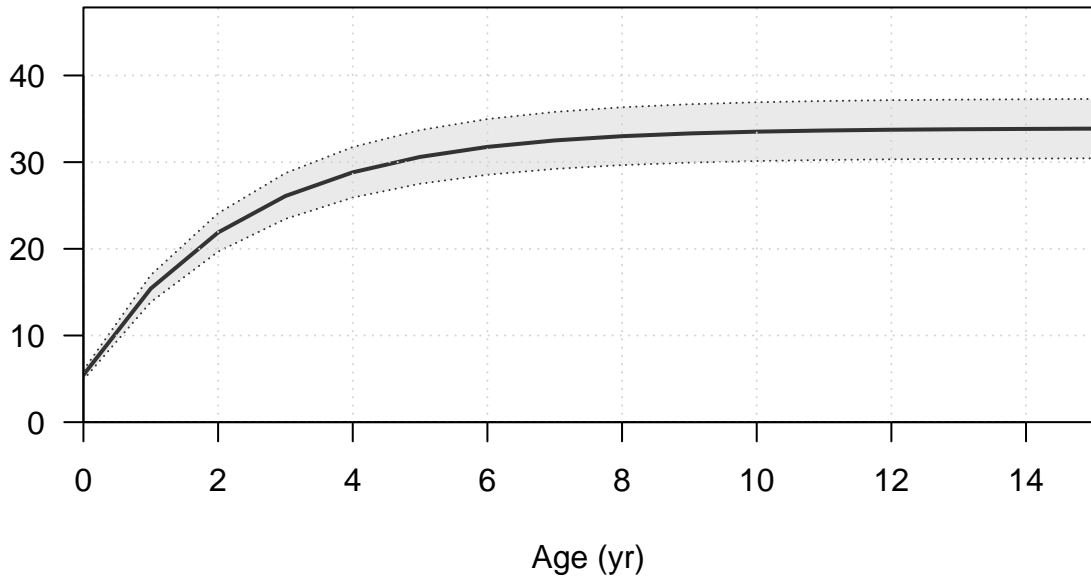
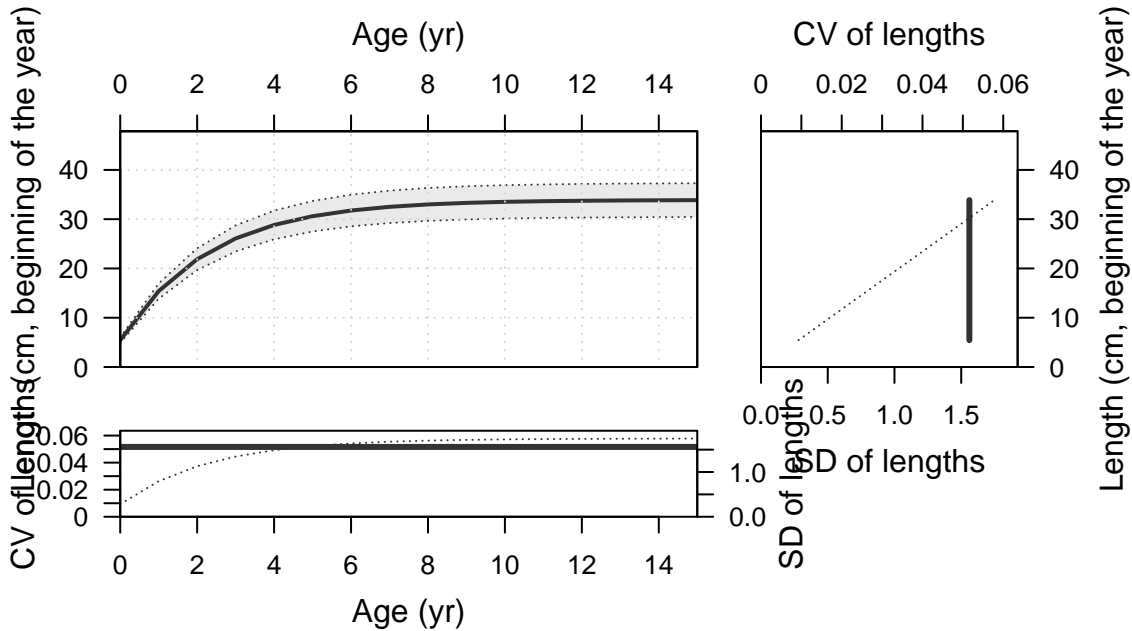
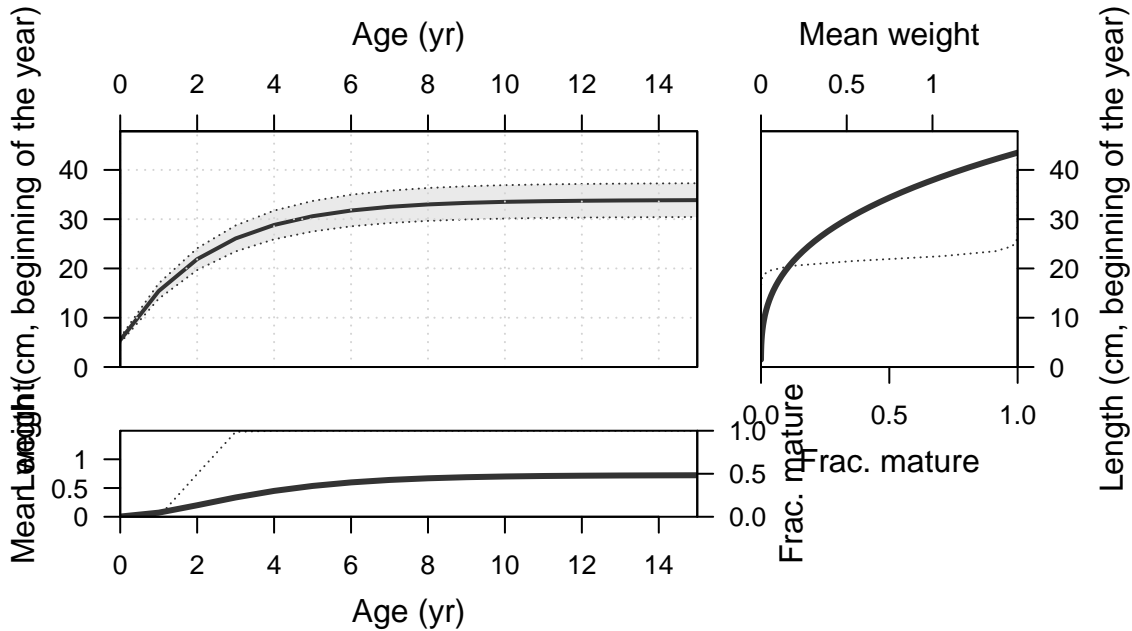


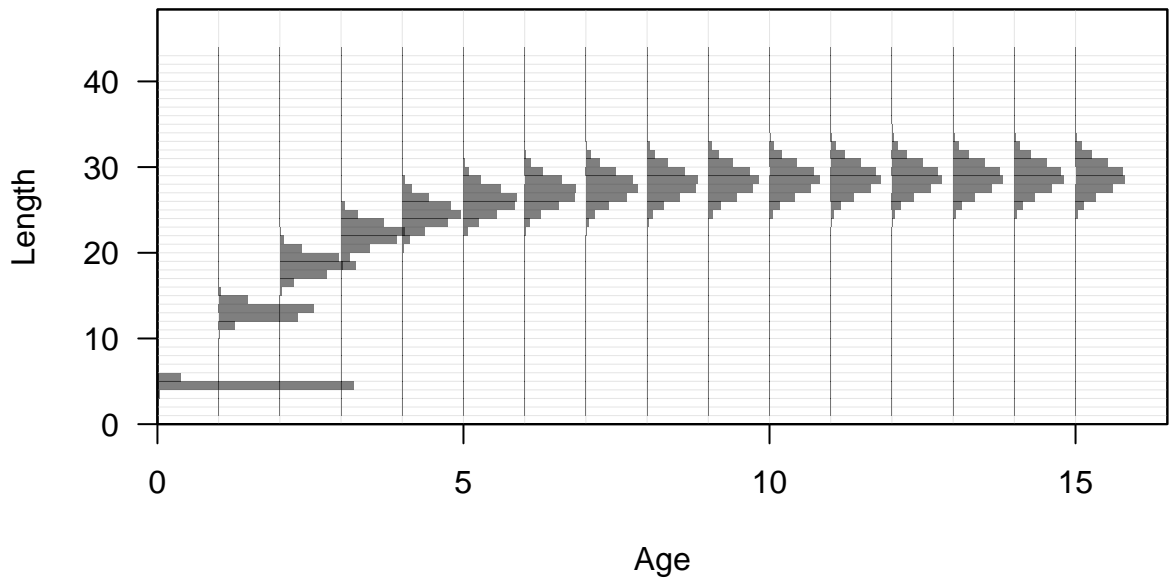
Plots created using the 'r4ss' package in R
Stock Synthesis version: 3.30.19.0
StartTime: Tue Aug 09 09:04:20 2022
Data_File: data.ss
Control_File: control.ss

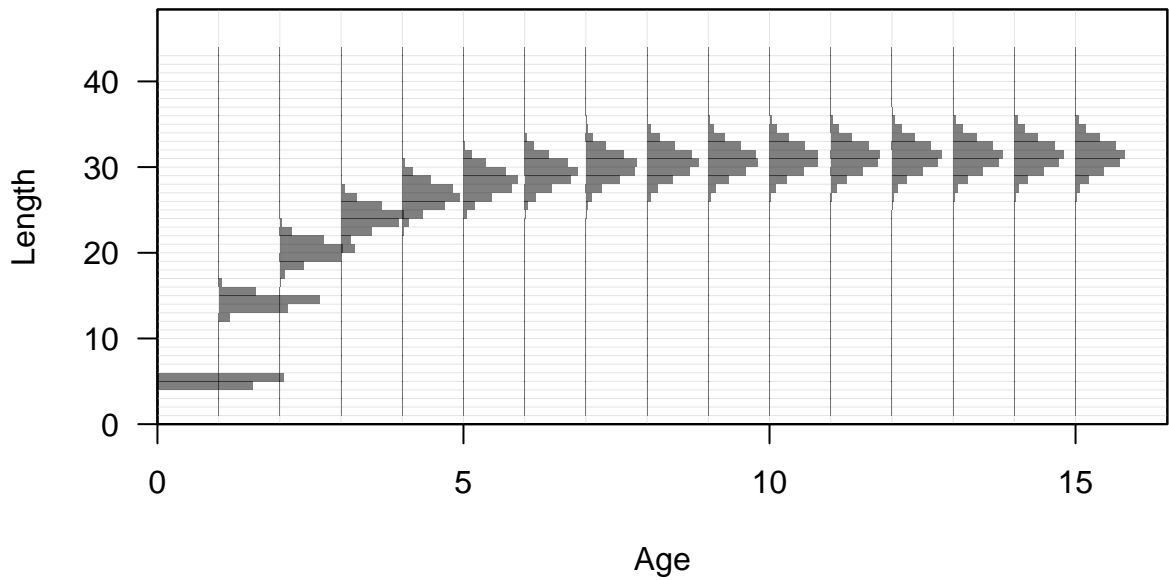
Length (cm, beginning of the year)

