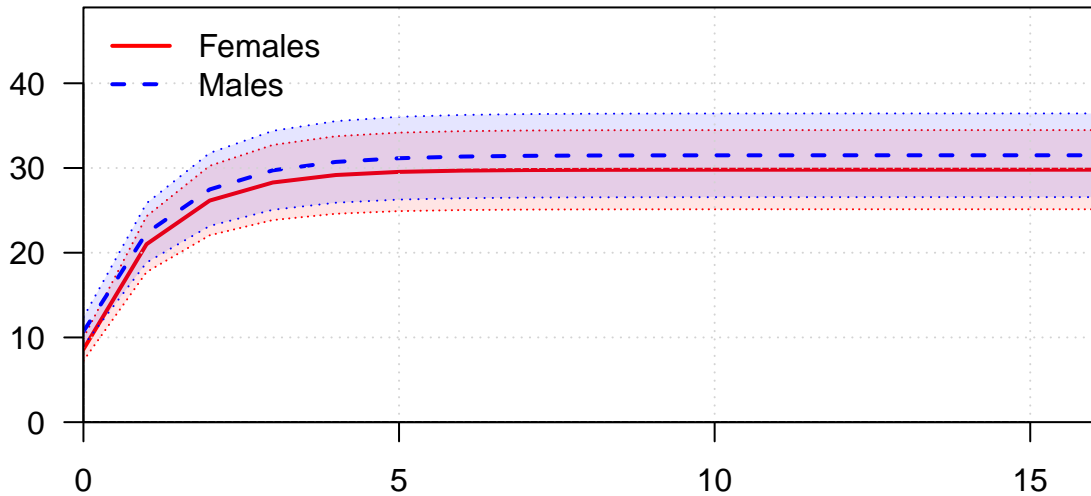
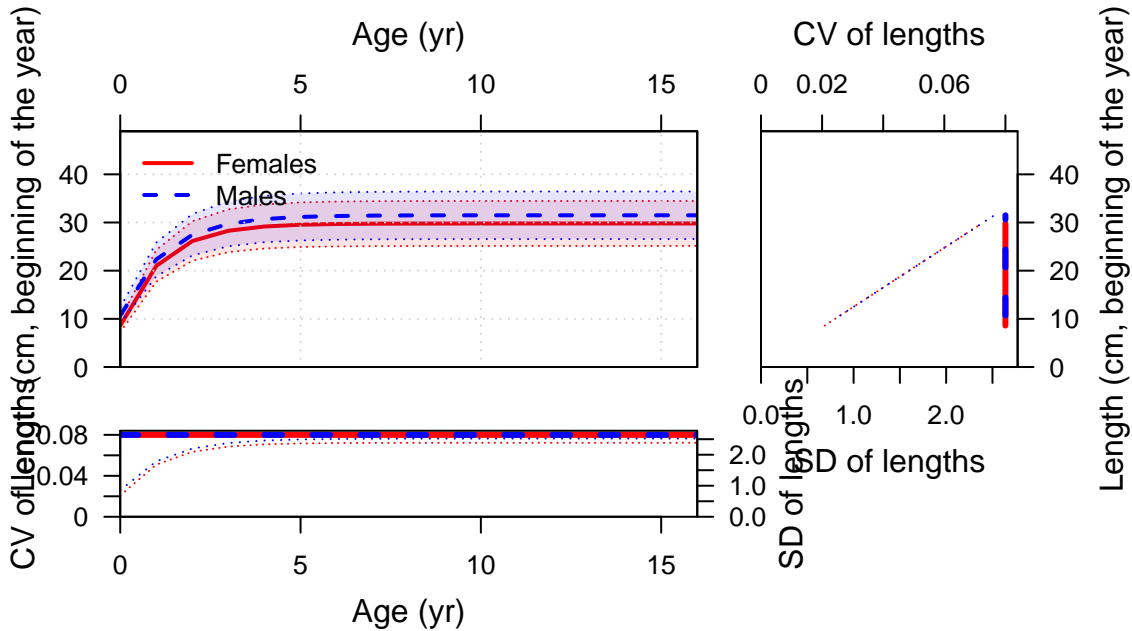


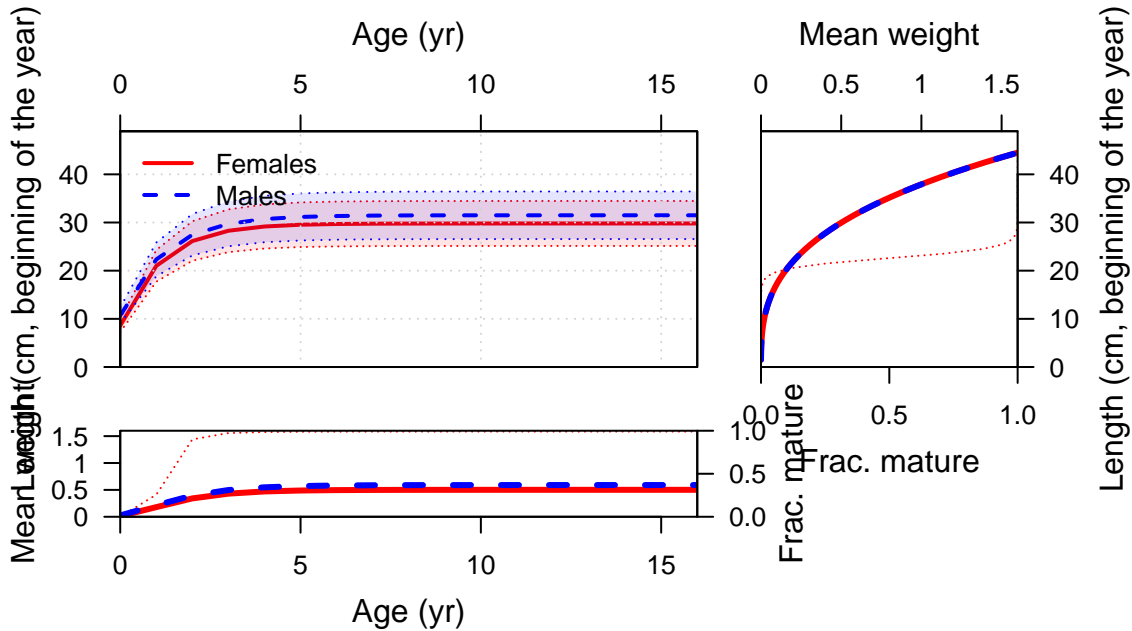
Plots created using the 'r4ss' package in R  
Stock Synthesis version: 3.30.19.0  
StartTime: Thu Jul 28 13:15:28 2022  
Data\_File: data.ss  
Control\_File: control.ss

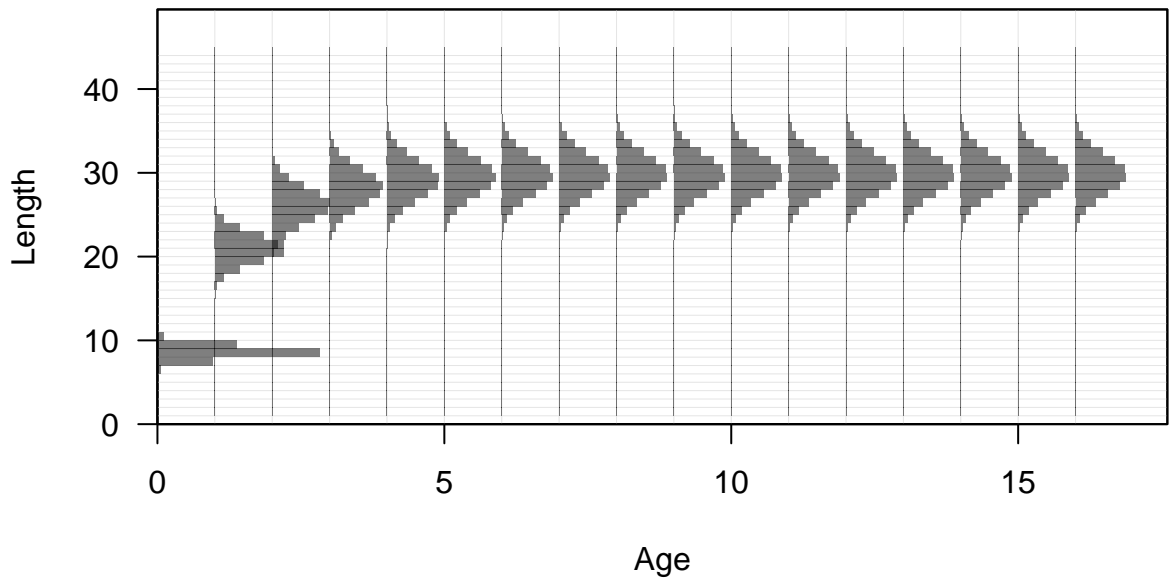
Length (cm, beginning of the year)

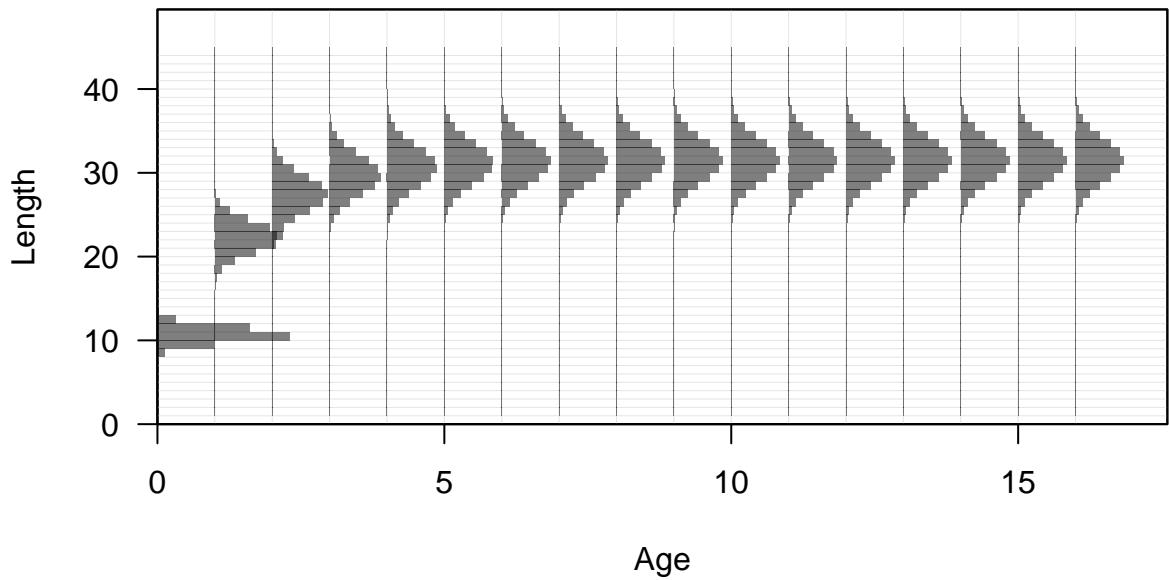


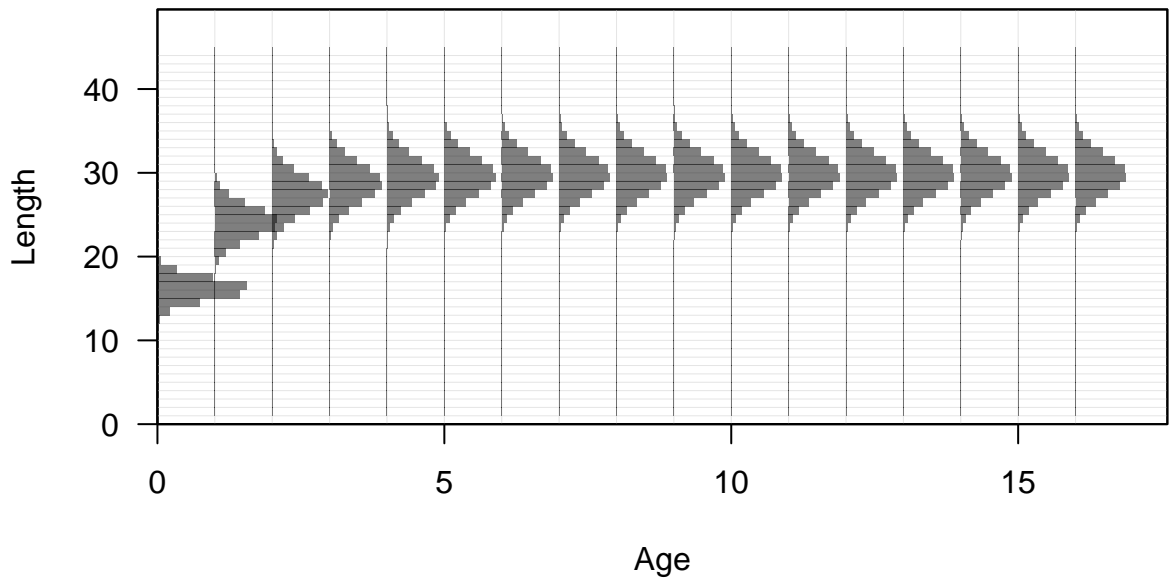
Age (yr)

