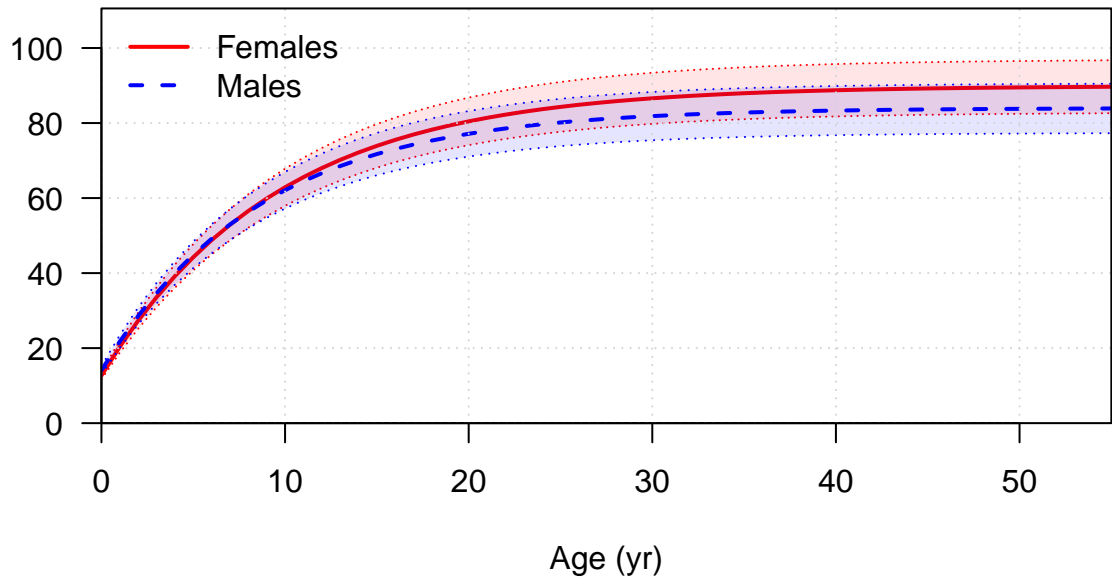
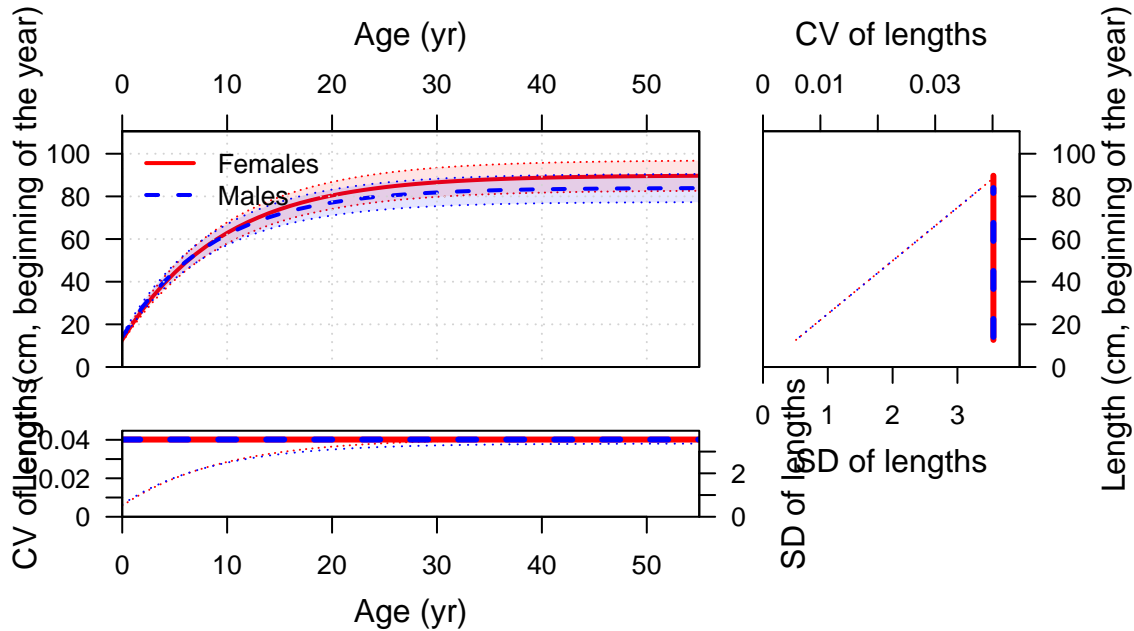
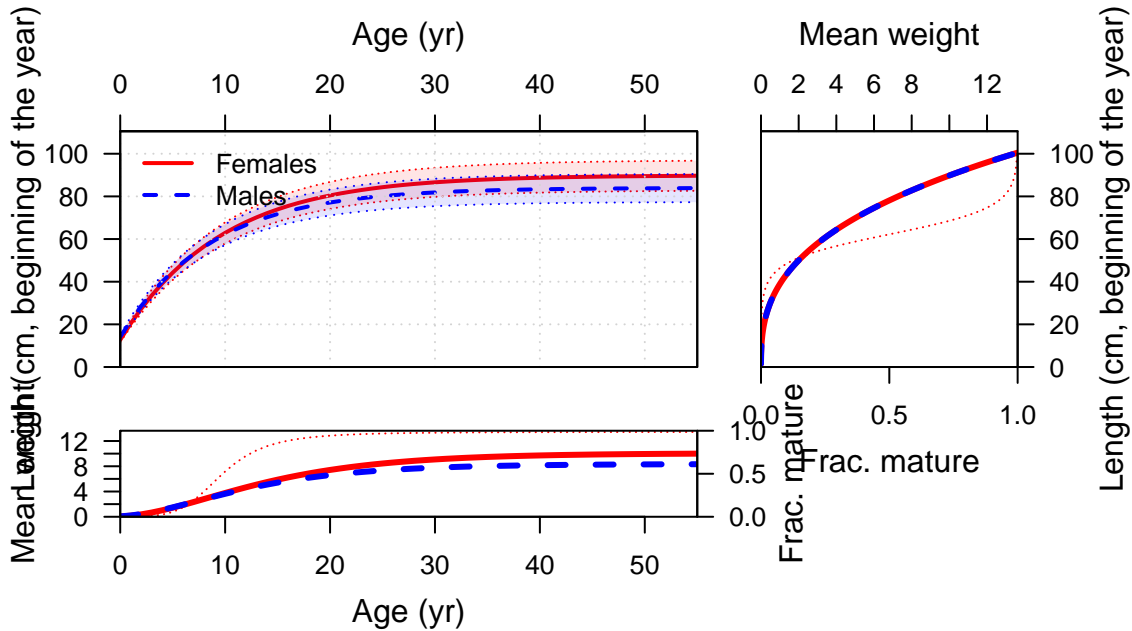


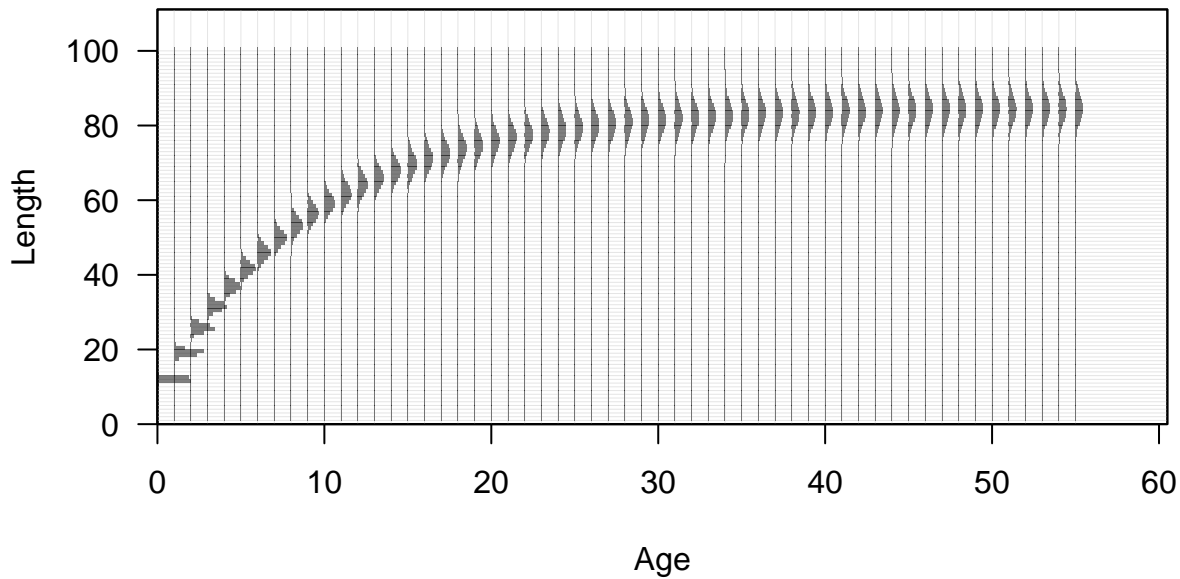
Plots created using the 'r4ss' package in R  
Stock Synthesis version: 3.30.19.0  
StartTime: Sun Feb 19 15:07:32 2023  
Data\_File: data.ss  
Control\_File: control.ss

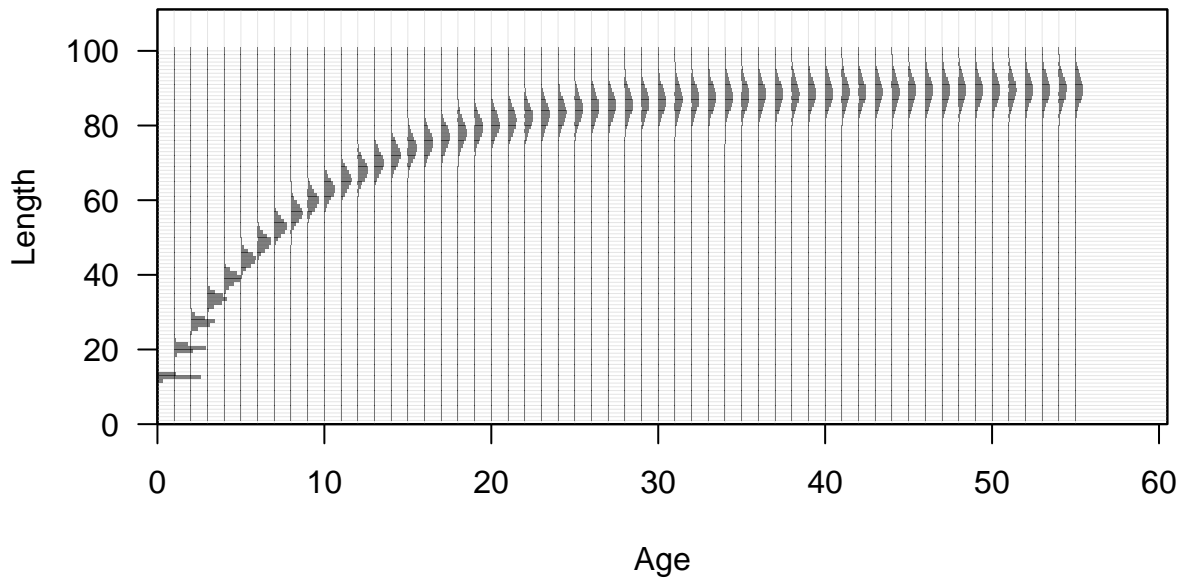
Length (cm, beginning of the year)