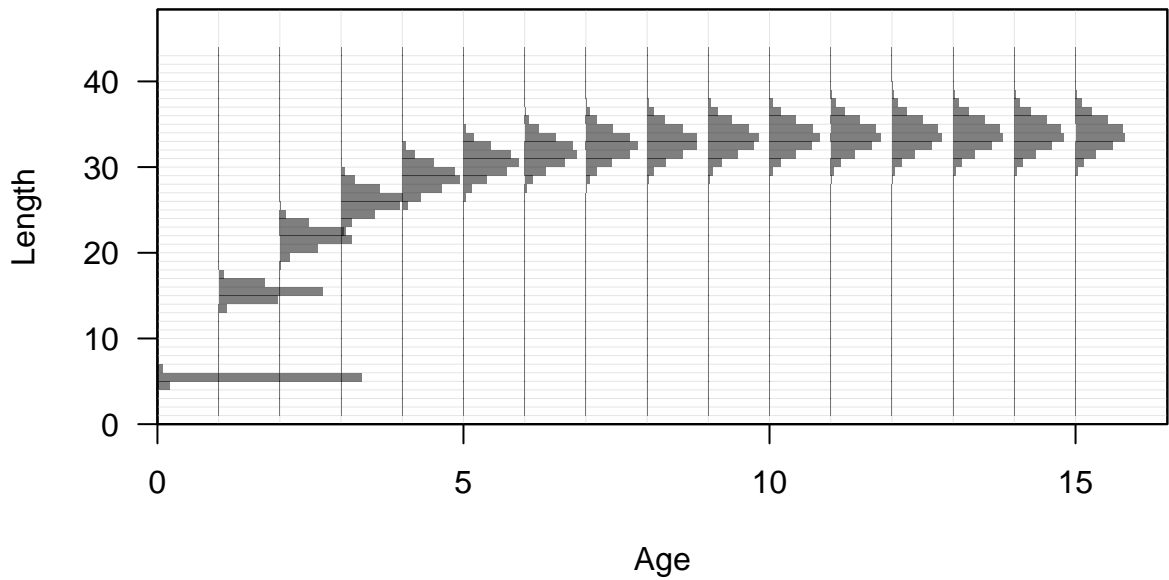


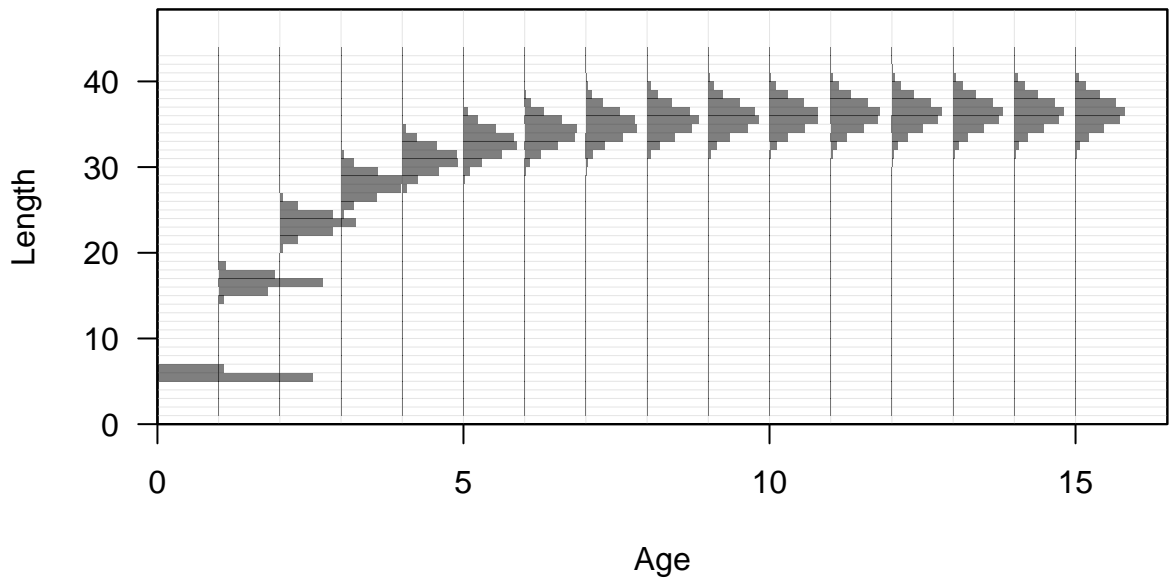


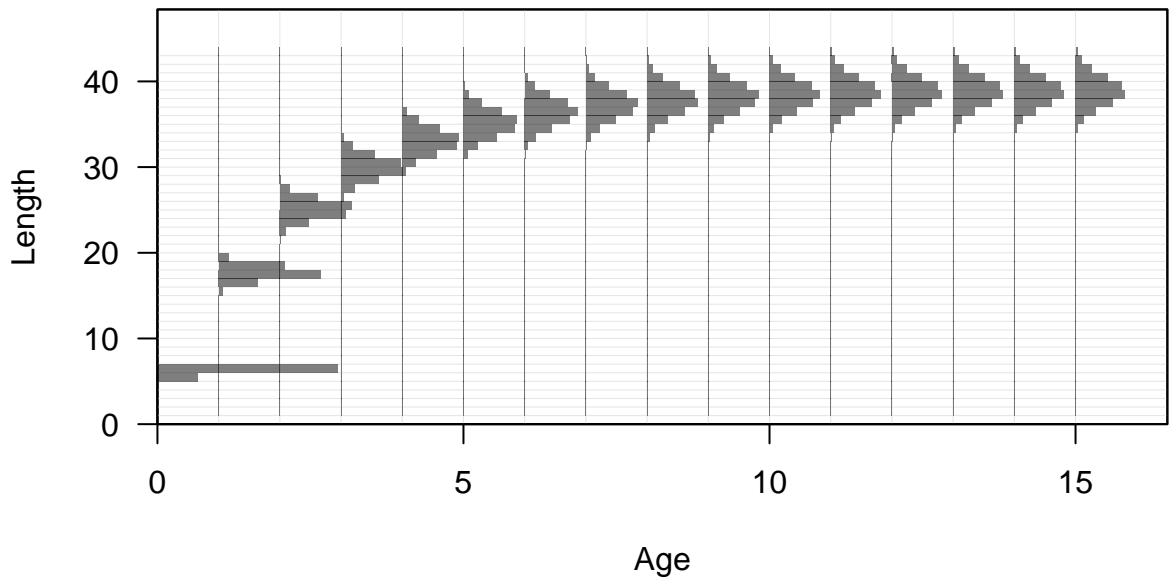


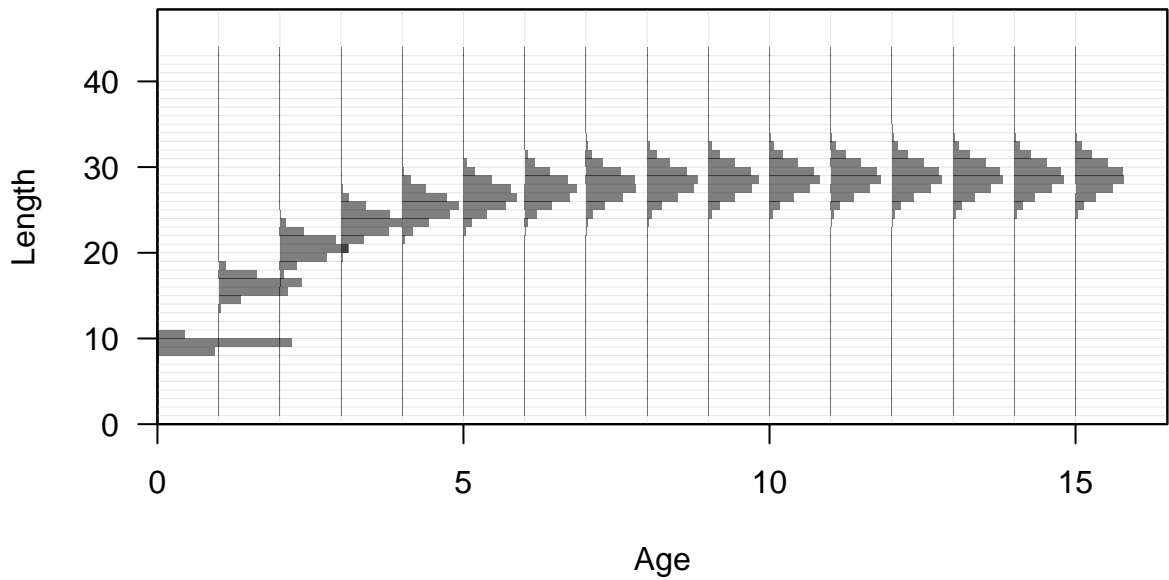


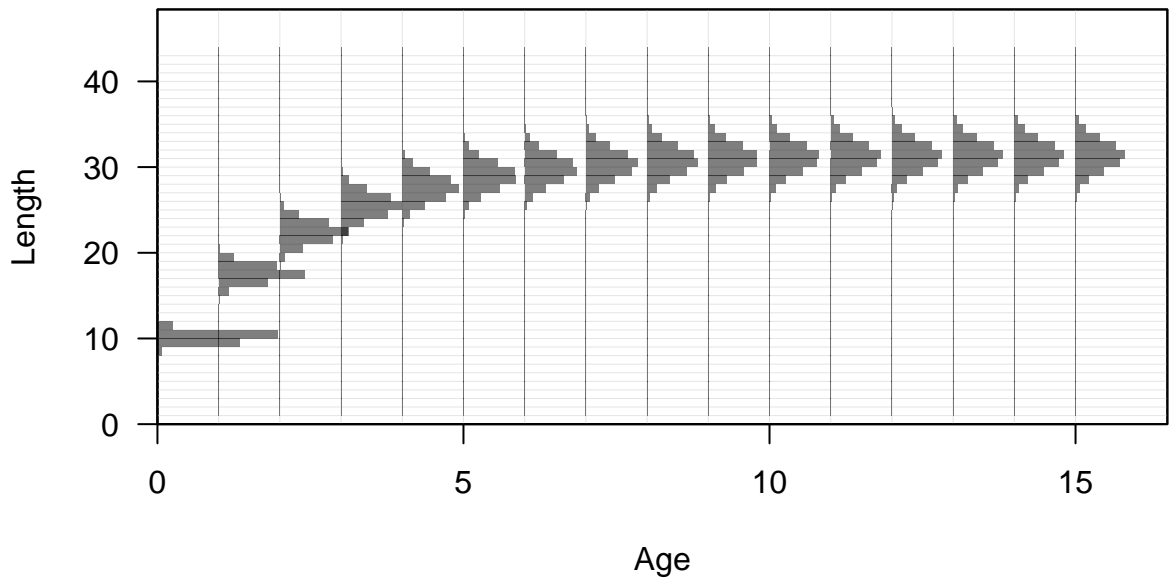


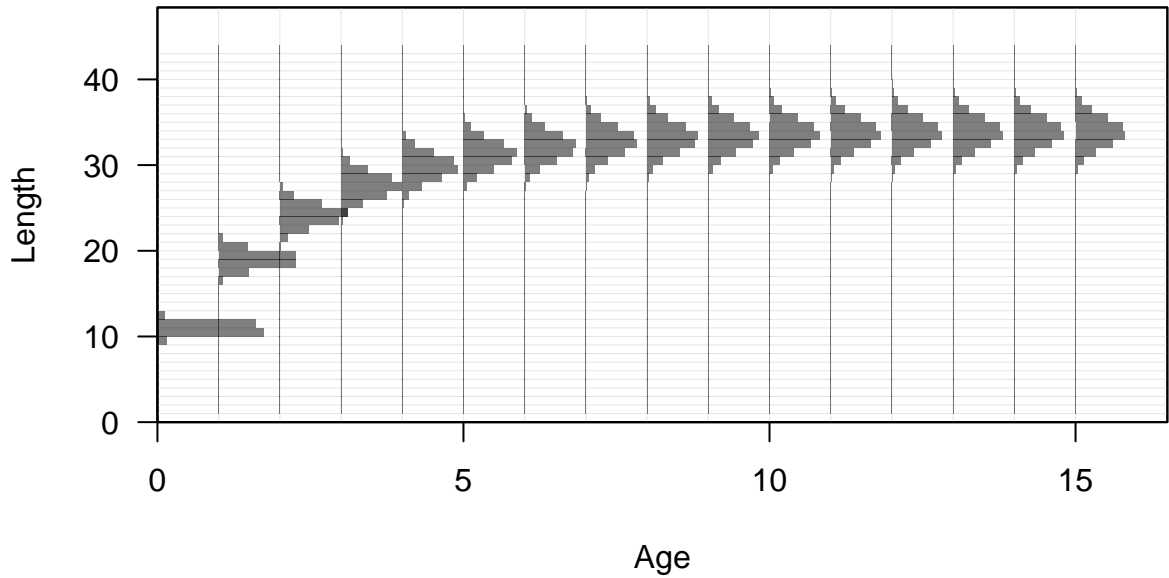


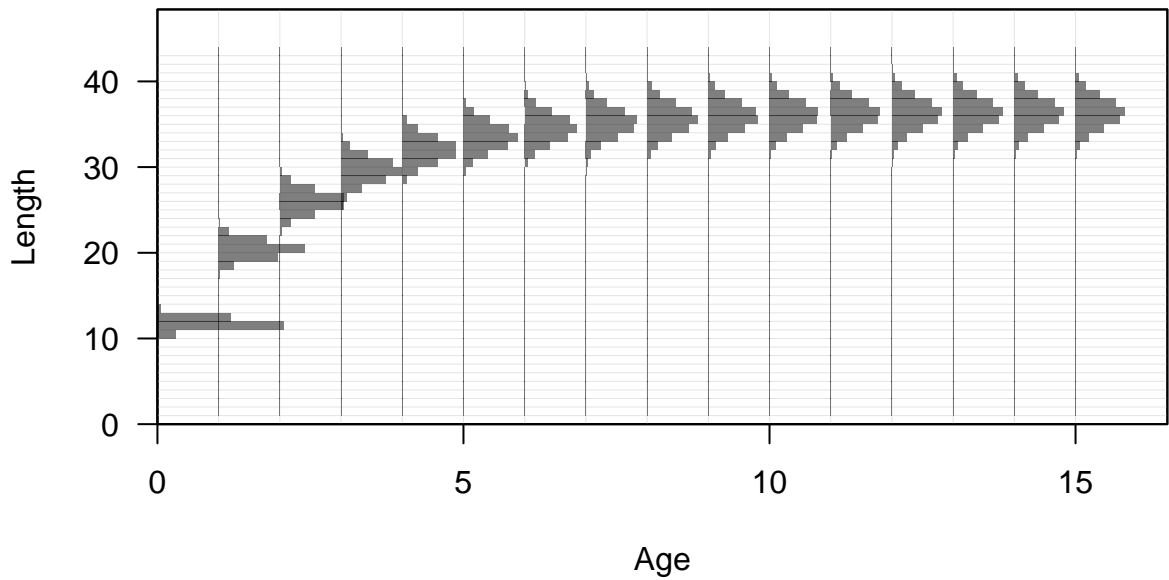


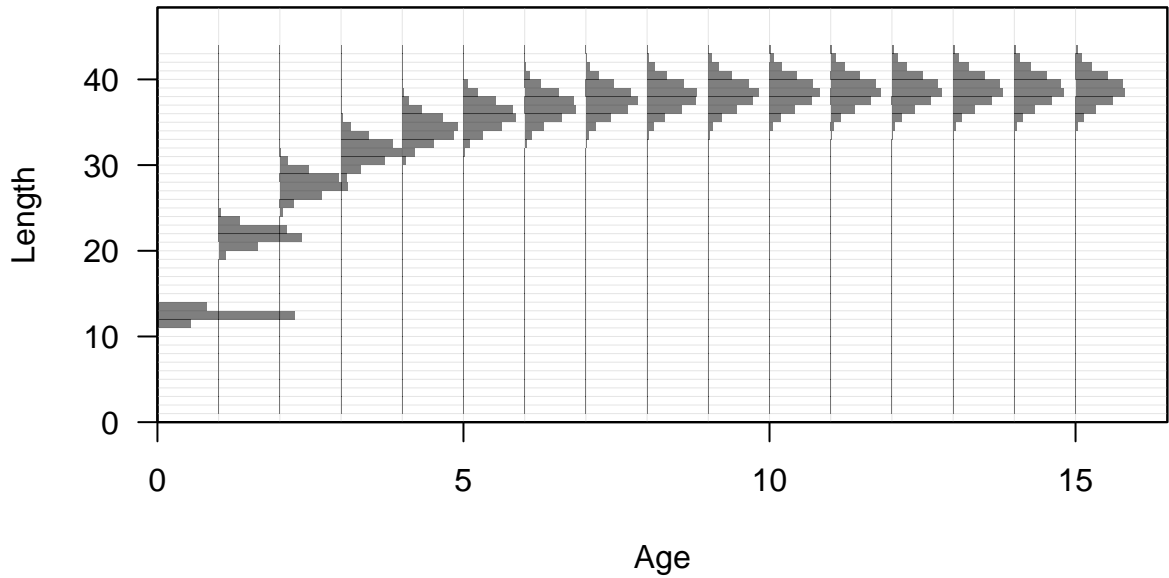






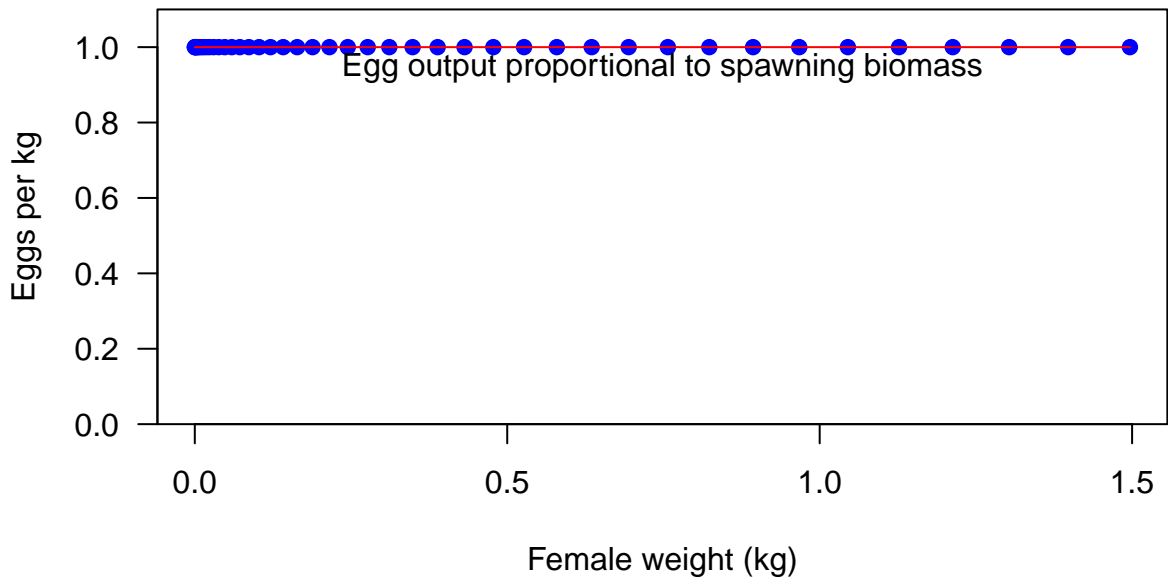








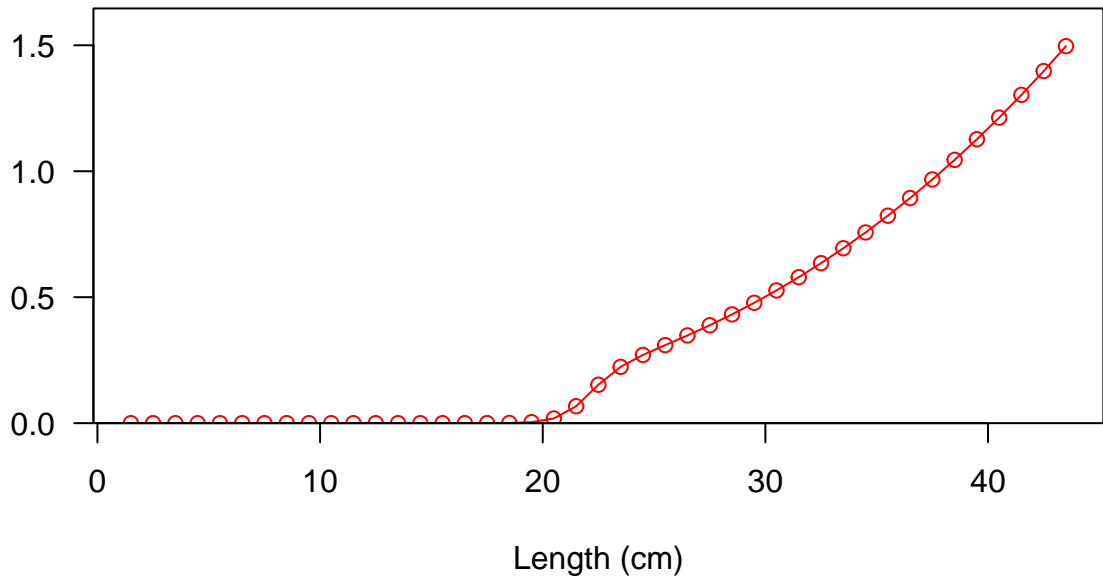


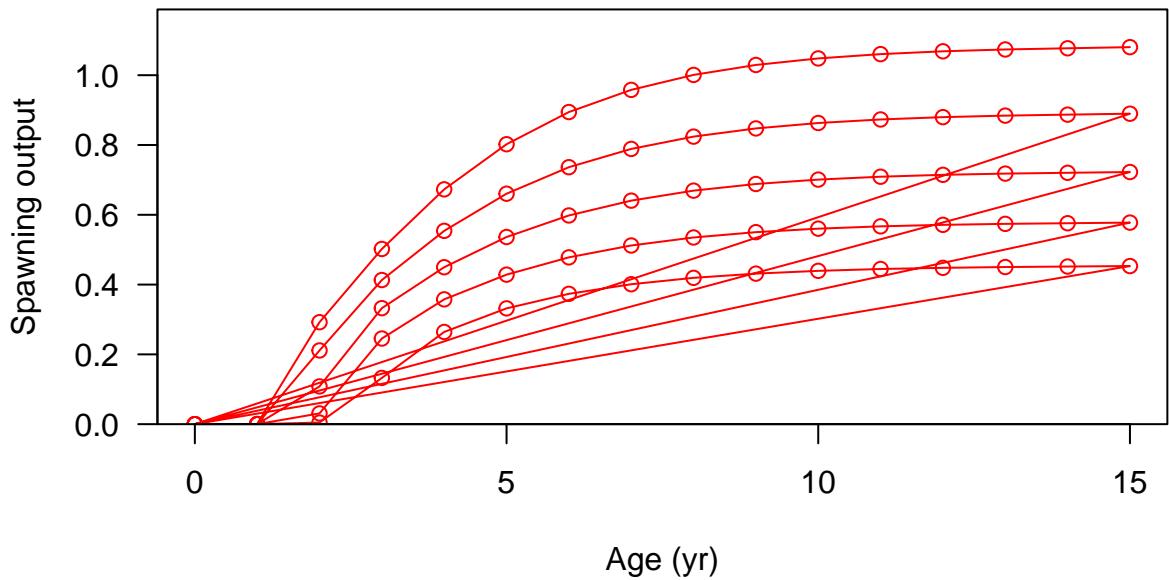






Spawning output

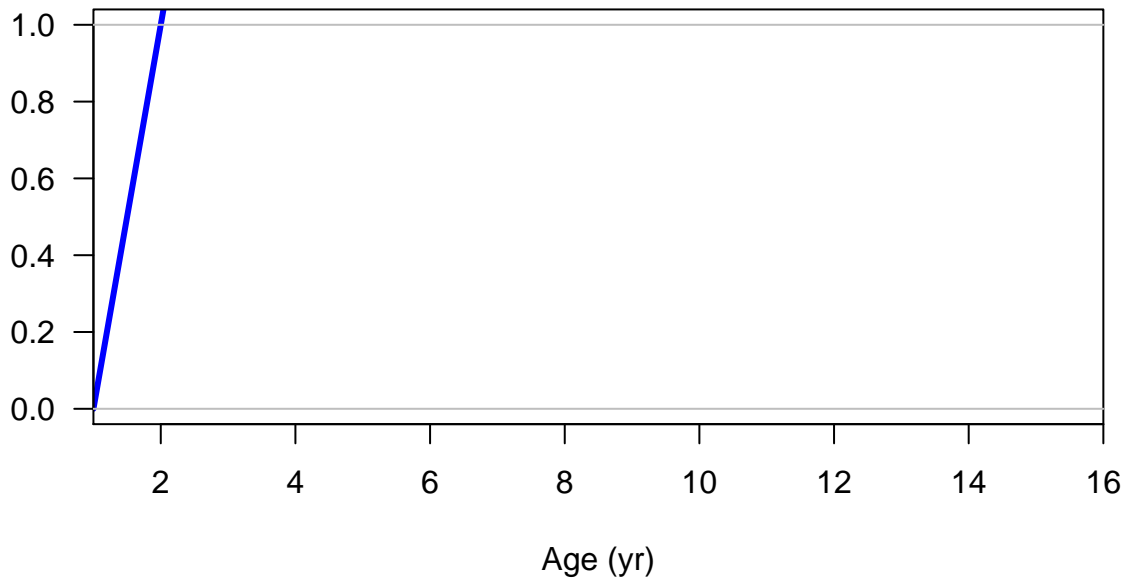




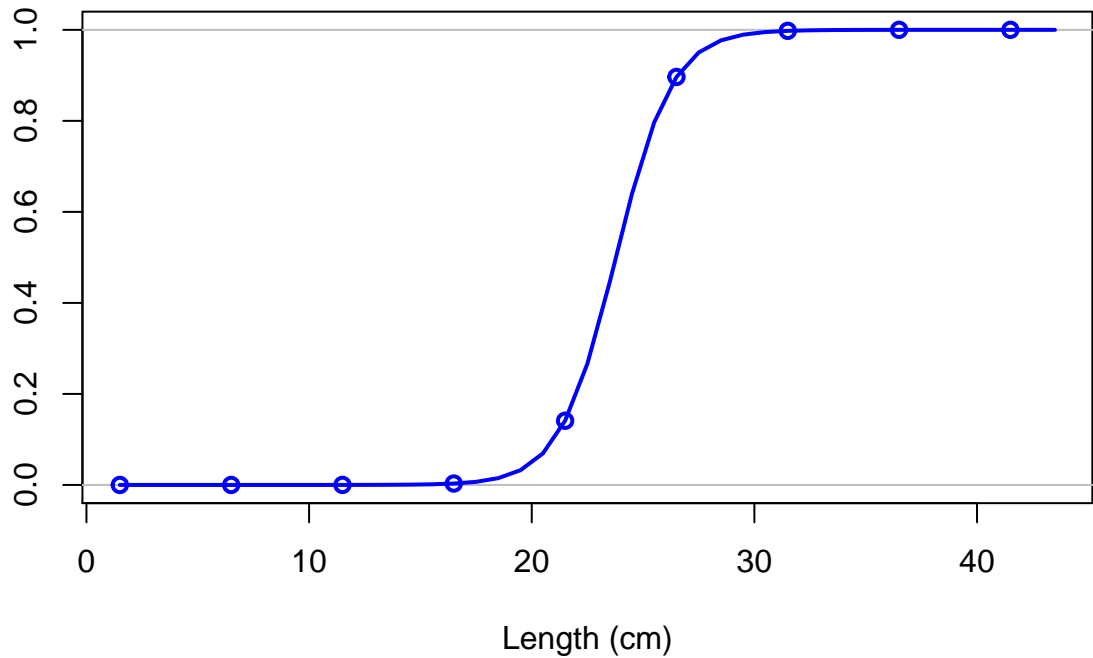
Hermaphroditism transition rate



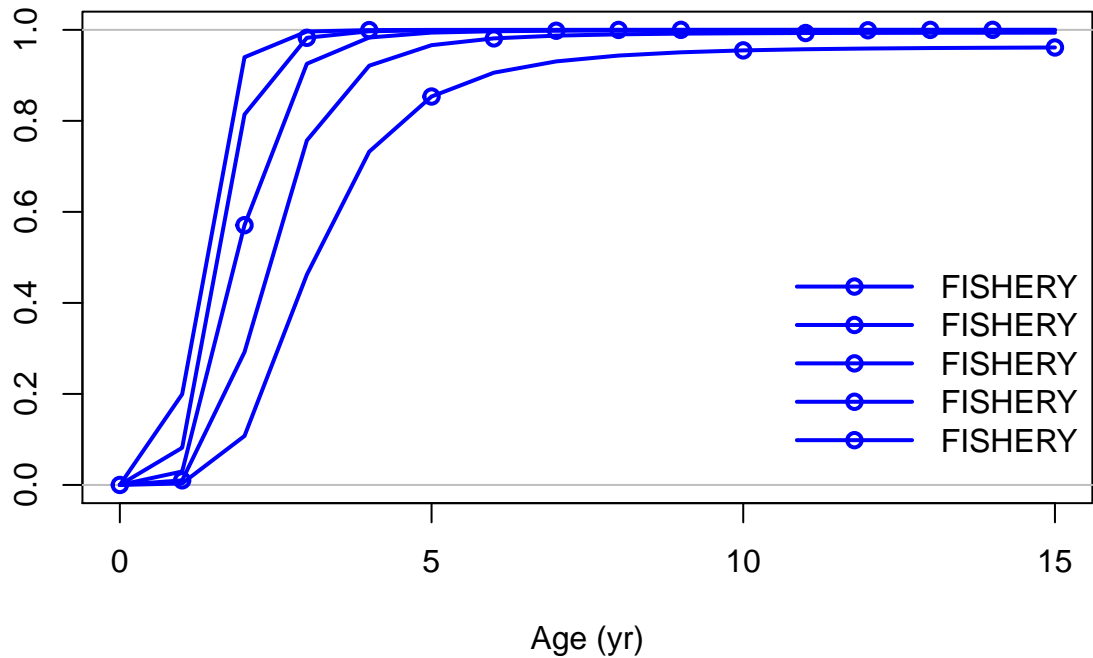
Fraction females by age at equilibrium



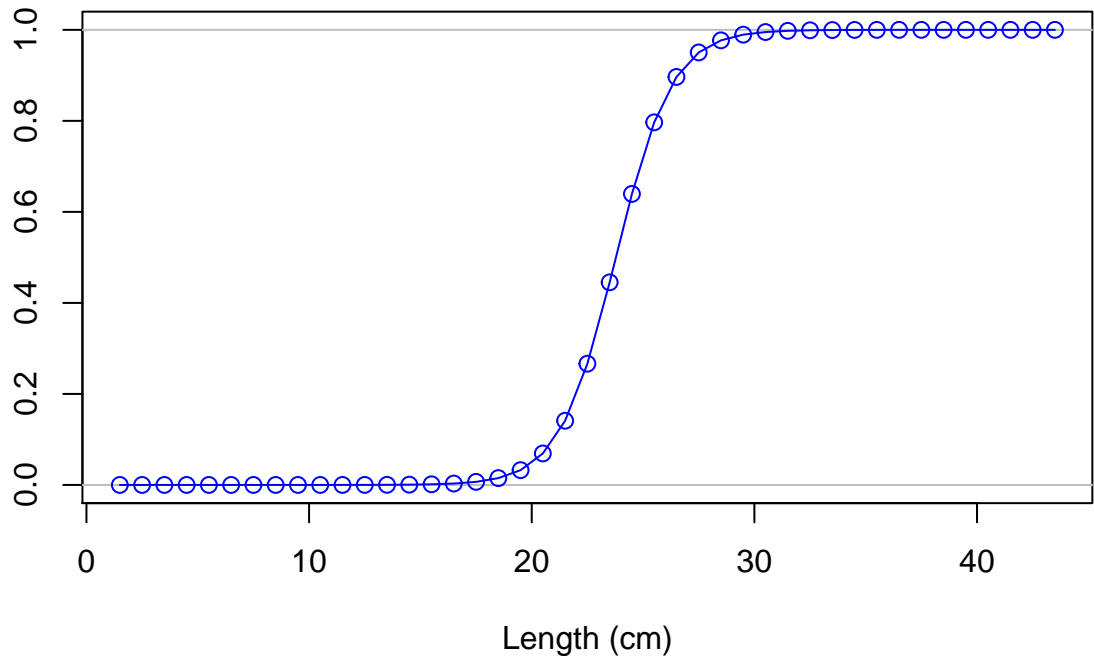
Selectivity

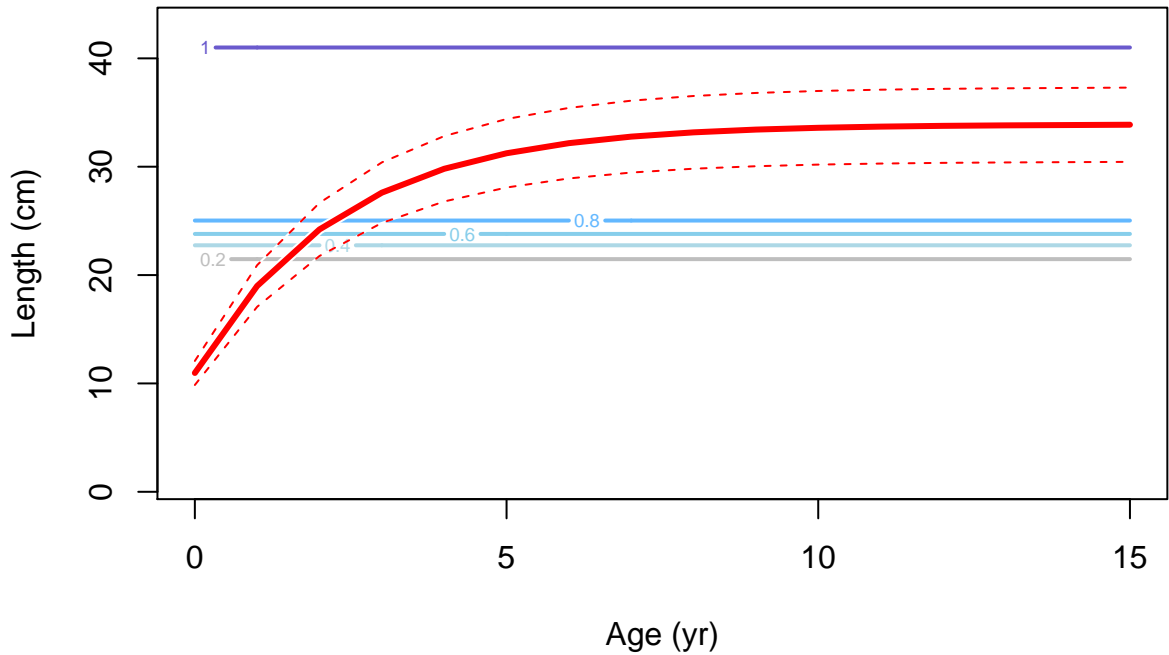


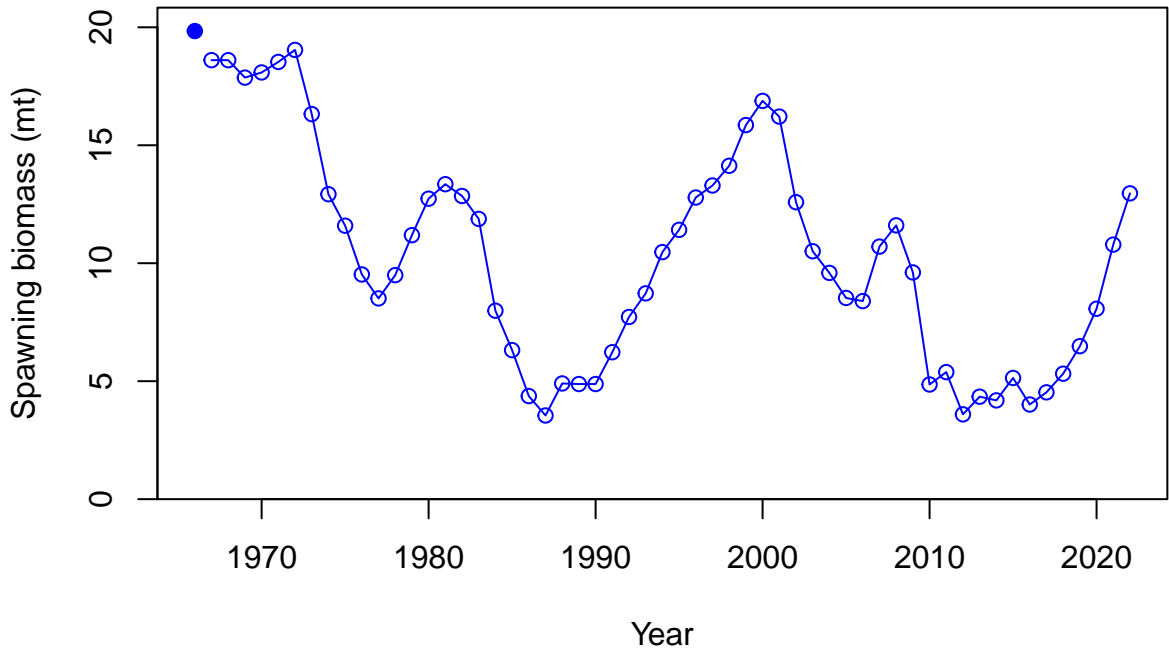
Selectivity



Selectivity







Spawning biomass (mt)

