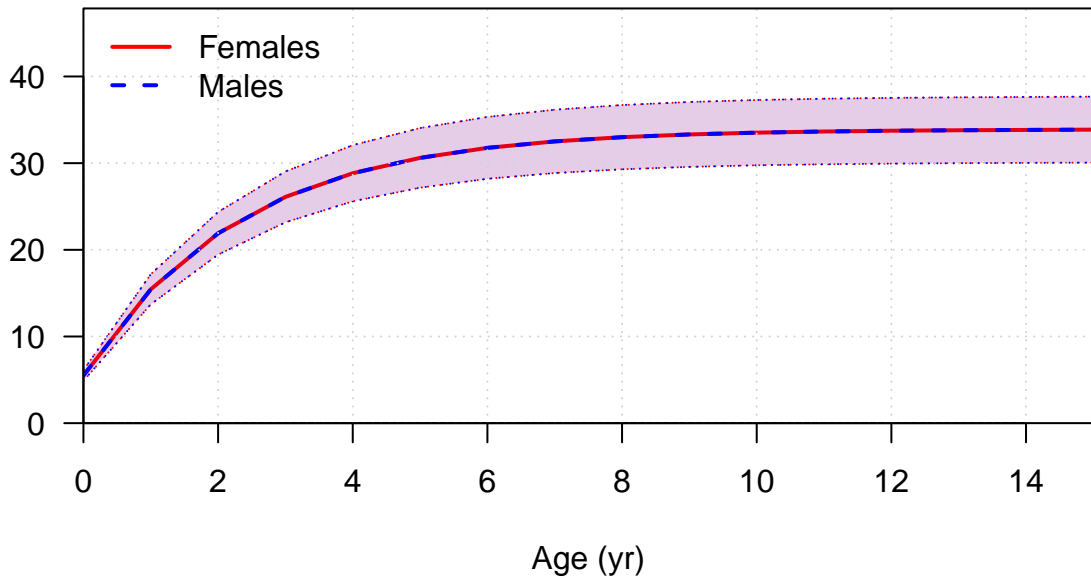
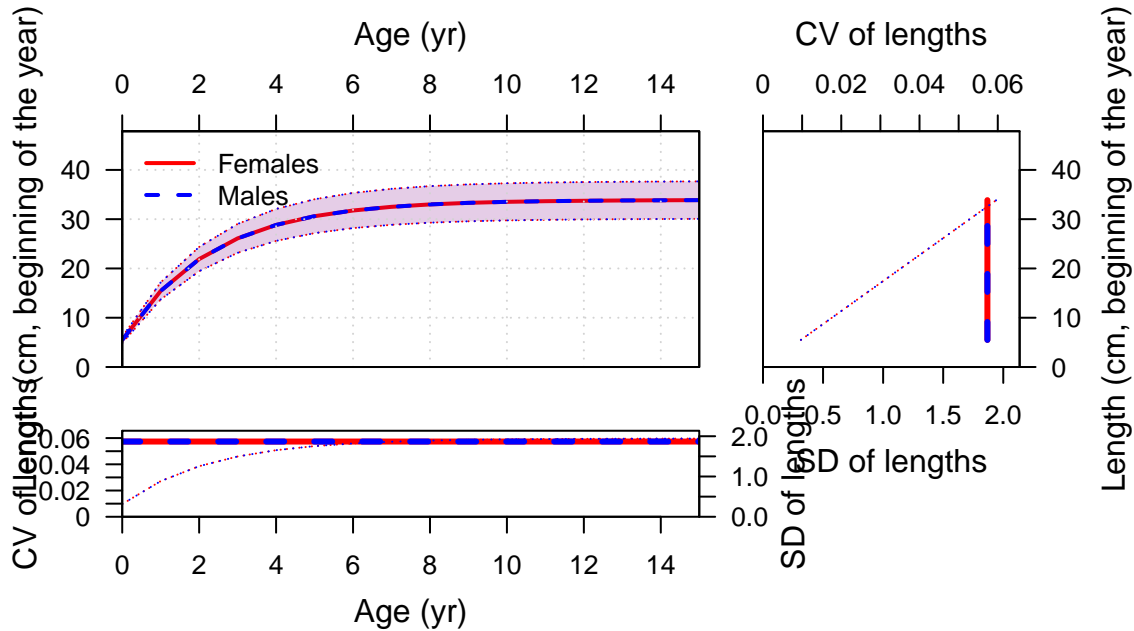
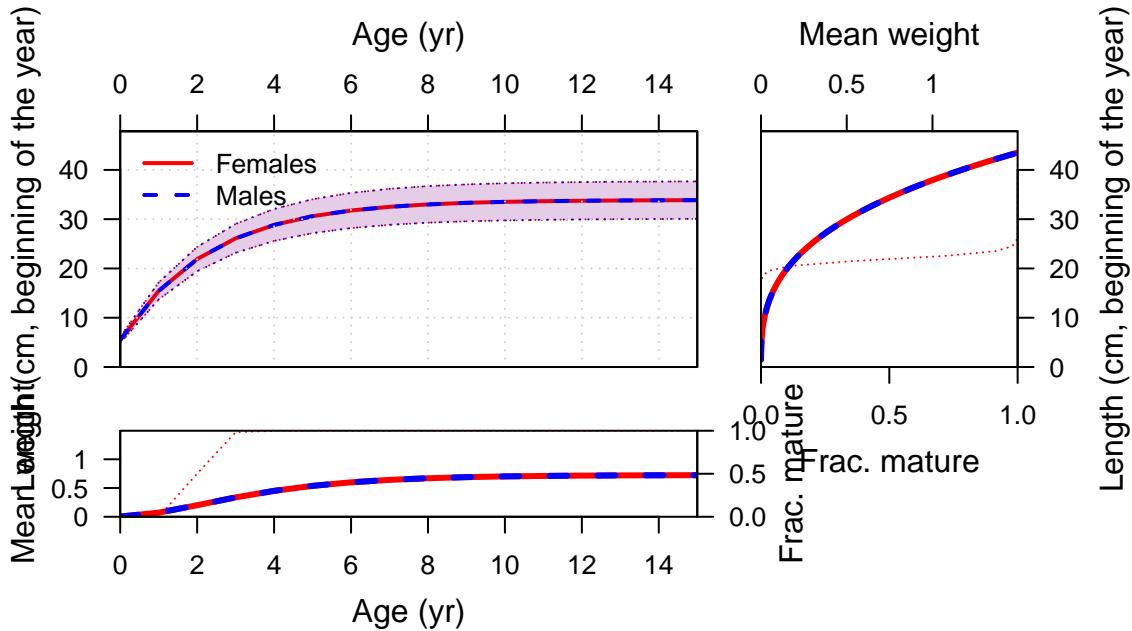


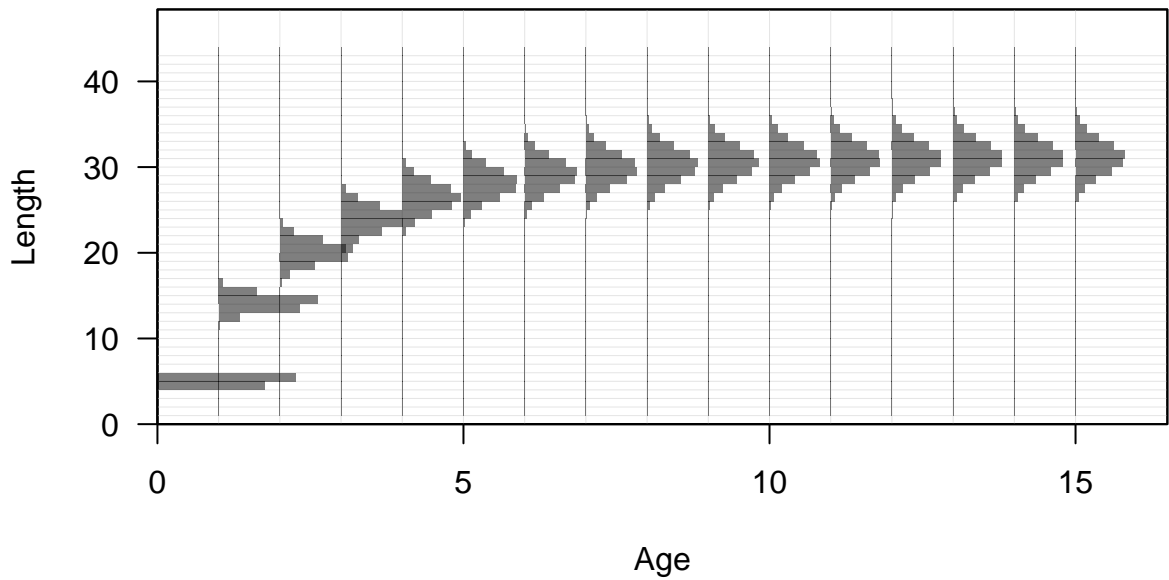
Plots created using the 'r4ss' package in R
Stock Synthesis version: 3.30.19.0
StartTime: Tue Feb 14 14:25:56 2023
Data_File: data.ss
Control_File: control.ss

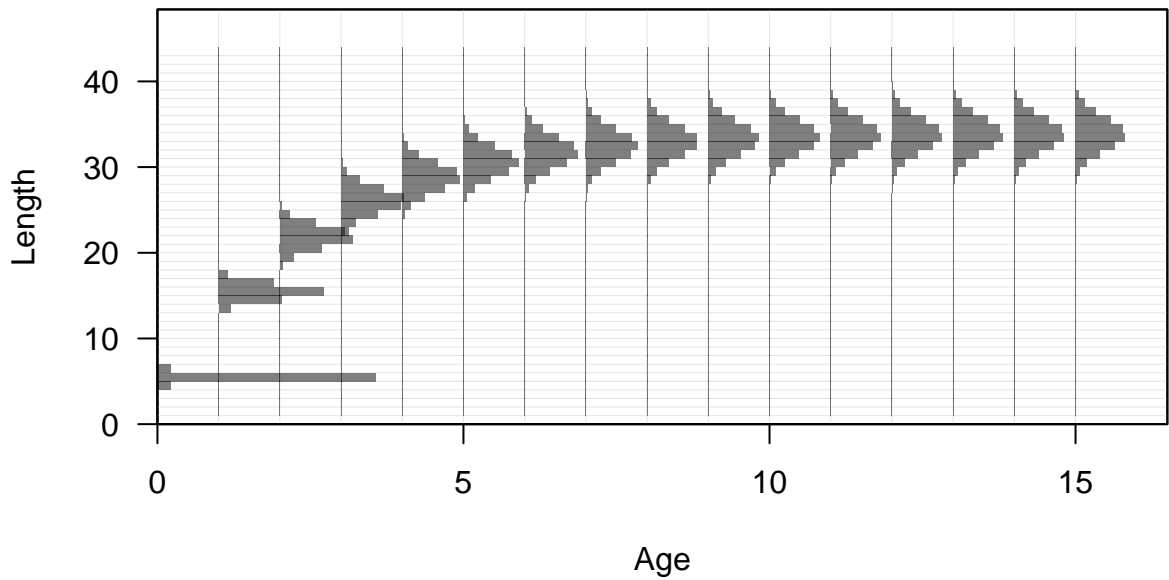
Length (cm, beginning of the year)