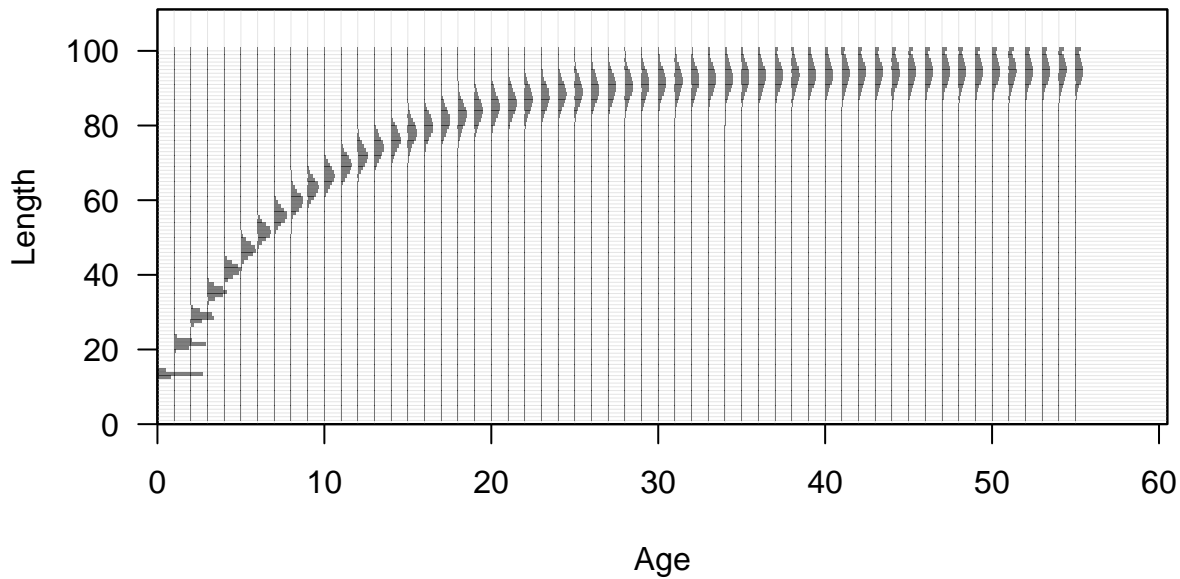


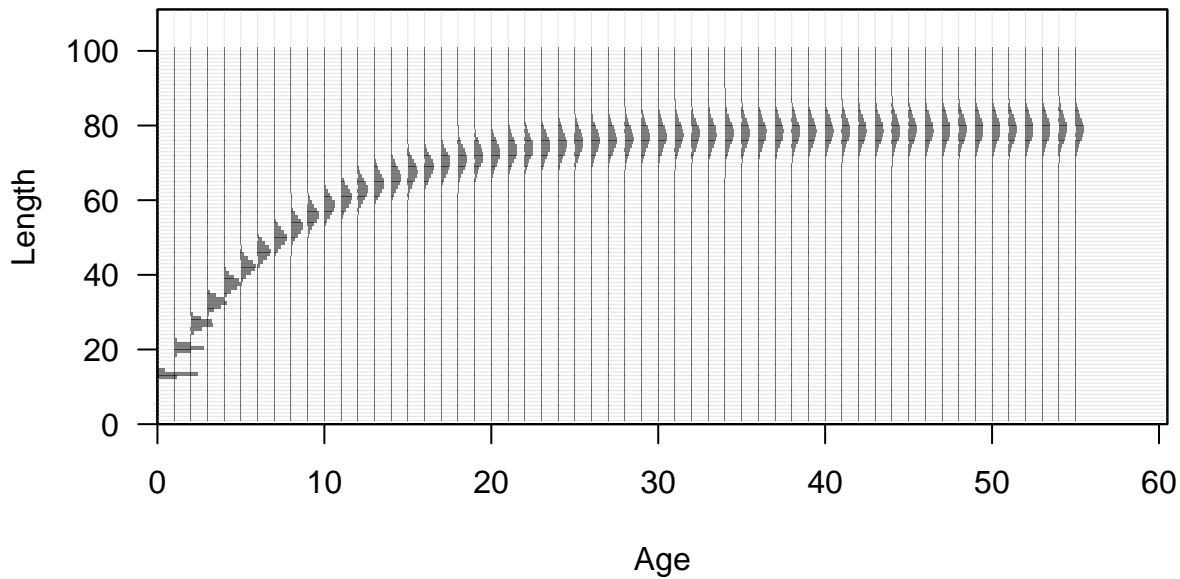




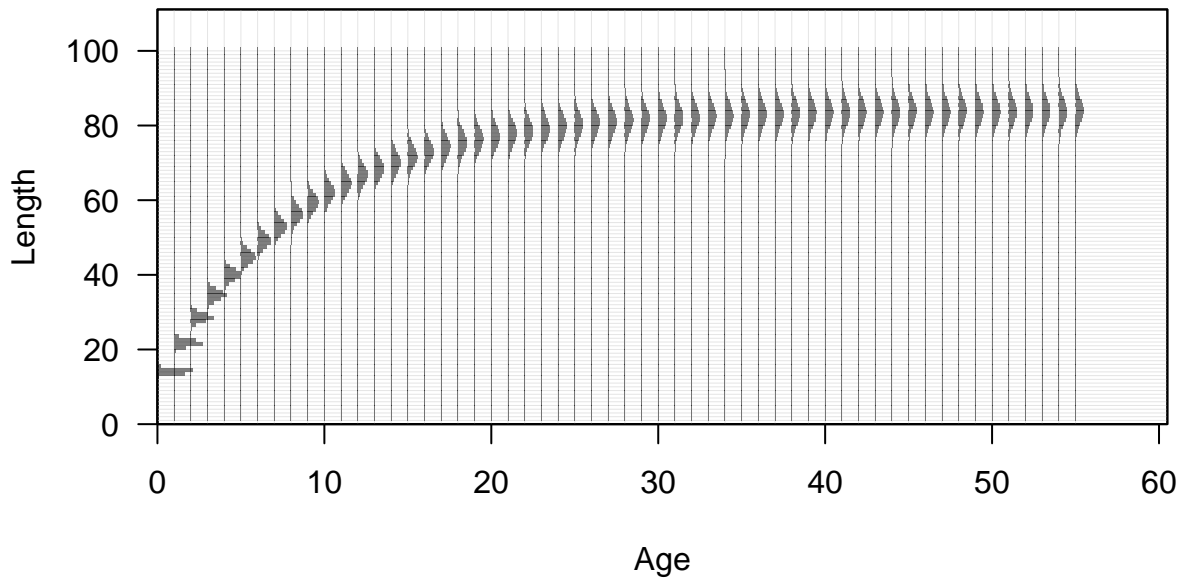


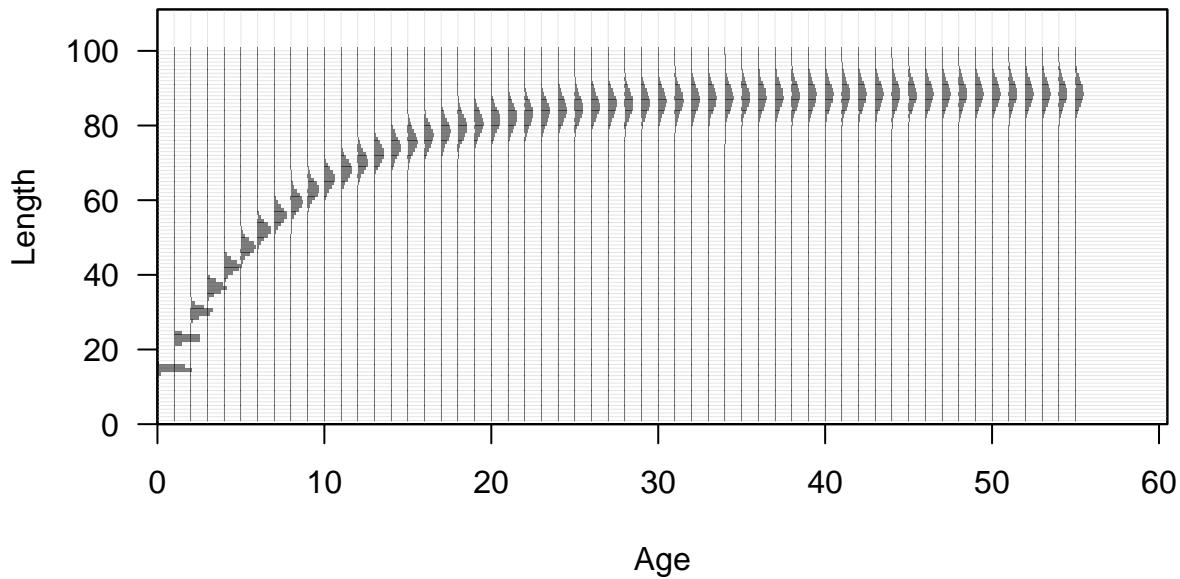


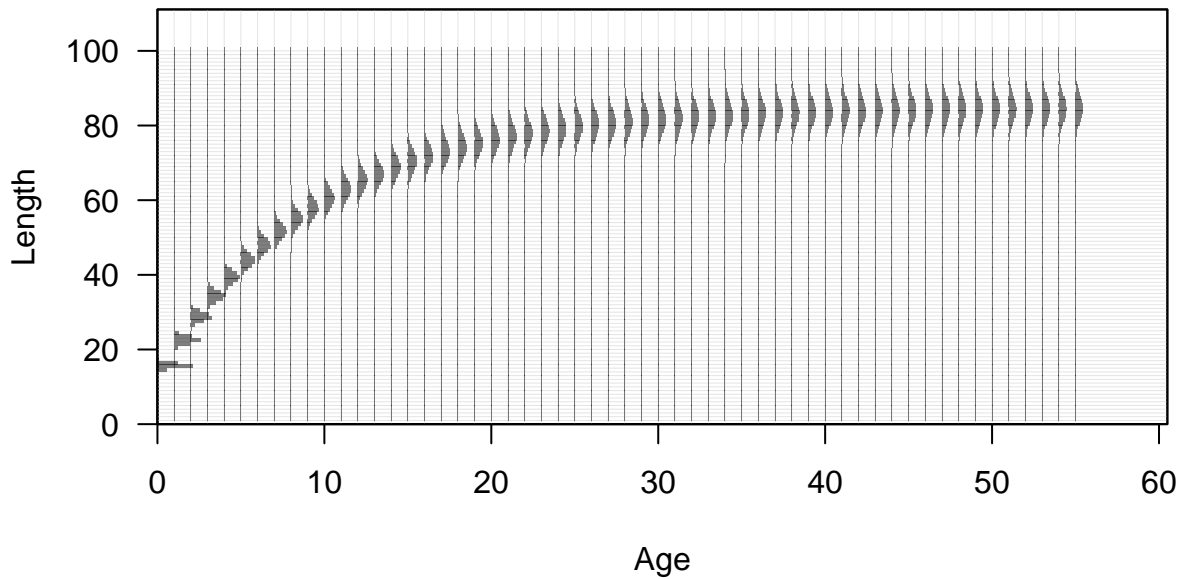


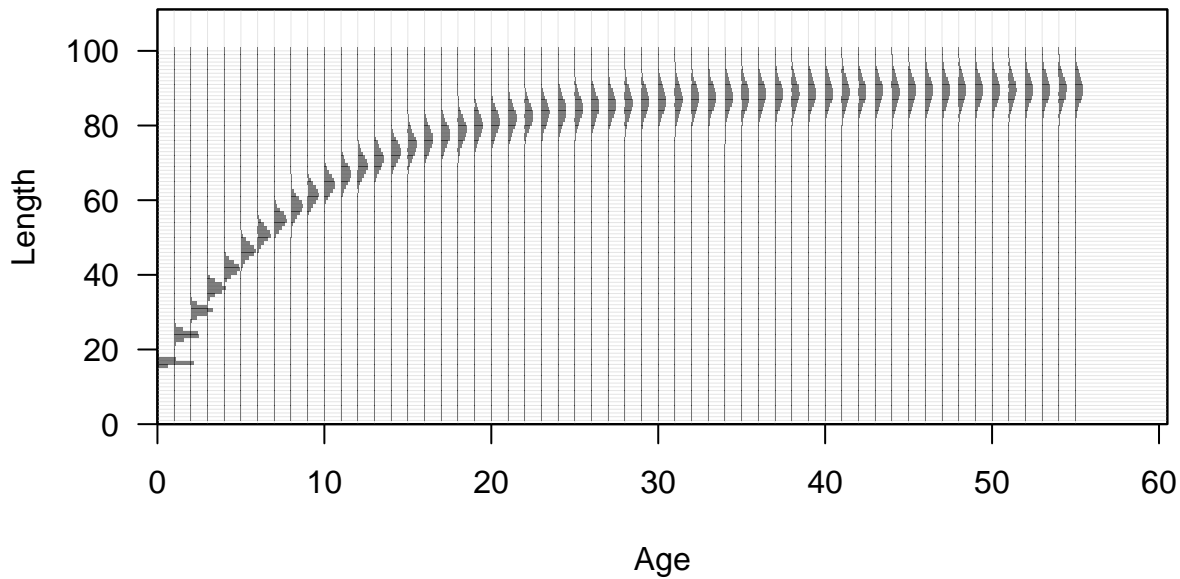


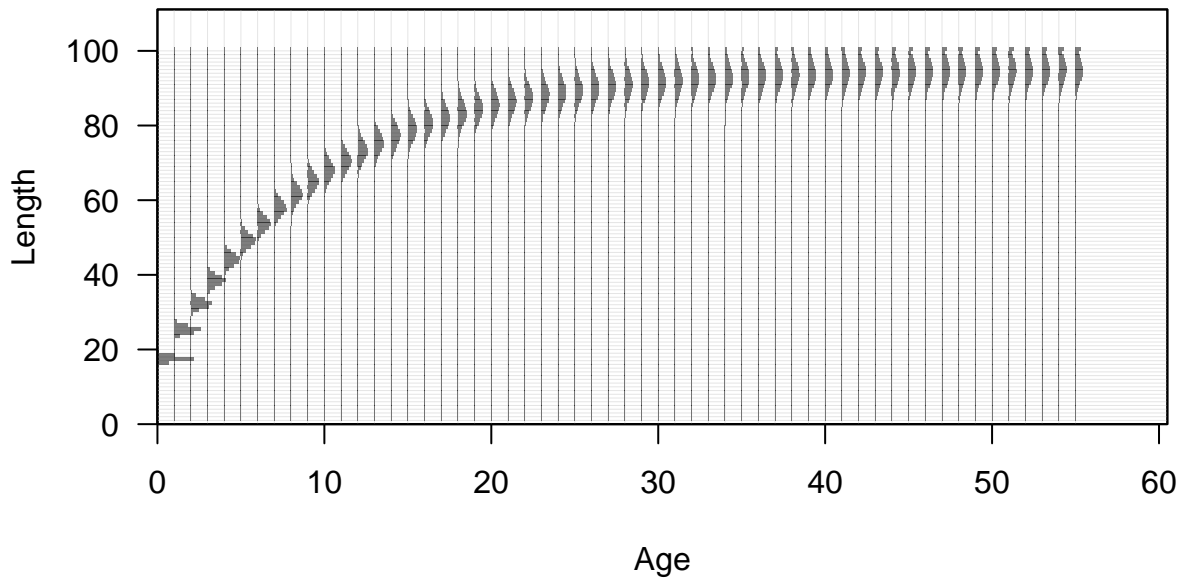


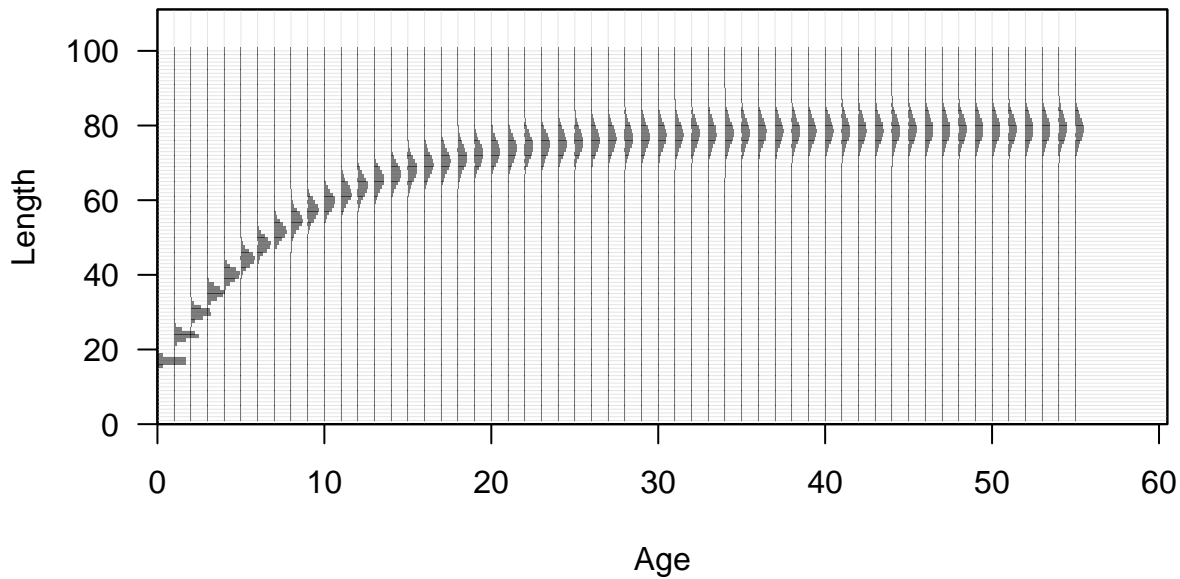


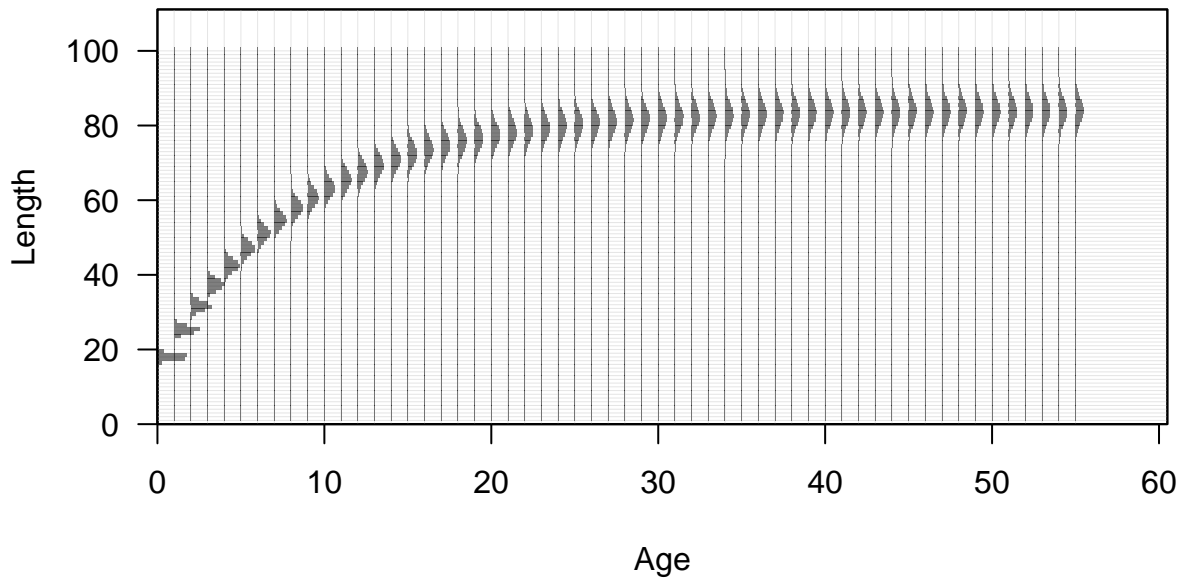


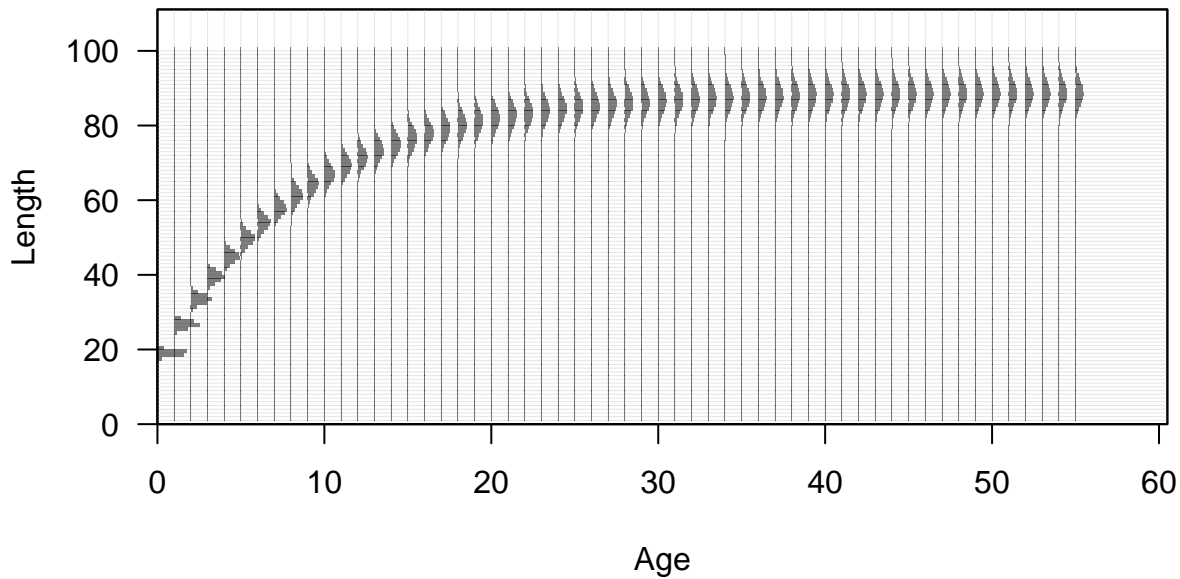




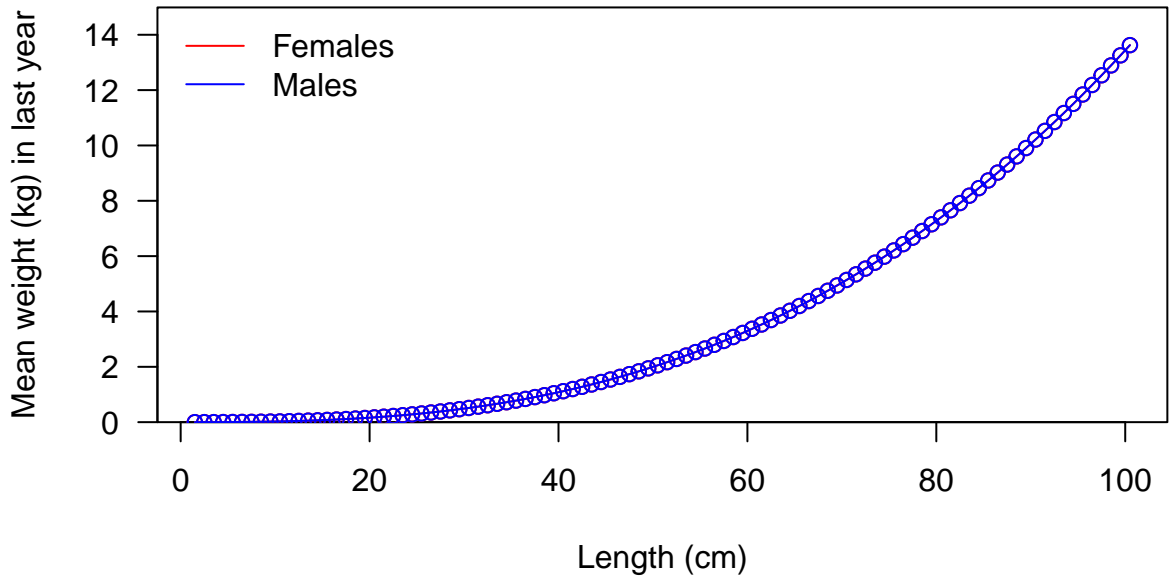


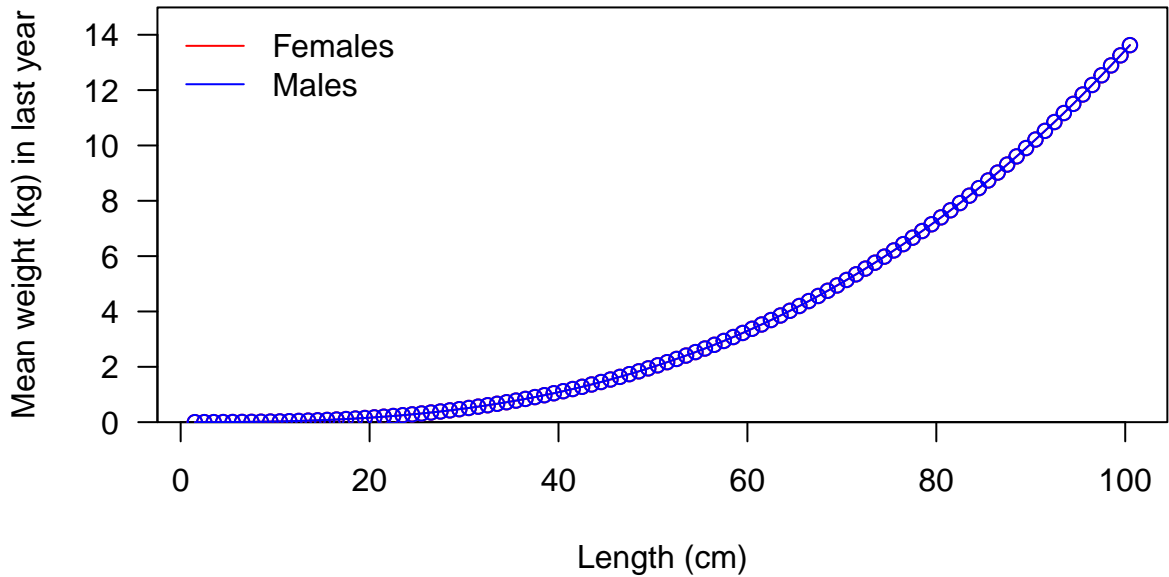


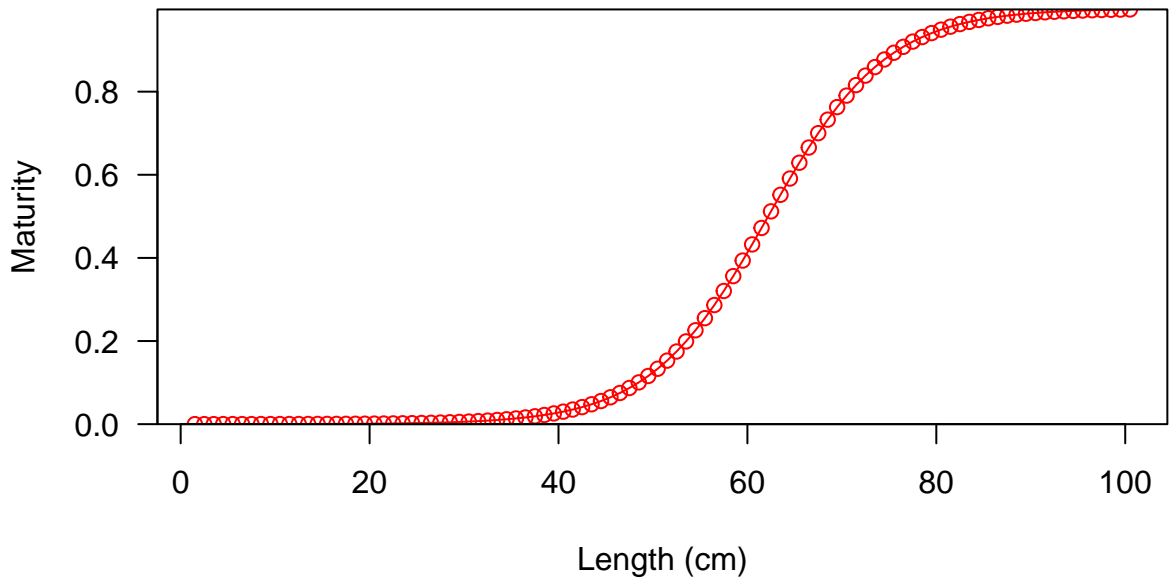


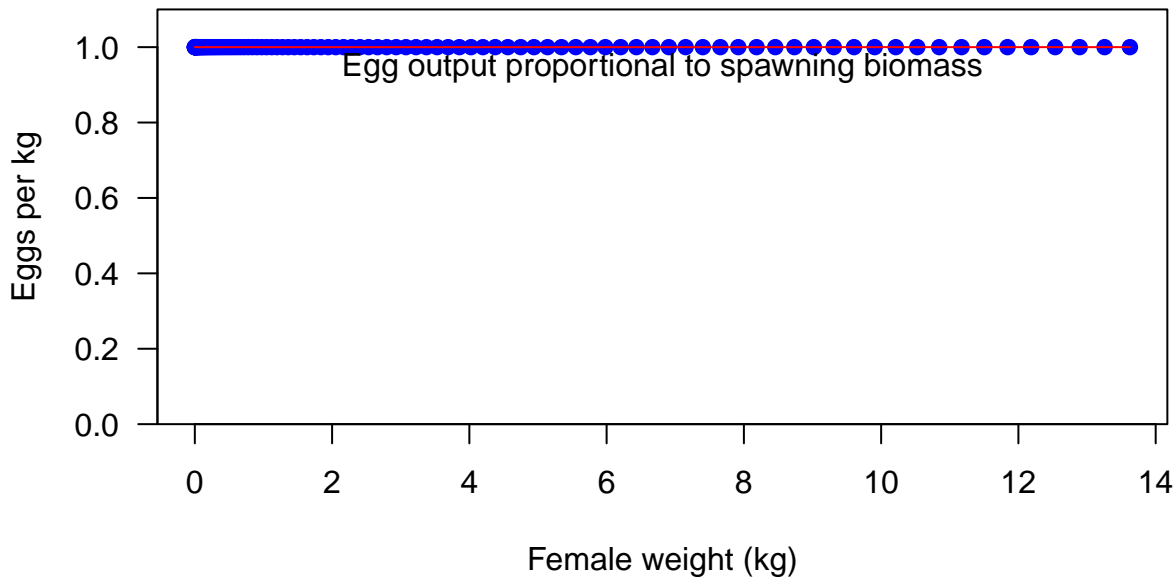




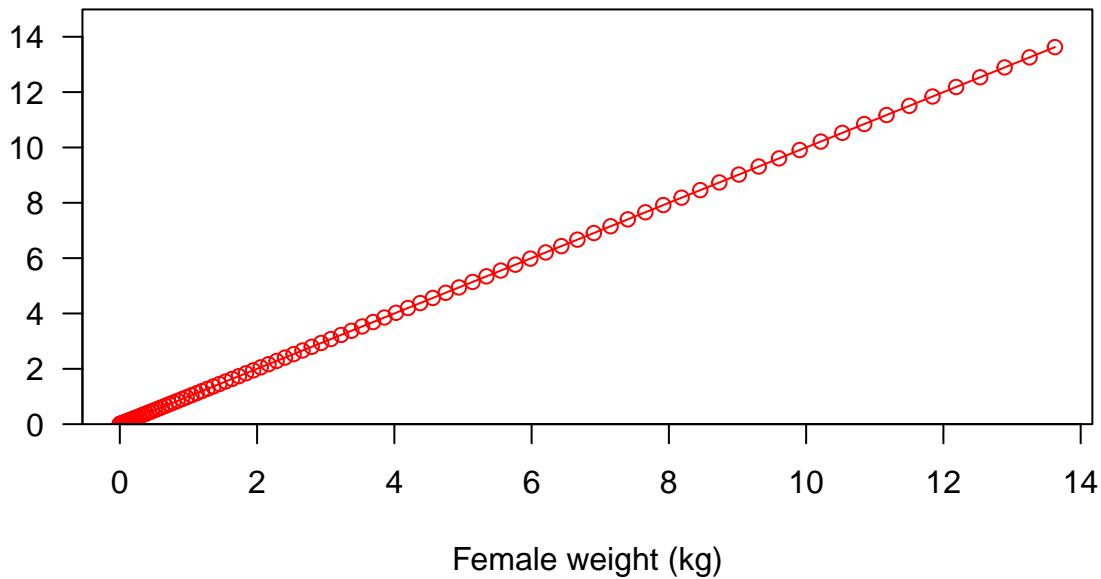




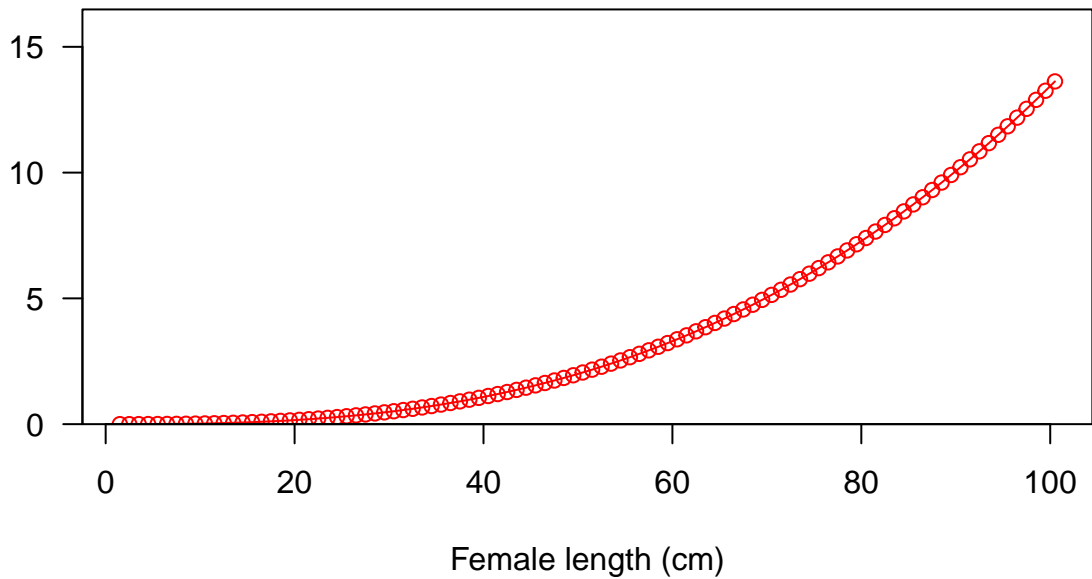




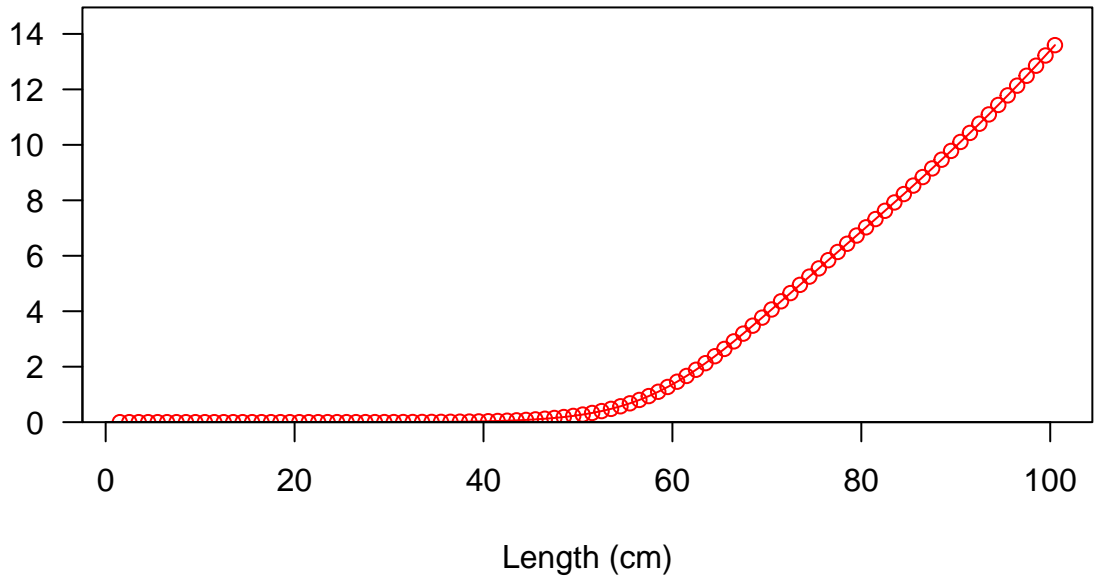
Fecundity



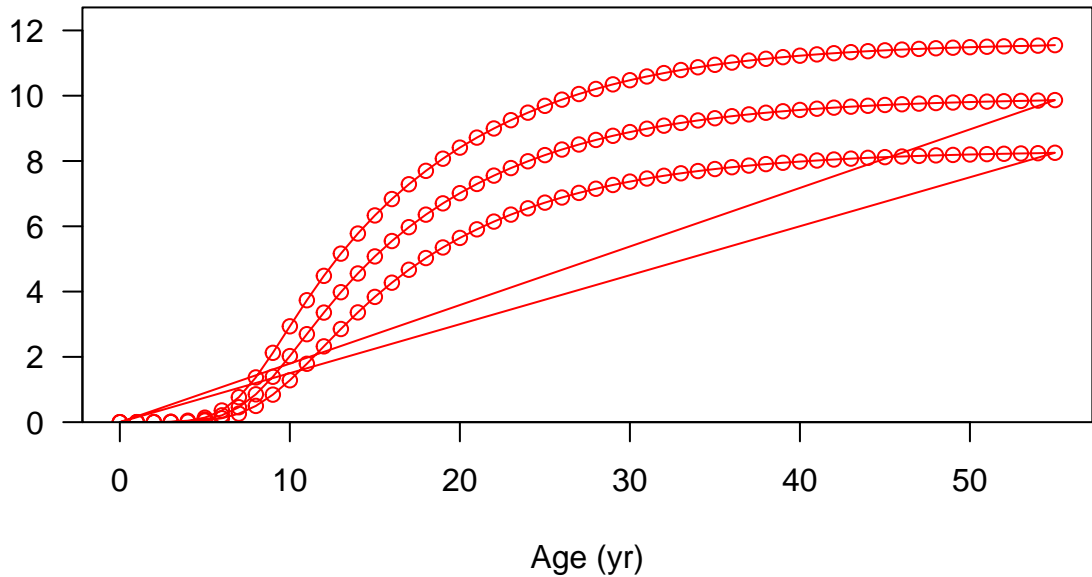
Fecundity



Spawning output

