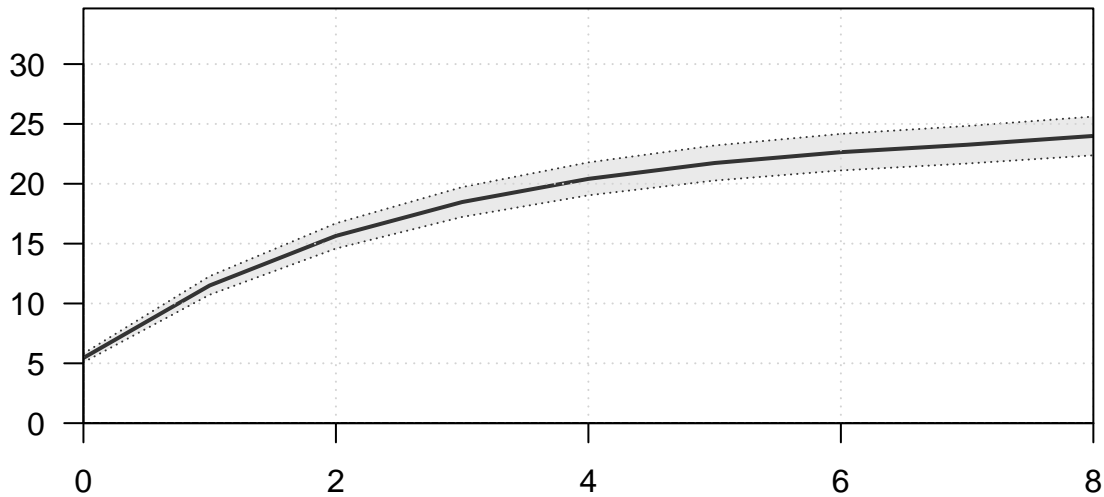
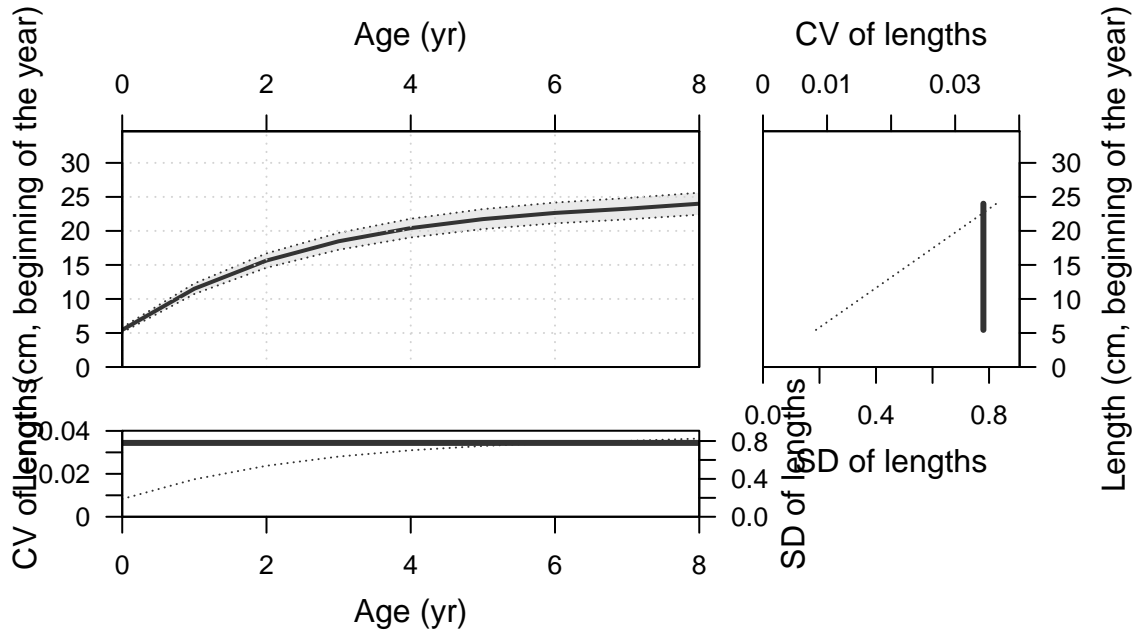


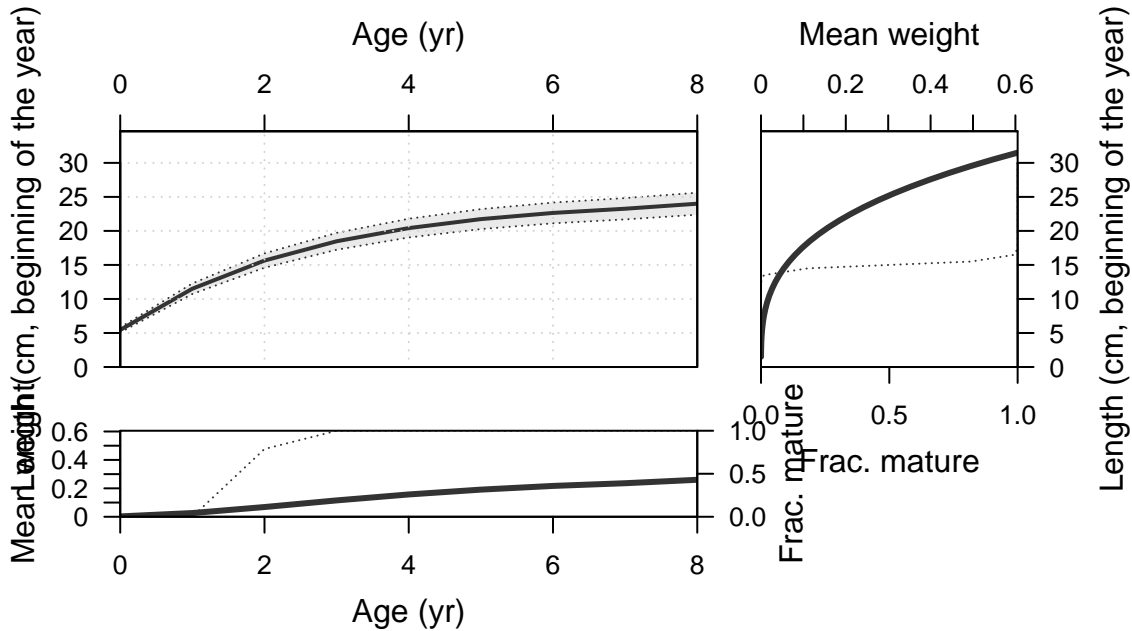
Plots created using the 'r4ss' package in R  
Stock Synthesis version: 3.30.19.0  
StartTime: Tue Aug 09 14:12:20 2022  
Data\_File: data.ss  
Control\_File: control.ss

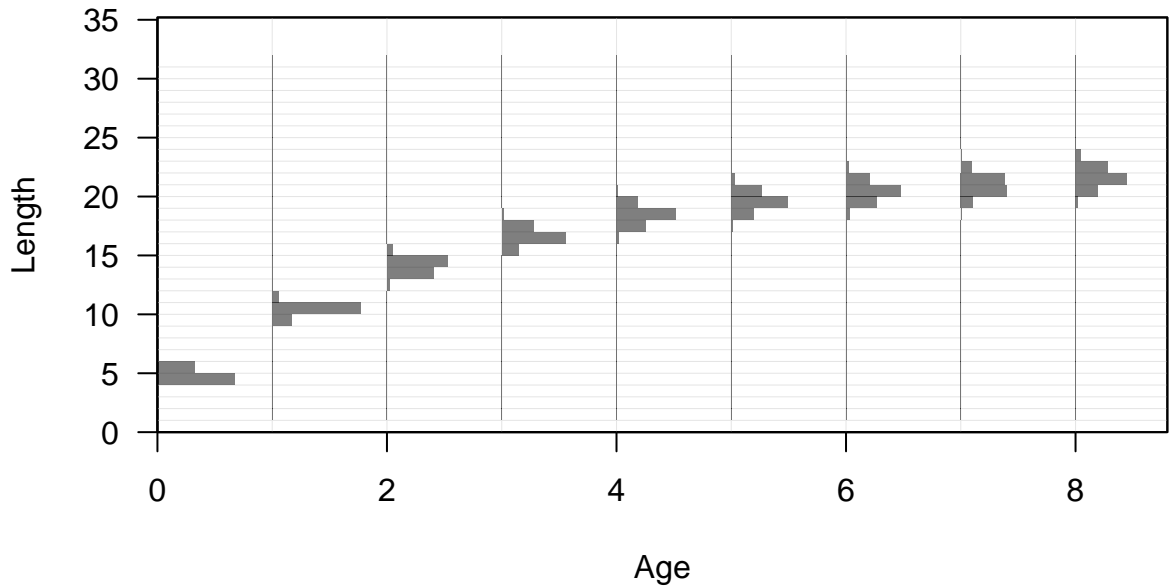
Length (cm, beginning of the year)

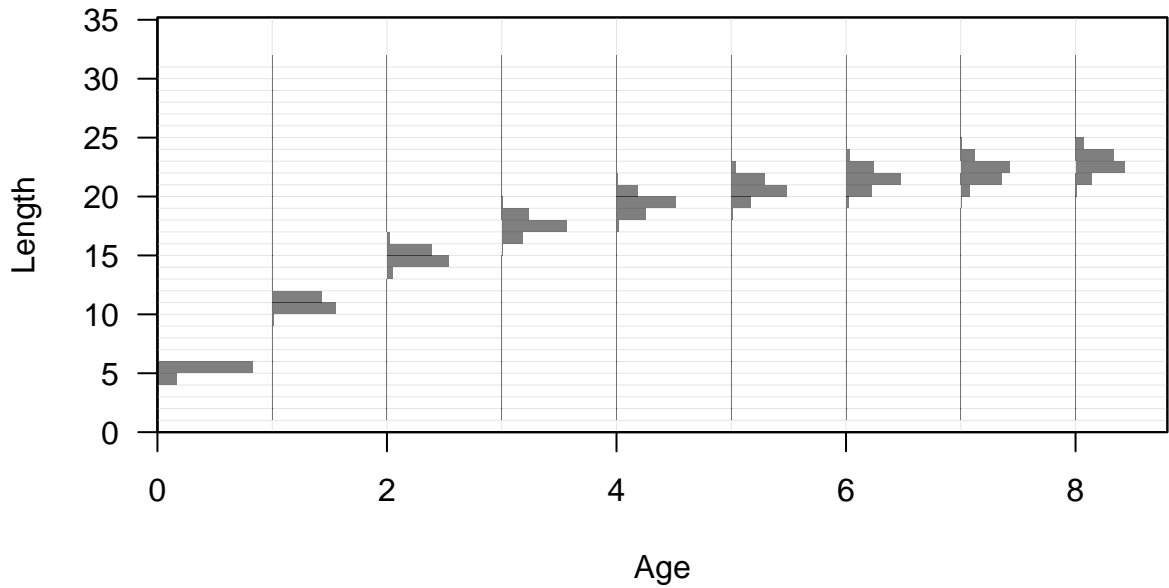


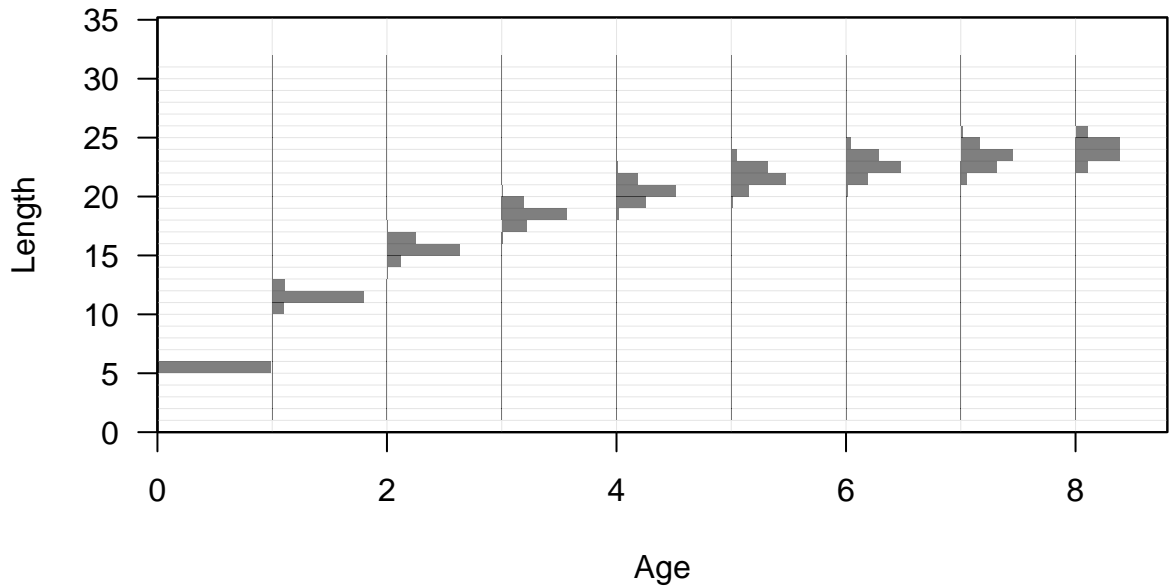
Age (yr)

