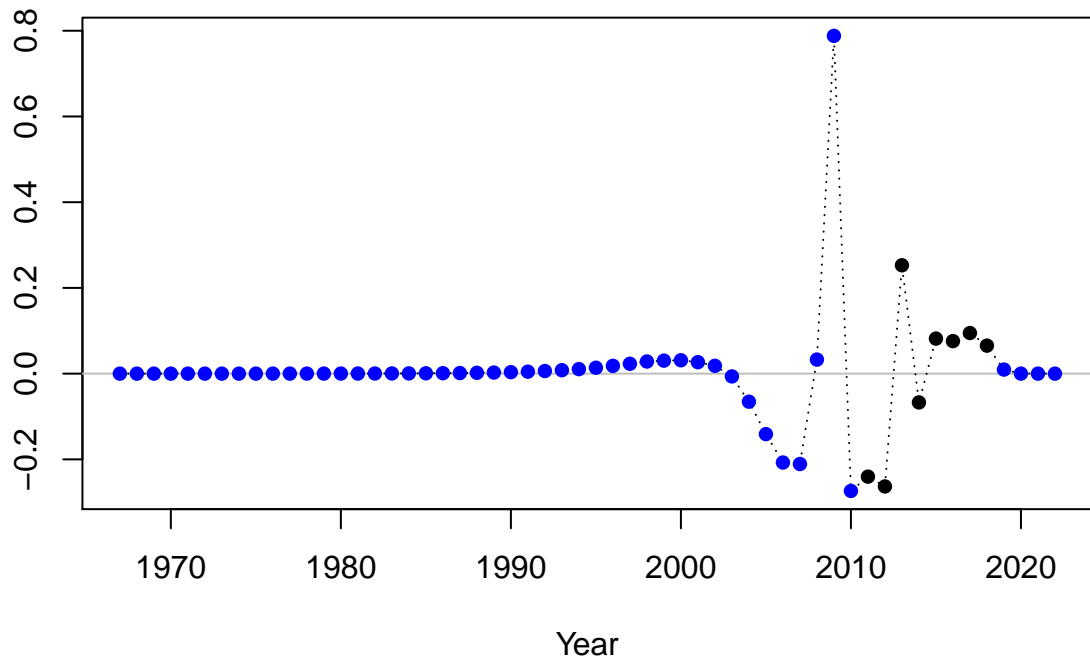


Summary Fishing Mortality

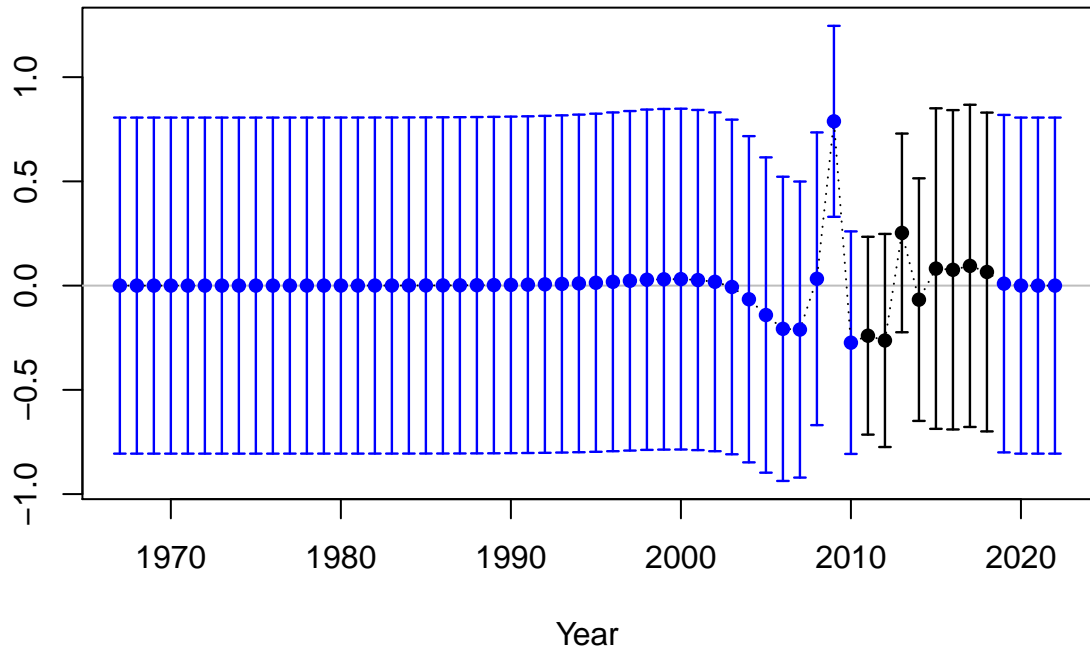




Log recruitment deviation

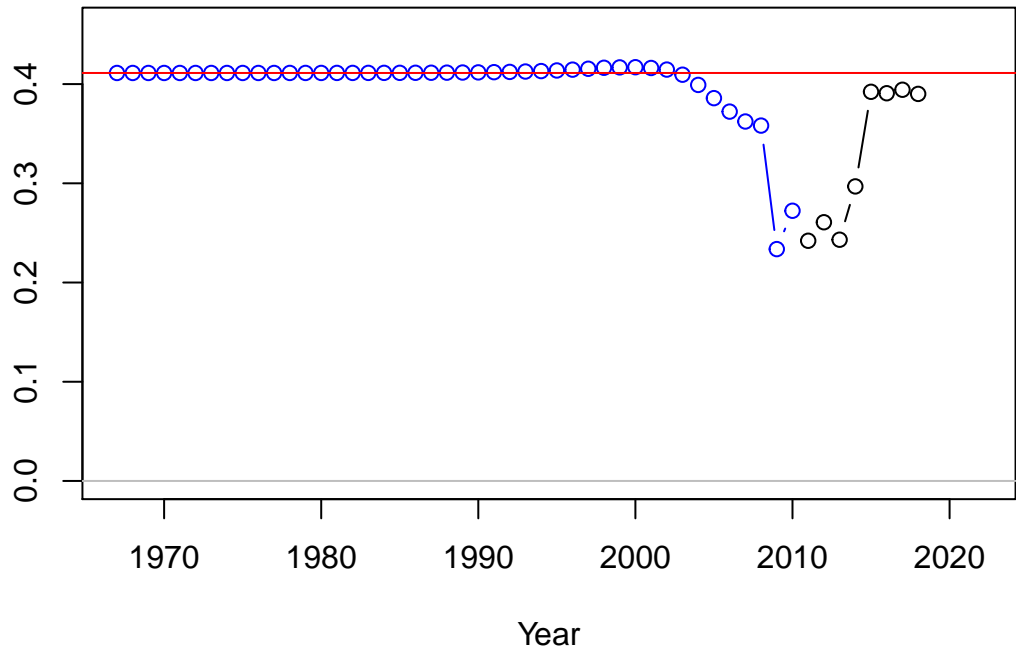


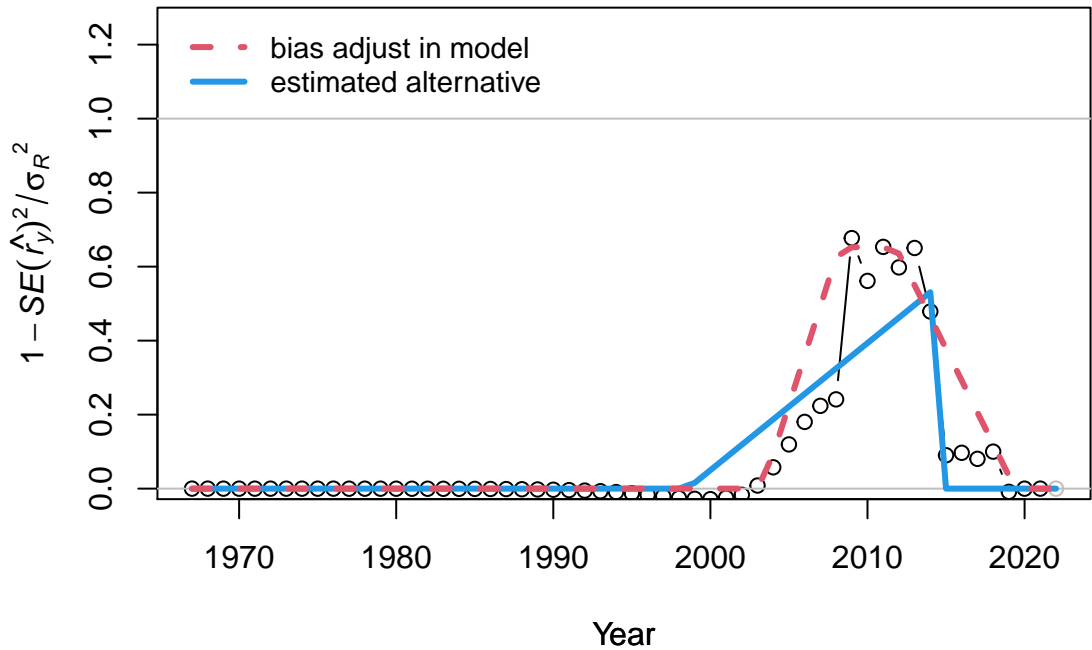
Log recruitment deviation

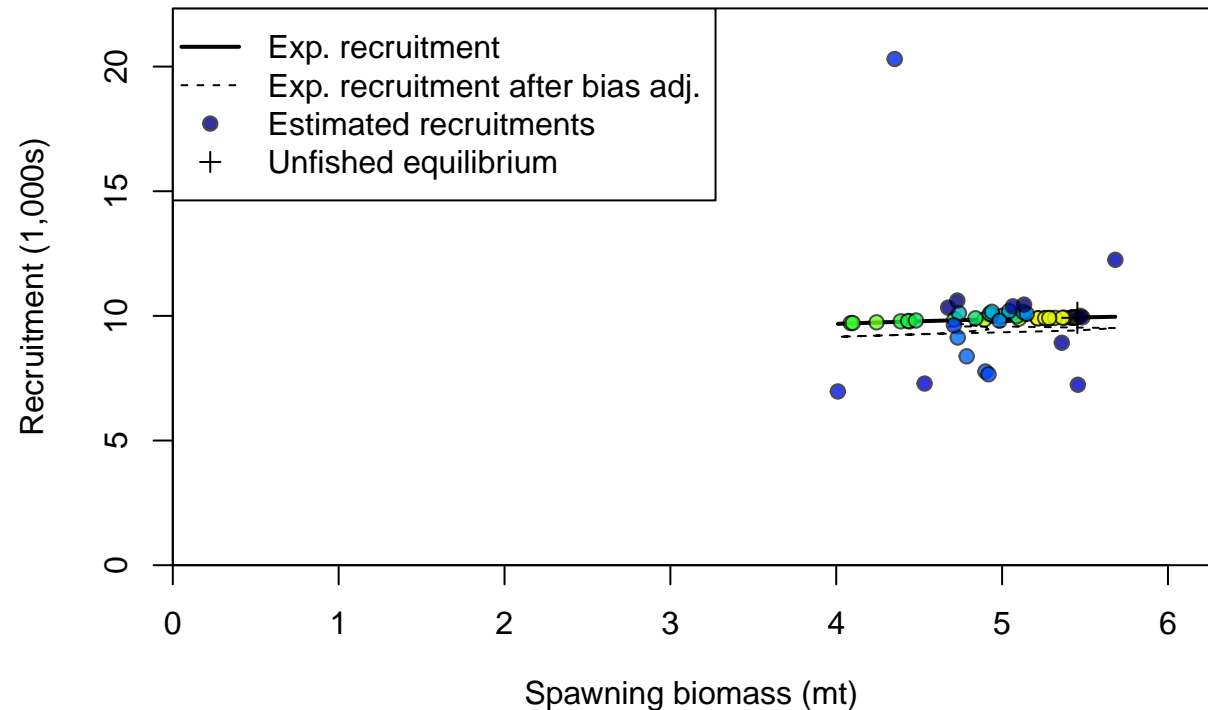


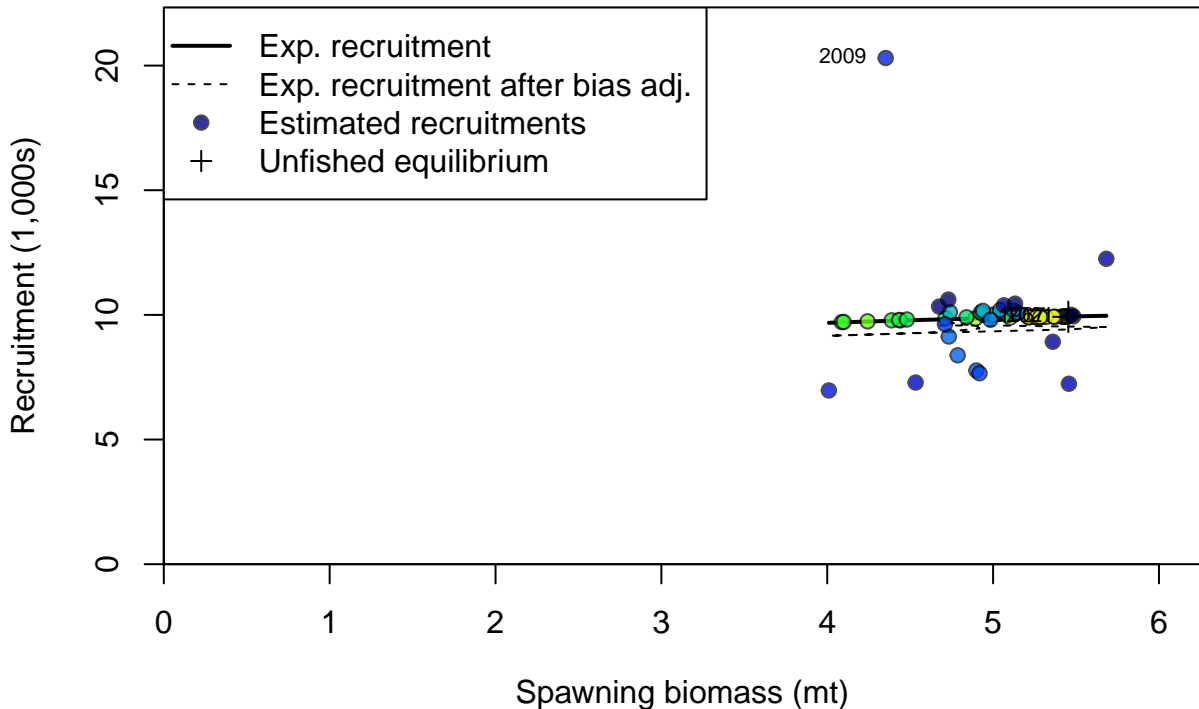
## Recruitment deviation variance

Asymptotic standard error estimate











Log recruitment deviation

0.5  
0.0  
-0.5

0.0

0.2

0.4

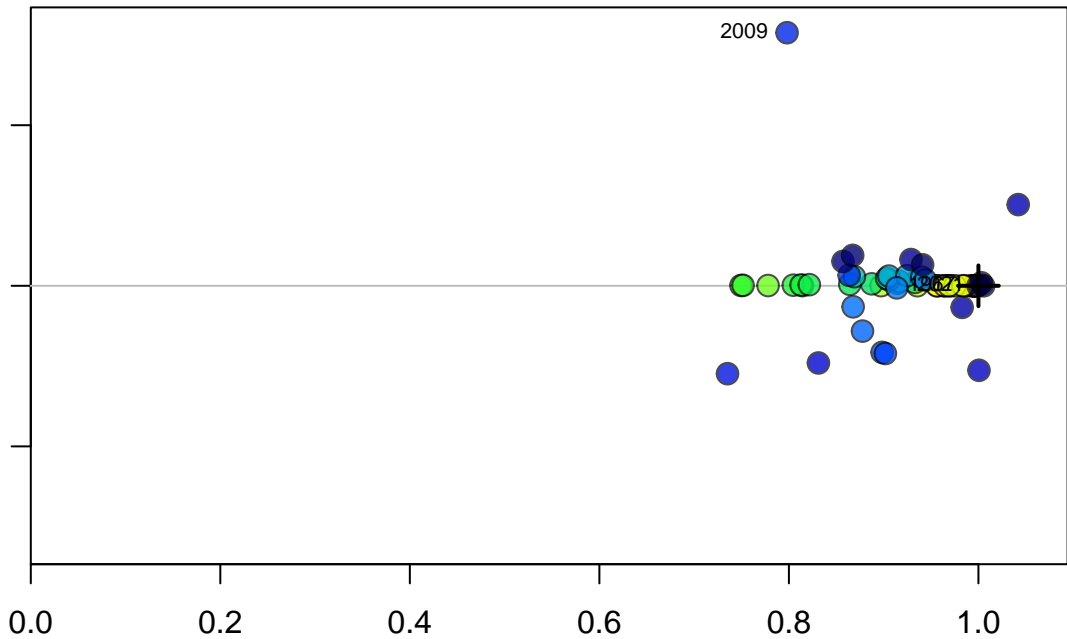
0.6

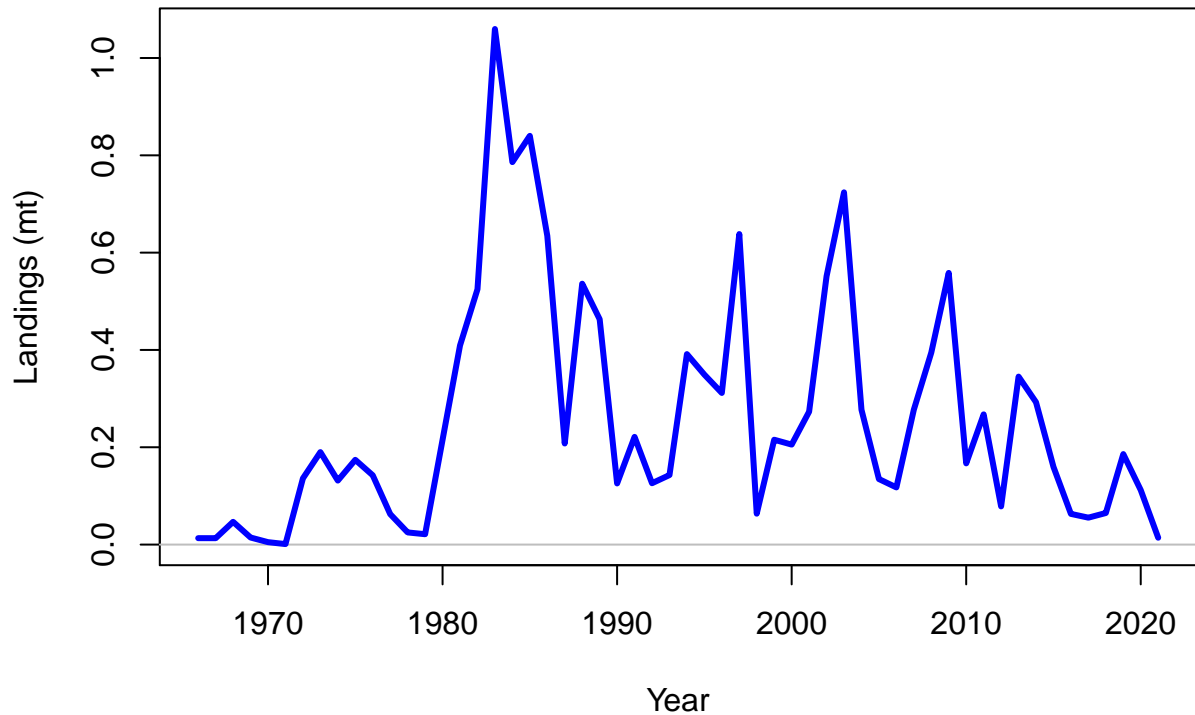
0.8

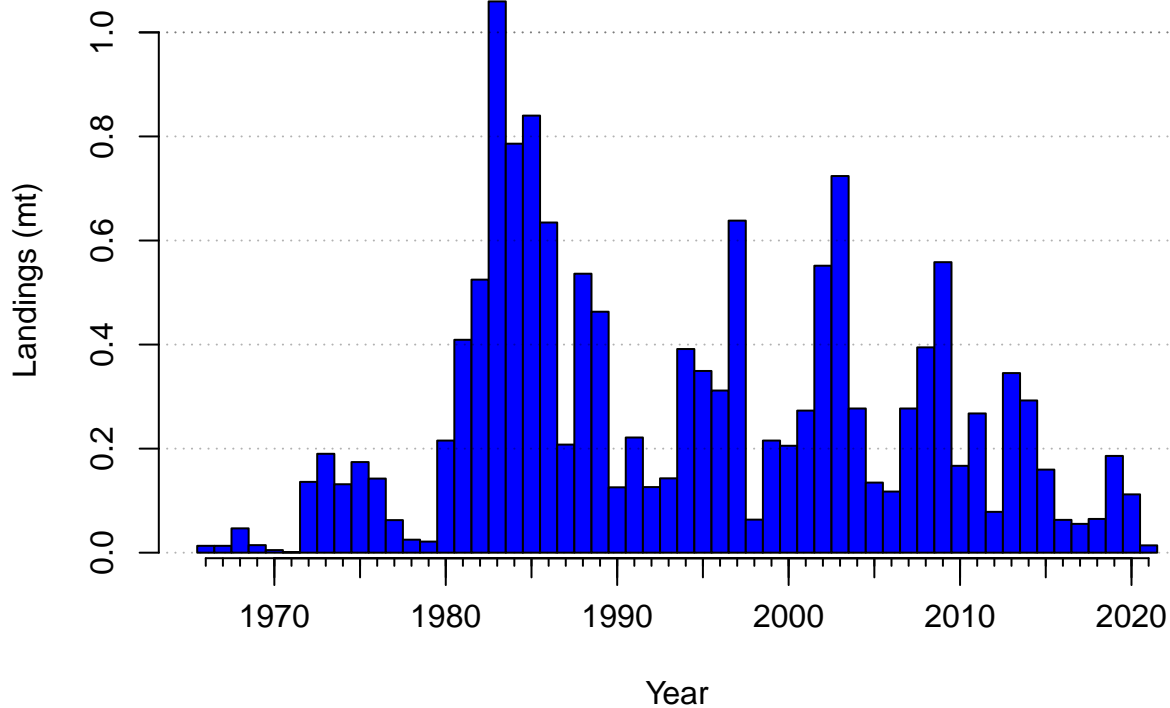
1.0

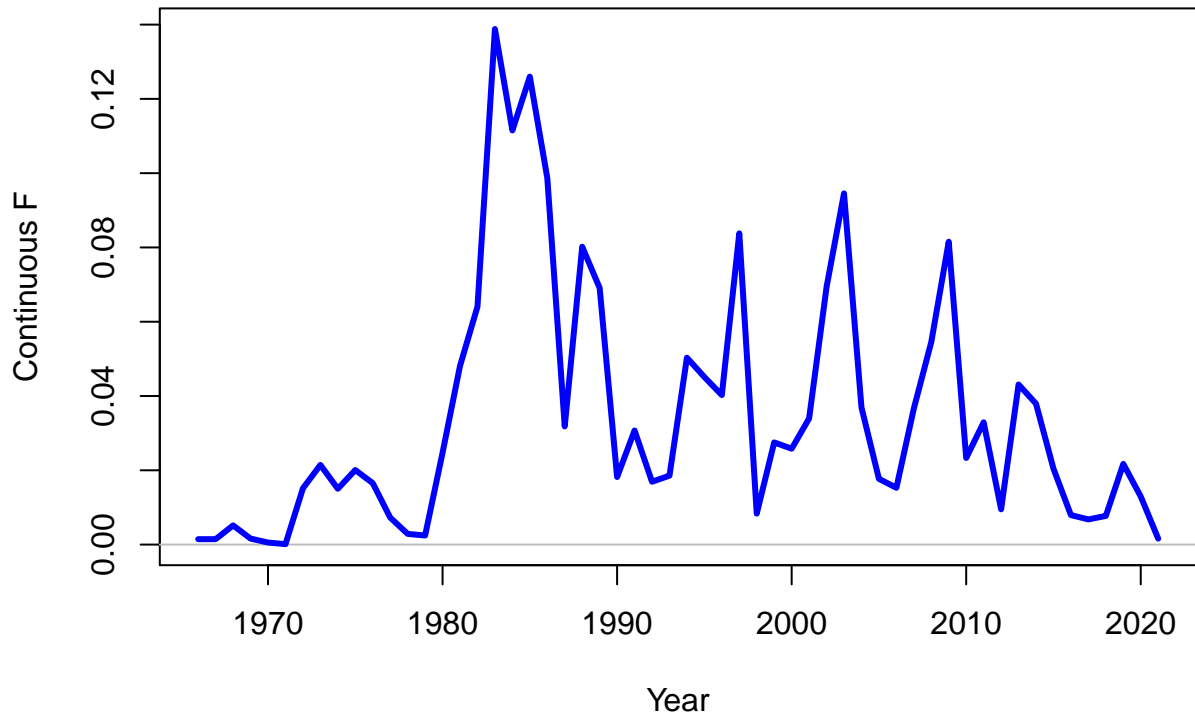
Spawning output (relative to  $B_0$ )