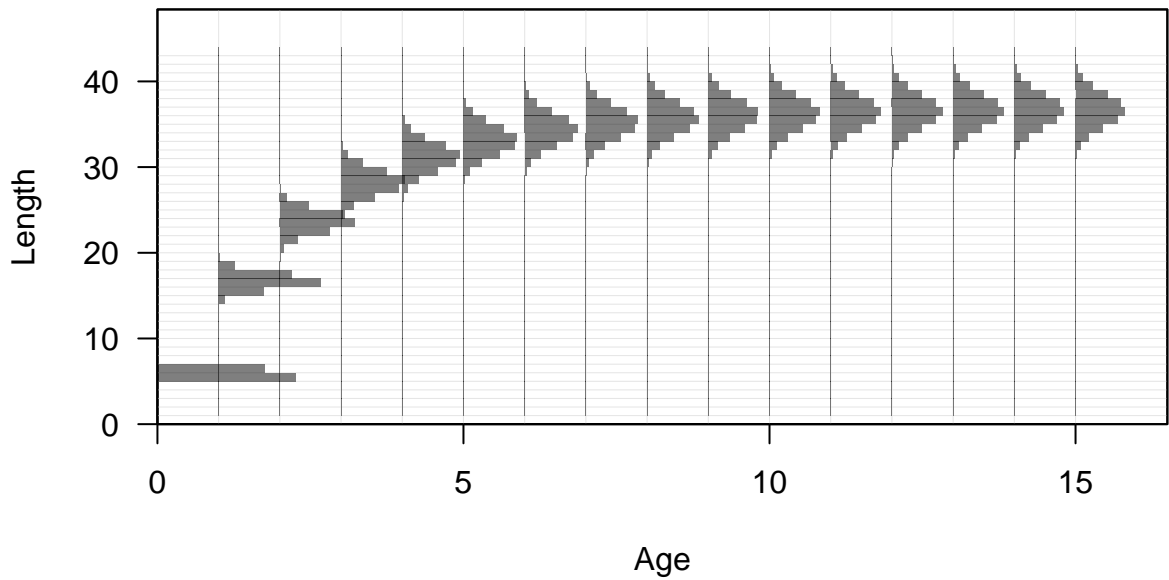


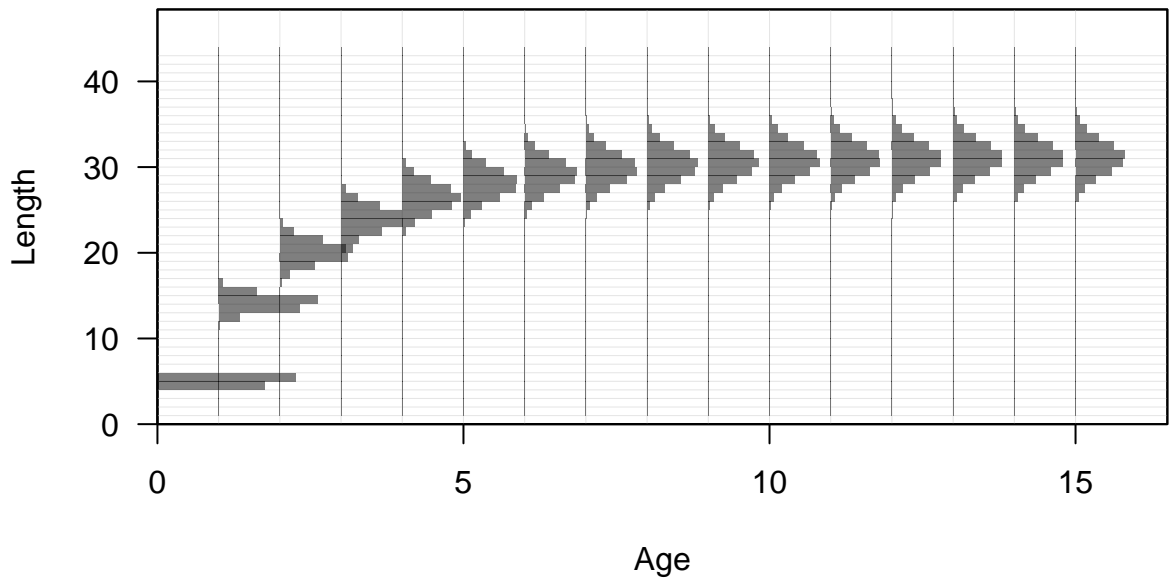


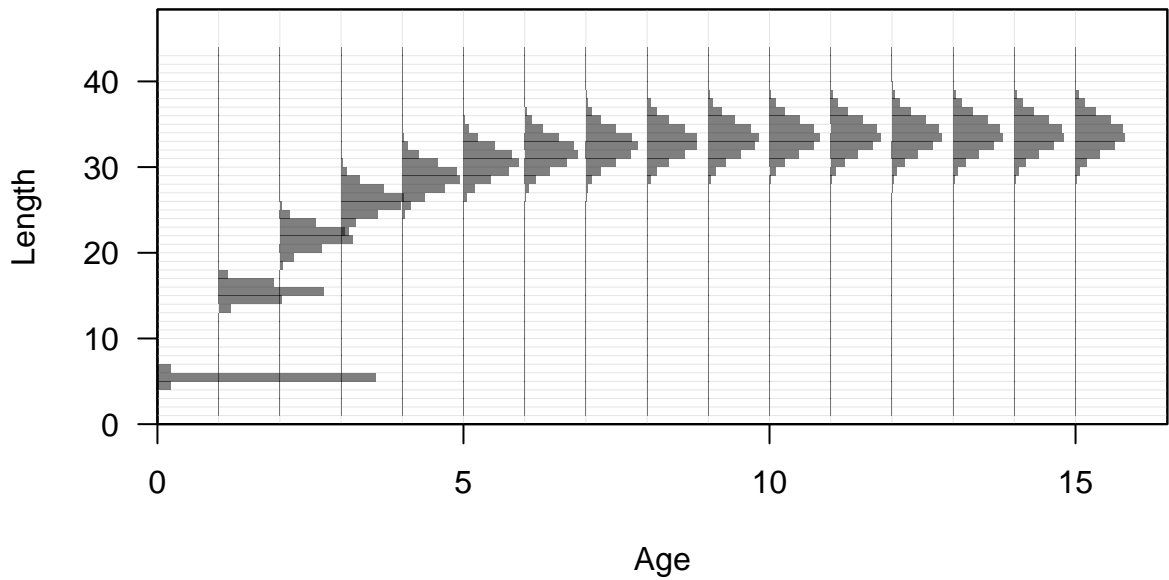


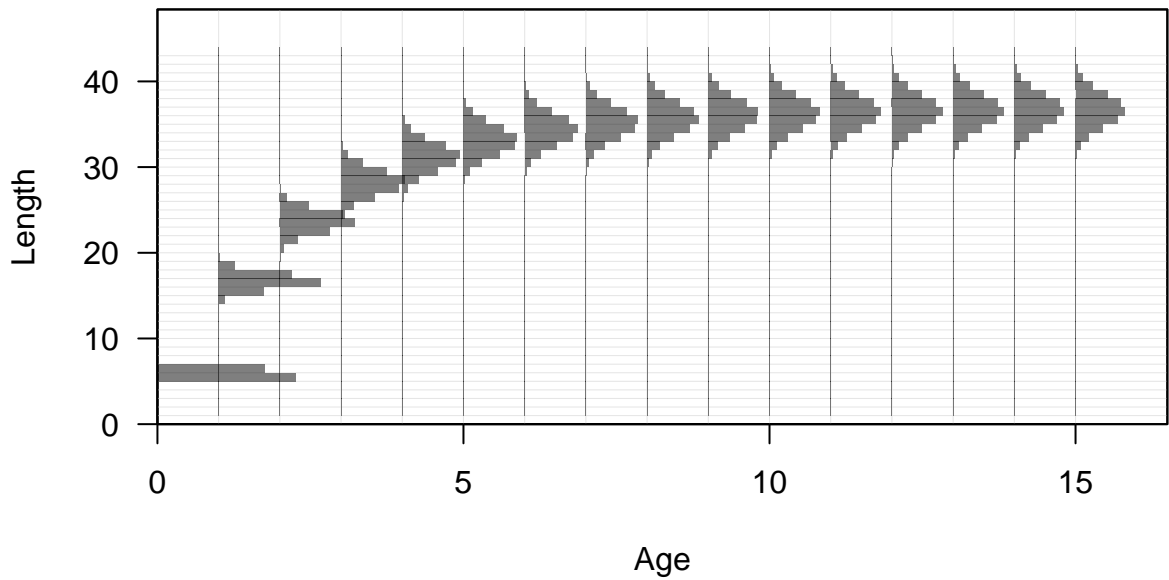


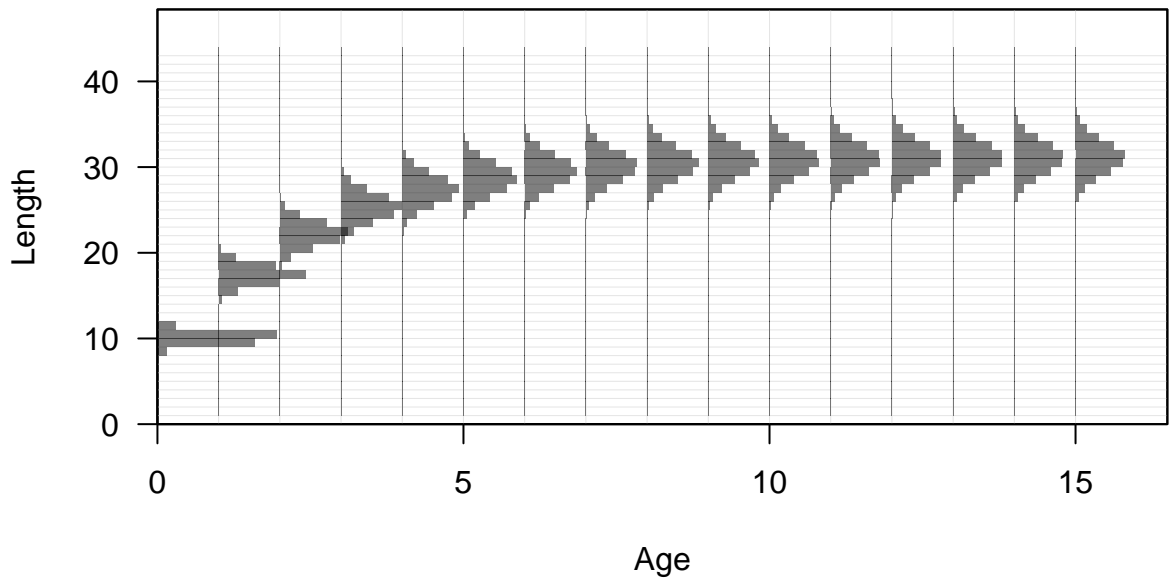


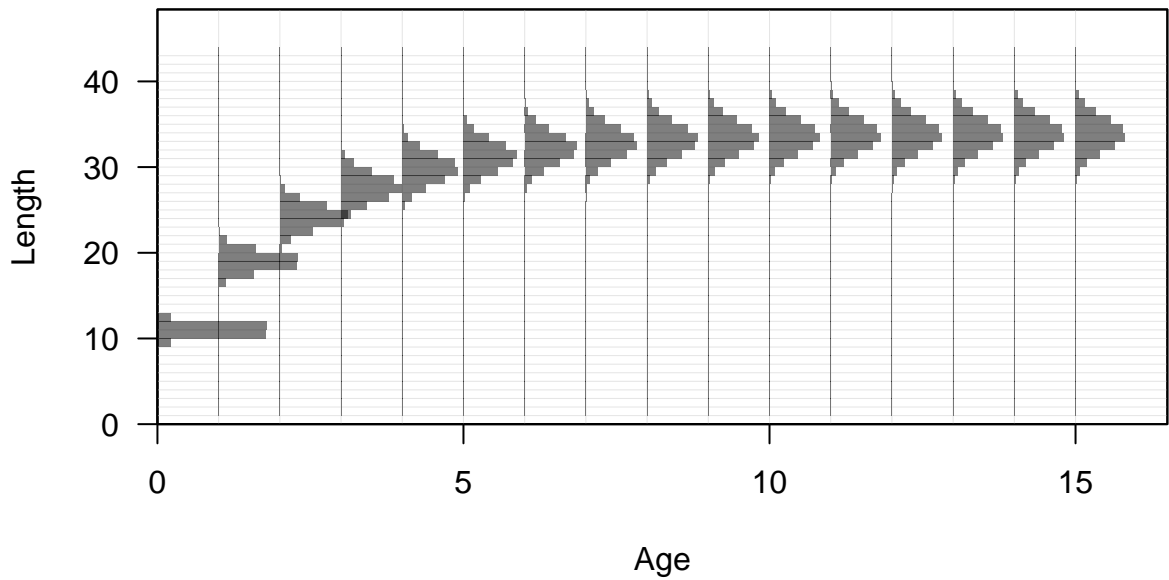


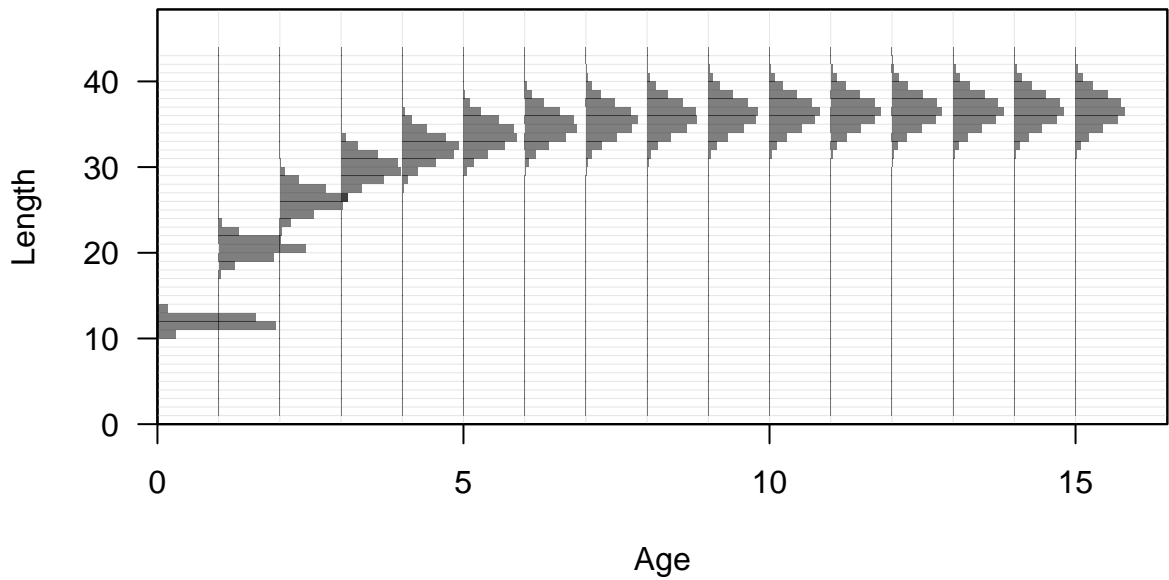


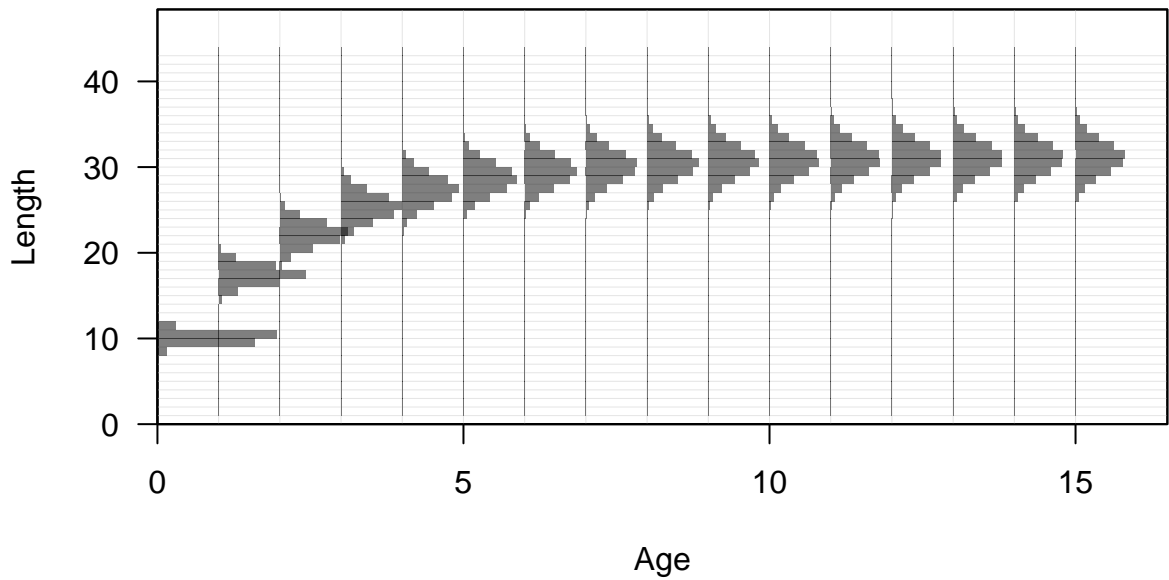


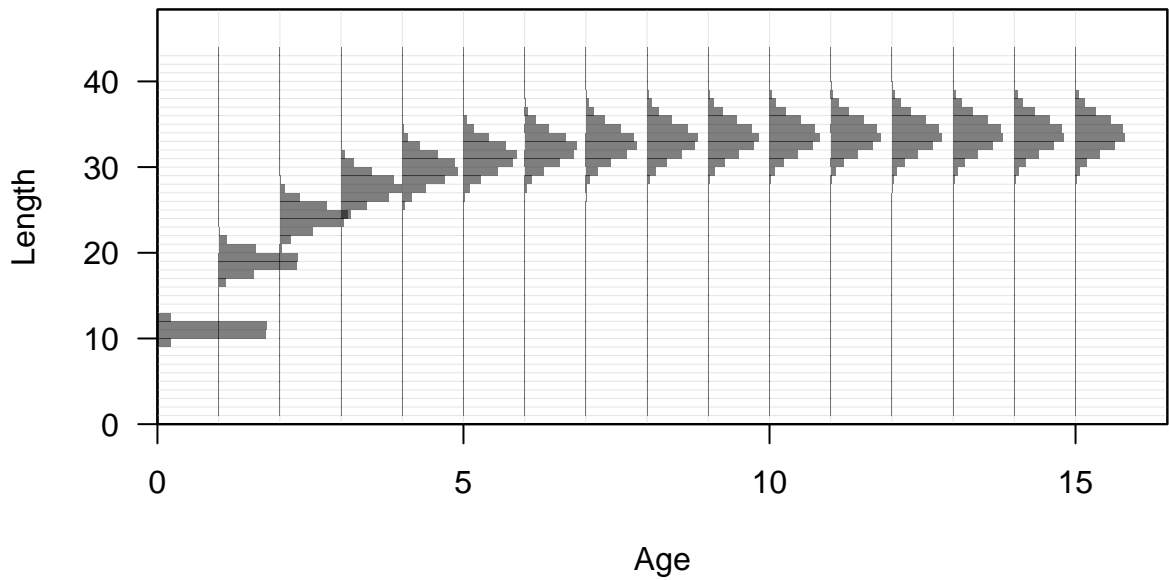


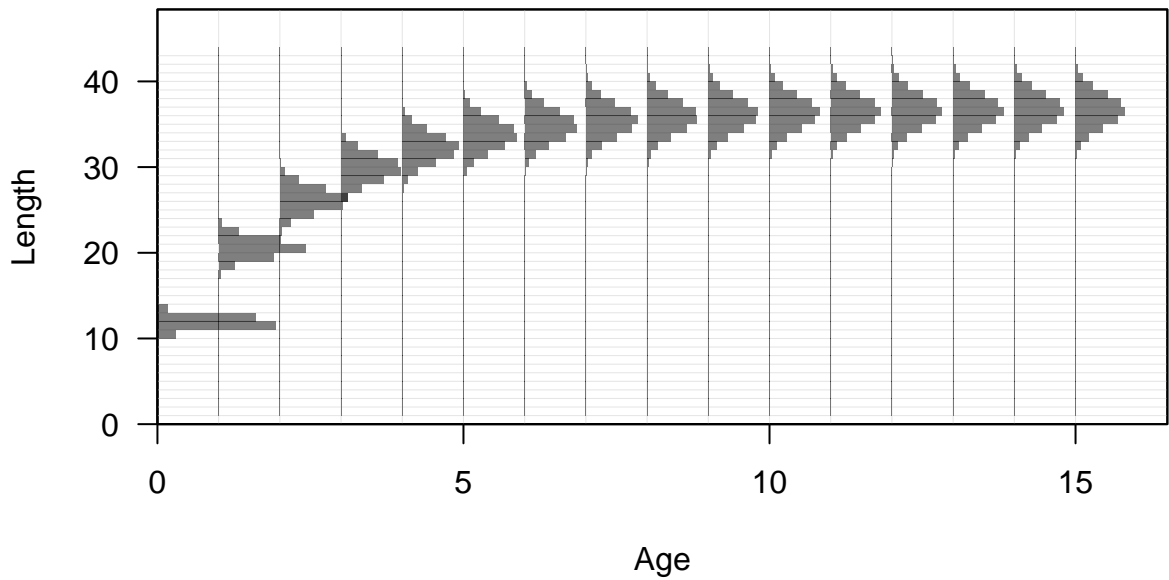


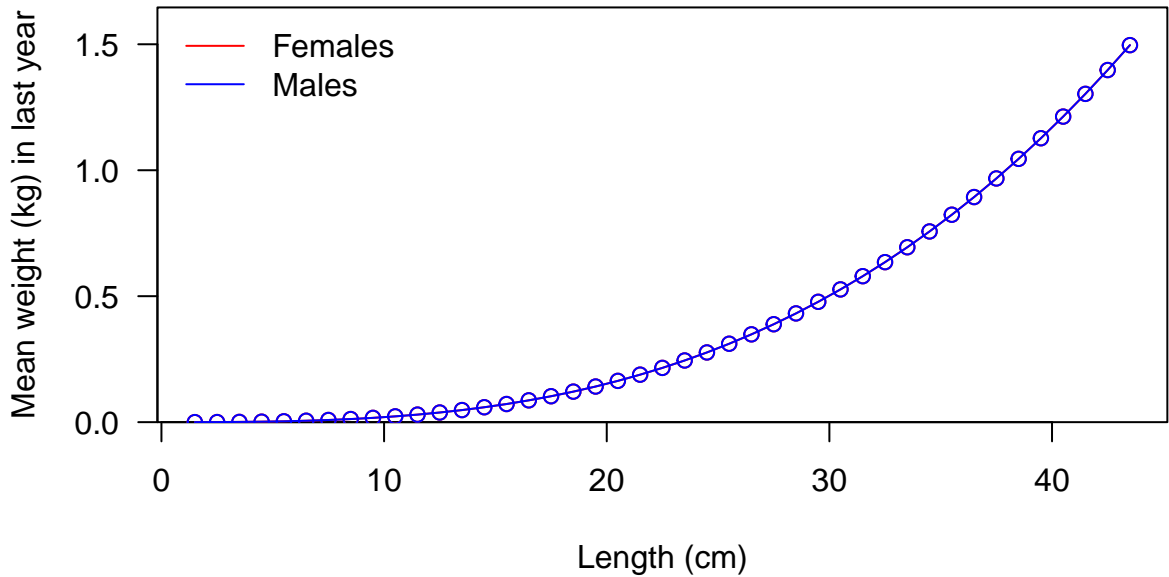


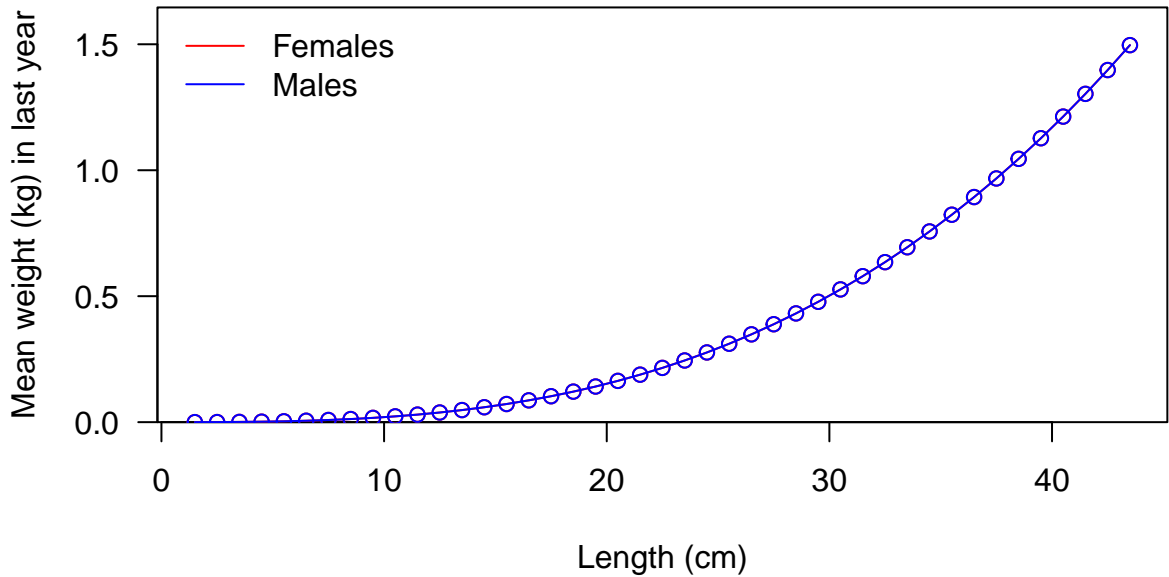


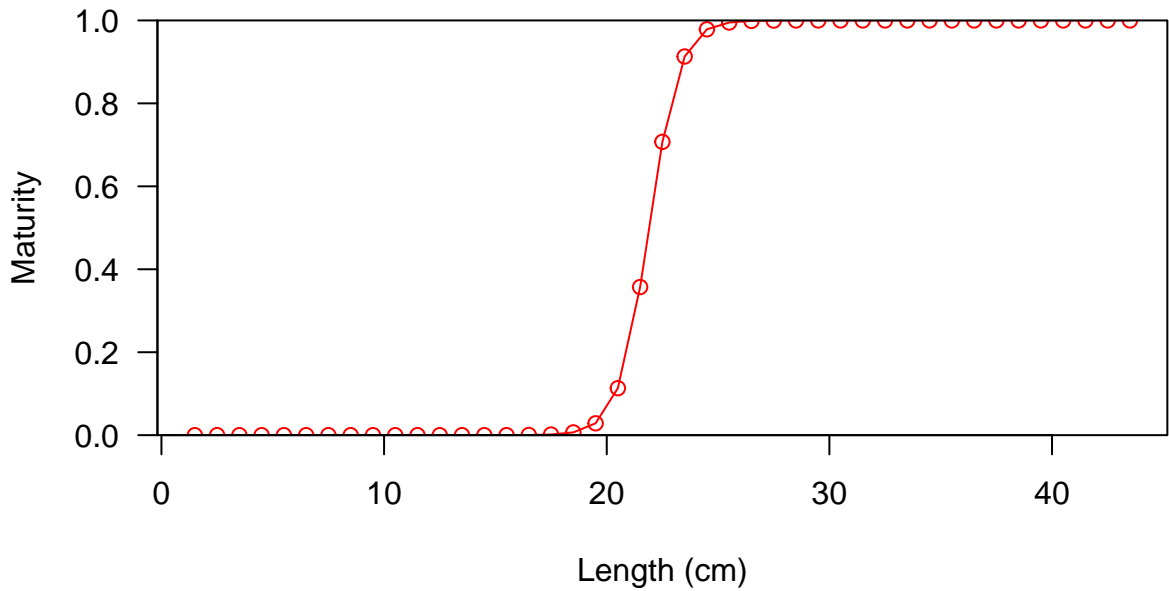


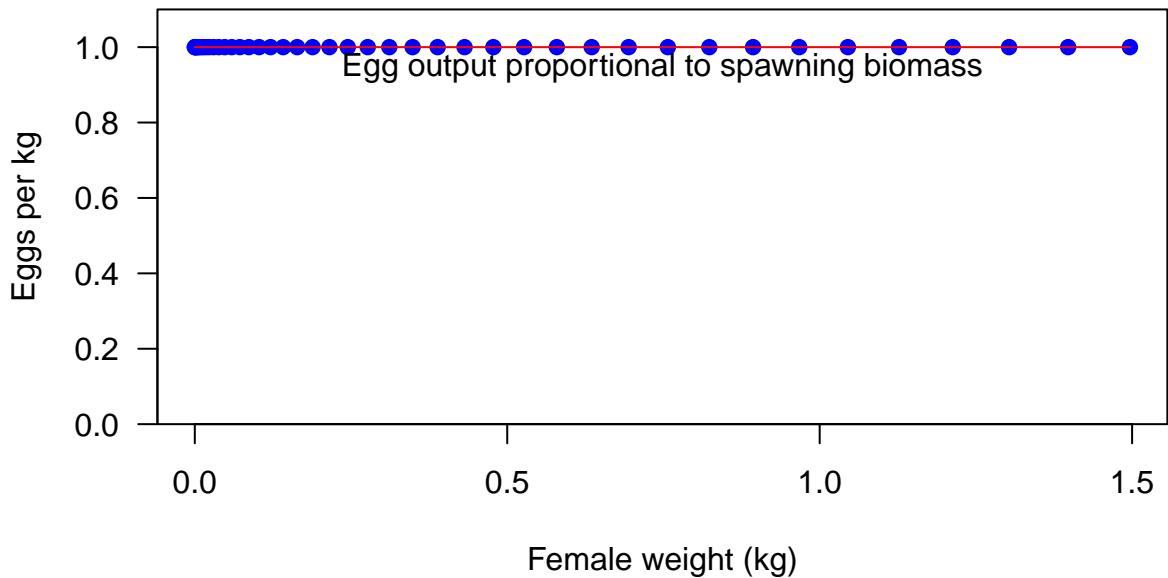


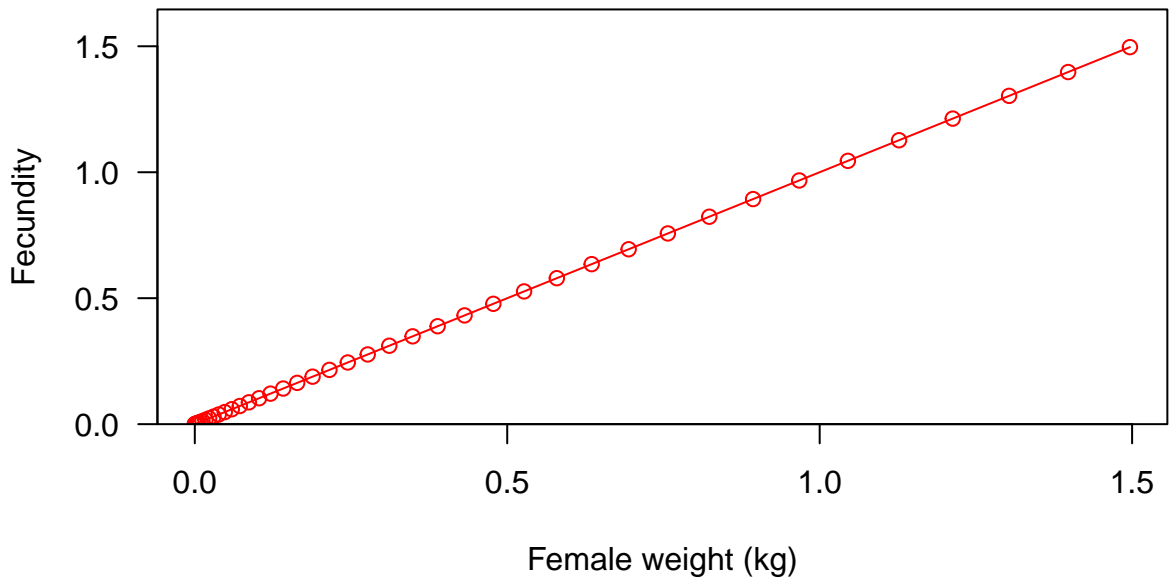


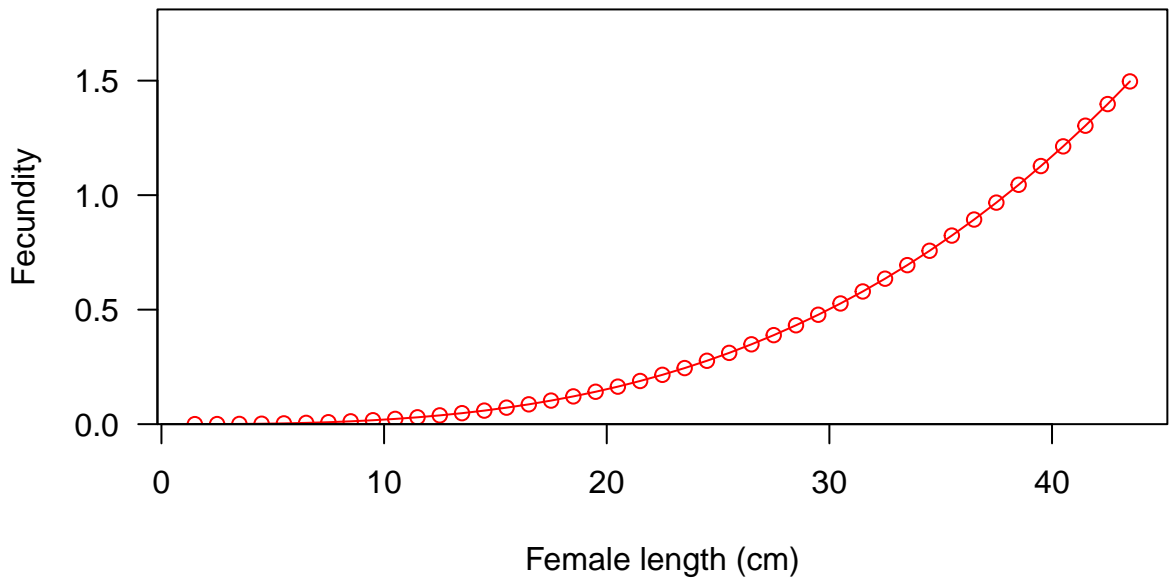


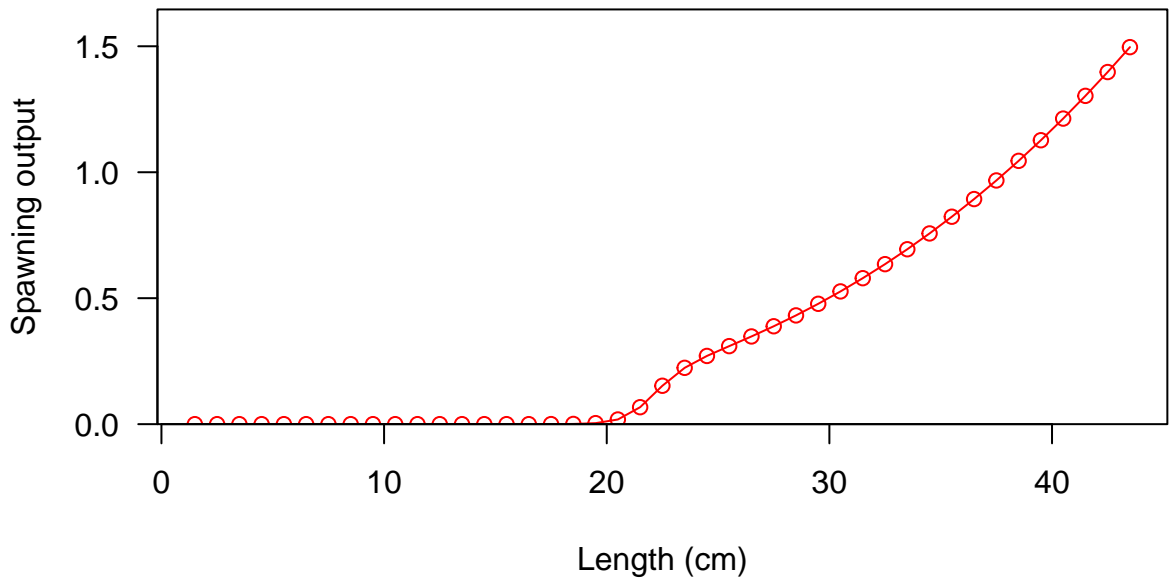


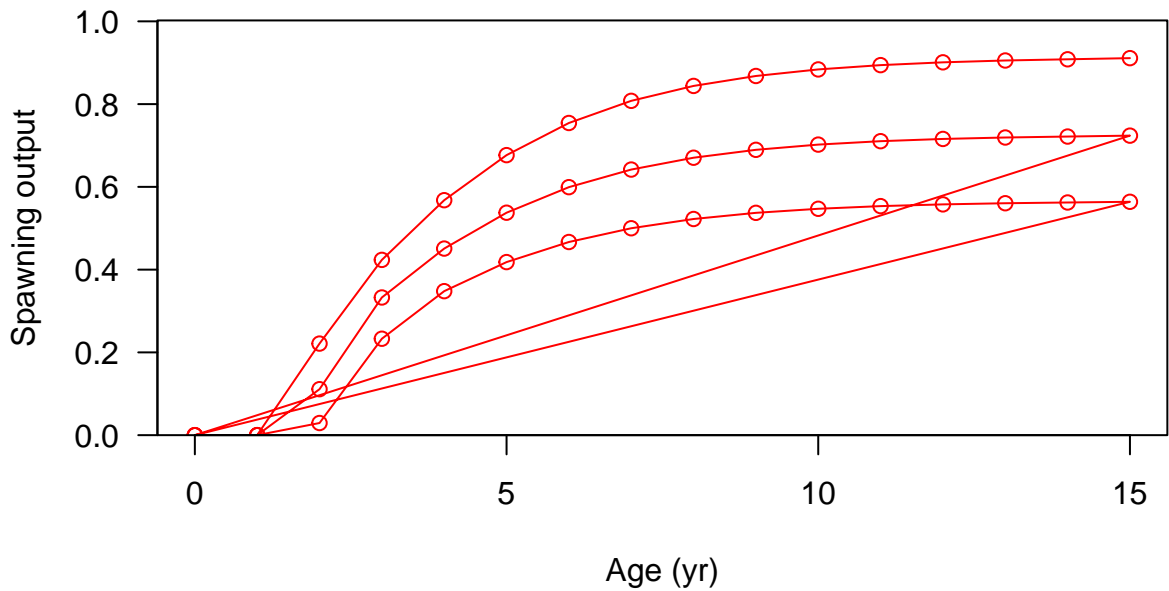




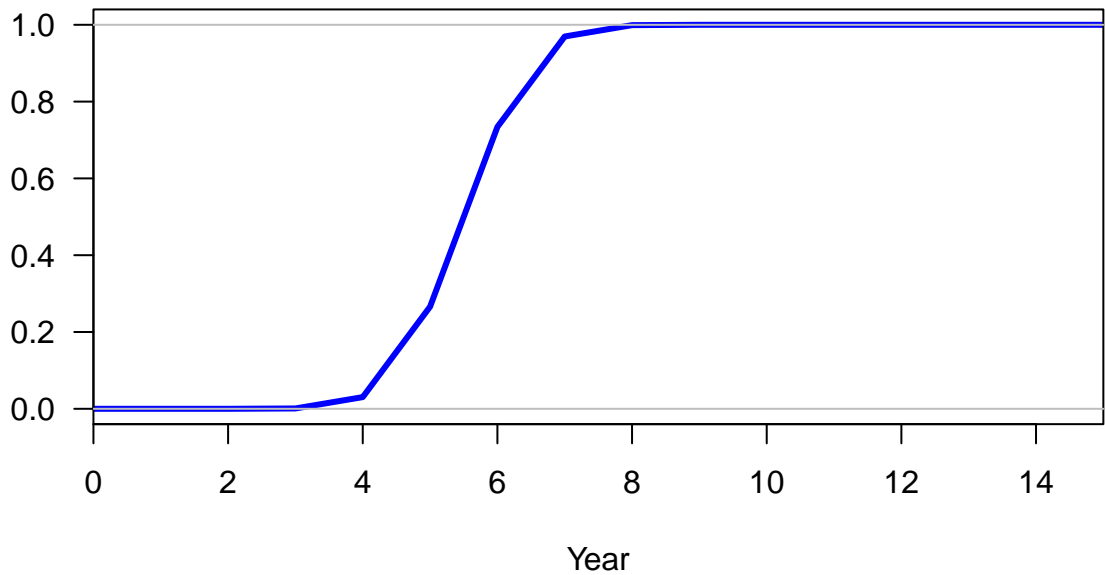




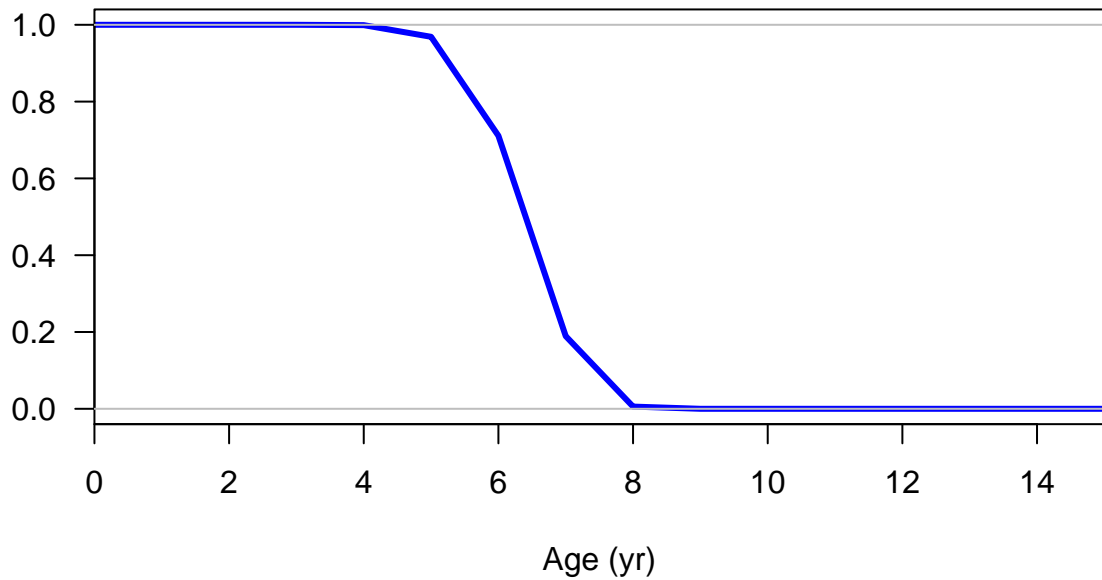




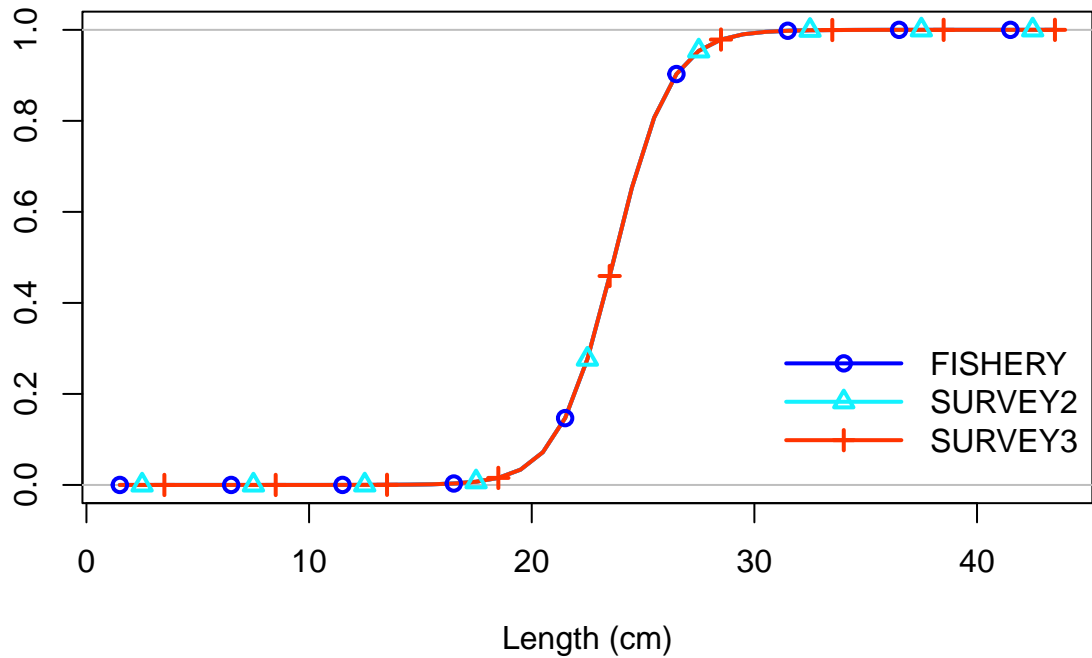
Hermaphroditism transition rate