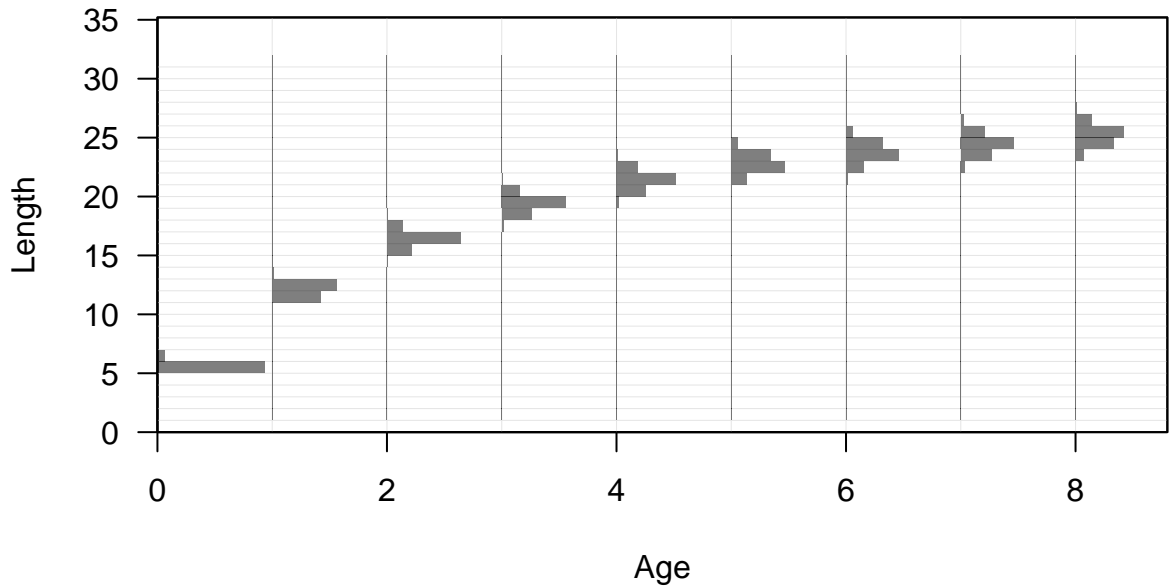




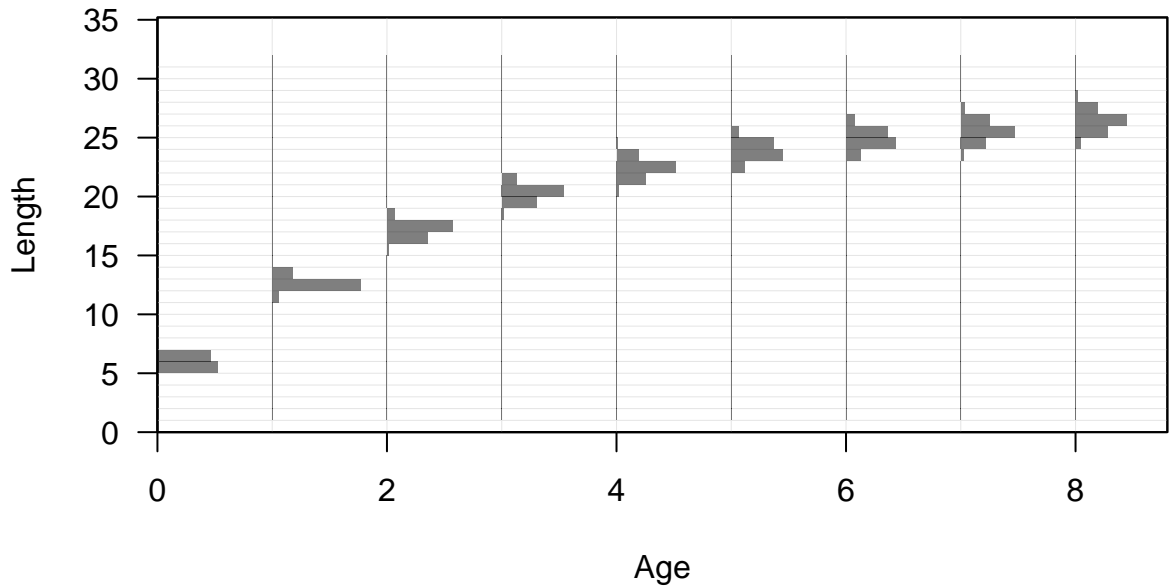


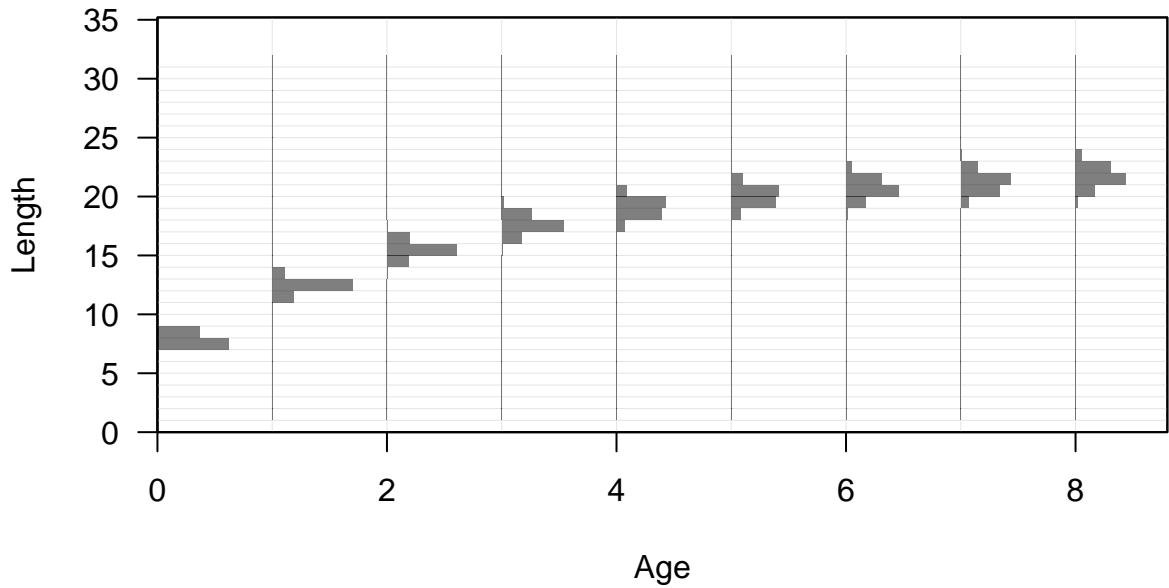


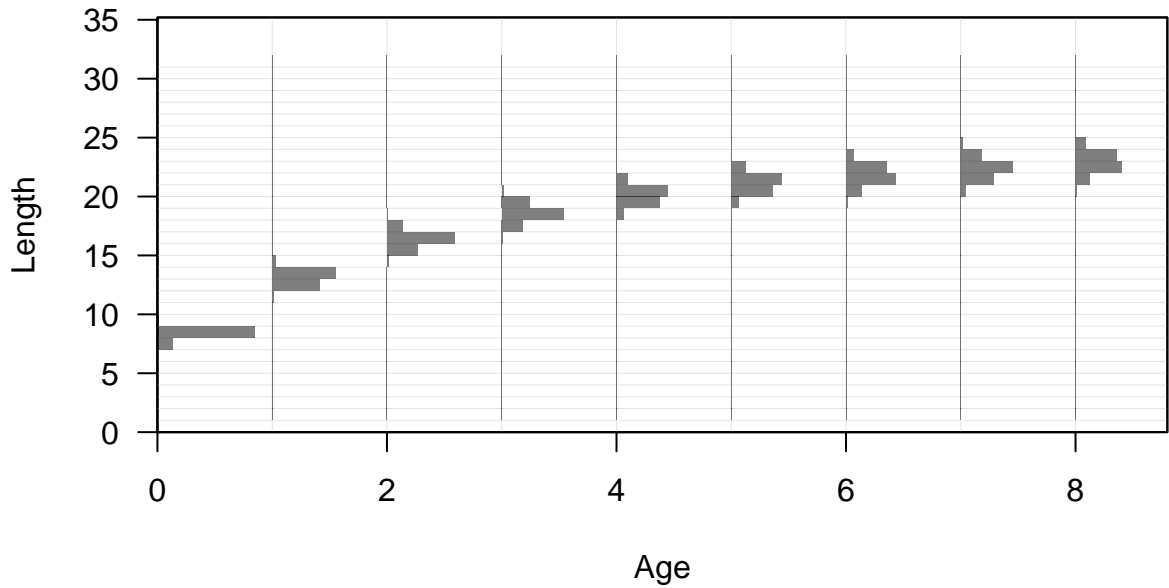


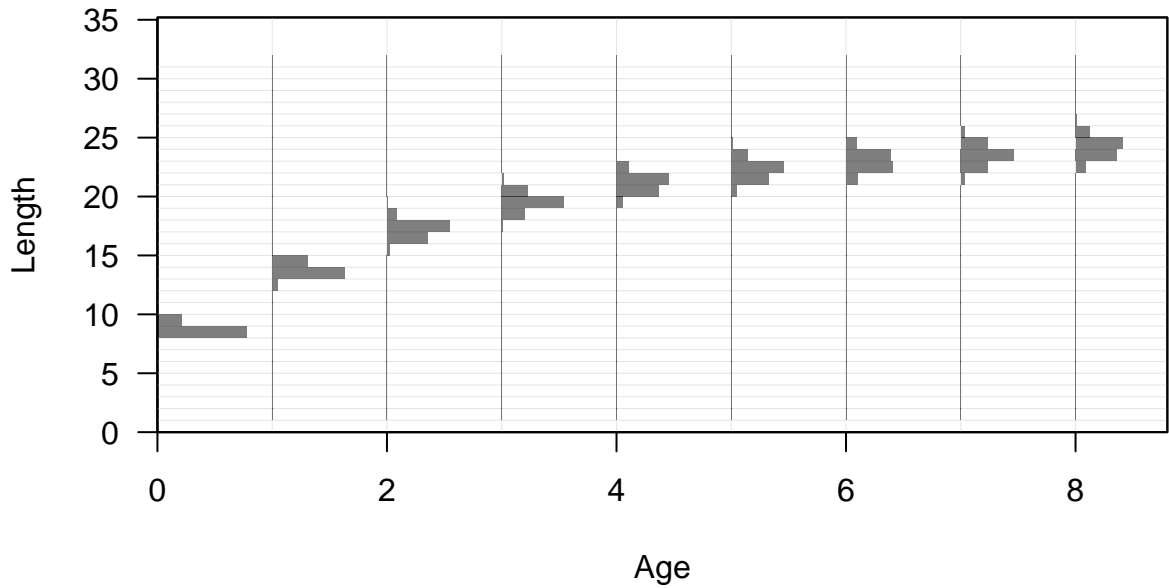


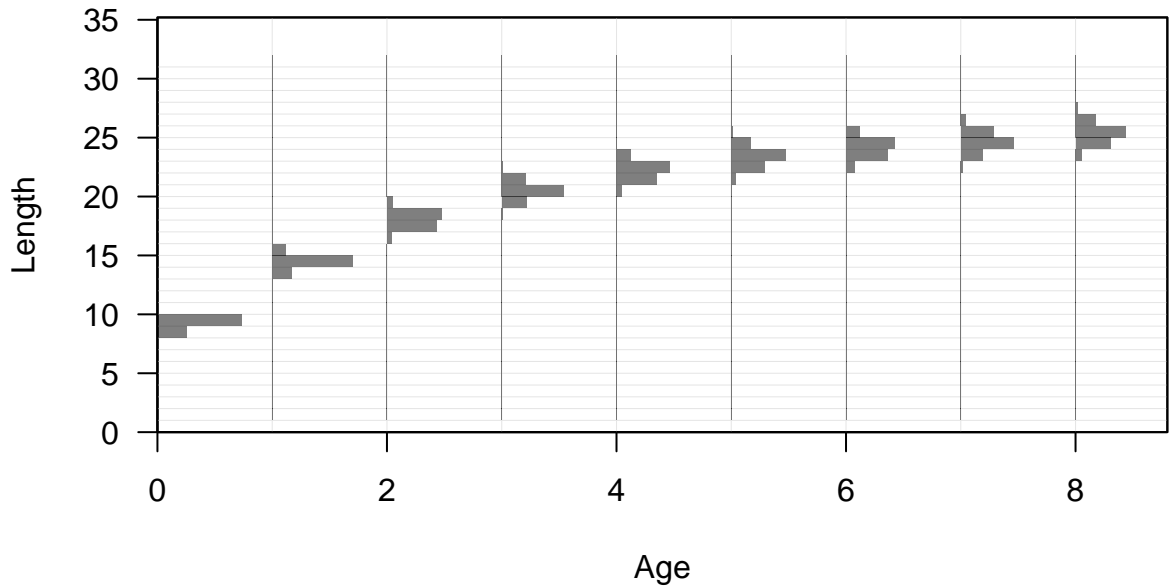


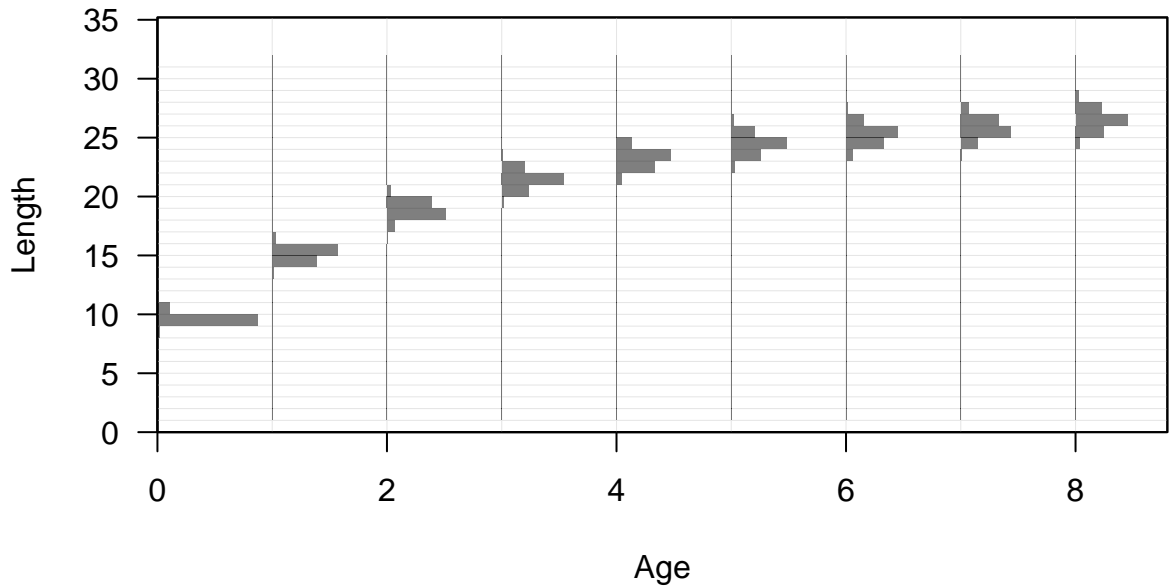


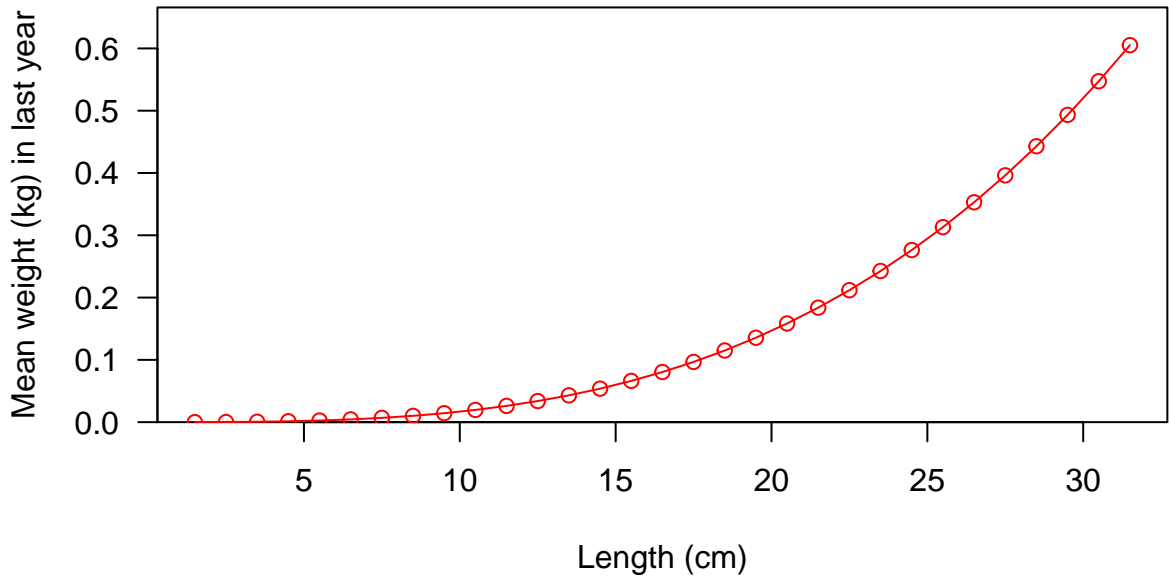


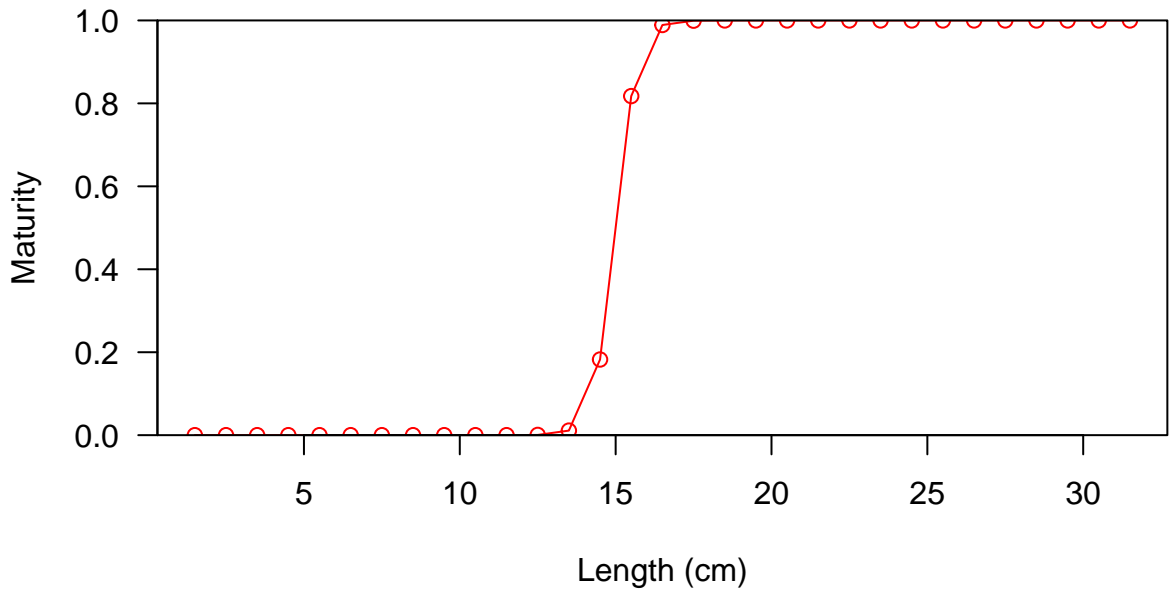




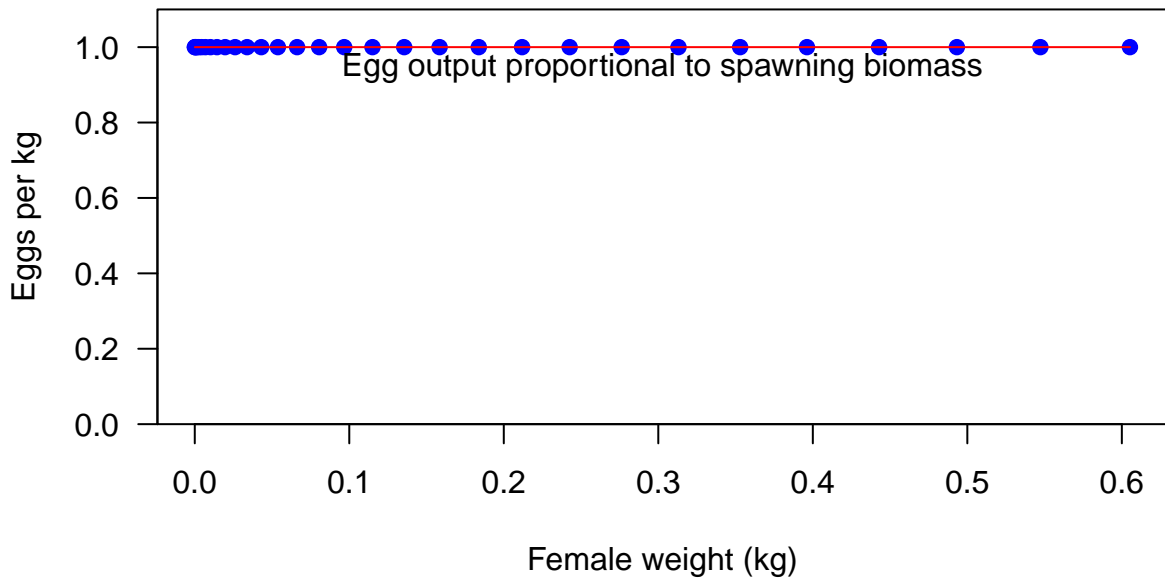


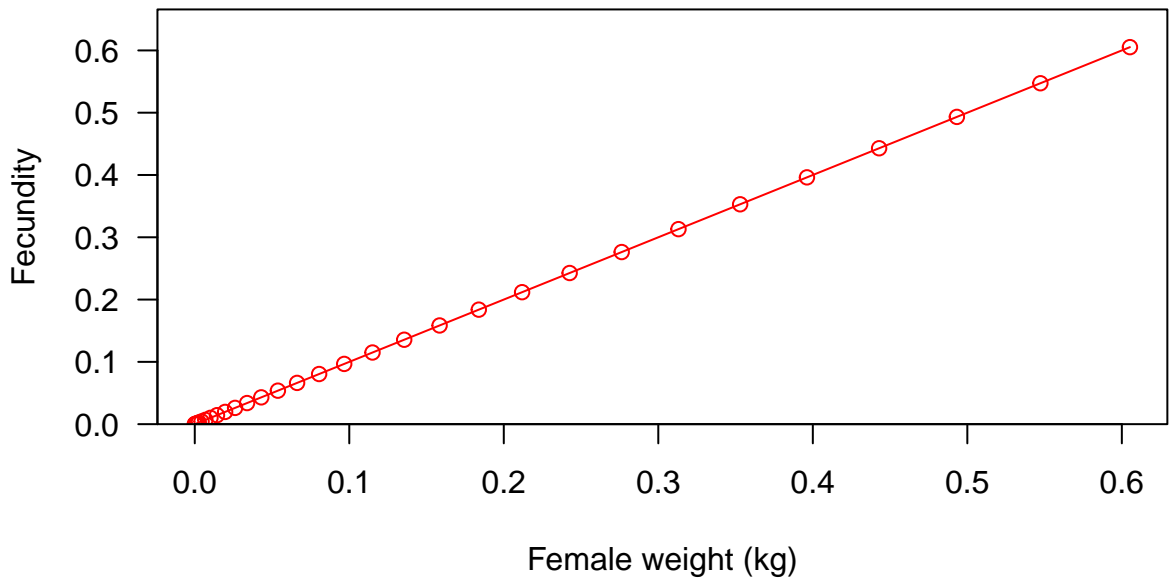


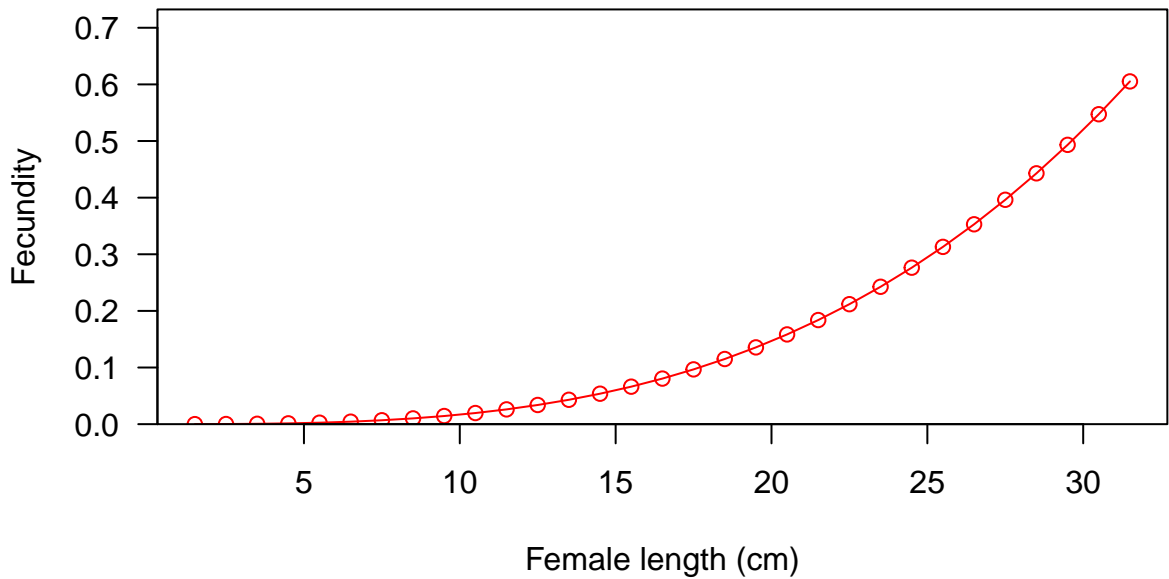


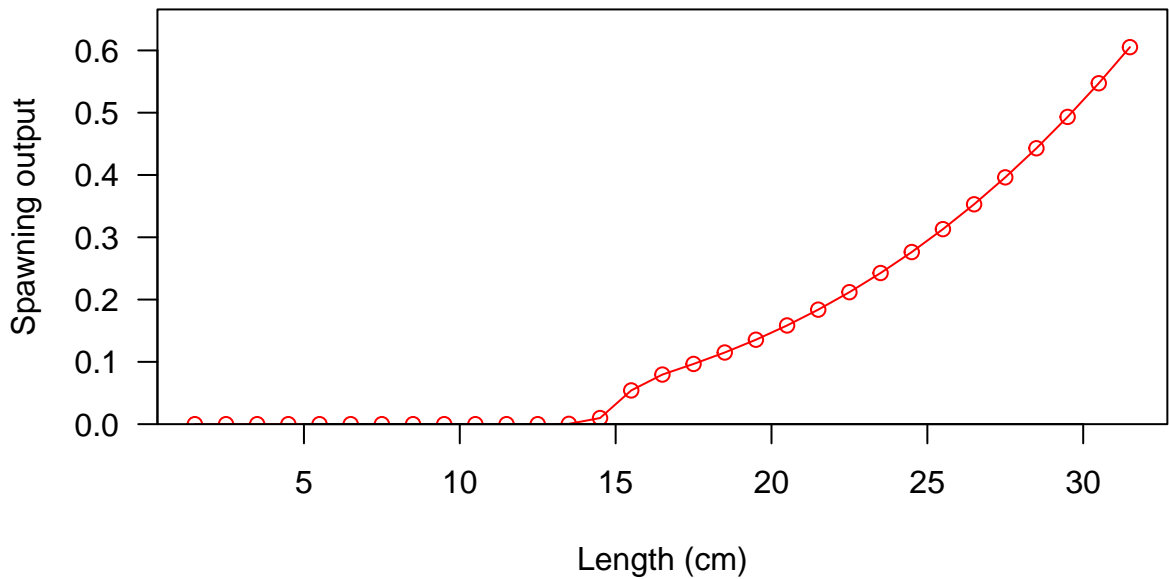


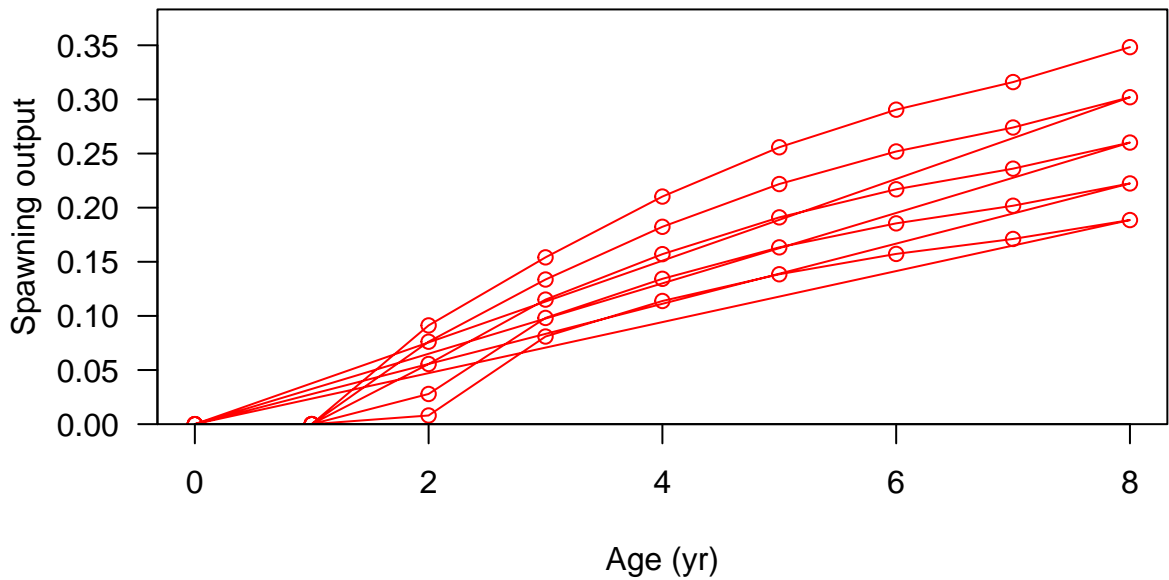




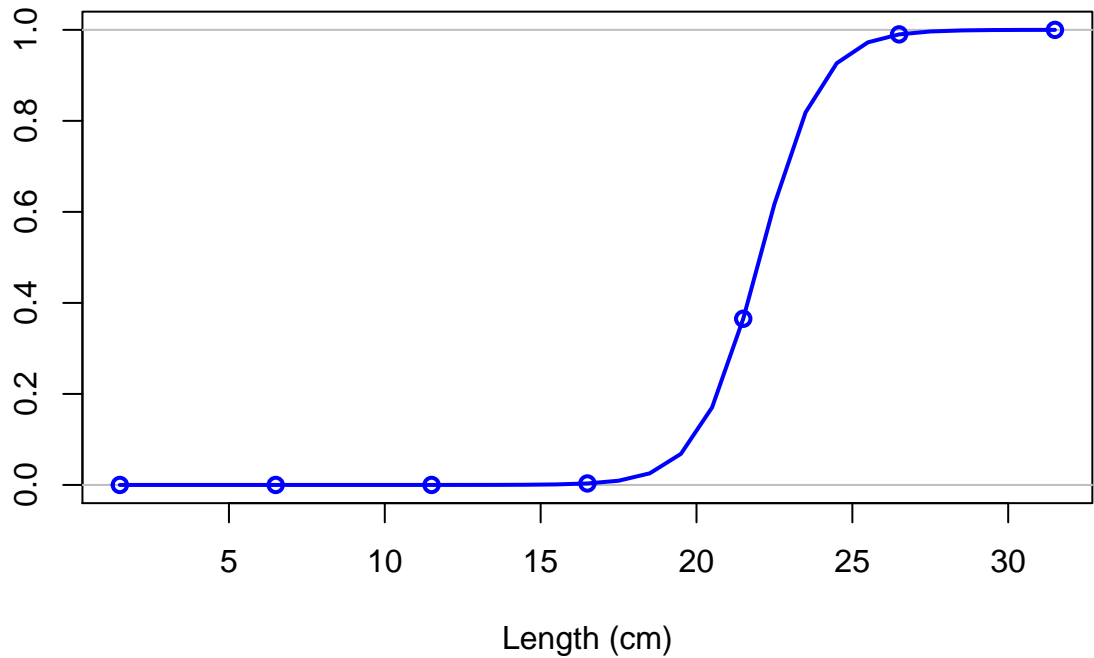