2009

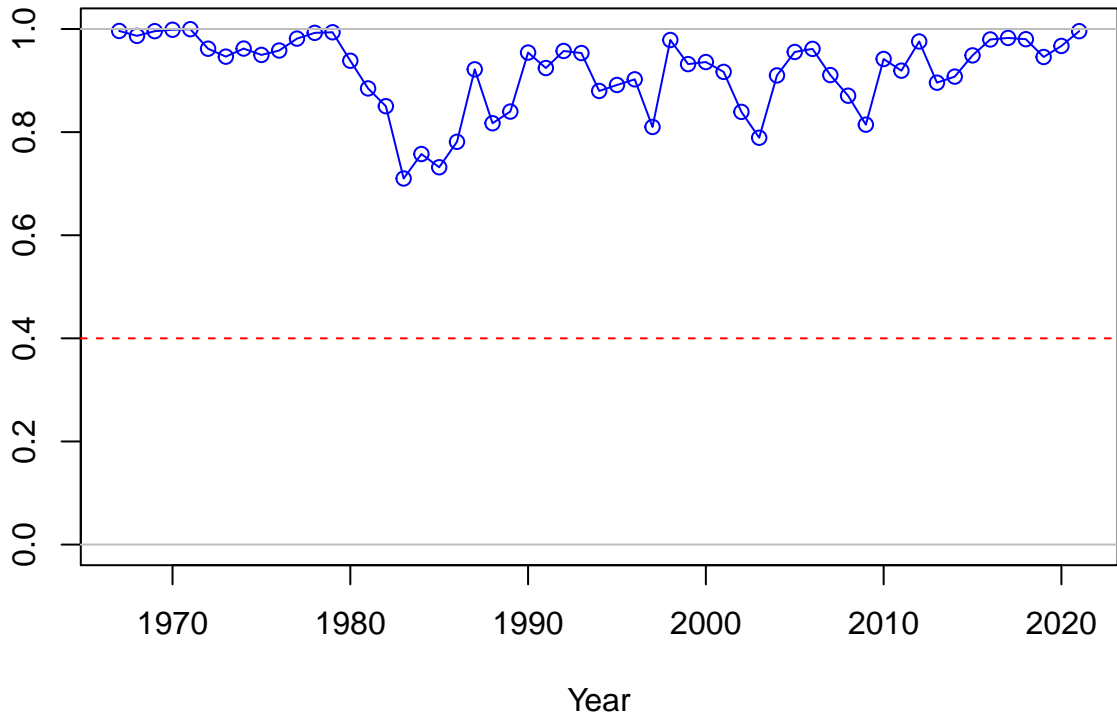




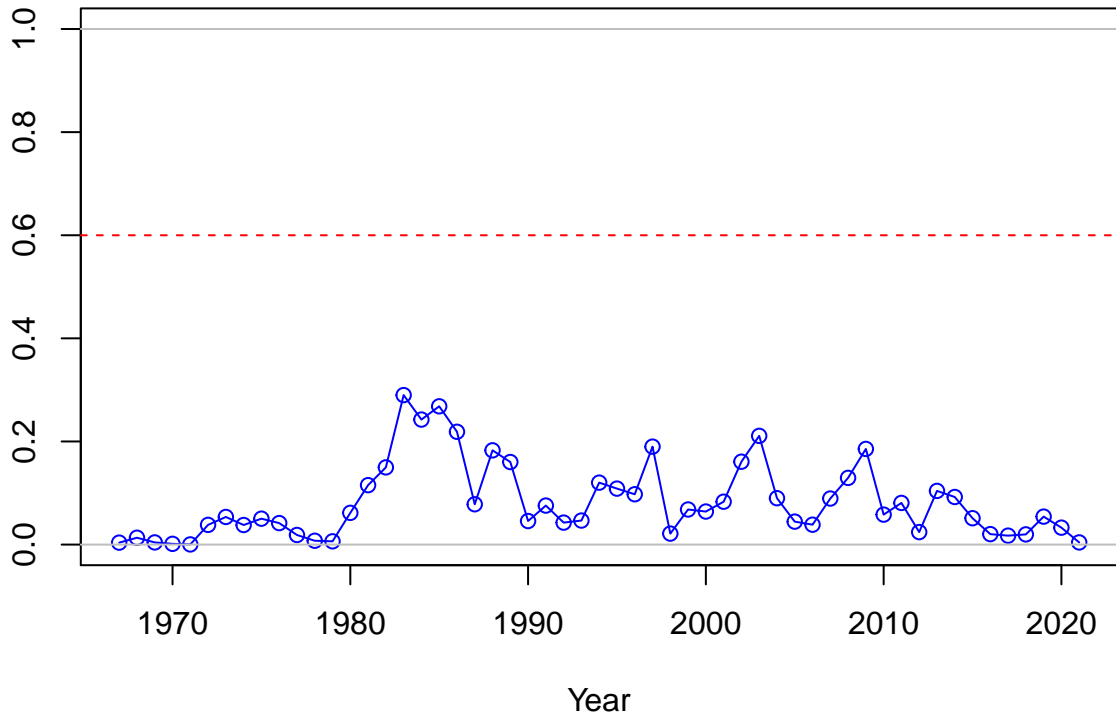




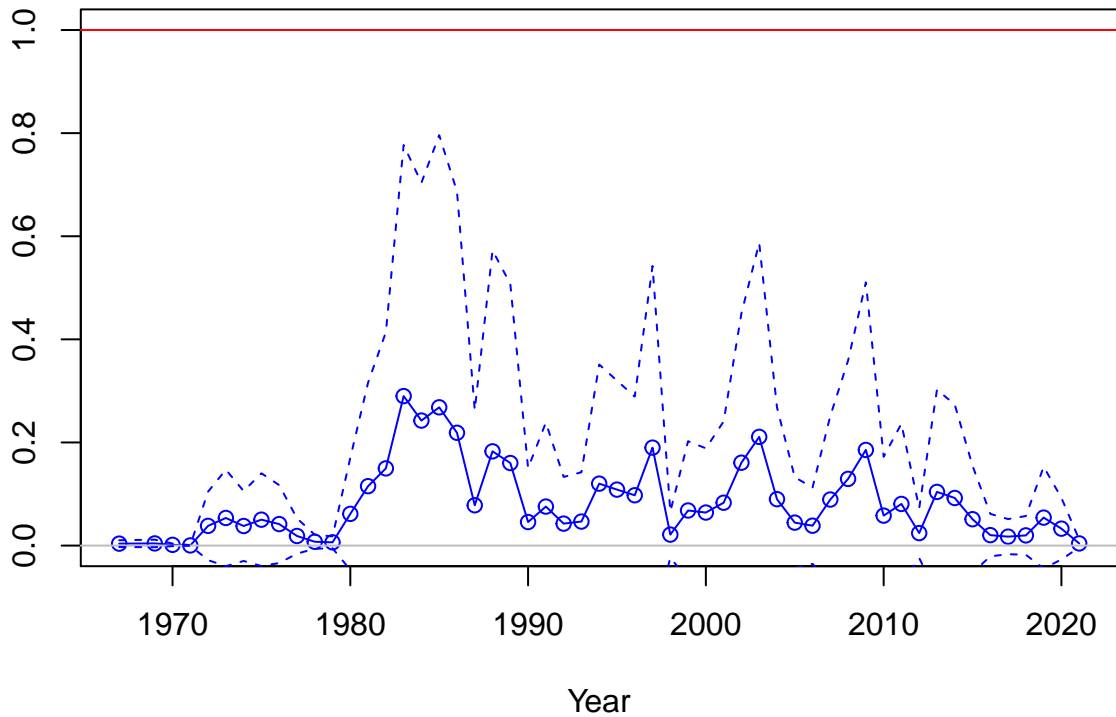
SPR



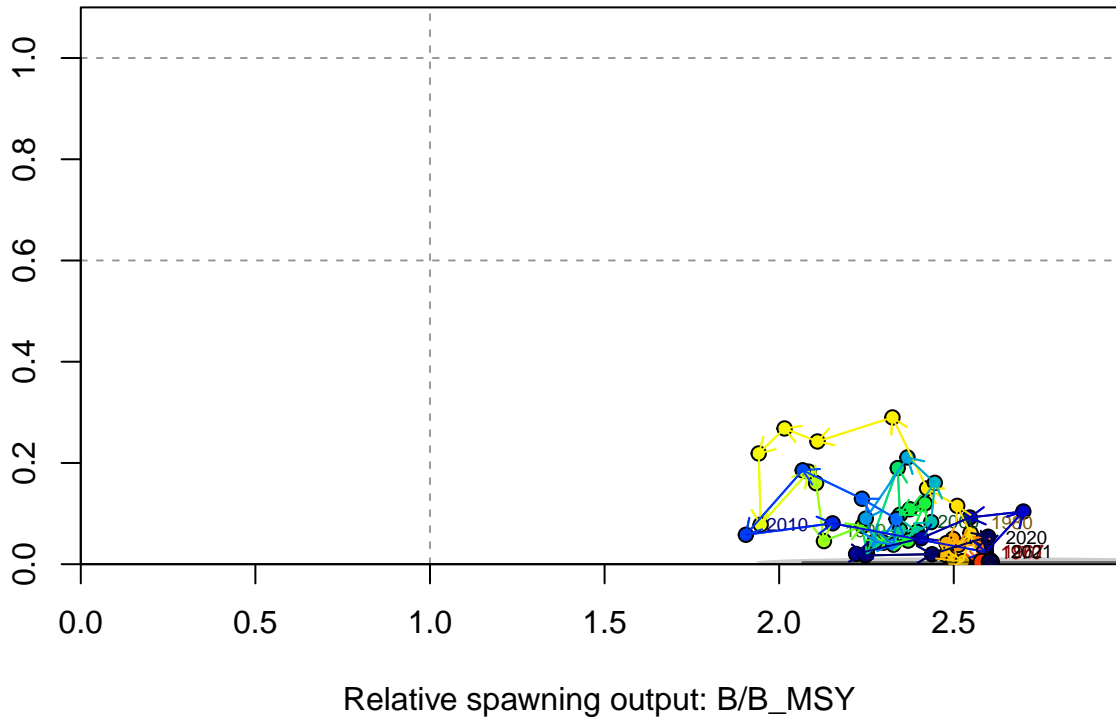
1-SPR



Fishing intensity: 1-SPR

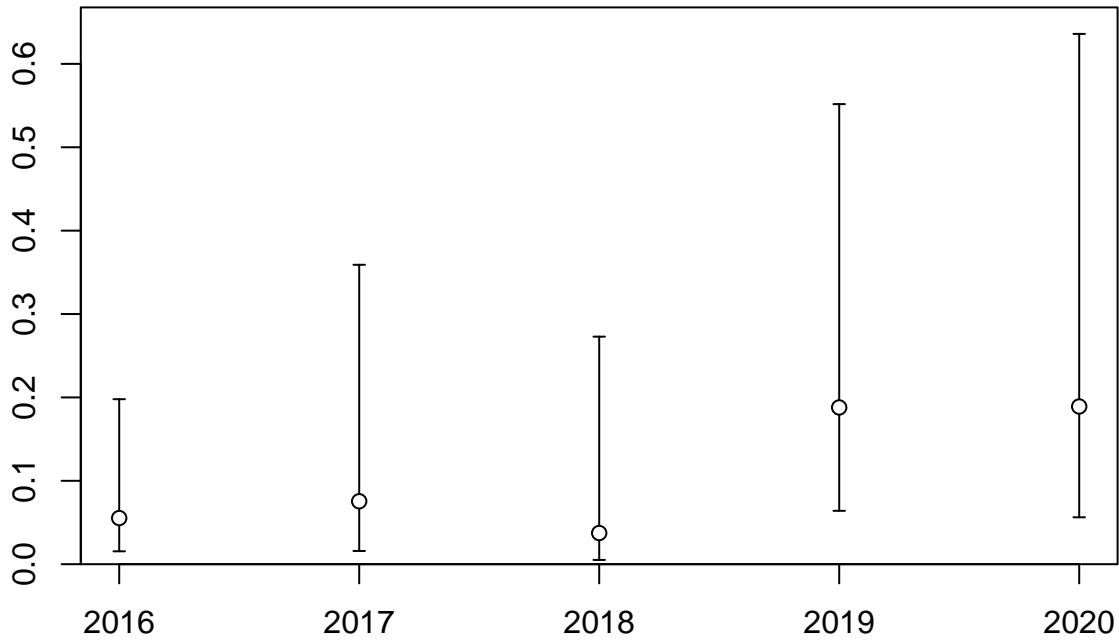


Fishing intensity: 1-SPR



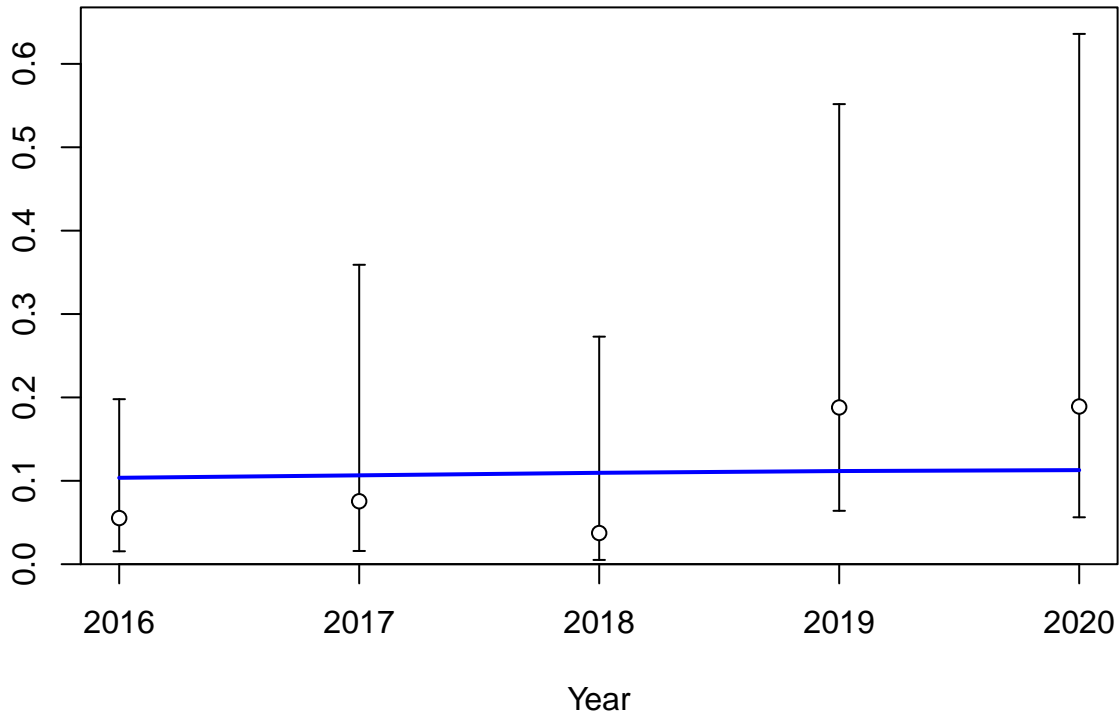


