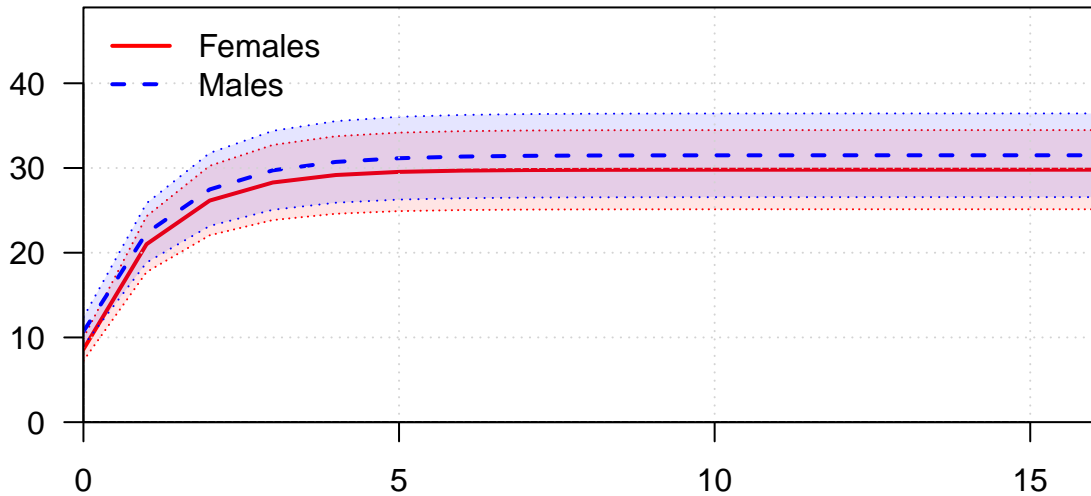
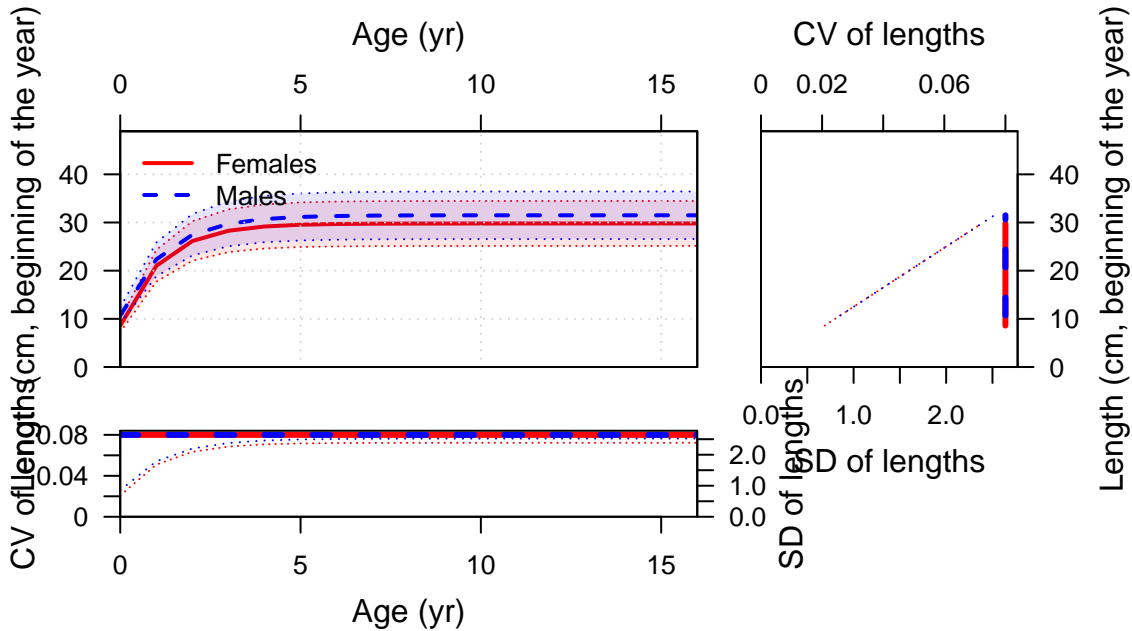


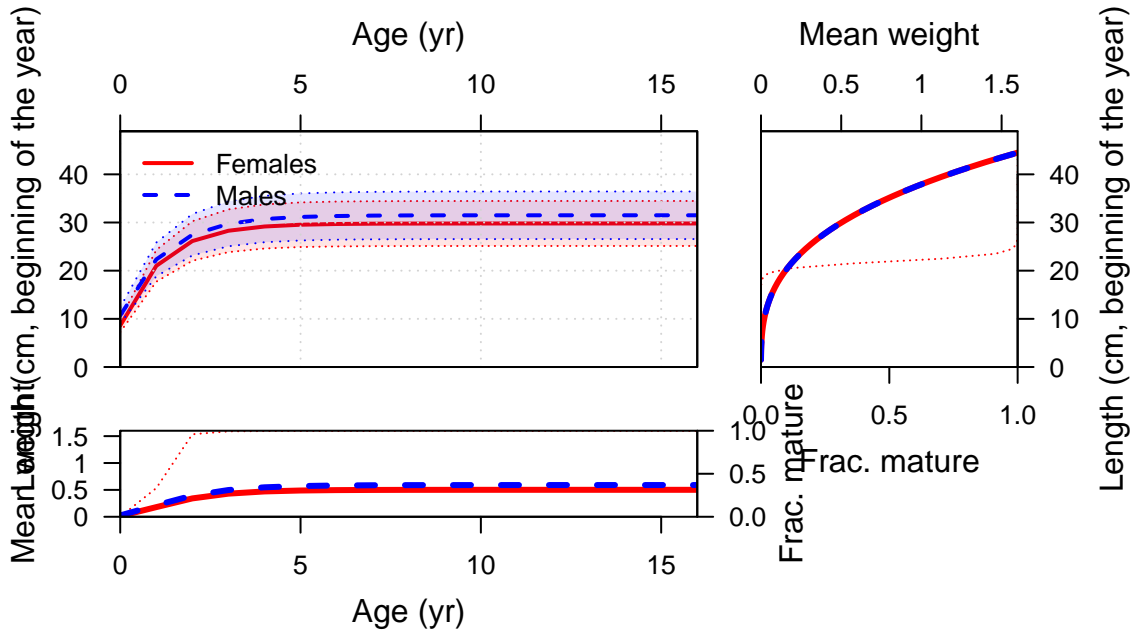
Plots created using the 'r4ss' package in R  
Stock Synthesis version: 3.30.19.0  
StartTime: Thu Jul 28 13:52:41 2022  
Data\_File: data.ss  
Control\_File: control.ss

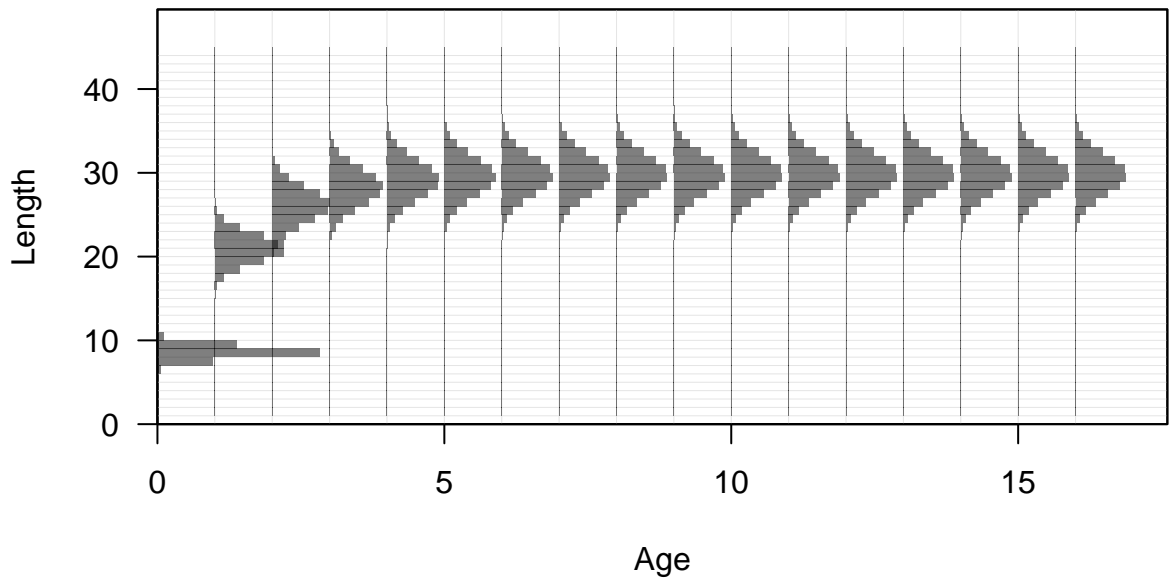
Length (cm, beginning of the year)

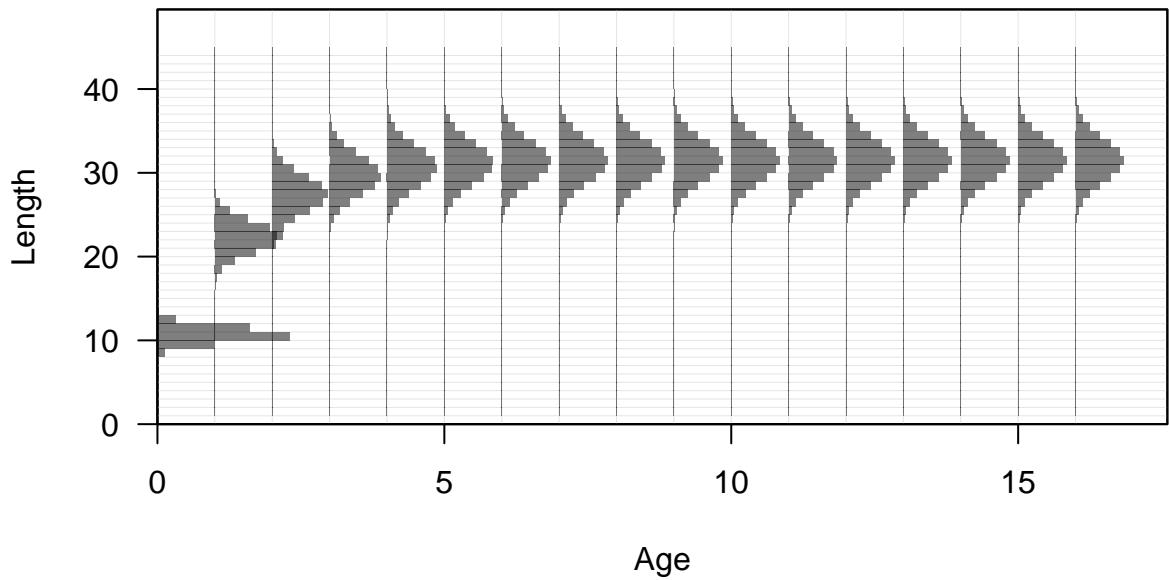


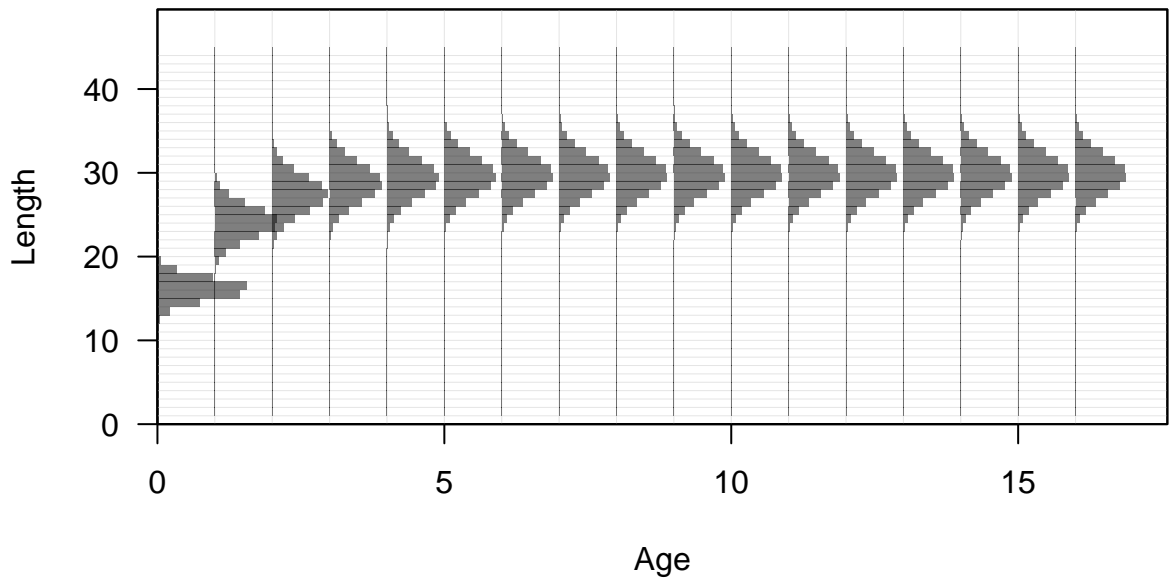
Age (yr)