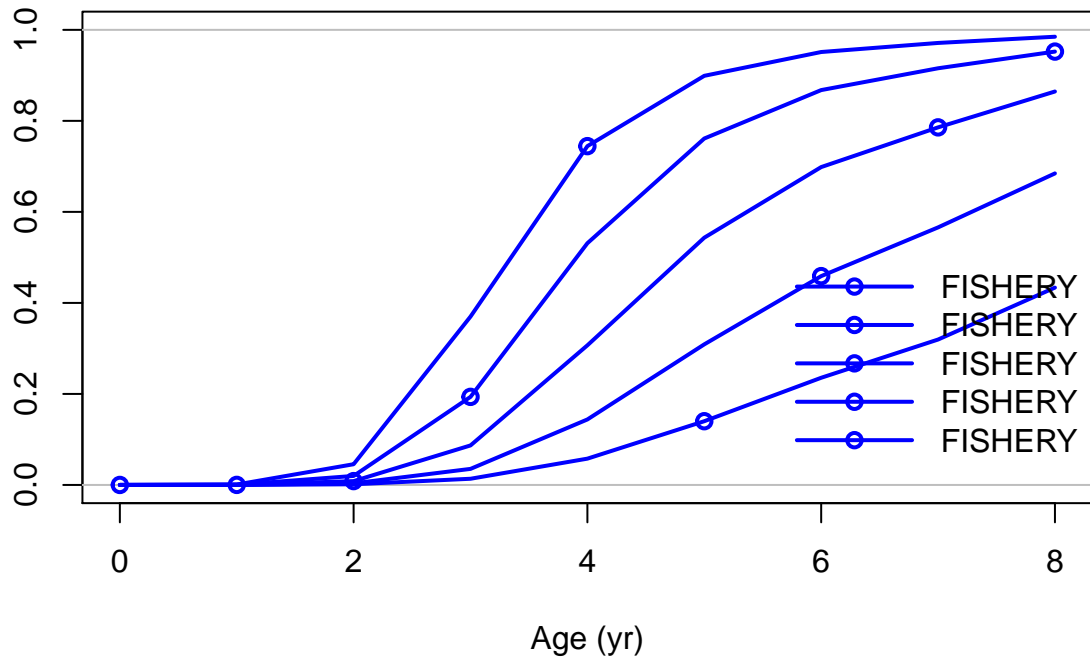




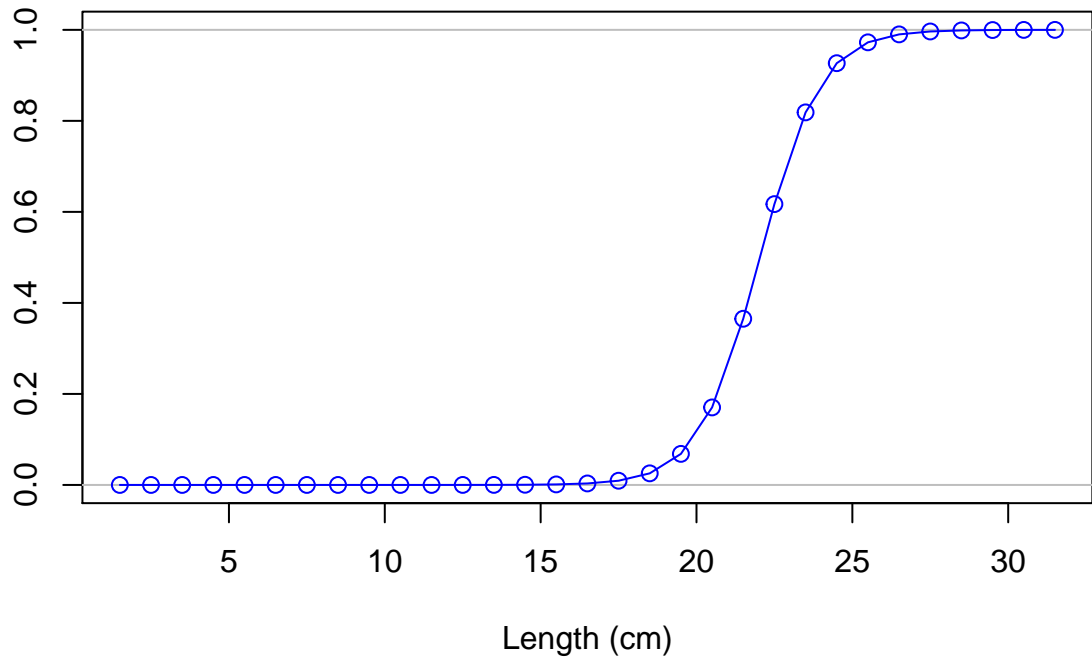
Selectivity



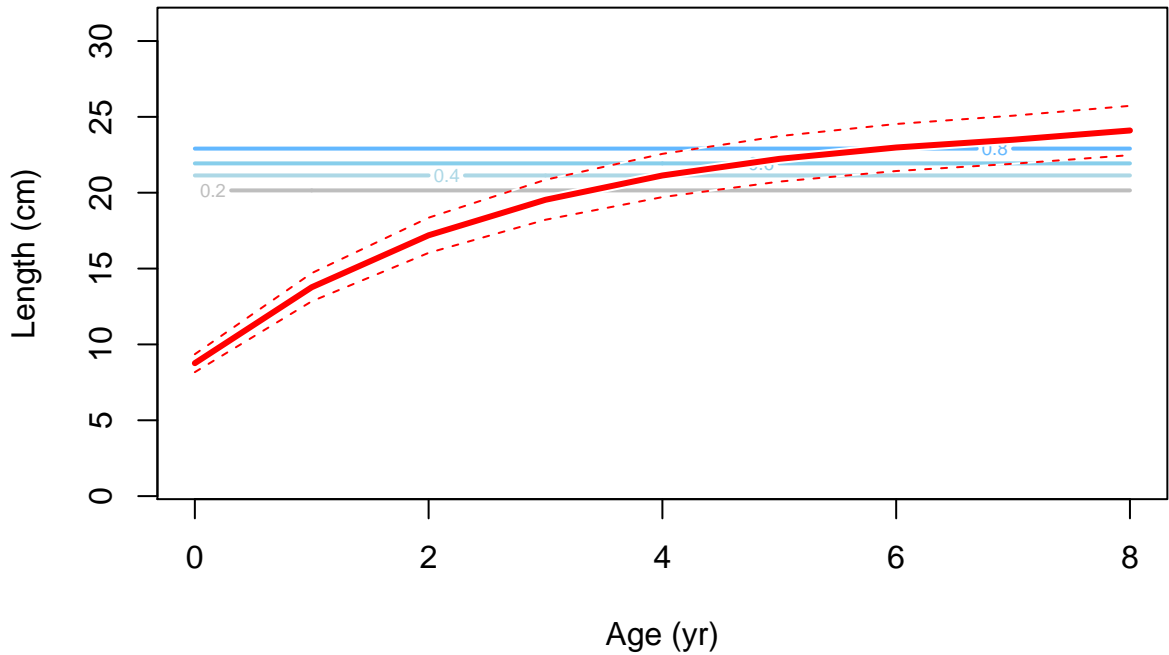
Selectivity

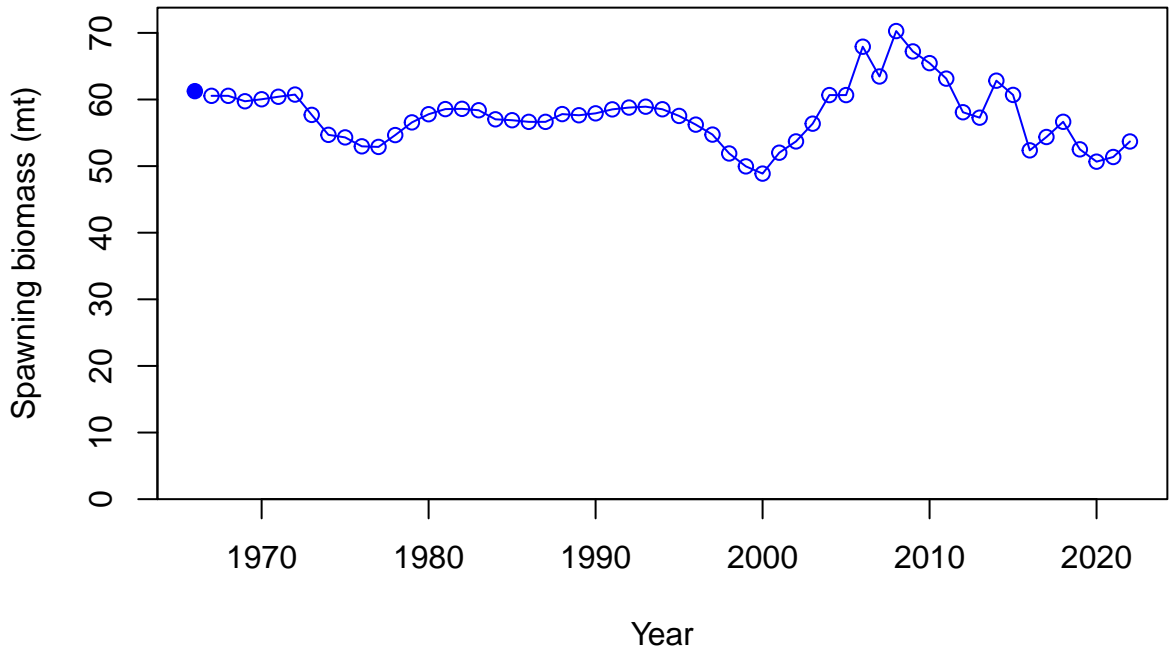


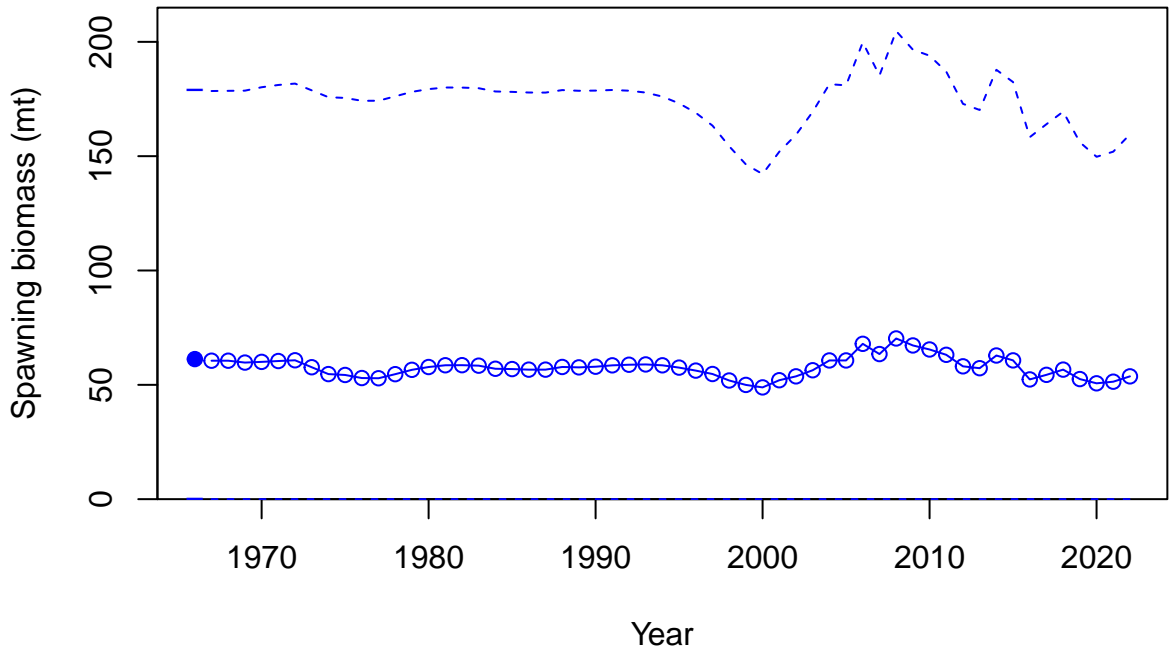
Selectivity



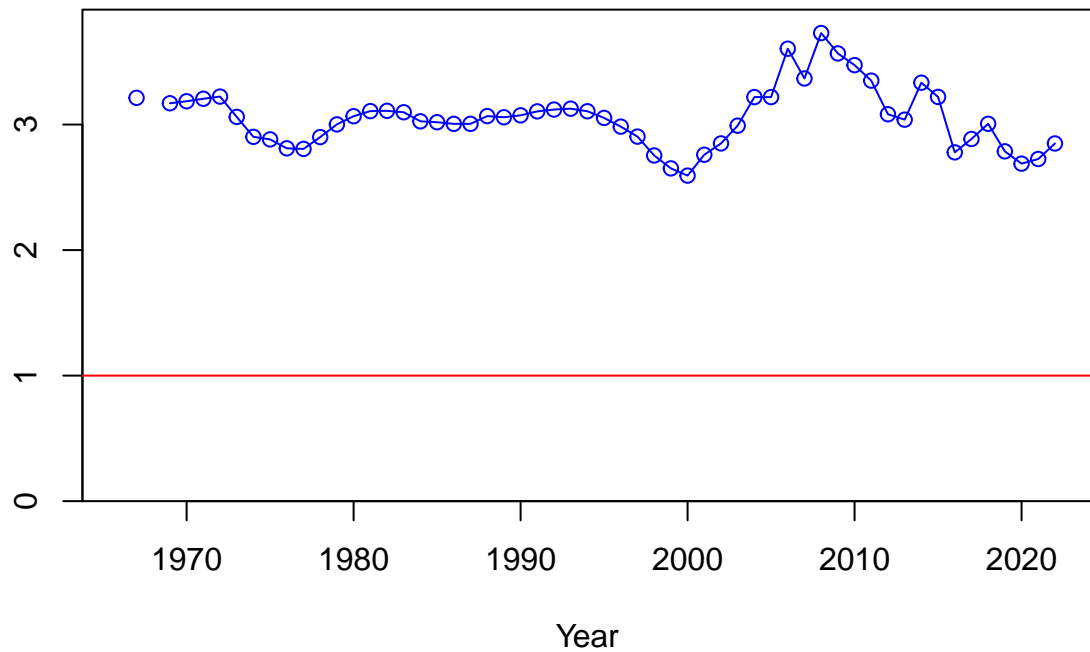




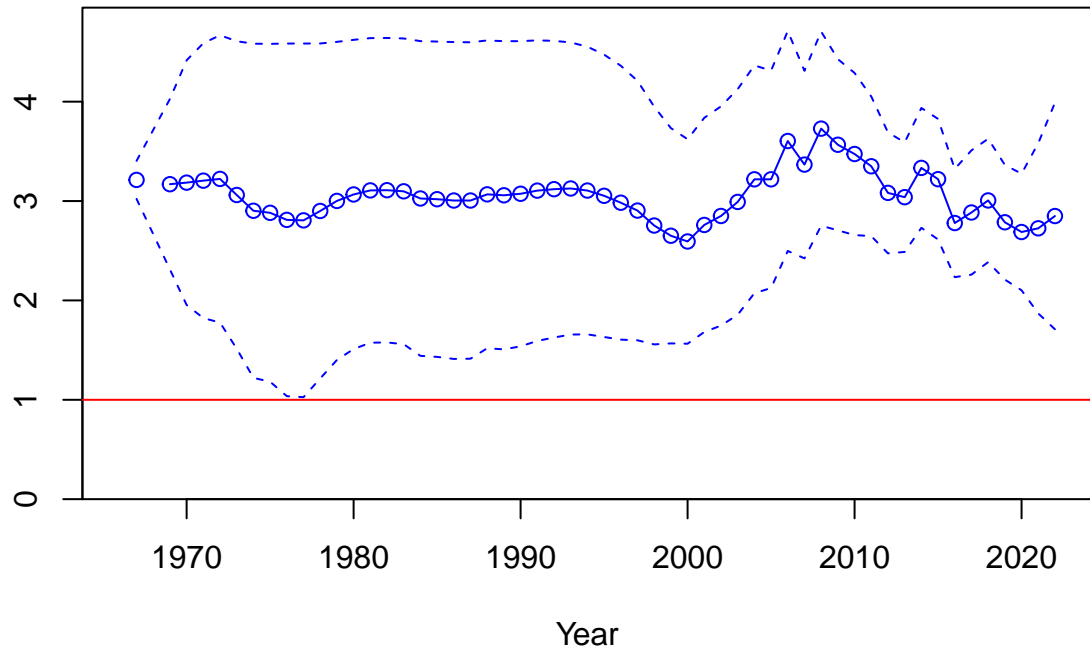


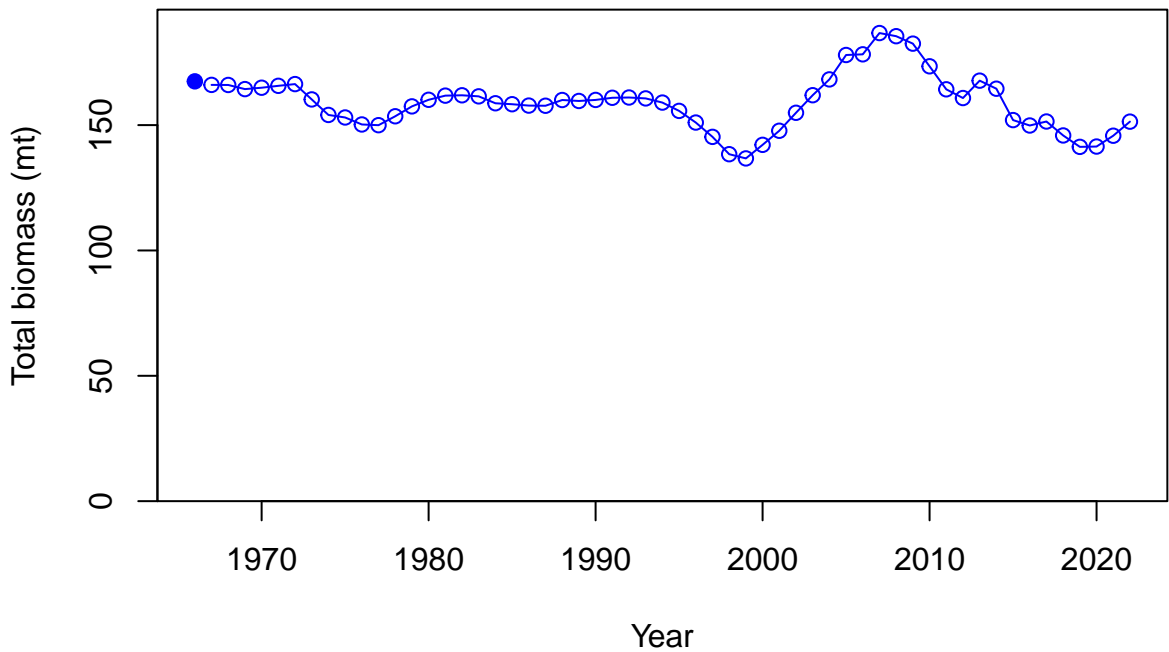


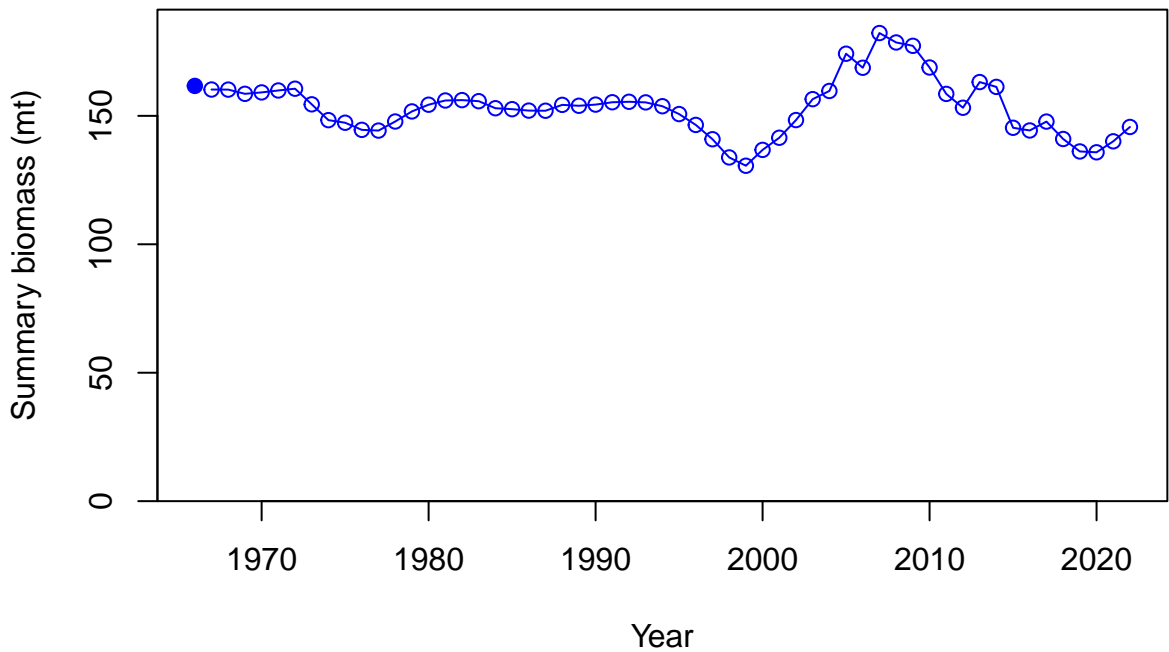
Relative spawning biomass:  $B/B_{MSY}$



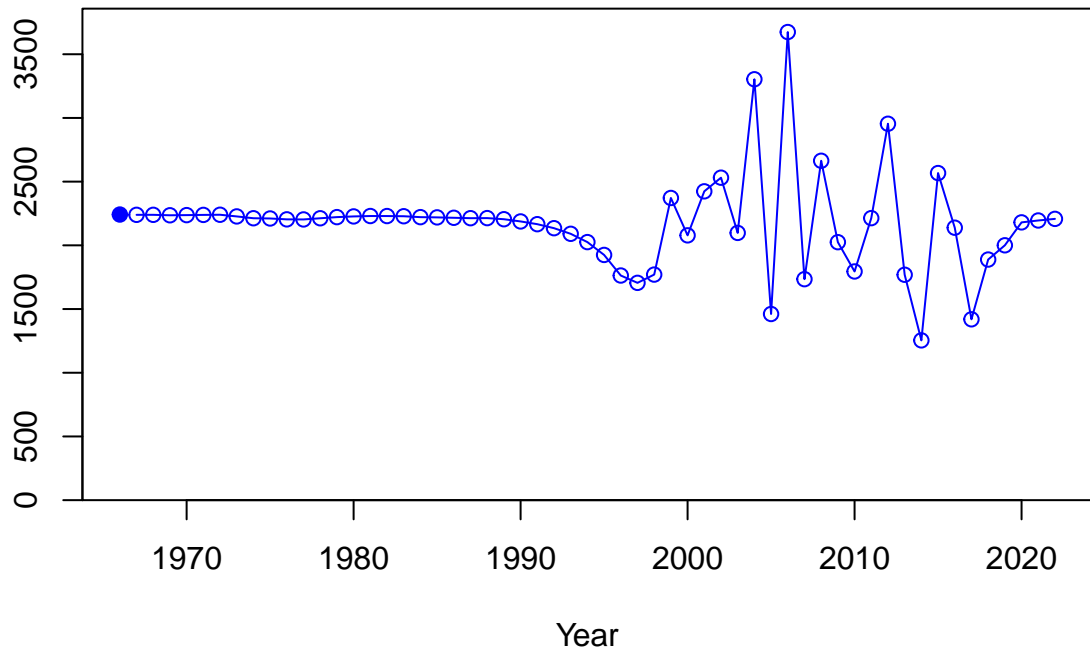
Relative spawning biomass:  $B/B_{MSY}$





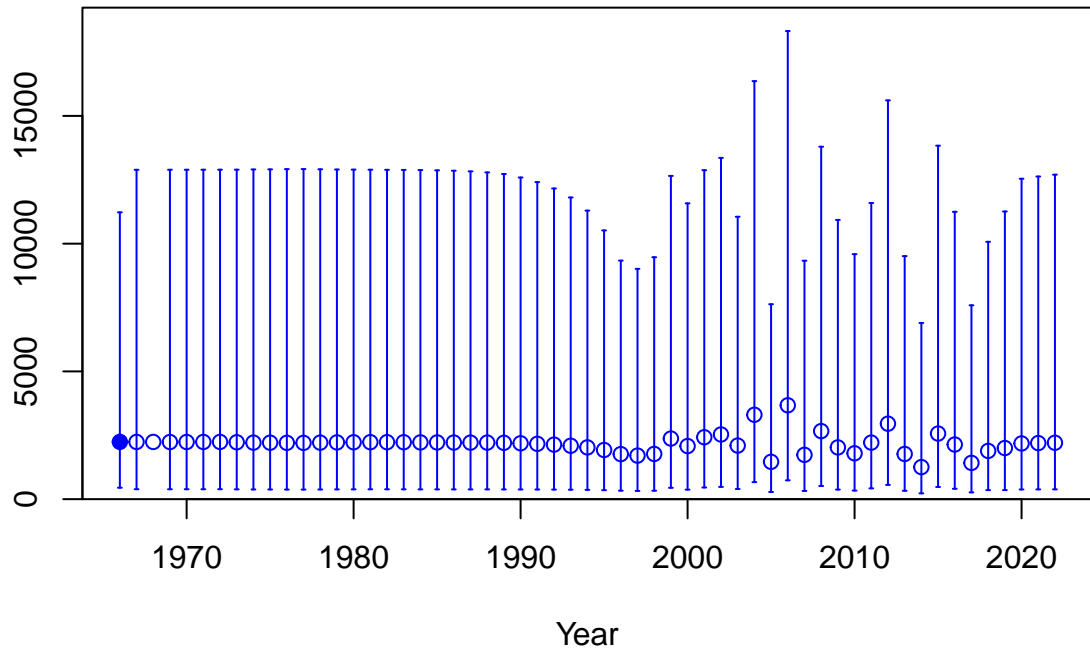


Age-0 recruits (1,000s)