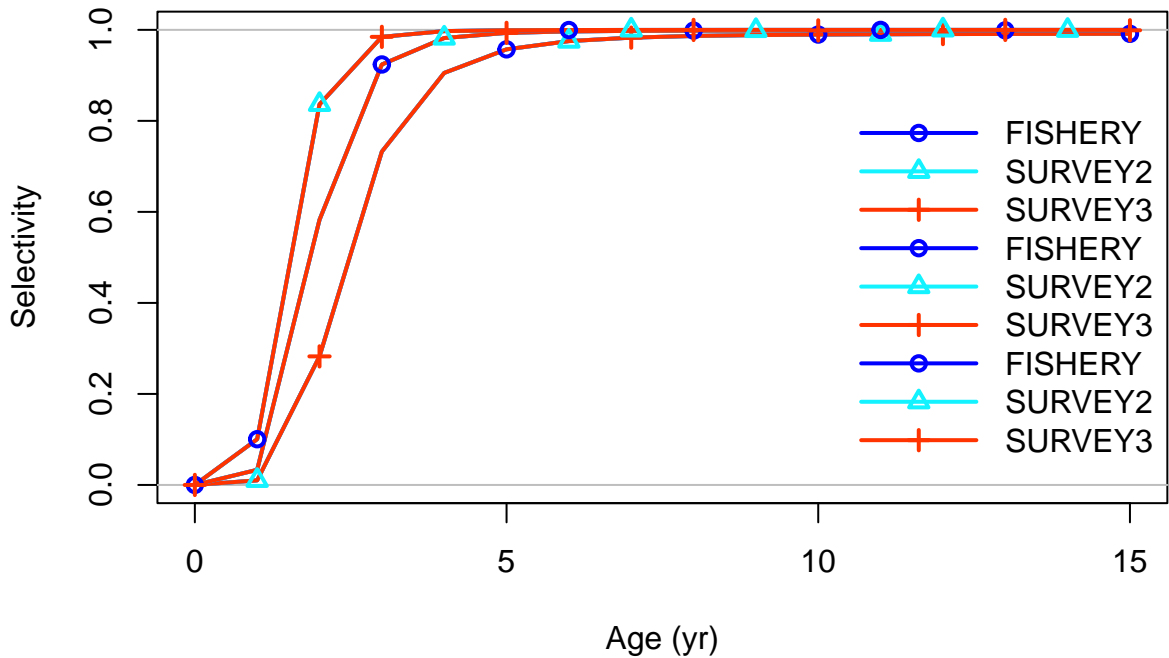


Fraction females by age at equilibrium

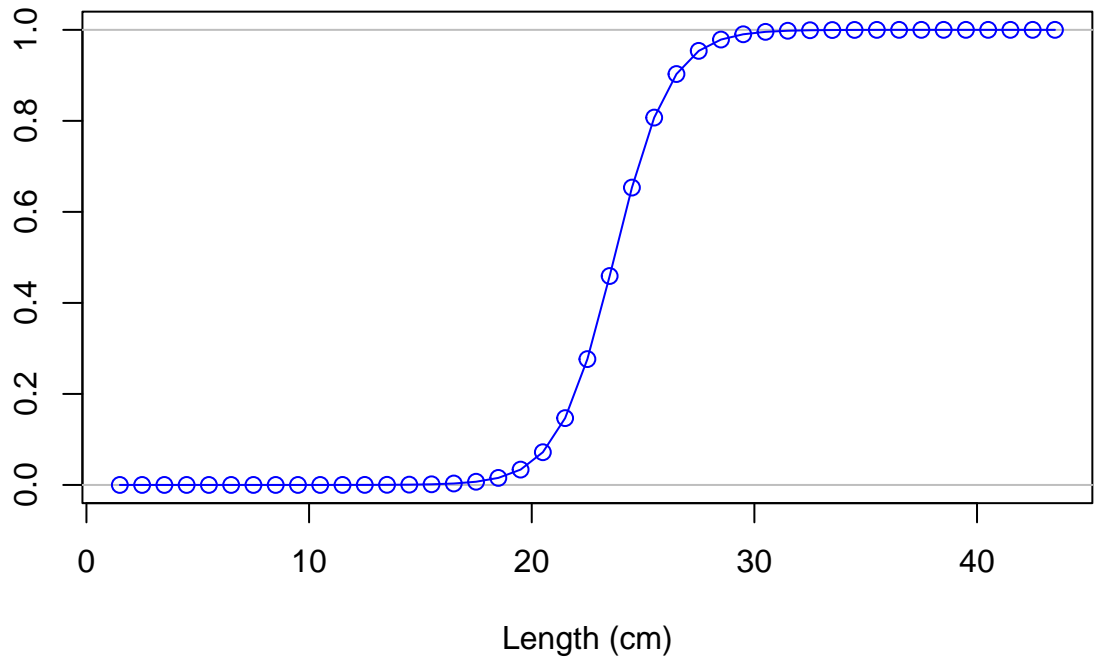


Selectivity

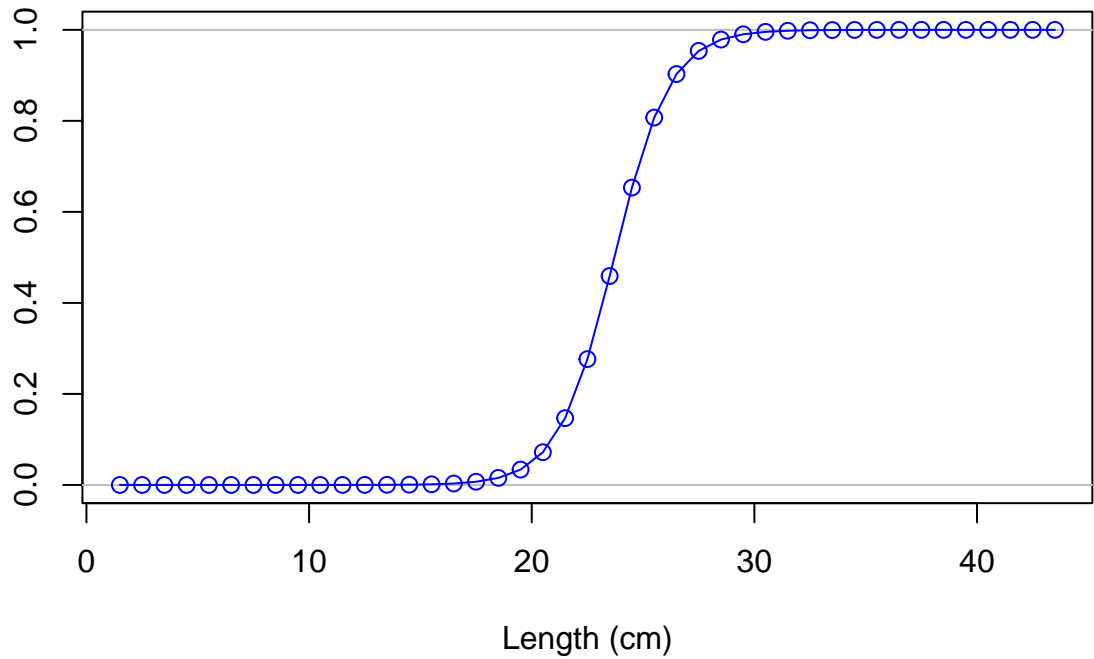




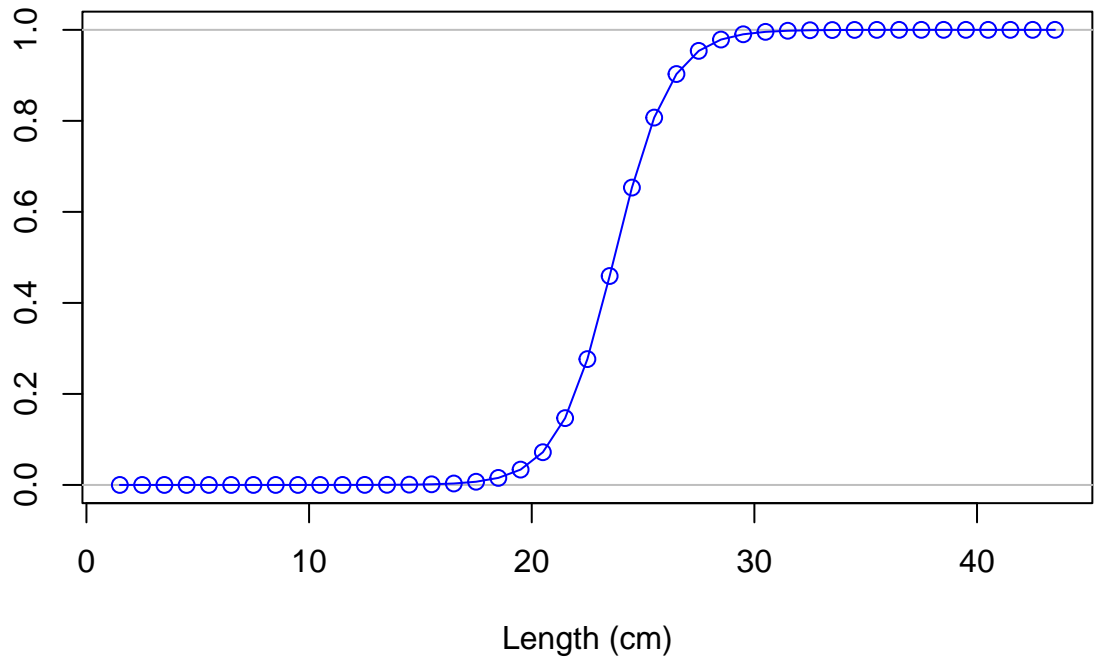
Selectivity



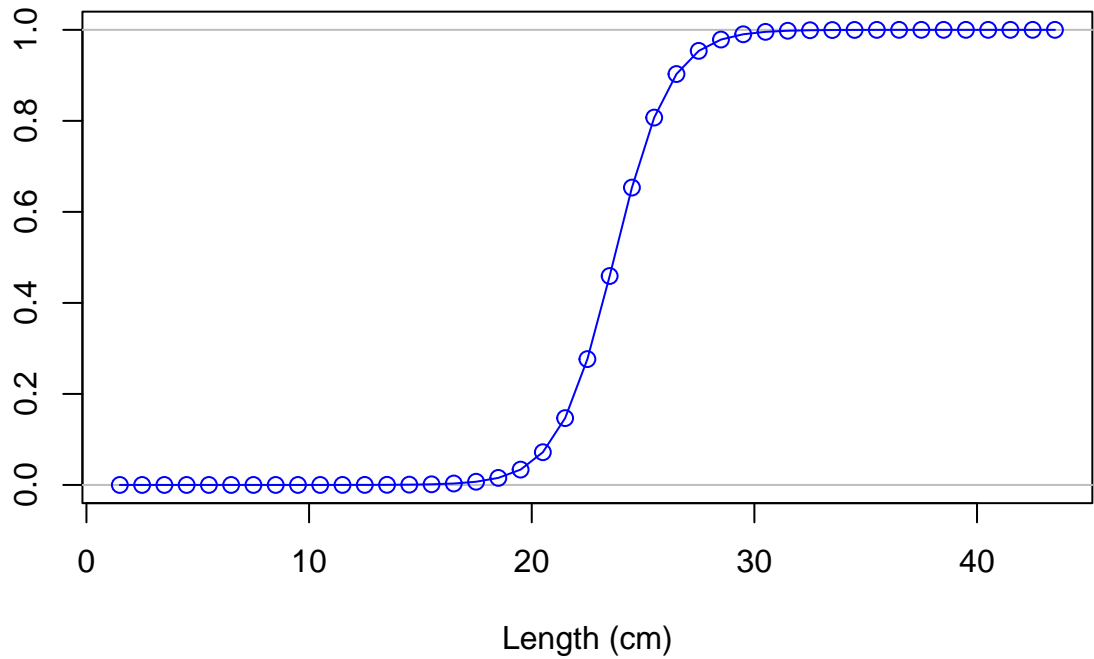
Selectivity



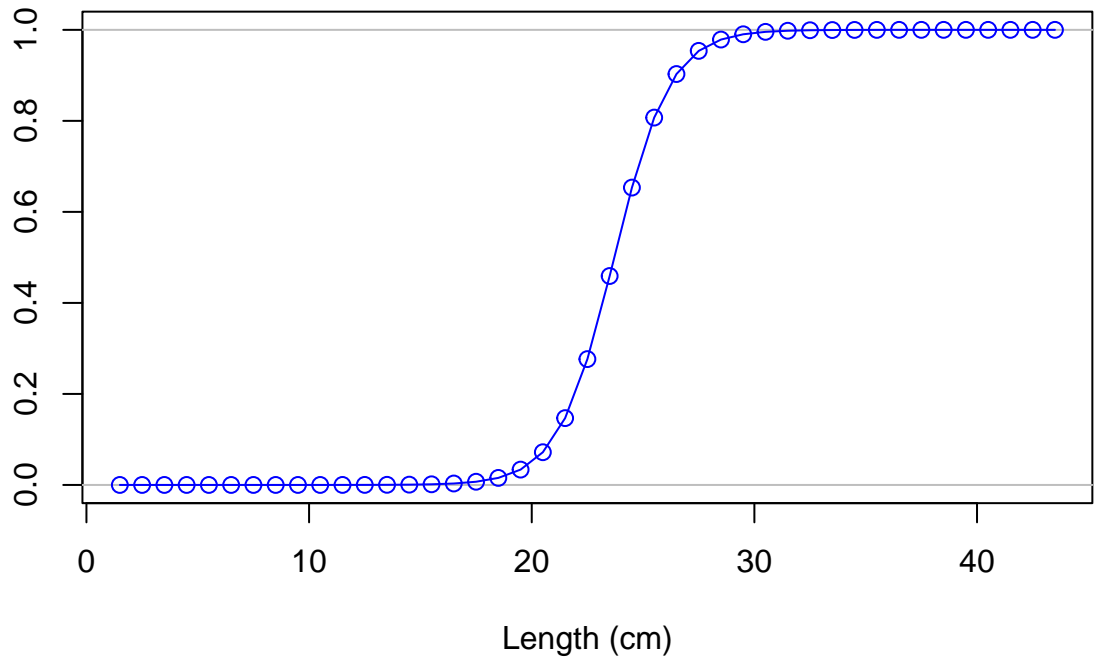
Selectivity



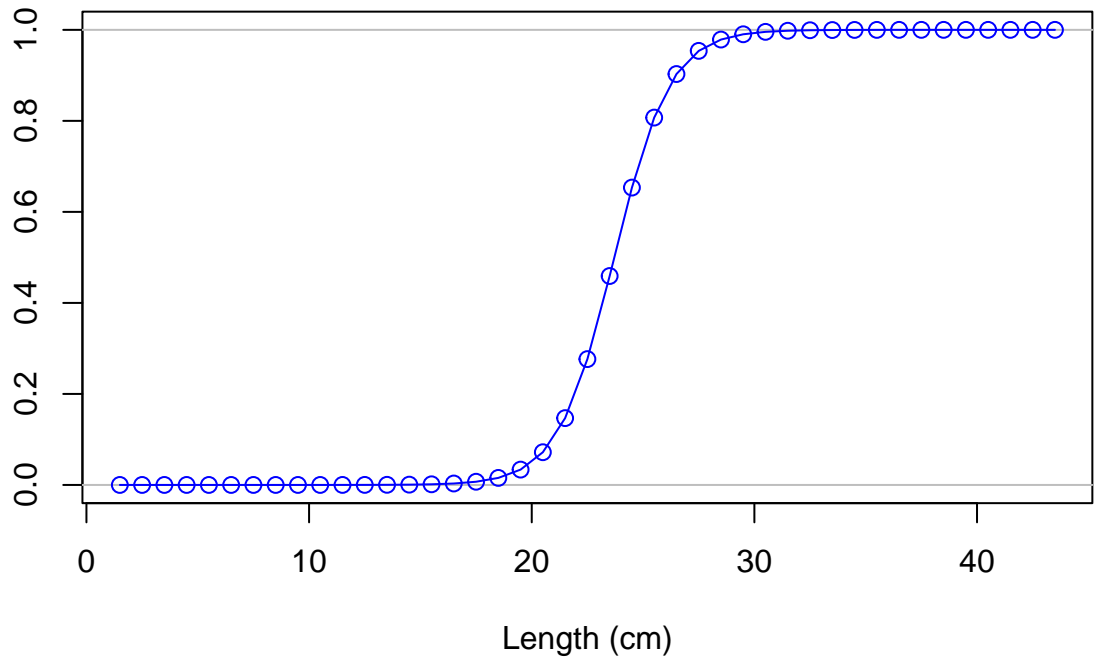
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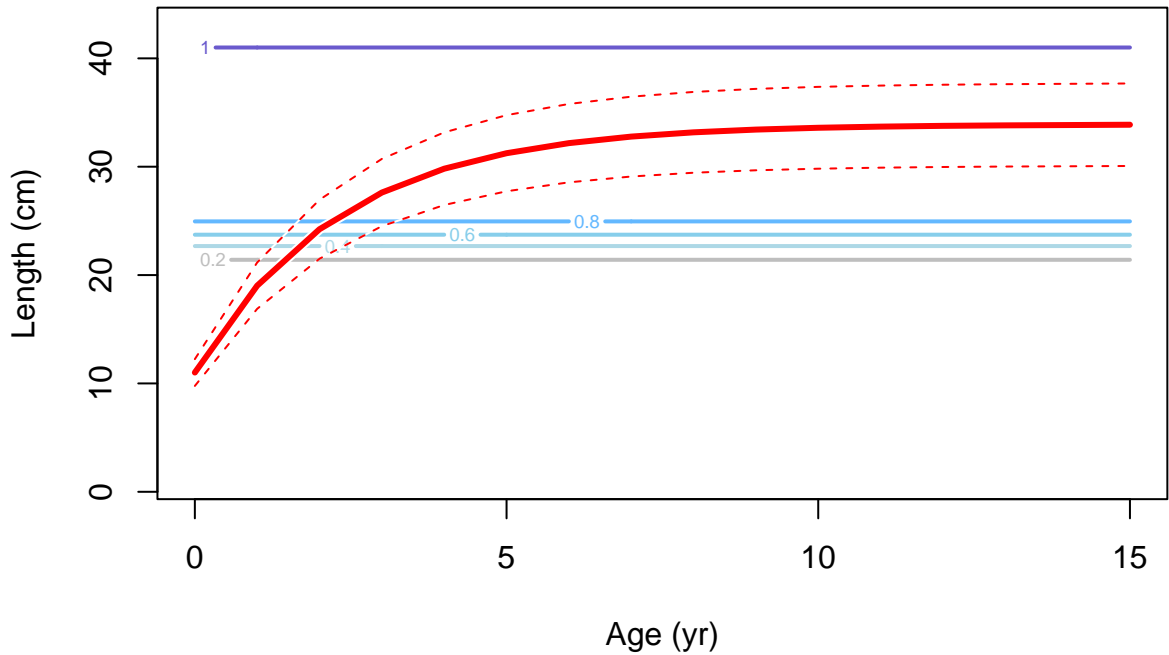


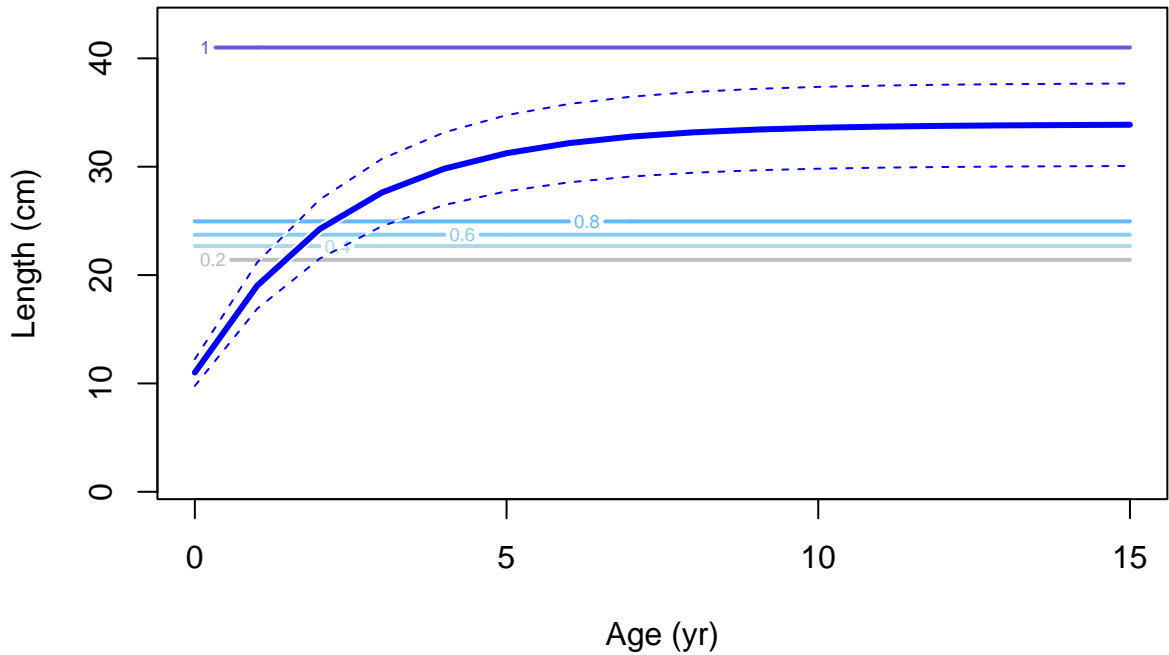
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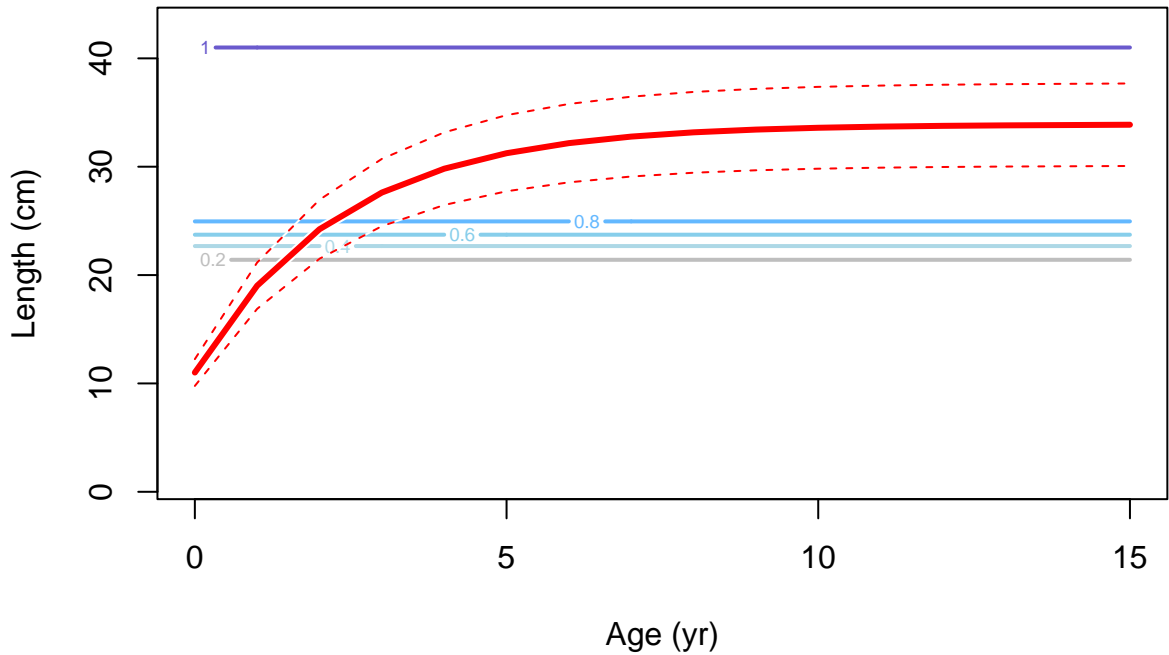


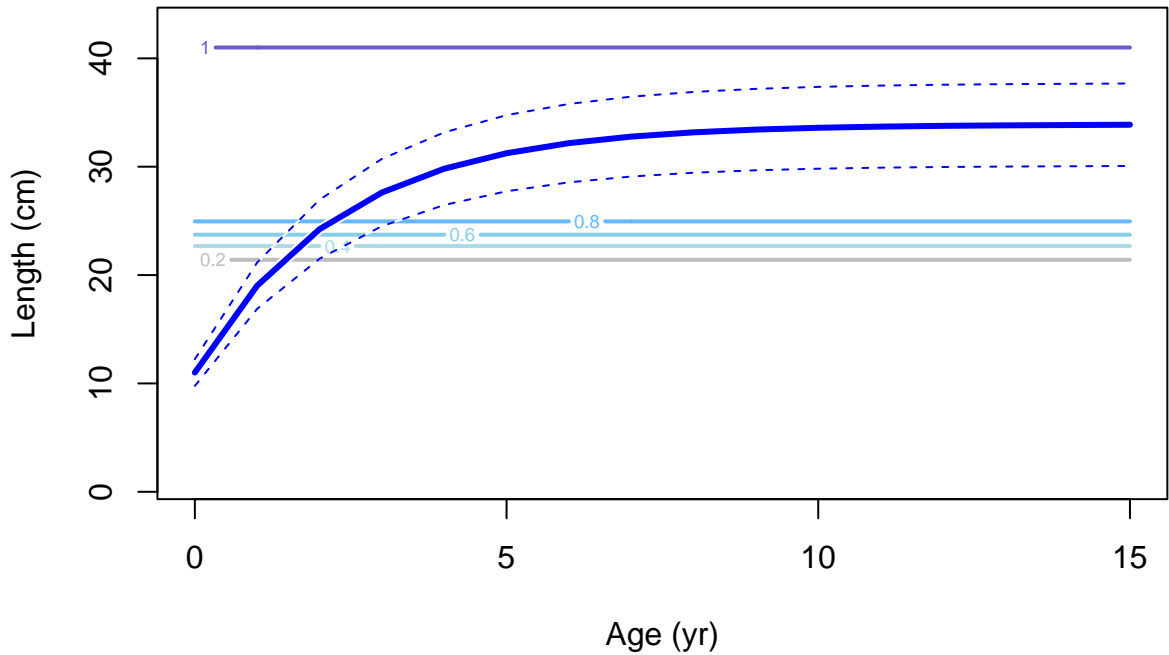
Selectivity

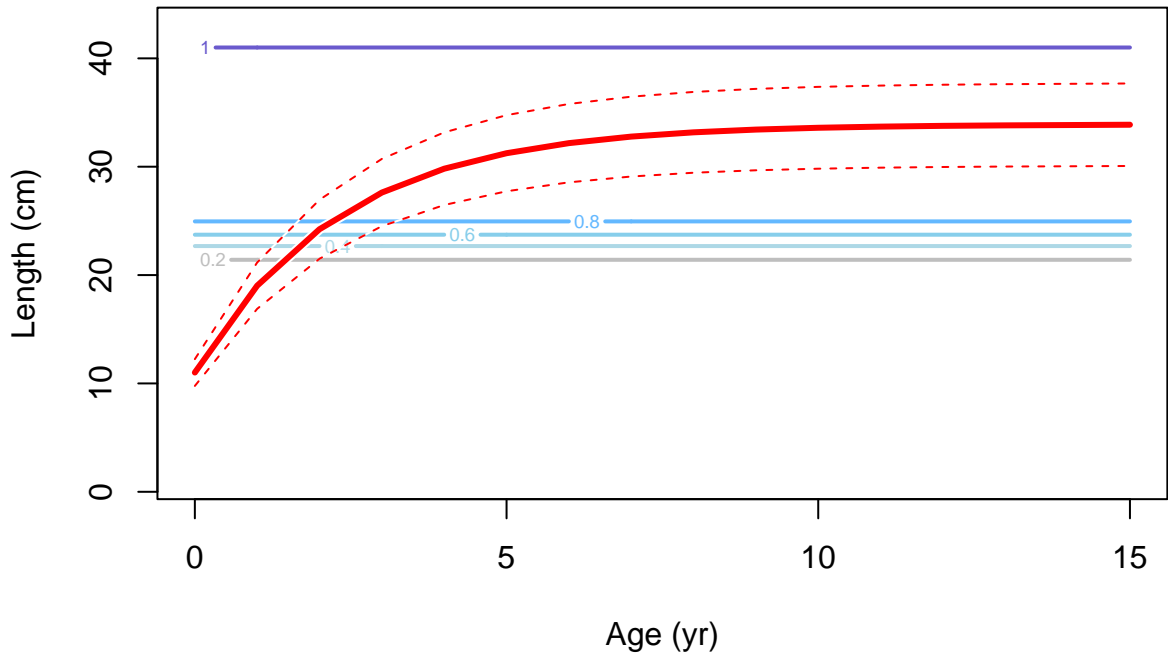


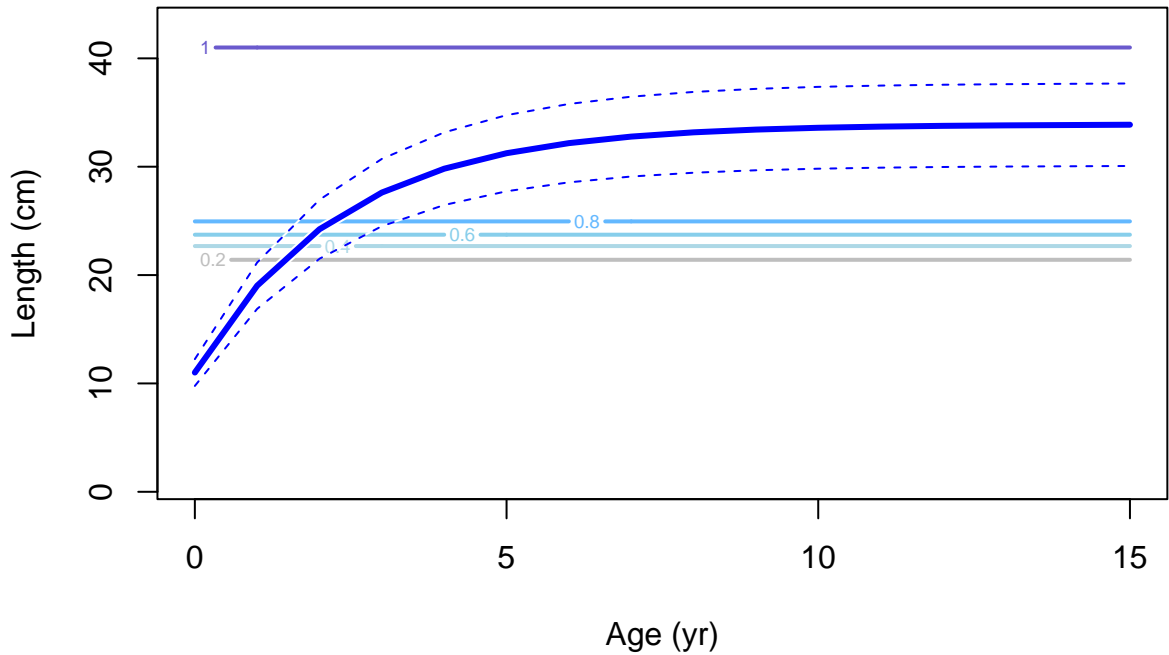


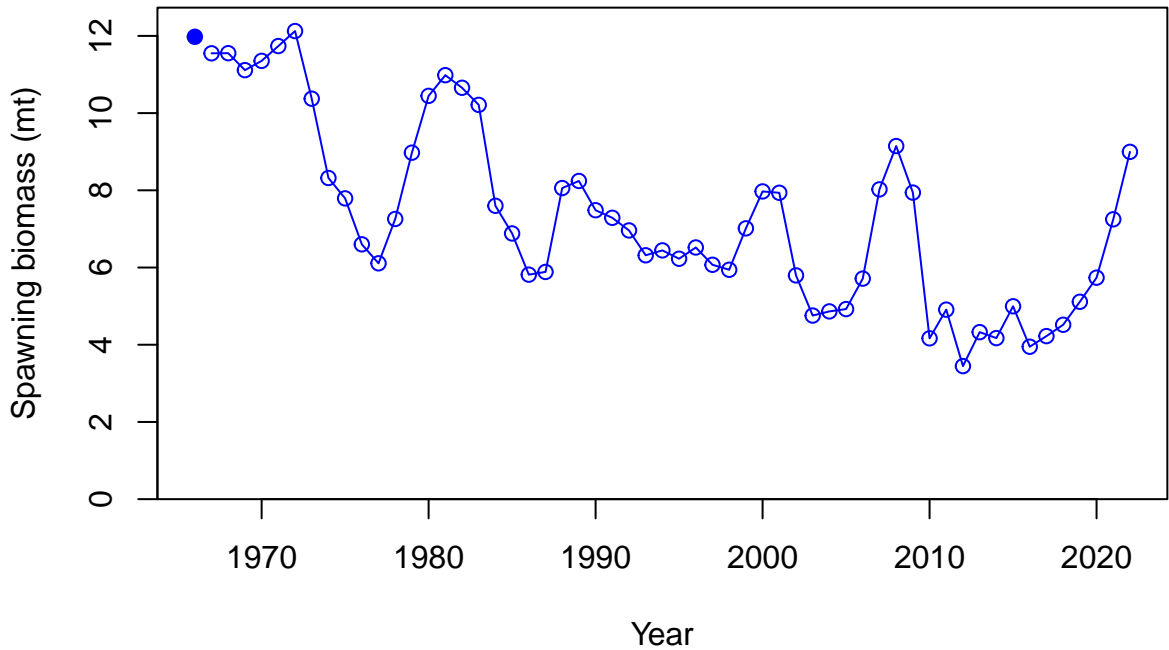




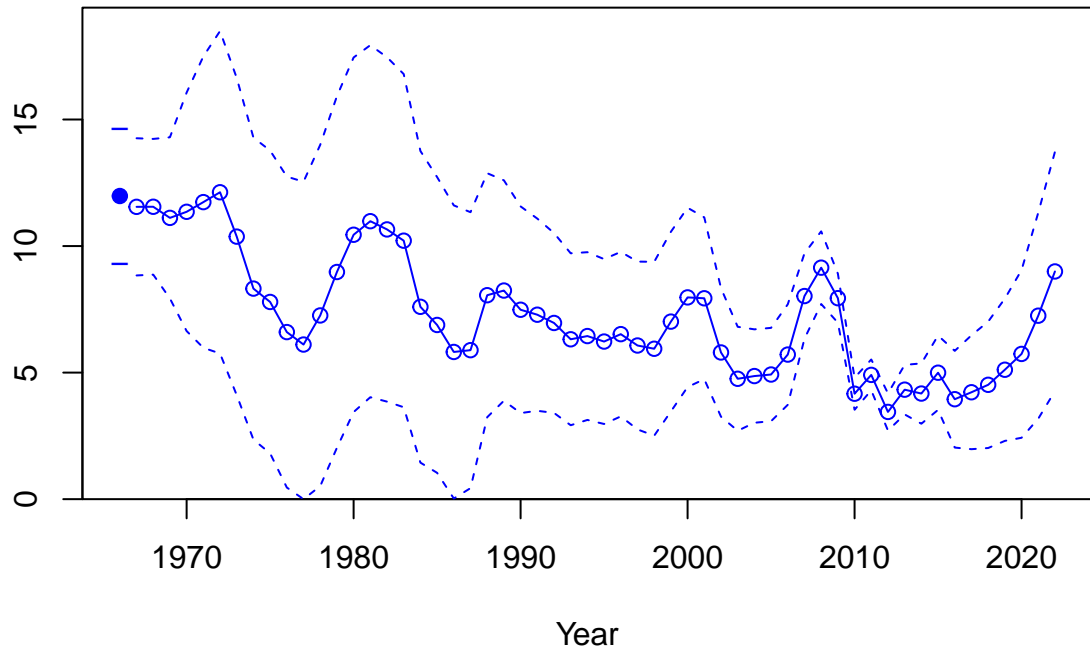




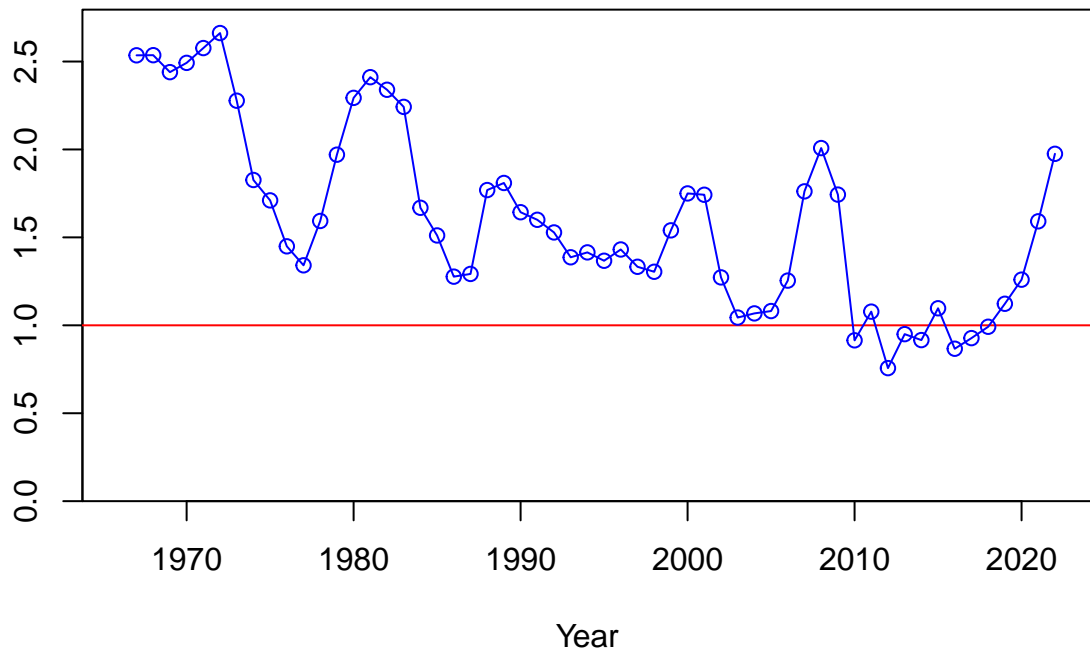




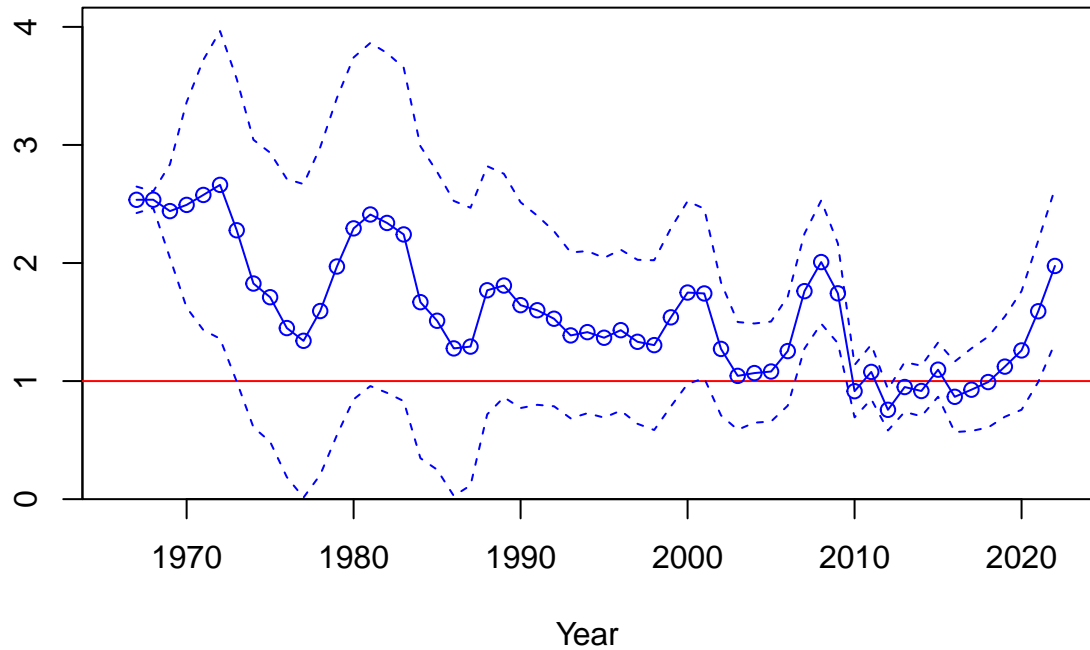
Spawning biomass (mt)