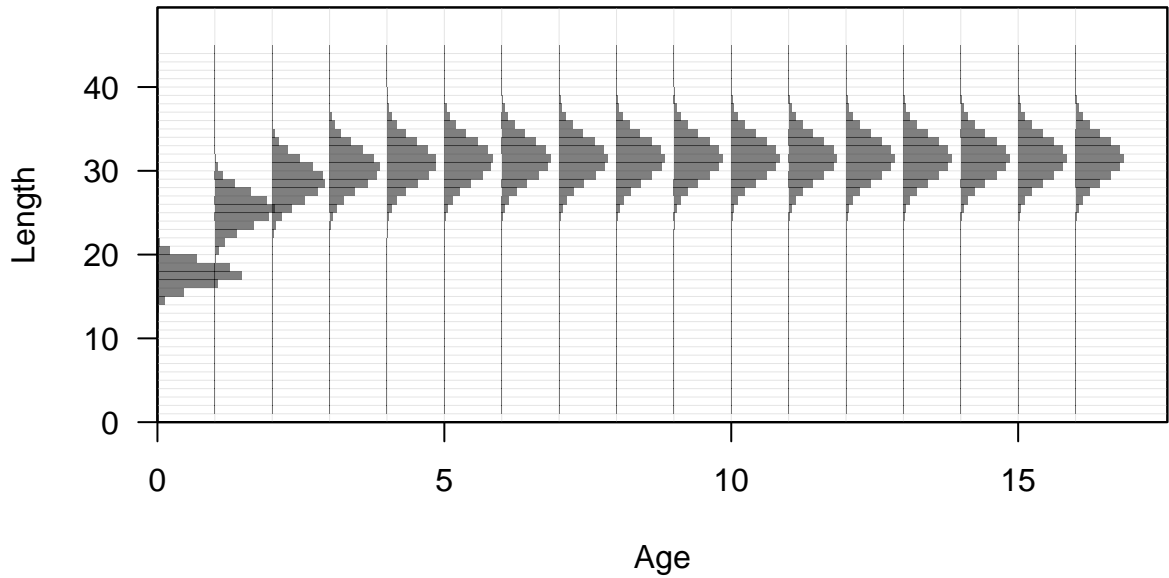




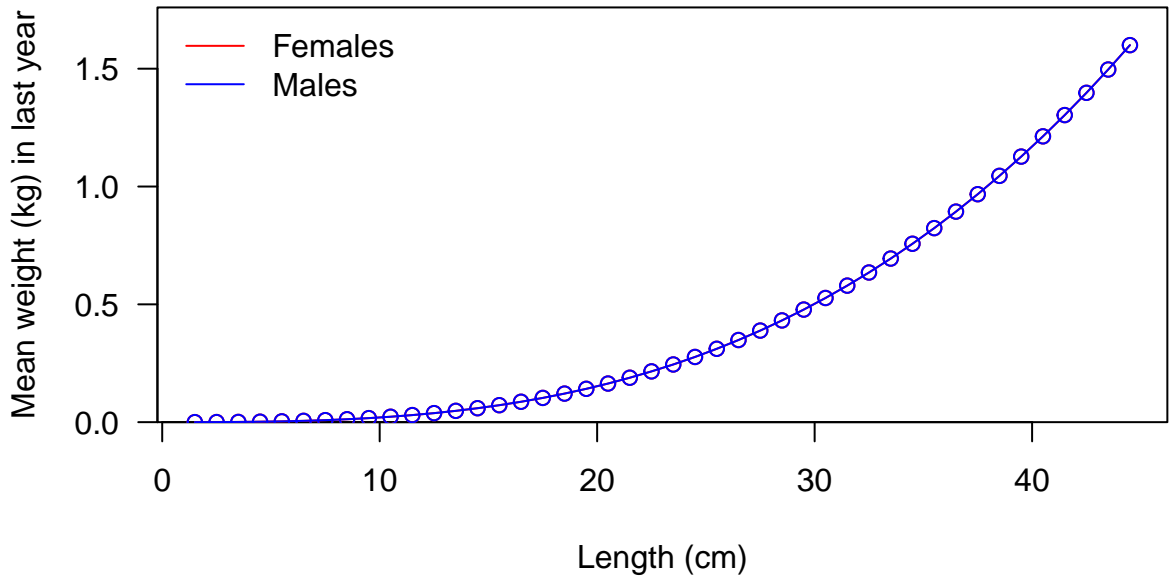


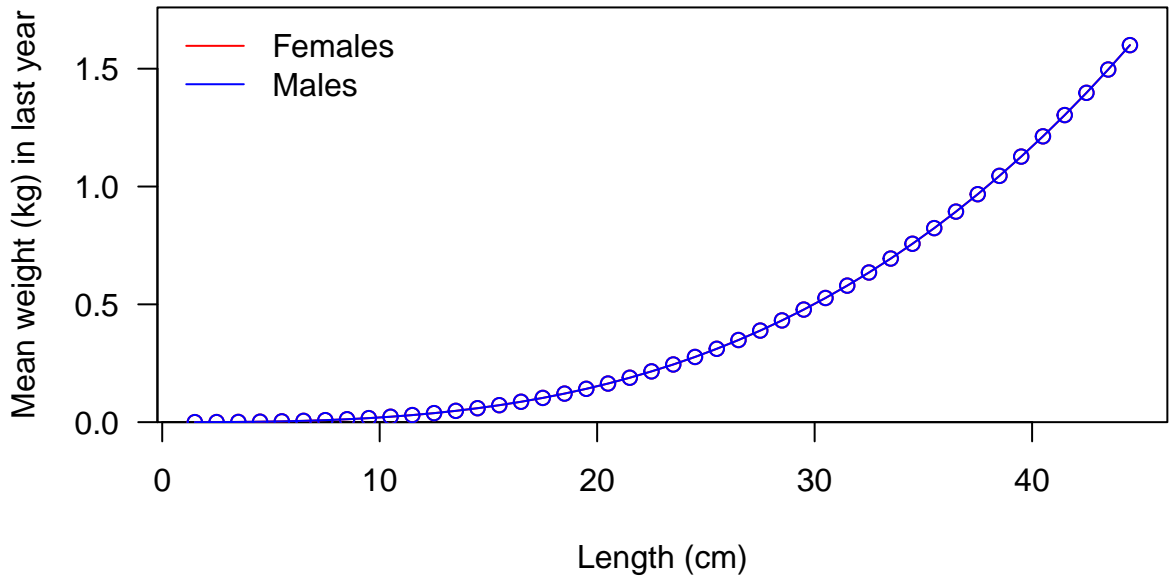


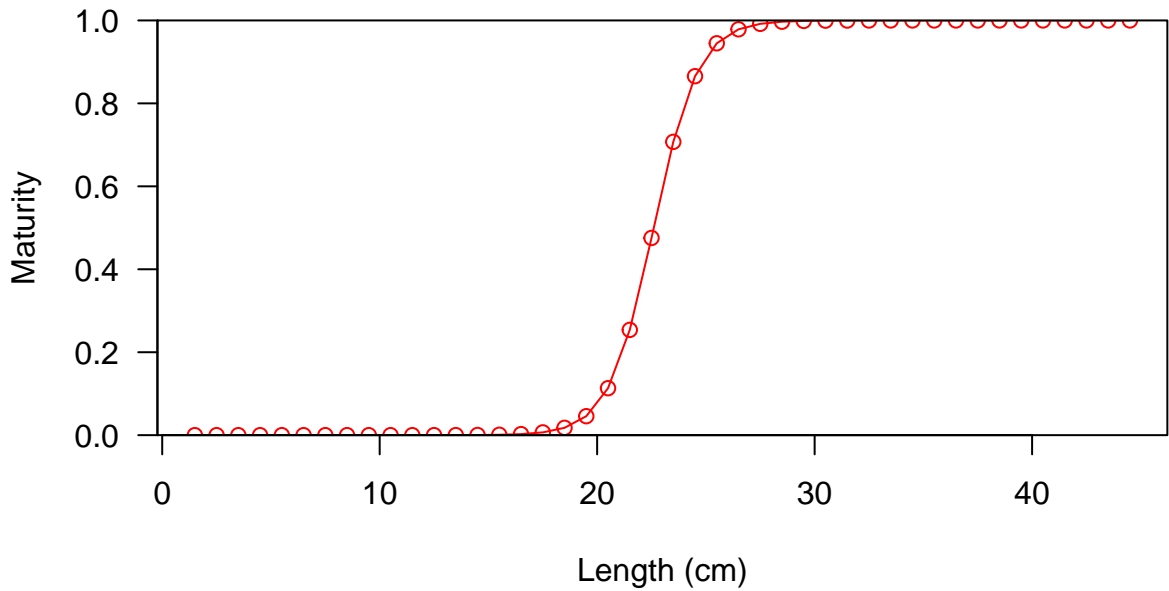


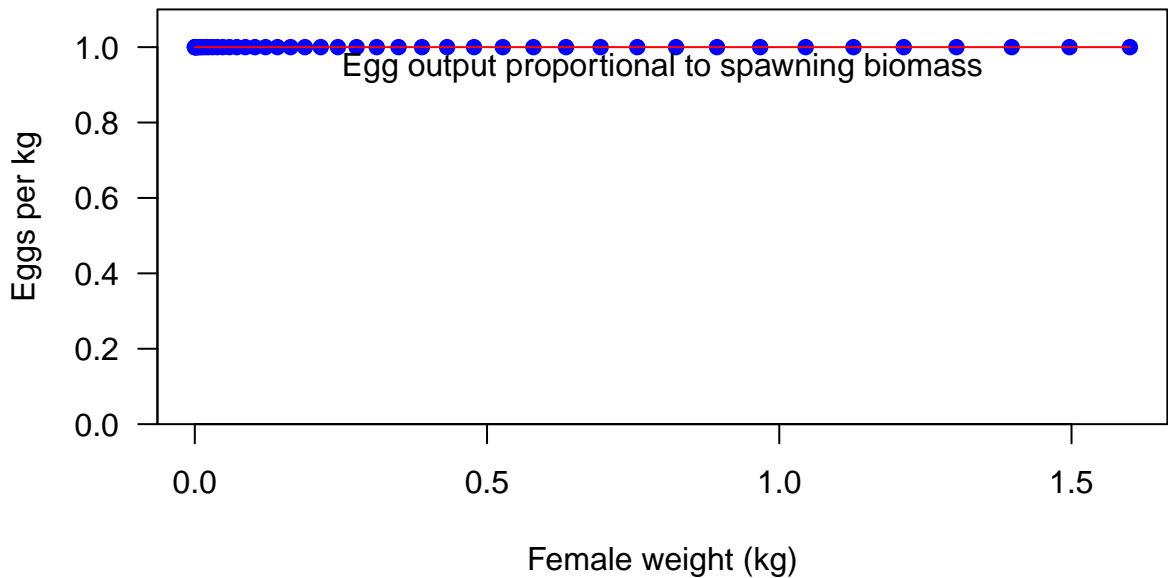


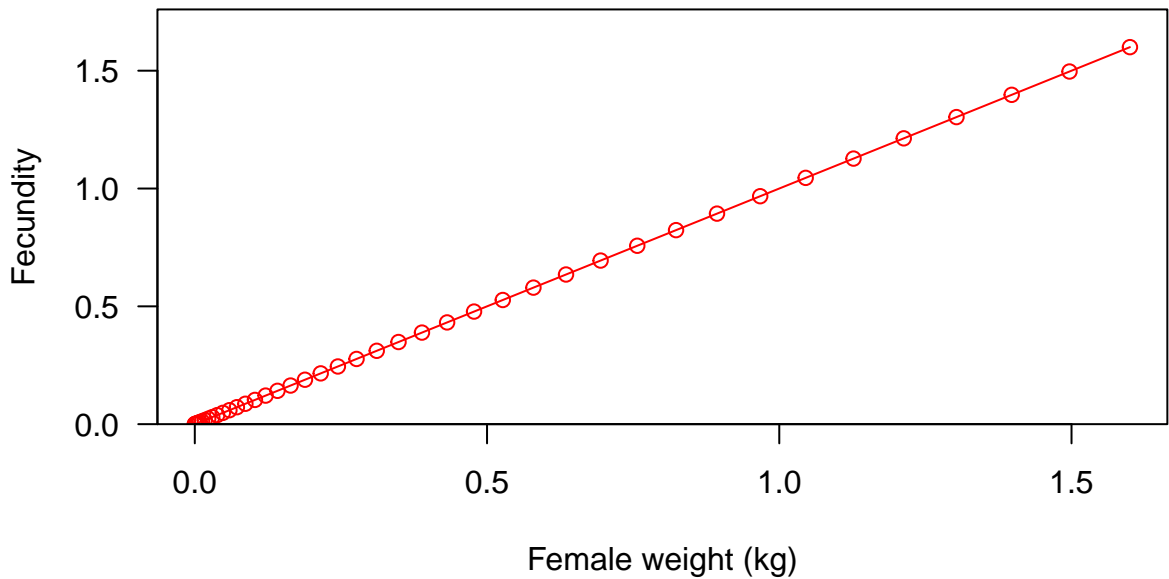


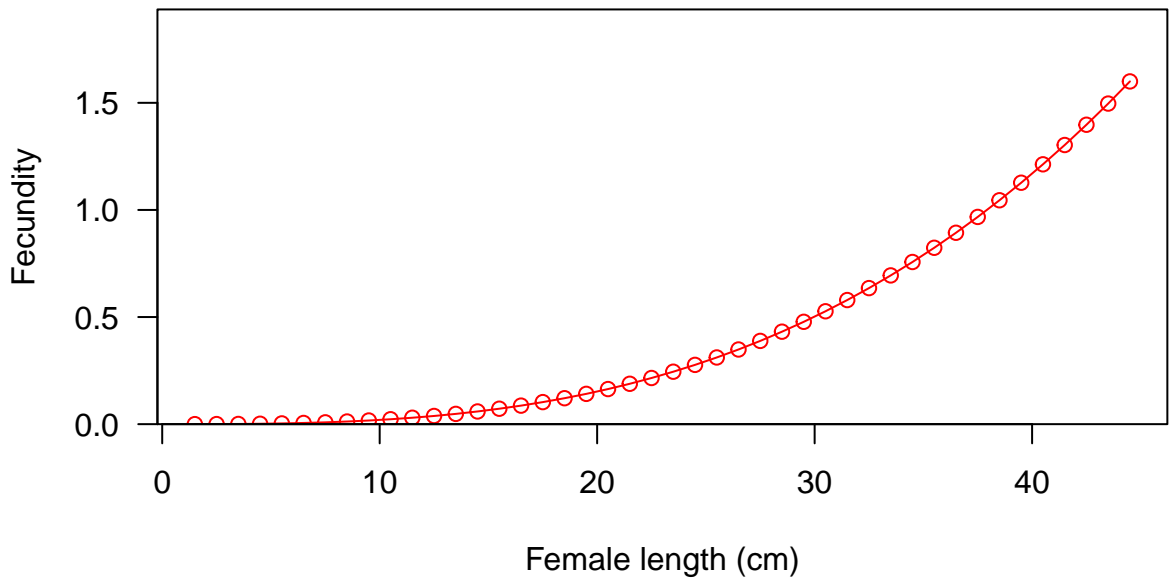


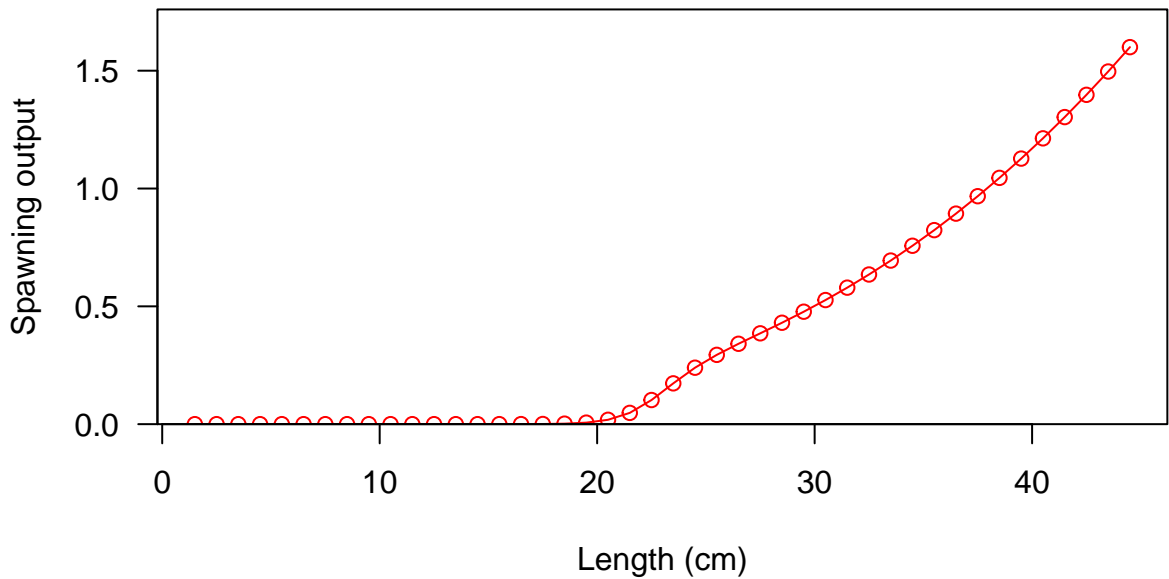


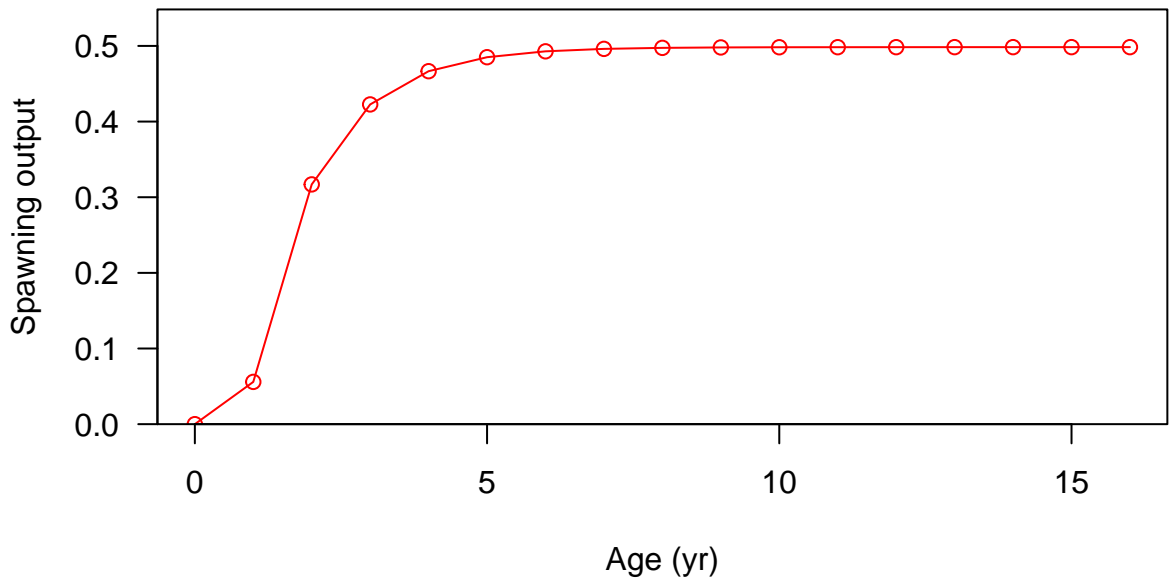




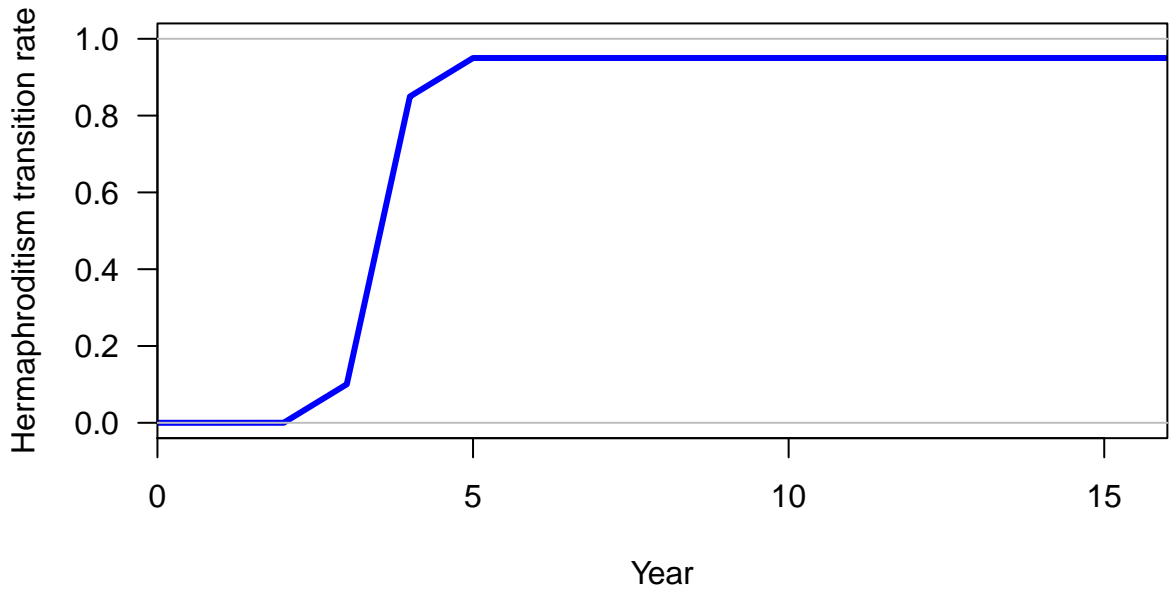




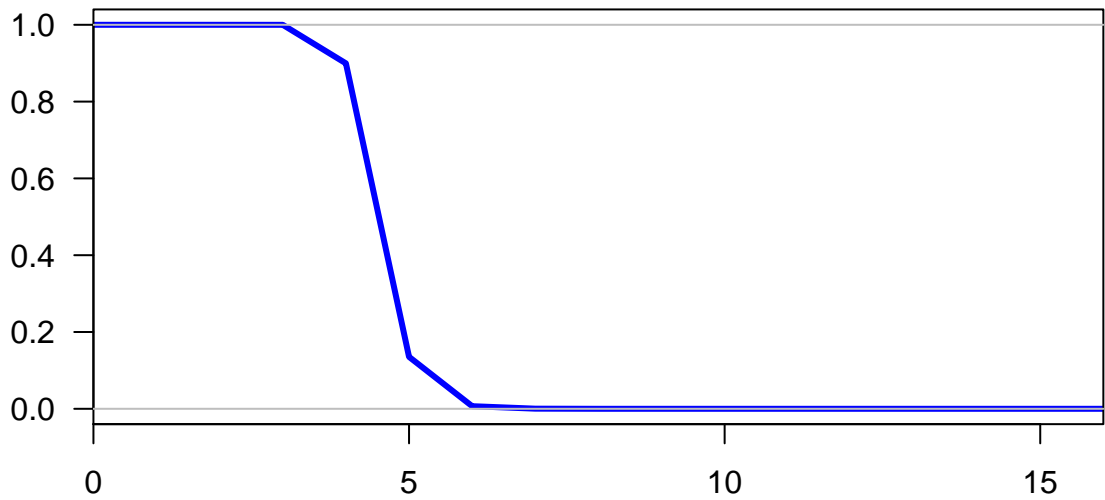






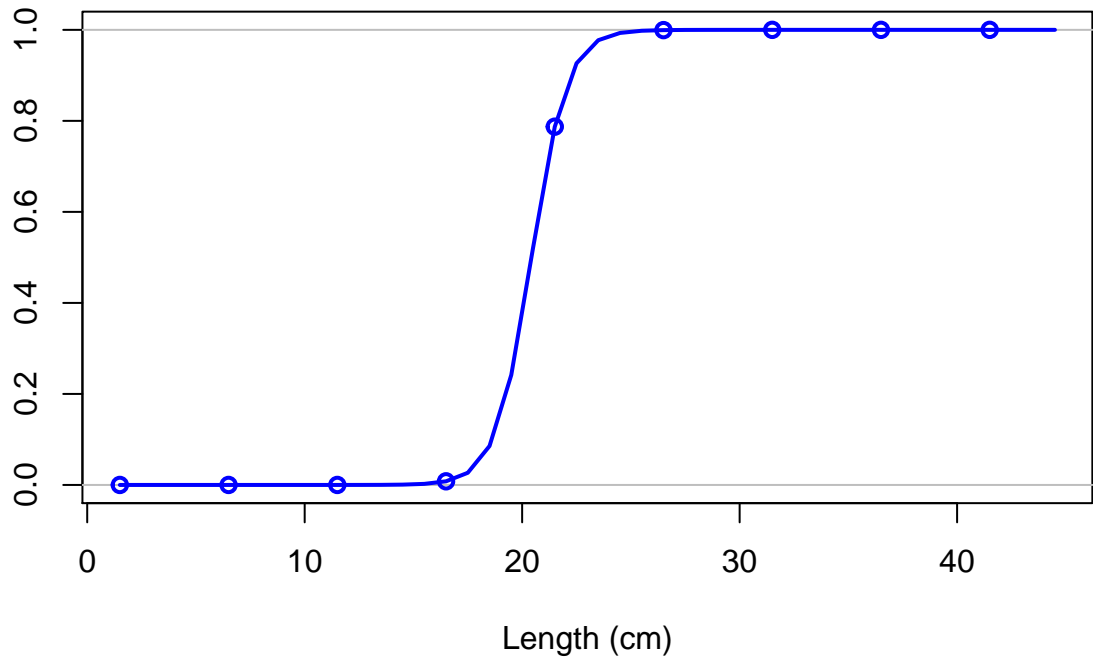


Fraction females by age at equilibrium

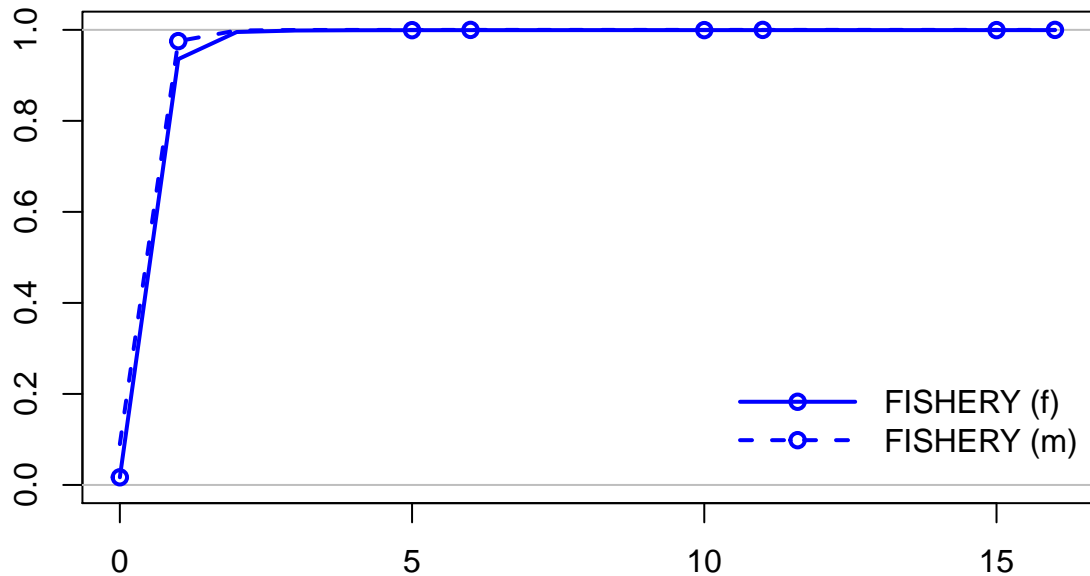


Age (yr)

Selectivity

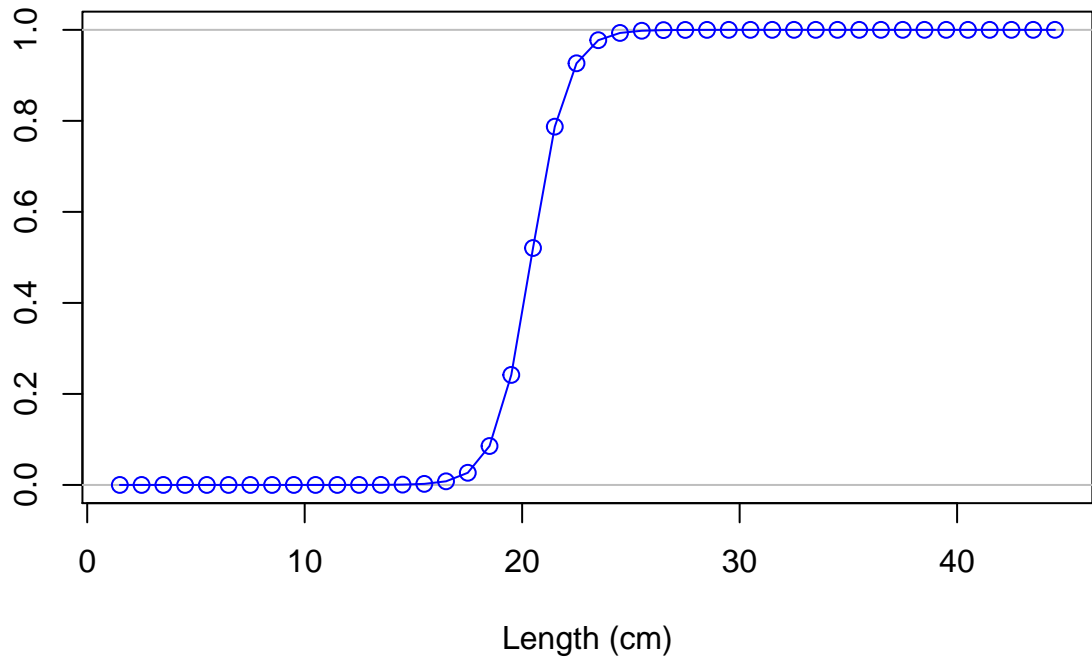


Selectivity

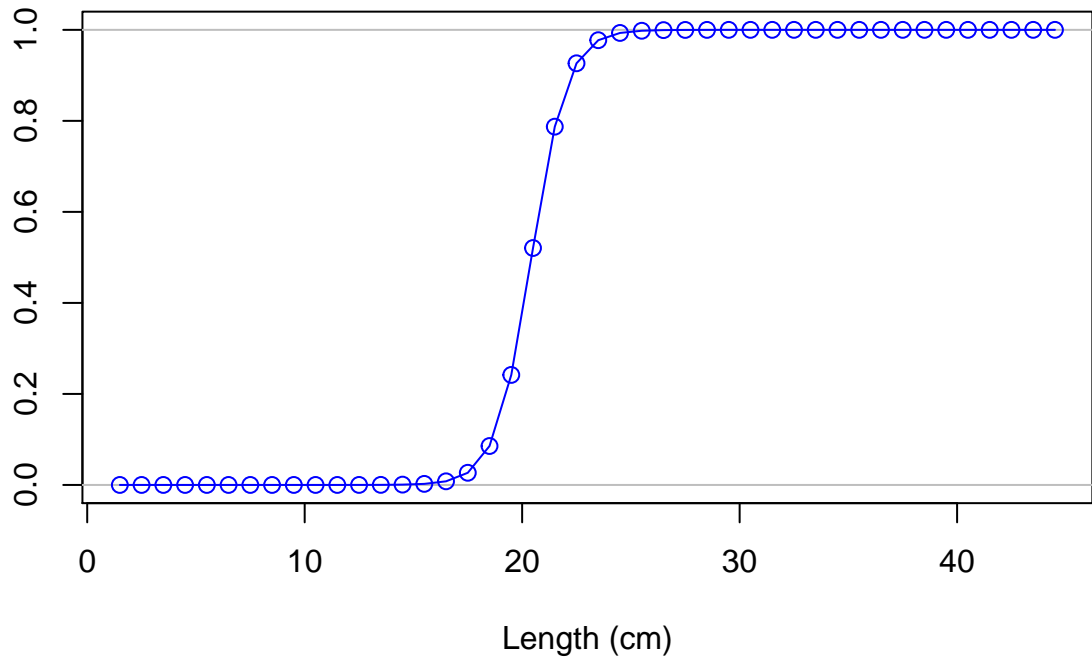


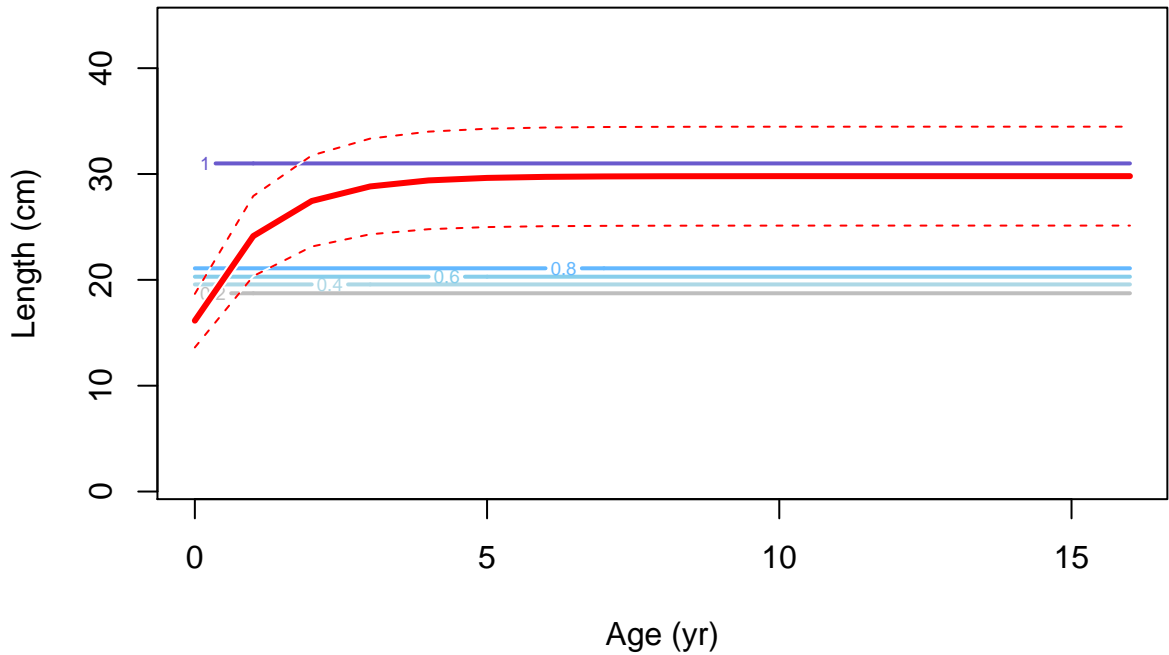
Age (yr)