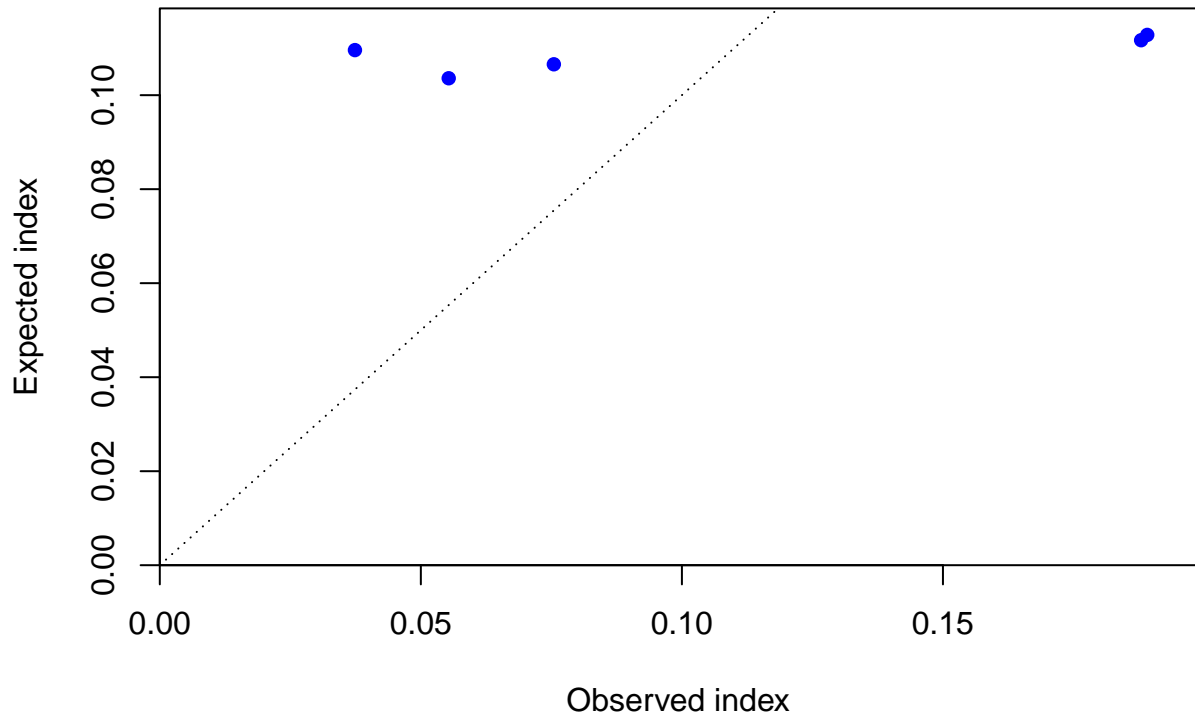
Index

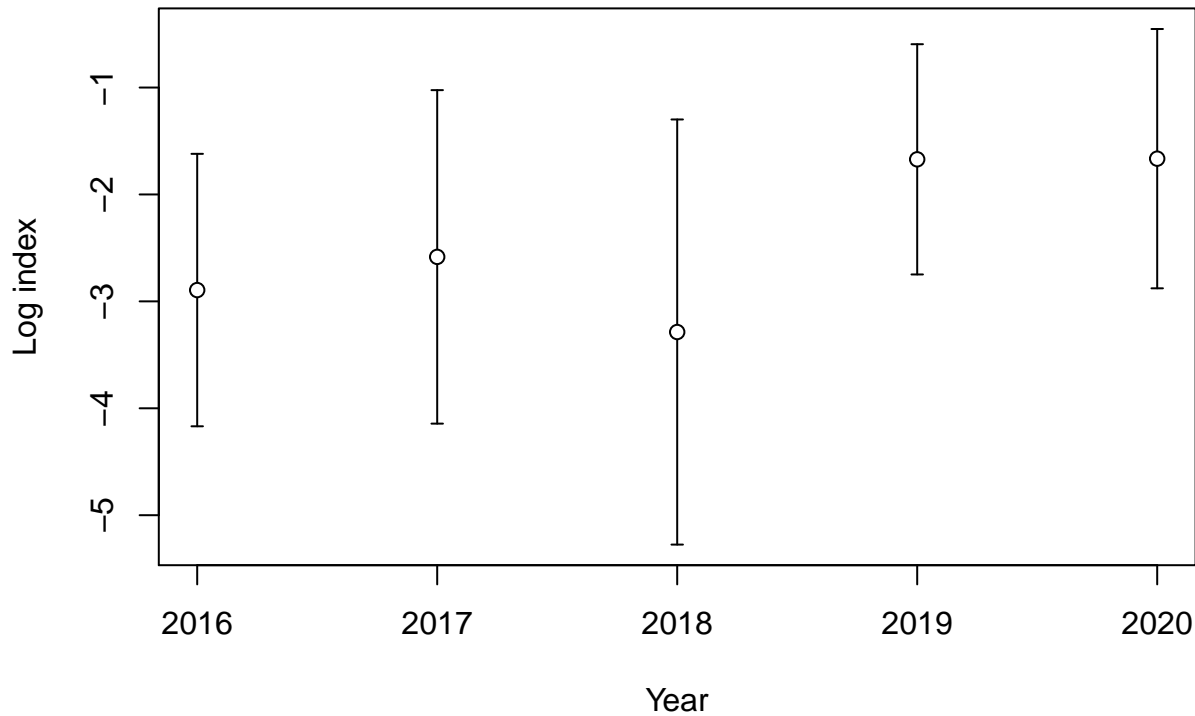


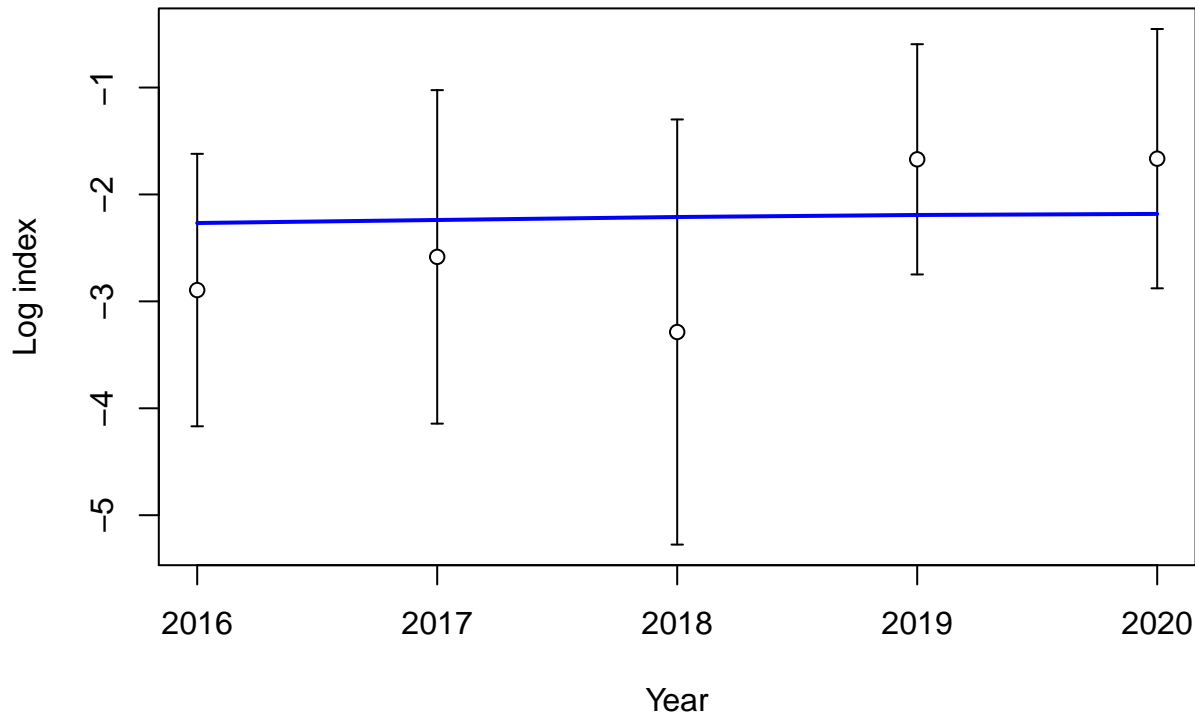
Year

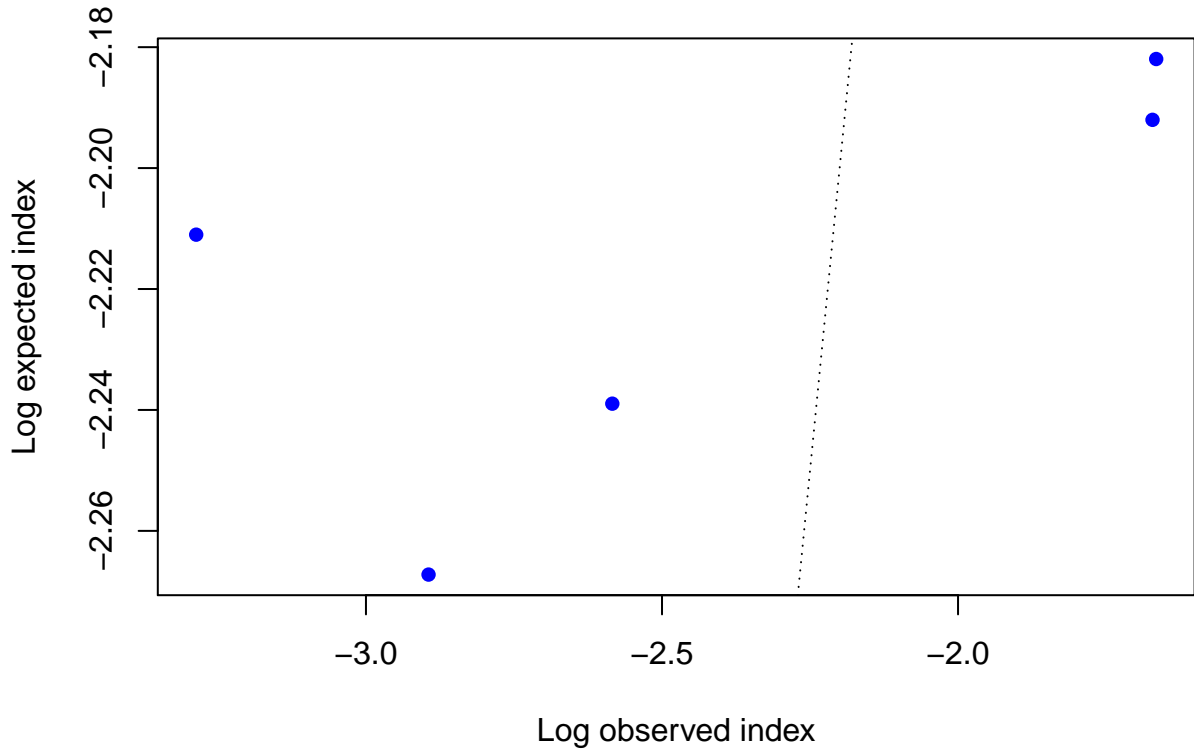
Index

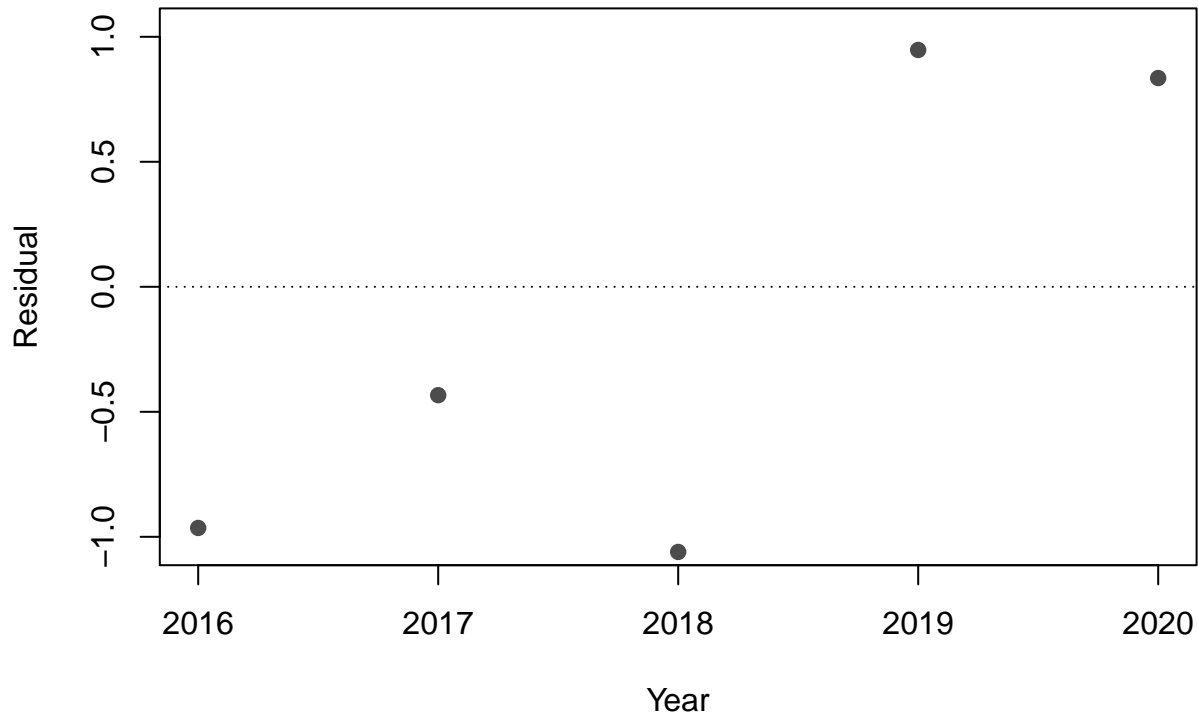




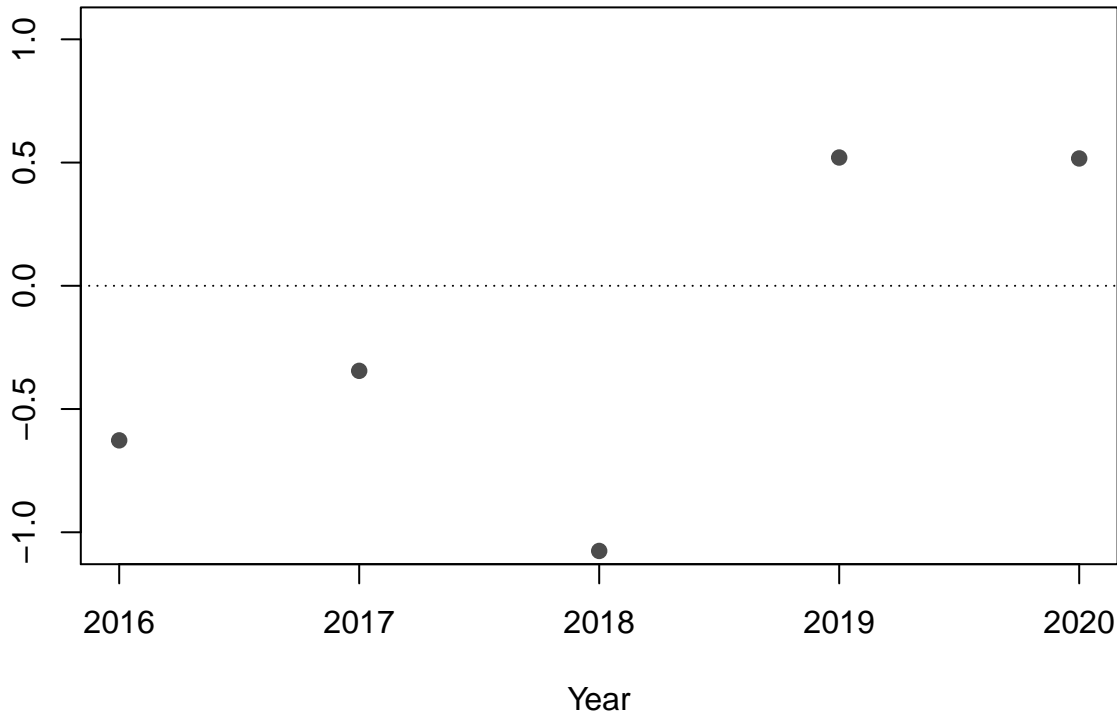