25
20
15
10
5
0

1970

1980

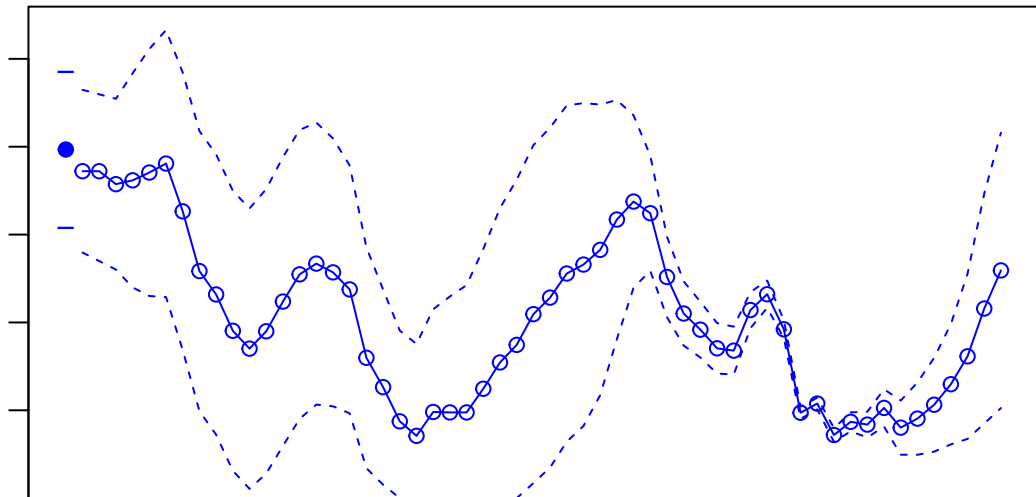
1990

2000

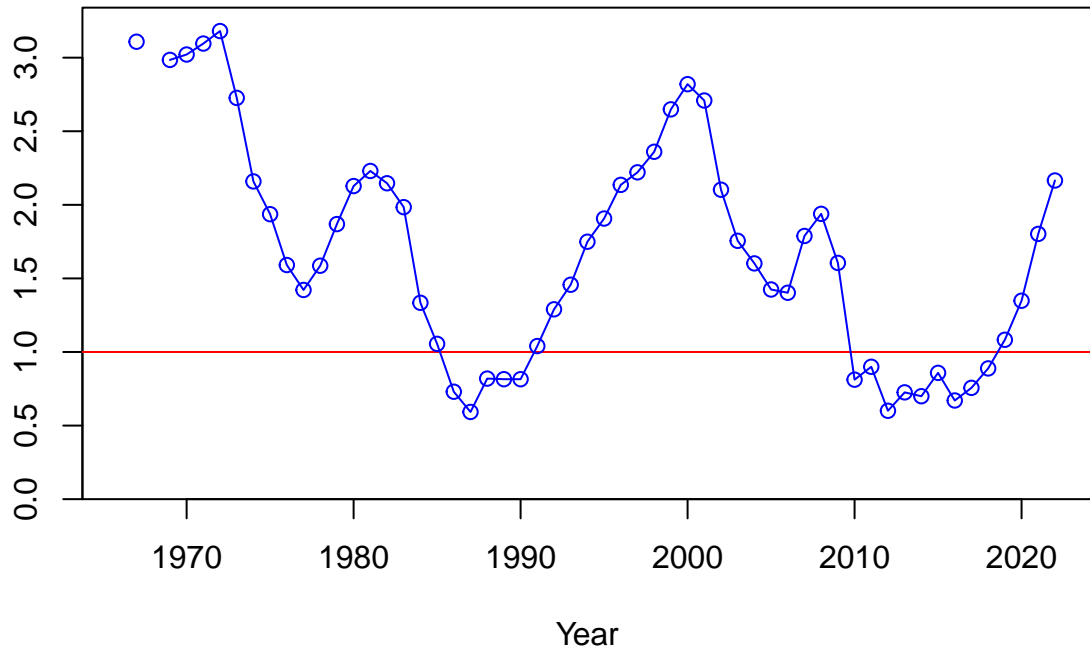
2010

2020

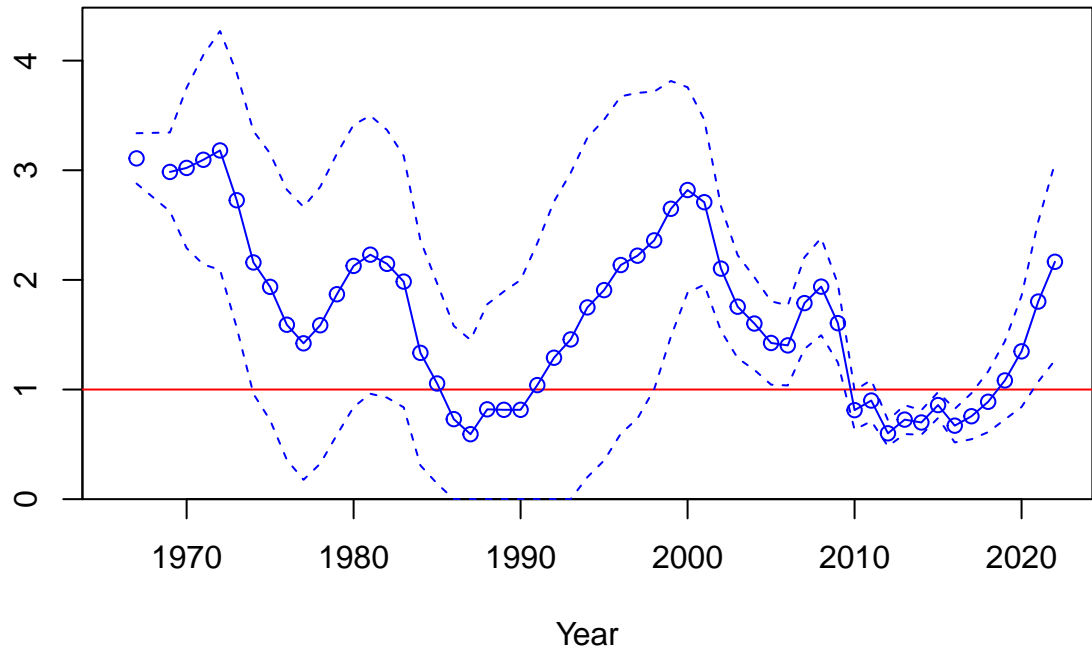
Year

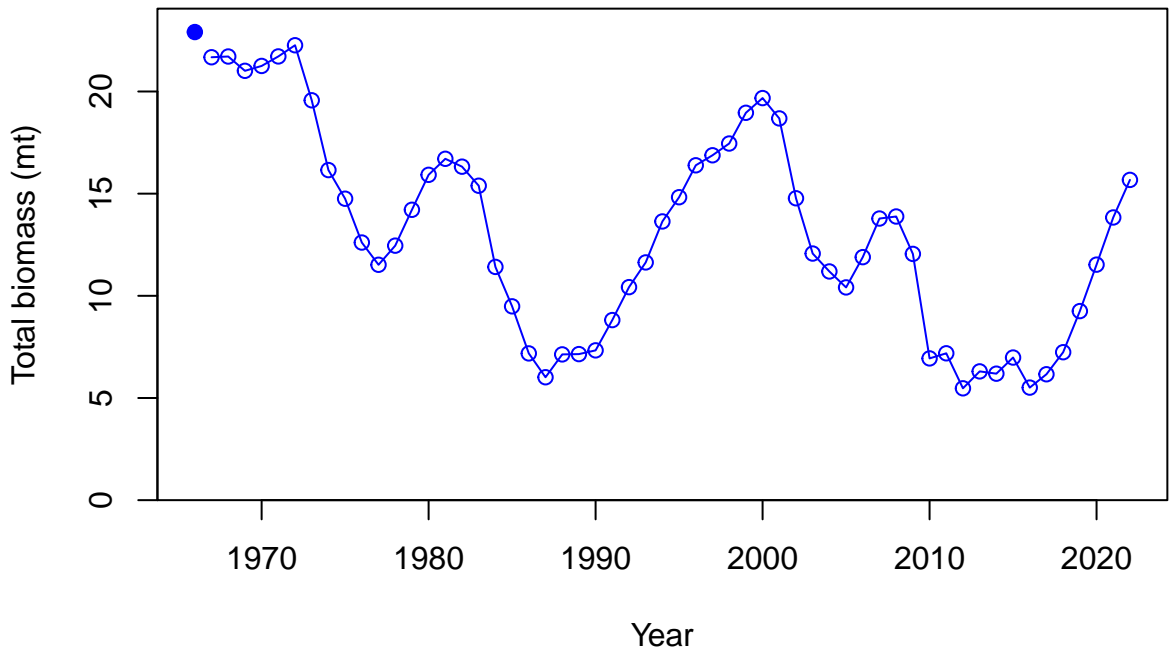


Relative spawning biomass: B/B_{MSY}

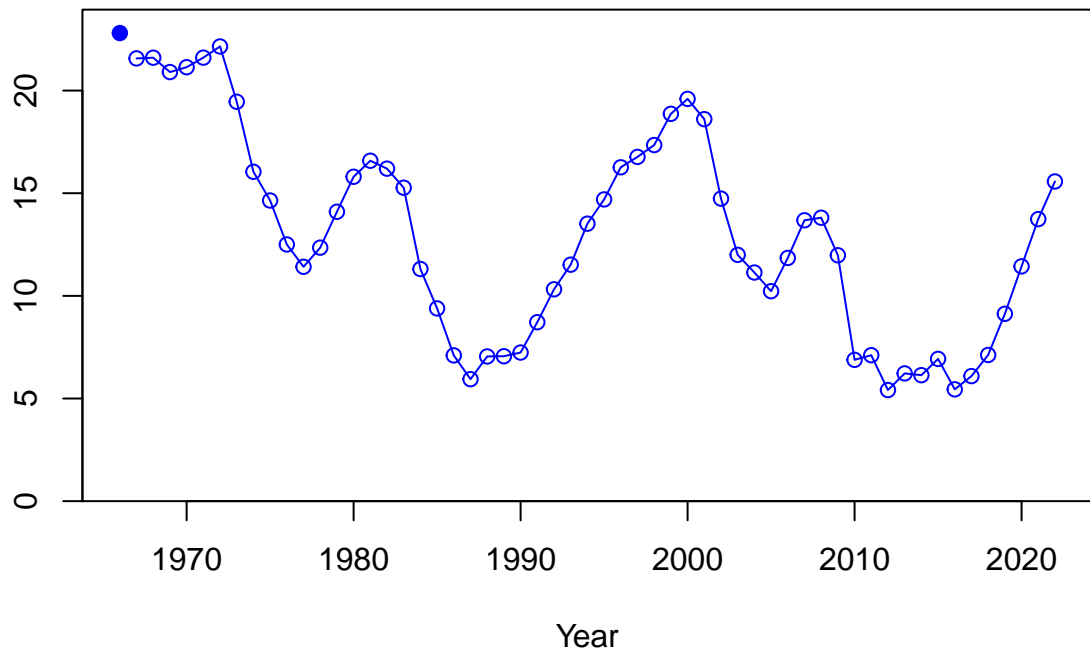


Relative spawning biomass: B/B_{MSY}

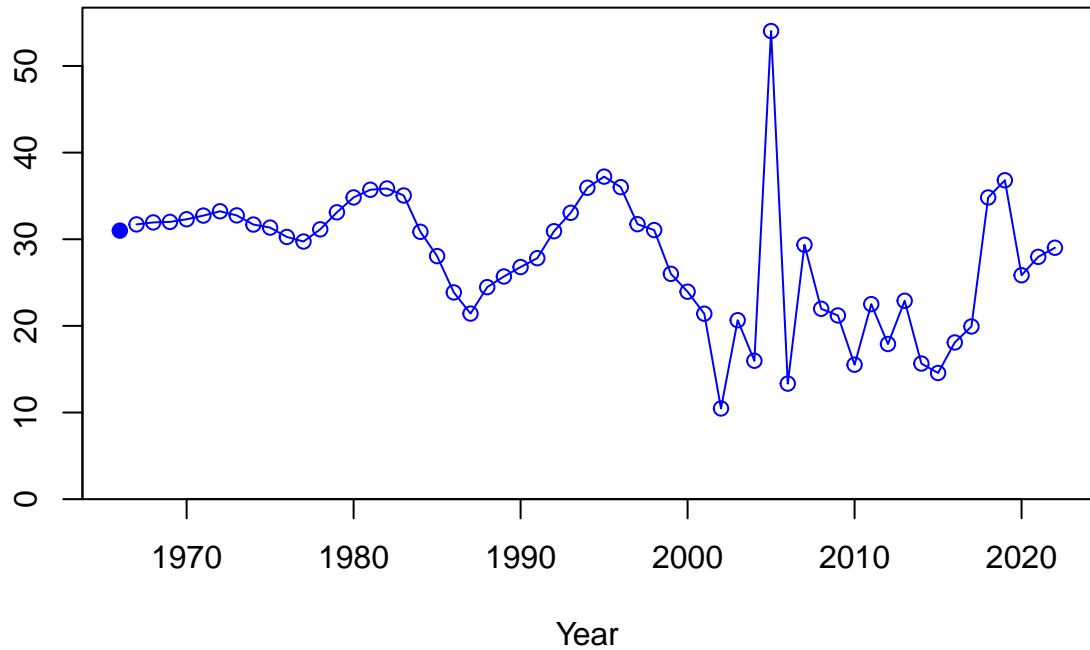




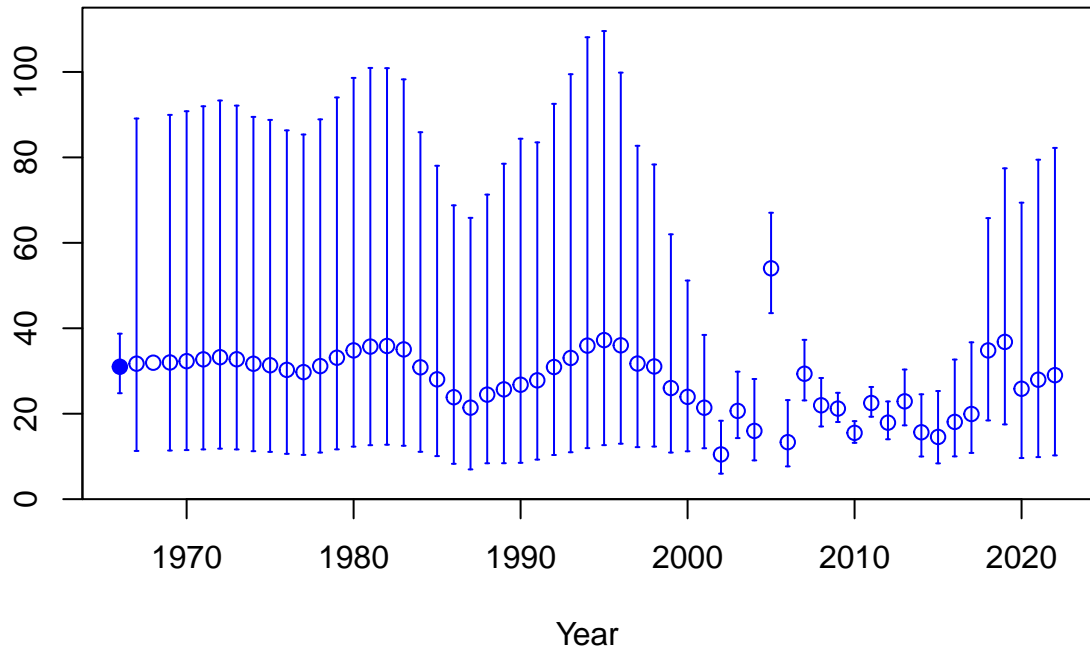
Summary biomass (mt)



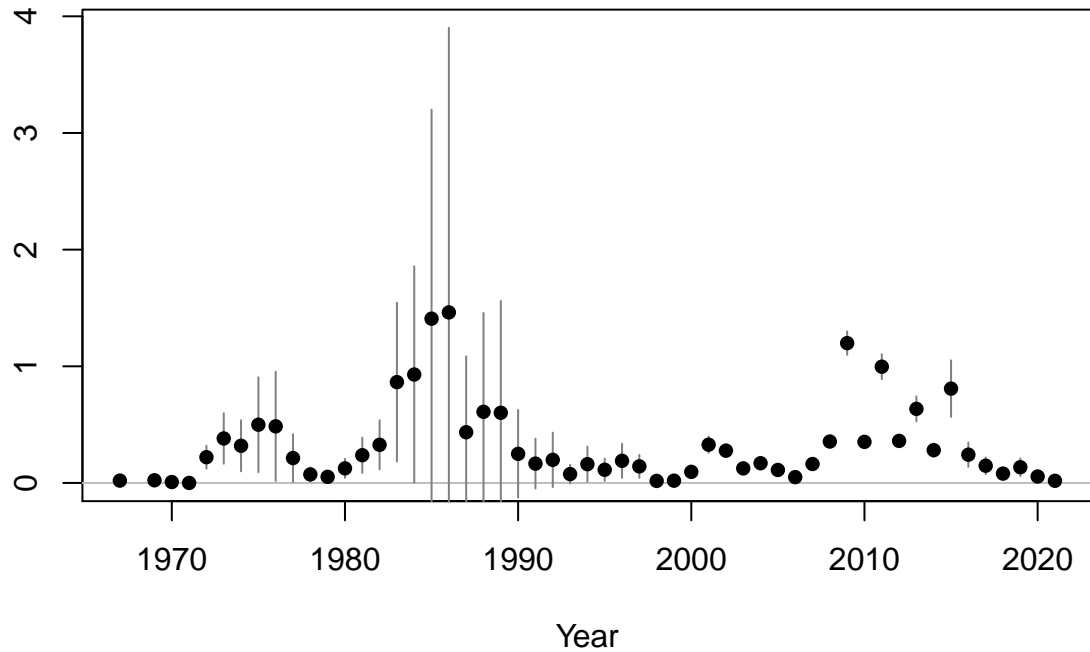
Age-0 recruits (1,000s)

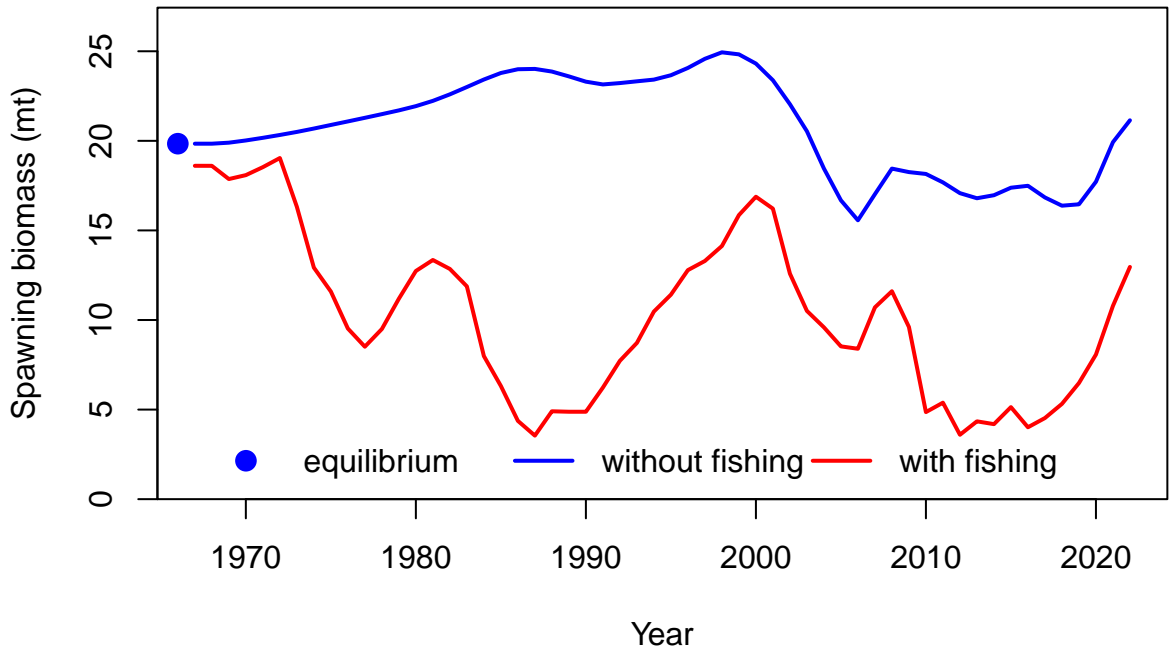


Age-0 recruits (1,000s)