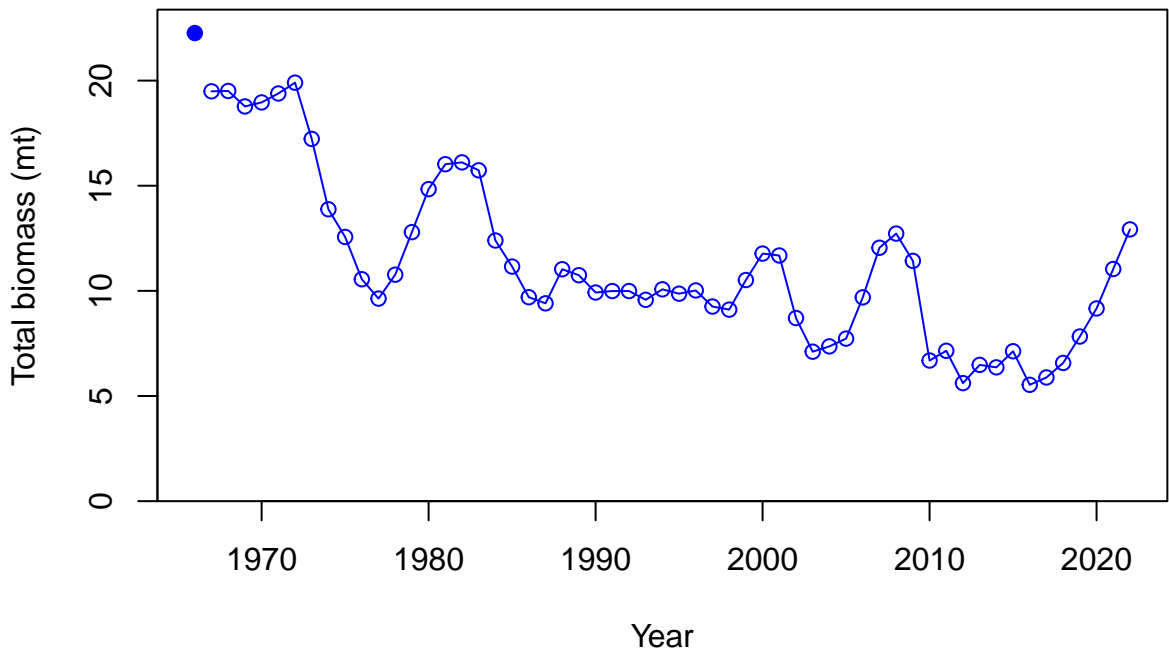


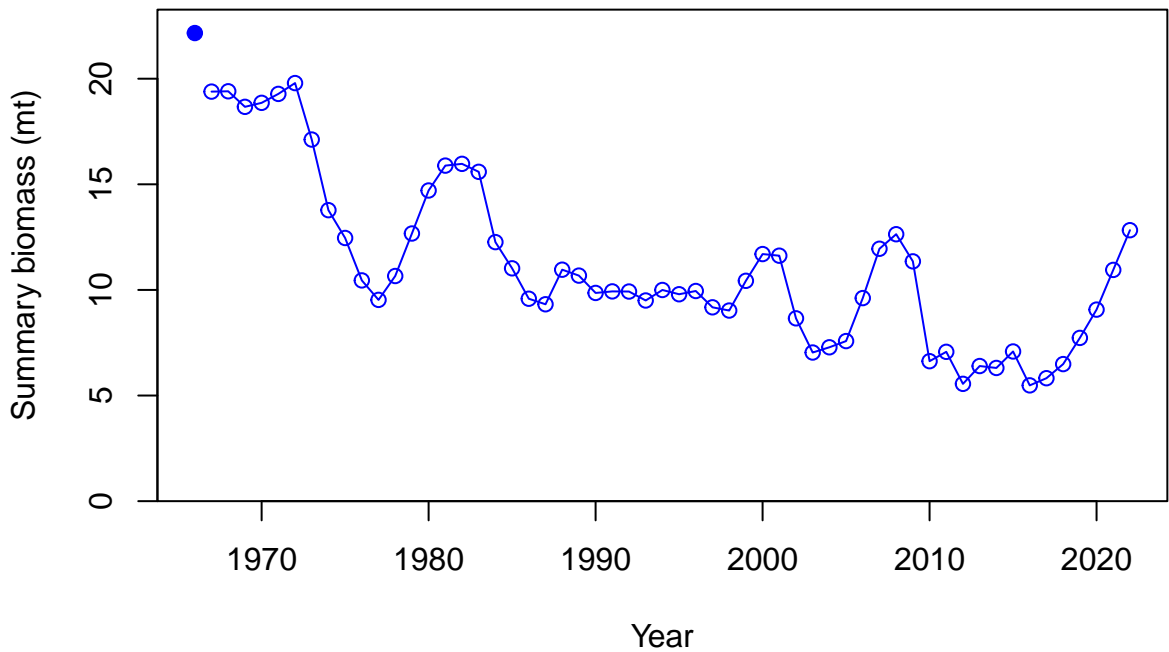
Relative spawning biomass: B/B_{MSY}



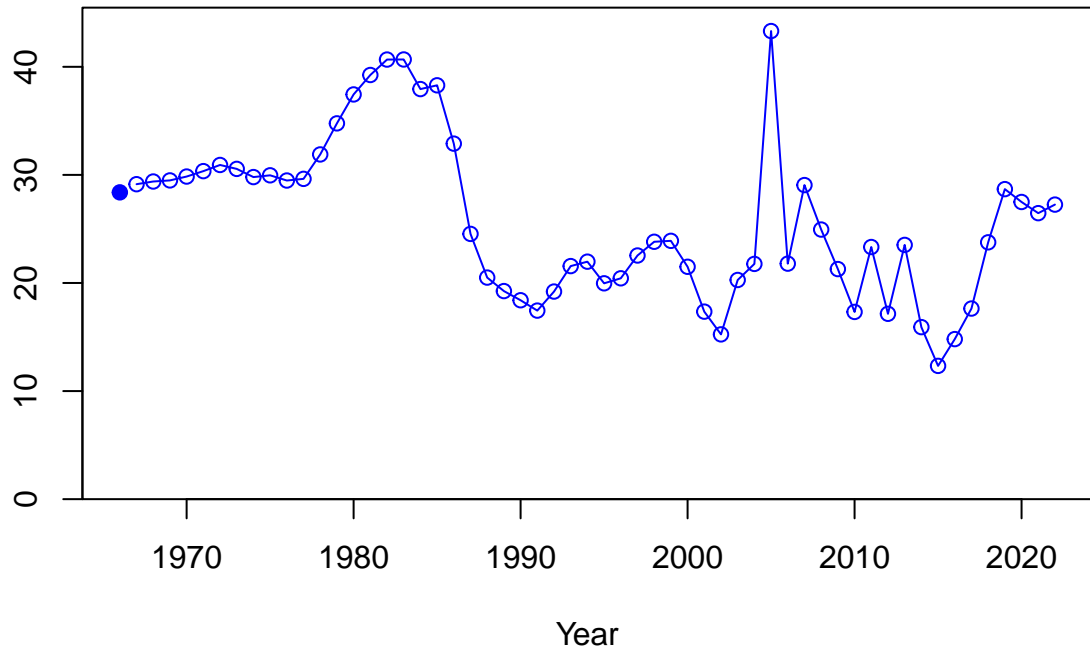
Relative spawning biomass: B/B_{MSY}



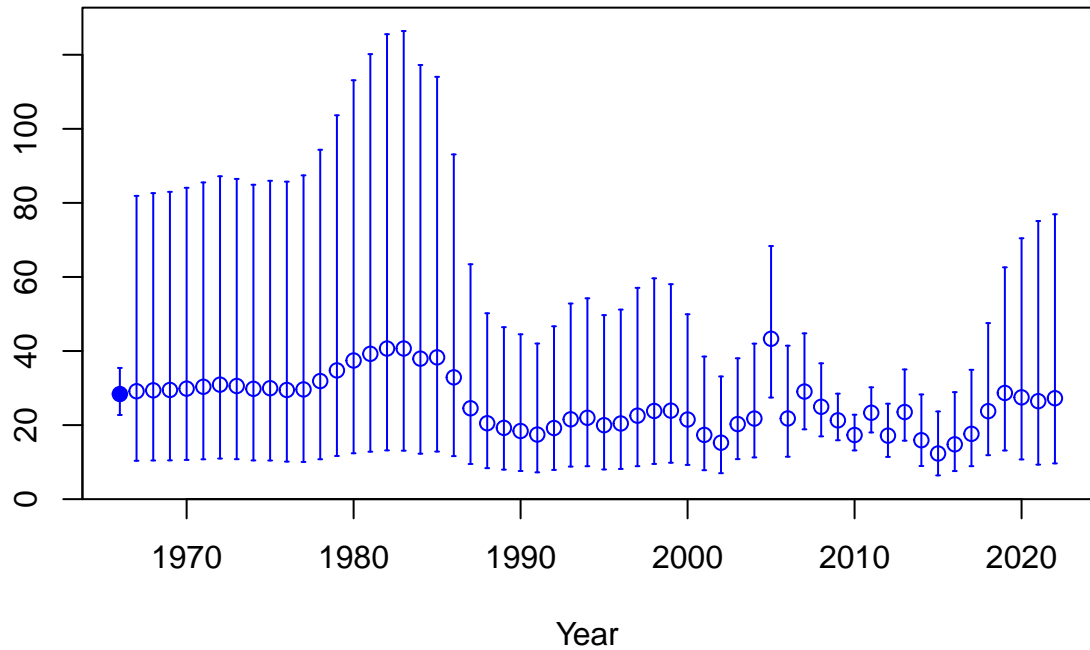




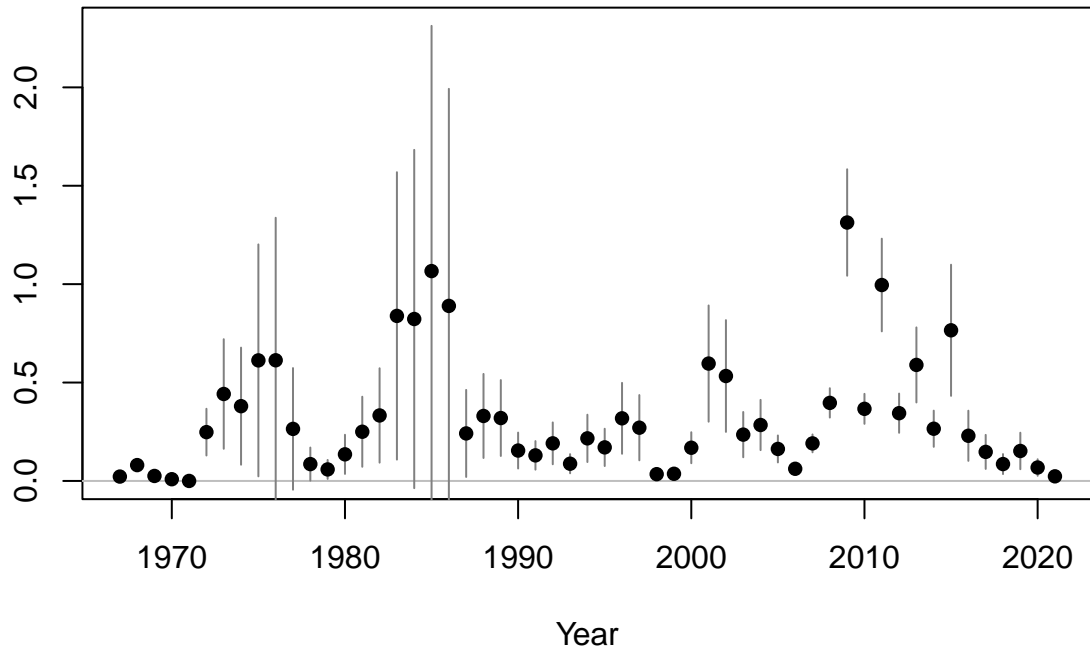
Age-0 recruits (1,000s)



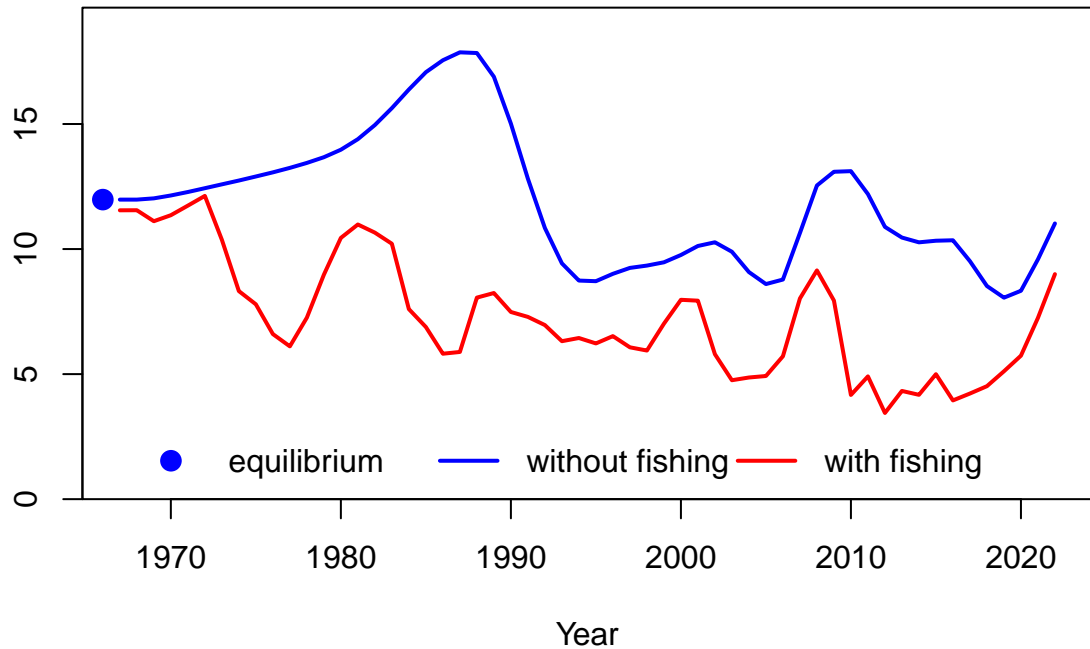
Age-0 recruits (1,000s)



Summary Fishing Mortality



Spawning biomass (mt)