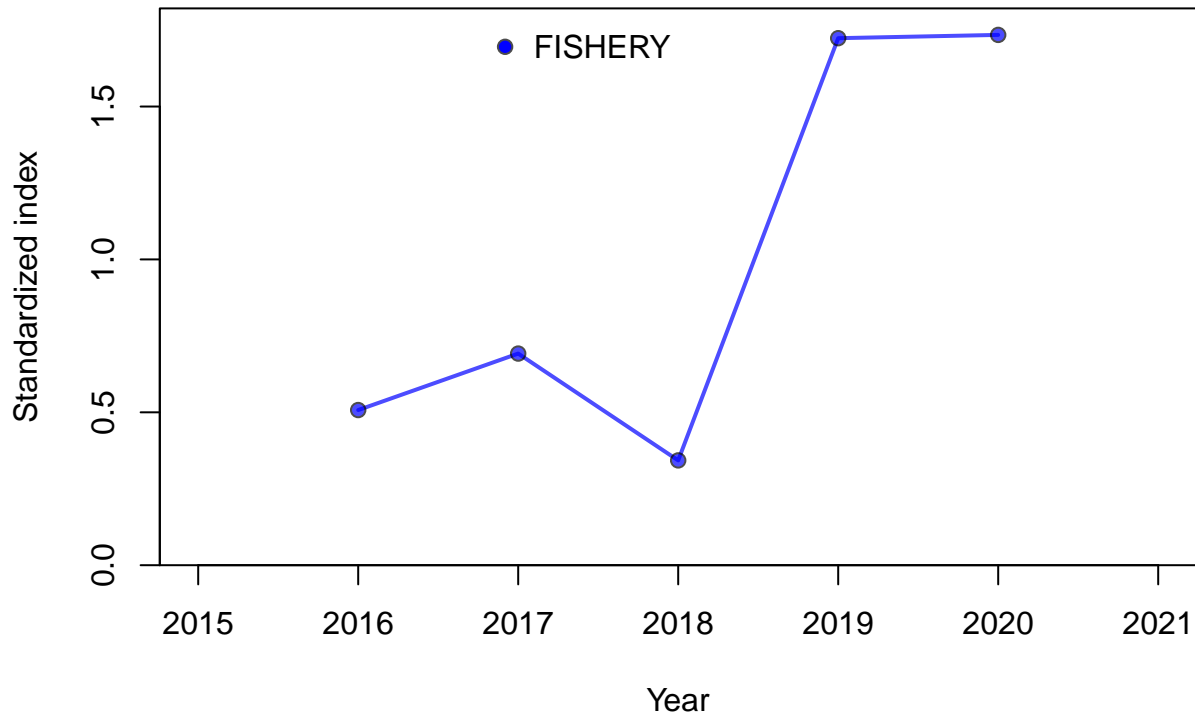


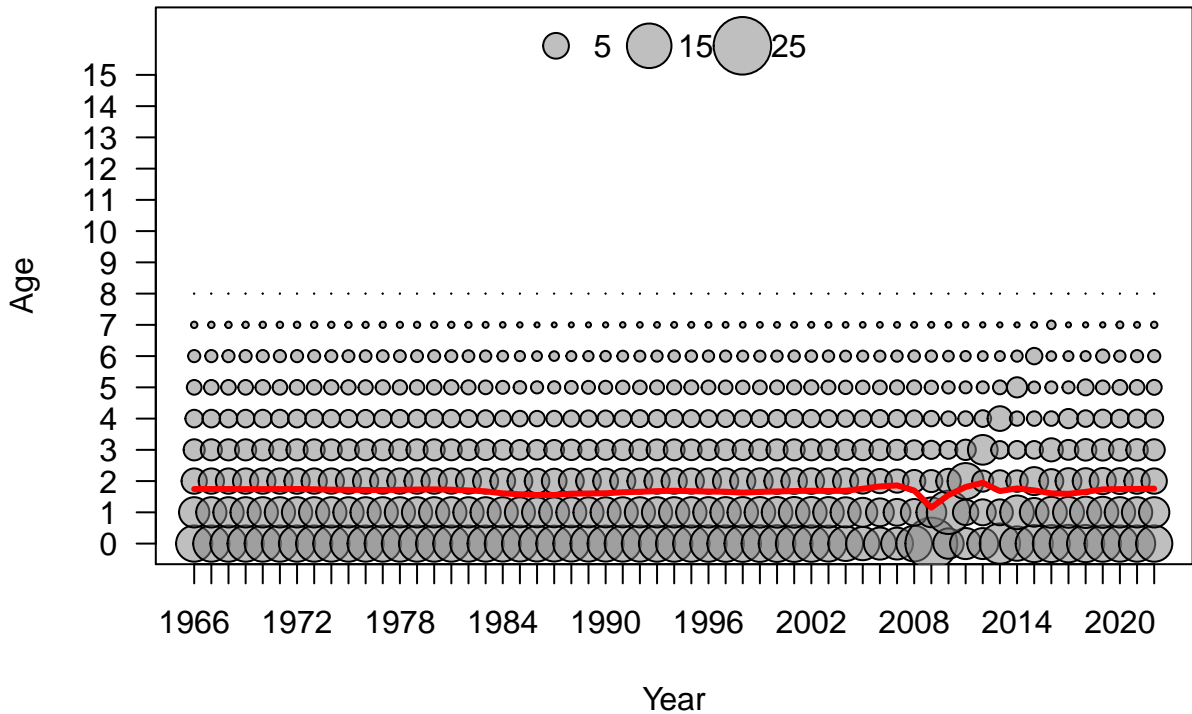


Deviation

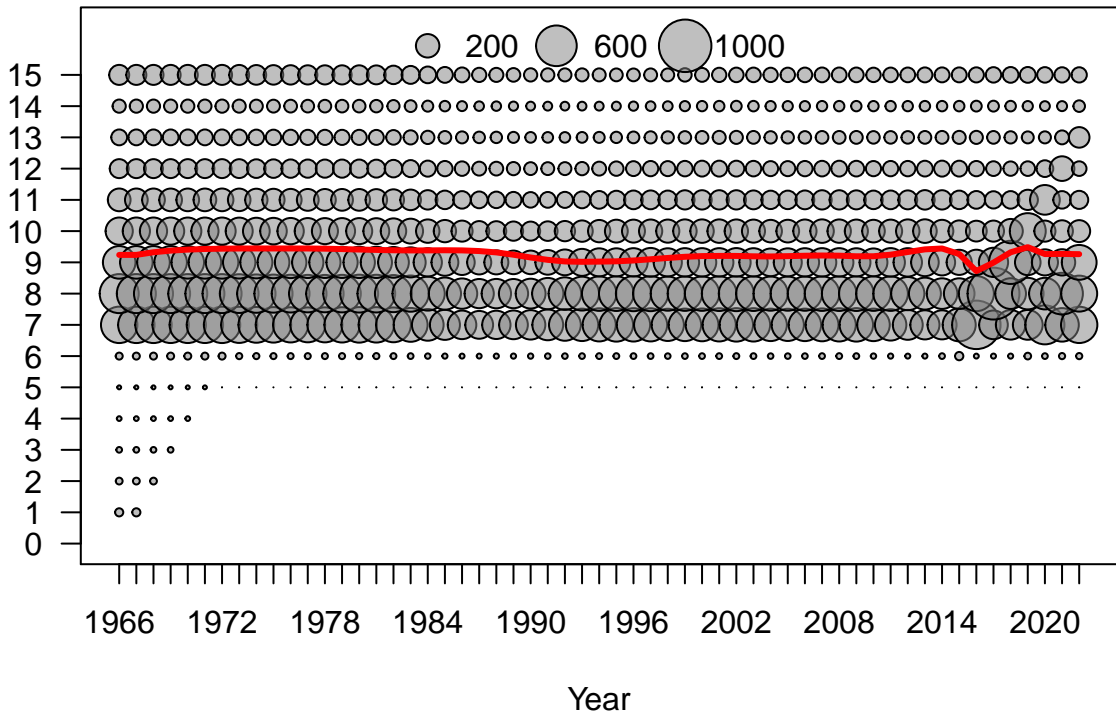


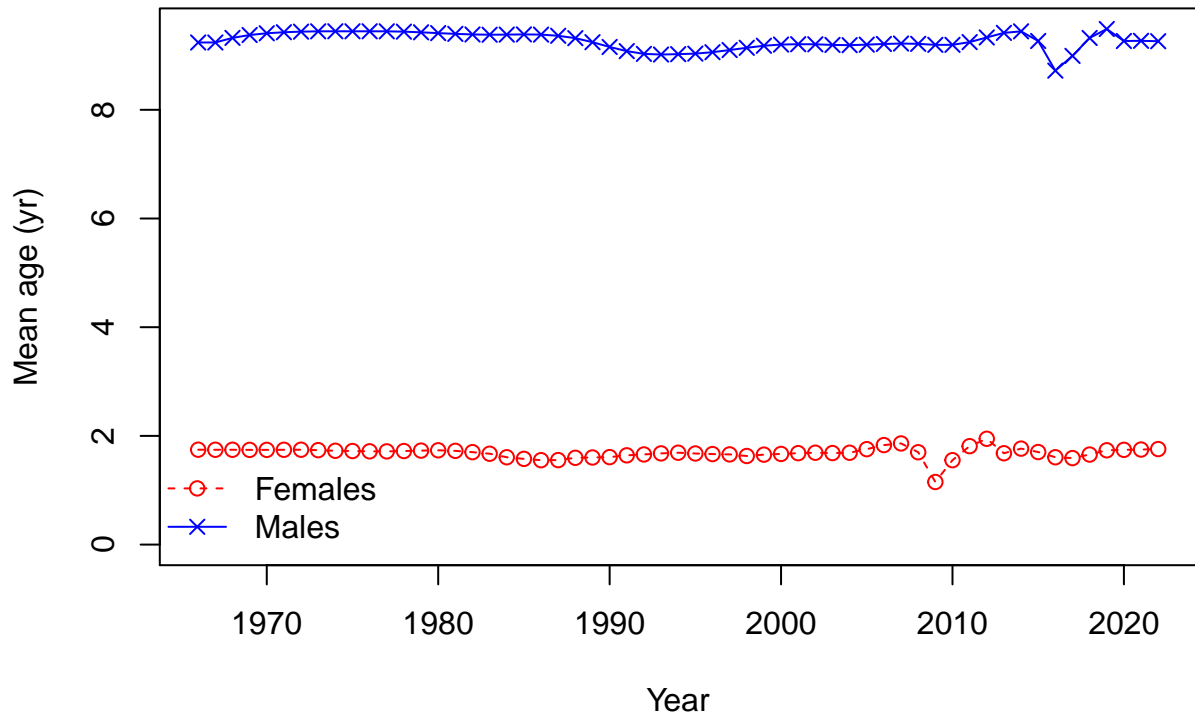


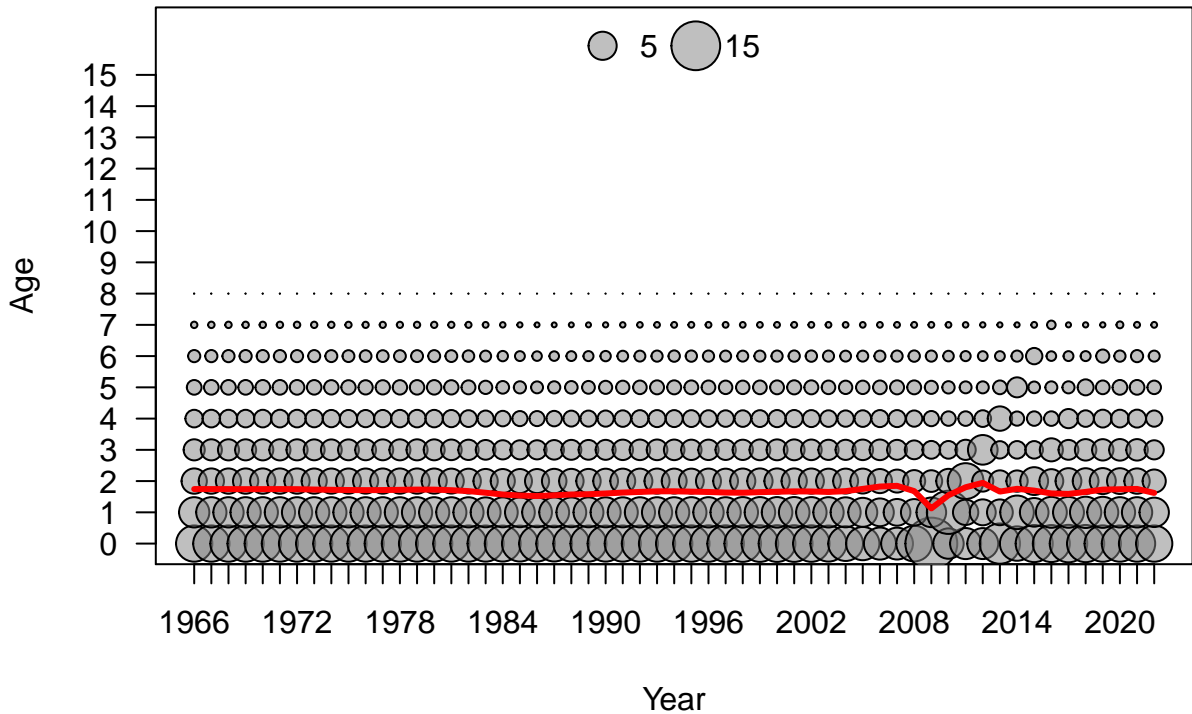




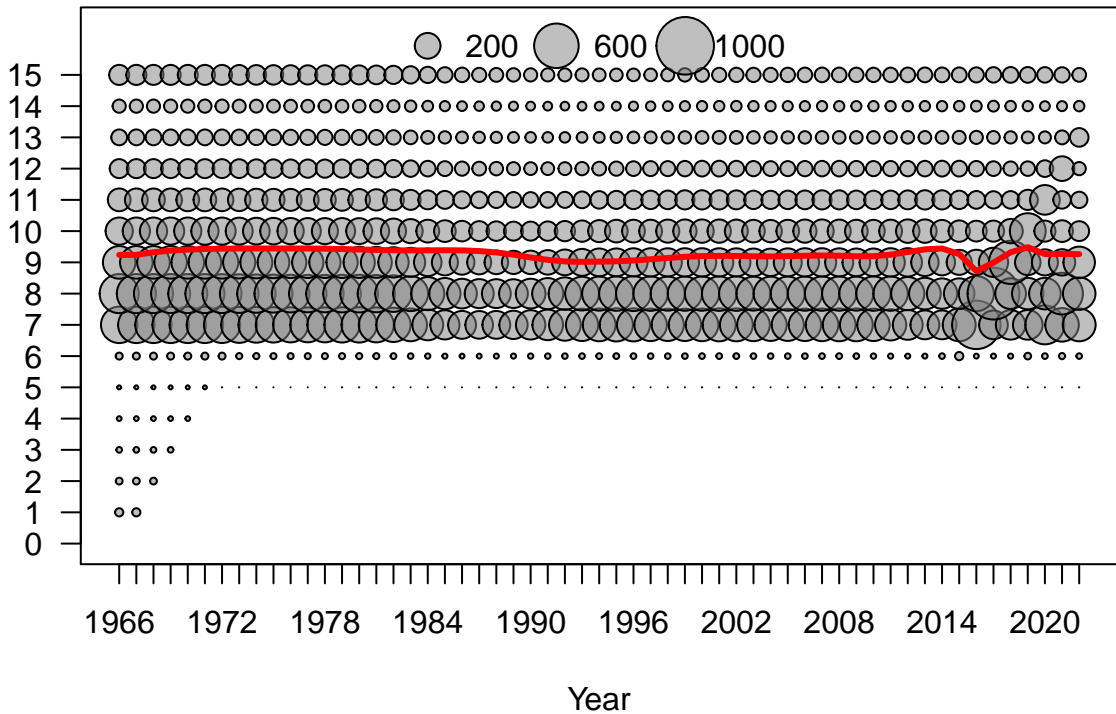
Age

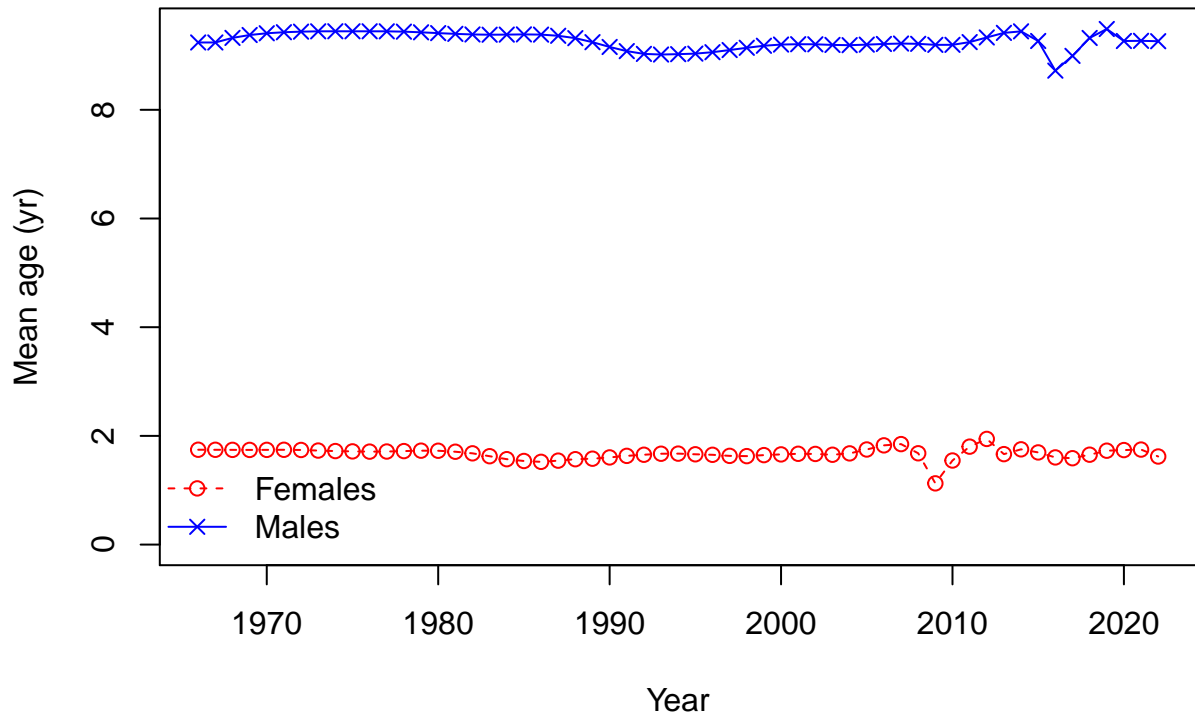