Summary Fishing Mortality





Log recruitment deviation

0.5
0.0
-0.5

1970

1980

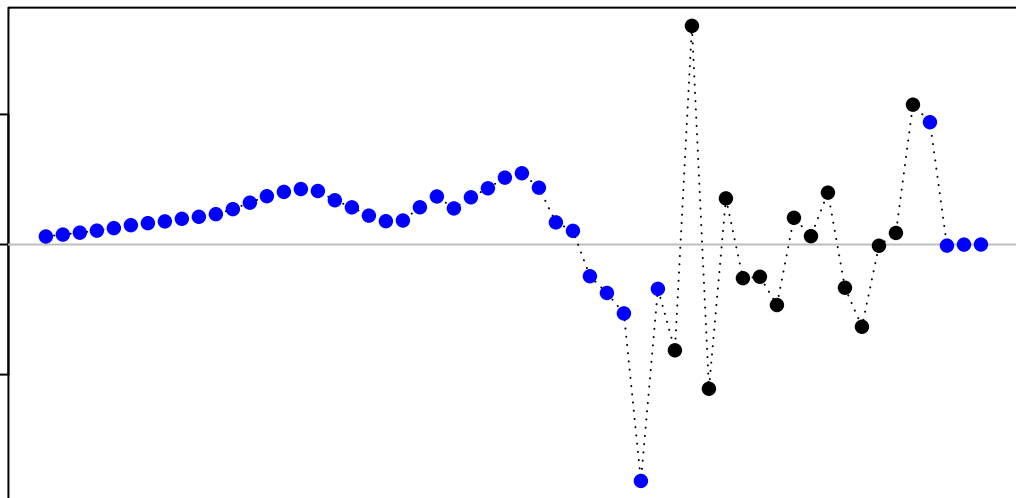
1990

2000

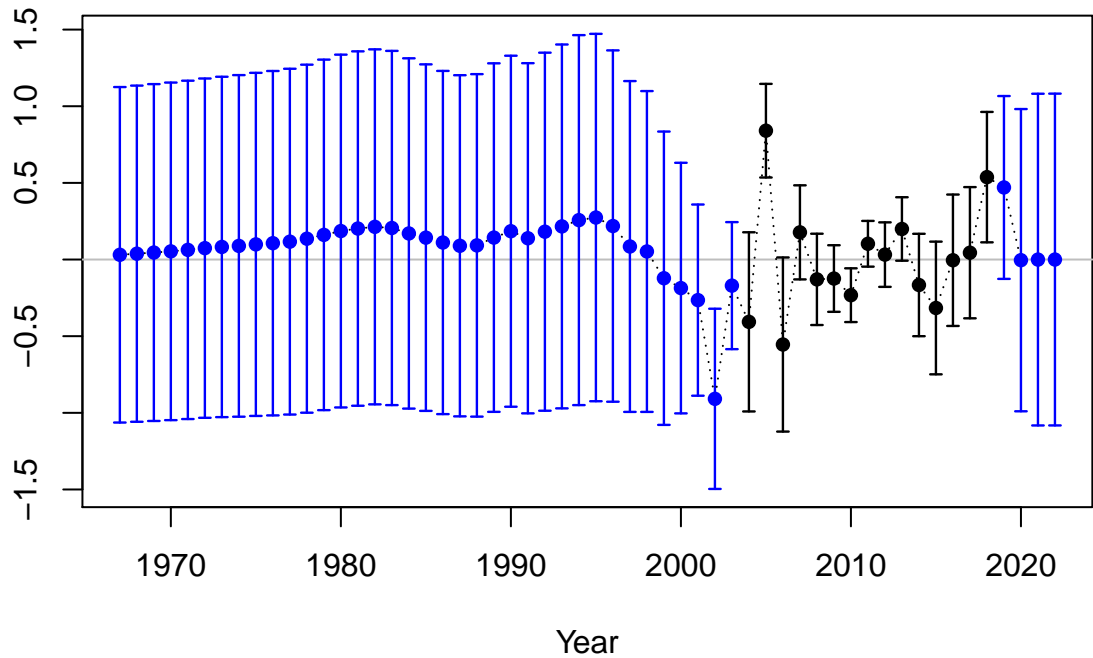
2010

2020

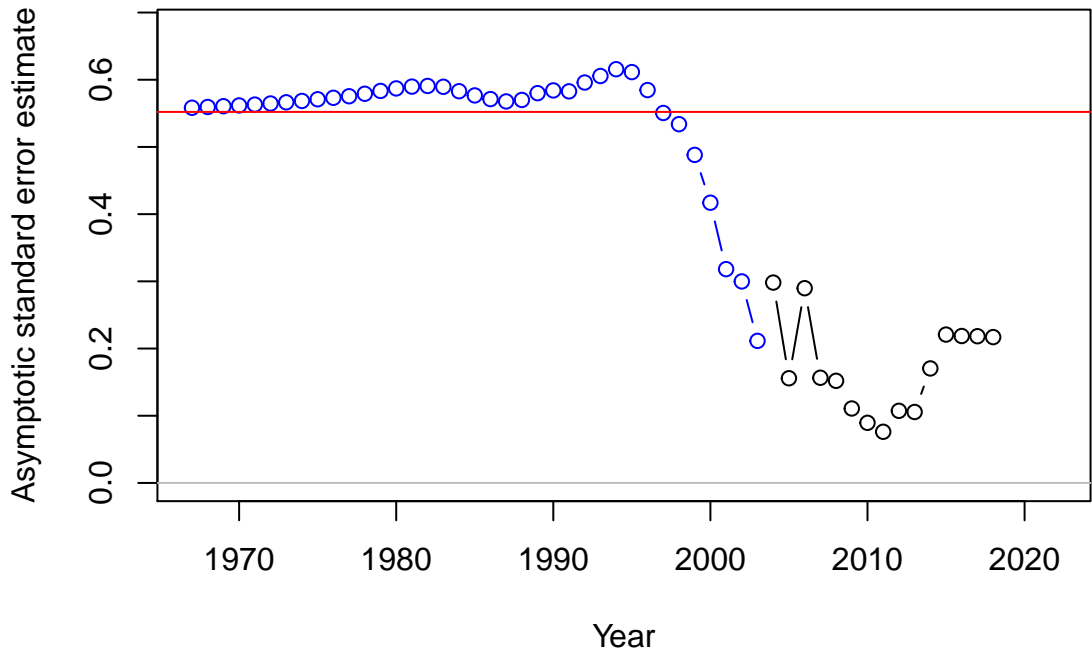
Year

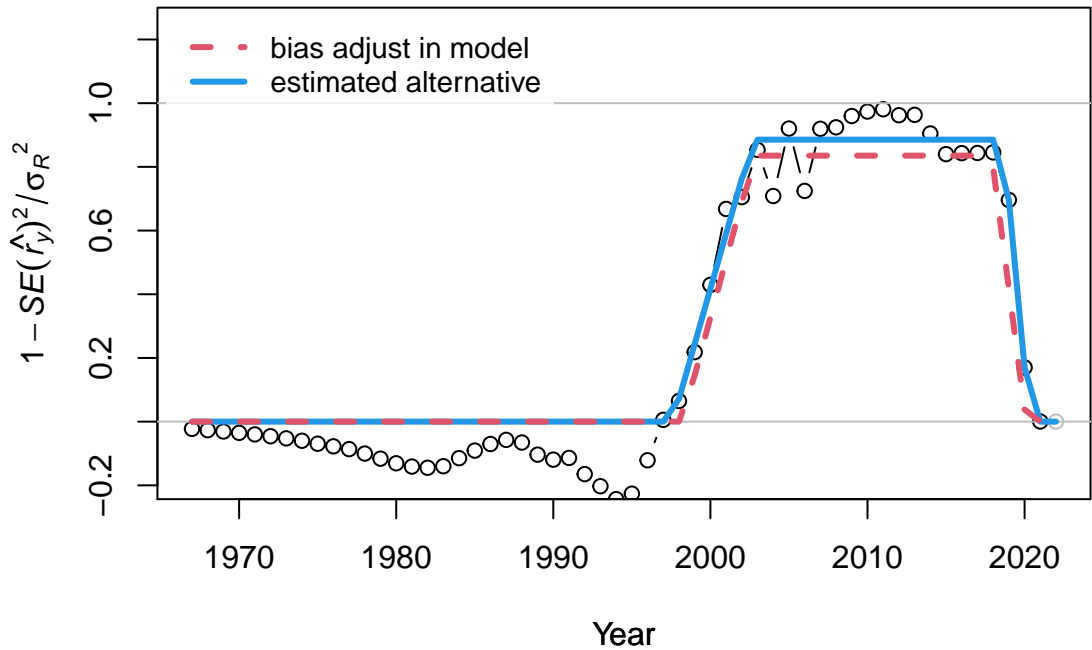


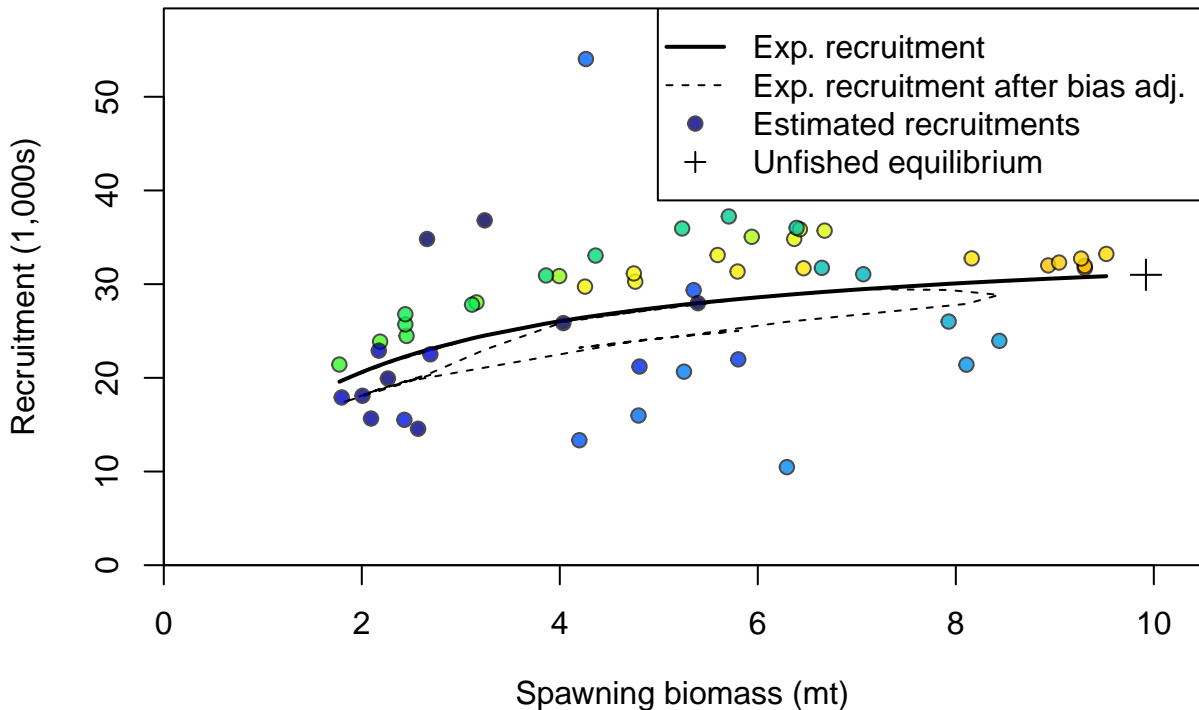
Log recruitment deviation

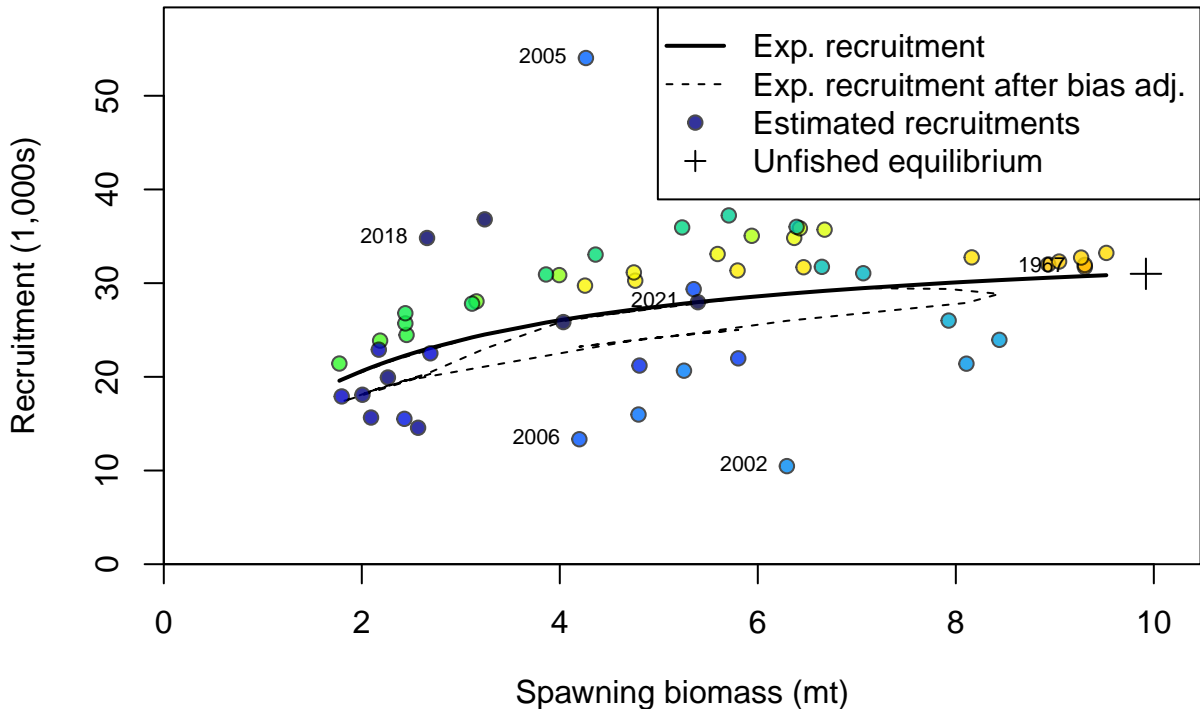


Recruitment deviation variance

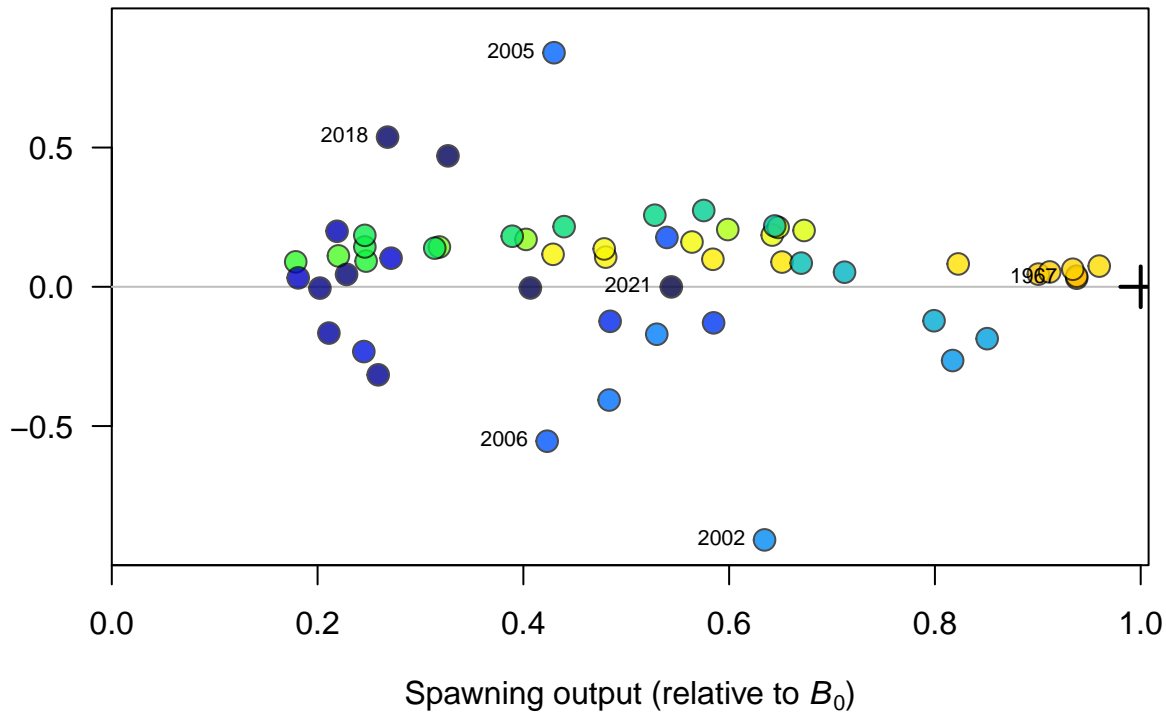


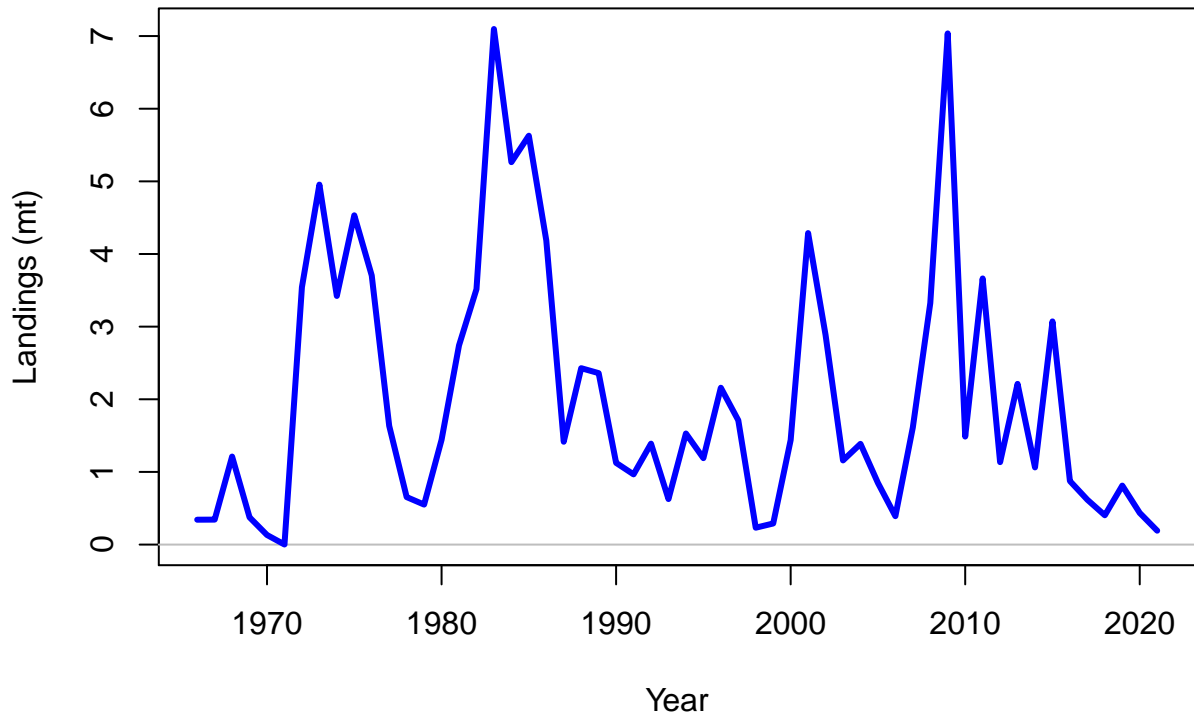