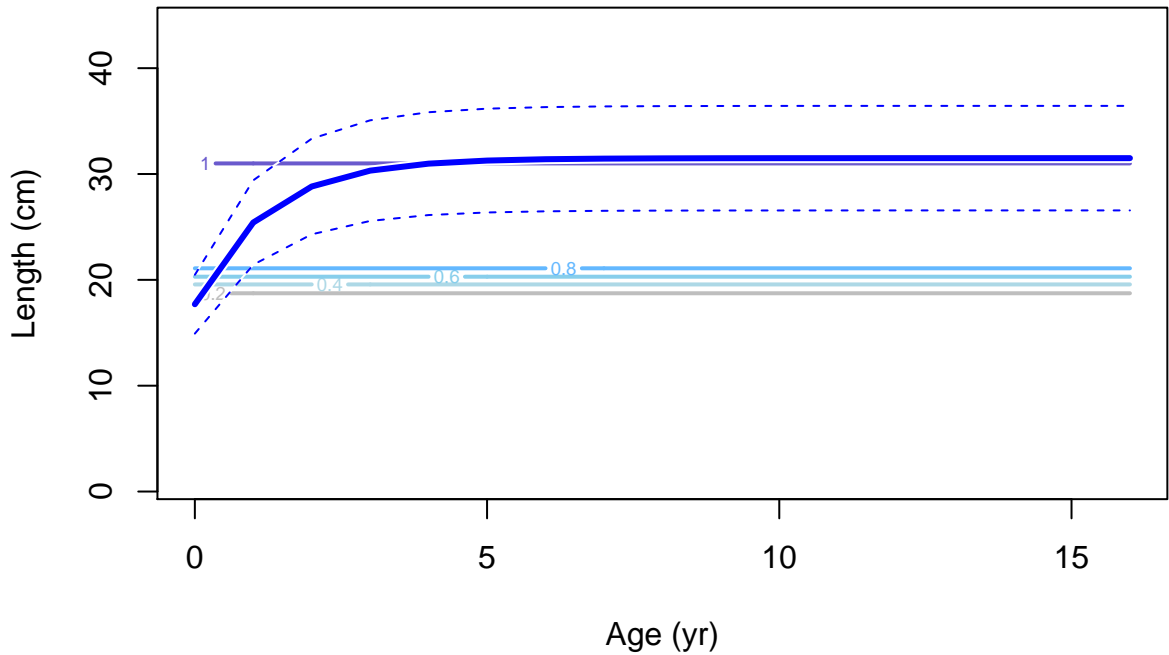
Selectivity



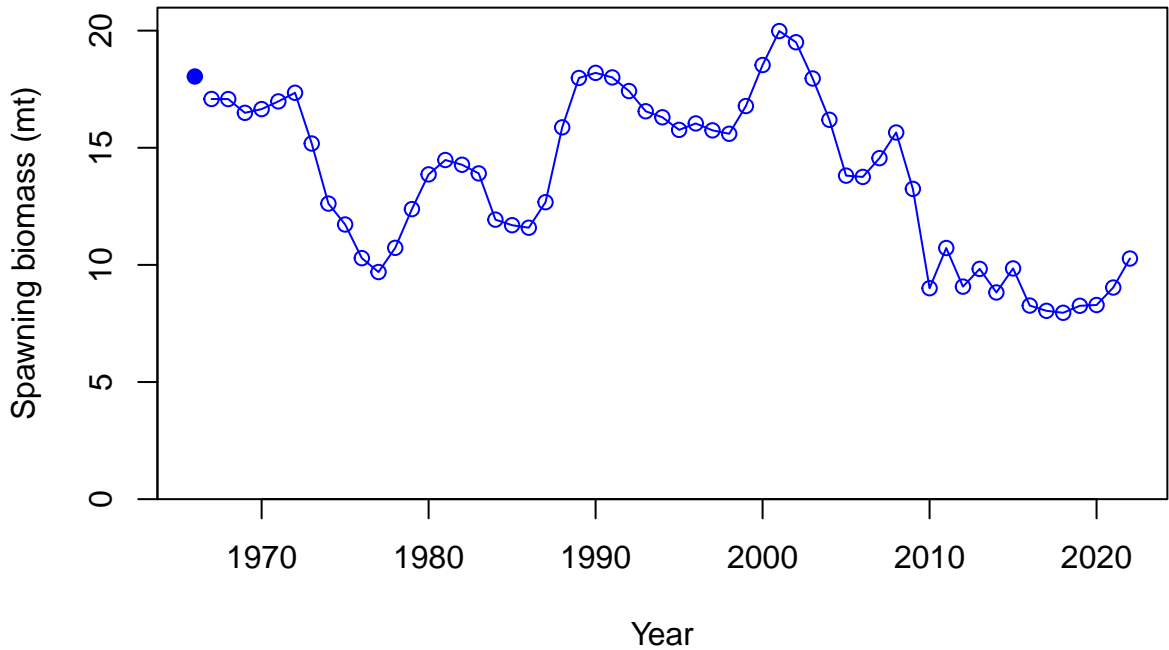
Selectivity



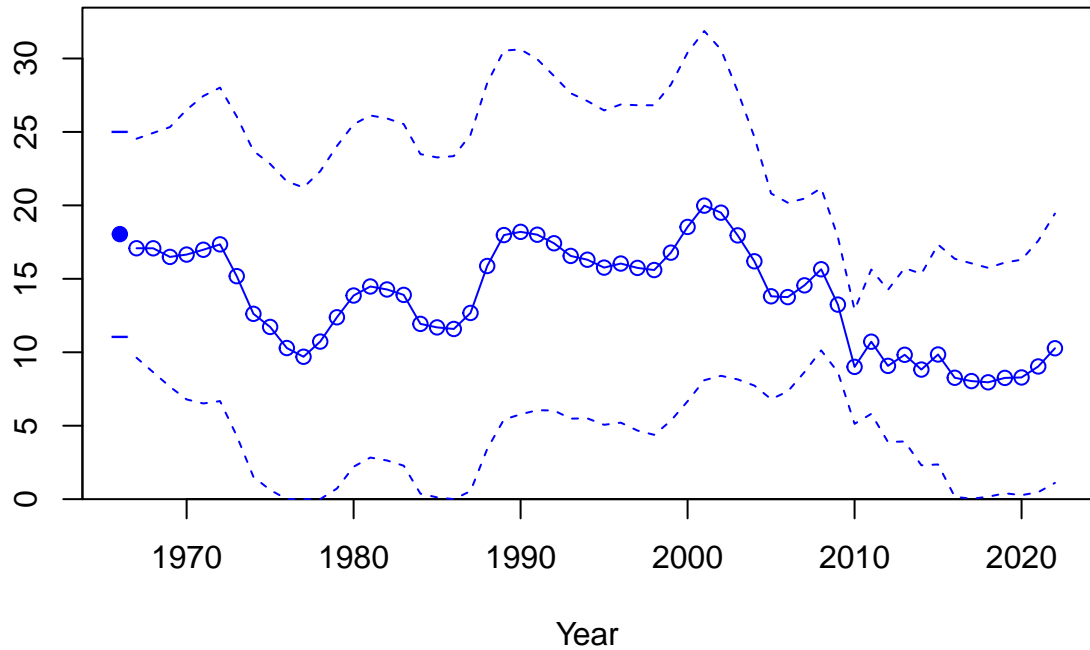




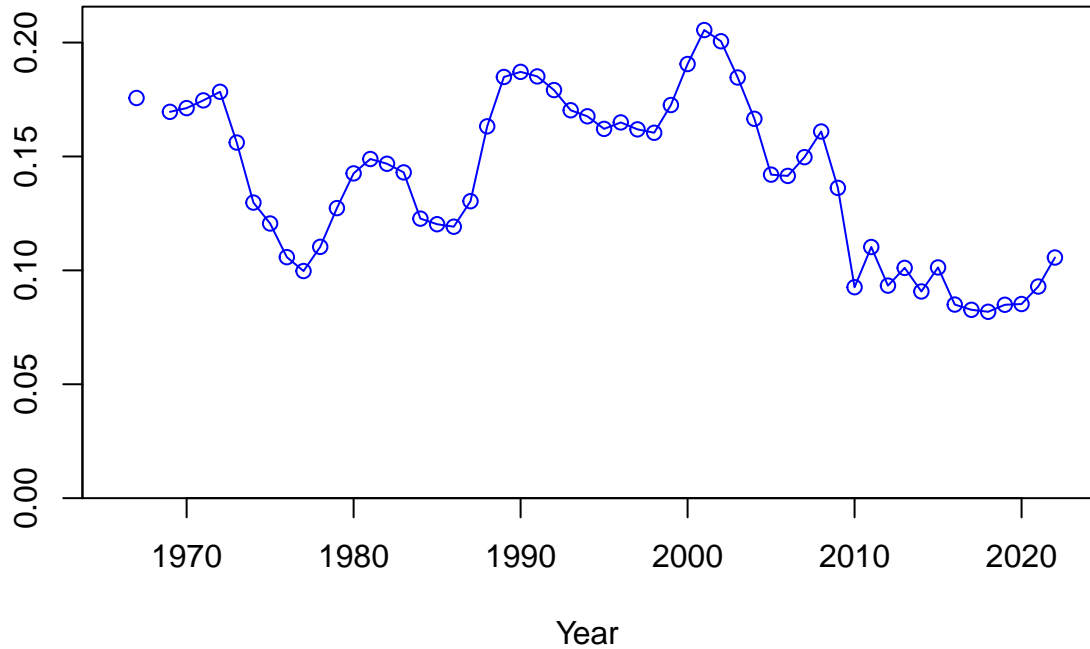




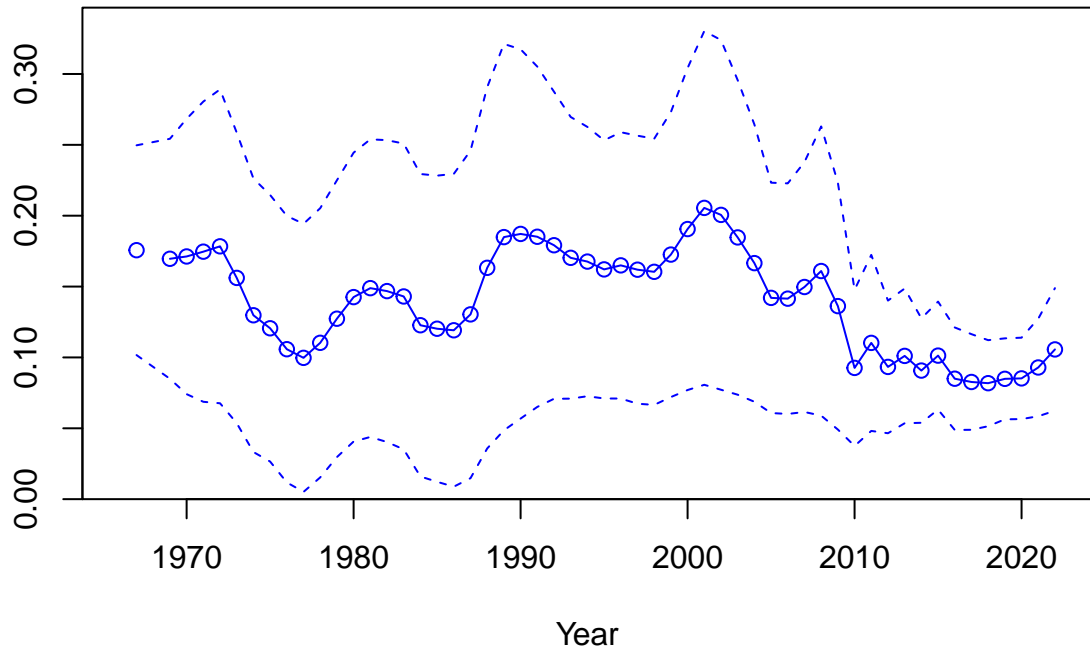
Spawning biomass (mt)

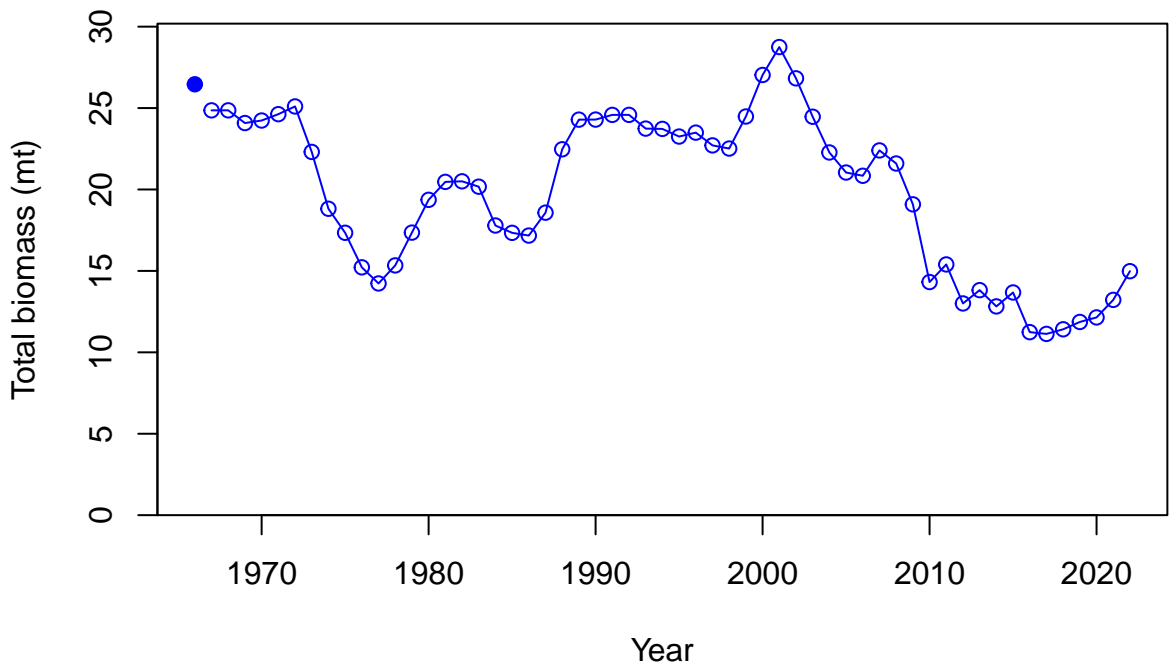


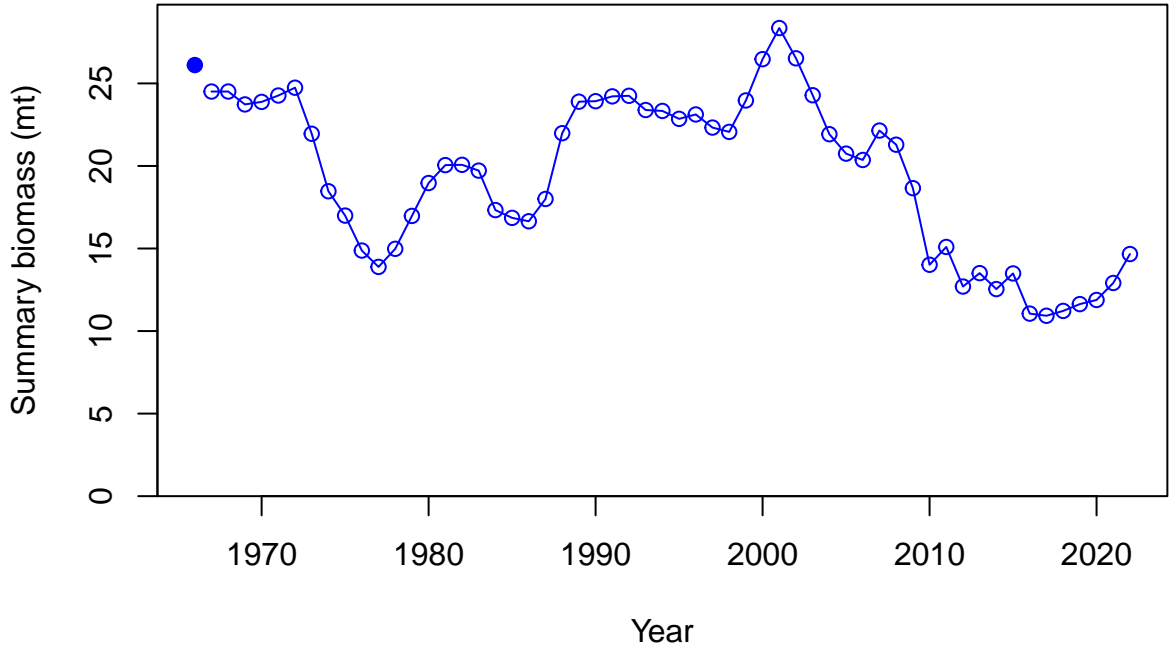
Relative spawning biomass: B/B\_MSY



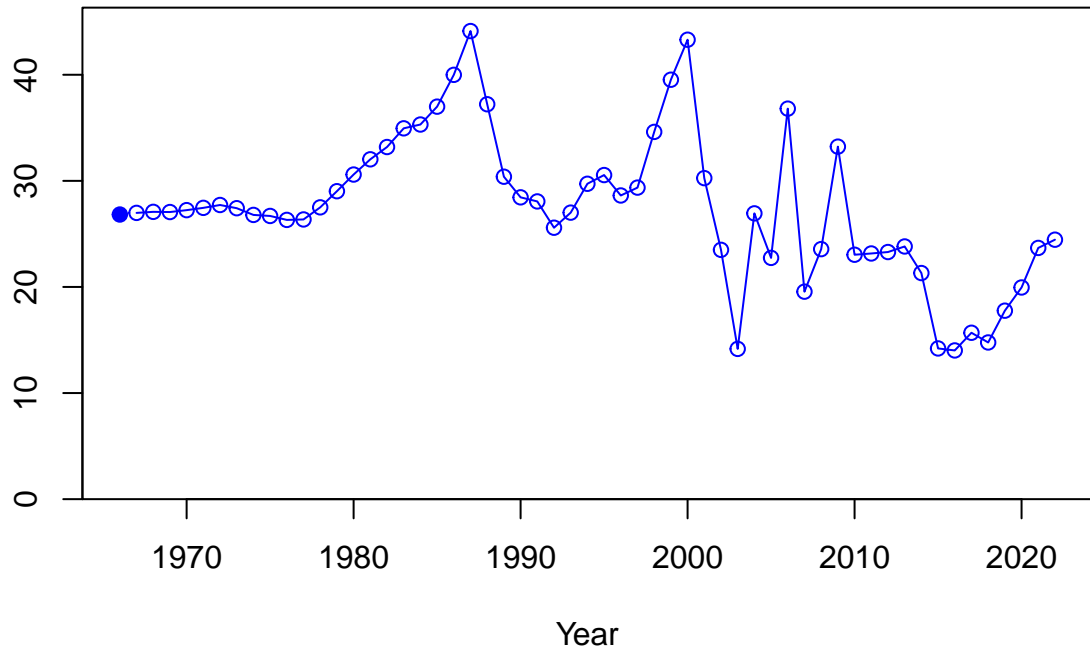
Relative spawning biomass:  $B/B_{MSY}$

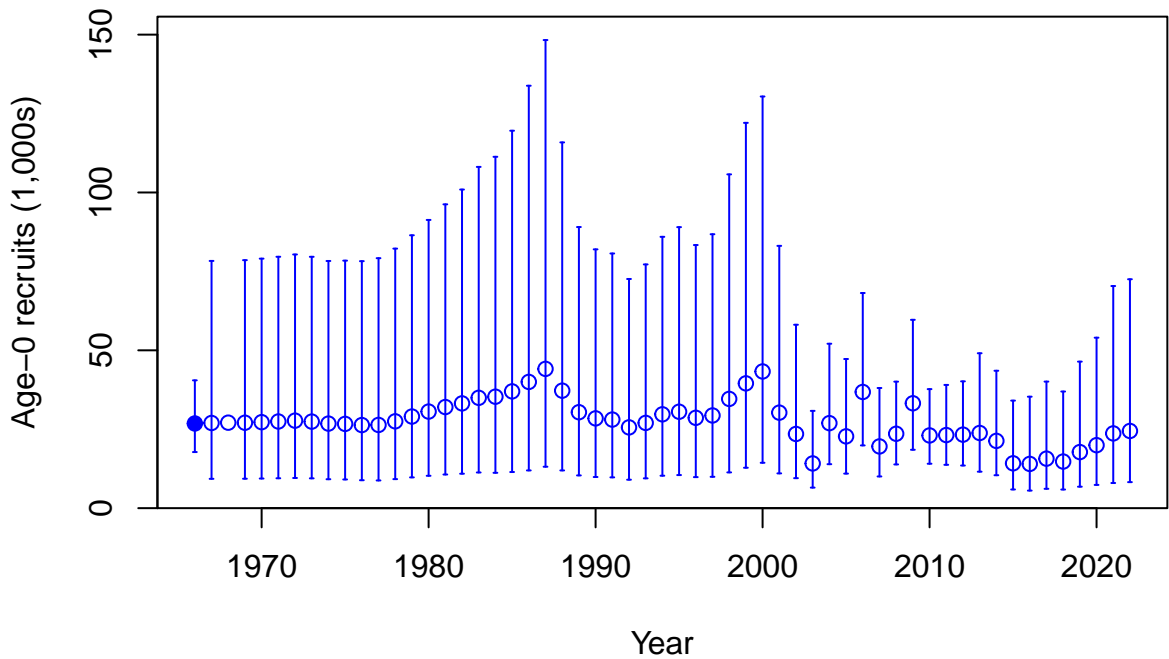






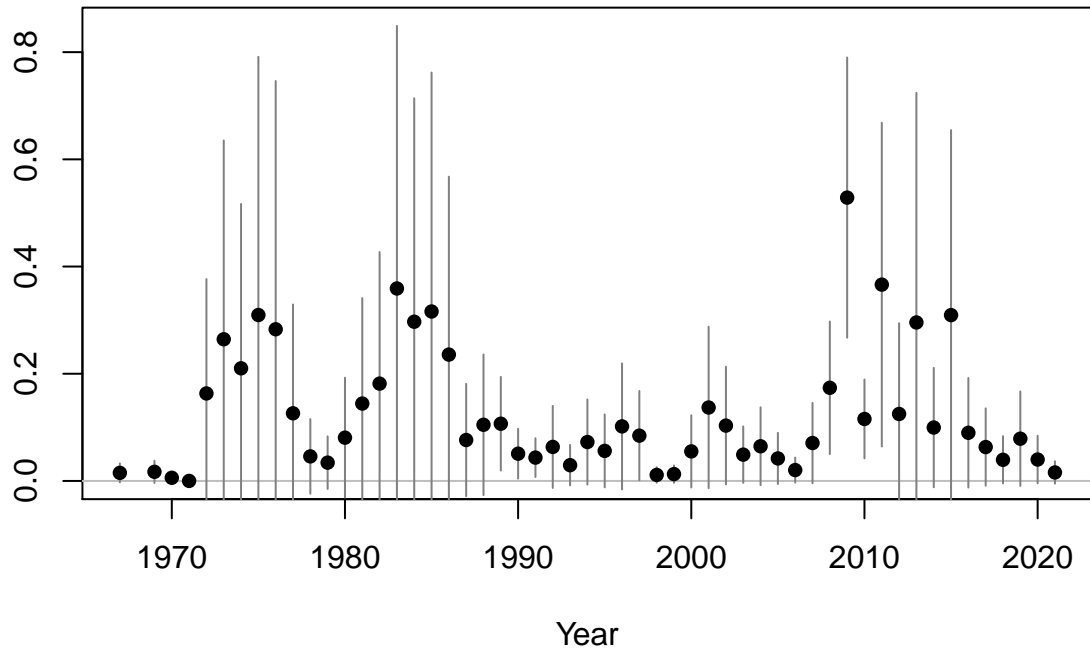
Age-0 recruits (1,000s)

