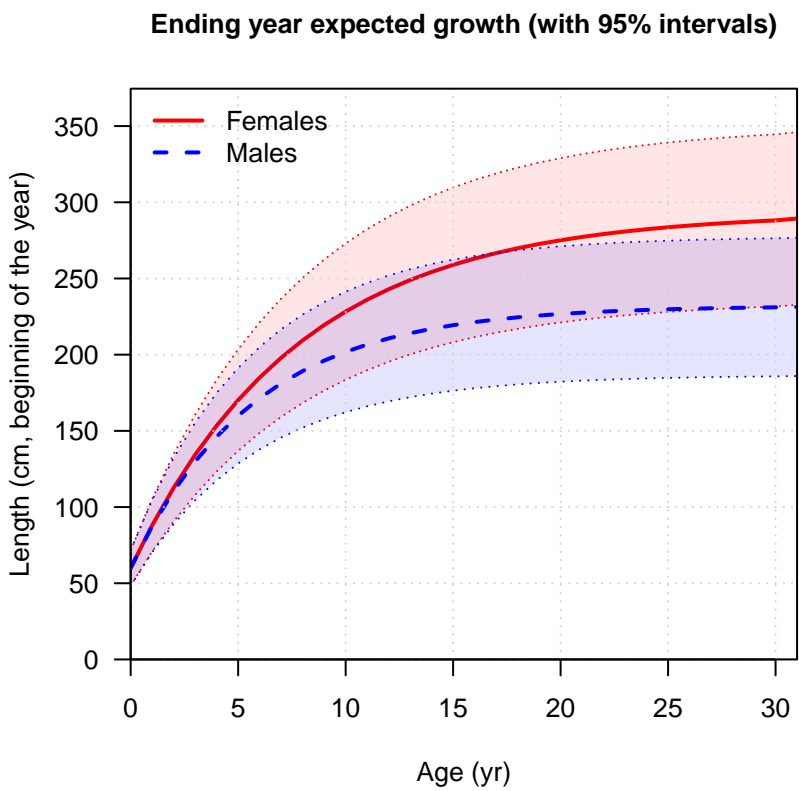
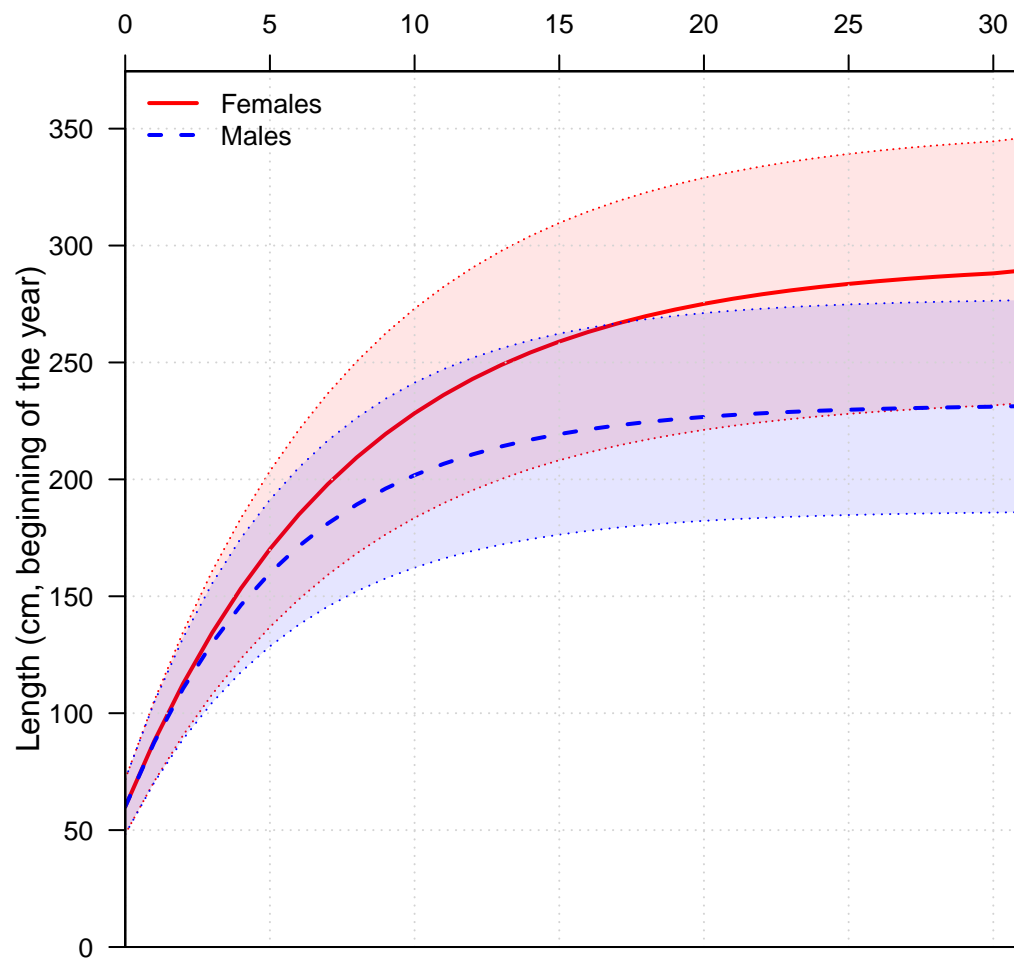


Plots created using the 'r4ss' package in R
Stock Synthesis version: SS-V3.24U

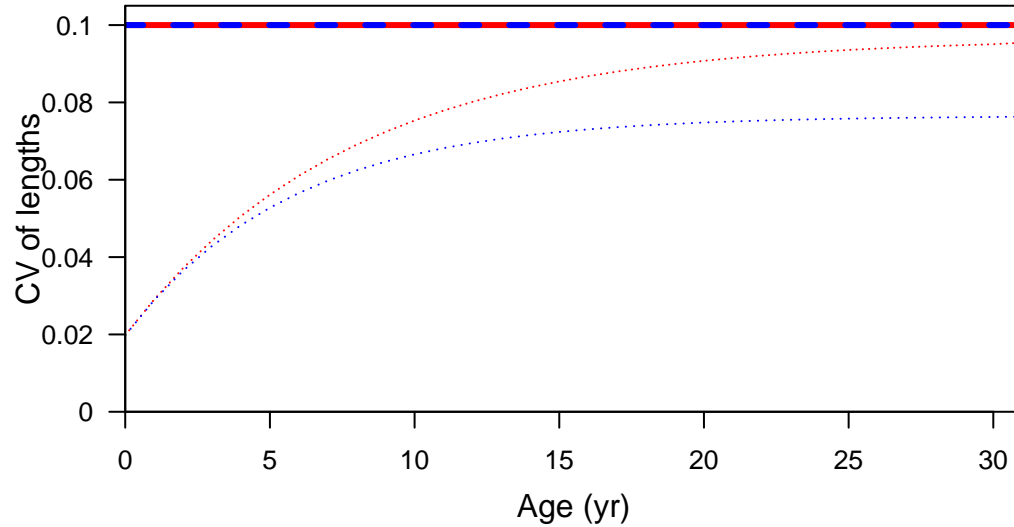
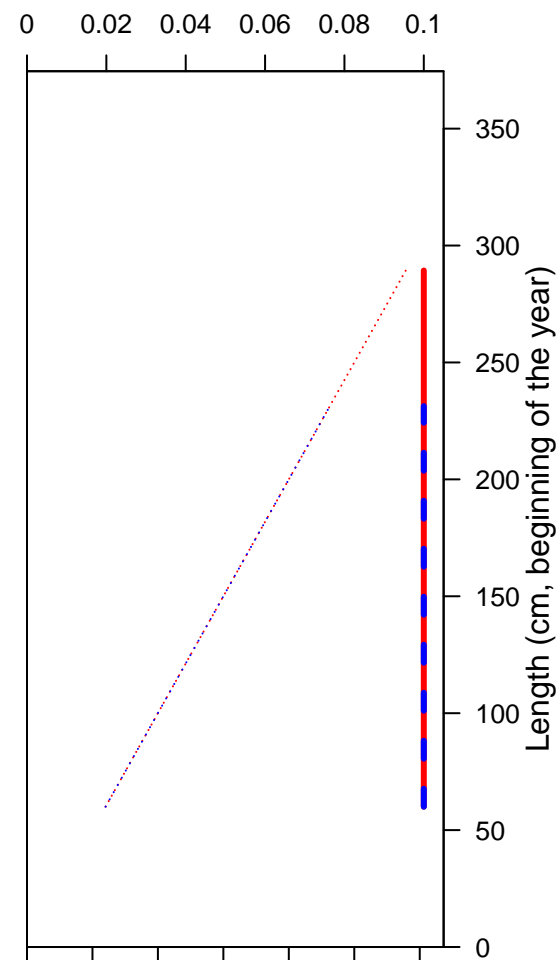
Data_File: DATA.ss
Control_File: CONTROL.ss



Age (yr)

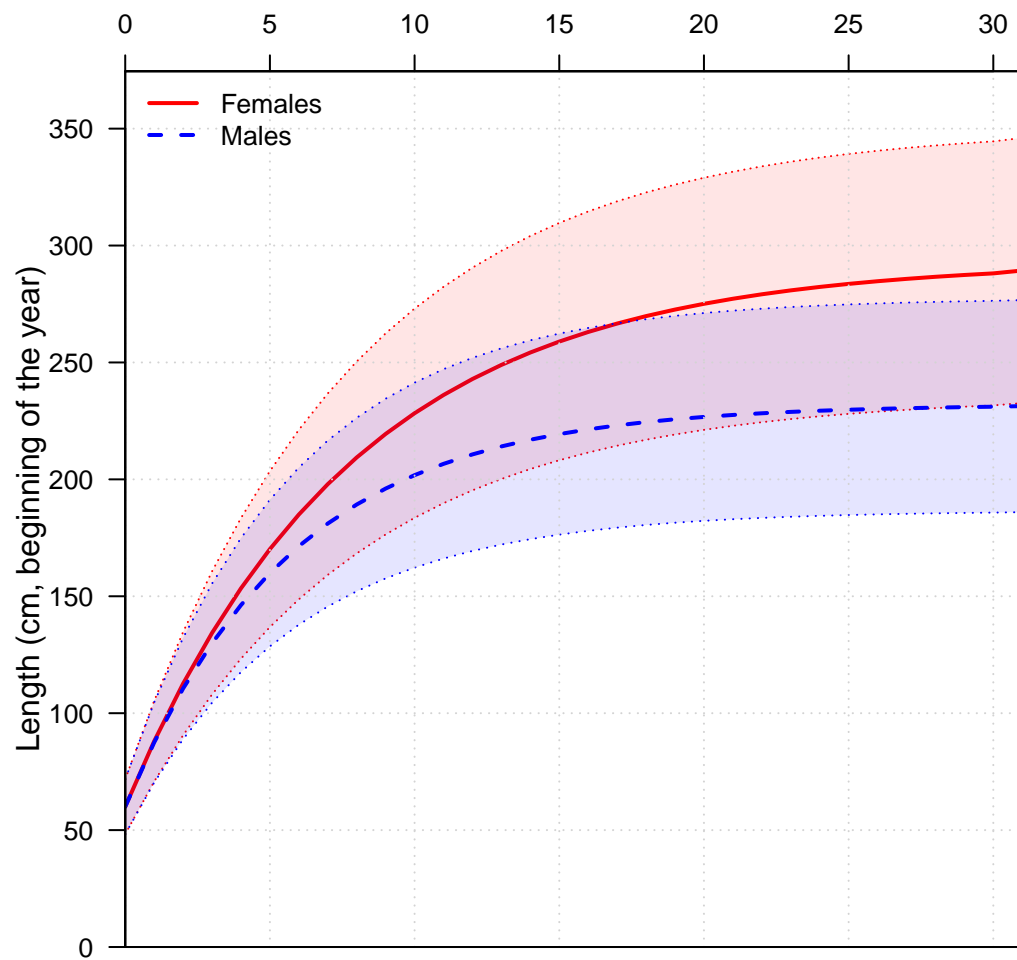


CV of lengths

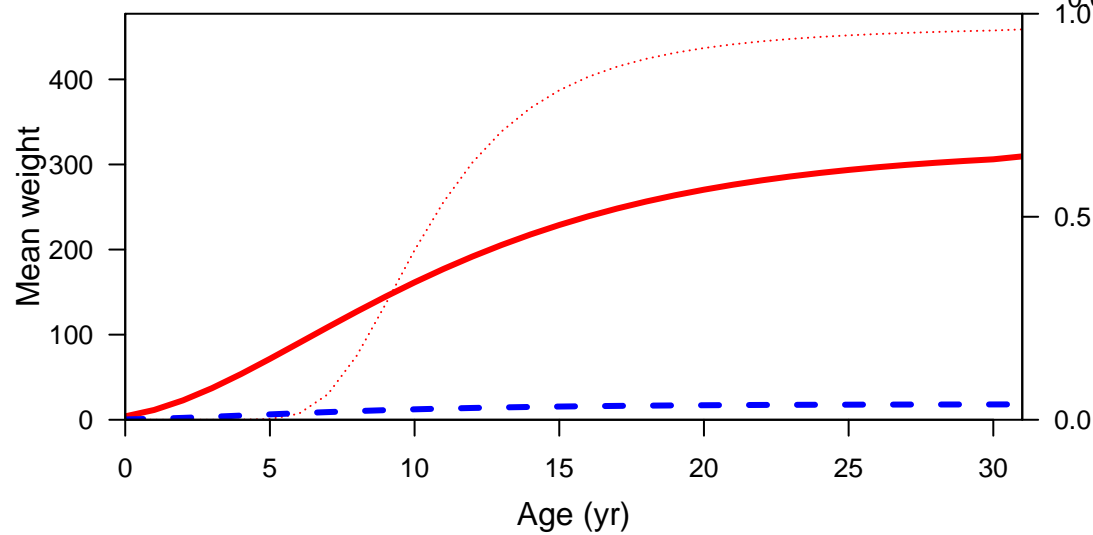
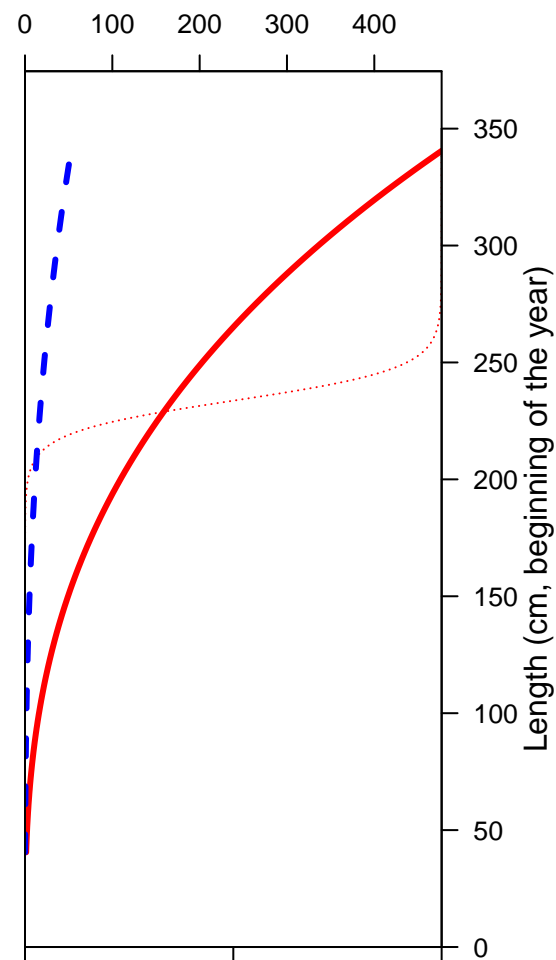


SD of lengths

Age (yr)



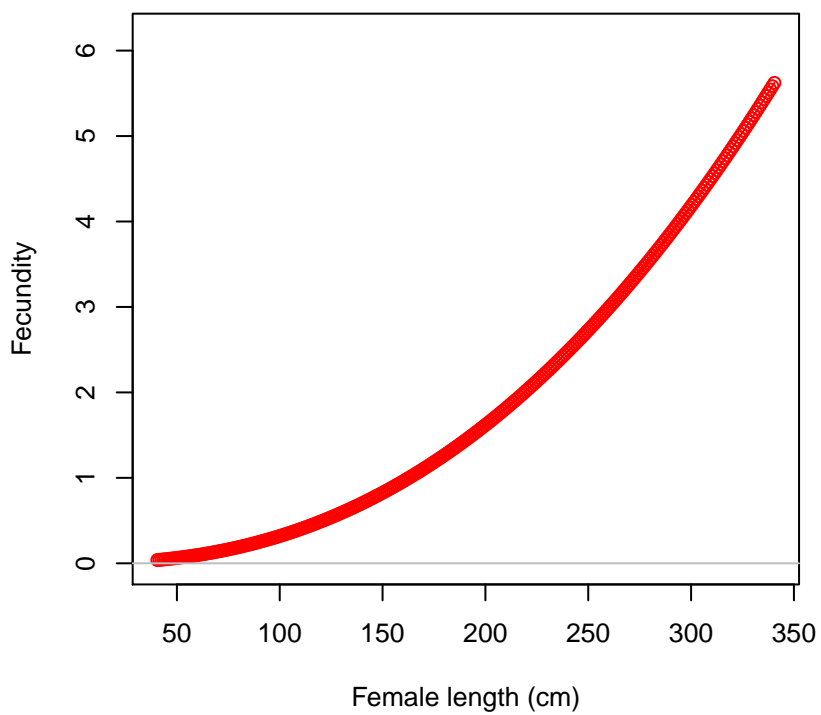
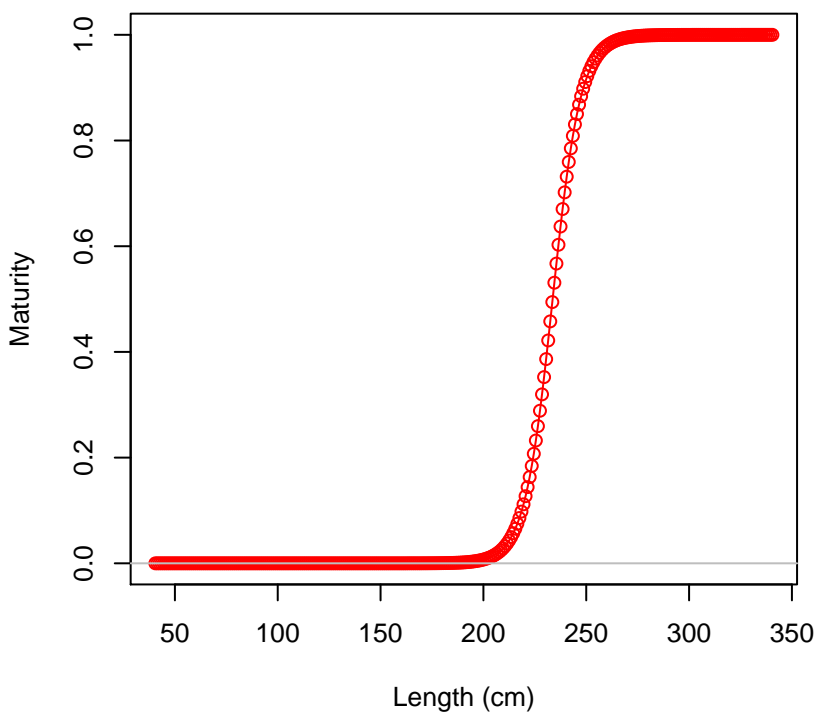
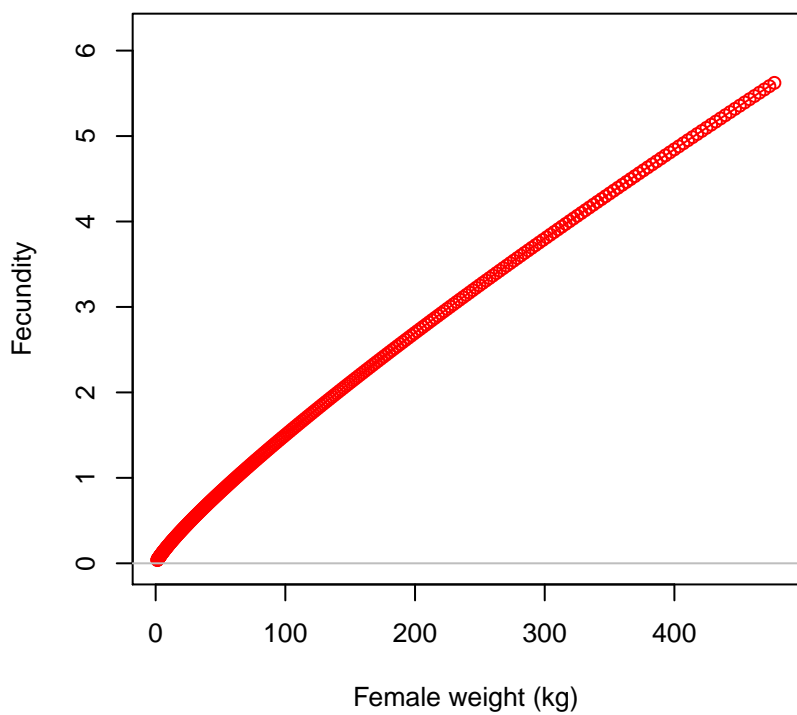
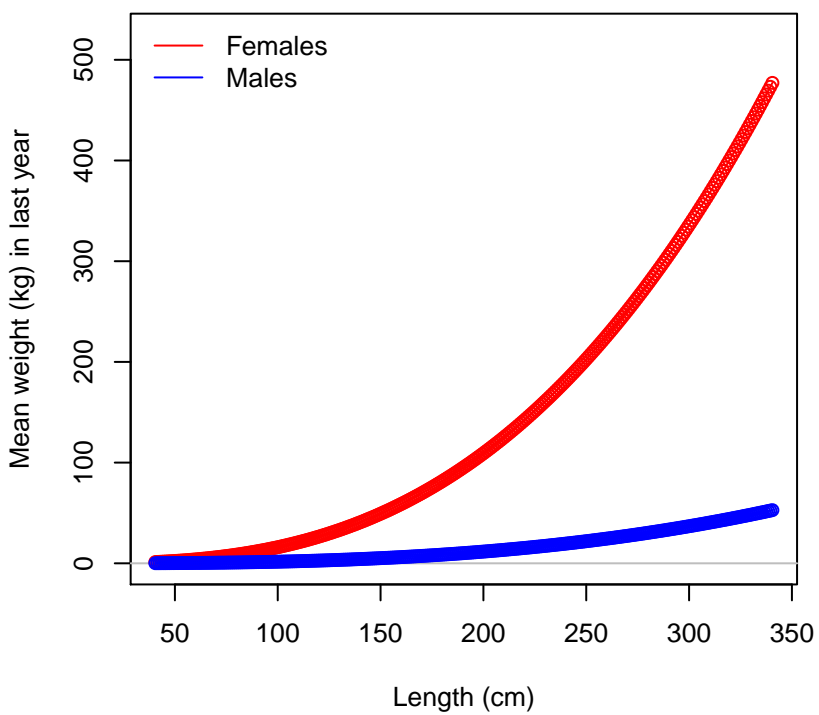
Mean weight



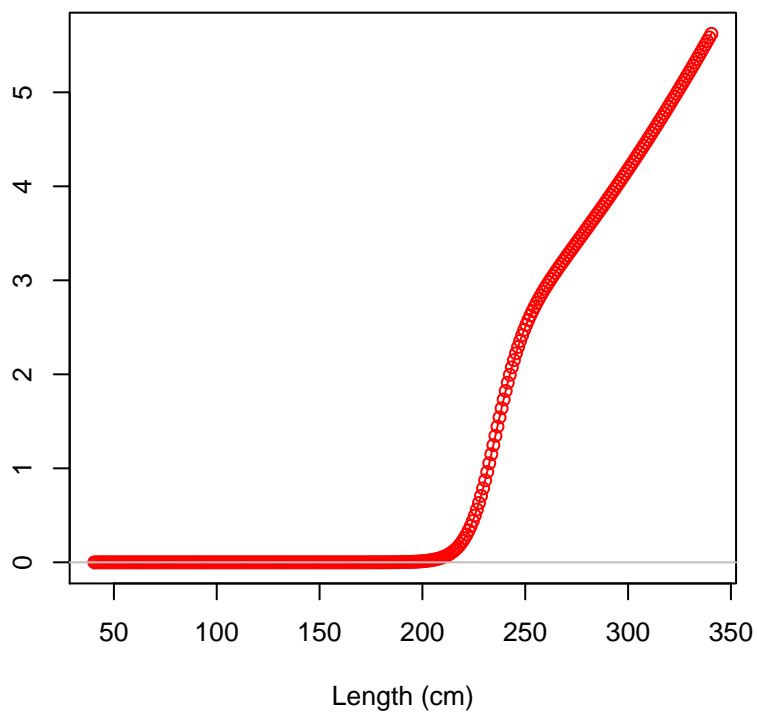
Frac. mature

Frac. mature

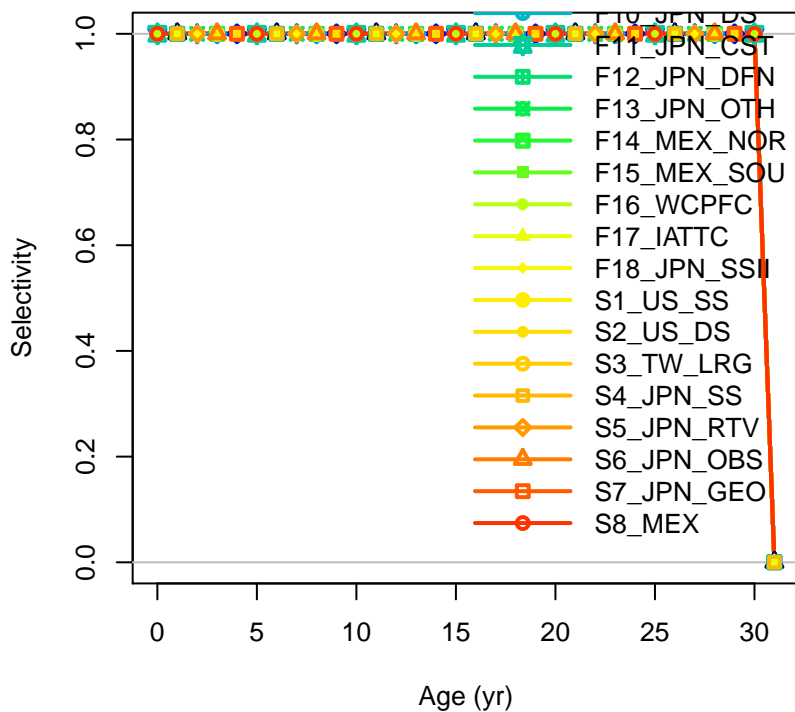
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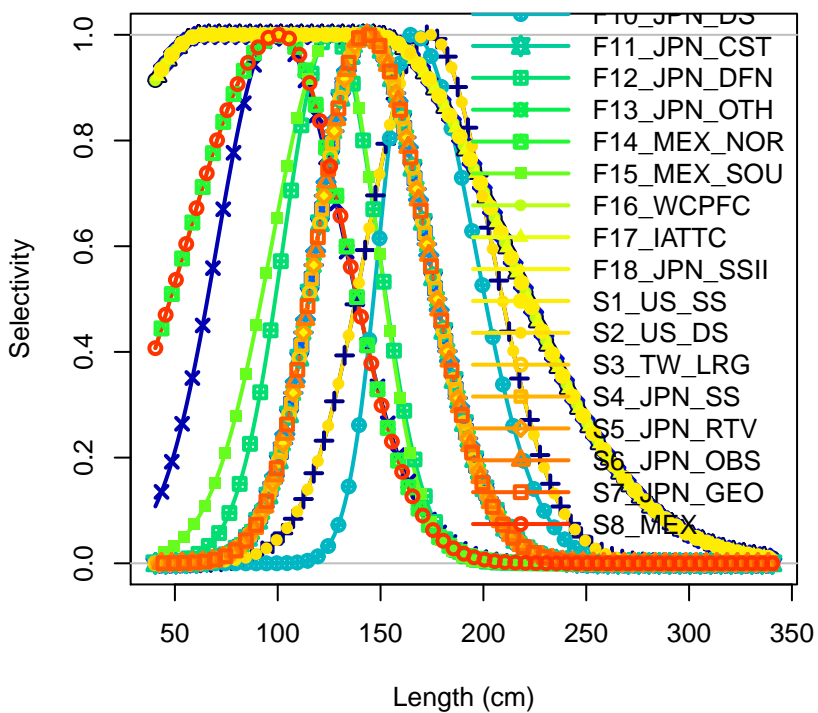
Spawning output



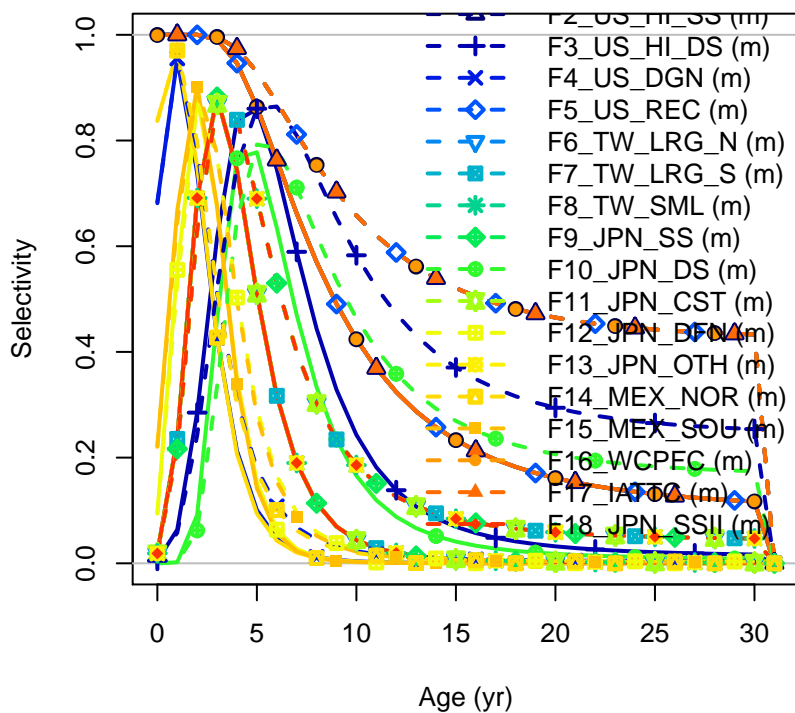
Age-based selectivity by fleet in 2016



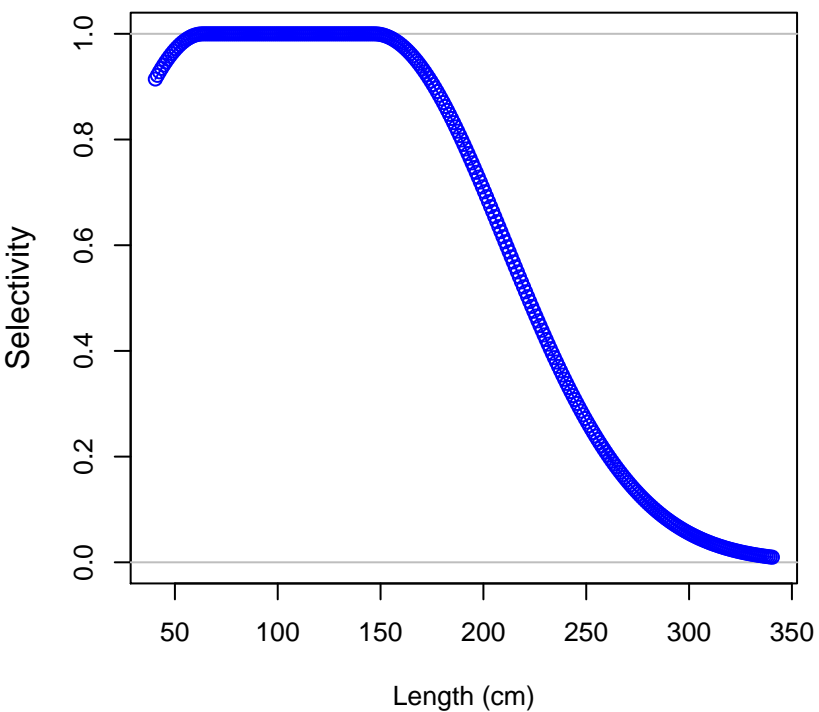
Length-based selectivity by fleet in 2016



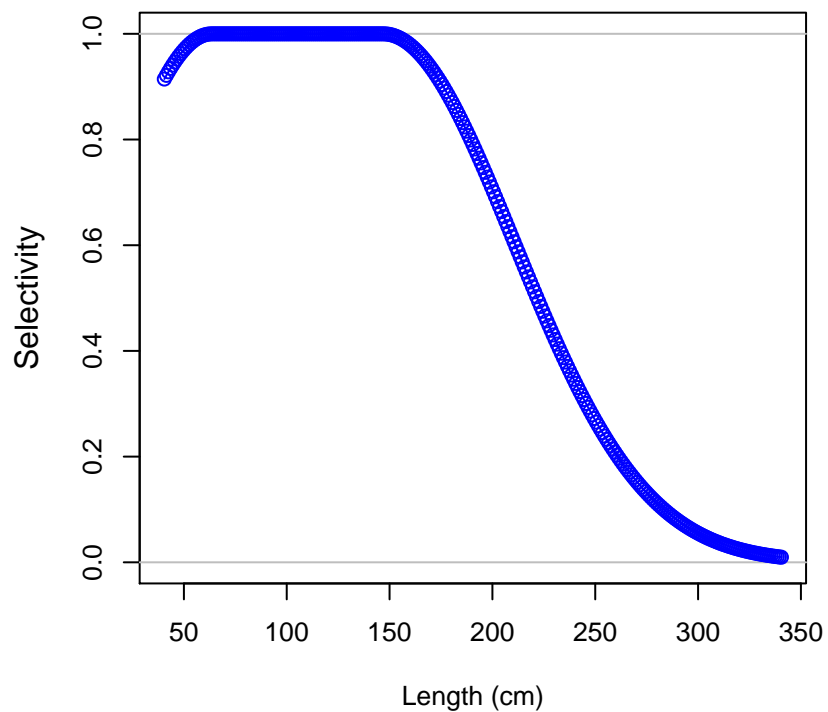
Derived age-based from length-based selectivity by fleet in 2016



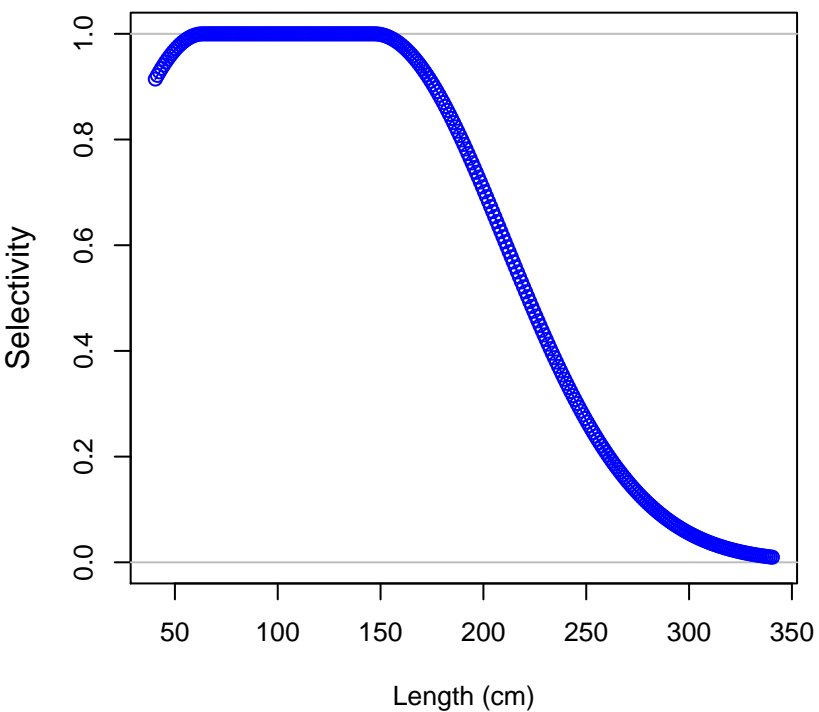
Female ending year selectivity for F1_US_CA



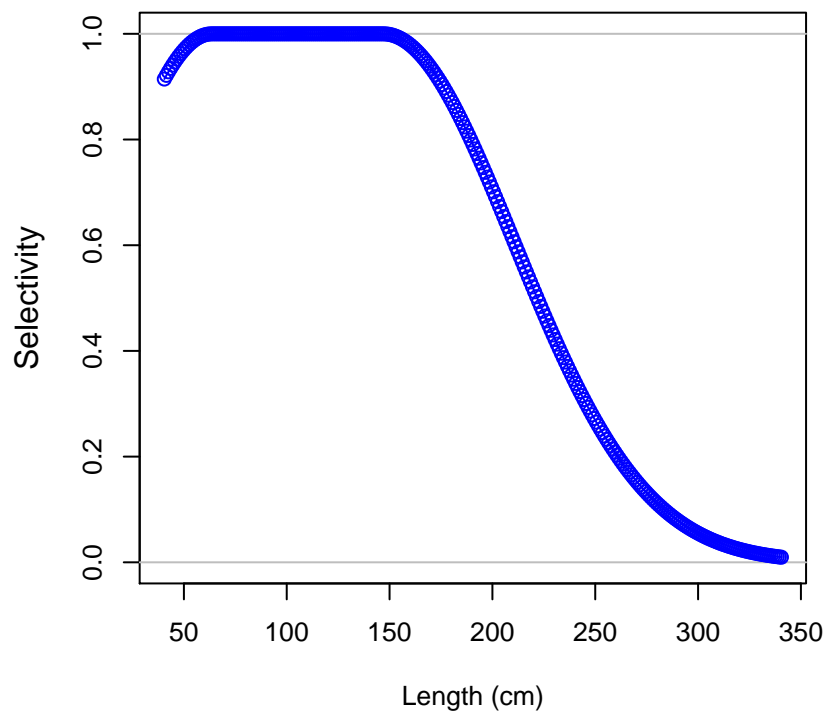
Female ending year selectivity for F2_US_HI_SS



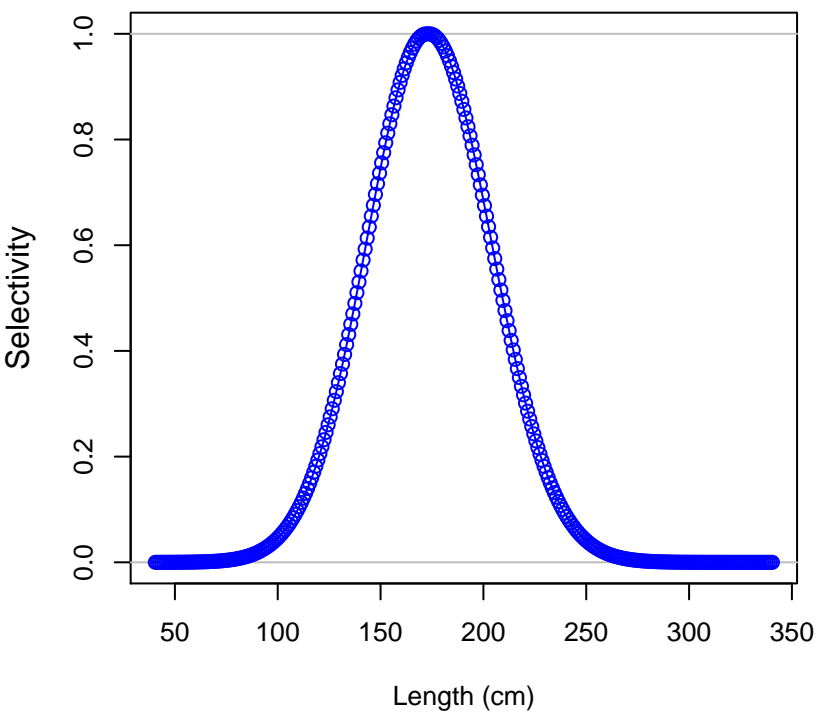
Male ending year selectivity for F1_US_CA



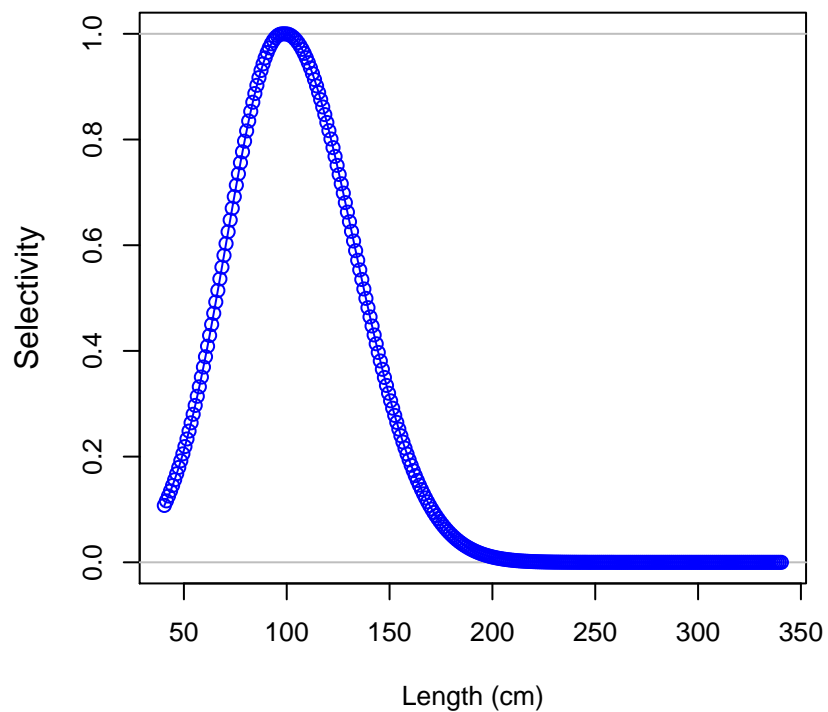
Male ending year selectivity for F2_US_HI_SS