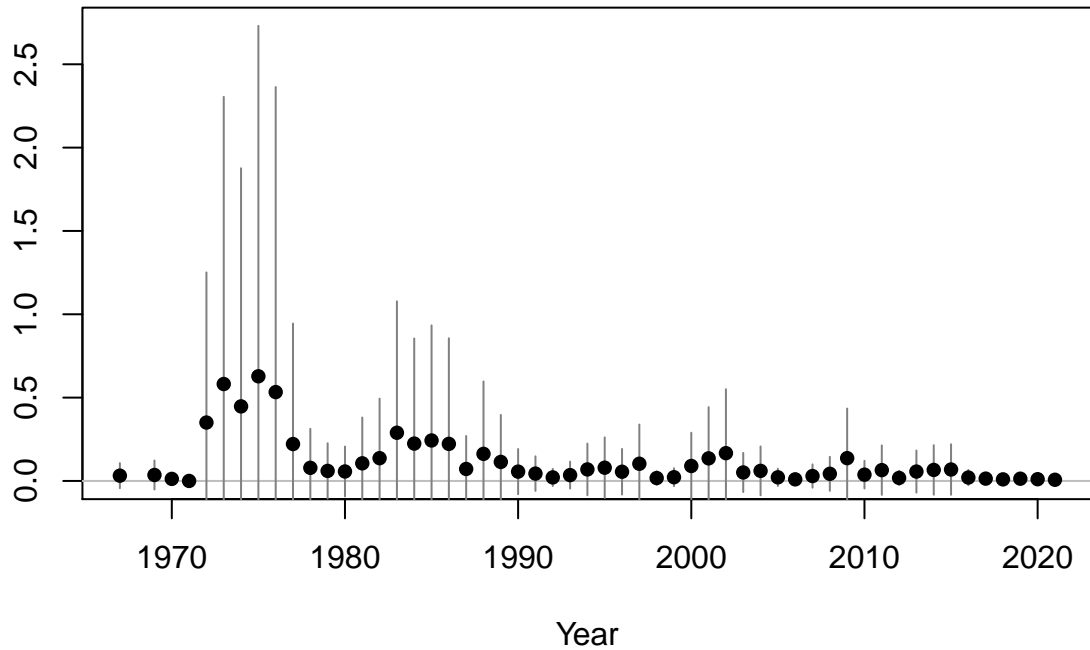


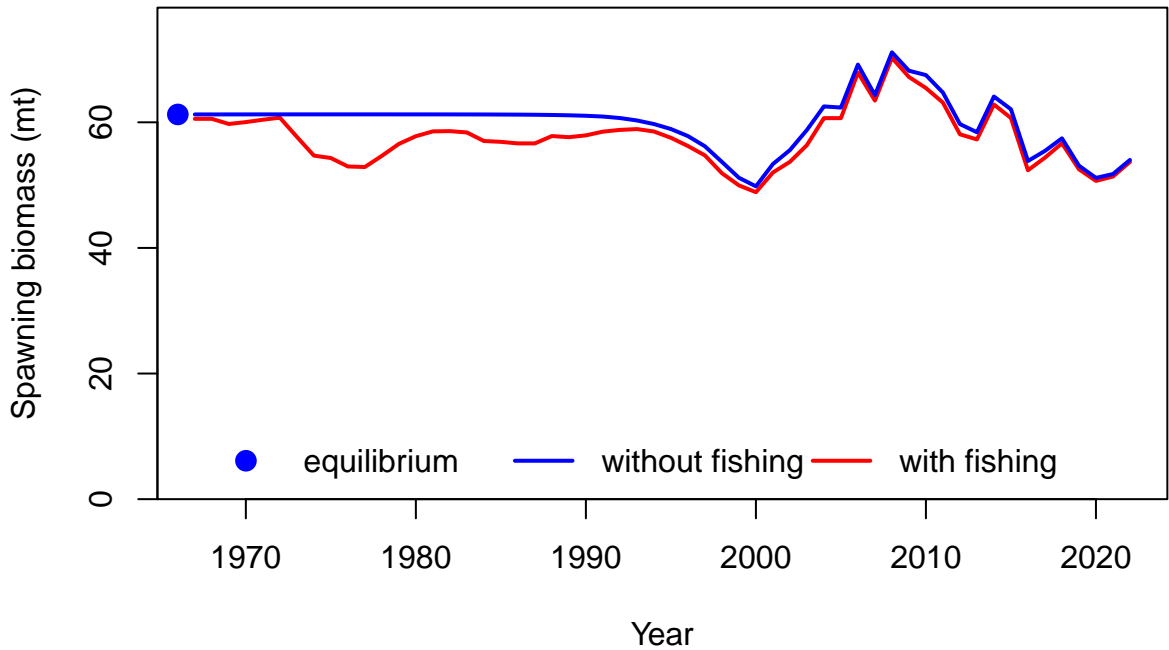


Age-0 recruits (1,000s)