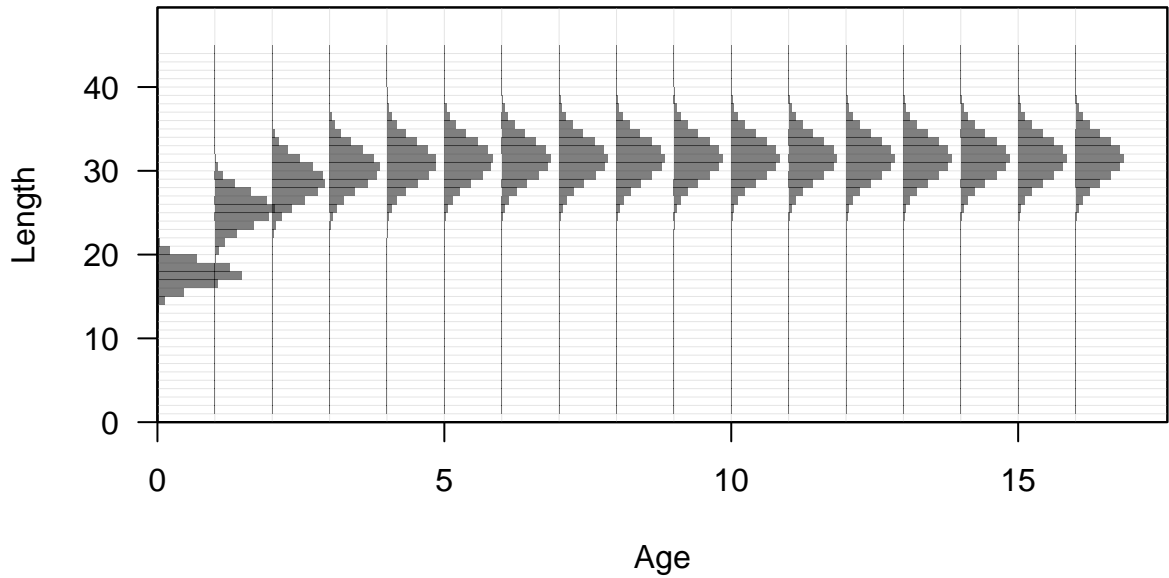




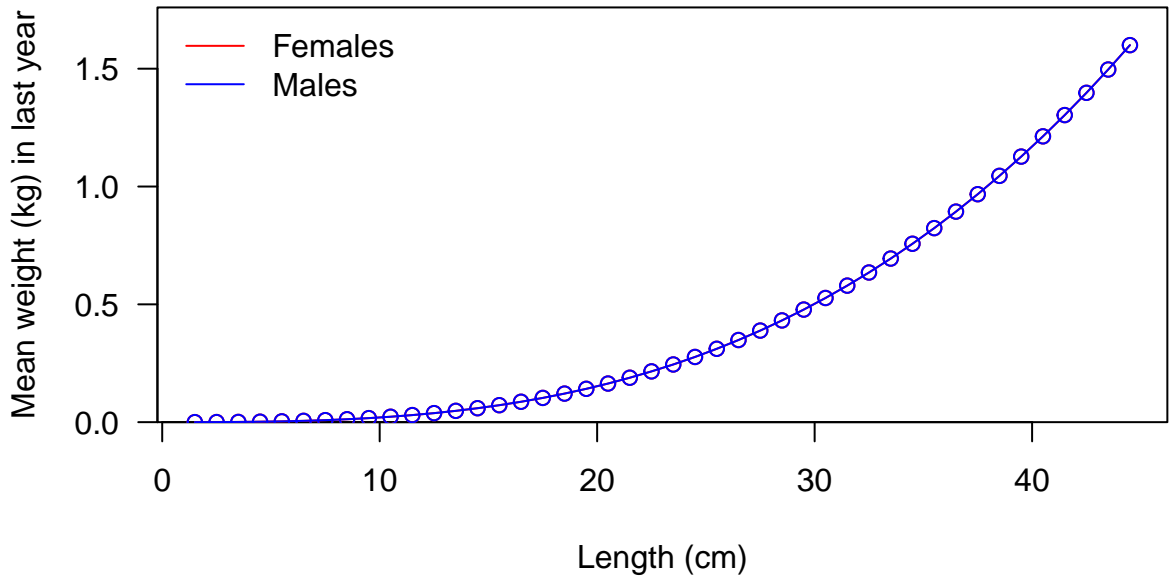


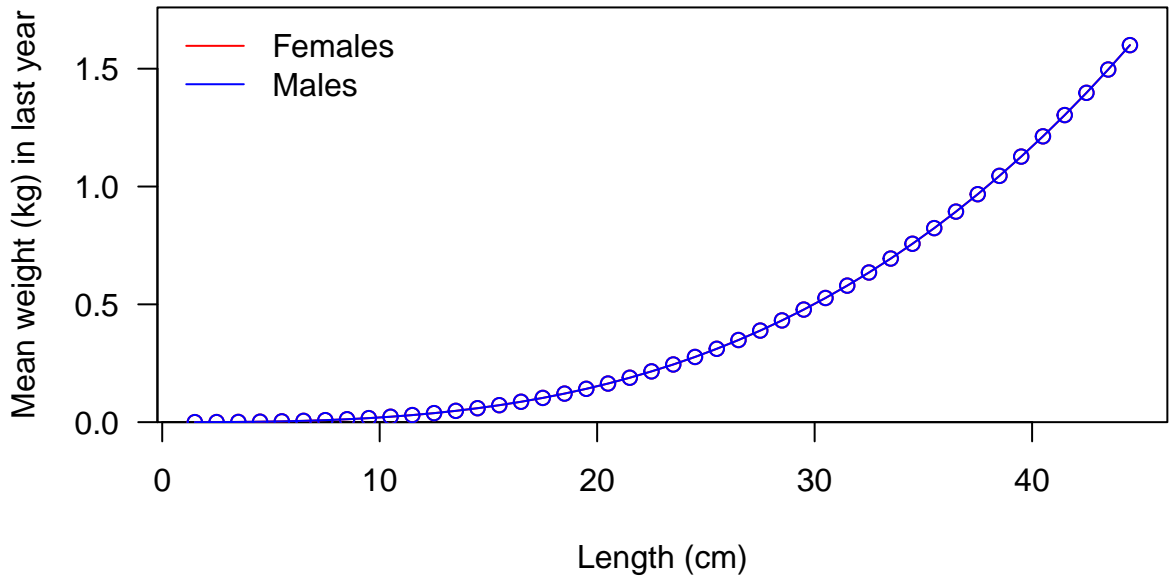


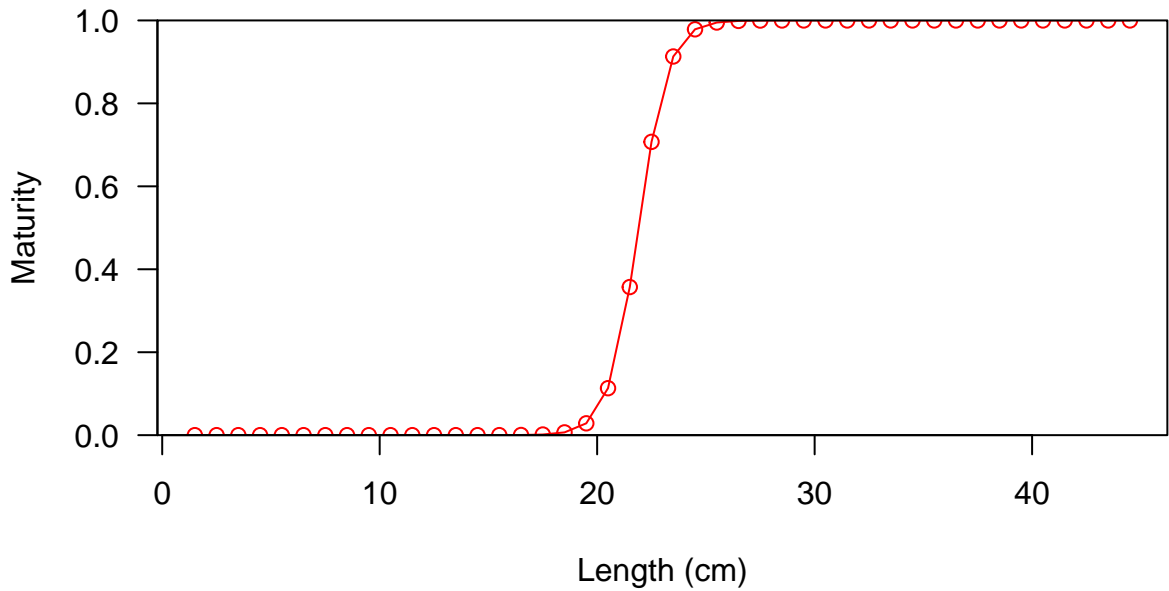


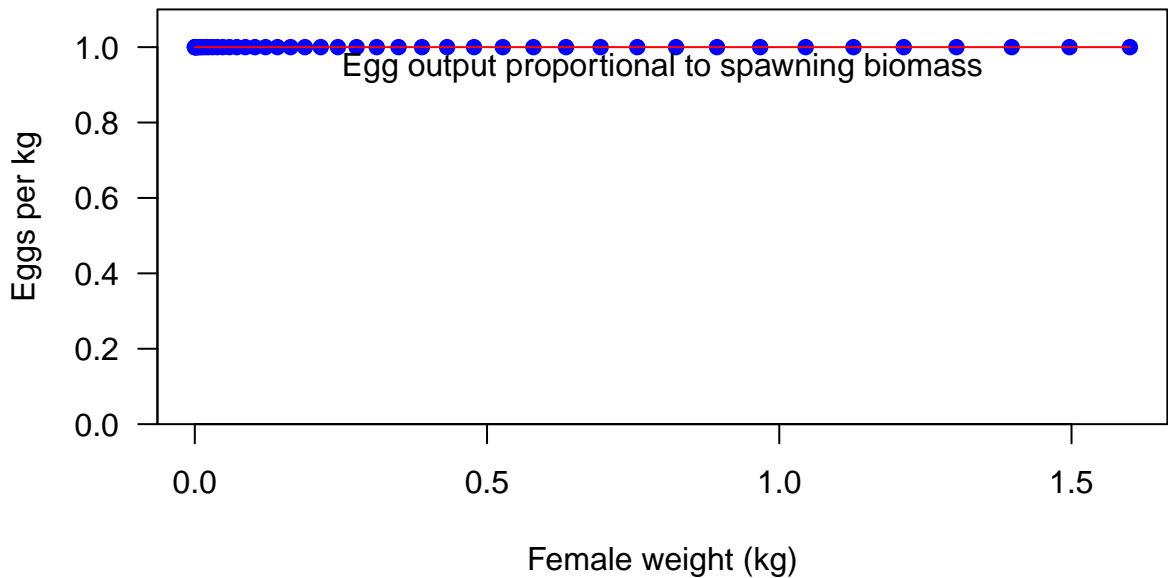


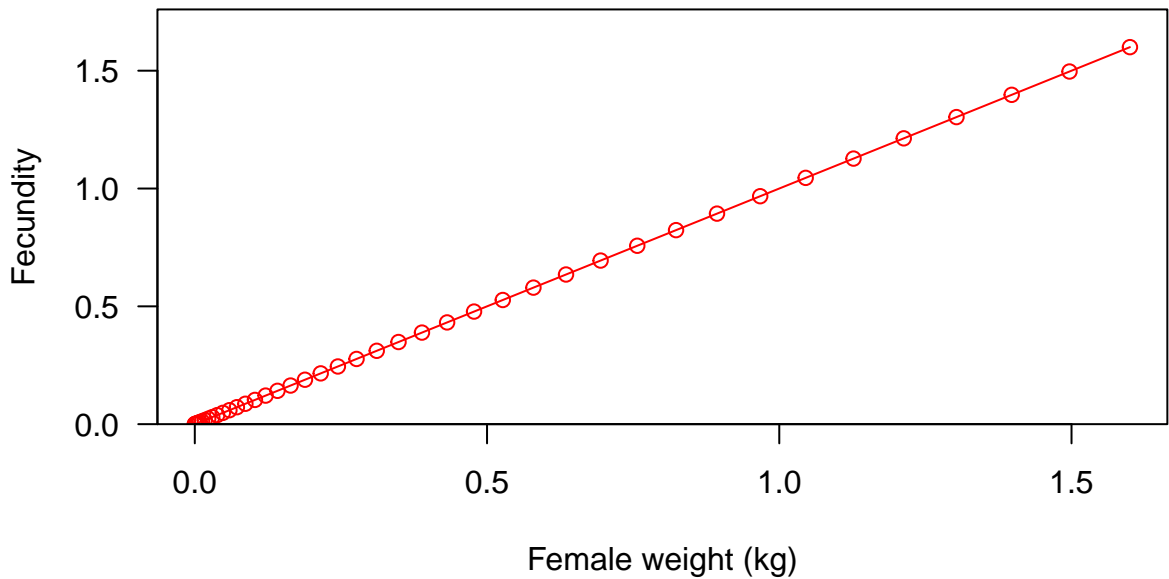


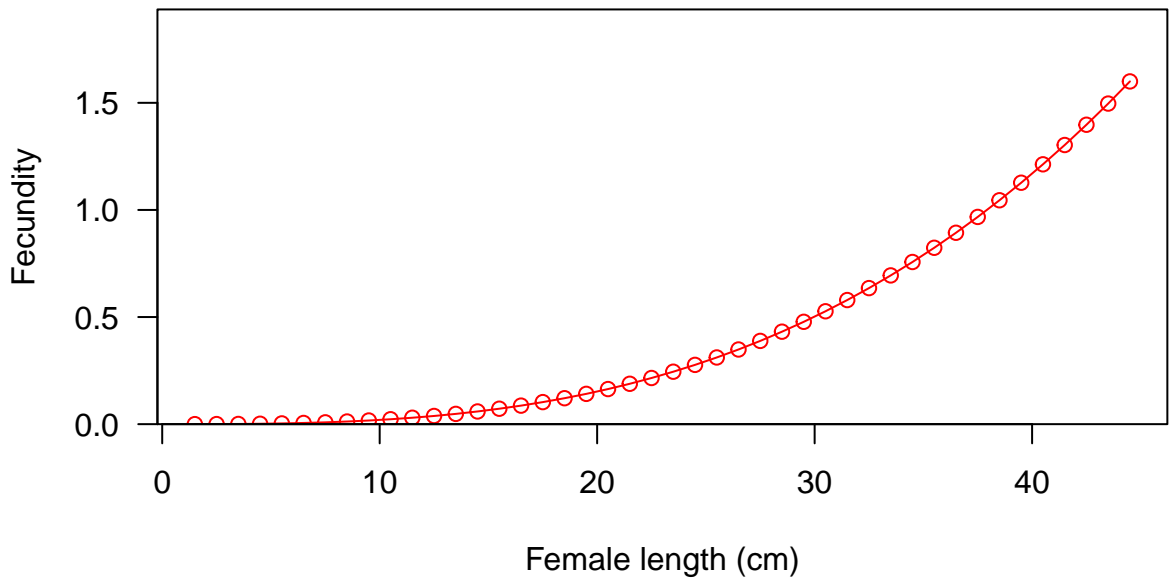


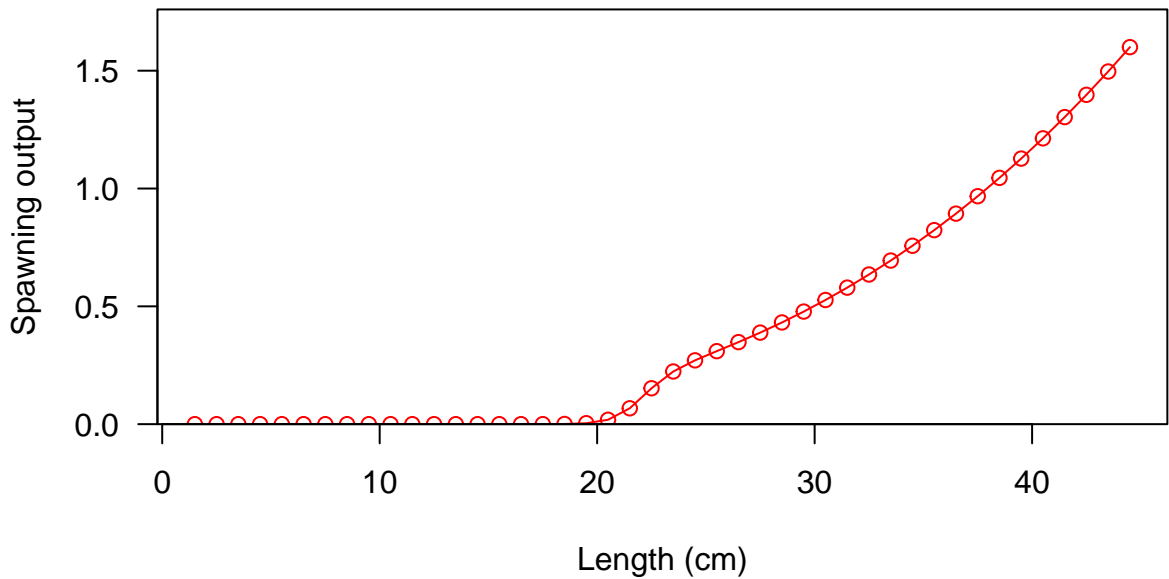


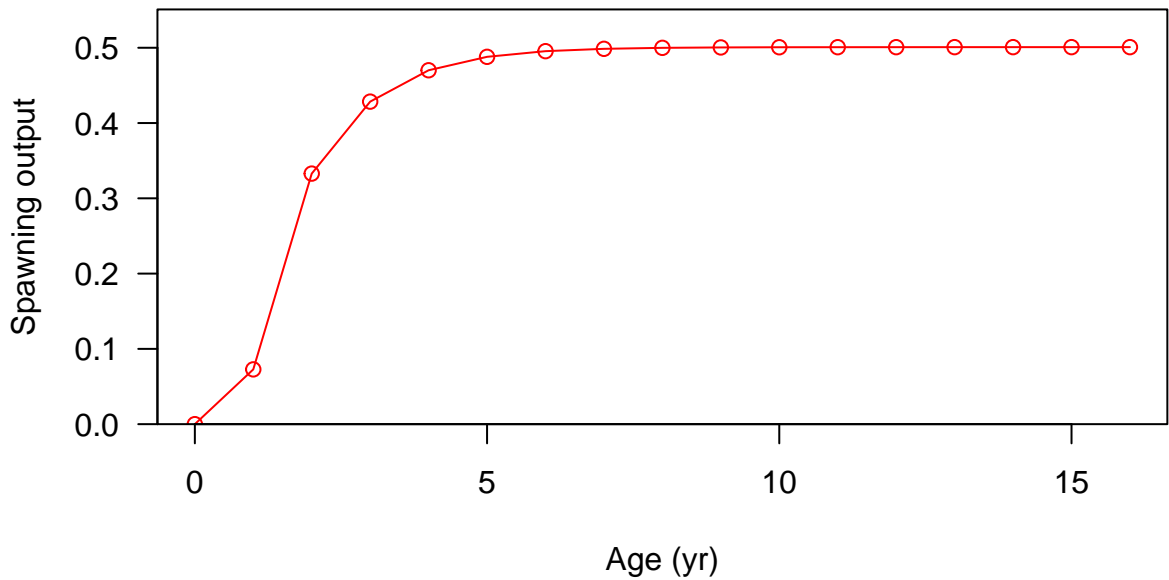




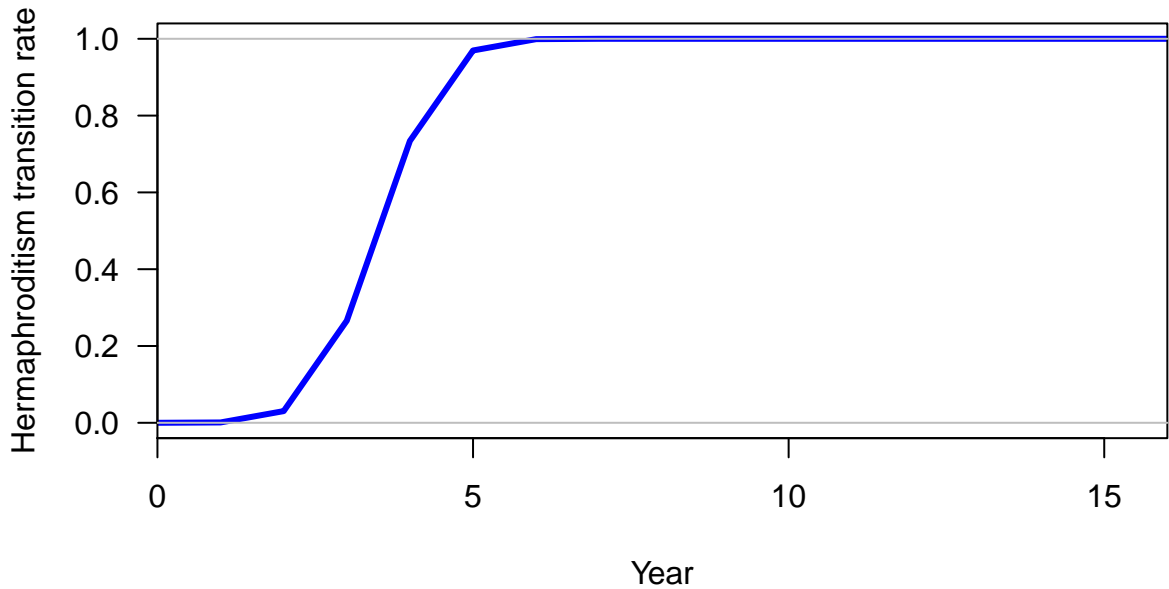




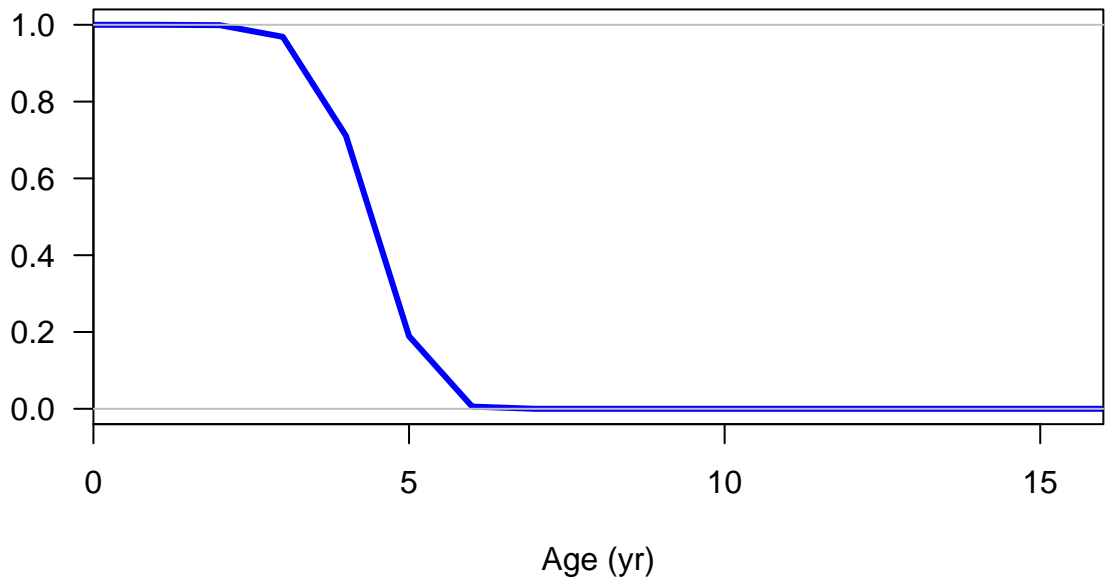




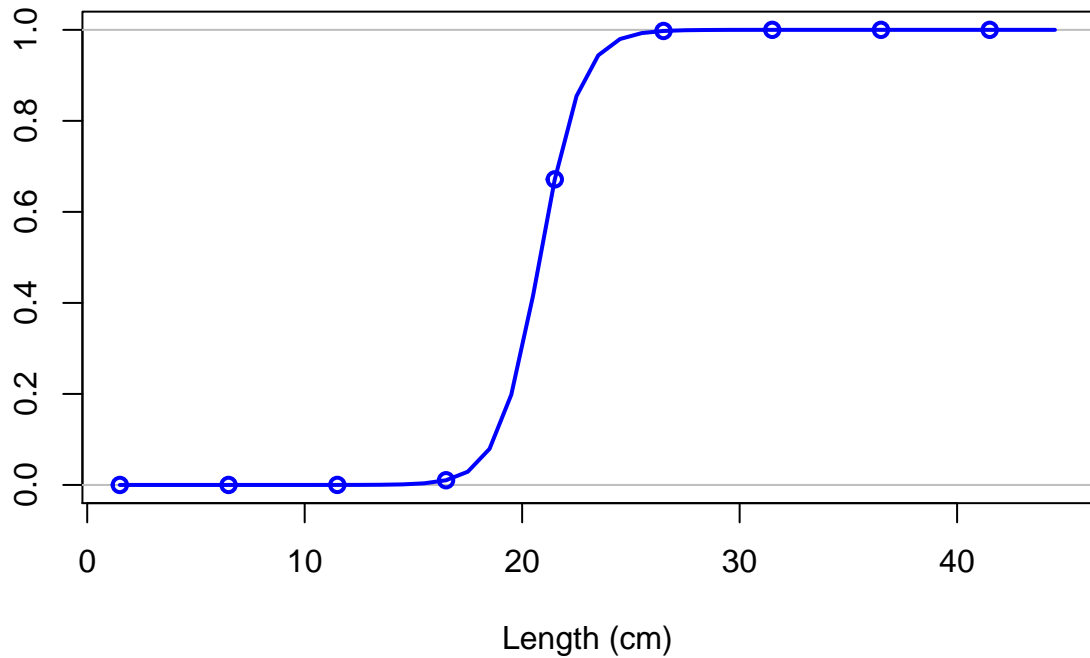




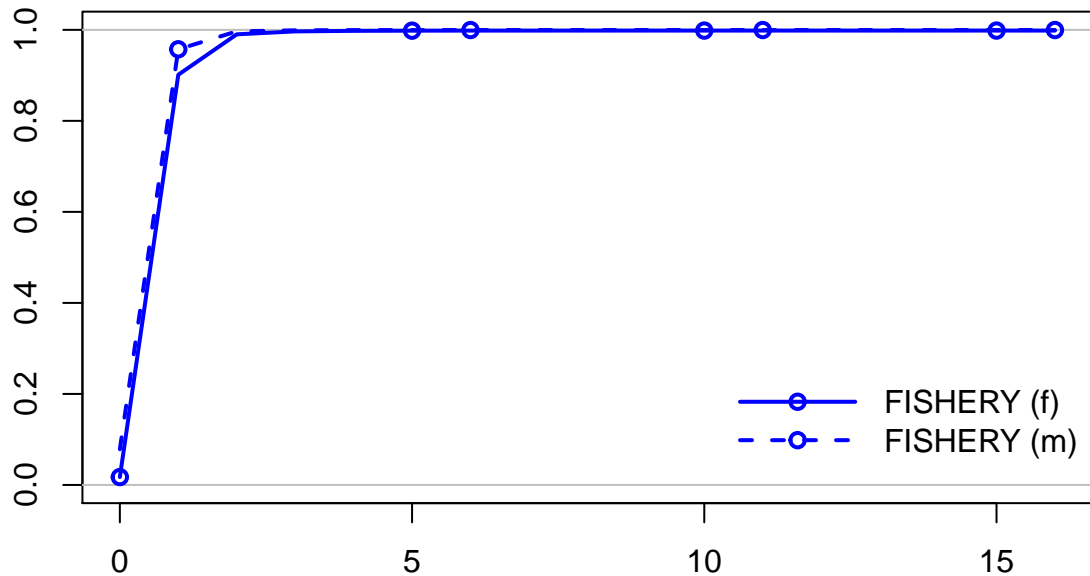
Fraction females by age at equilibrium



Selectivity

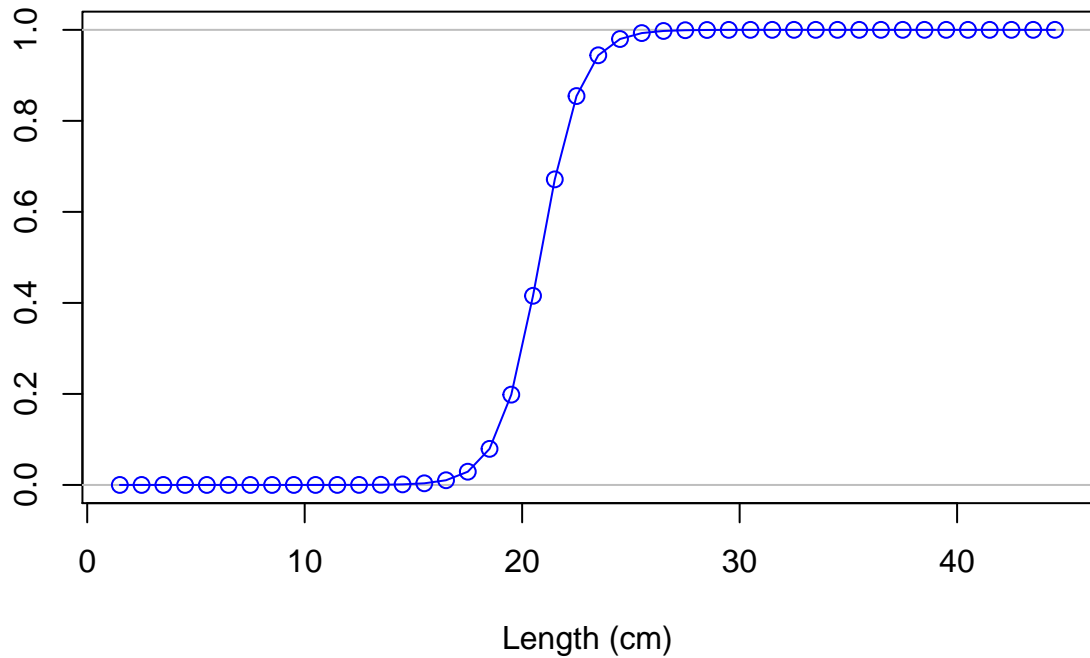


Selectivity

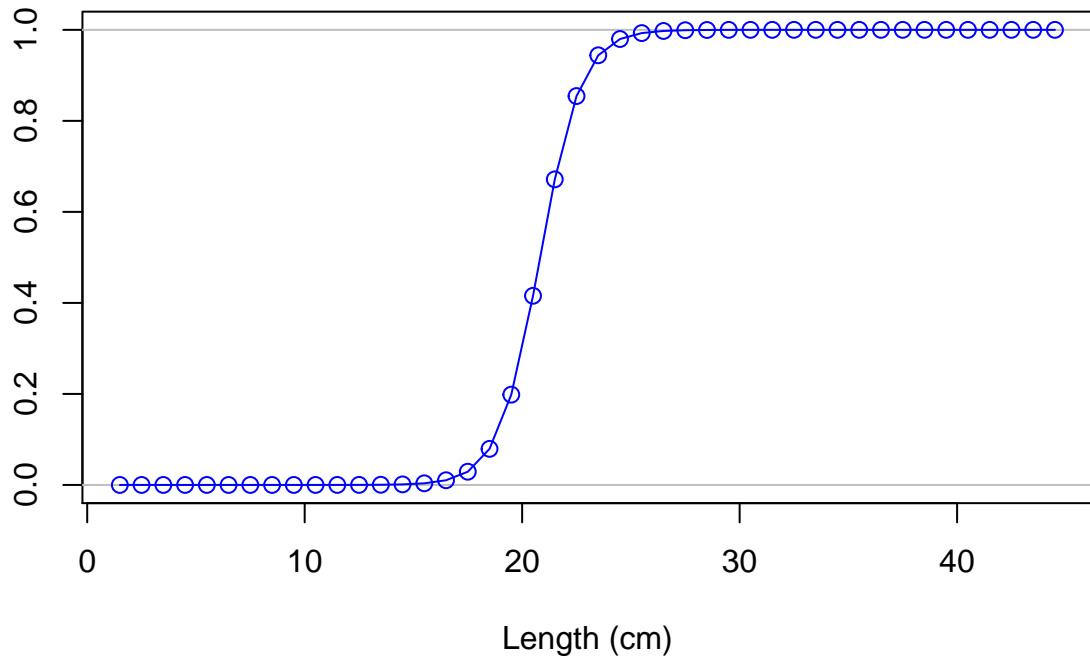


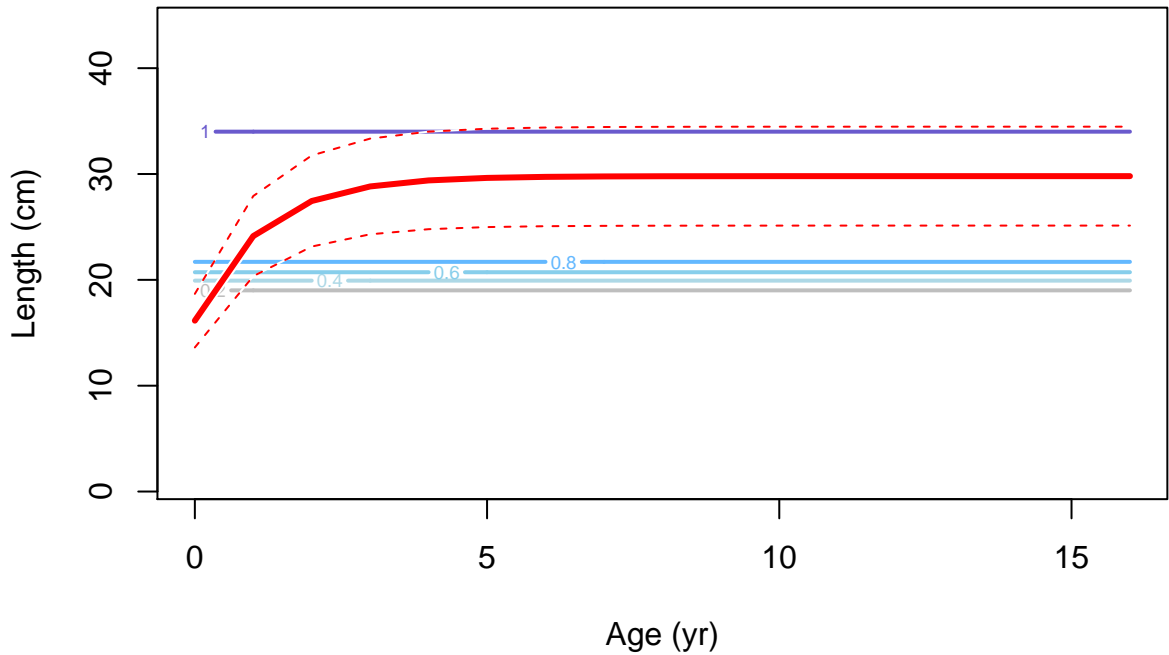
Age (yr)

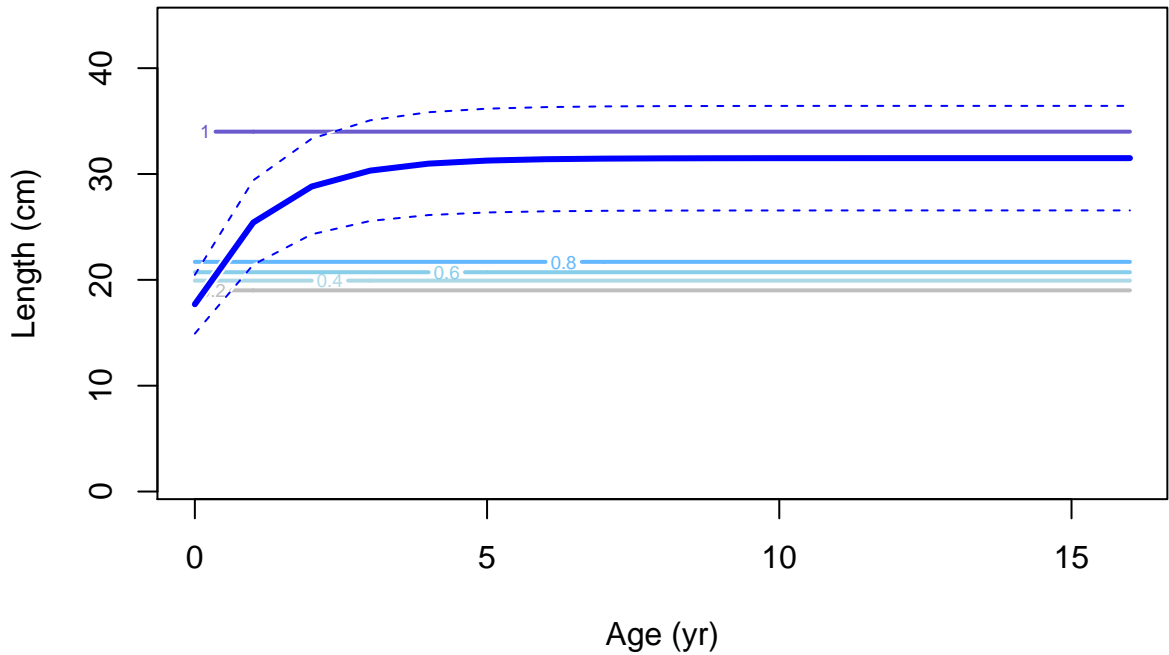
Selectivity



Selectivity

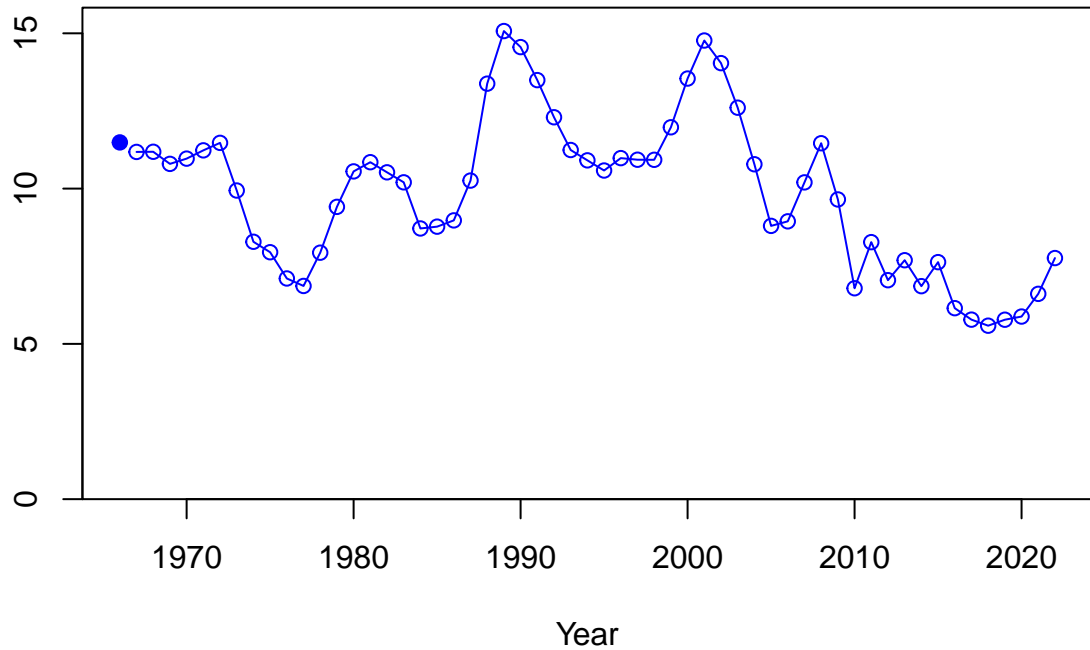




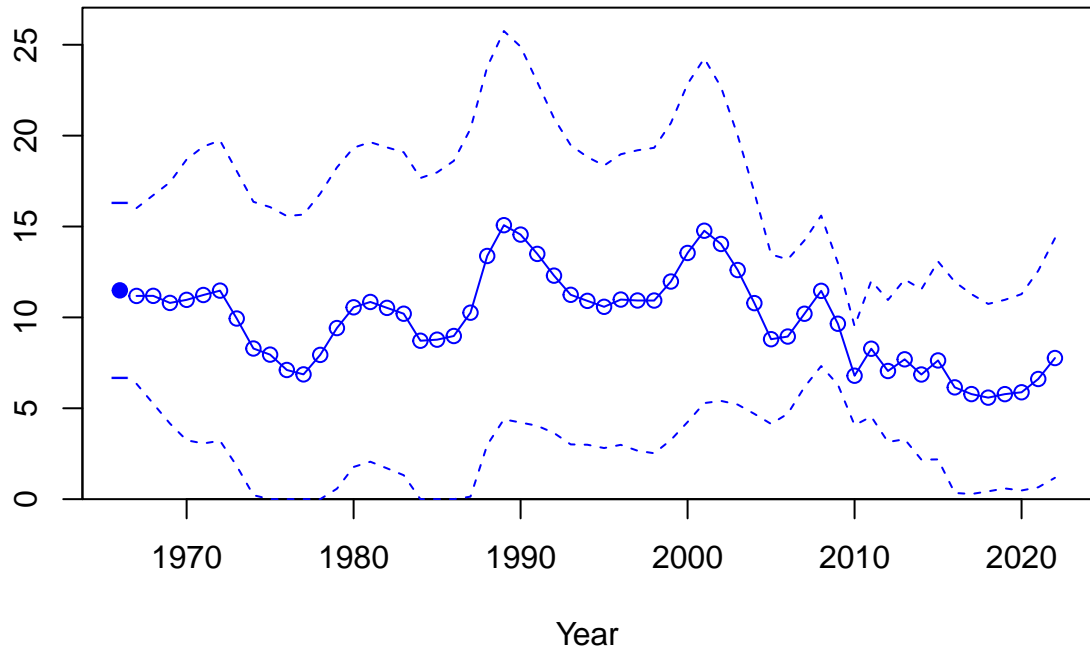




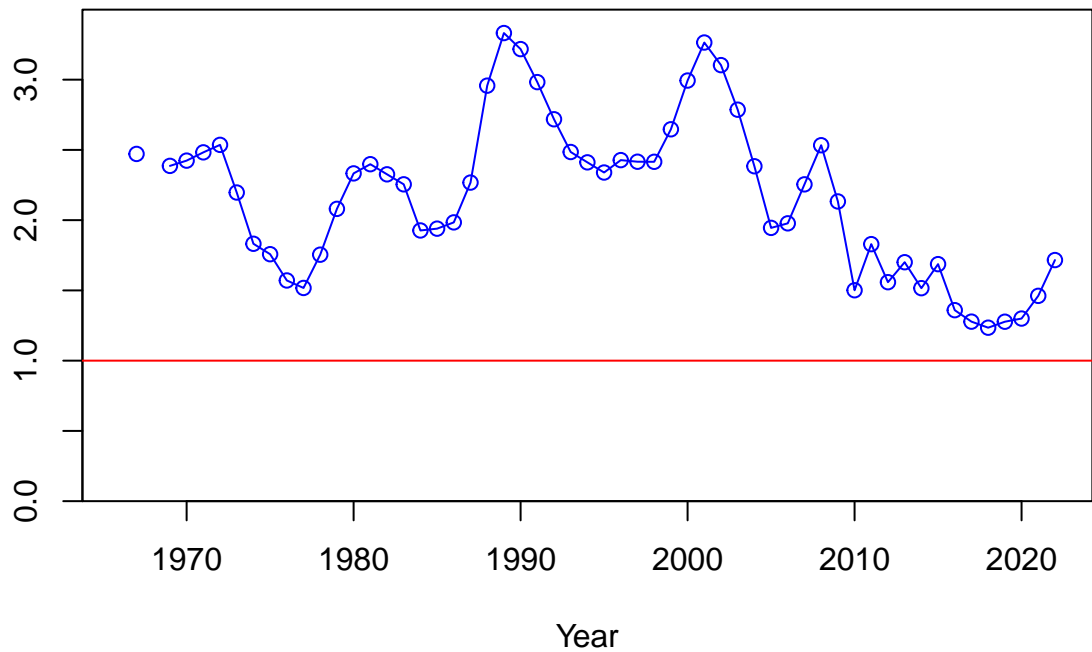
Spawning biomass (mt)