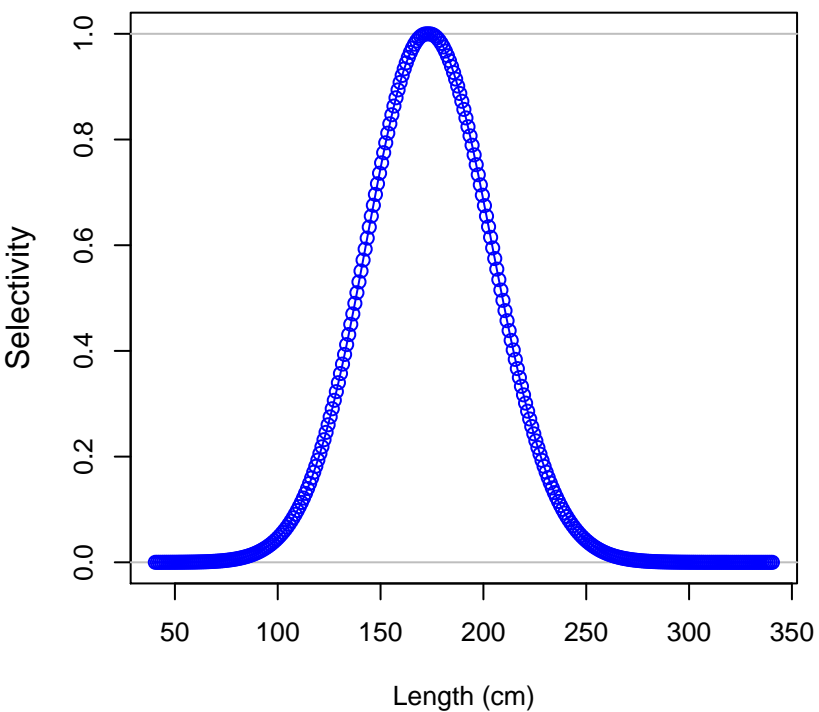
Female ending year selectivity for F3_US_HI_DS



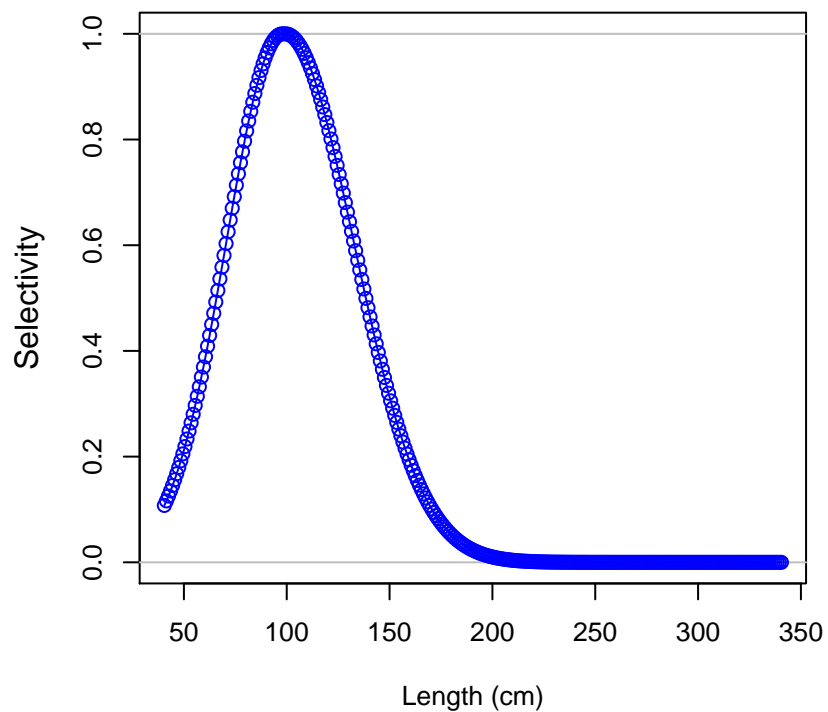
Female ending year selectivity for F4_US_DGN



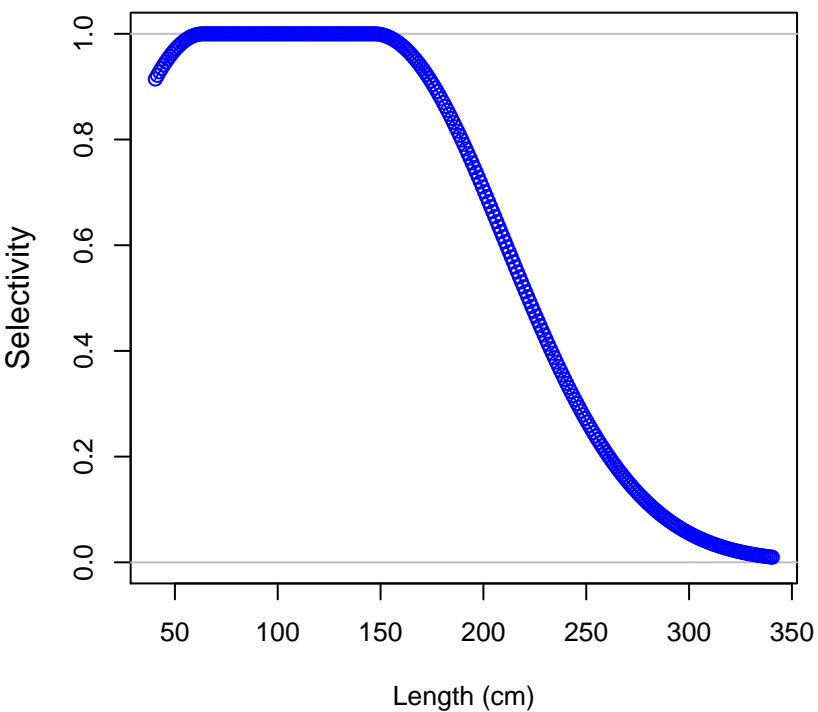
Male ending year selectivity for F3_US_HI_DS



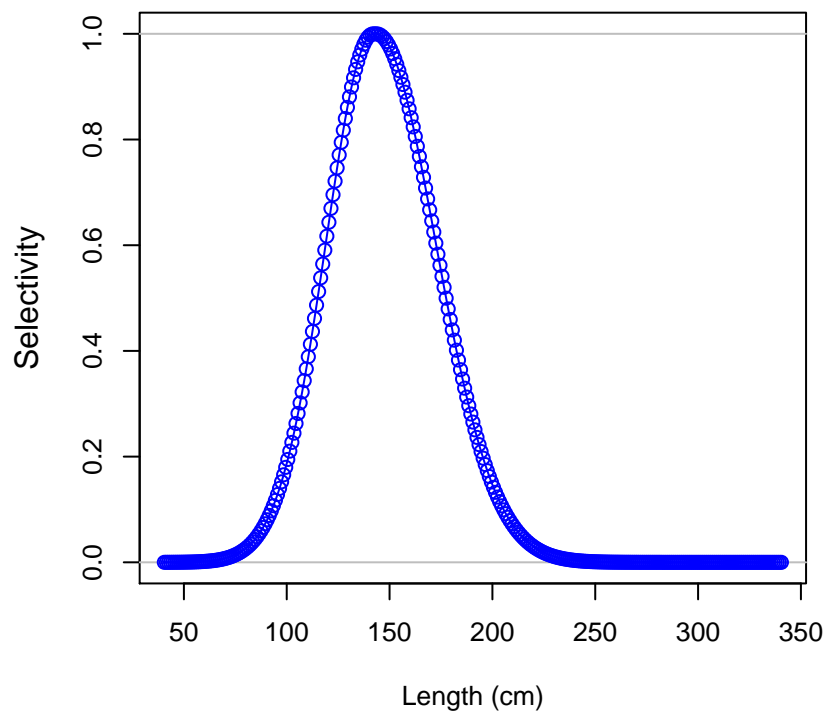
Male ending year selectivity for F4_US_DGN



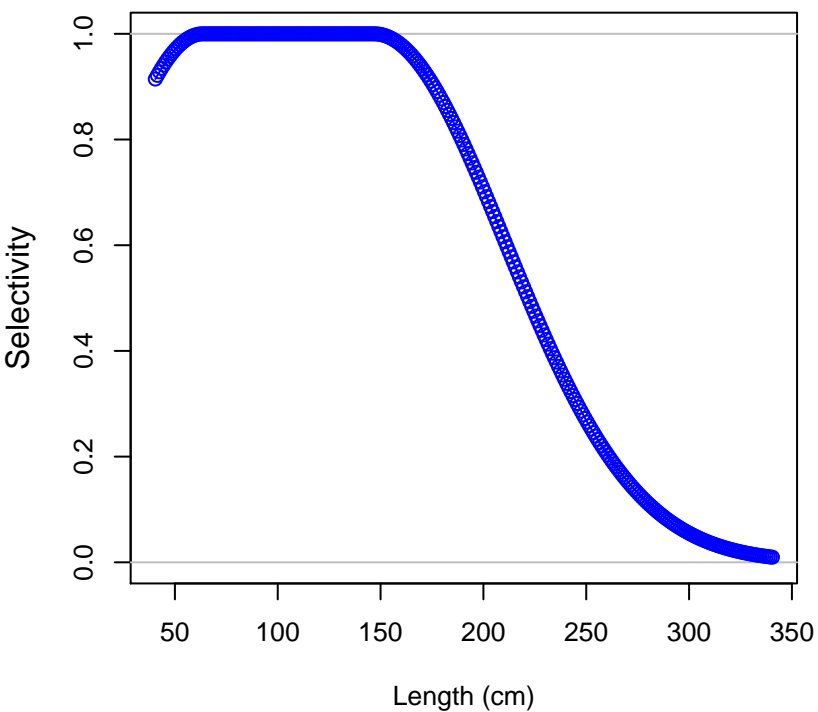
Female ending year selectivity for F5_US_REC



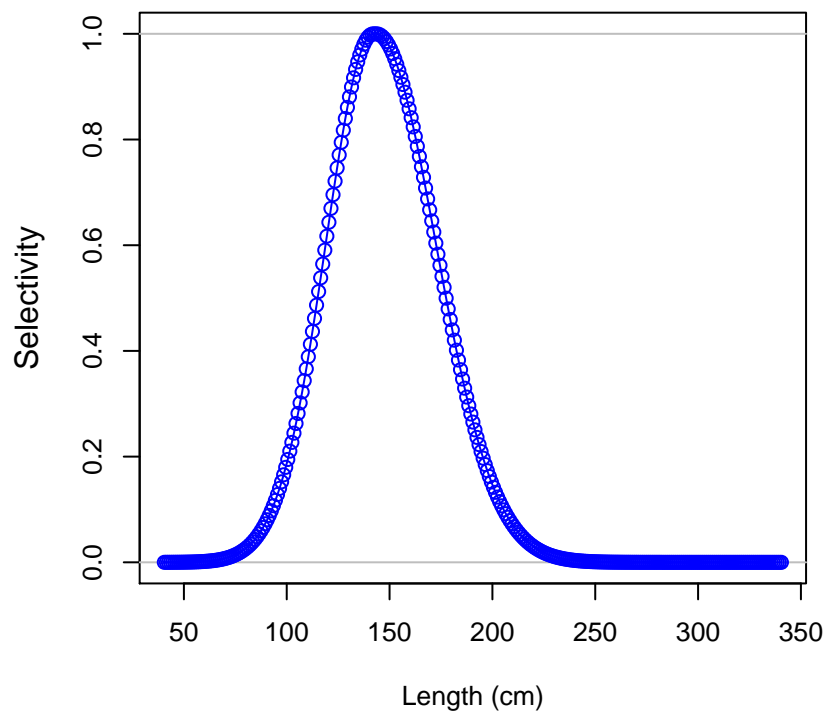
Female ending year selectivity for F6_TW_LRG_N



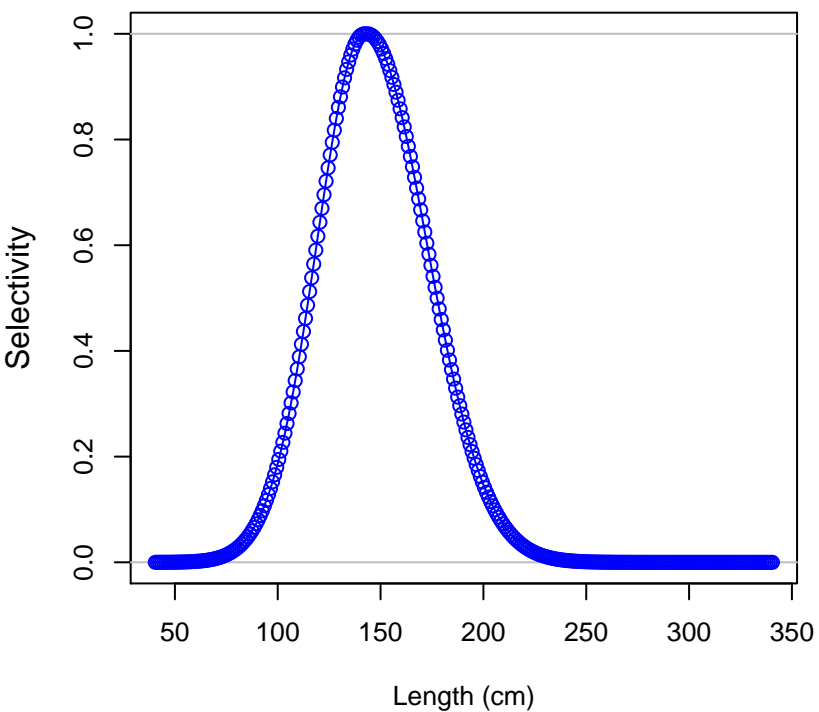
Male ending year selectivity for F5_US_REC



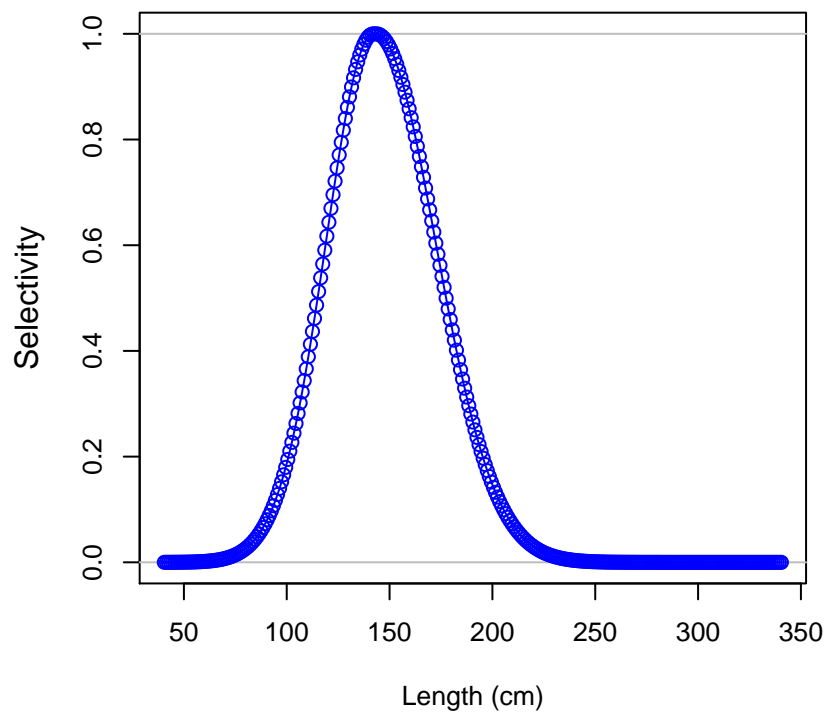
Male ending year selectivity for F6_TW_LRG_N



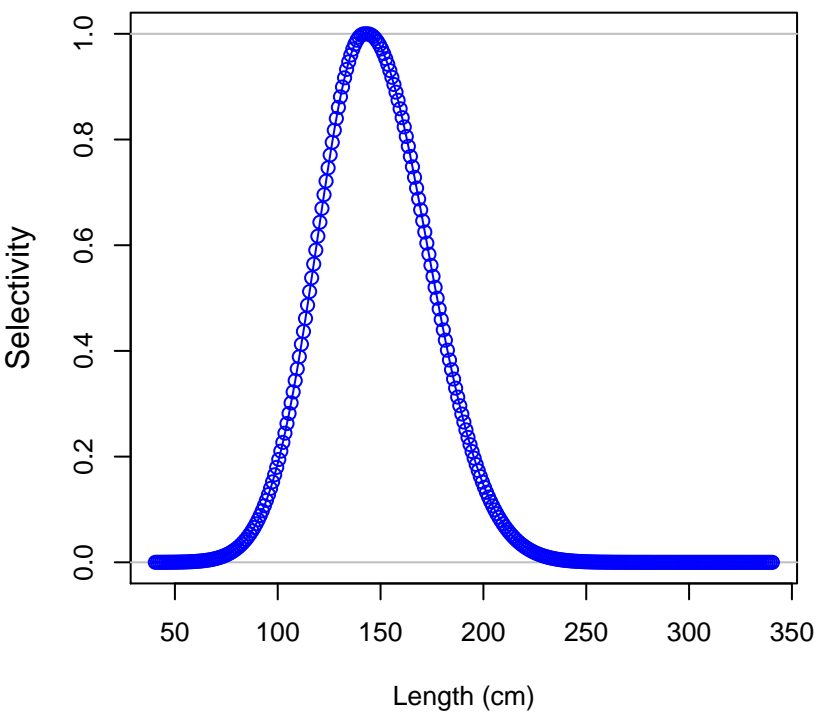
Female ending year selectivity for F7_TW_LRG_S



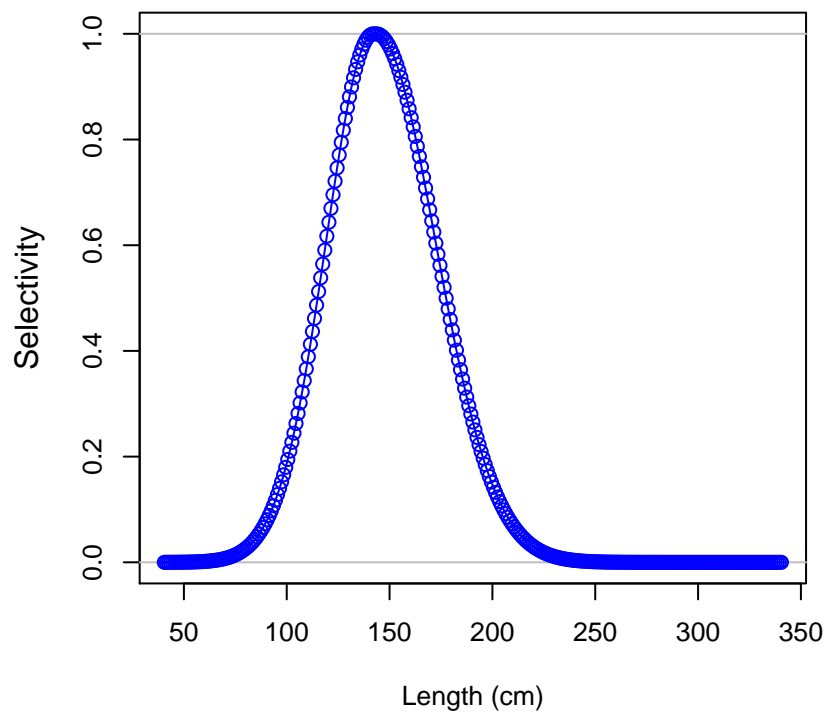
Female ending year selectivity for F8_TW_SML



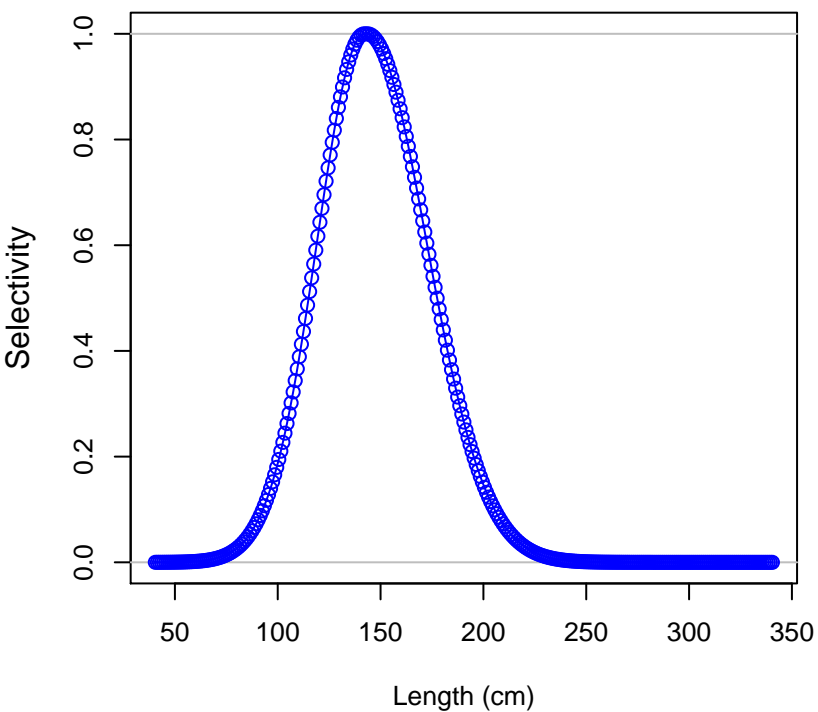
Male ending year selectivity for F7_TW_LRG_S



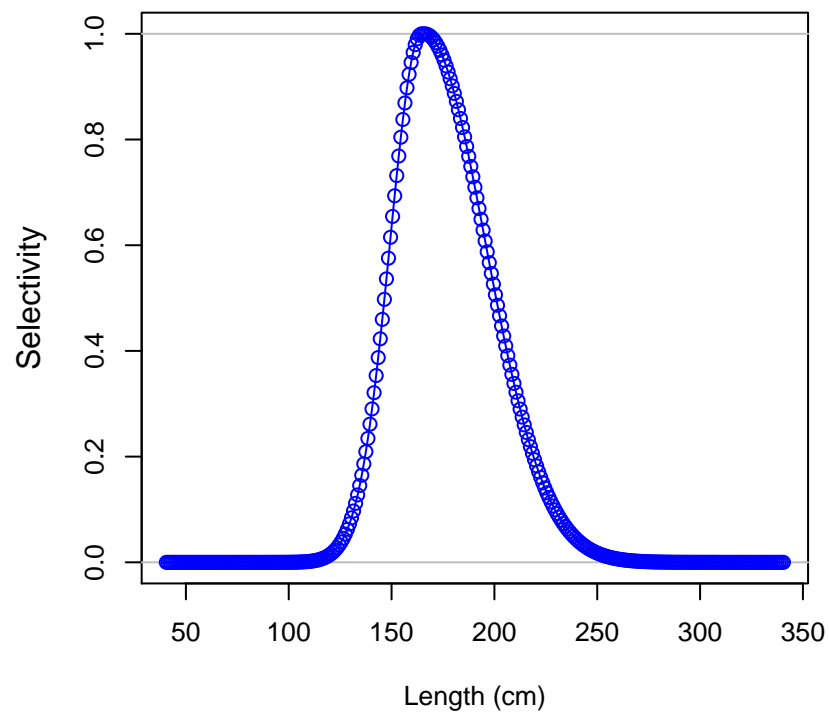
Male ending year selectivity for F8_TW_SML



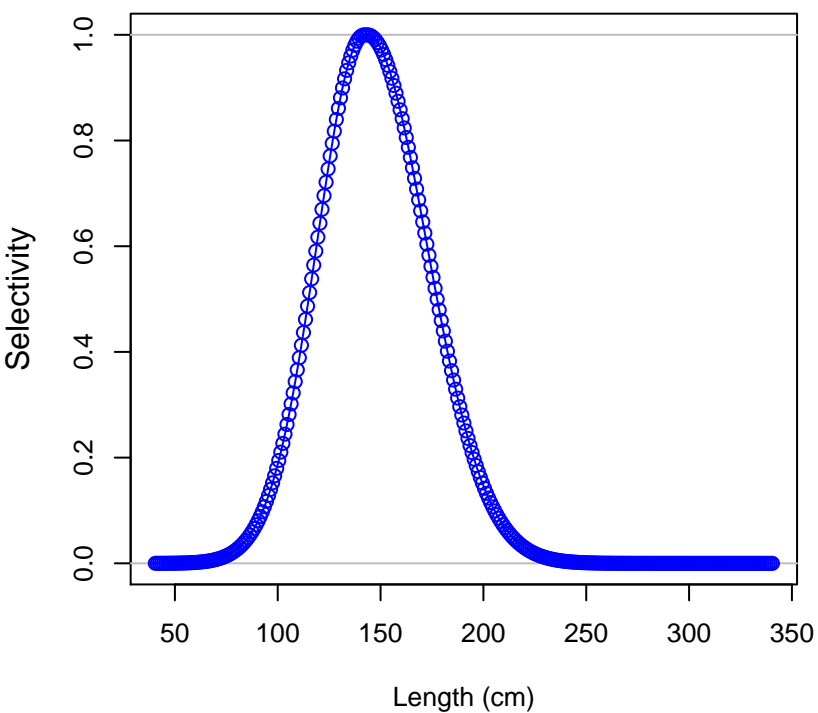
Female ending year selectivity for F9_JPN_SS



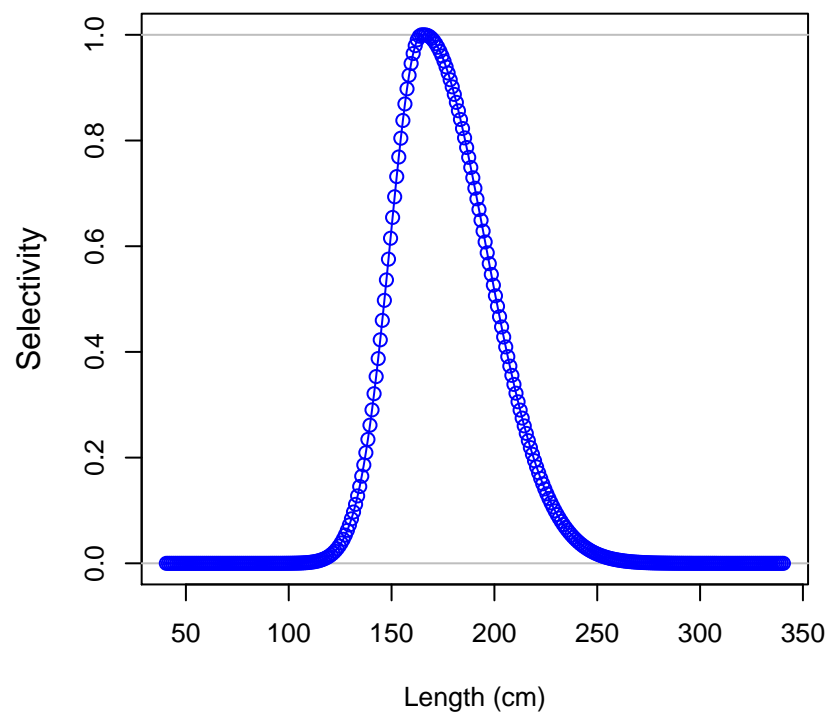
Female ending year selectivity for F10_JPN_DS



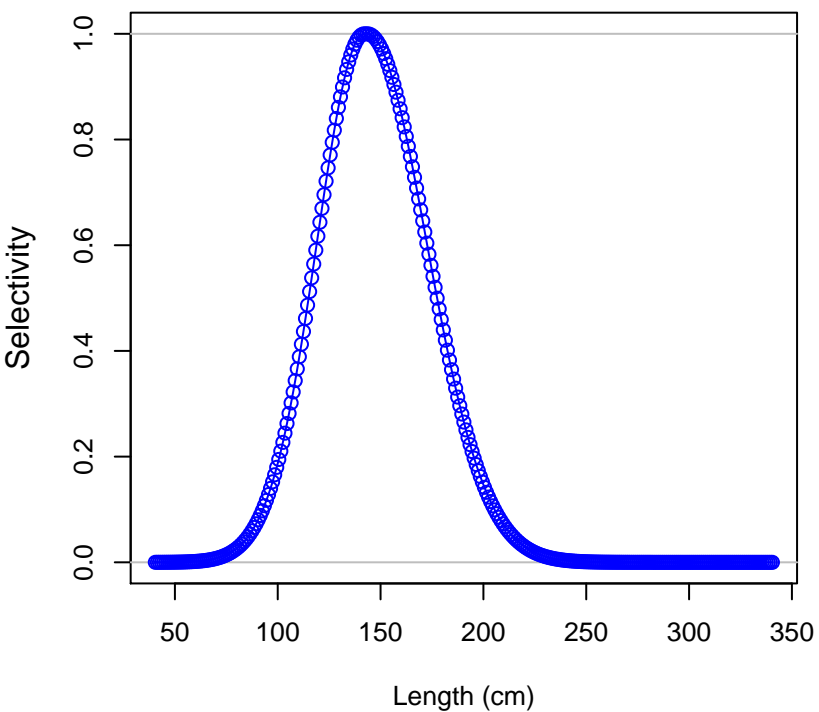
Male ending year selectivity for F9_JPN_SS



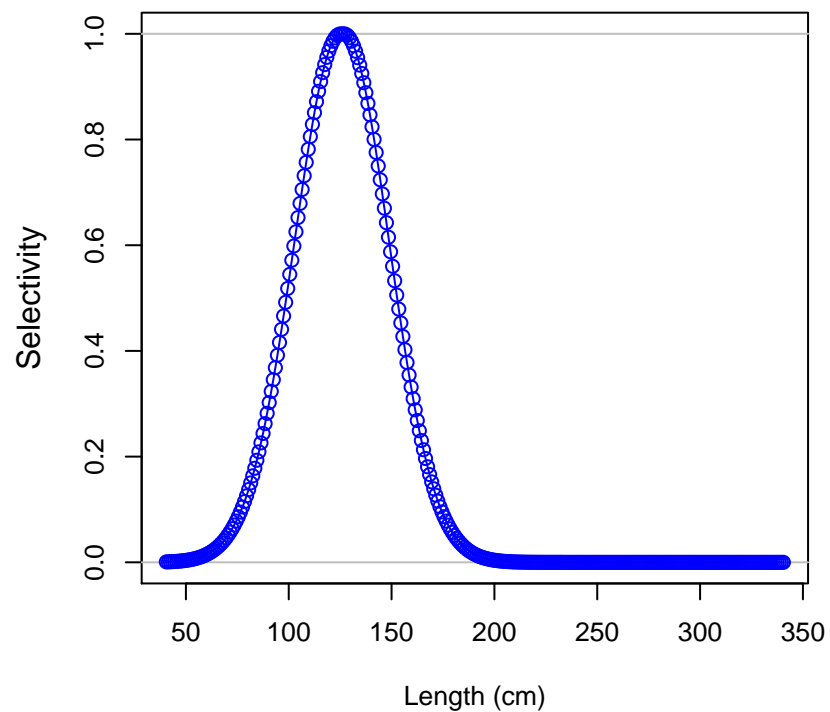
Male ending year selectivity for F10_JPN_DS



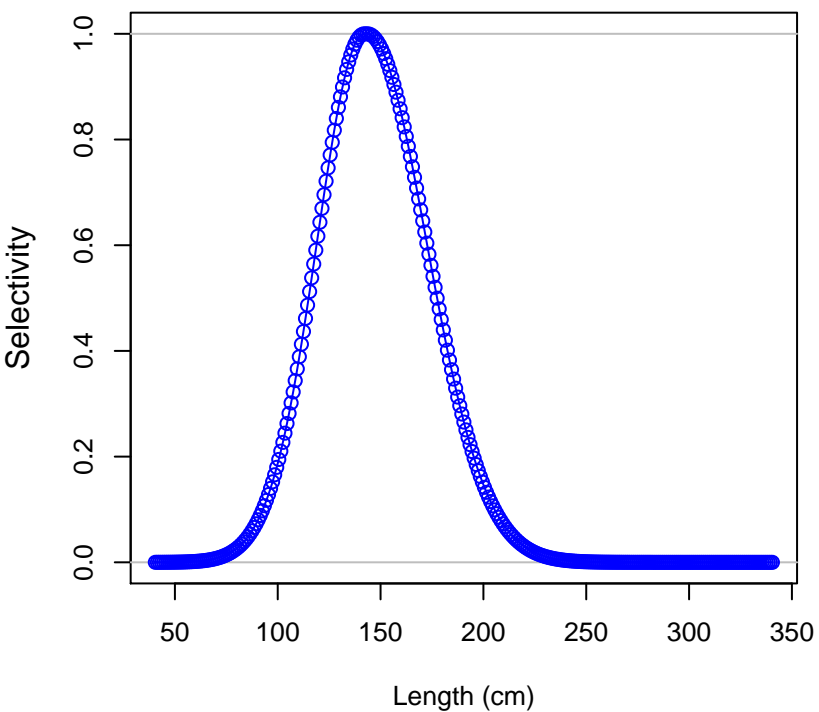
Female ending year selectivity for F11_JPN_CST



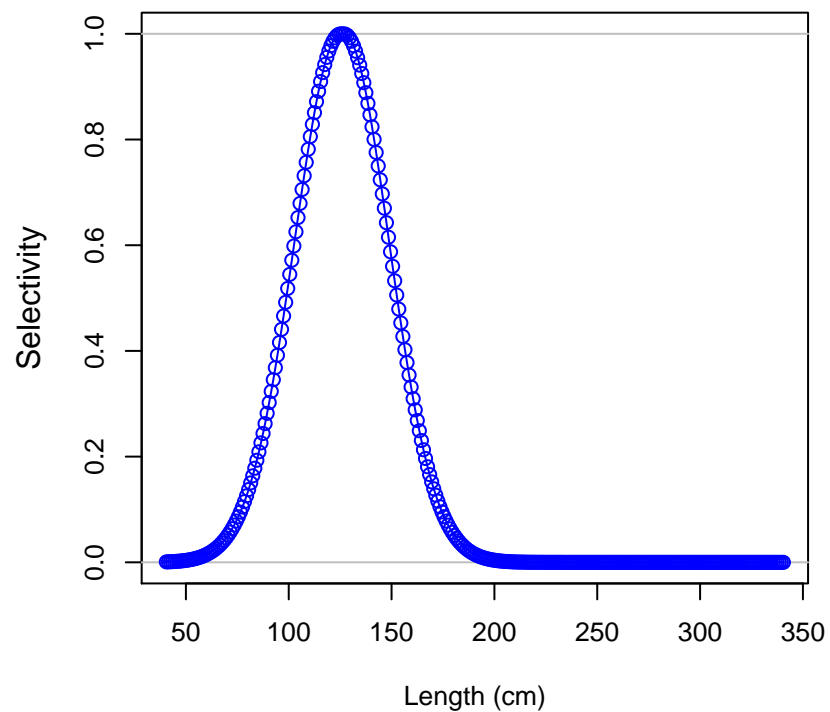
Female ending year selectivity for F12_JPN_DFN



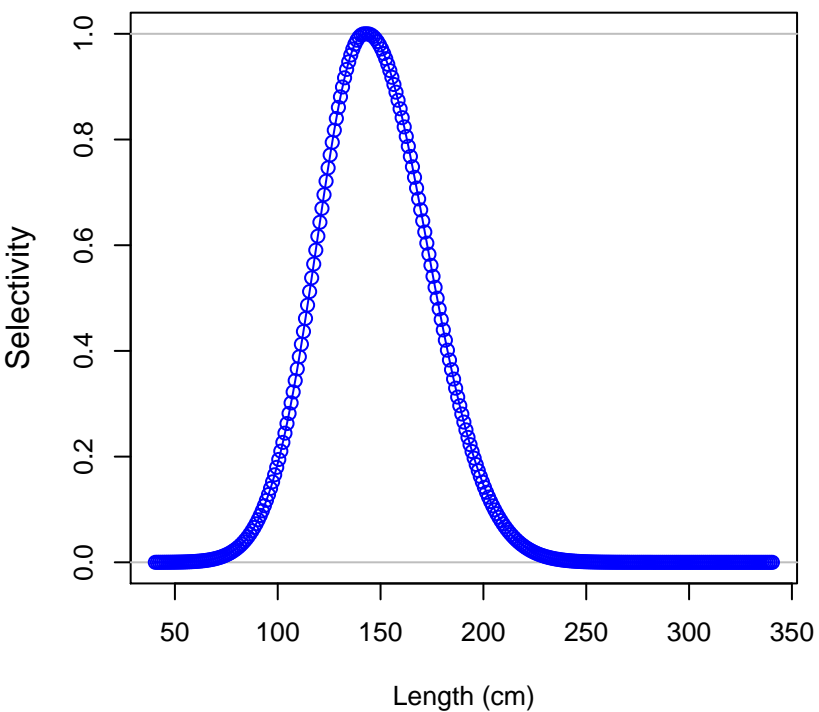
Male ending year selectivity for F11_JPN_CST



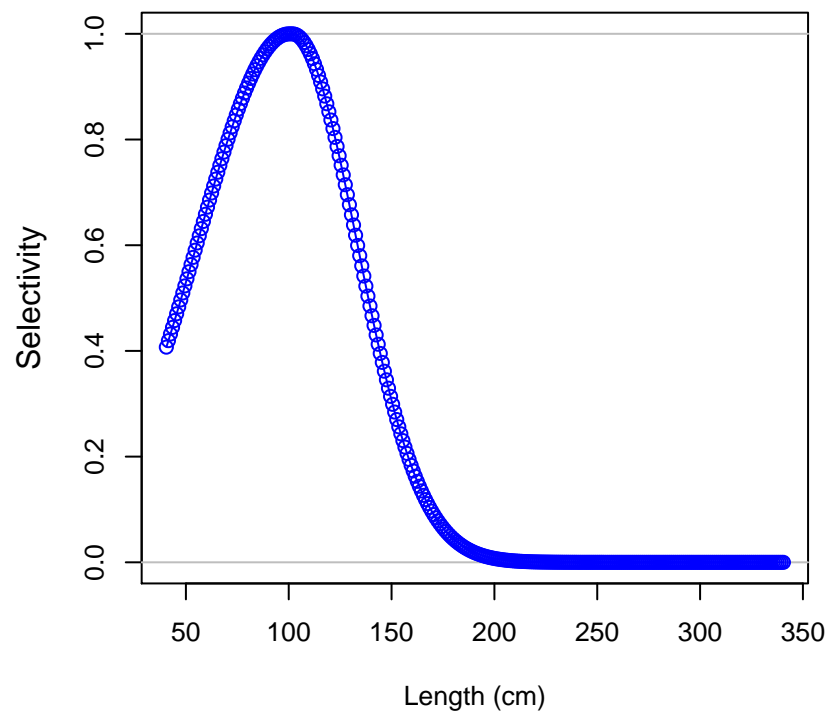
Male ending year selectivity for F12_JPN_DFN



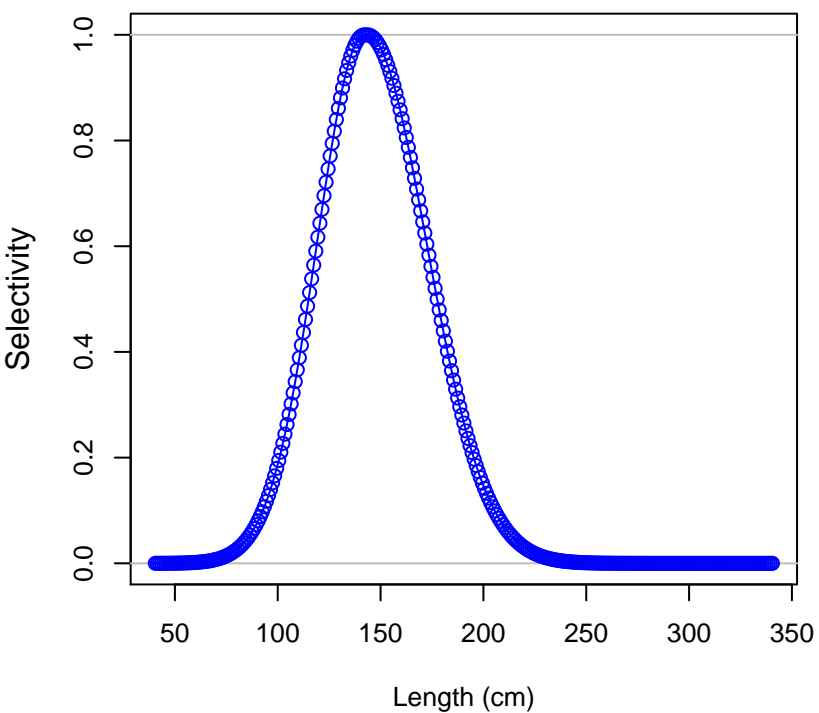
Female ending year selectivity for F13_JPN_OTH