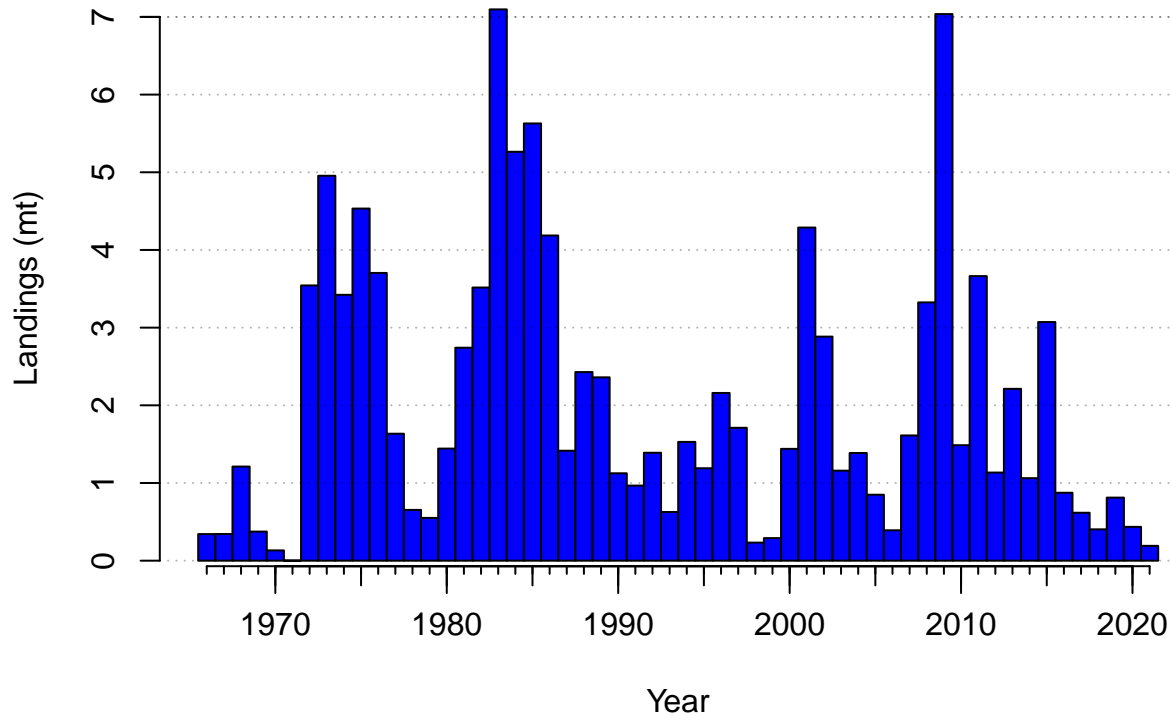




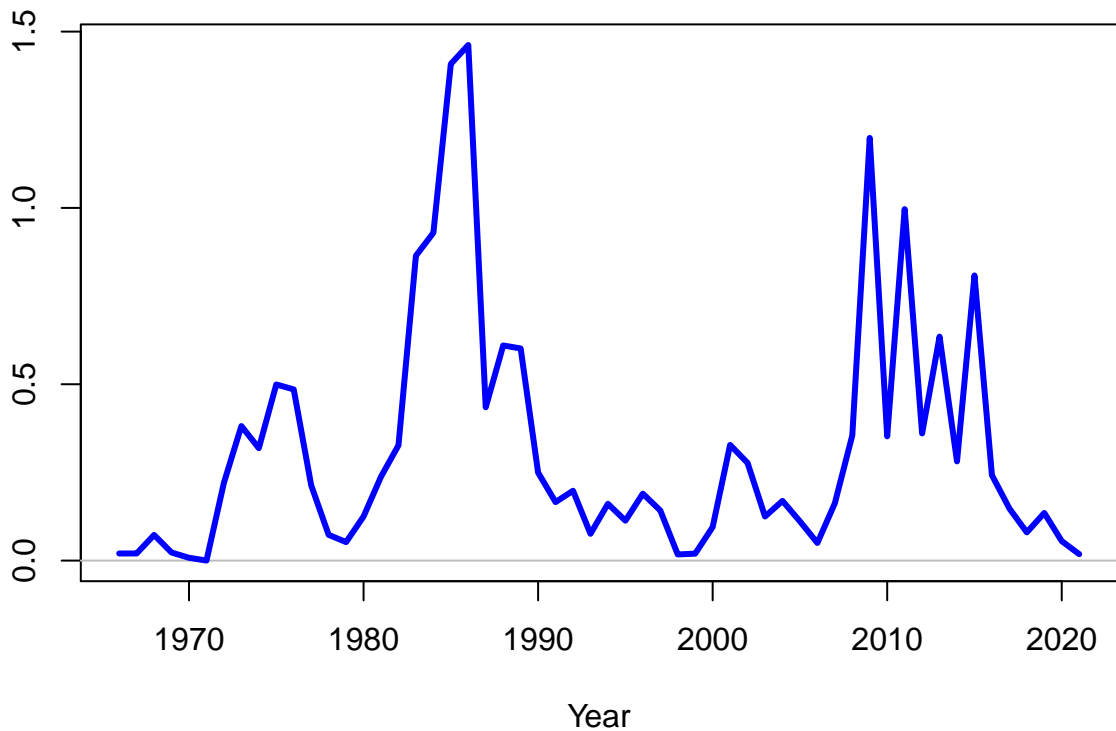
Log recruitment deviation



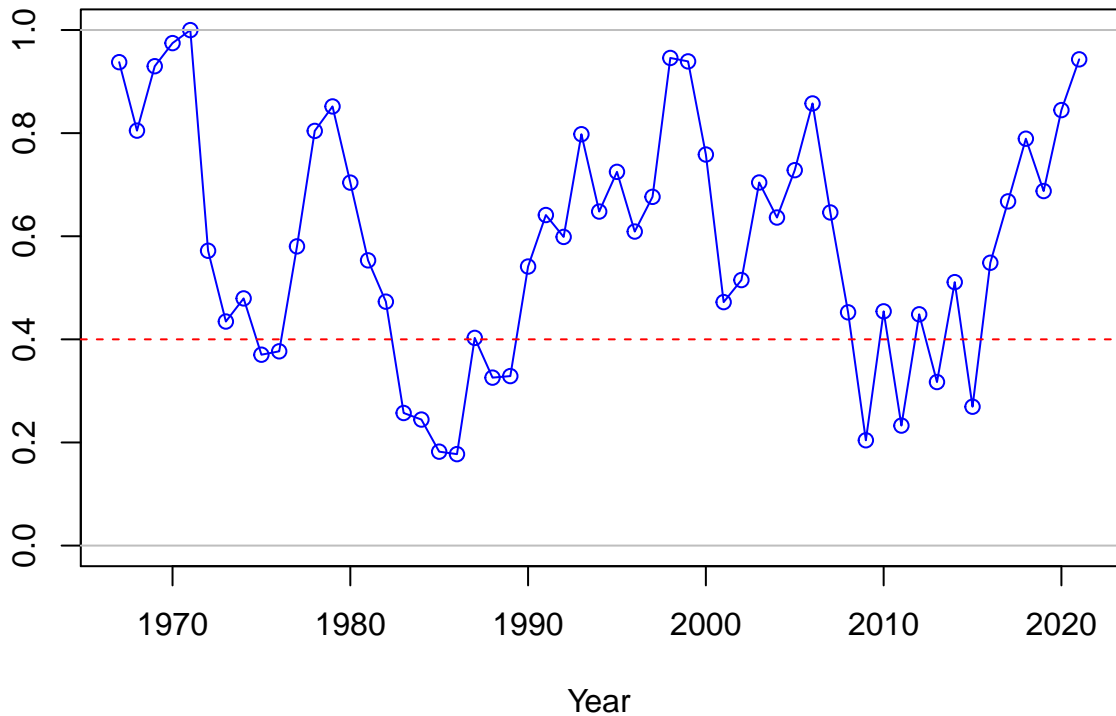


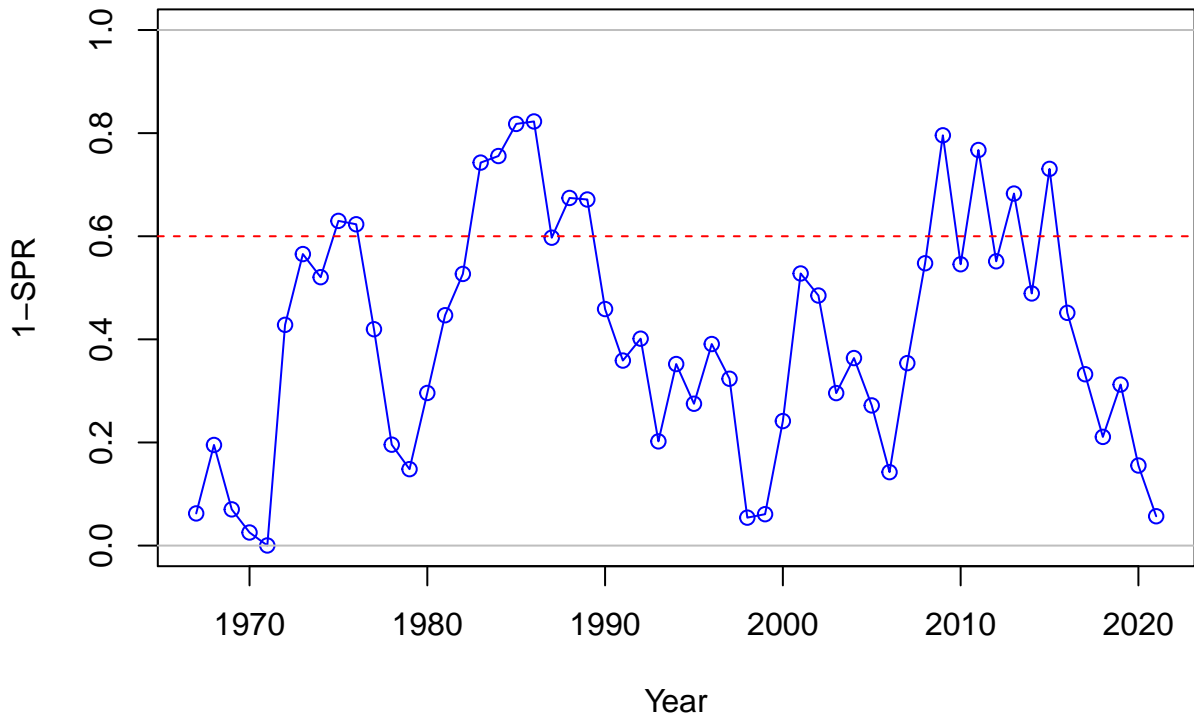


Continuous F

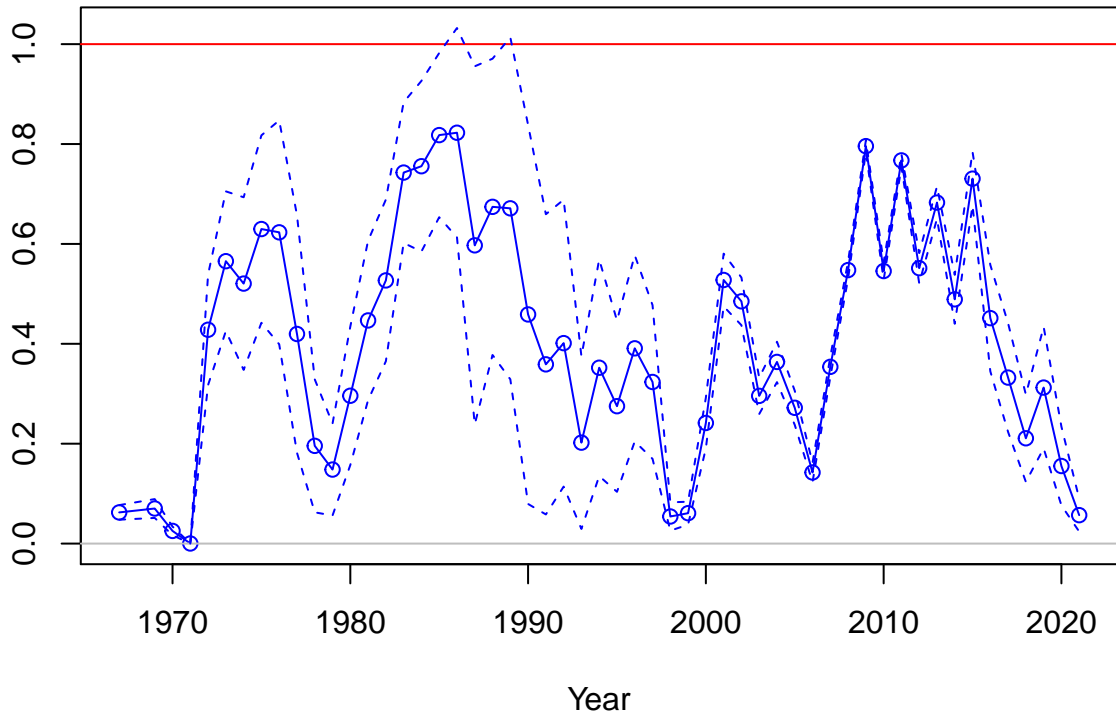


SPR

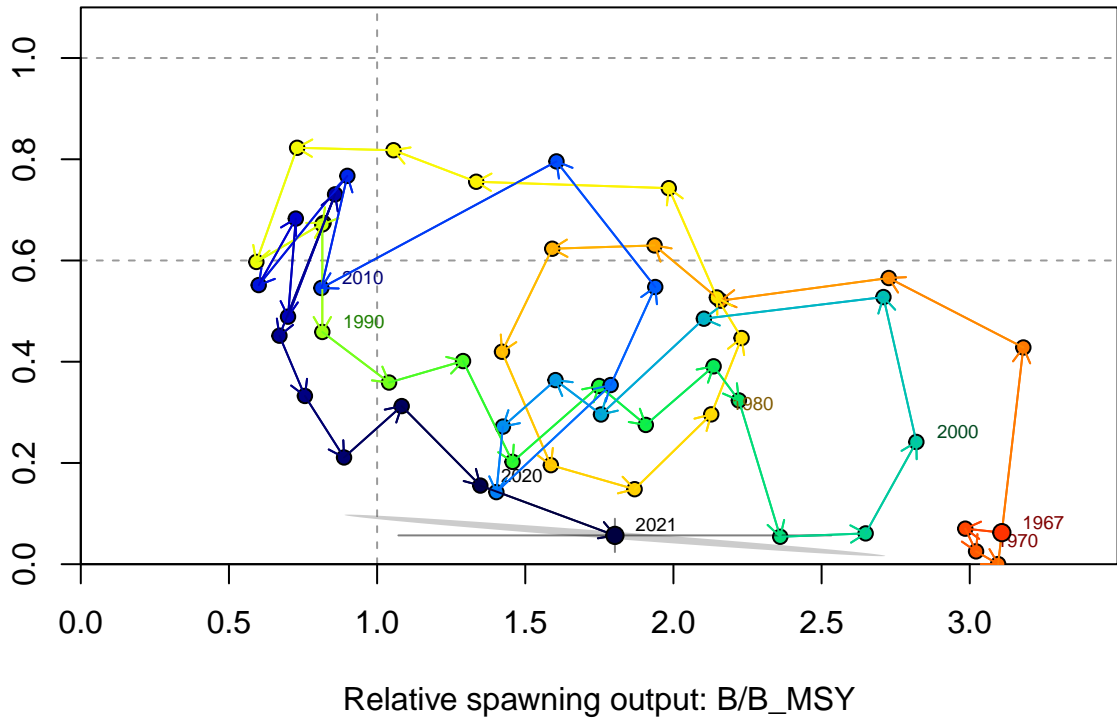




Fishing intensity: 1-SPR



Fishing intensity: 1-SPR



Index

14
12
10
8
6
4
2
0

2016

2017

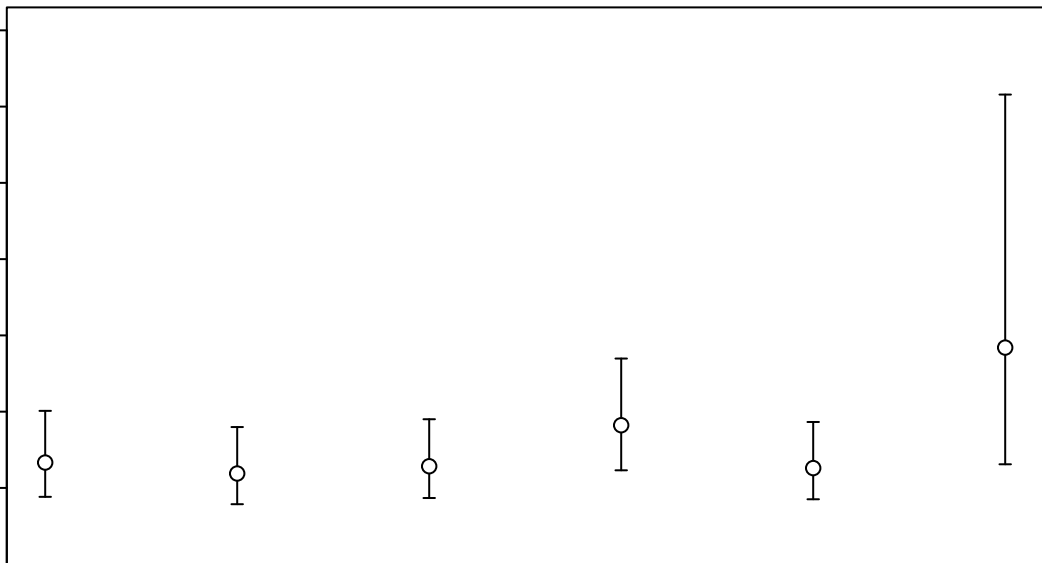
2018

2019