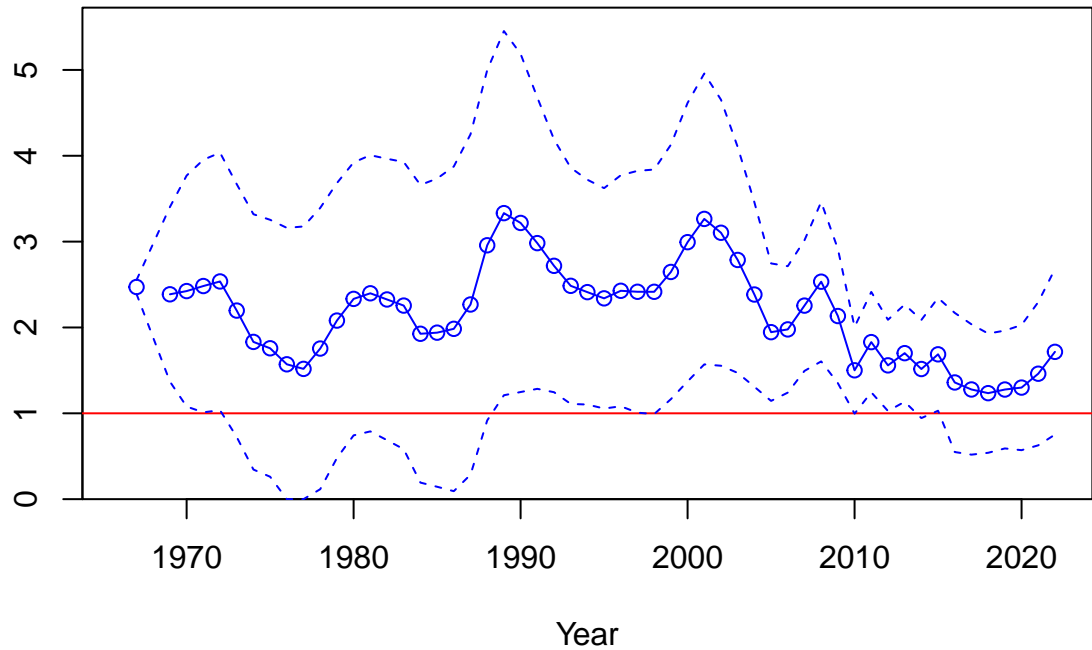
Spawning biomass (mt)

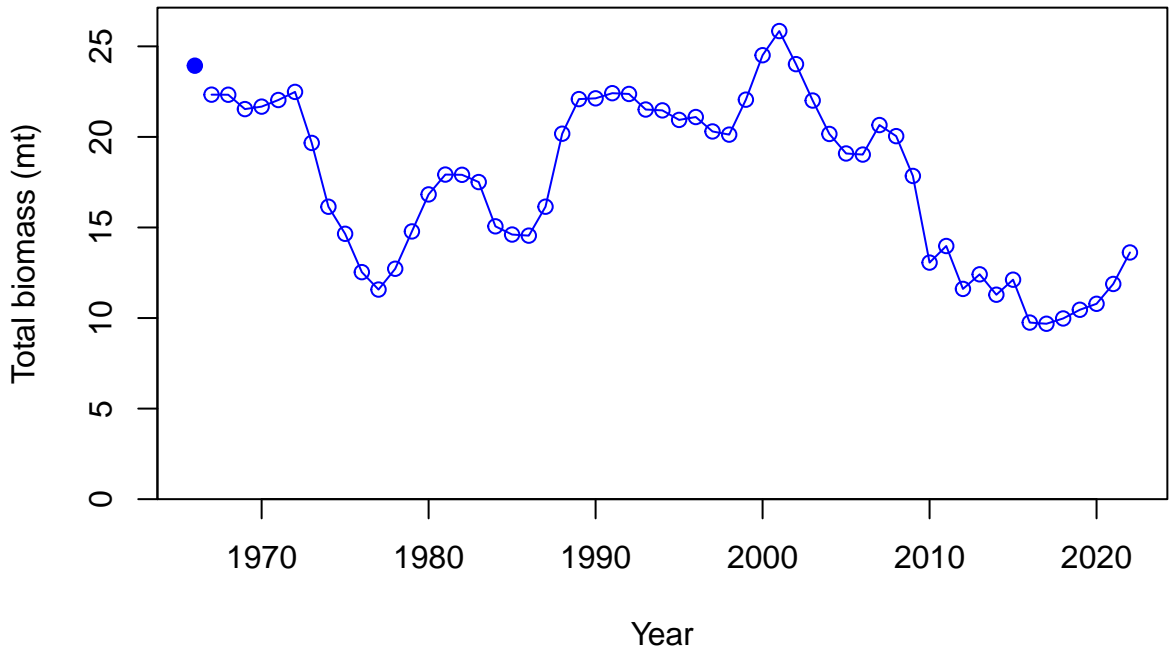


Relative spawning biomass:  $B/B_{MSY}$

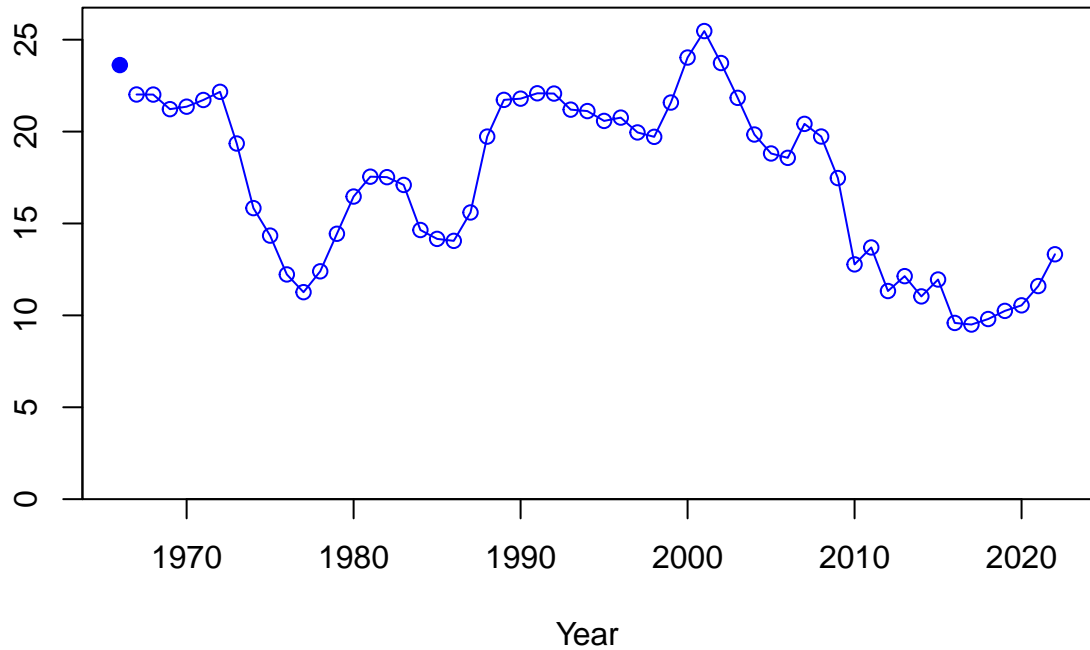


Relative spawning biomass:  $B/B_{MSY}$

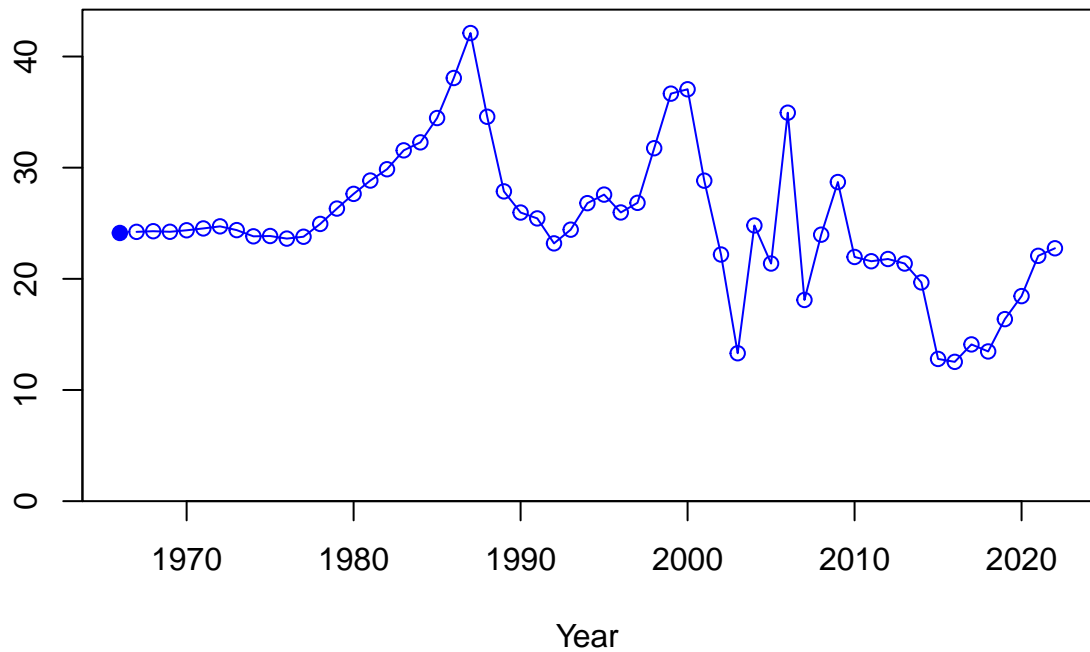




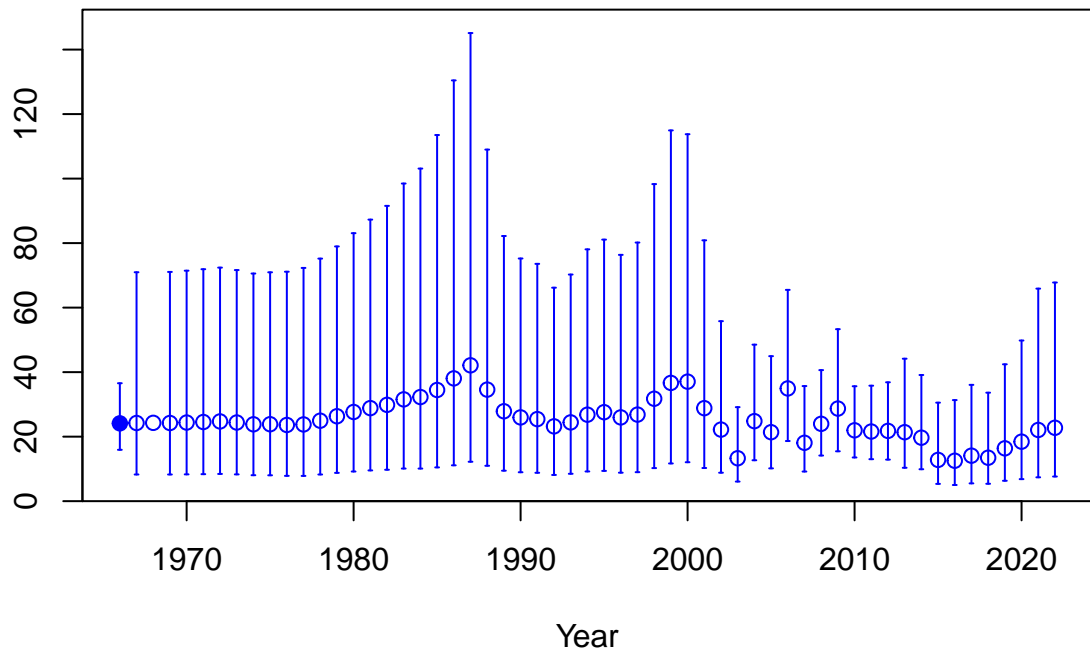
Summary biomass (mt)



Age-0 recruits (1,000s)

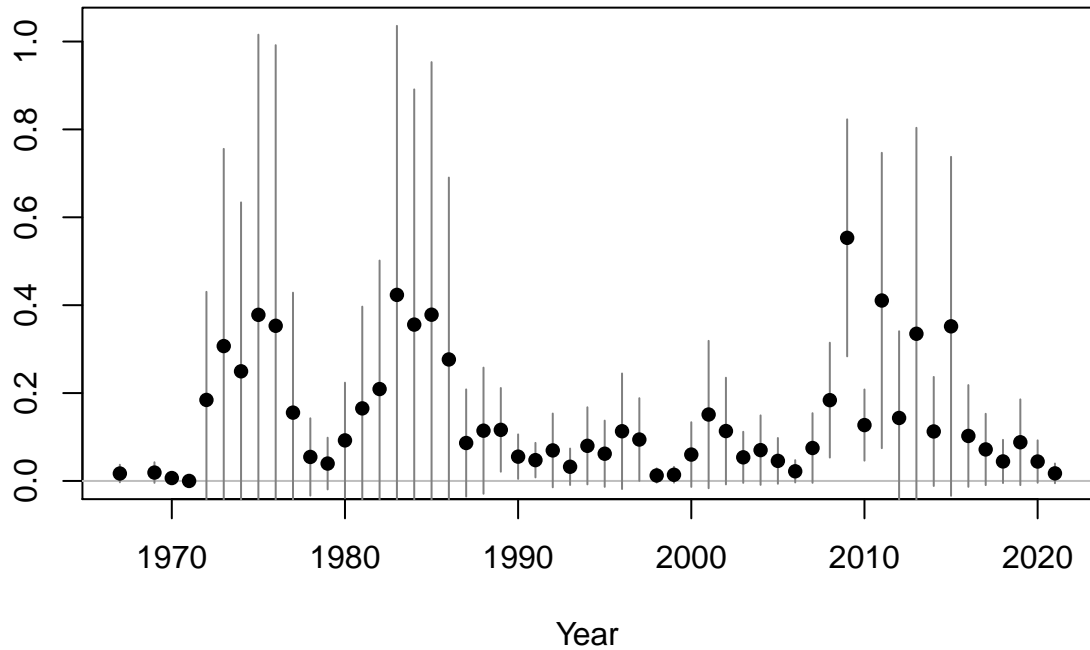


Age-0 recruits (1,000s)

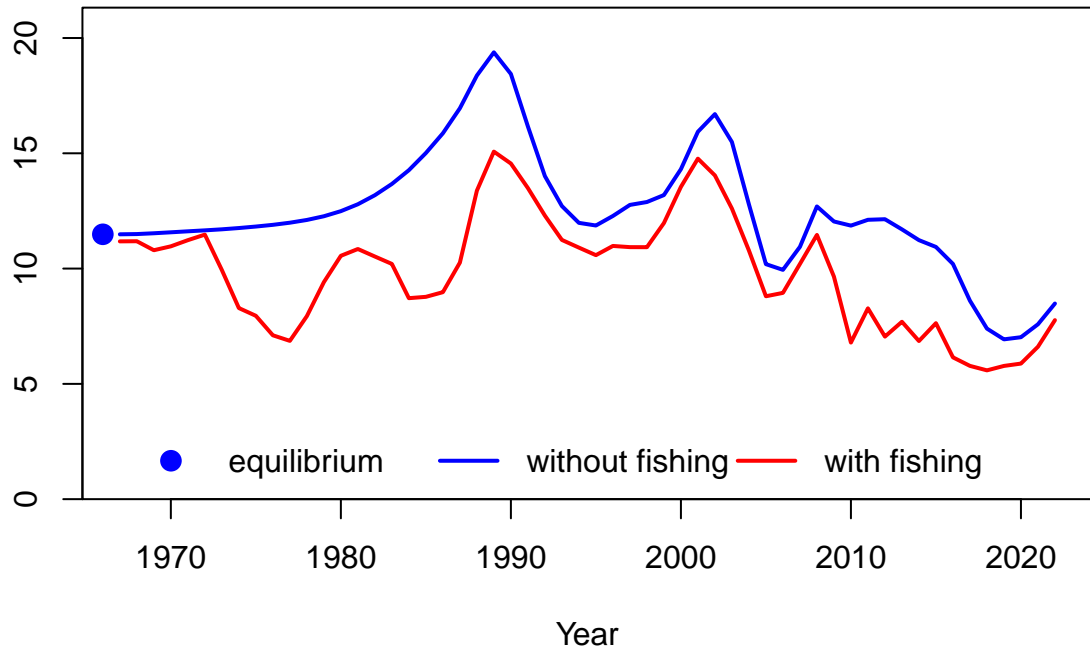




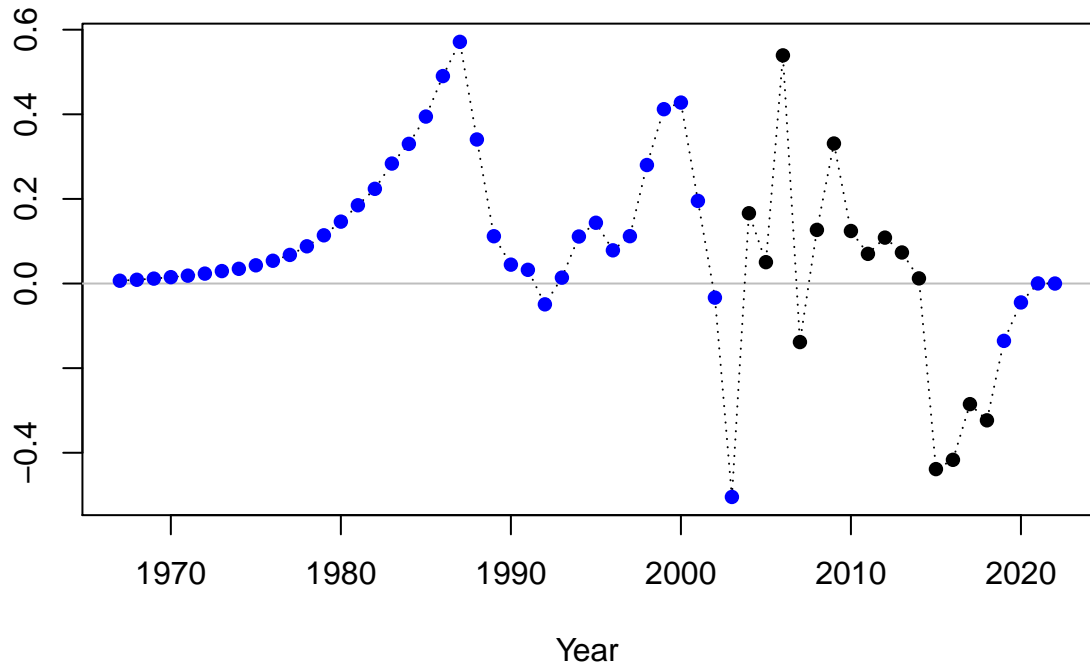
Summary Fishing Mortality



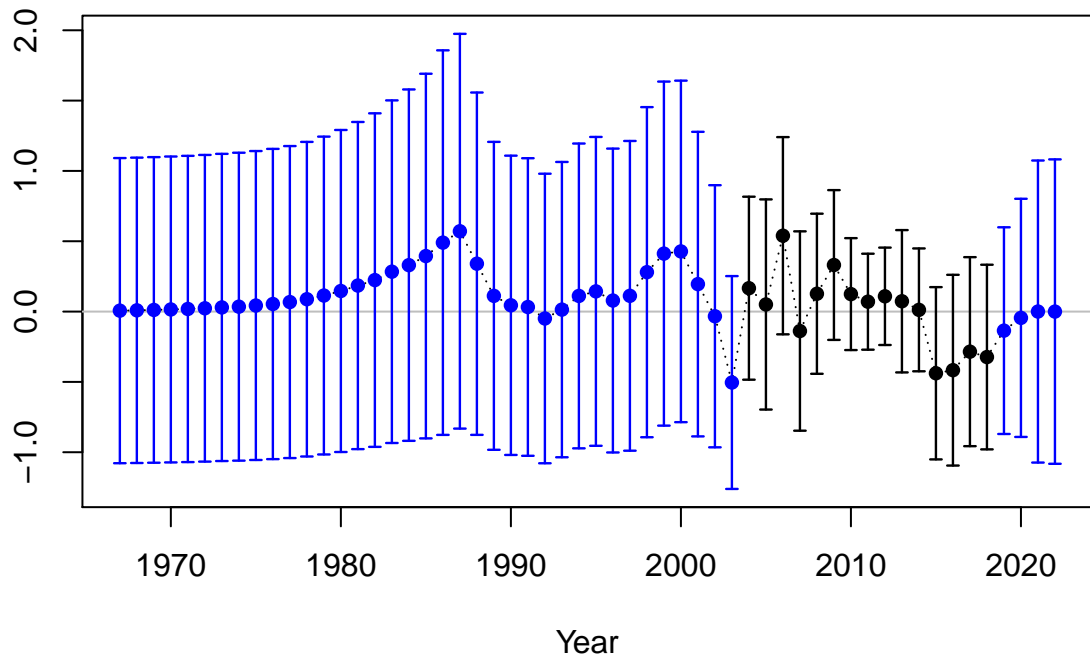
Spawning biomass (mt)