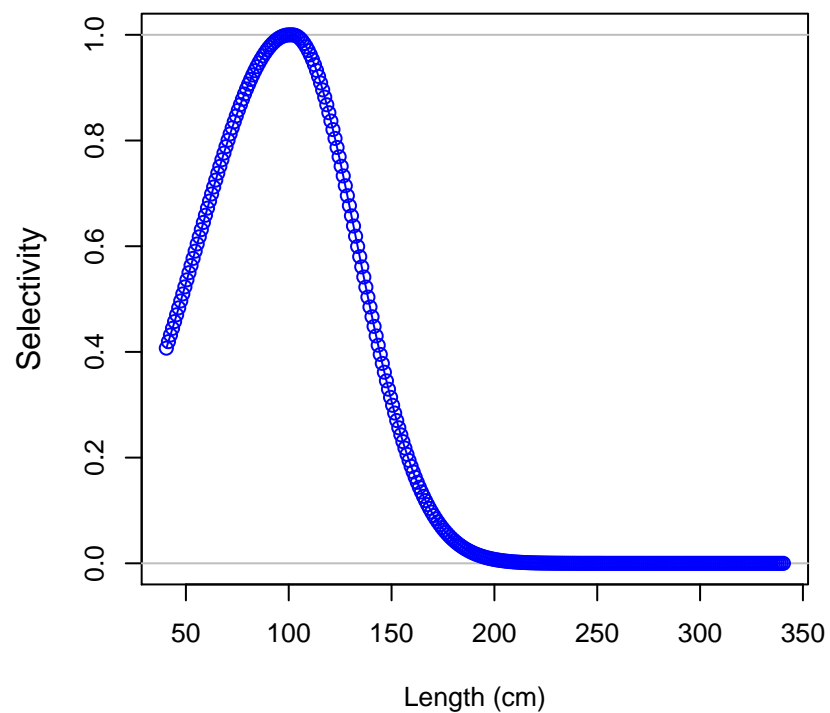
Female ending year selectivity for F14_MEX_NOR



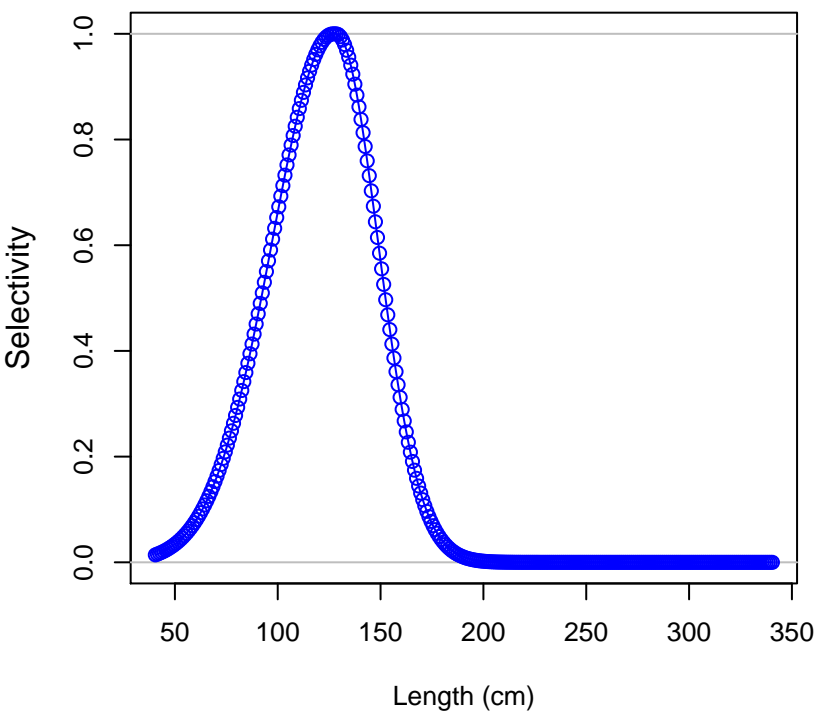
Male ending year selectivity for F13_JPN_OTH



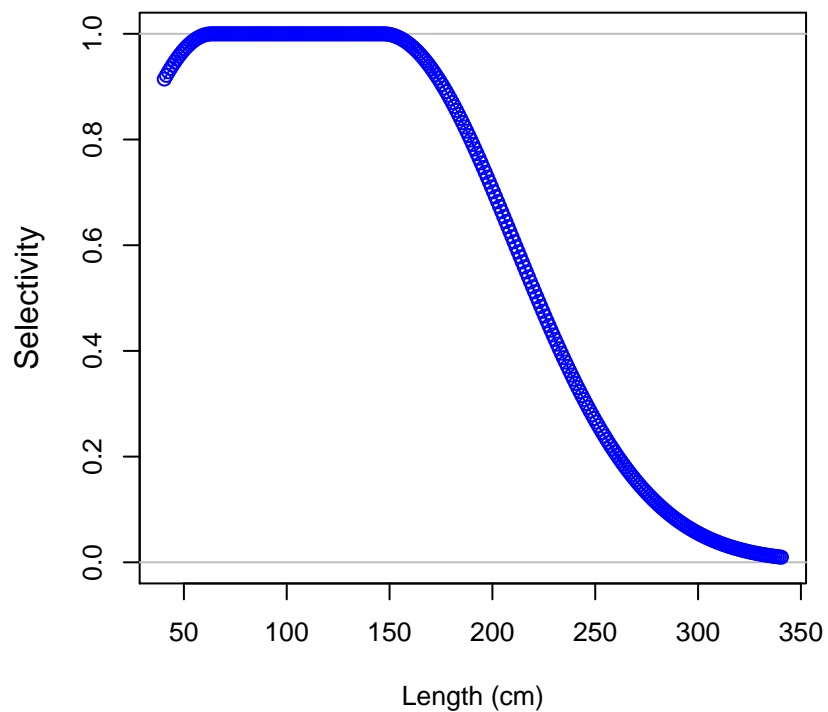
Male ending year selectivity for F14_MEX_NOR



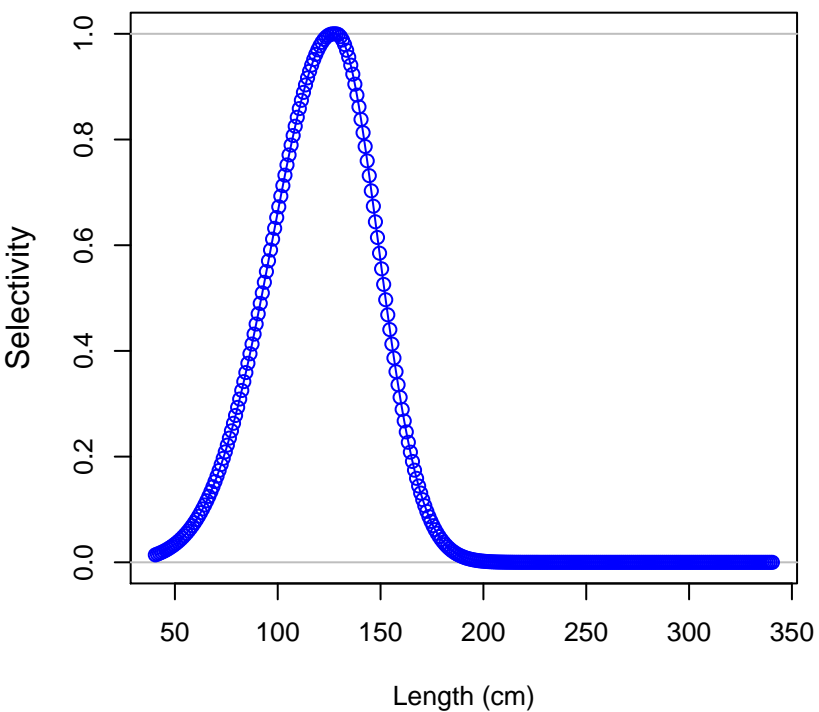
Female ending year selectivity for F15_MEX_SOU



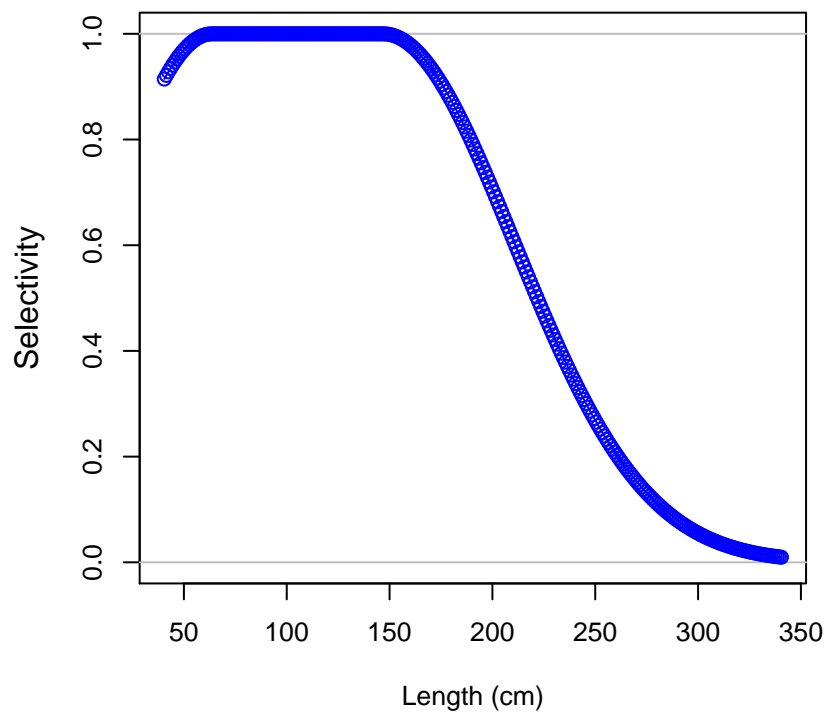
Female ending year selectivity for F16_WCPFC



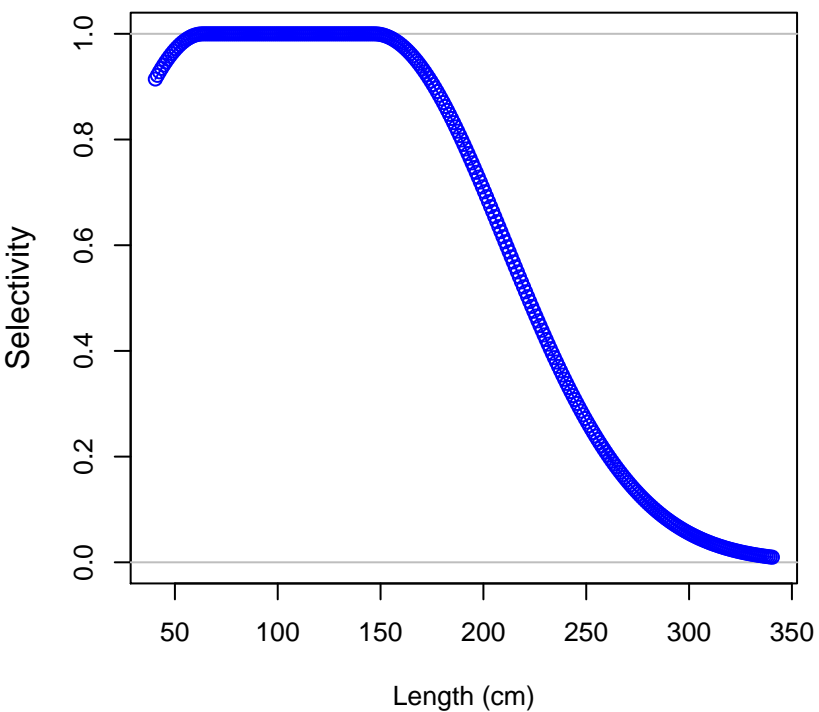
Male ending year selectivity for F15_MEX_SOU



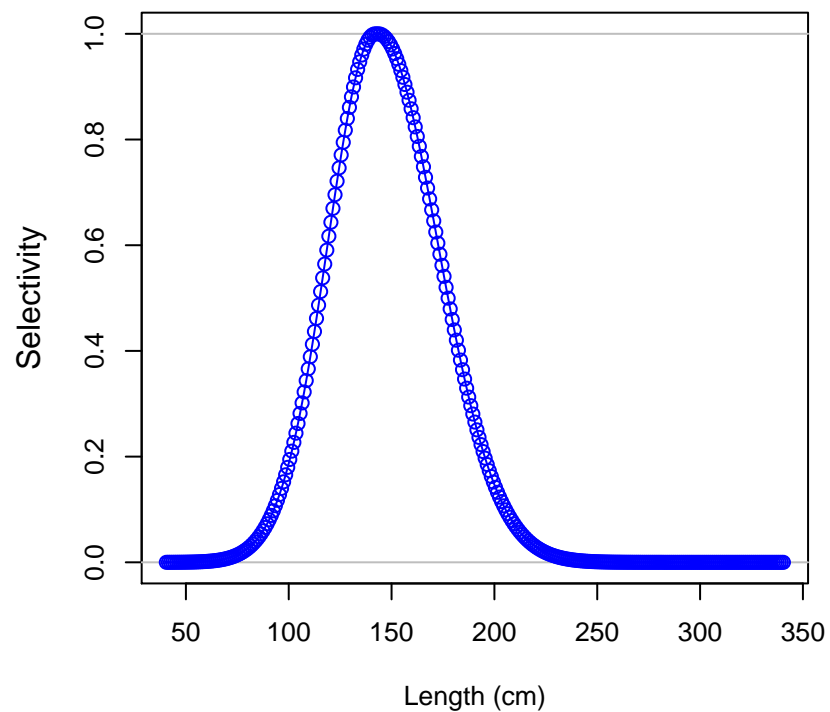
Male ending year selectivity for F16_WCPFC



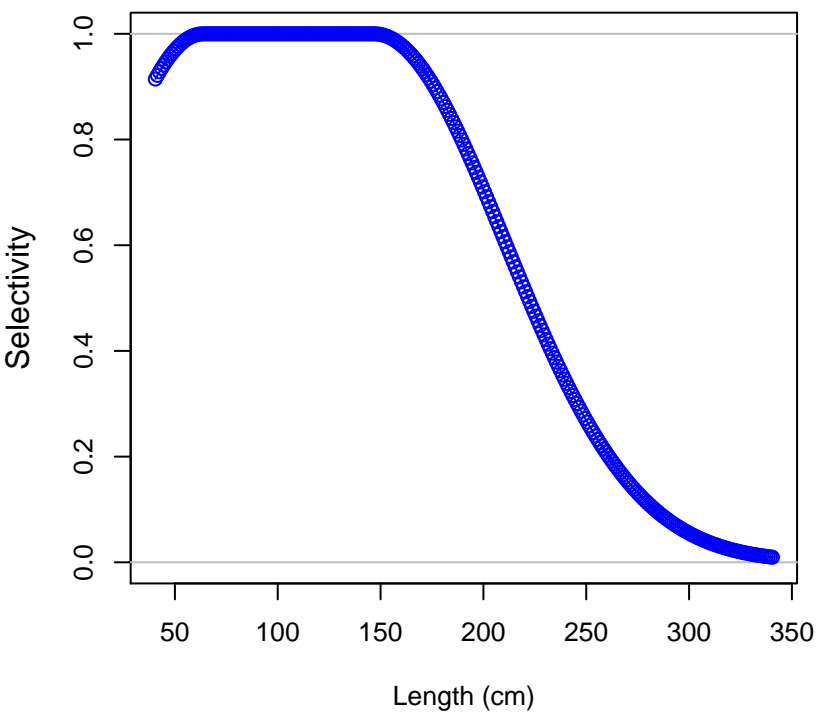
Female ending year selectivity for F17_IATTC



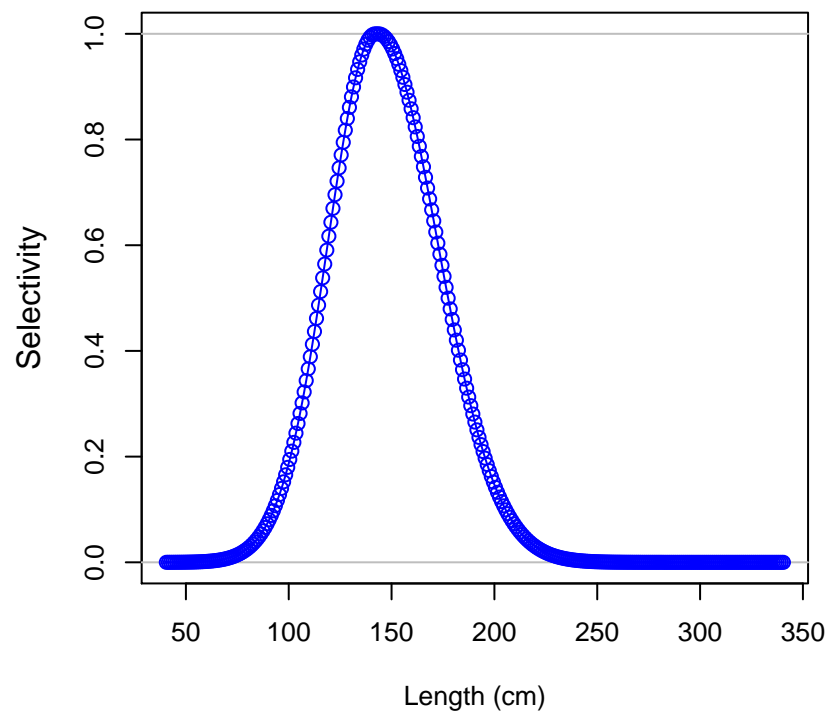
Female ending year selectivity for F18_JPN_SSII



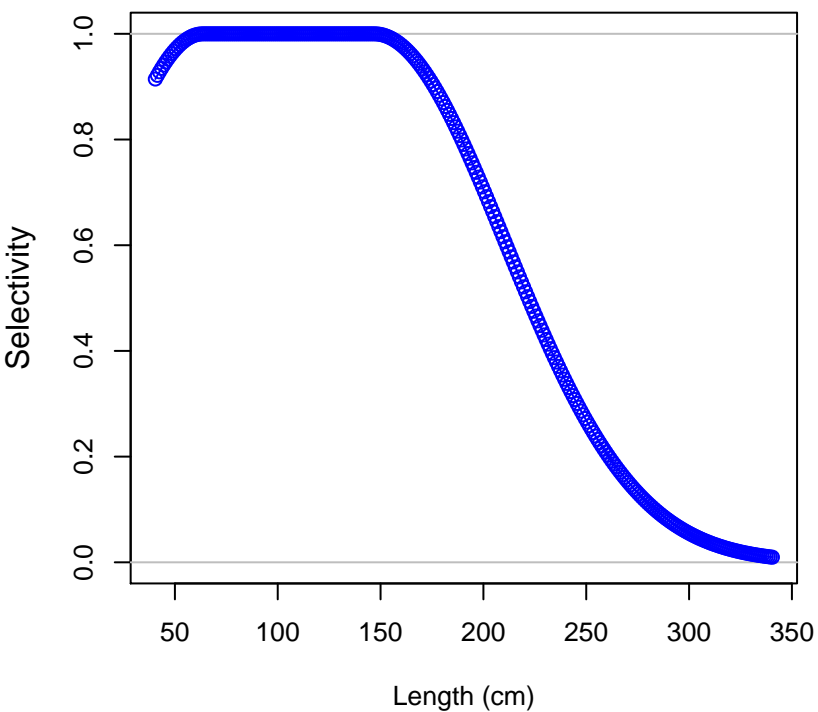
Male ending year selectivity for F17_IATTC



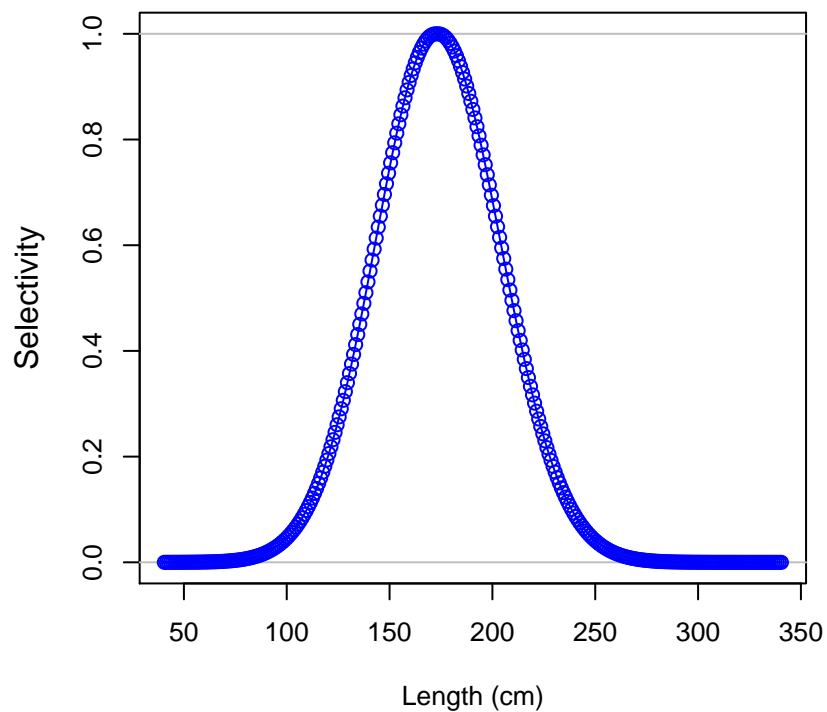
Male ending year selectivity for F18_JPN_SSII



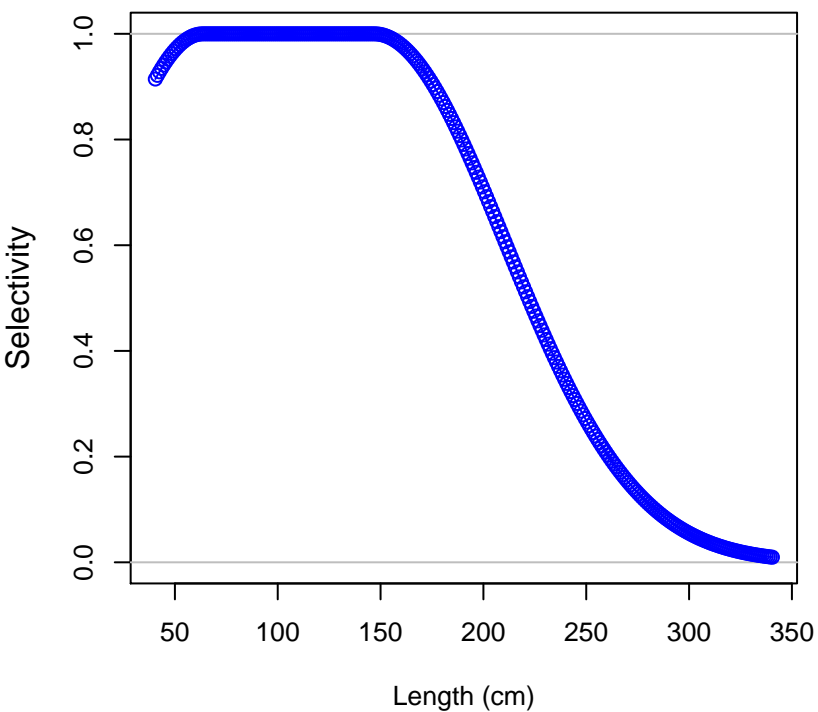
Female ending year selectivity for S1_US_SS



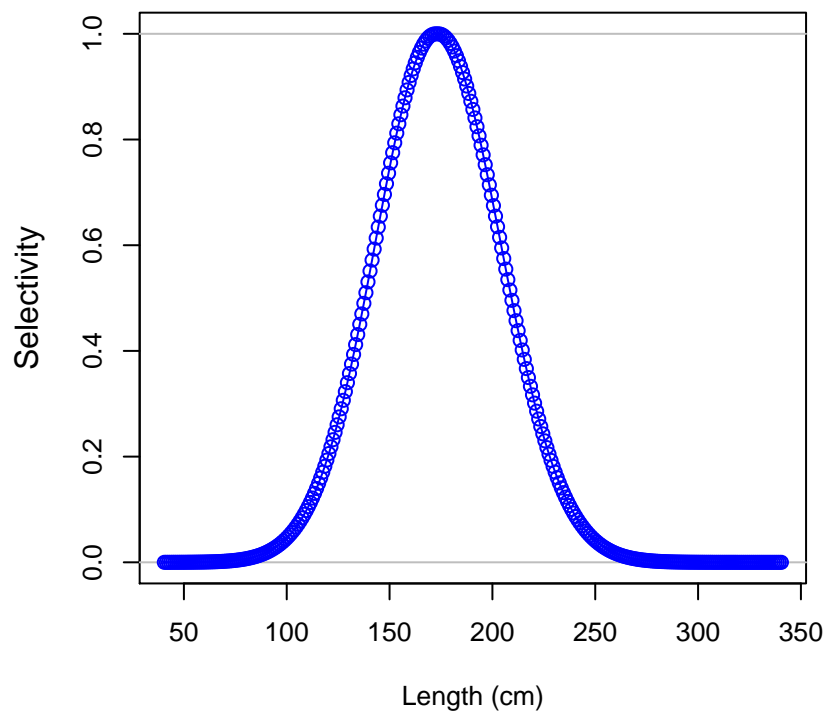
Female ending year selectivity for S2_US_DS



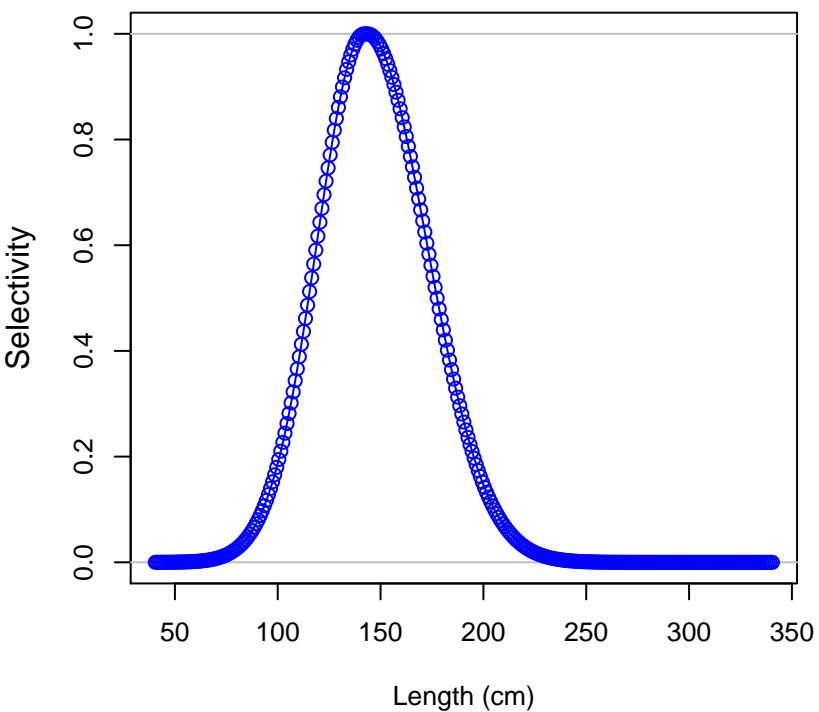
Male ending year selectivity for S1_US_SS



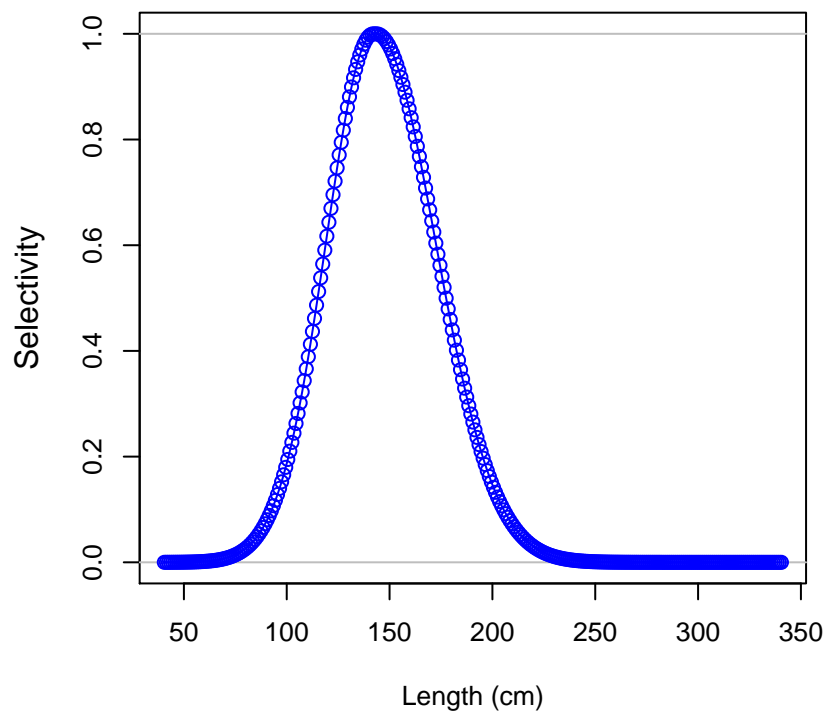
Male ending year selectivity for S2_US_DS



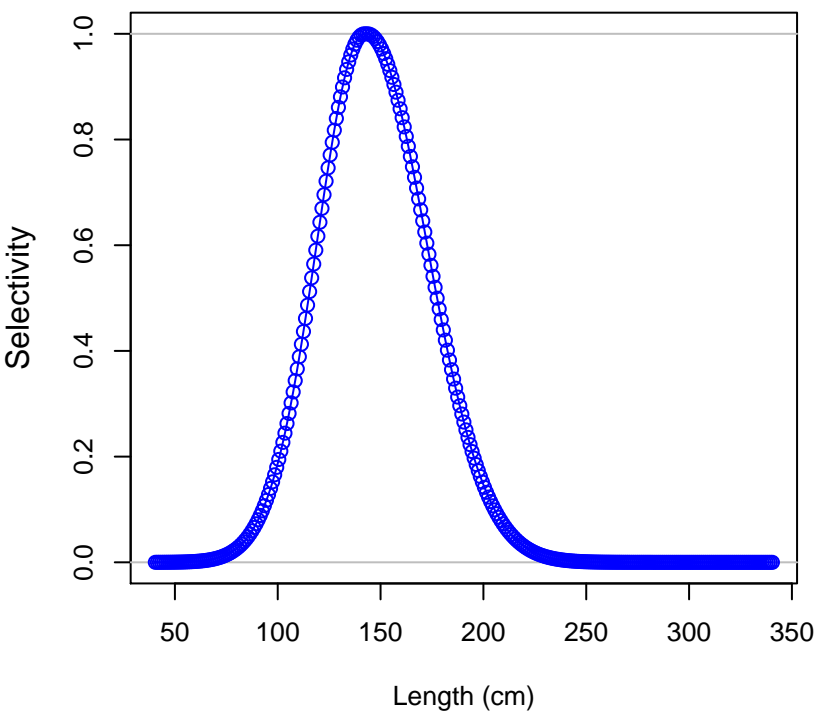
Female ending year selectivity for S3_TW_LRG



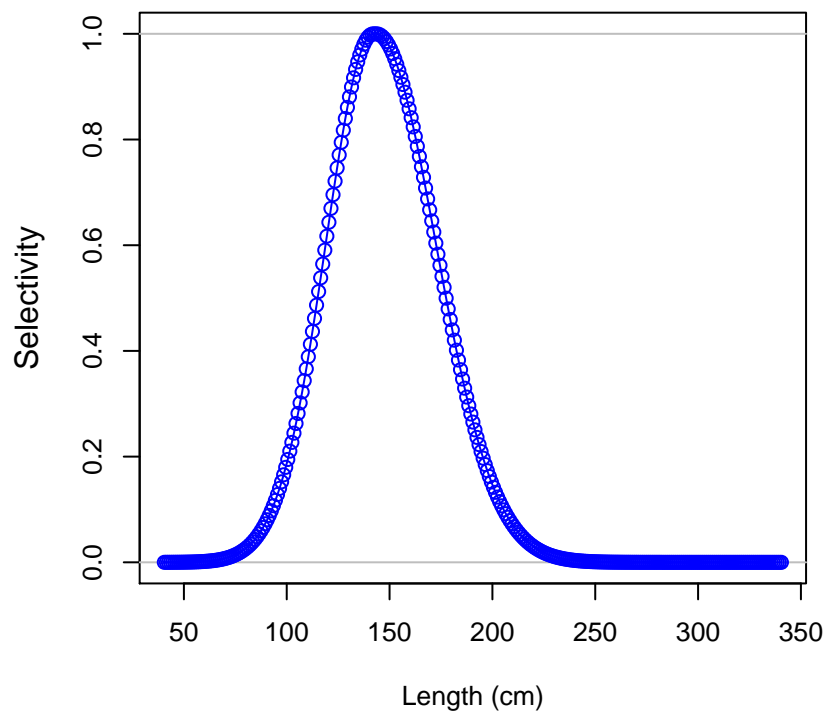
Female ending year selectivity for S4_JPN_SS



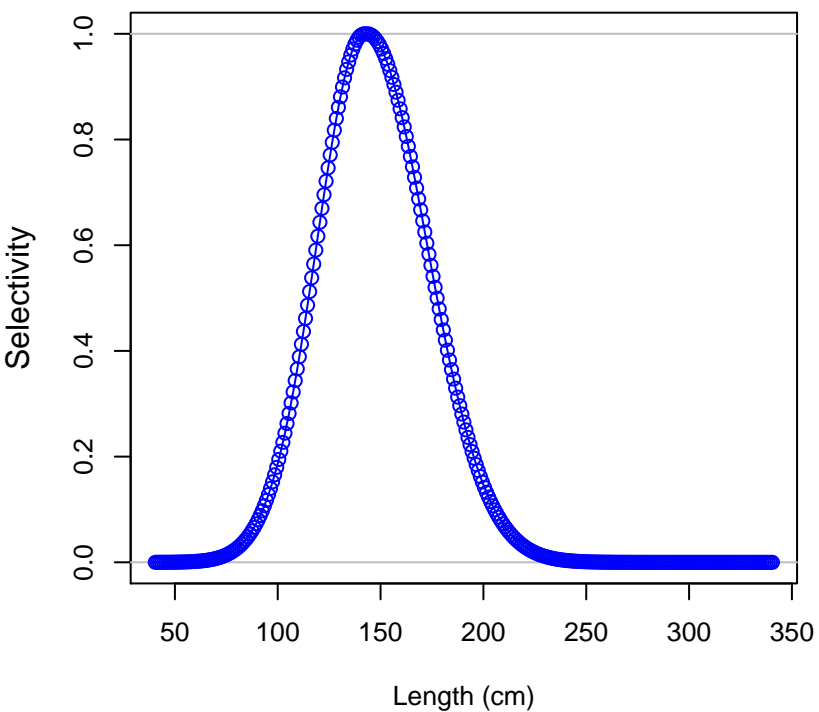
Male ending year selectivity for S3_TW_LRG



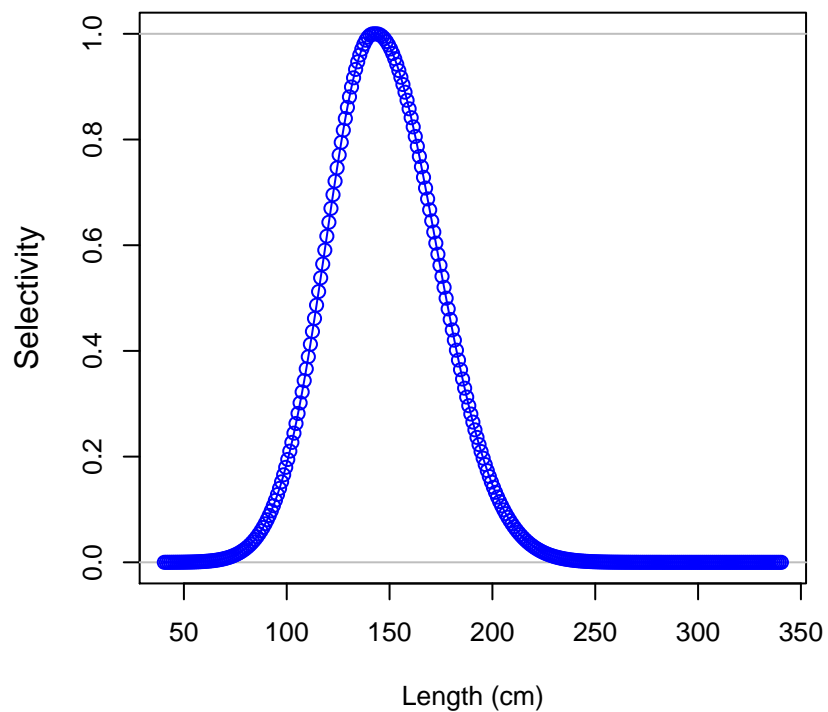
Male ending year selectivity for S4_JPN_SS



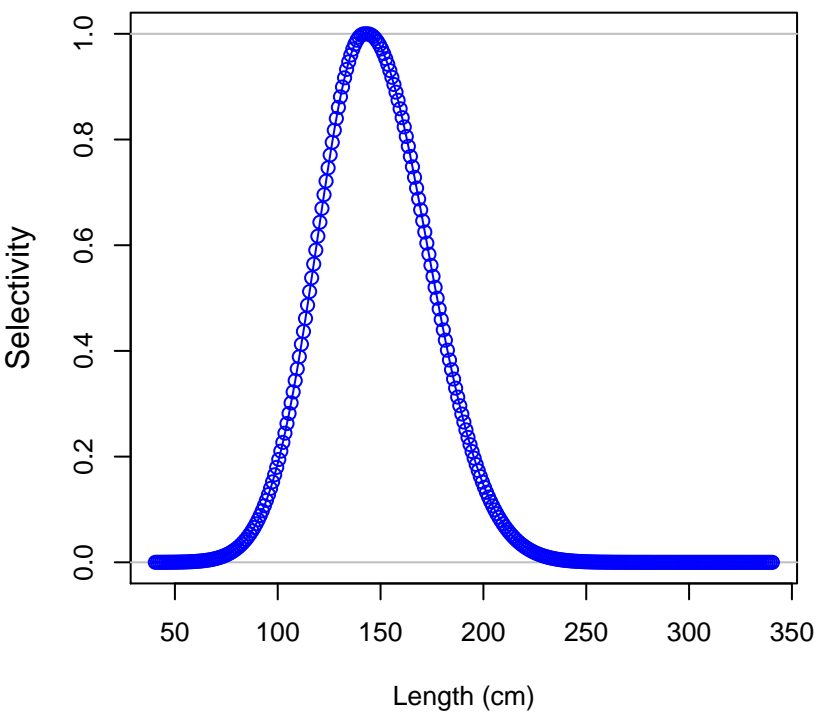
Female ending year selectivity for S5_JPN_RTV



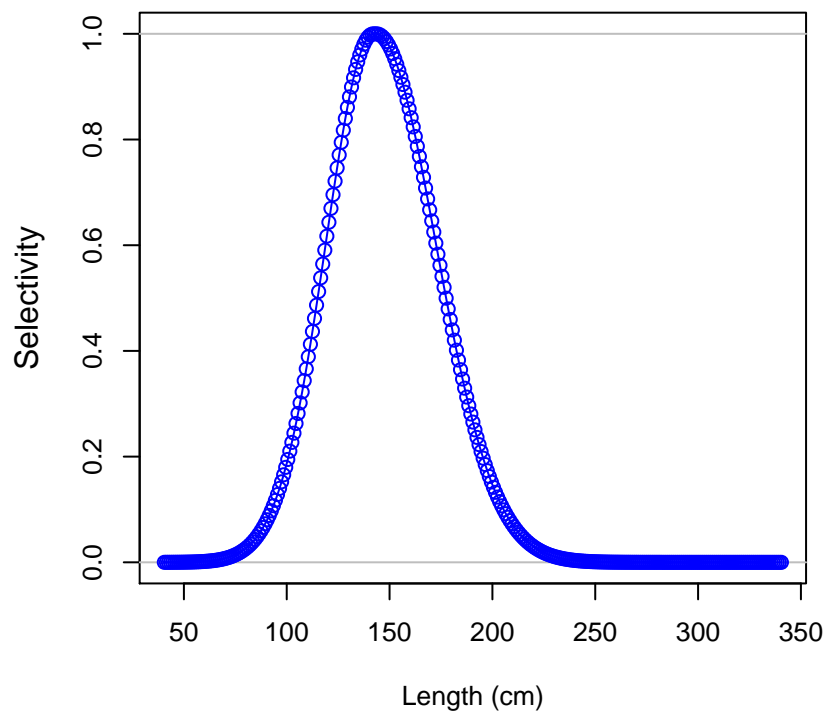
Female ending year selectivity for S6_JPN_OBS