Summary Fishing Mortality





Log recruitment deviation

0.4  
0.2  
0.0  
-0.4

1970

1980

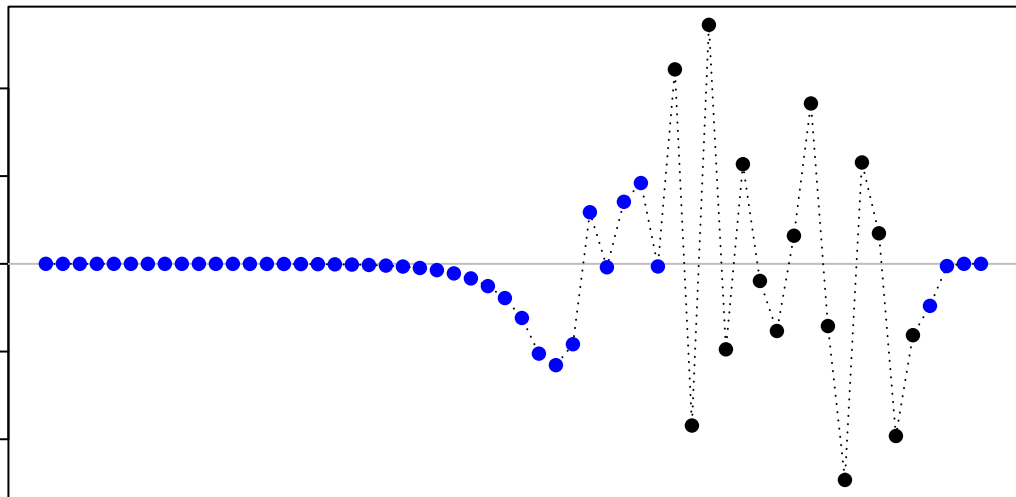
1990

2000

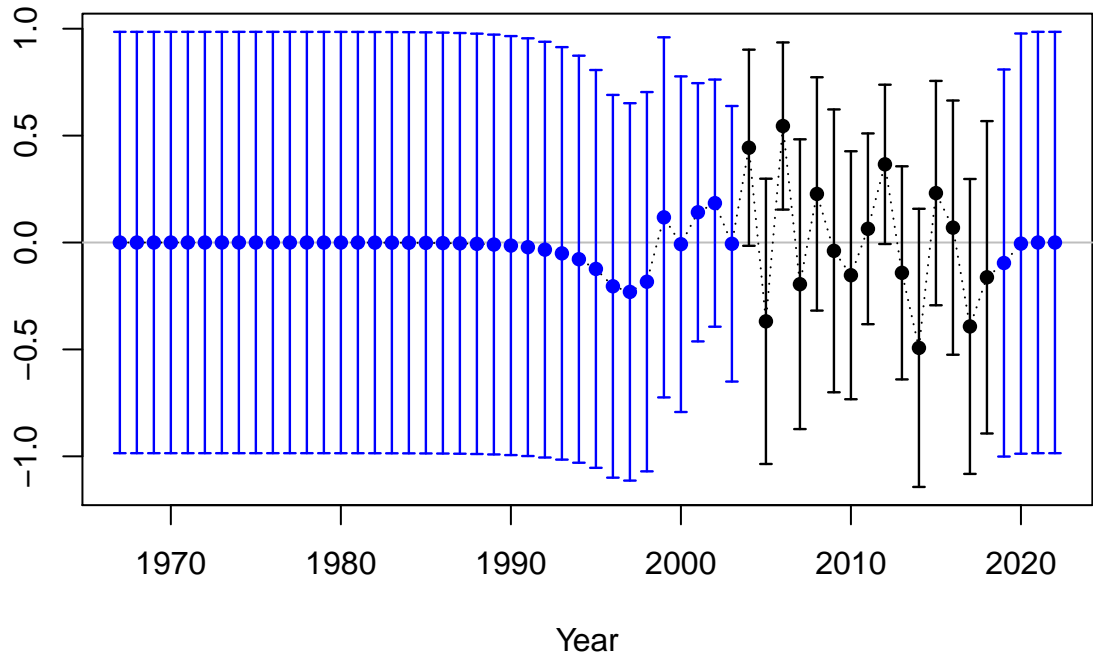
2010

2020

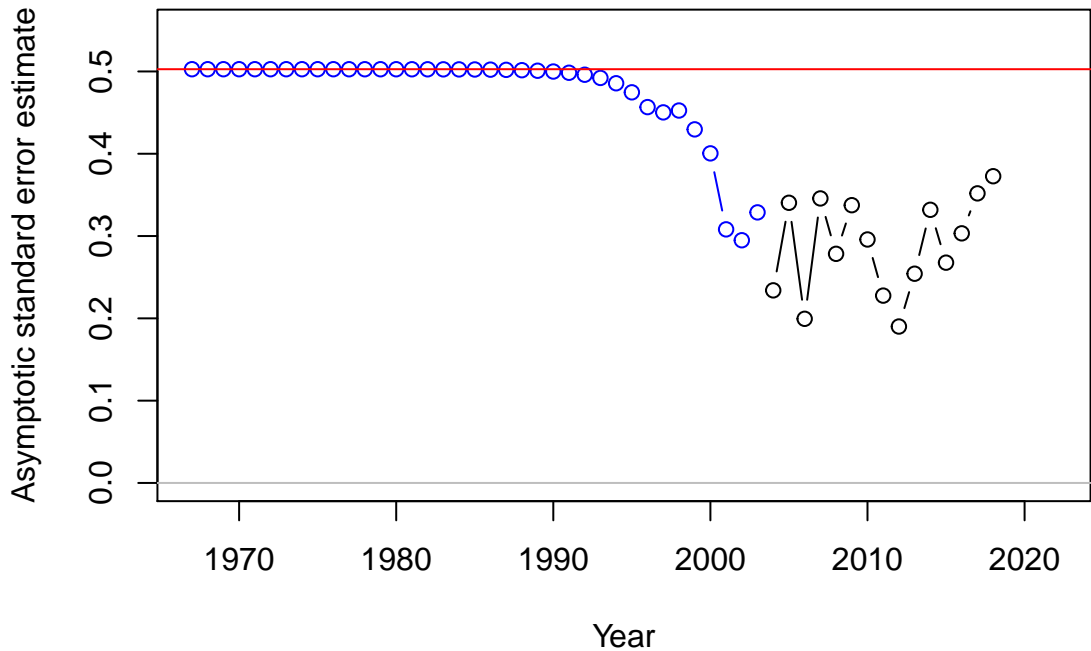
Year

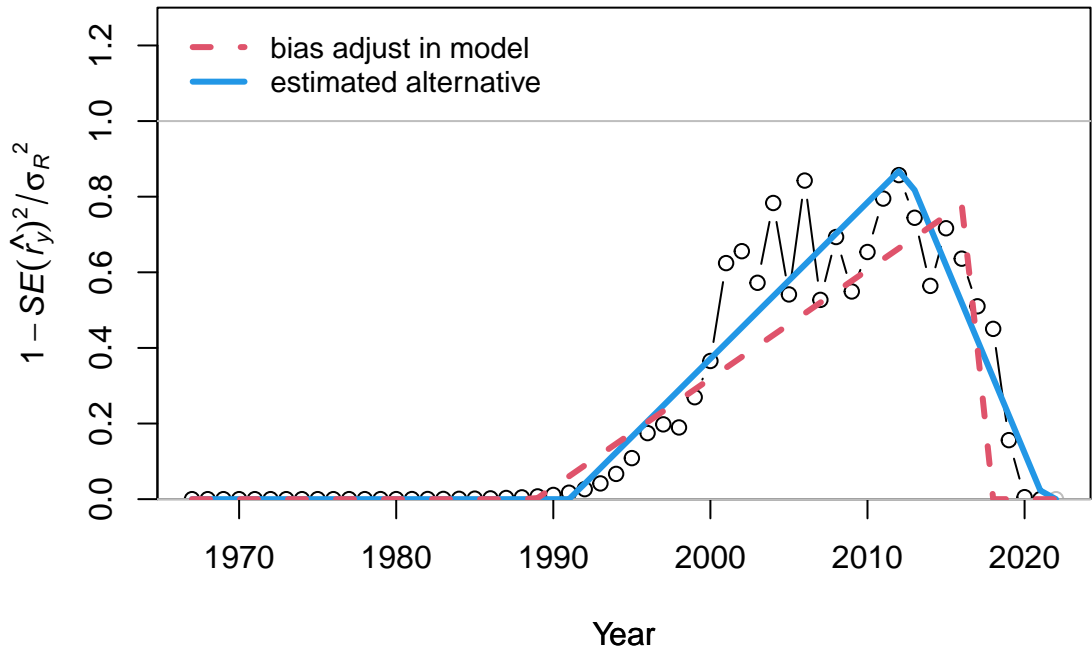


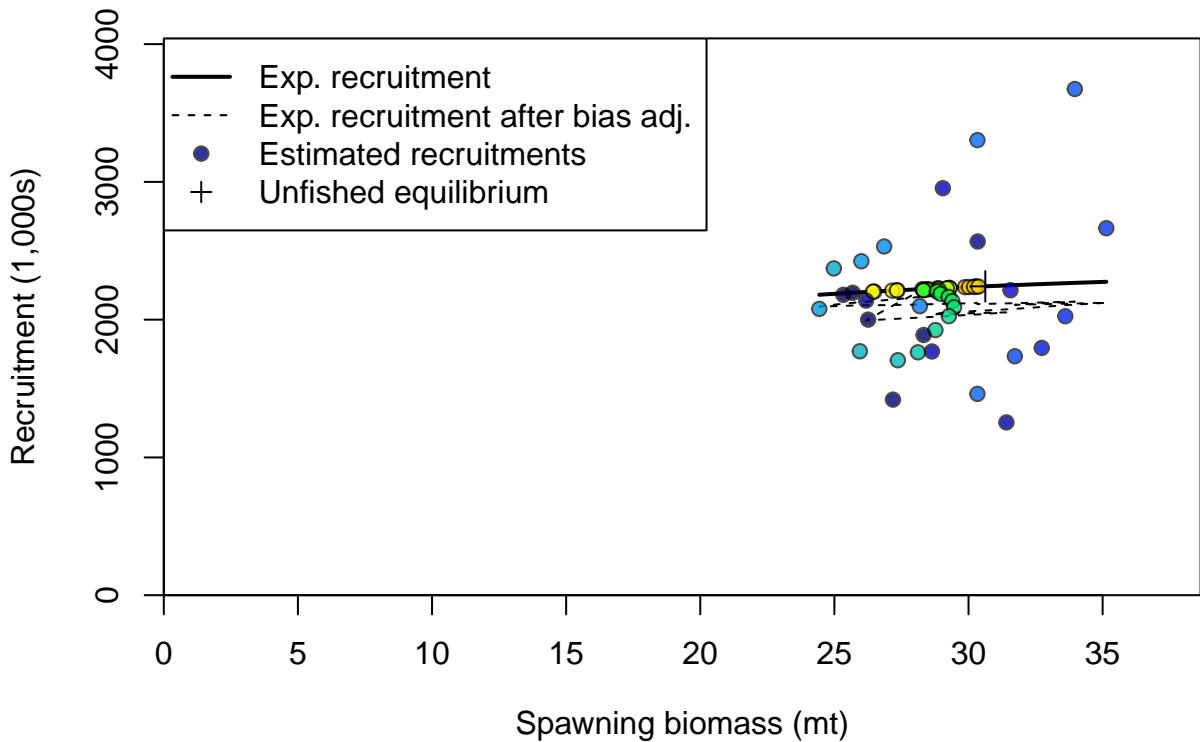
Log recruitment deviation



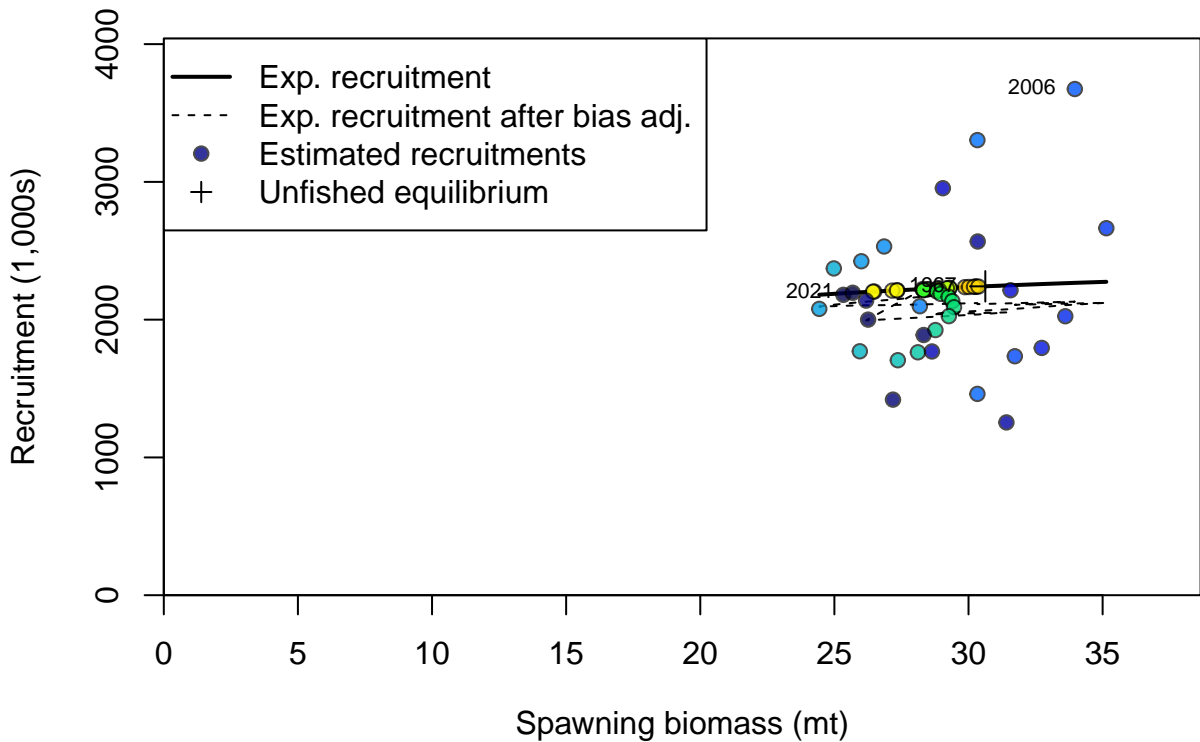
## Recruitment deviation variance

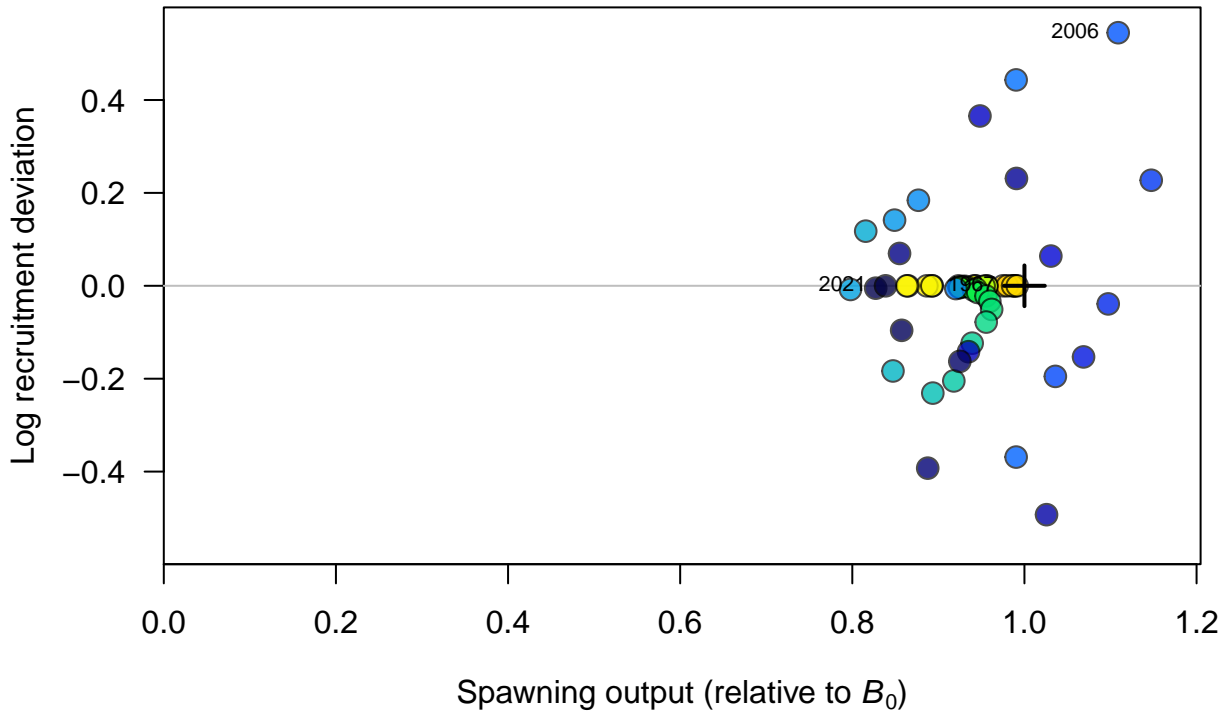


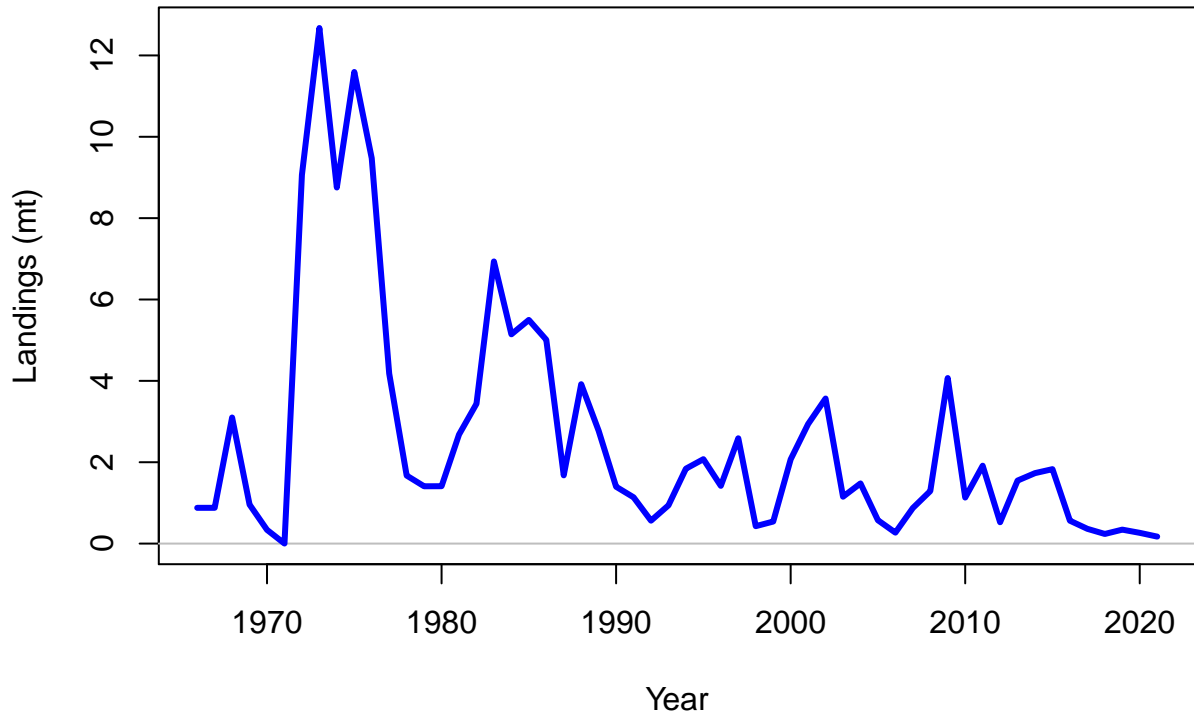


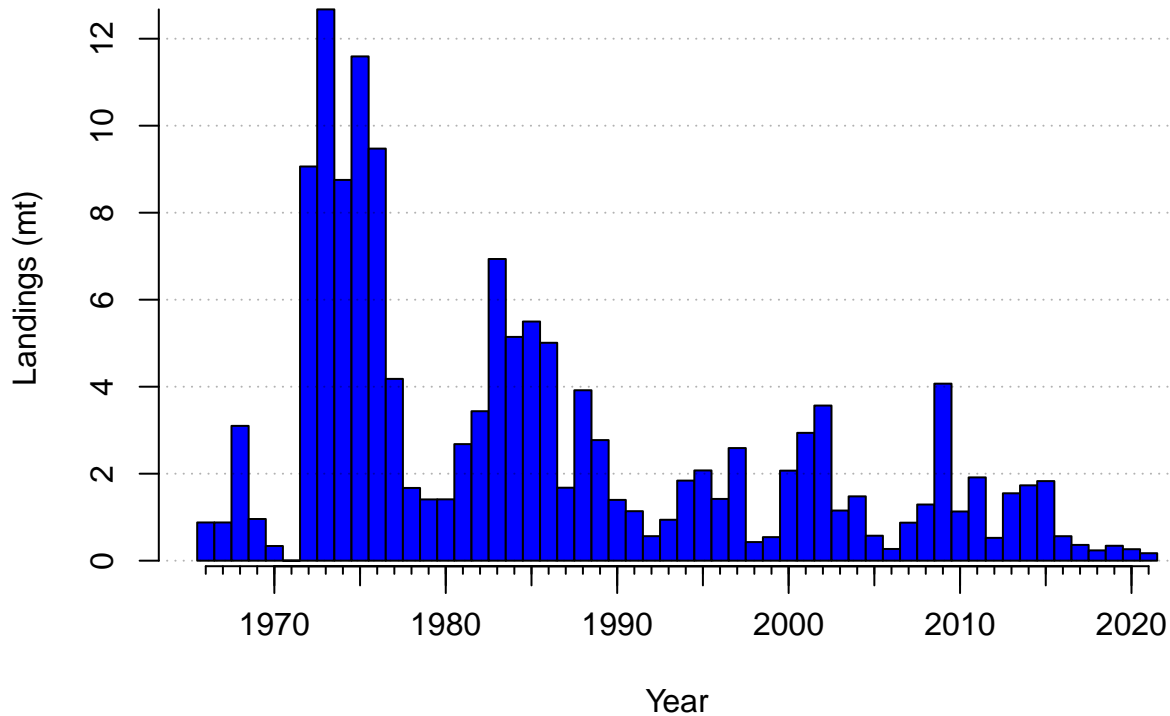




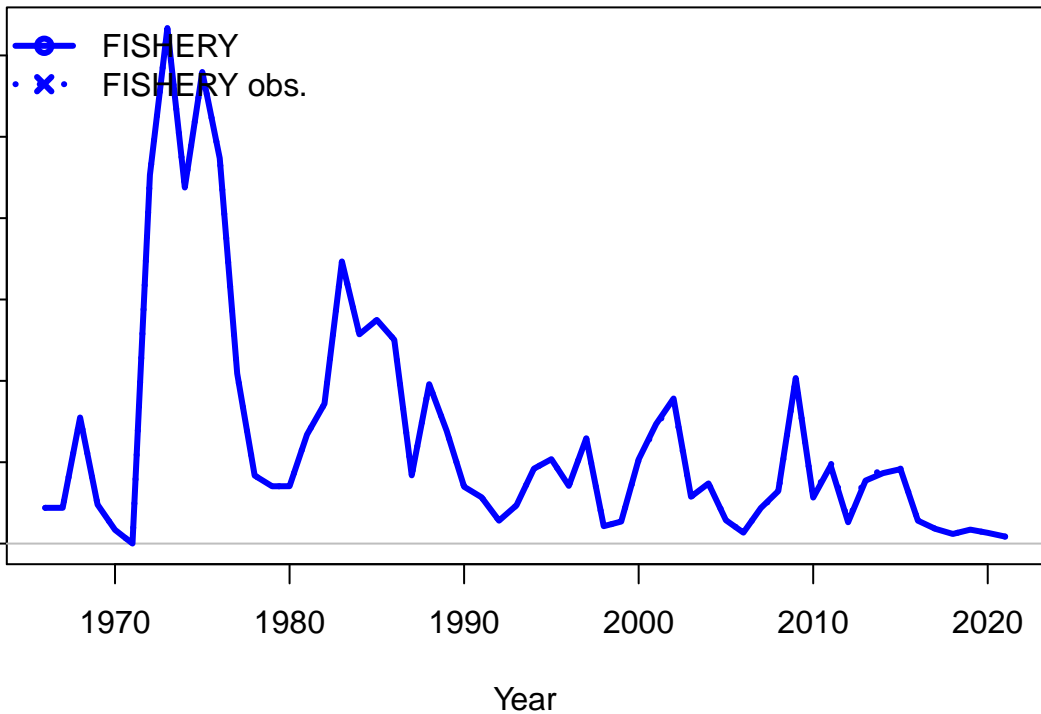


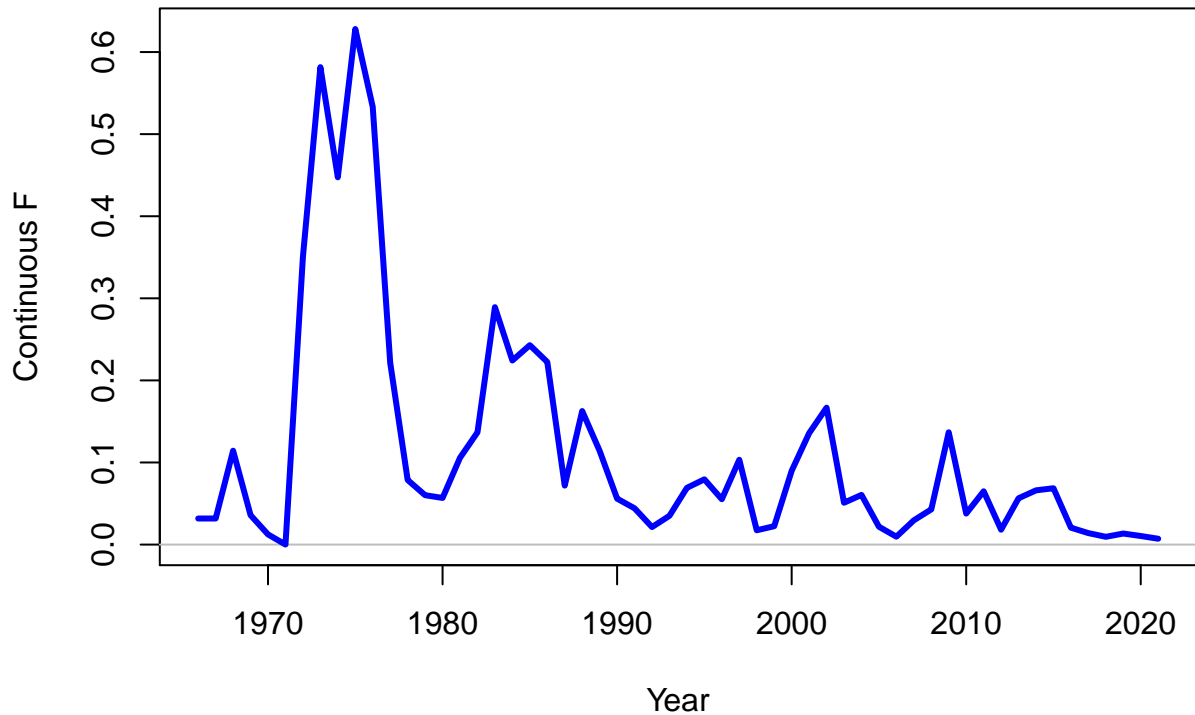




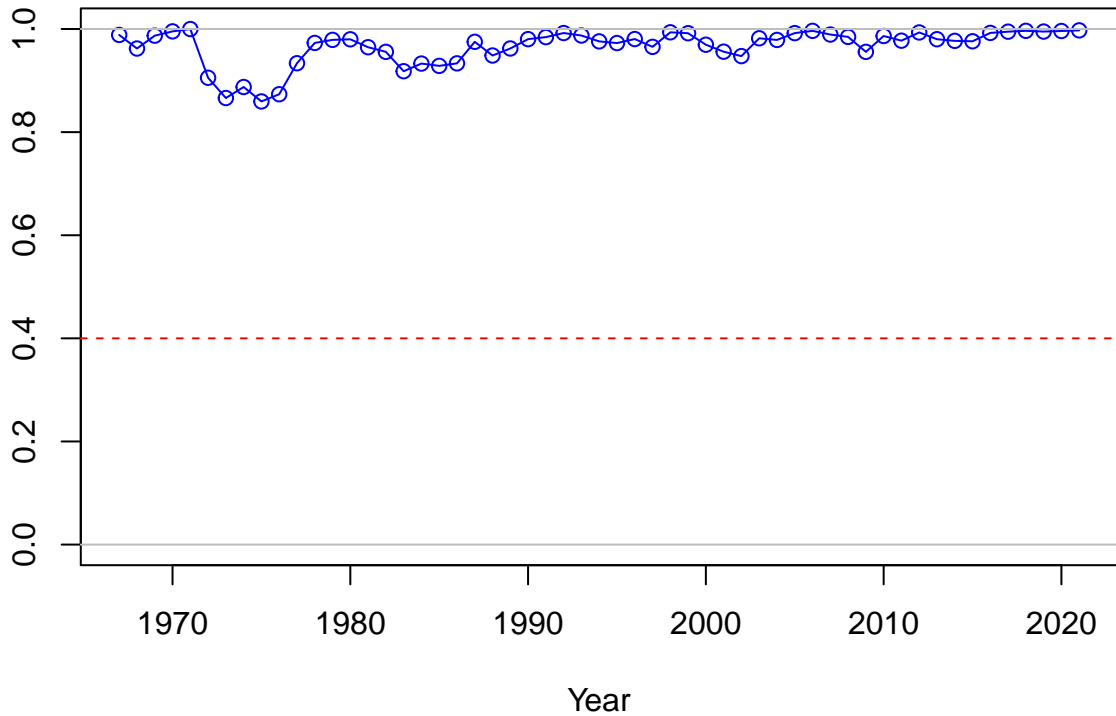


Observed and expected Landings (mt)