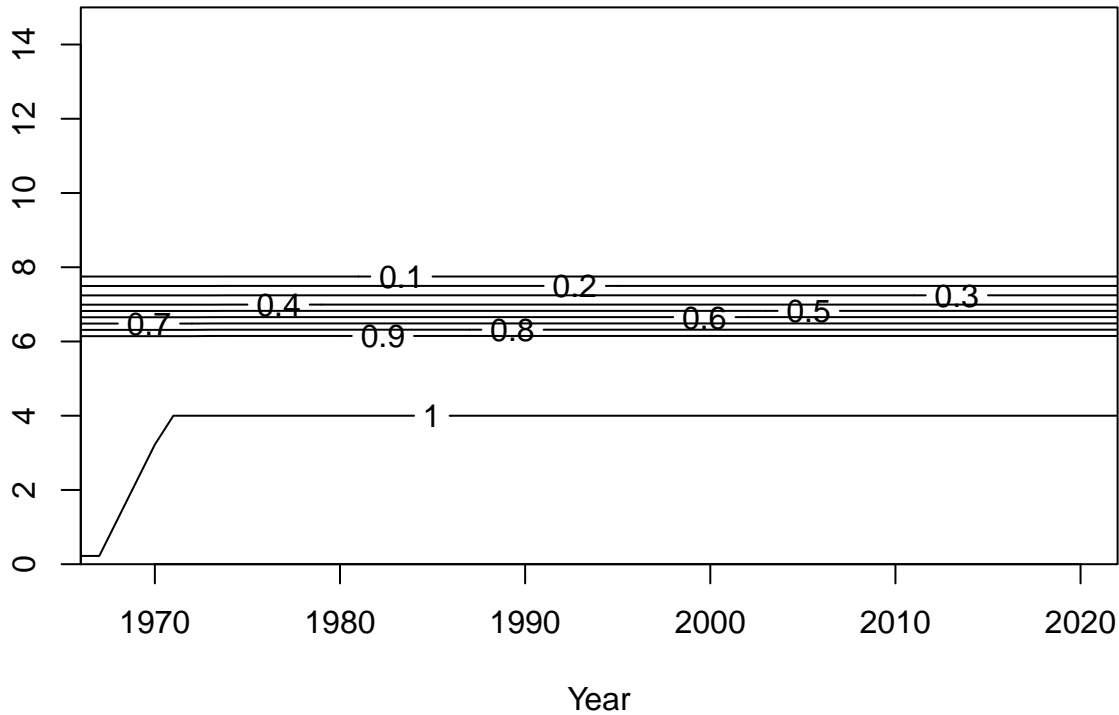


Age

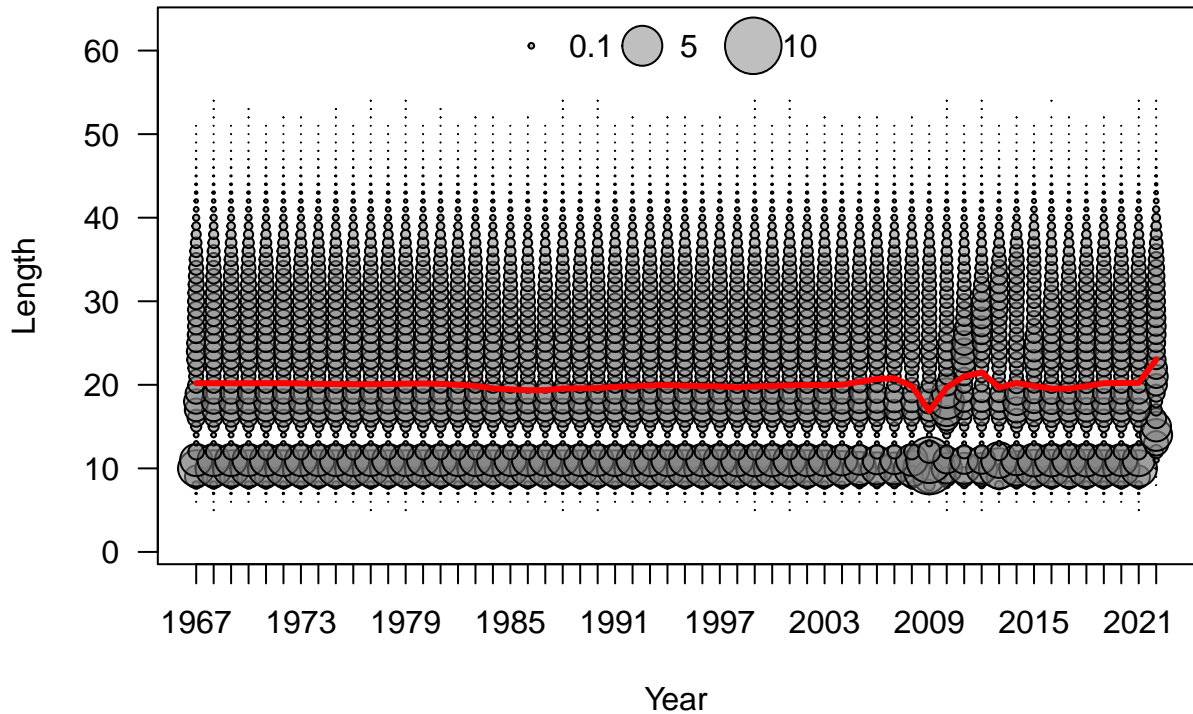


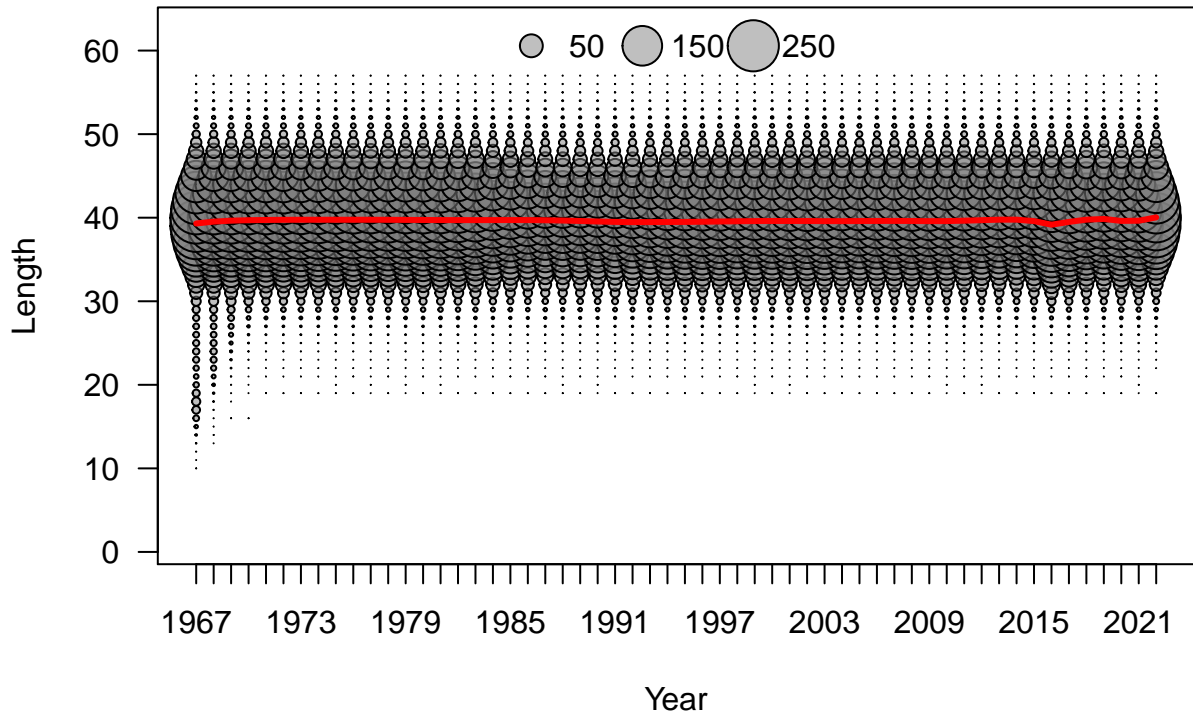


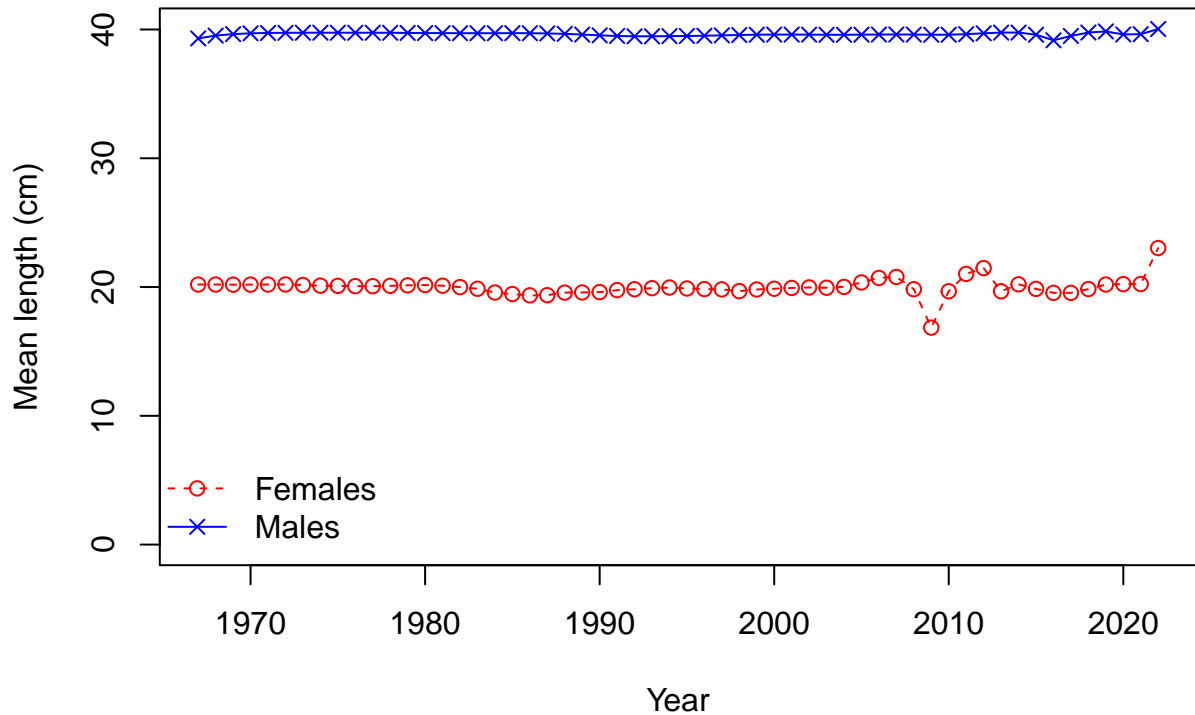
Age

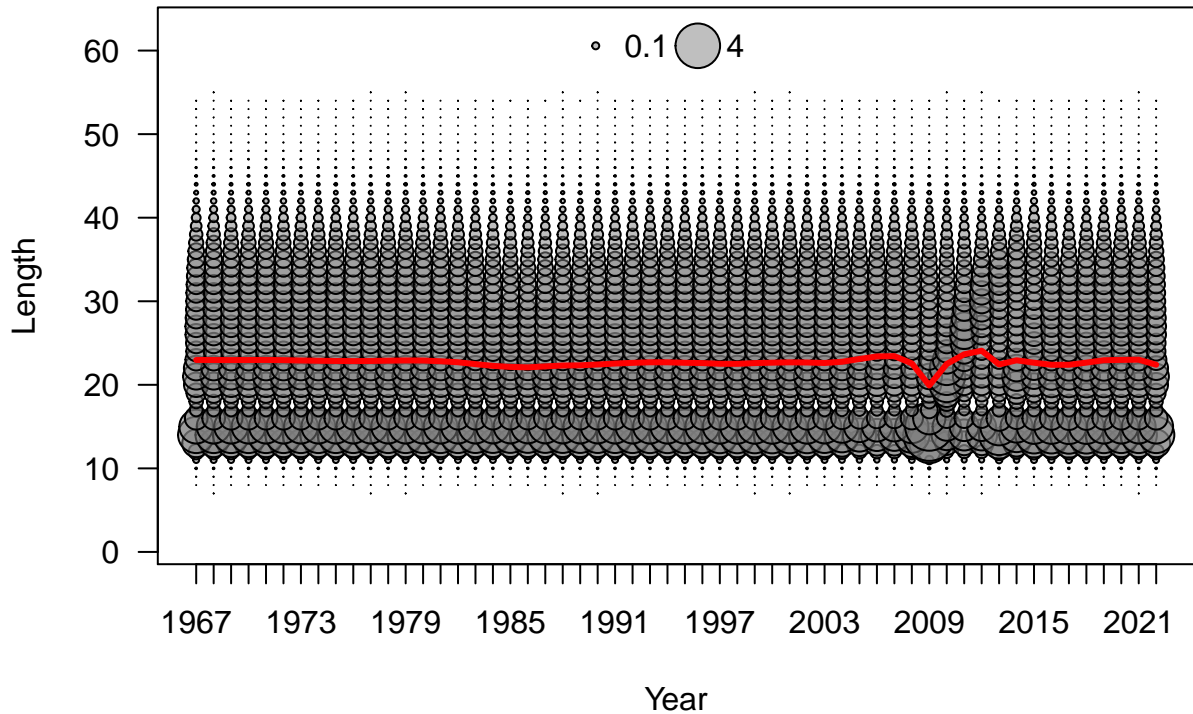


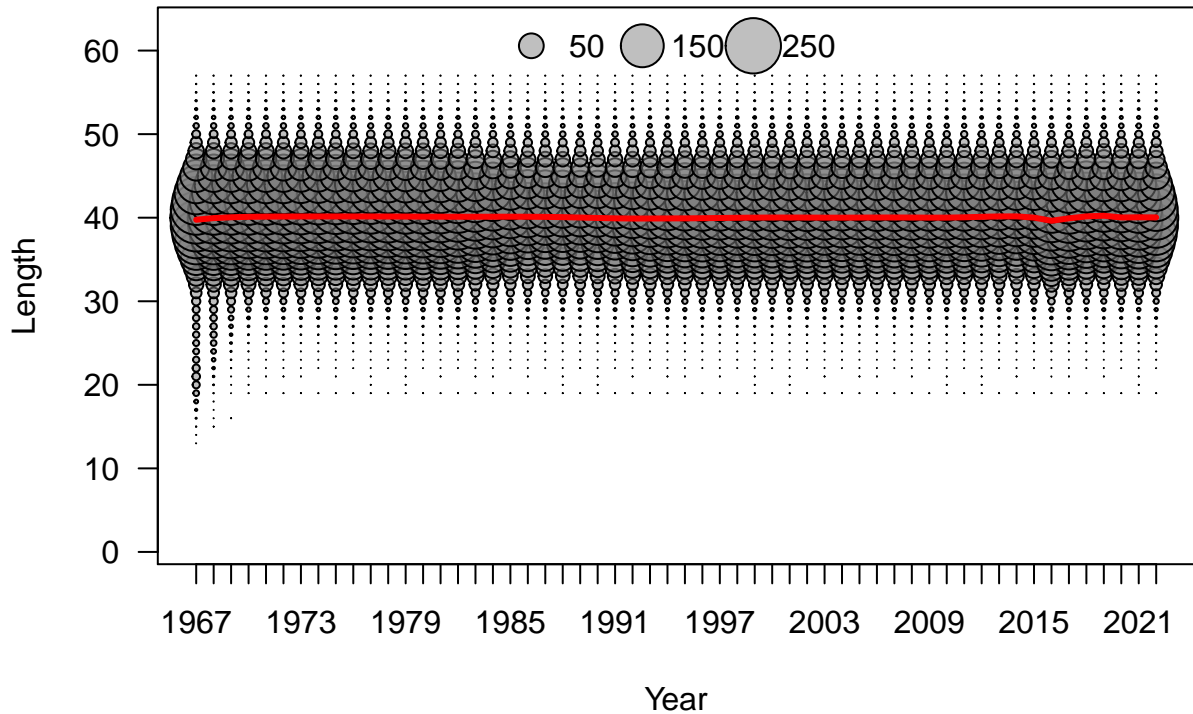


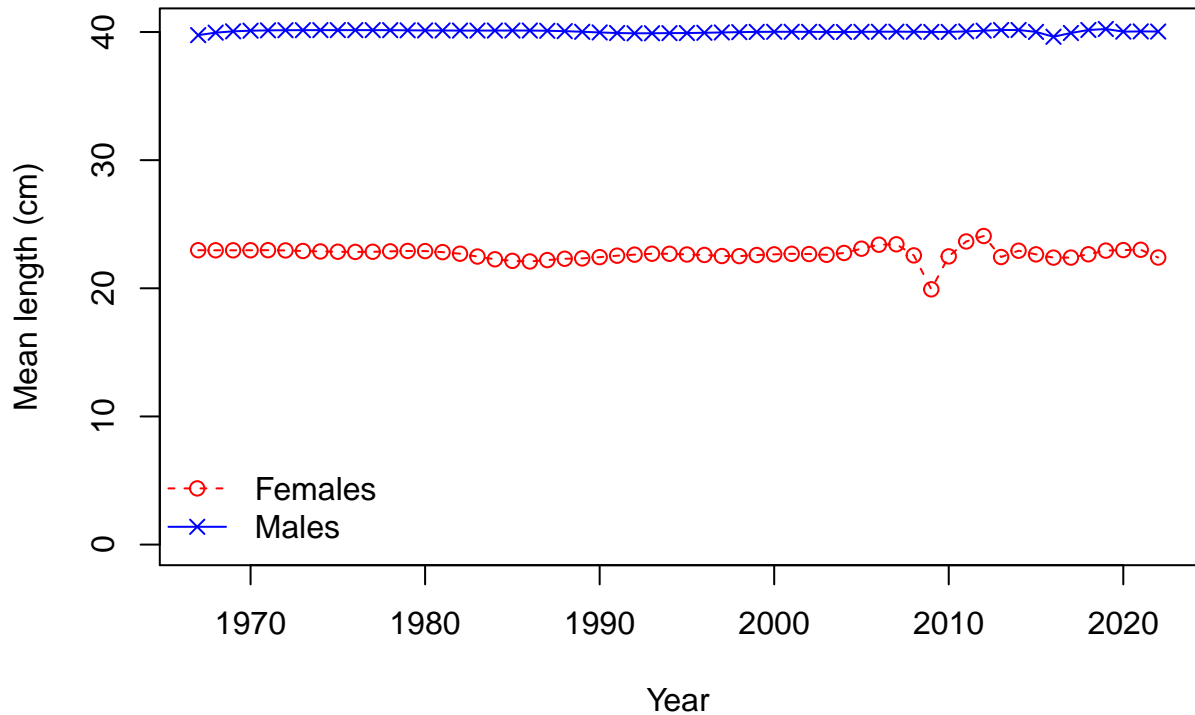