Log recruitment deviation

0.6
0.4
0.2
0.0
-0.2
-0.4

1970

1980

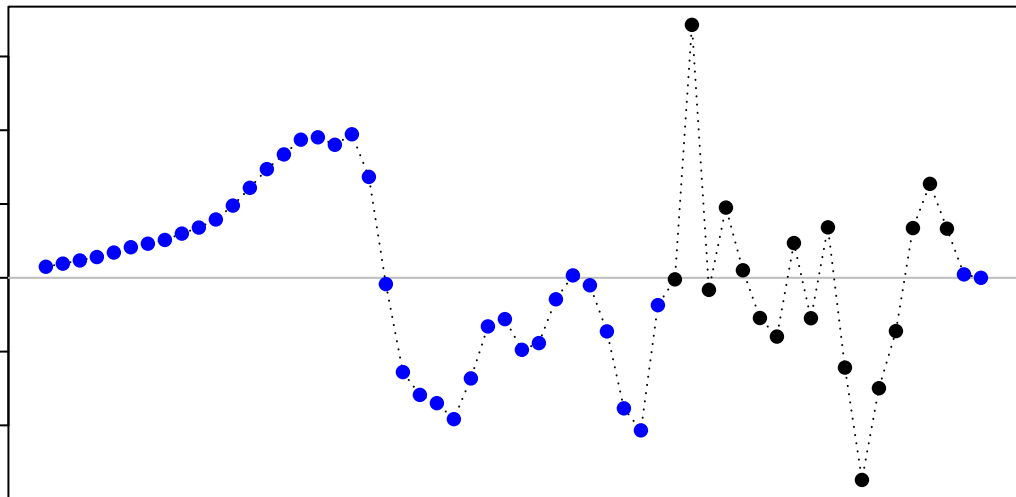
1990

2000

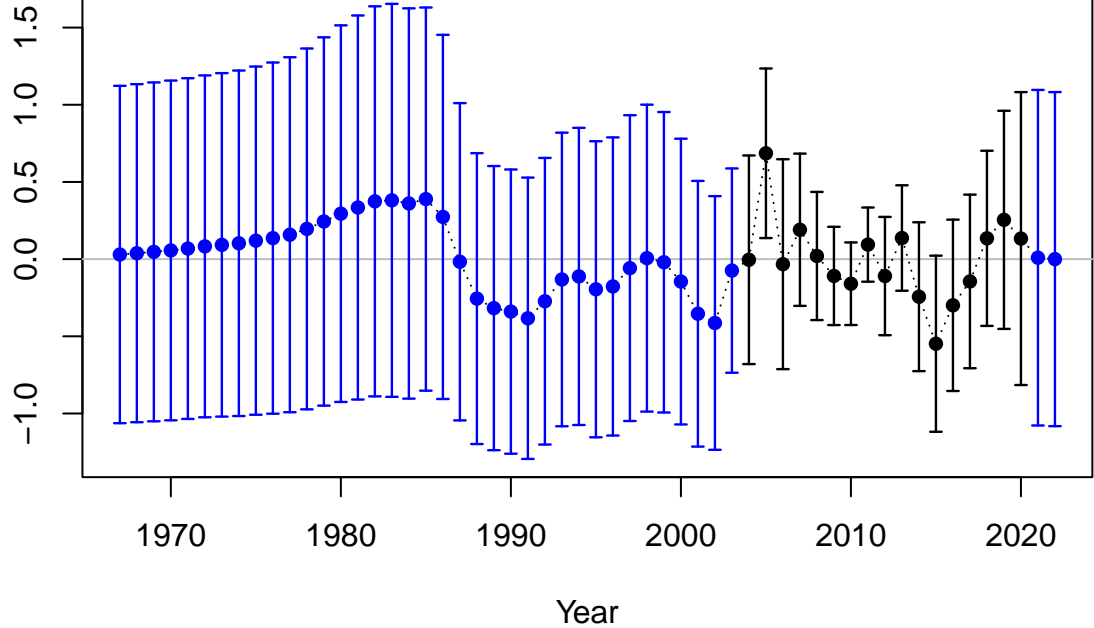
2010

2020

Year

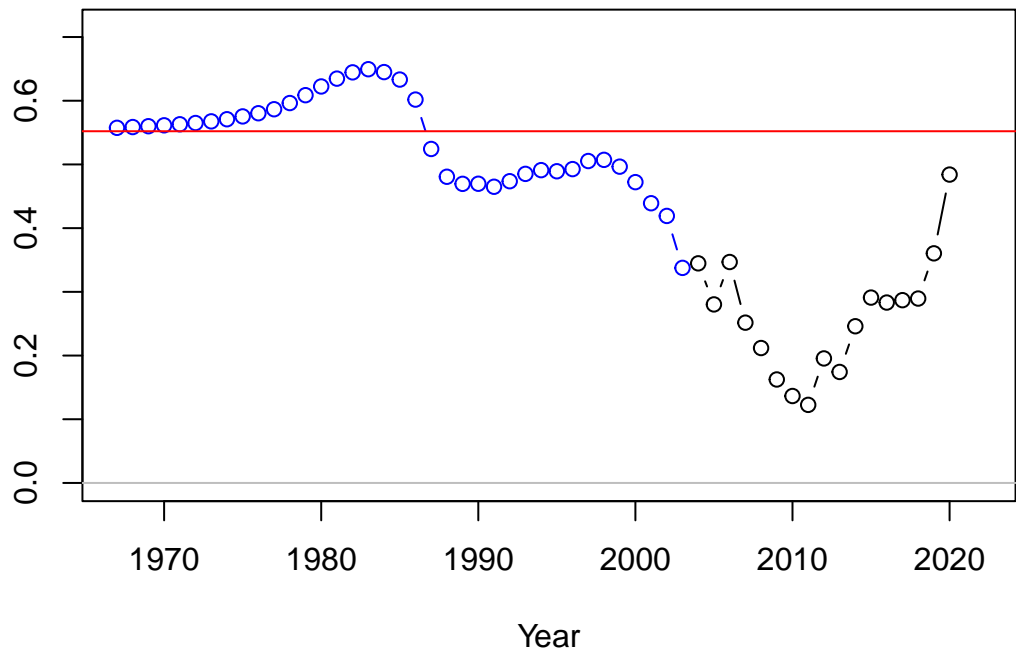


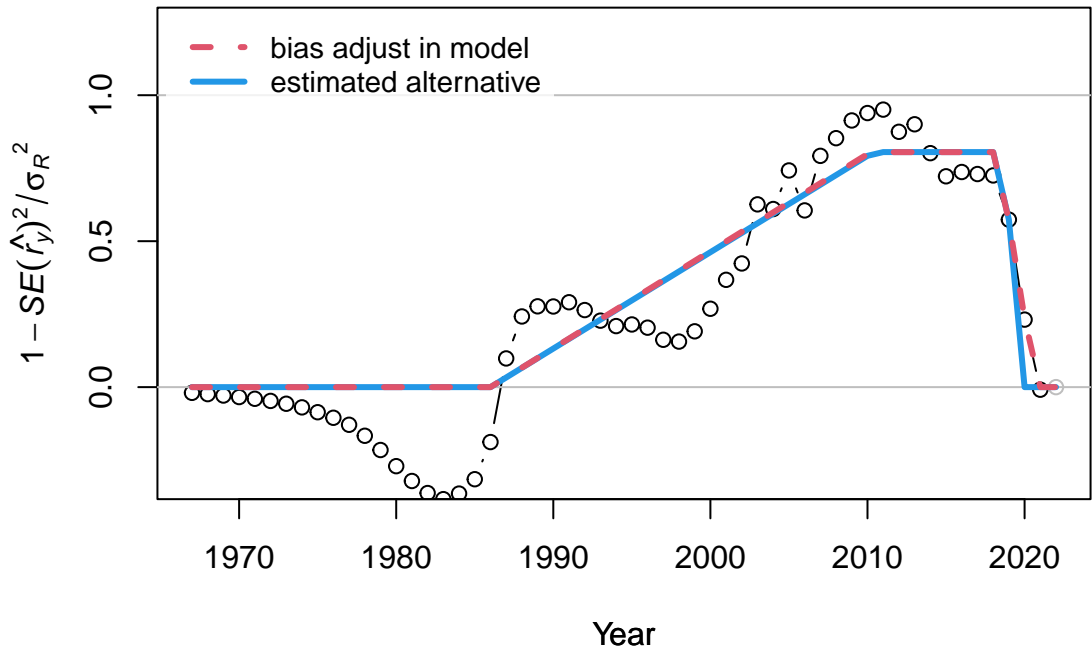
Log recruitment deviation

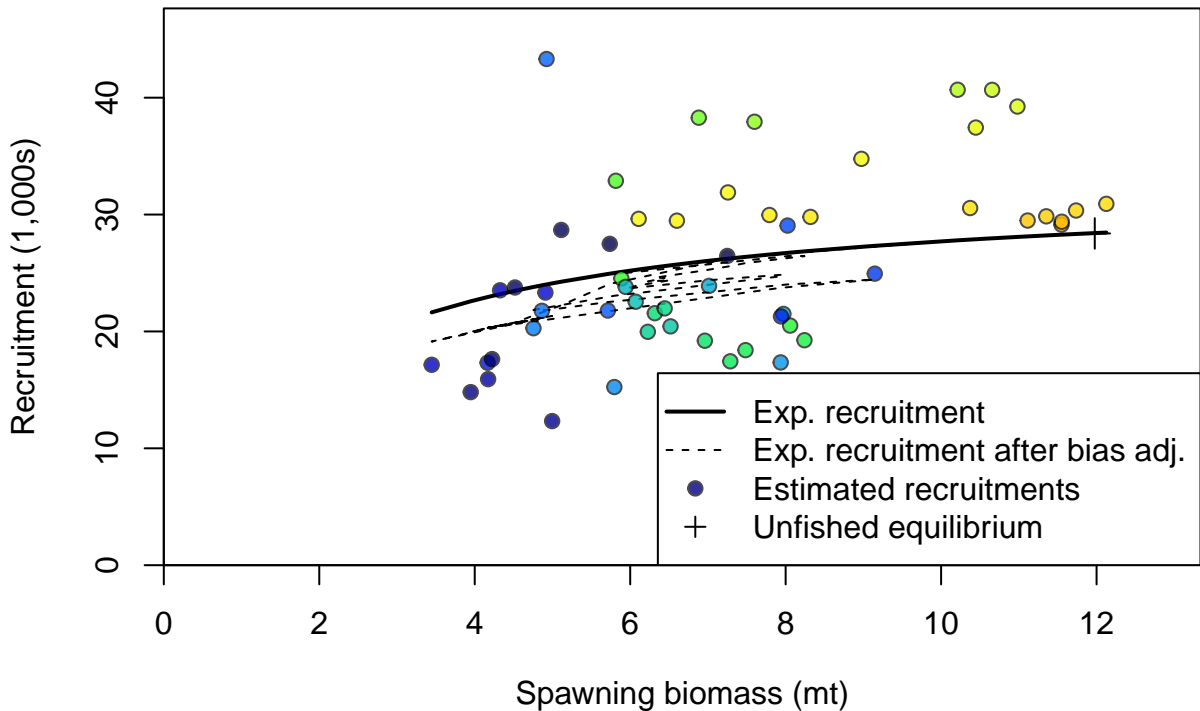


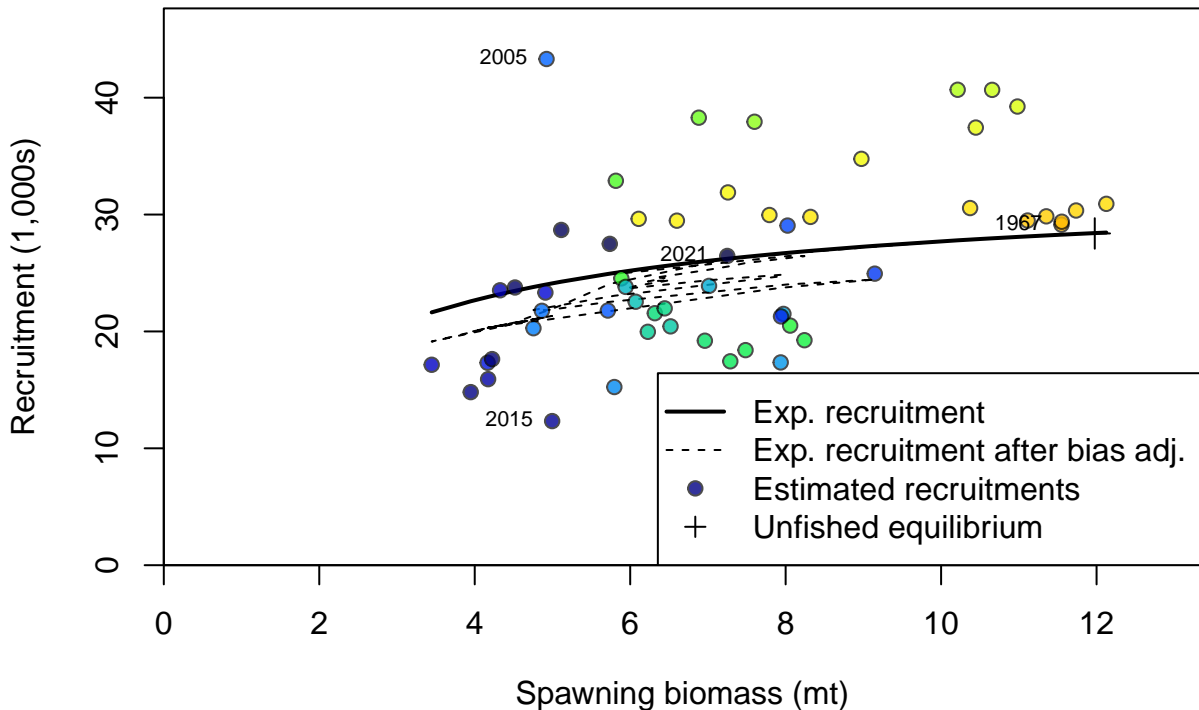
Recruitment deviation variance

Asymptotic standard error estimate

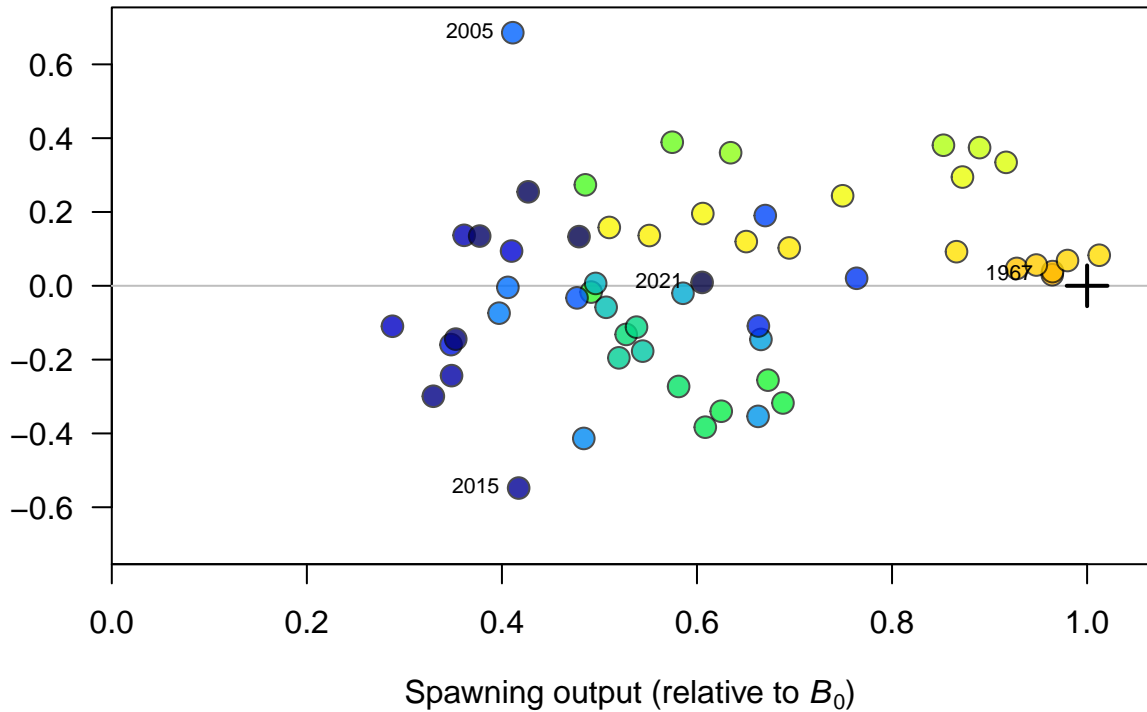


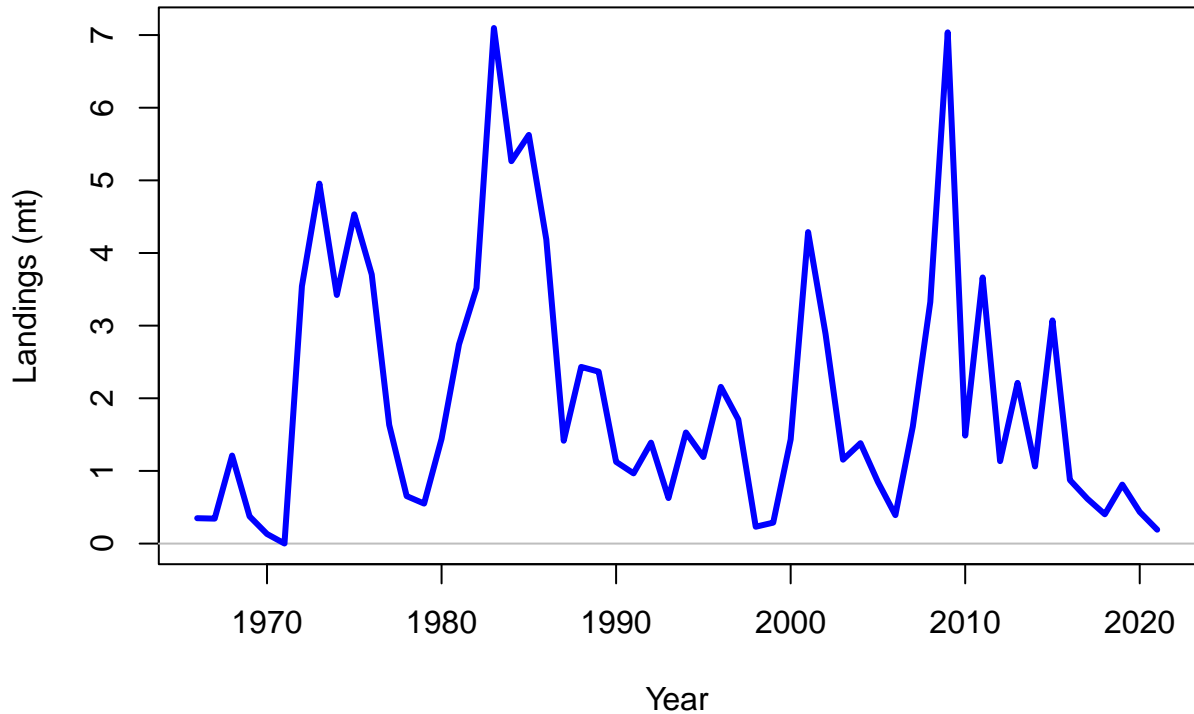


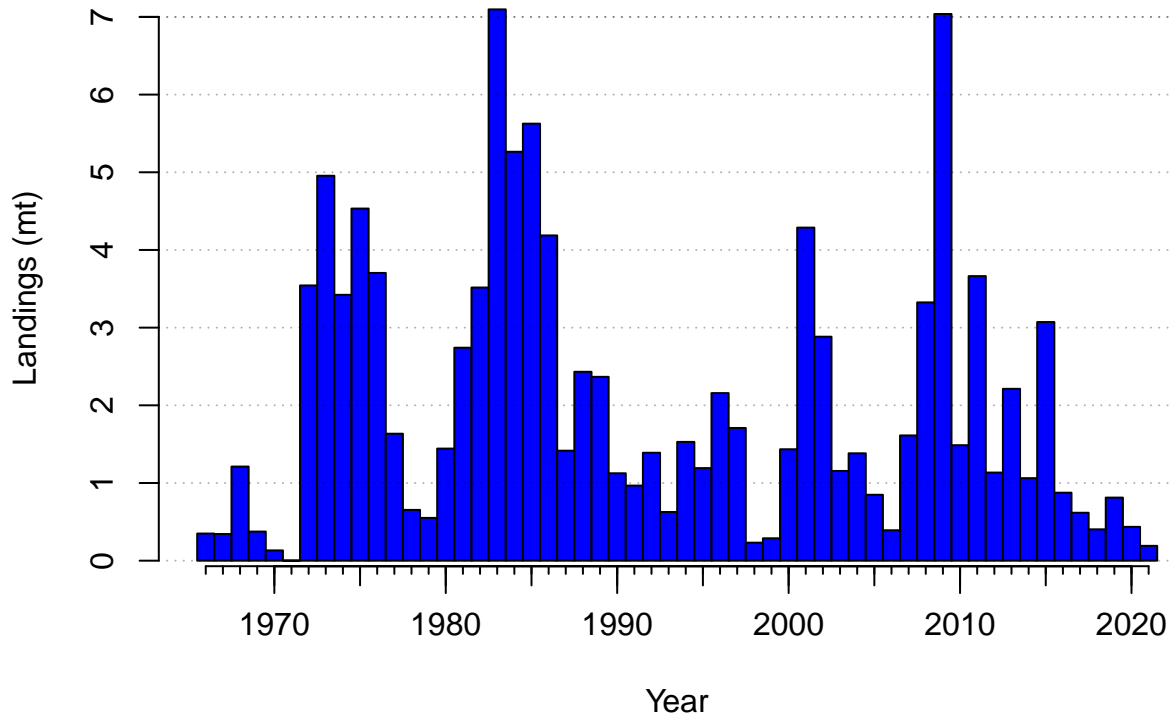


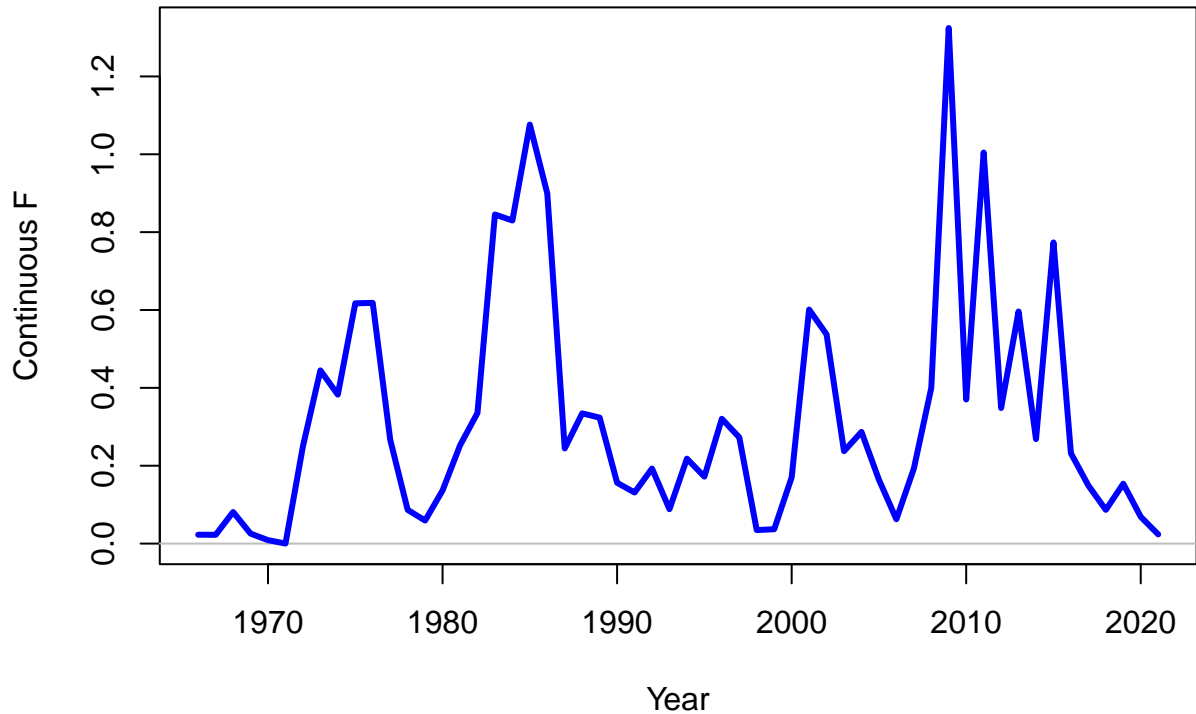


Log recruitment deviation

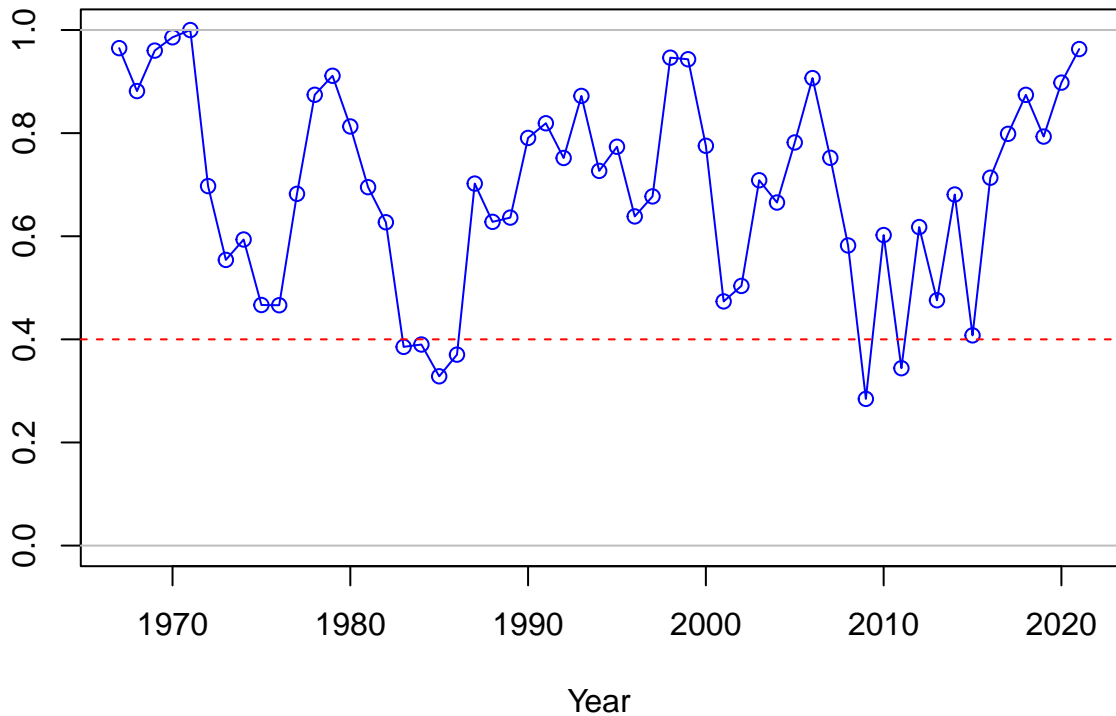




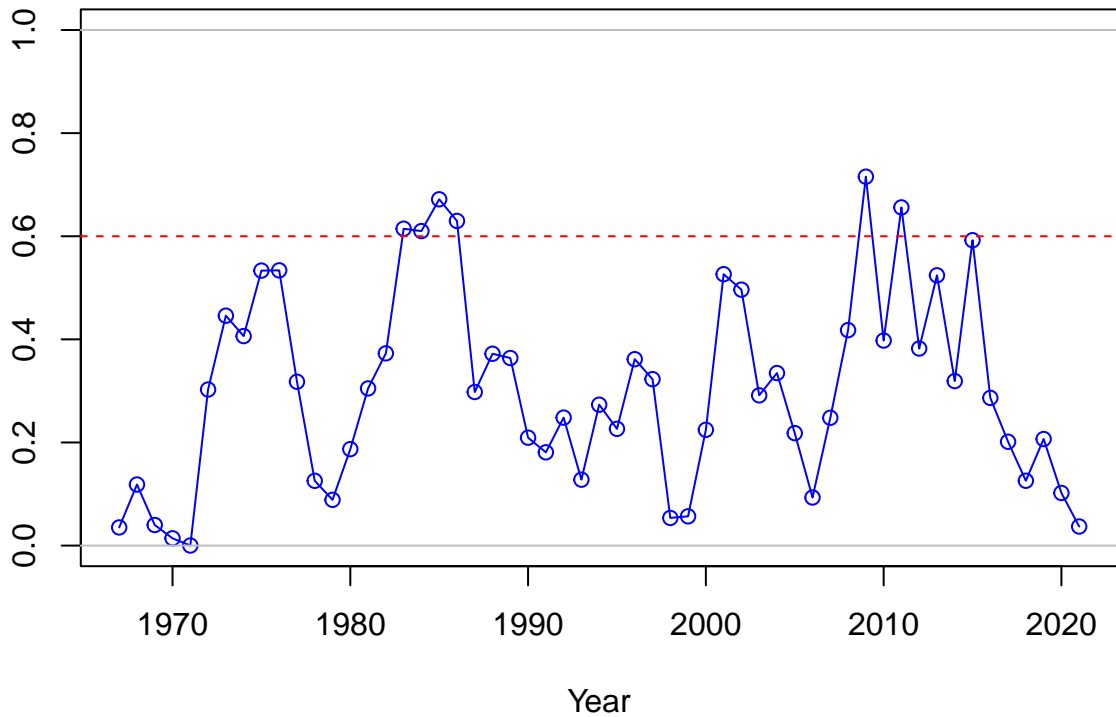




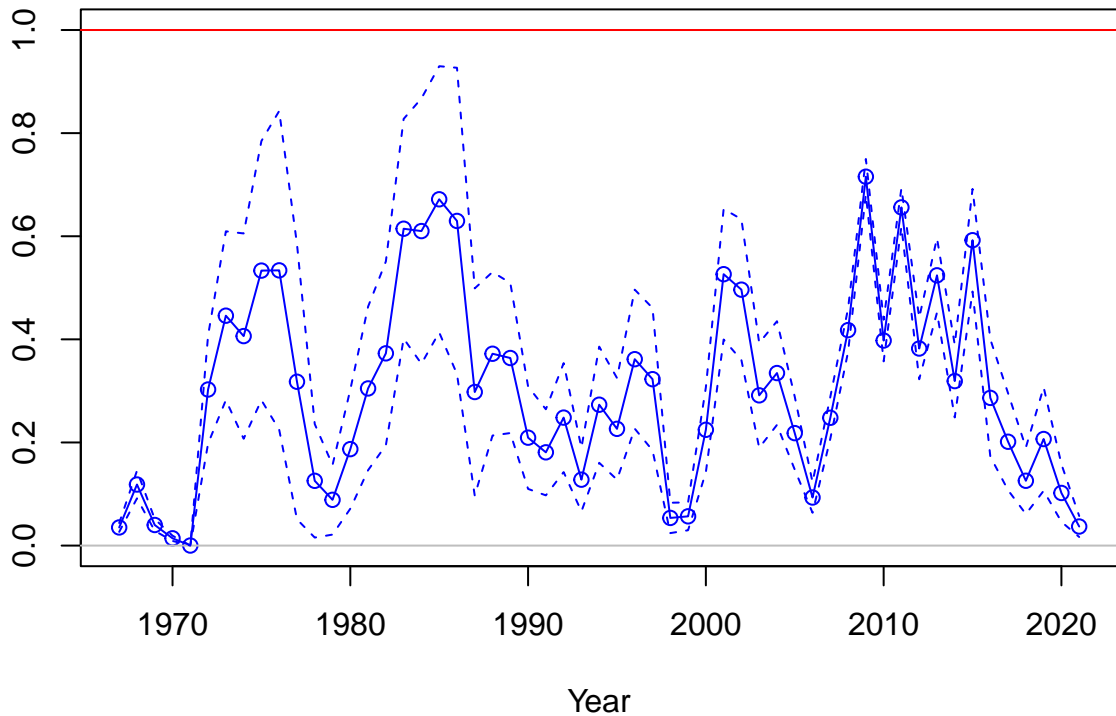
SPR



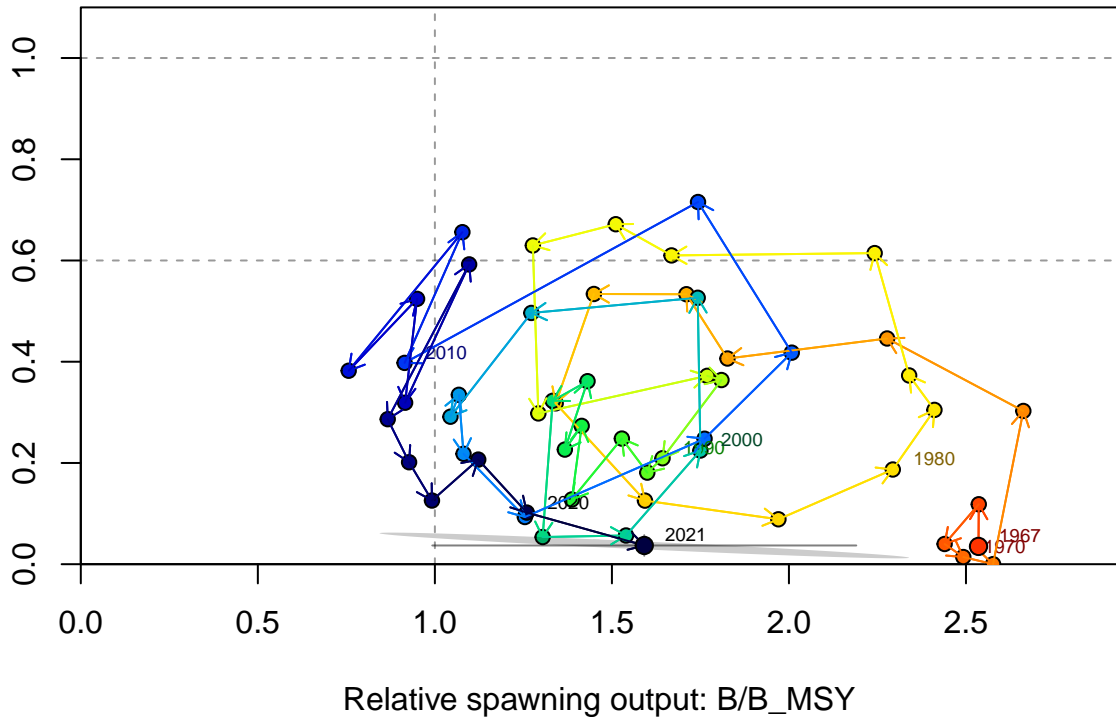
1-SPR



Fishing intensity: 1-SPR



Fishing intensity: 1-SPR



Index

80
60
40
20
0

1990

1995

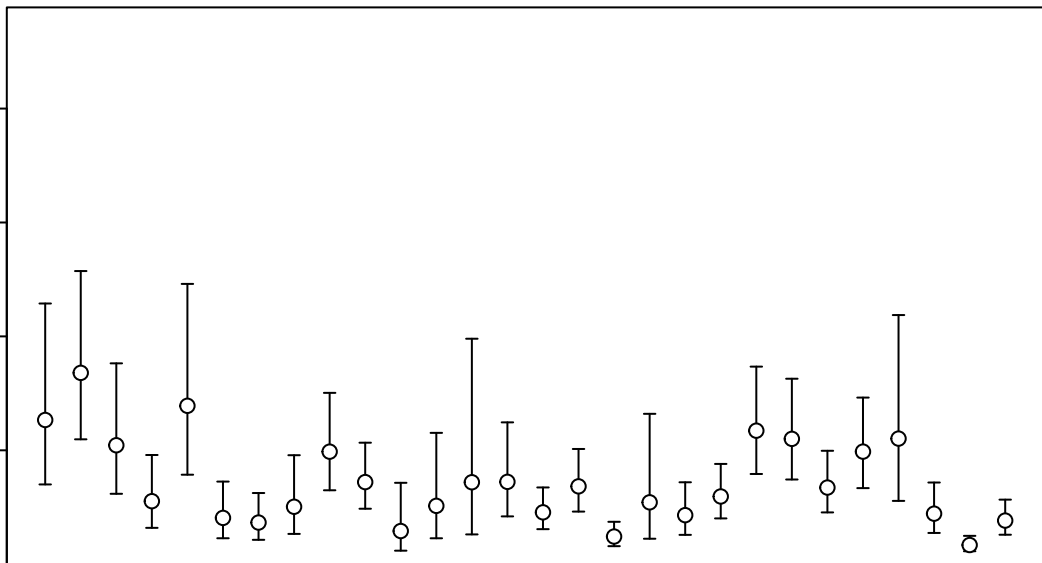
2000

2005

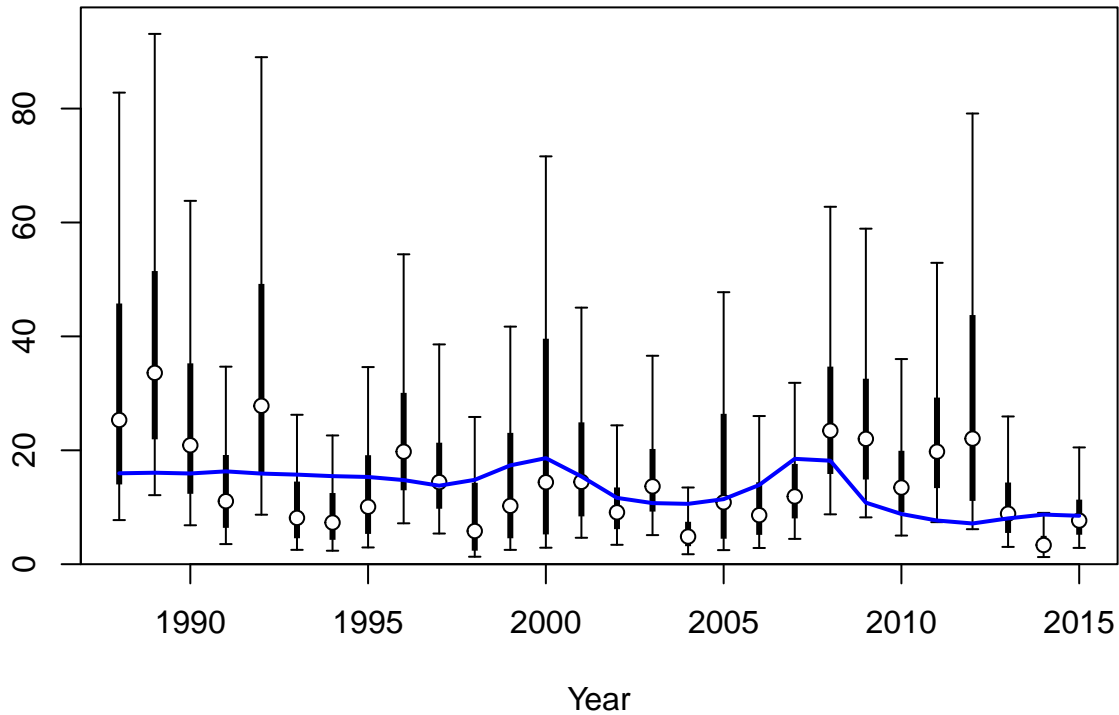
2010

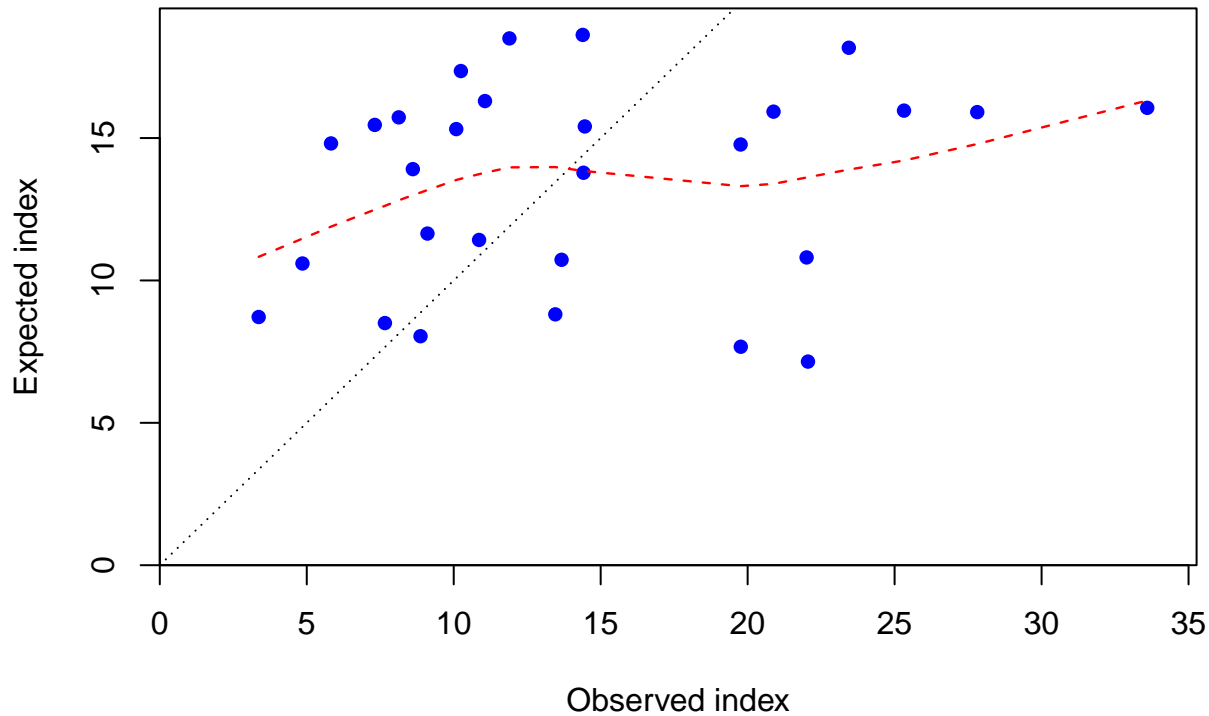
2015

Year



Index





Log index

4
3
2
1

1990

1995

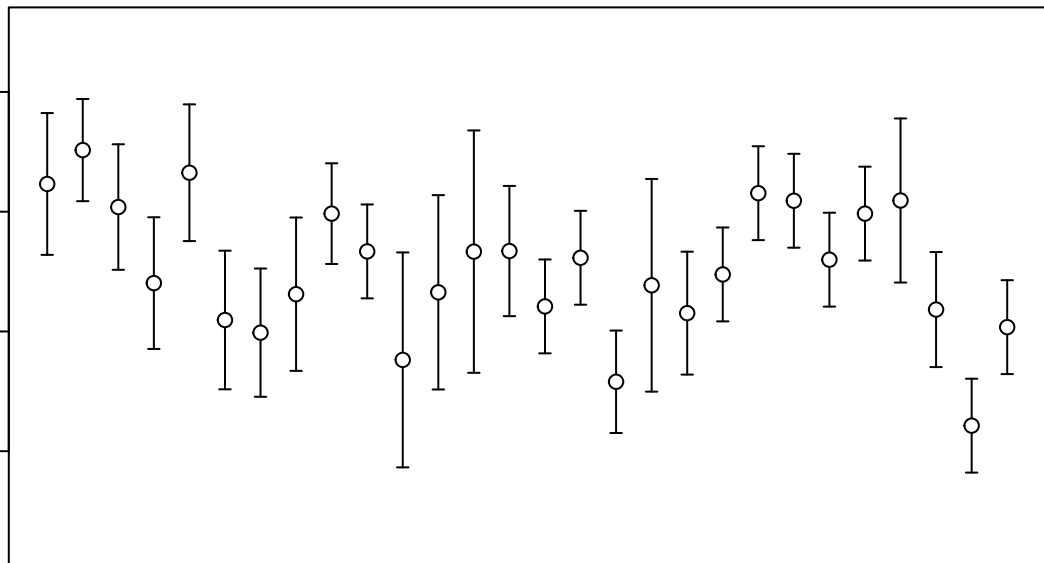
2000

2005

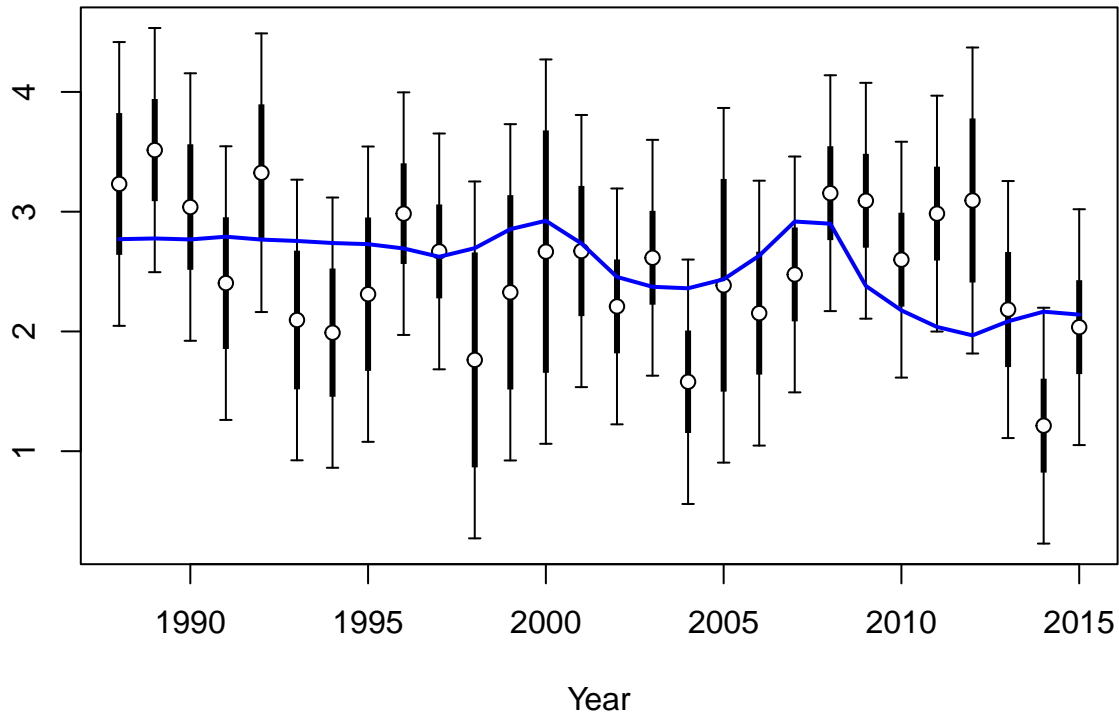
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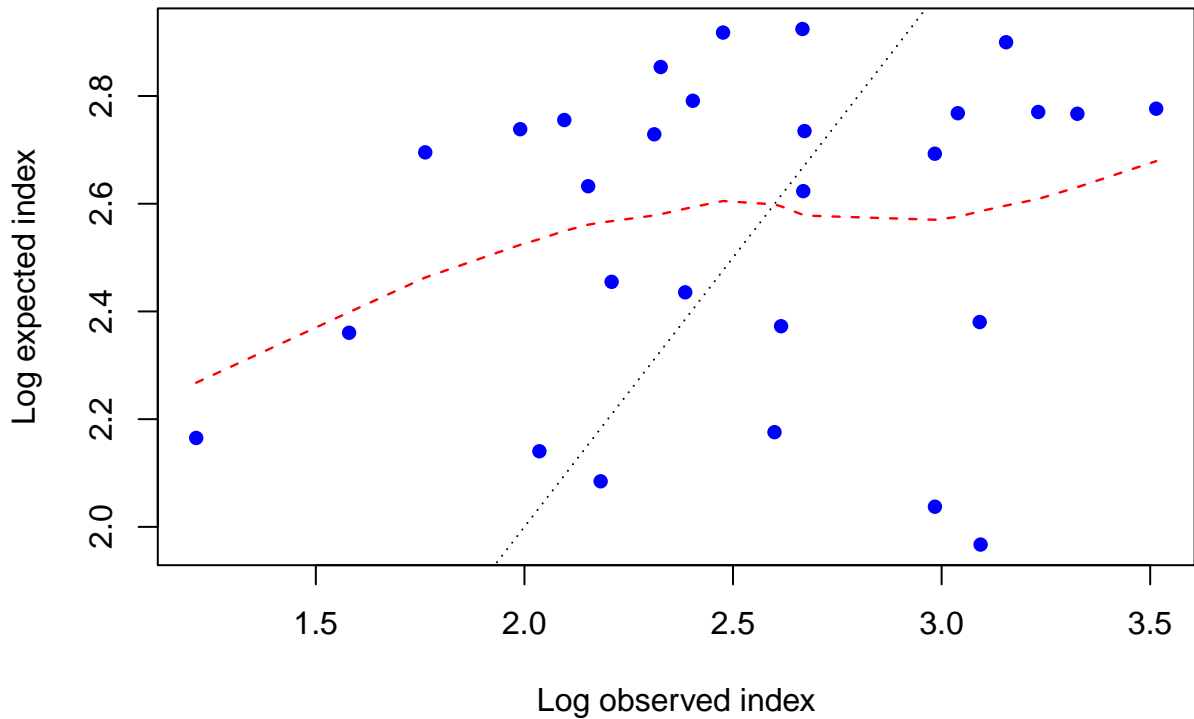
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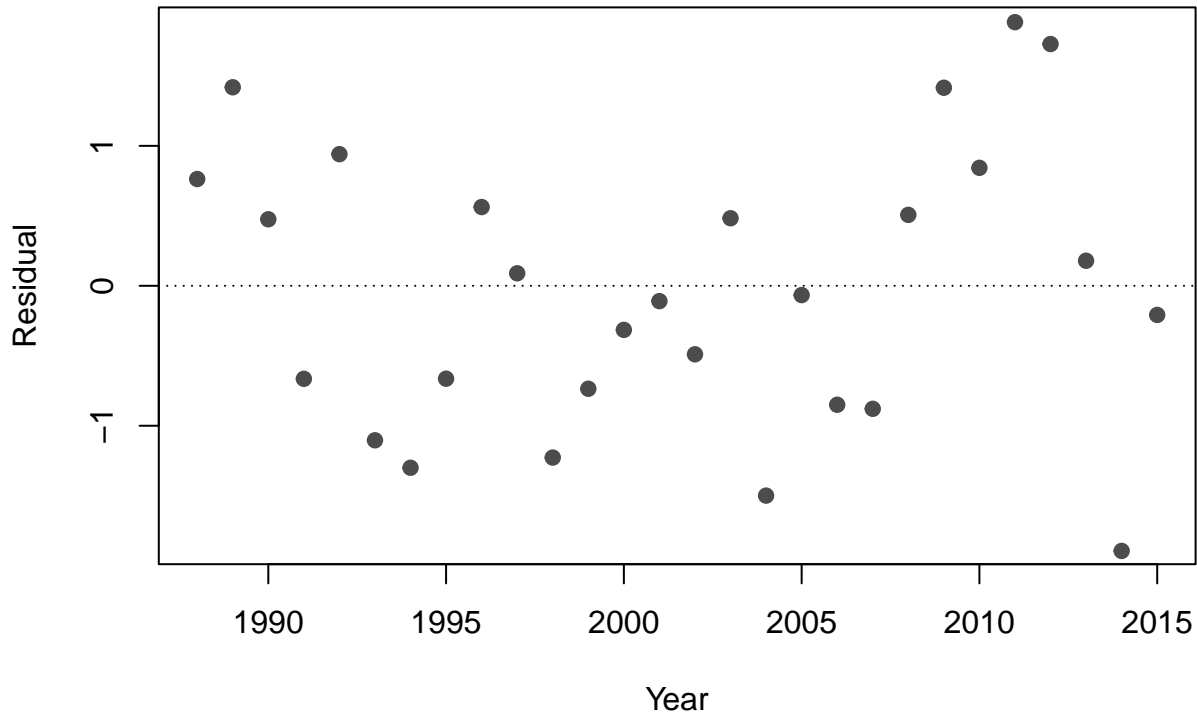
Year