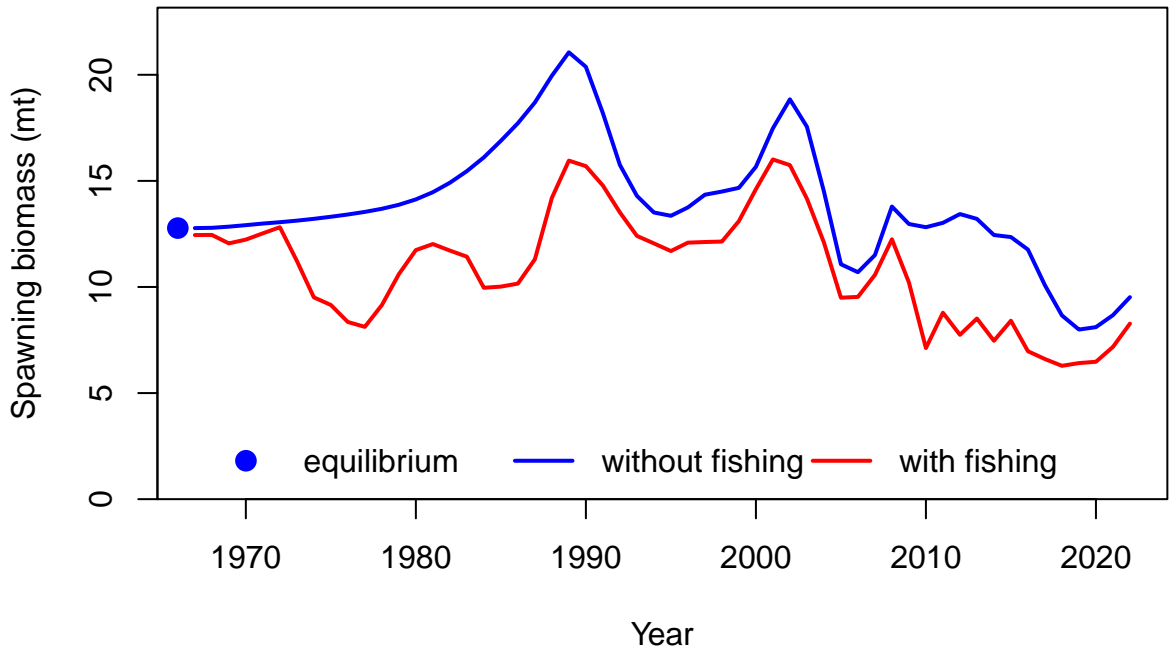






Summary Fishing Mortality





Log recruitment deviation

0.4  
0.2  
0.0  
-0.4

1970

1980

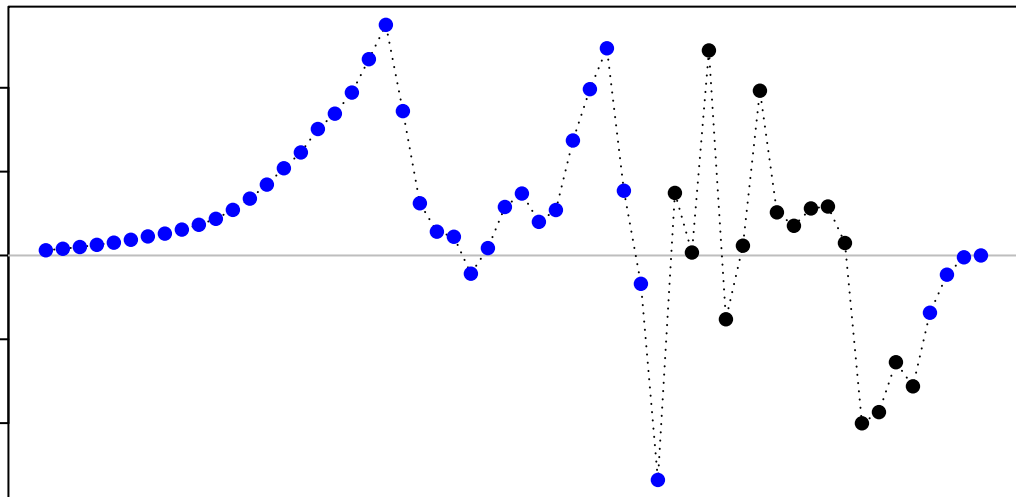
1990

2000

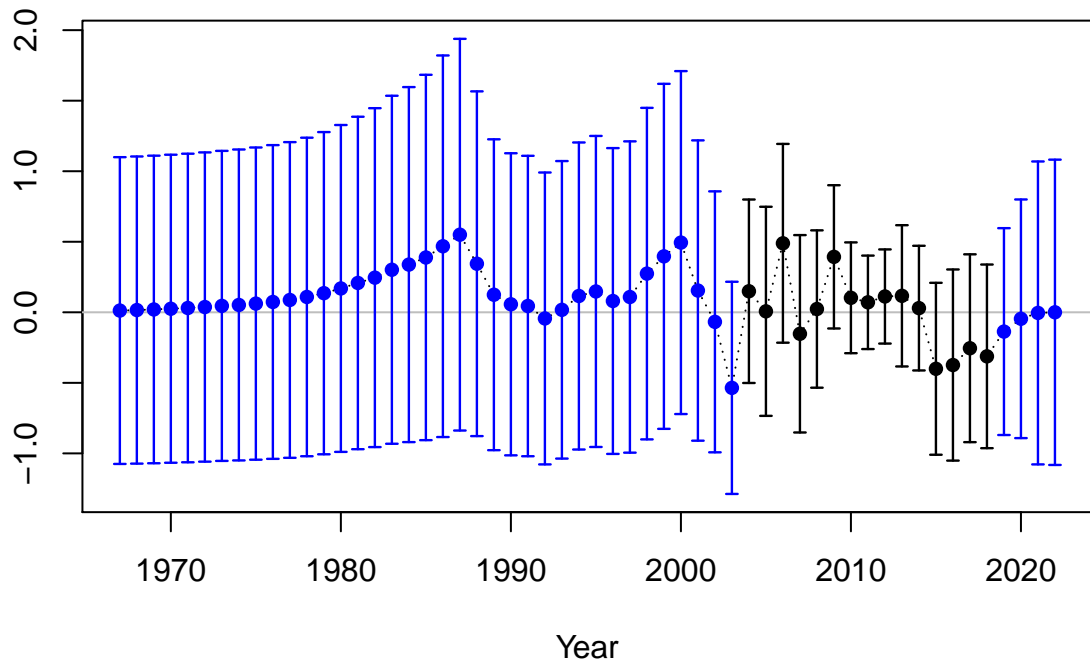
2010

2020

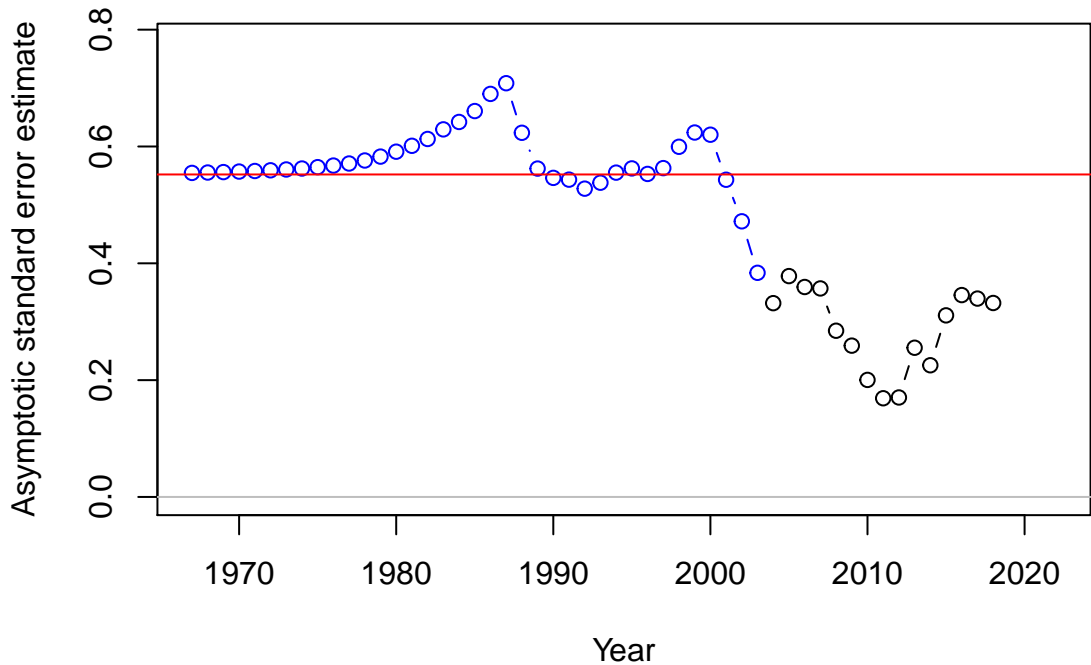
Year

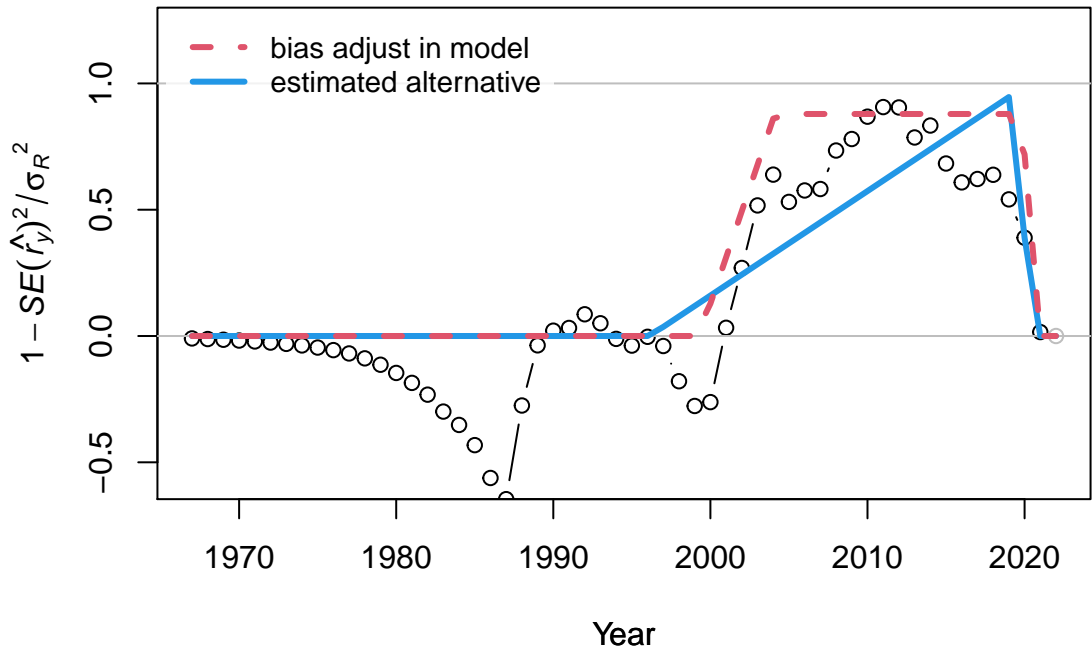


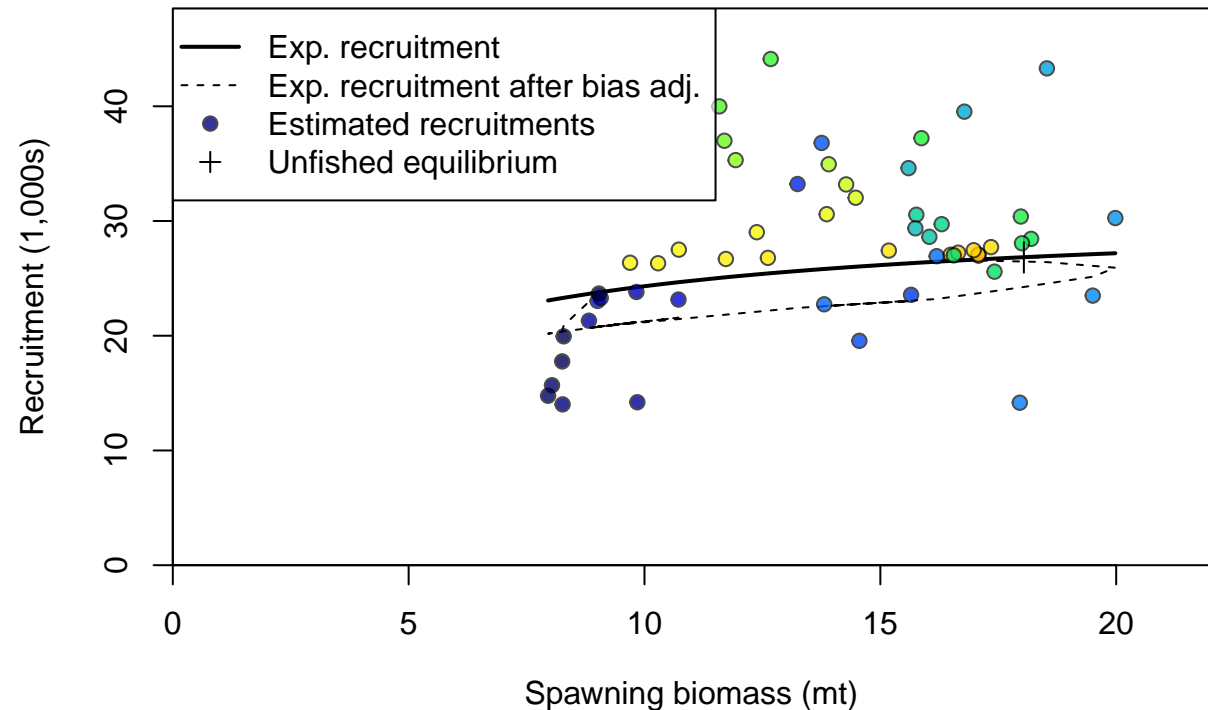
Log recruitment deviation

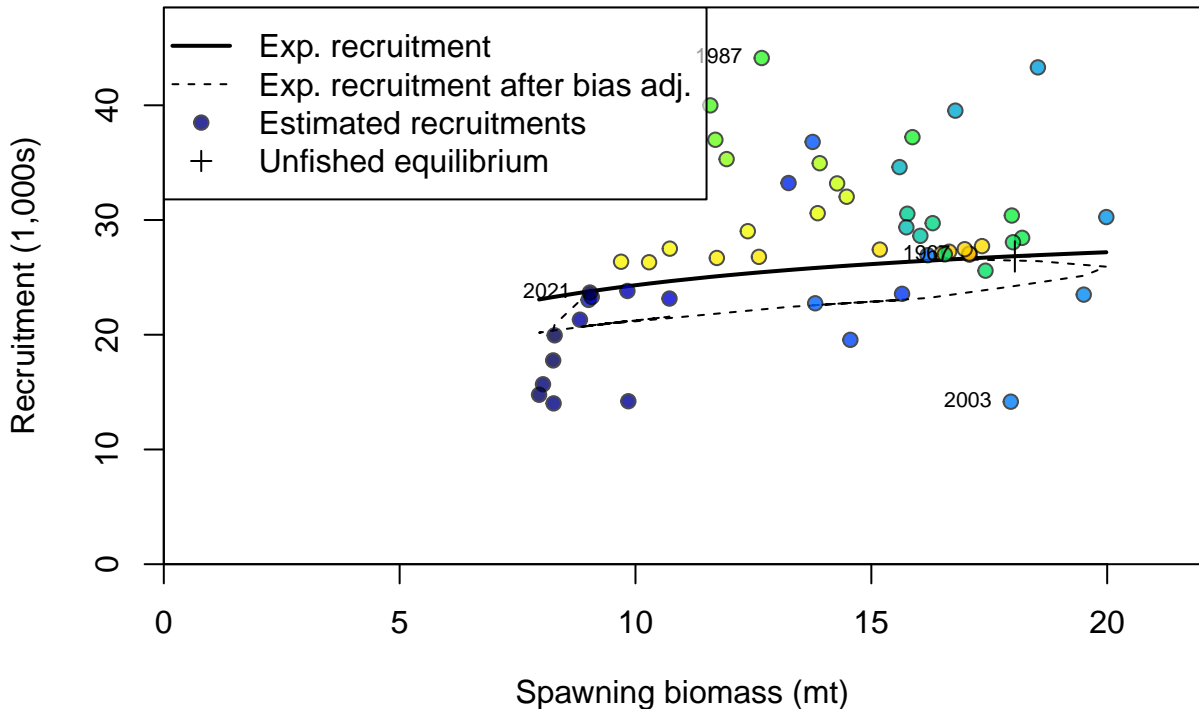


## Recruitment deviation variance

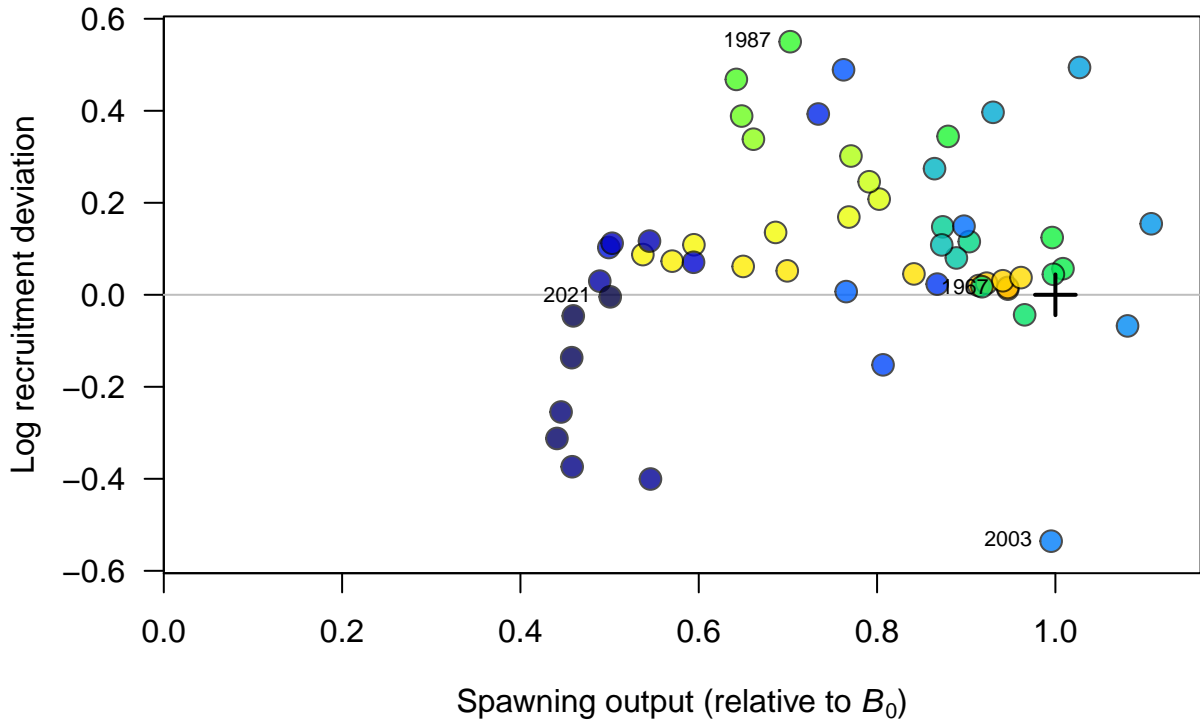


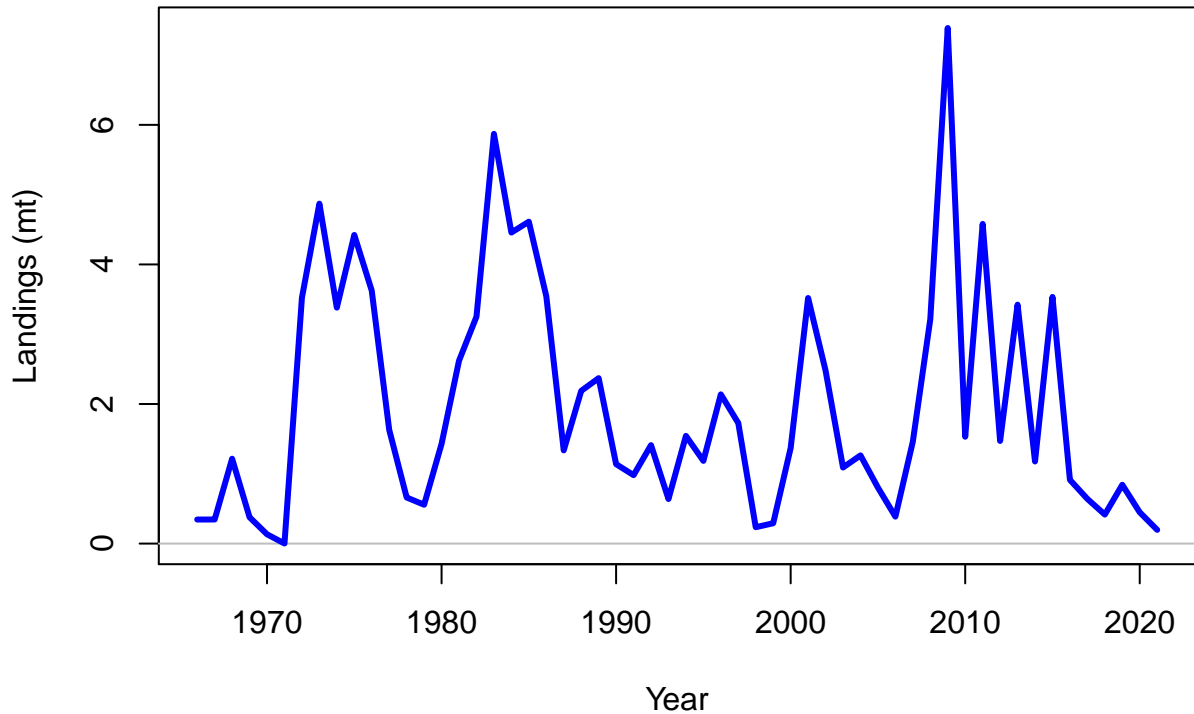


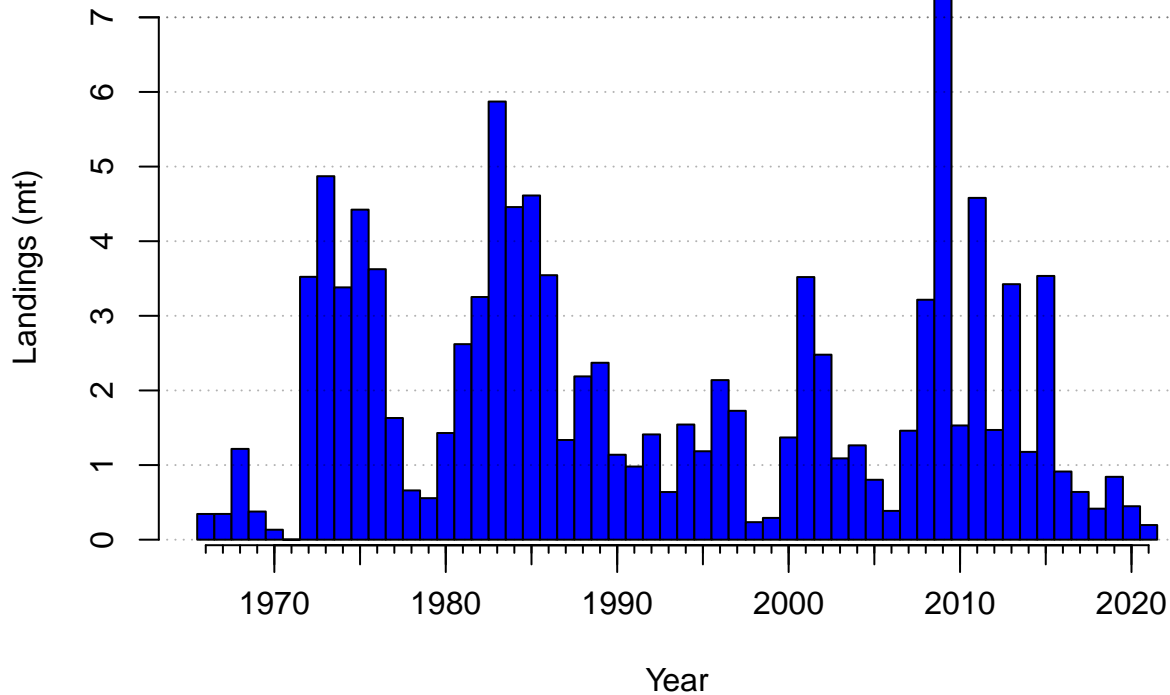












Observed and expected Landings (mt)

FISHERY  
FISHERY obs.