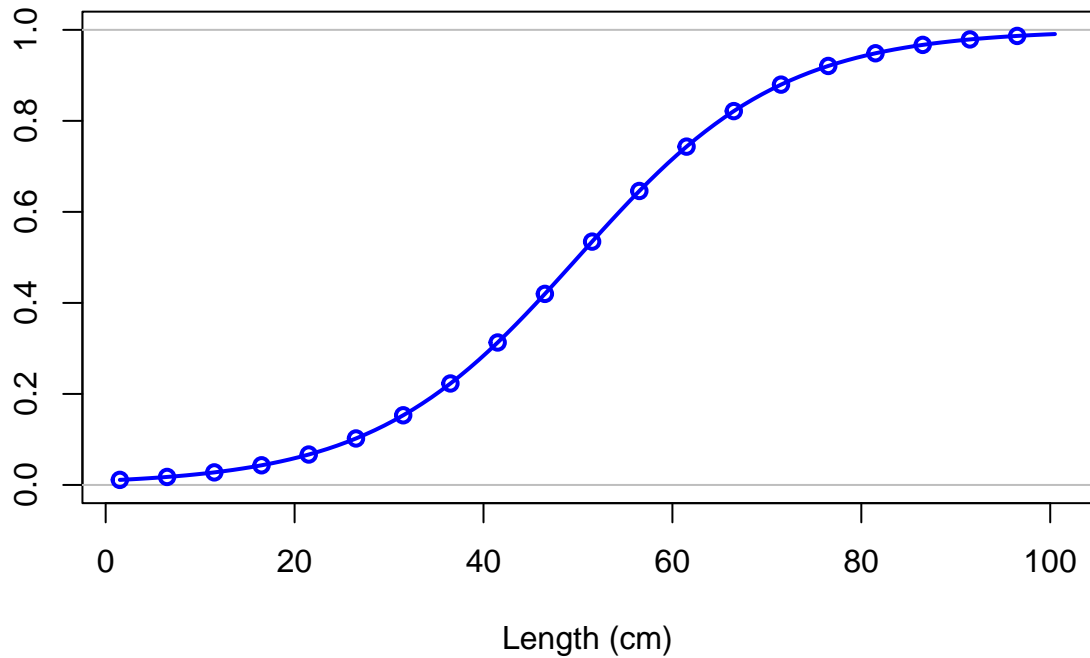


Spawning output

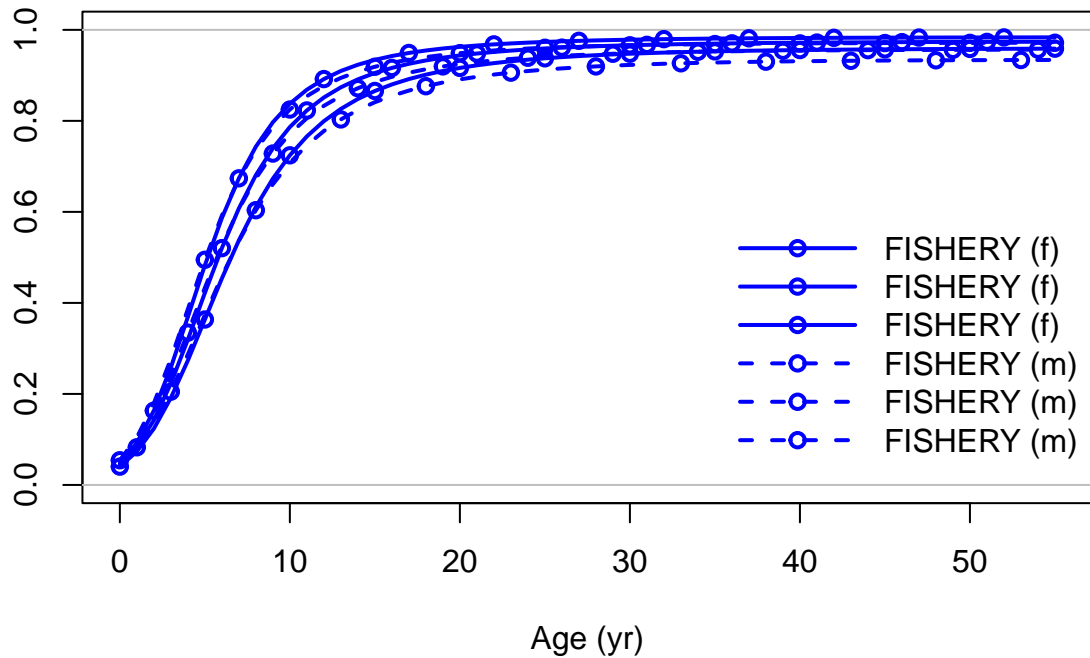




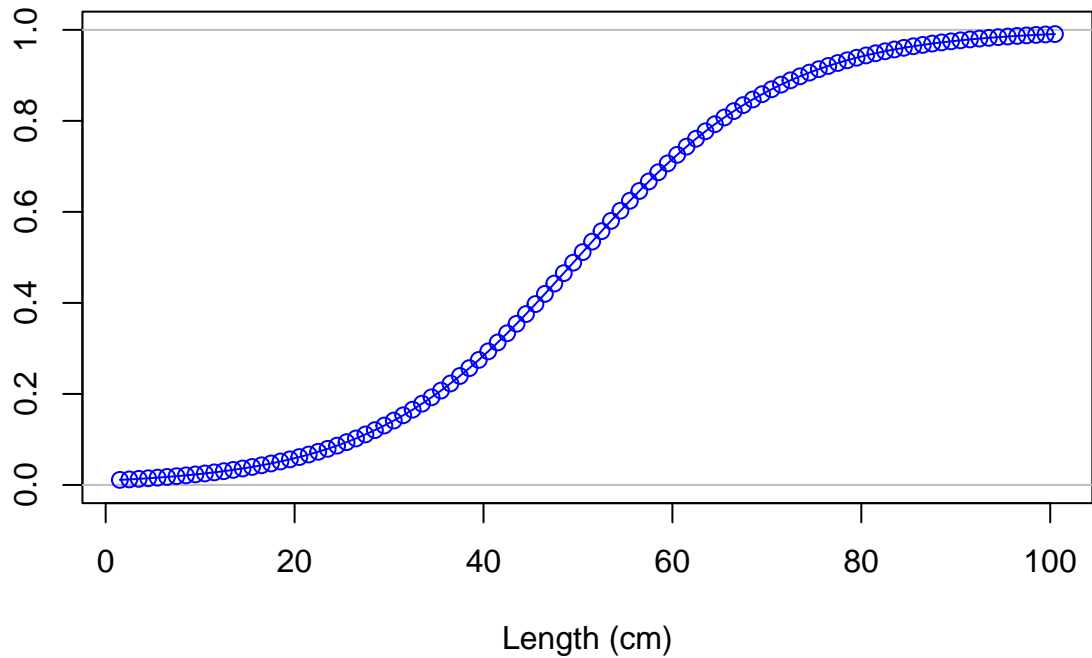
Selectivity



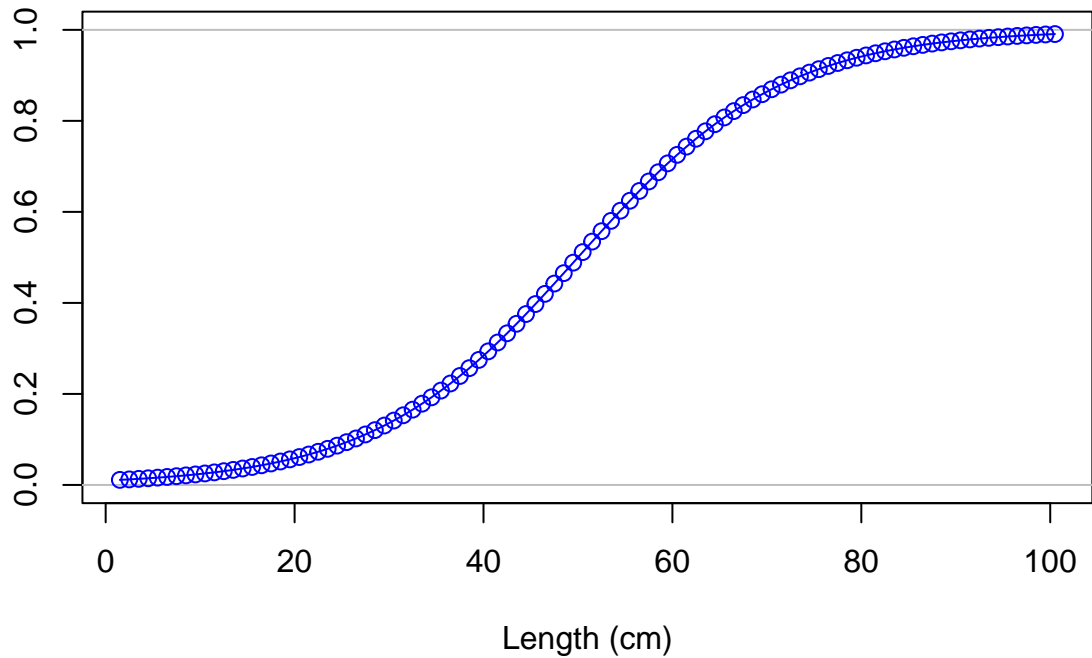
Selectivity

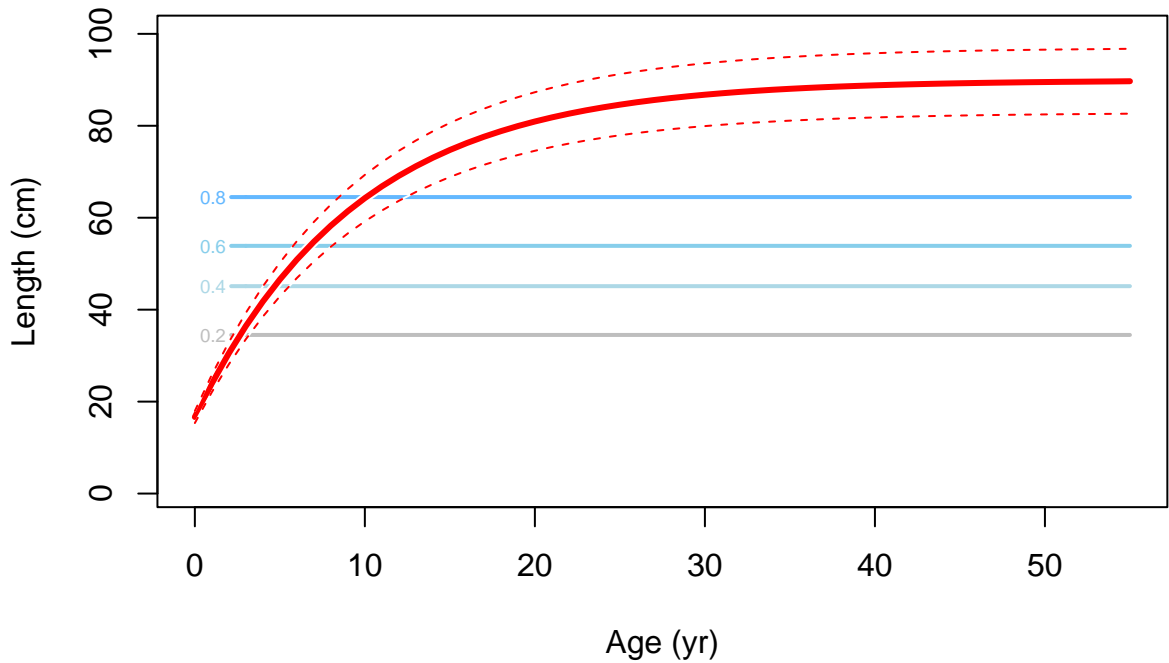


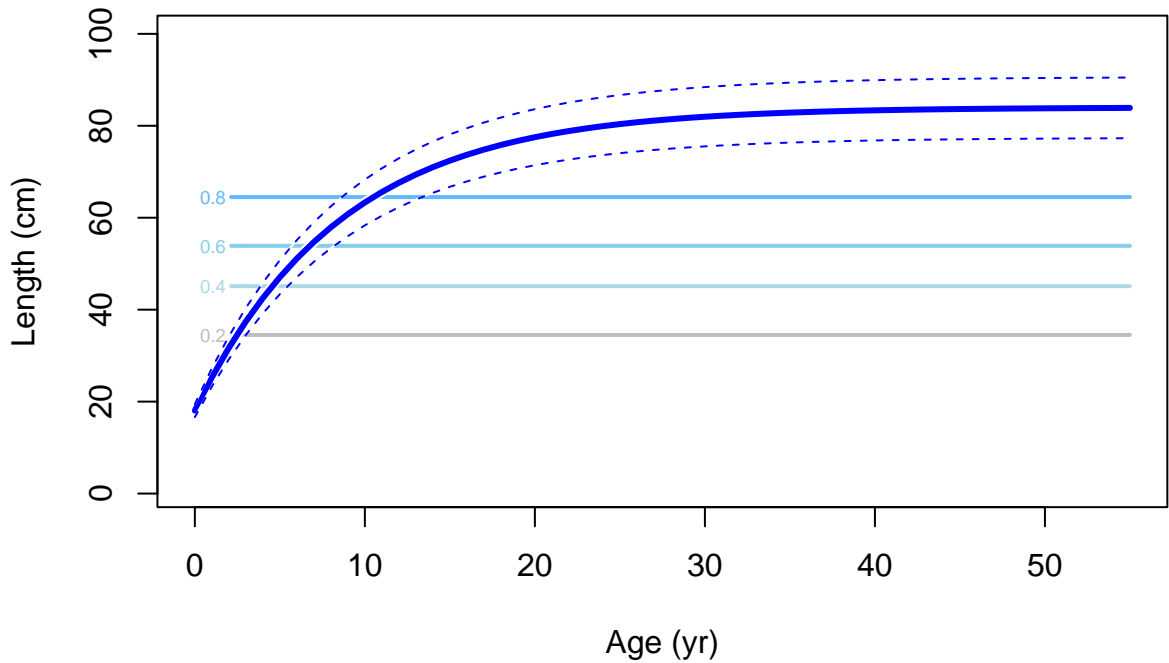
Selectivity

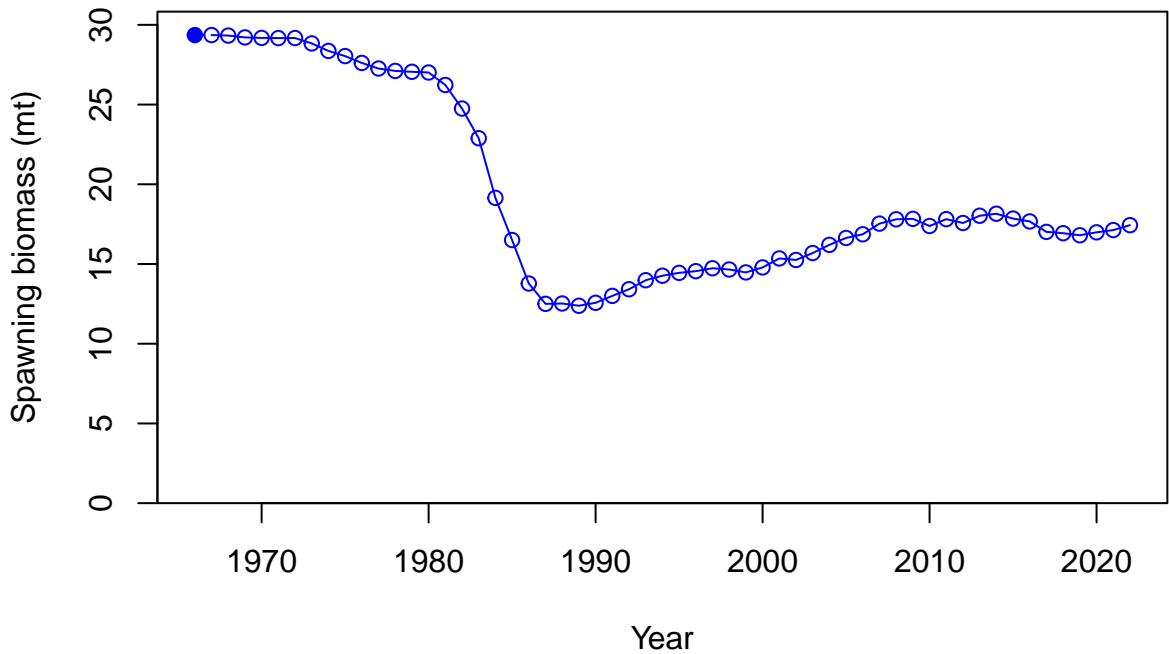


Selectivity

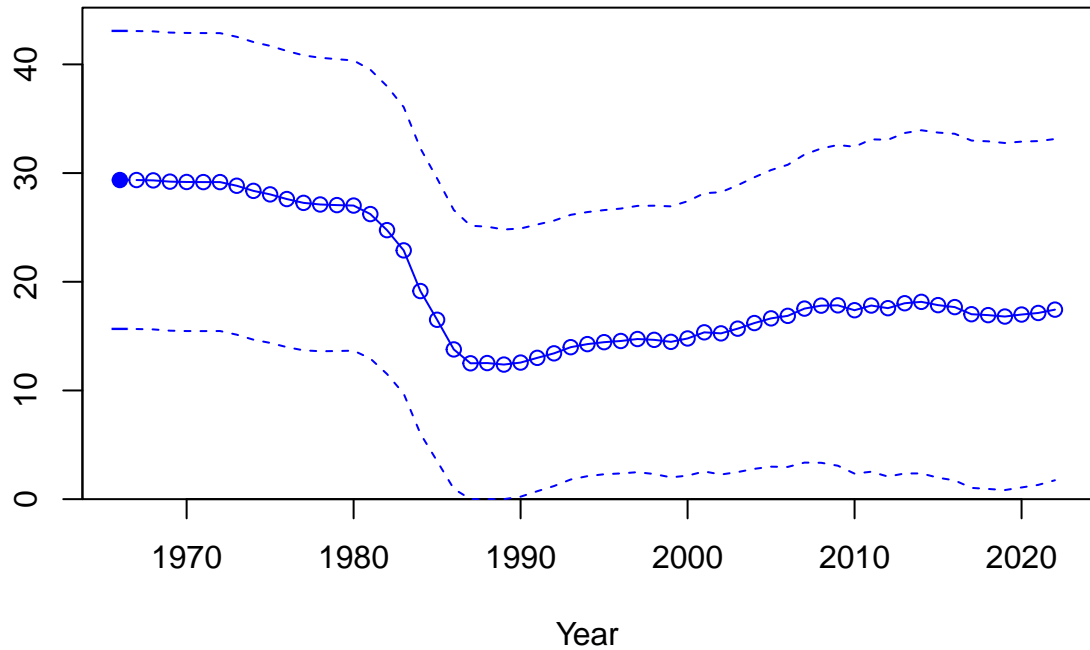






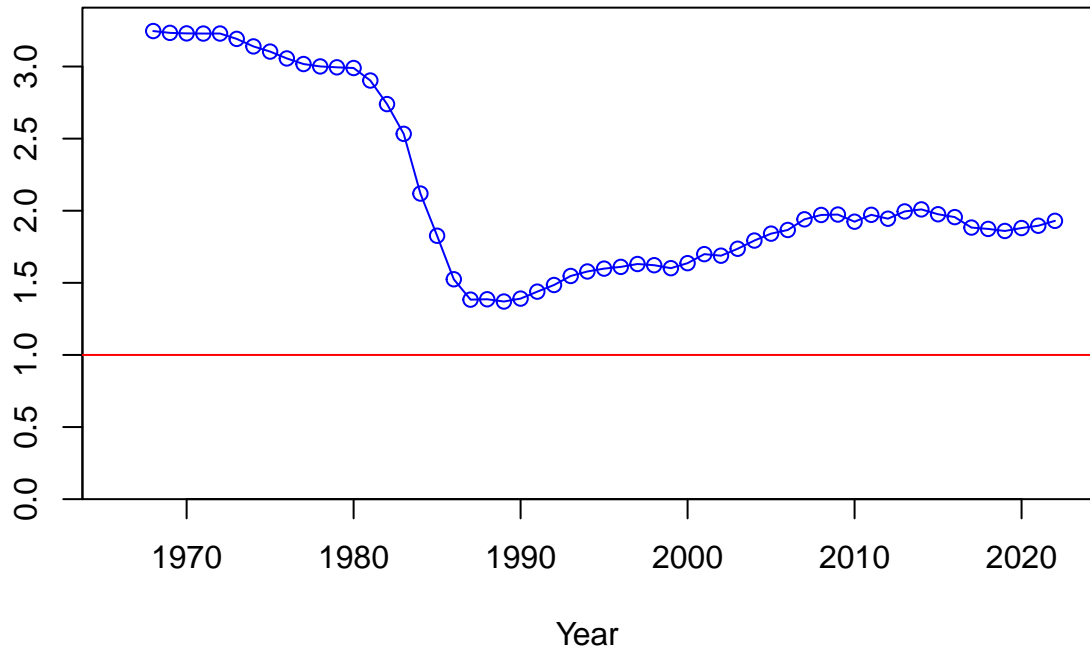


Spawning biomass (mt)

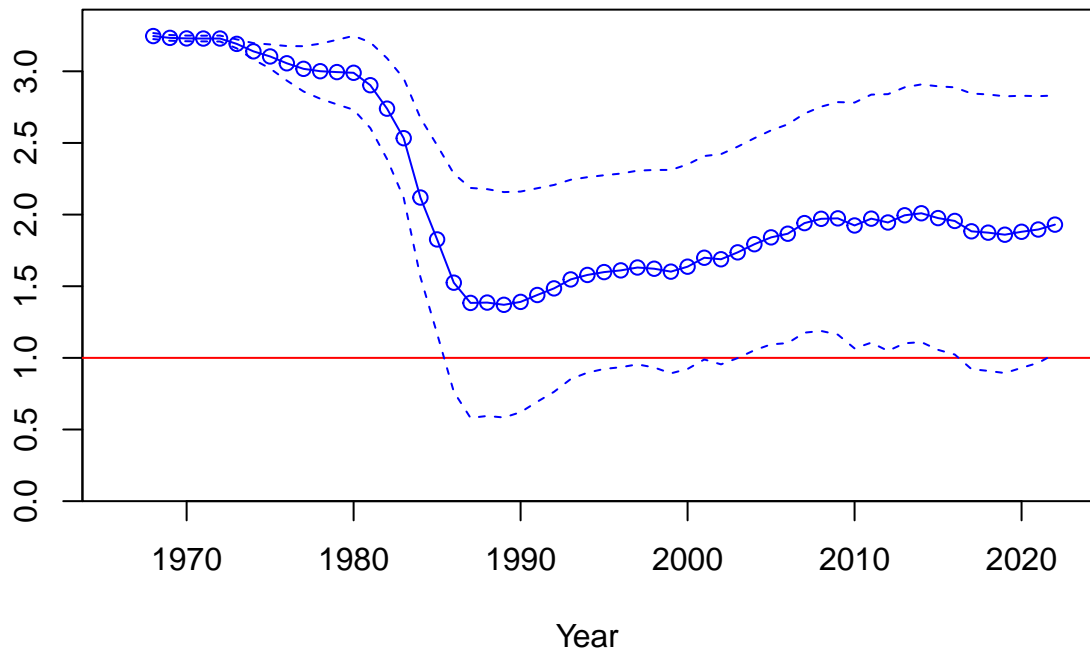


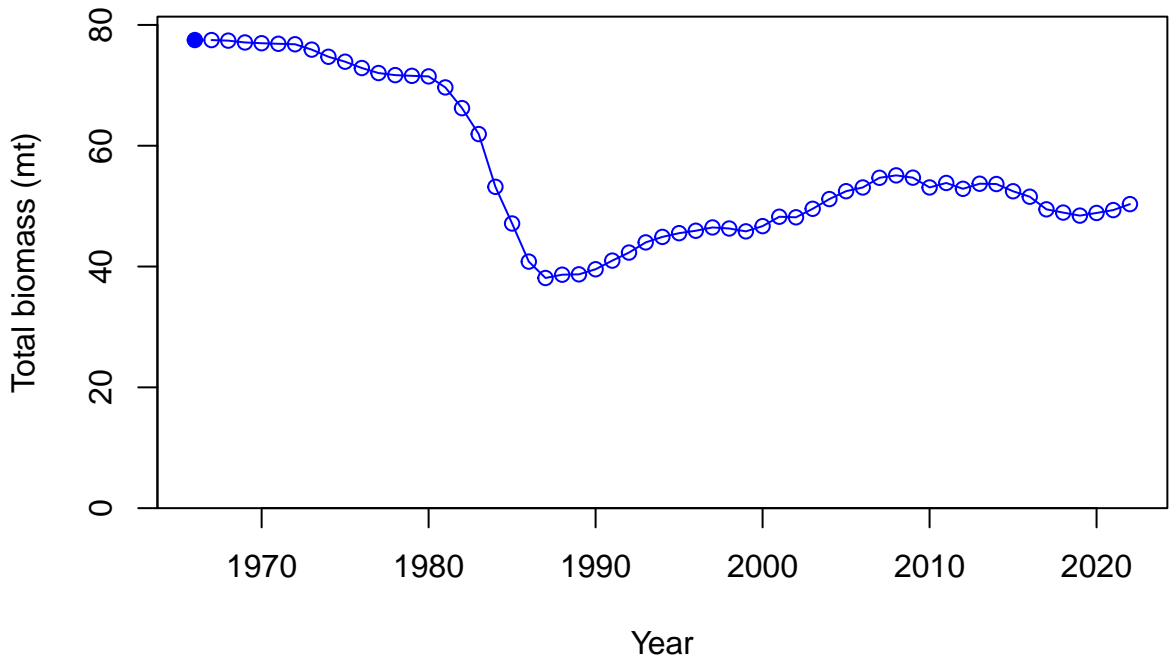


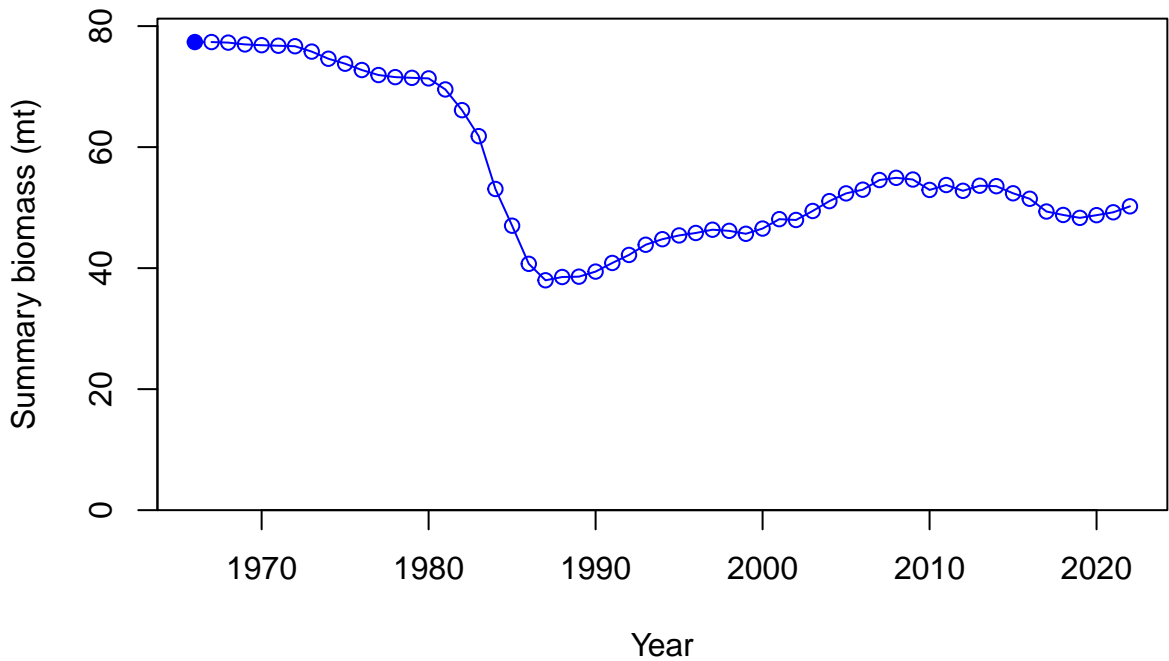
Relative spawning biomass:  $B/B_{MSY}$



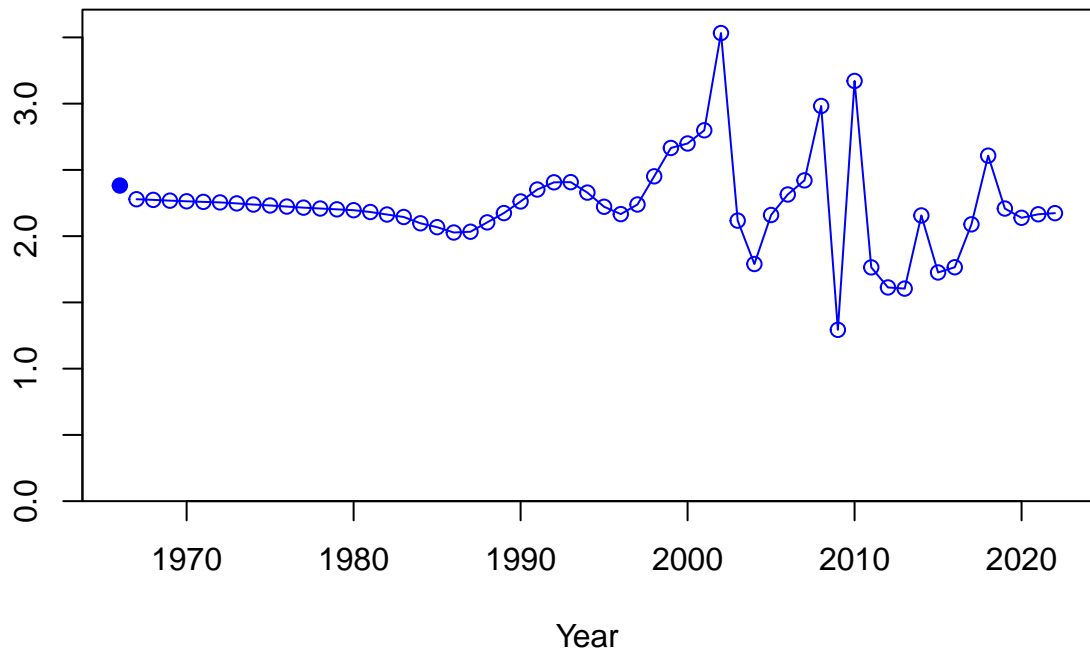
Relative spawning biomass:  $B/B_{MSY}$



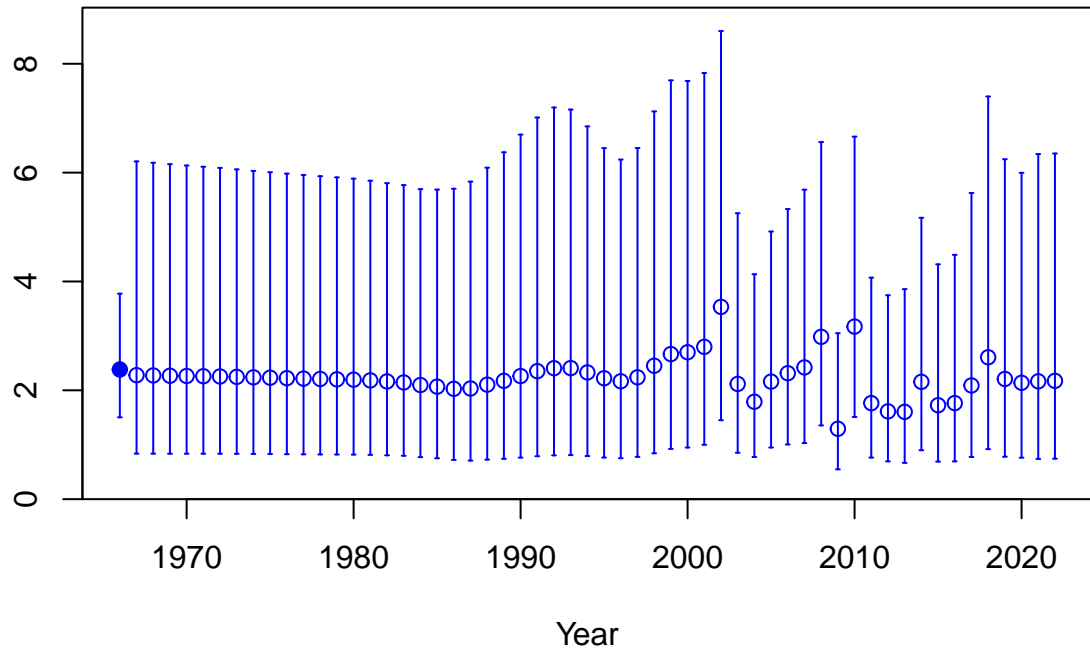




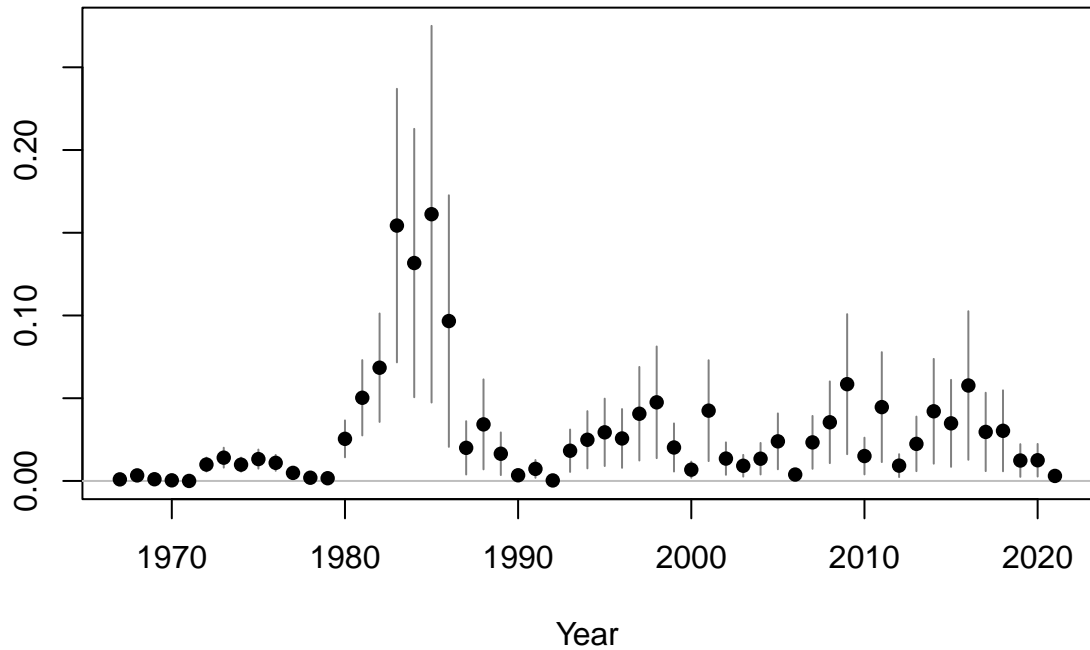
Age-0 recruits (1,000s)