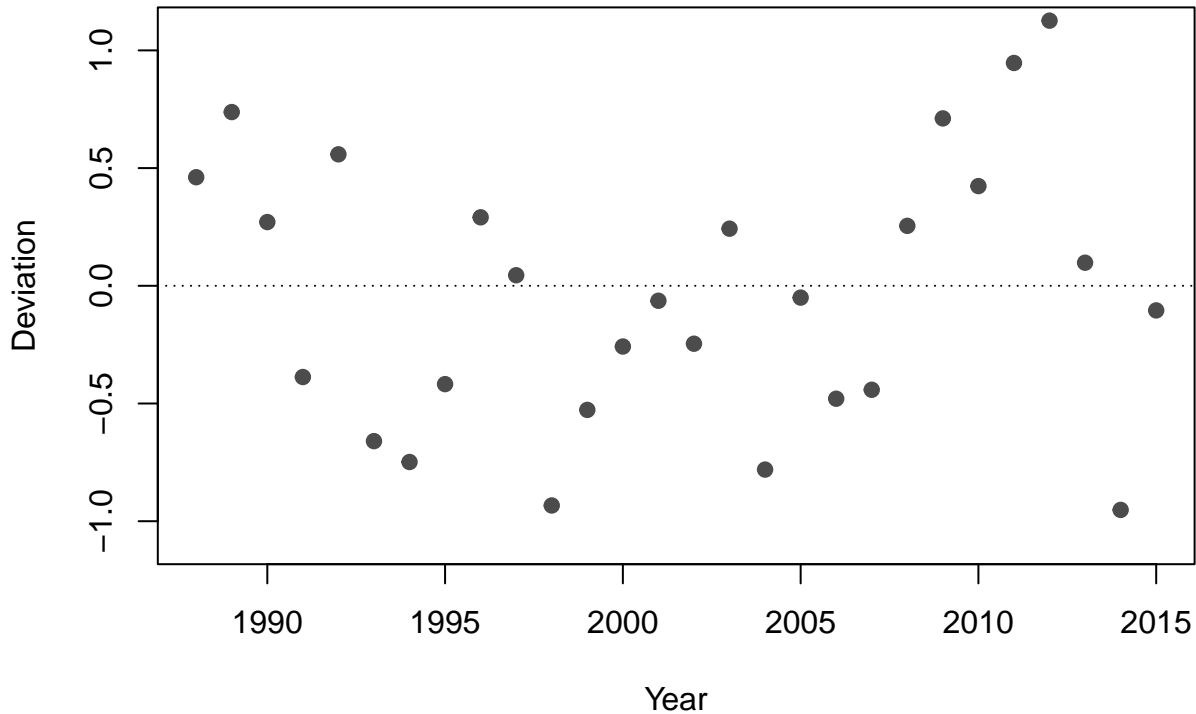


Log index

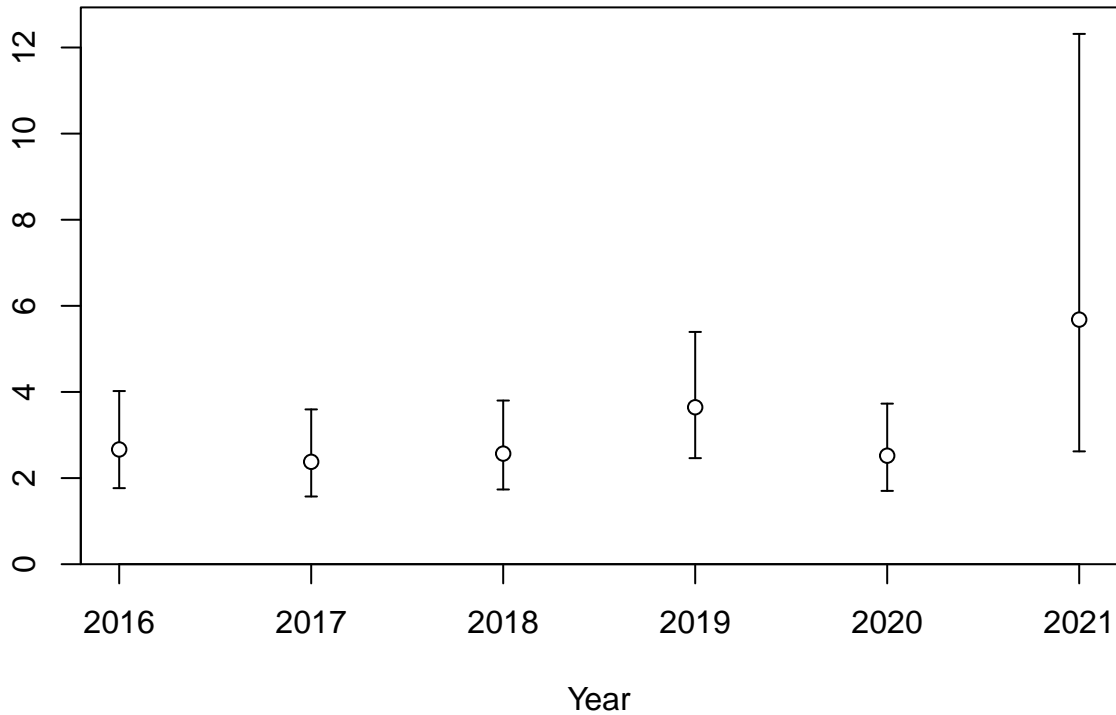




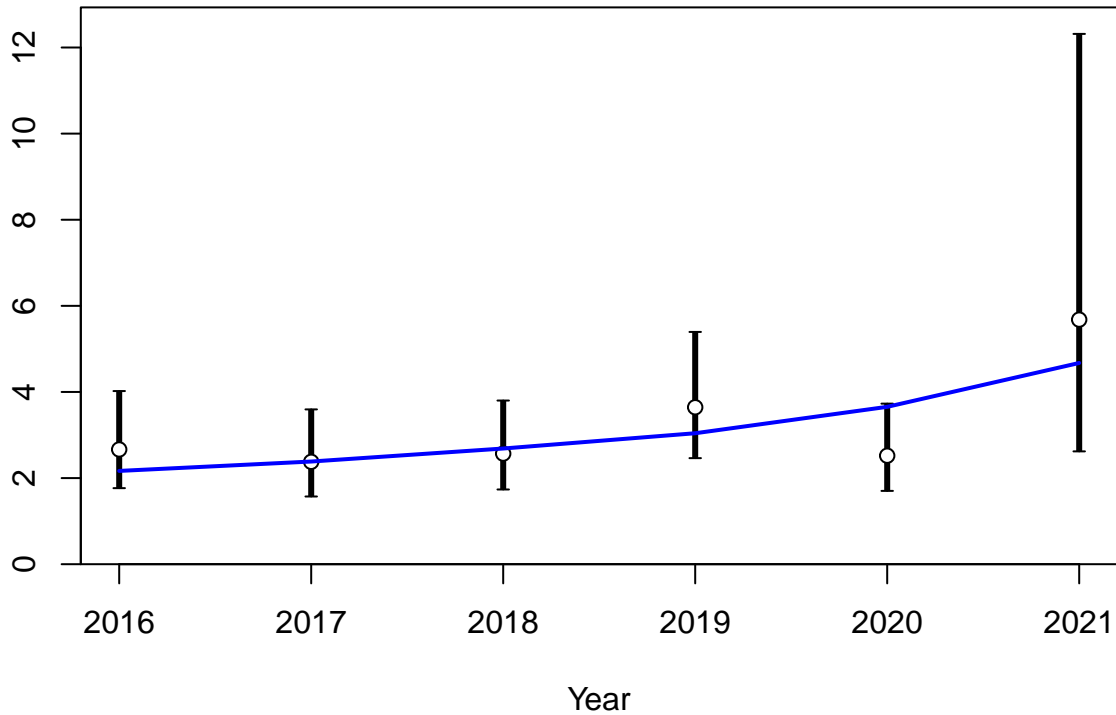


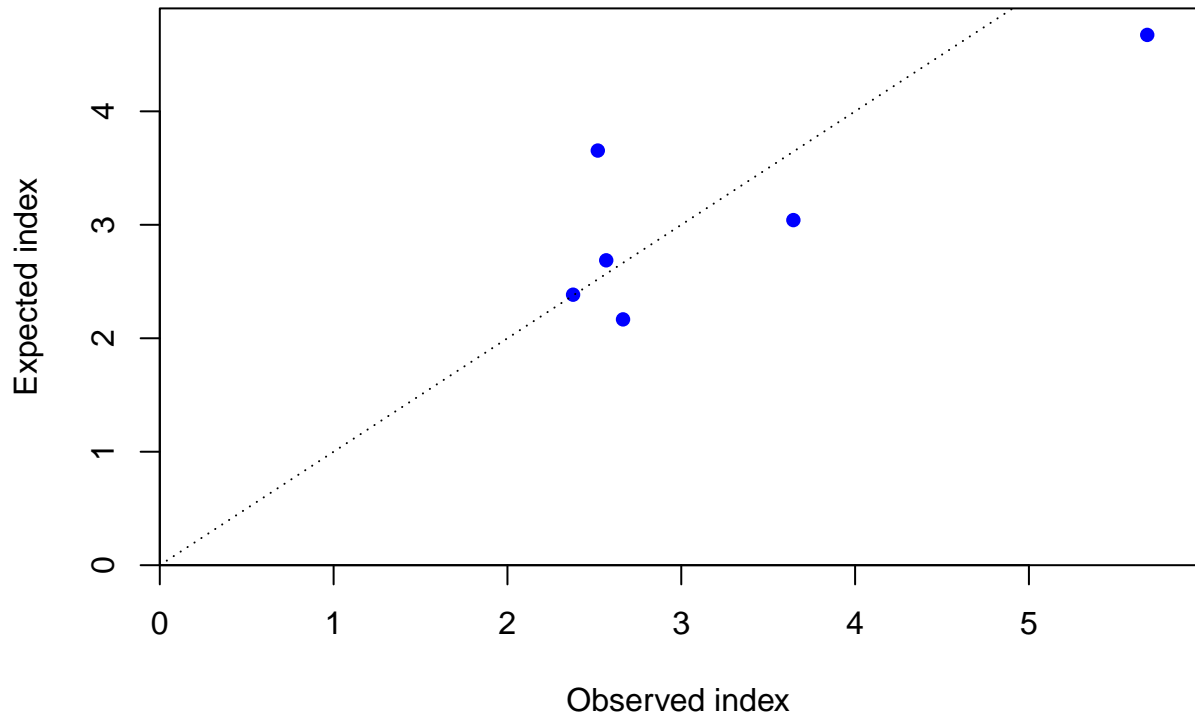


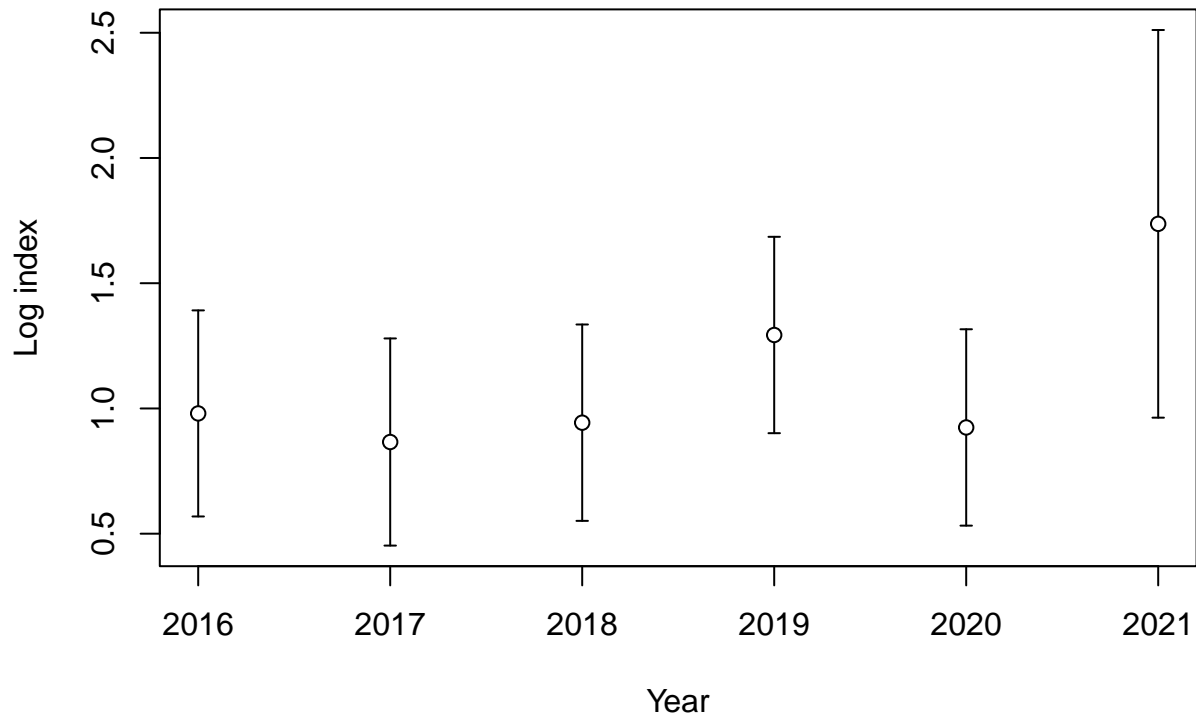
Index

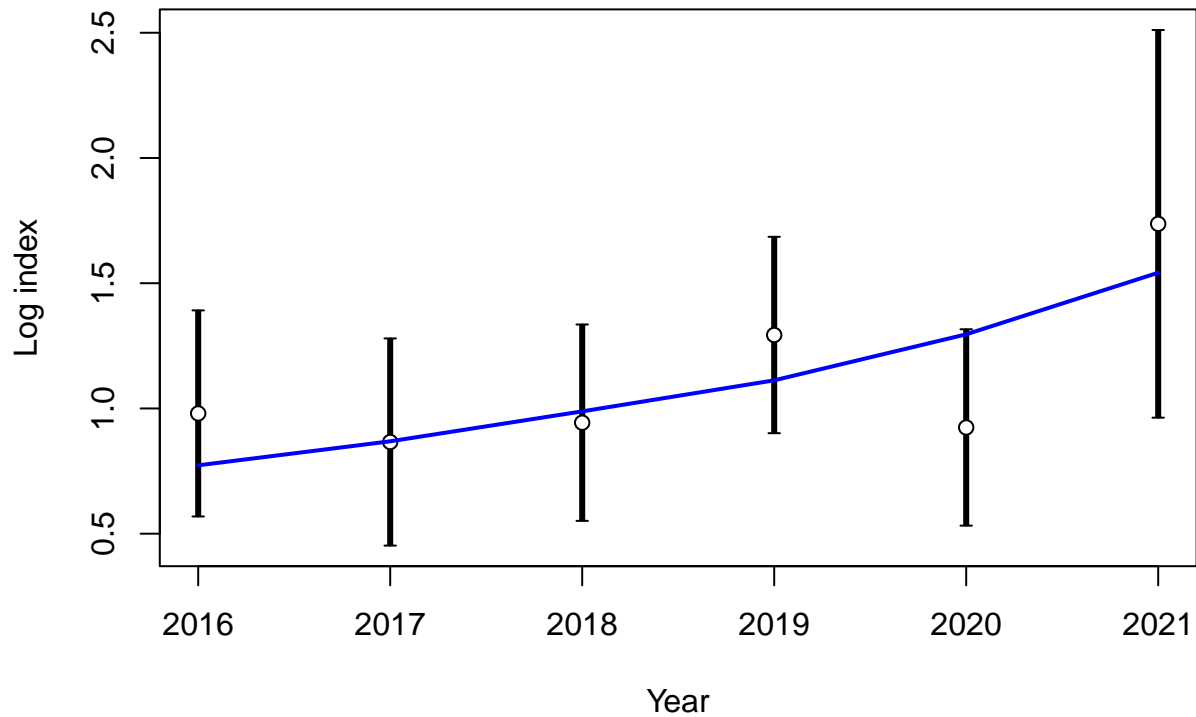


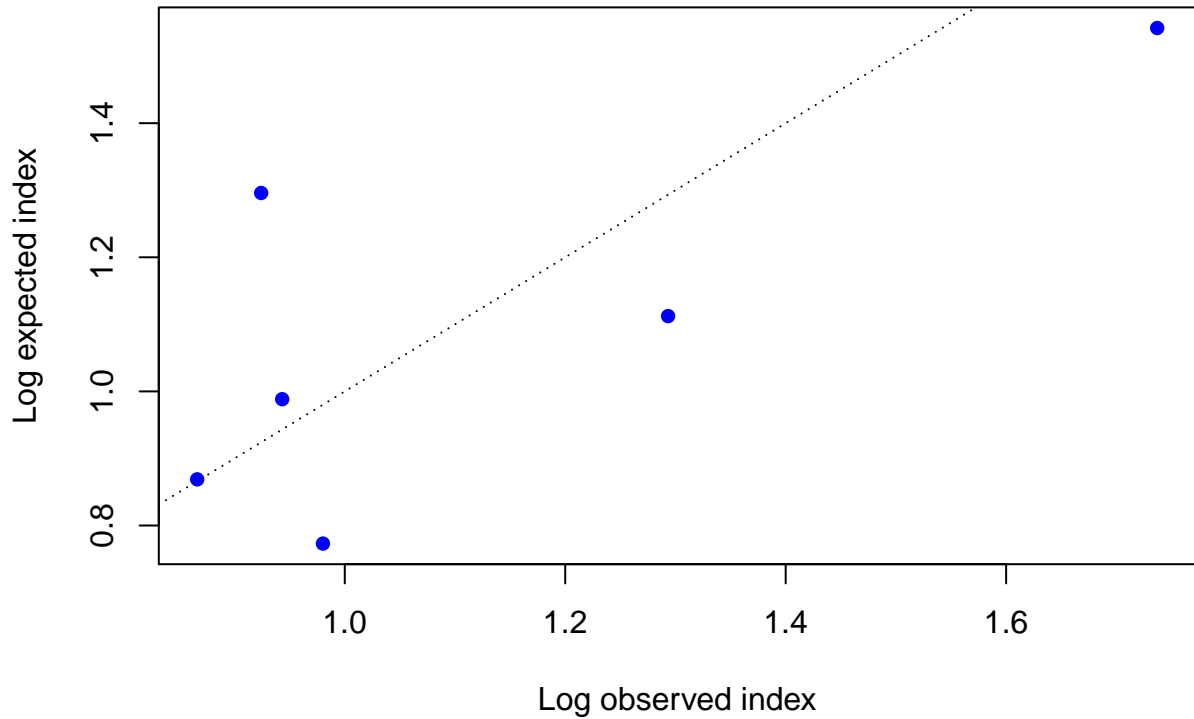
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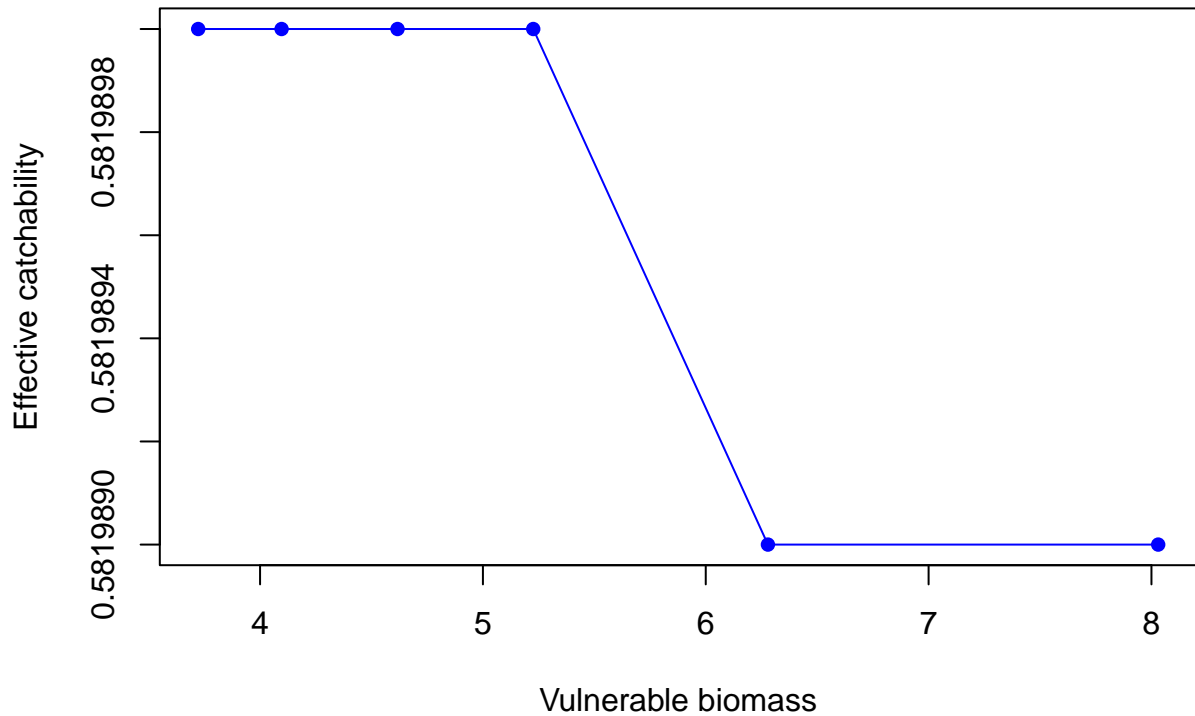