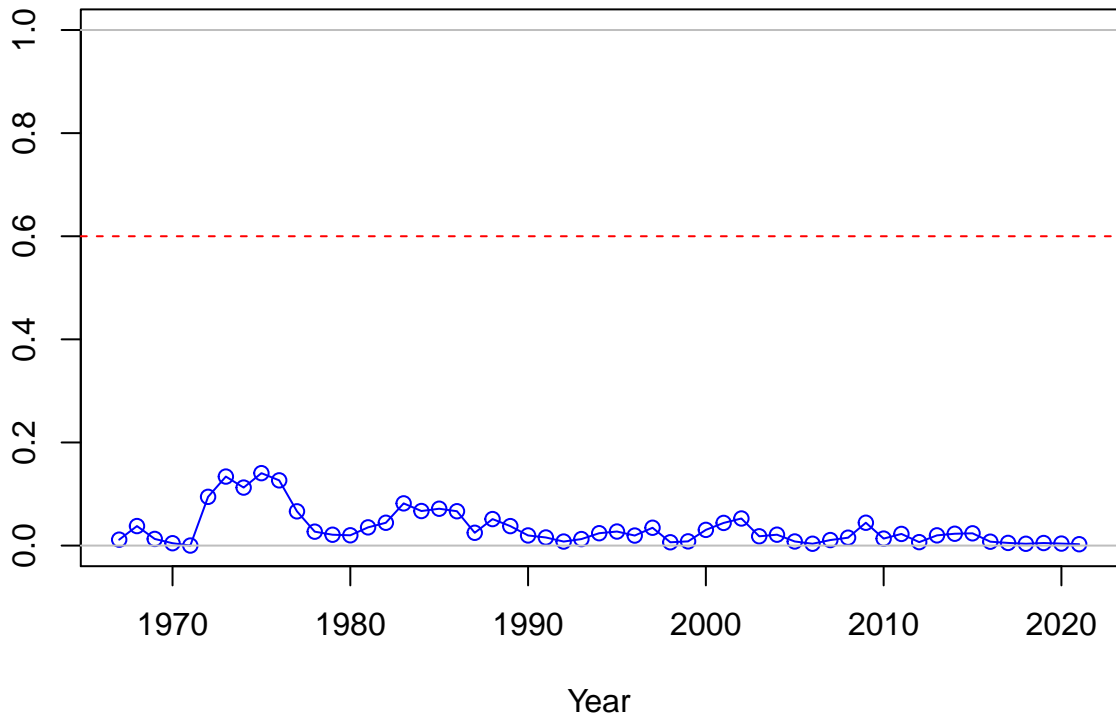




SPR

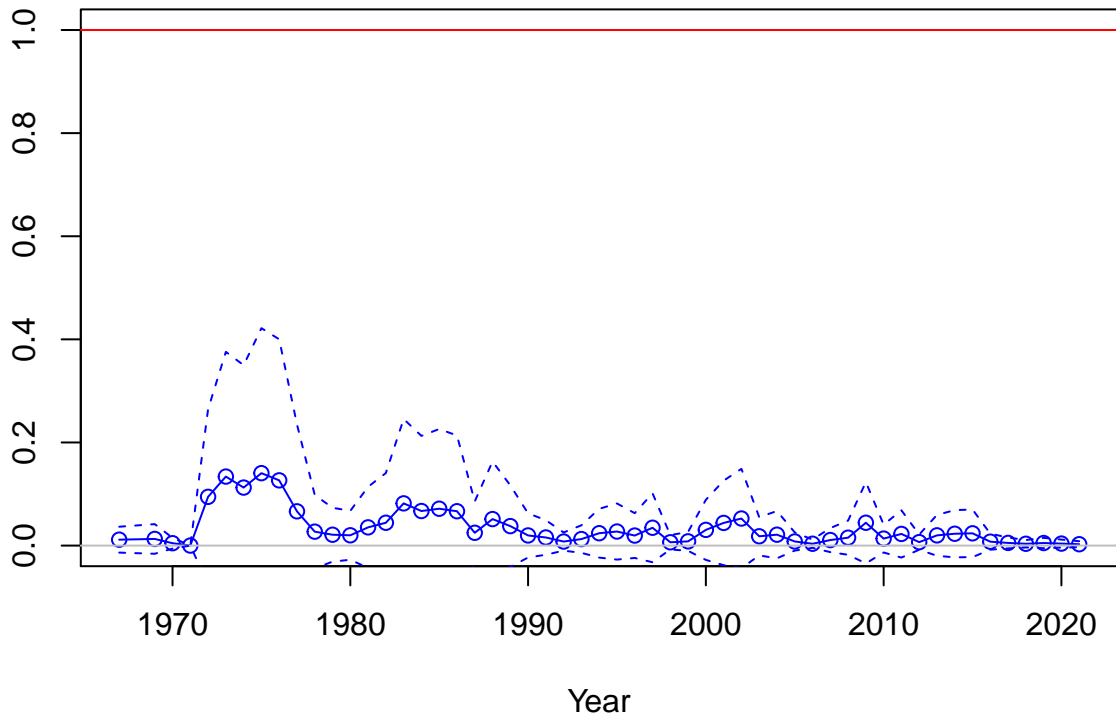


1-SPR

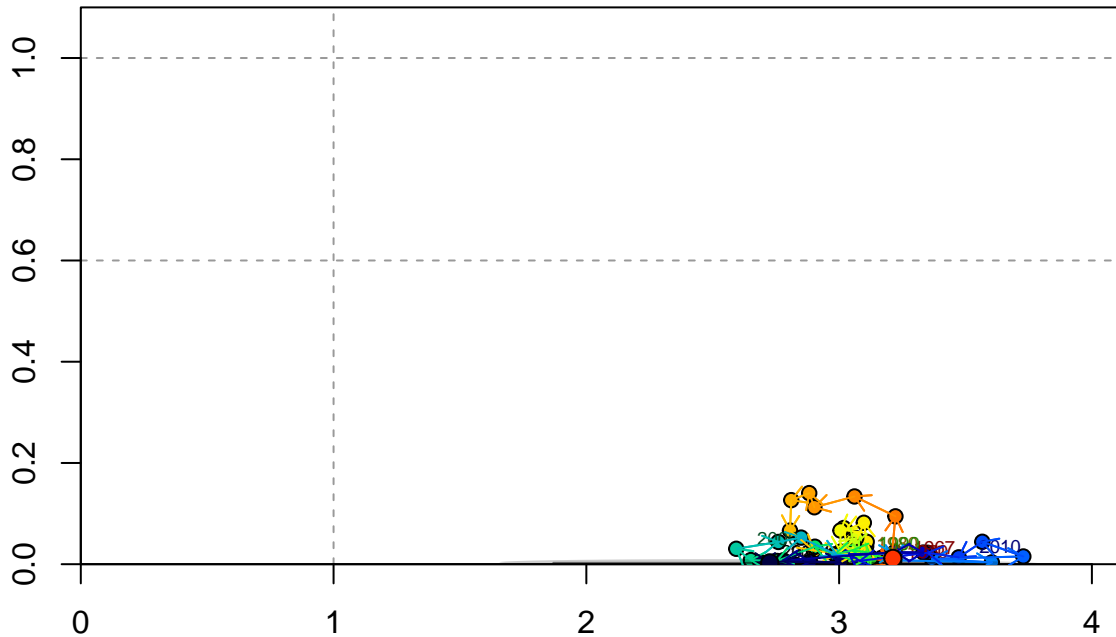




Fishing intensity: 1-SPR

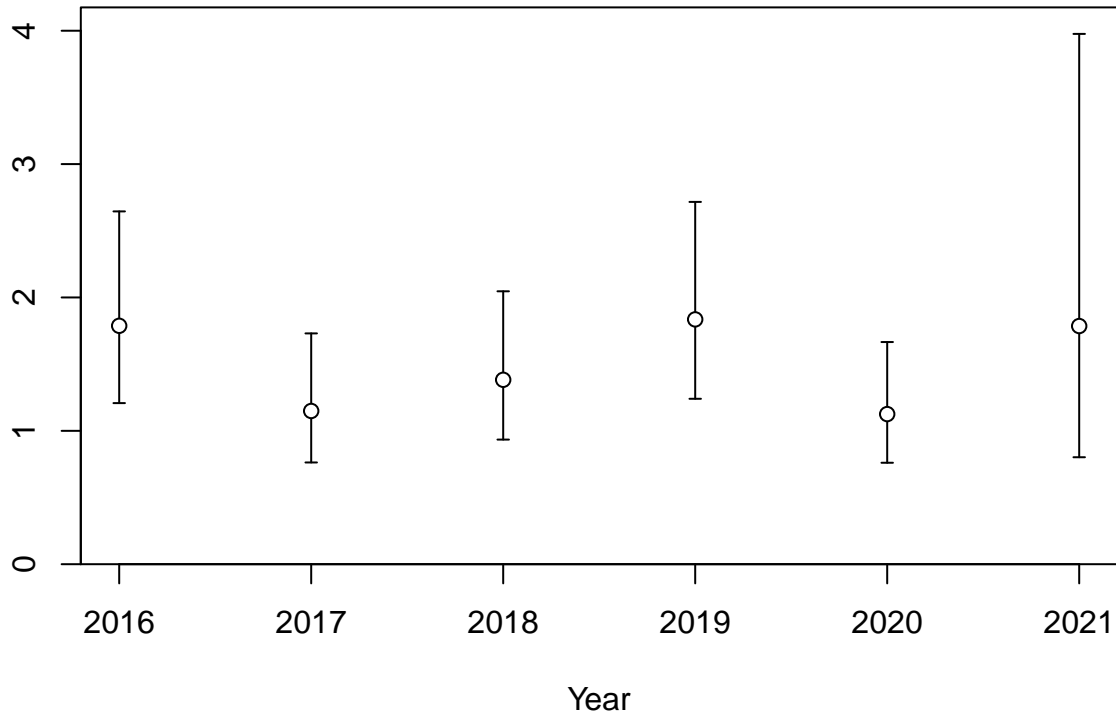


Fishing intensity: 1-SPR

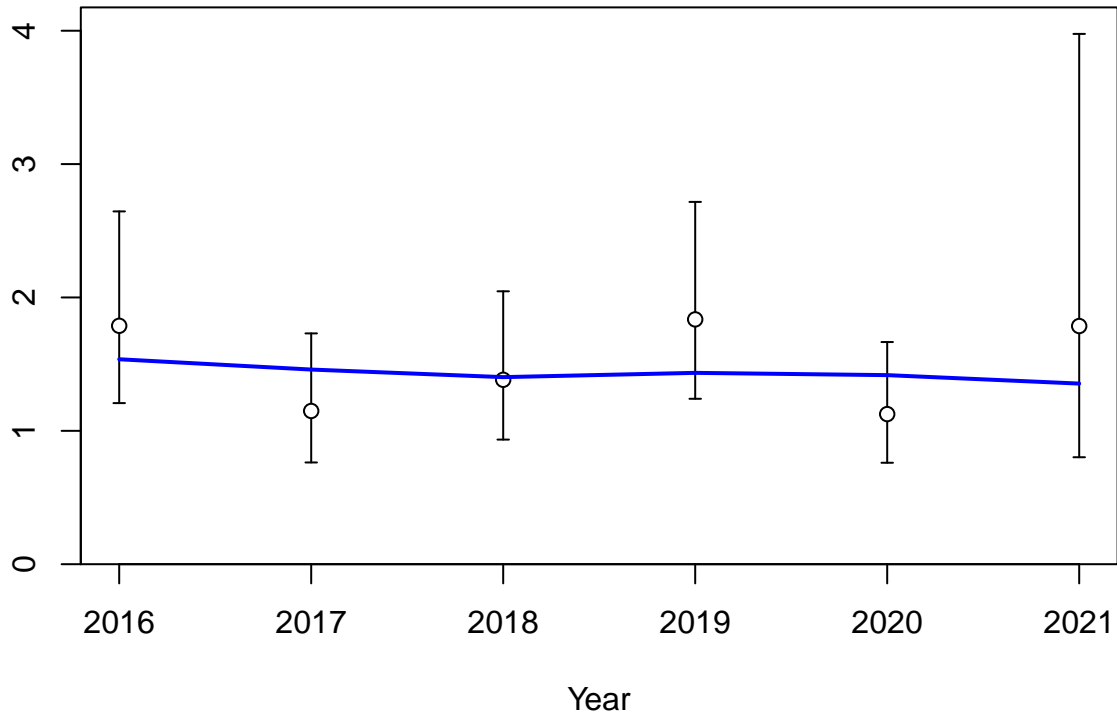


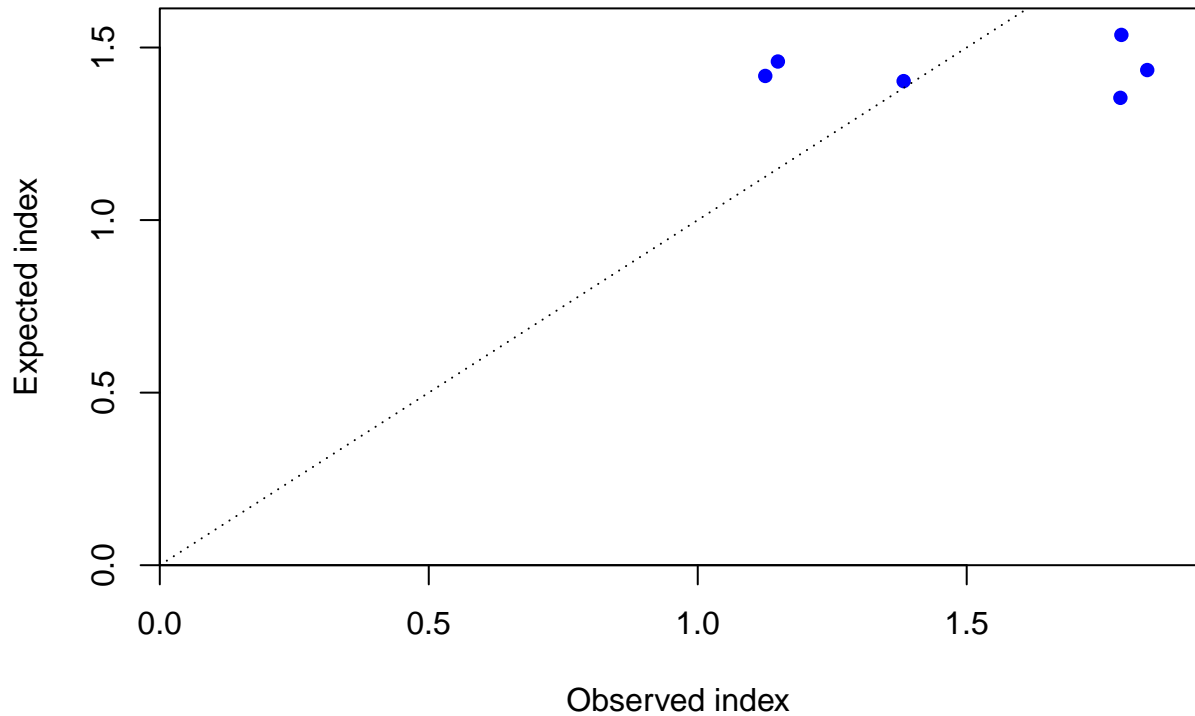
Relative spawning output:  $B/B_{MSY}$

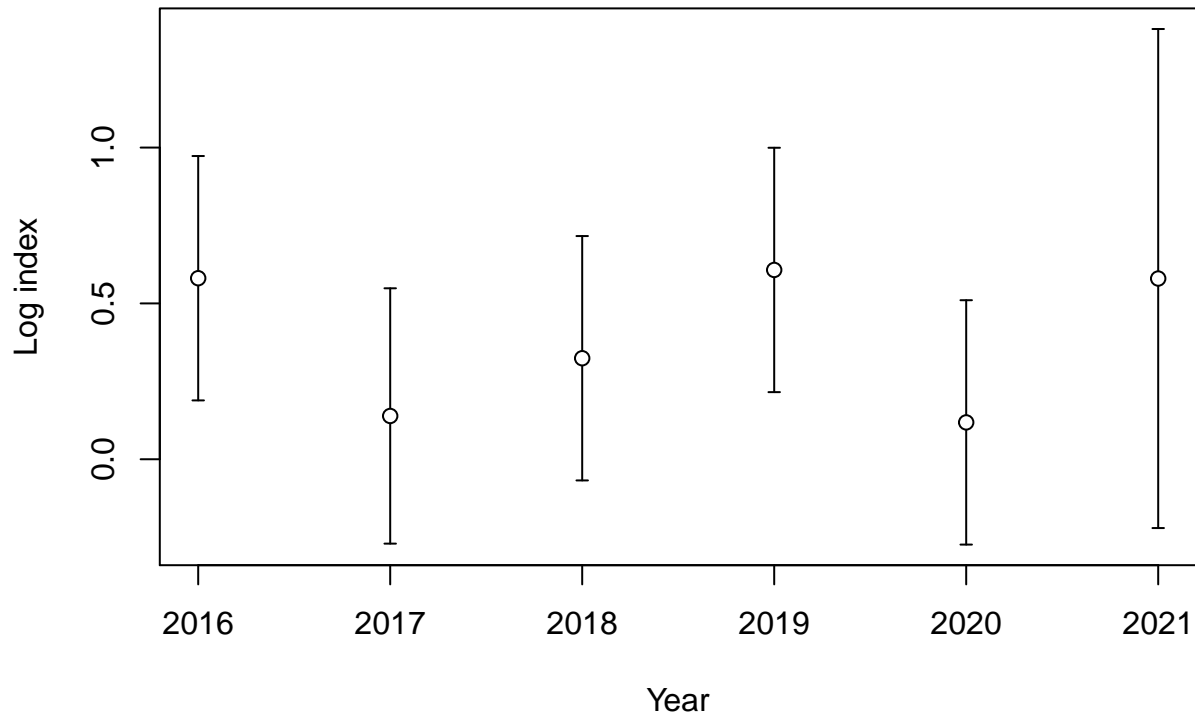
Index

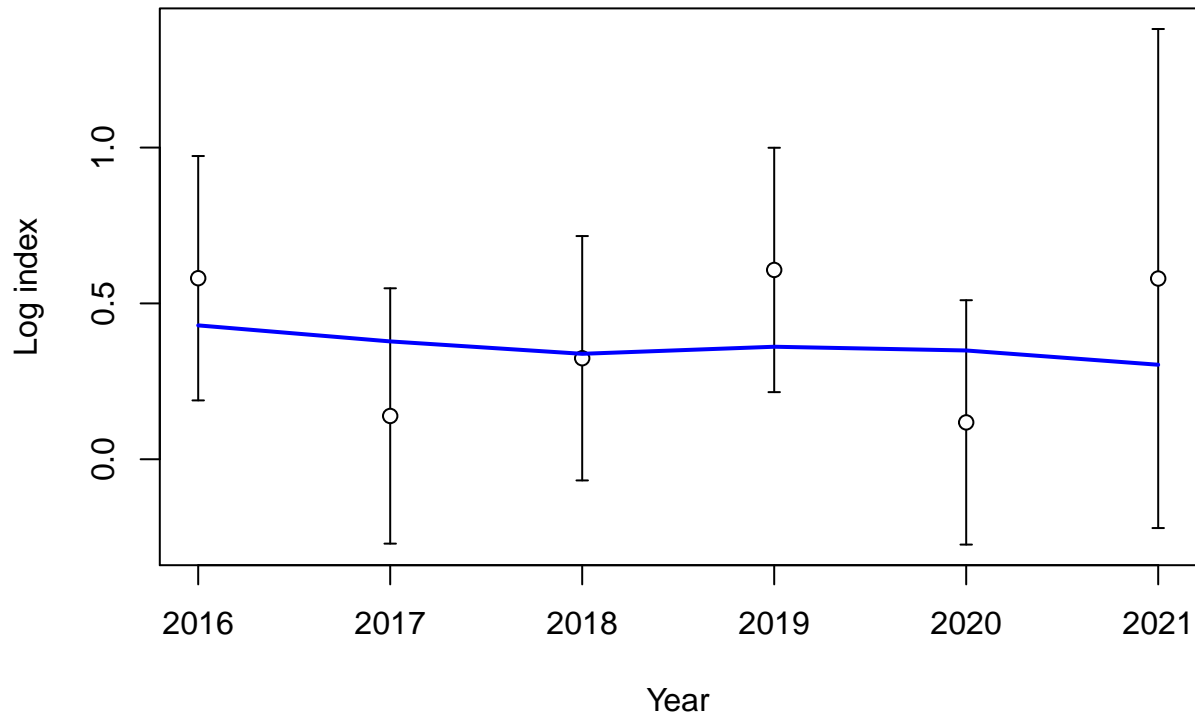


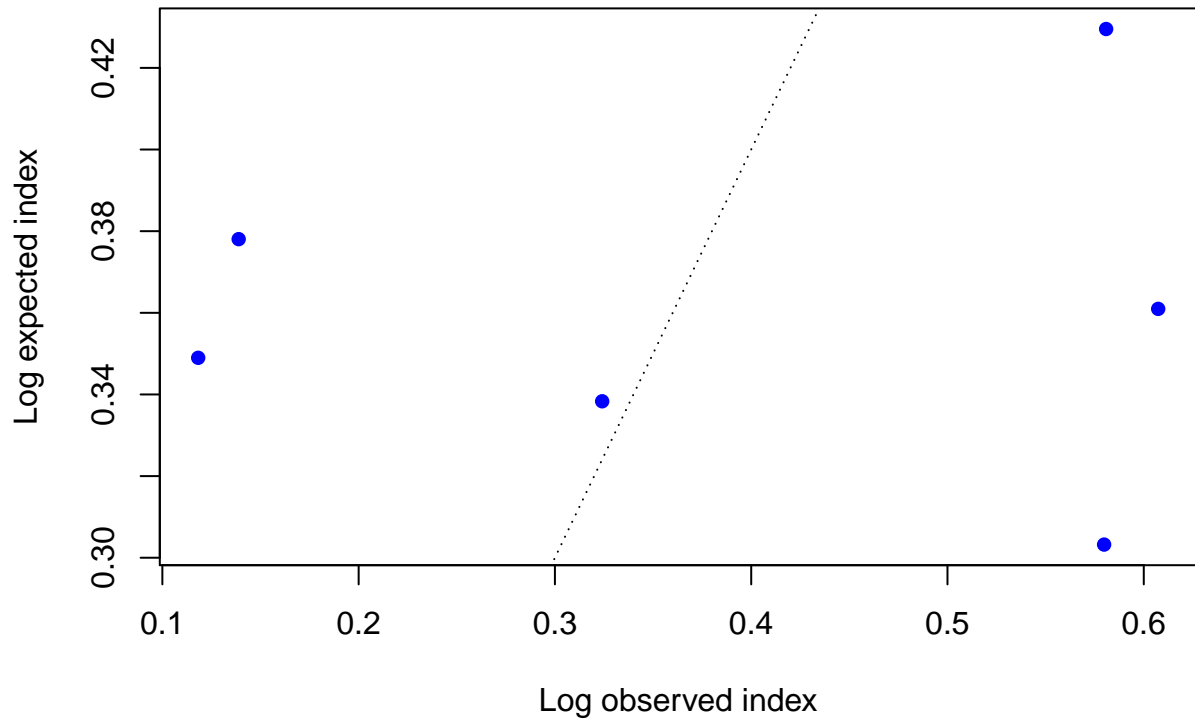
Index



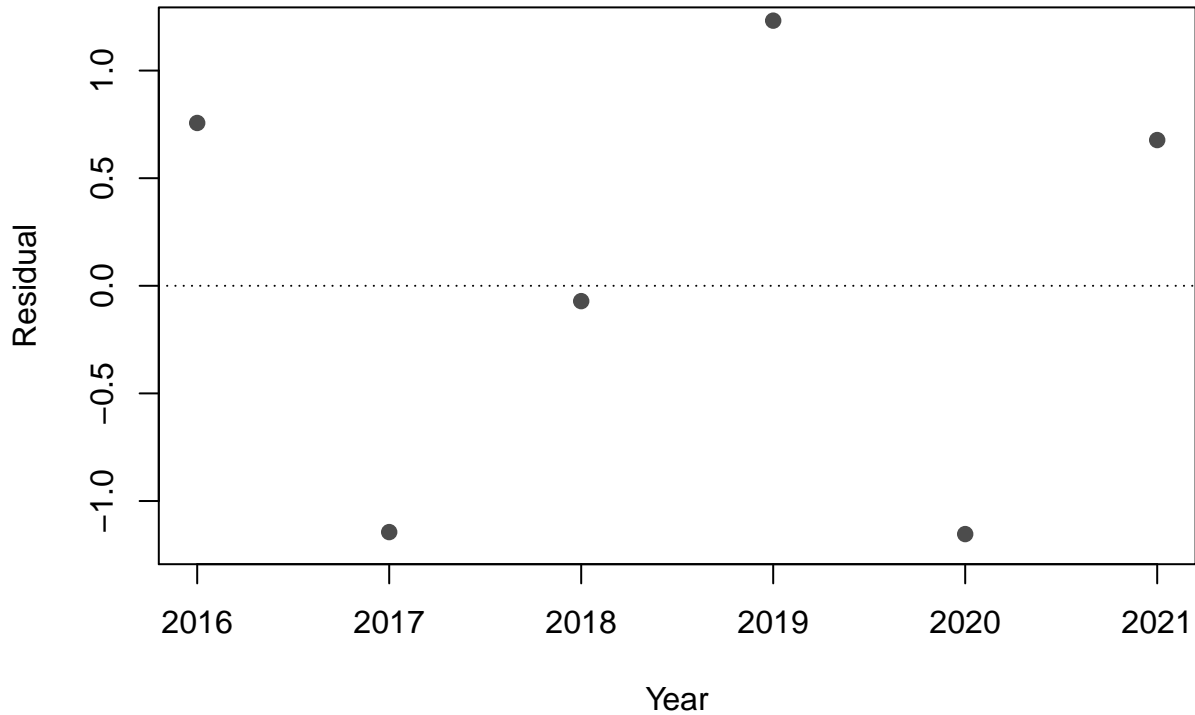












Deviation

0.2  
0.1  
0.0  
-0.1  
-0.2

2016

2017

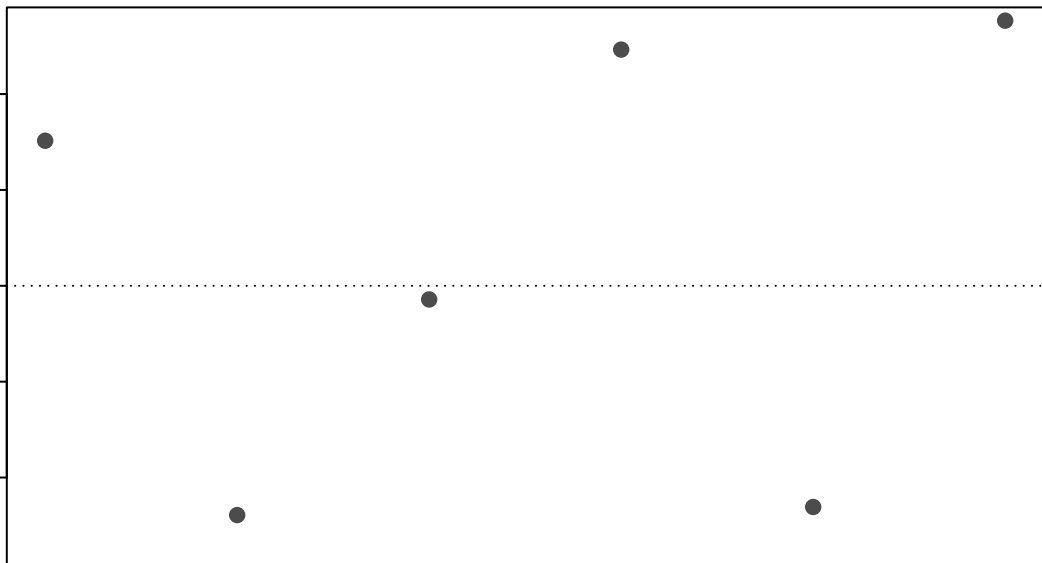