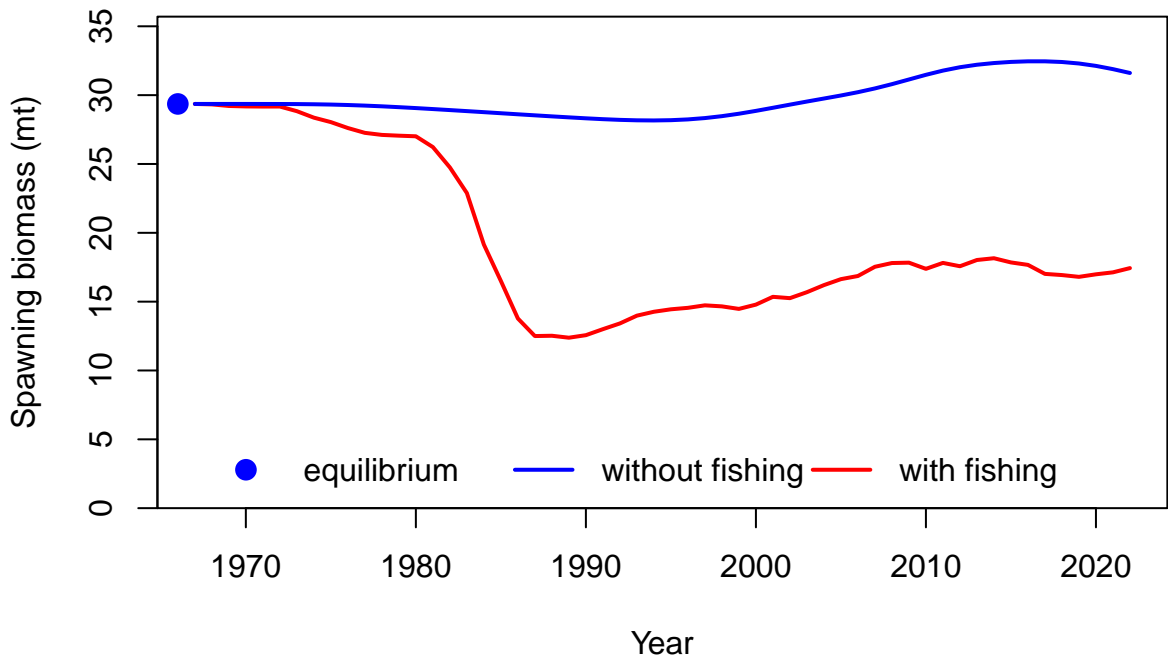


Age-0 recruits (1,000s)