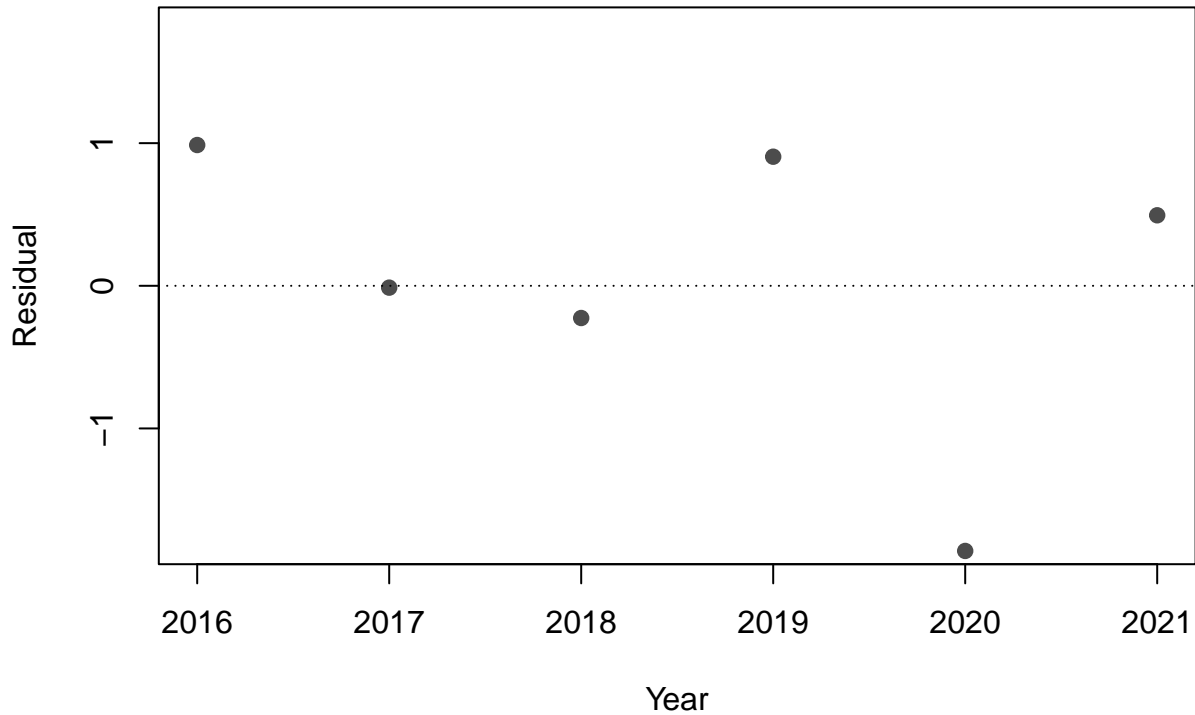


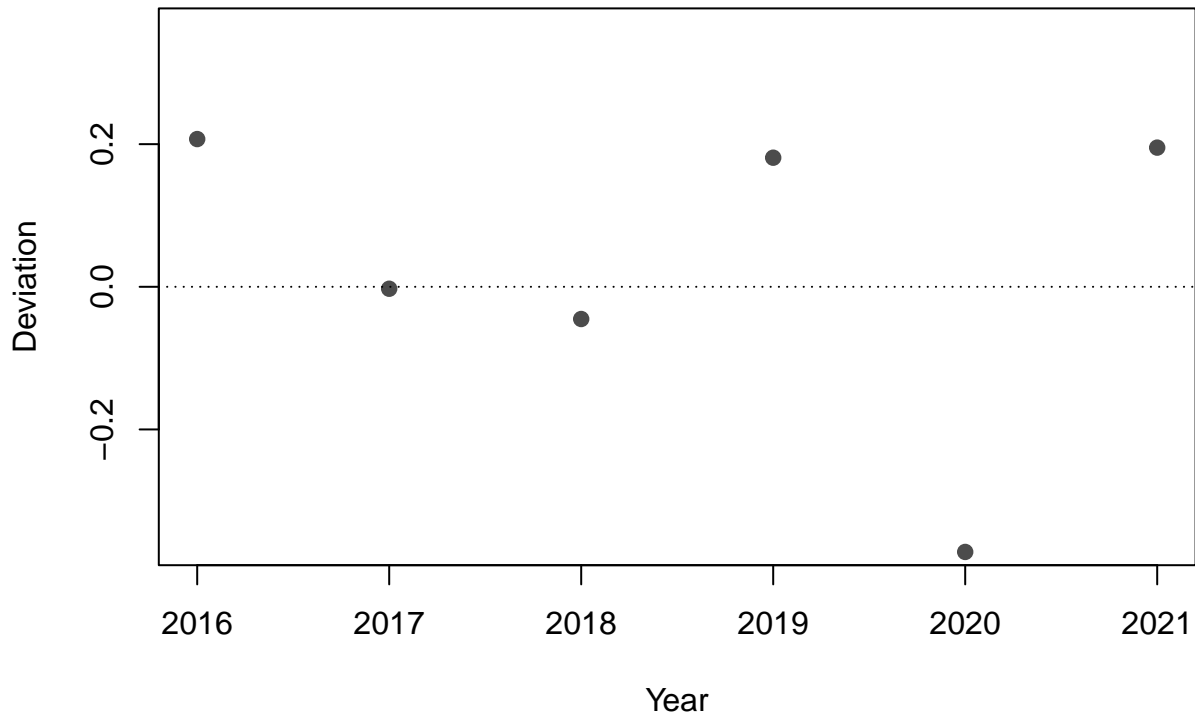


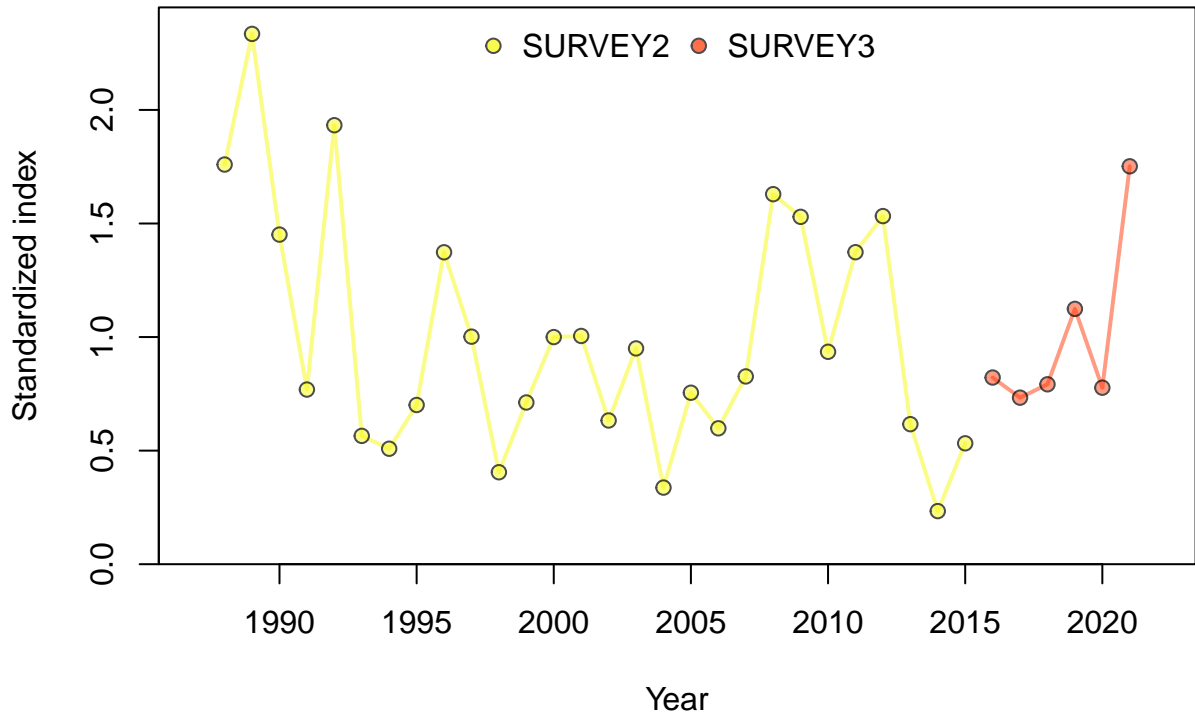




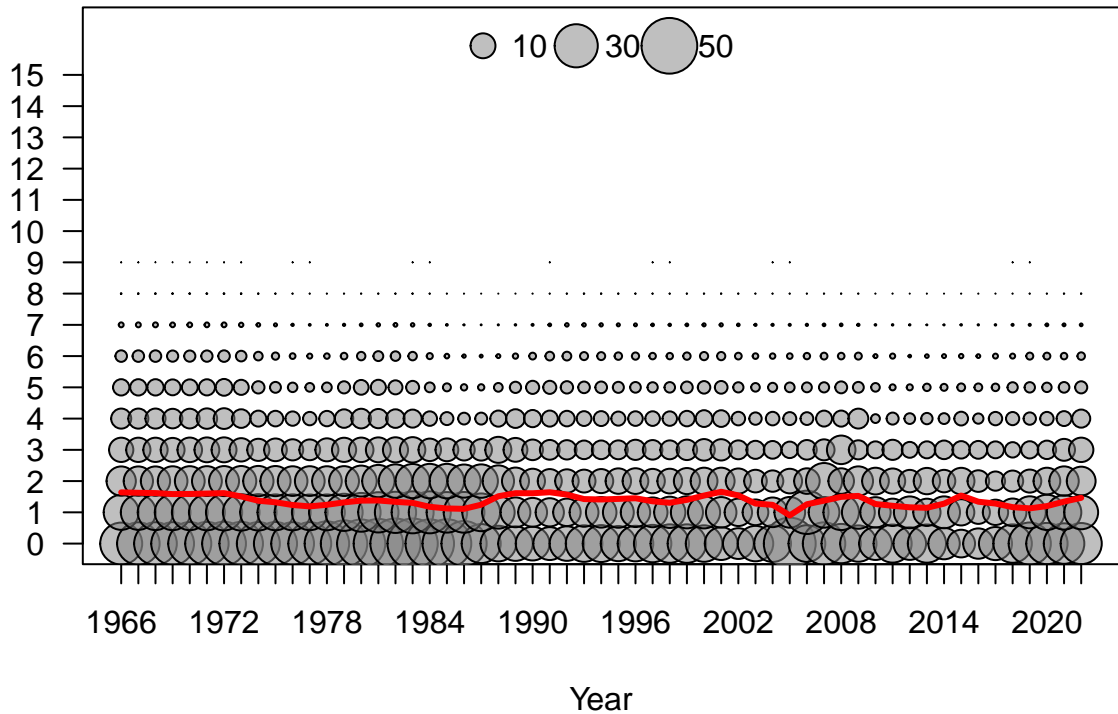


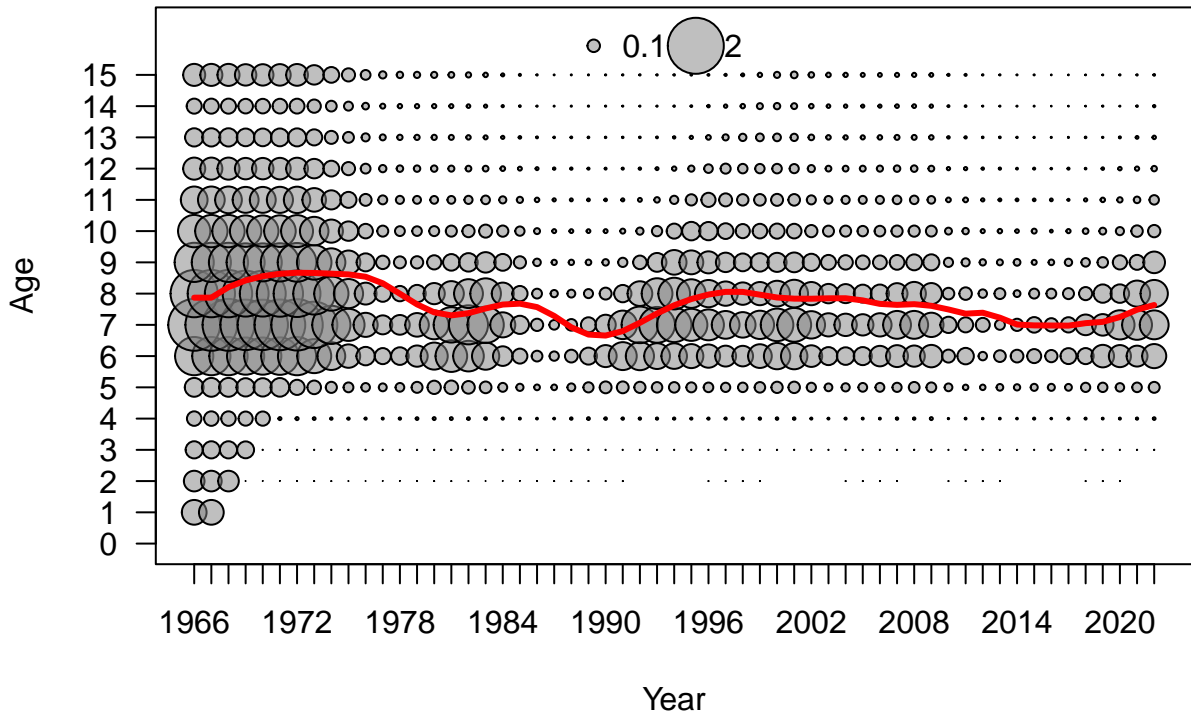


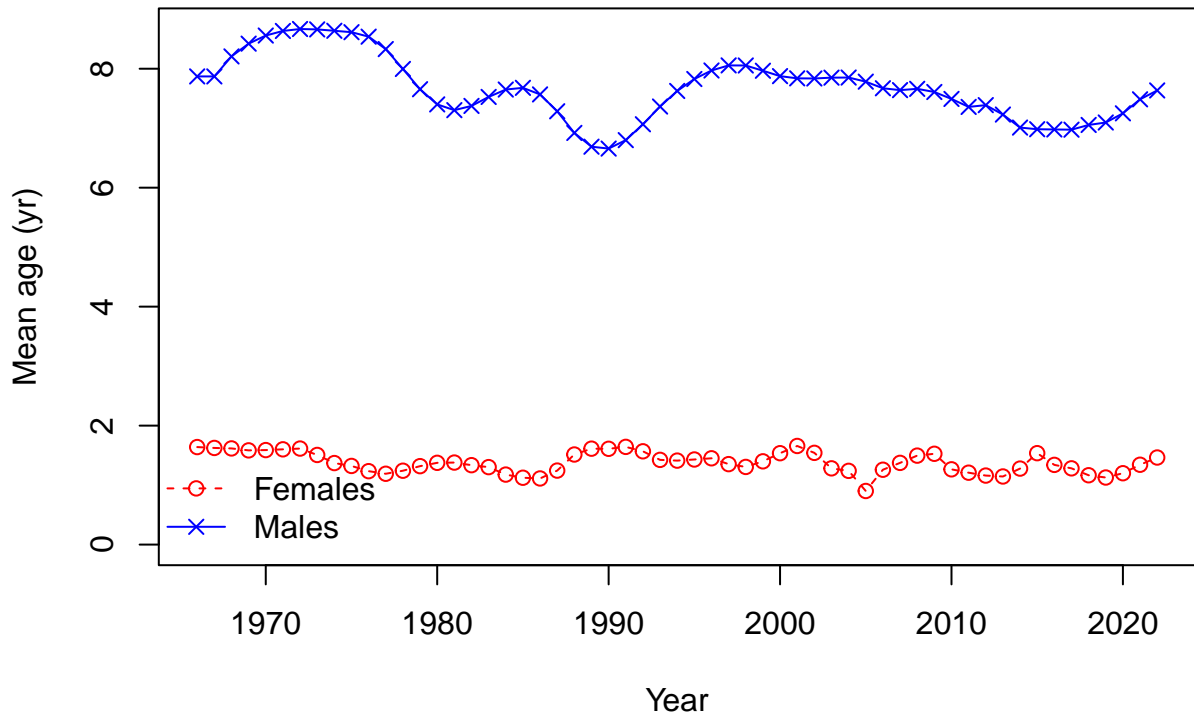


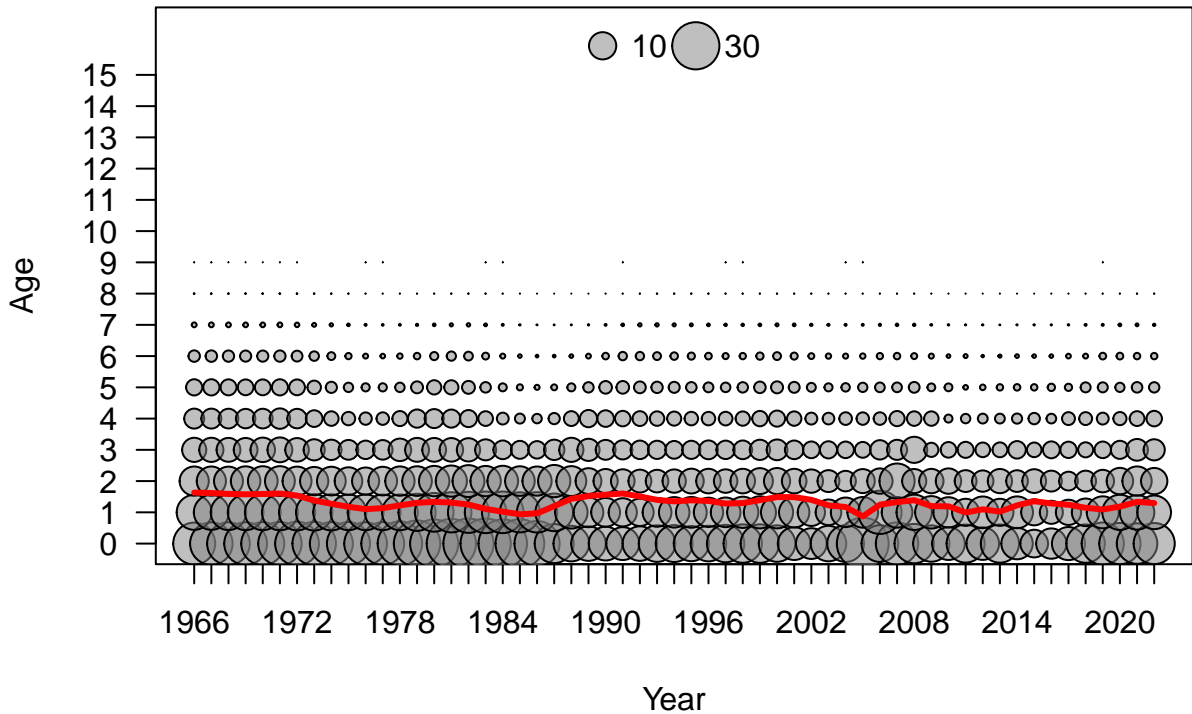


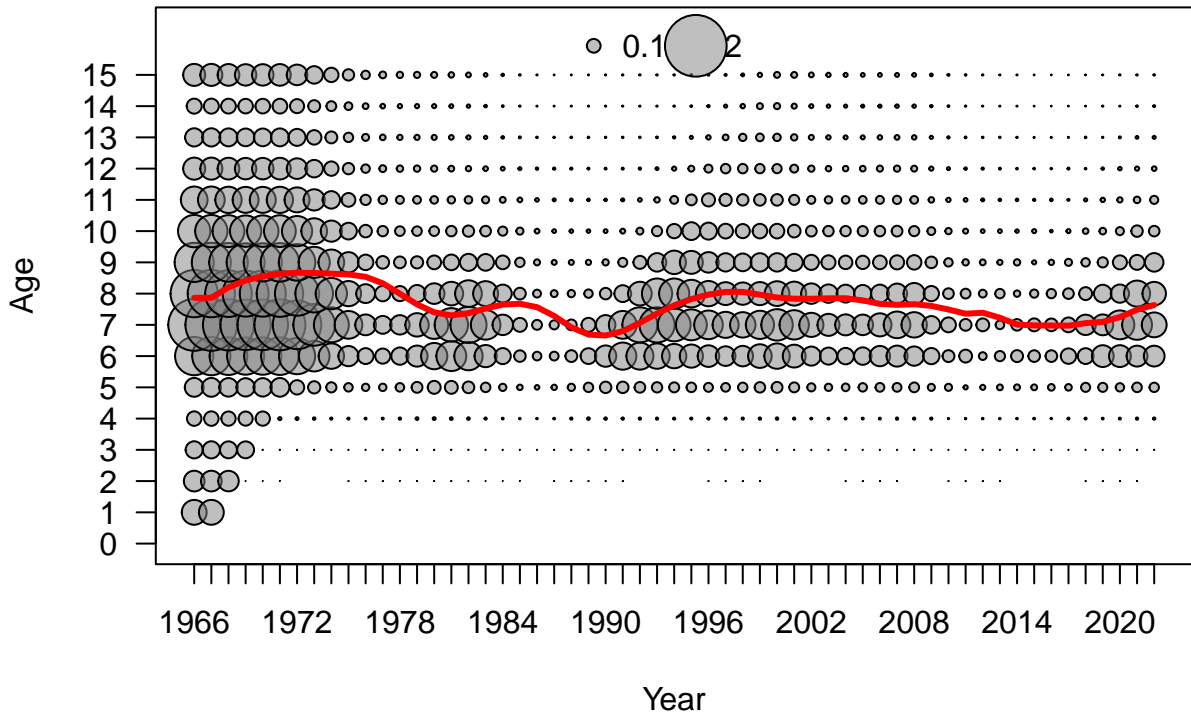
Age

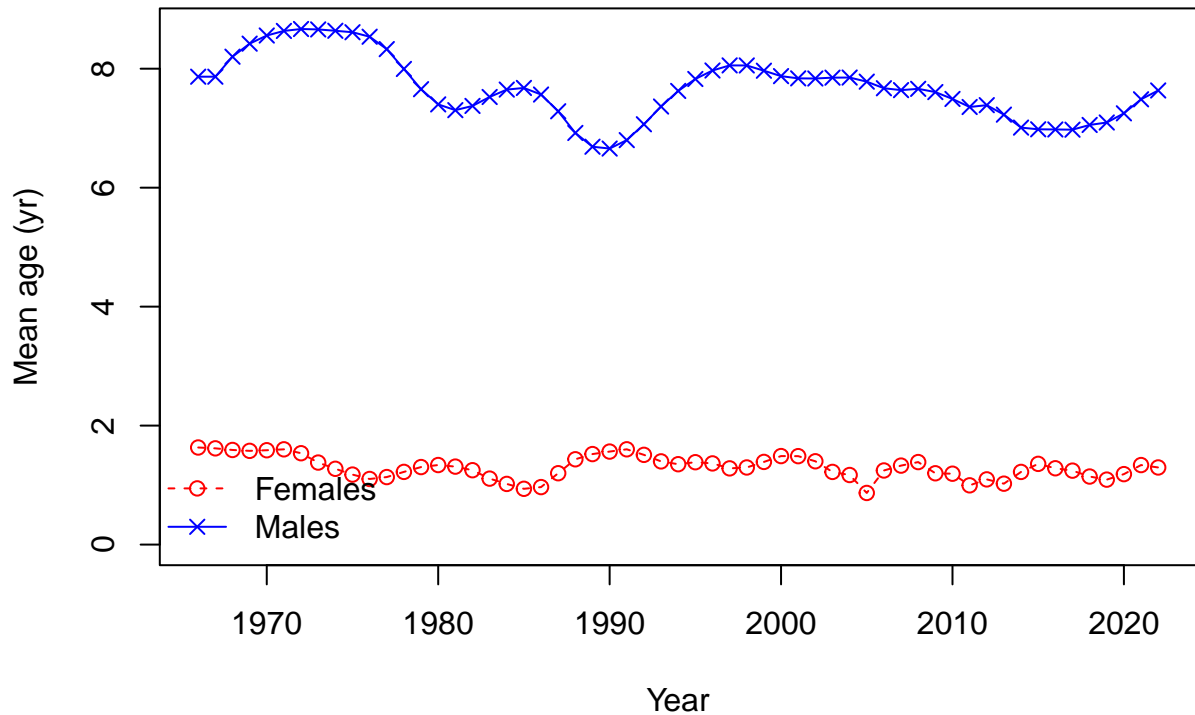












Age

0
2
4
6
8
10
12
14

1970

1980

1990

2000

2010

2020

Year

1

0.6

0.7

0.4

0.2

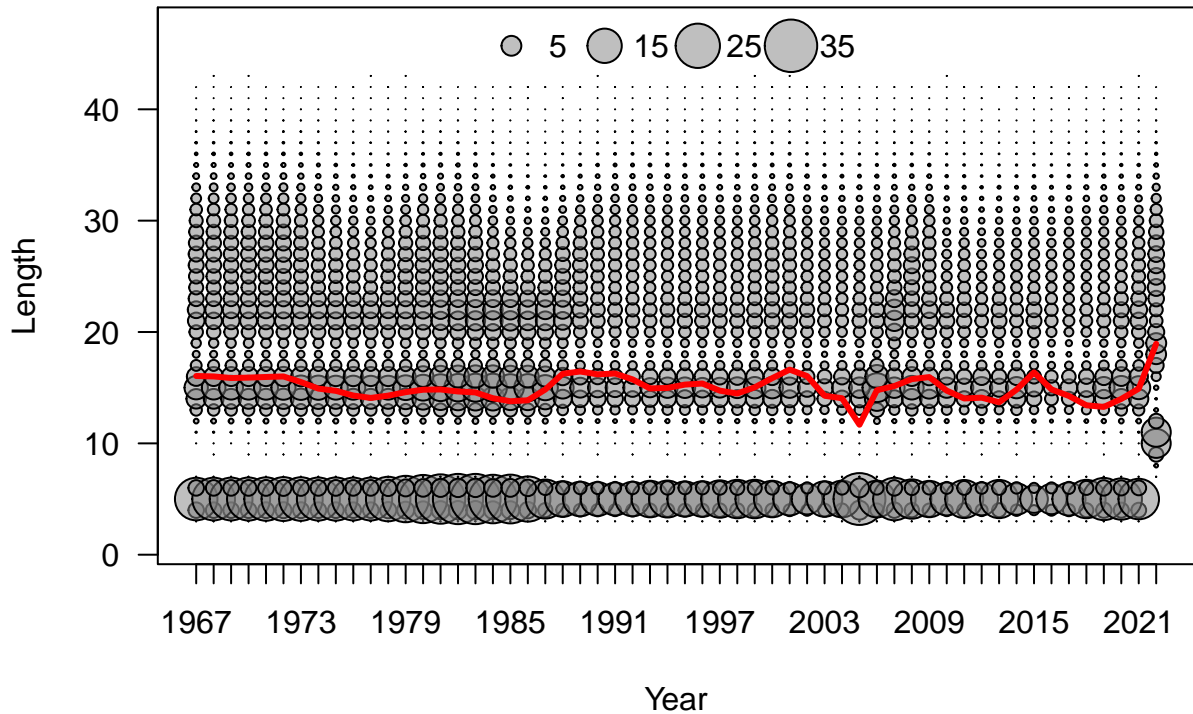
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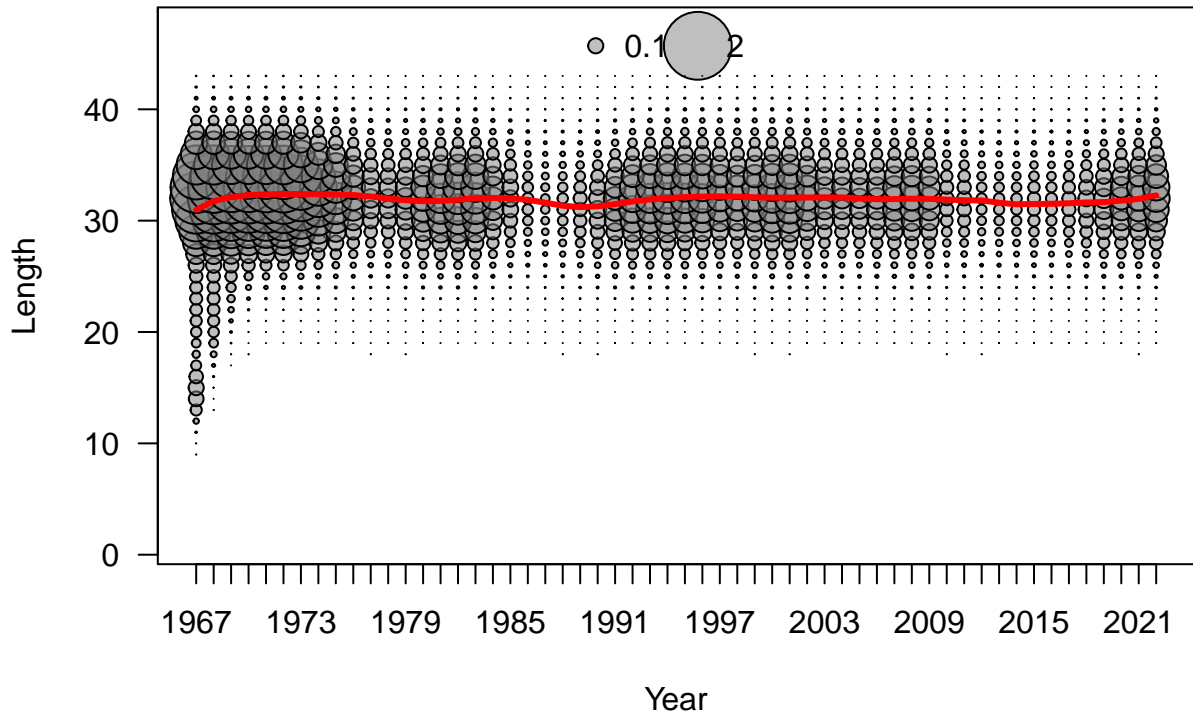
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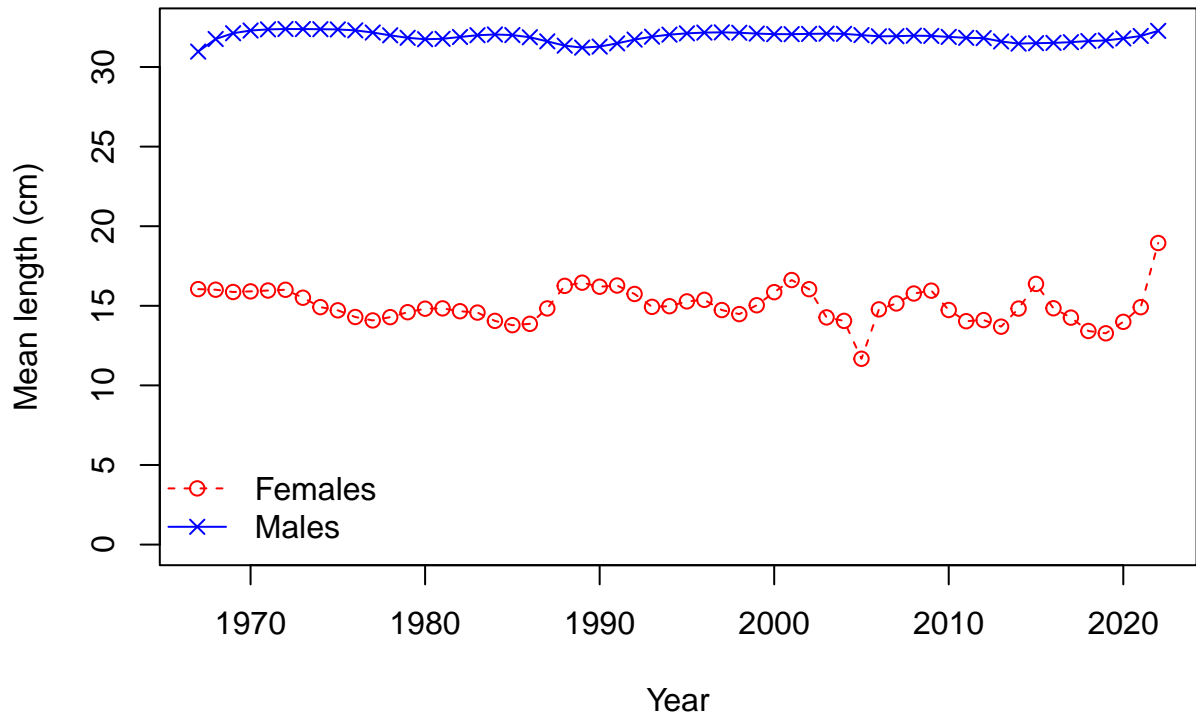
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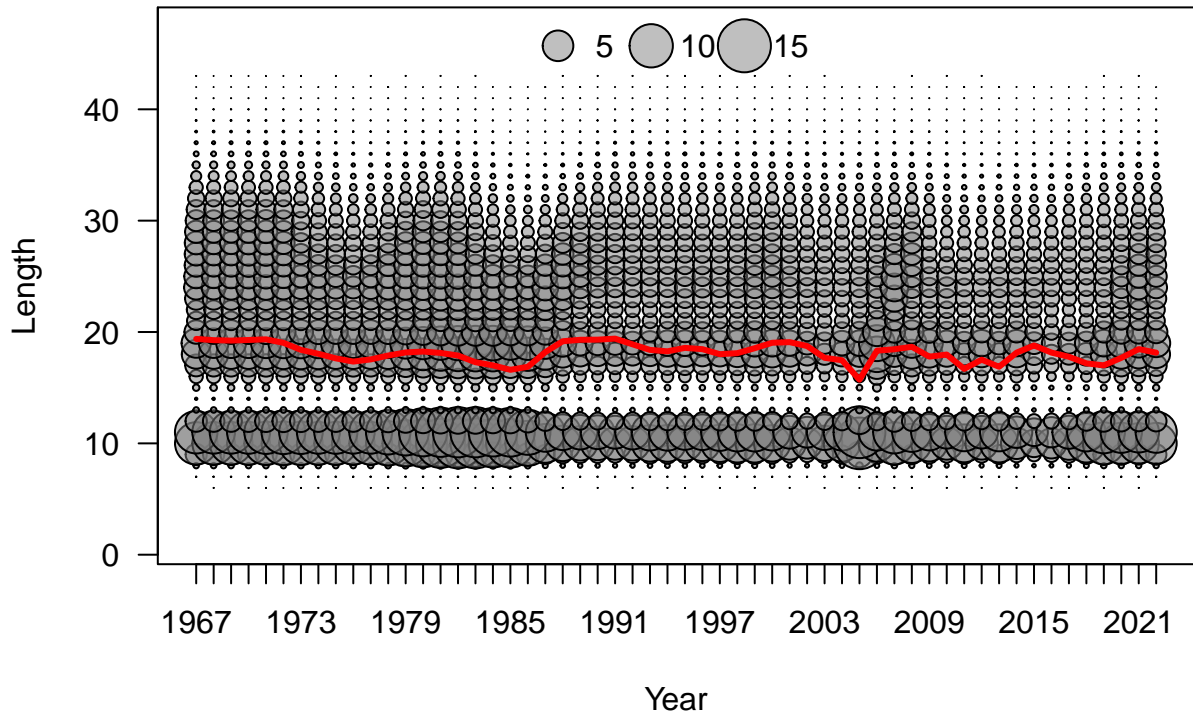
0.9

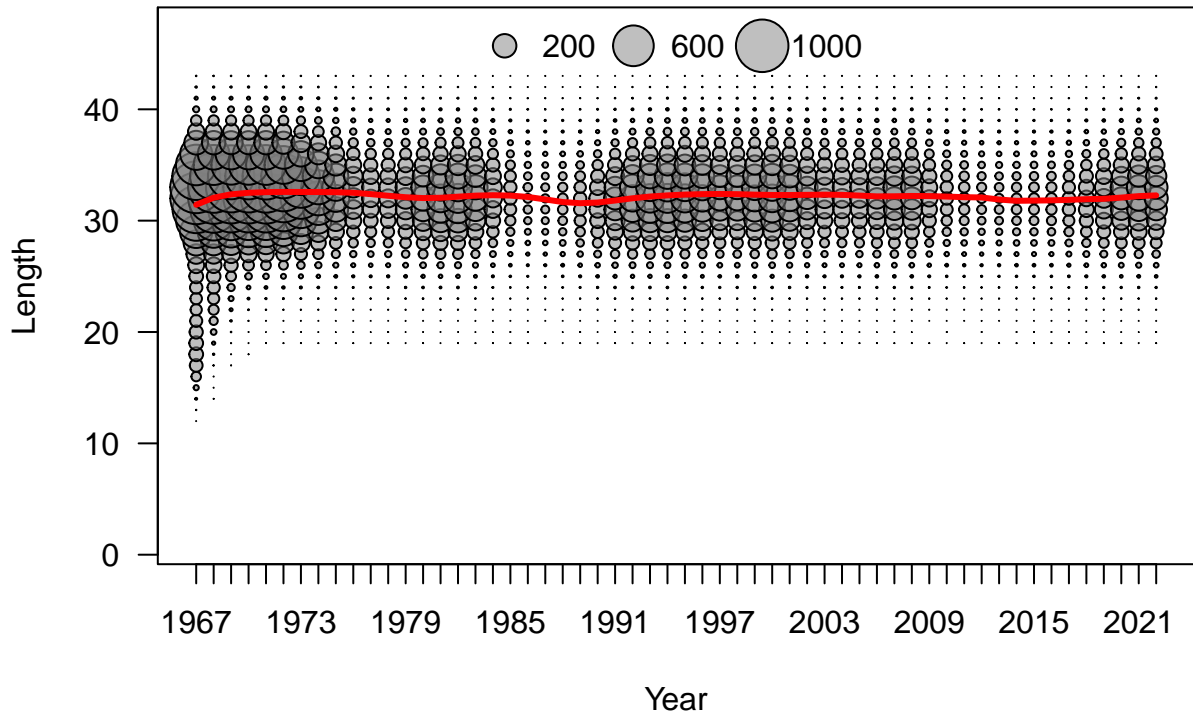
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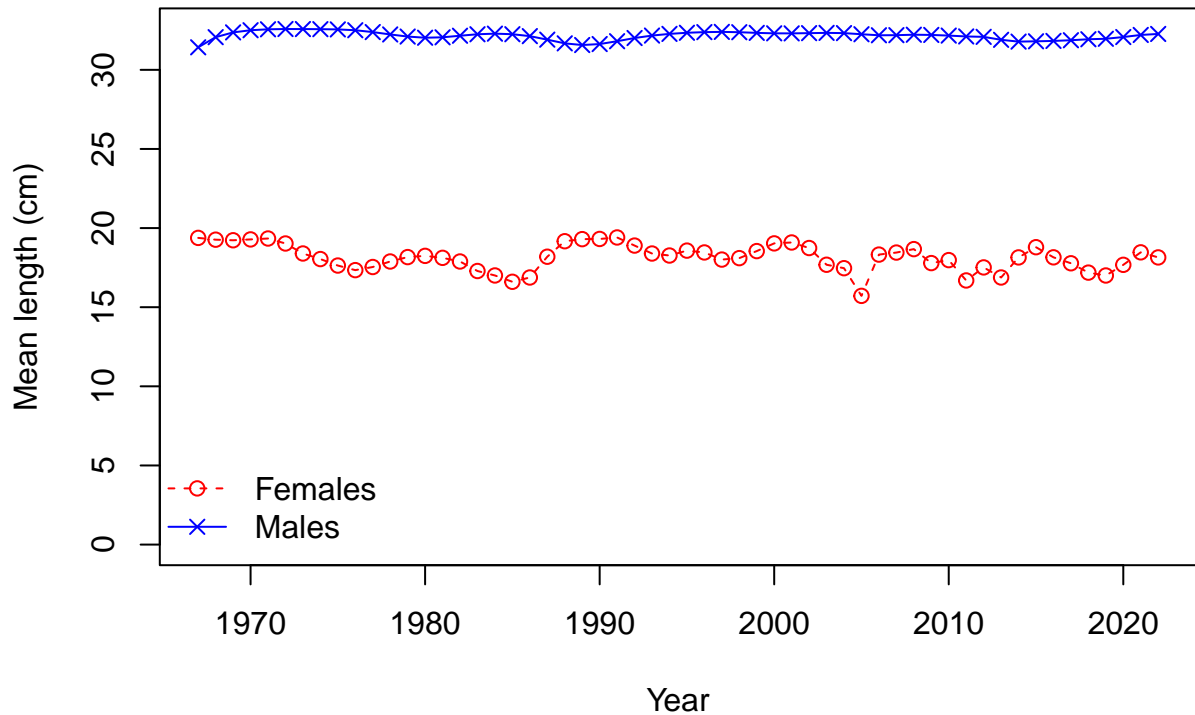