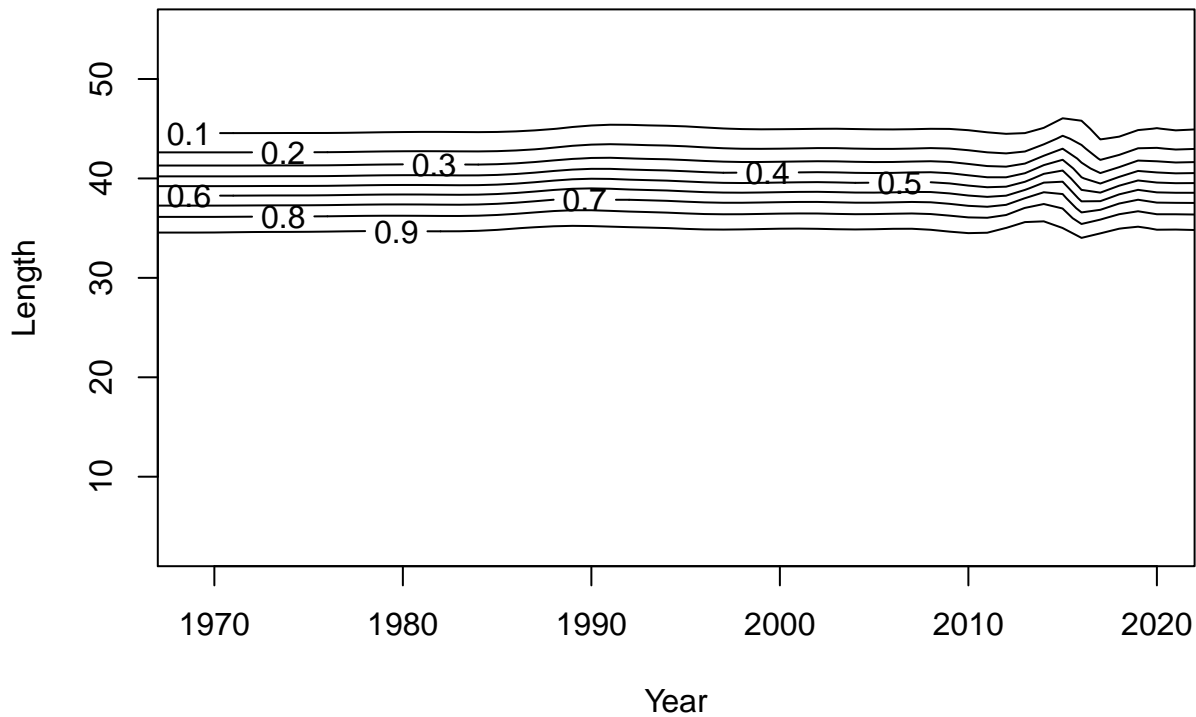


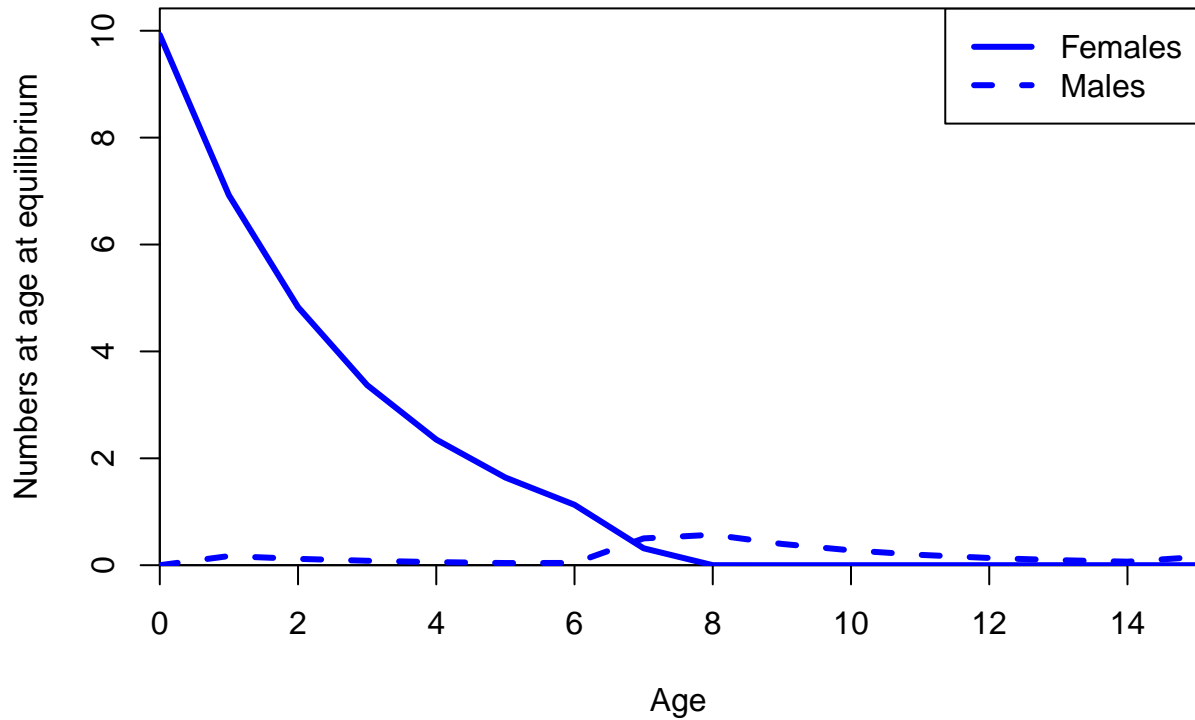




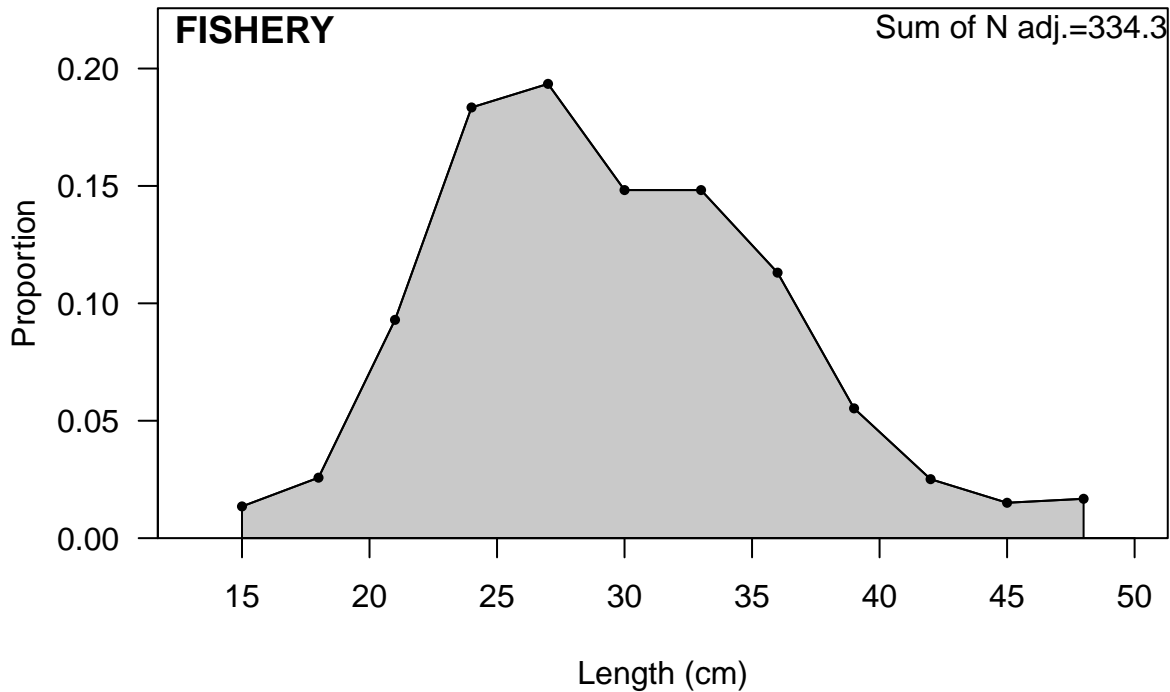


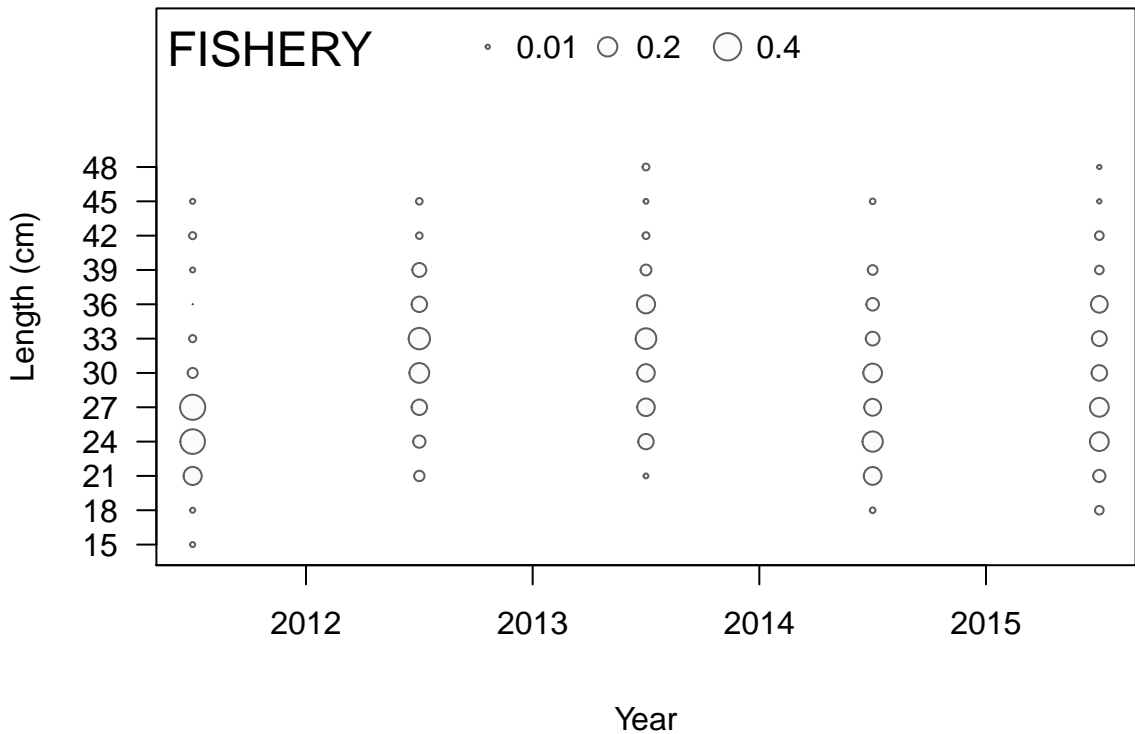




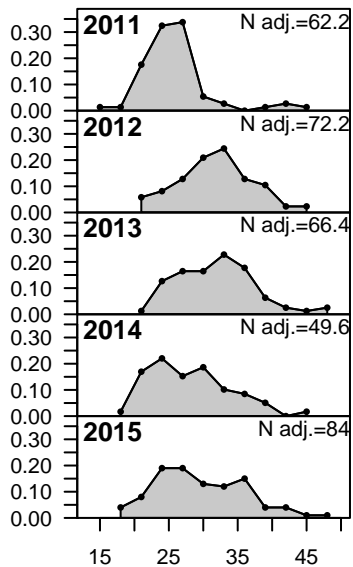




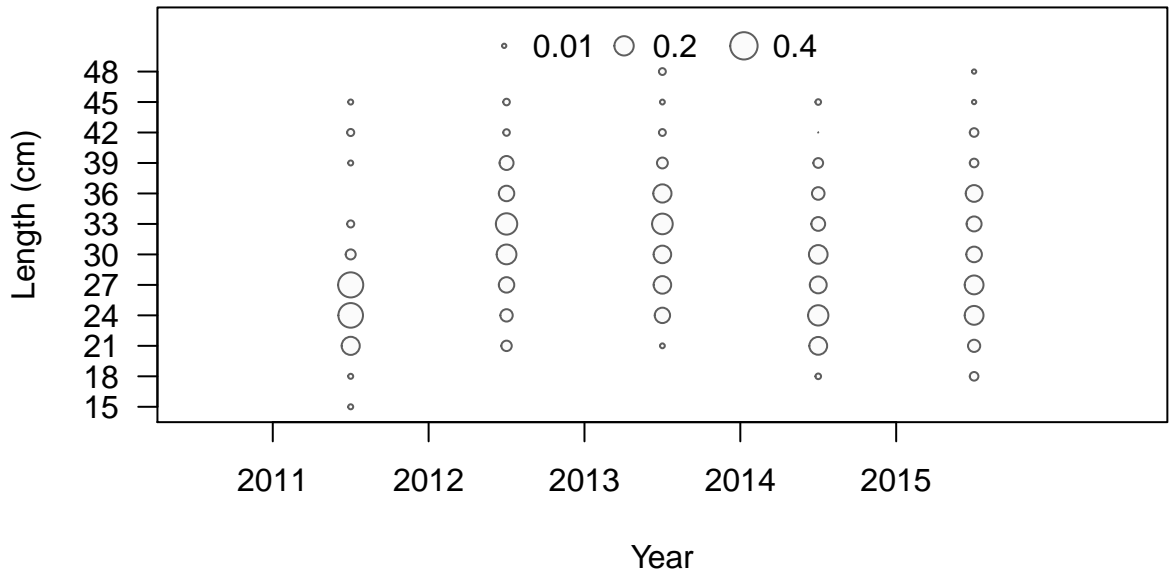




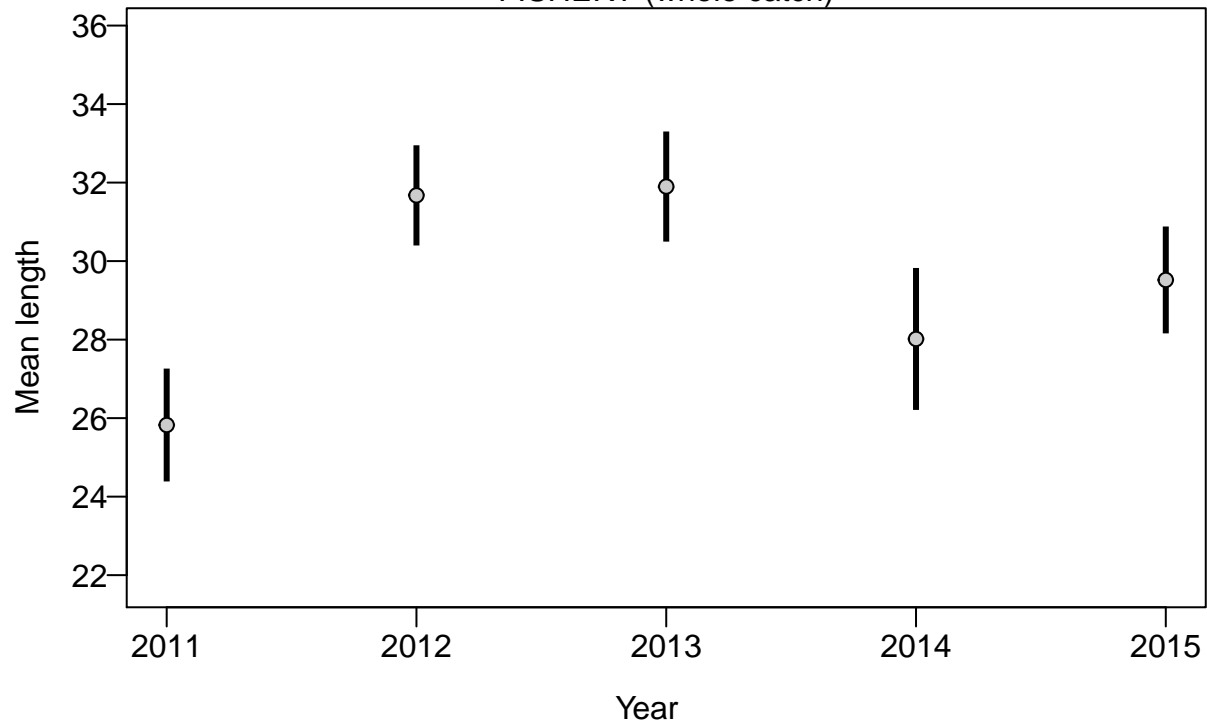
Proportion



Length (cm)