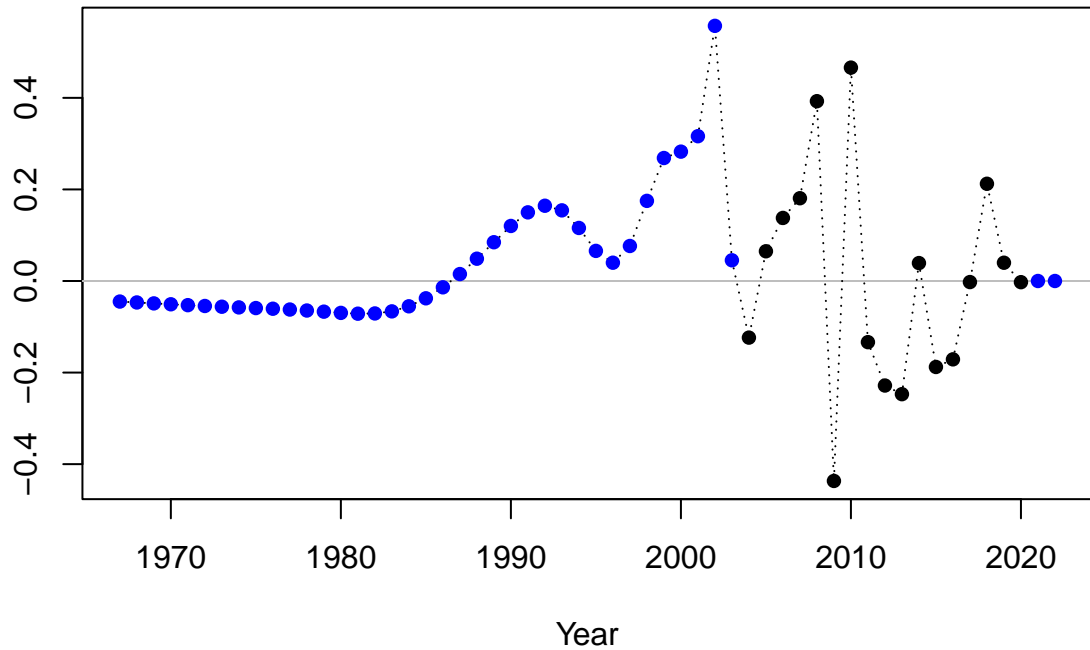
Summary Fishing Mortality







Log recruitment deviation



Log recruitment deviation

1.0  
0.5  
0.0  
-0.5  
-1.0

1970

1980

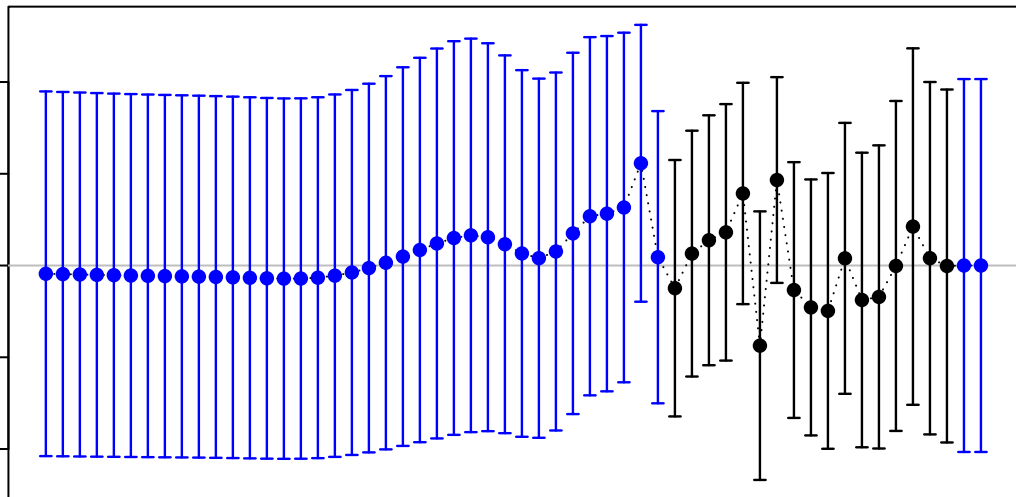
1990

2000

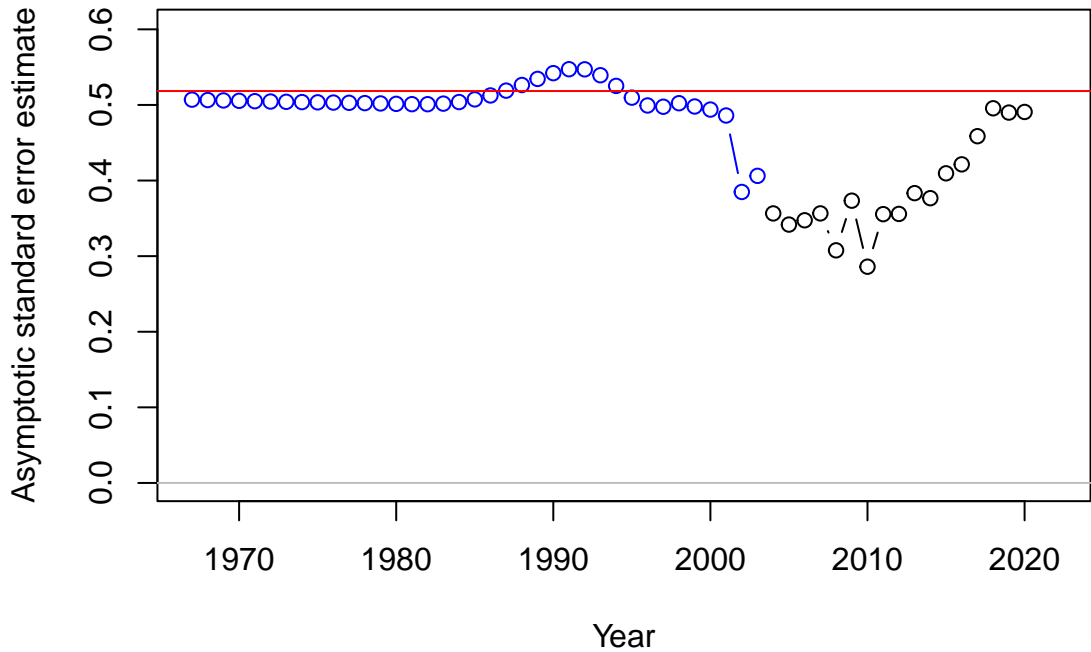
2010

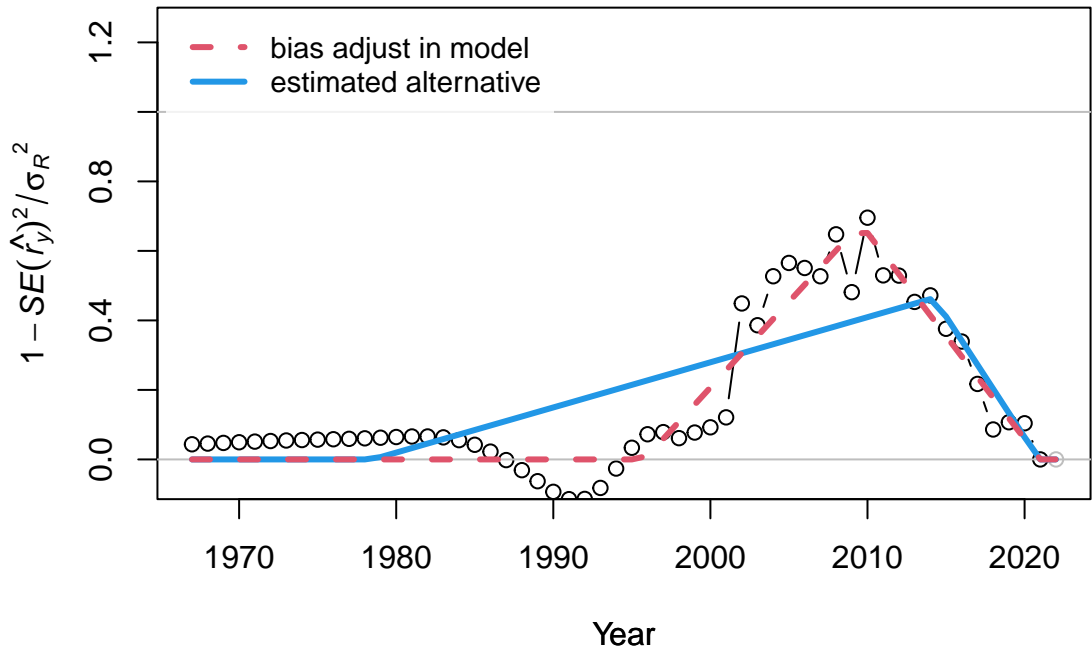
2020

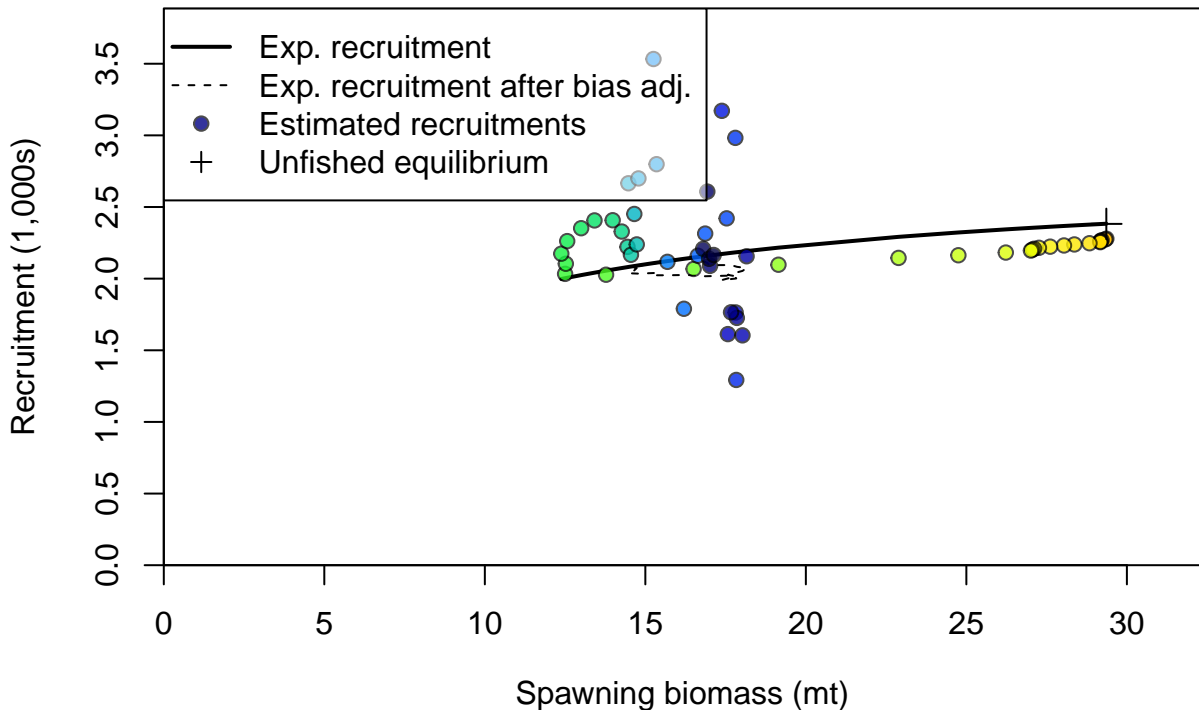
Year

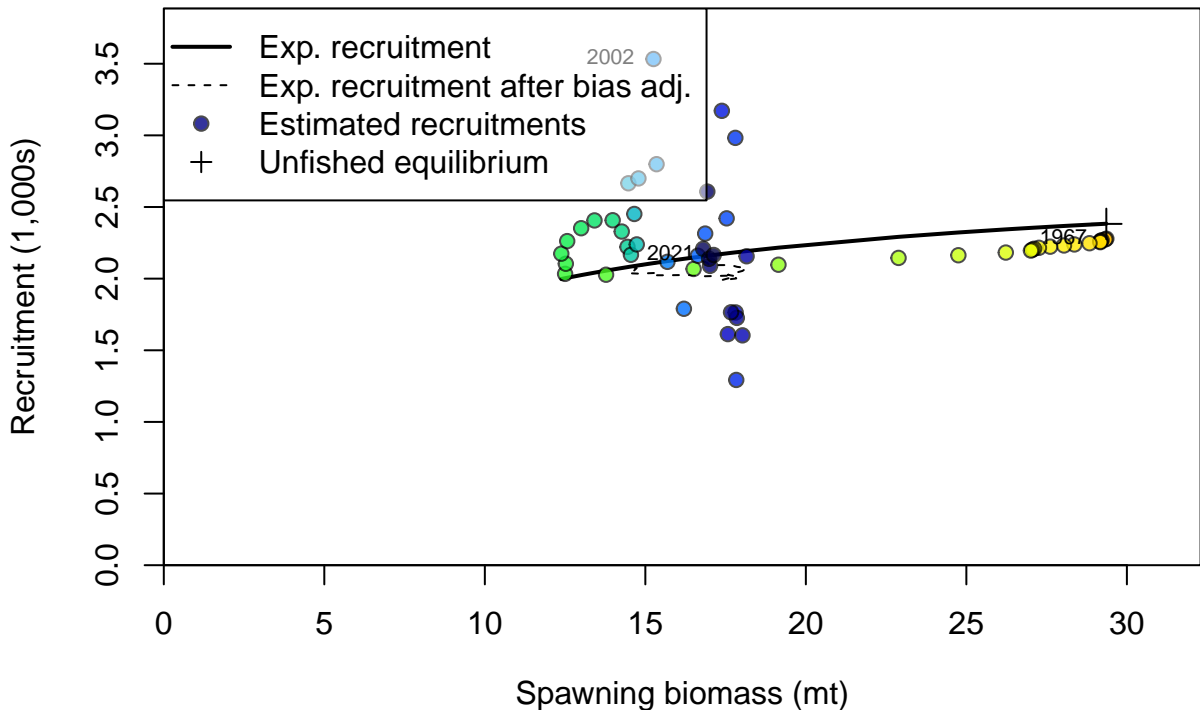


## Recruitment deviation variance

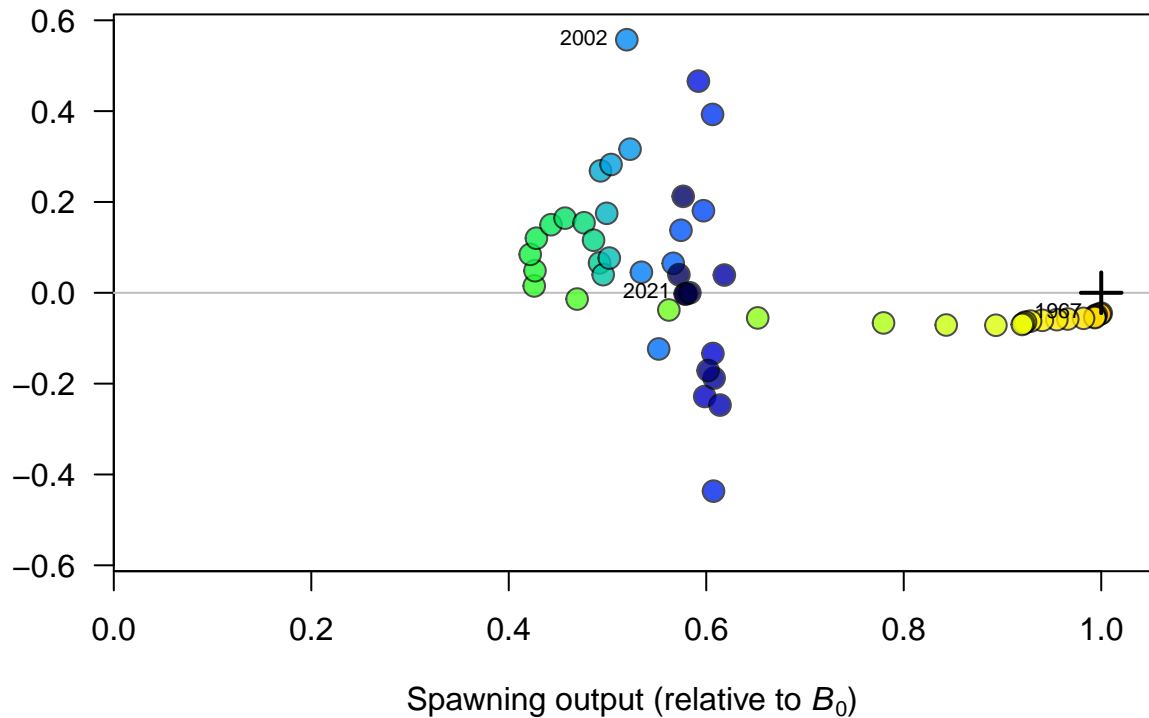


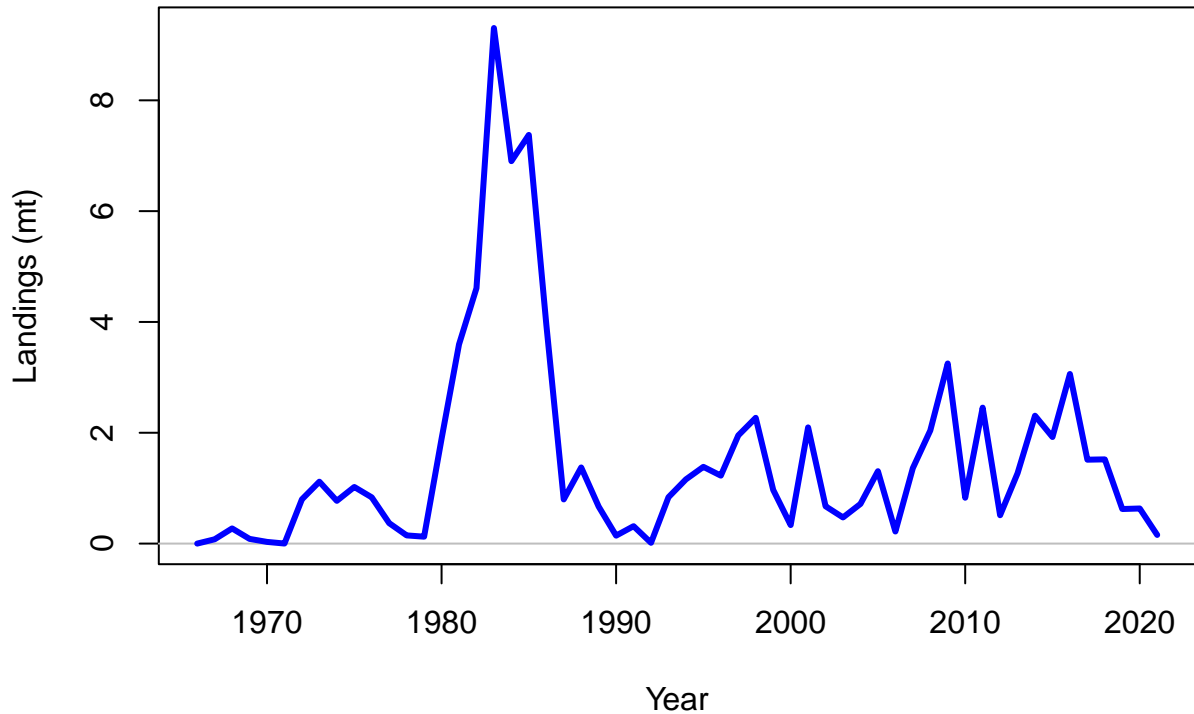




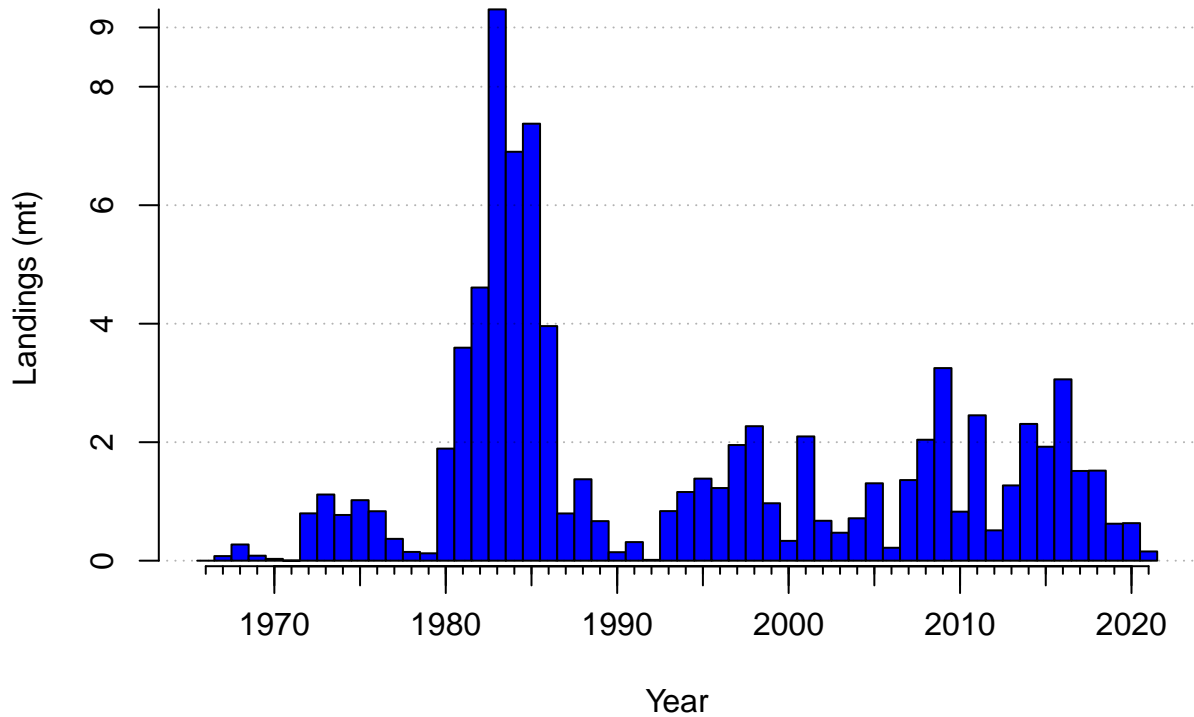