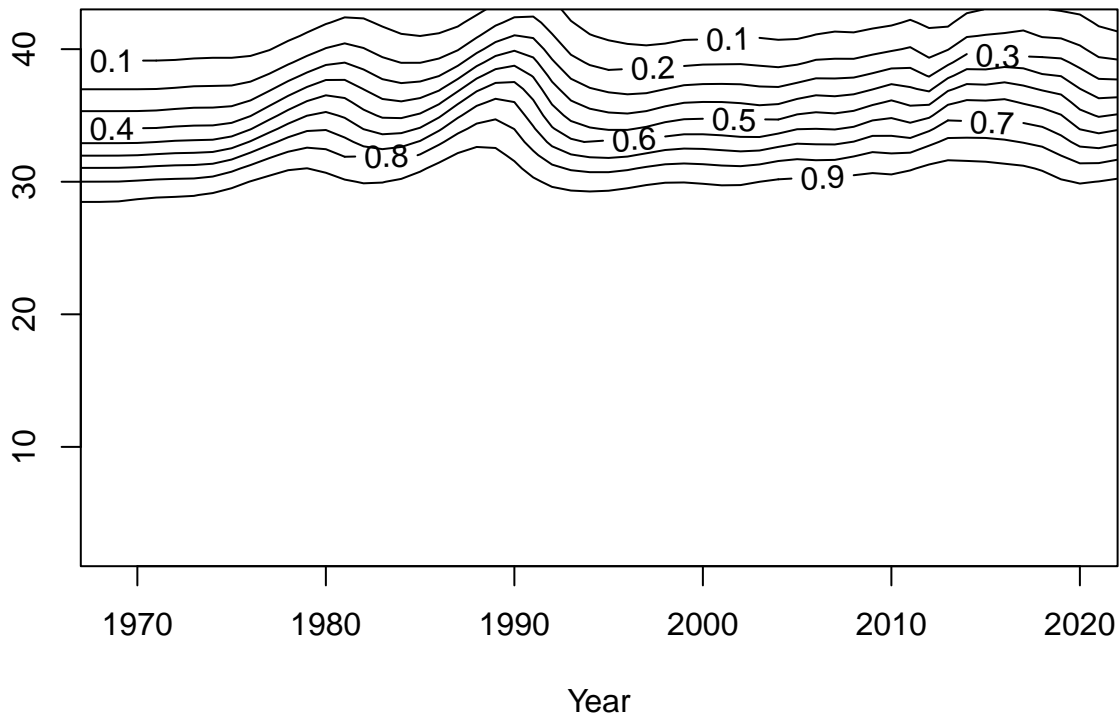


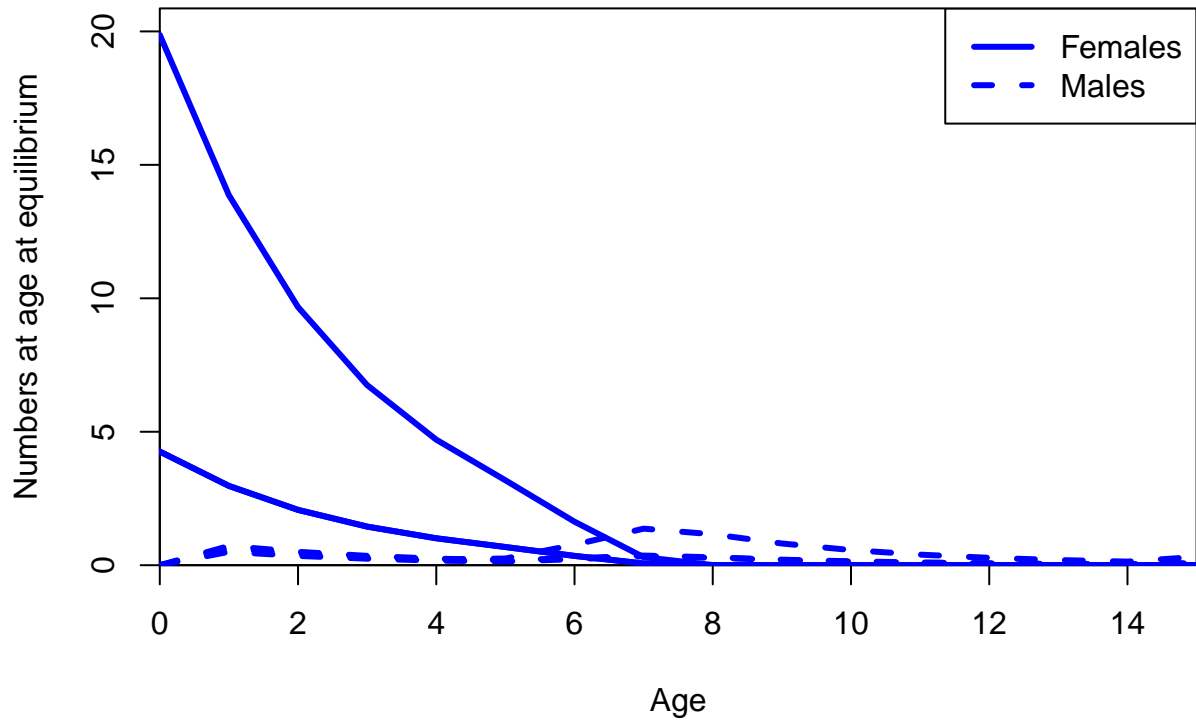






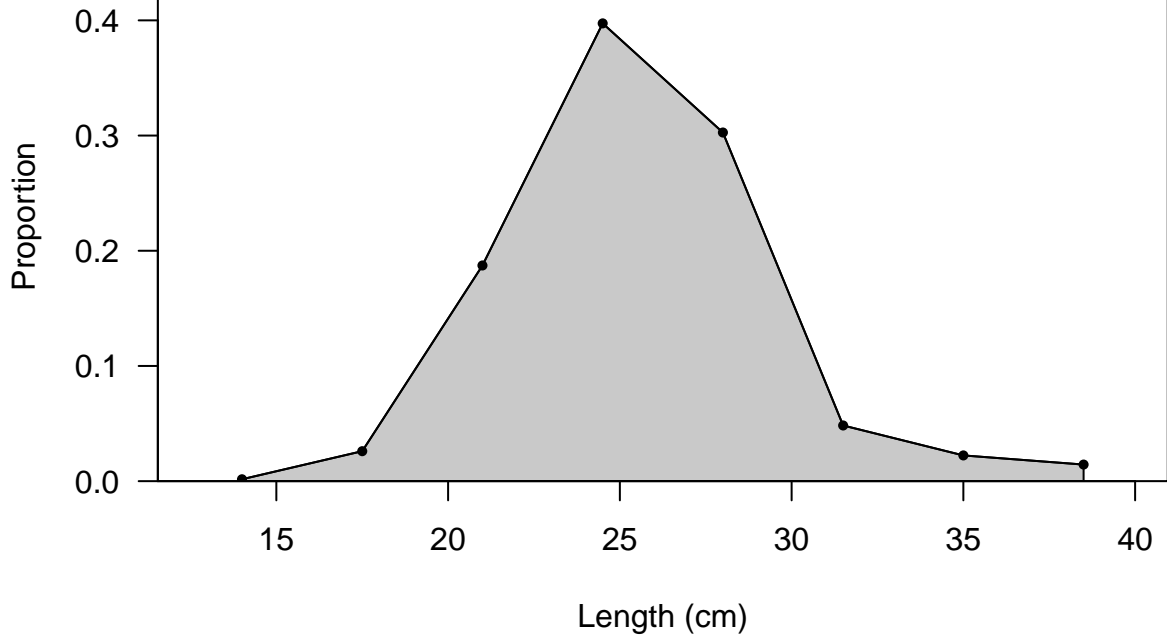
Length





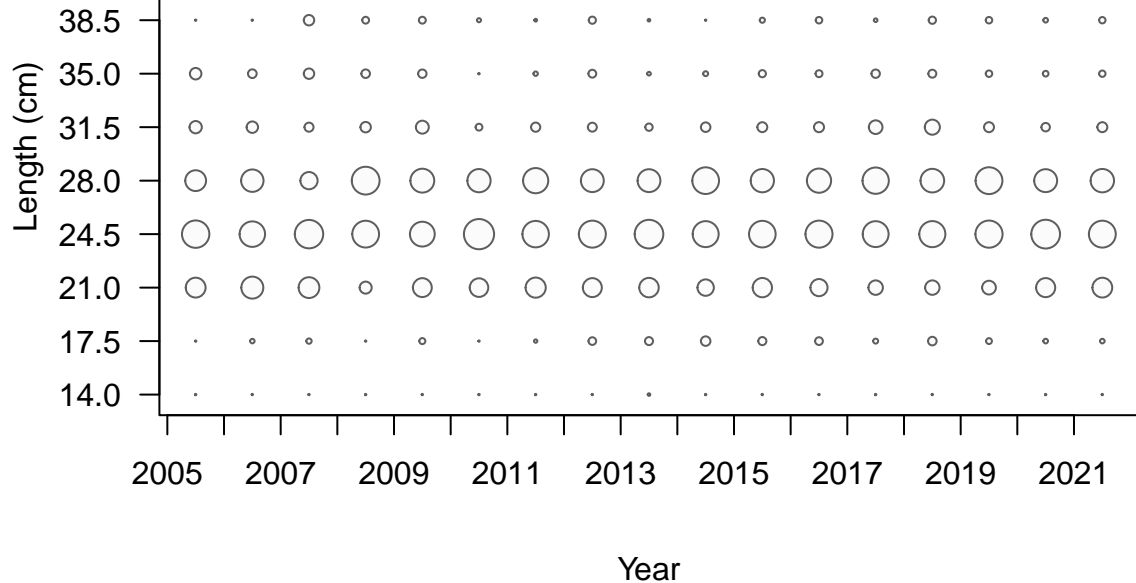
FISHERY

Sum of N input=5953

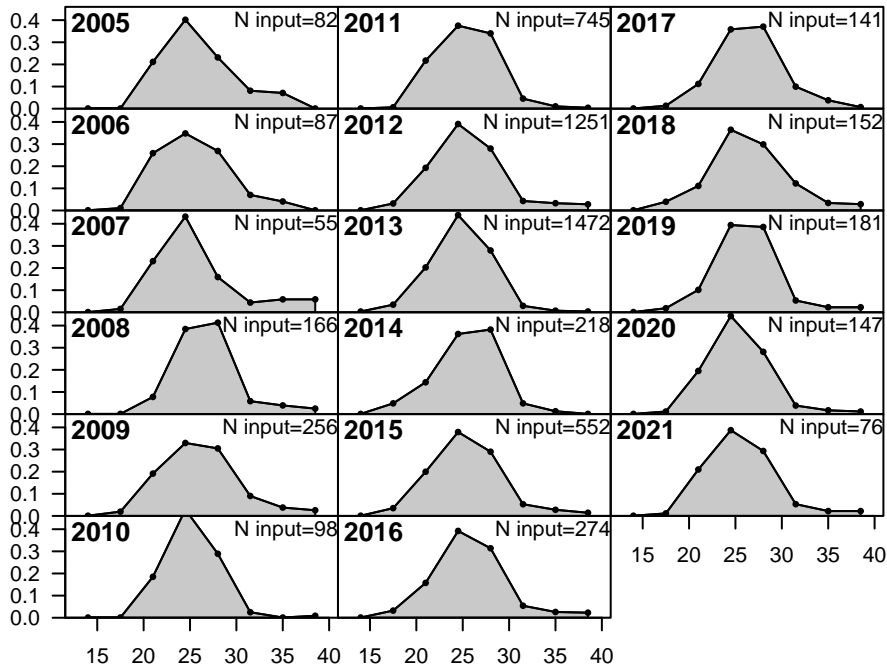


FISHERY

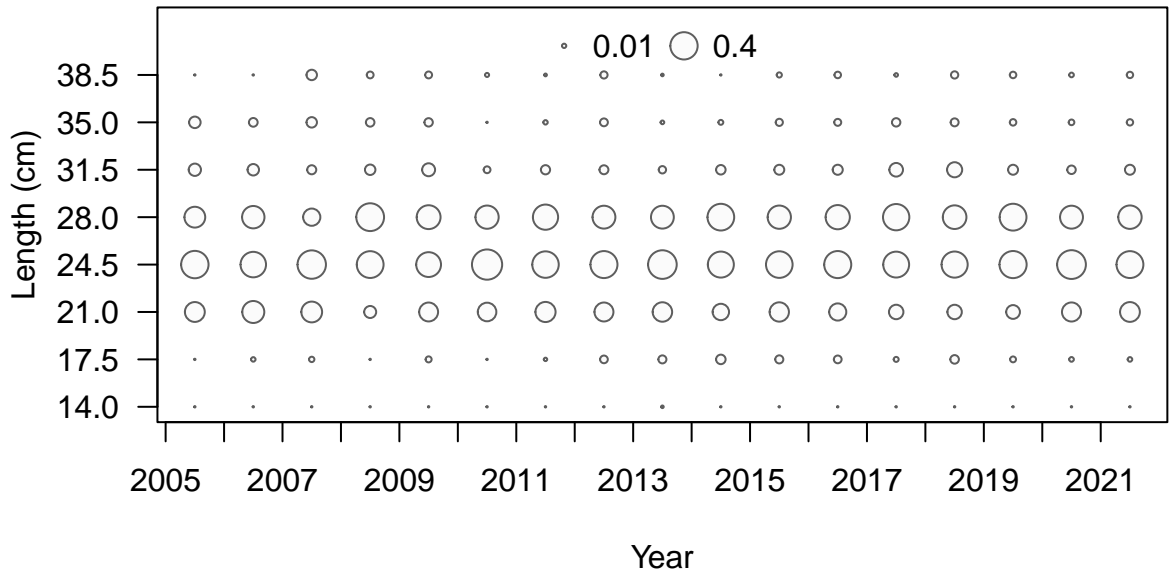
◦ 0.01 ○ 0.4



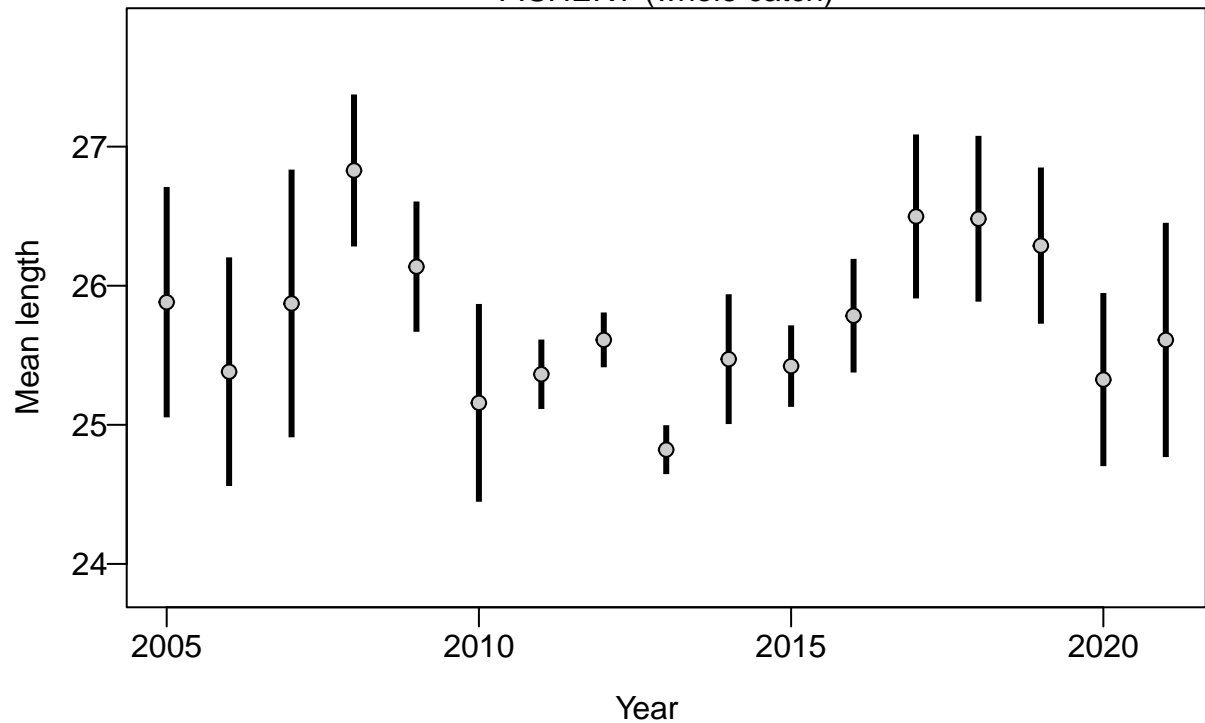
Proportion

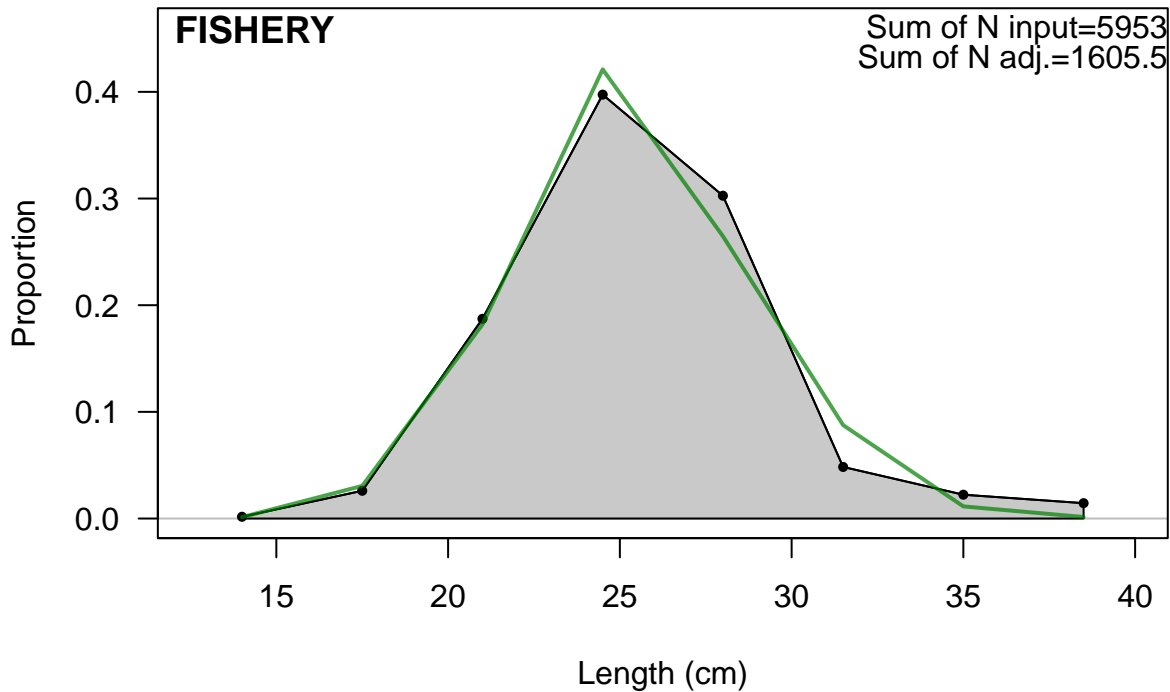


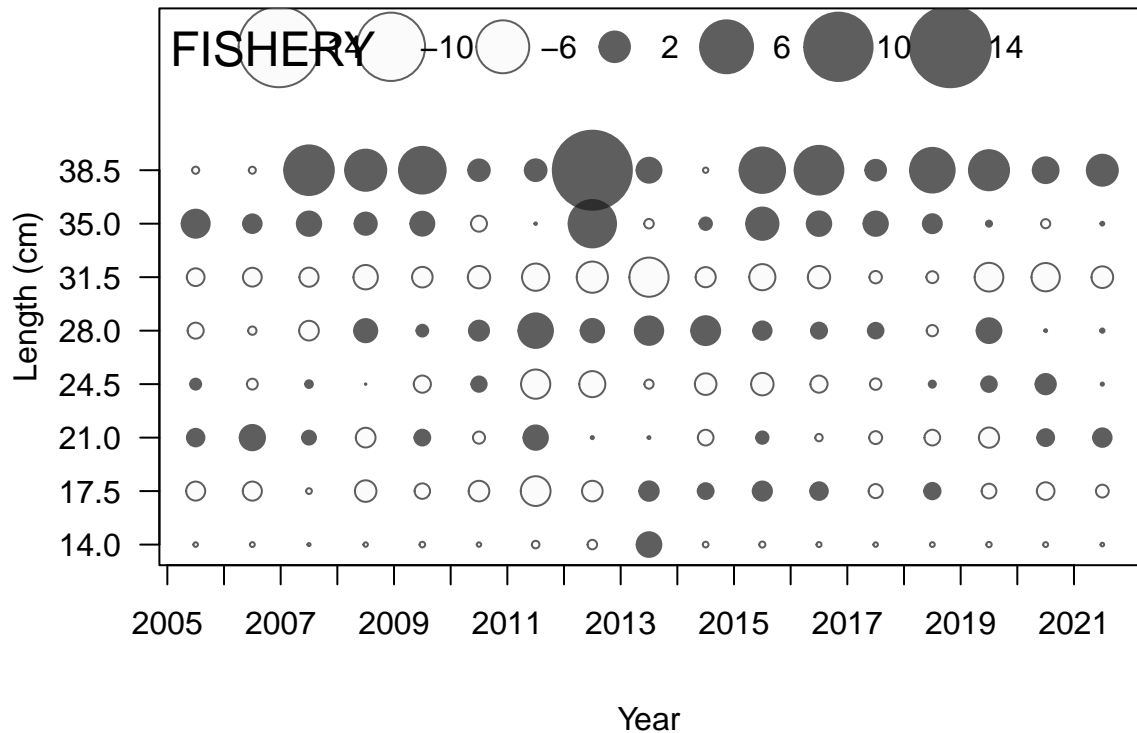
Length (cm)



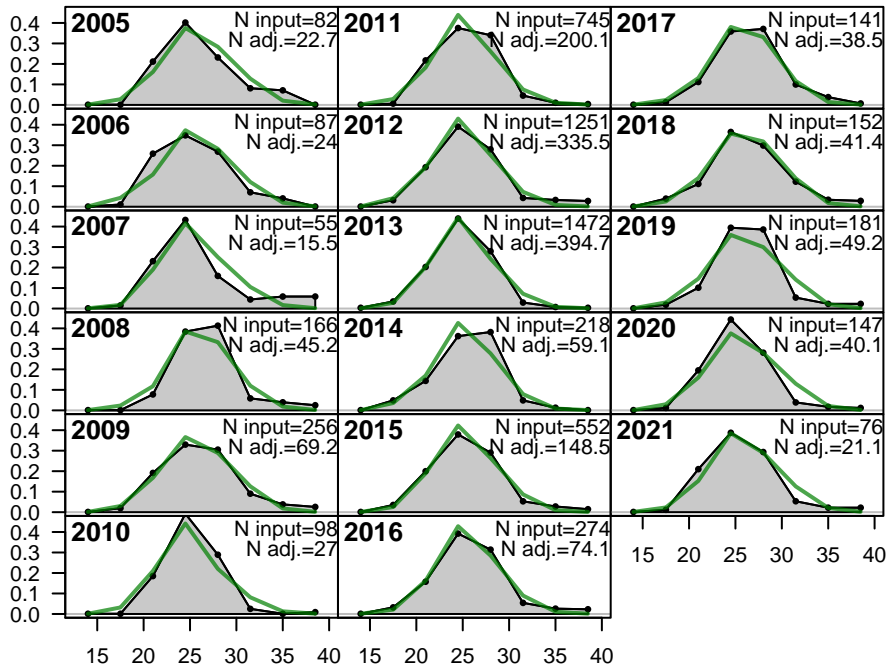
FISHERY (whole catch)



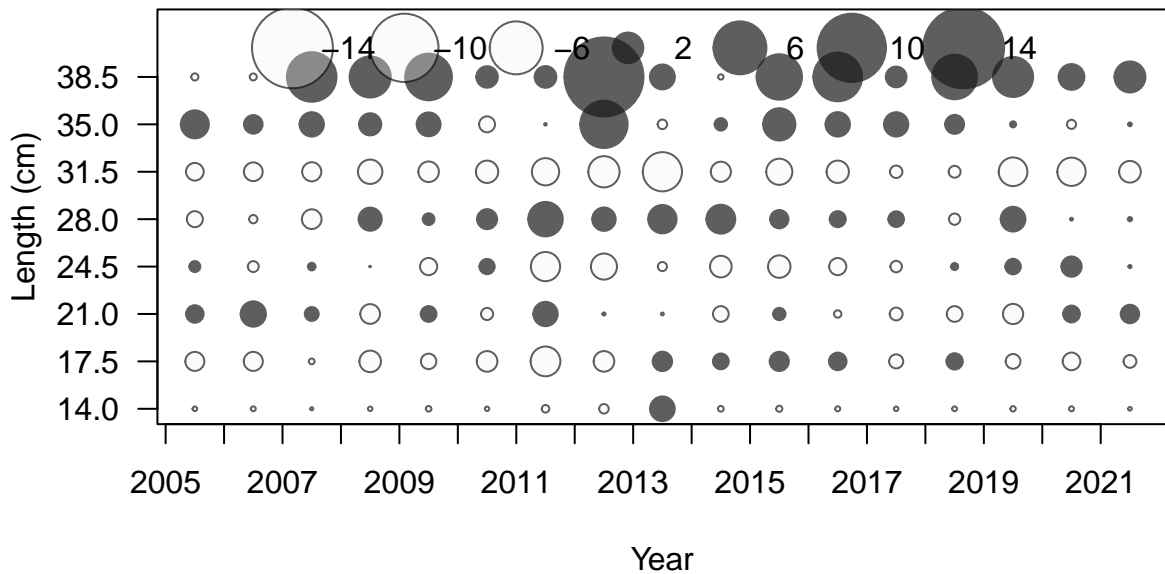




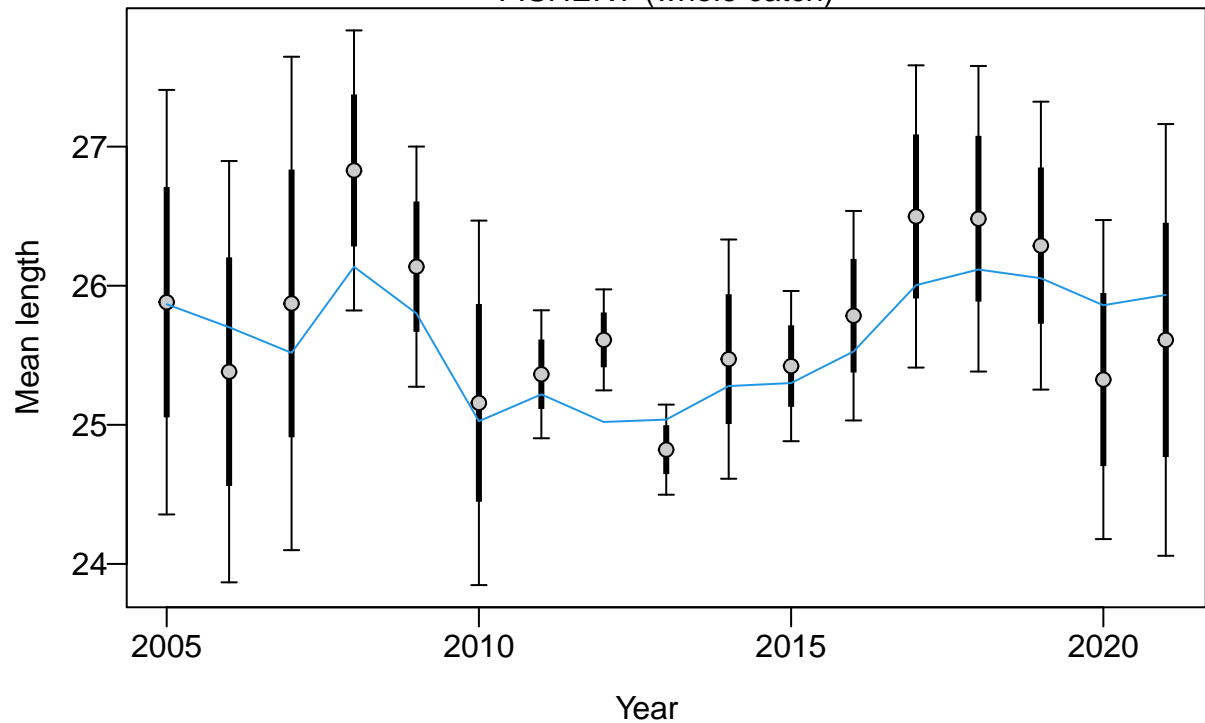
Proportion

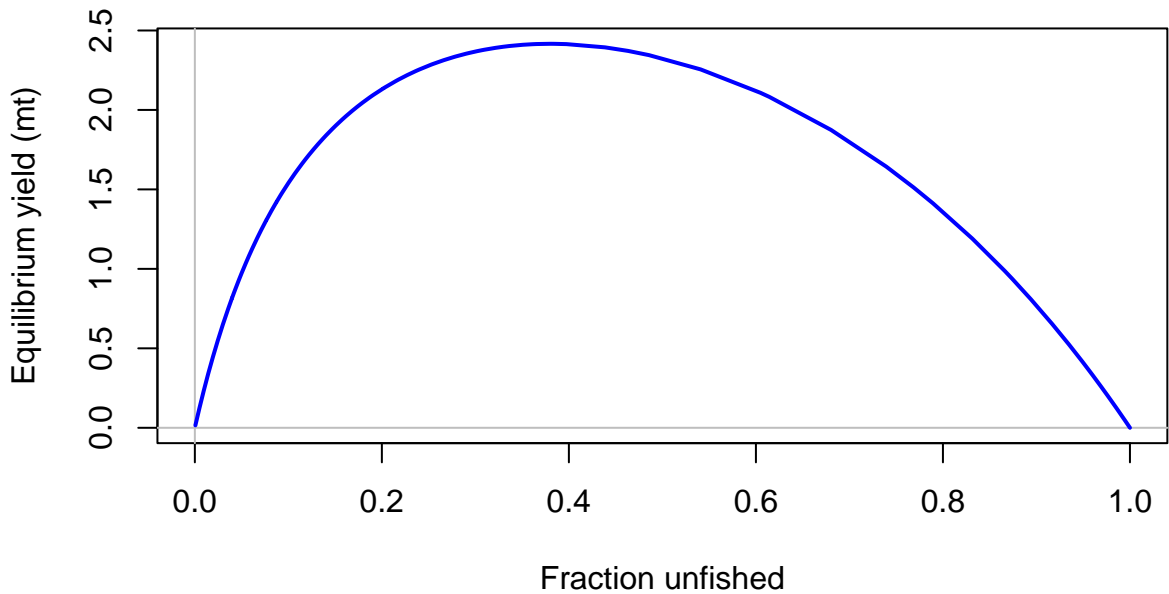


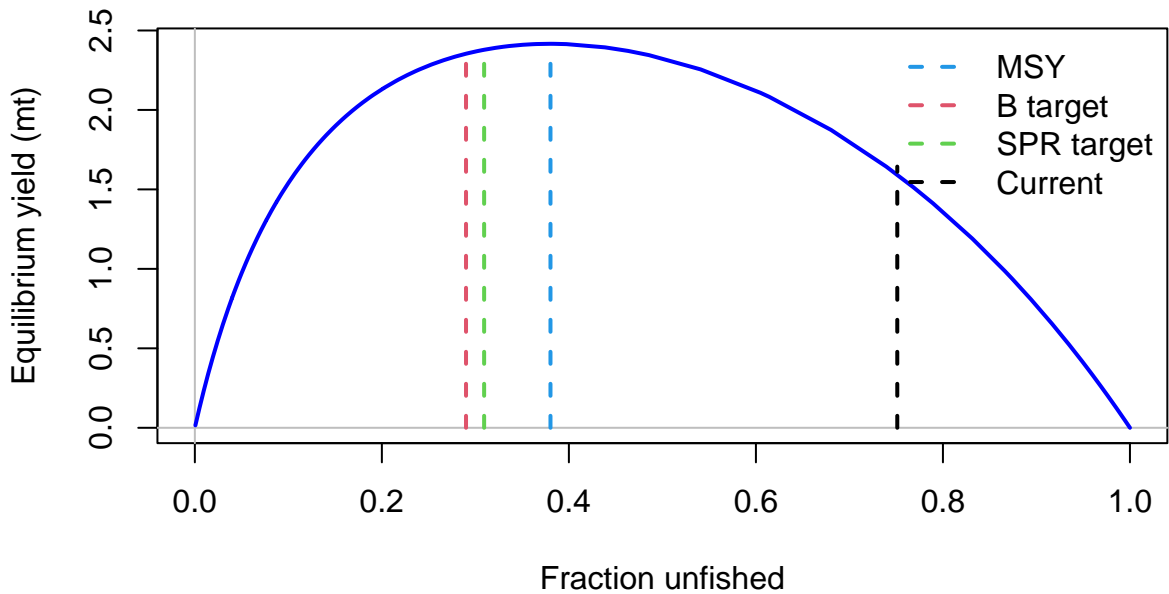
Length (cm)

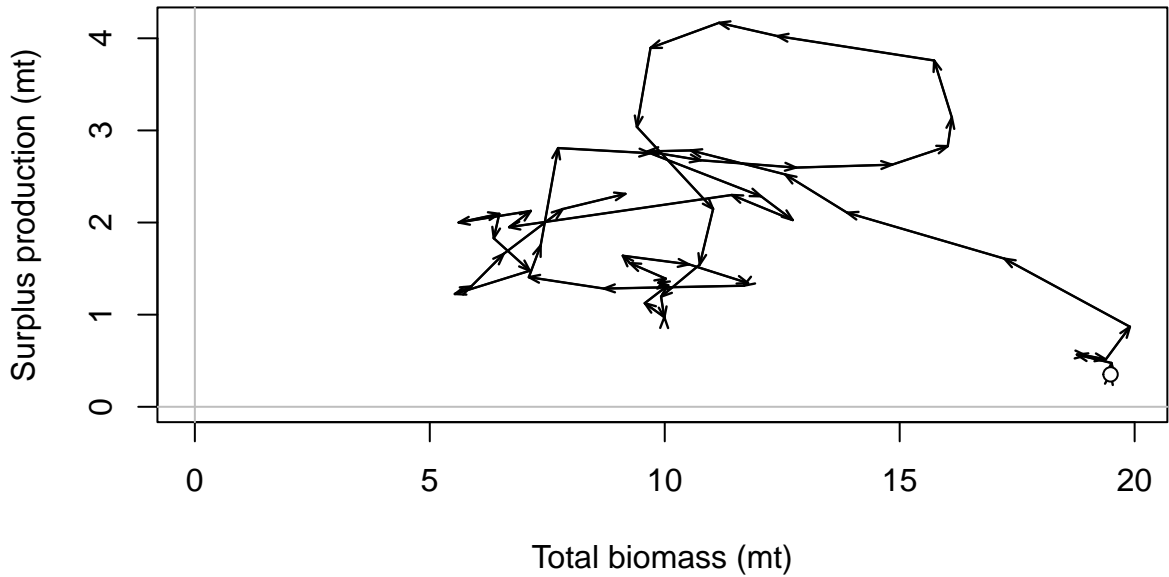


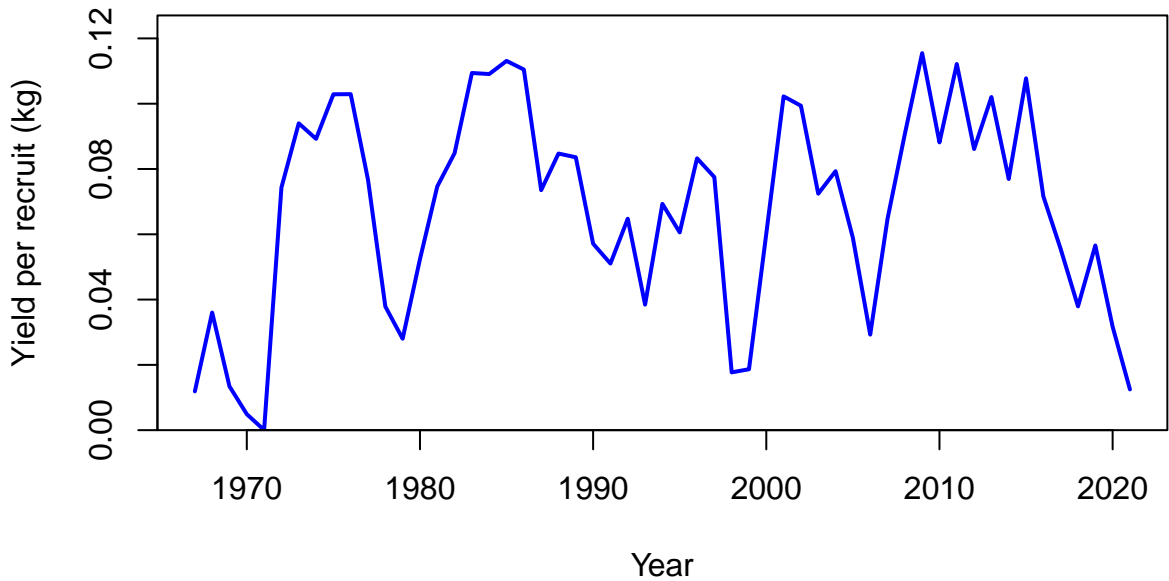
FISHERY (whole catch)

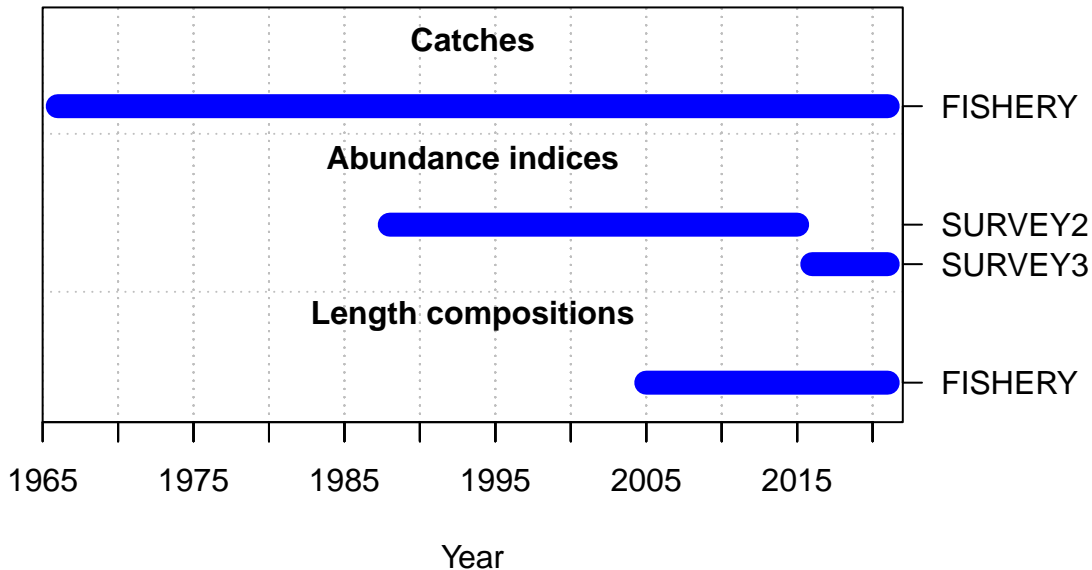


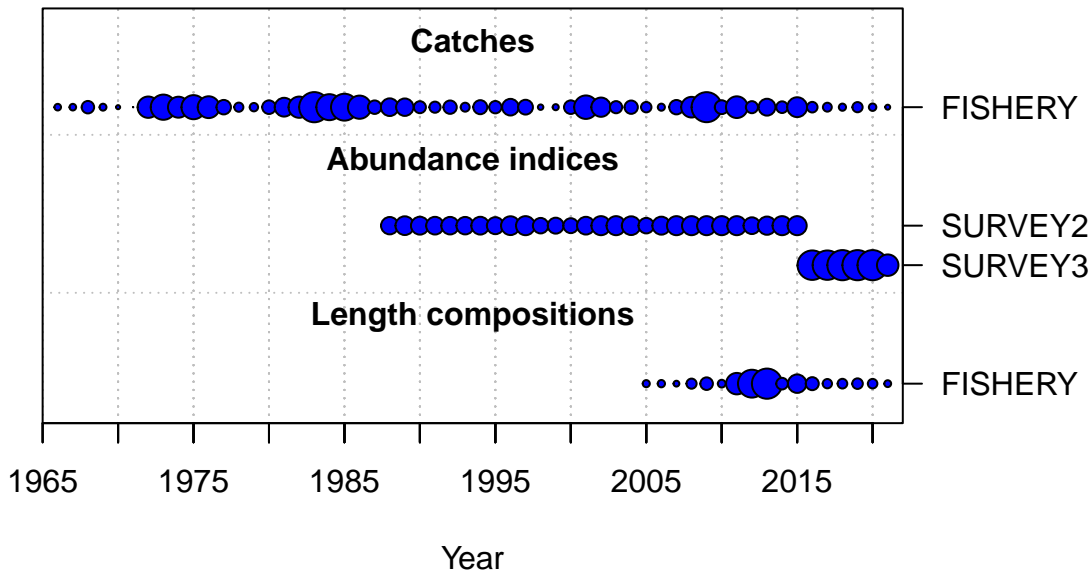


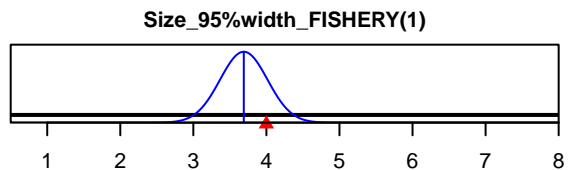
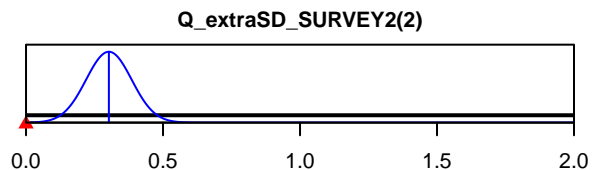
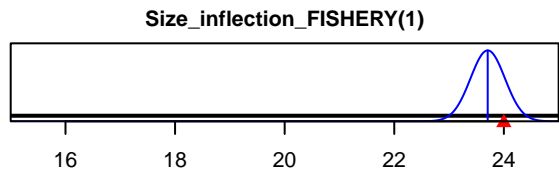
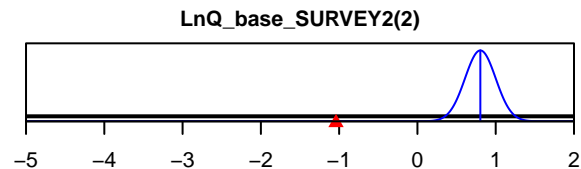
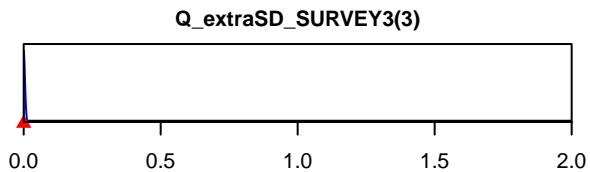
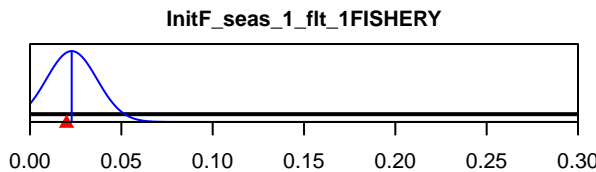
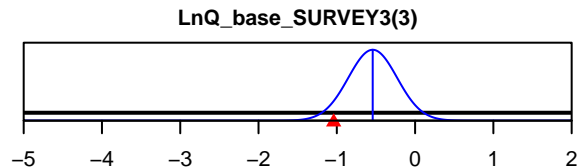
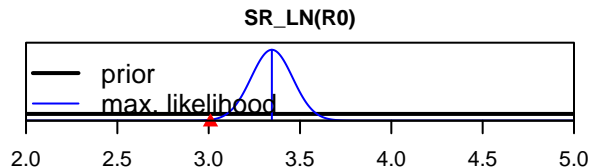






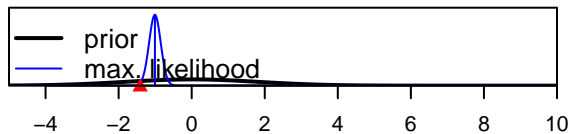






Parameter value

$\ln(\text{DM_theta})_1$



Density

Parameter value