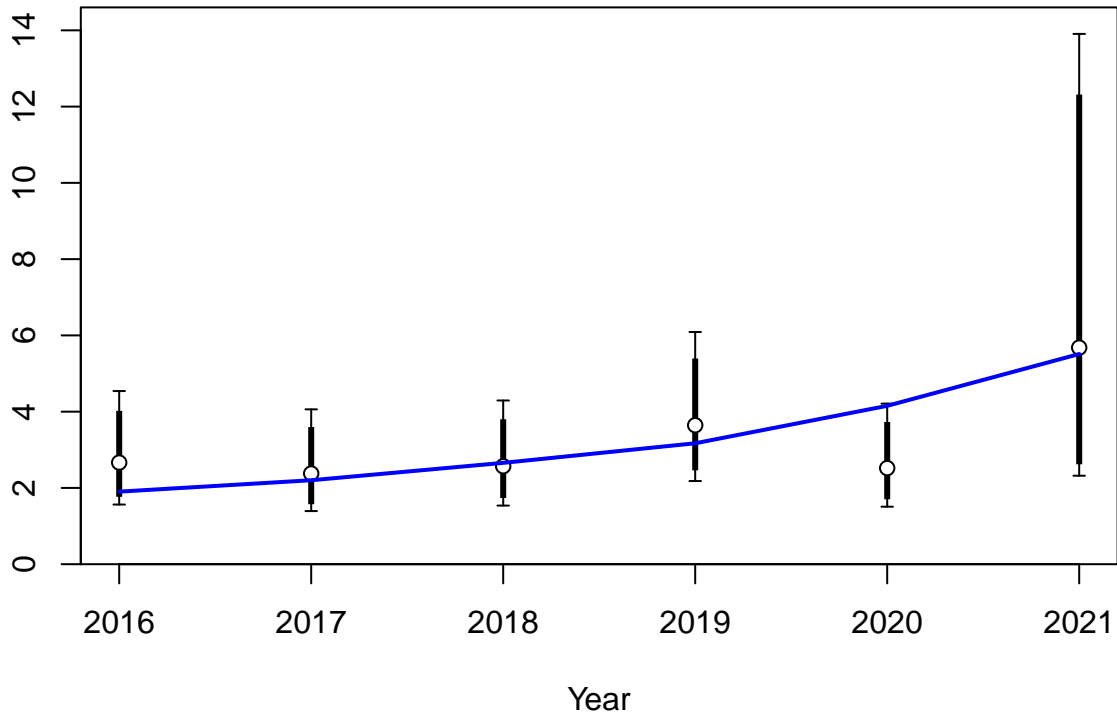
2020

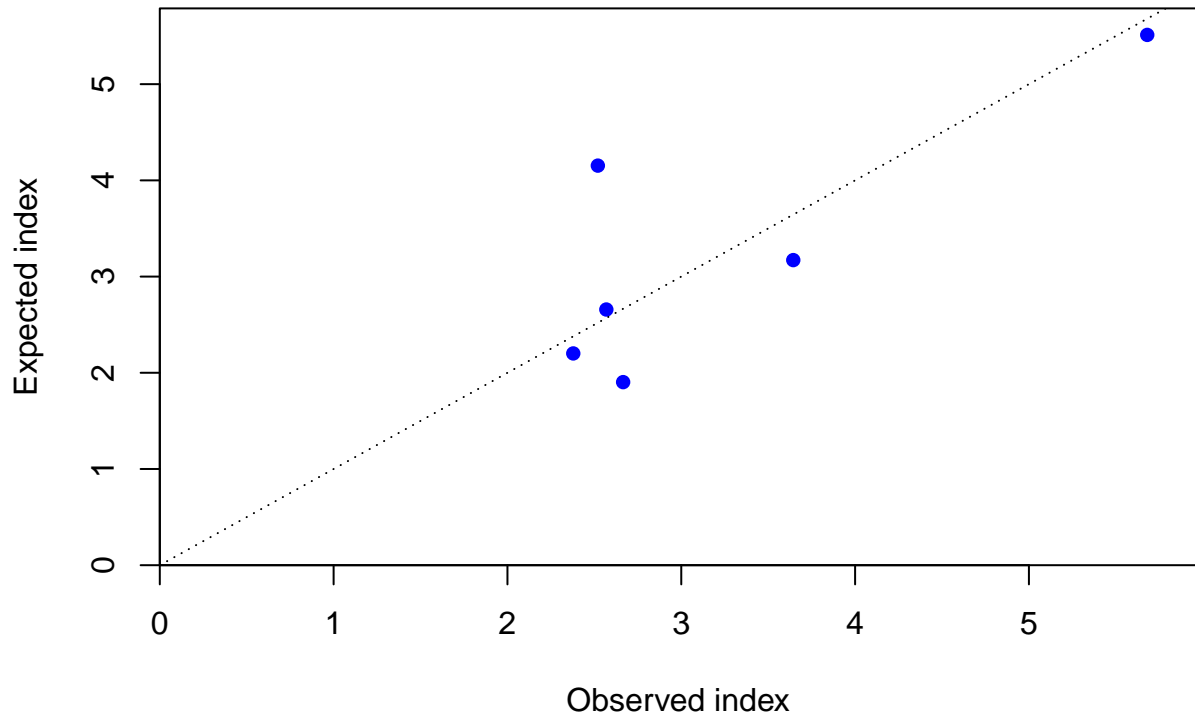
2021

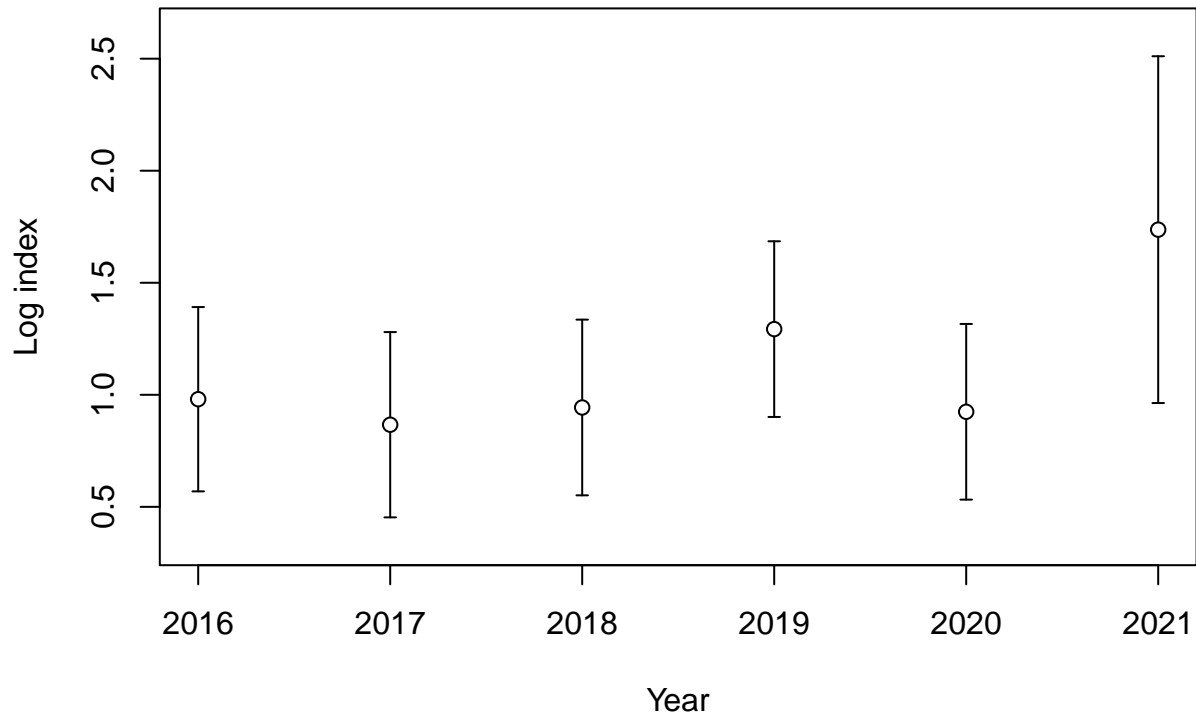
Year

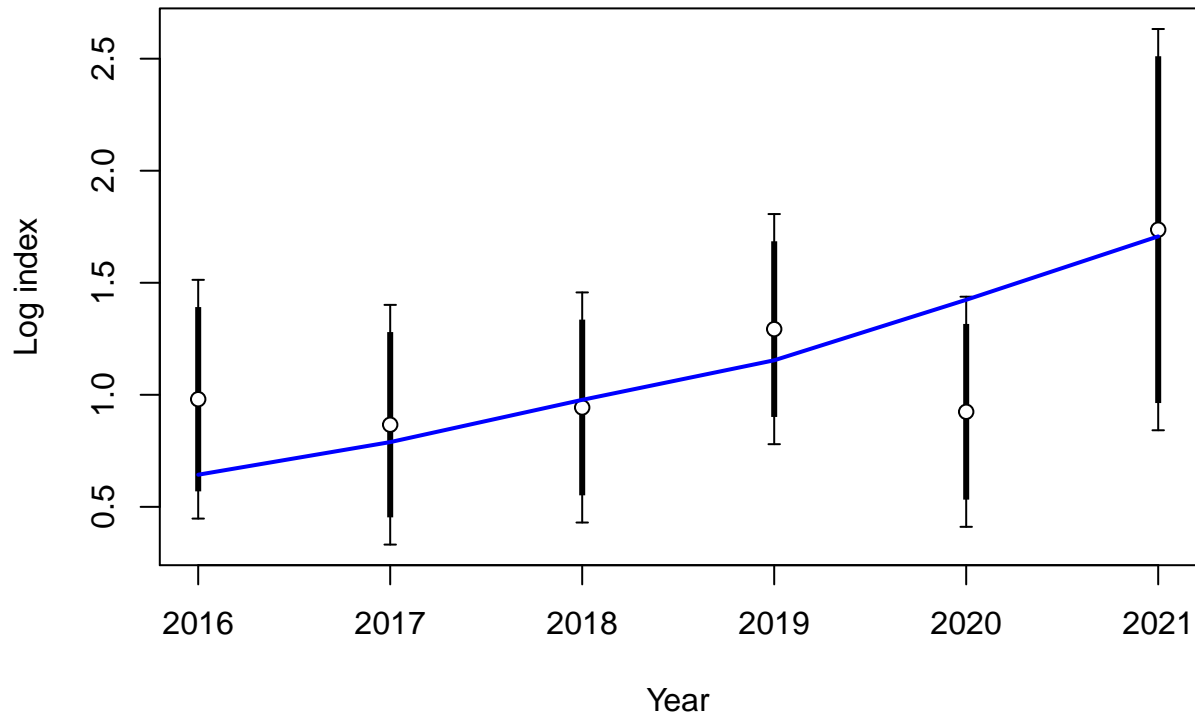


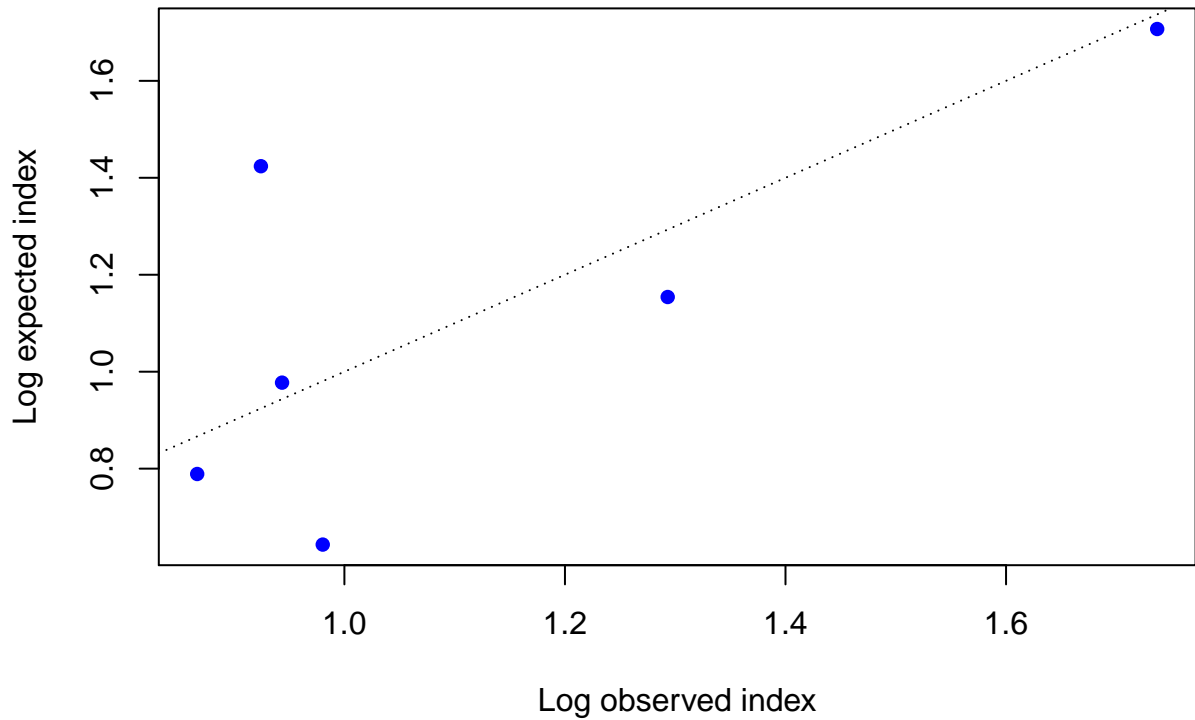
Index



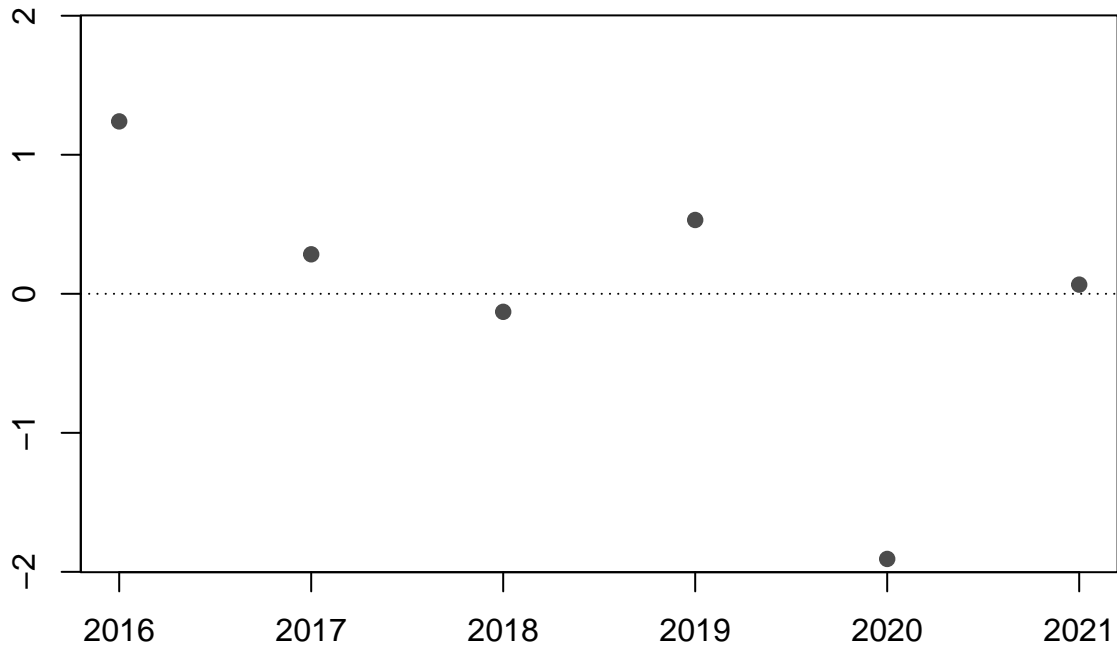




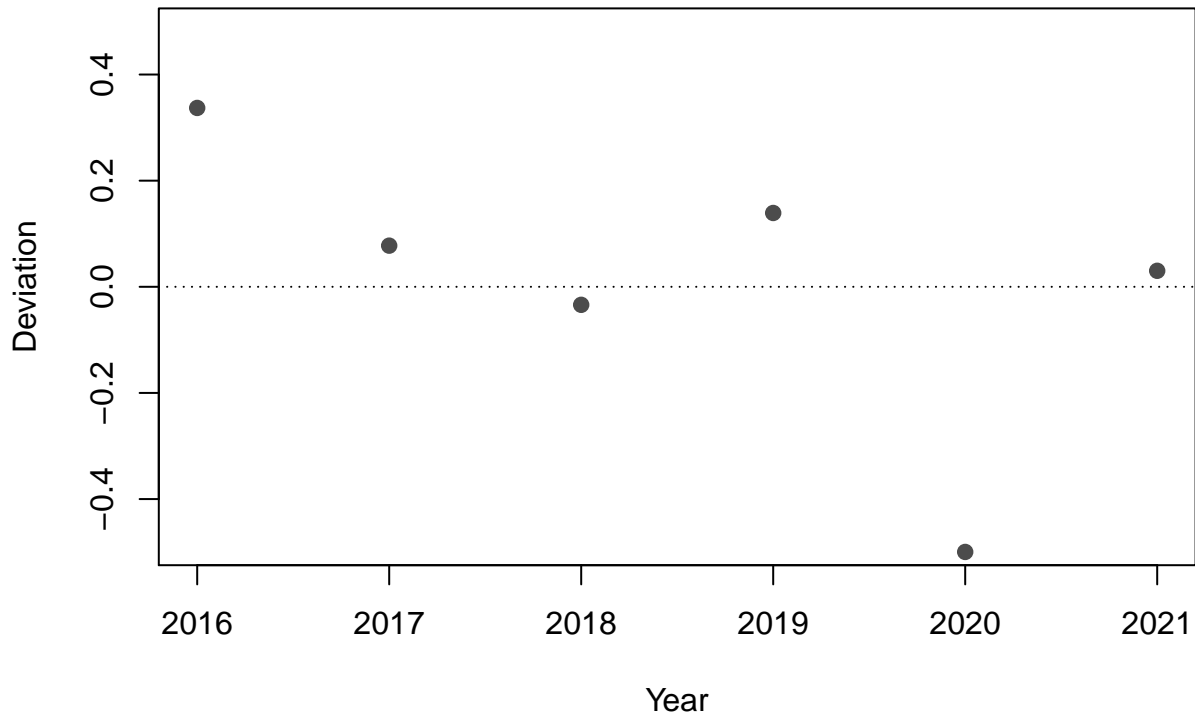


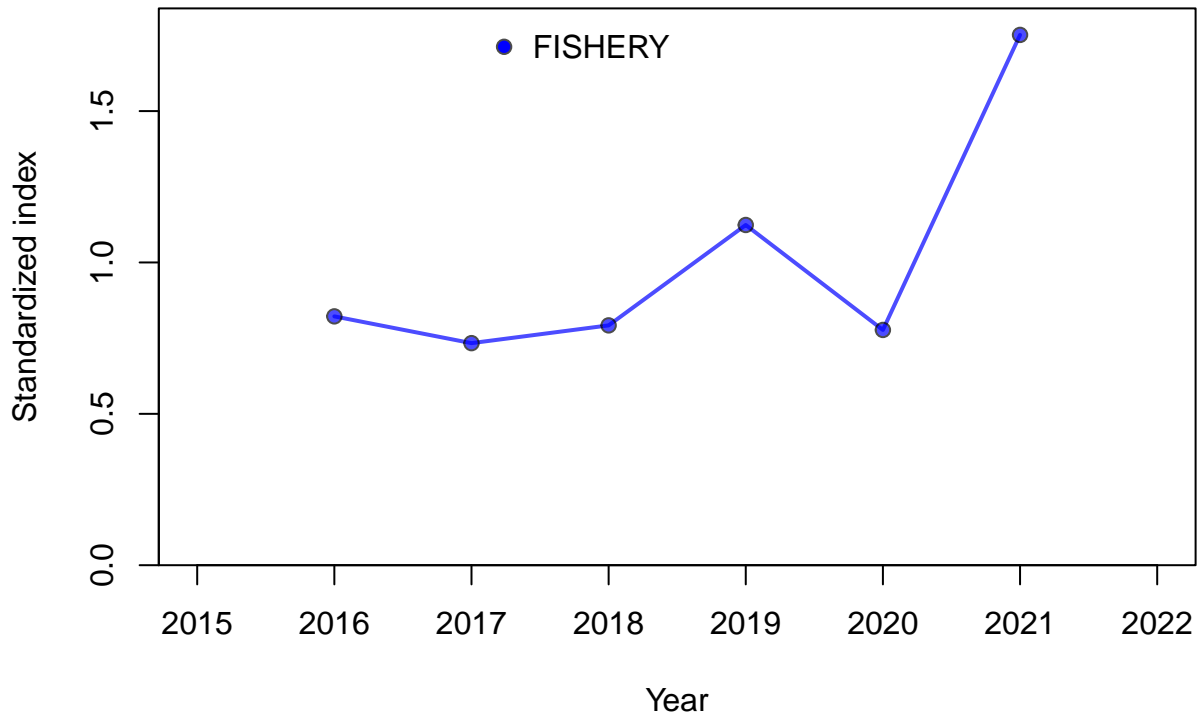


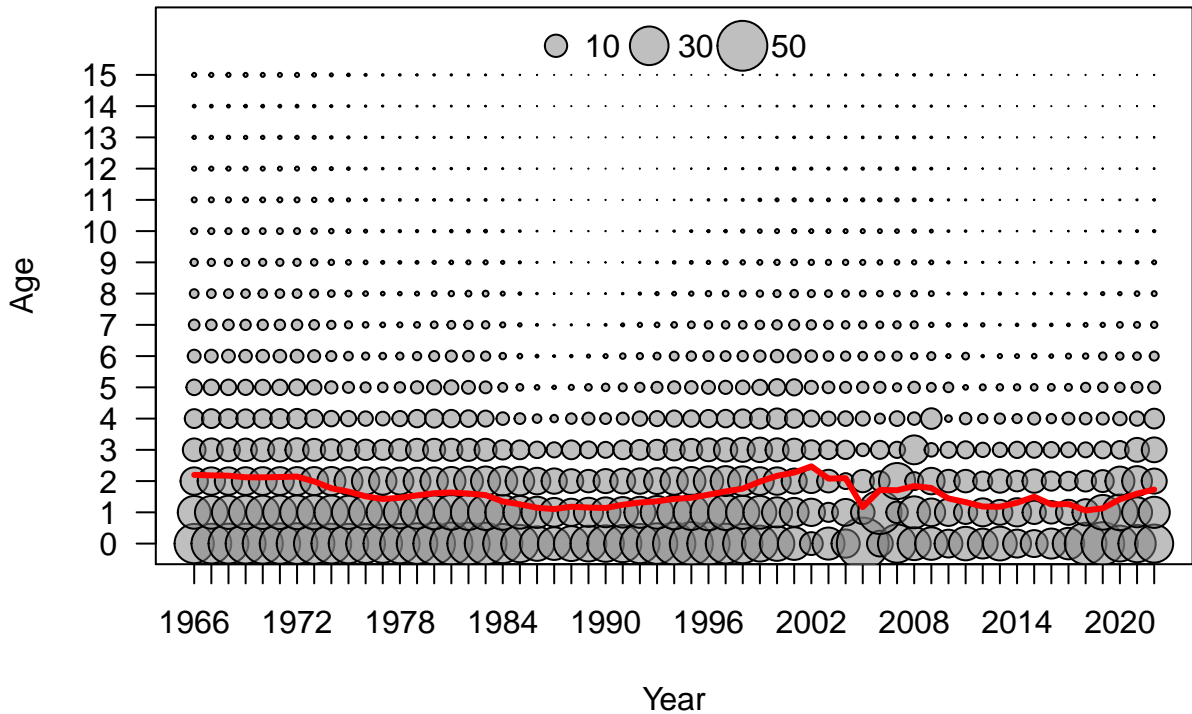
Residual

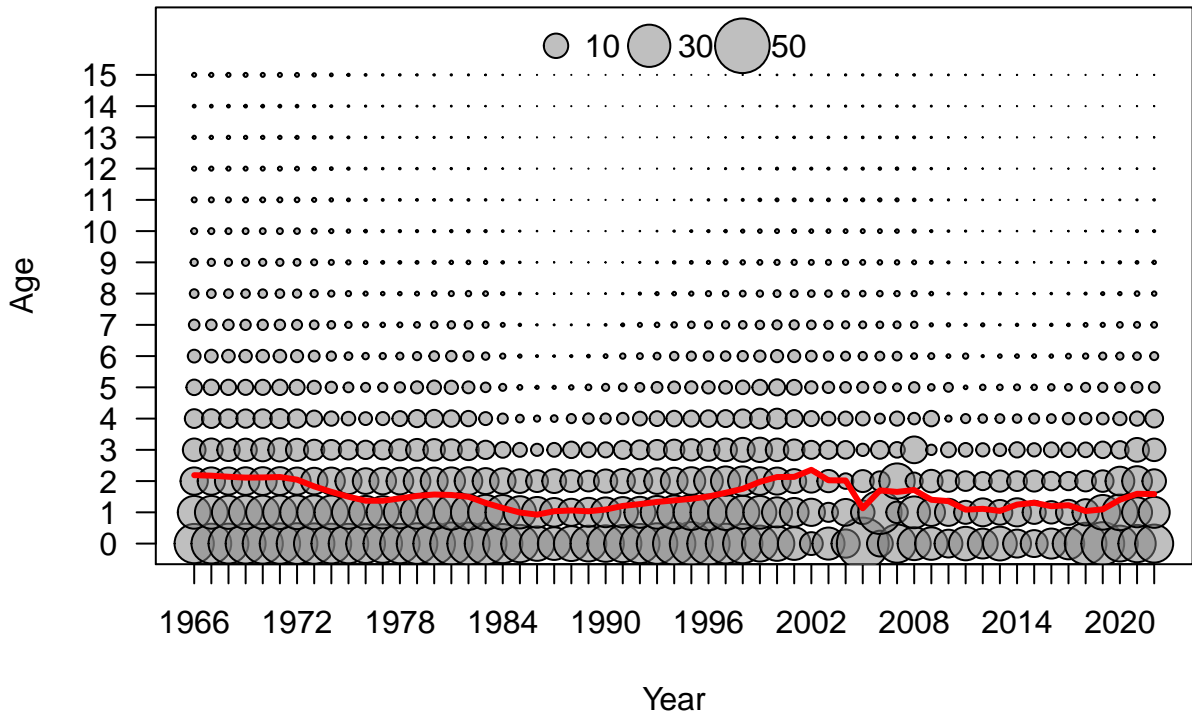


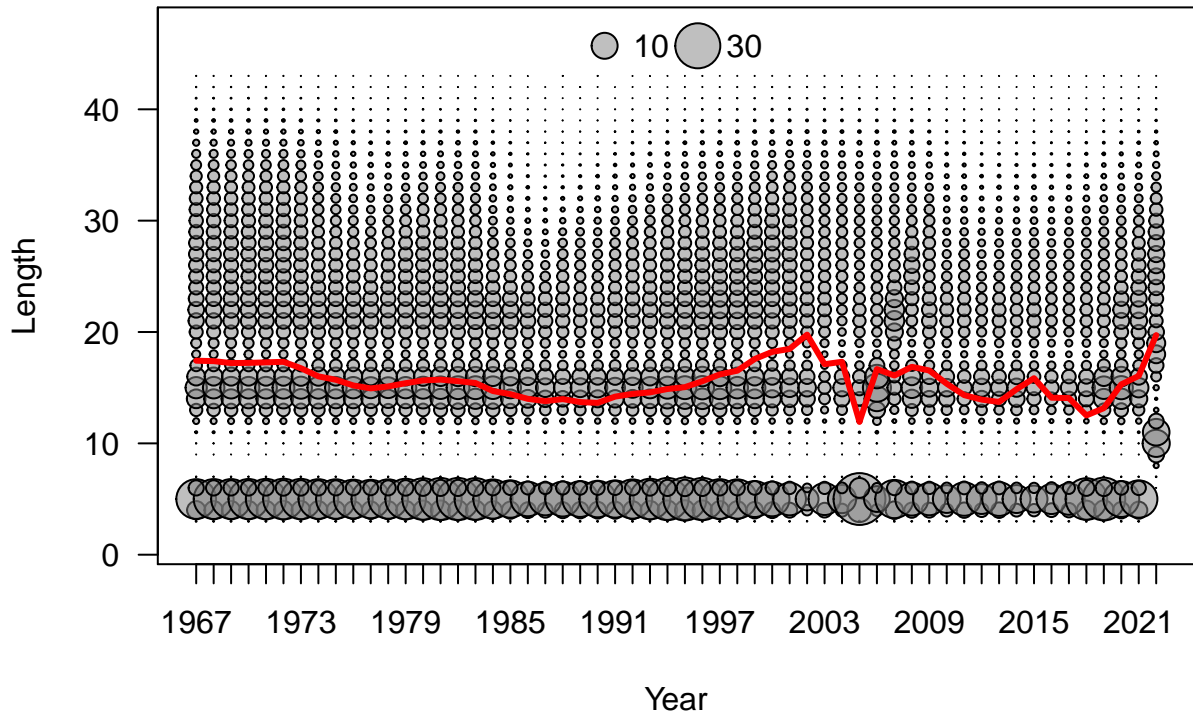