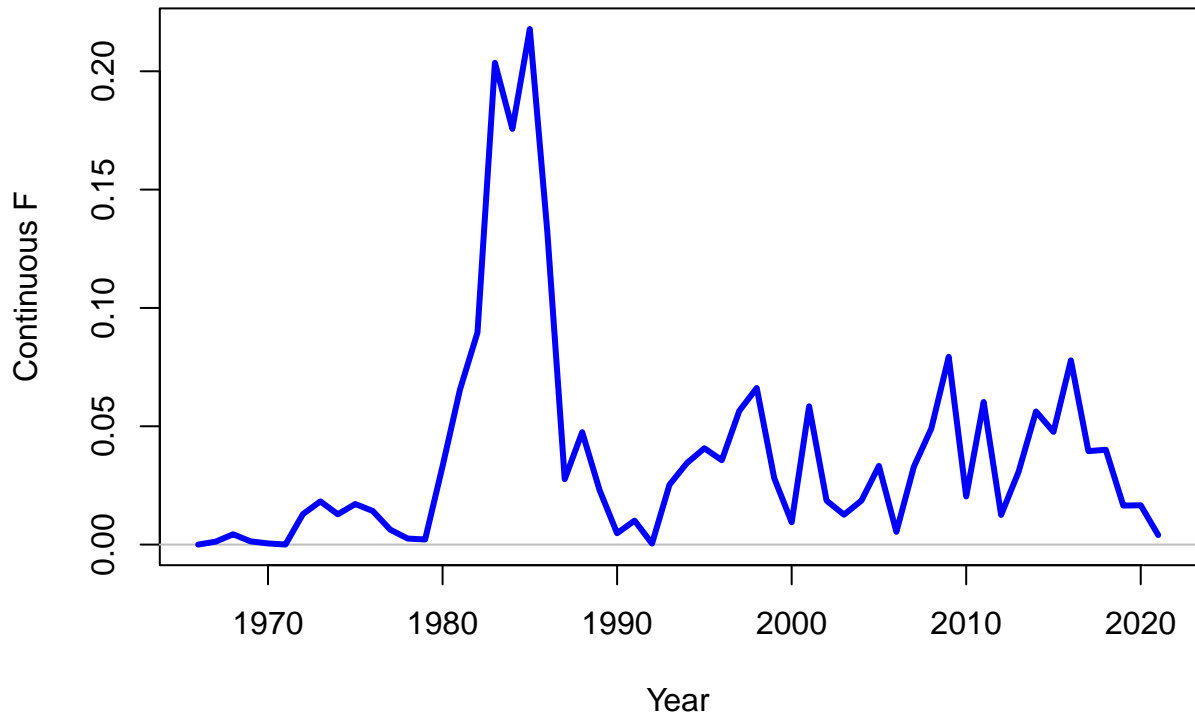
Log recruitment deviation



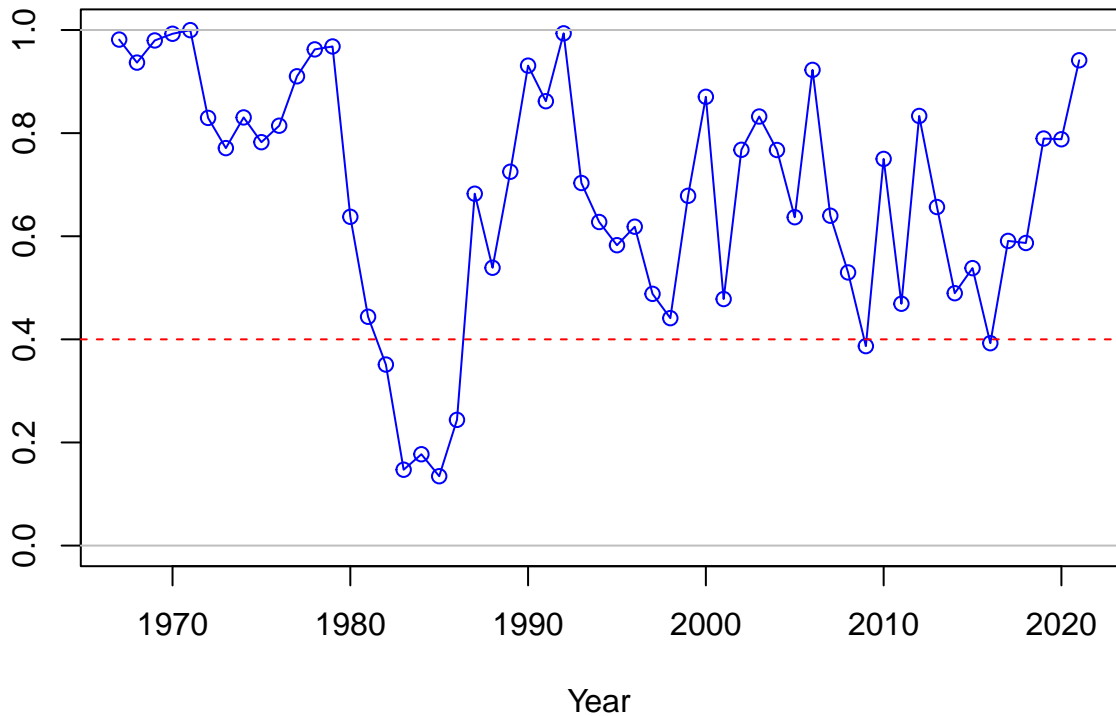




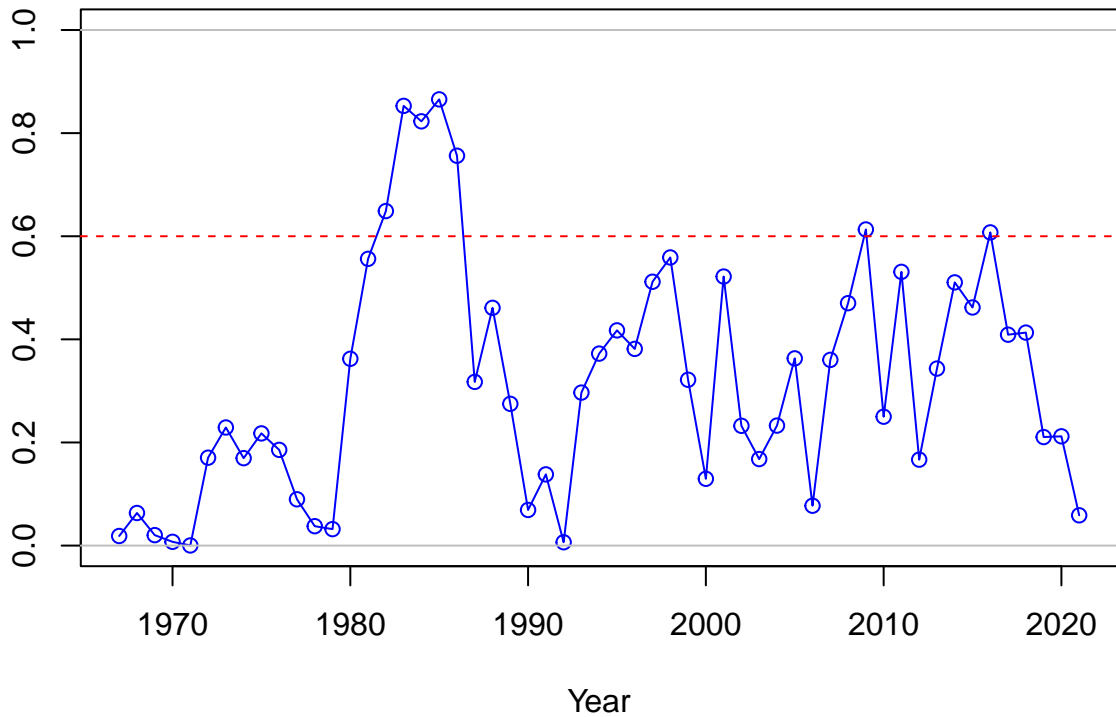




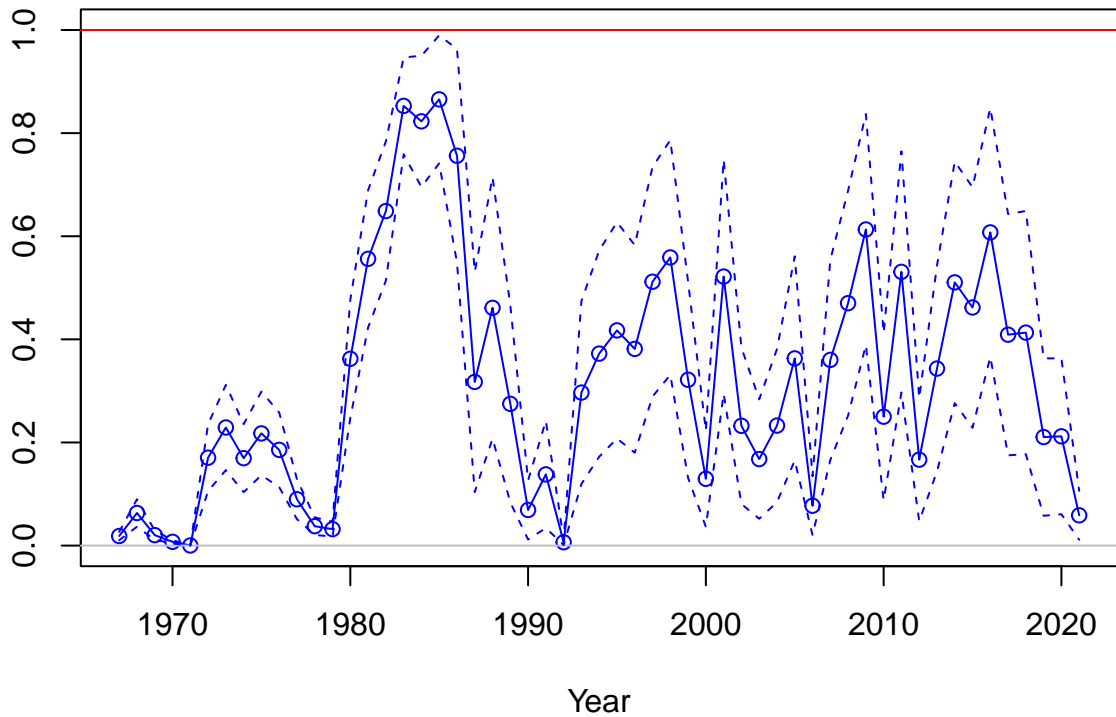
SPR



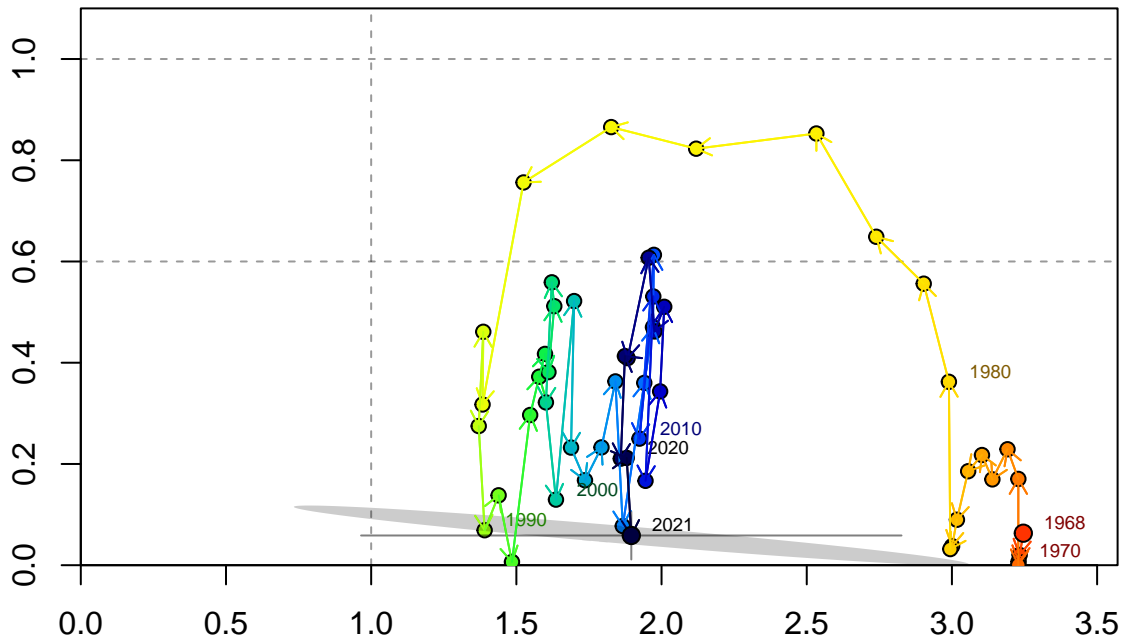
1-SPR



Fishing intensity: 1-SPR

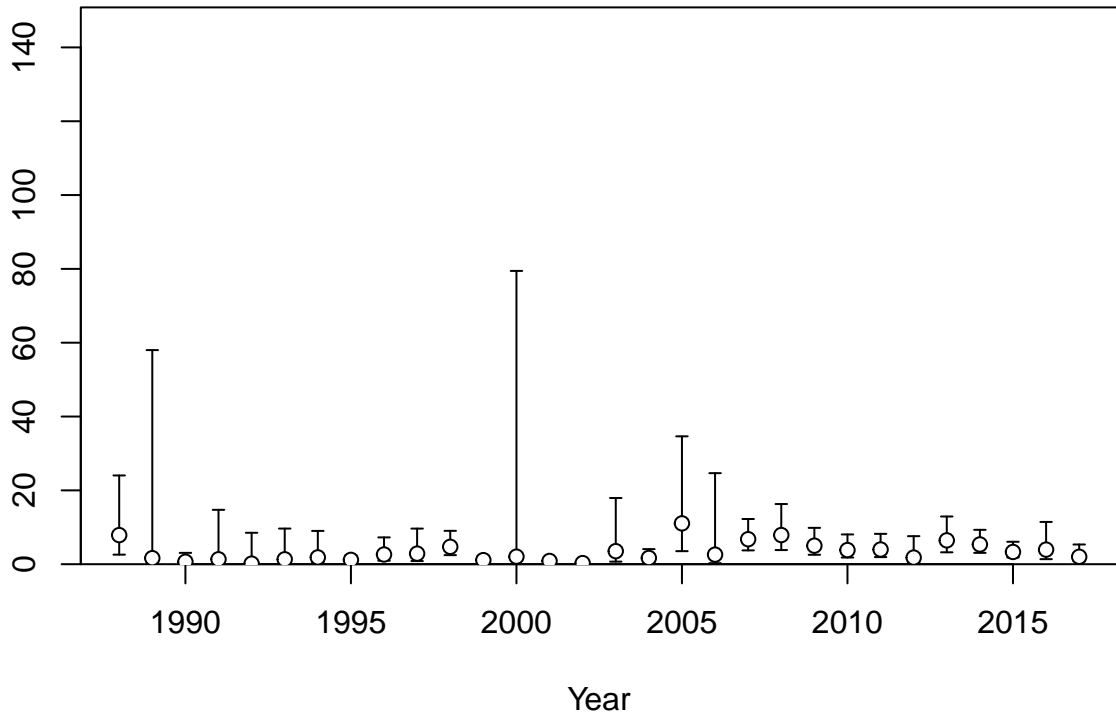


Fishing intensity: 1-SPR

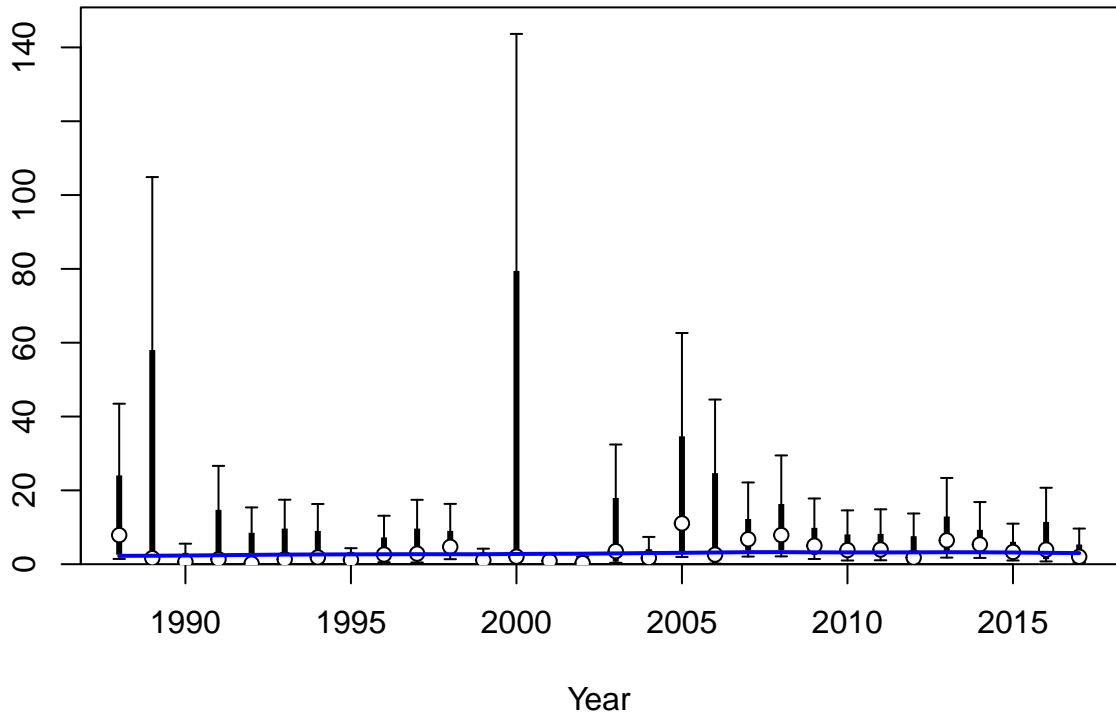


Relative spawning output:  $B/B_{MSY}$

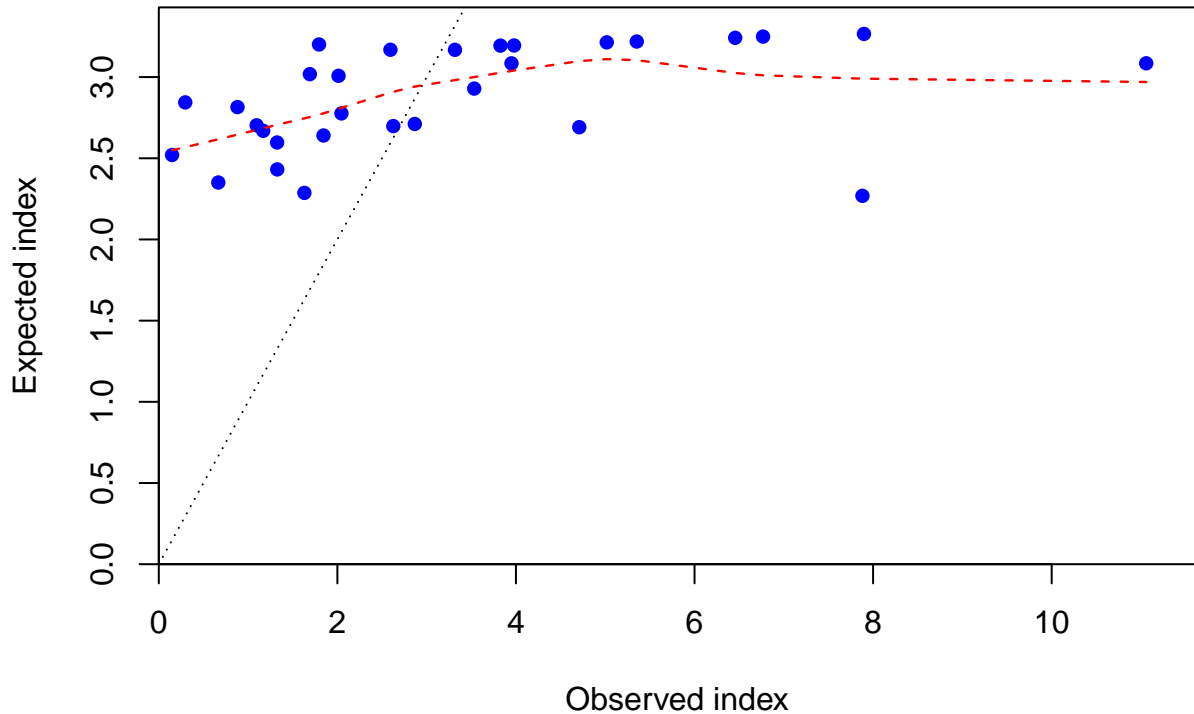
Index

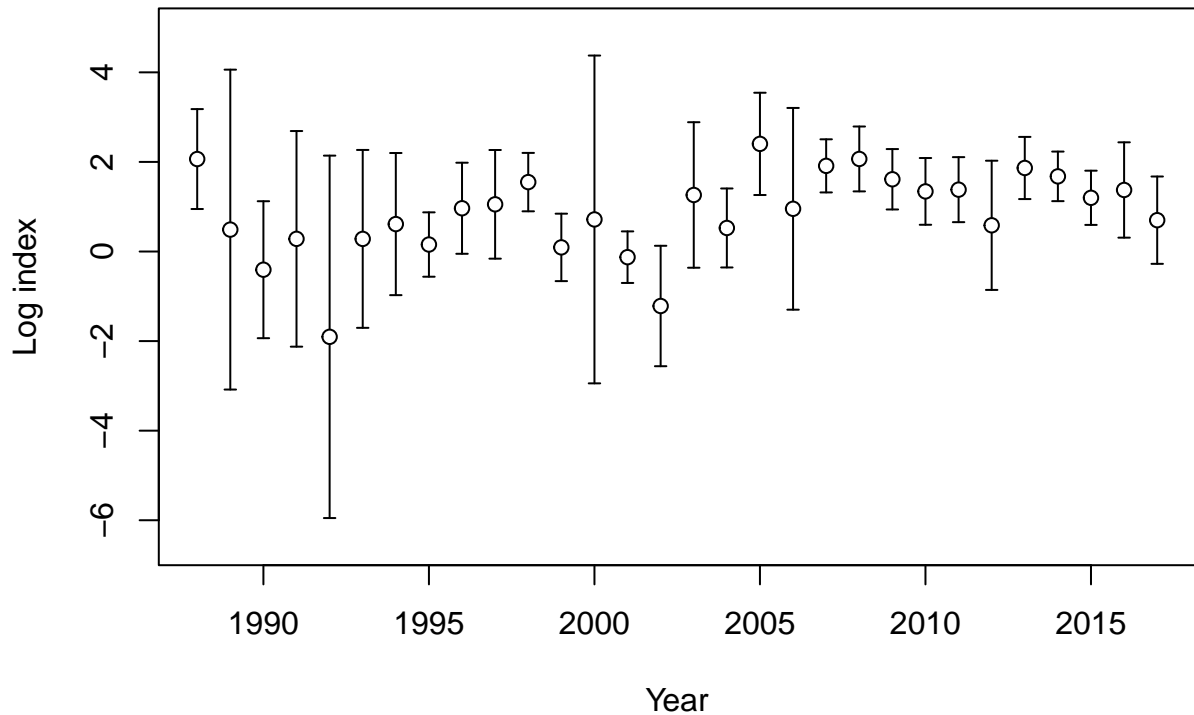


Index

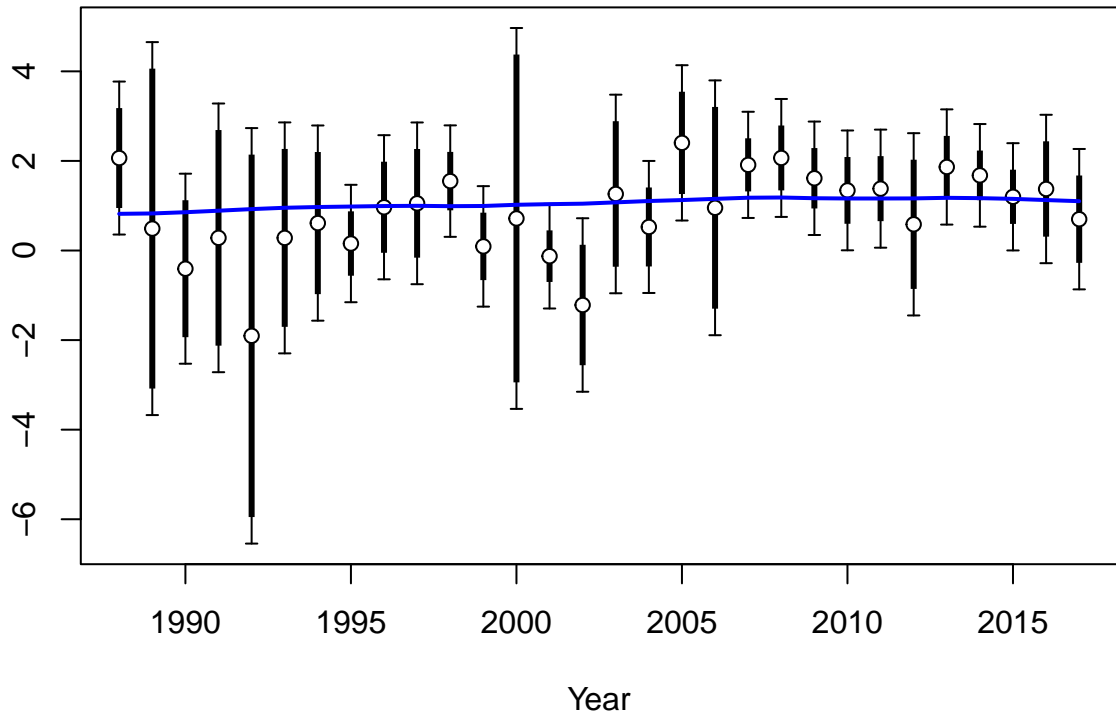