6  
4  
2  
0

1970

1980

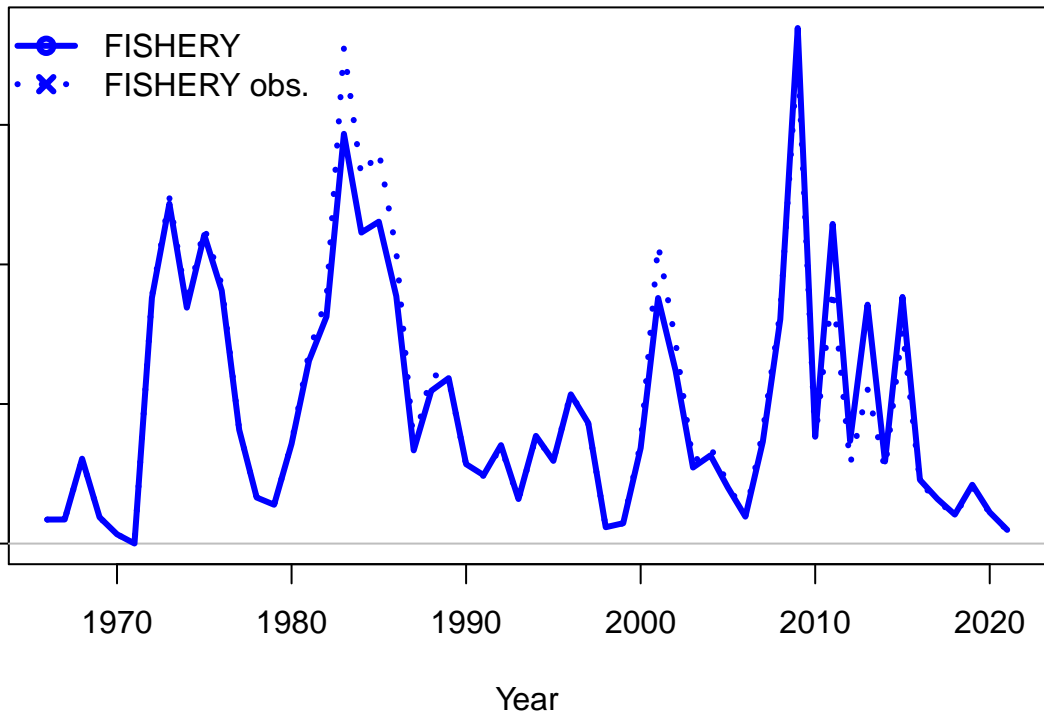
1990

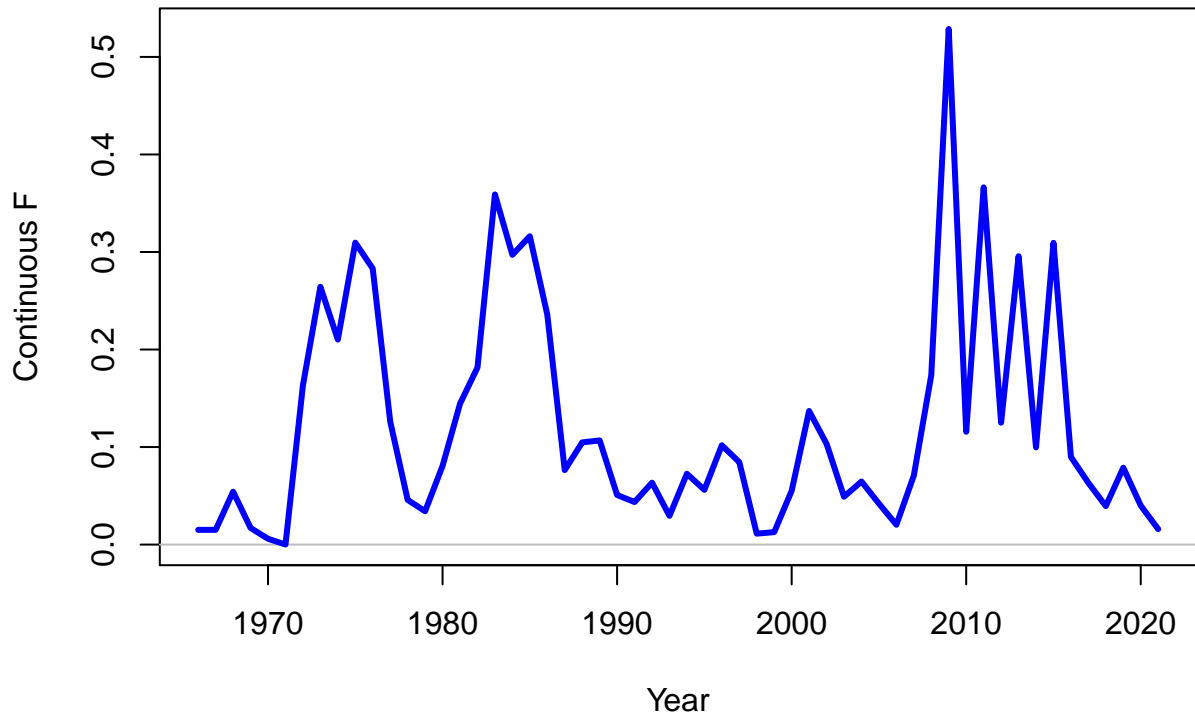
2000

2010

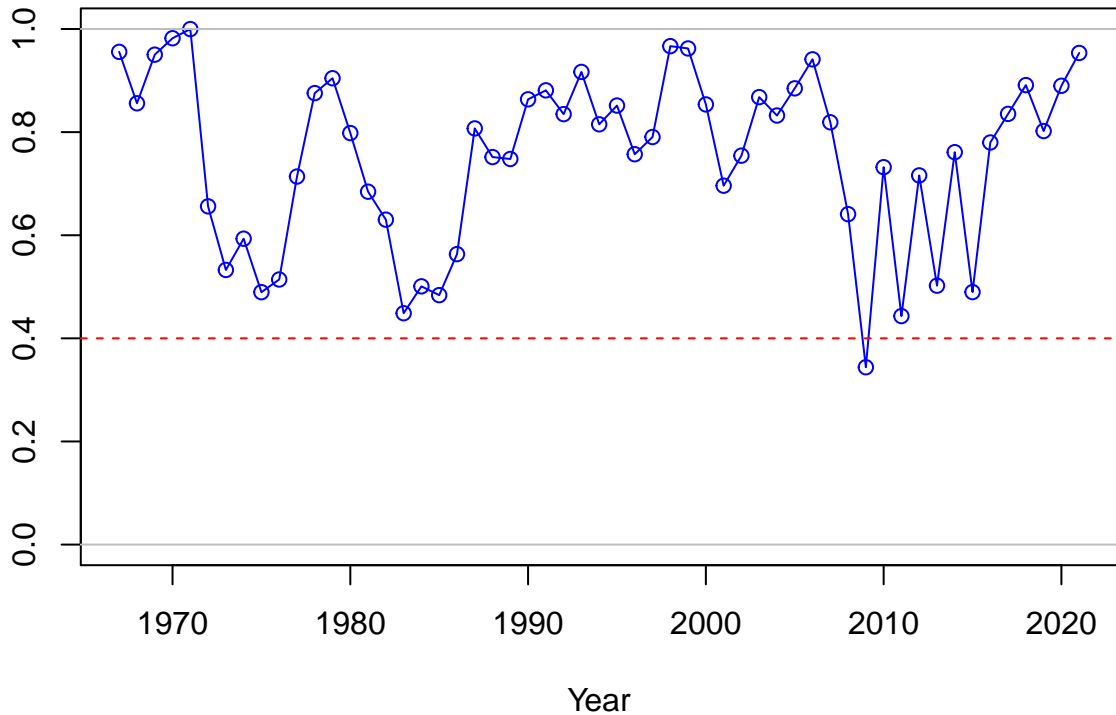
2020

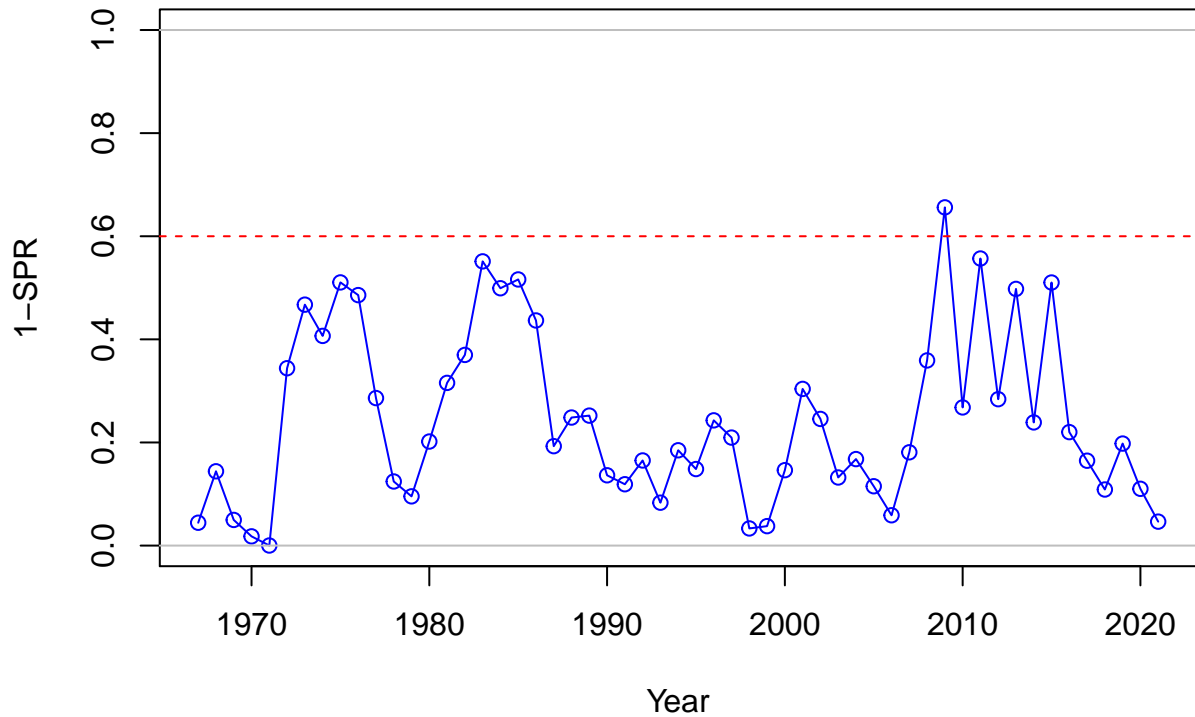
Year



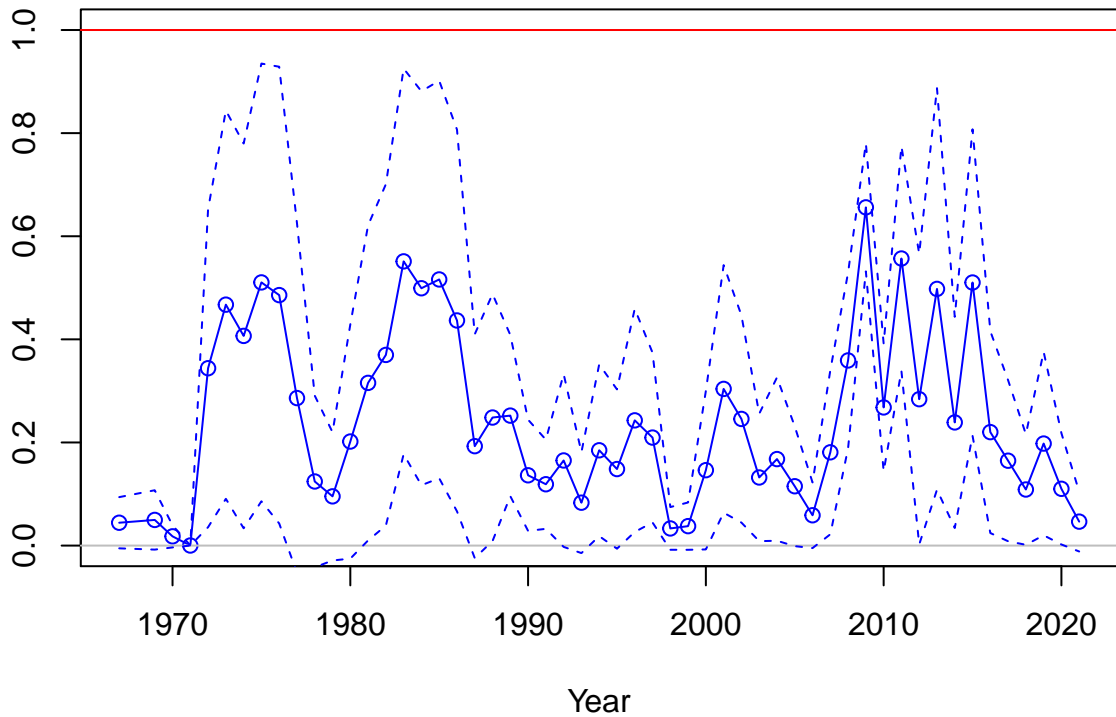


SPR



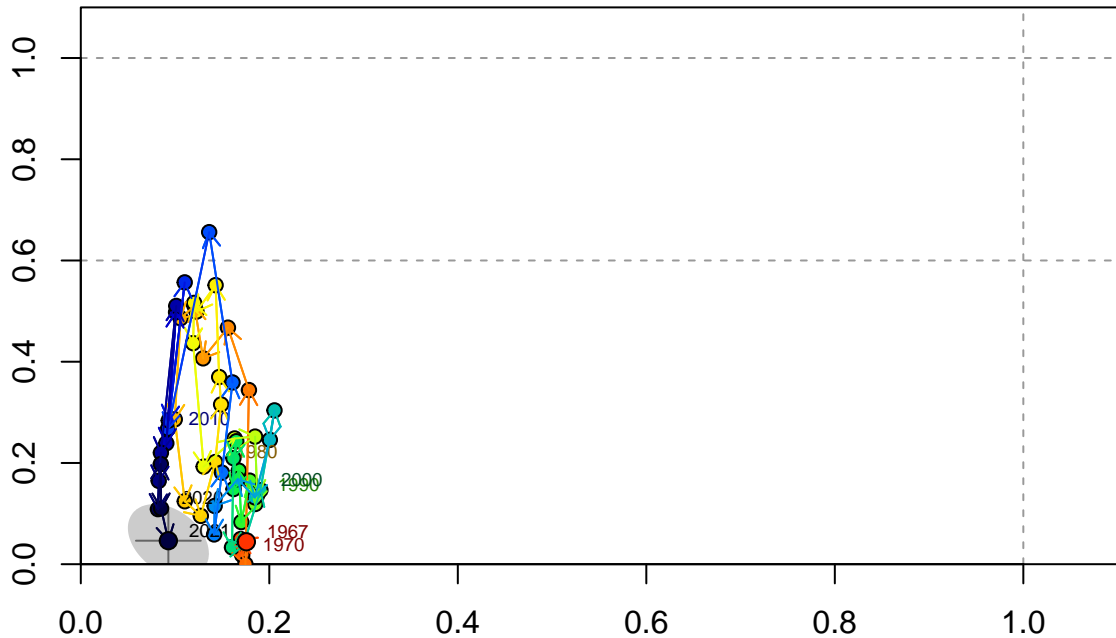


Fishing intensity: 1-SPR

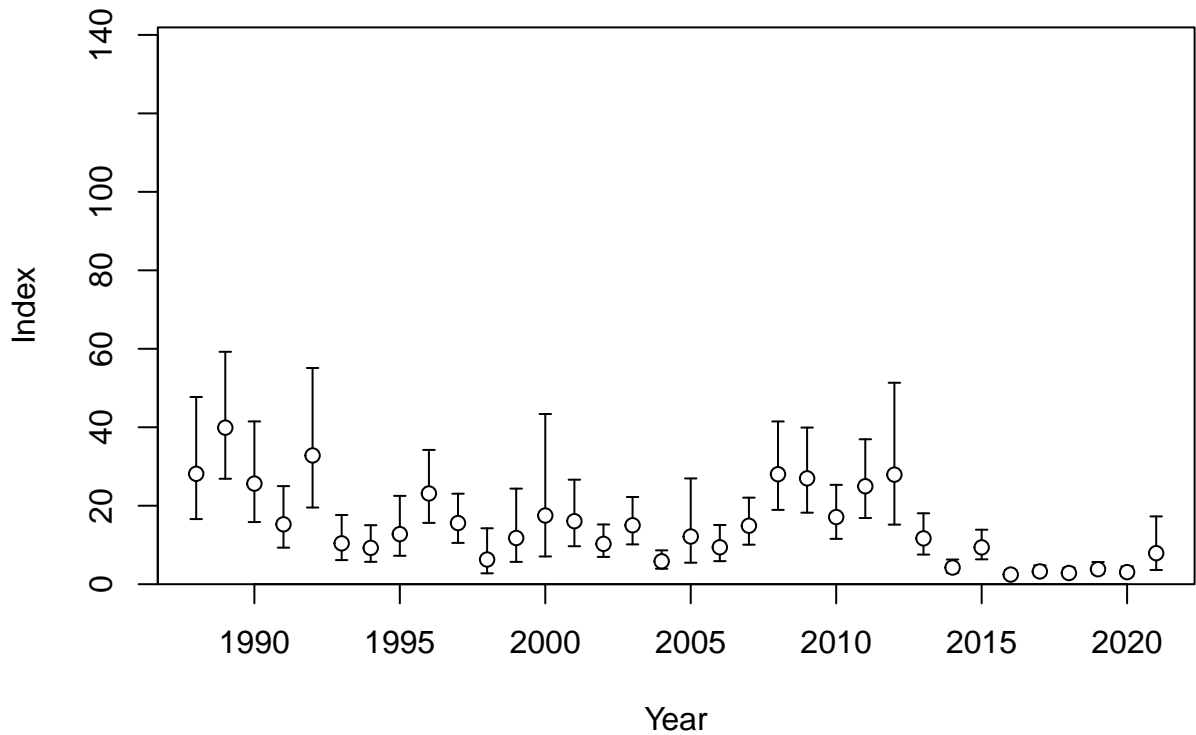


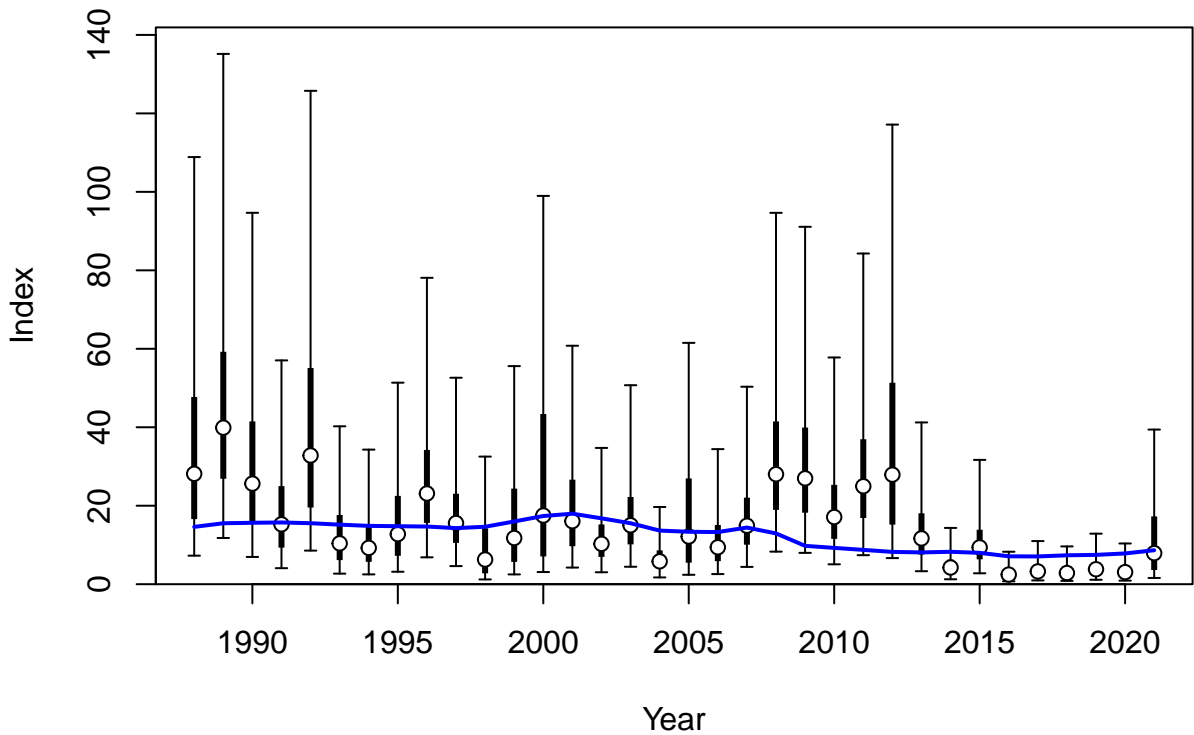


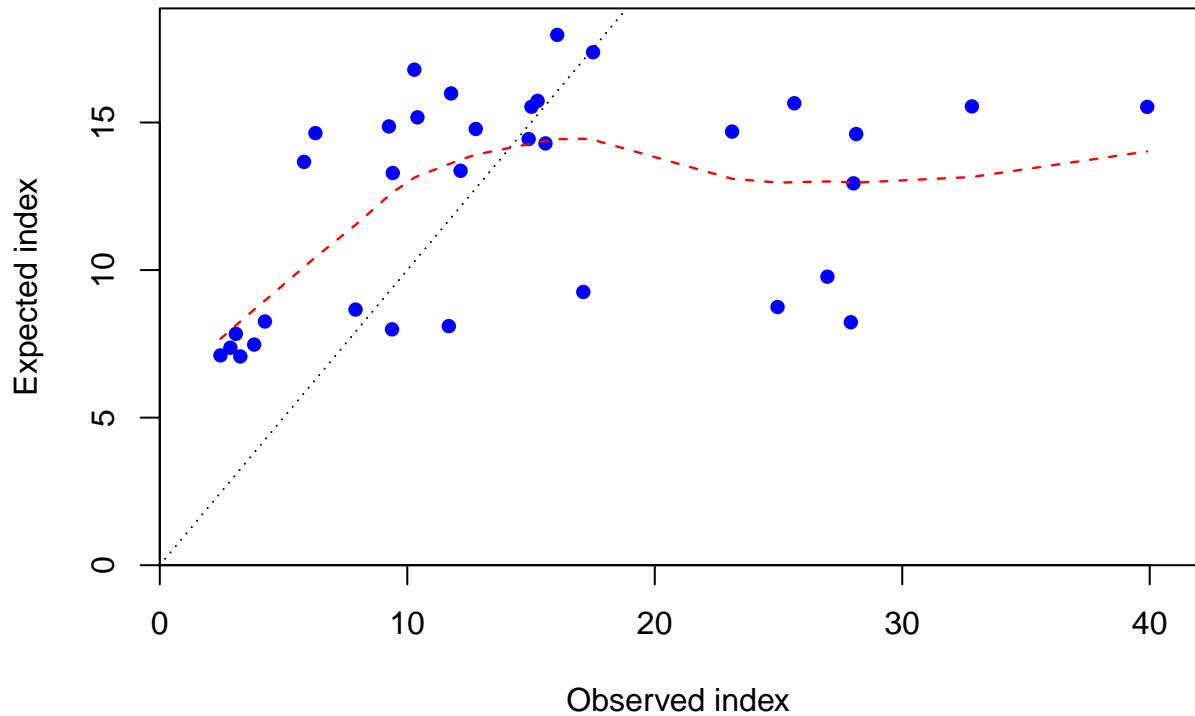
Fishing intensity: 1-SPR



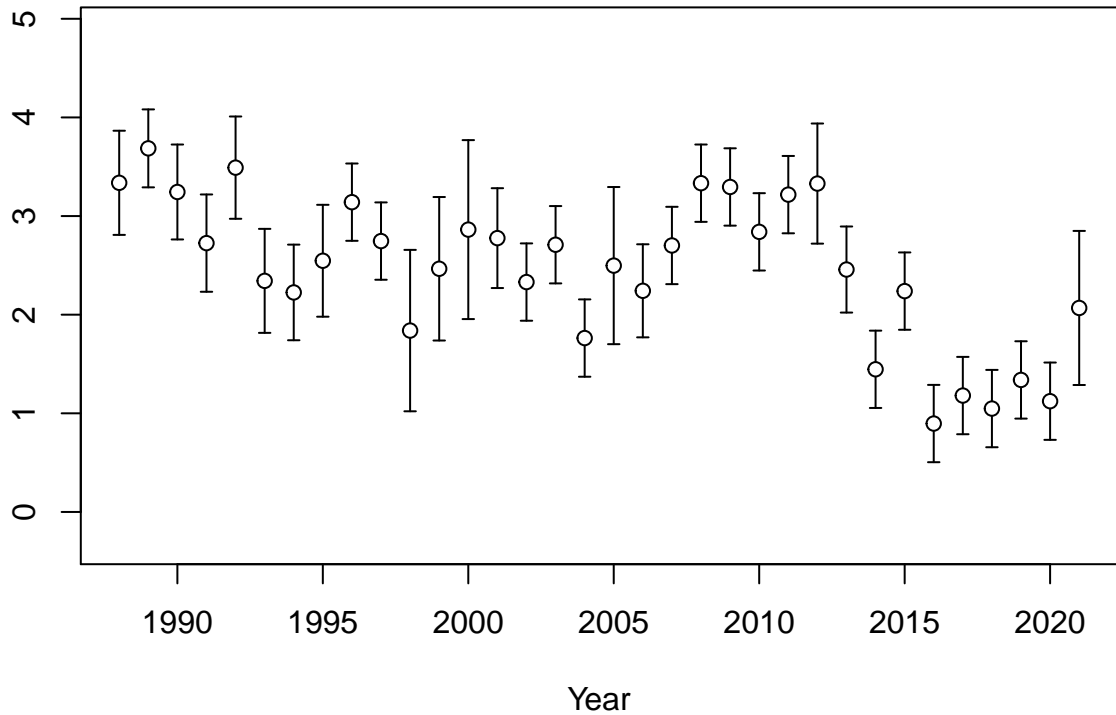
Relative spawning output: B/B\_MSY



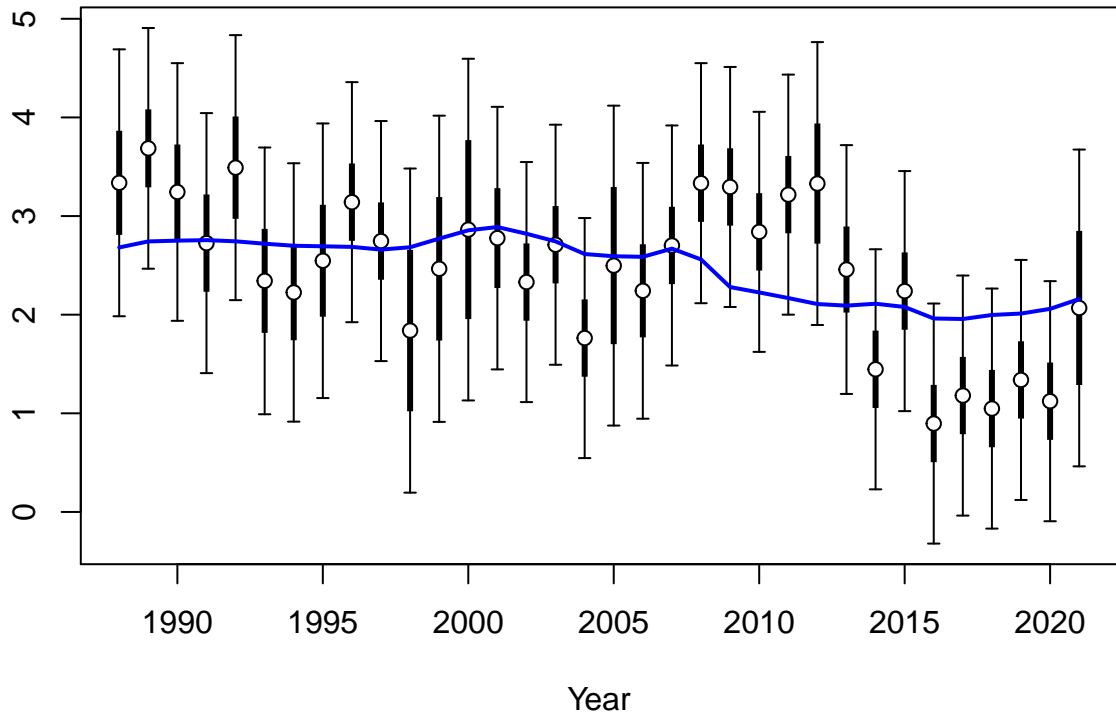


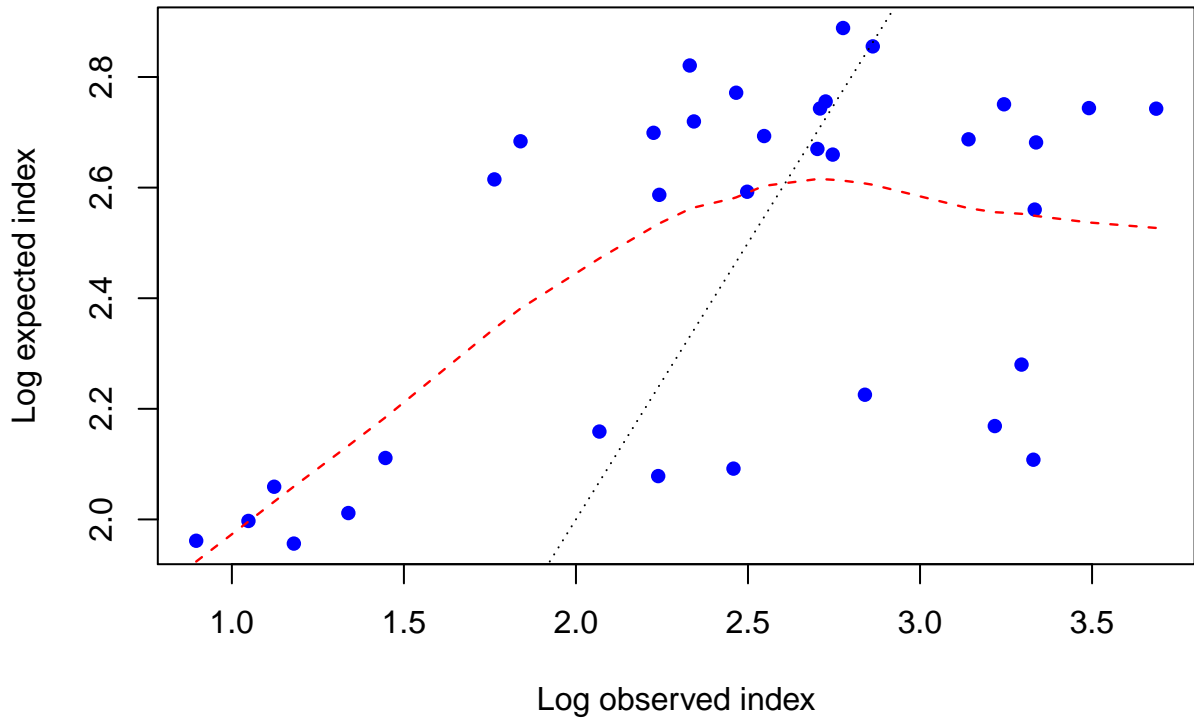