Year

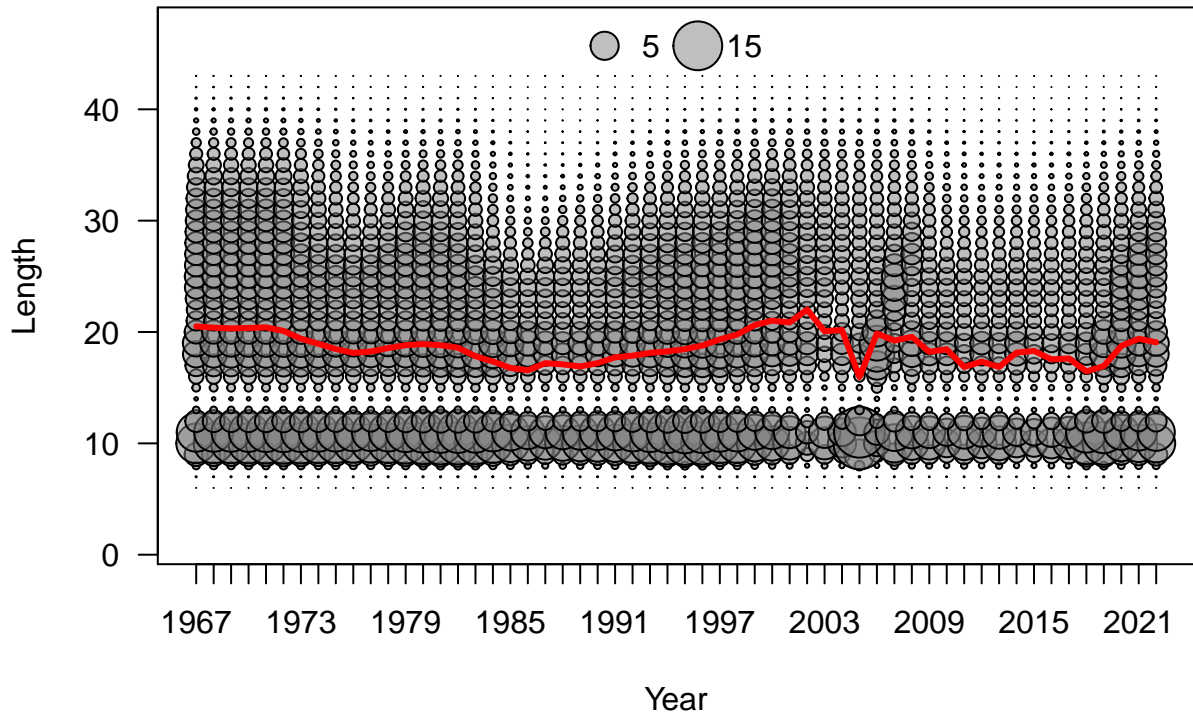


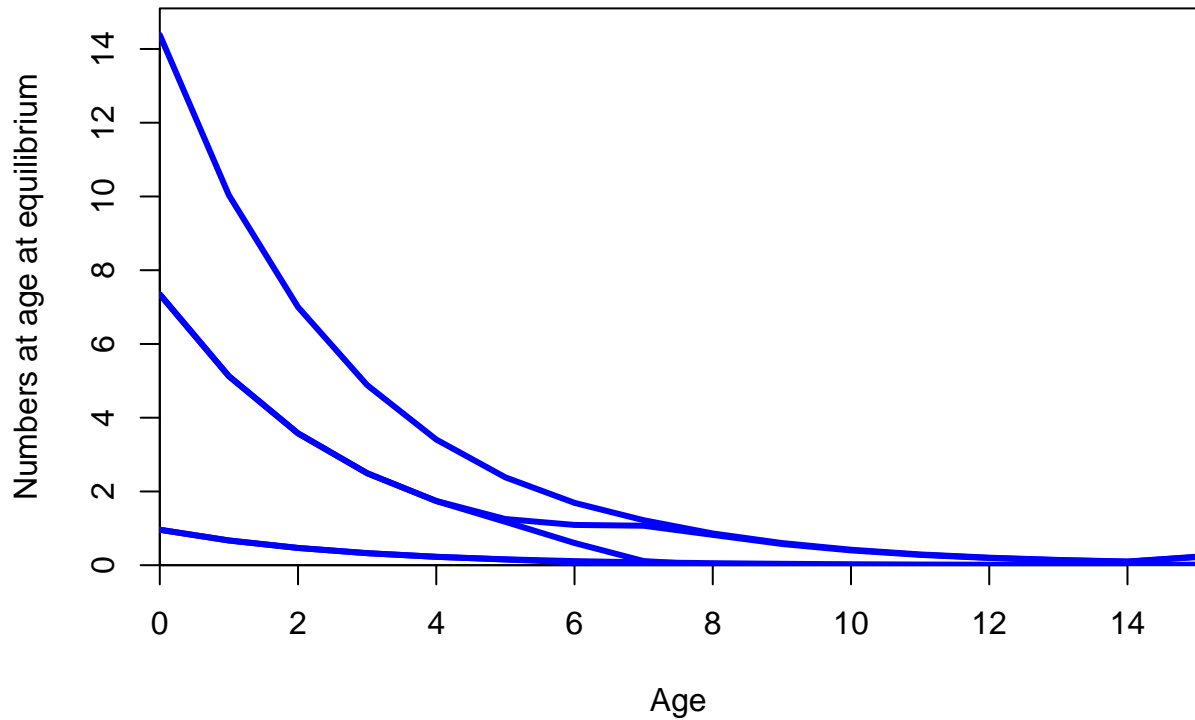






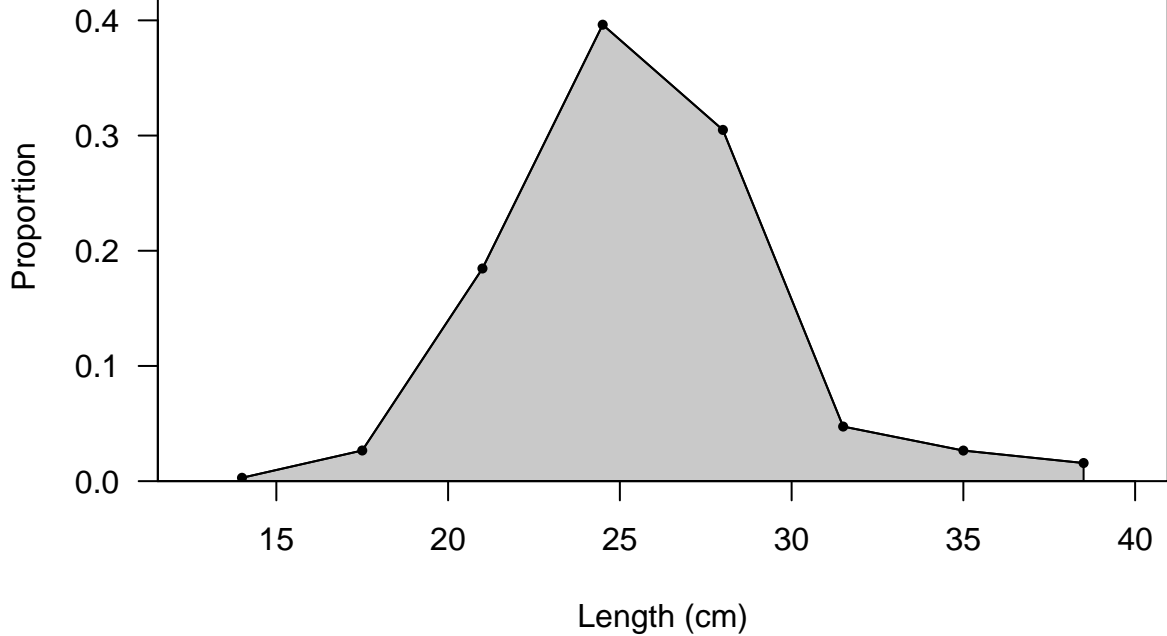






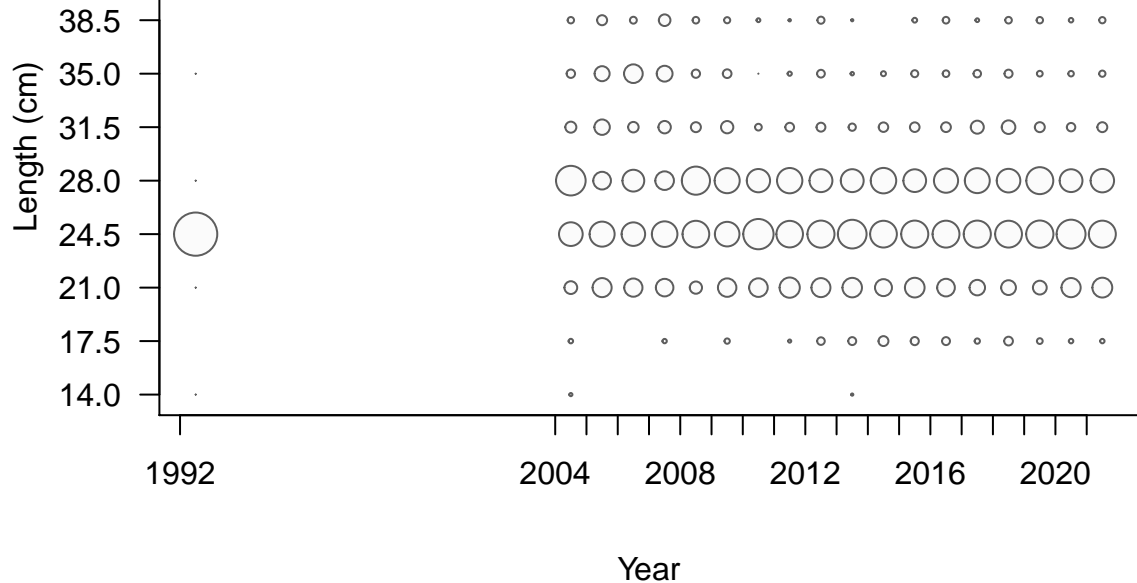
FISHERY

Sum of N adj.=6477

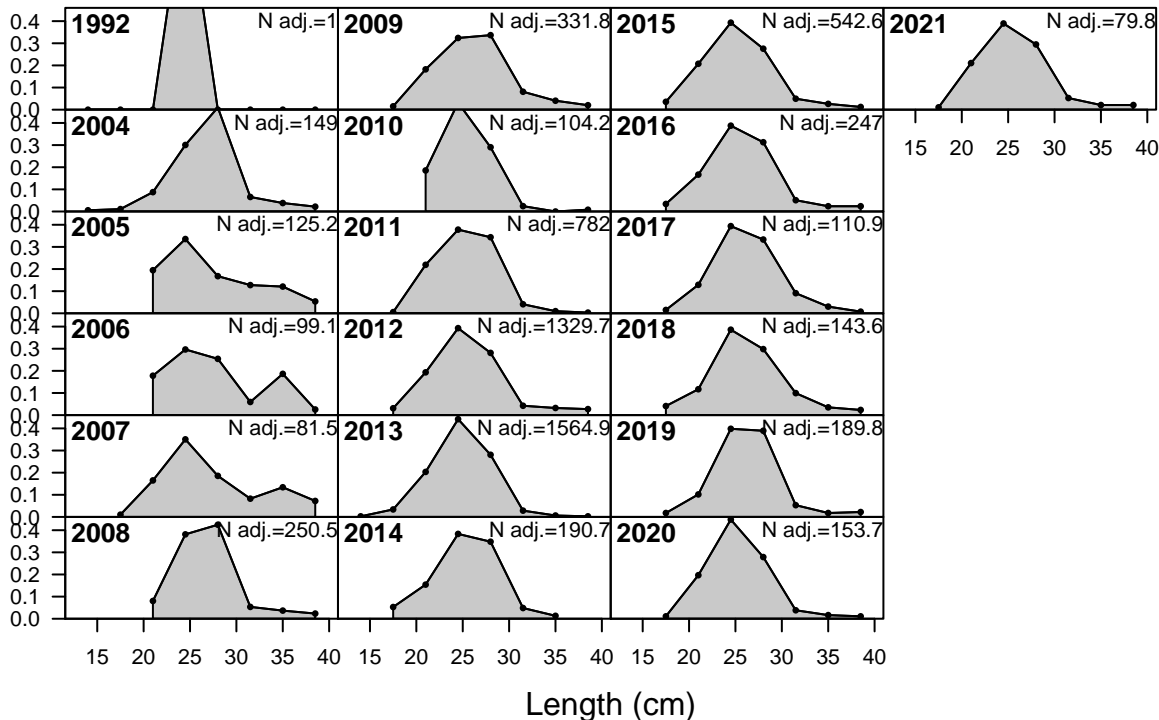


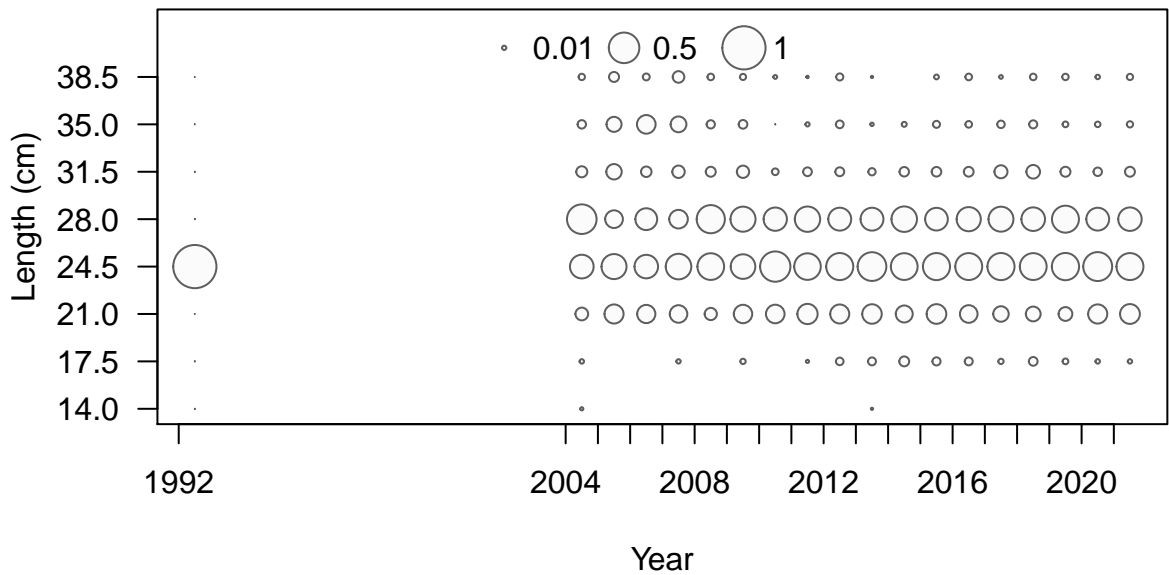
FISHERY

• 0.01 ○ 0.5 ○ 1

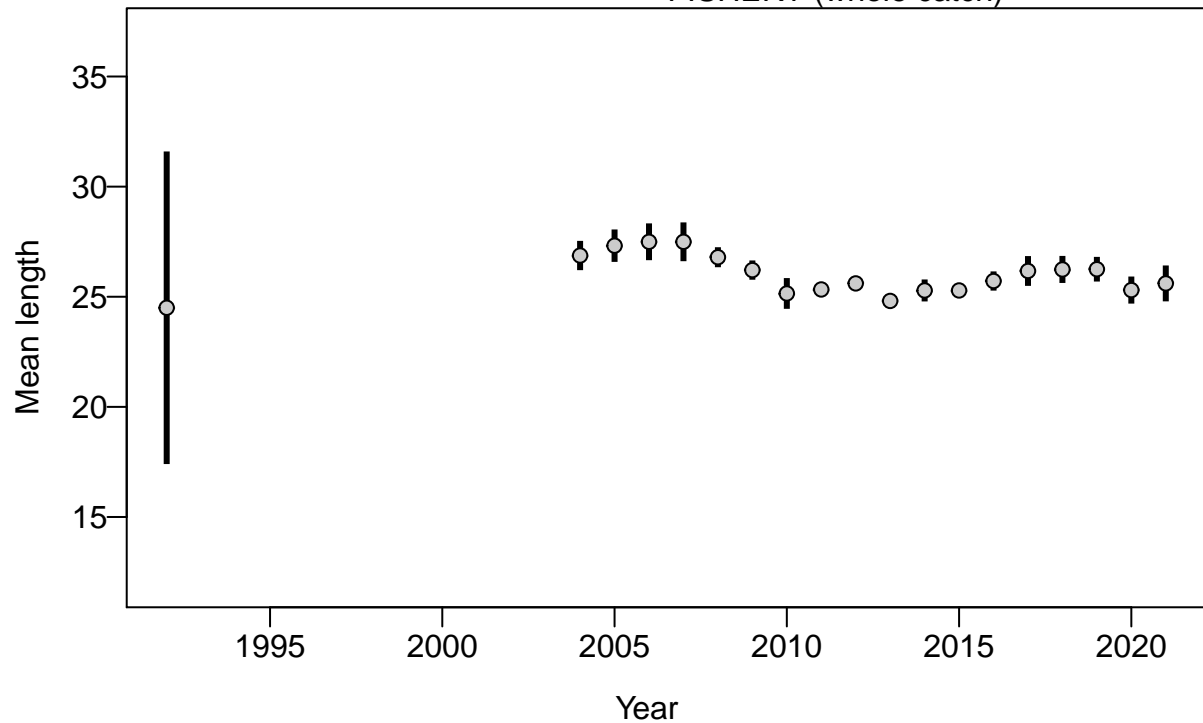


Proportion



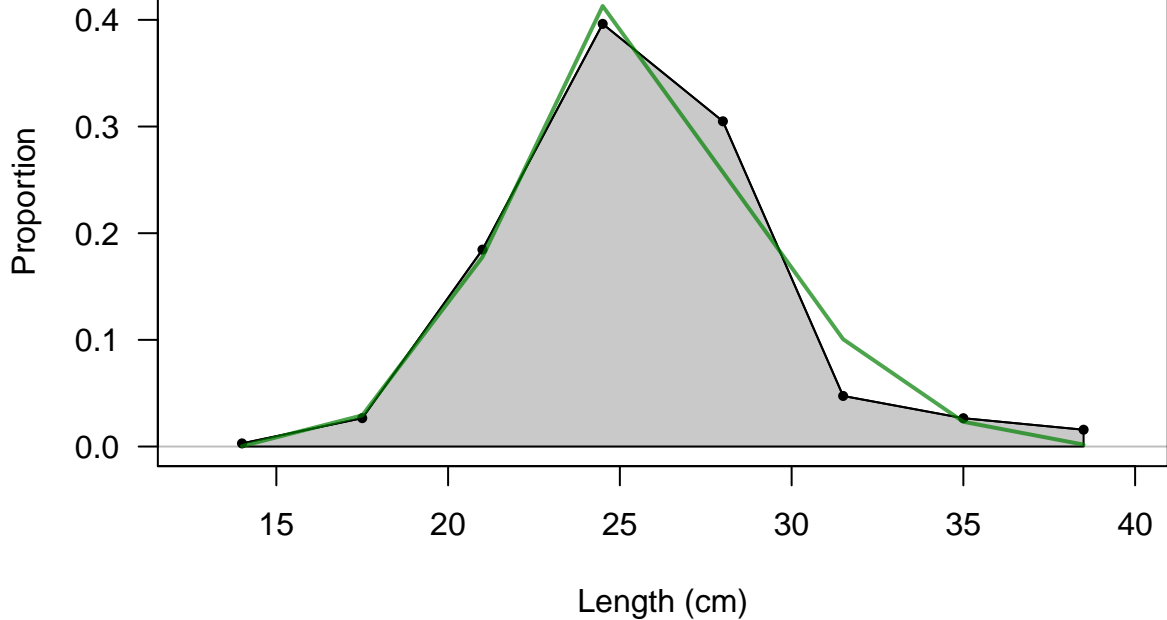


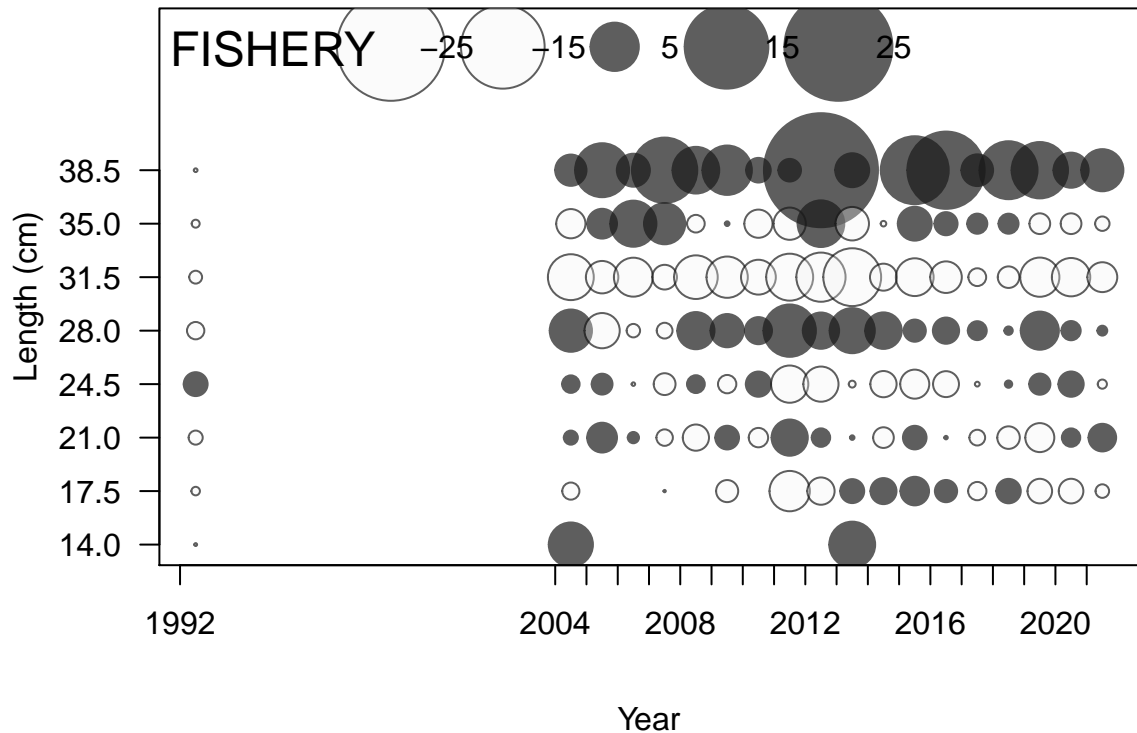
FISHERY (whole catch)