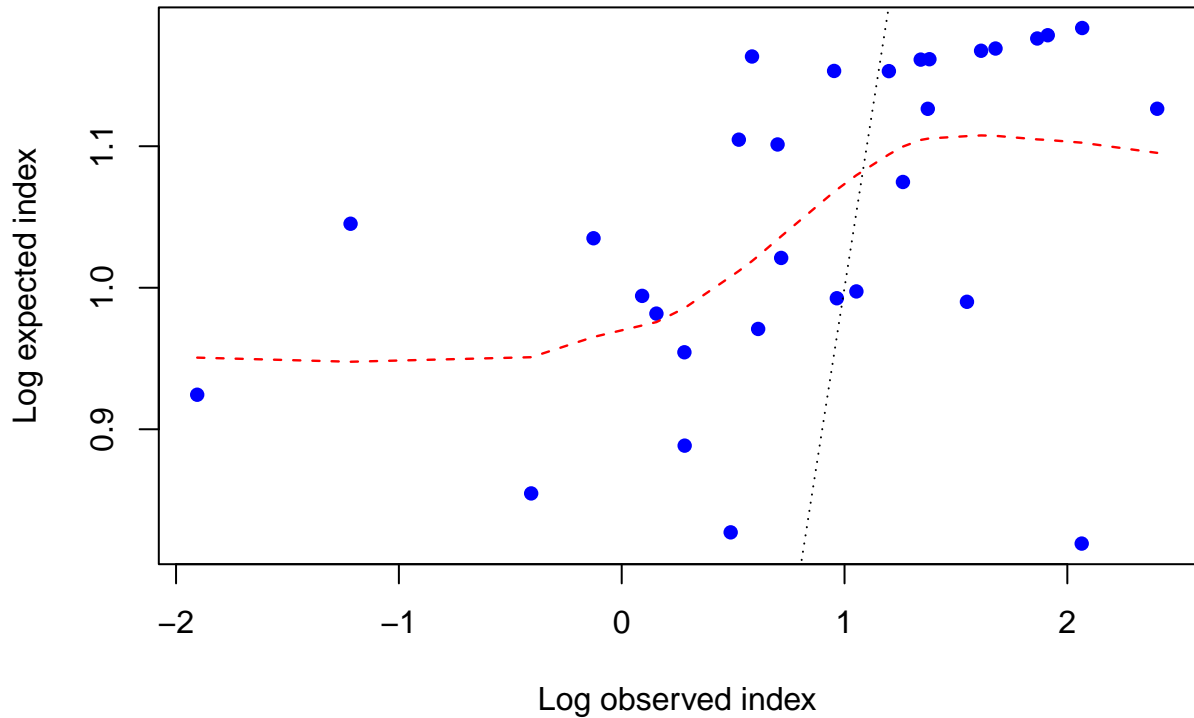


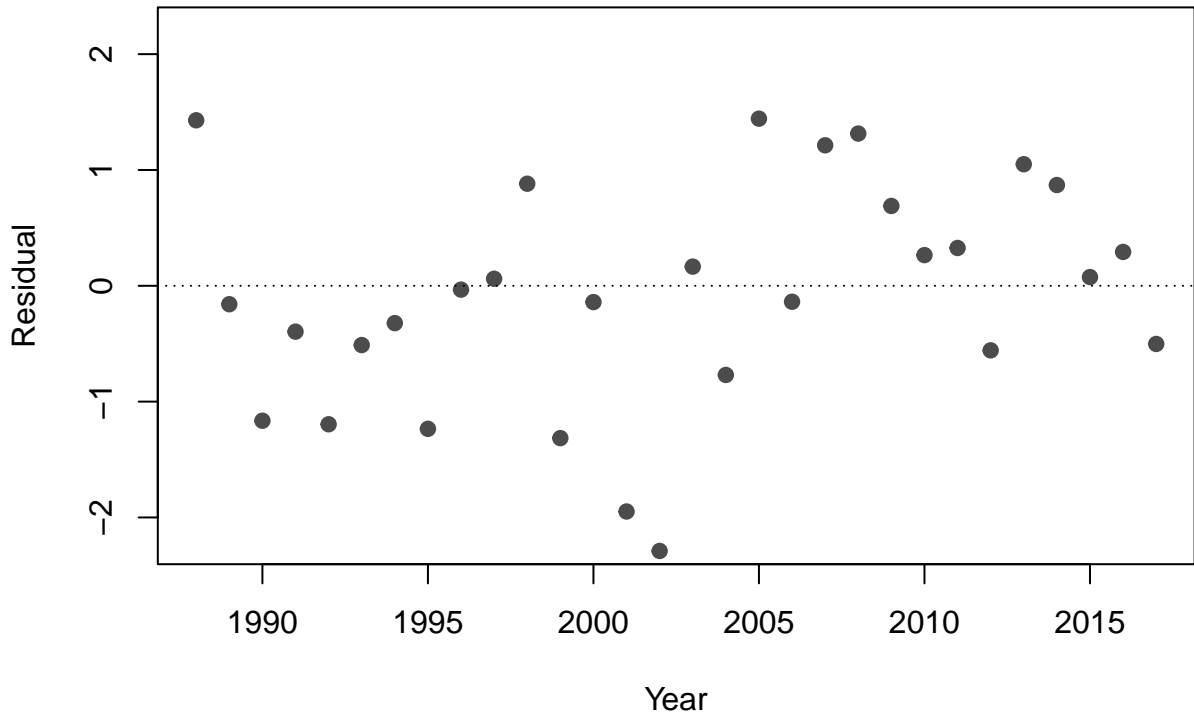


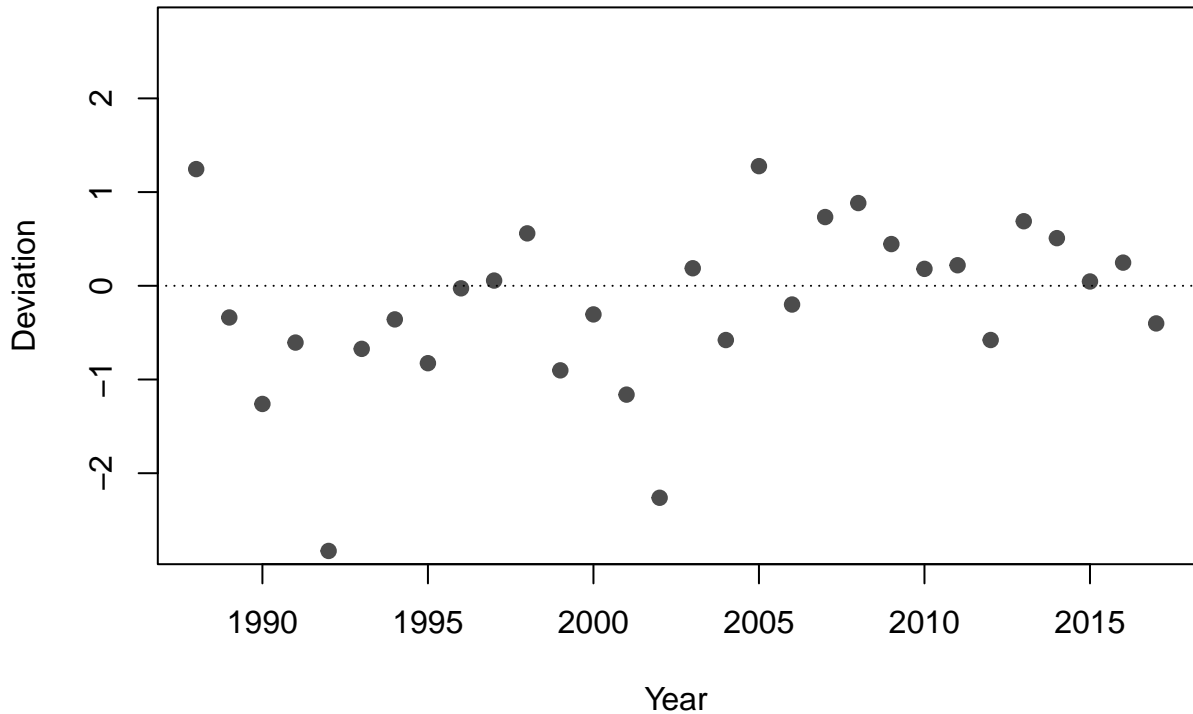


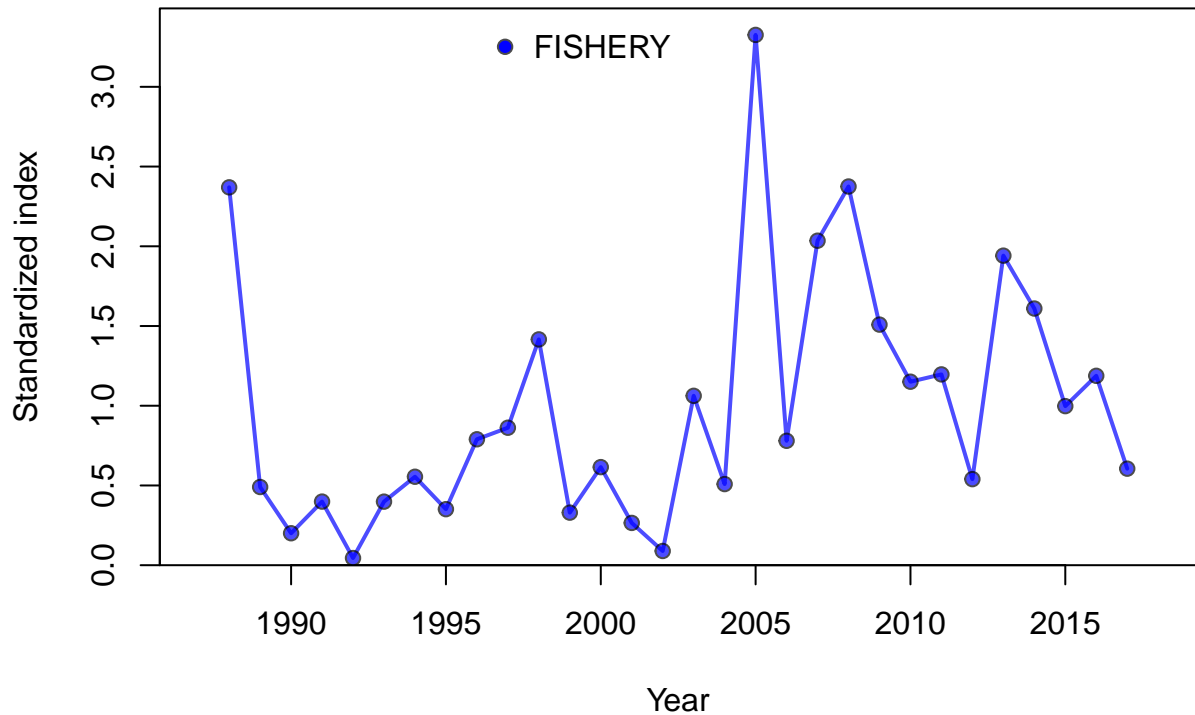
Log index

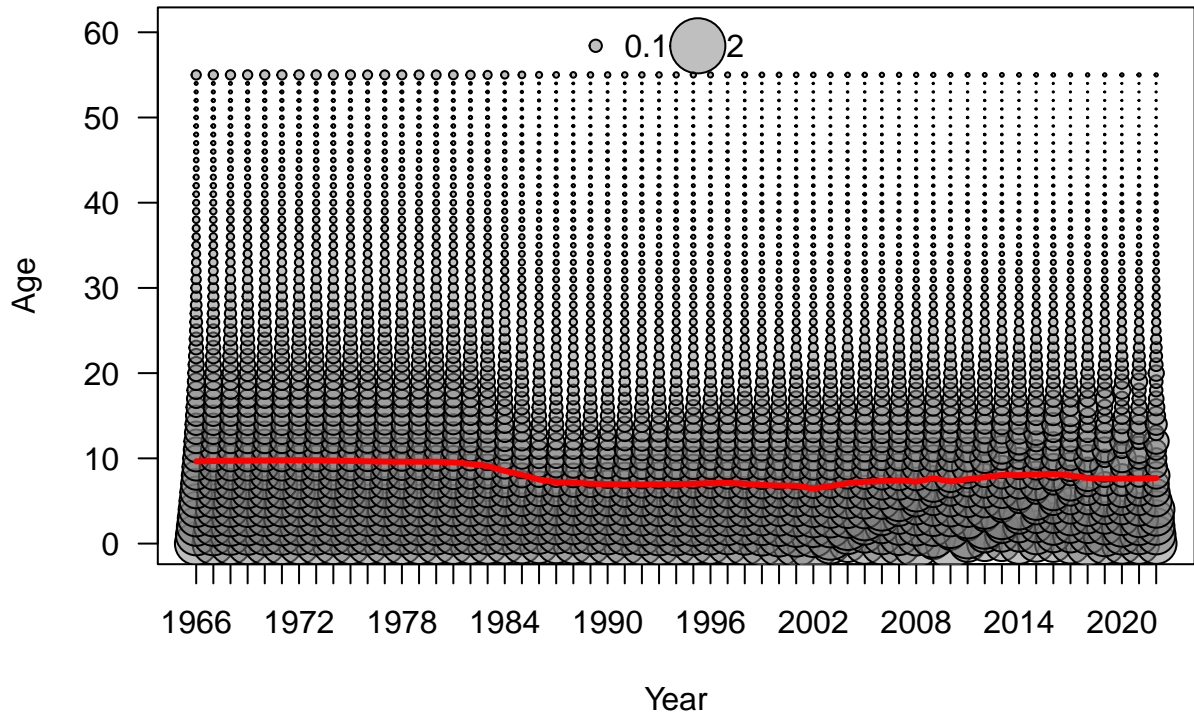




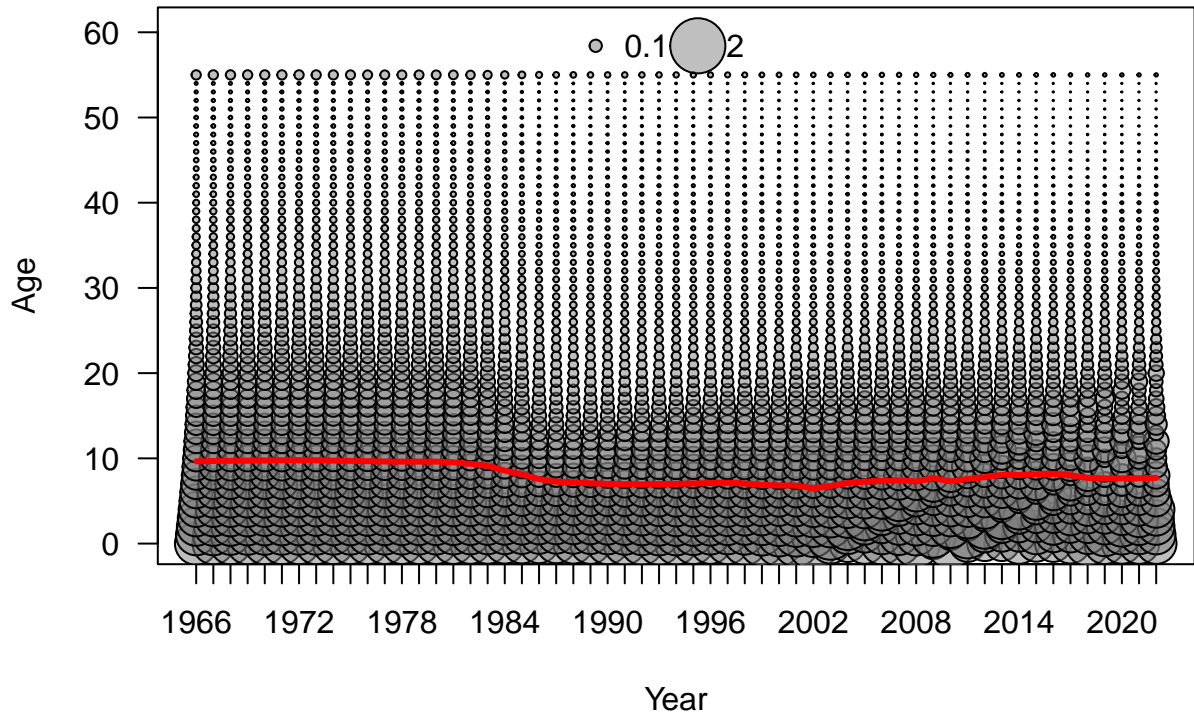




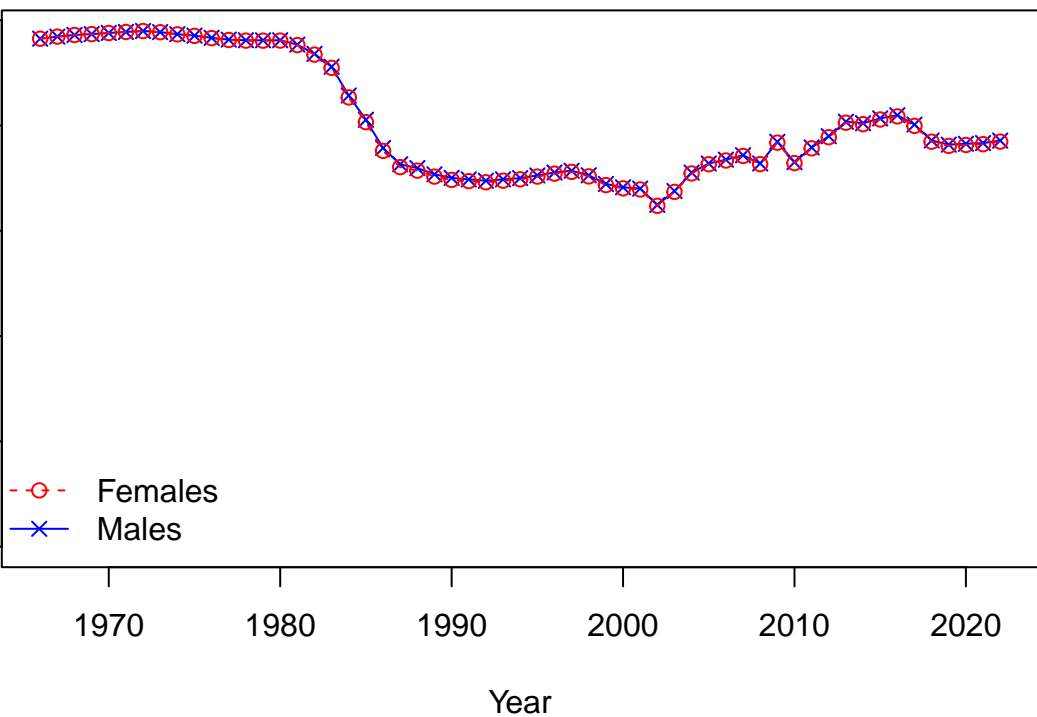


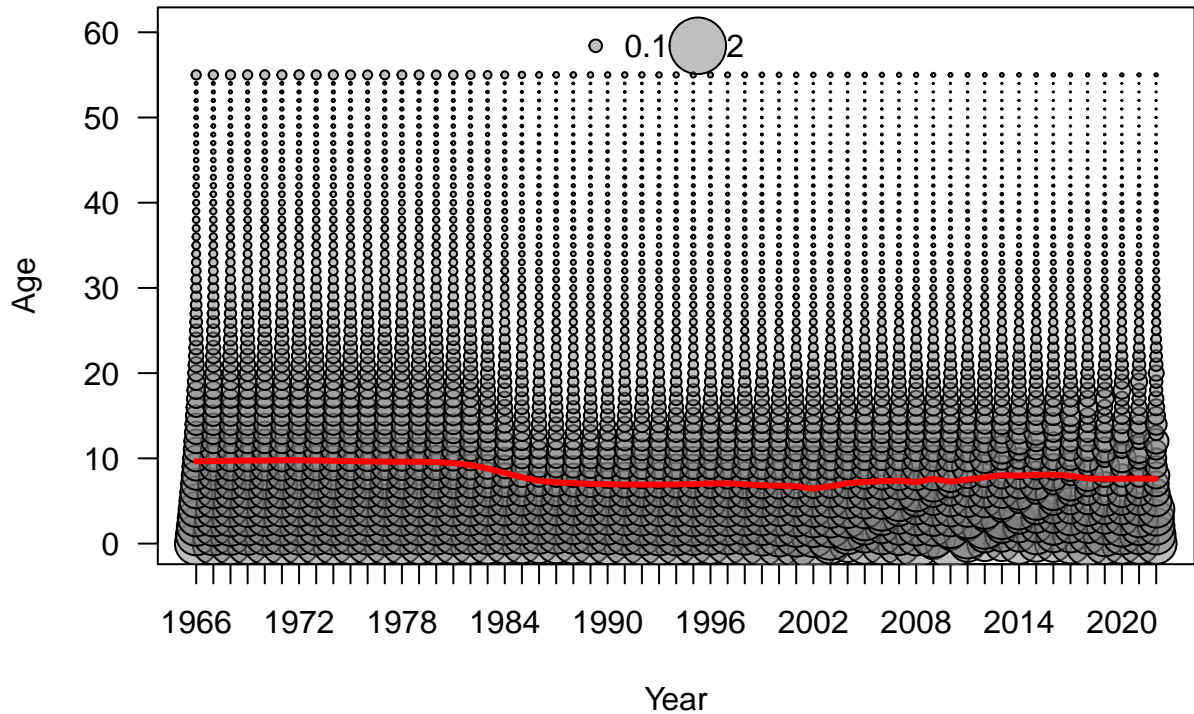


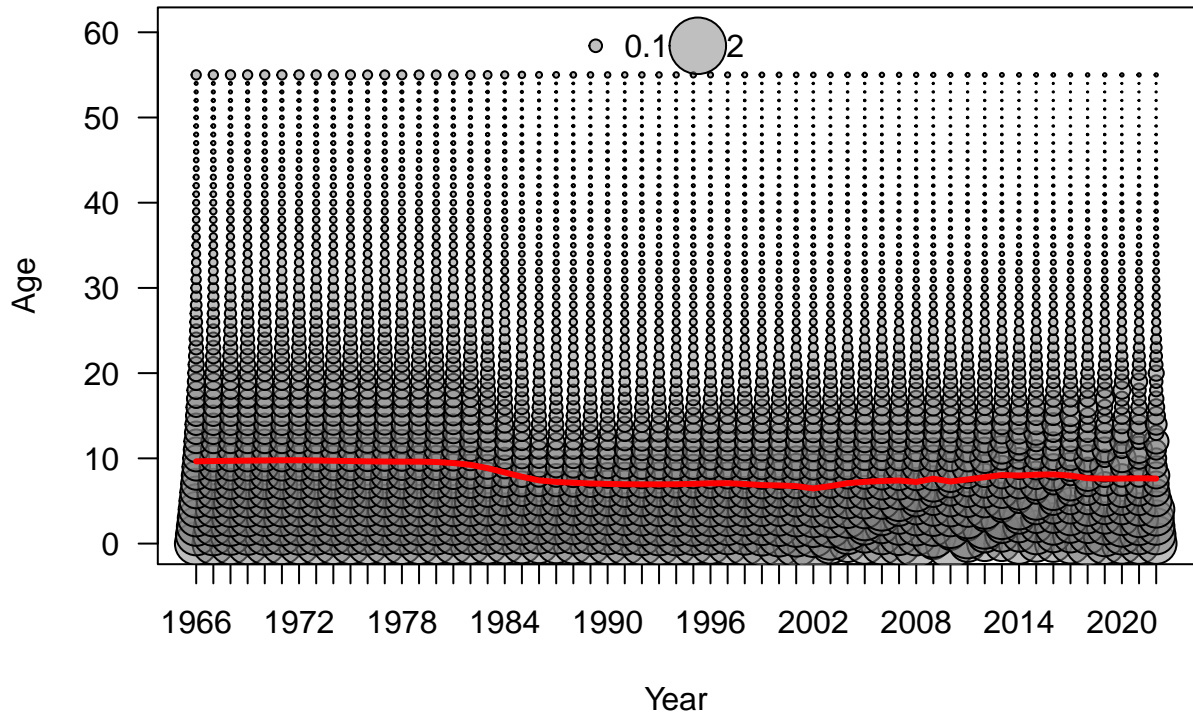




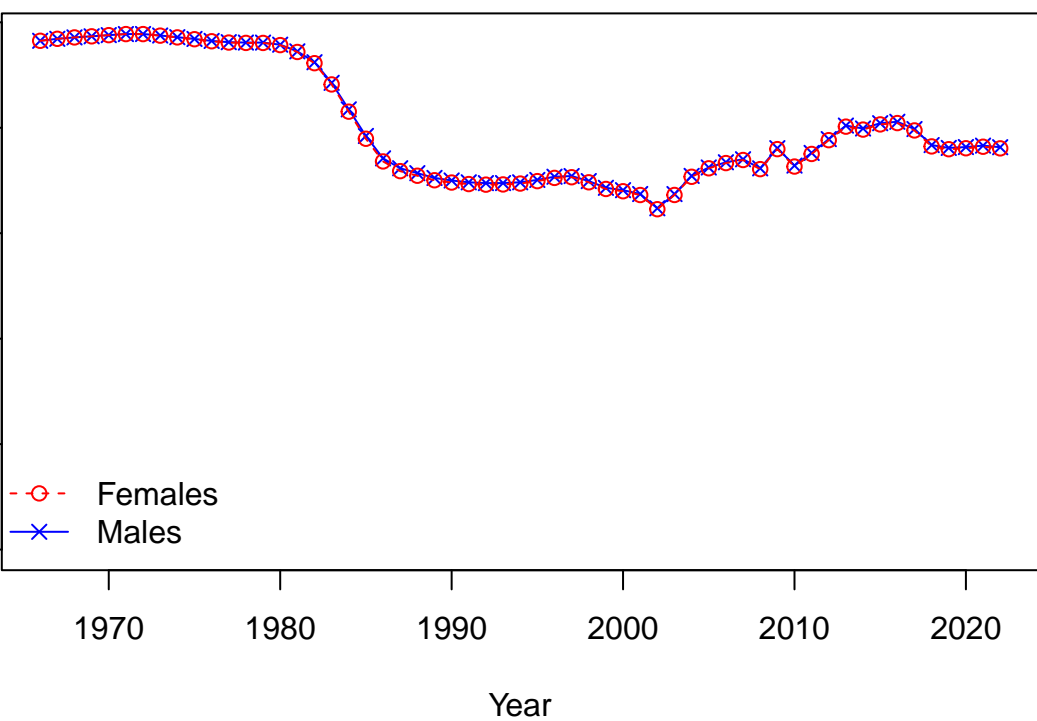
Mean age (yr)

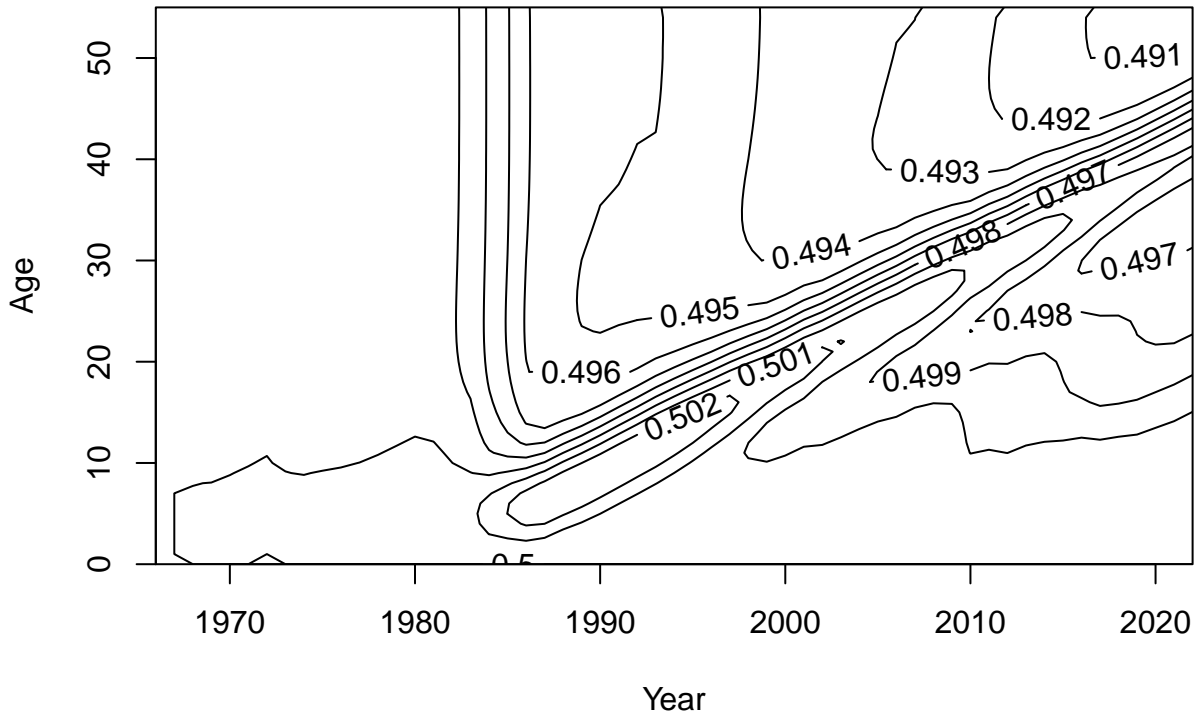


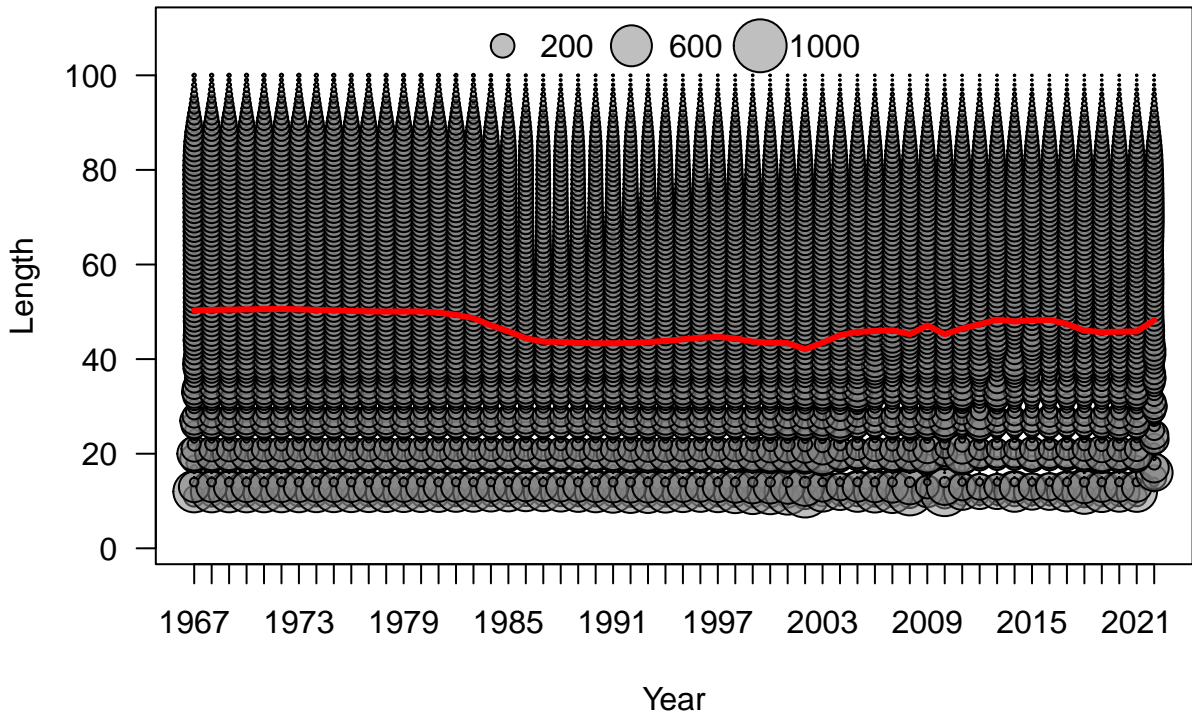


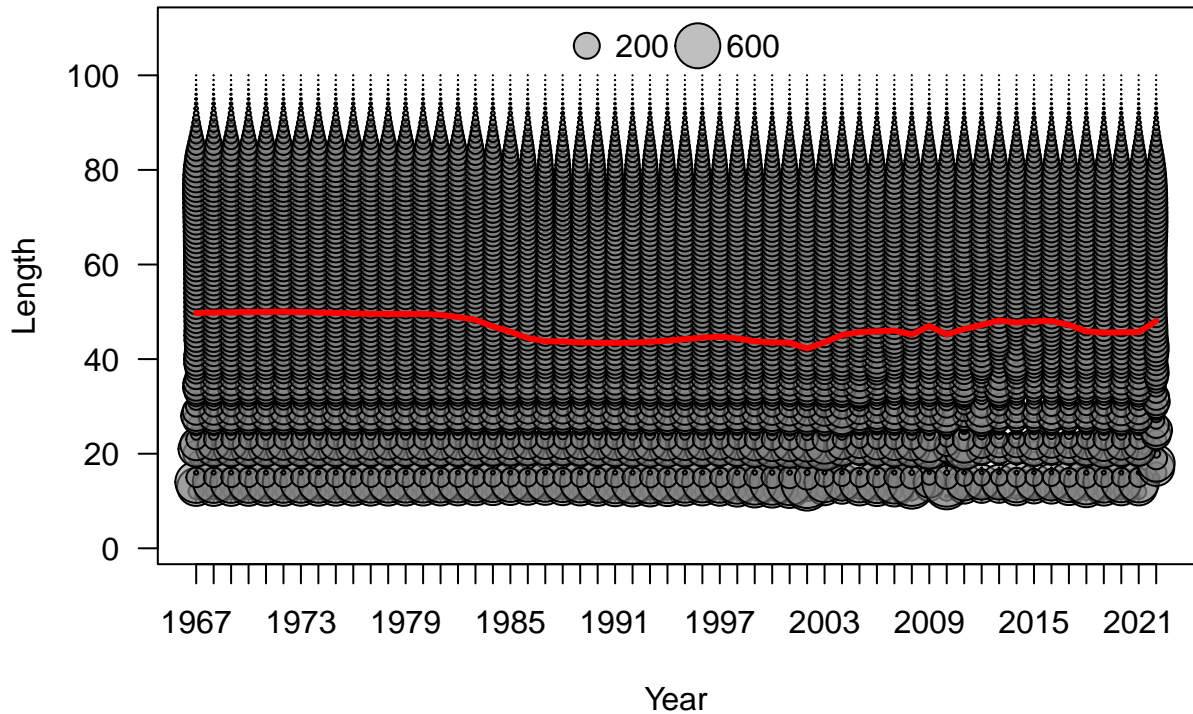


Mean age (yr)