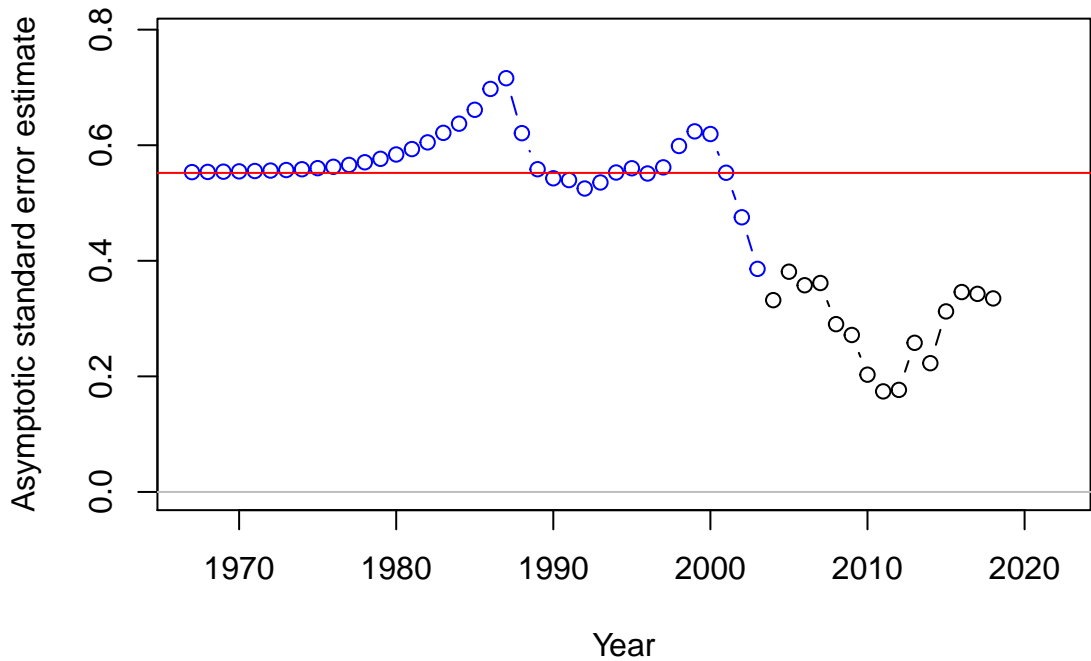
Log recruitment deviation

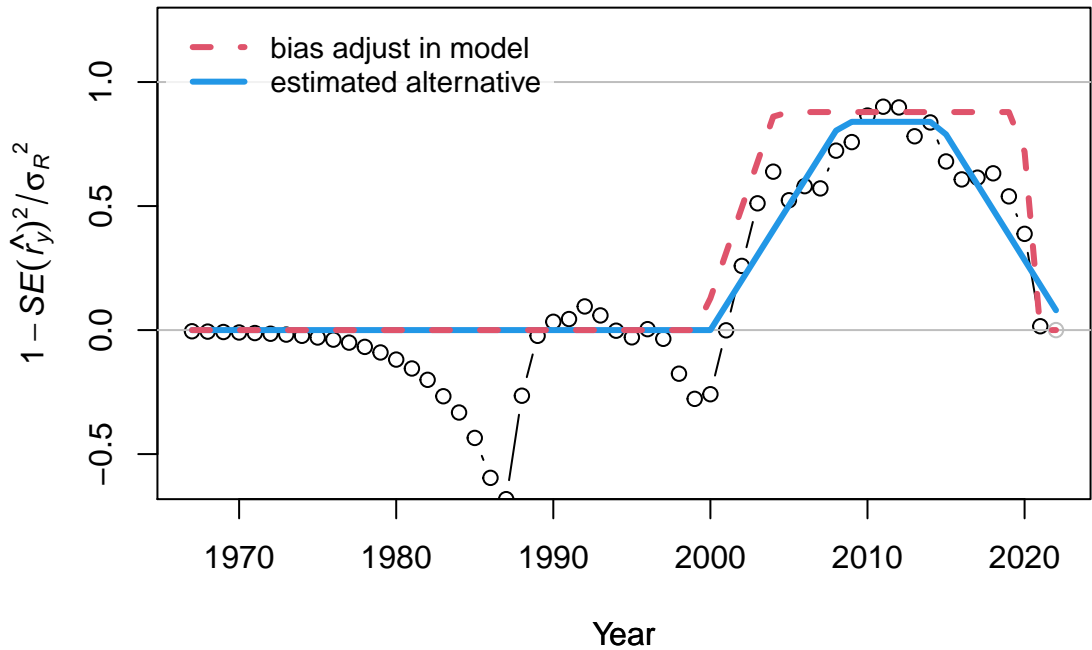


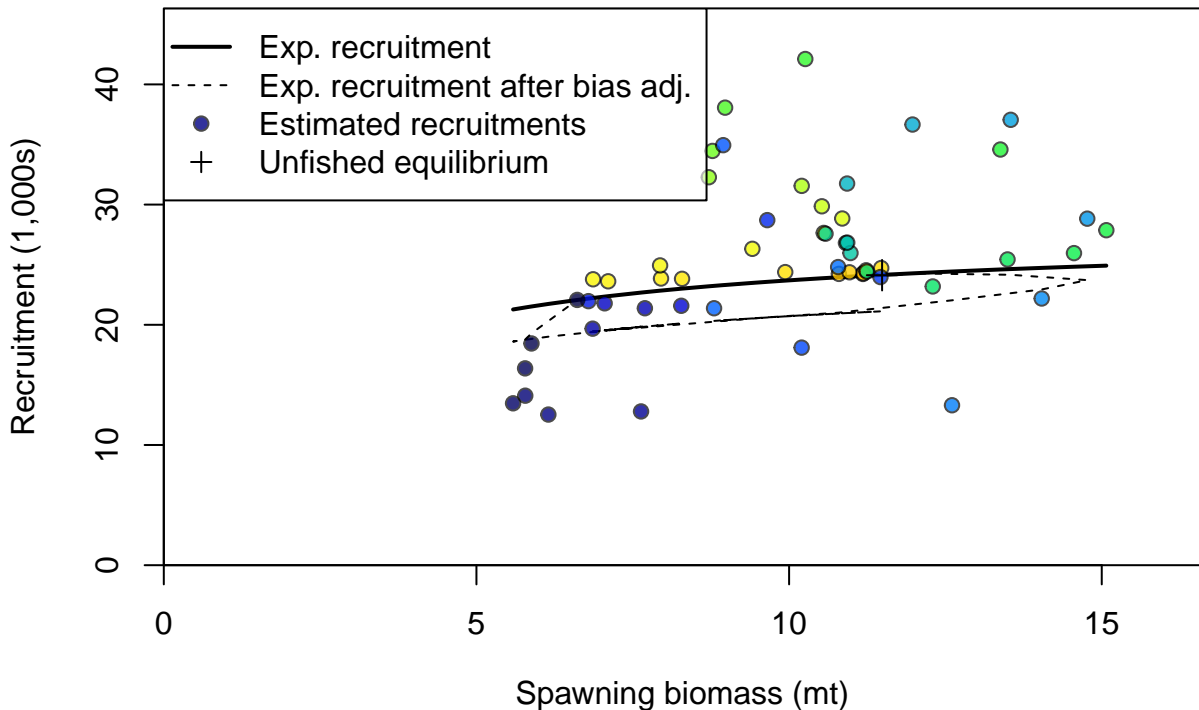
Log recruitment deviation

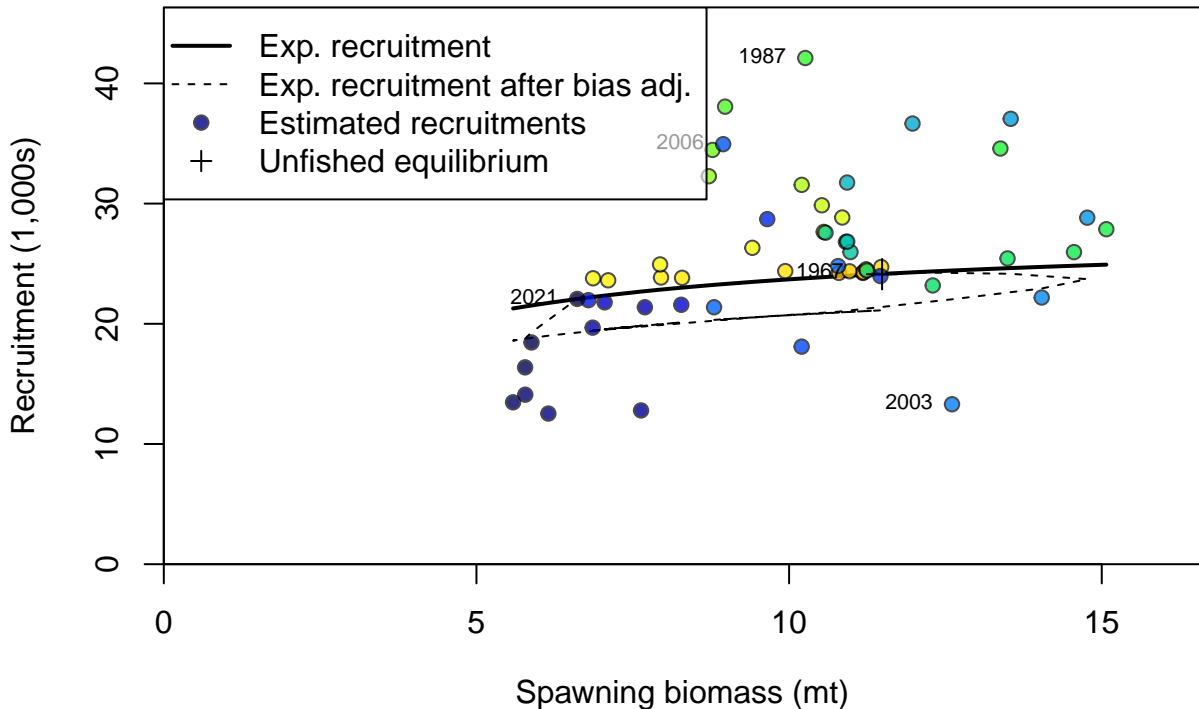


## Recruitment deviation variance



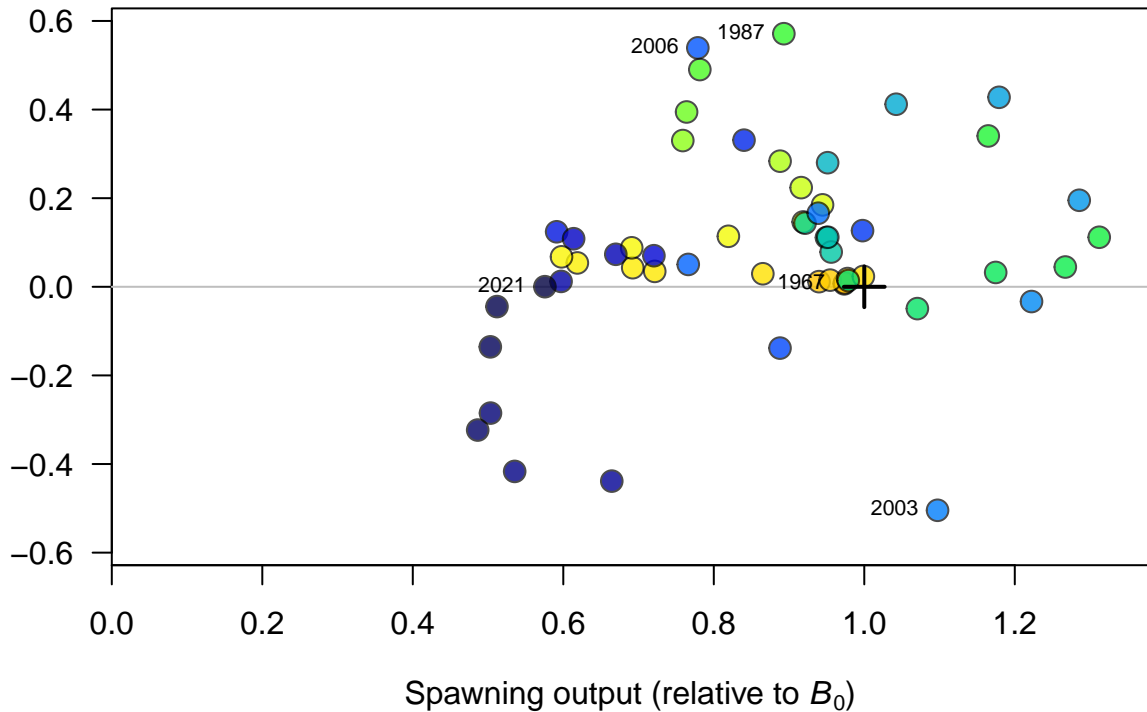


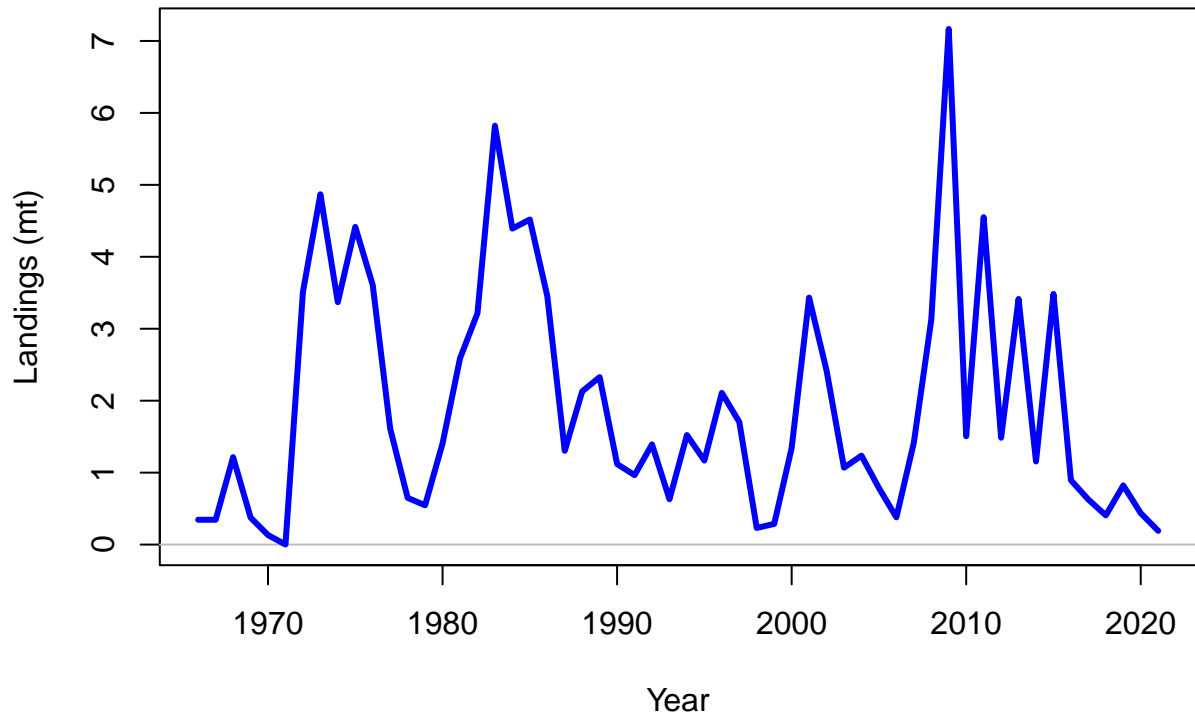


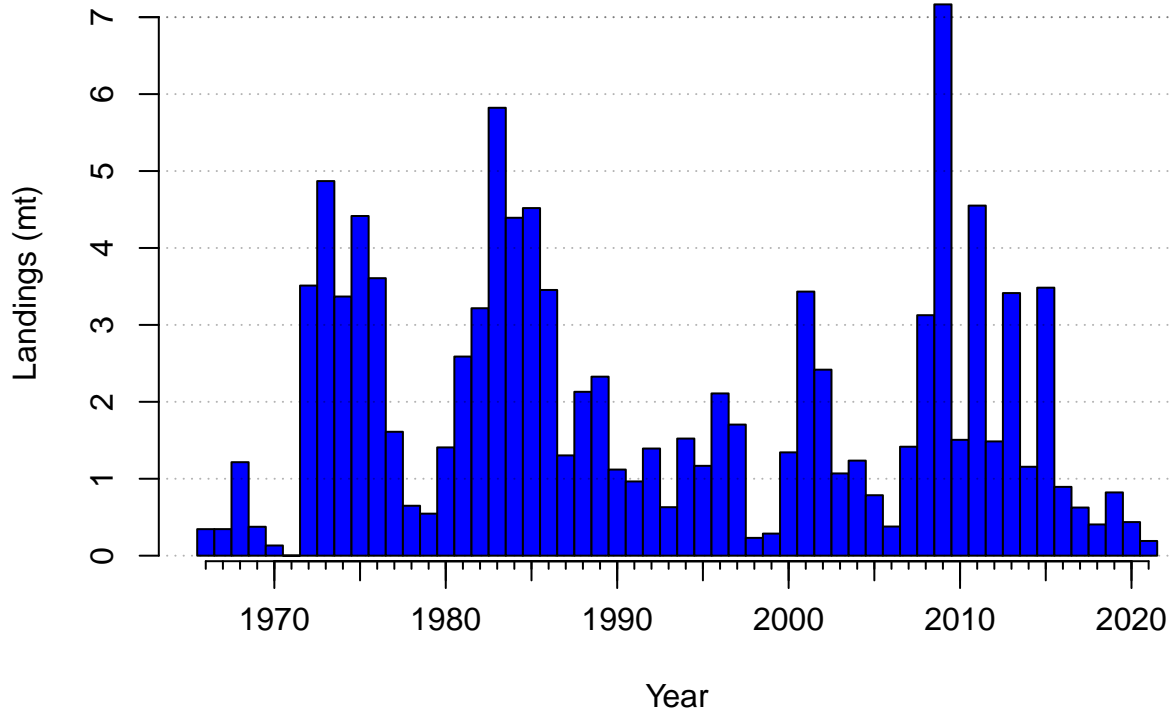




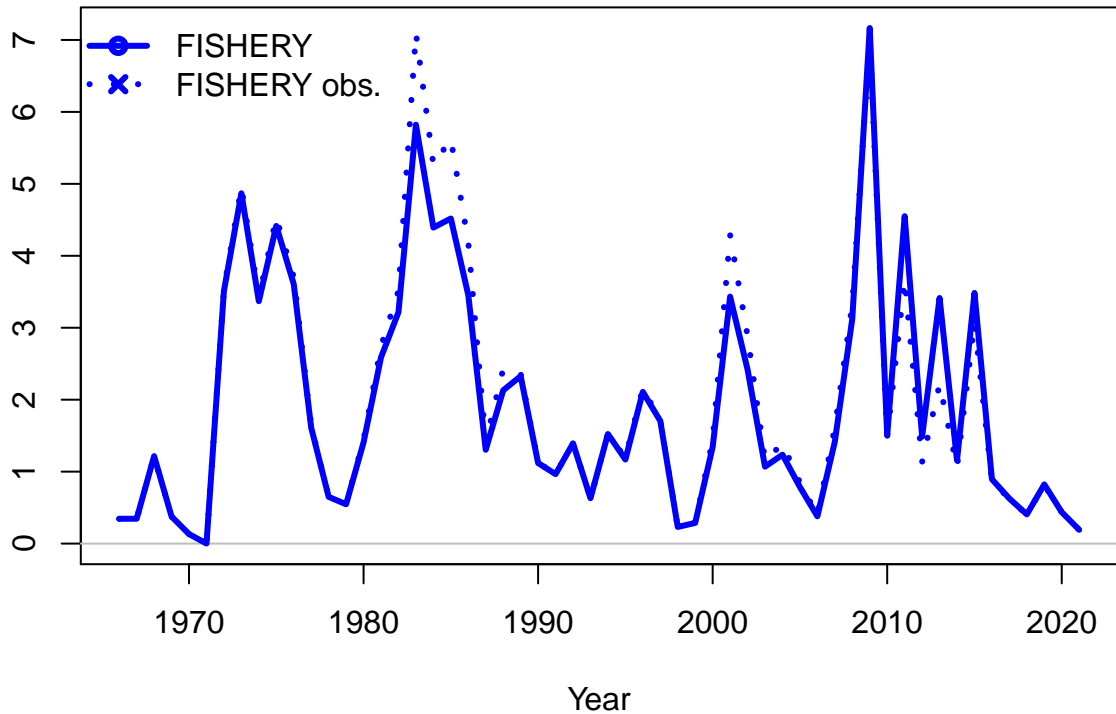
Log recruitment deviation

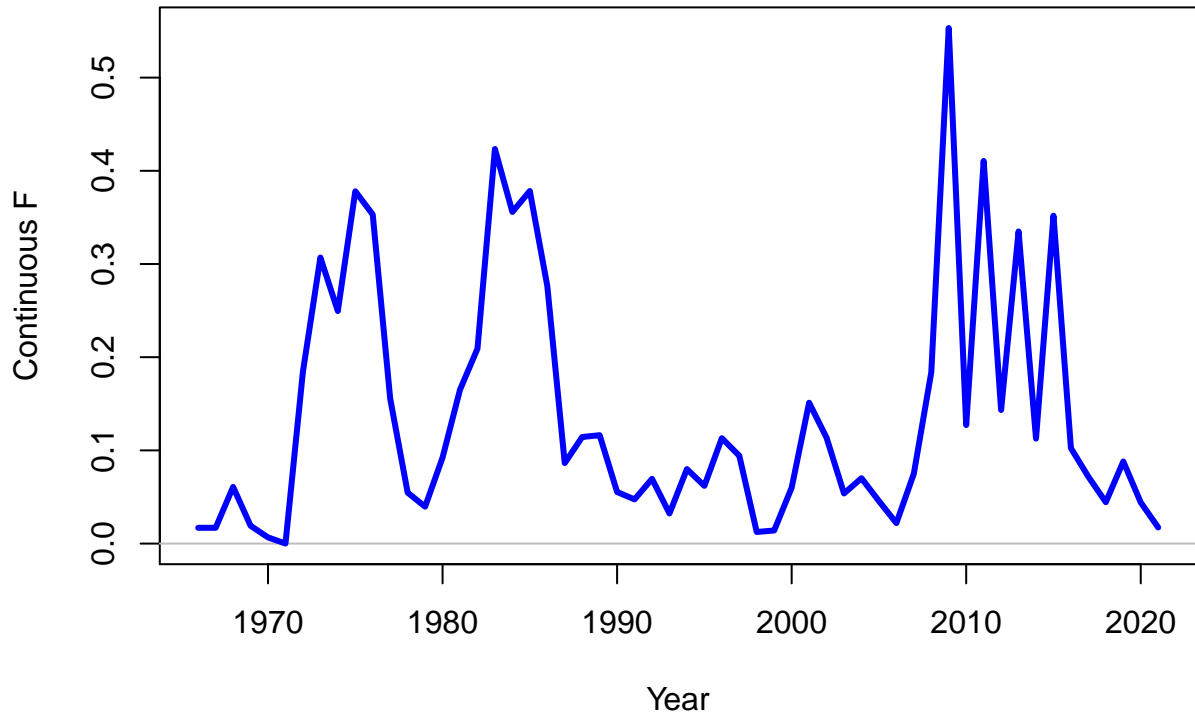




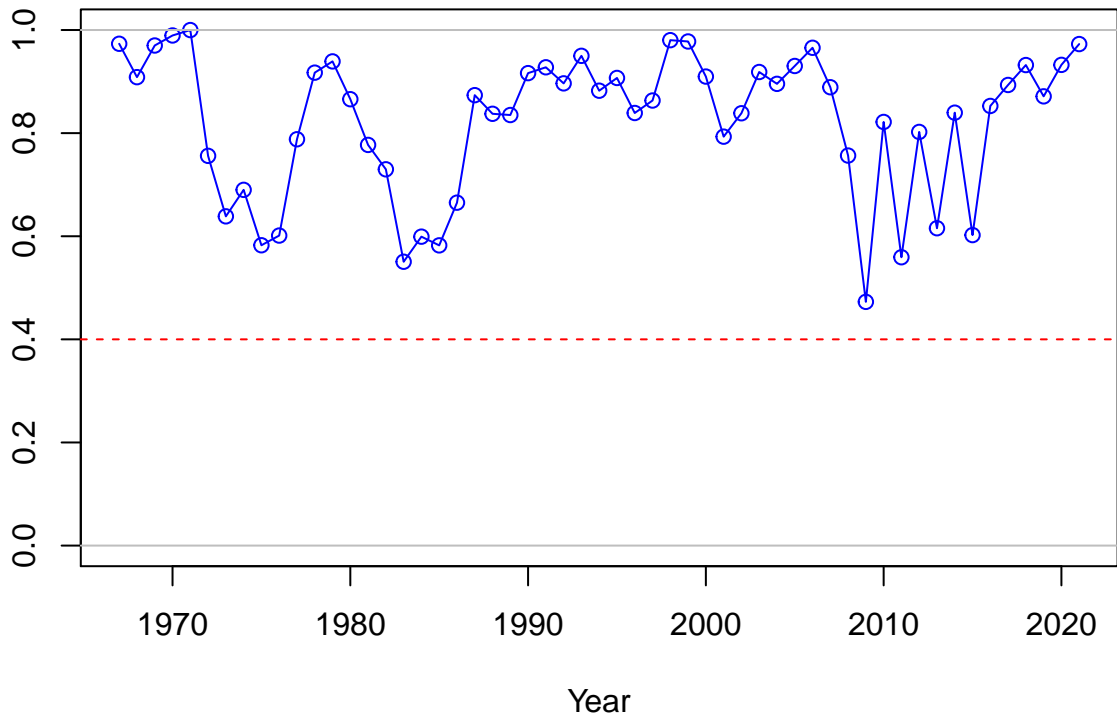


Observed and expected Landings (mt)