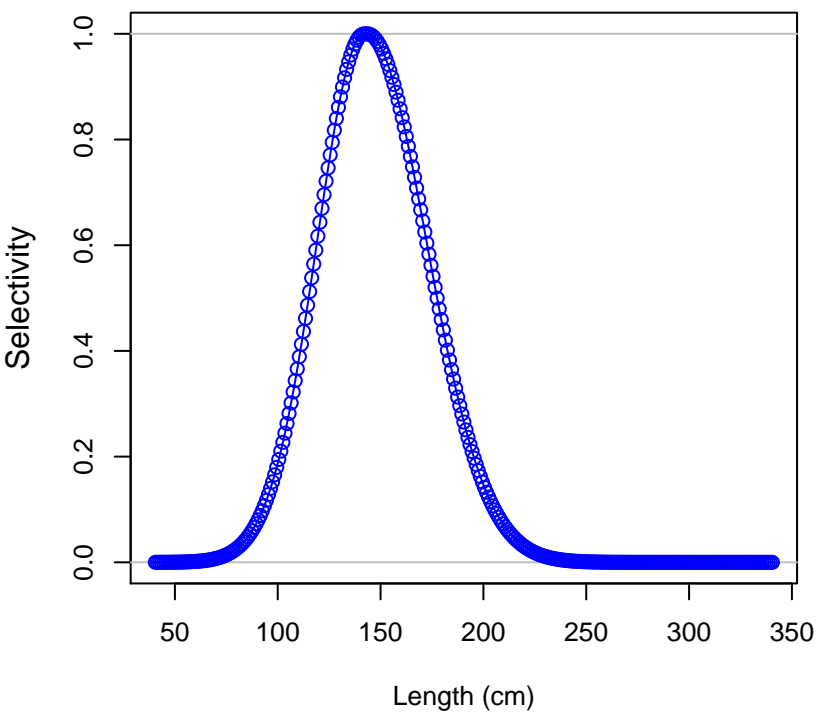
Male ending year selectivity for S5_JPN_RTV



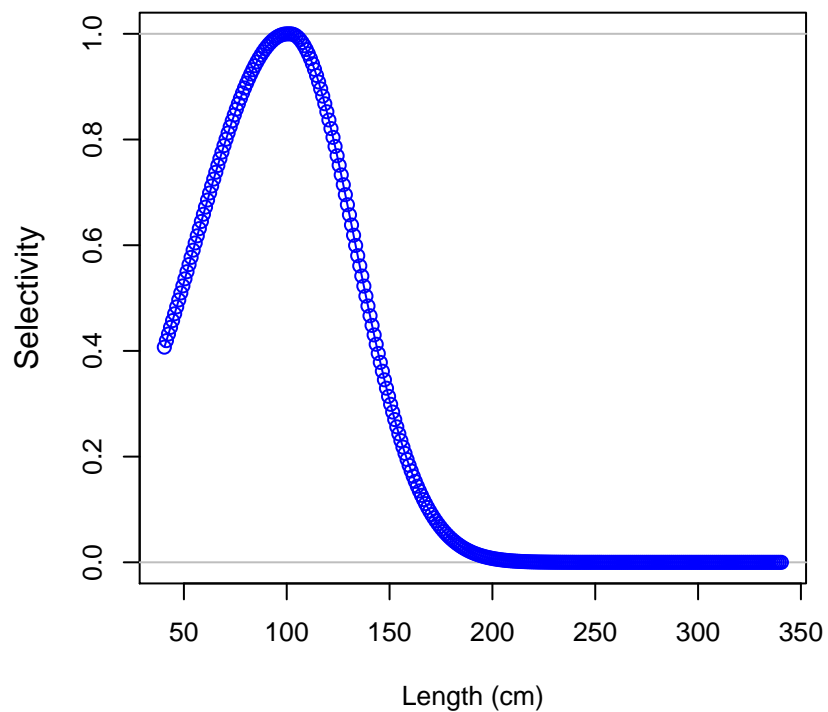
Male ending year selectivity for S6_JPN_OBS



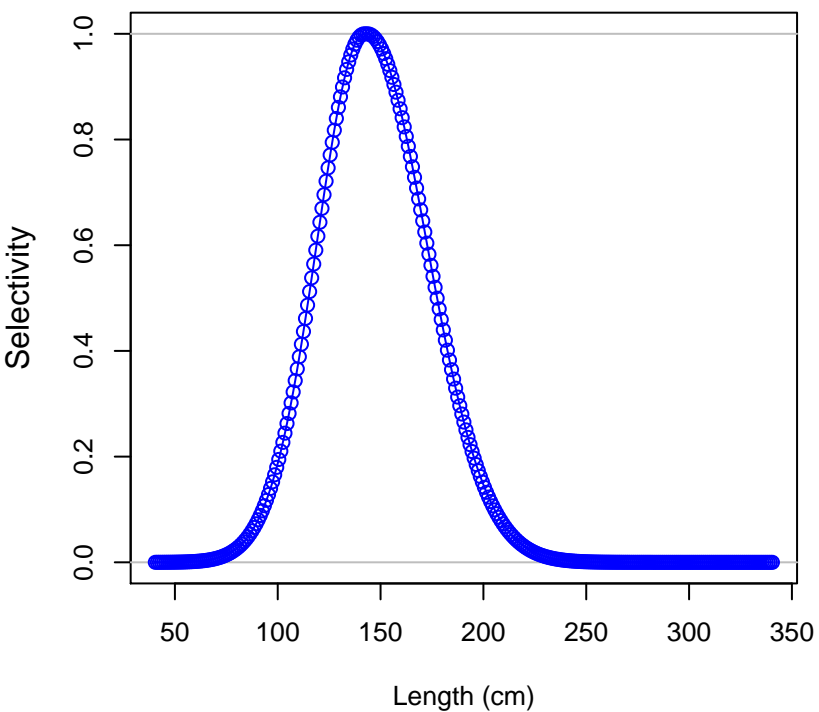
Female ending year selectivity for S7_JPN_GEO



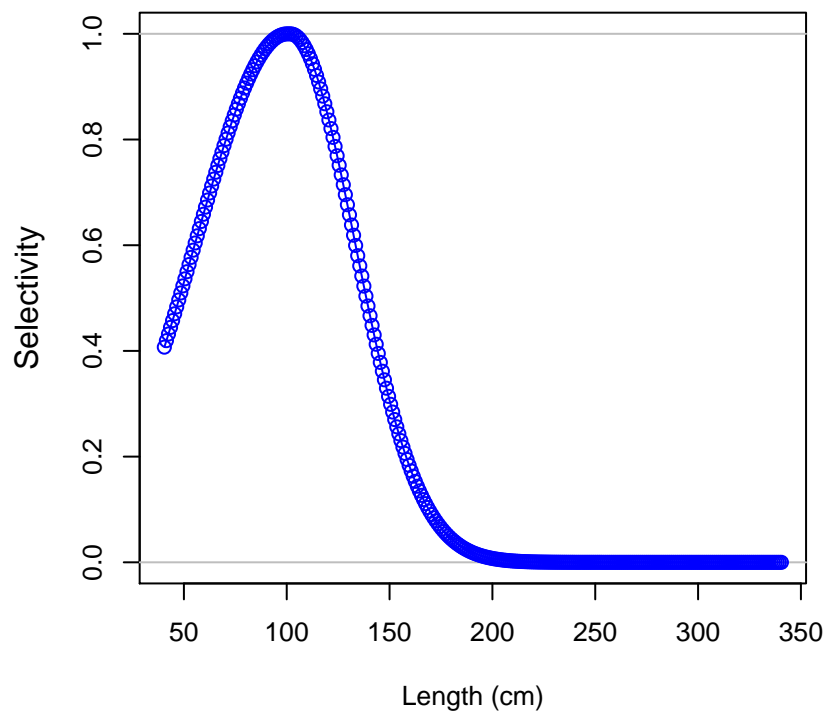
Female ending year selectivity for S8_MEX



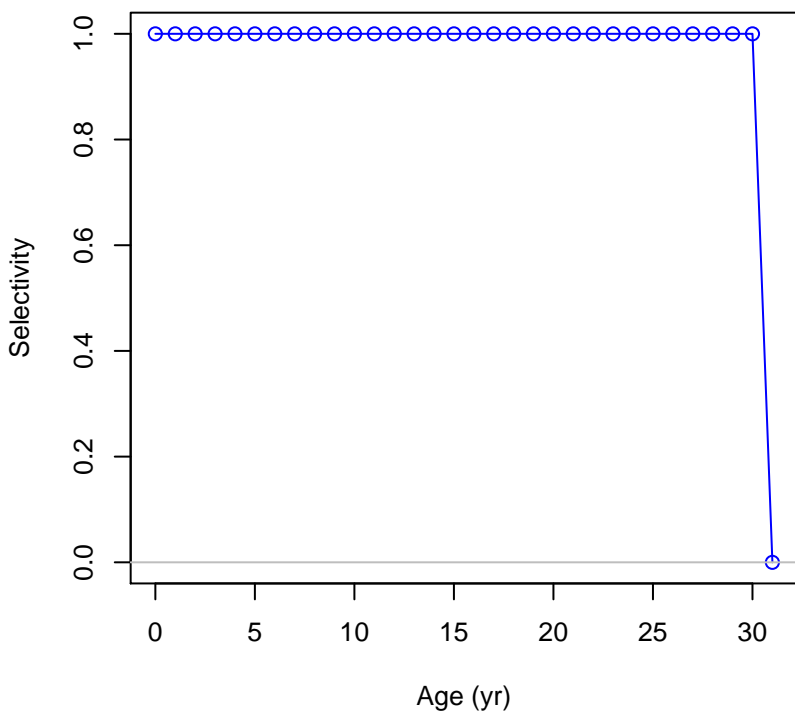
Male ending year selectivity for S7_JPN_GEO



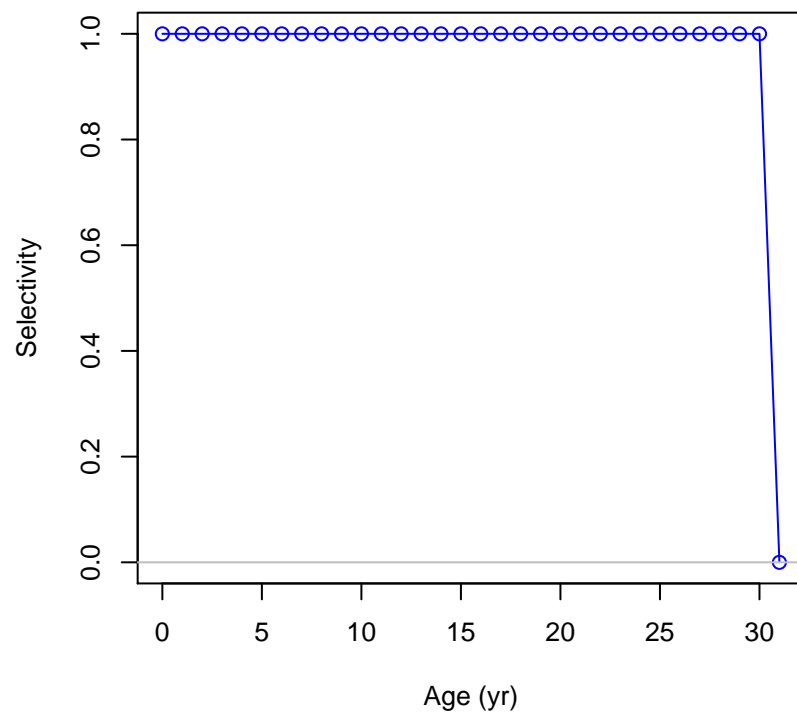
Male ending year selectivity for S8_MEX



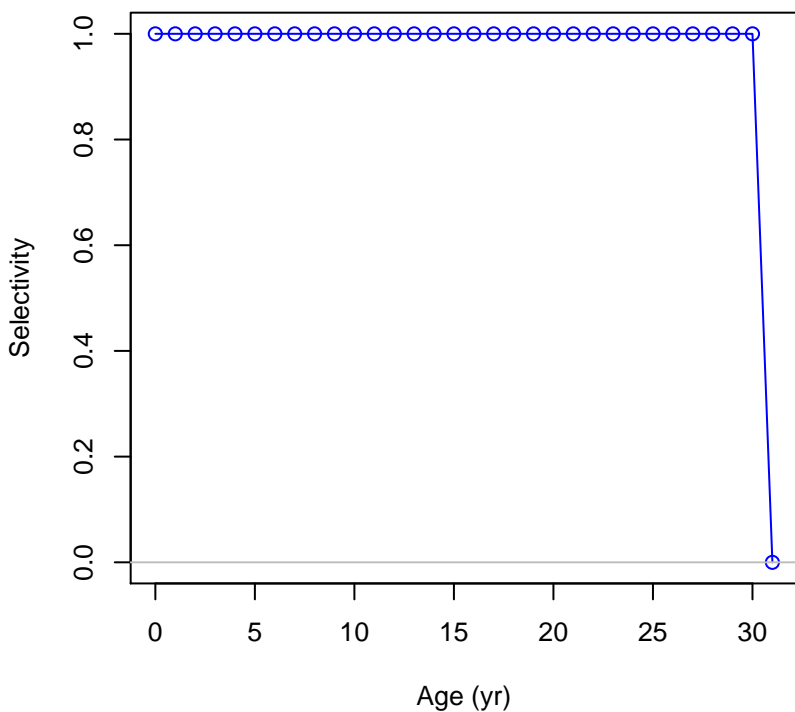
Female ending year selectivity for F1_US_CA



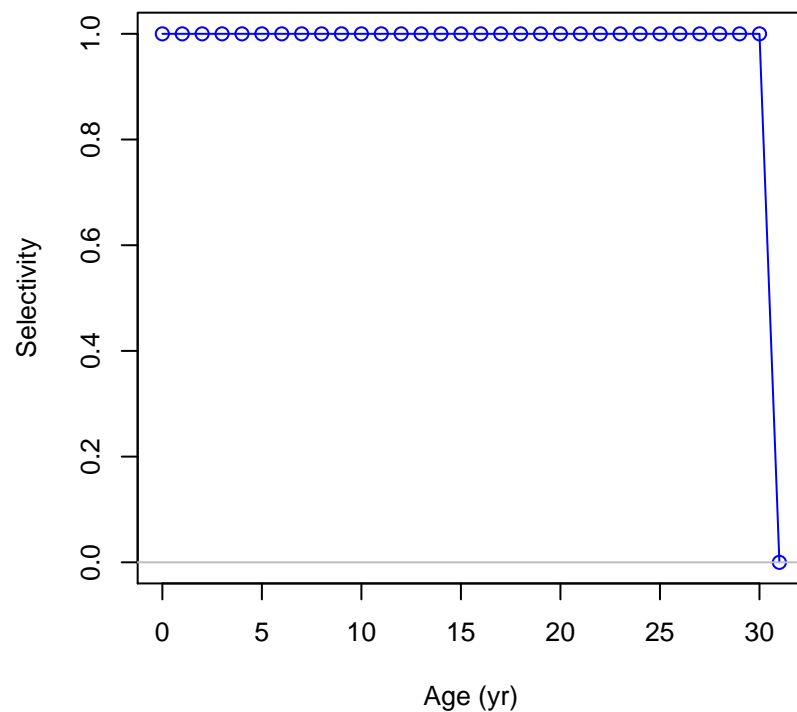
Female ending year selectivity for F2_US_HI_SS



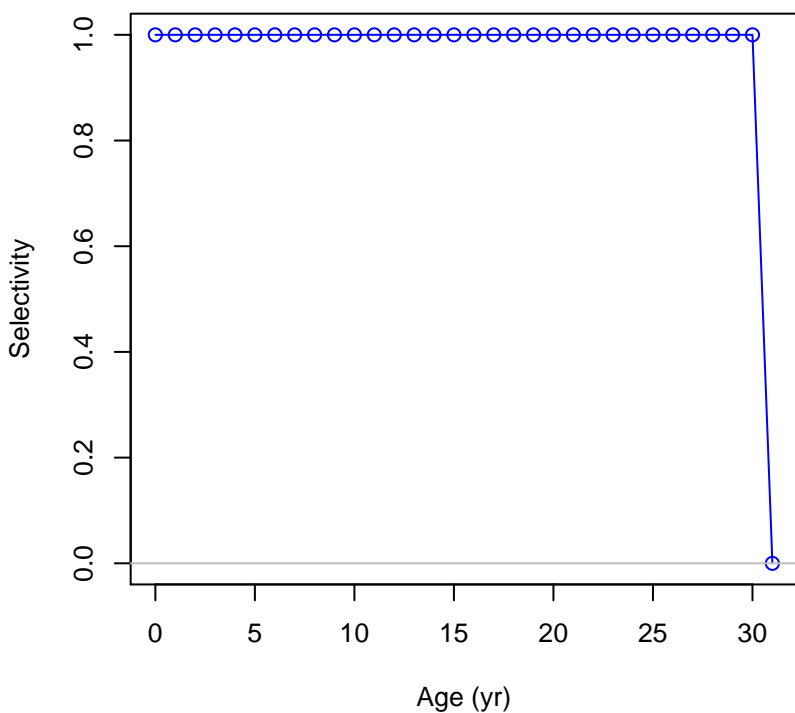
Male ending year selectivity for F1_US_CA



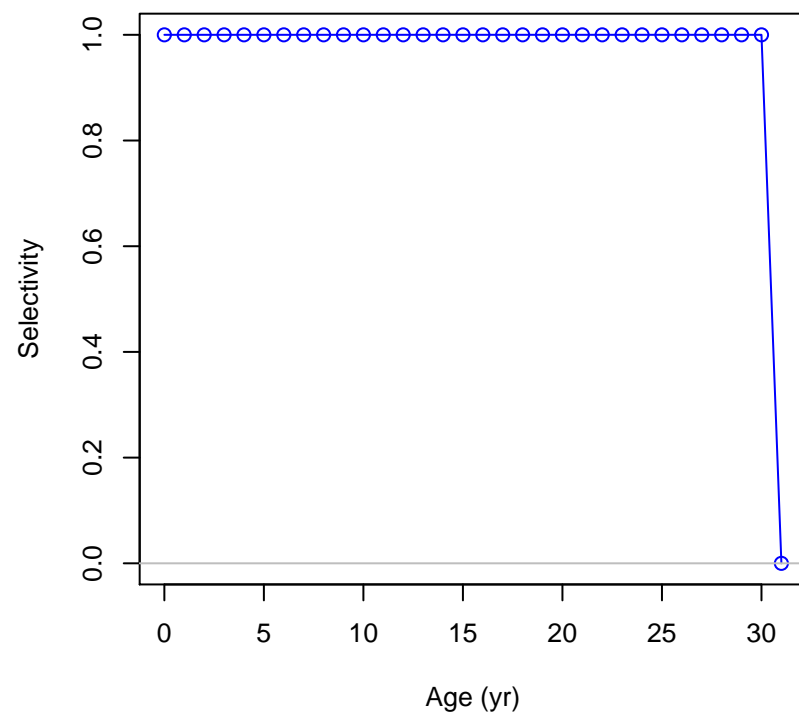
Male ending year selectivity for F2_US_HI_SS



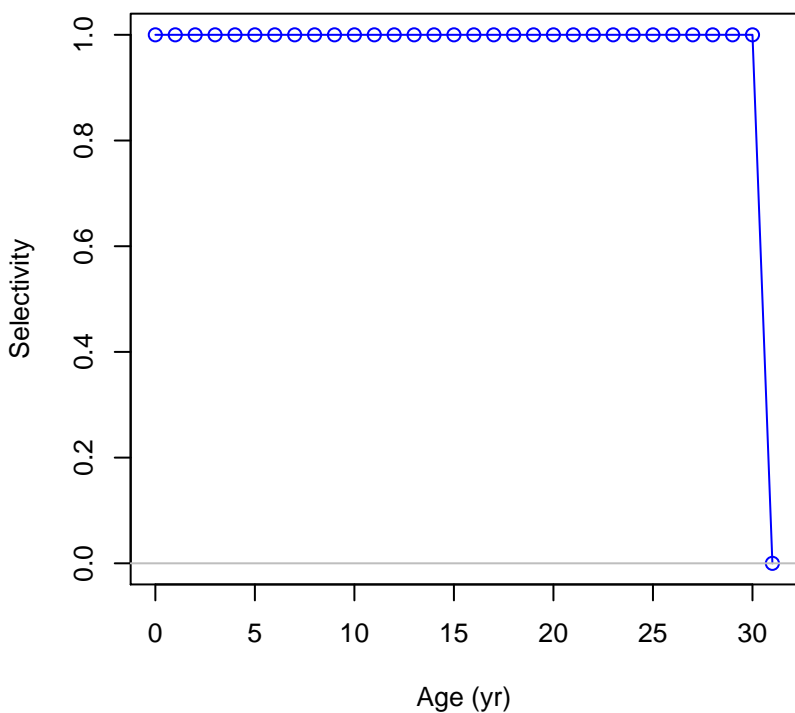
Female ending year selectivity for F3_US_HI_DS



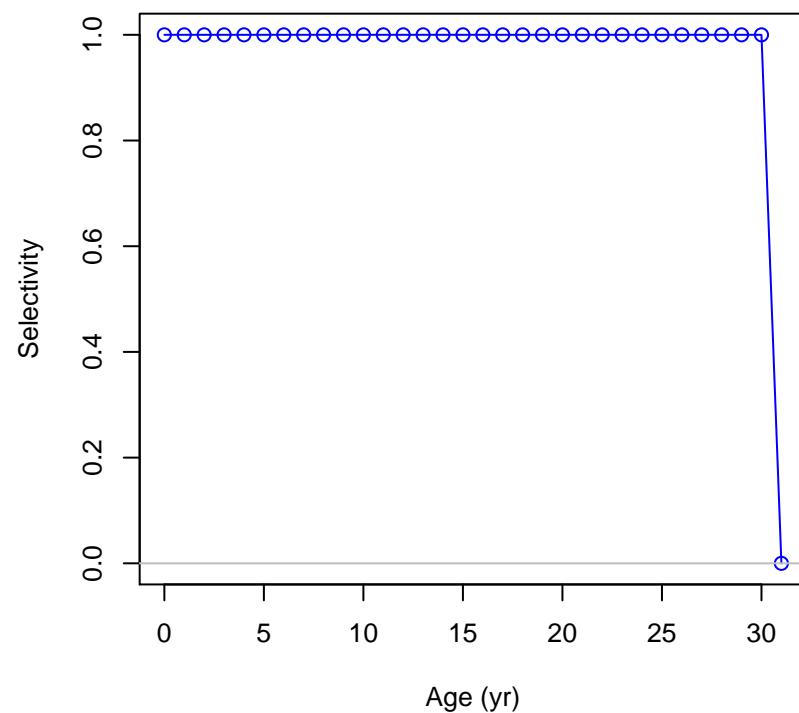
Female ending year selectivity for F4_US_DGN



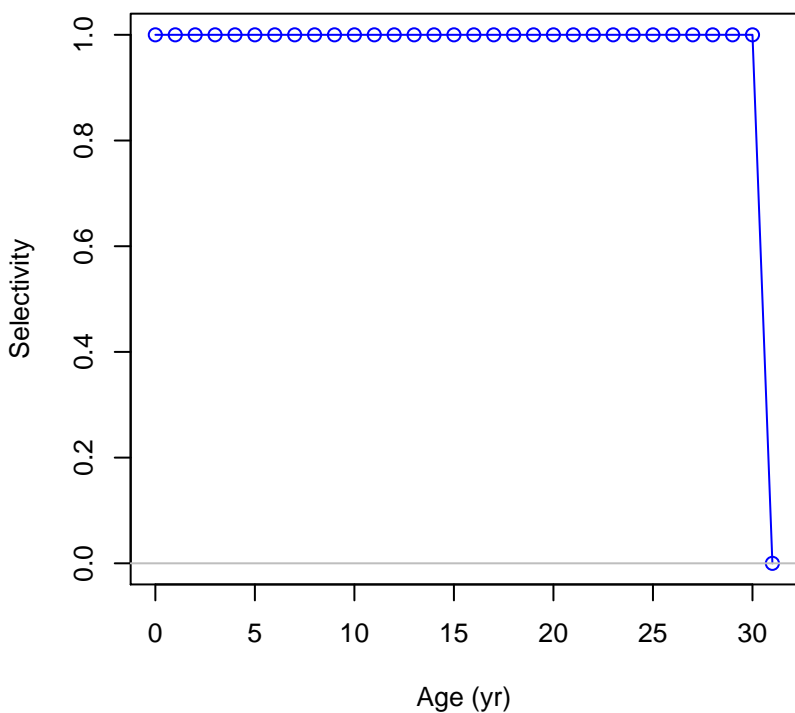
Male ending year selectivity for F3_US_HI_DS



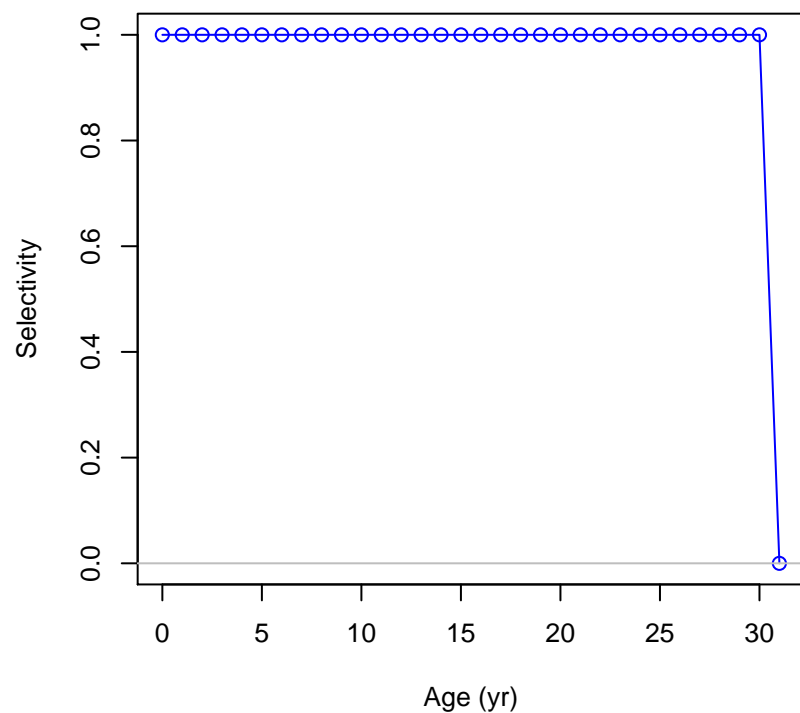
Male ending year selectivity for F4_US_DGN



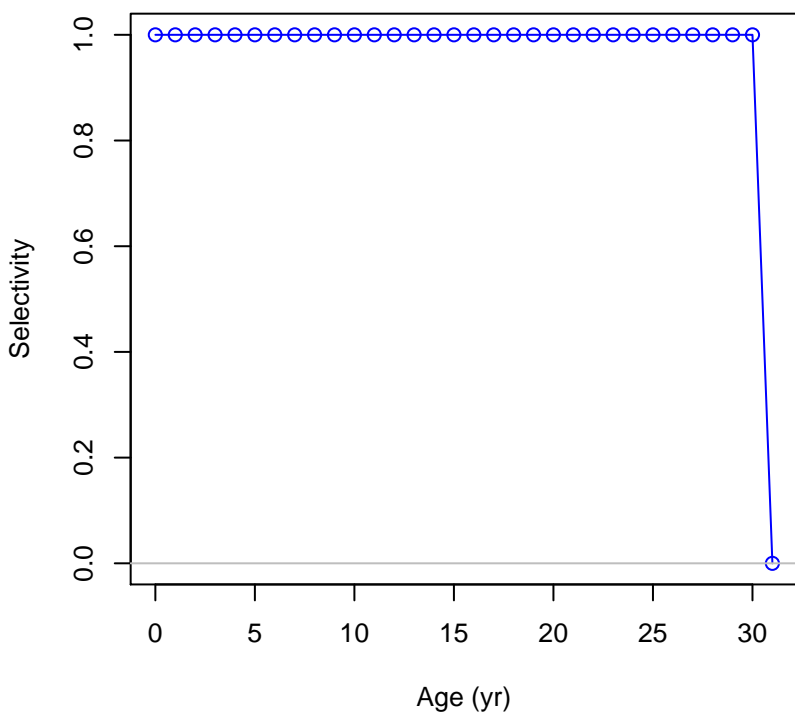
Female ending year selectivity for F5_US_REC



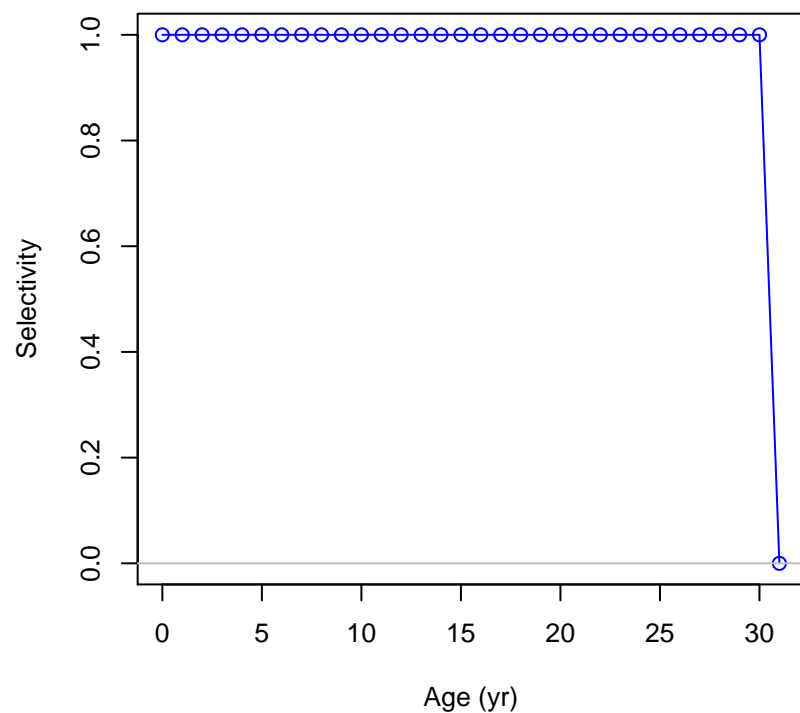
Female ending year selectivity for F6_TW_LRG_N



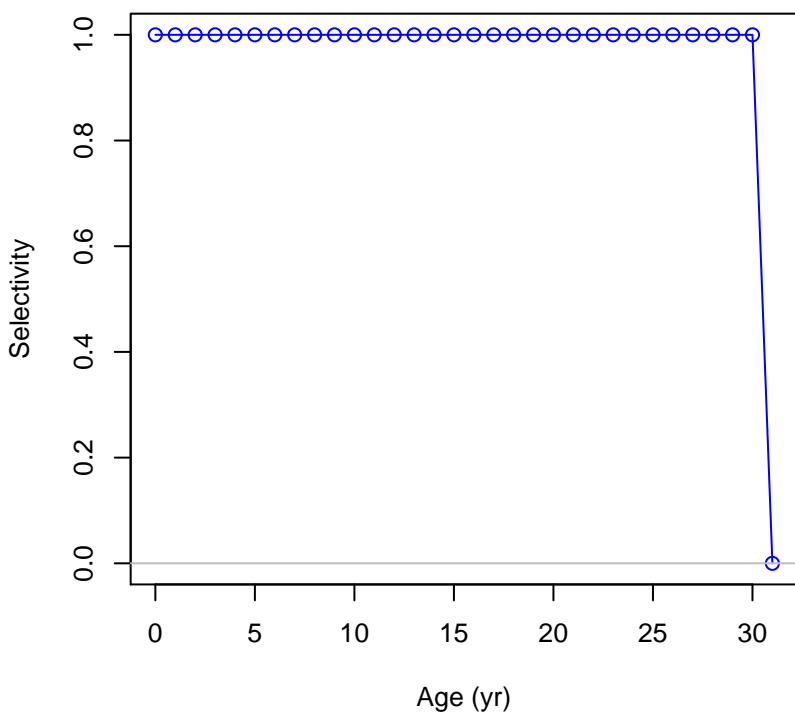
Male ending year selectivity for F5_US_REC



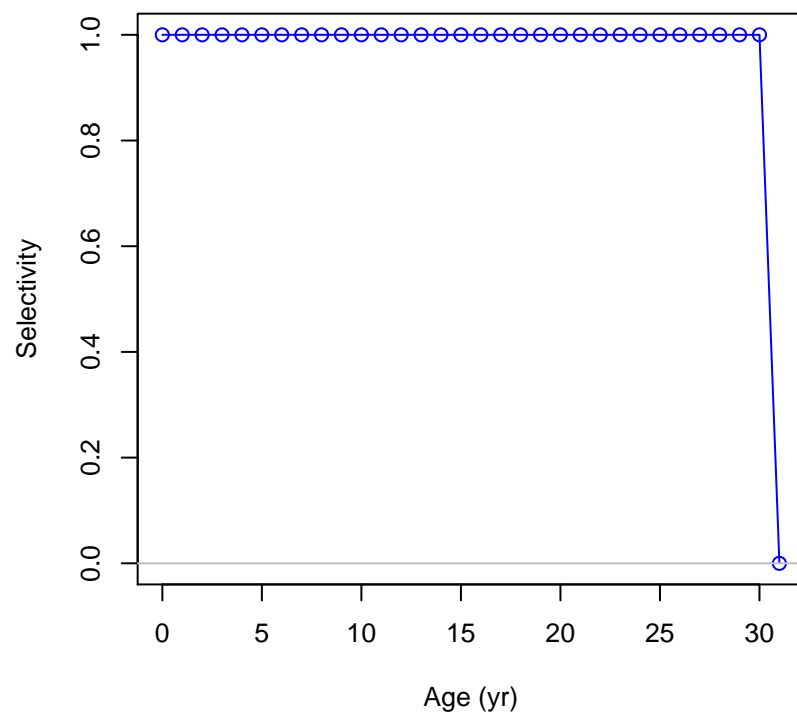
Male ending year selectivity for F6_TW_LRG_N



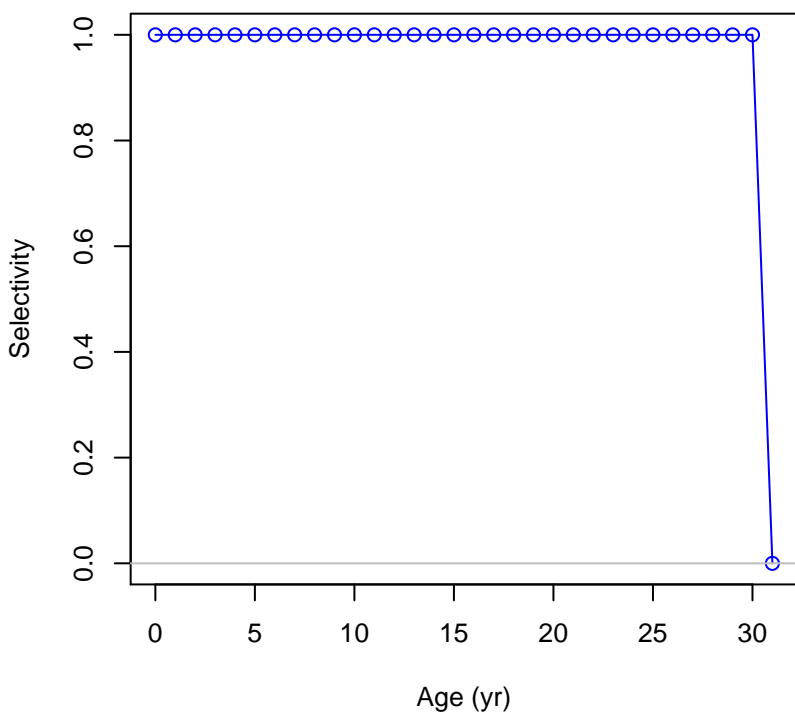
Female ending year selectivity for F7_TW_LRG_S



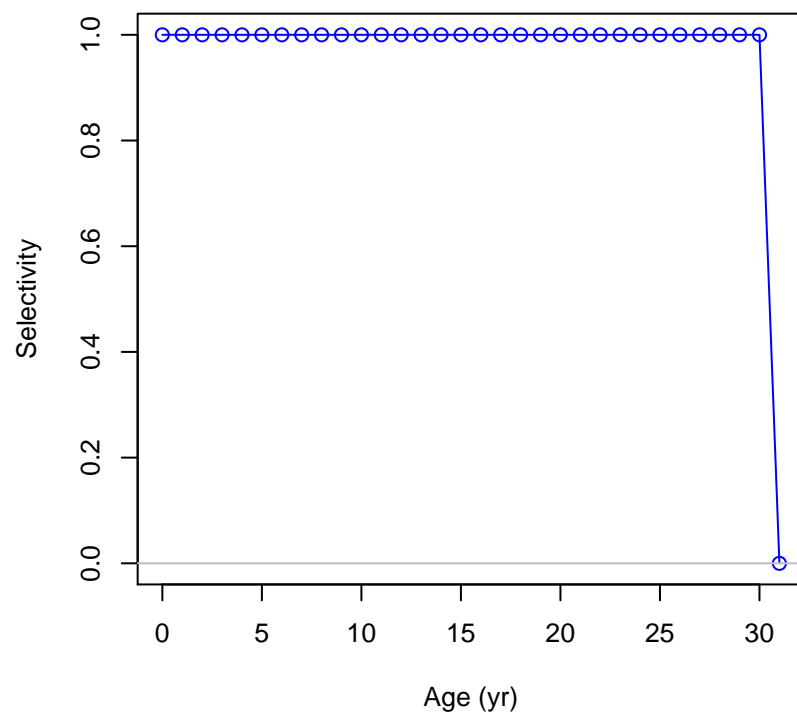
Female ending year selectivity for F8_TW_SML



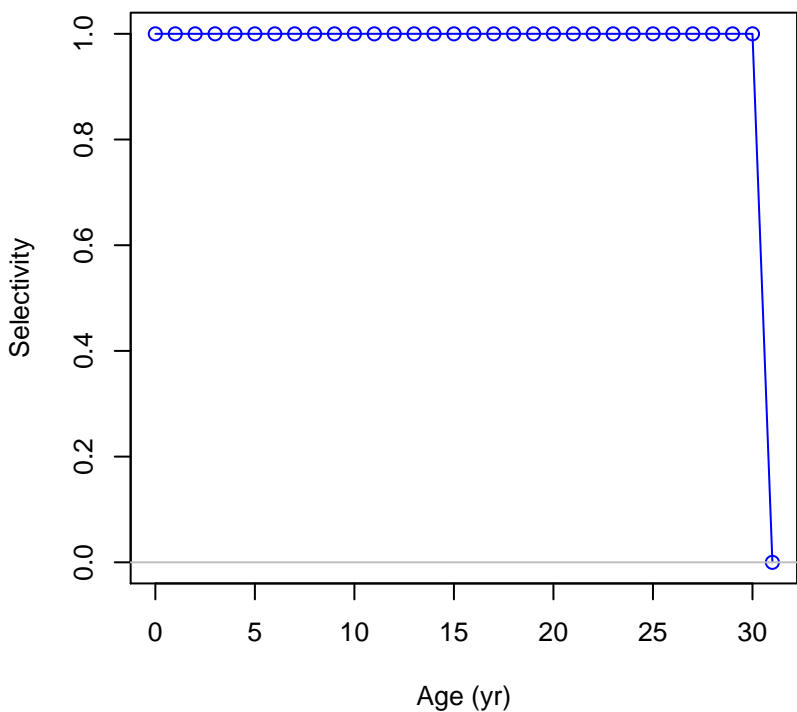
Male ending year selectivity for F7_TW_LRG_S



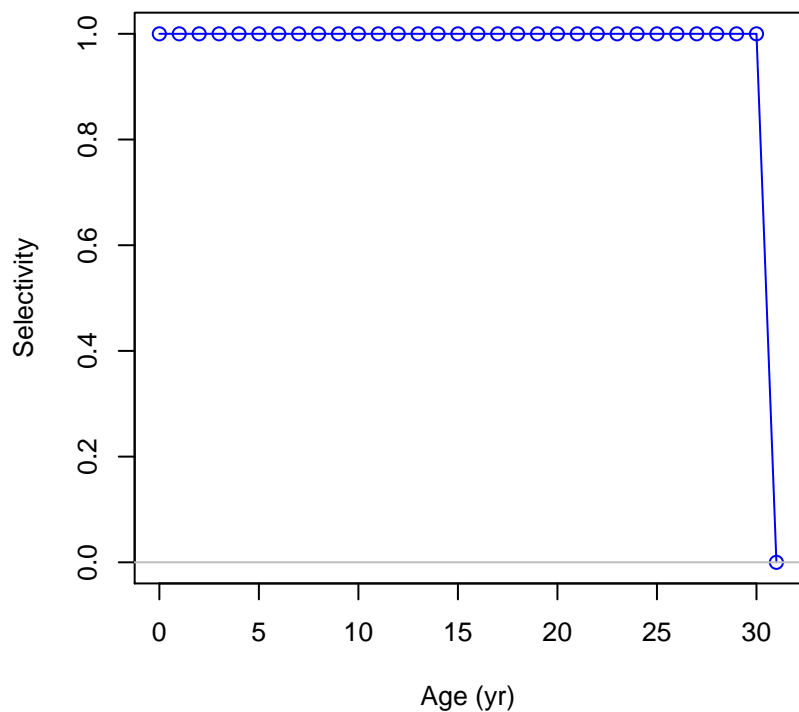
Male ending year selectivity for F8_TW_SML