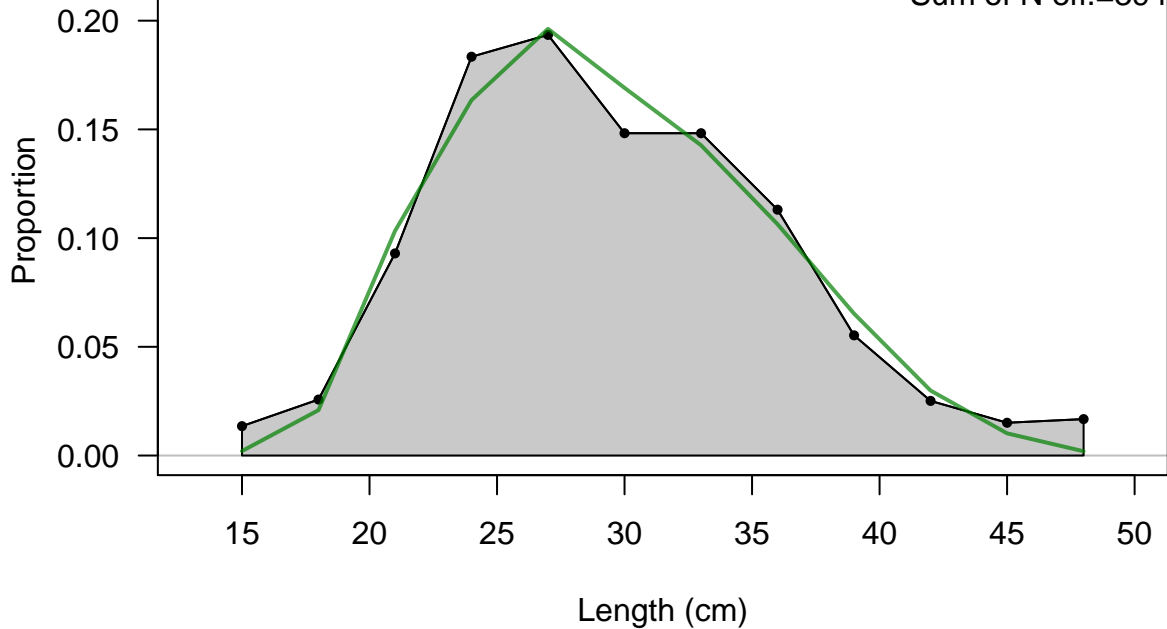


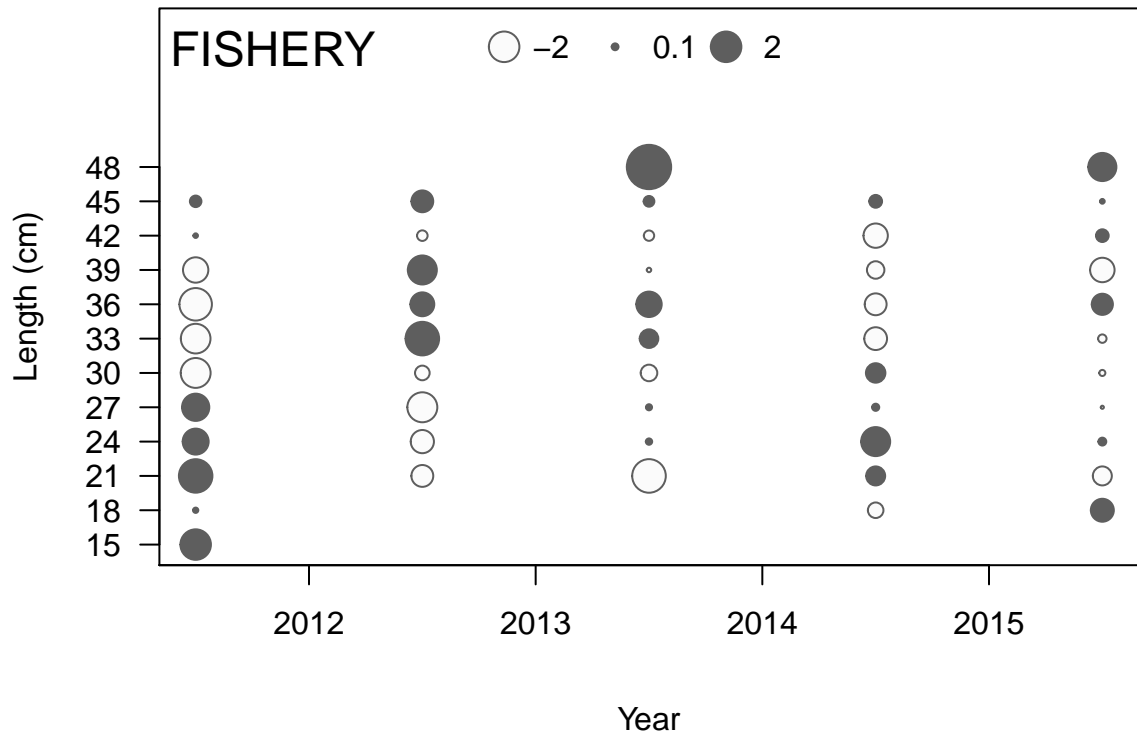
FISHERY (whole catch)



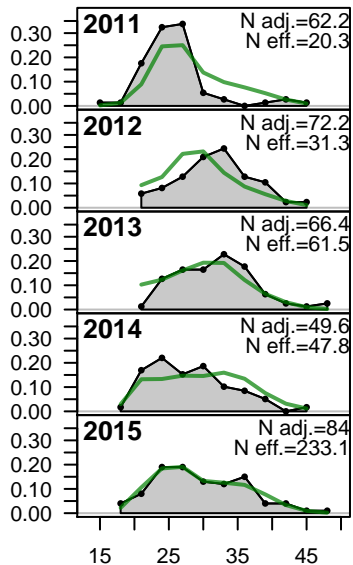
# FISHERY

Sum of N adj.=334.3  
Sum of N eff.=394



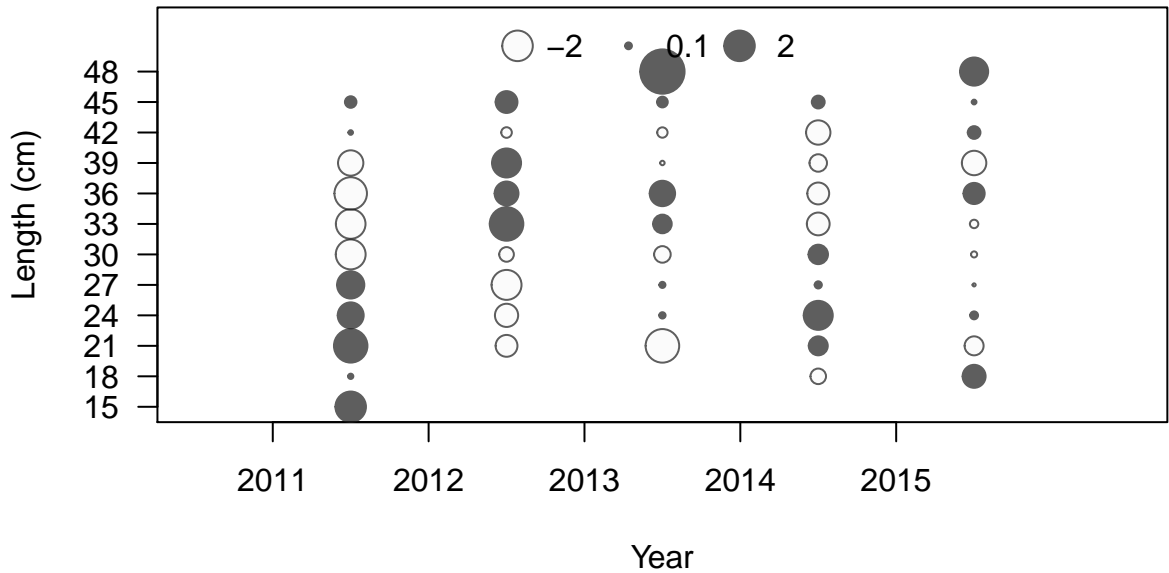


Proportion

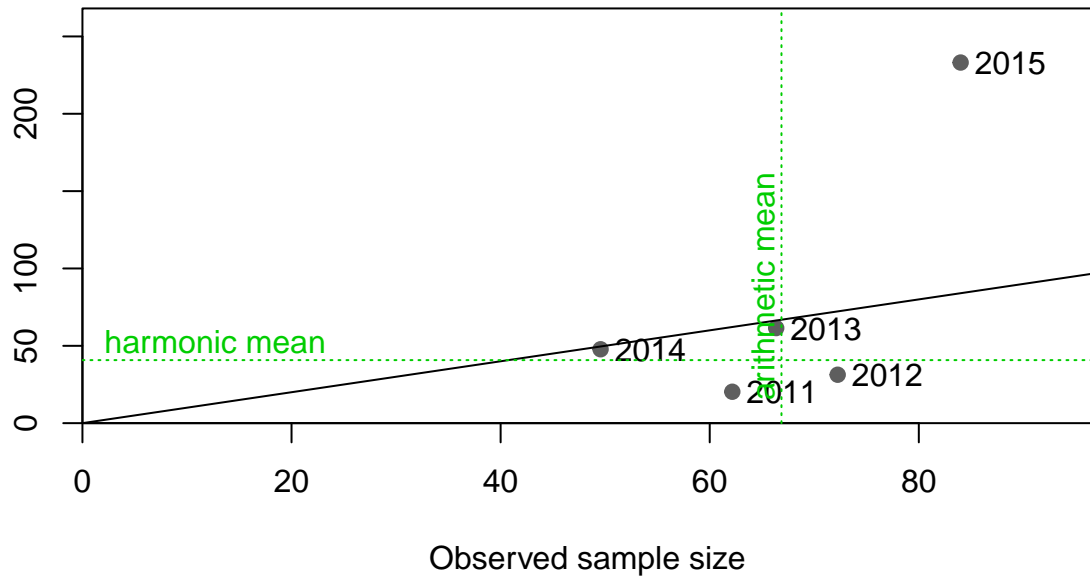


Length (cm)