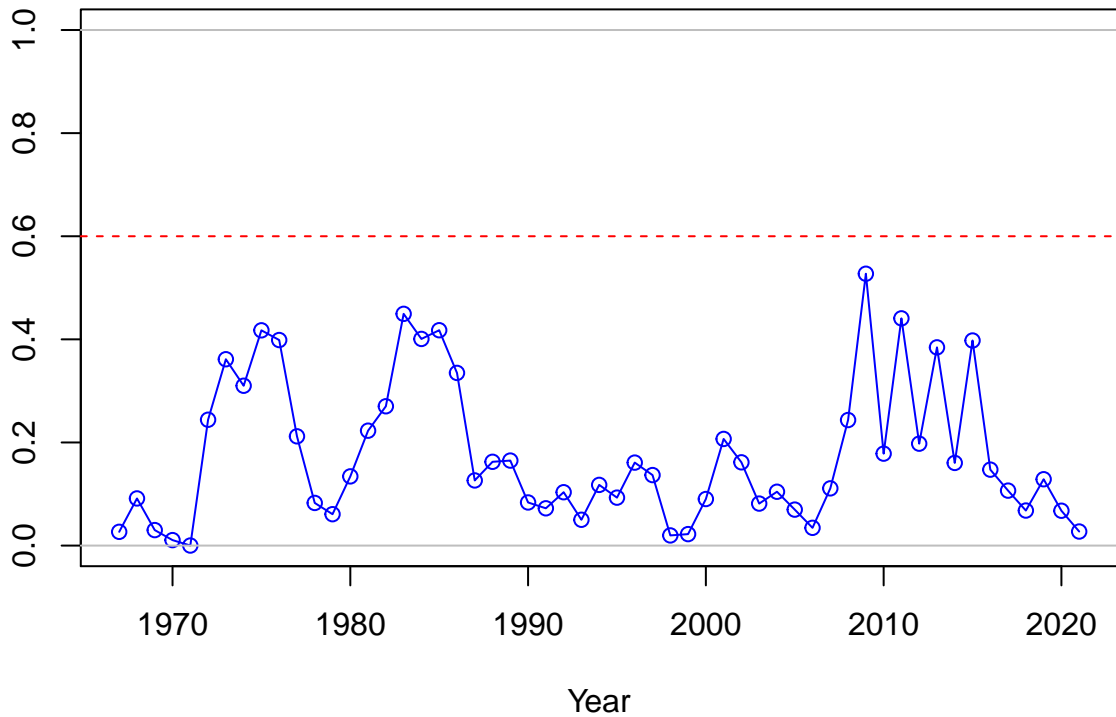




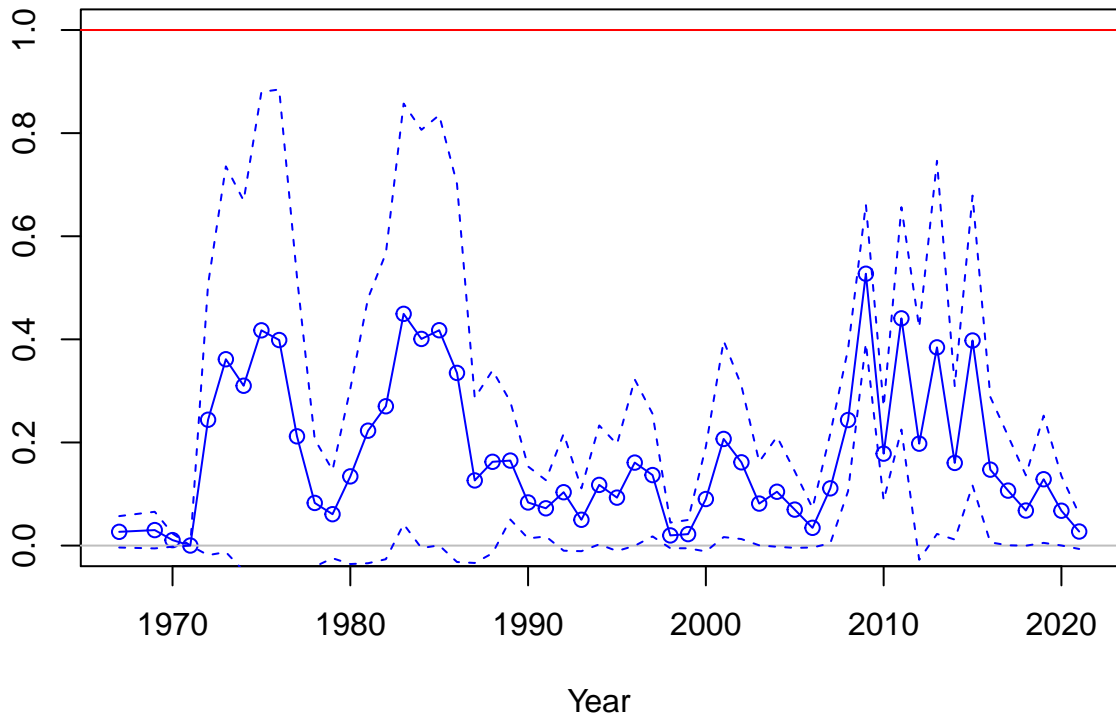
SPR



1-SPR

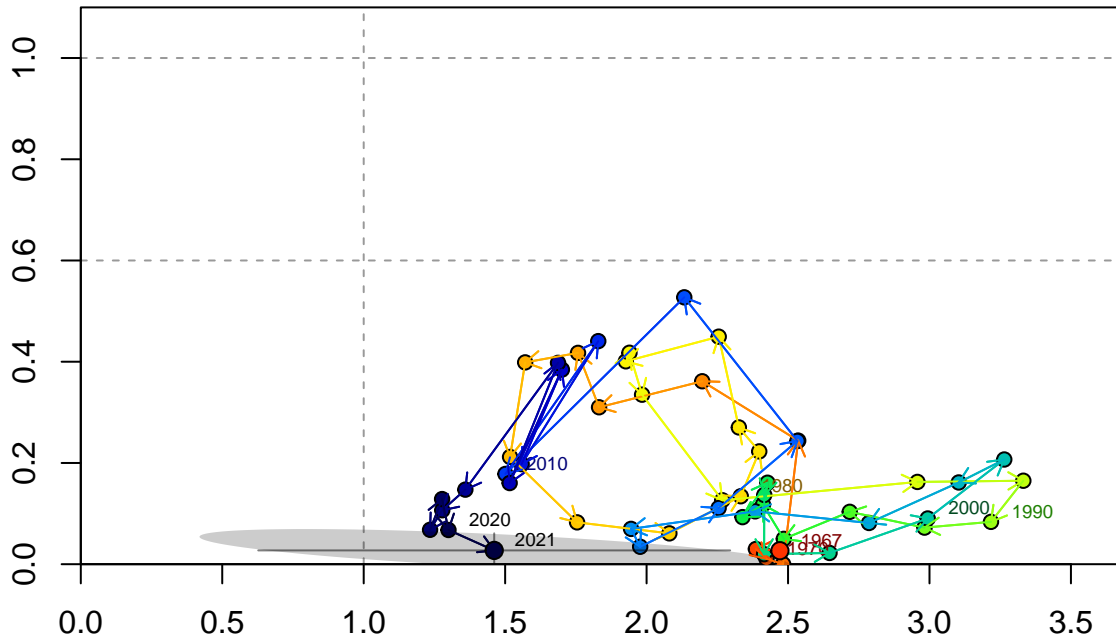


Fishing intensity: 1-SPR



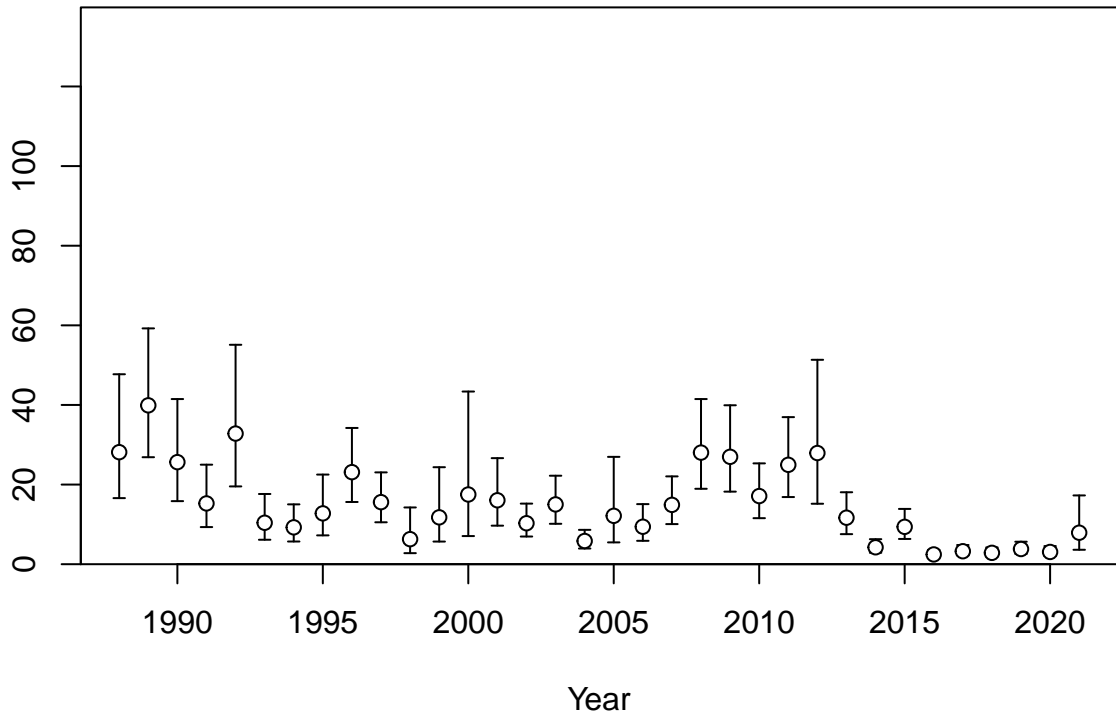


Fishing intensity: 1-SPR

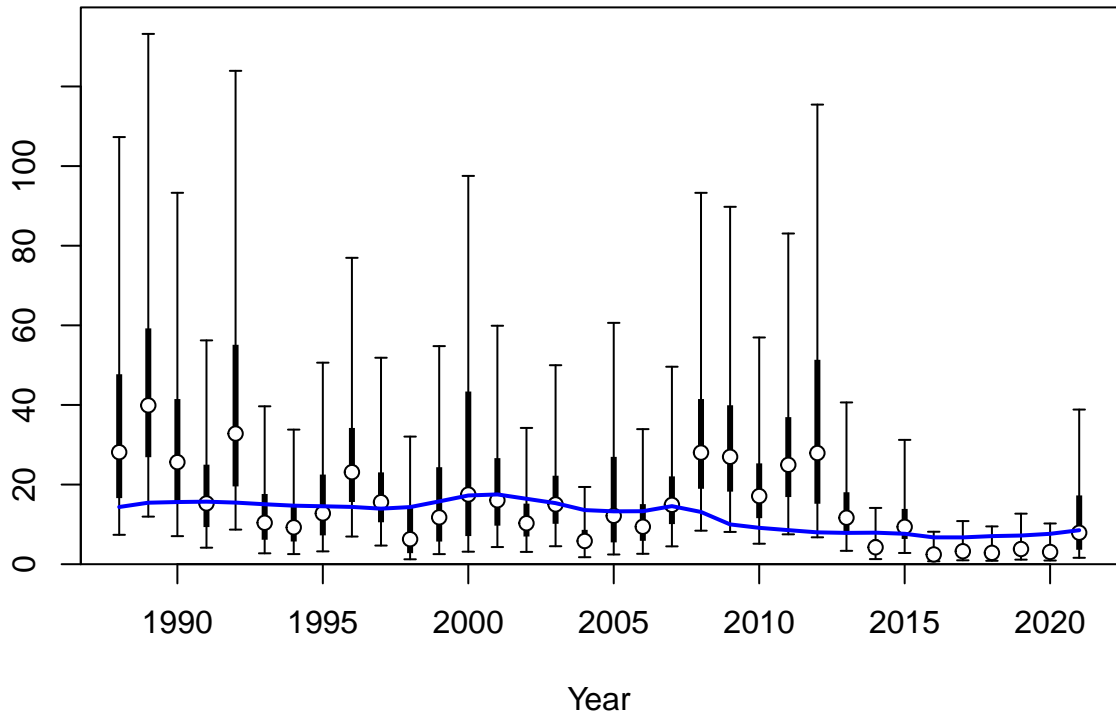


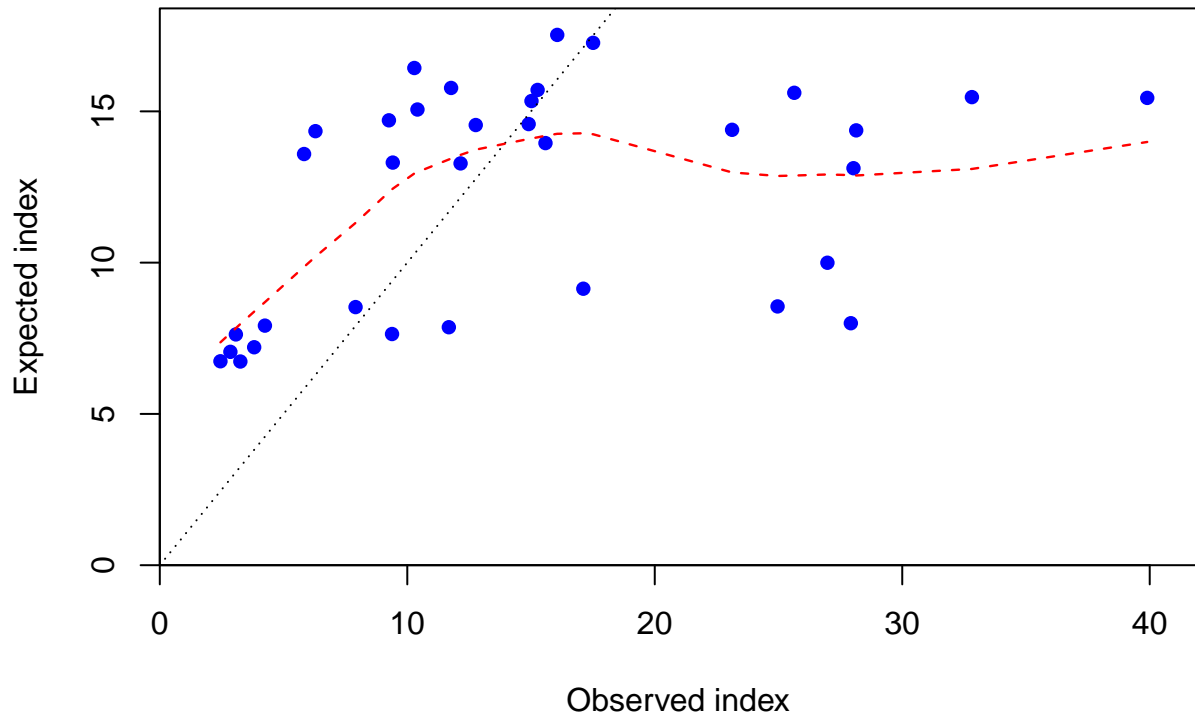
Relative spawning output:  $B/B_{MS}$

Index

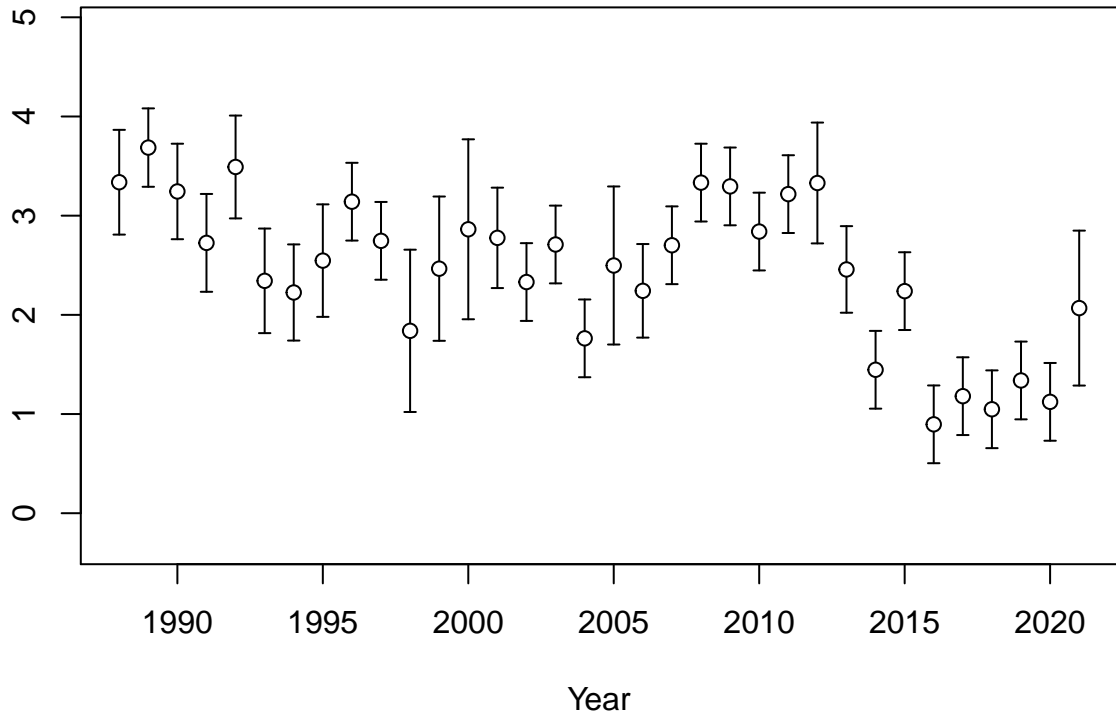


Index

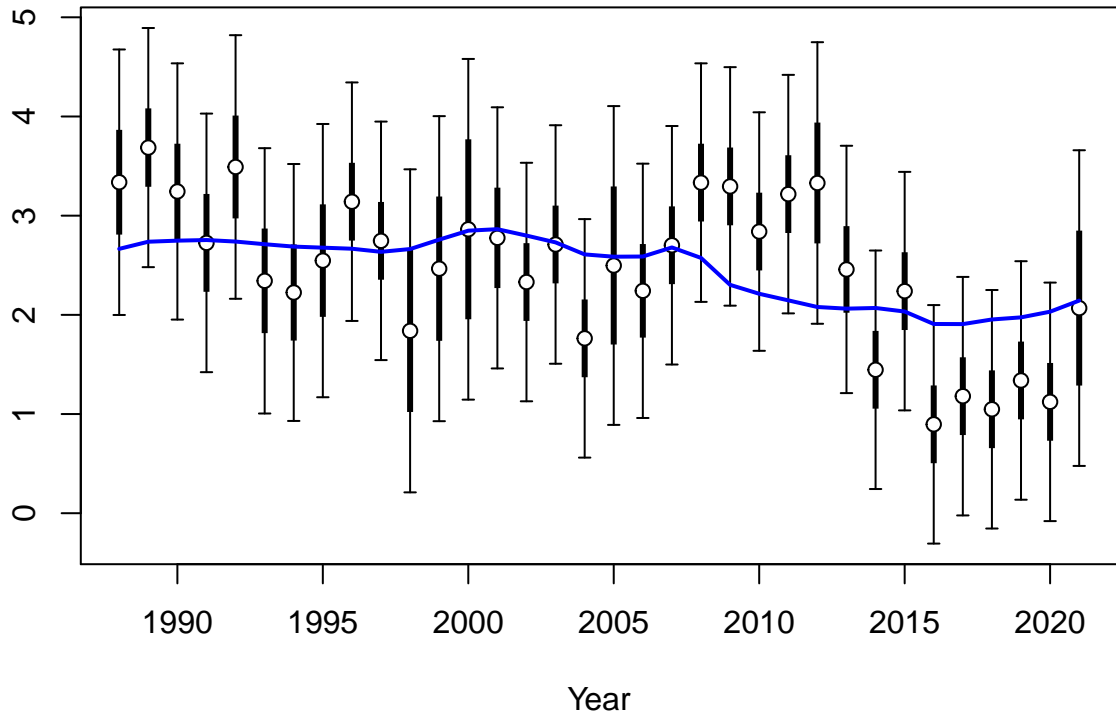


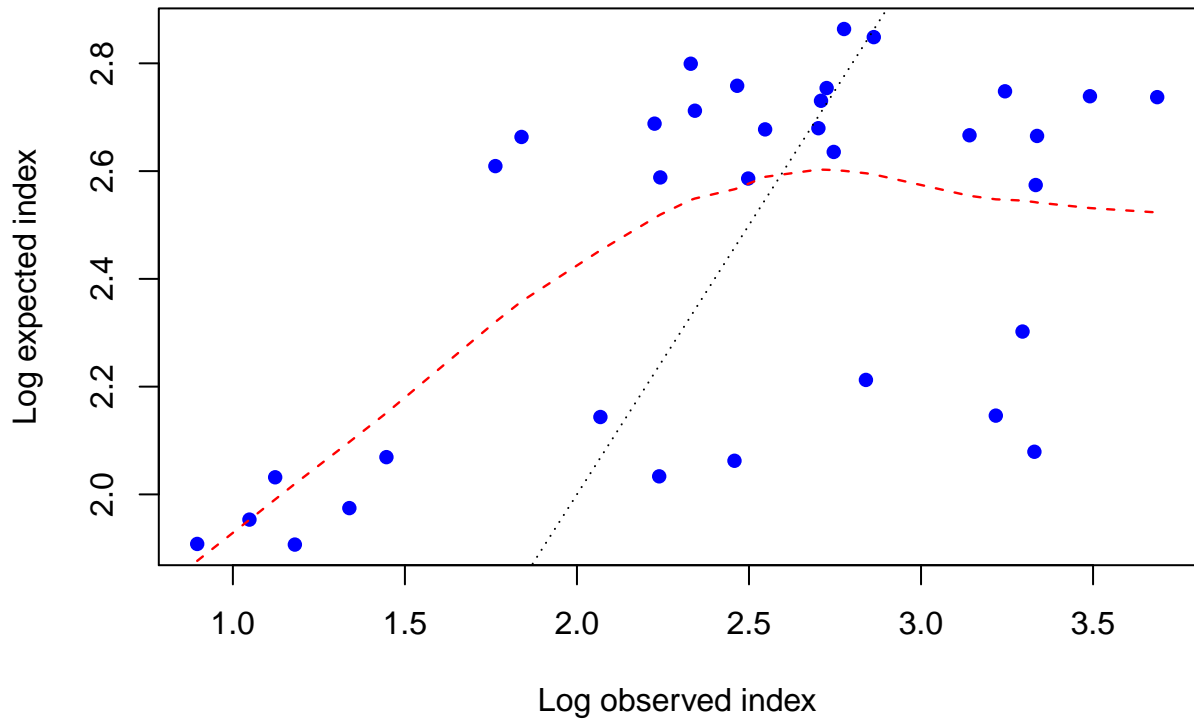


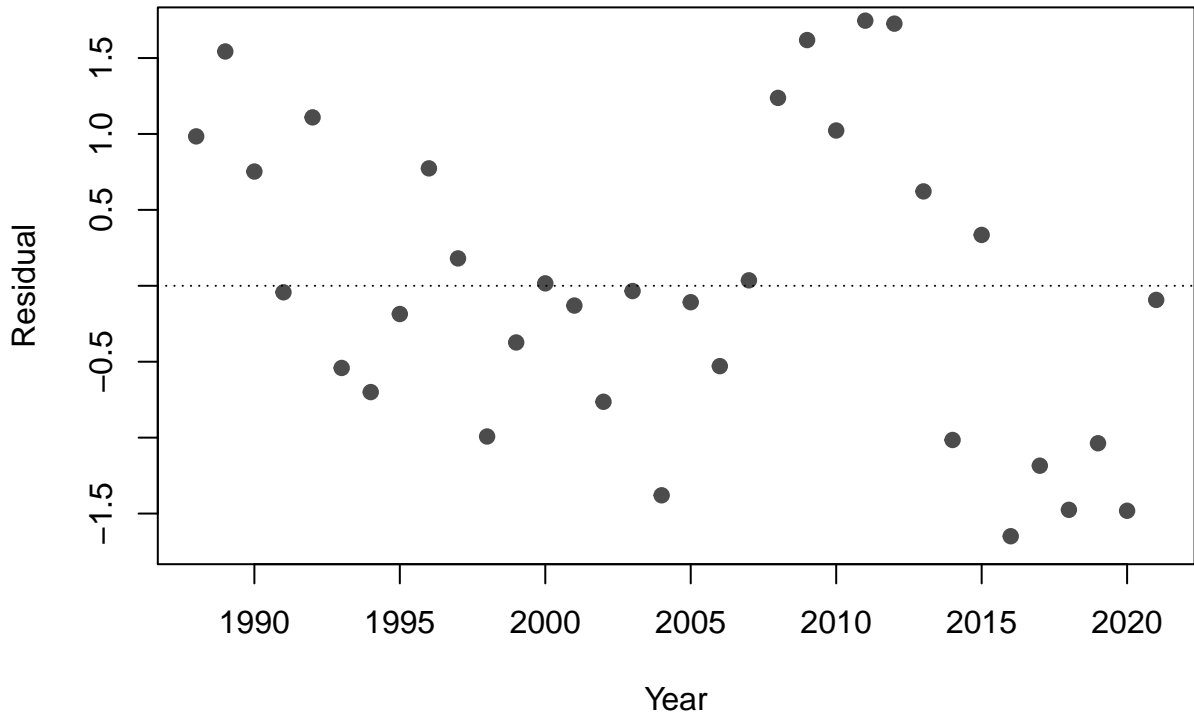
Log index



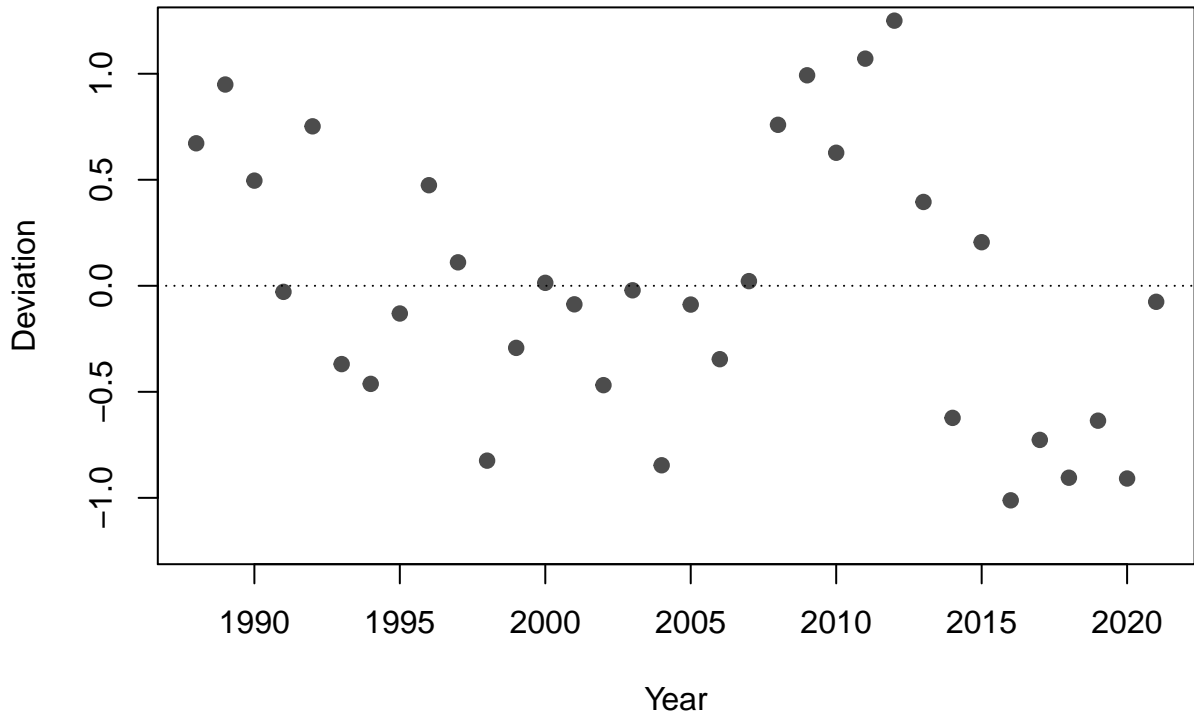
Log index

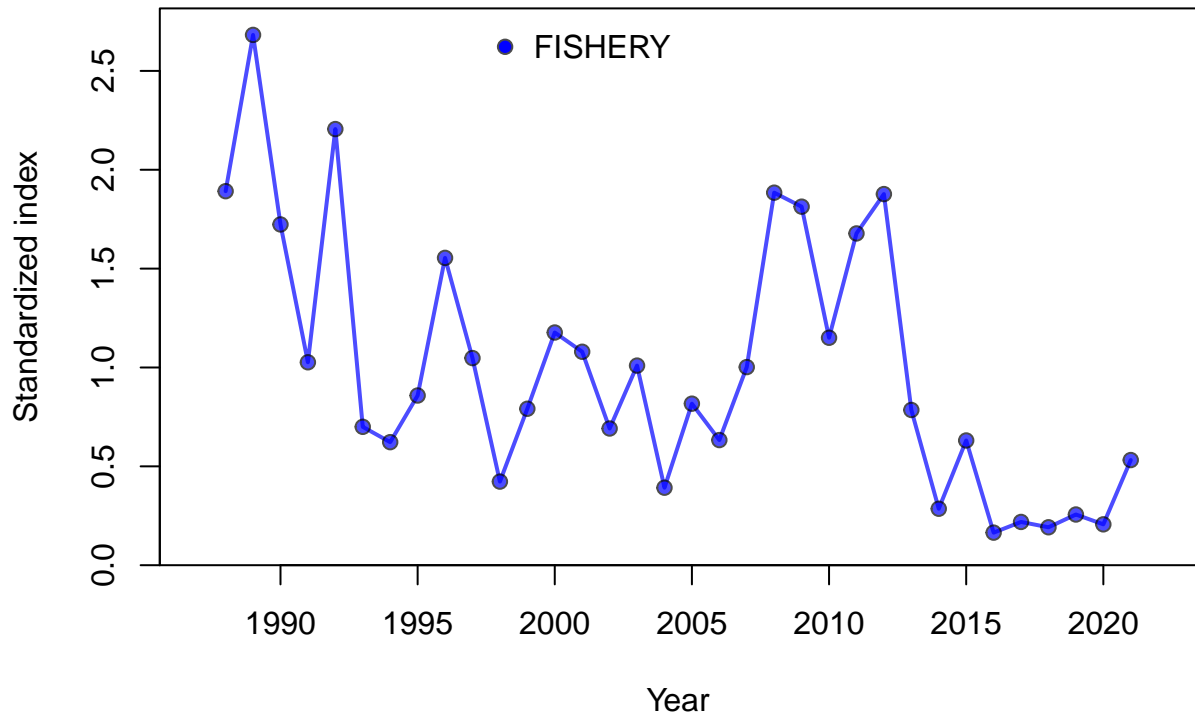