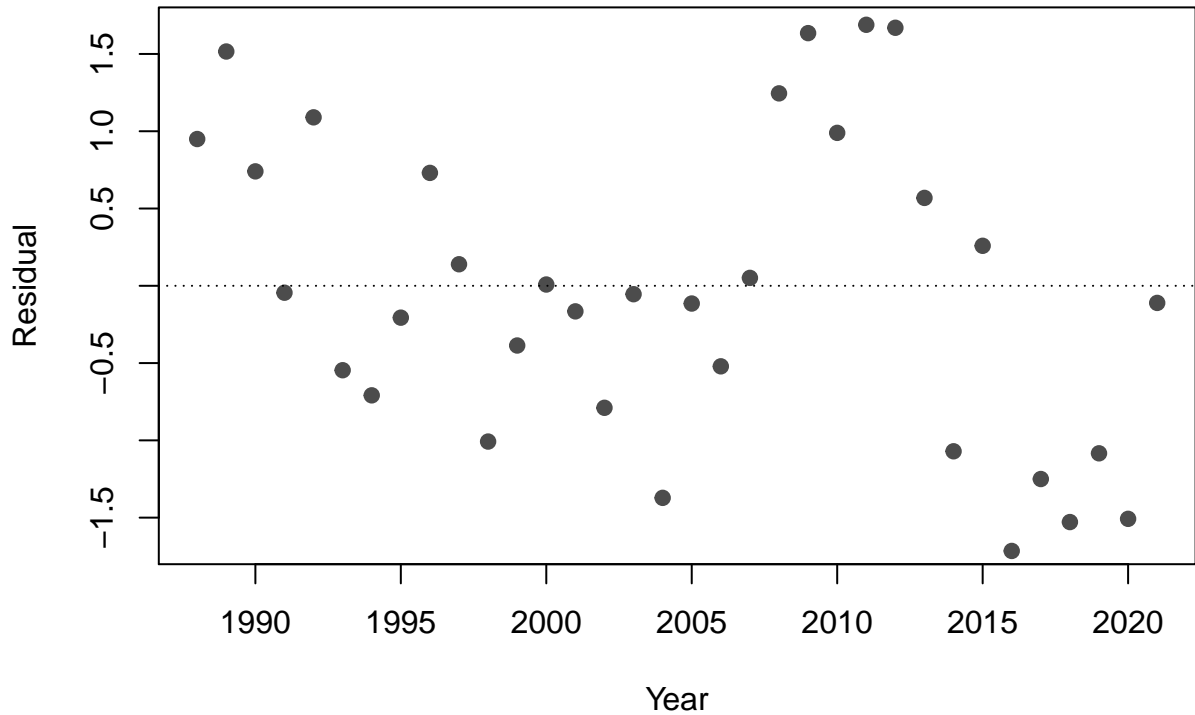
Log index



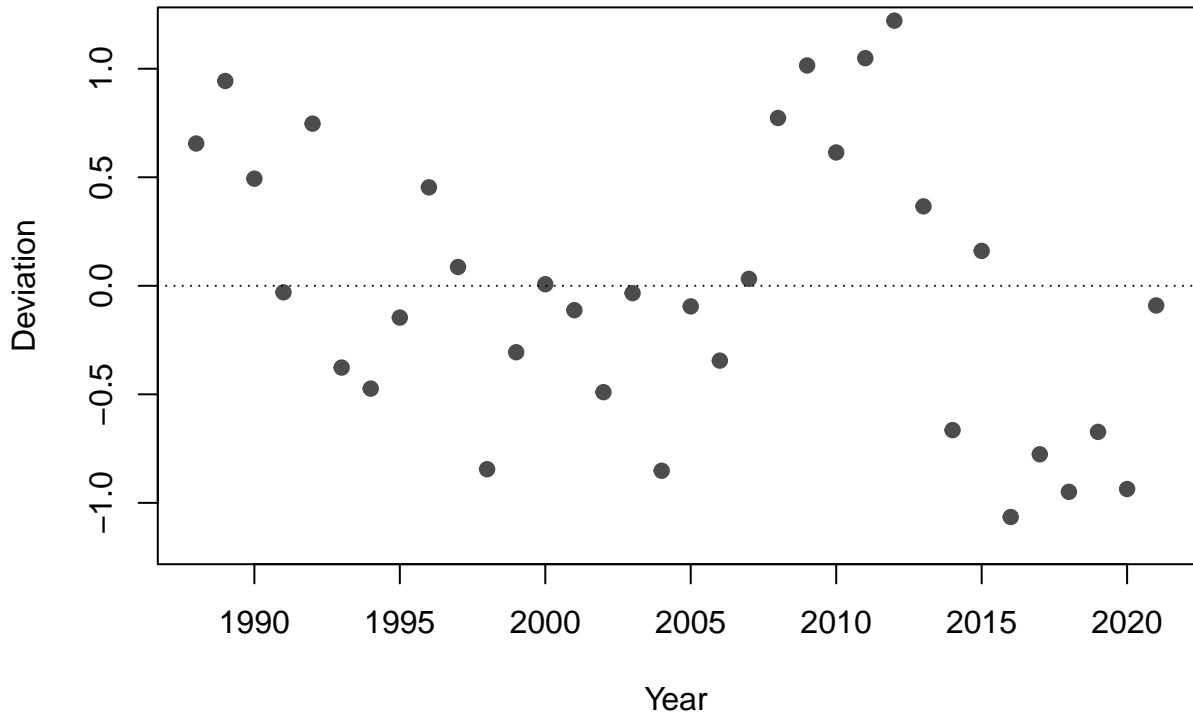
Log index

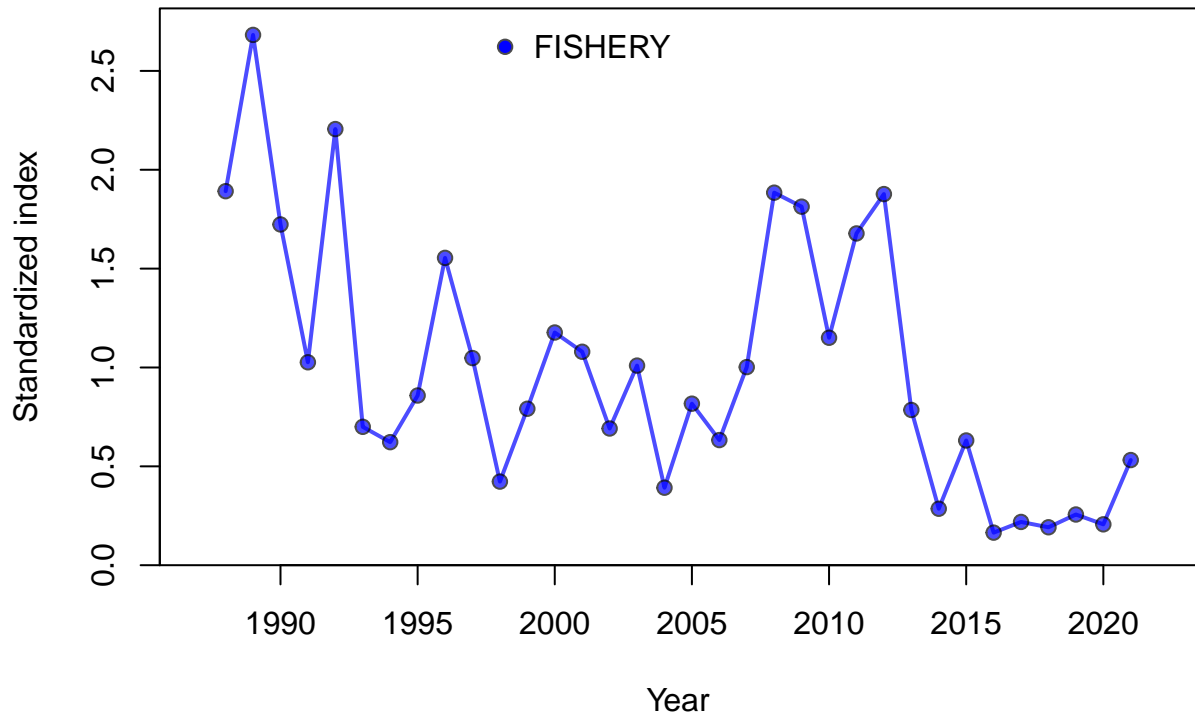




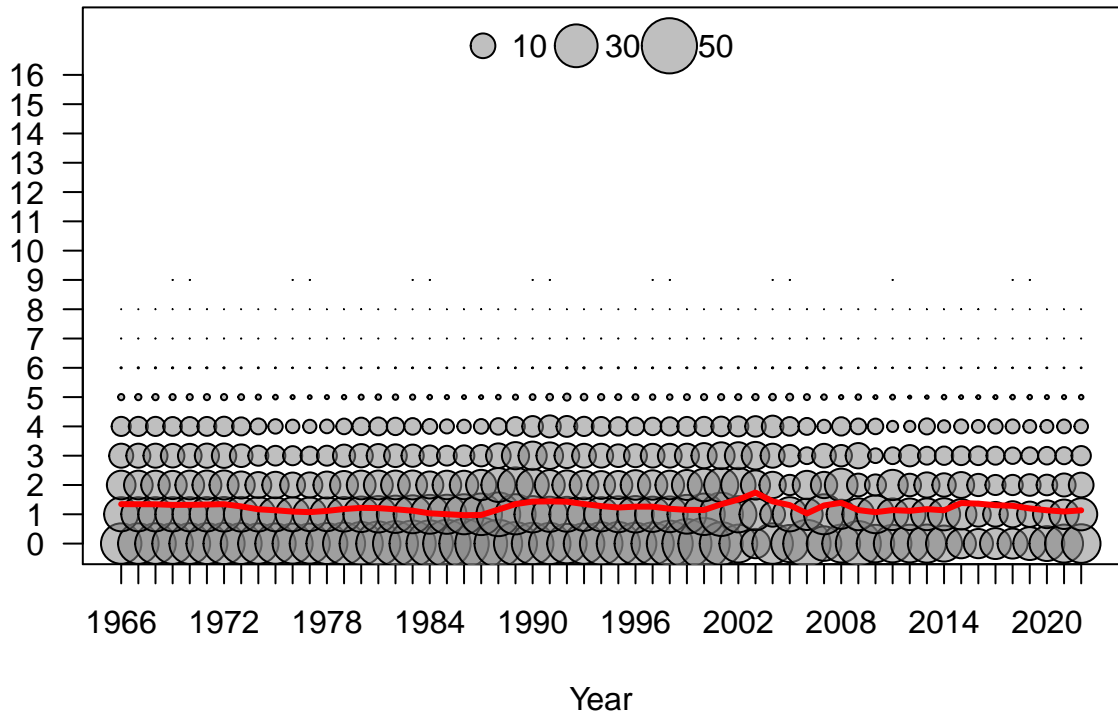




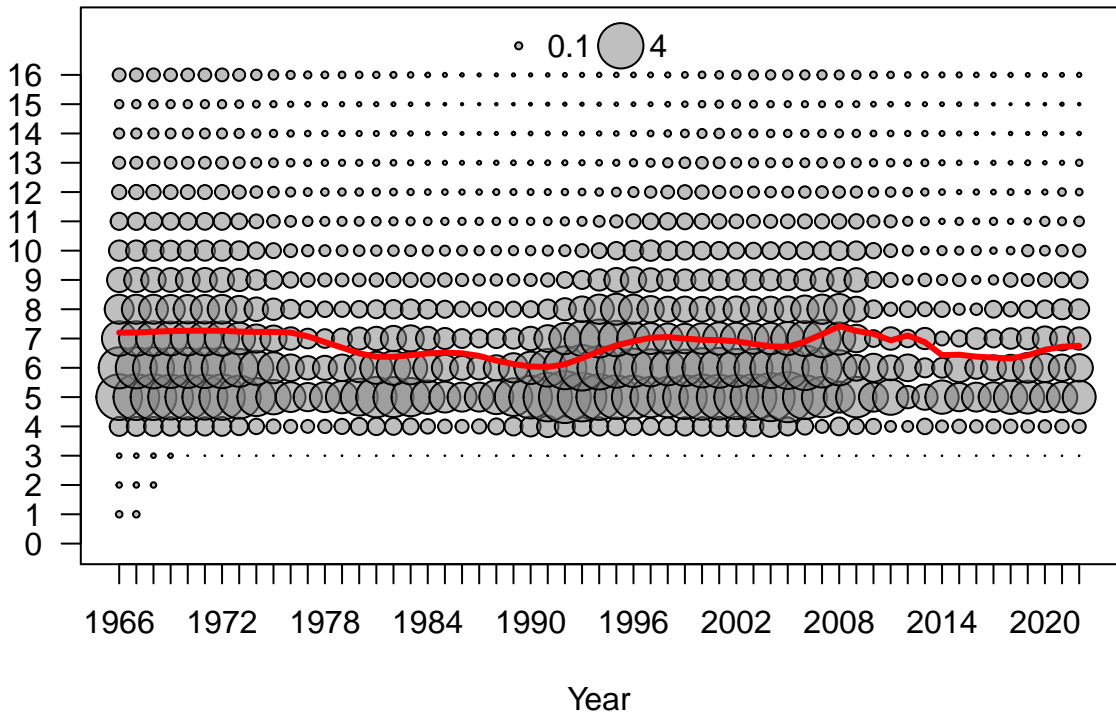


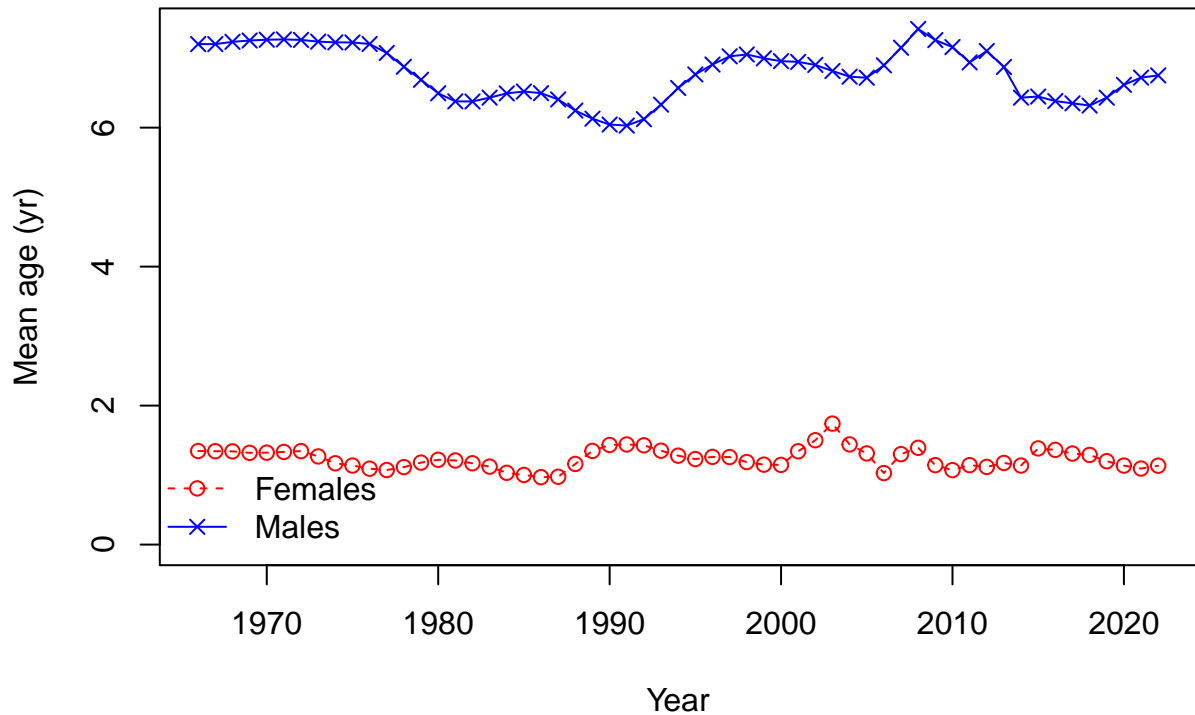


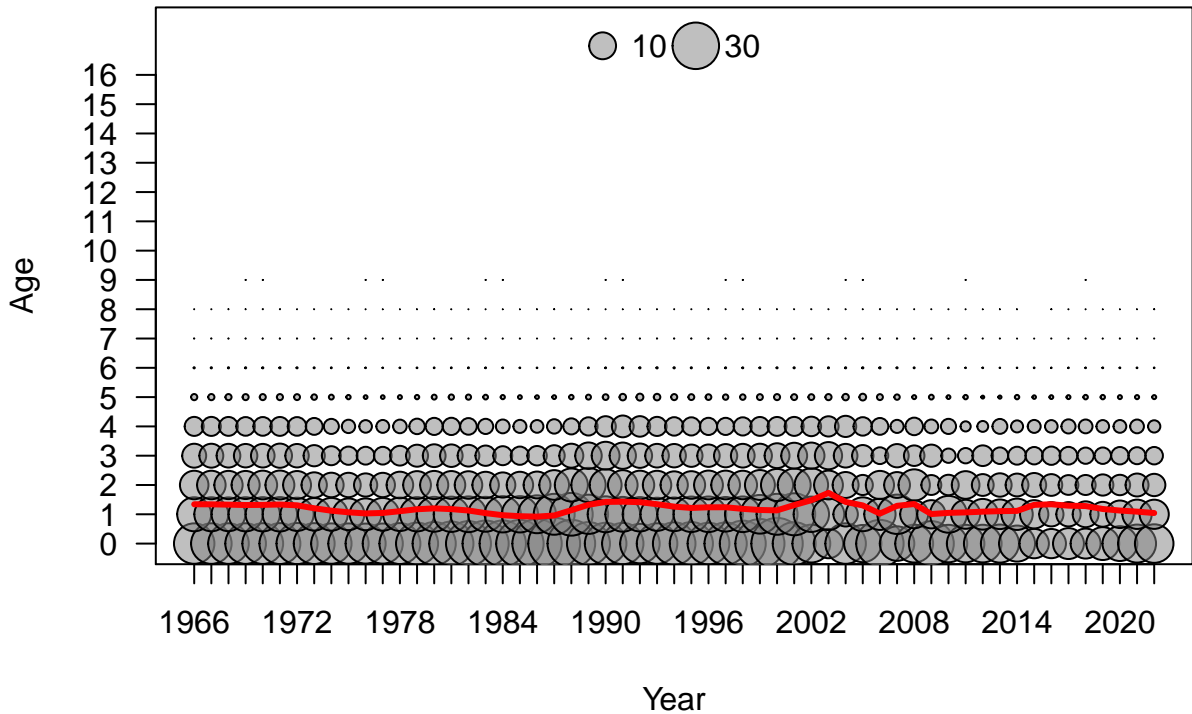
Age

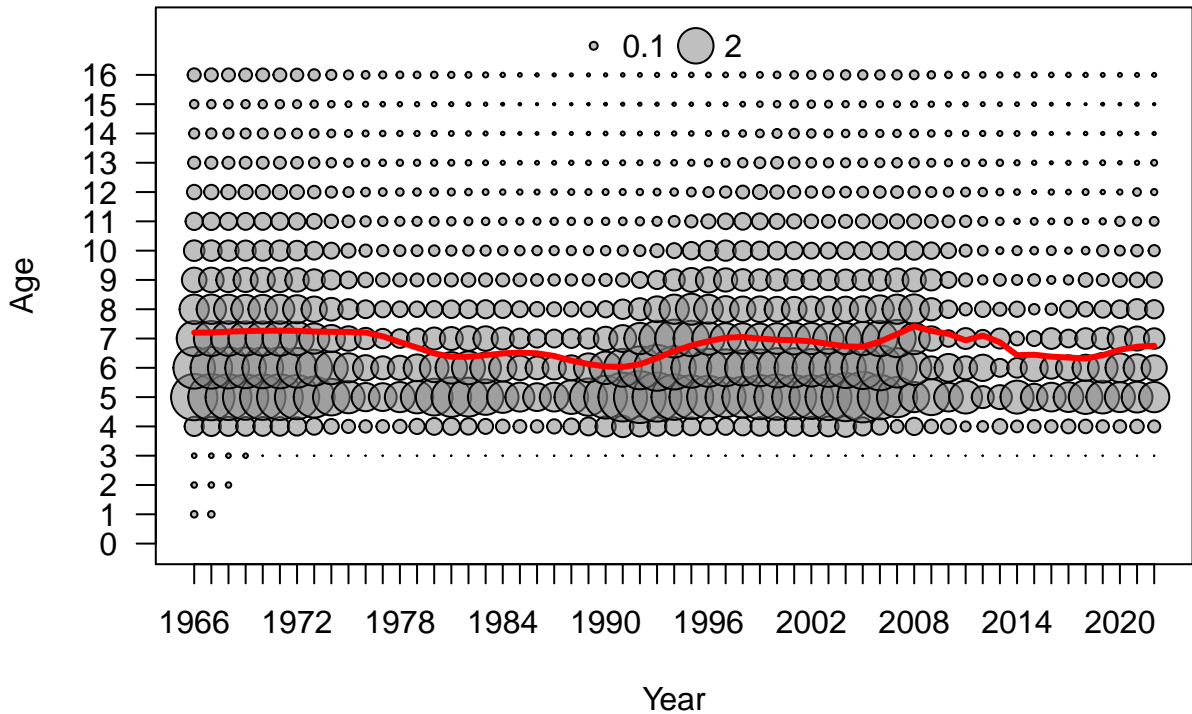


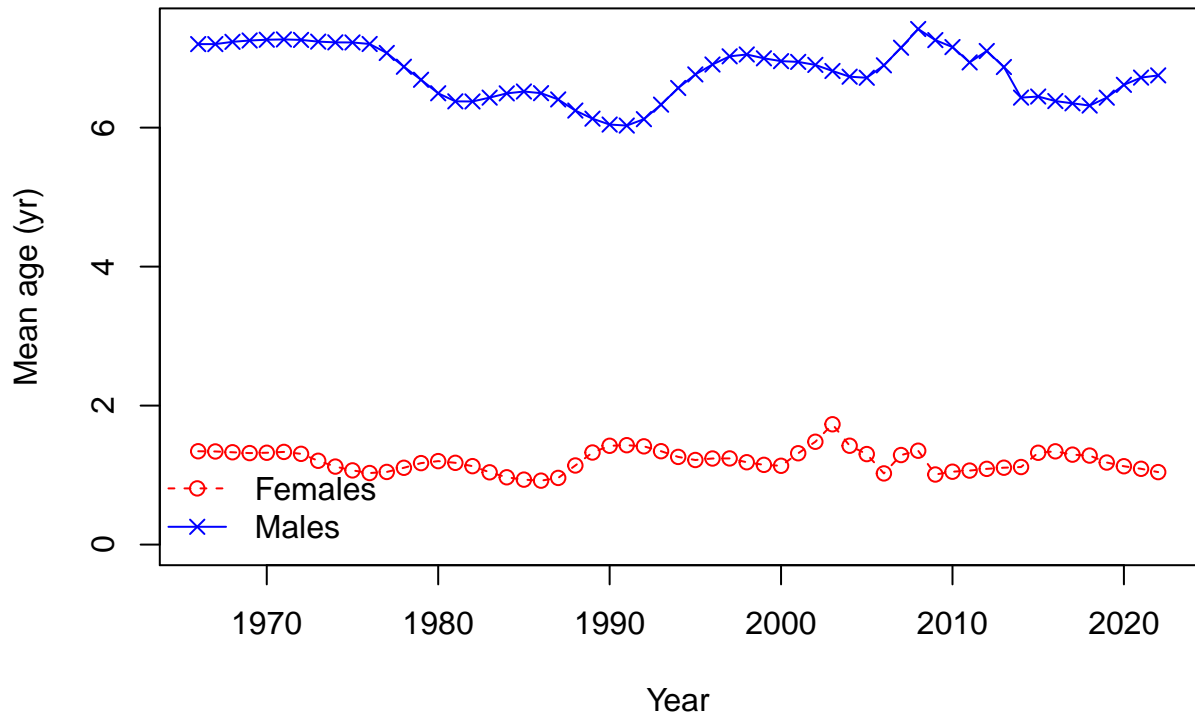
Age





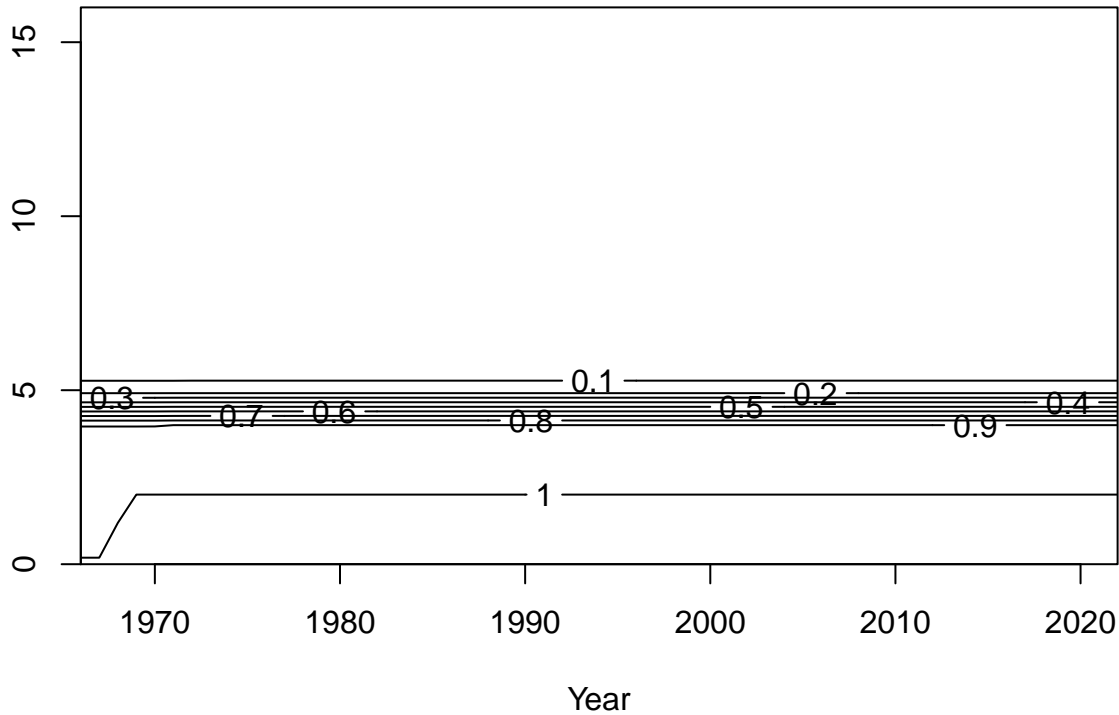


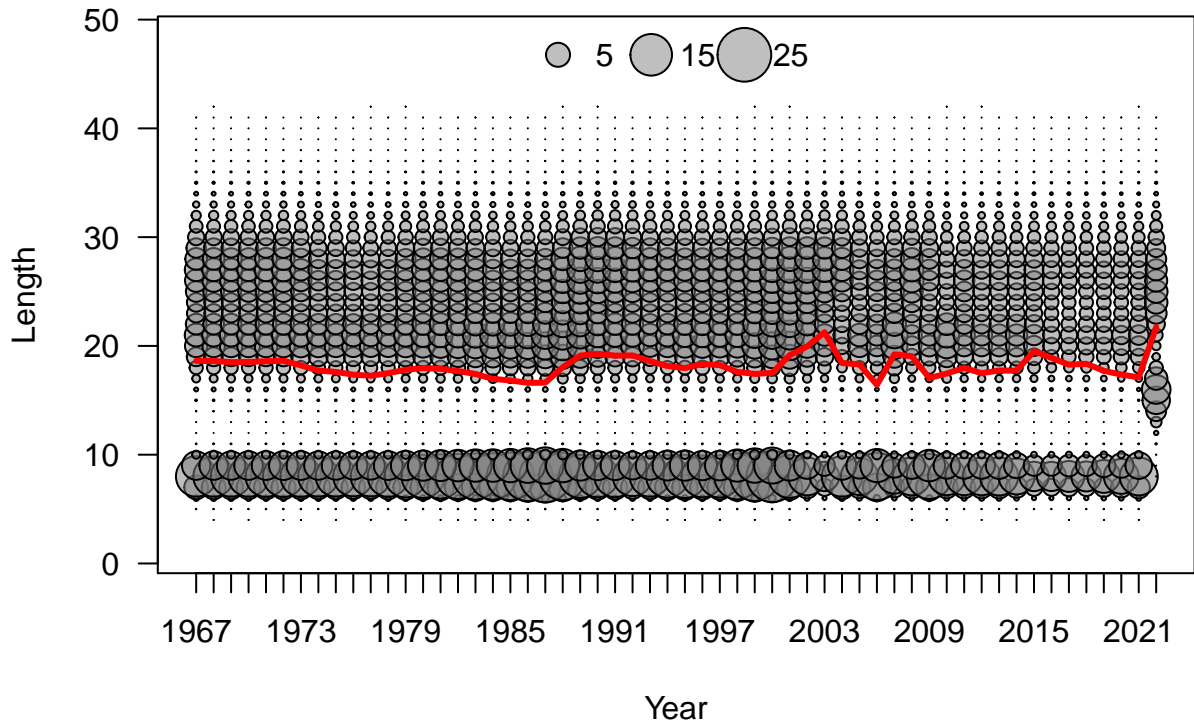


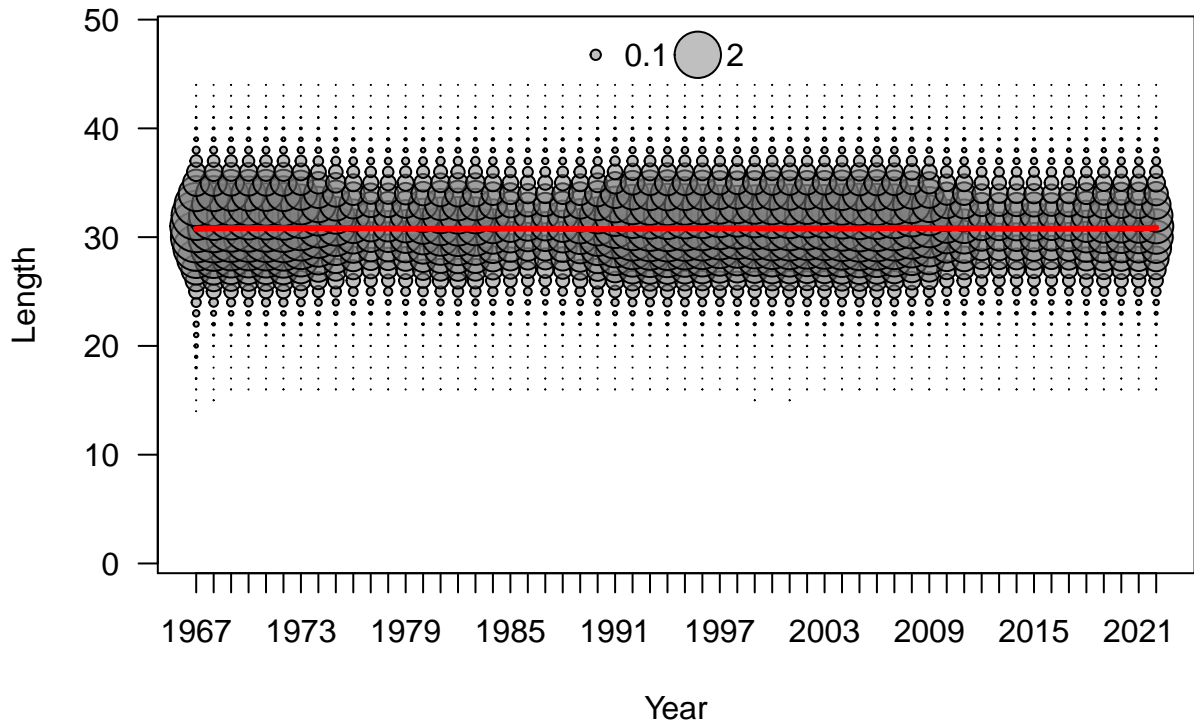


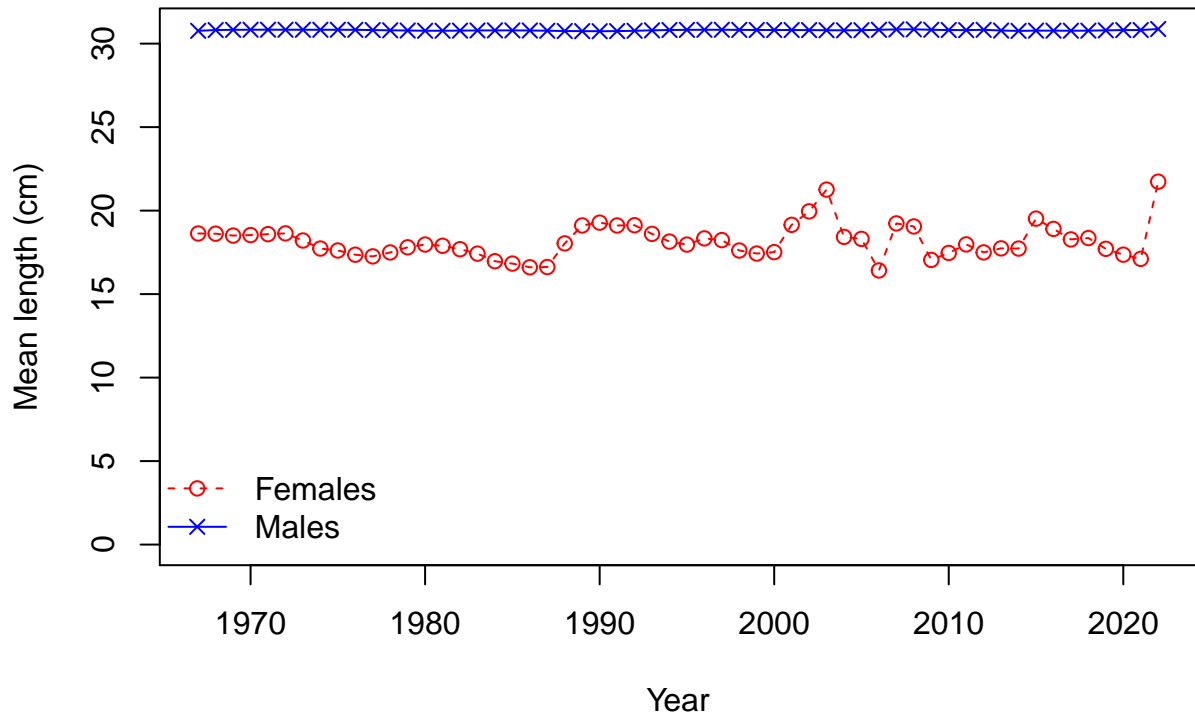


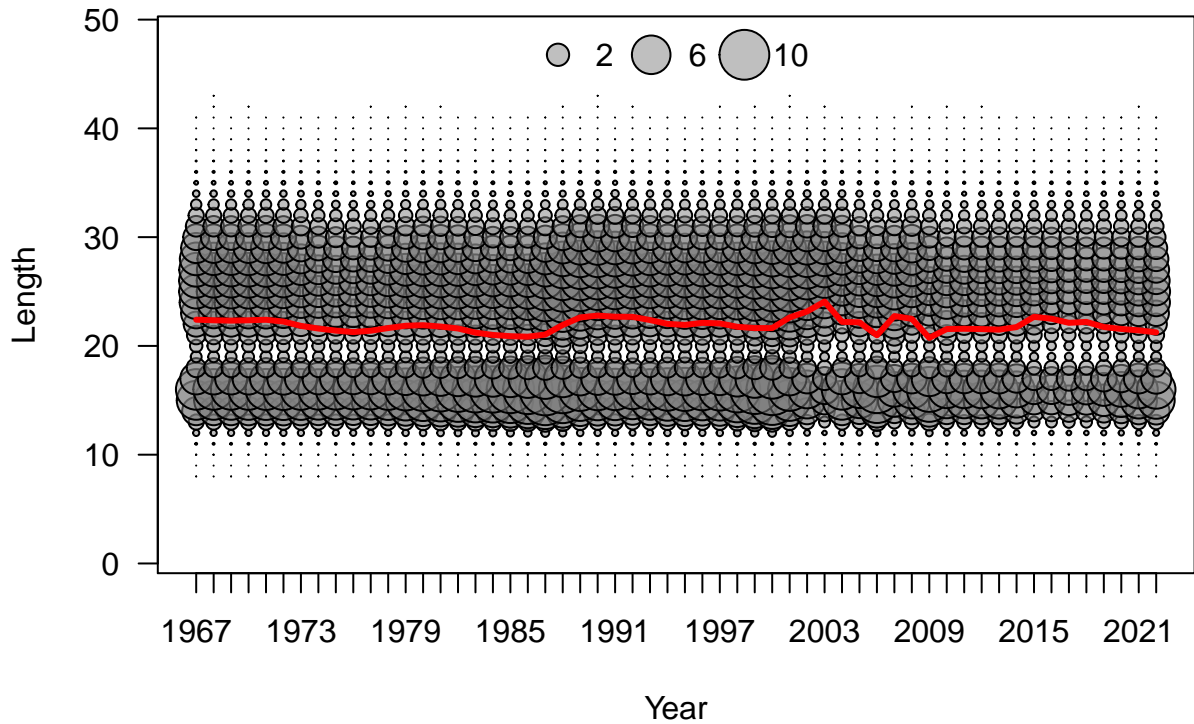
Age

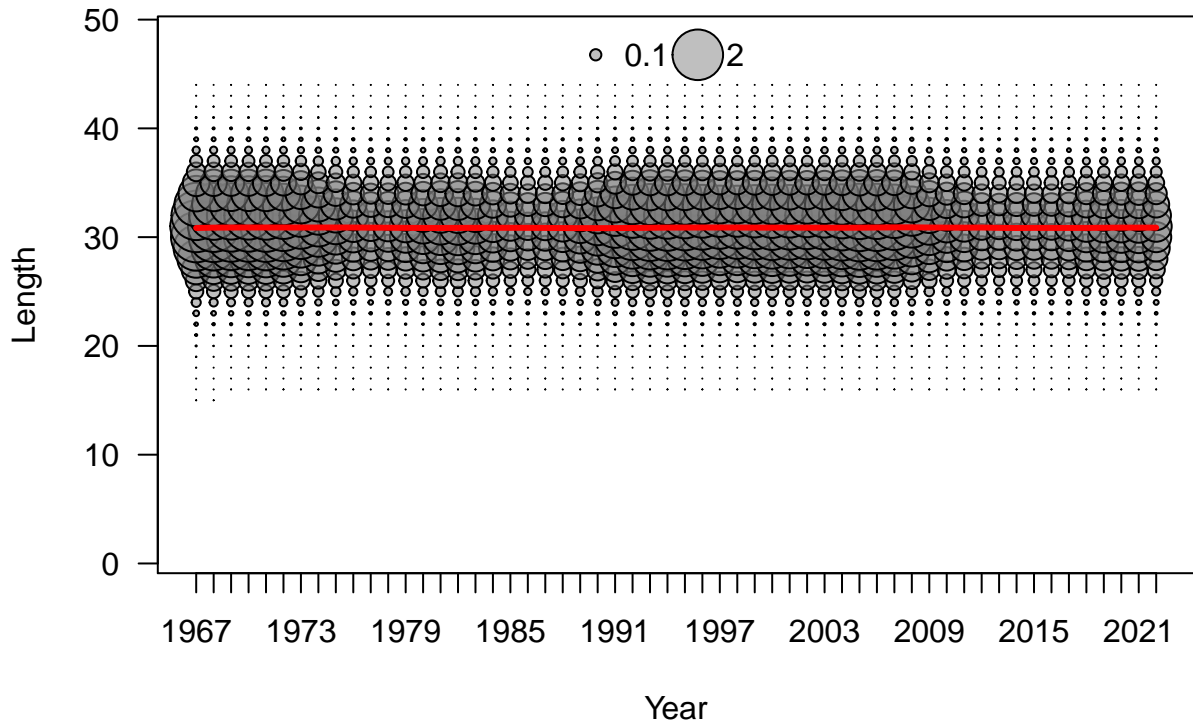