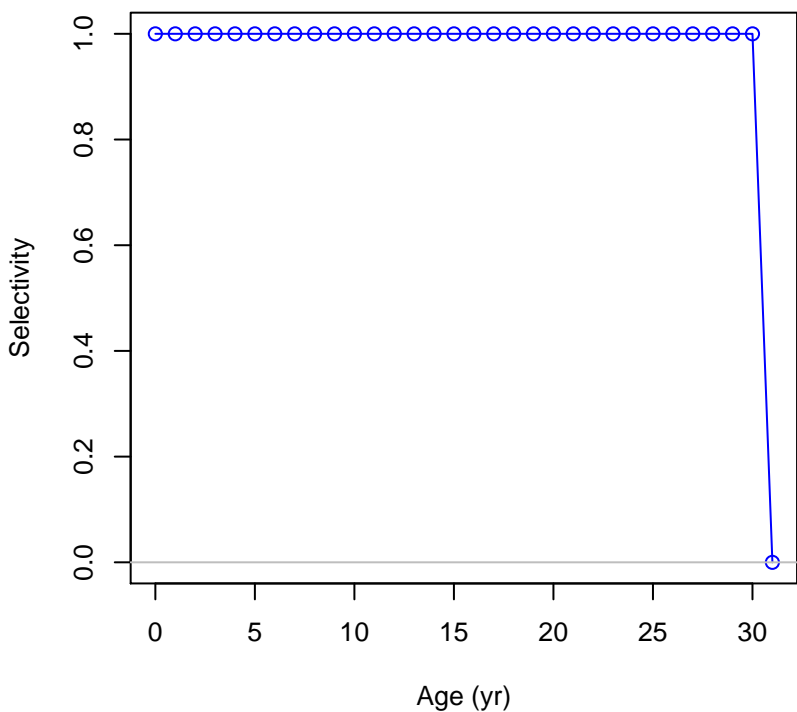
Female ending year selectivity for F9_JPN_SS



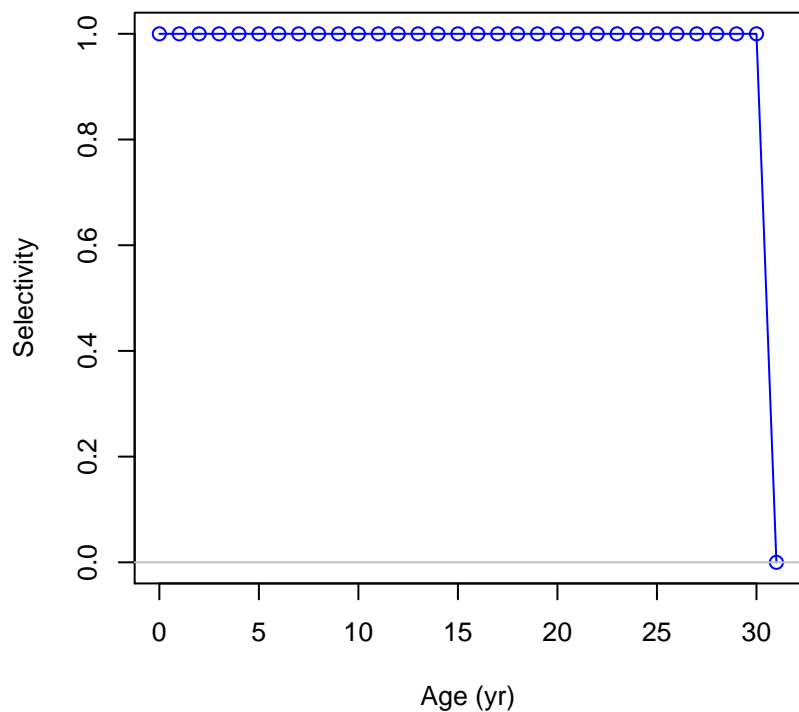
Female ending year selectivity for F10_JPN_DS



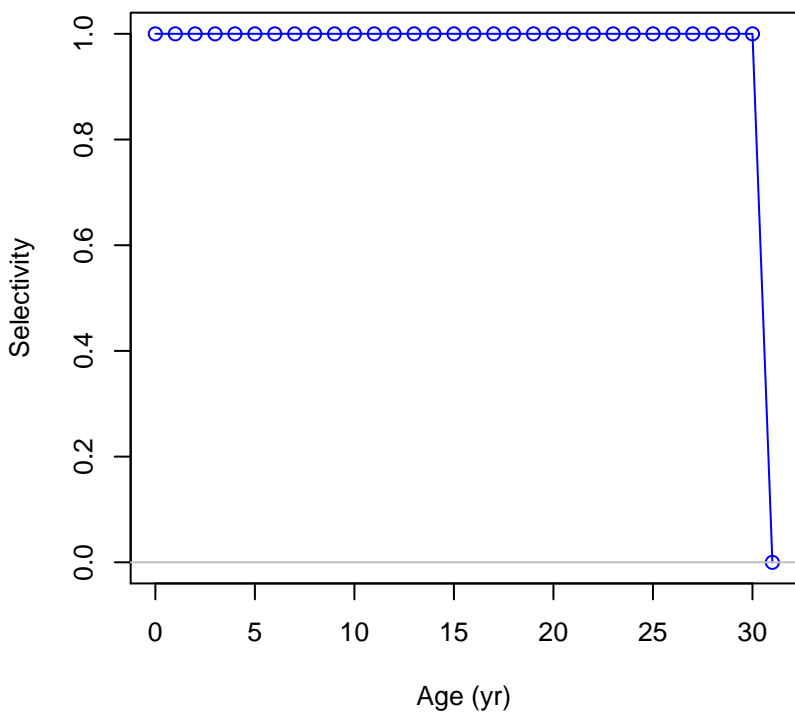
Male ending year selectivity for F9_JPN_SS



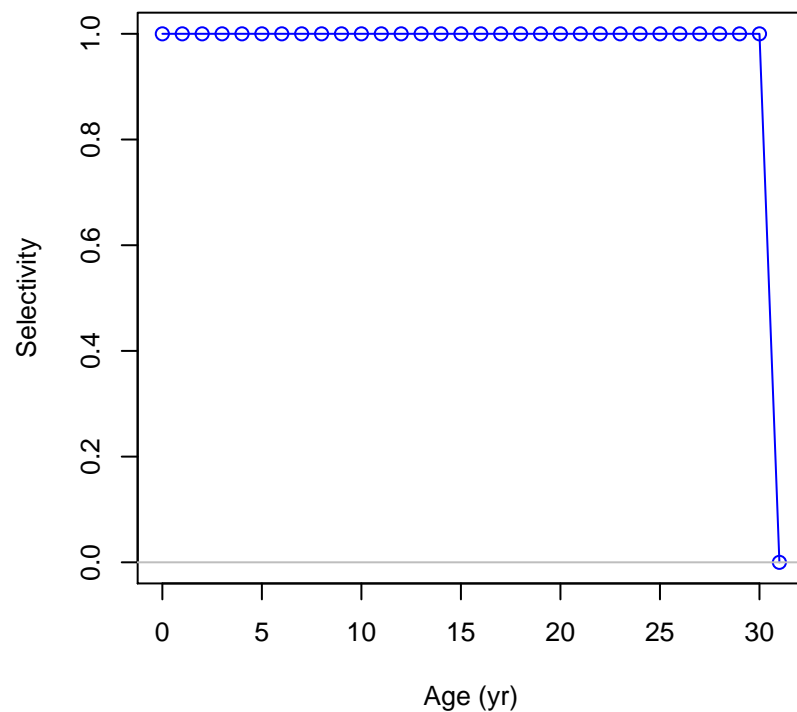
Male ending year selectivity for F10_JPN_DS



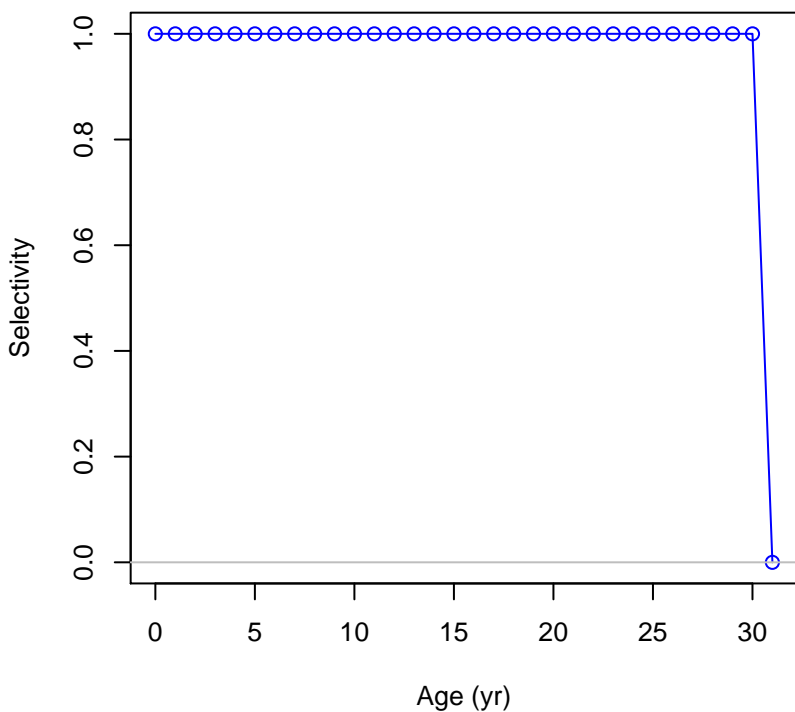
Female ending year selectivity for F11_JPN_CST



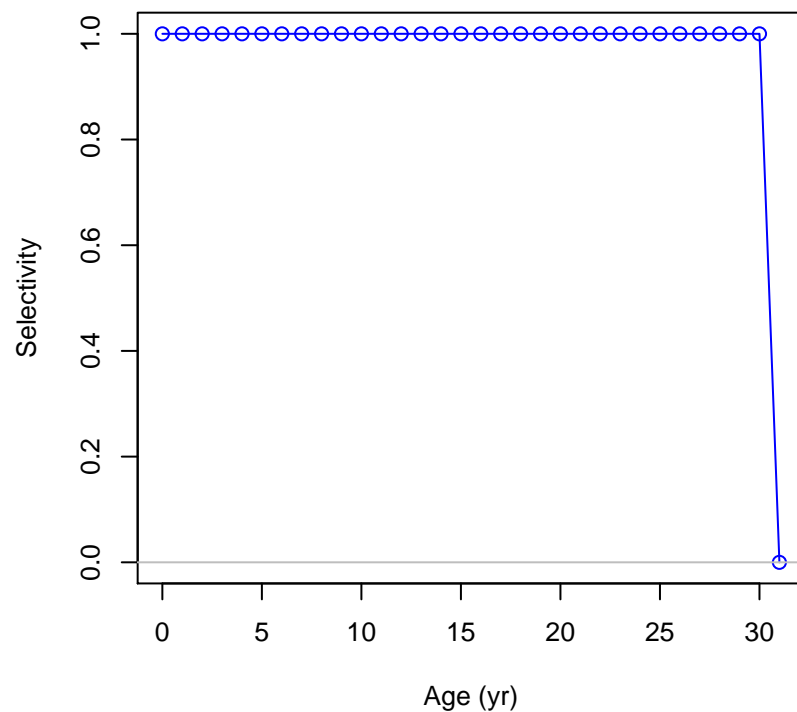
Female ending year selectivity for F12_JPN_DFN



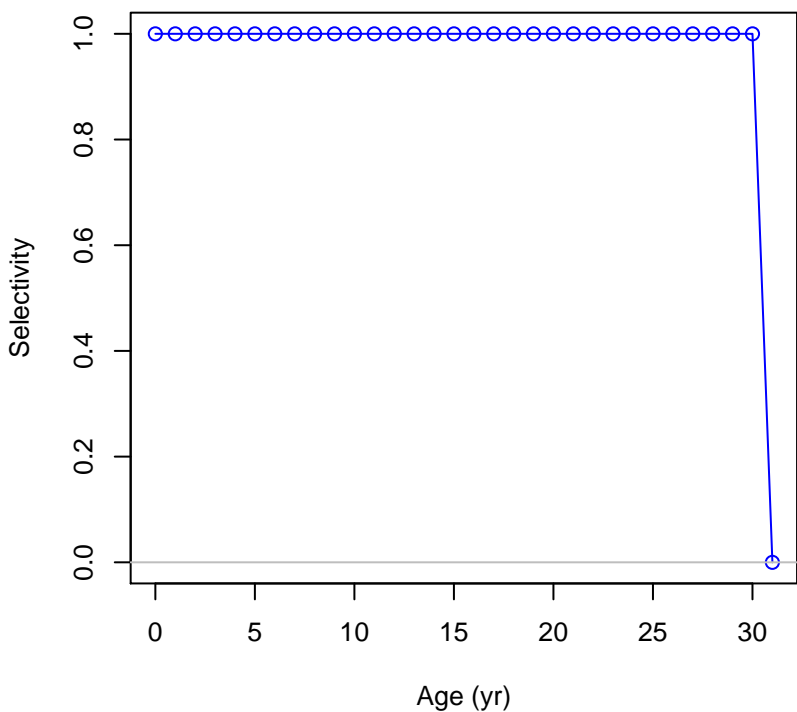
Male ending year selectivity for F11_JPN_CST



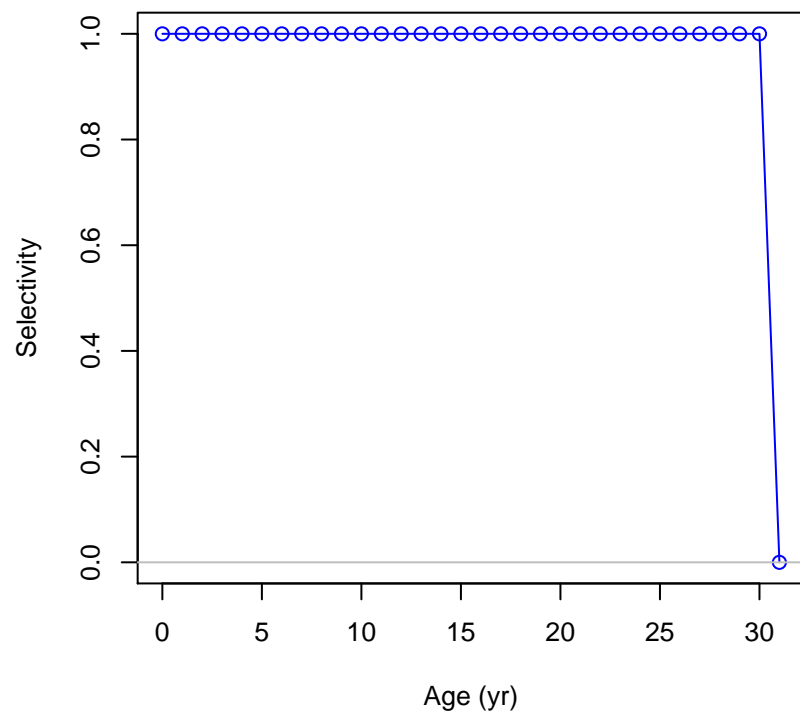
Male ending year selectivity for F12_JPN_DFN



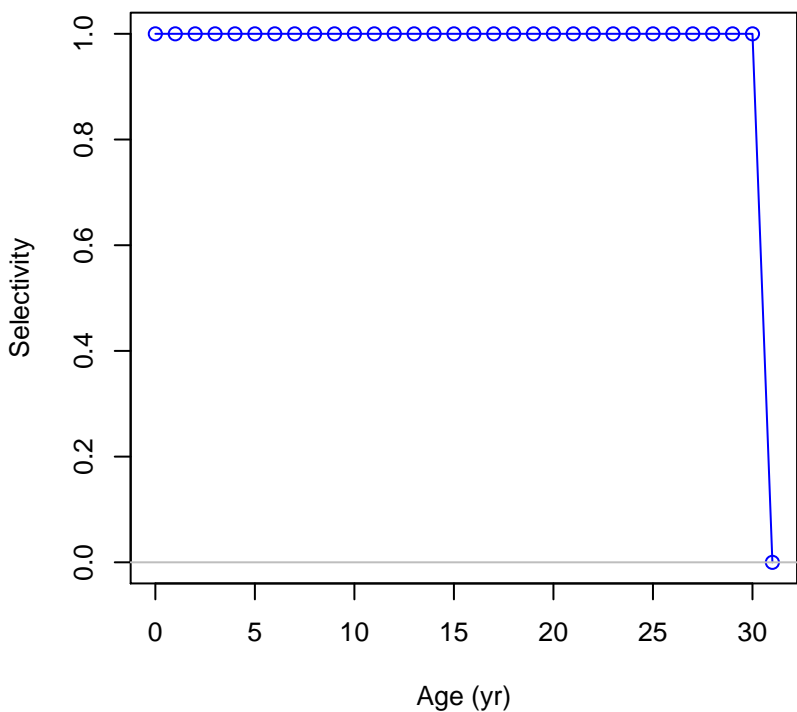
Female ending year selectivity for F13_JPN_OTH



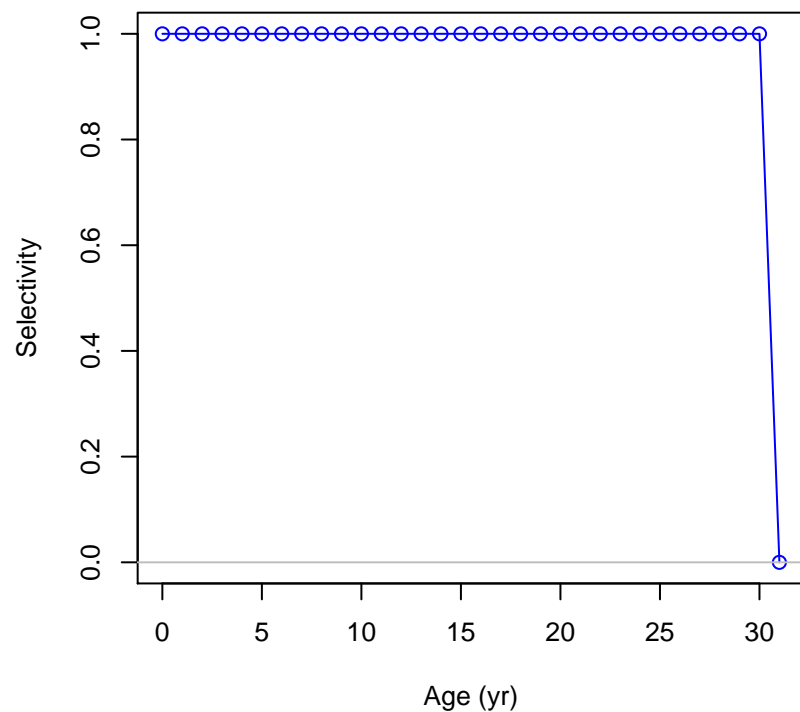
Female ending year selectivity for F14_MEX_NOR



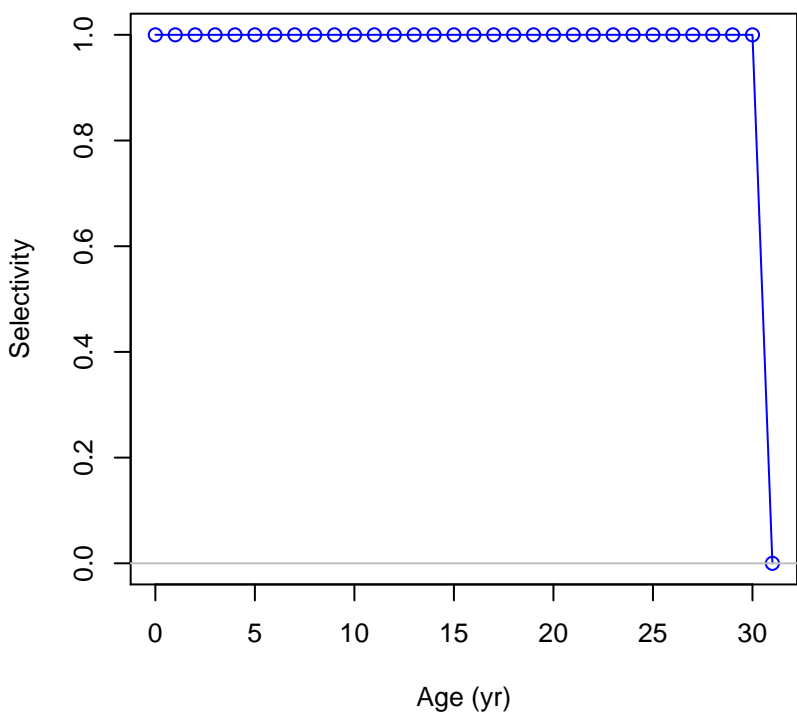
Male ending year selectivity for F13_JPN_OTH



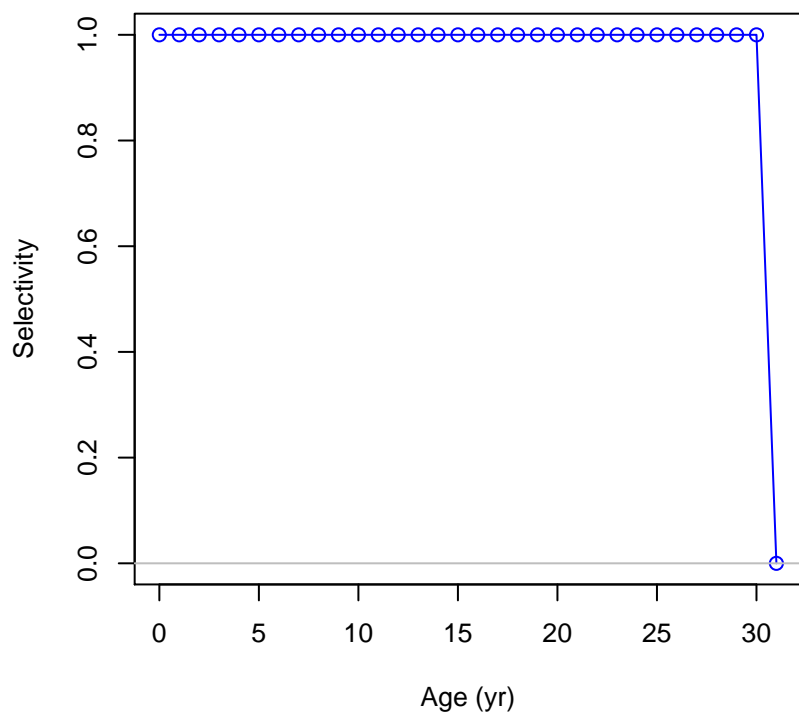
Male ending year selectivity for F14_MEX_NOR



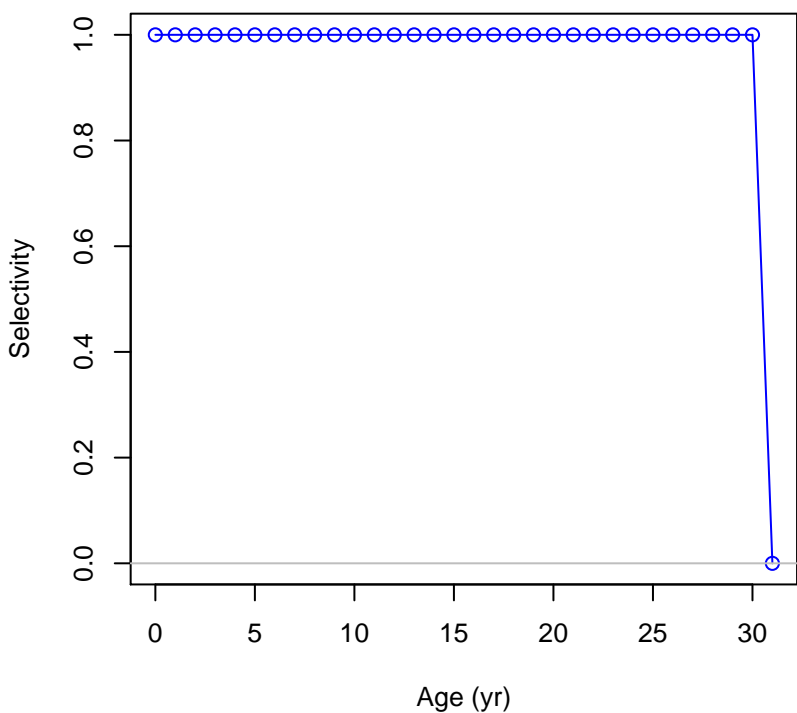
Female ending year selectivity for F15_MEX_SOU



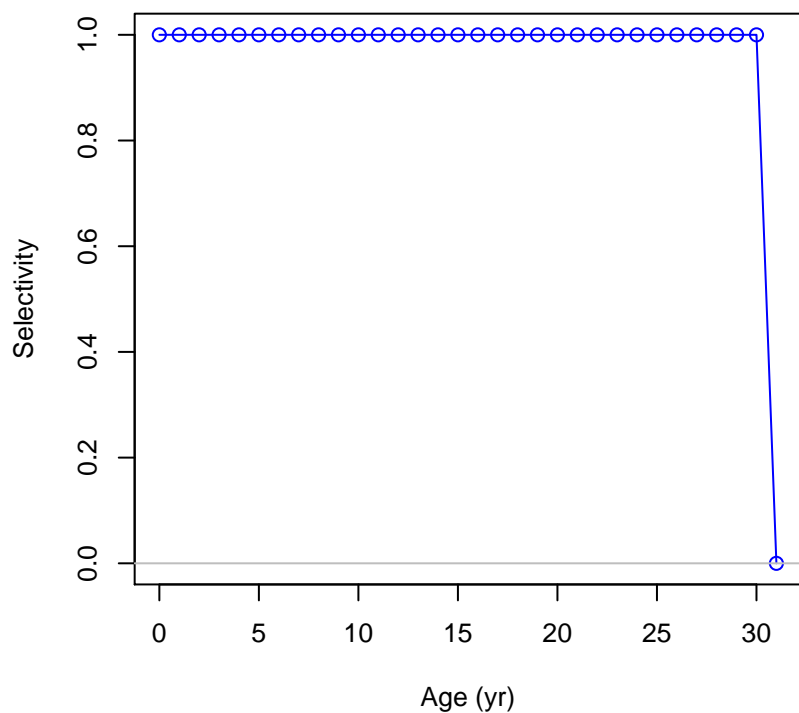
Female ending year selectivity for F16_WCPFC



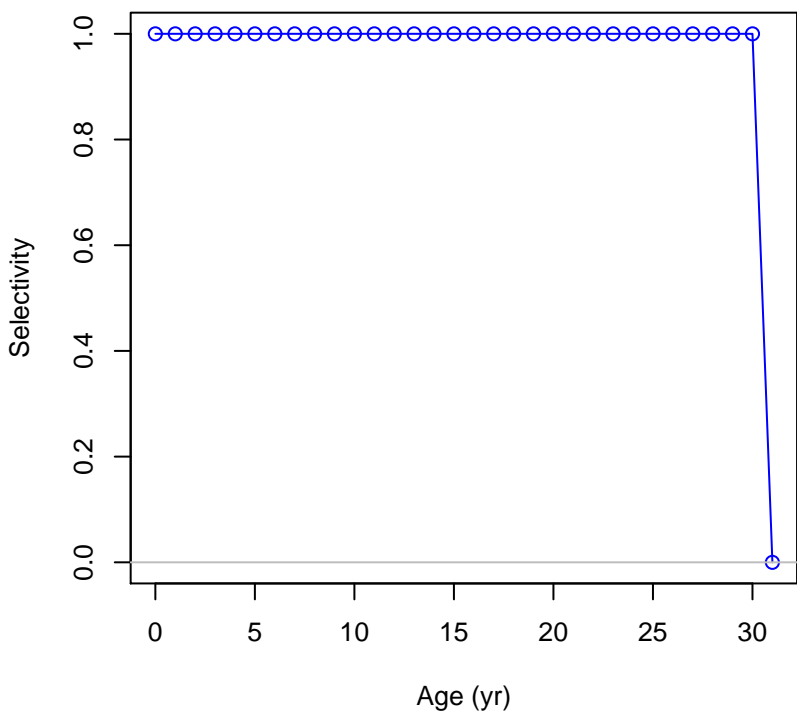
Male ending year selectivity for F15_MEX_SOU



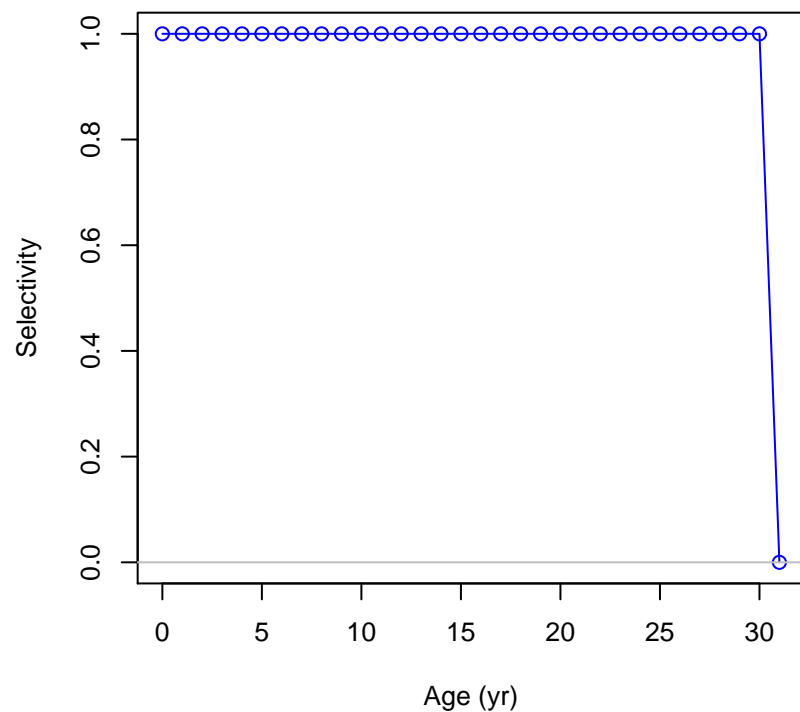
Male ending year selectivity for F16_WCPFC



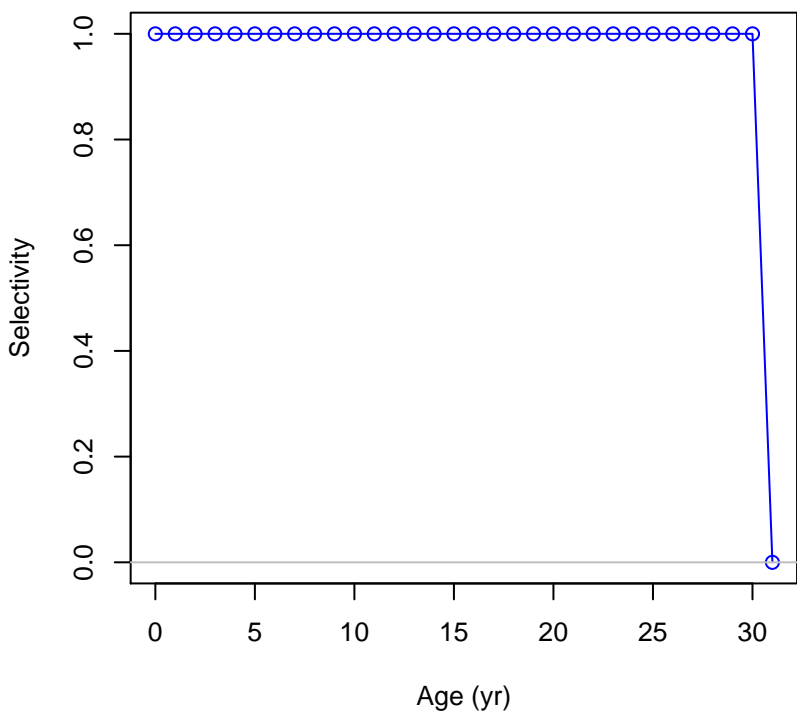
Female ending year selectivity for F17_IATTC



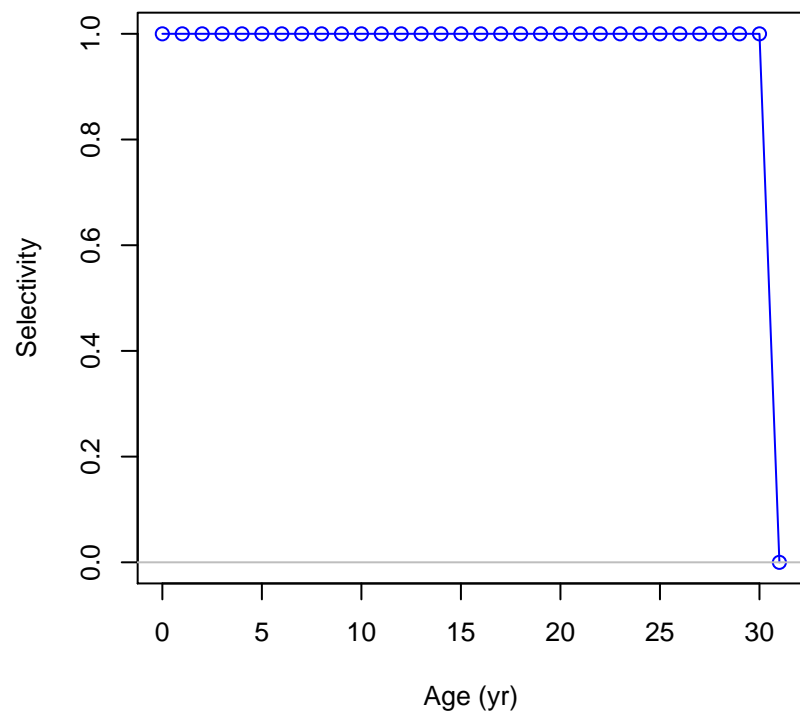
Female ending year selectivity for F18_JPN_SSII



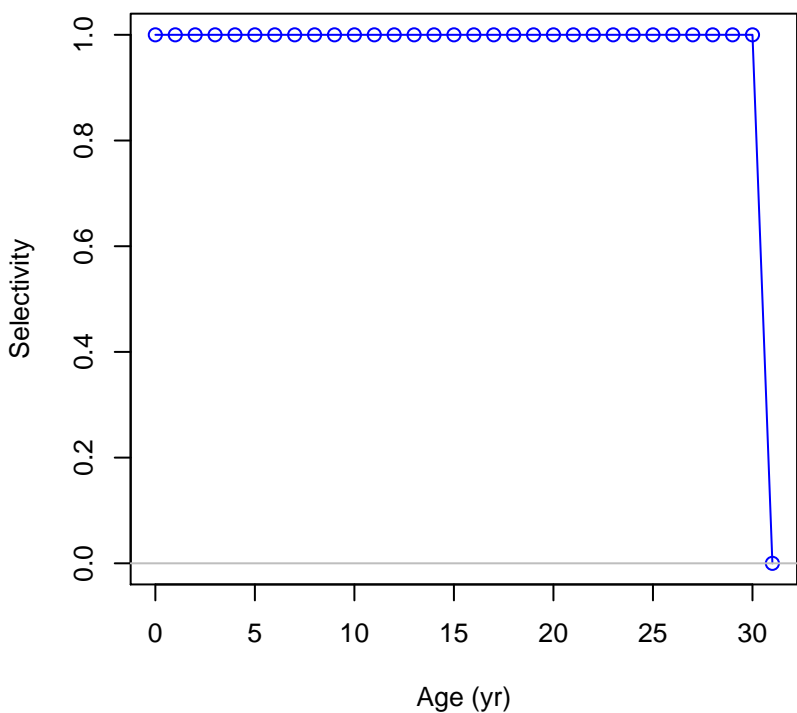
Male ending year selectivity for F17_IATTC



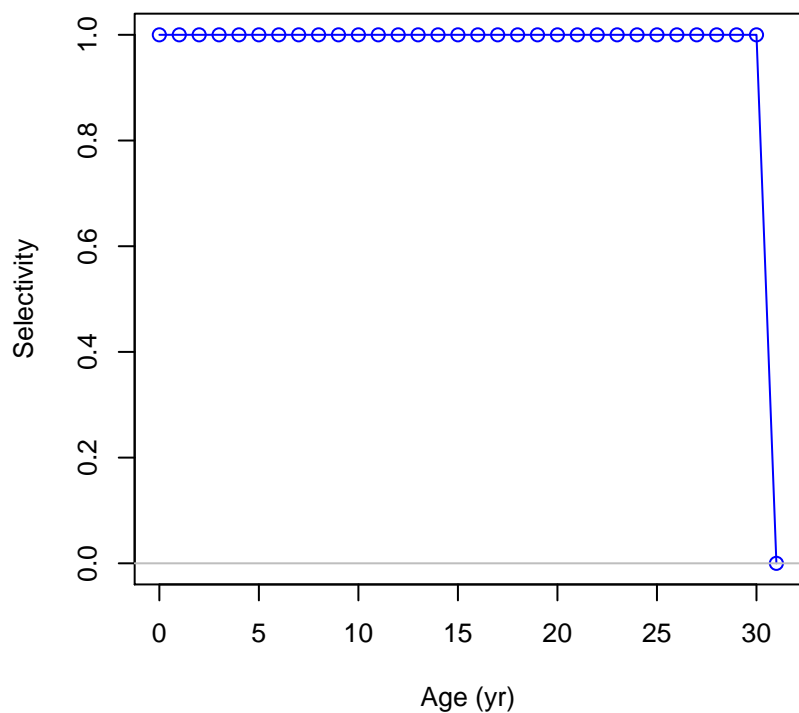
Male ending year selectivity for F18_JPN_SSII



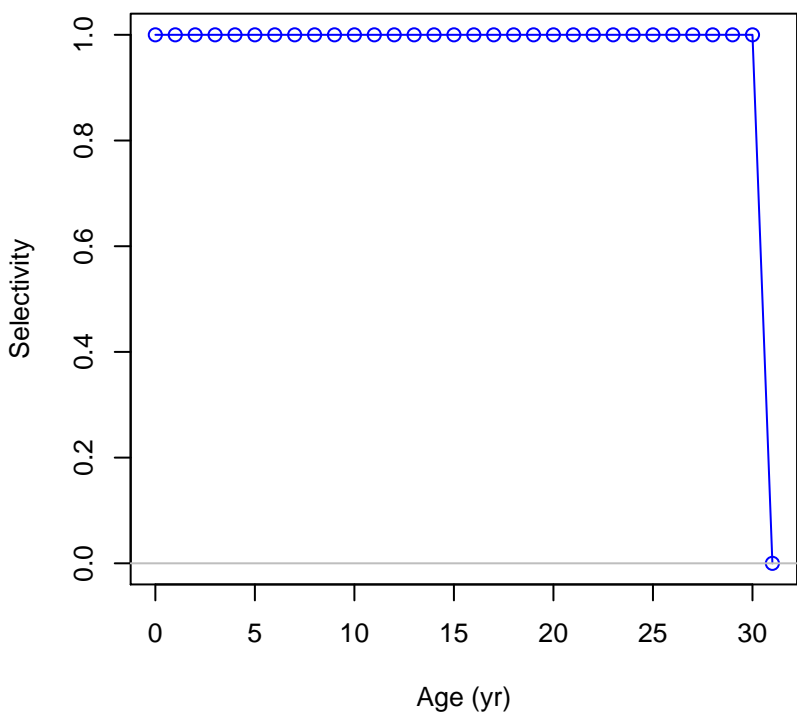
Female ending year selectivity for S1_US_SS



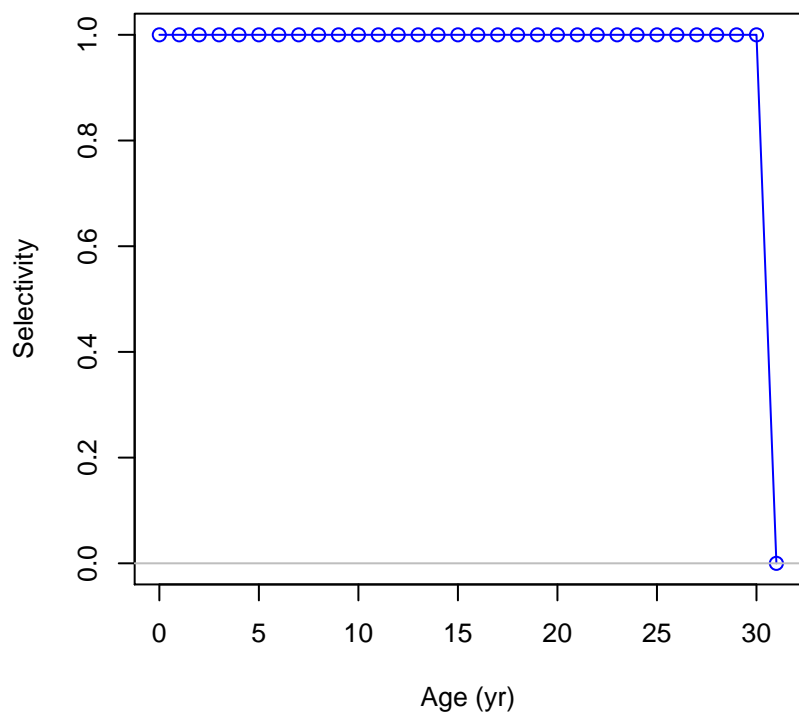
Female ending year selectivity for S2_US_DS