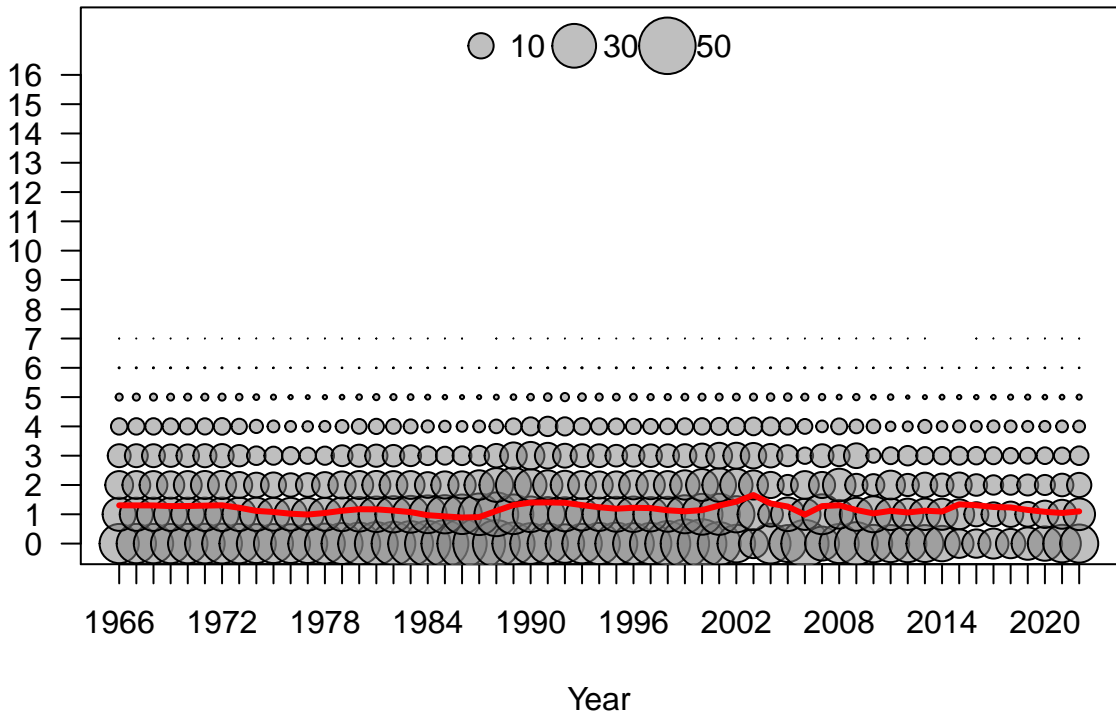




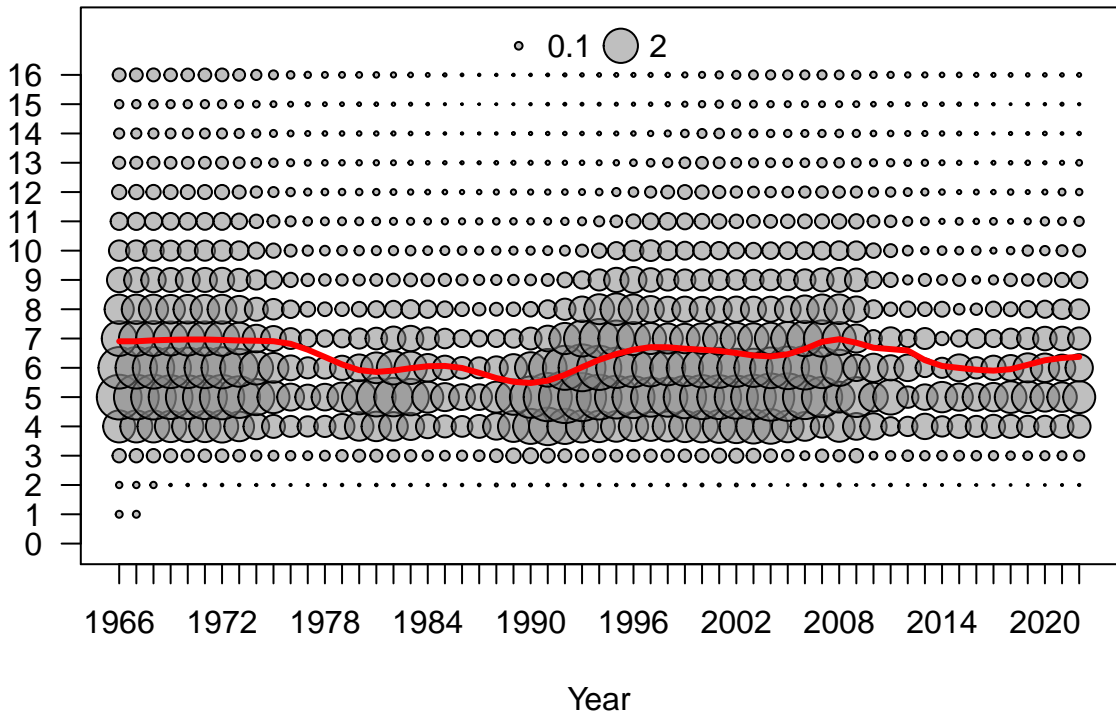


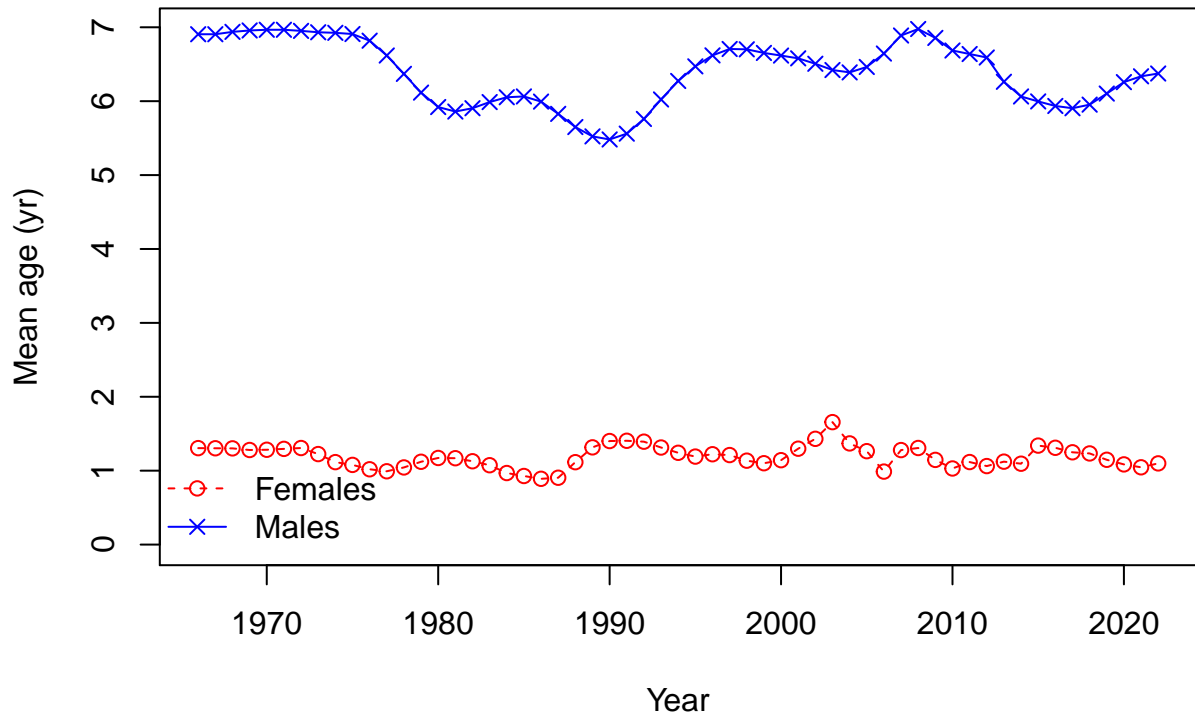


Age

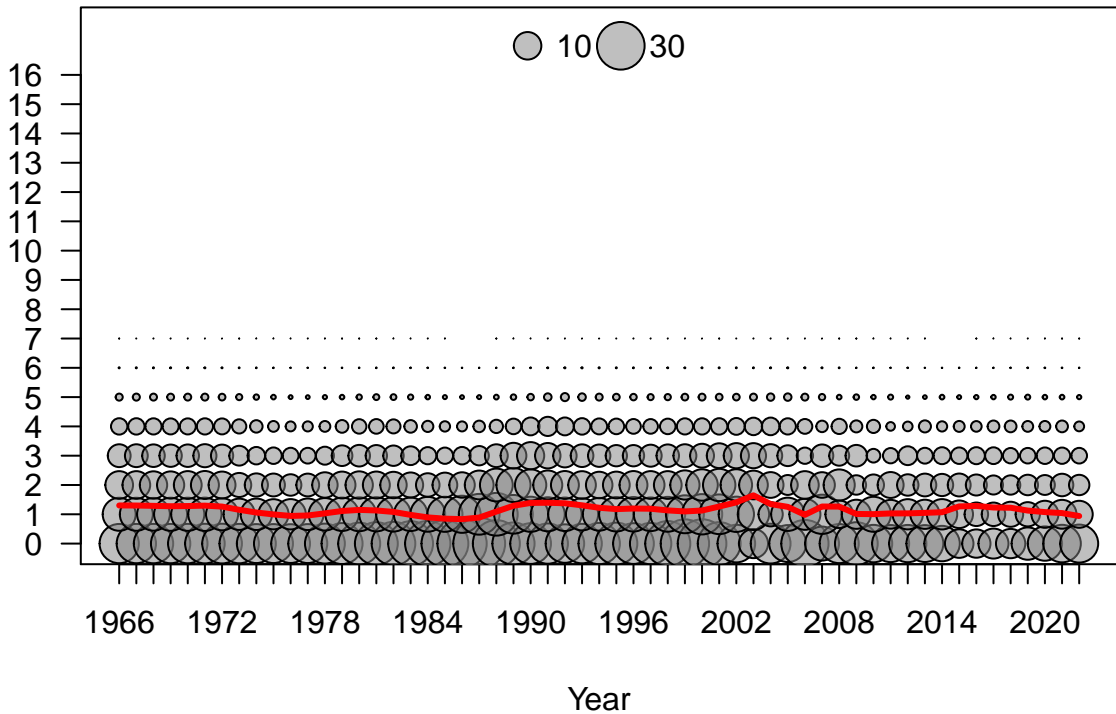


Age

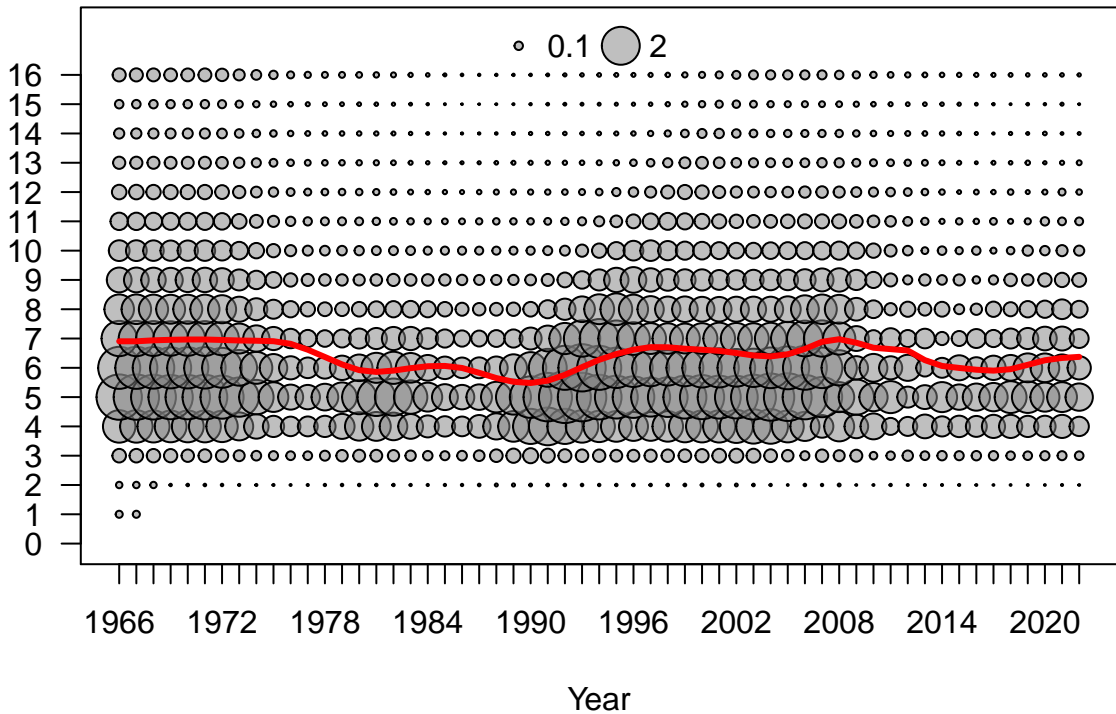


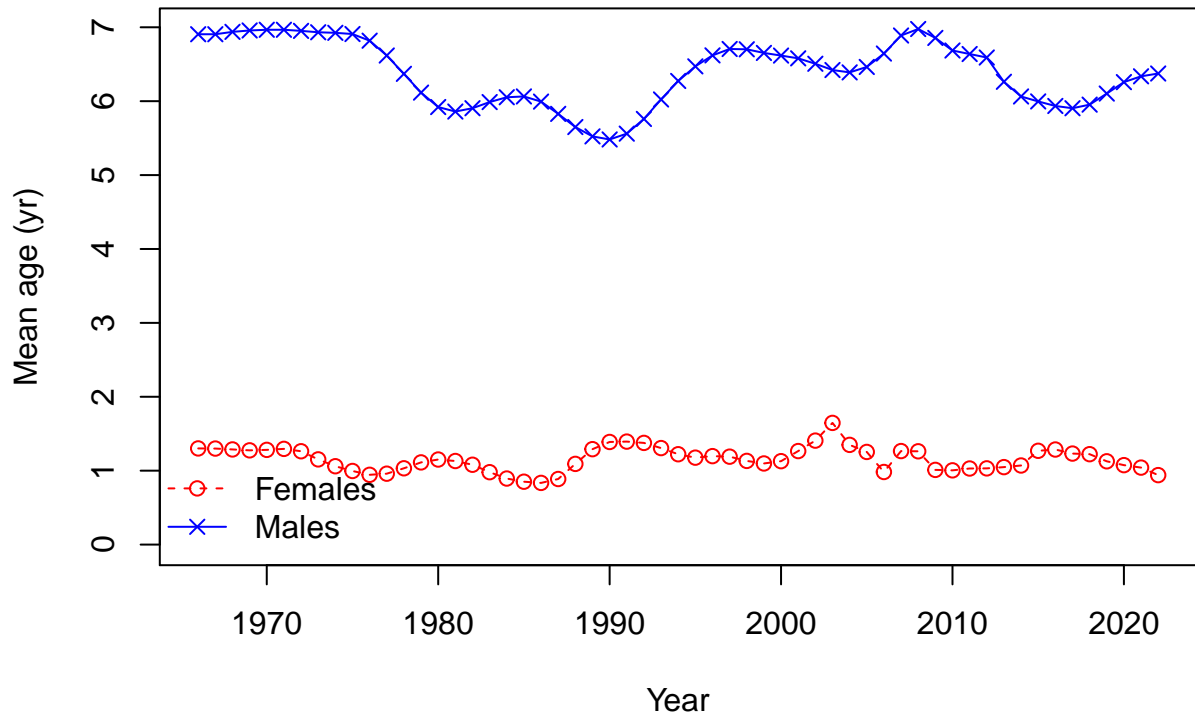


Age



Age







Age

15

10

5

0

1970

1980

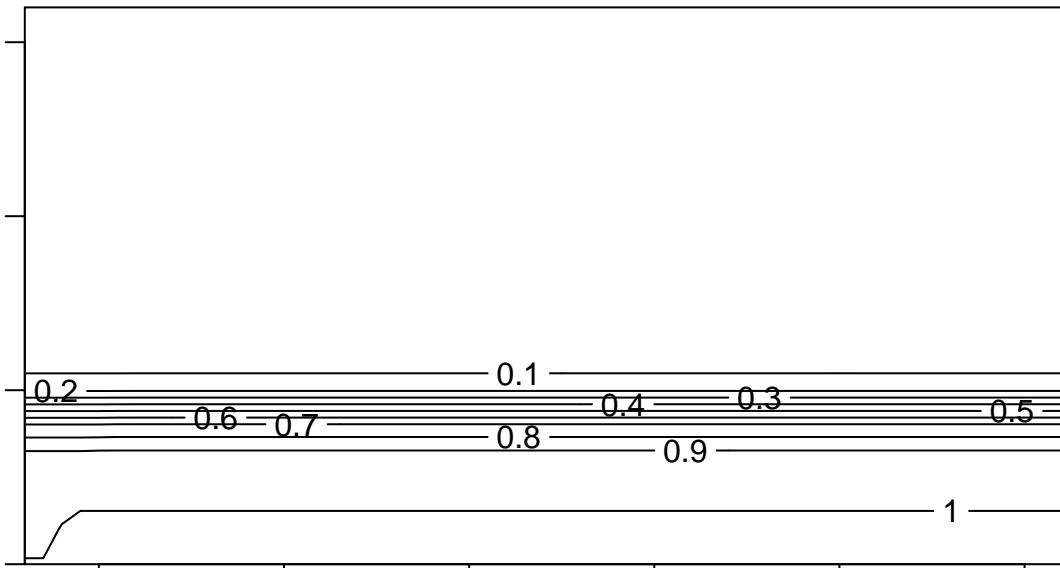
1990

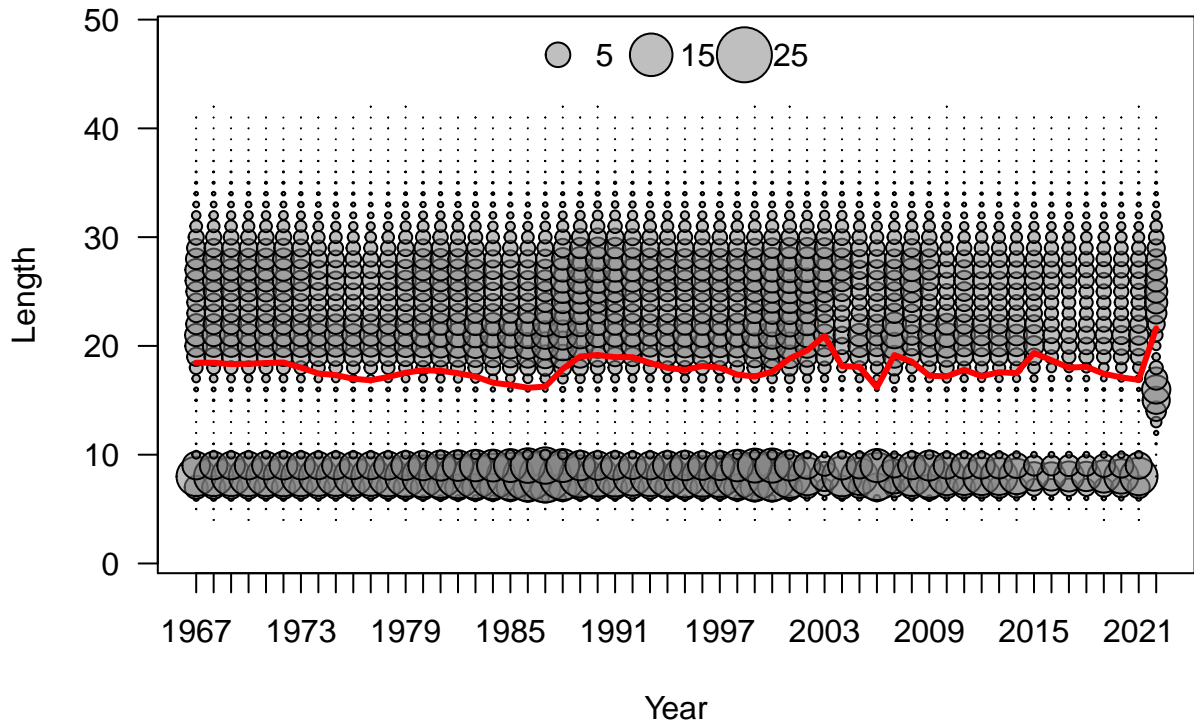
2000

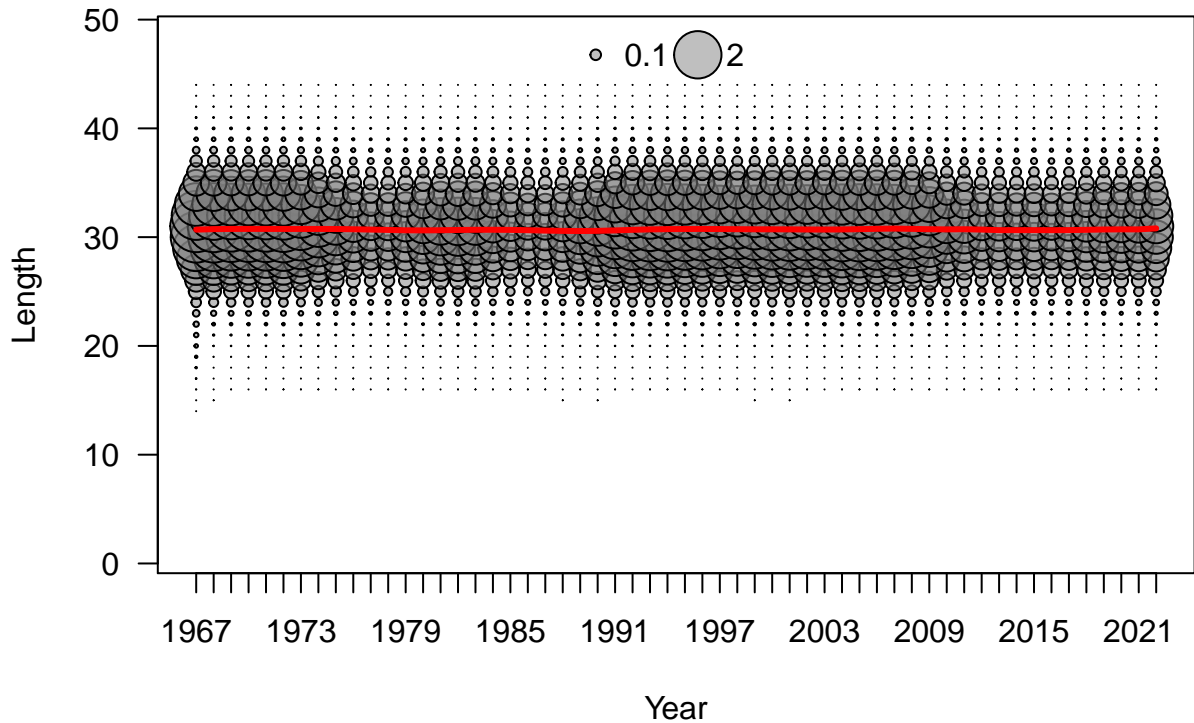
2010

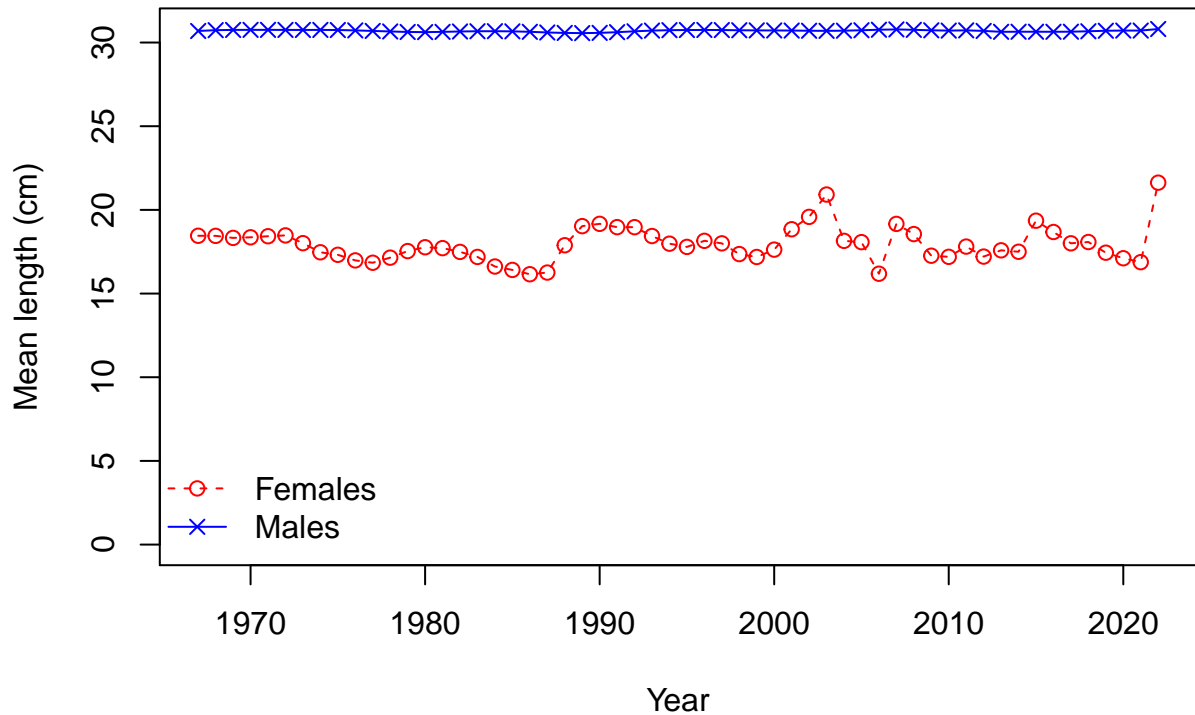
2020

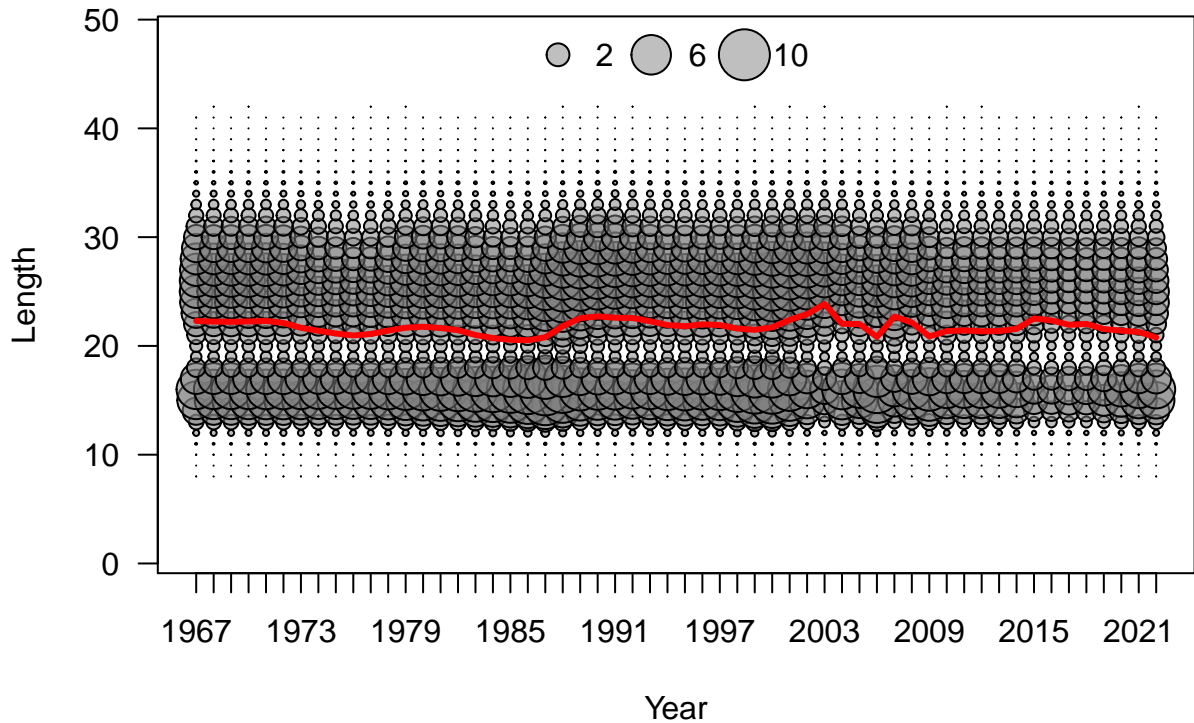
Year

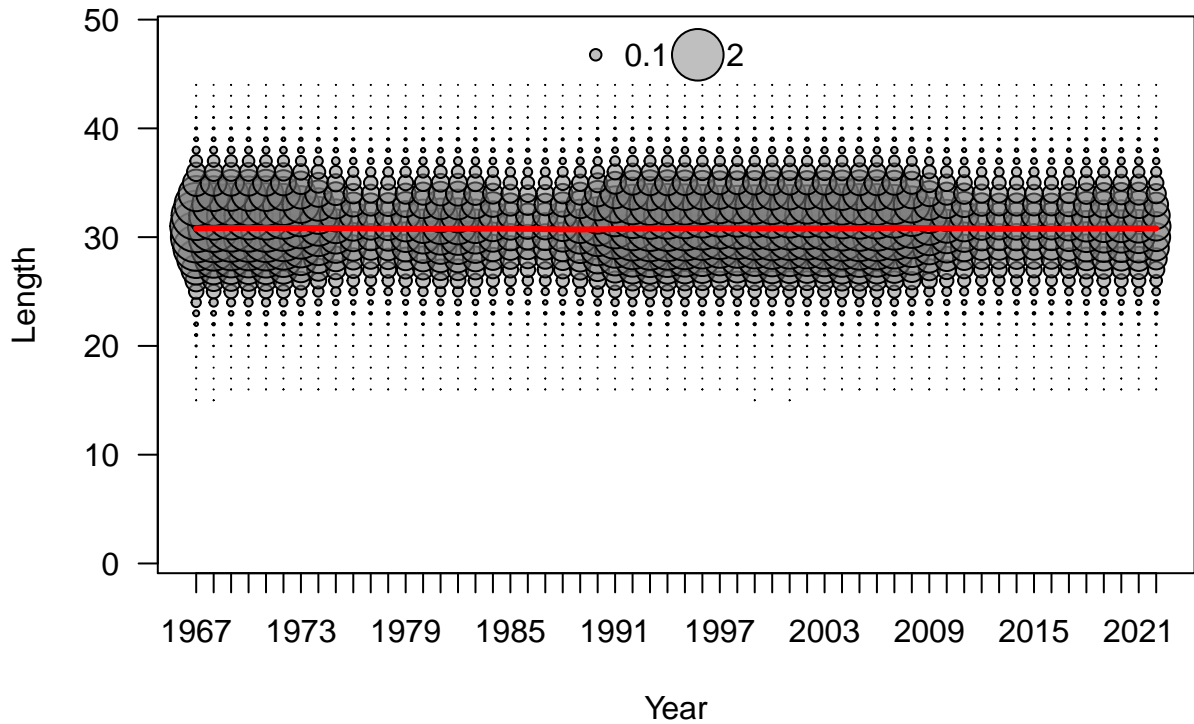


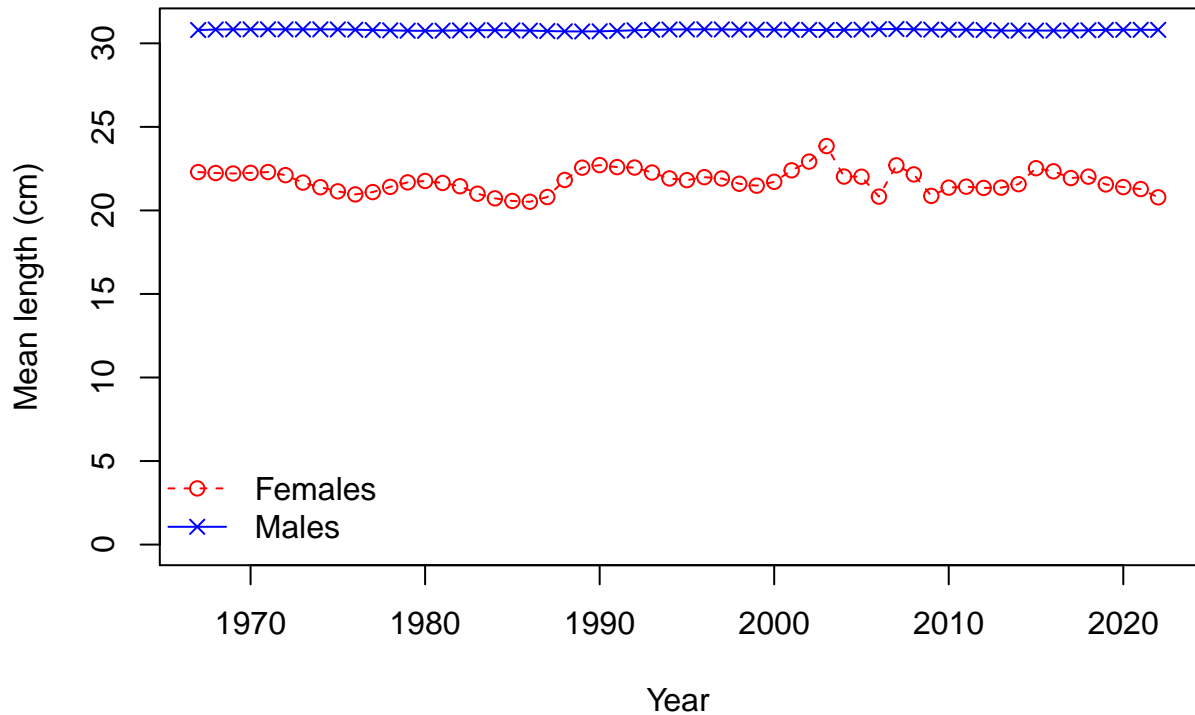


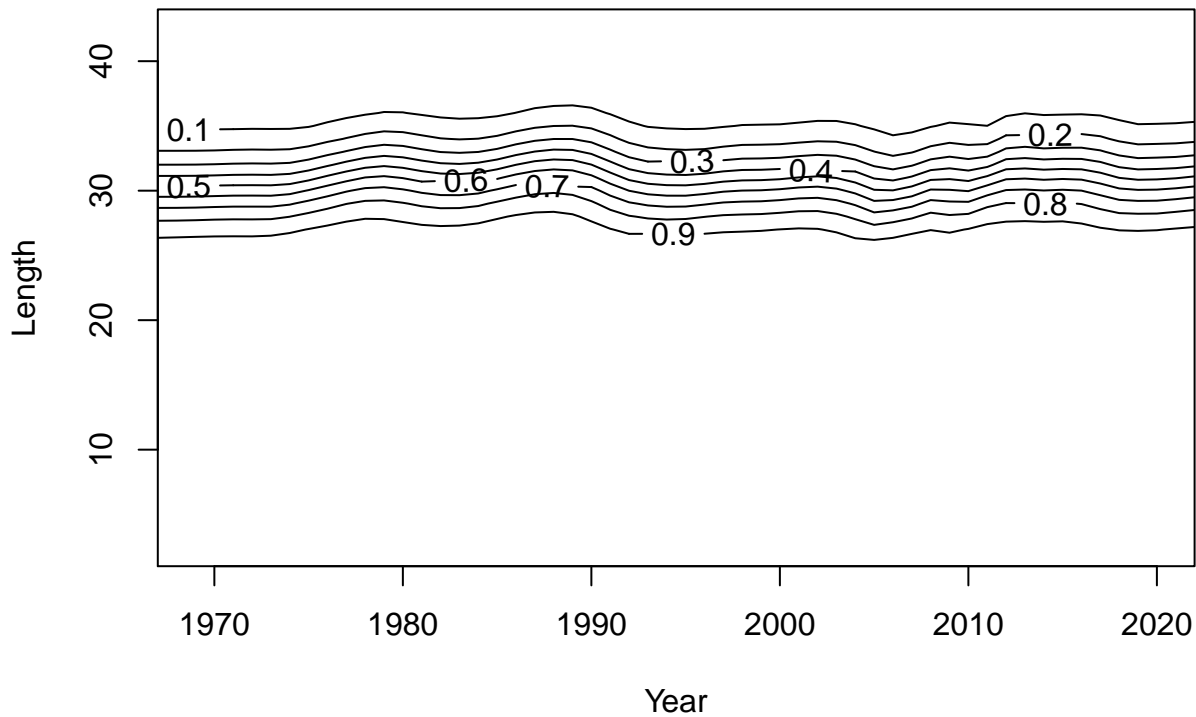