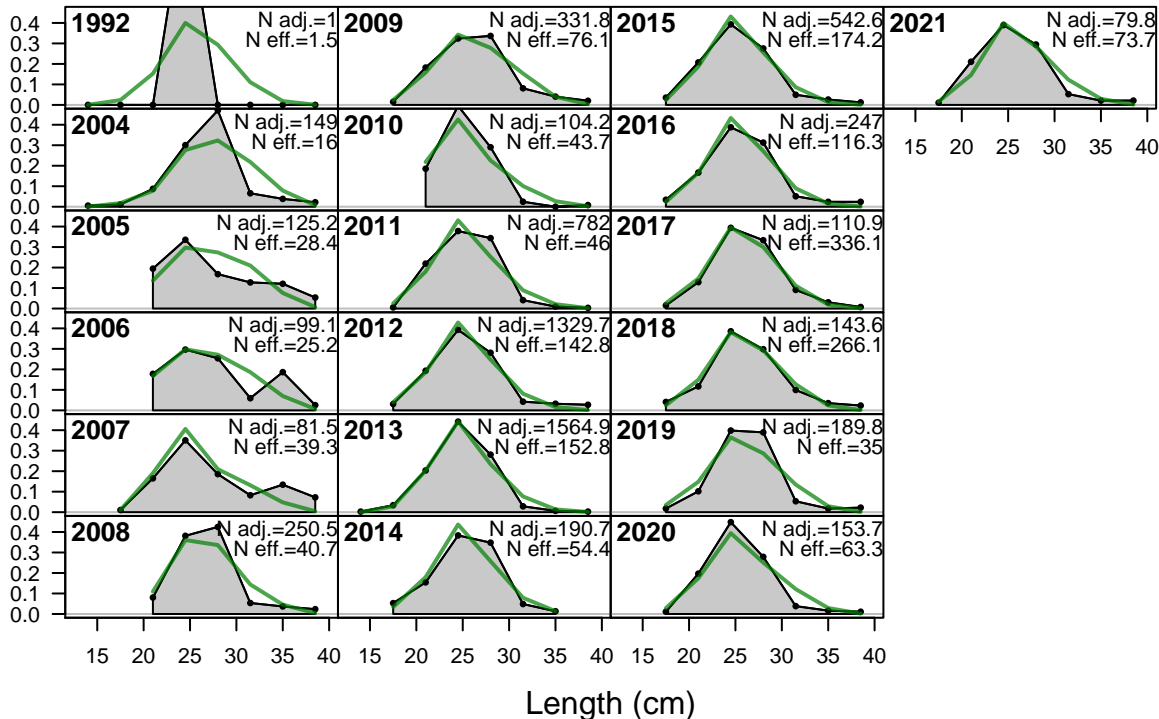
FISHERY

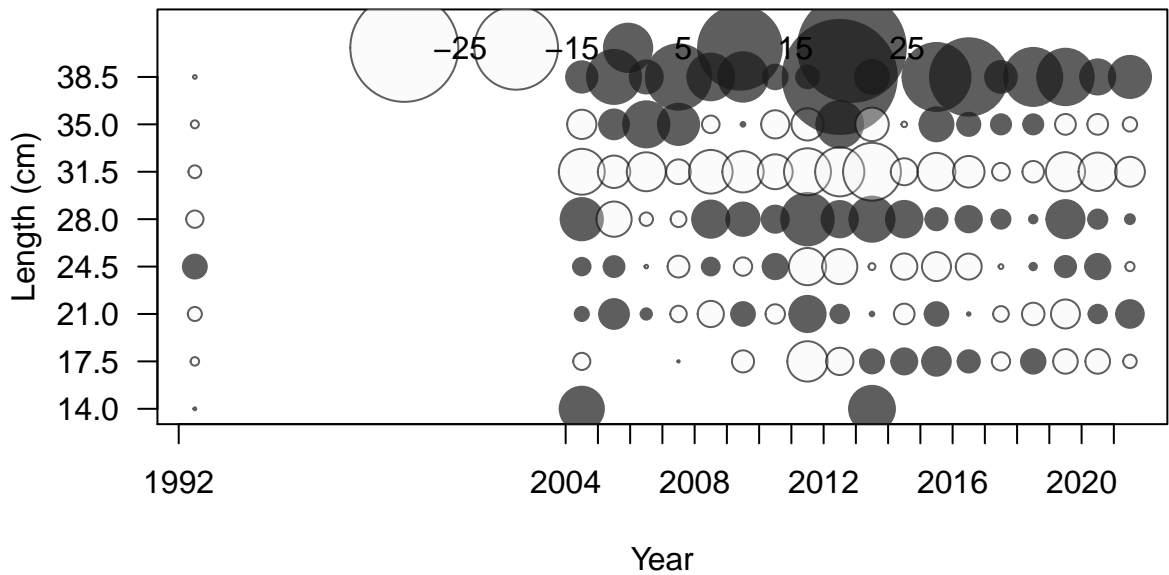
Sum of N adj.=6477
Sum of N eff.=1731.7



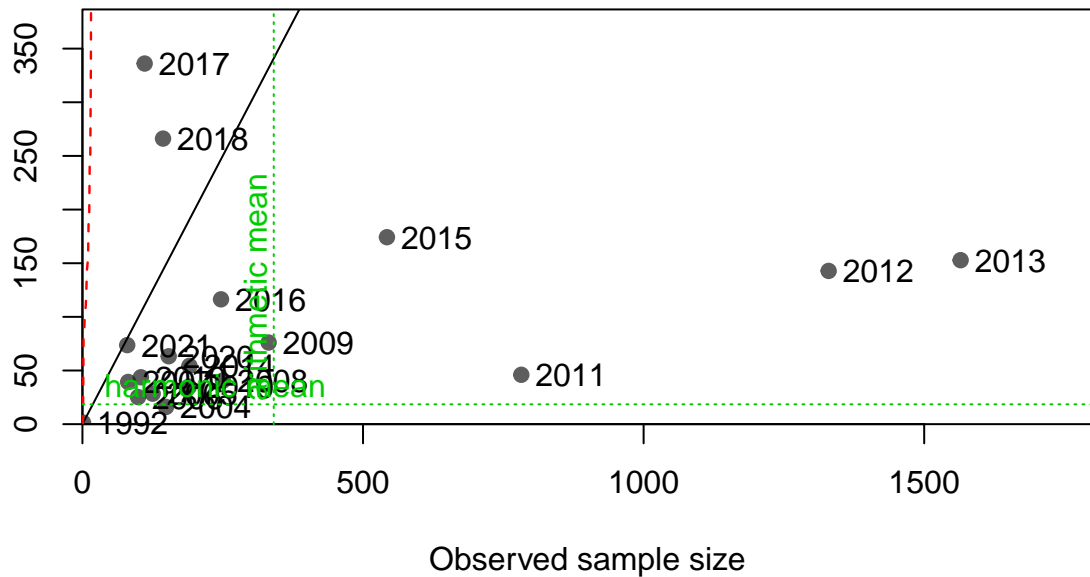


Proportion

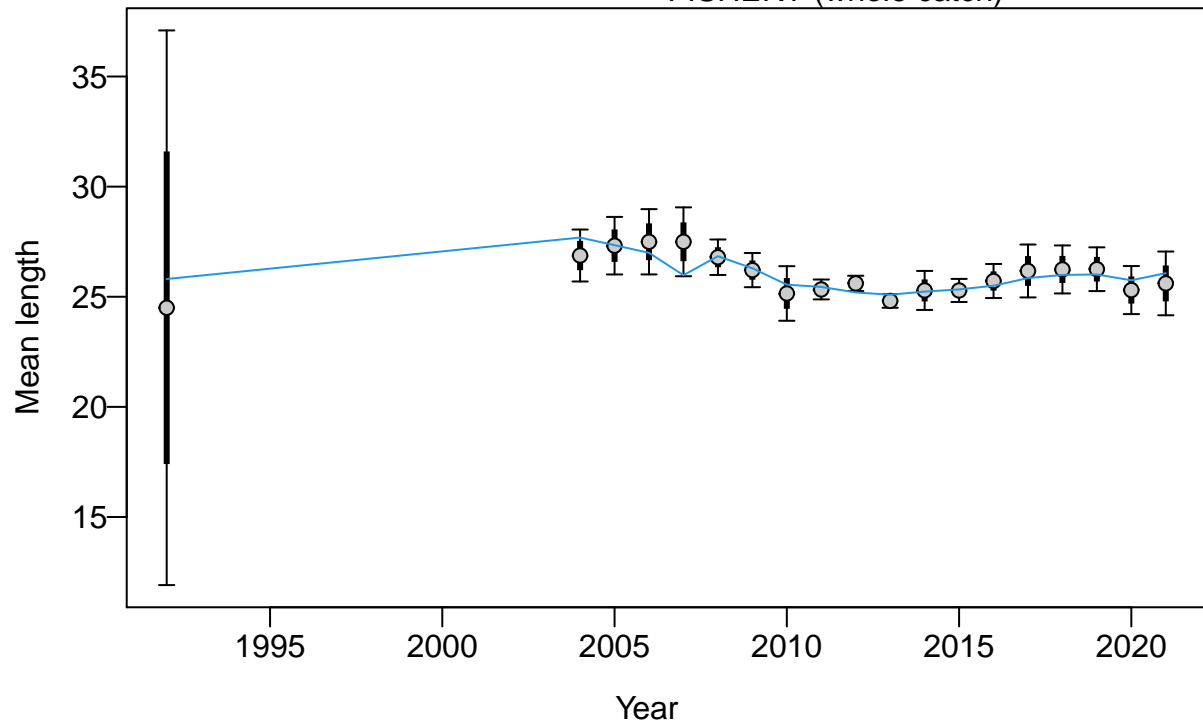


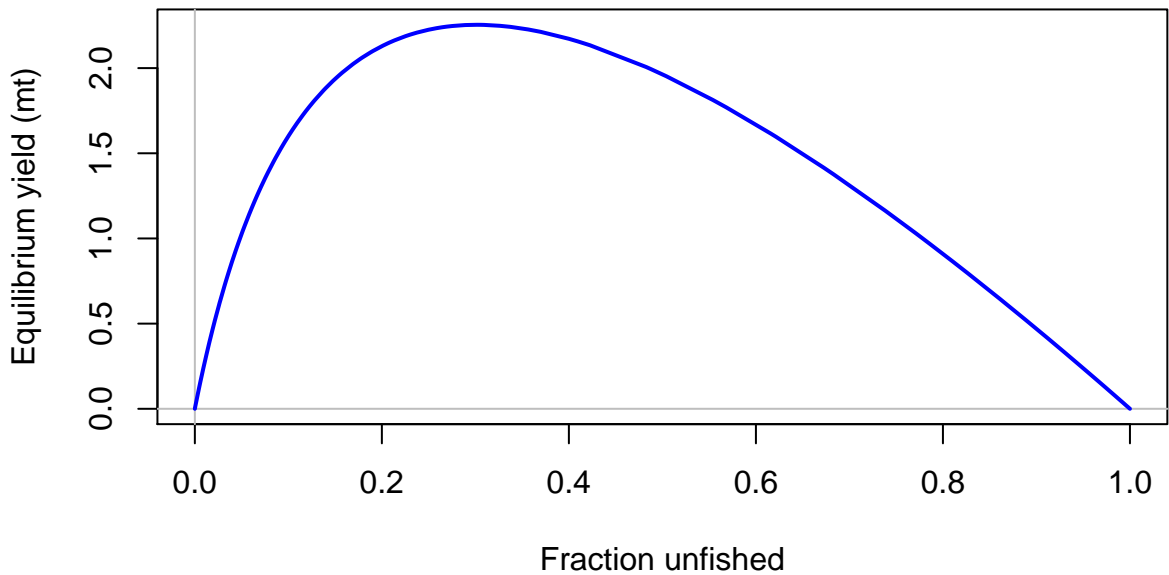


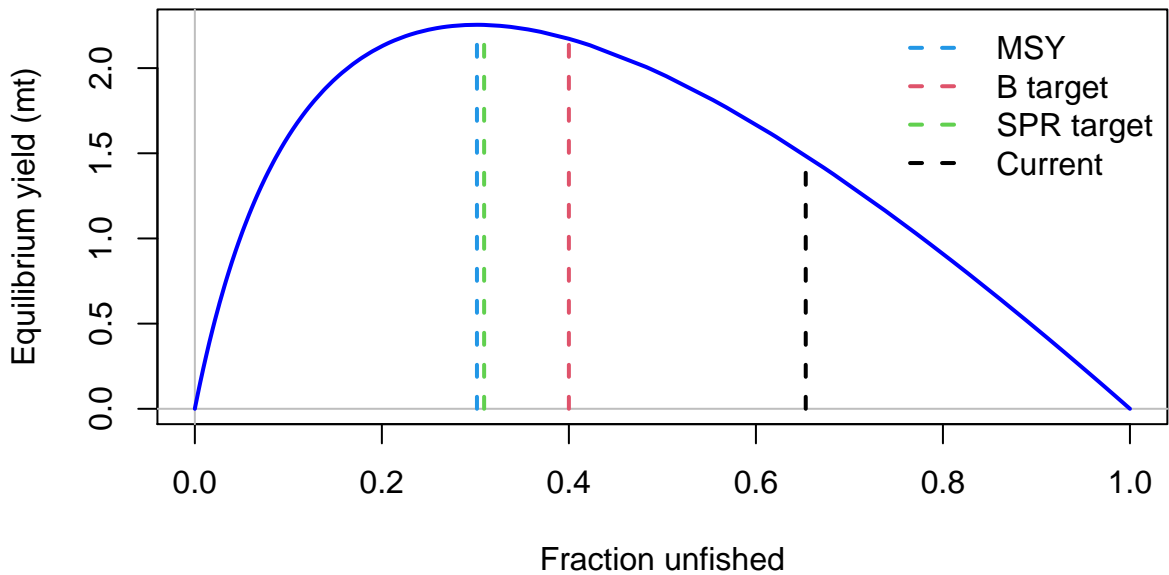
Effective sample size

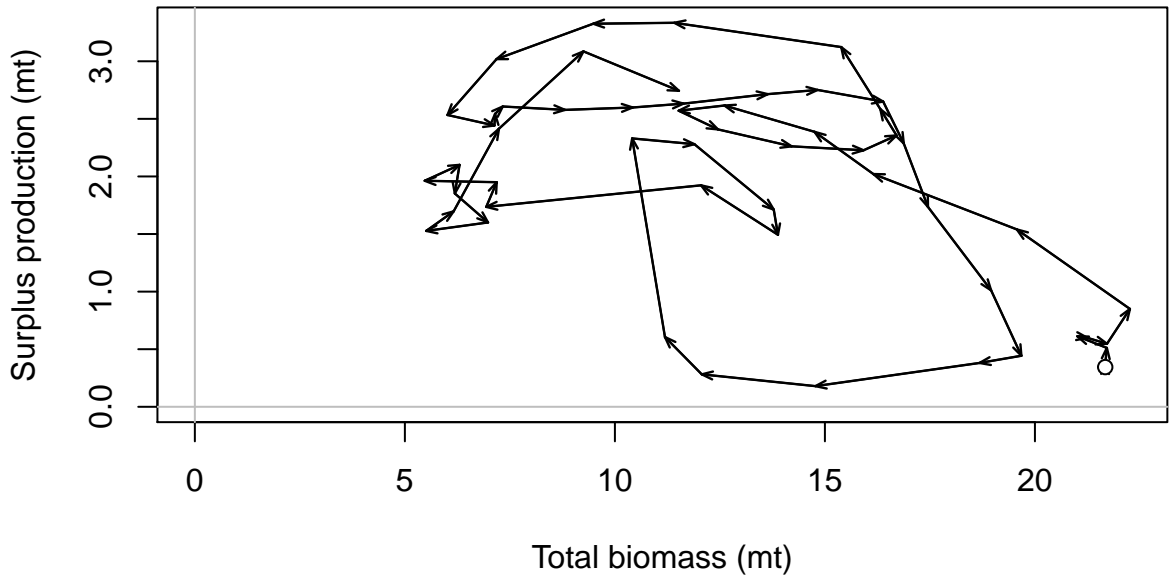


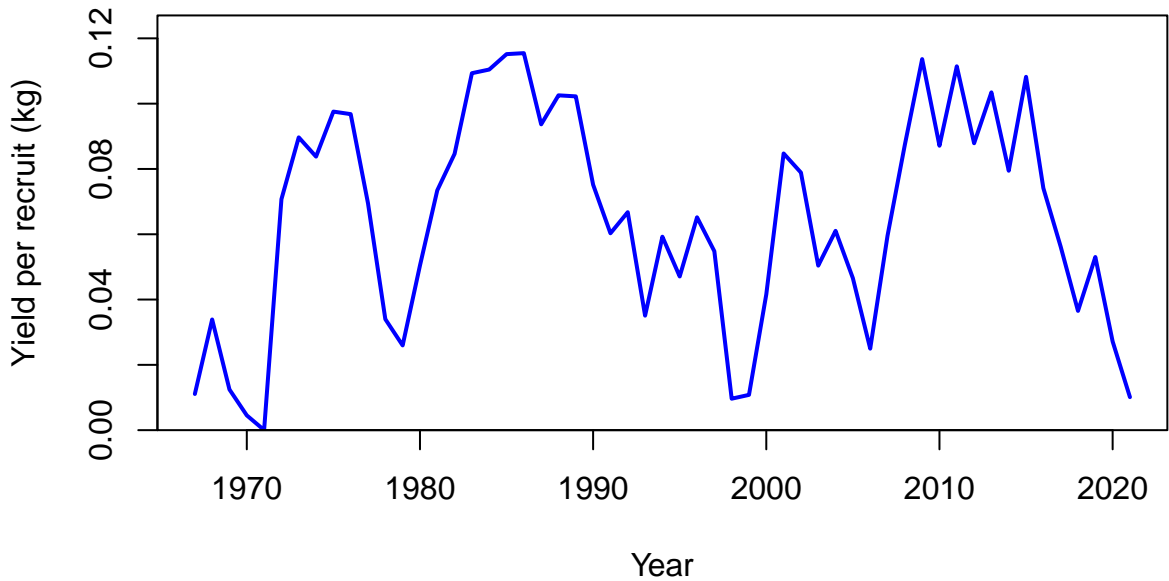
FISHERY (whole catch)

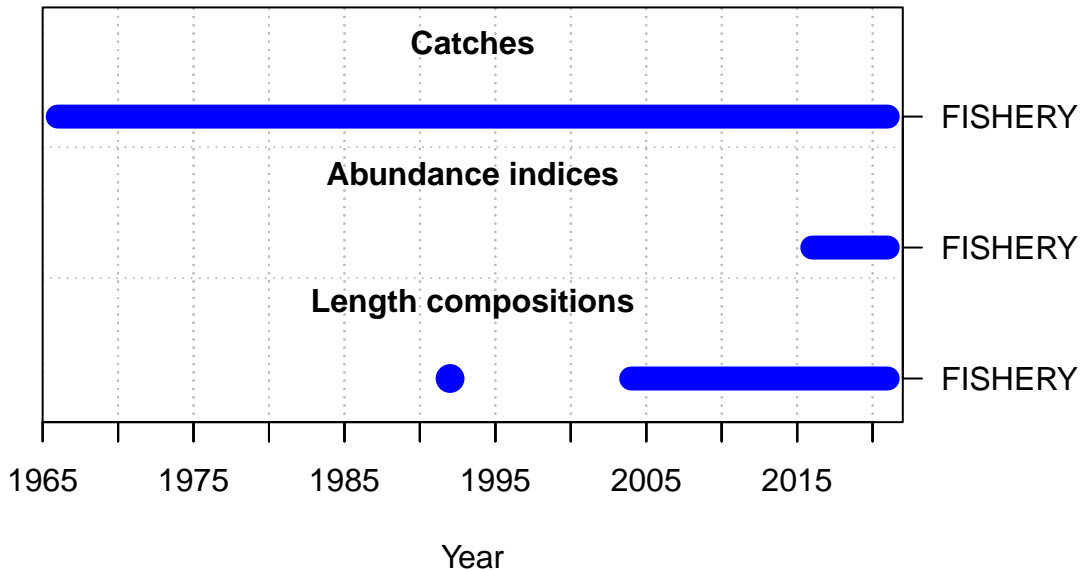


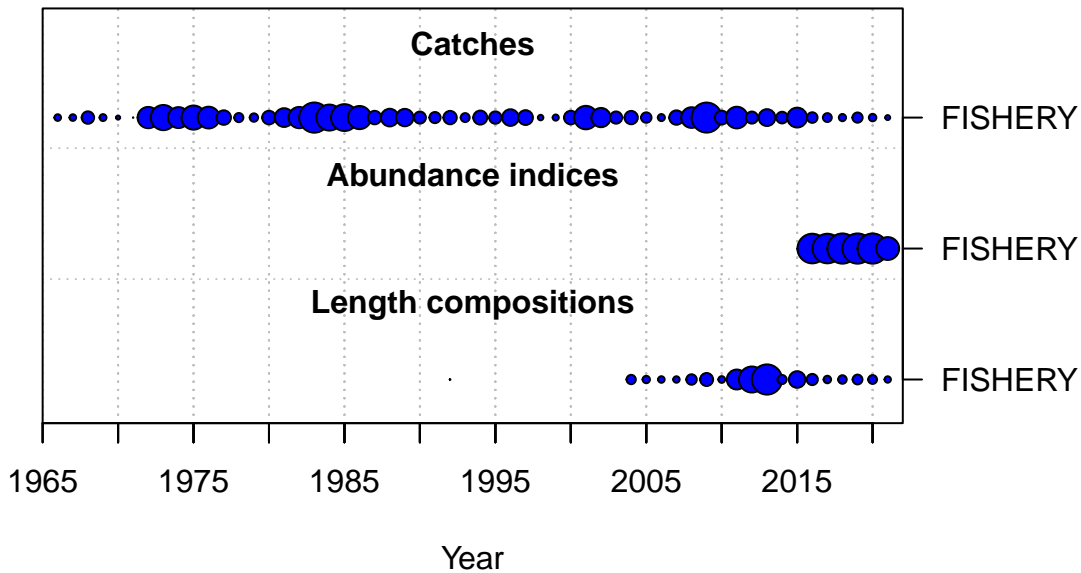




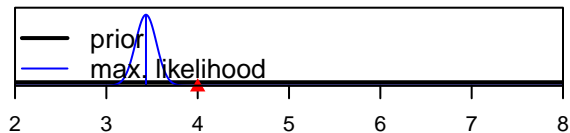




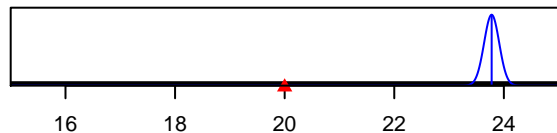




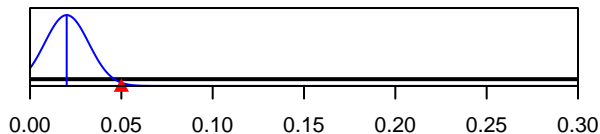
SR_LN(R0)



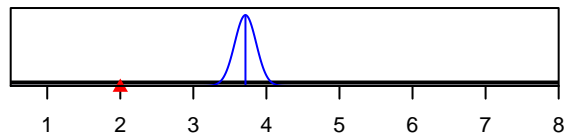
Size_inflection_FISHERY(1)



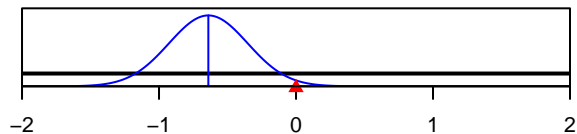
InitF_seas_1flt_1FISHERY



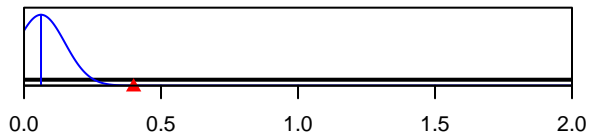
Size_95%width_FISHERY(1)



LnQ_base_FISHERY(1)



Q_extraSD_FISHERY(1)



Parameter value