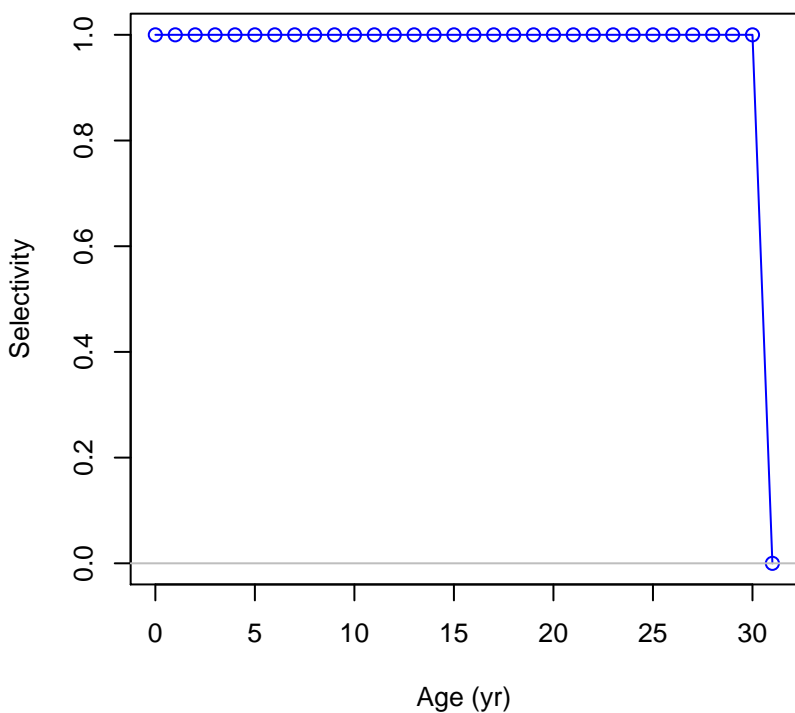
Male ending year selectivity for S1_US_SS



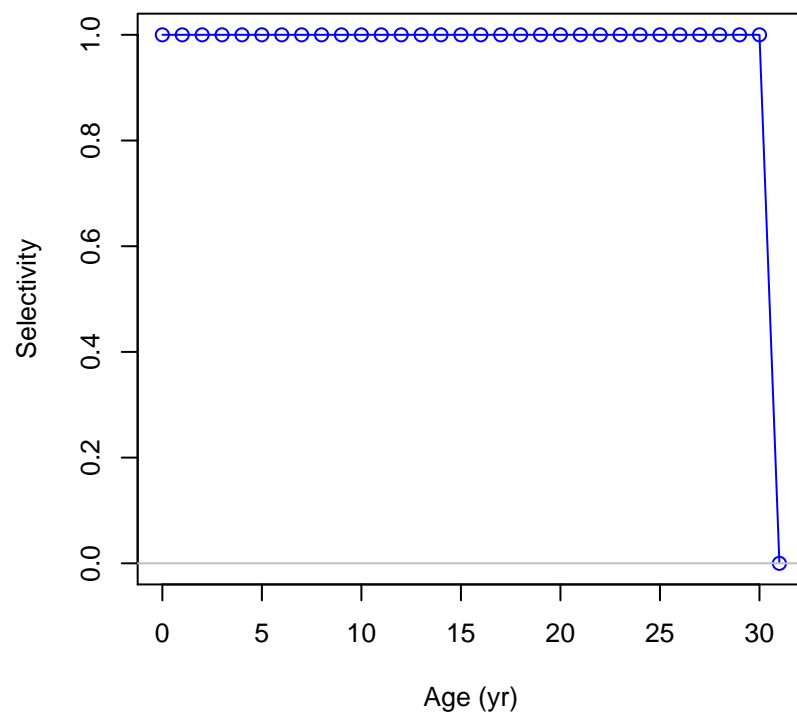
Male ending year selectivity for S2_US_DS



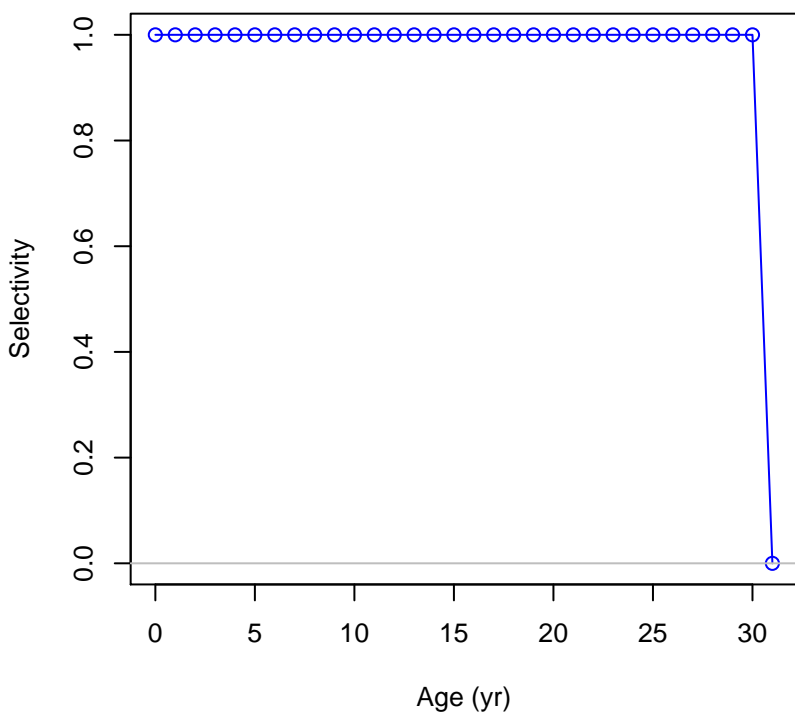
Female ending year selectivity for S3_TW_LRG



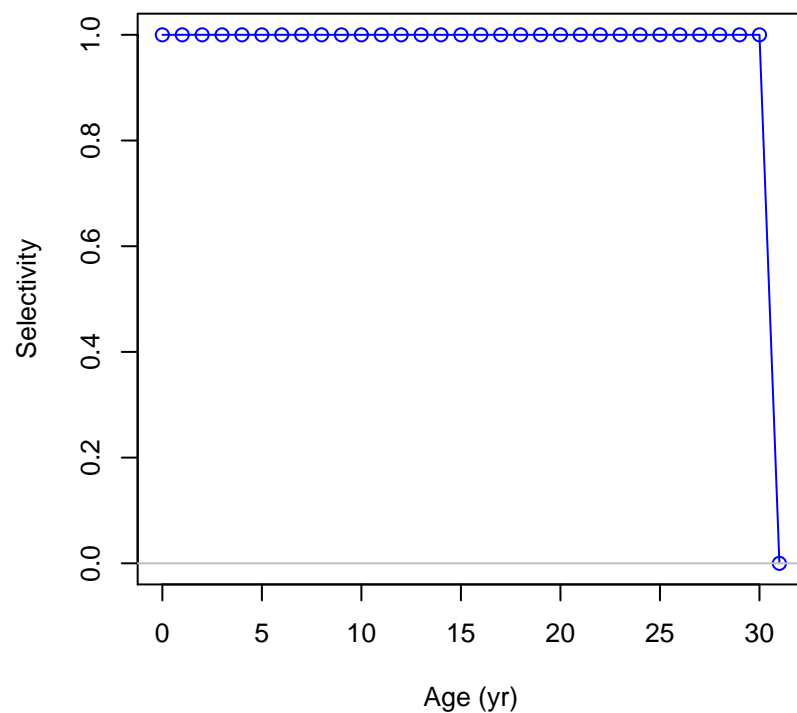
Female ending year selectivity for S4_JPN_SS



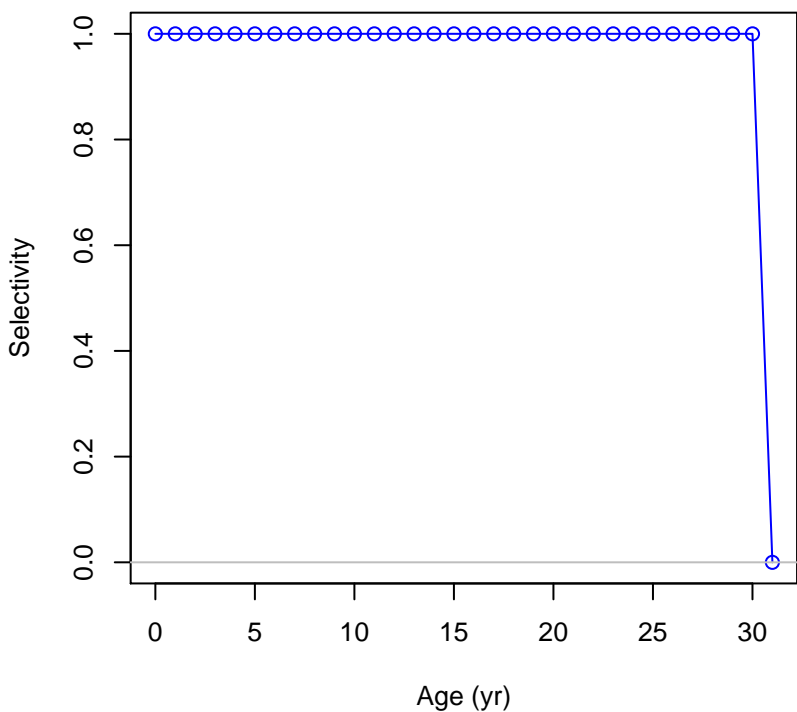
Male ending year selectivity for S3_TW_LRG



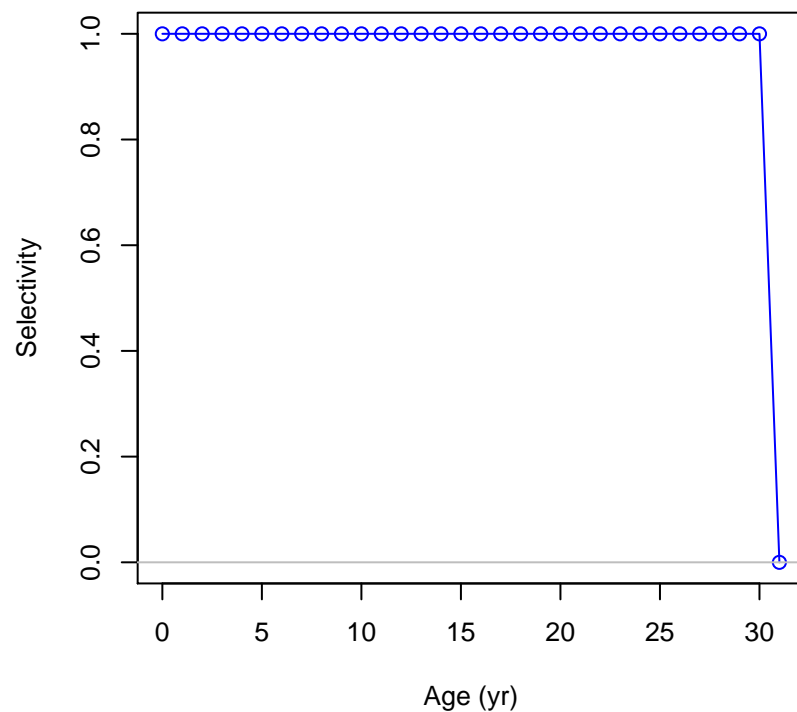
Male ending year selectivity for S4_JPN_SS



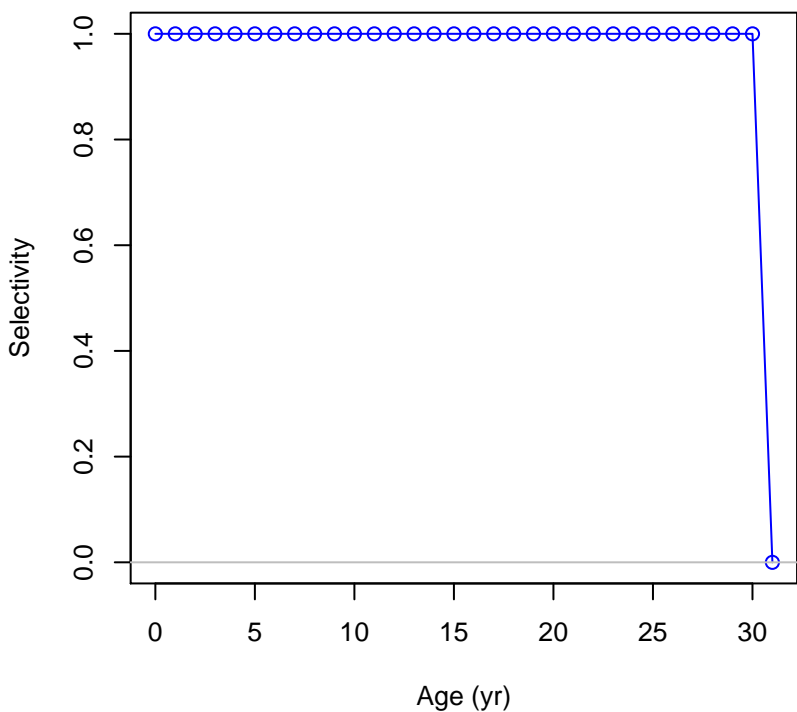
Female ending year selectivity for S5_JPN_RTV



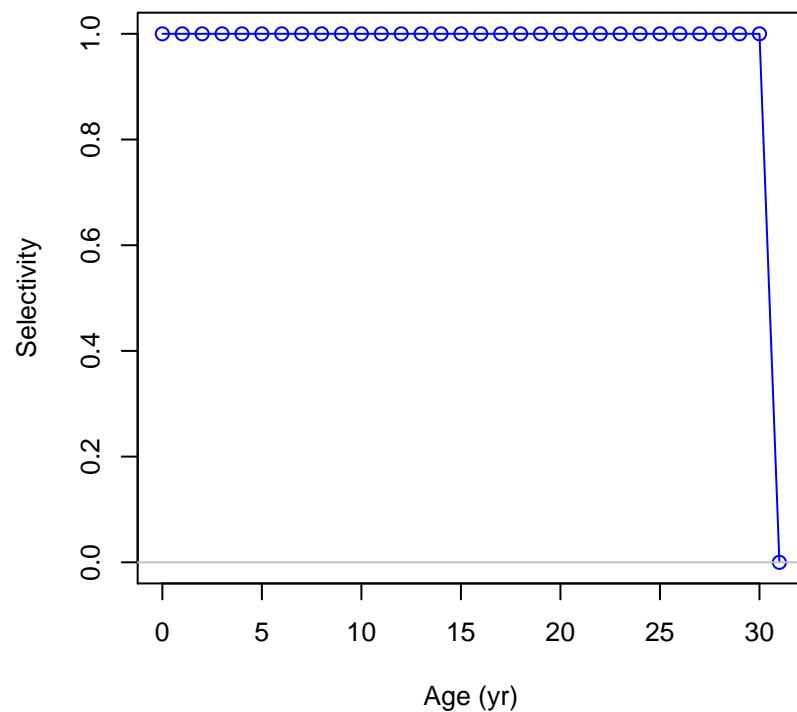
Female ending year selectivity for S6_JPN_OBS



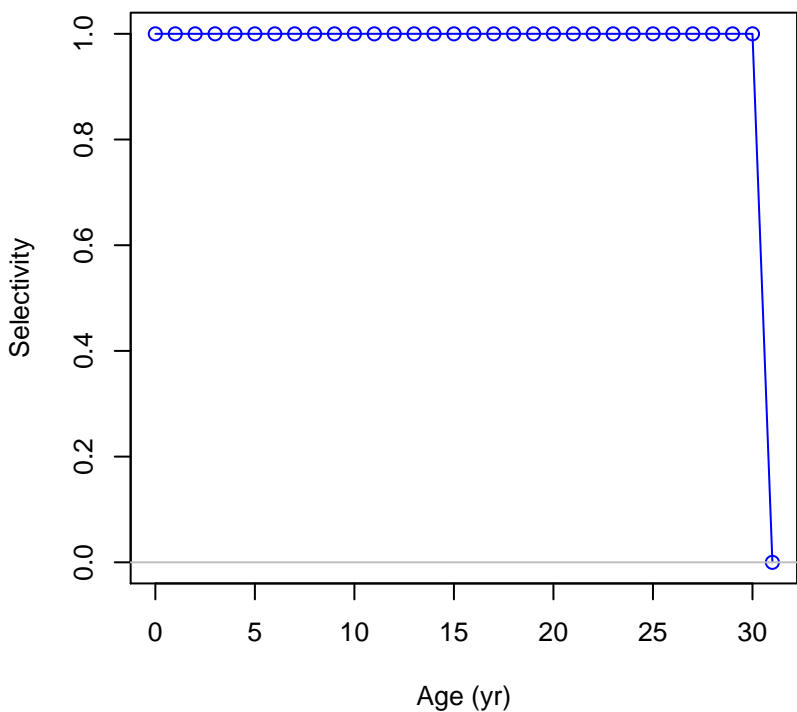
Male ending year selectivity for S5_JPN_RTV



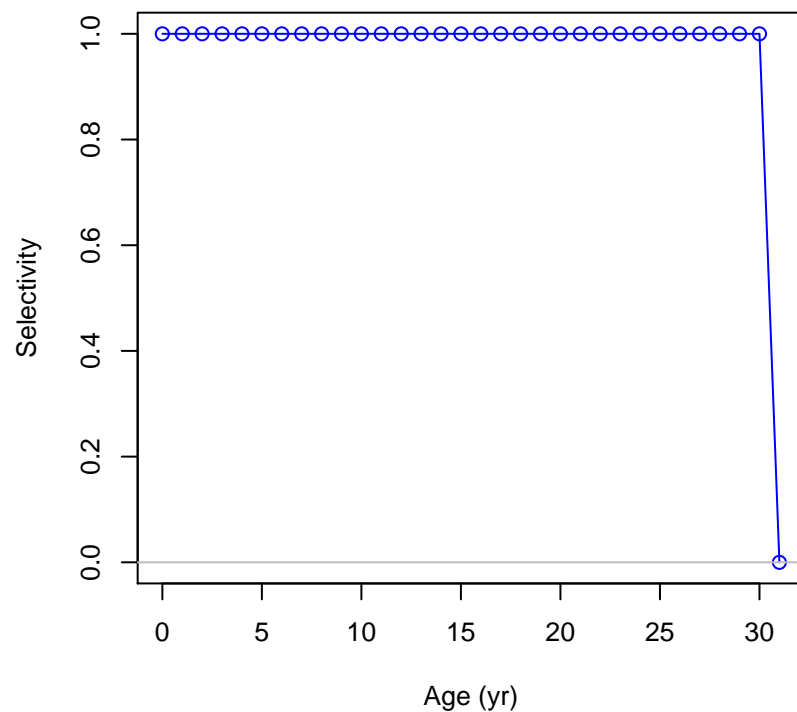
Male ending year selectivity for S6_JPN_OBS



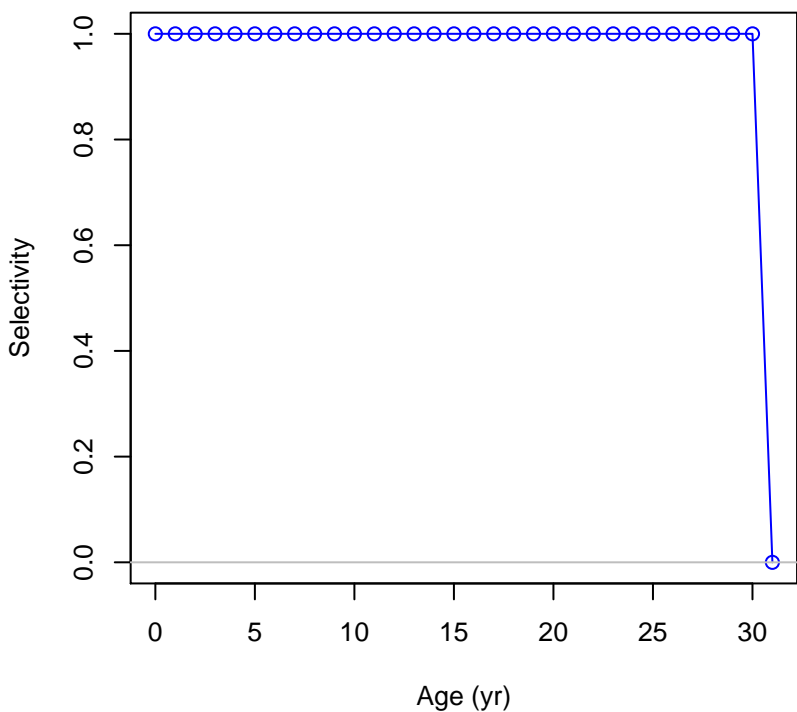
Female ending year selectivity for S7_JPN_GEO



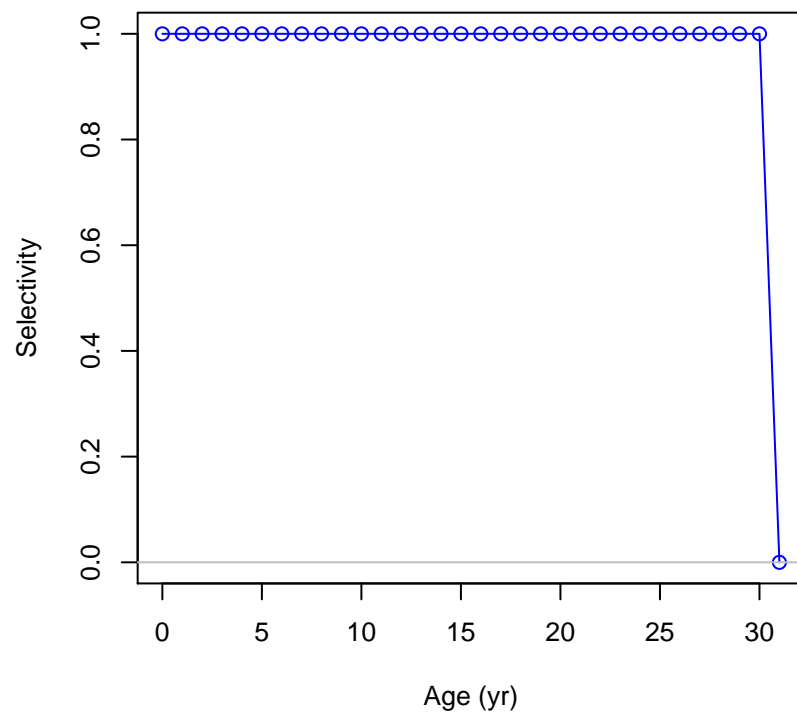
Female ending year selectivity for S8_MEX



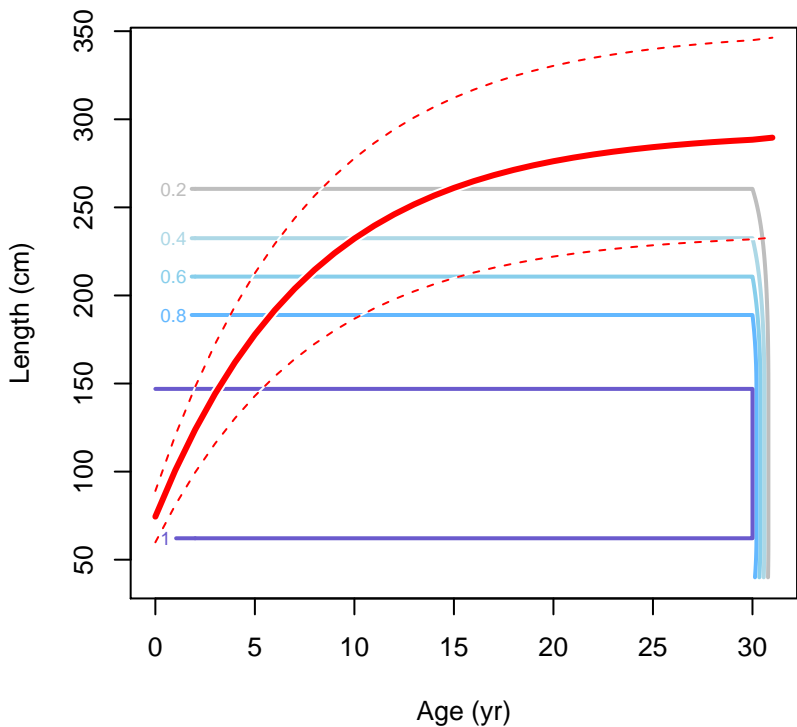
Male ending year selectivity for S7_JPN_GEO



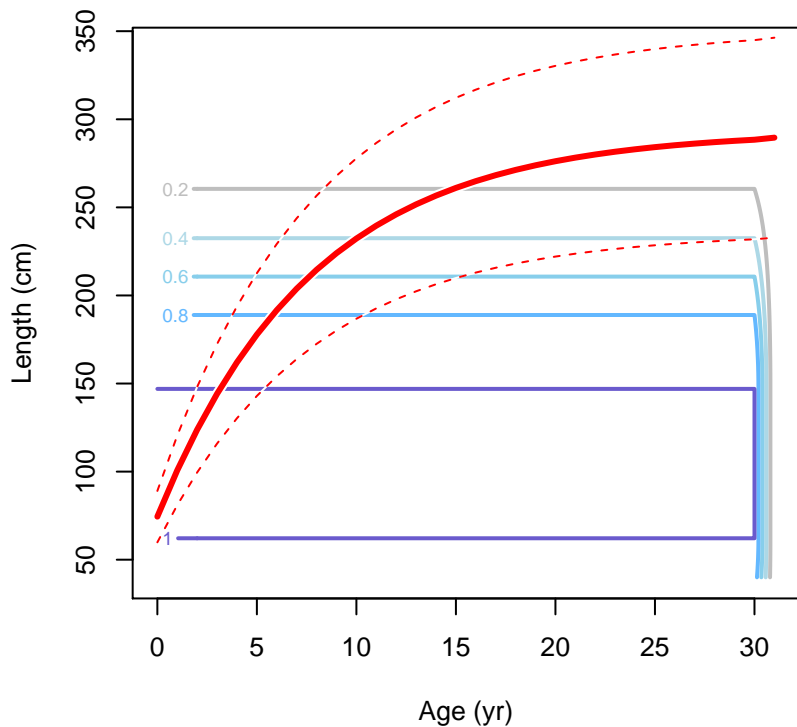
Male ending year selectivity for S8_MEX



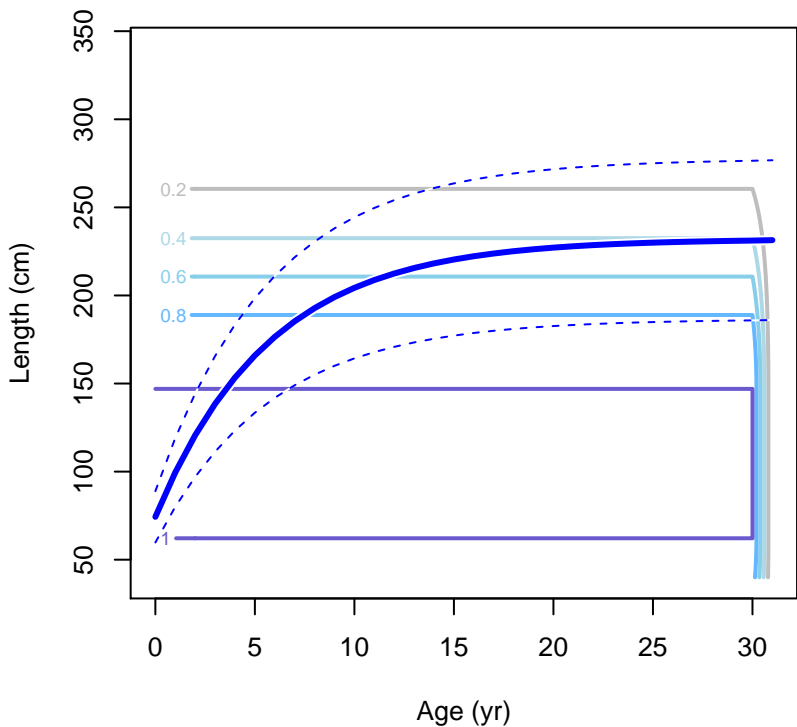
Female ending year selectivity and growth for F1_US_CA



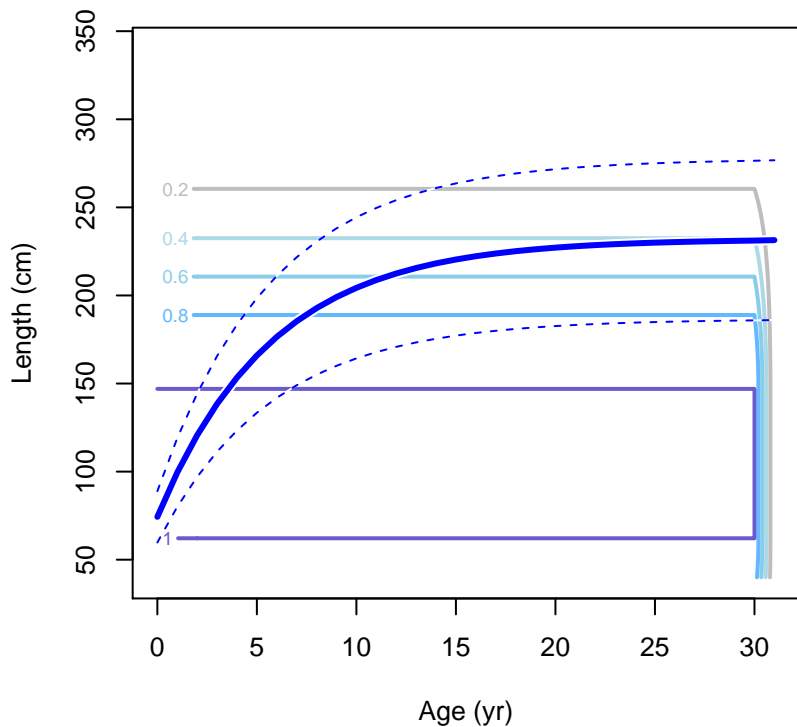
Female ending year selectivity and growth for F2_US_HI_SS



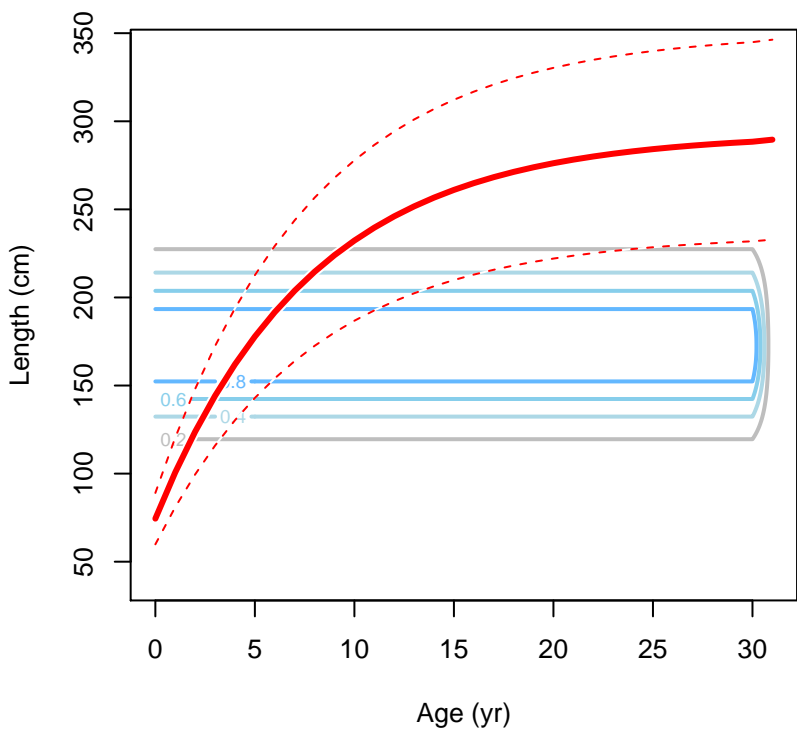
Male ending year selectivity and growth for F1_US_CA



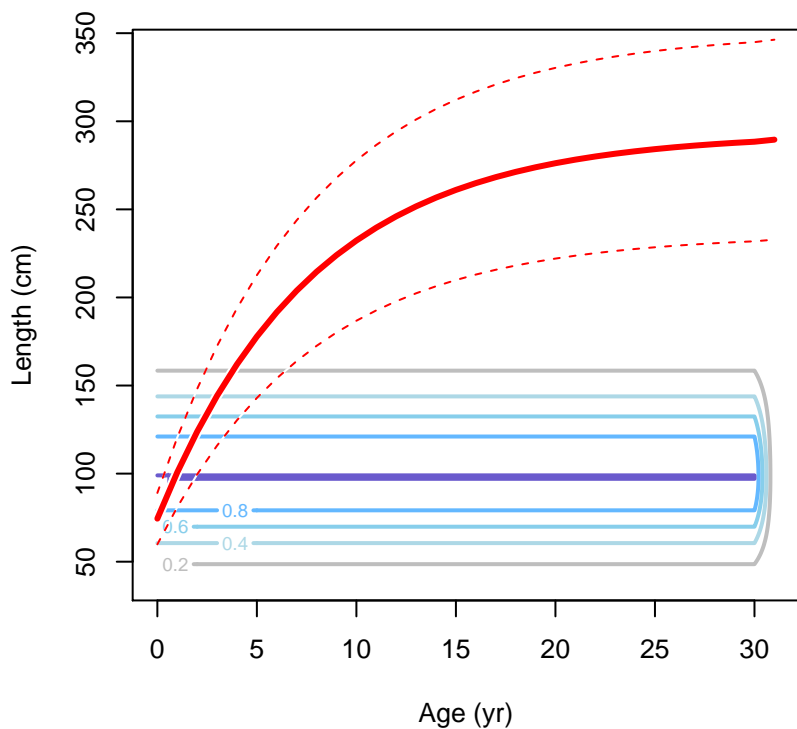
Male ending year selectivity and growth for F2_US_HI_SS



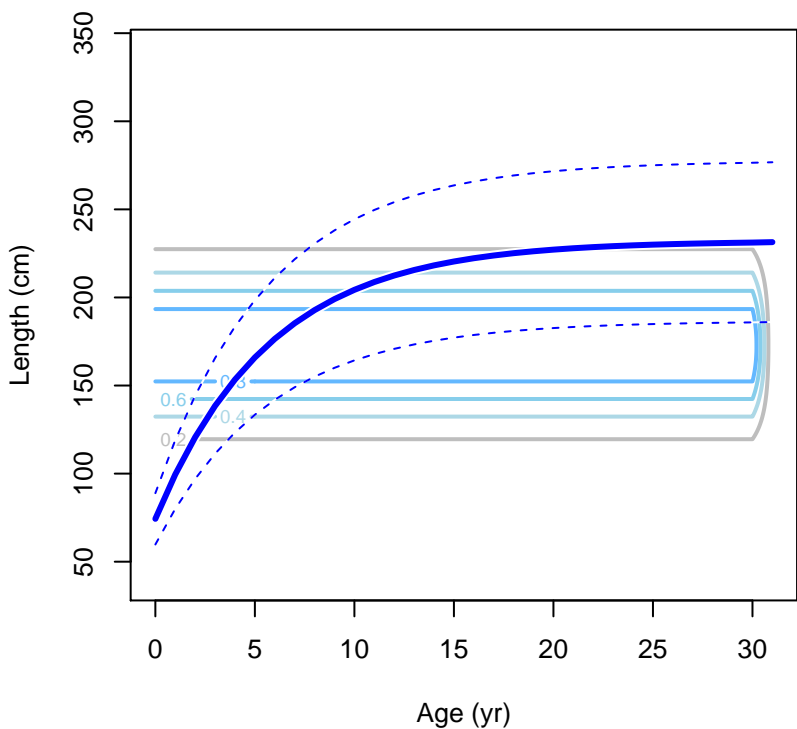
Female ending year selectivity and growth for F3_US_HI_DS



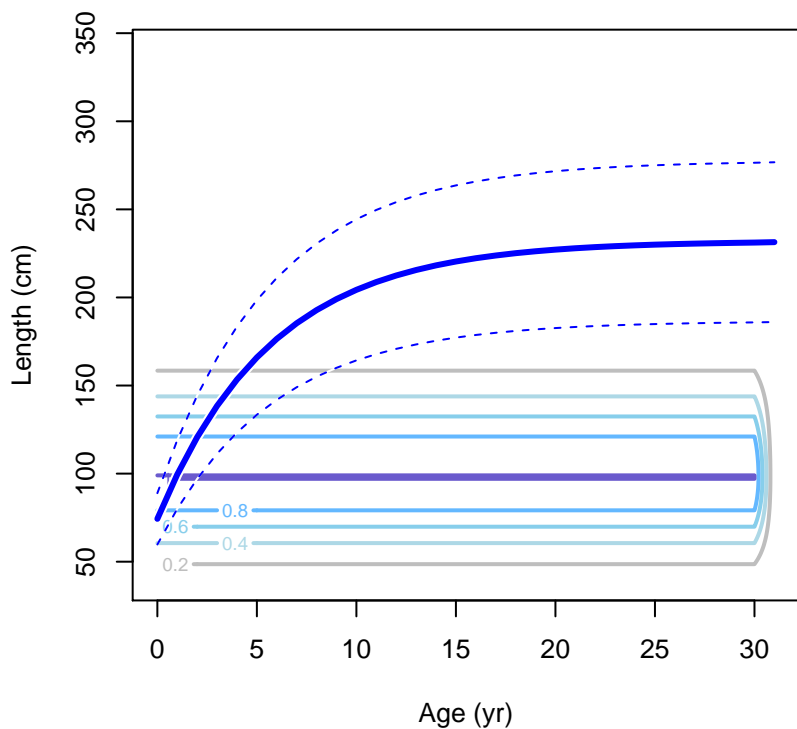
Female ending year selectivity and growth for F4_US_DGN



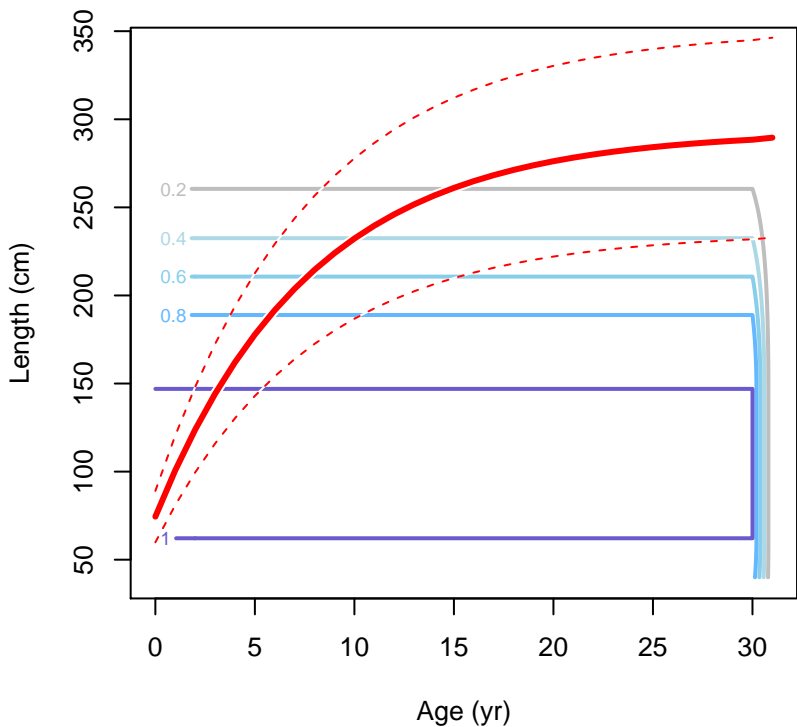
Male ending year selectivity and growth for F3_US_HI_DS



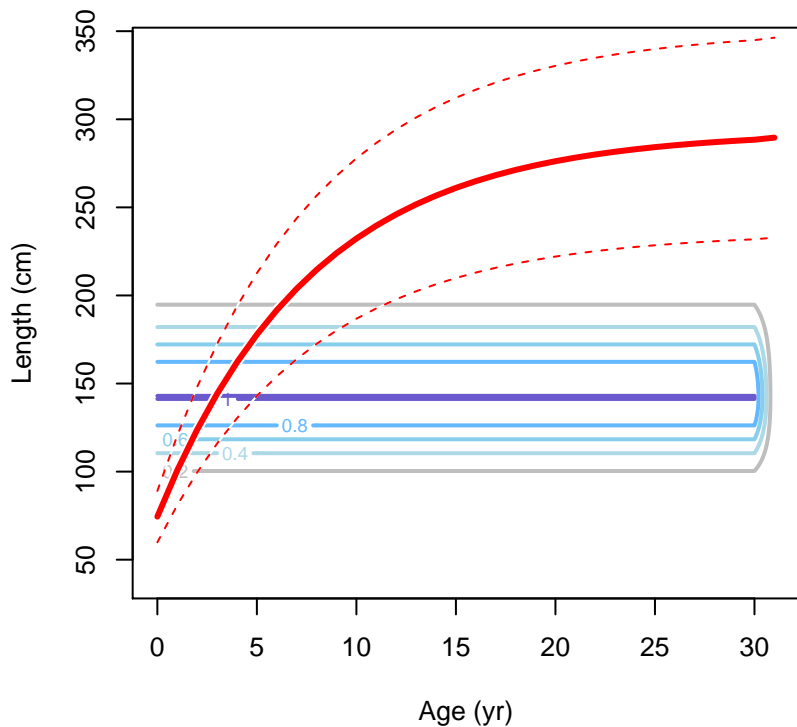
Male ending year selectivity and growth for F4_US_DGN