2018

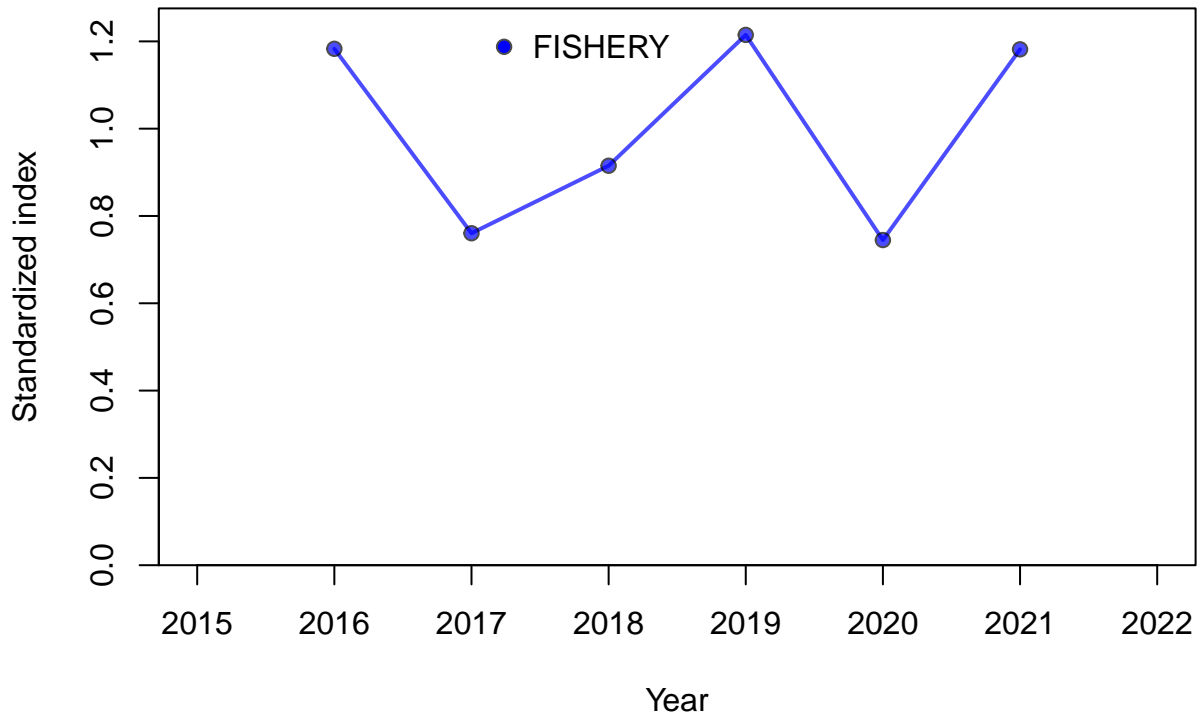
2019

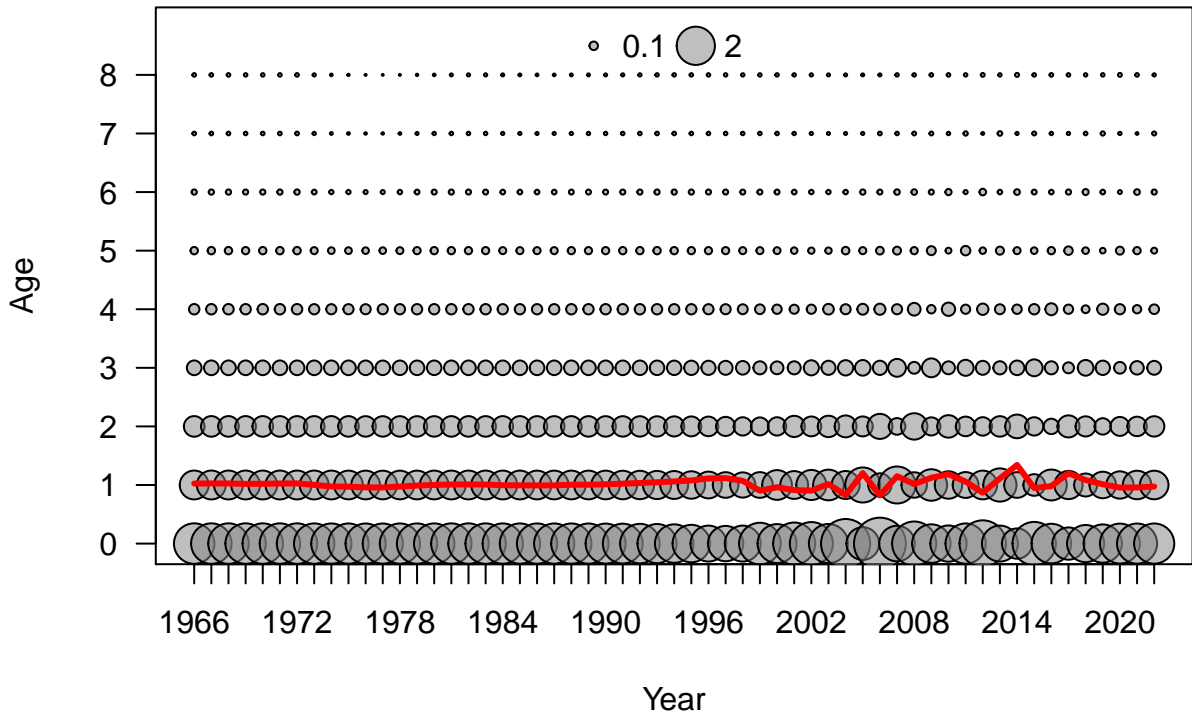
2020

2021

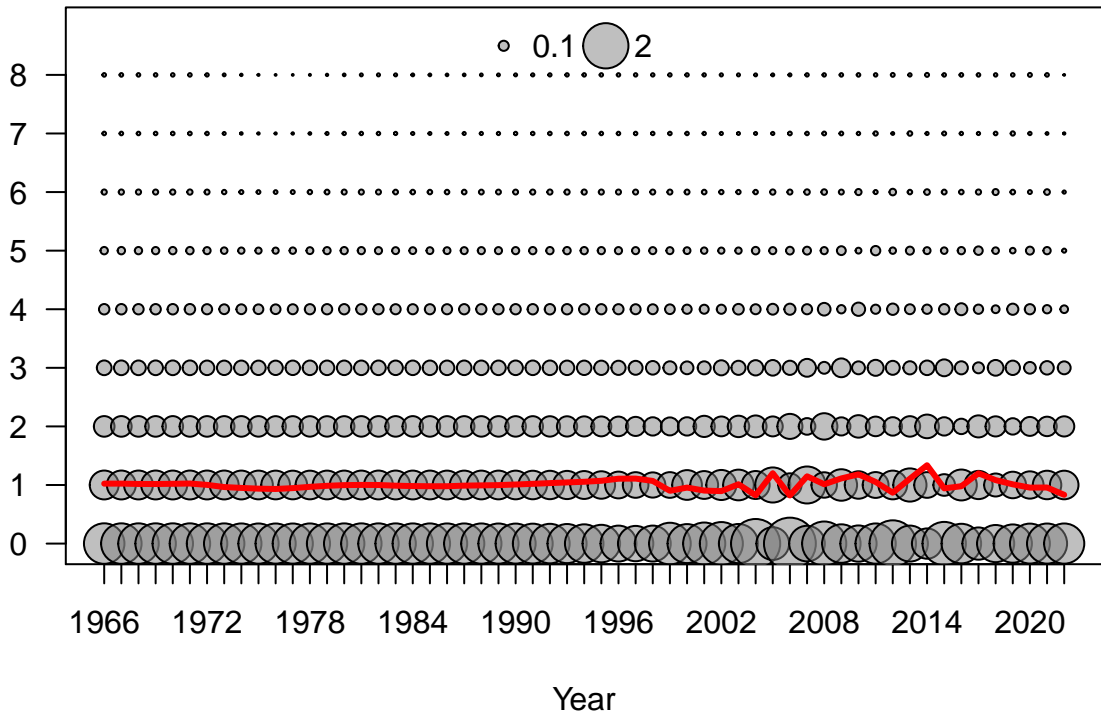
Year

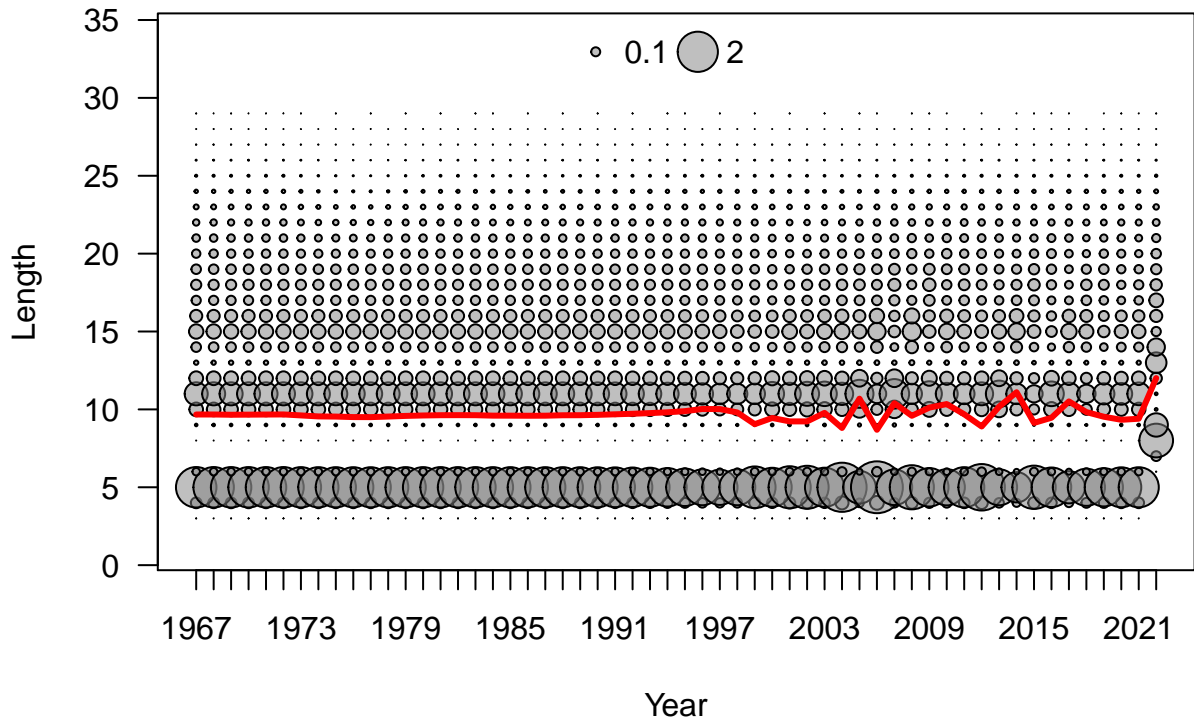


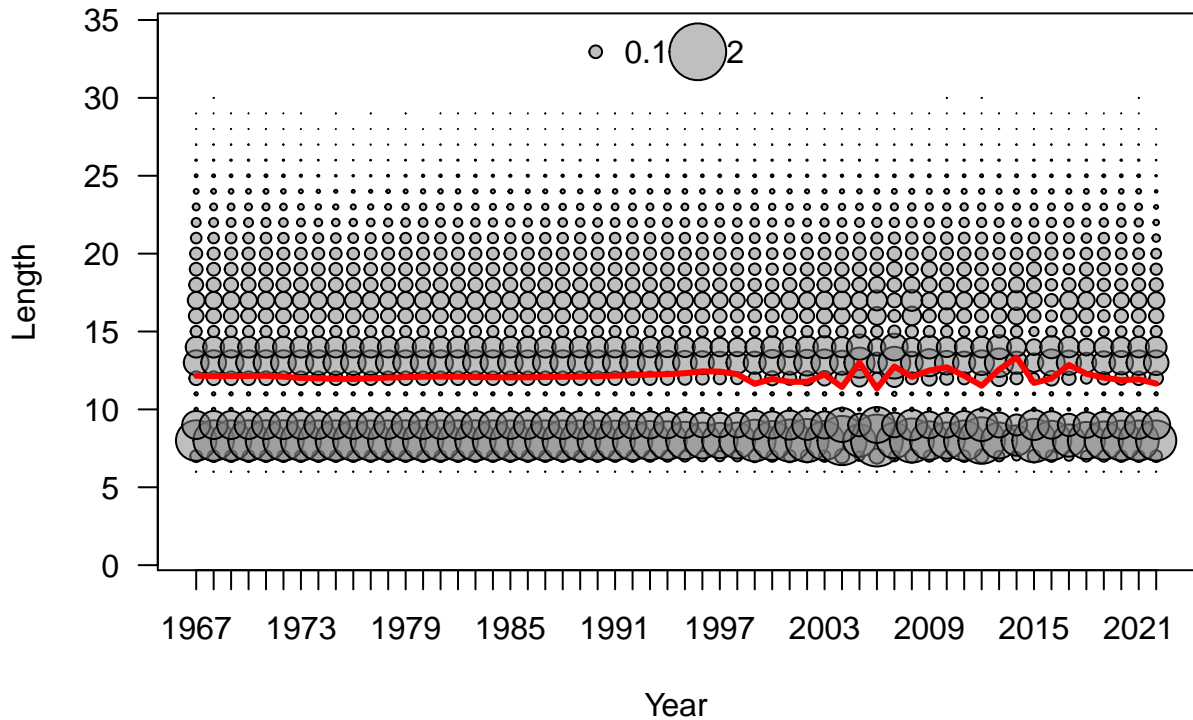


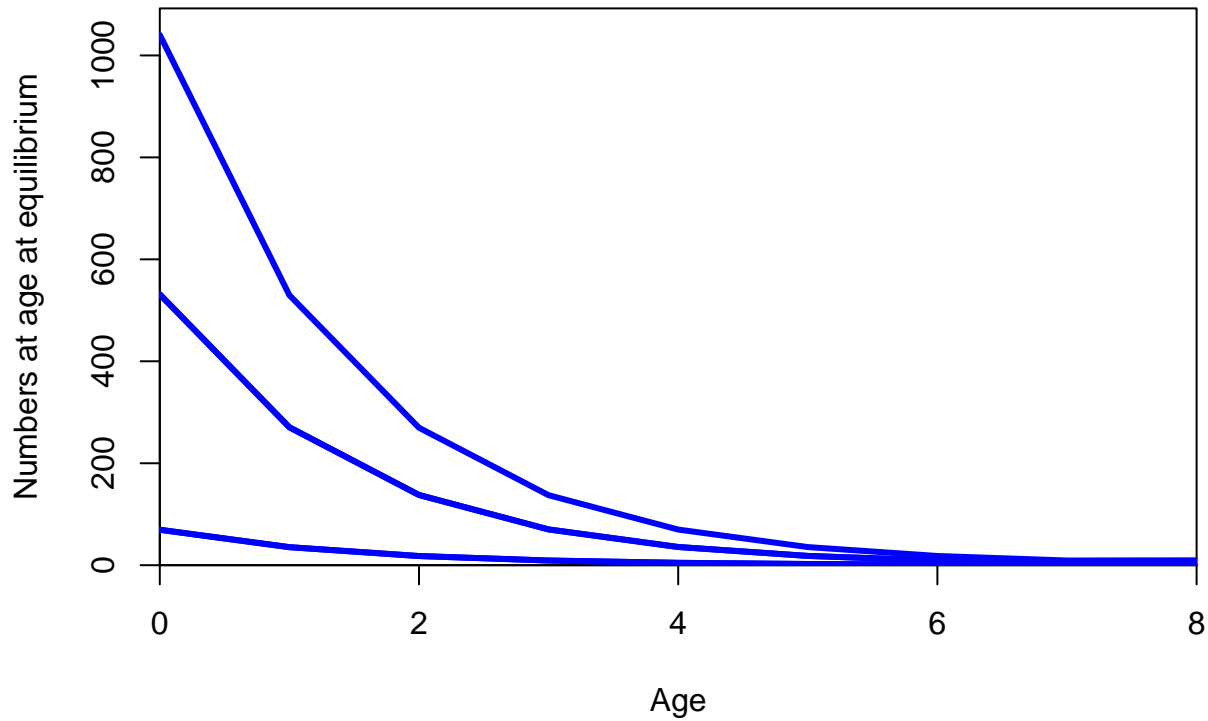


Age

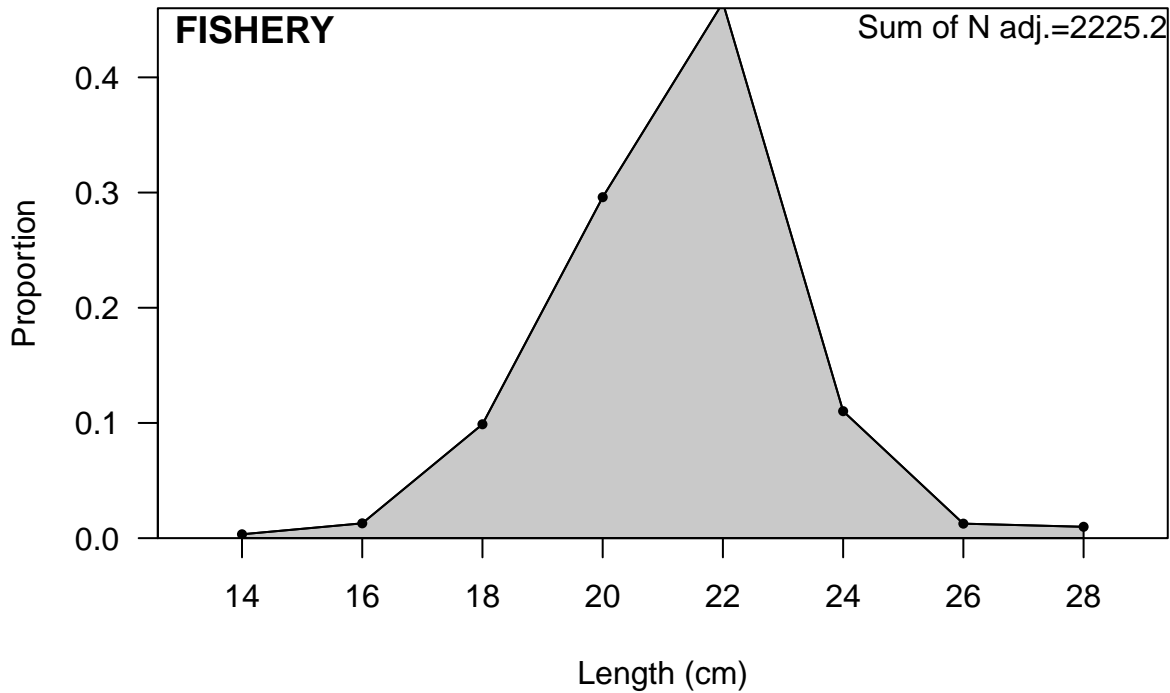






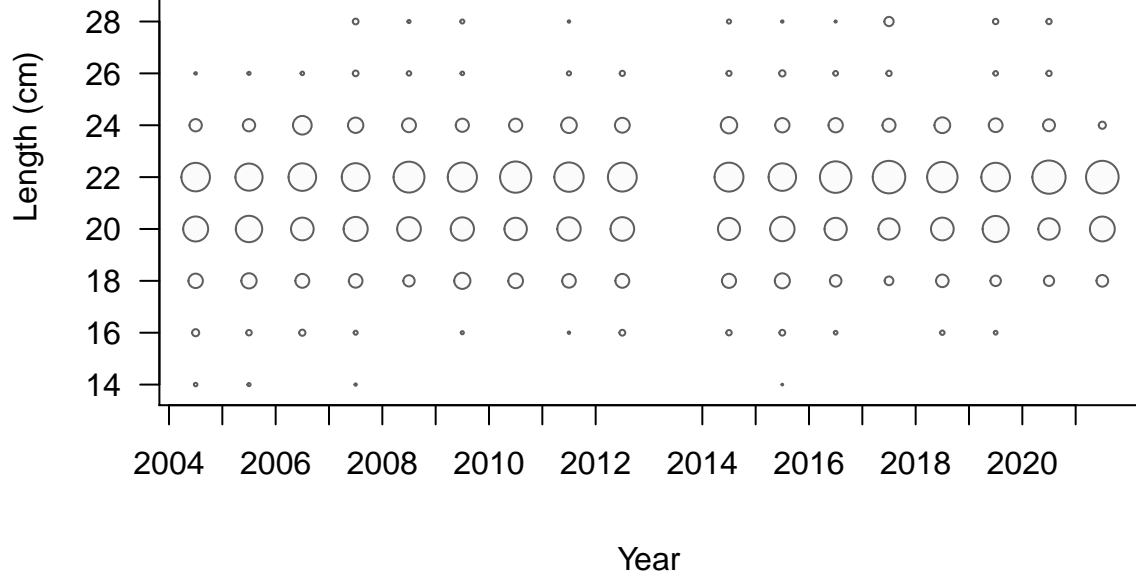




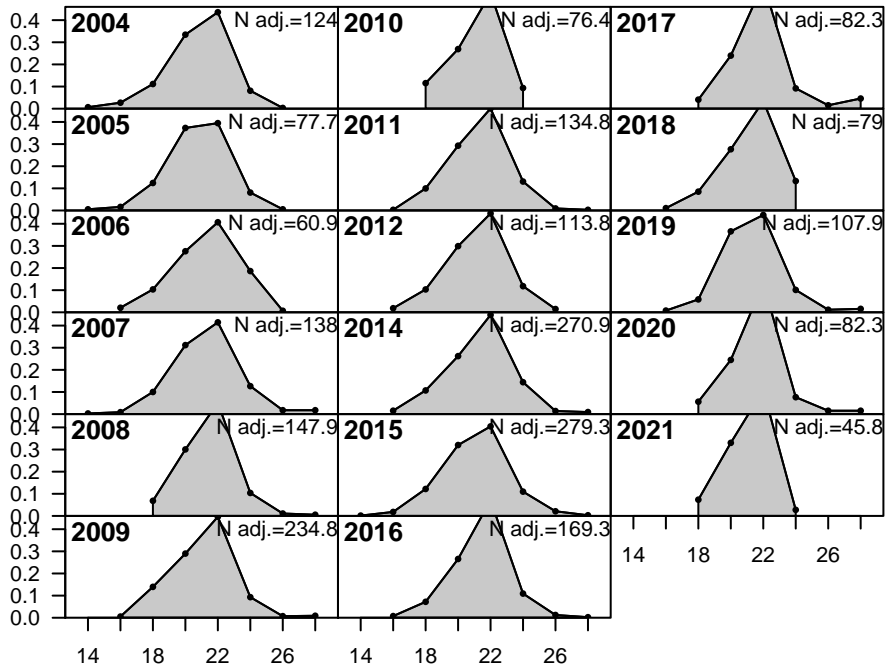


# FISHERY

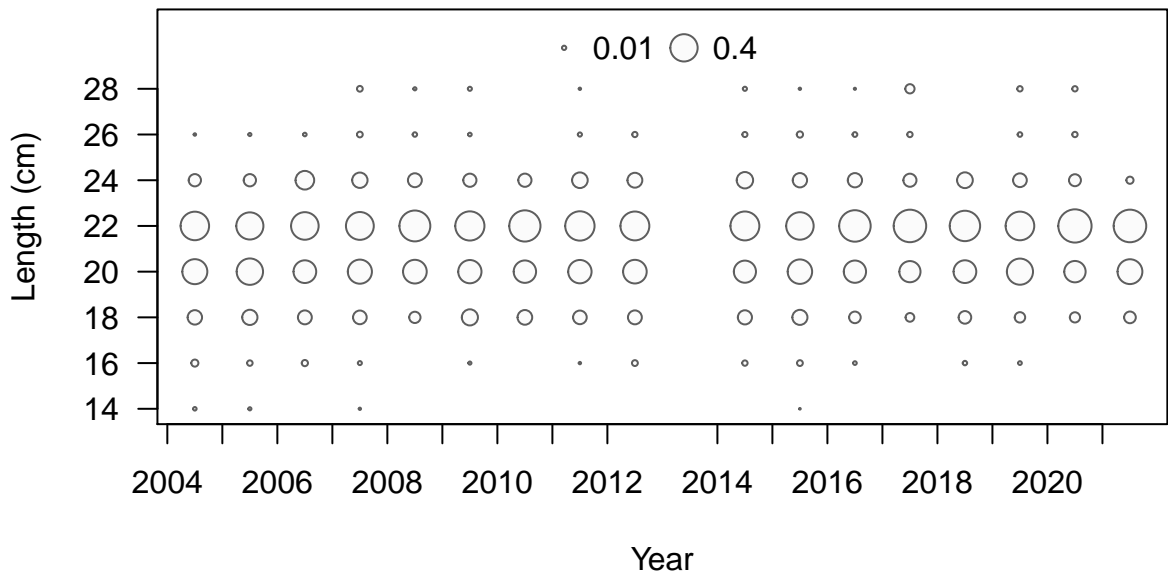
◦ 0.01 ○ 0.4



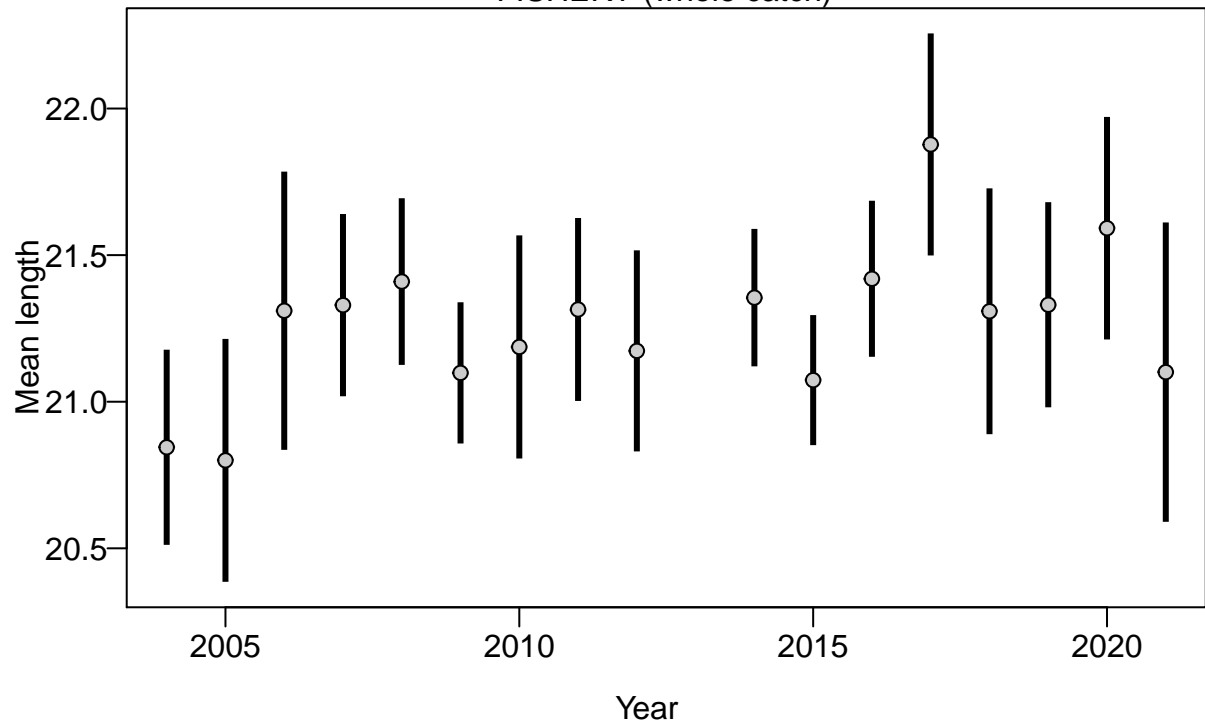
Proportion

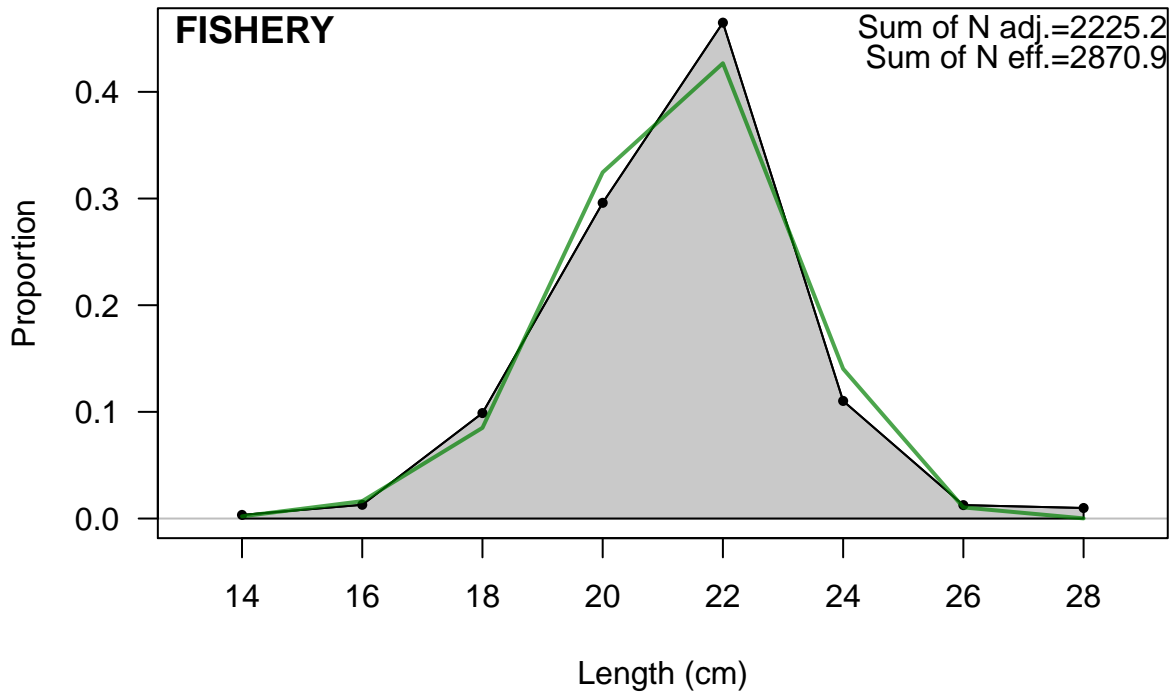


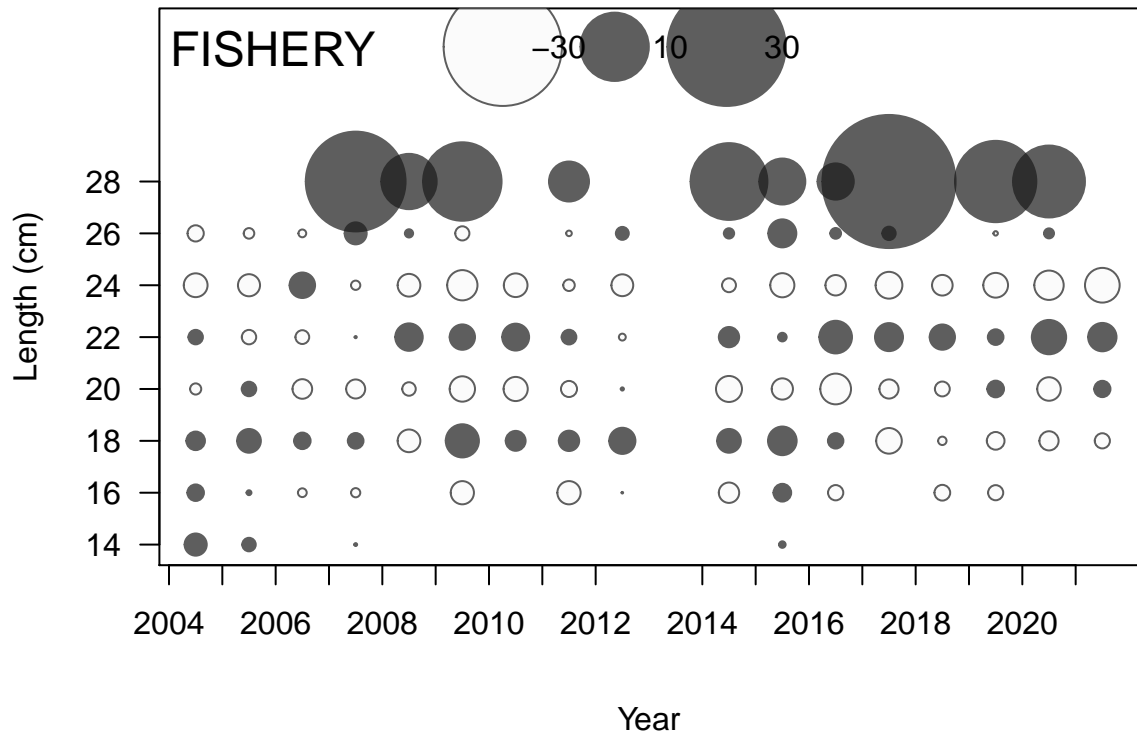
Length (cm)