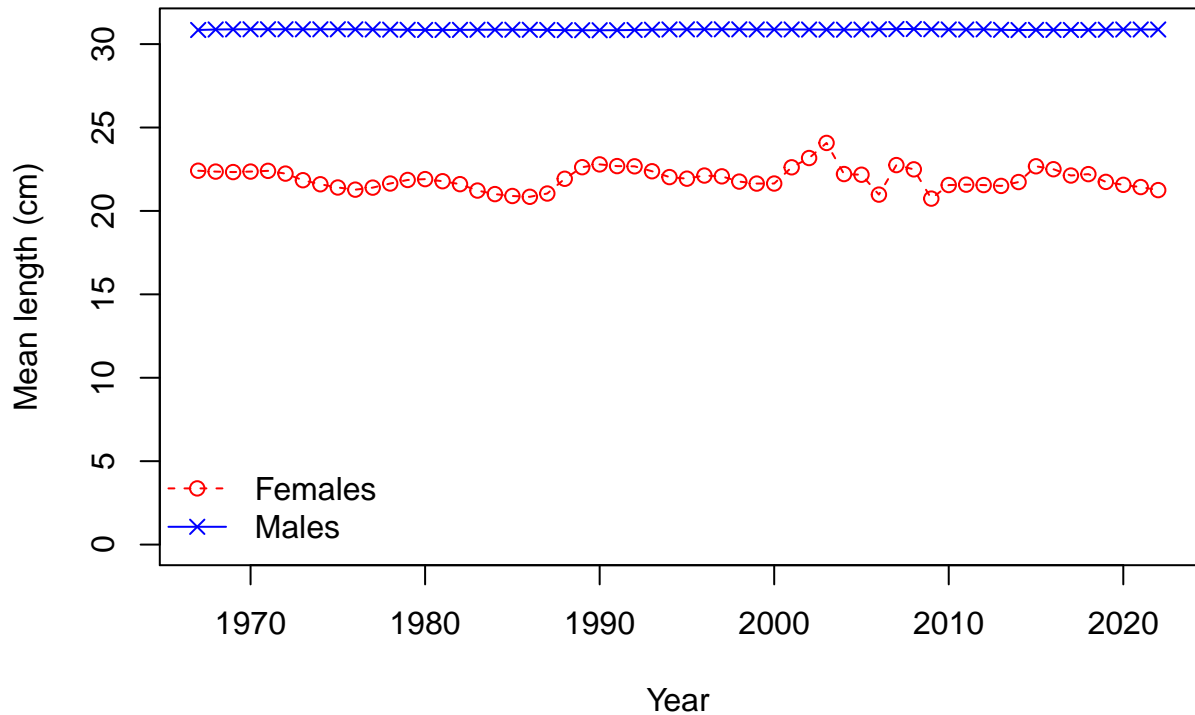


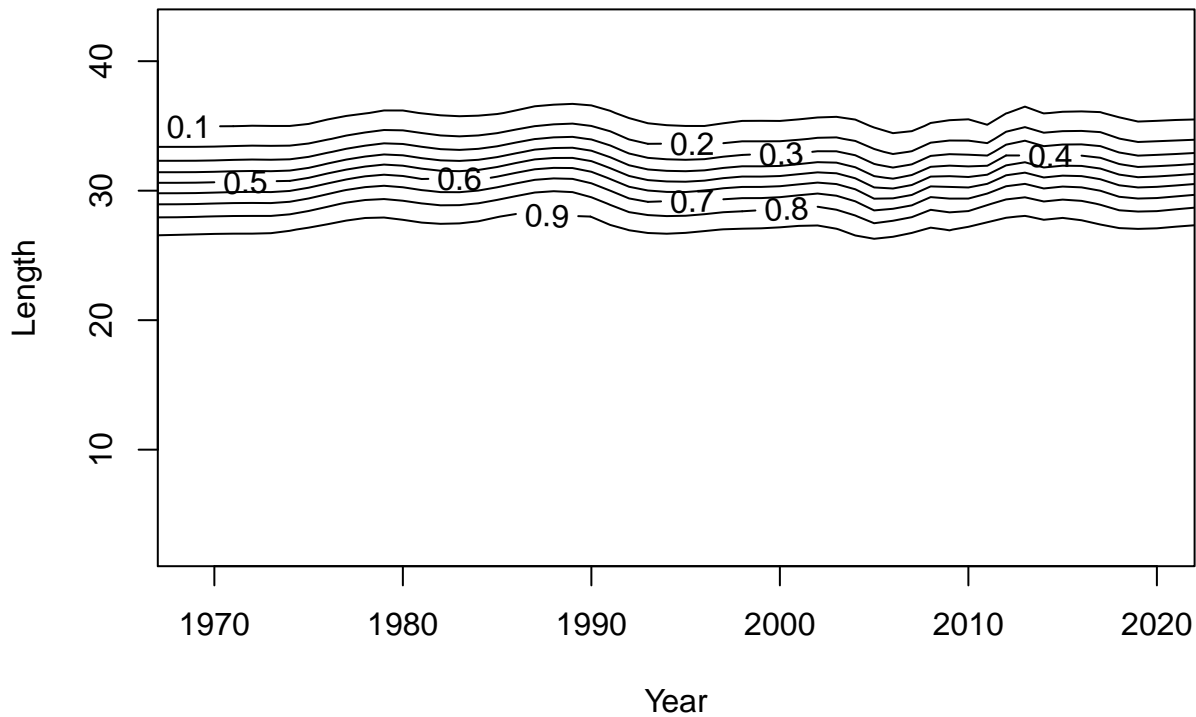




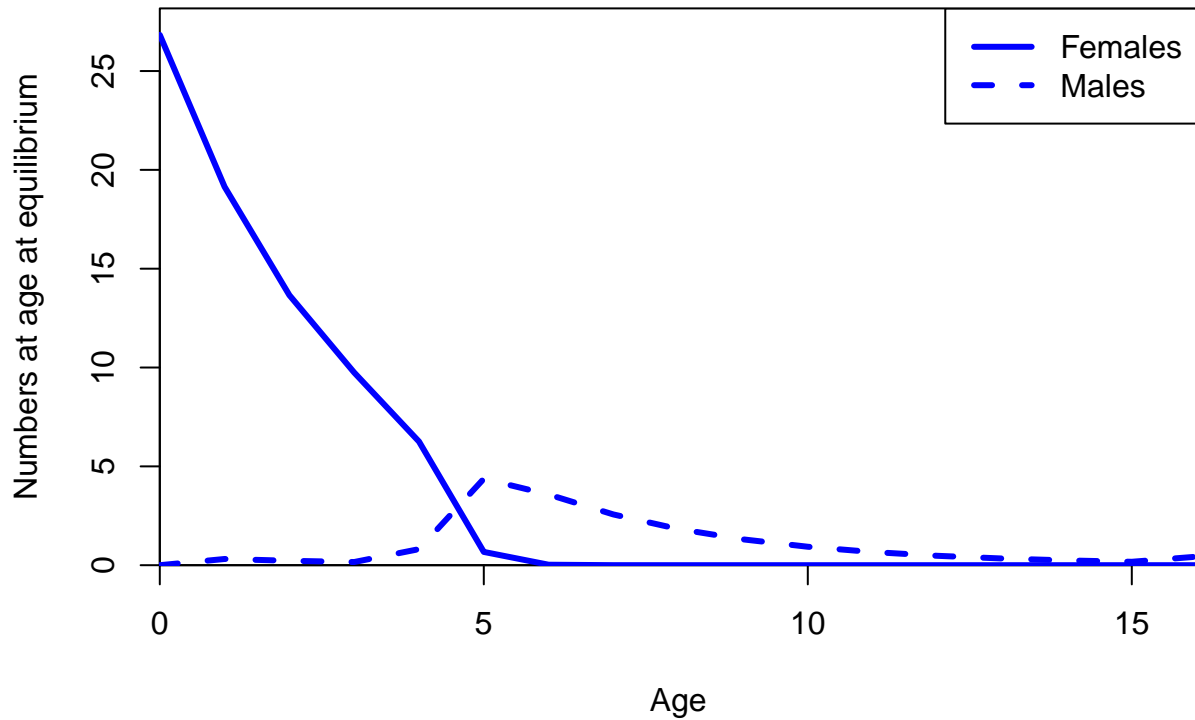






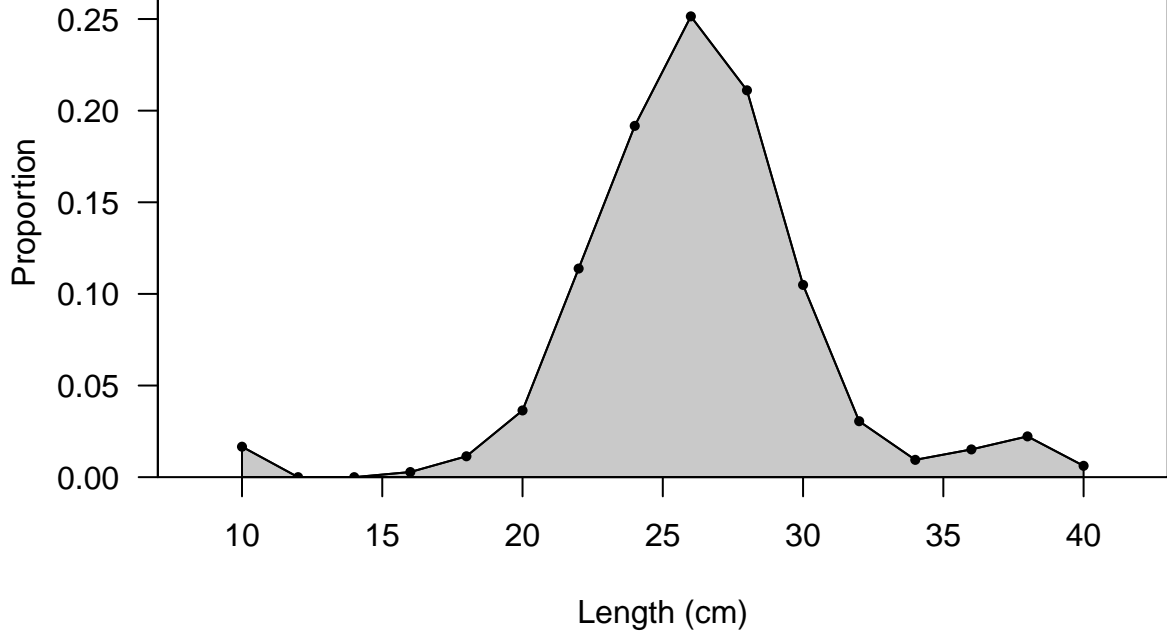


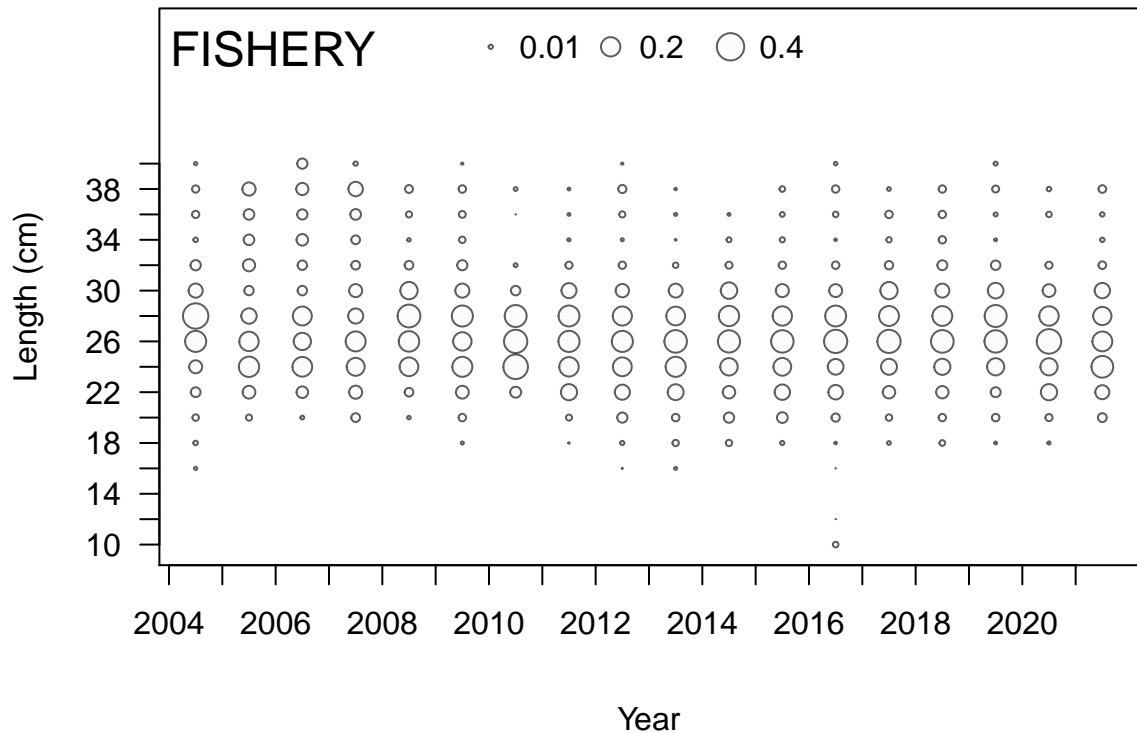


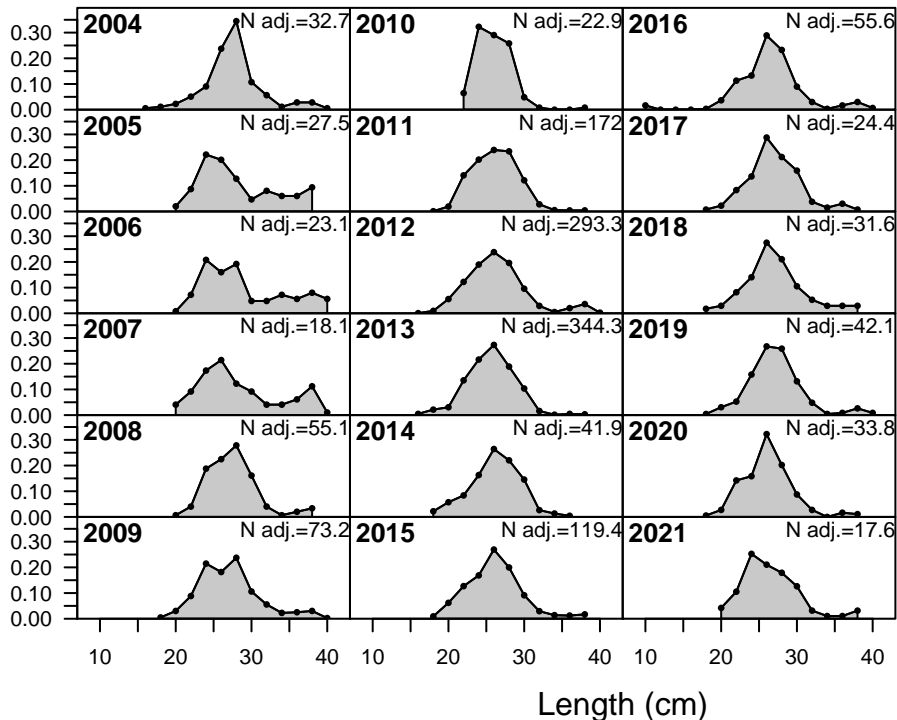


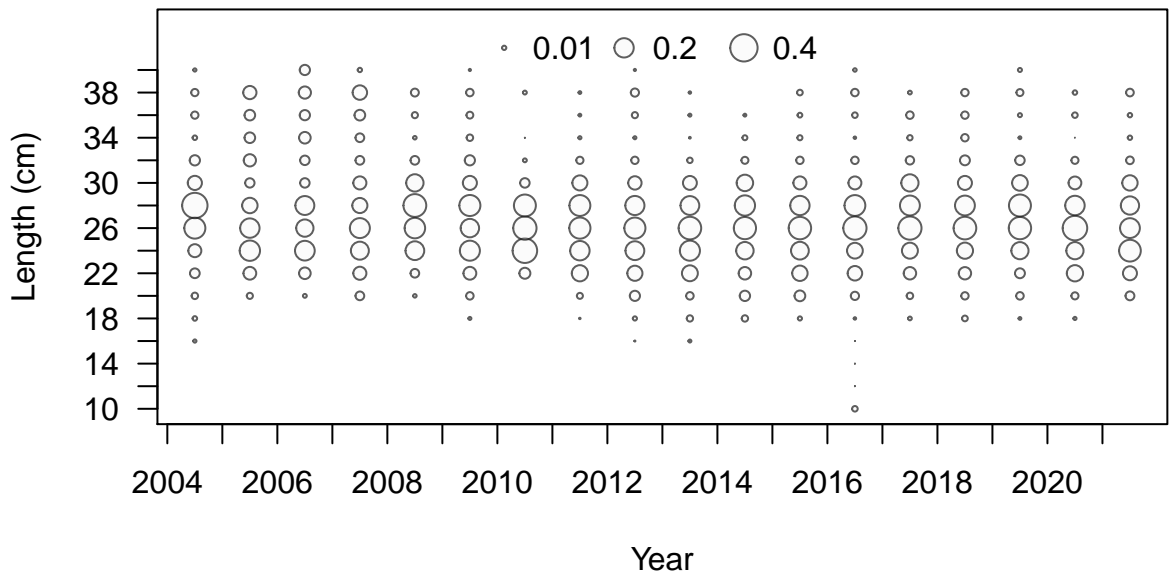
# FISHERY

Sum of N adj.=1428.7

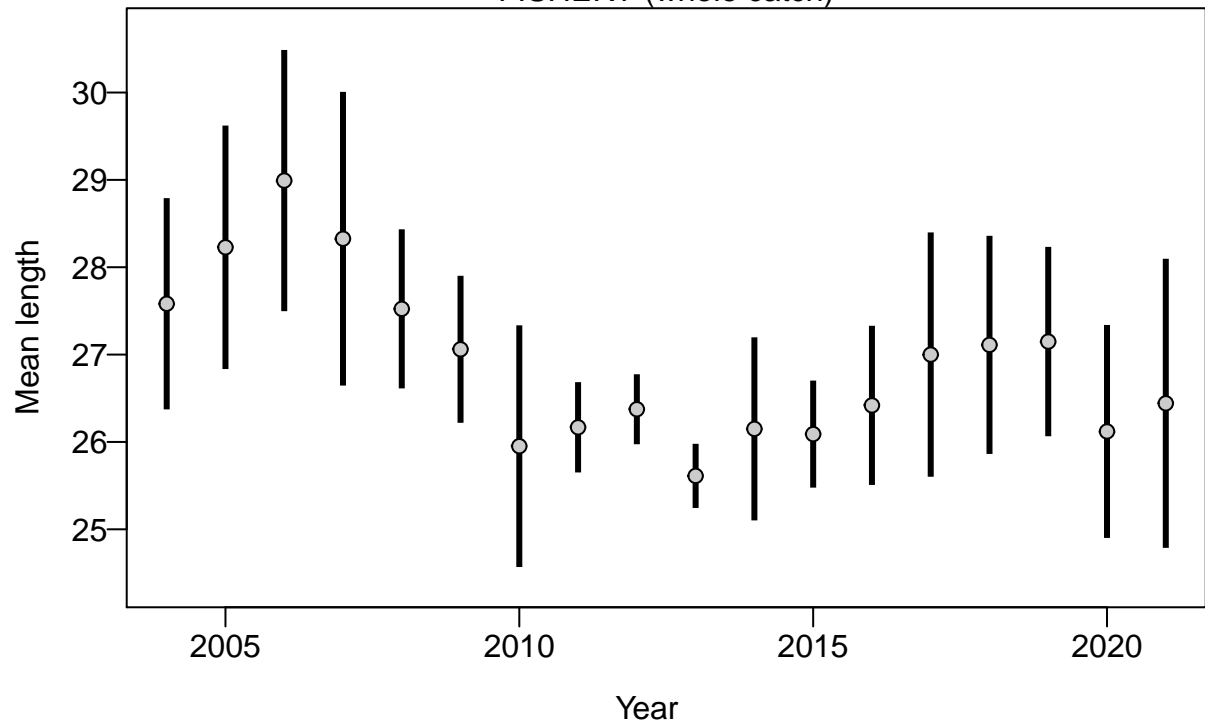


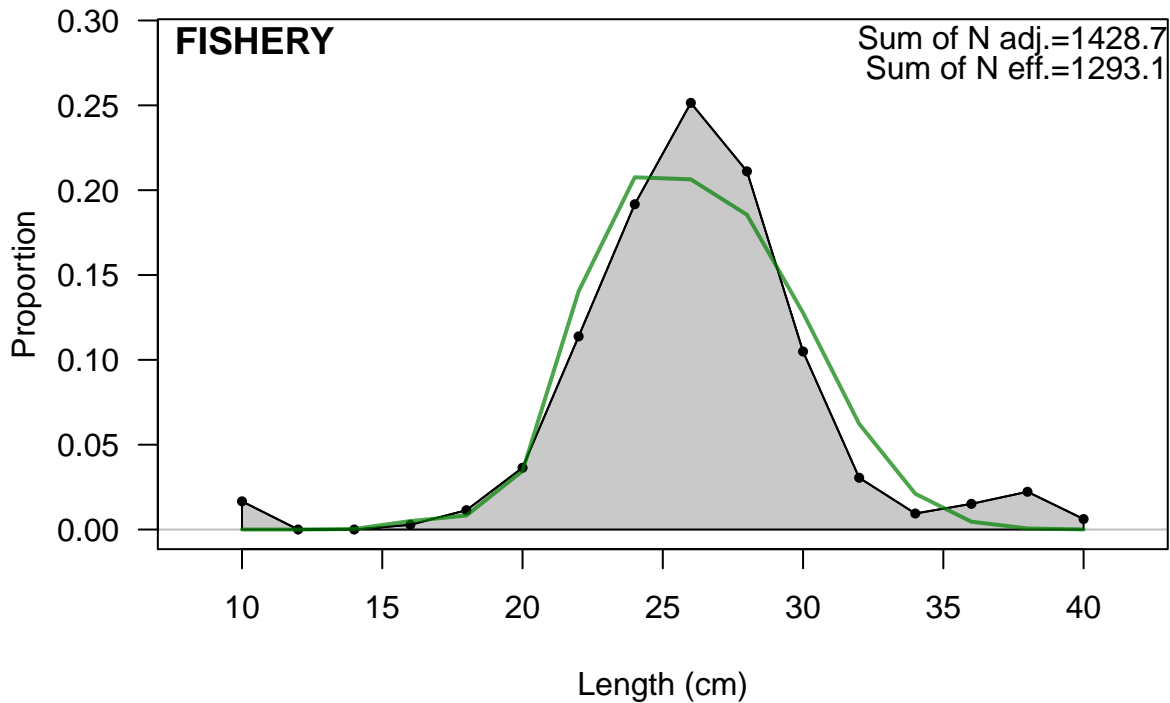


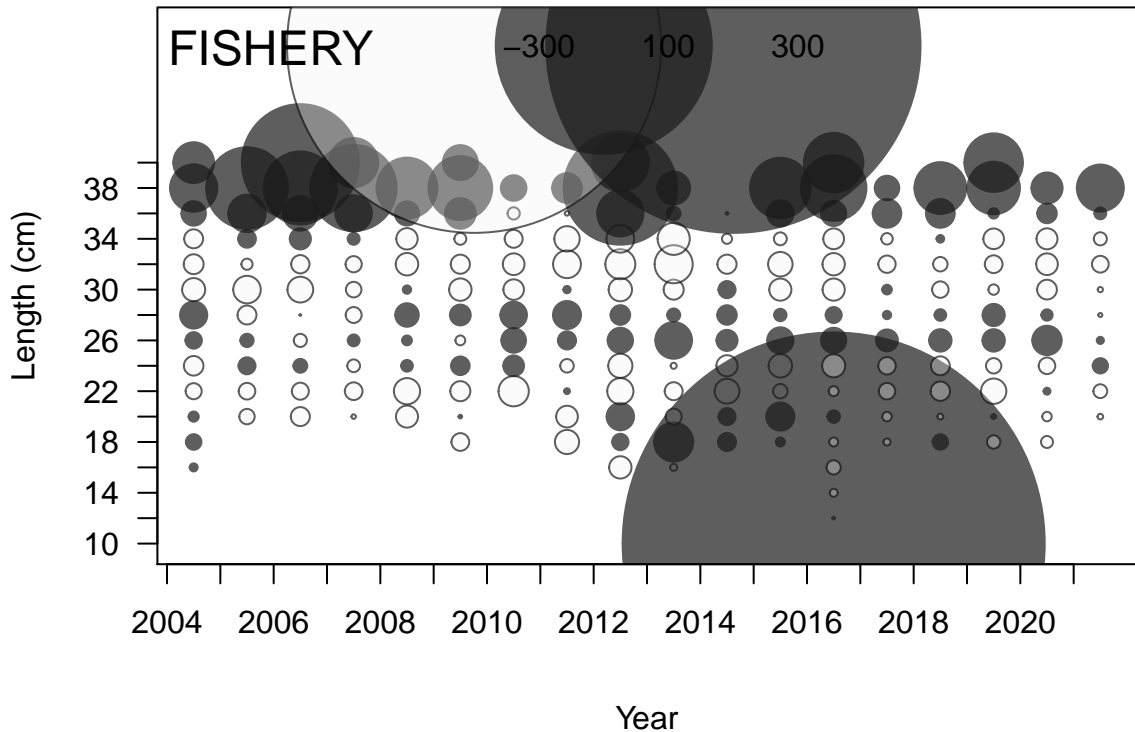




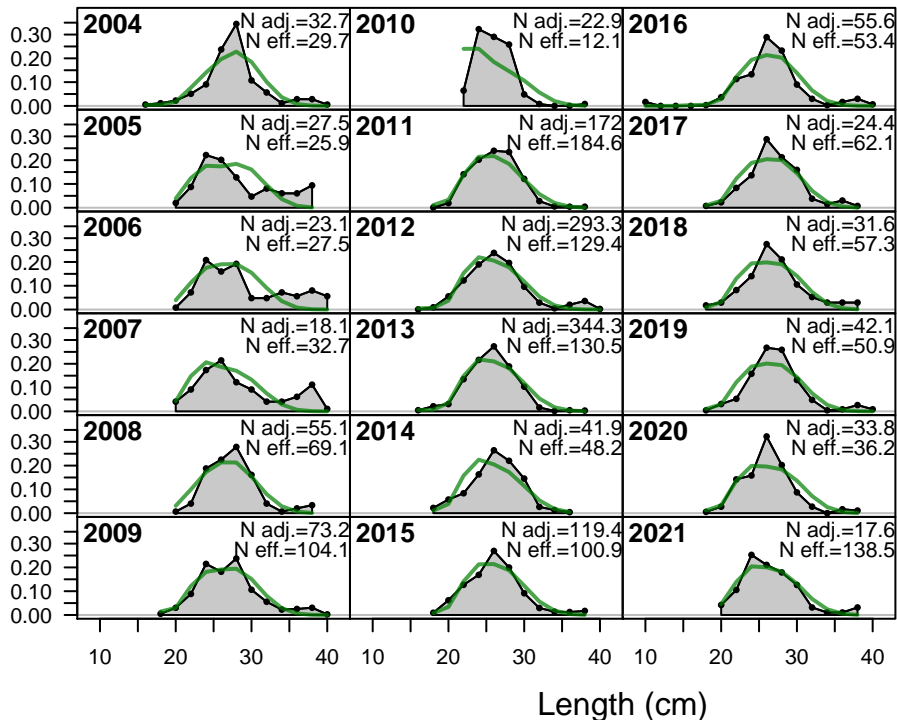
FISHERY (whole catch)

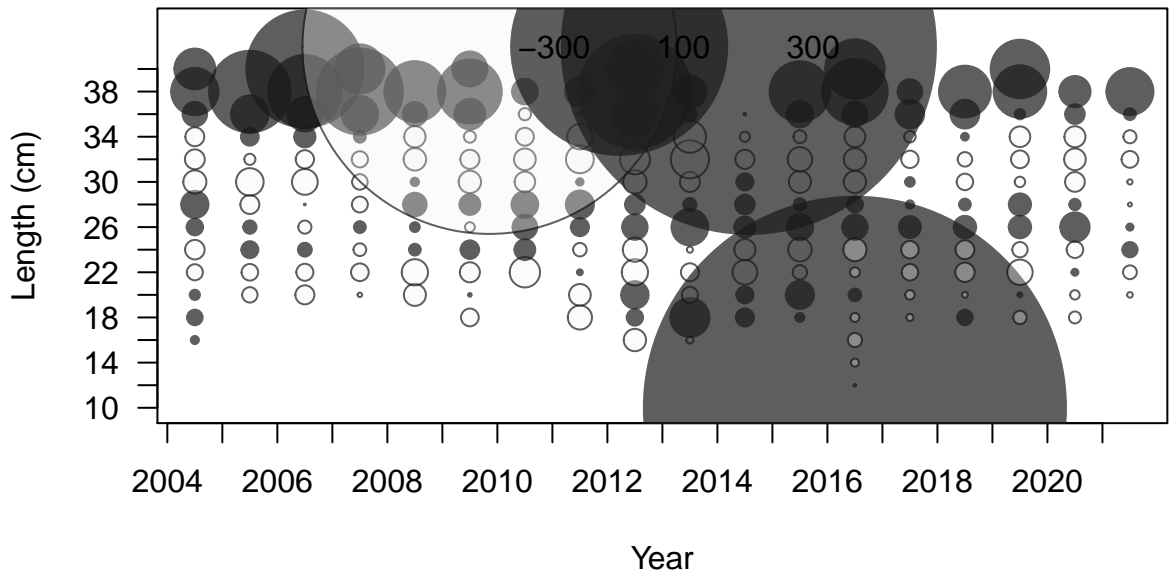


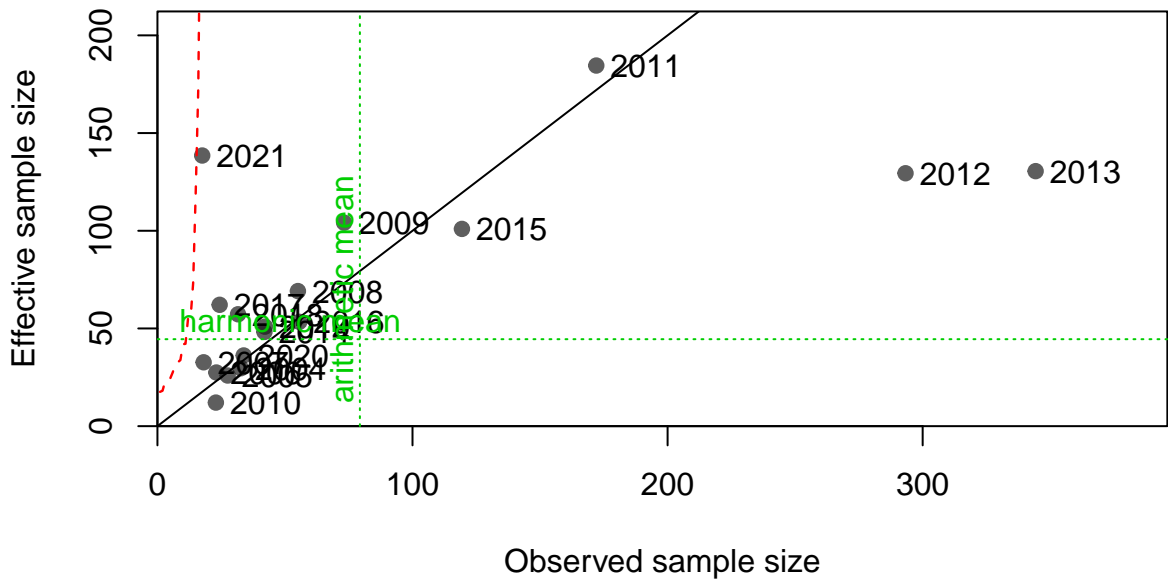




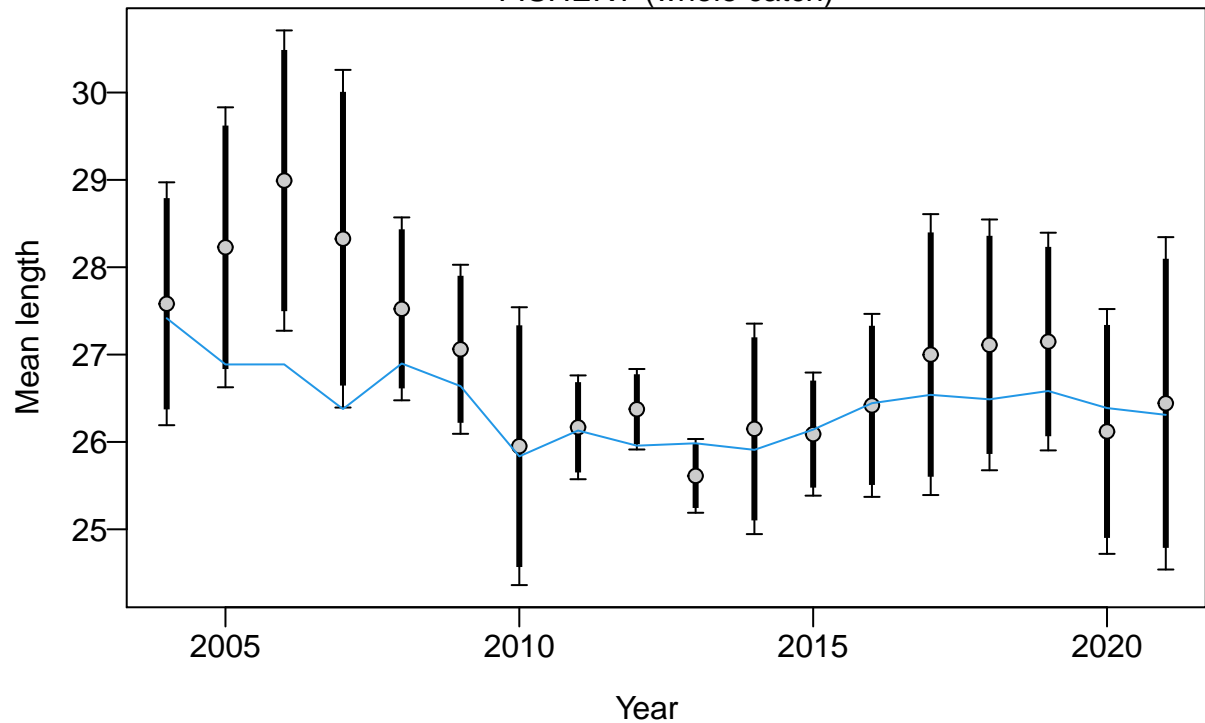


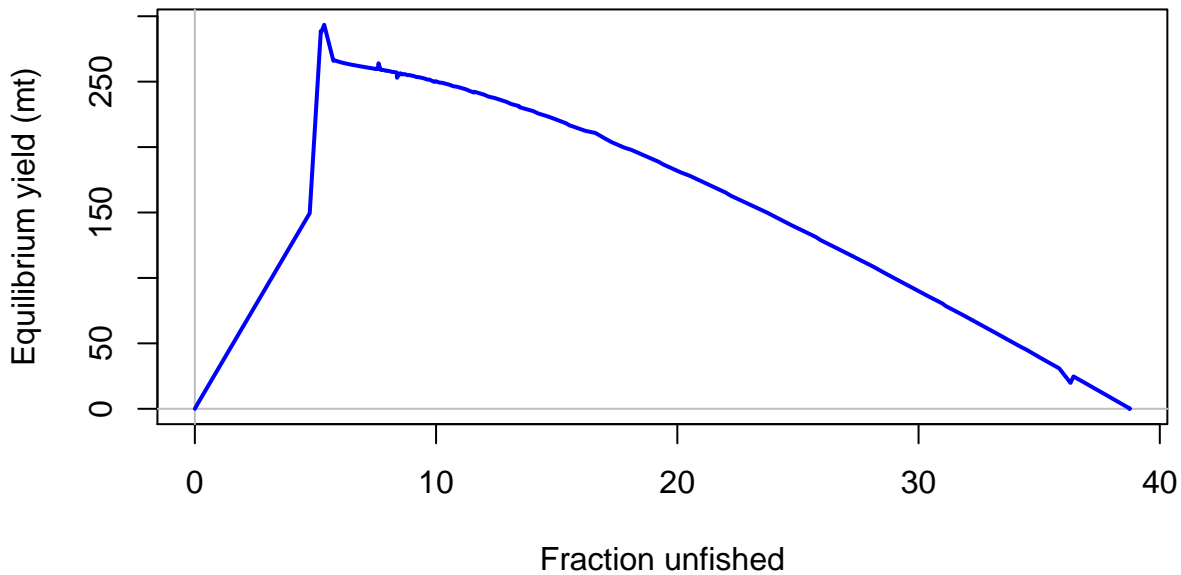