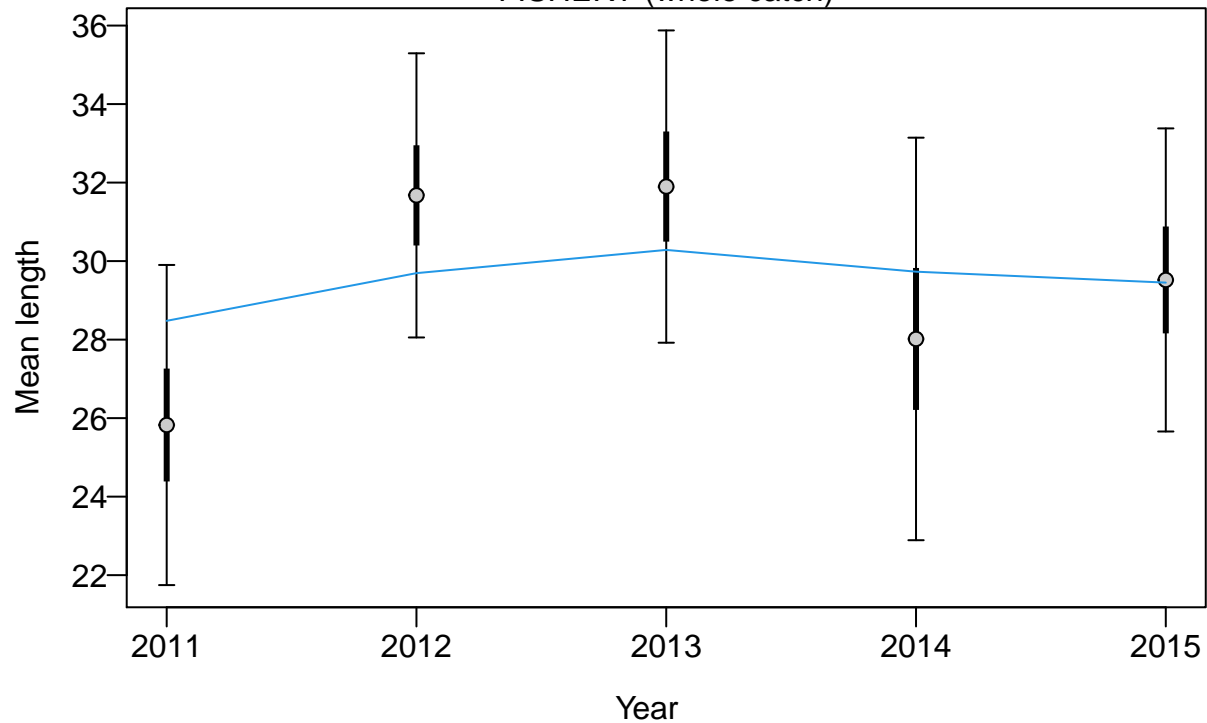


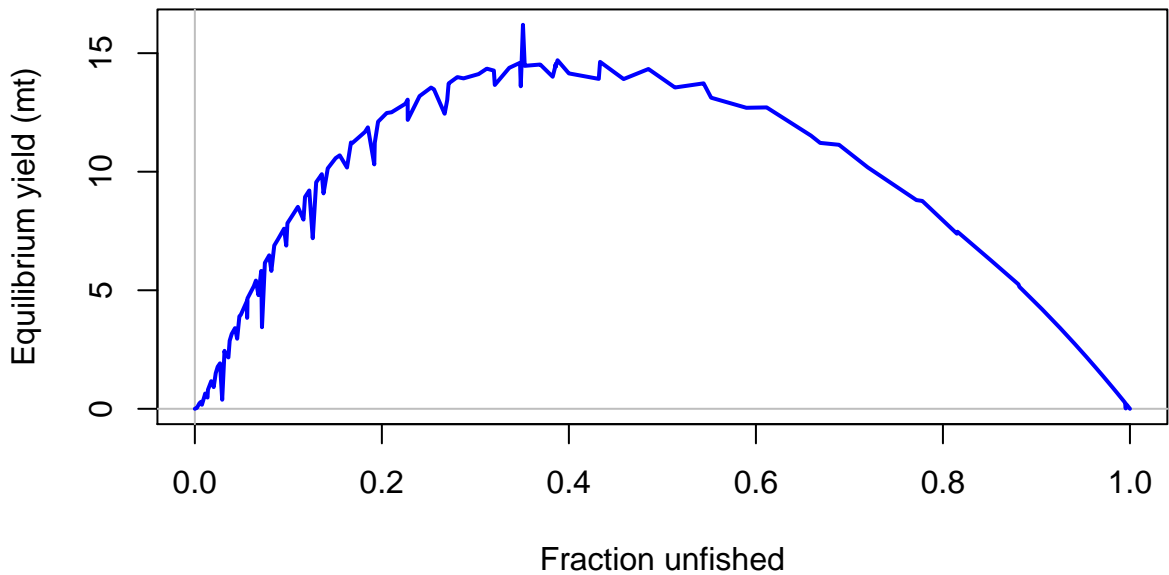


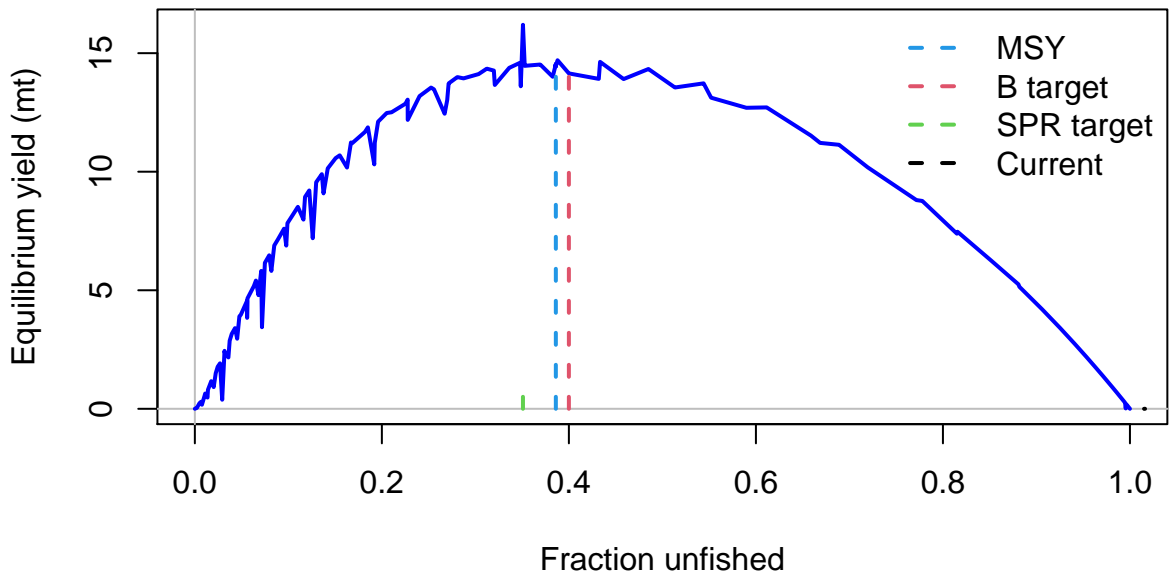
Effective sample size

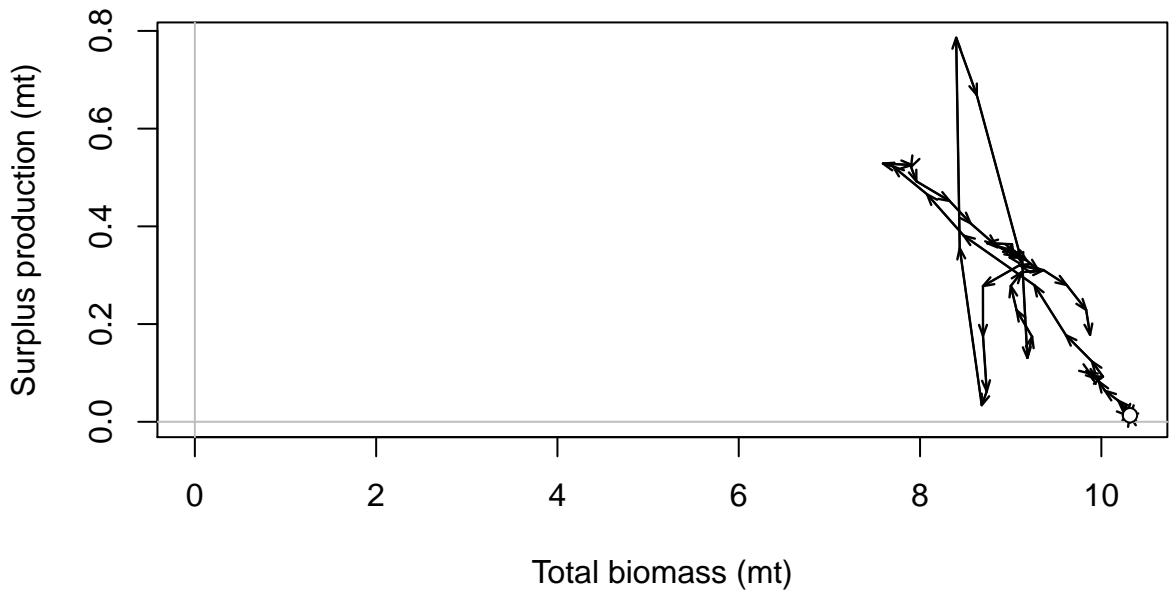


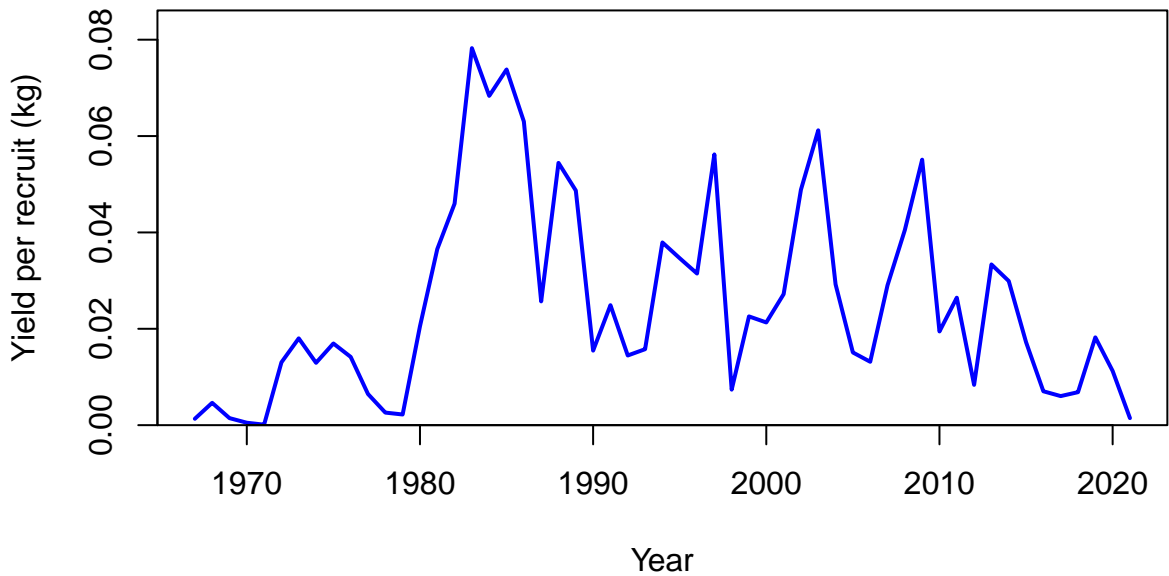
FISHERY (whole catch)

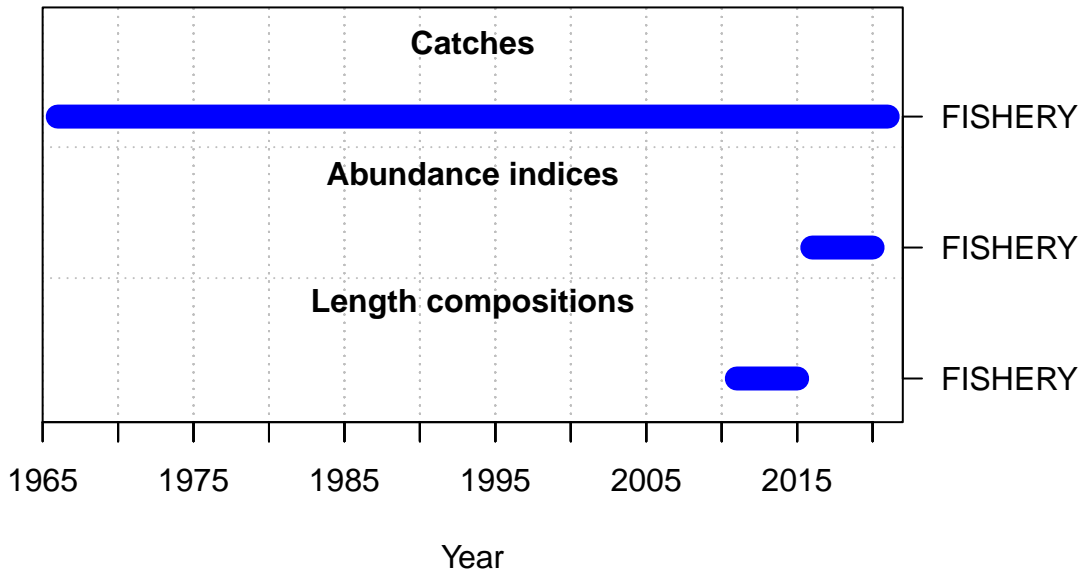




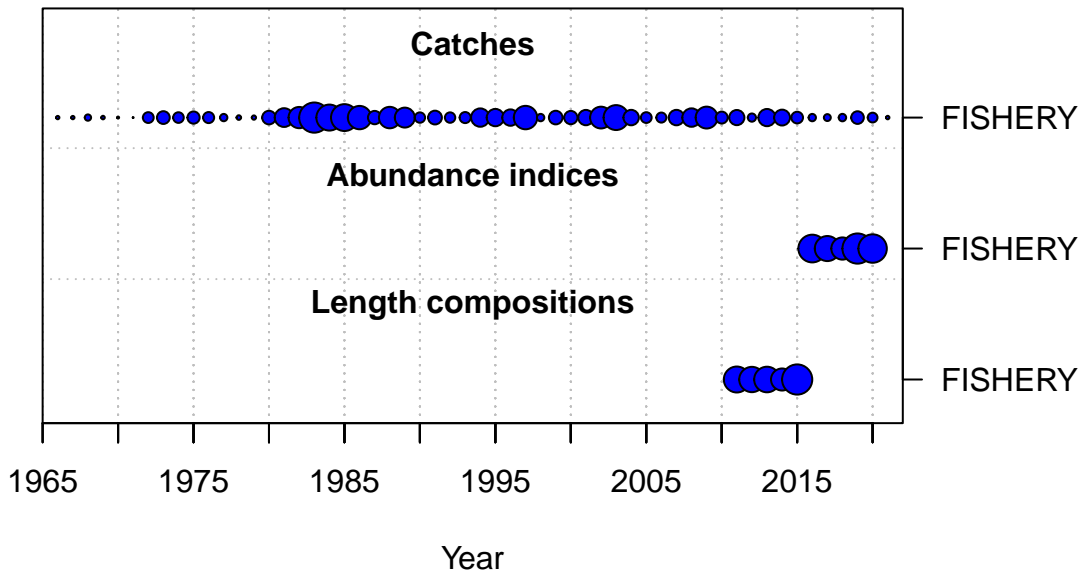




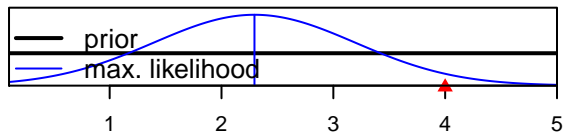




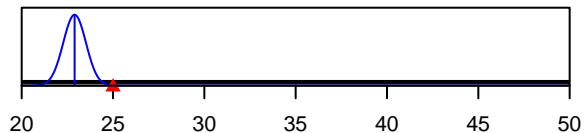




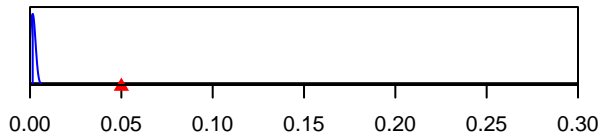
SR\_LN(R0)



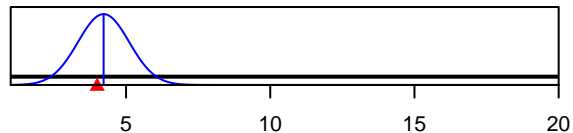
Size\_inflection\_FISHERY(1)



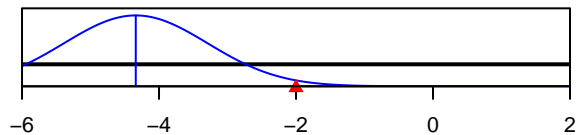
InitF\_seas\_1\_flt\_1FISHERY



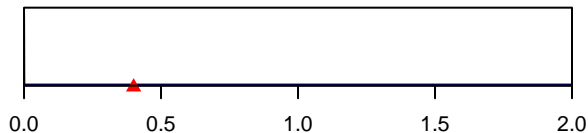
Size\_95%width\_FISHERY(1)



LnQ\_base\_FISHERY(1)



Q\_extraSD\_FISHERY(1)



Parameter value