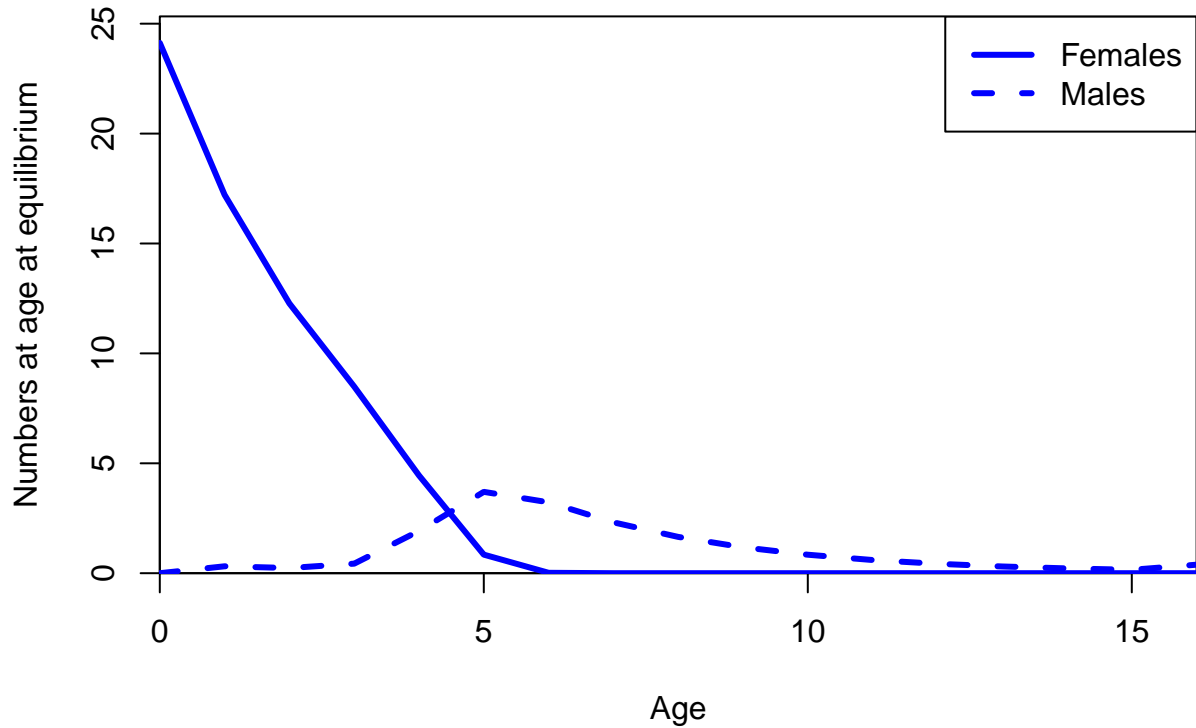






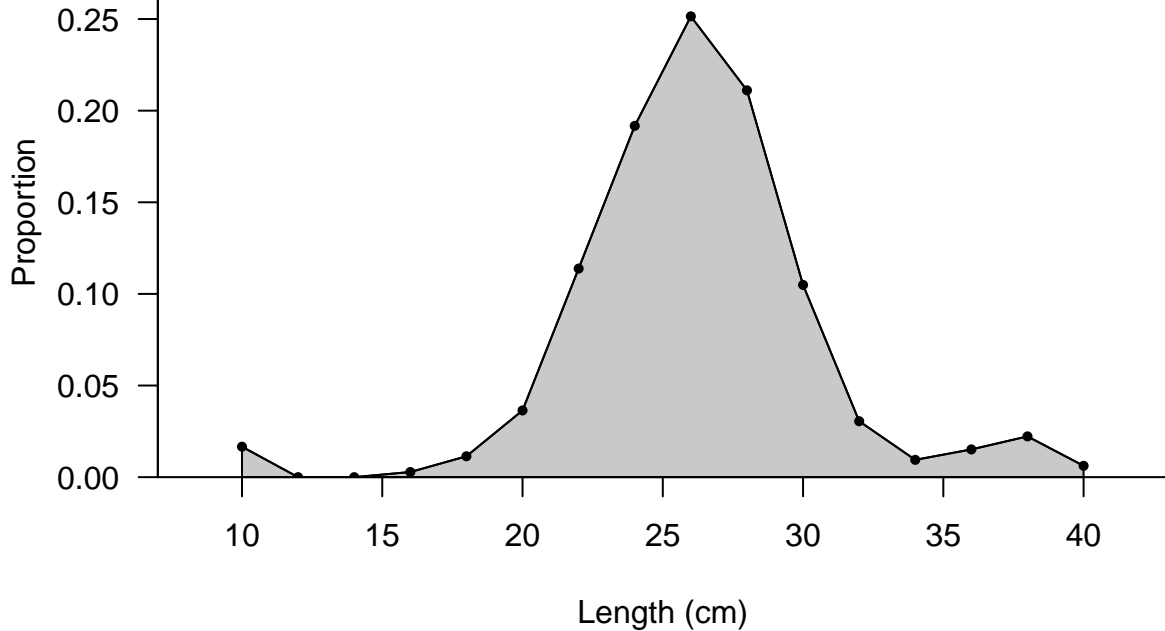


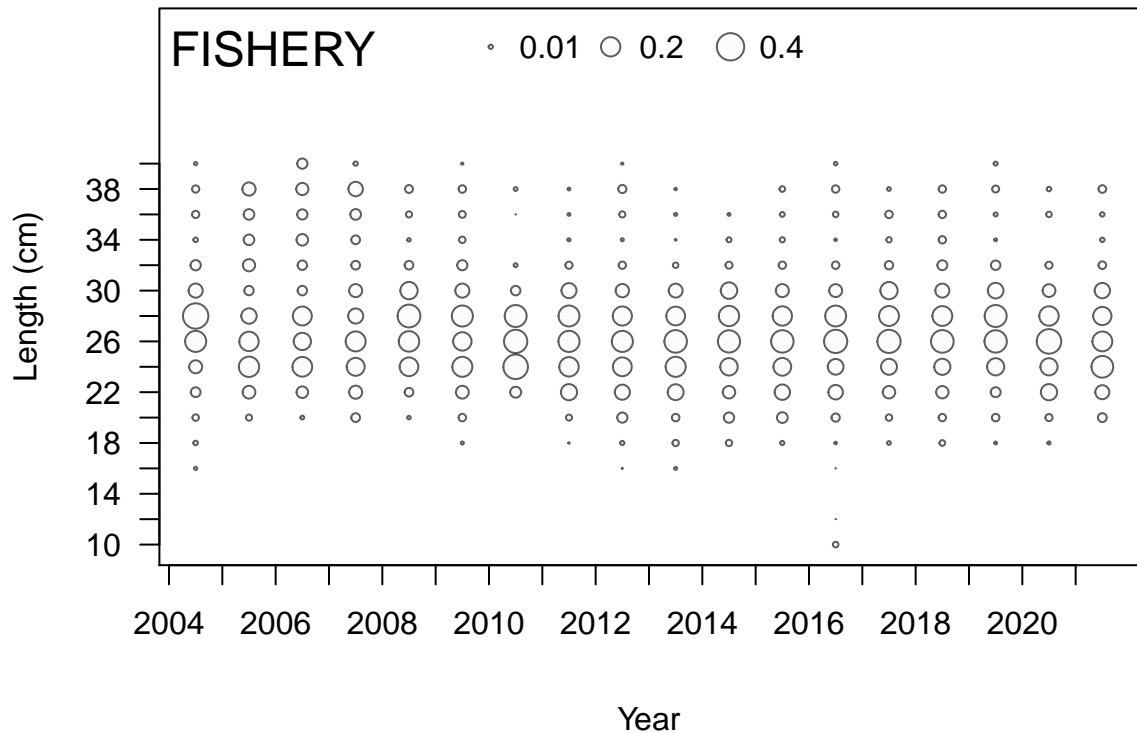


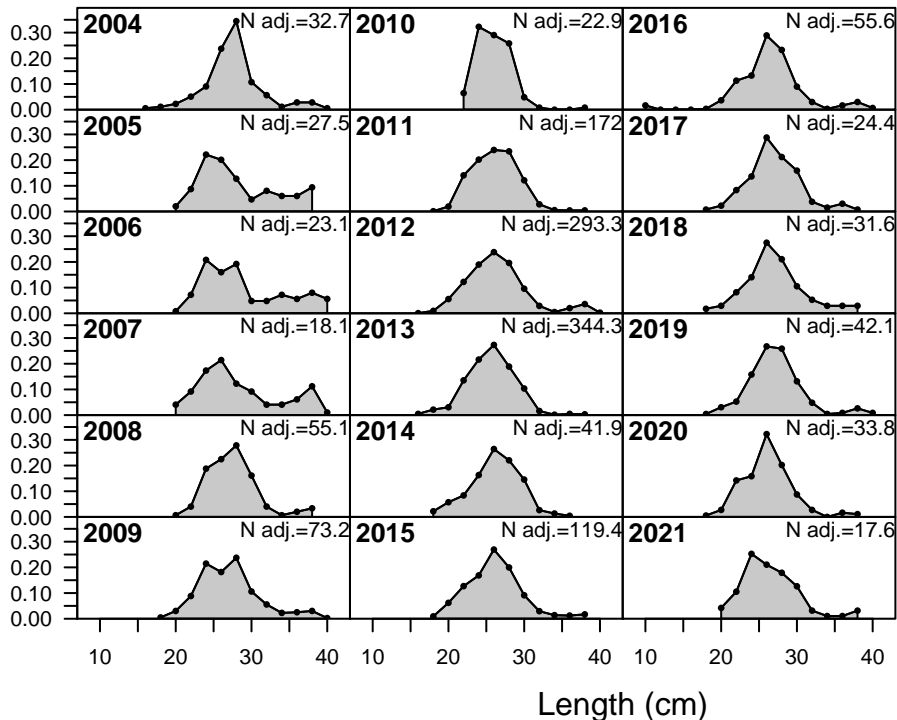


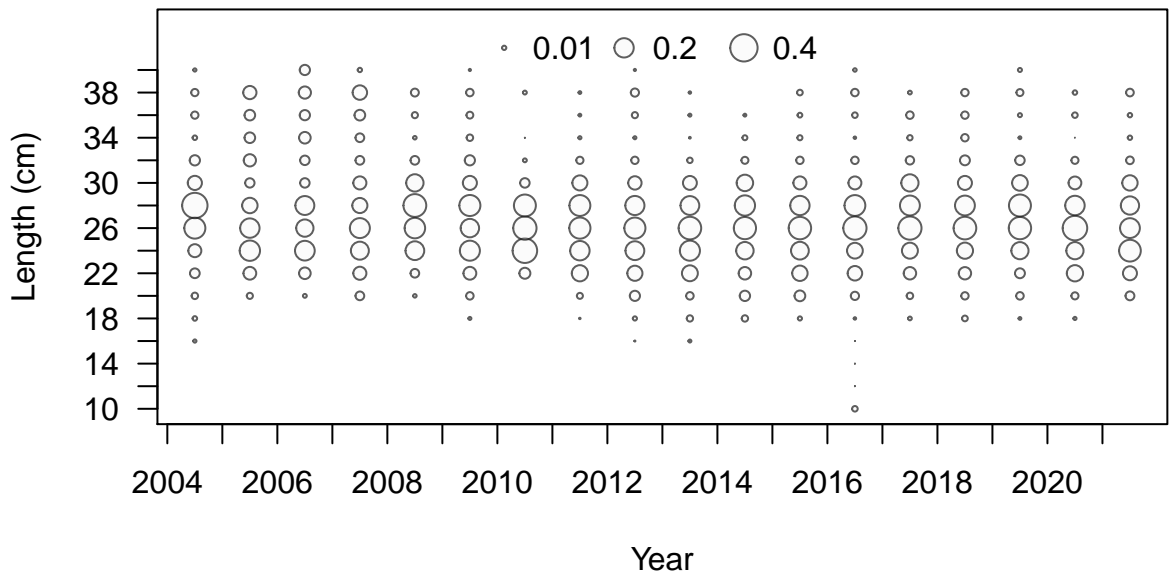
# FISHERY

Sum of N adj.=1428.7

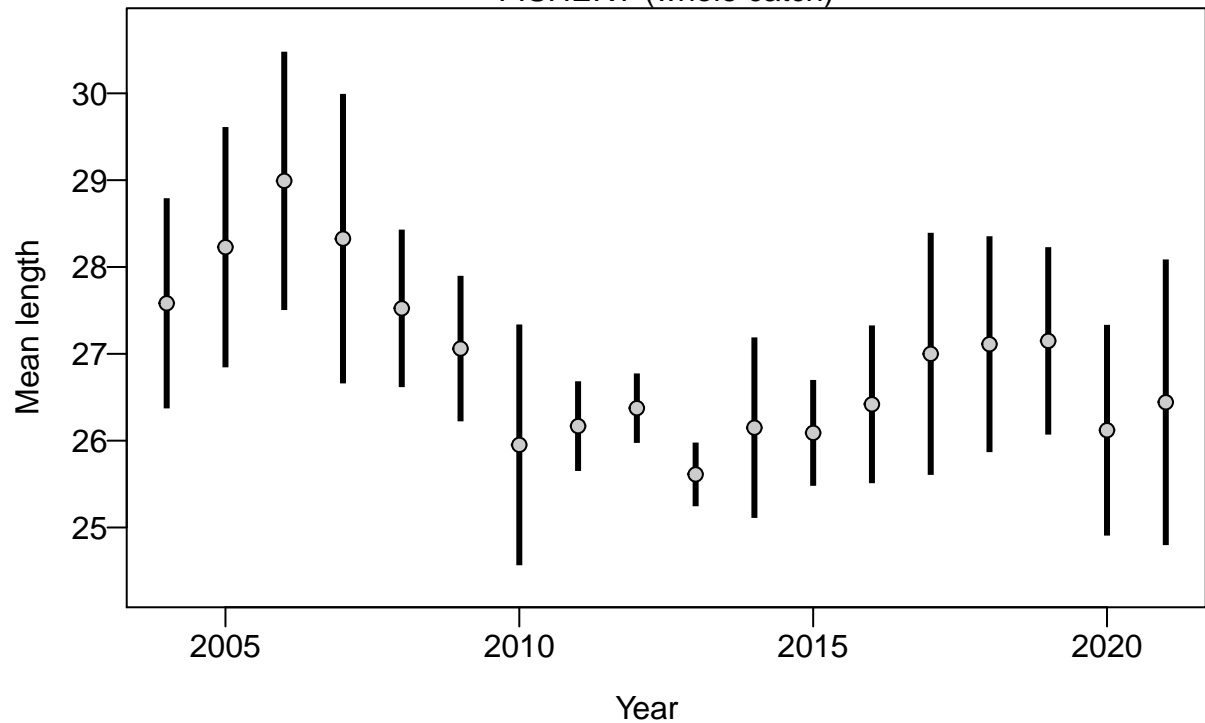


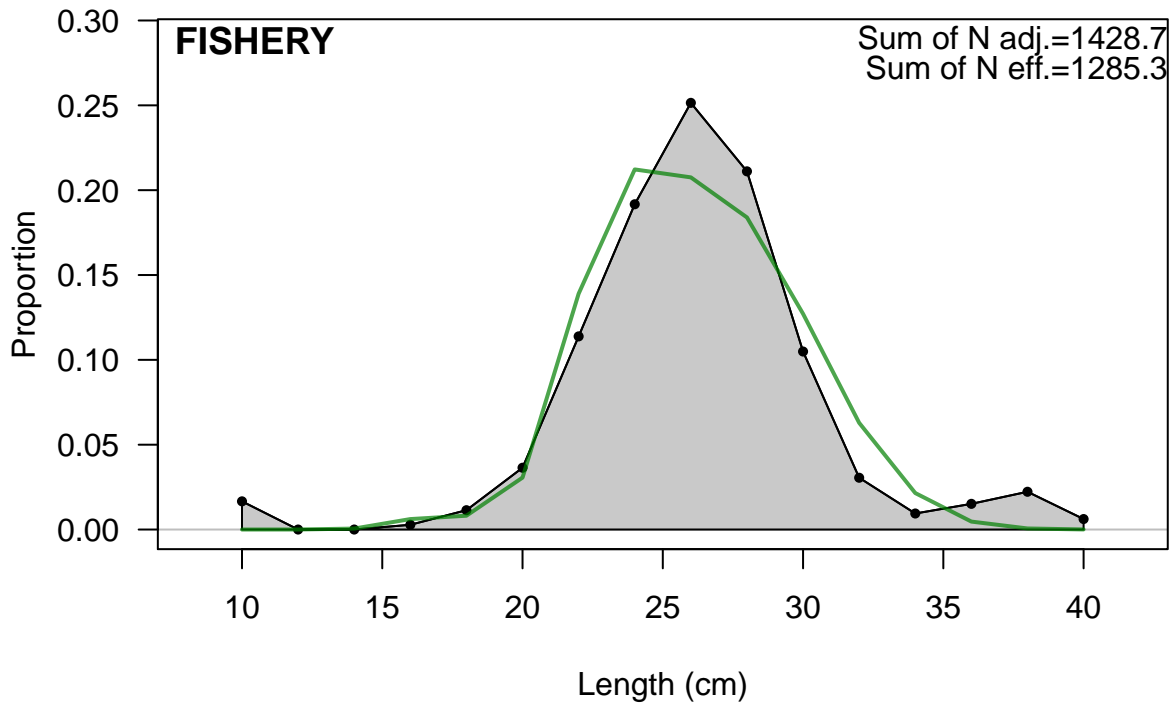


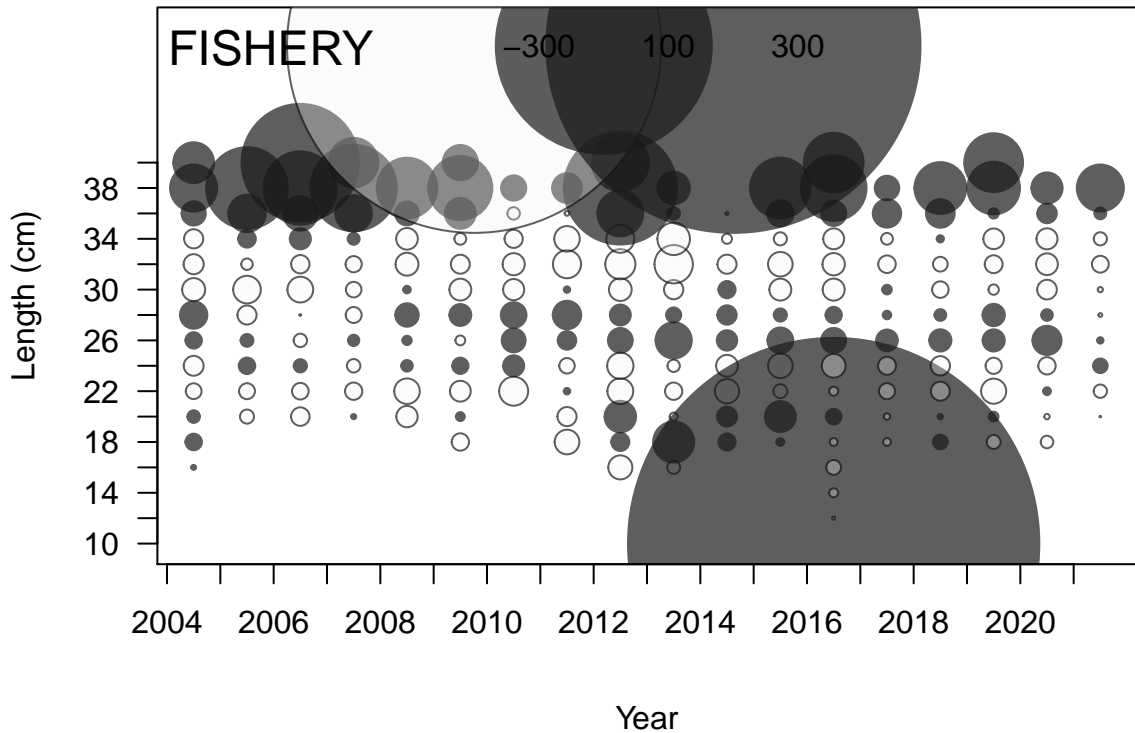




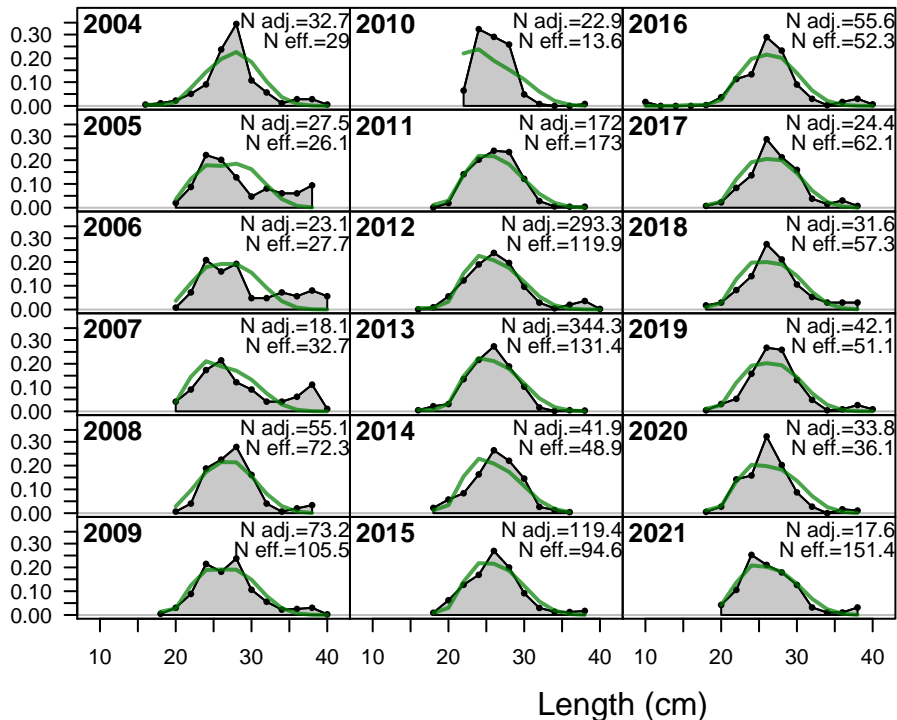
## FISHERY (whole catch)

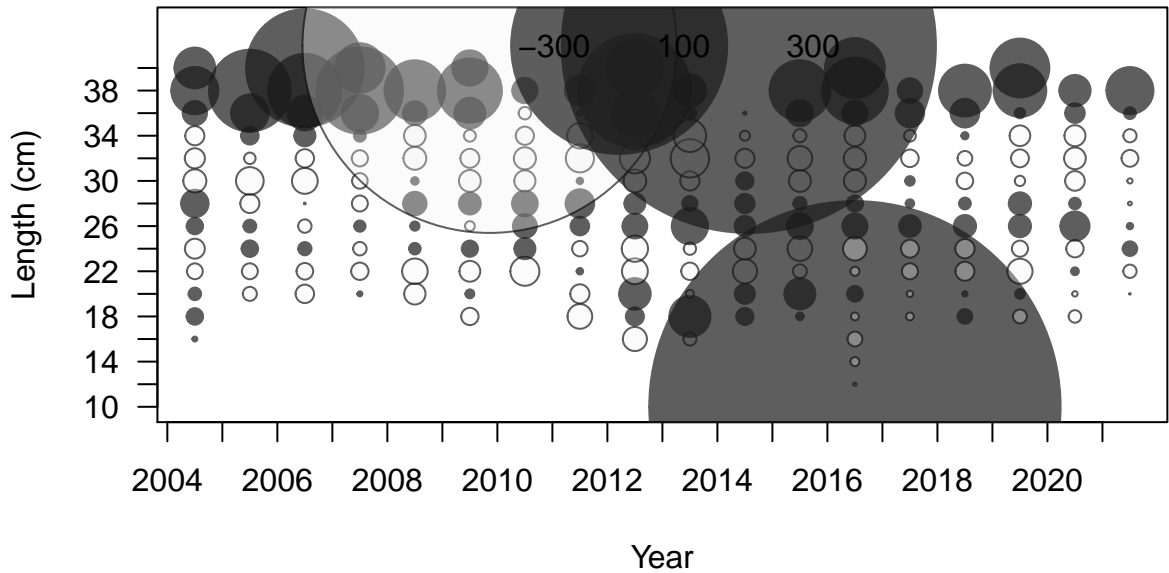




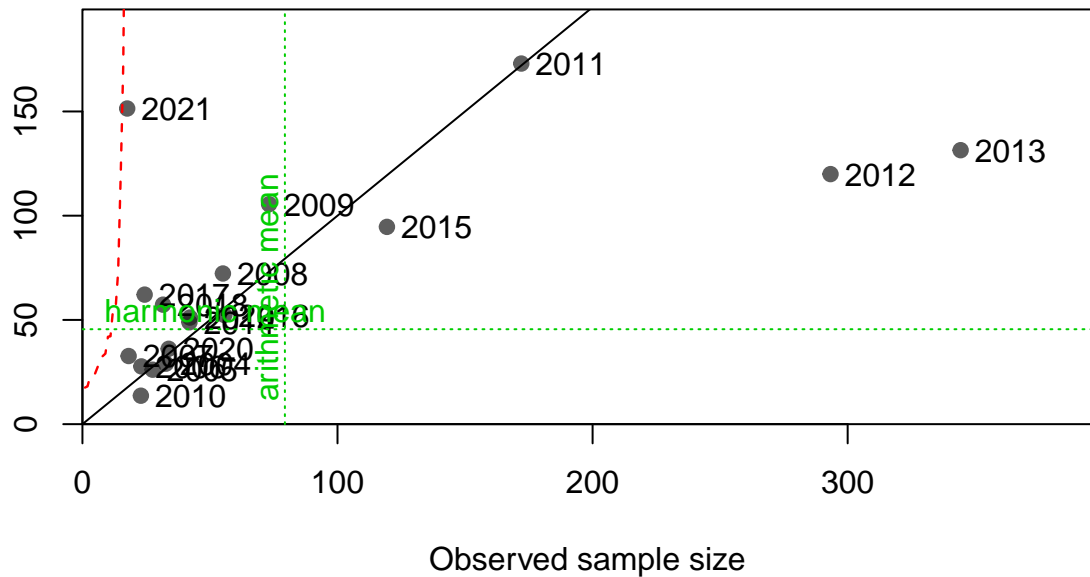




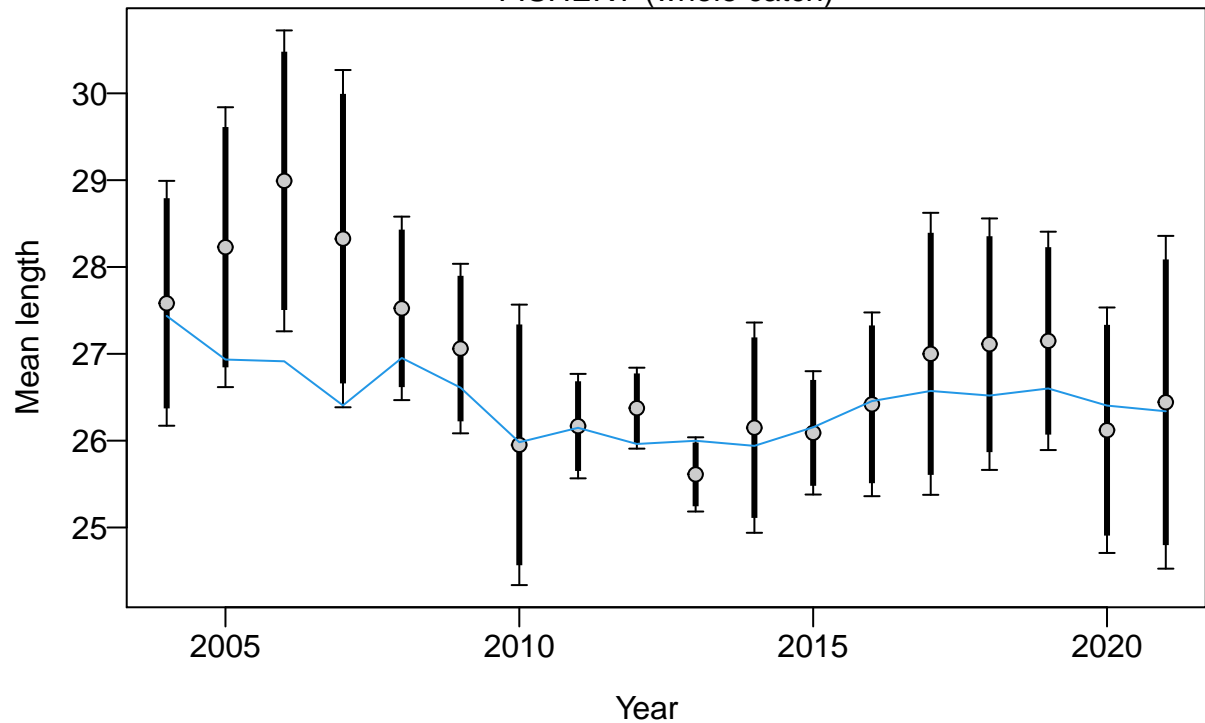


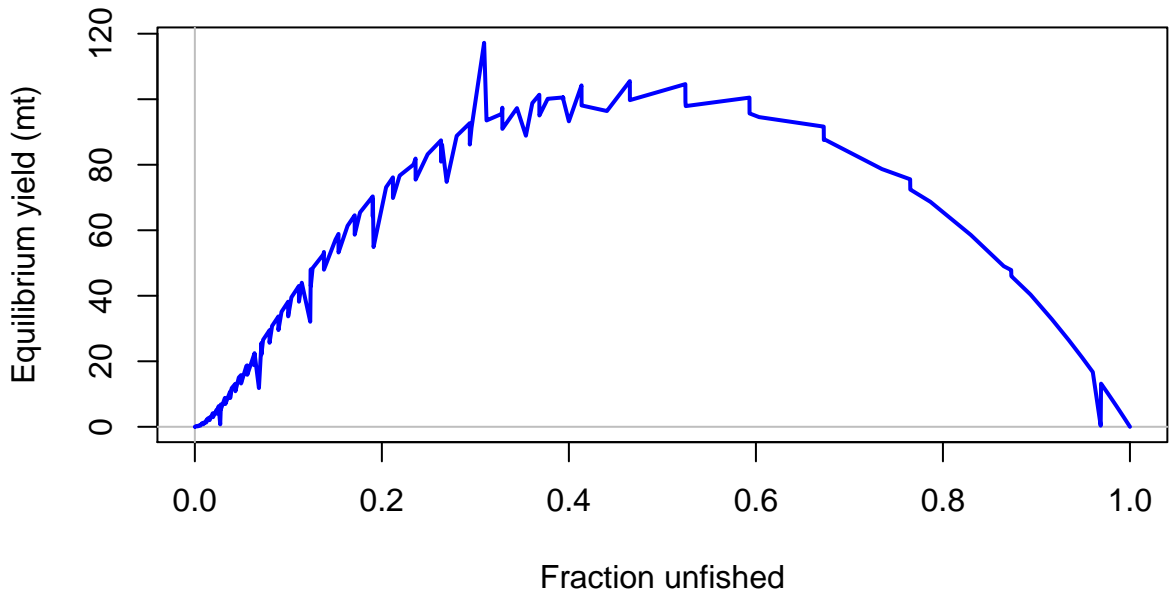


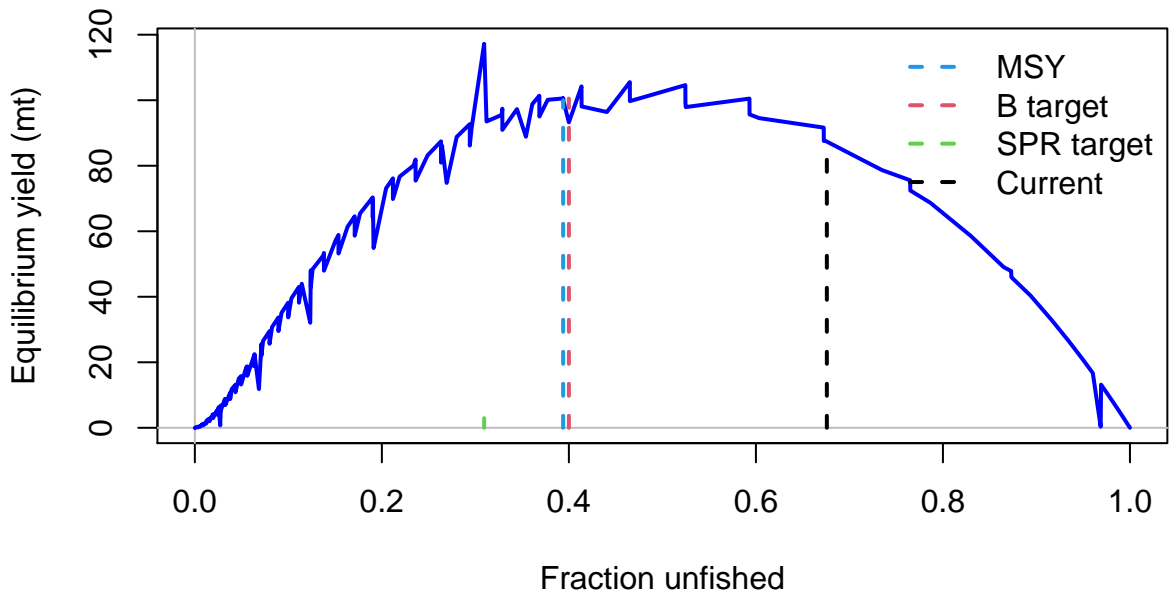