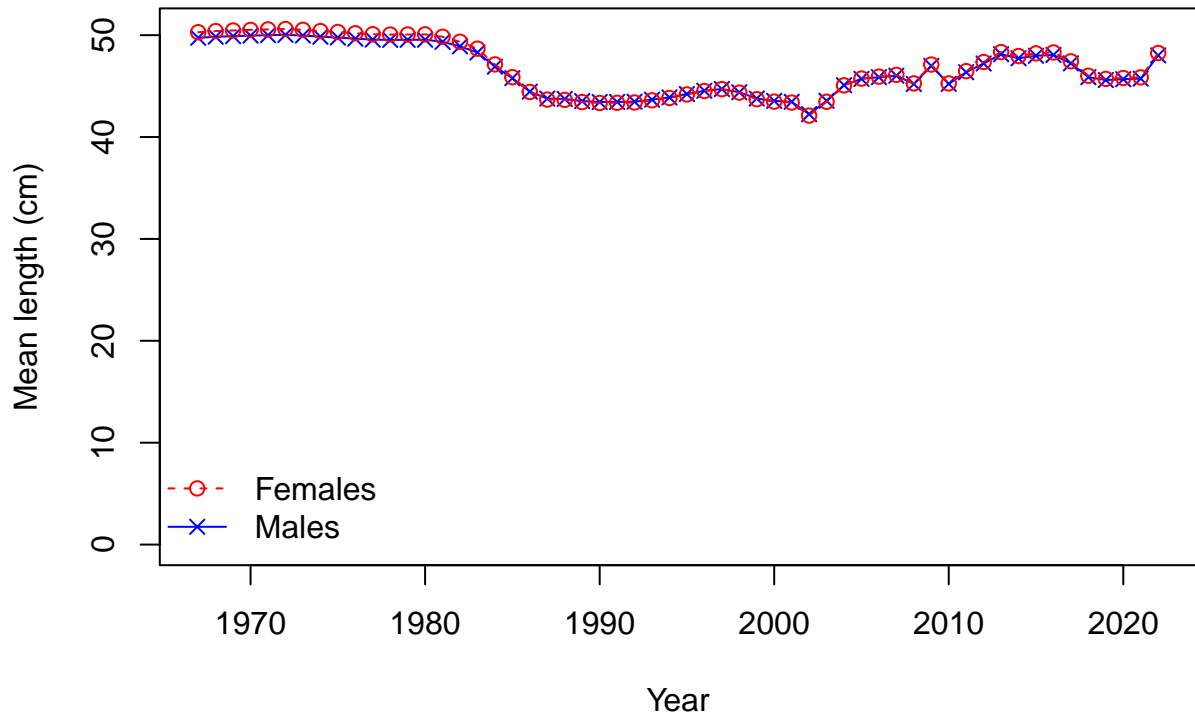


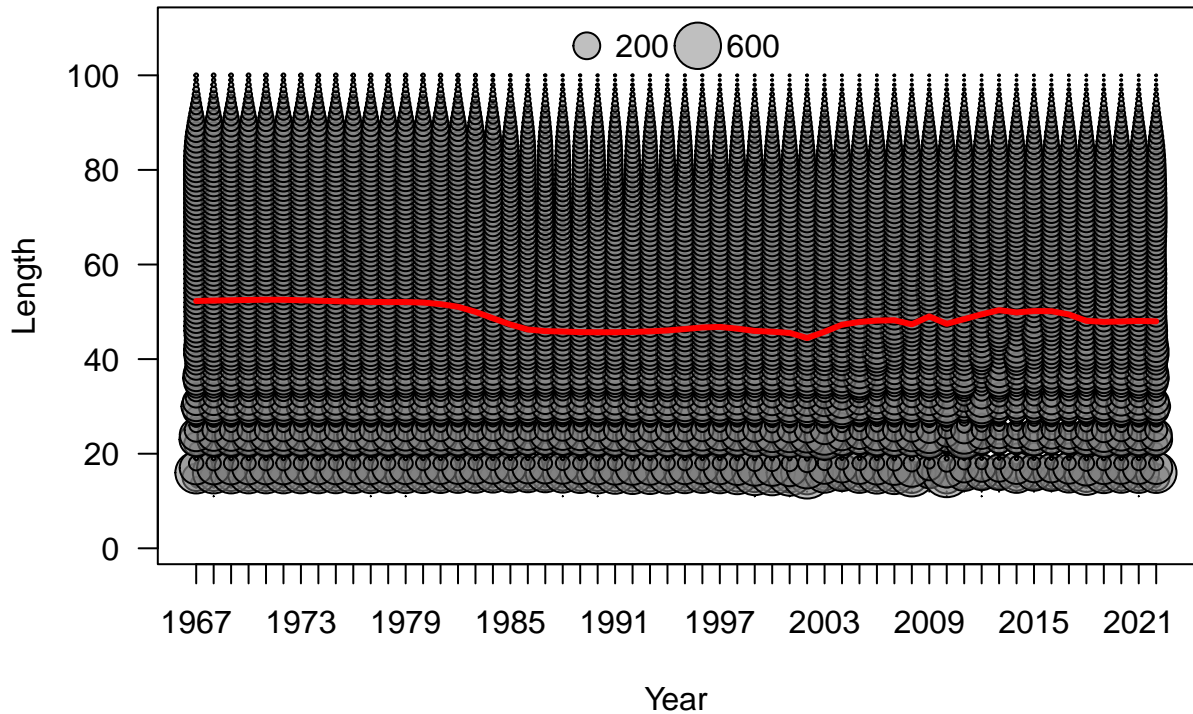


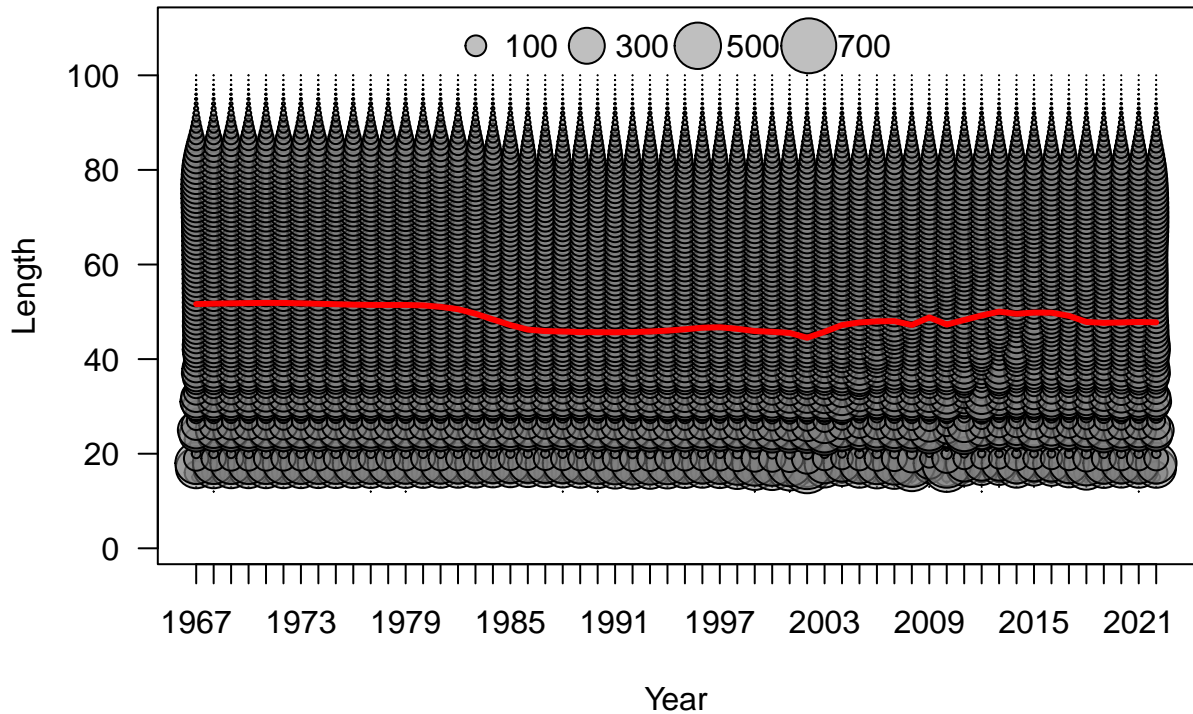


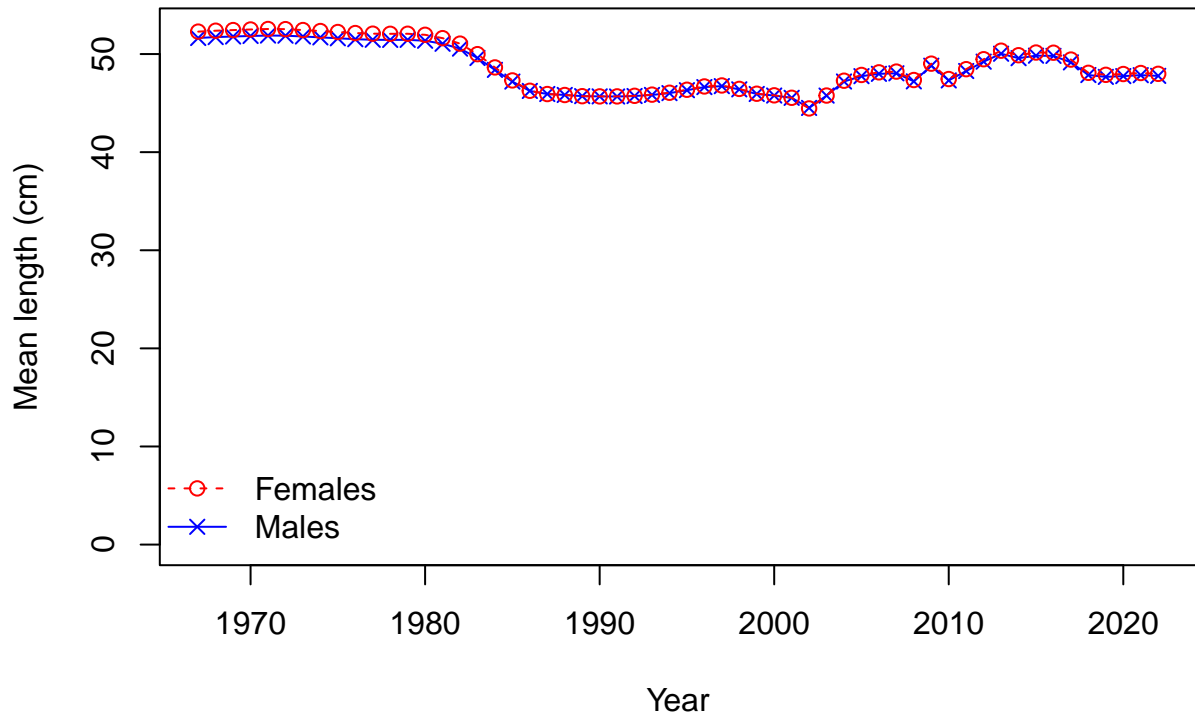


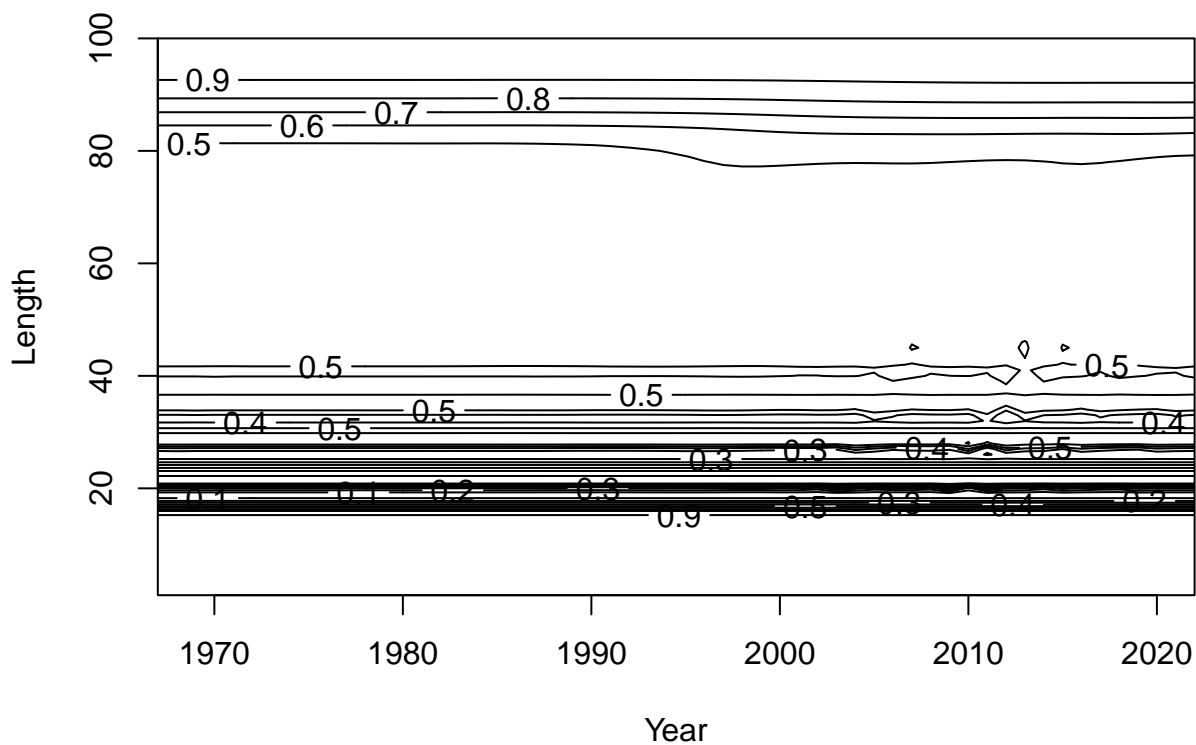


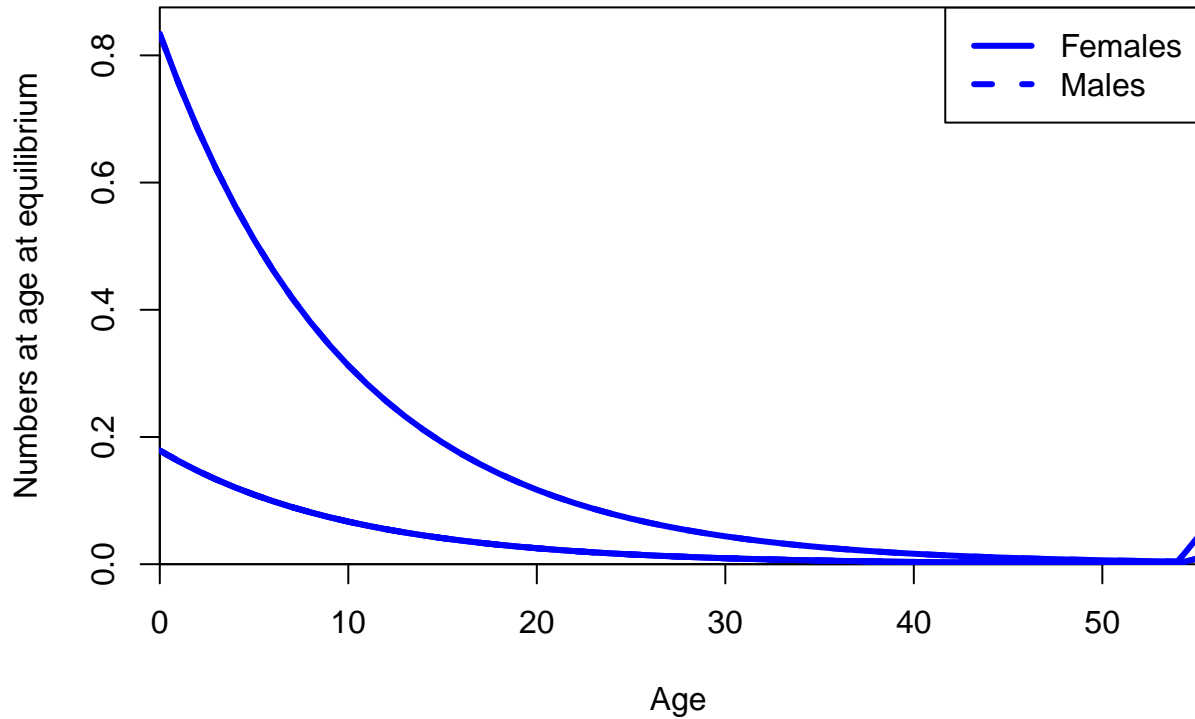


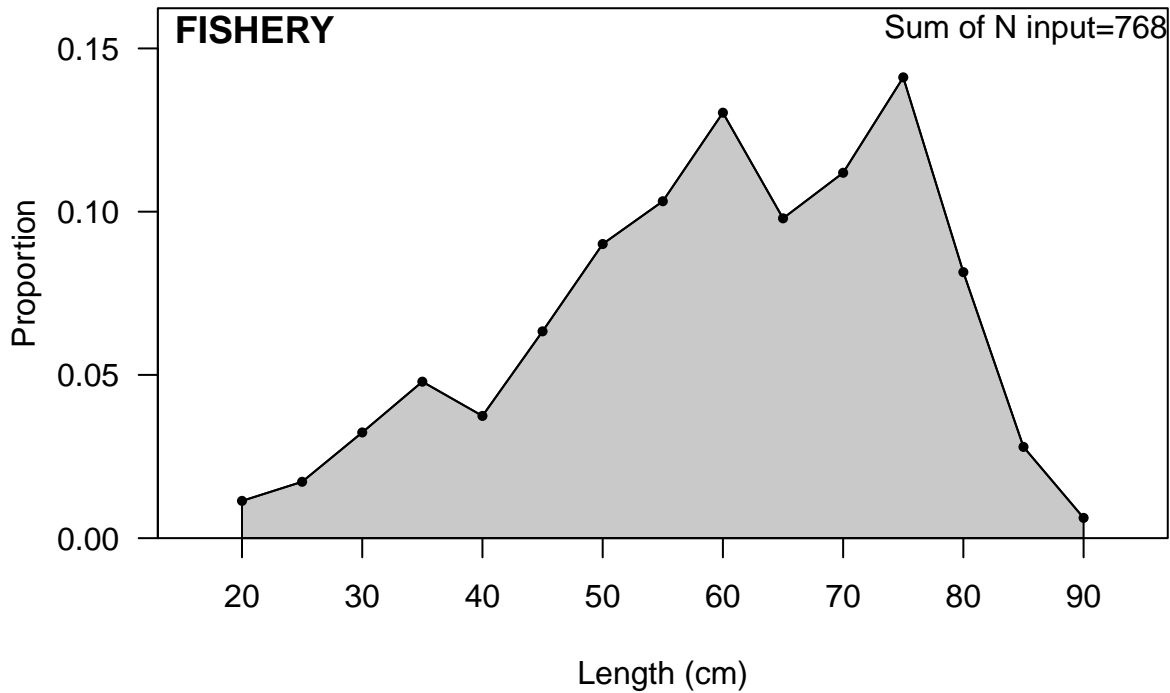


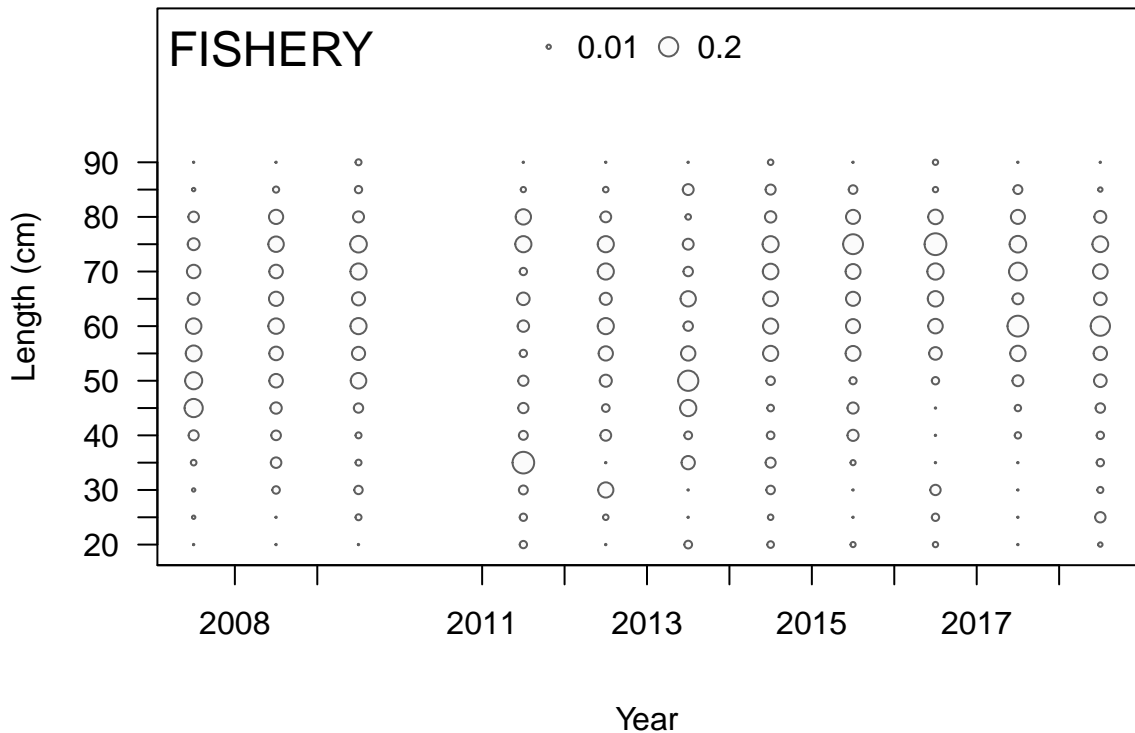






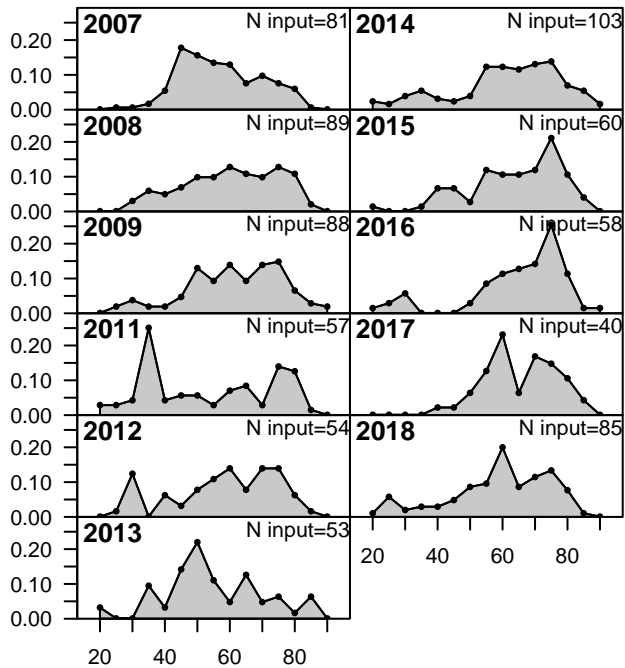




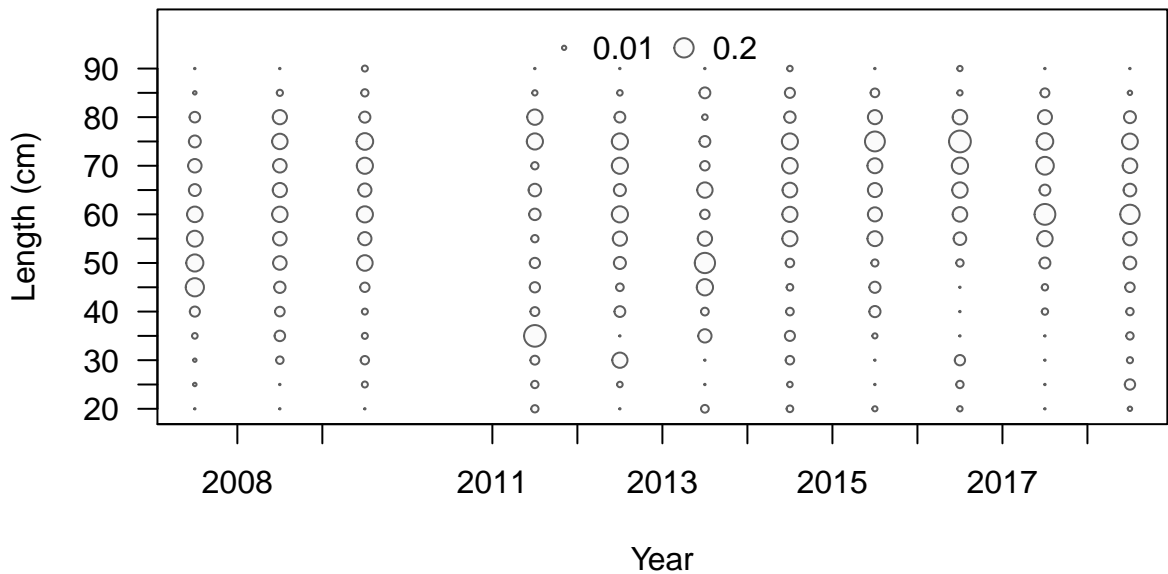




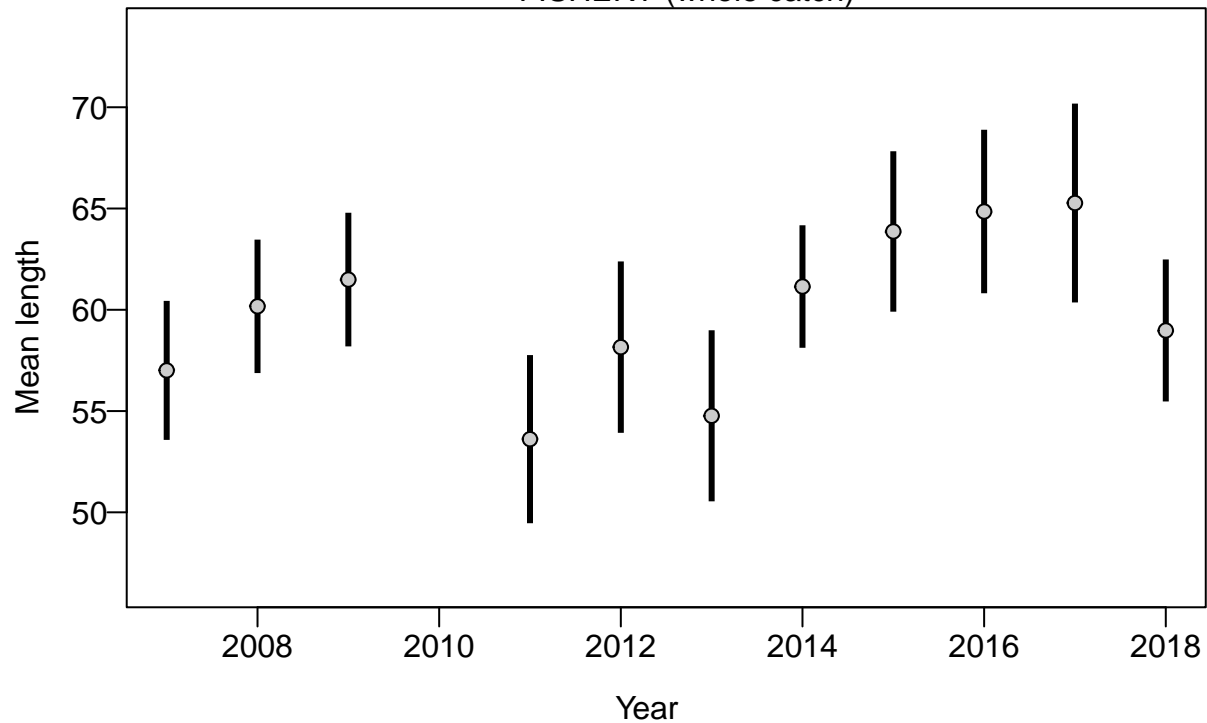
Proportion

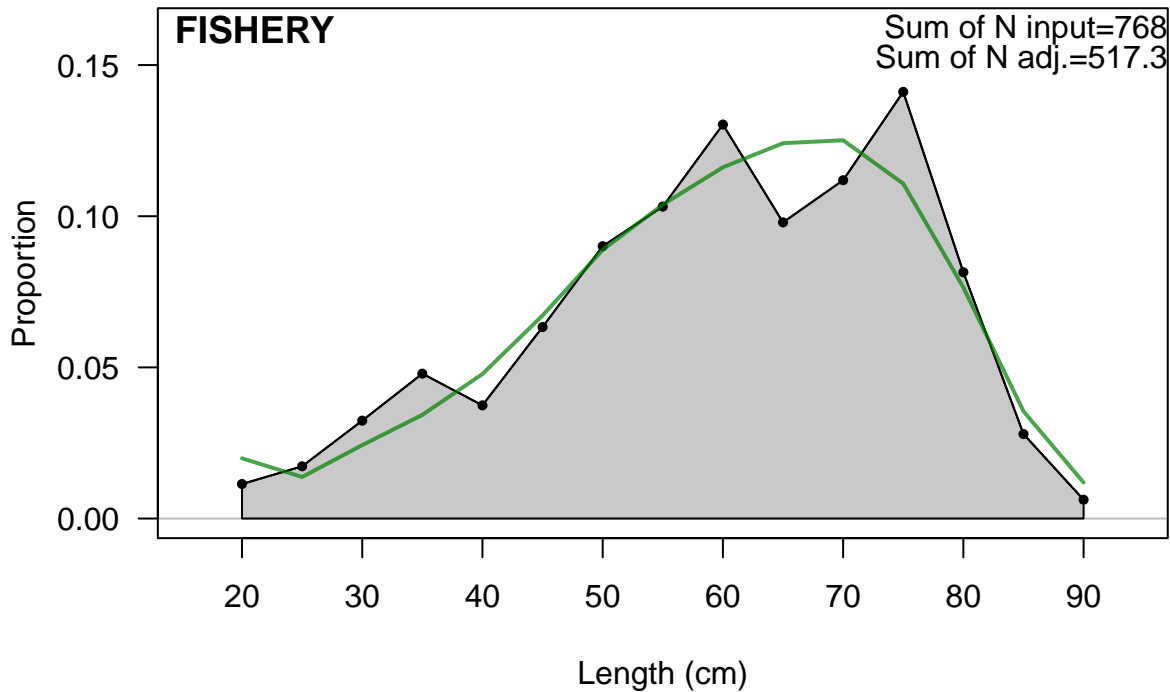


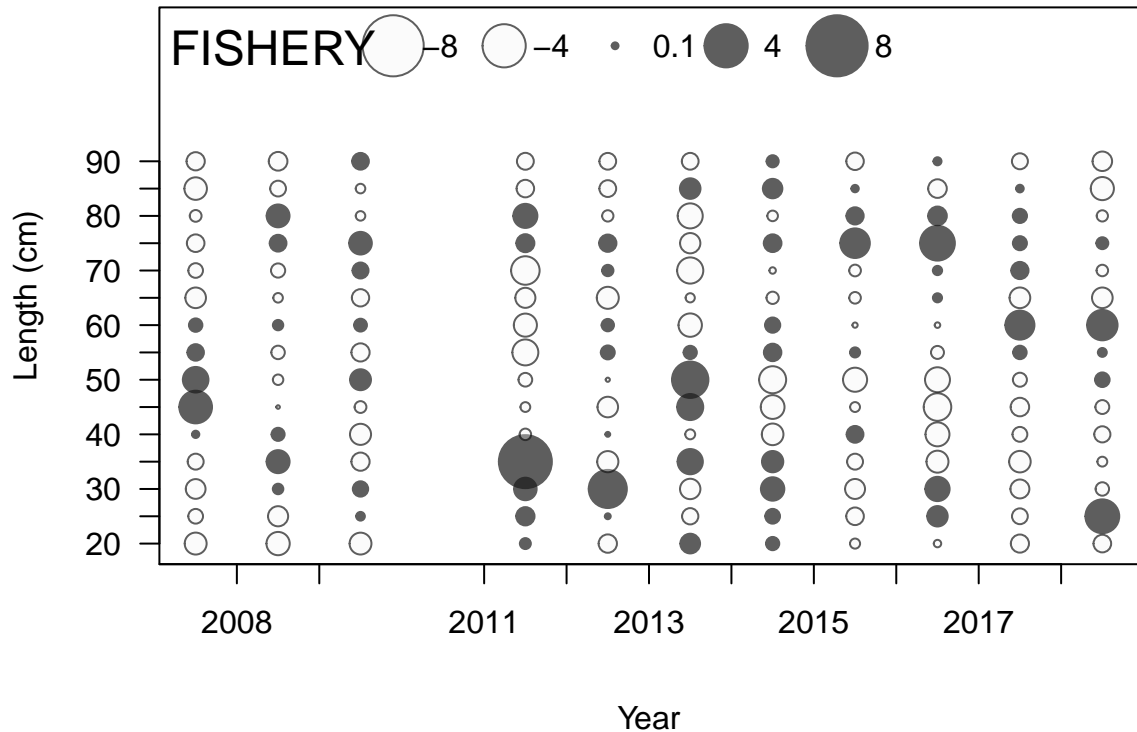
Length (cm)



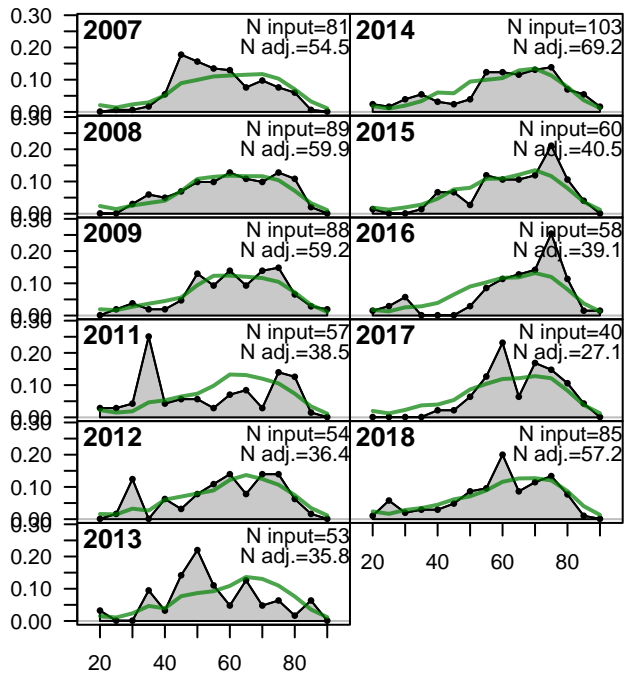
FISHERY (whole catch)



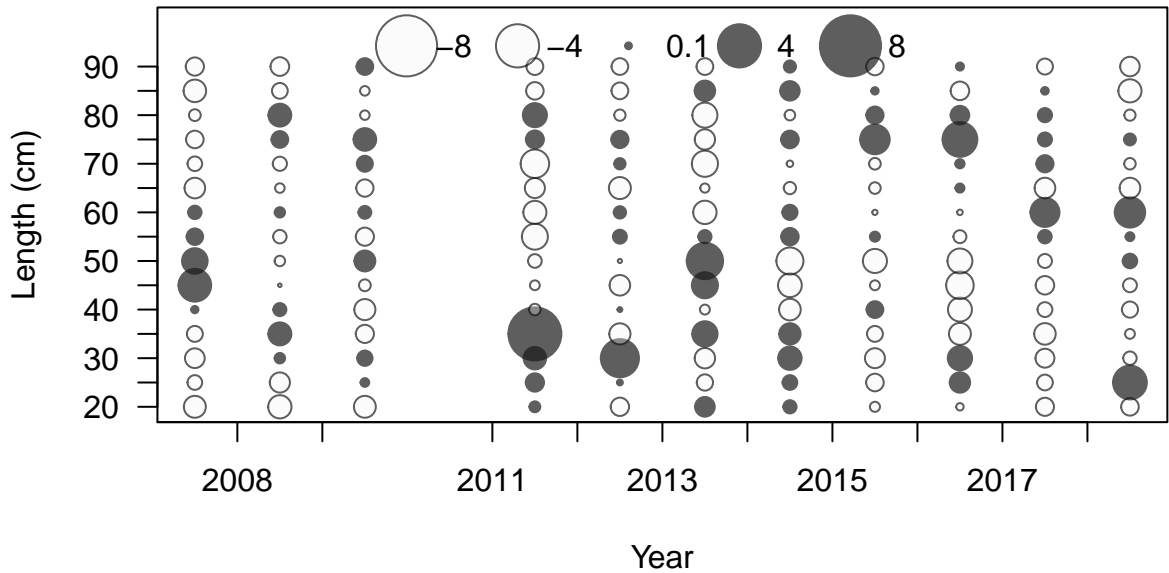




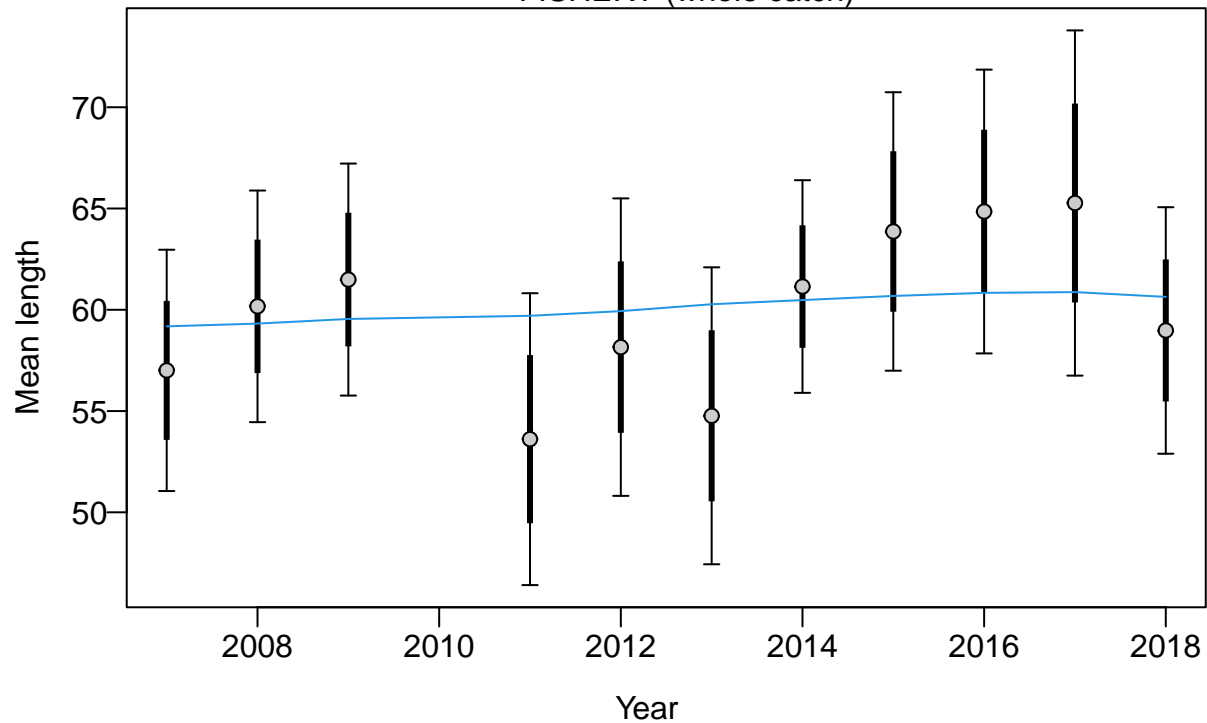
Proportion



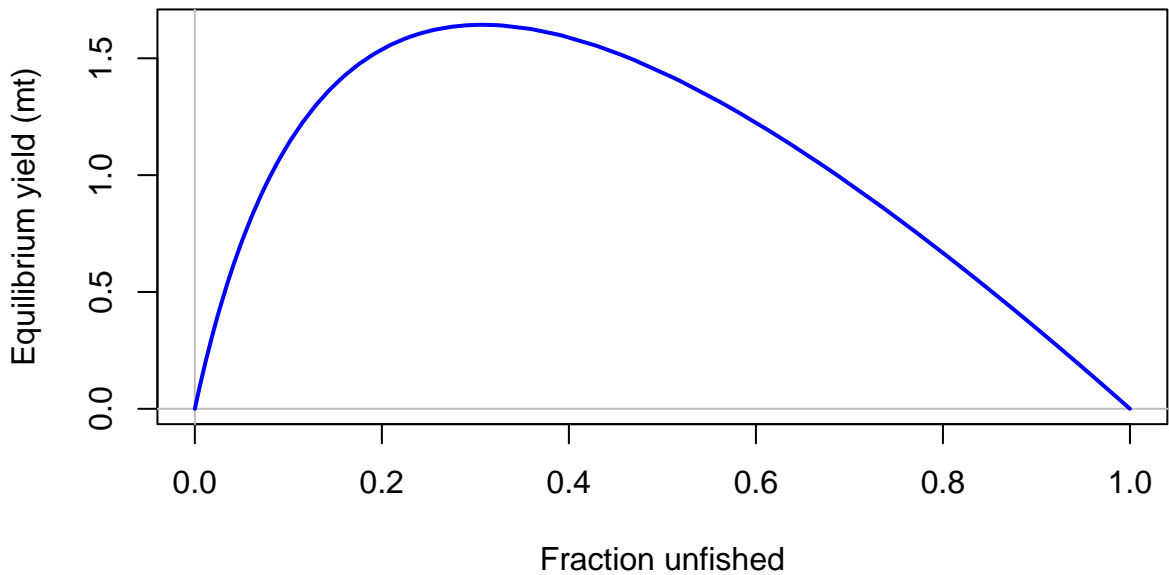
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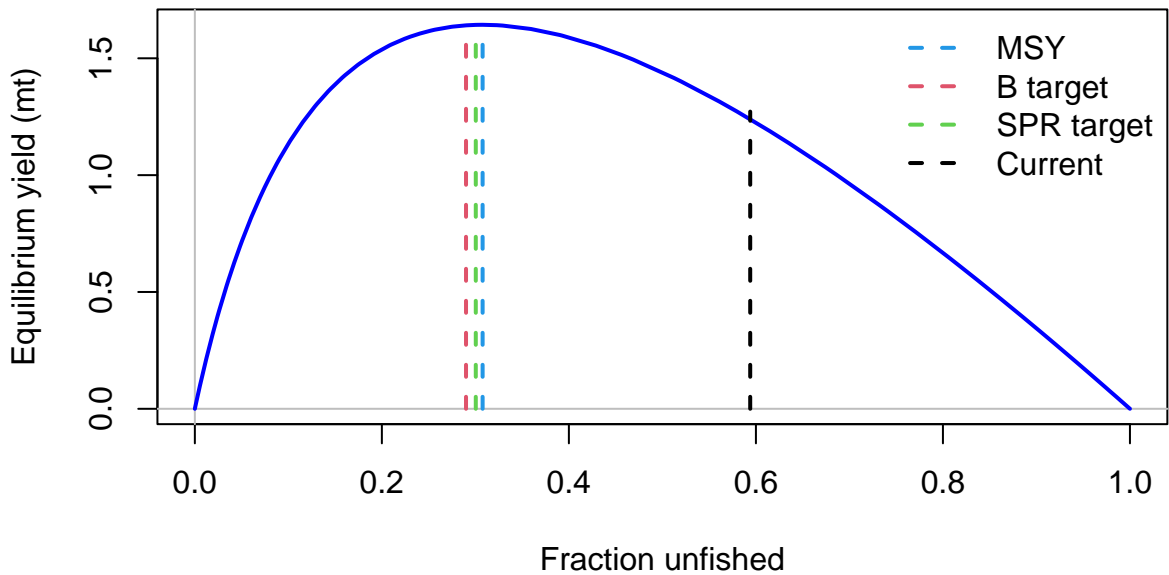


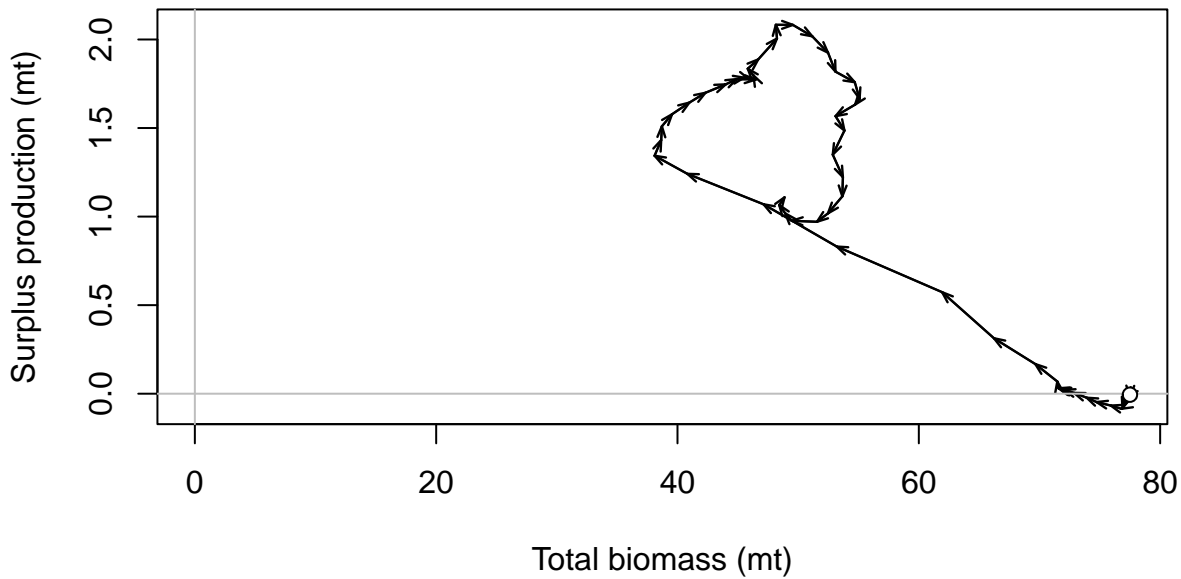
FISHERY (whole catch)

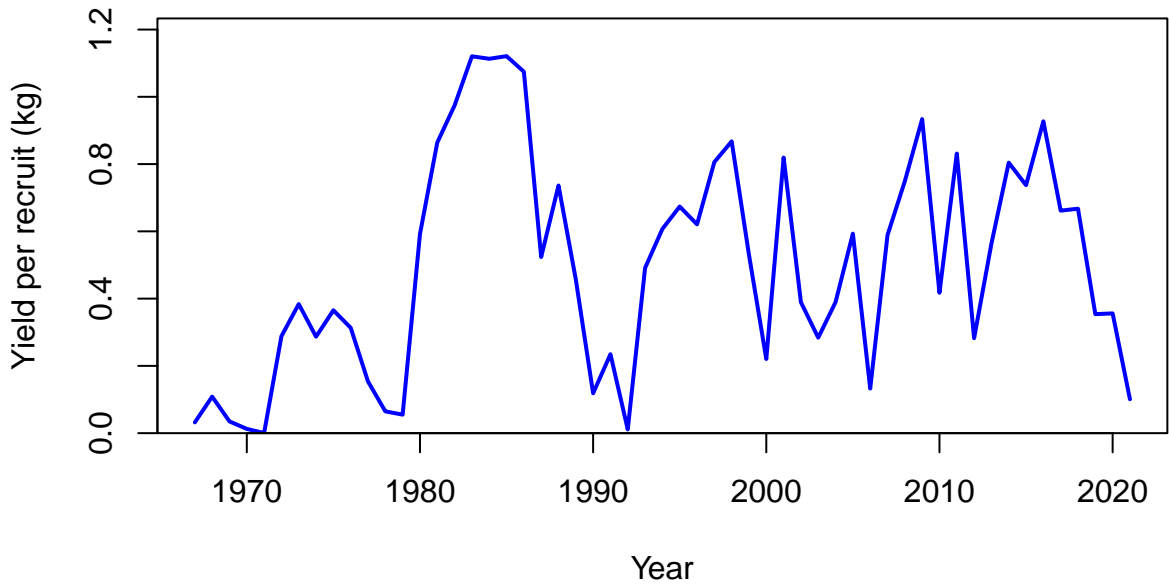


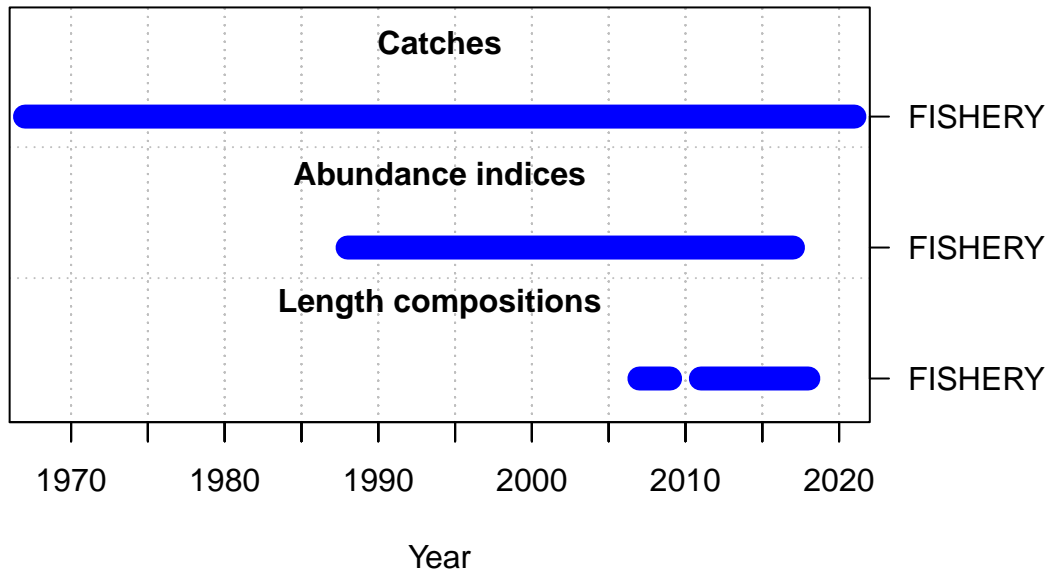


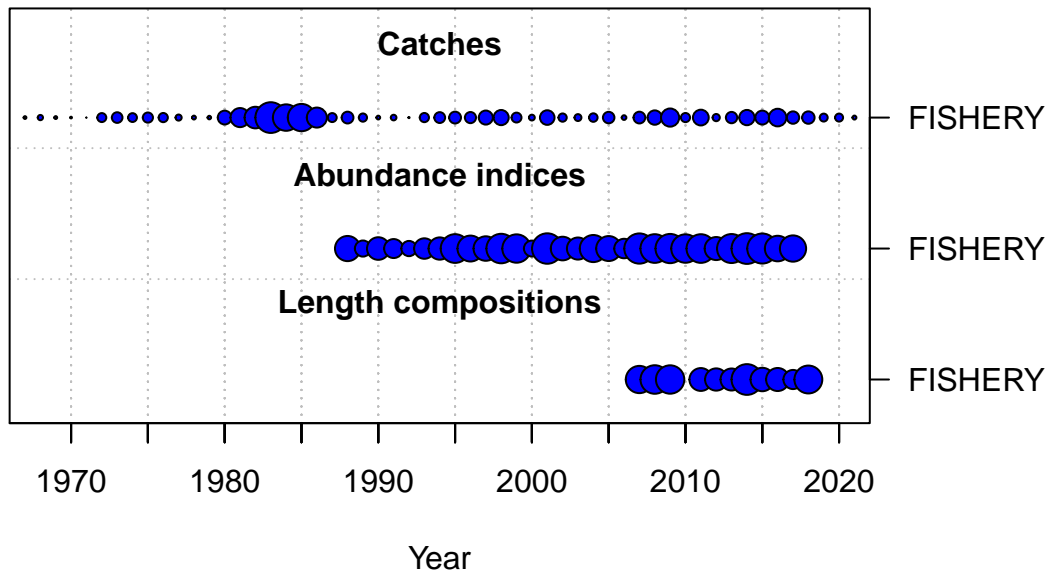










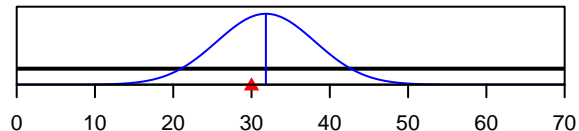


Density

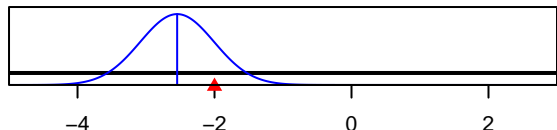
SR\_LN(R0)



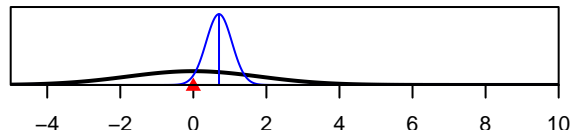
Size\_95%width\_FISHERY(1)



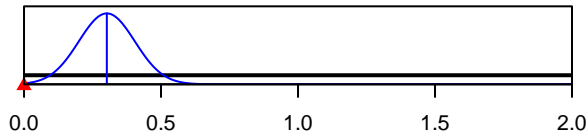
LnQ\_base\_FISHERY(1)



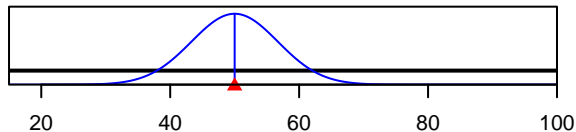
ln(DM\_theta)\_1



Q\_extraSD\_FISHERY(1)



Size\_inflection\_FISHERY(1)



Parameter value