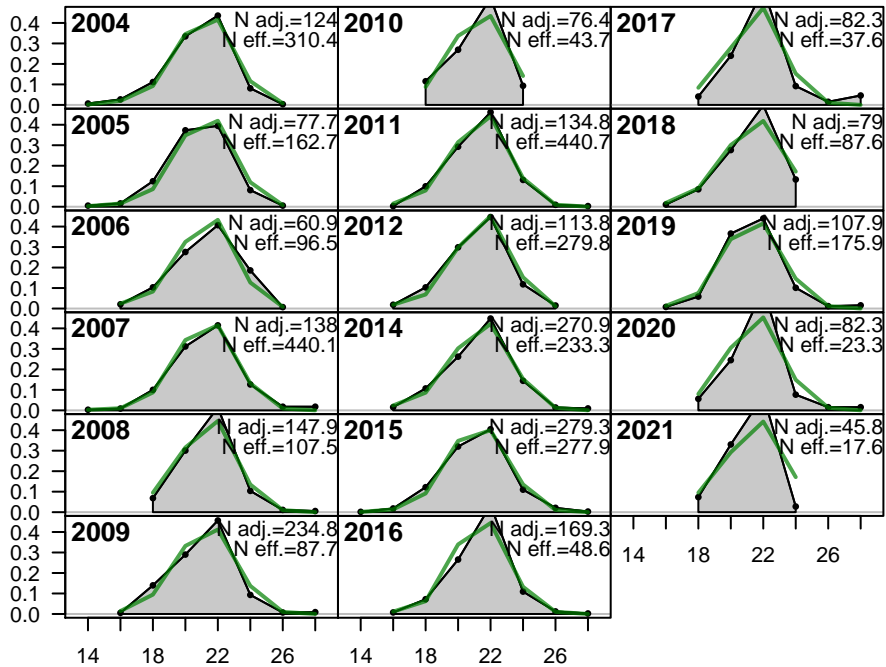
FISHERY (whole catch)





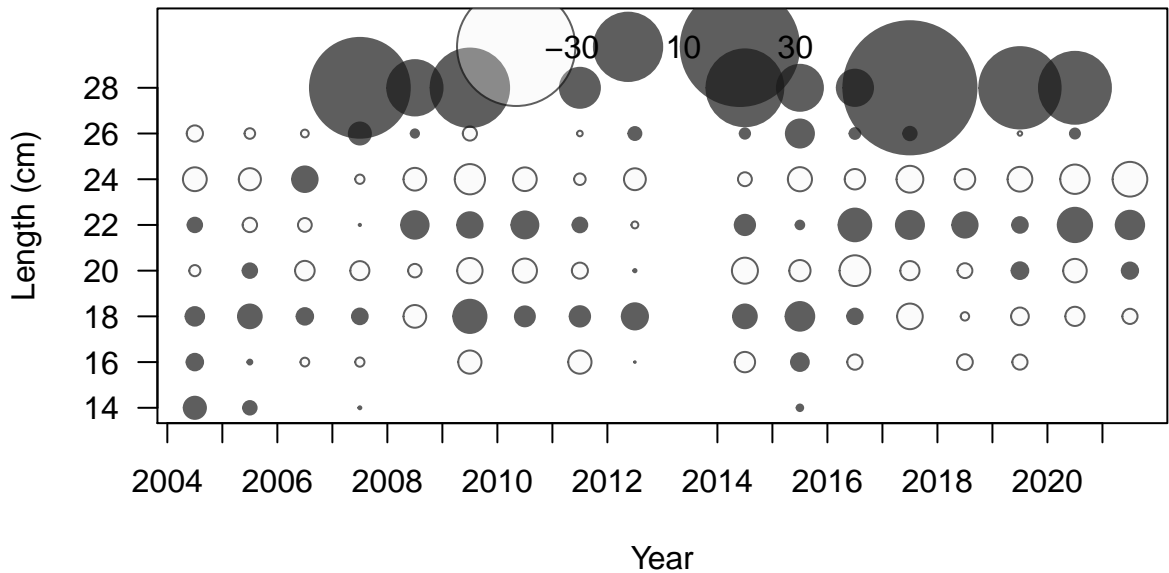


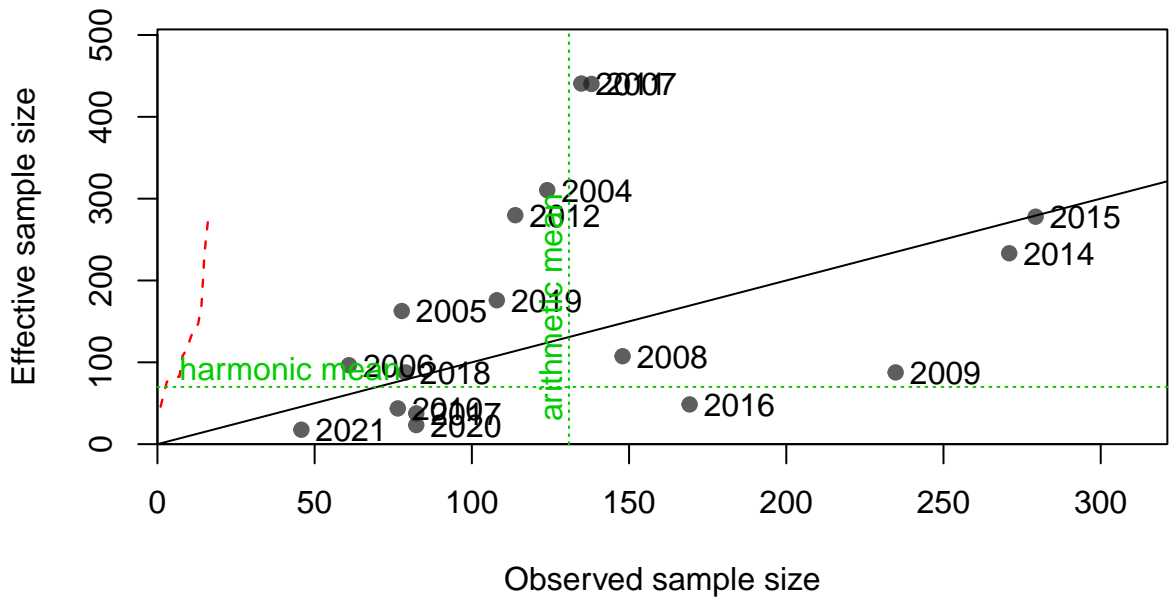
Proportion



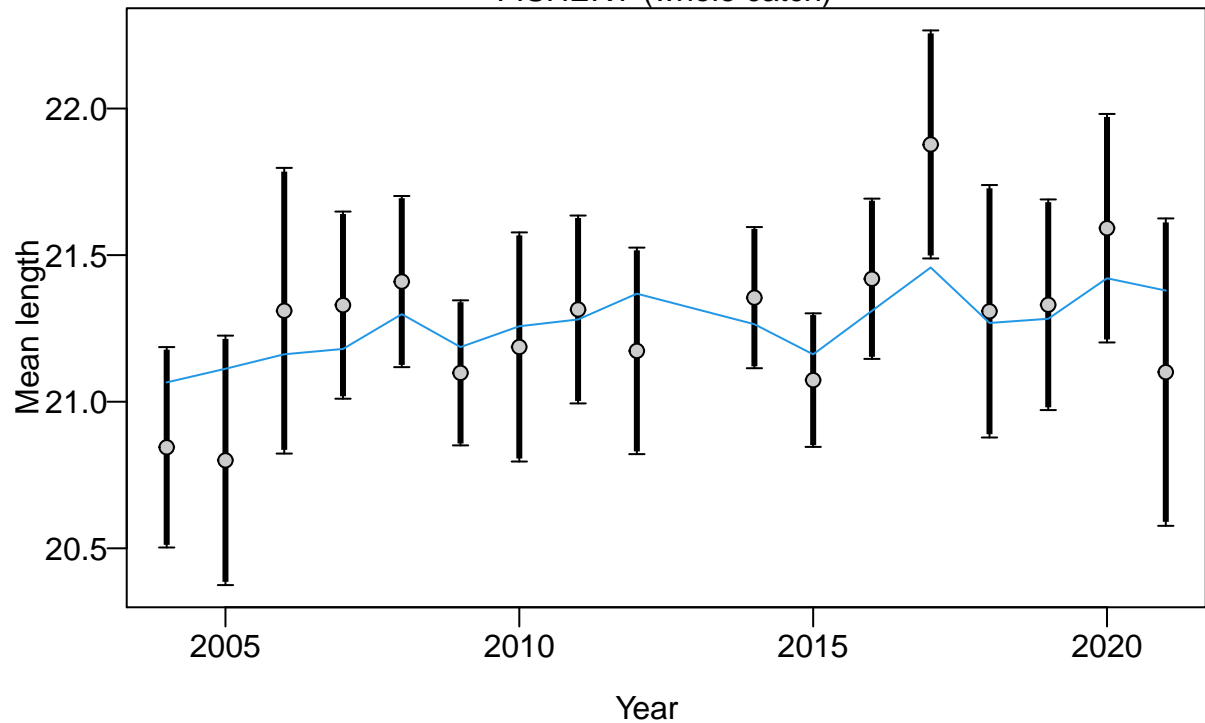
Length (cm)

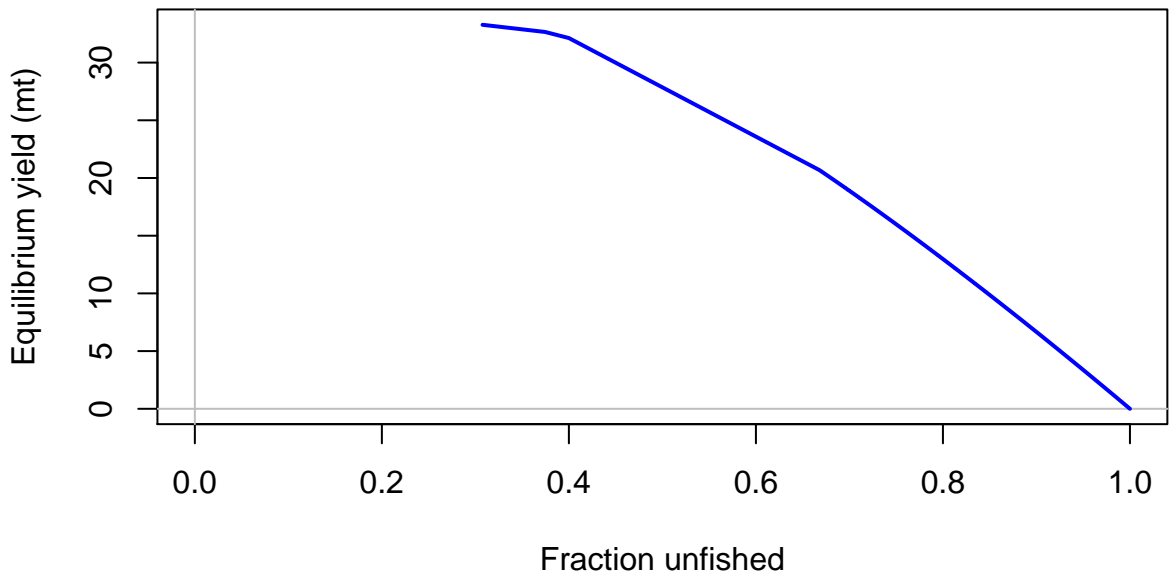


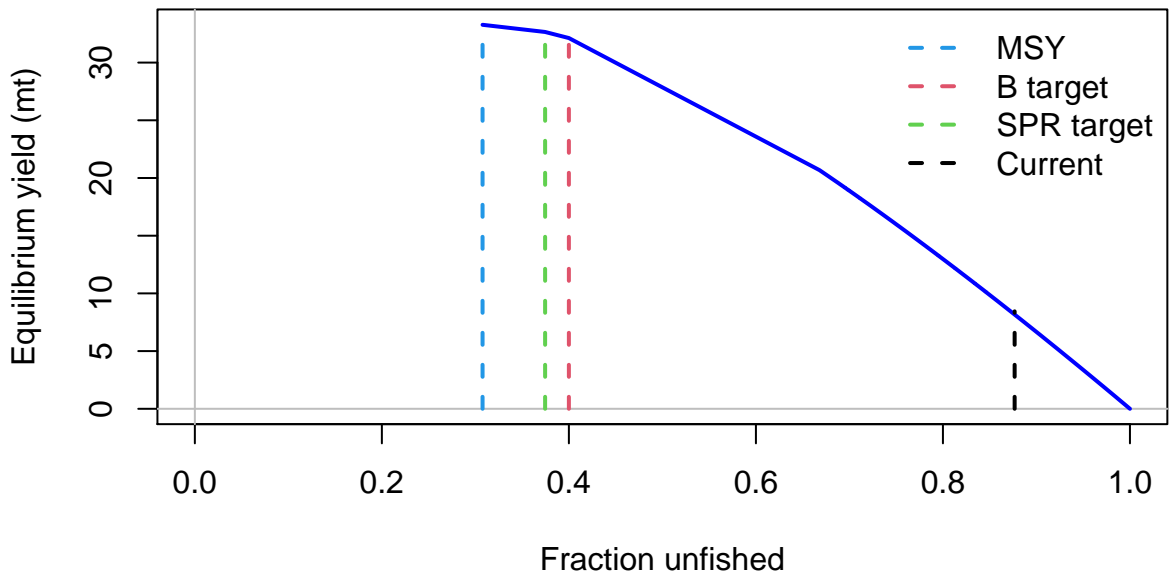


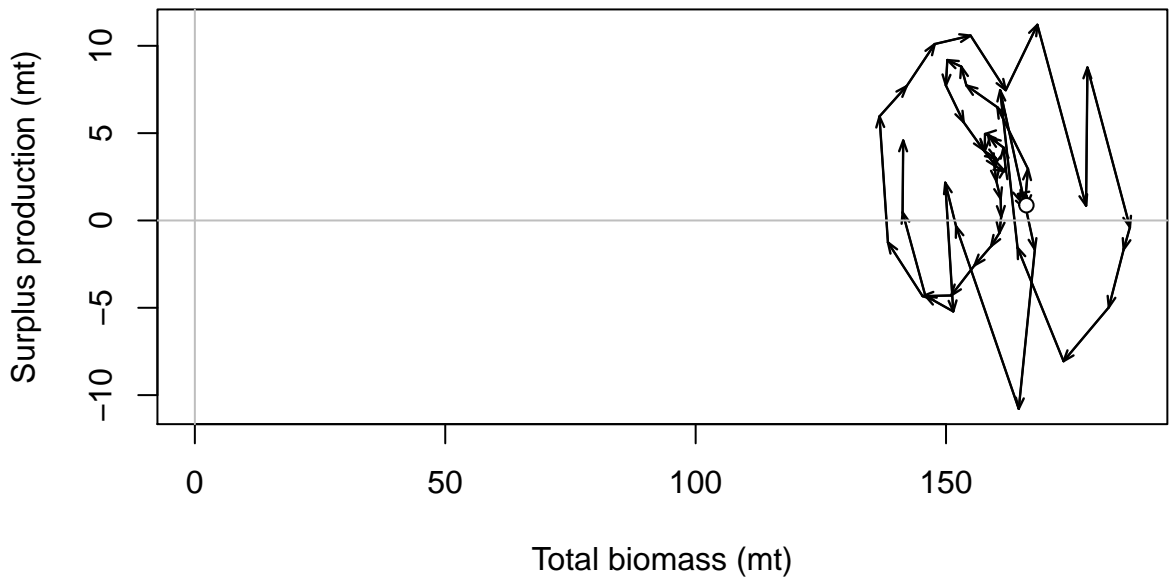


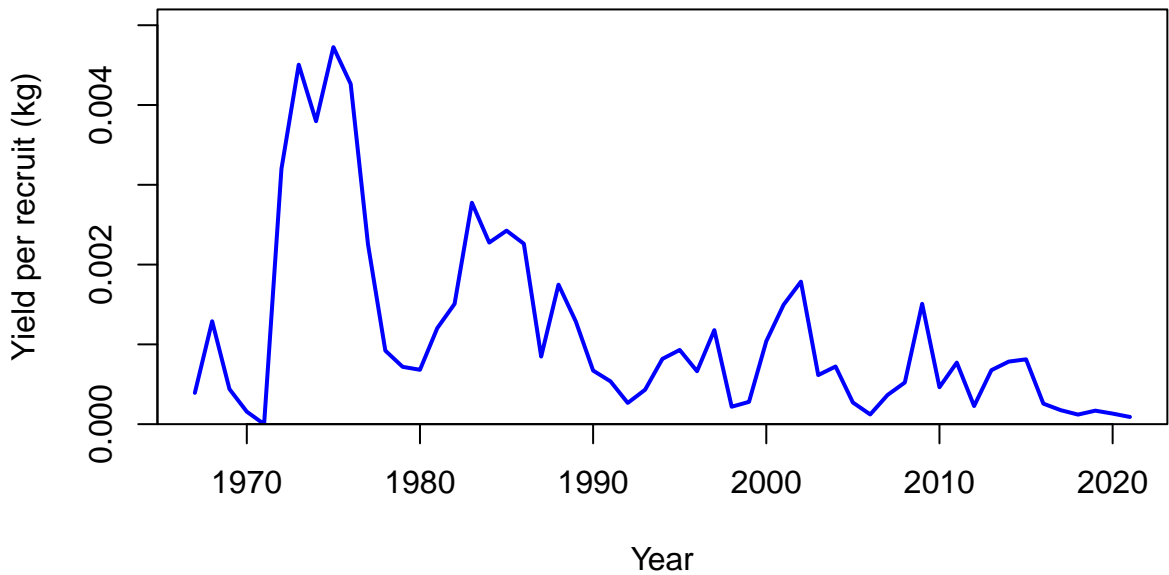
FISHERY (whole catch)

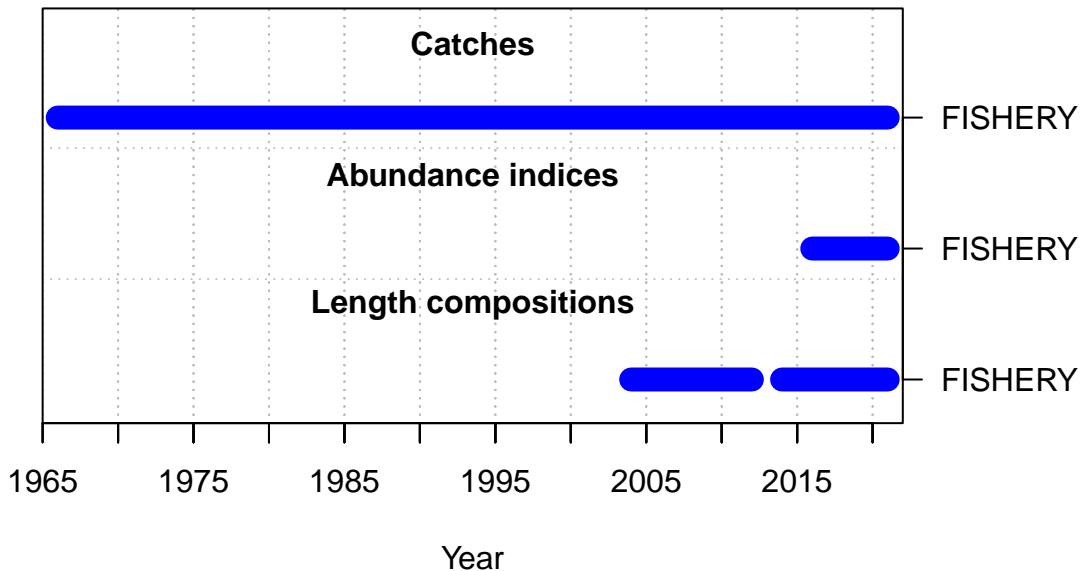




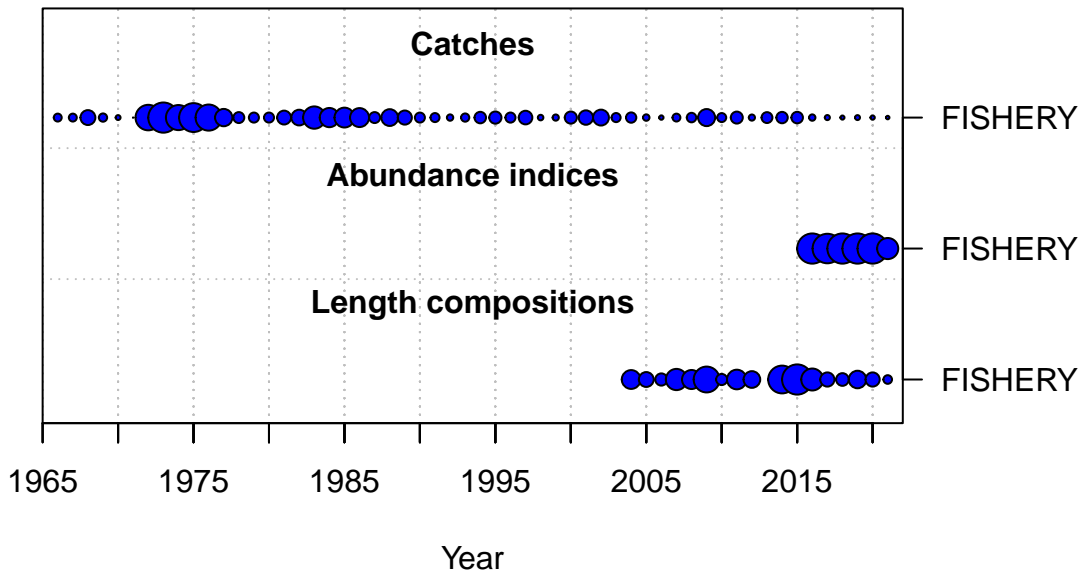






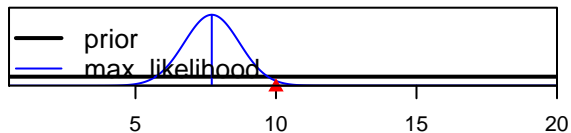




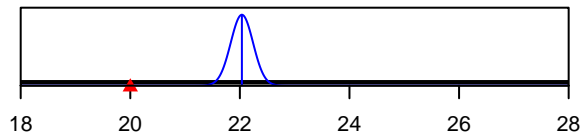


Density

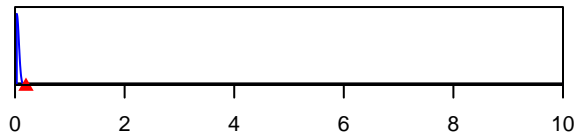
SR\_LN(R0)



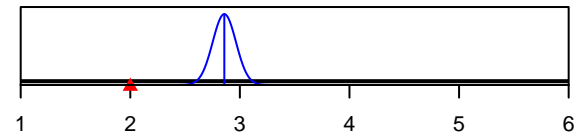
Size\_inflection\_FISHERY(1)



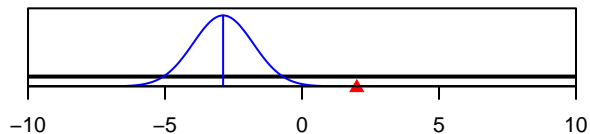
InitF\_seas\_1\_flt\_1FISHERY



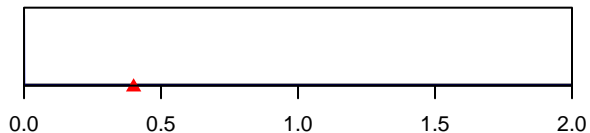
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LnQ\_base\_FISHERY(1)



Q\_extraSD\_FISHERY(1)



Parameter value