Effective sample size

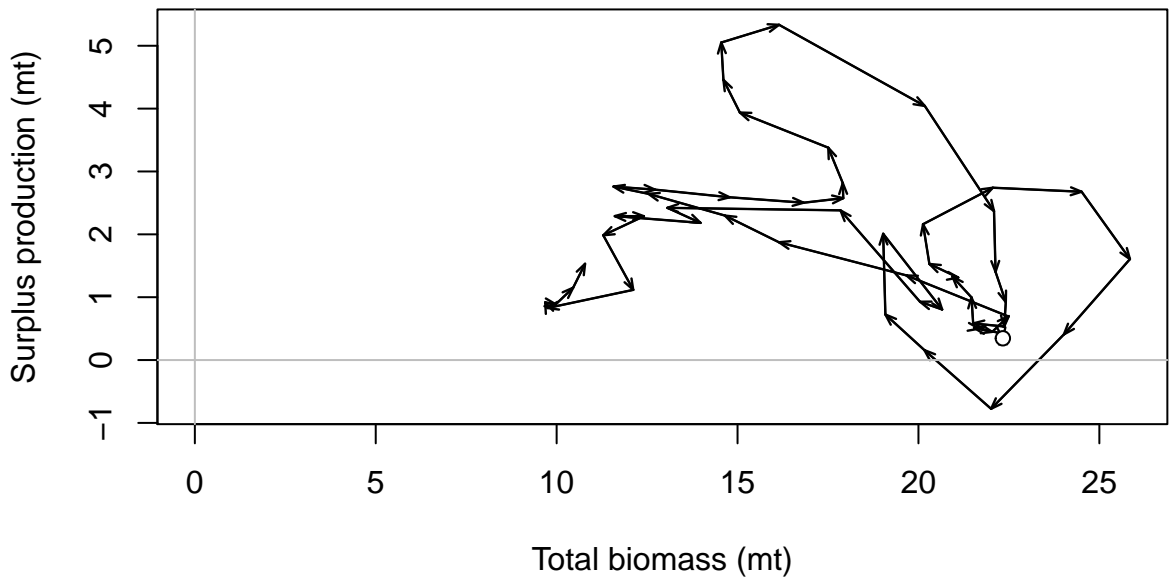


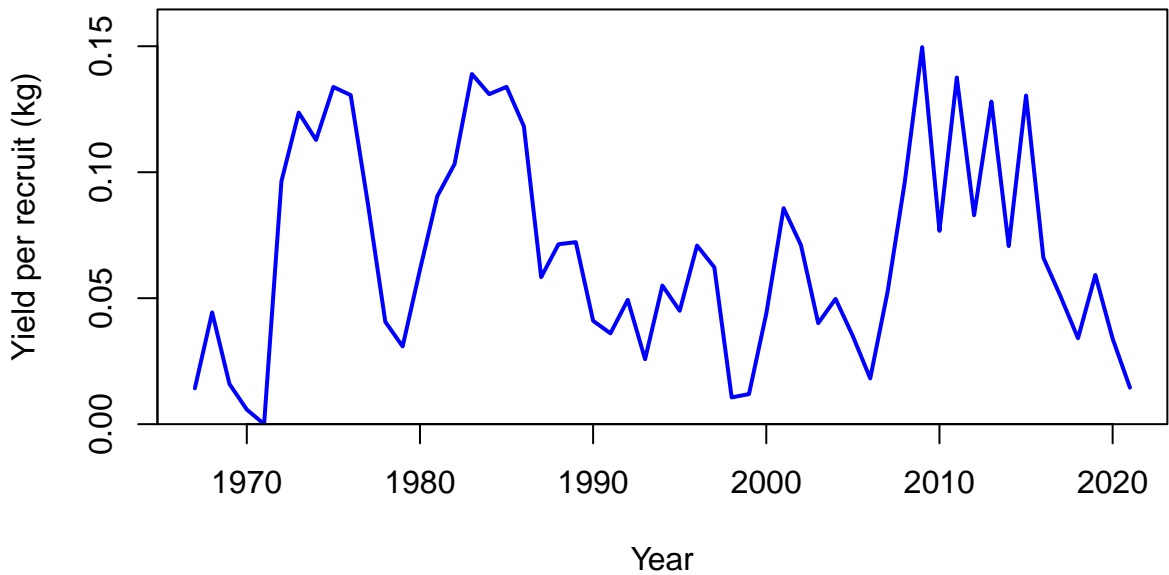
## FISHERY (whole catch)



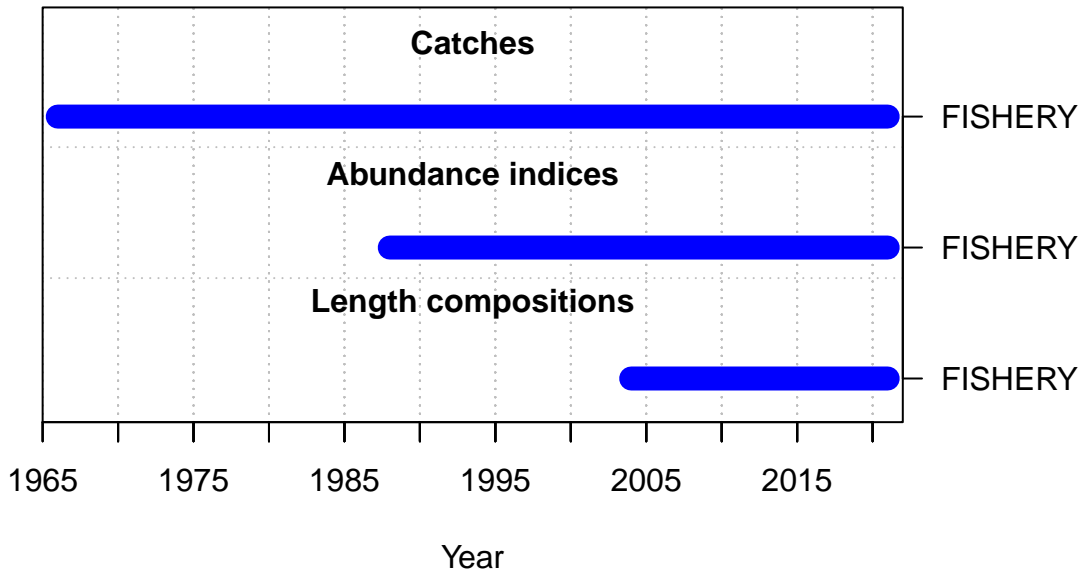


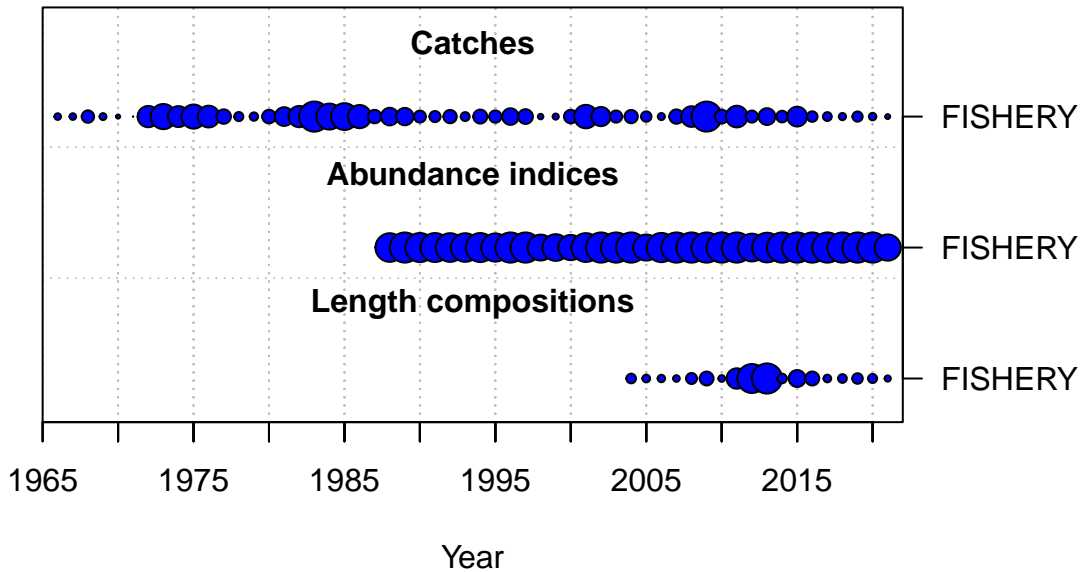




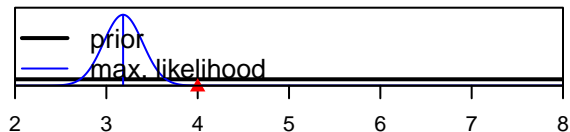




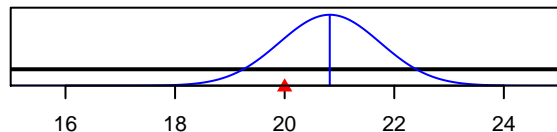




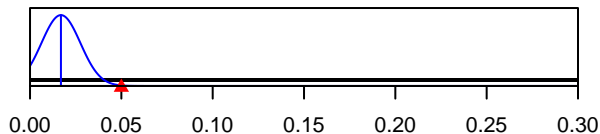
SR\_LN(R0)



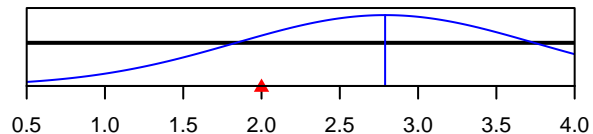
Size\_inflection\_FISHERY(1)



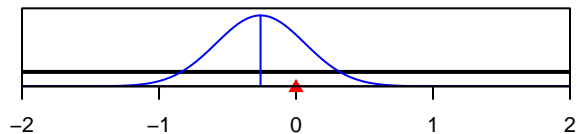
InitF\_seas\_1\_flt\_1FISHERY



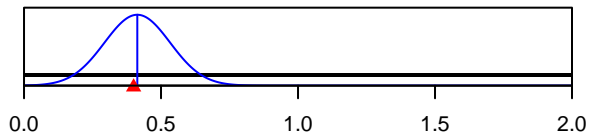
Size\_95%width\_FISHERY(1)



LnQ\_base\_FISHERY(1)



Q\_extraSD\_FISHERY(1)



Parameter value