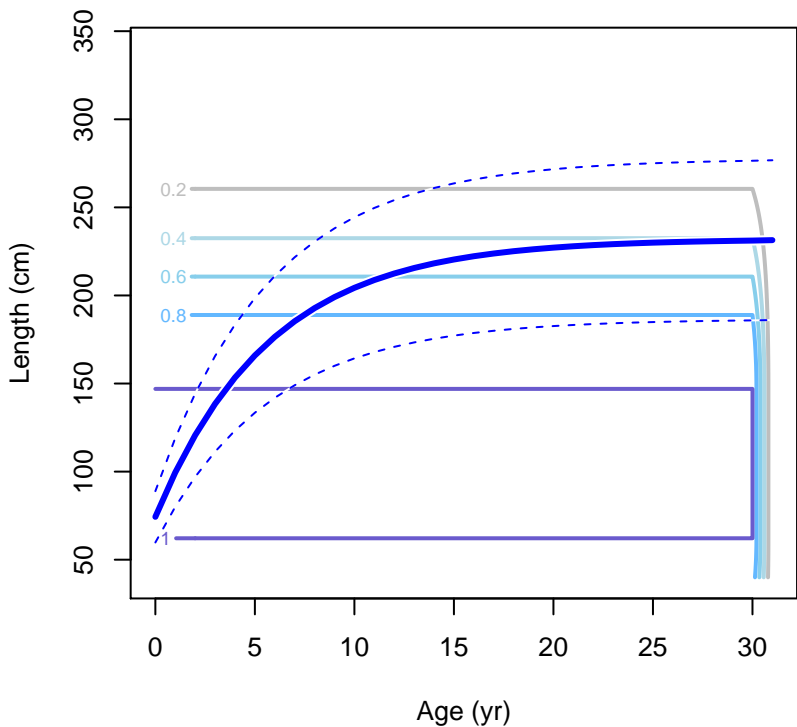
Female ending year selectivity and growth for F5_US_REC



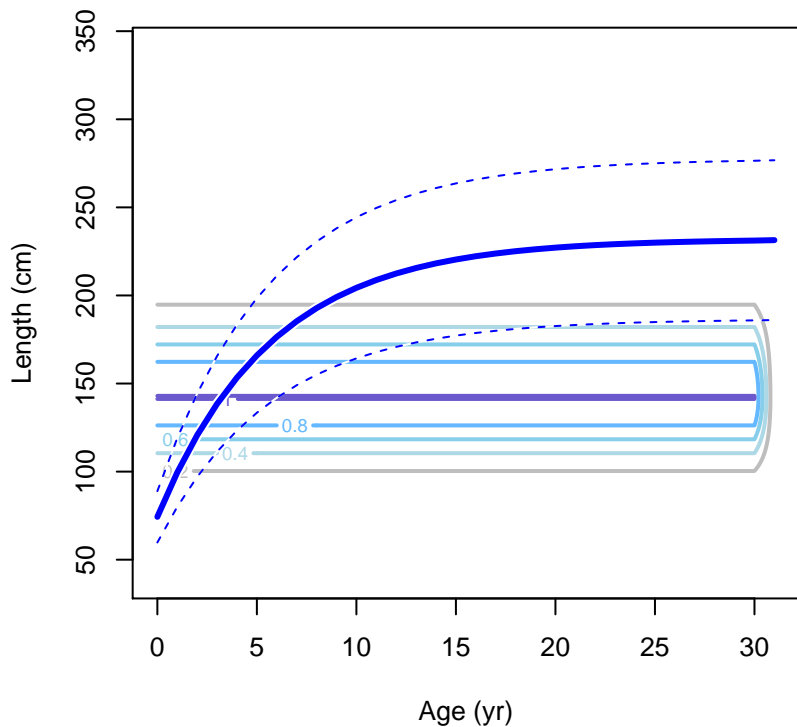
Female ending year selectivity and growth for F6_TW_LRG_N



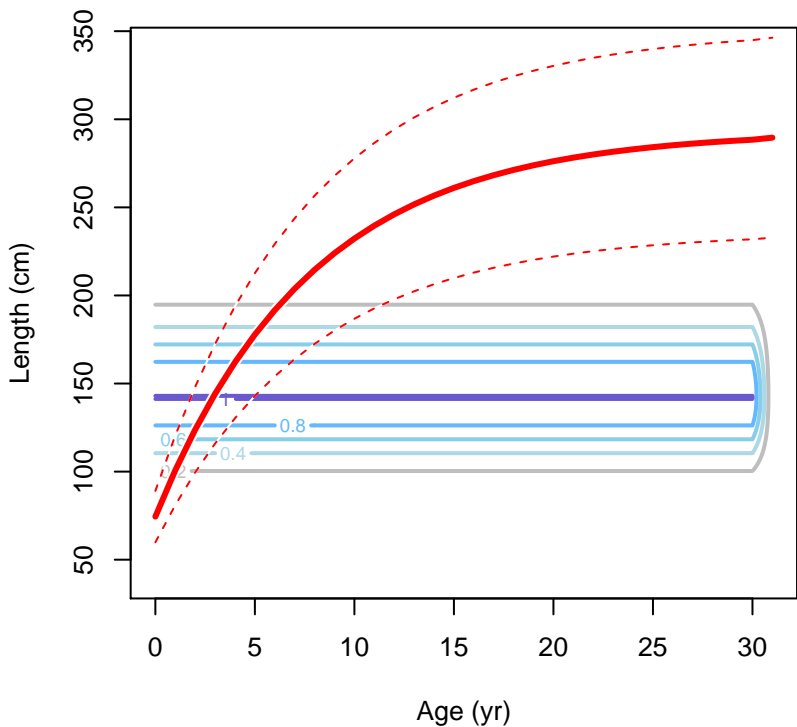
Male ending year selectivity and growth for F5_US_REC



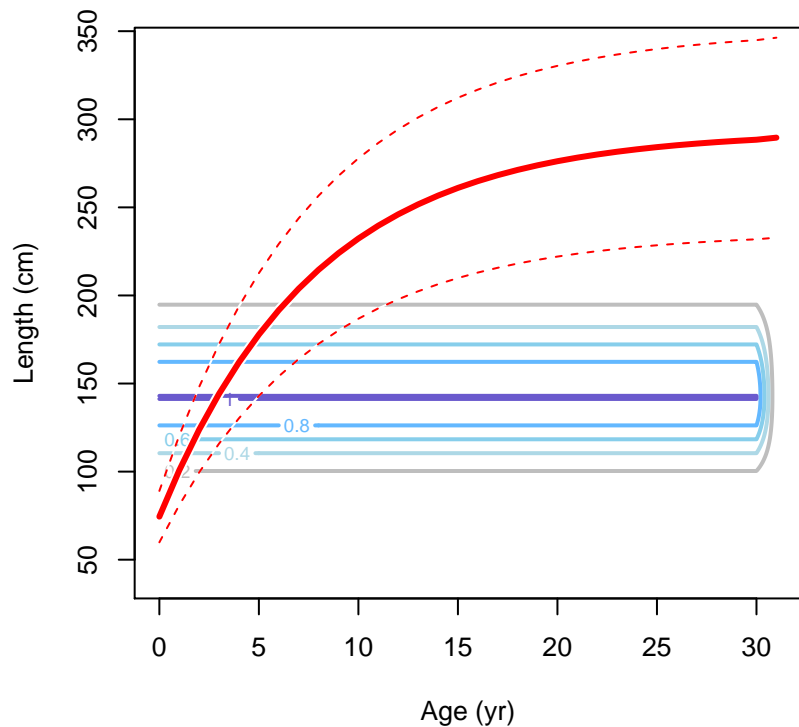
Male ending year selectivity and growth for F6_TW_LRG_N



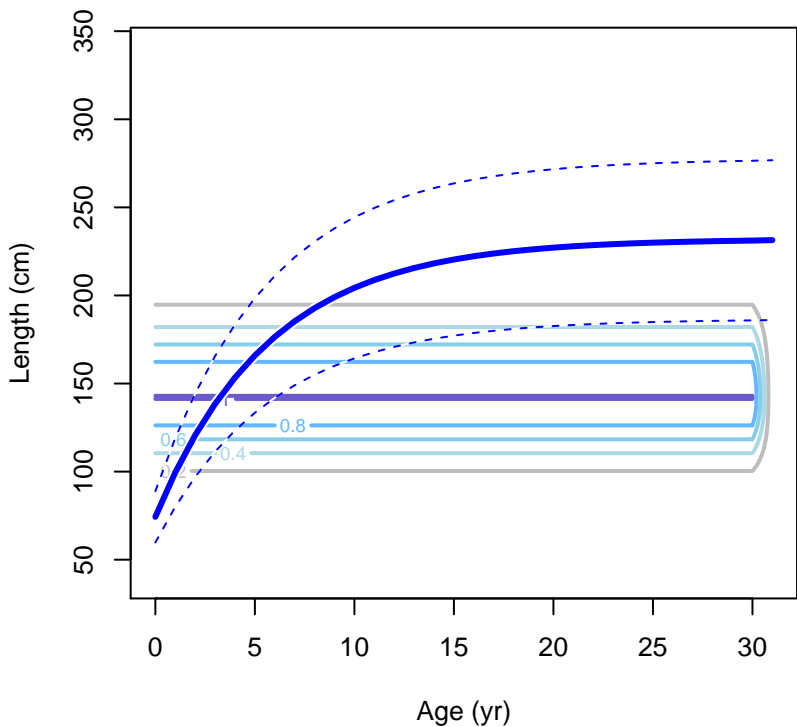
Female ending year selectivity and growth for F7_TW_LRG_S



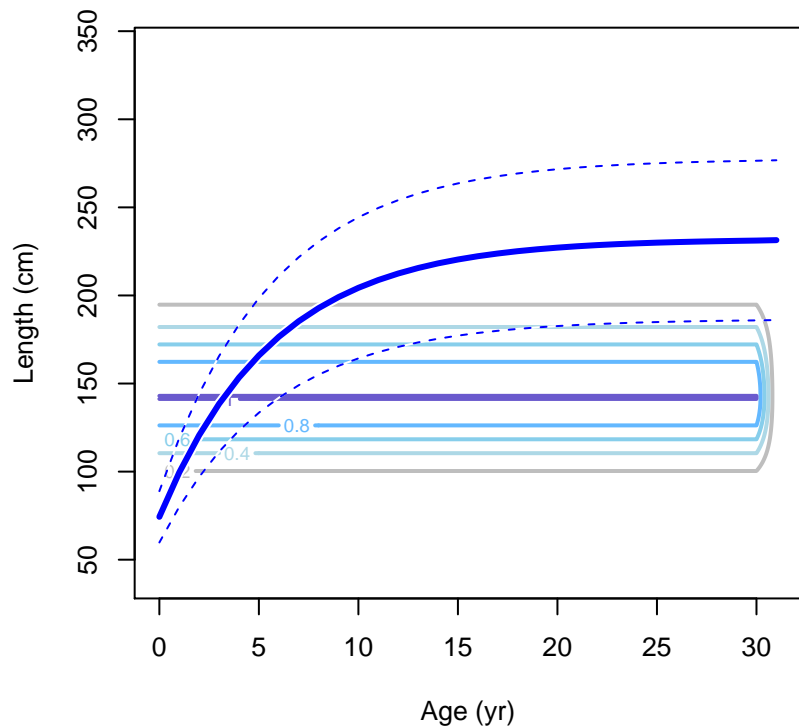
Female ending year selectivity and growth for F8_TW_SML



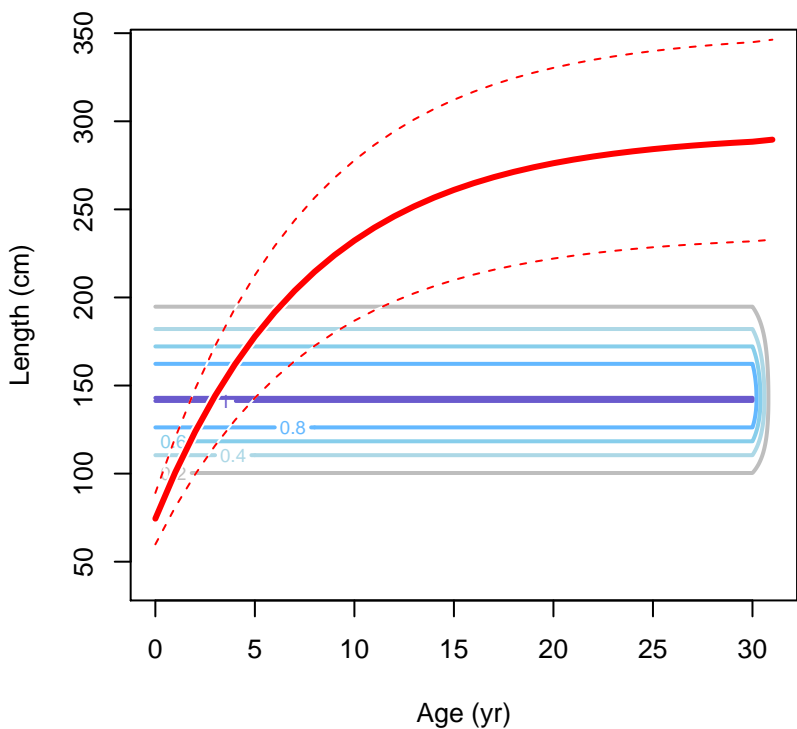
Male ending year selectivity and growth for F7_TW_LRG_S



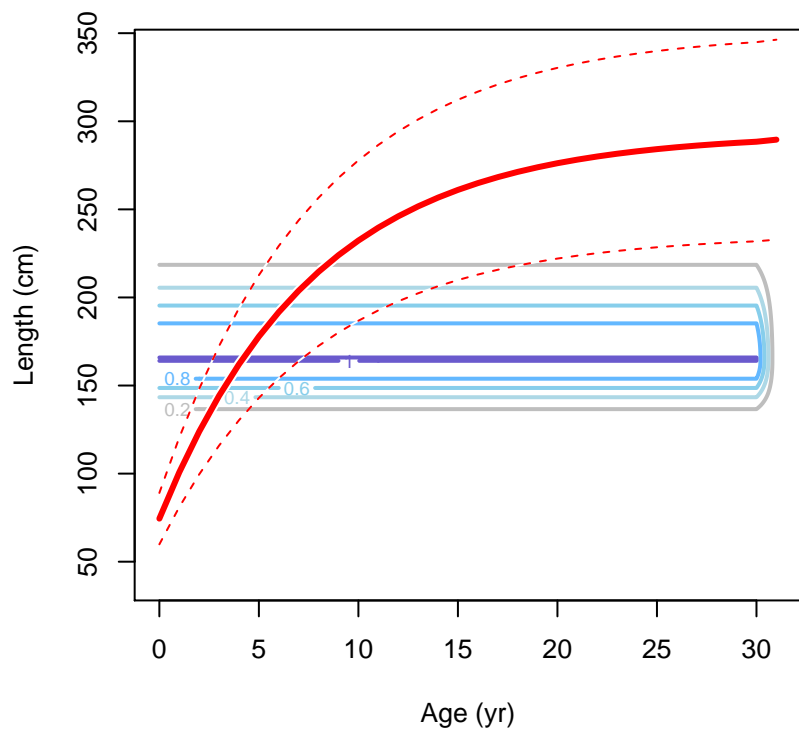
Male ending year selectivity and growth for F8_TW_SML



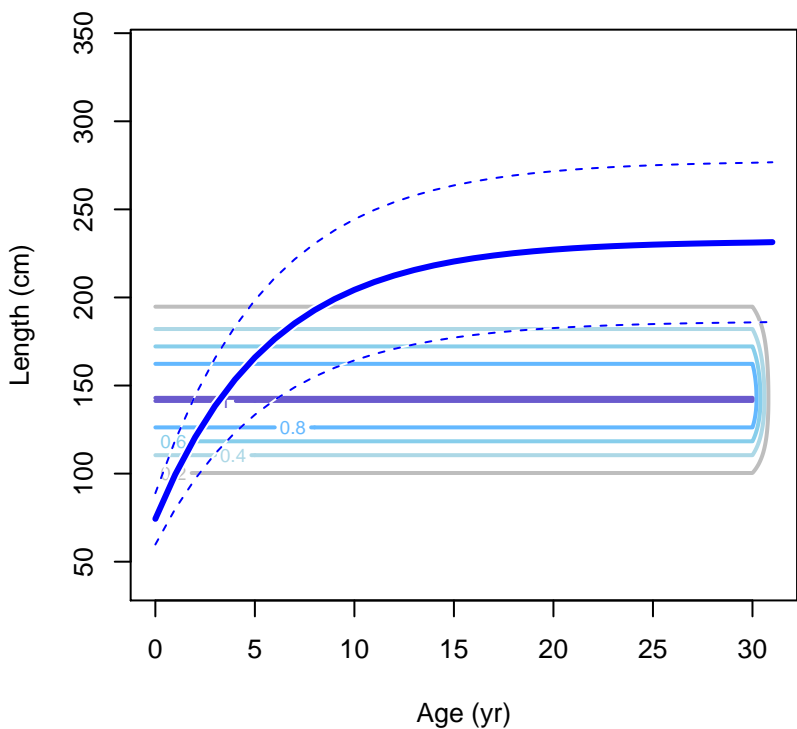
Female ending year selectivity and growth for F9_JPN_SS



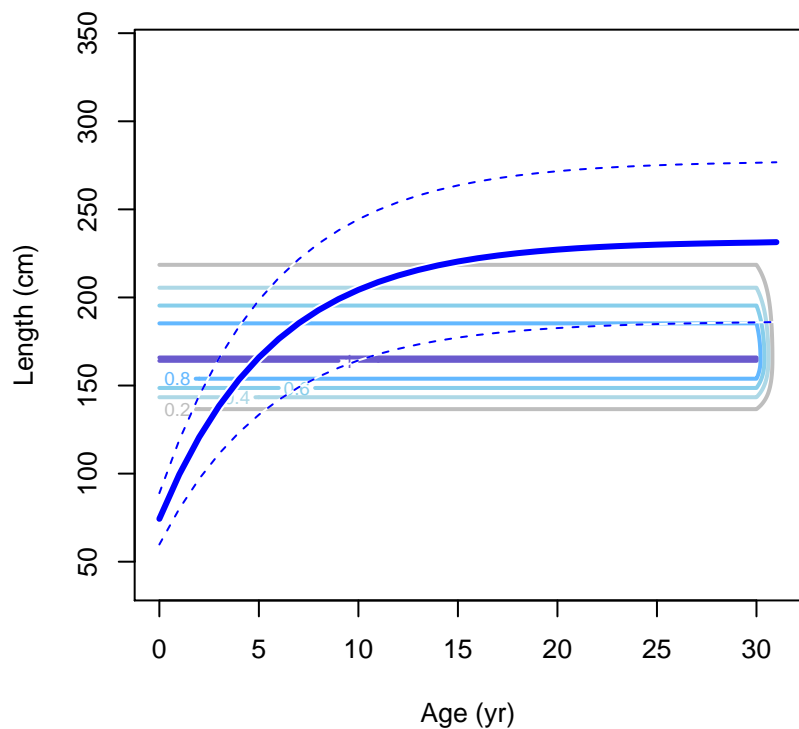
Female ending year selectivity and growth for F10_JPN_DS



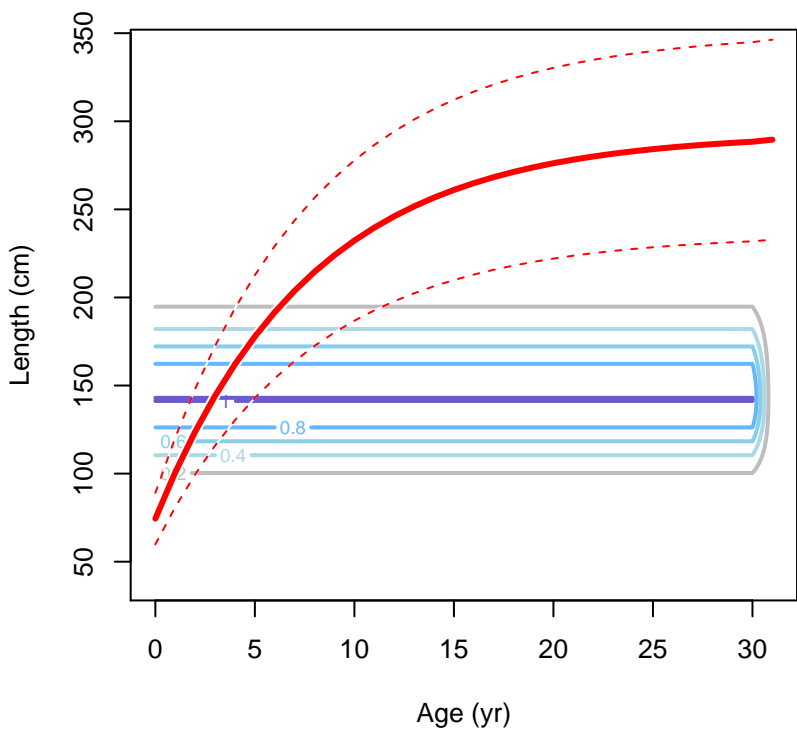
Male ending year selectivity and growth for F9_JPN_SS



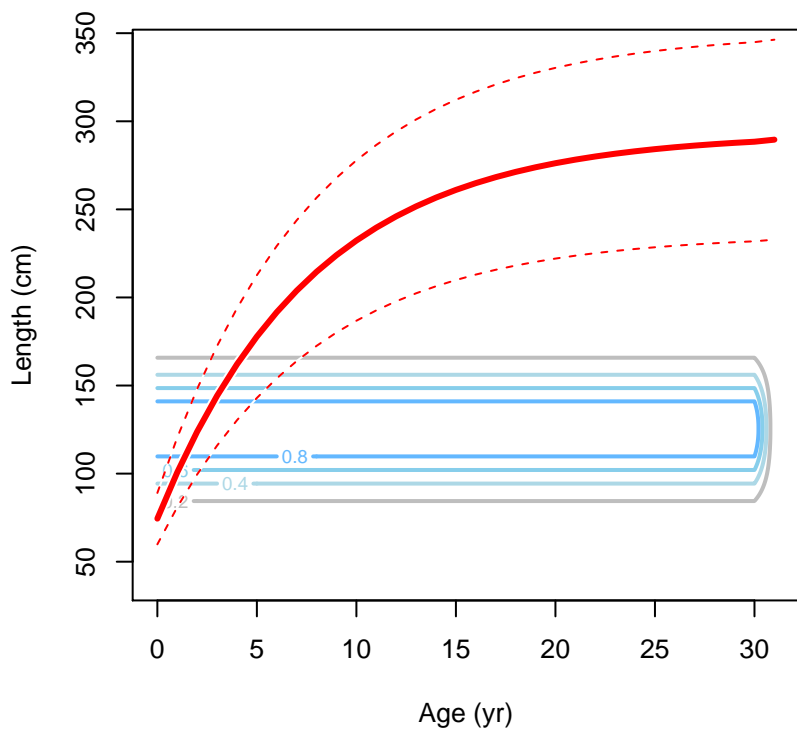
Male ending year selectivity and growth for F10_JPN_DS



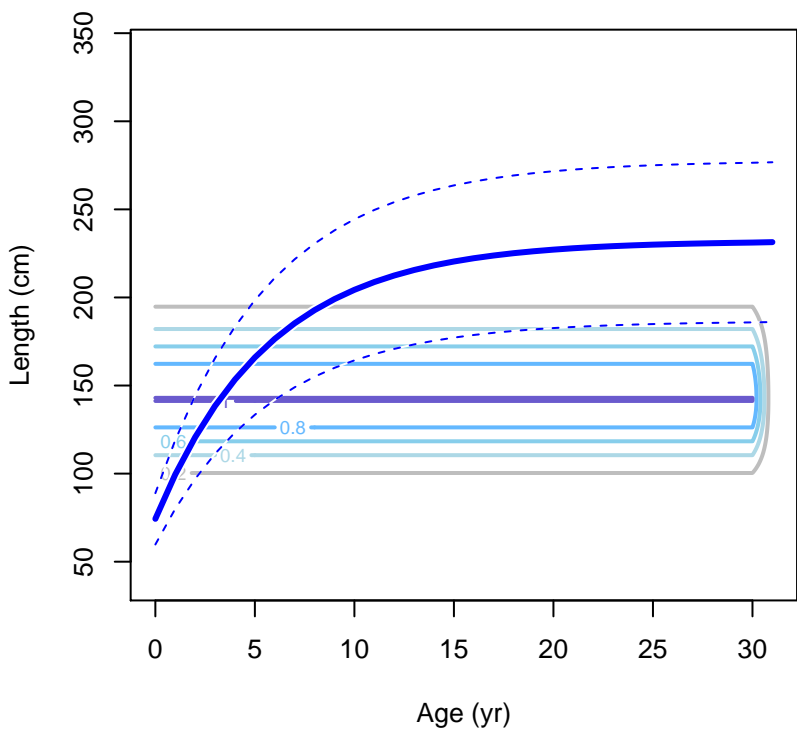
Female ending year selectivity and growth for F11_JPN_CST



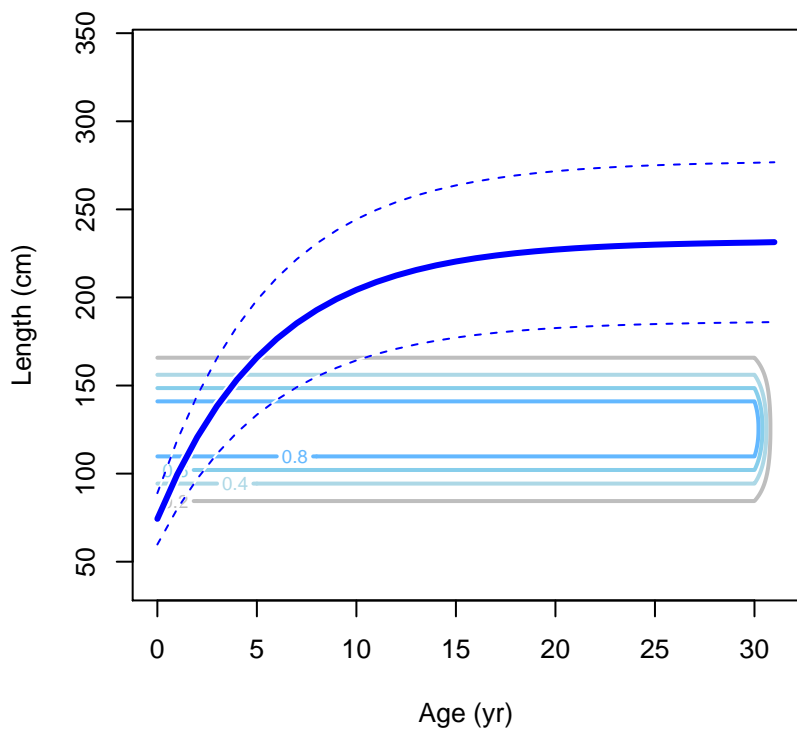
Female ending year selectivity and growth for F12_JPN_DFN



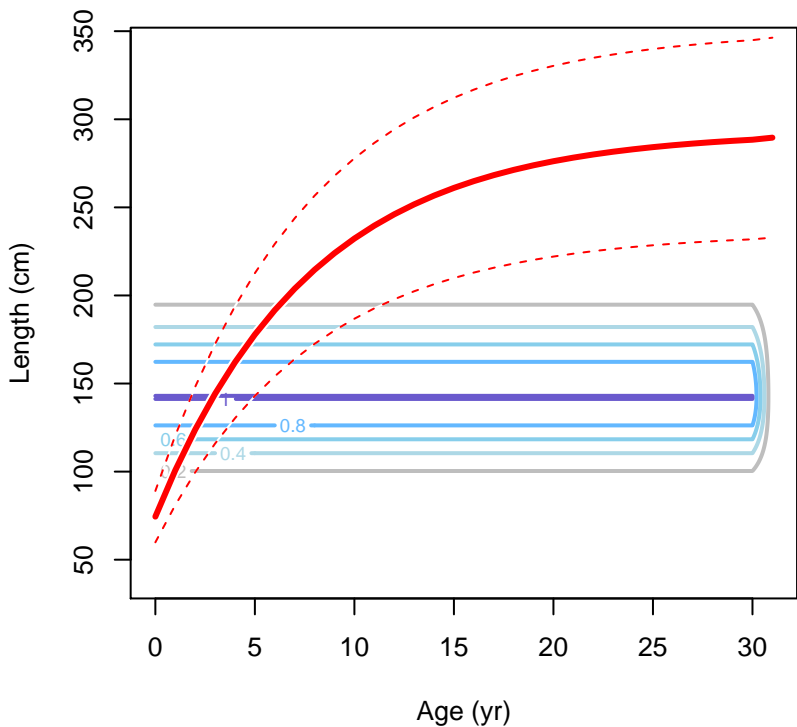
Male ending year selectivity and growth for F11_JPN_CST



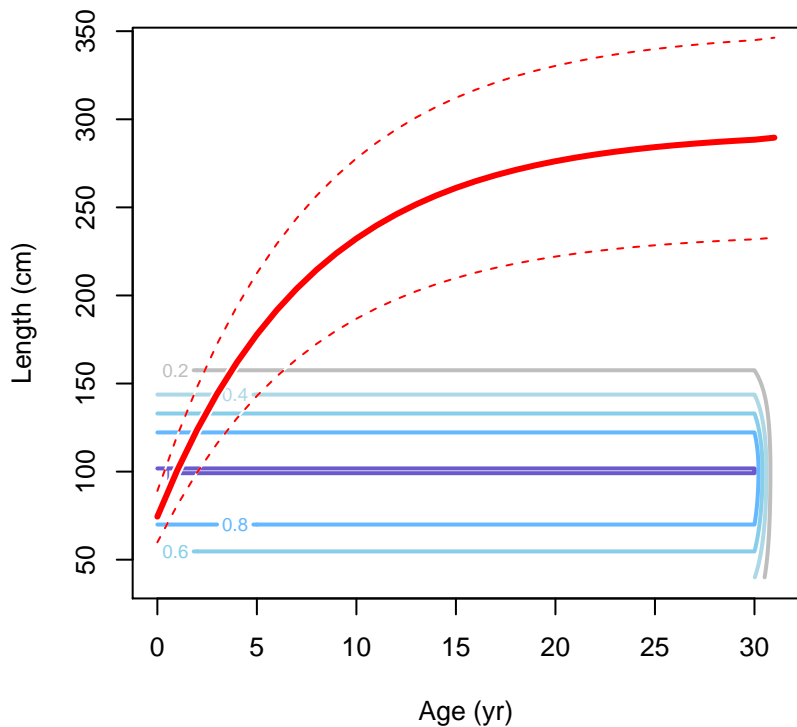
Male ending year selectivity and growth for F12_JPN_DFN



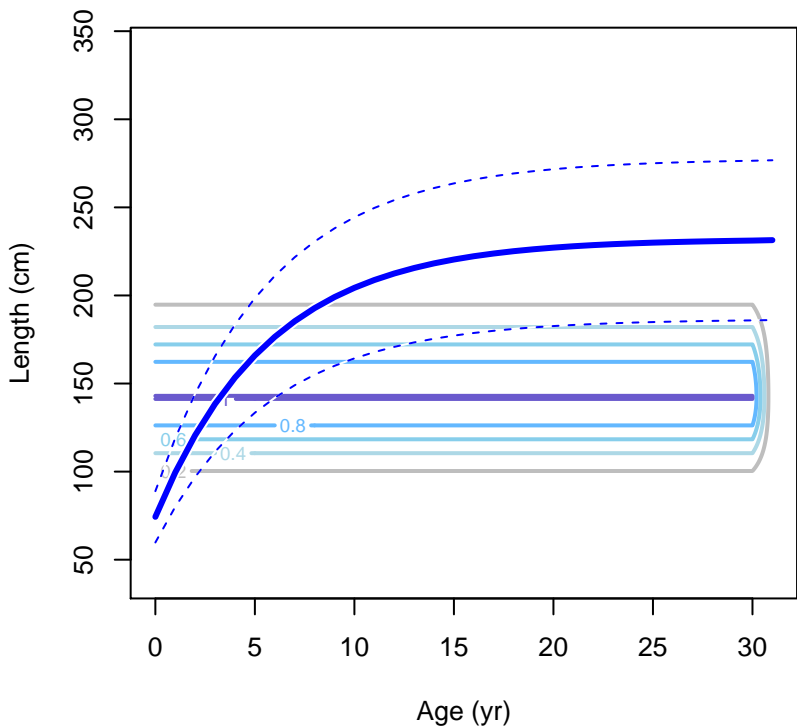
Female ending year selectivity and growth for F13_JPN_OTH



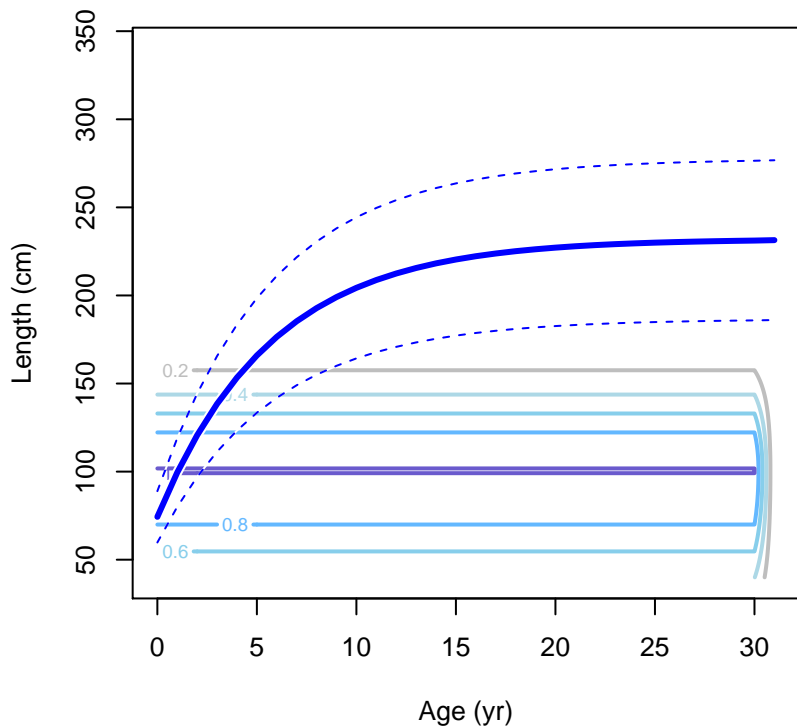
Female ending year selectivity and growth for F14_MEX_NOR



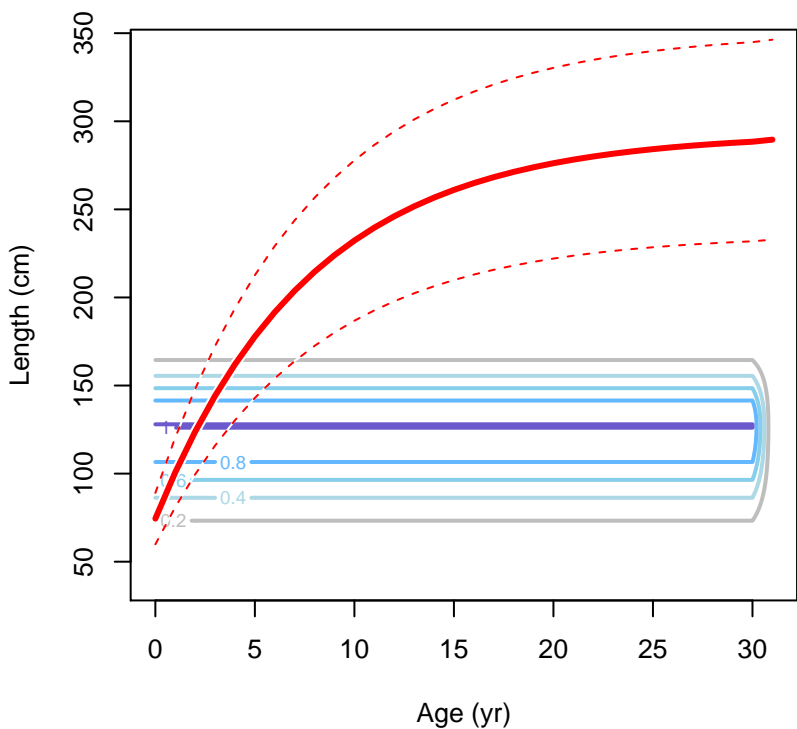
Male ending year selectivity and growth for F13_JPN_OTH



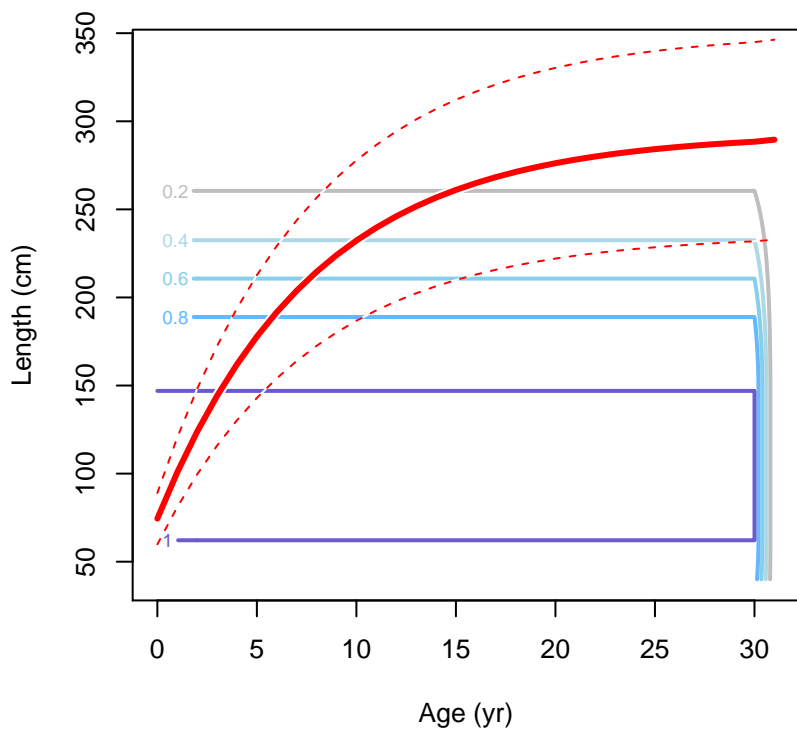
Male ending year selectivity and growth for F14_MEX_NOR



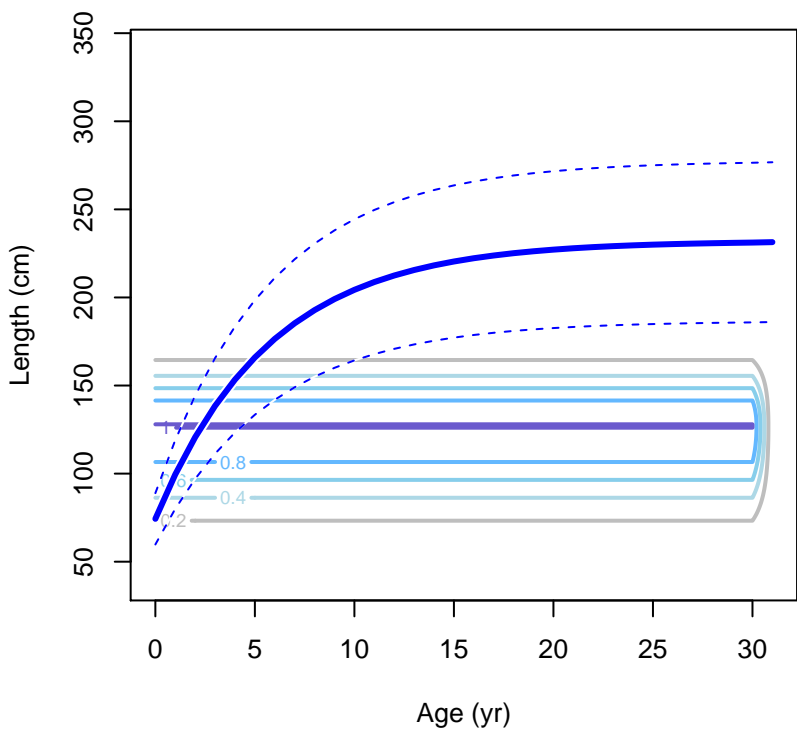
Female ending year selectivity and growth for F15_MEX_SOU



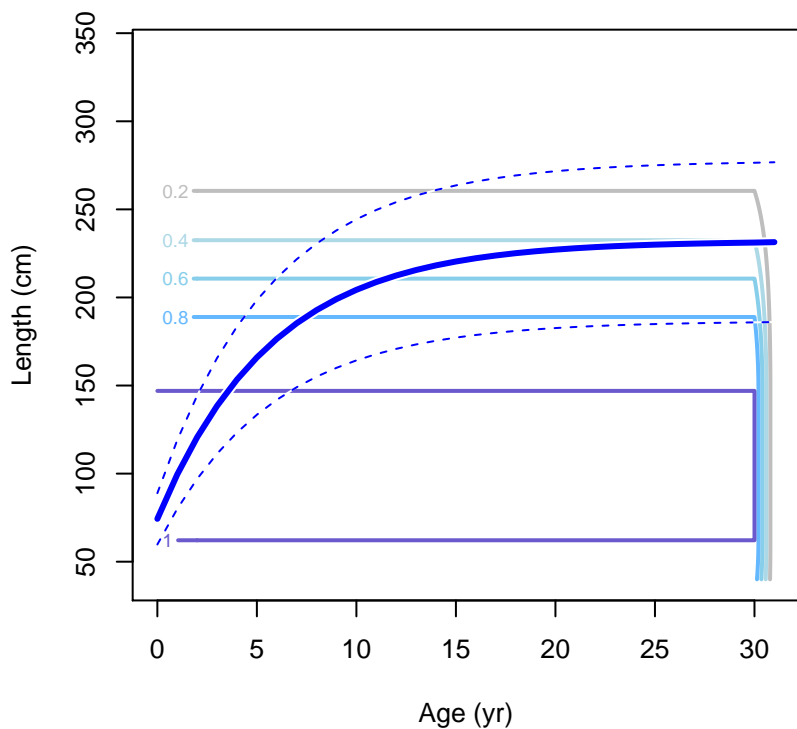
Female ending year selectivity and growth for F16_WCPFC