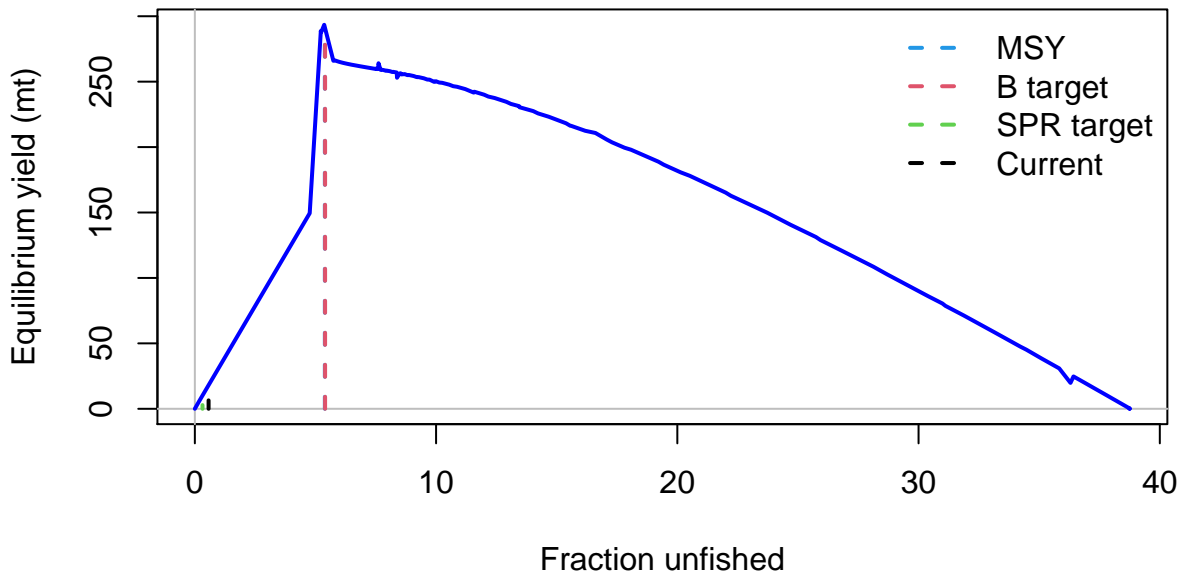


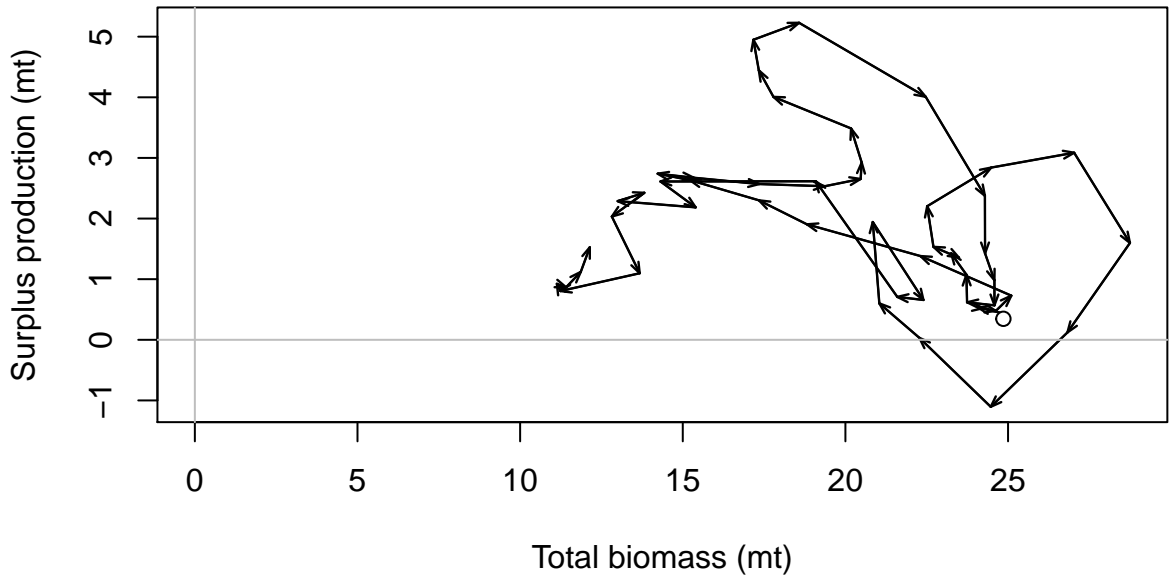


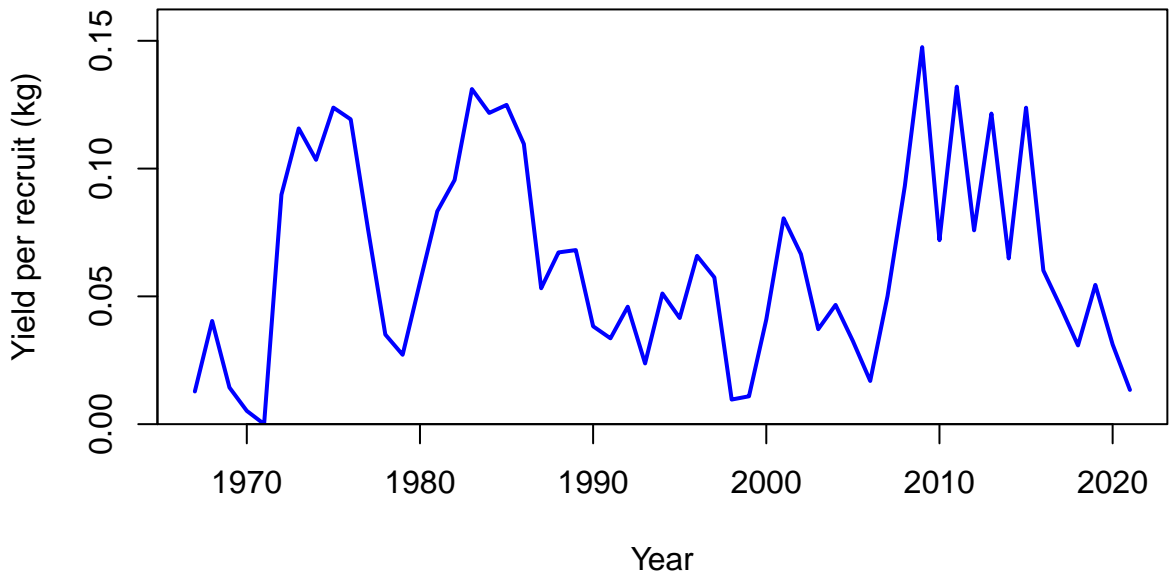
## FISHERY (whole catch)



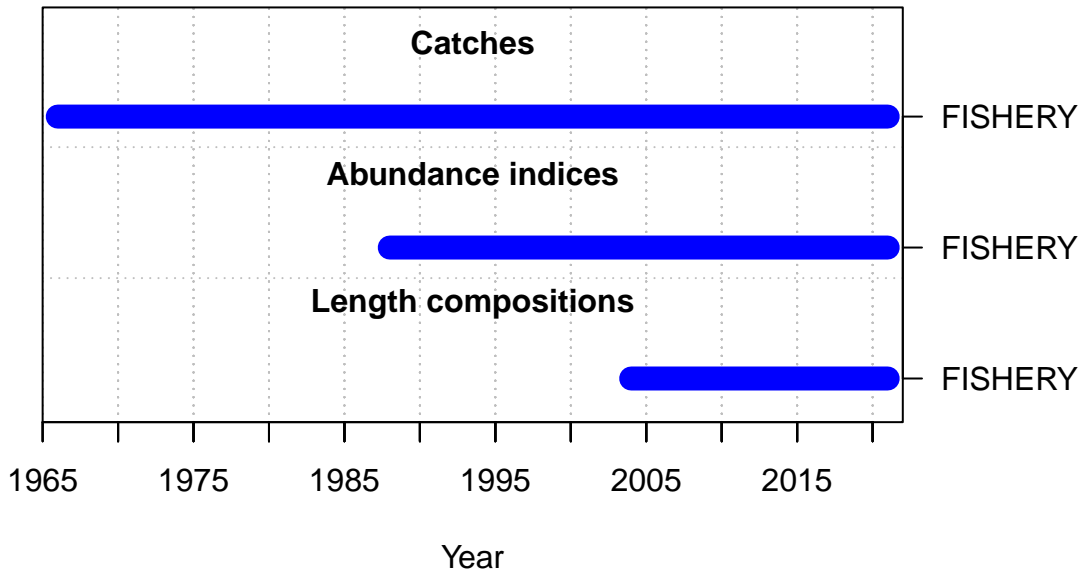


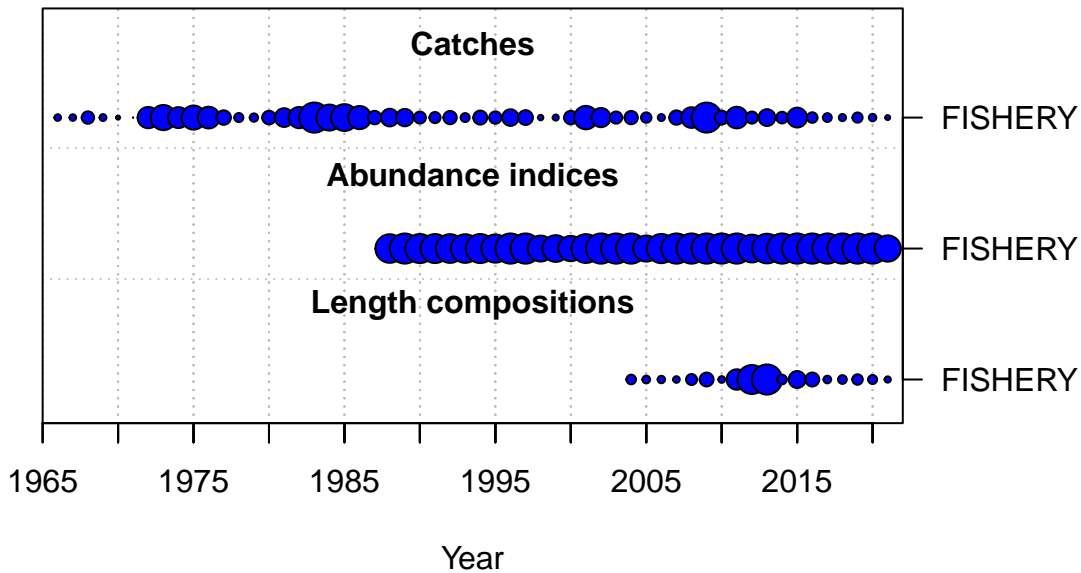




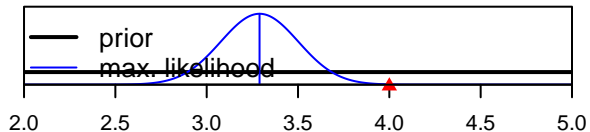




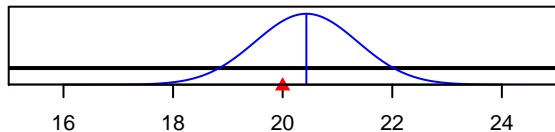




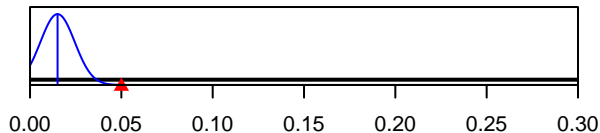
SR\_LN(R0)



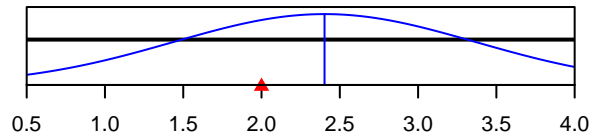
Size\_inflection\_FISHERY(1)



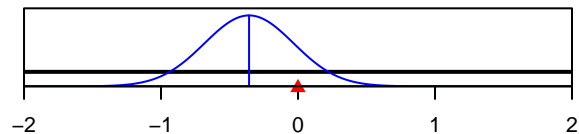
InitF\_seas\_1\_flt\_1FISHERY



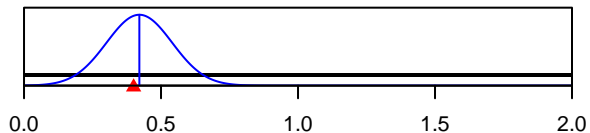
Size\_95%width\_FISHERY(1)



LnQ\_base\_FISHERY(1)



Q\_extraSD\_FISHERY(1)



Parameter value