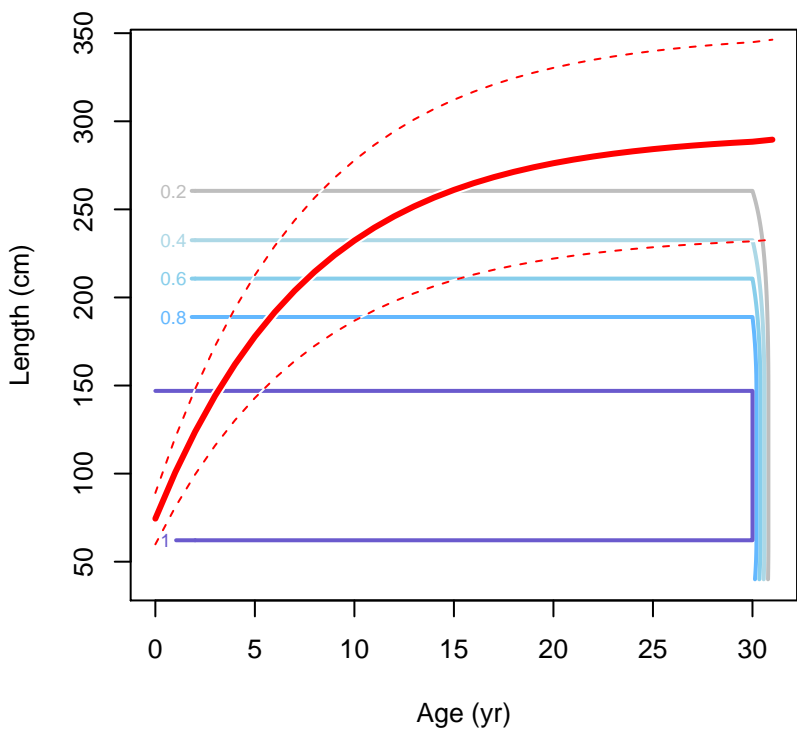
Male ending year selectivity and growth for F15_MEX_SOU



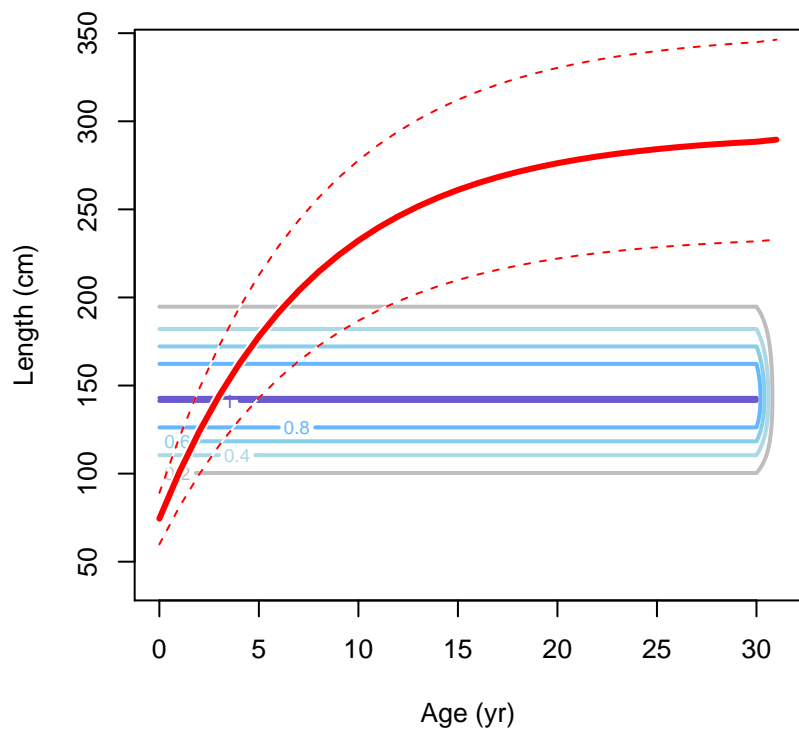
Male ending year selectivity and growth for F16_WCPFC



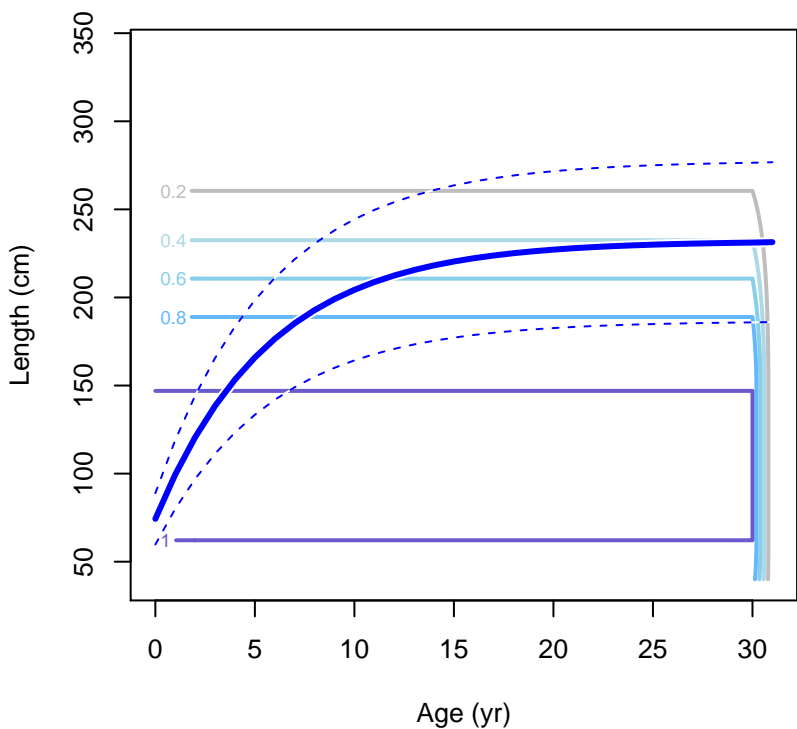
Female ending year selectivity and growth for F17_IATTC



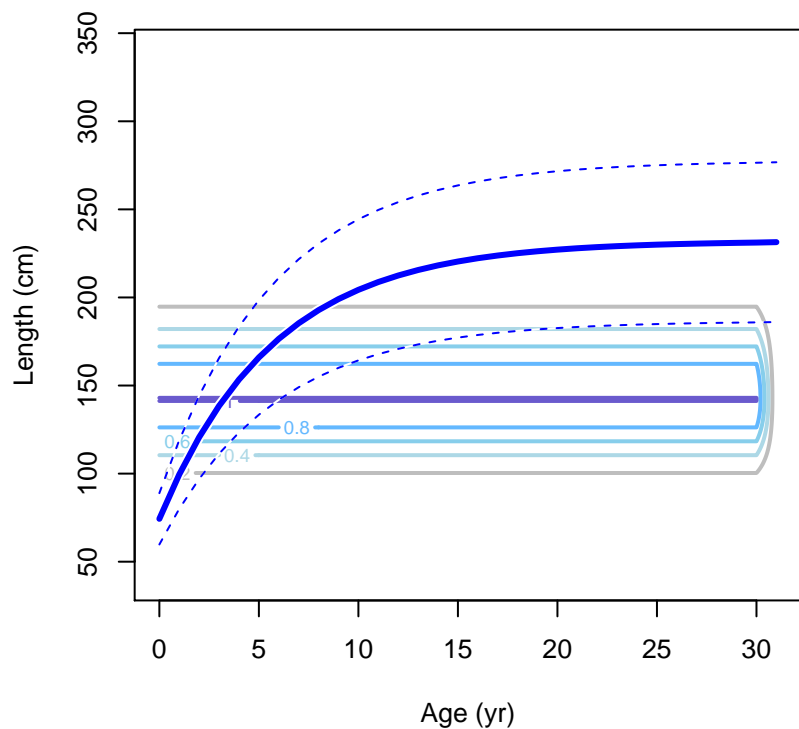
Female ending year selectivity and growth for F18_JPN_SSII



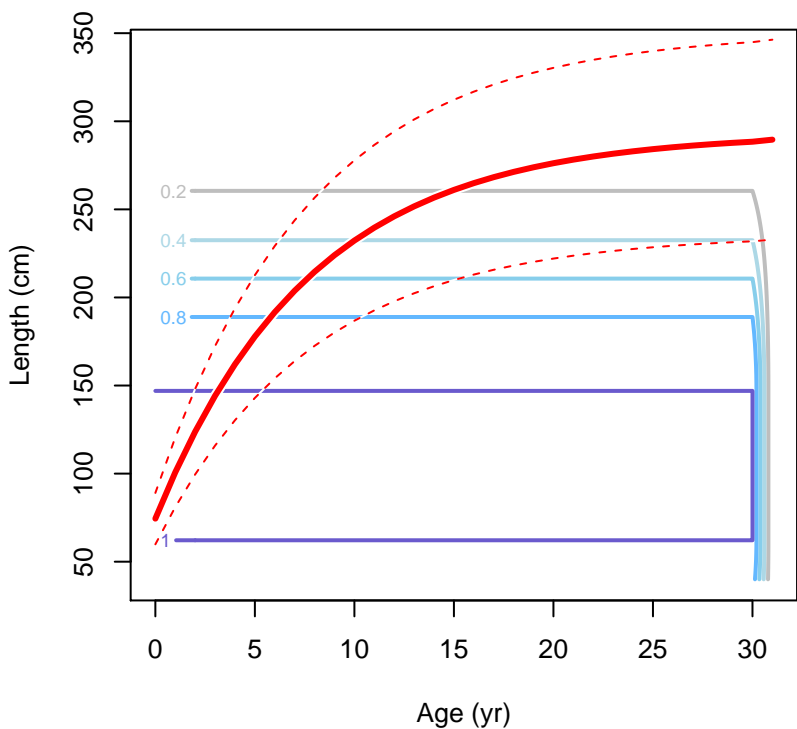
Male ending year selectivity and growth for F17_IATTC



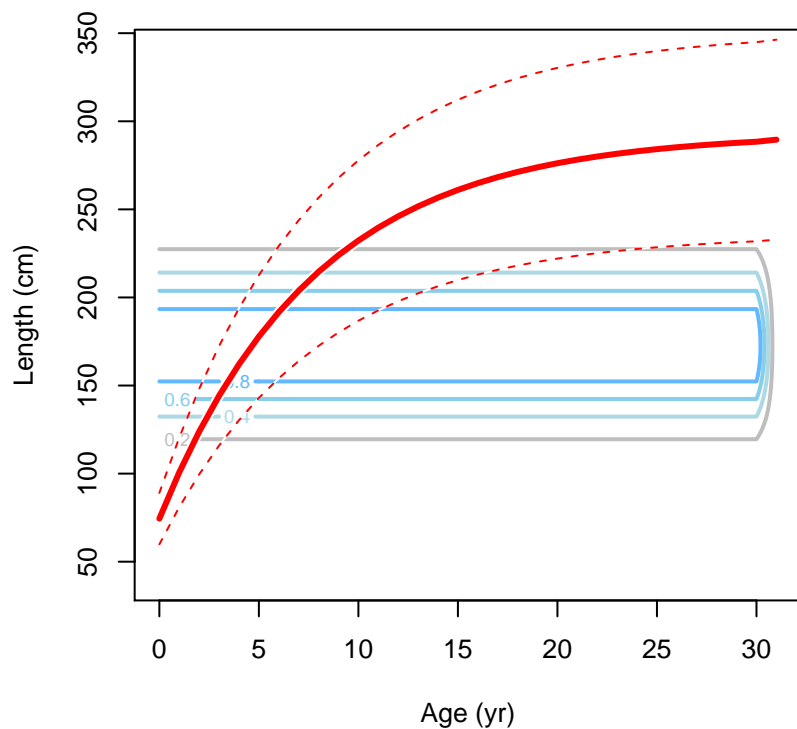
Male ending year selectivity and growth for F18_JPN_SSII



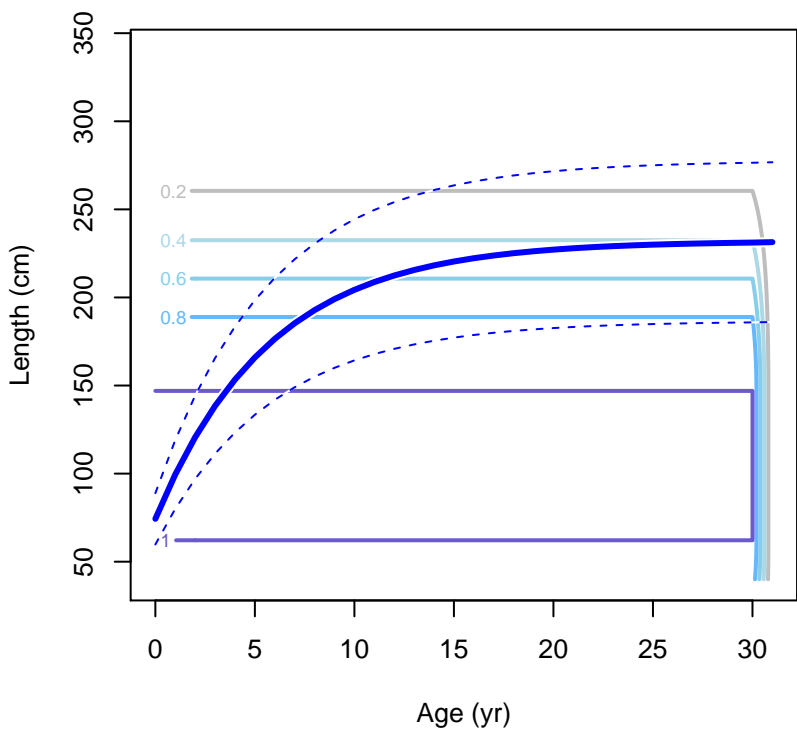
Female ending year selectivity and growth for S1_US_SS



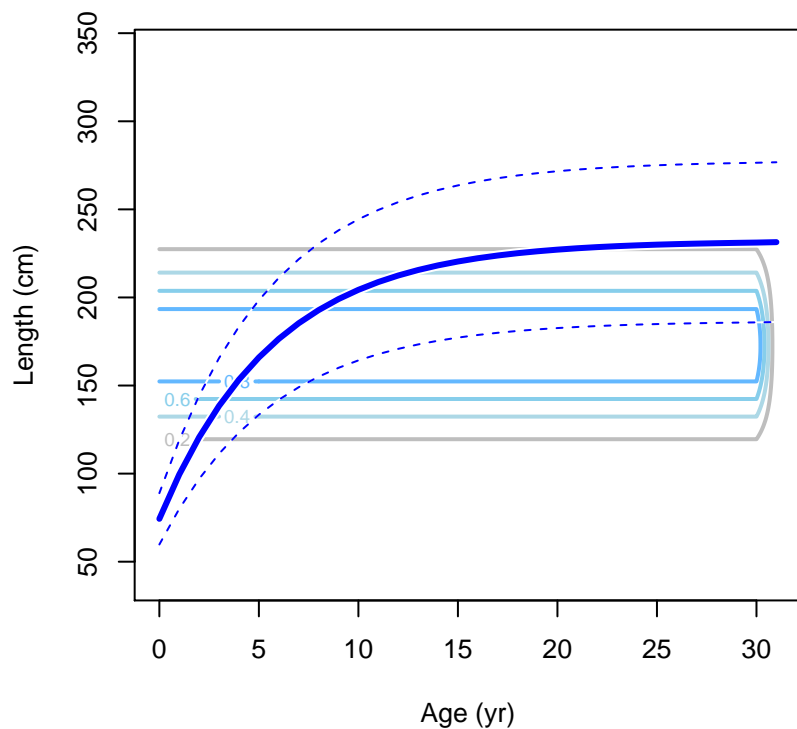
Female ending year selectivity and growth for S2_US_DS



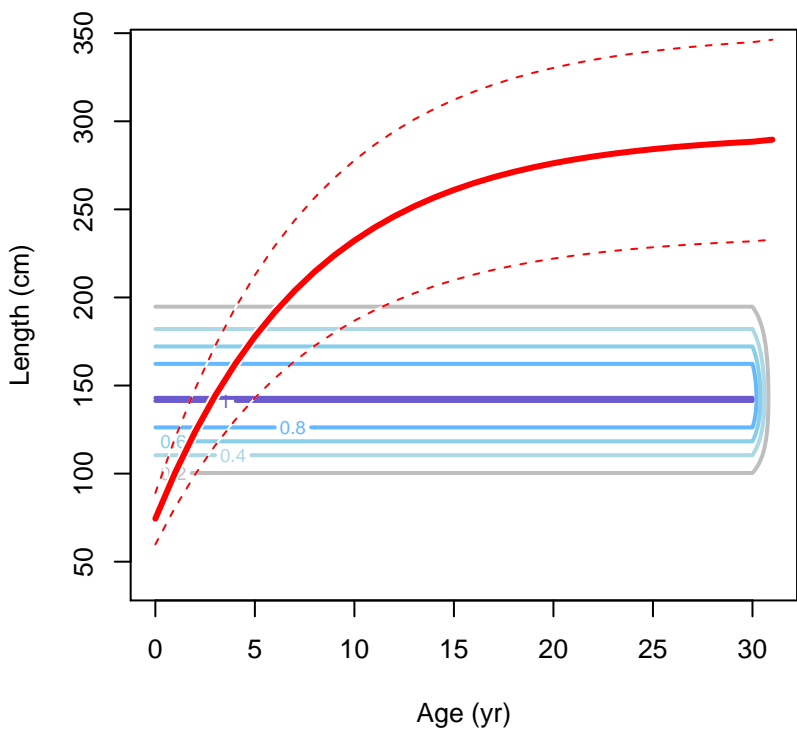
Male ending year selectivity and growth for S1_US_SS



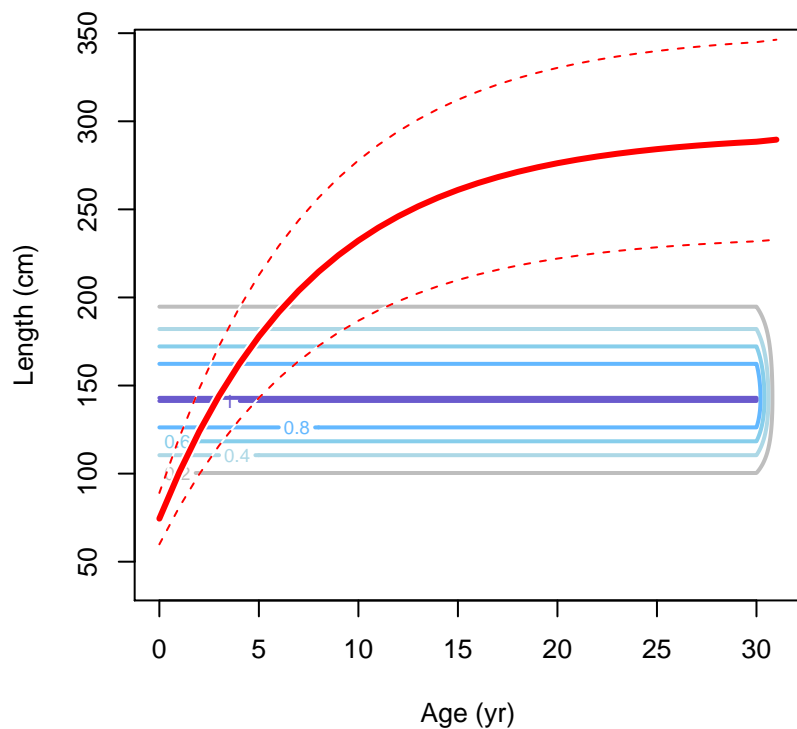
Male ending year selectivity and growth for S2_US_DS



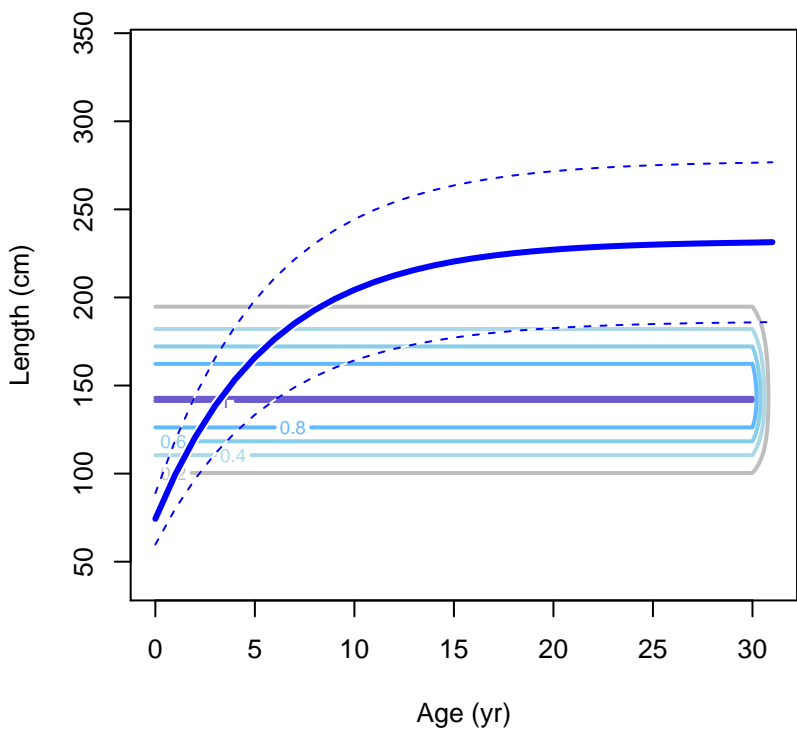
Female ending year selectivity and growth for S3_TW_LRG



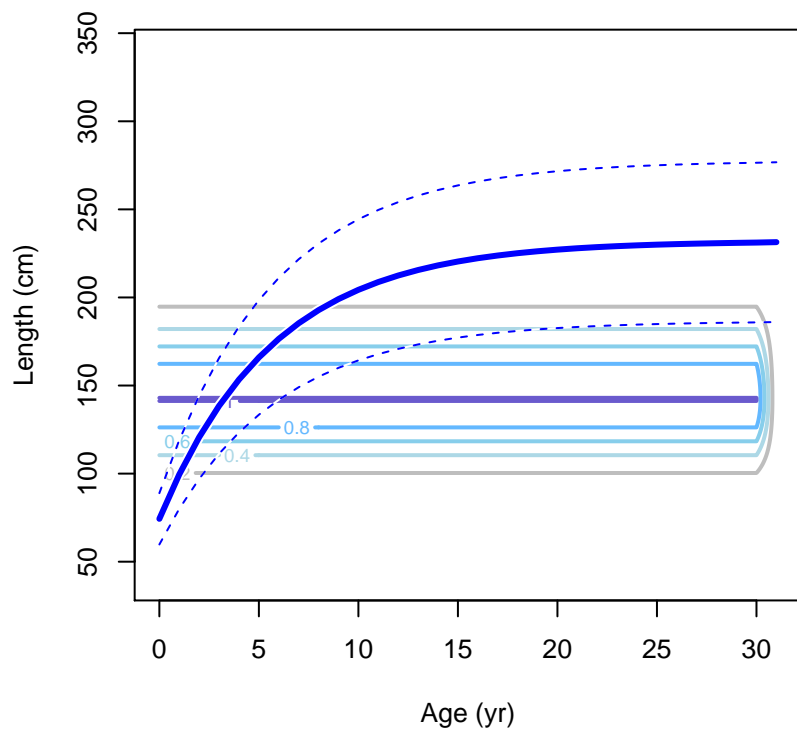
Female ending year selectivity and growth for S4_JPN_SS



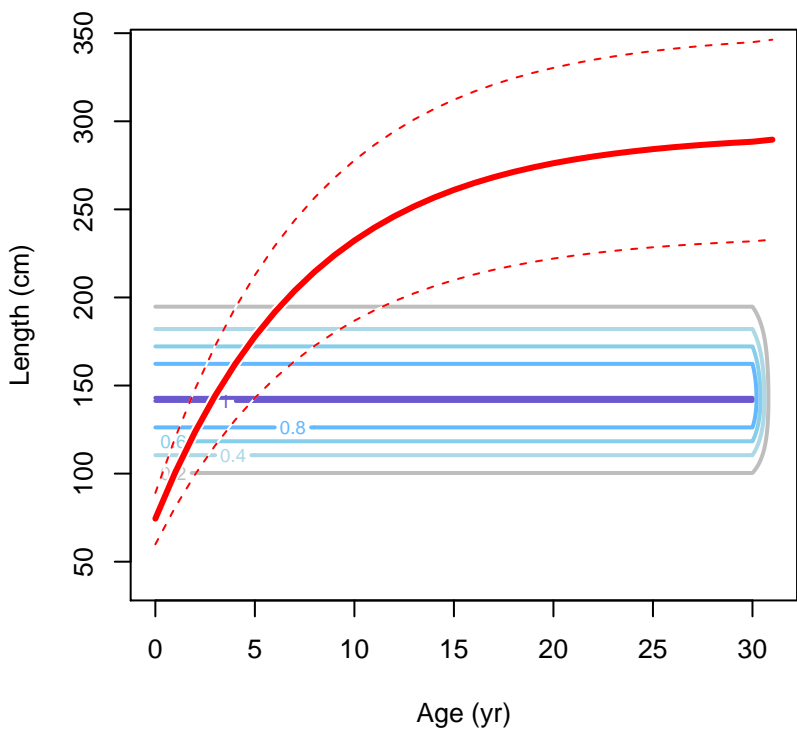
Male ending year selectivity and growth for S3_TW_LRG



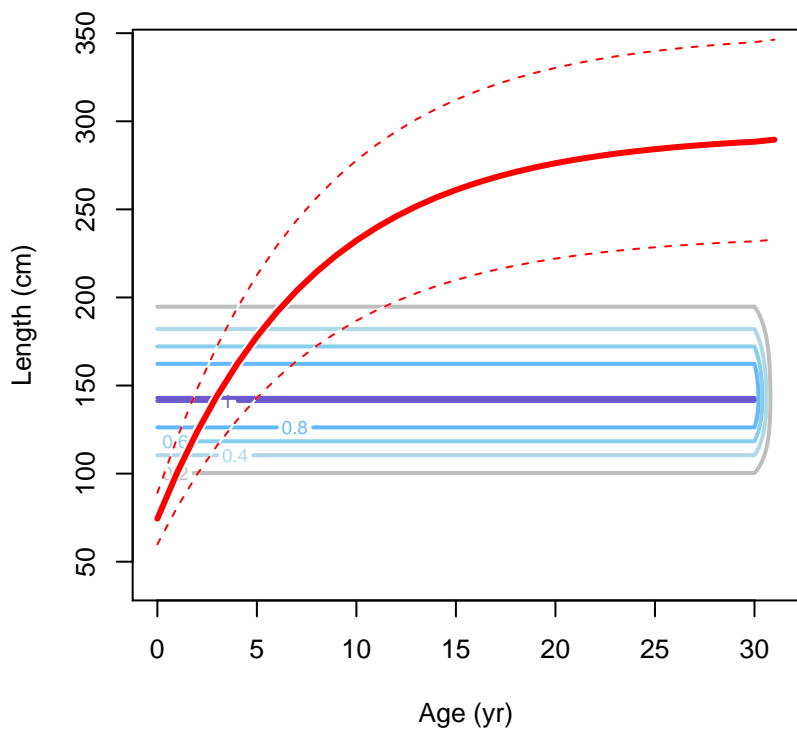
Male ending year selectivity and growth for S4_JPN_SS



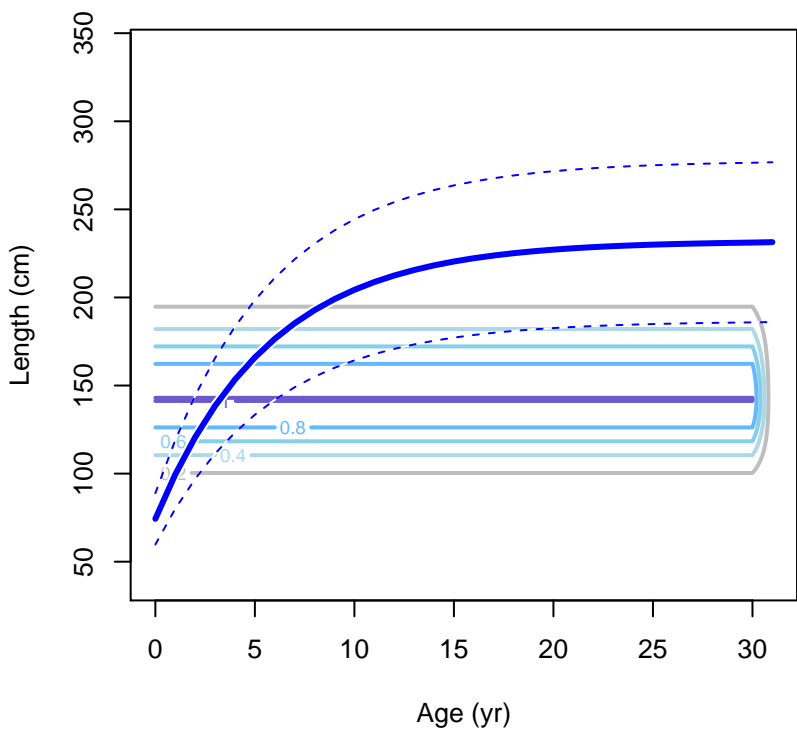
Female ending year selectivity and growth for S5_JPN_RTV



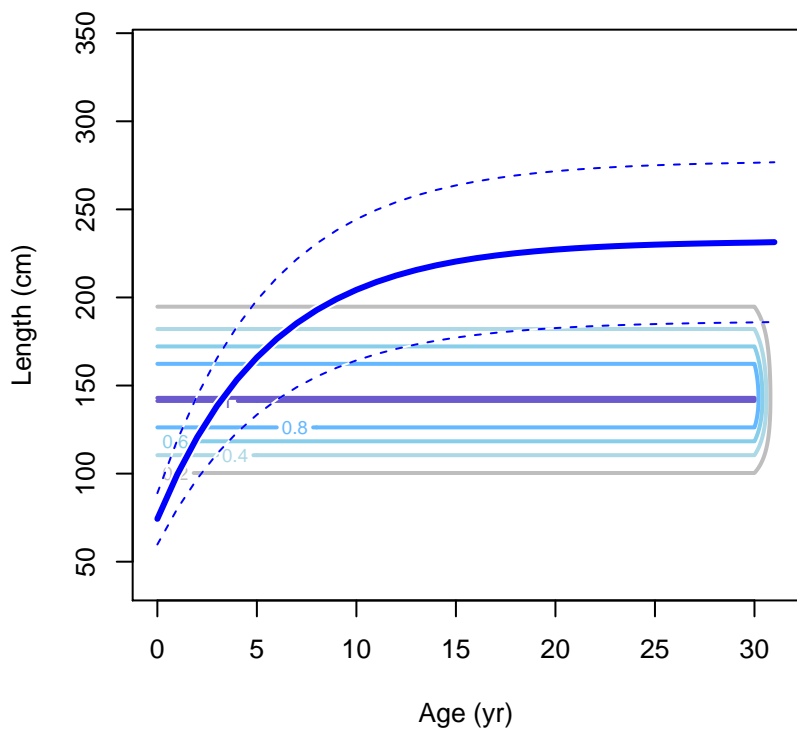
Female ending year selectivity and growth for S6_JPN_OBS



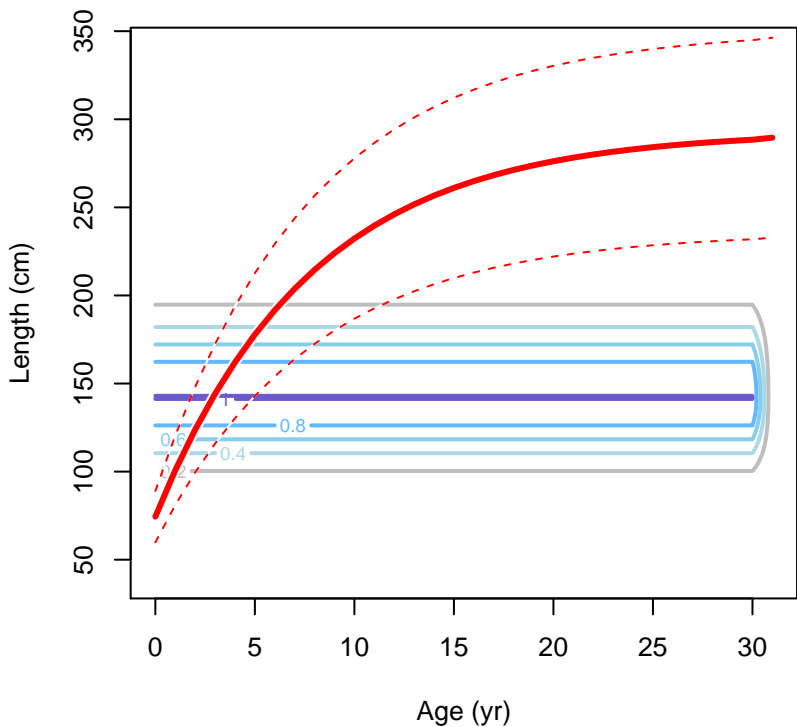
Male ending year selectivity and growth for S5_JPN_RTV



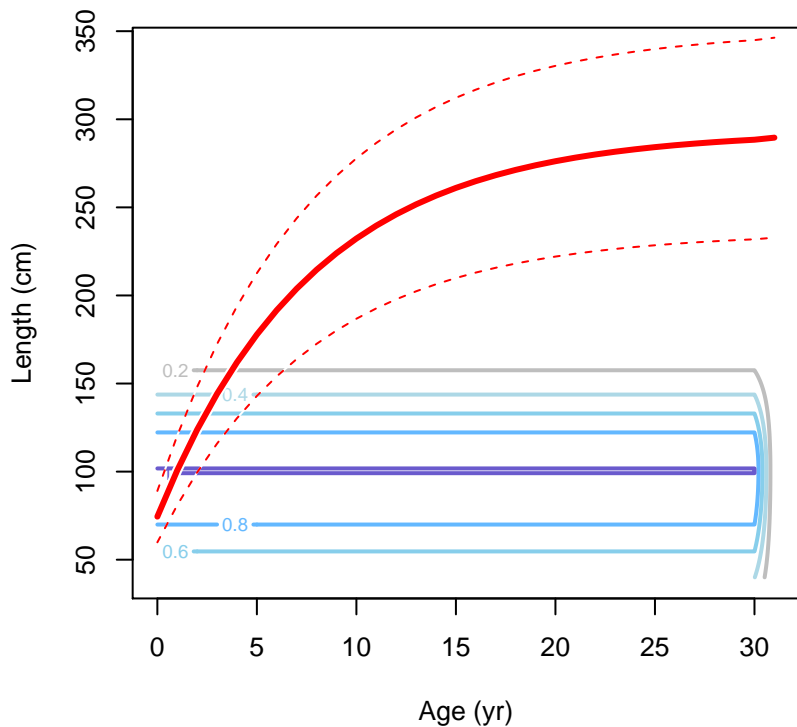
Male ending year selectivity and growth for S6_JPN_OBS



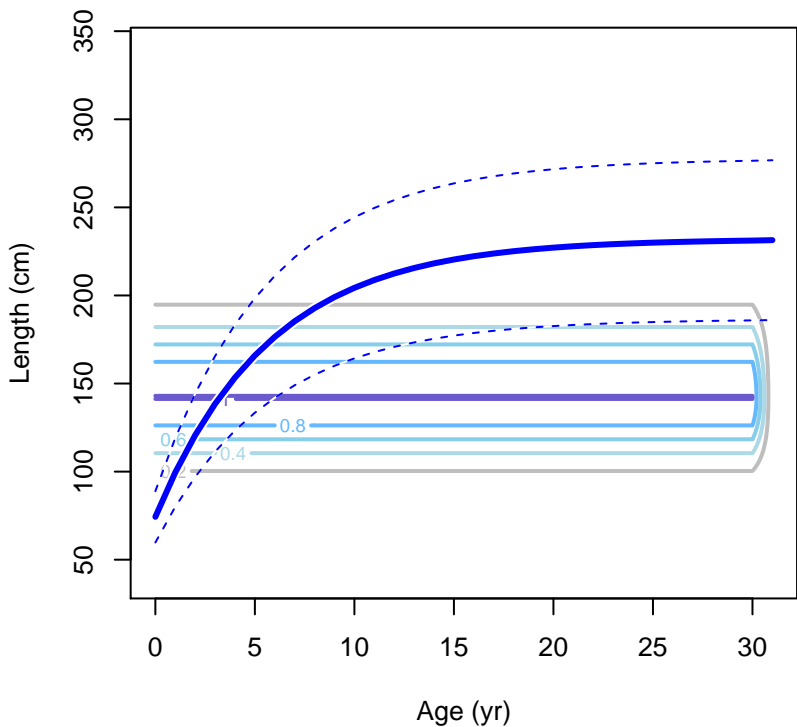
Female ending year selectivity and growth for S7_JPN_GEO



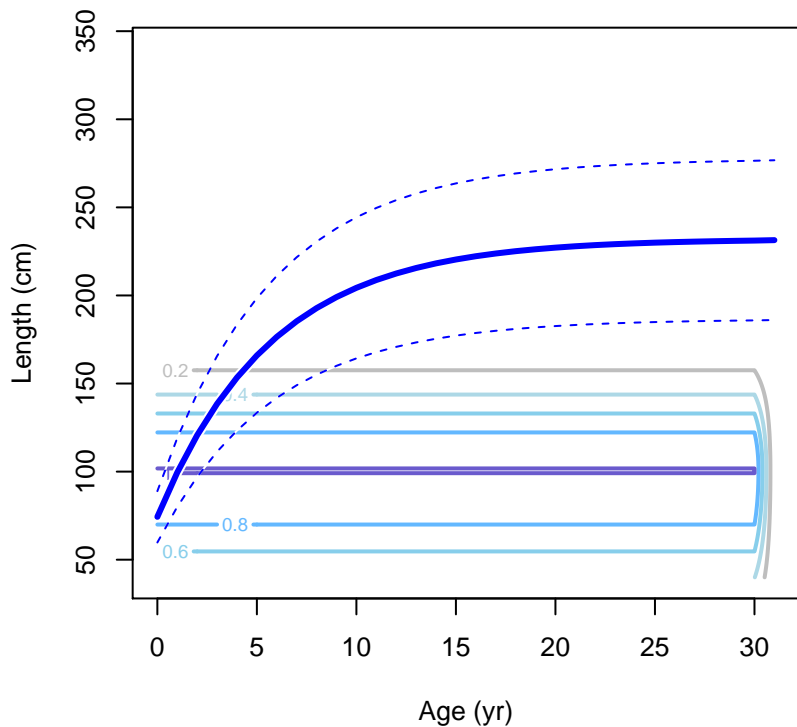
Female ending year selectivity and growth for S8_MEX



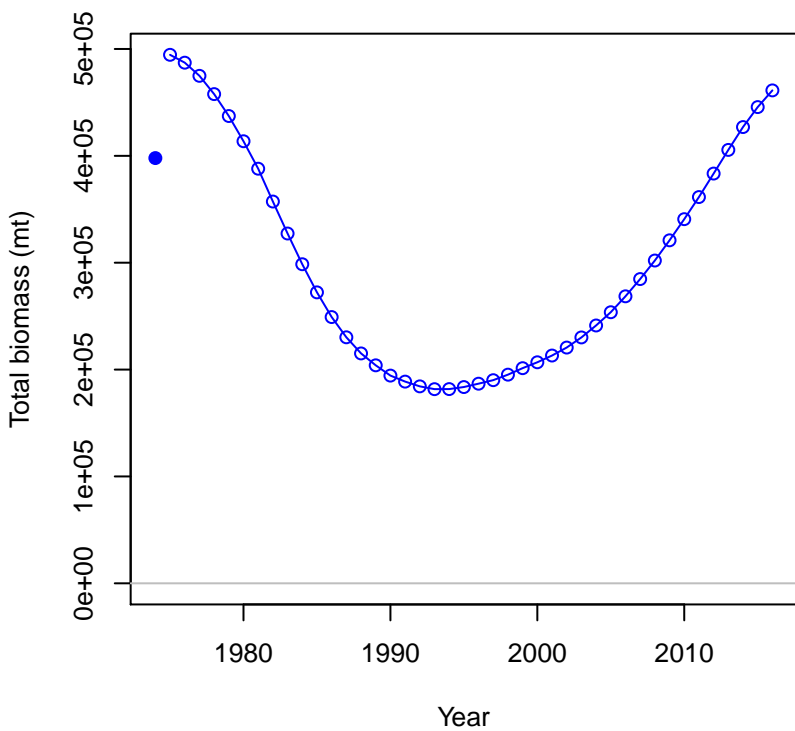
Male ending year selectivity and growth for S7_JPN_GEO



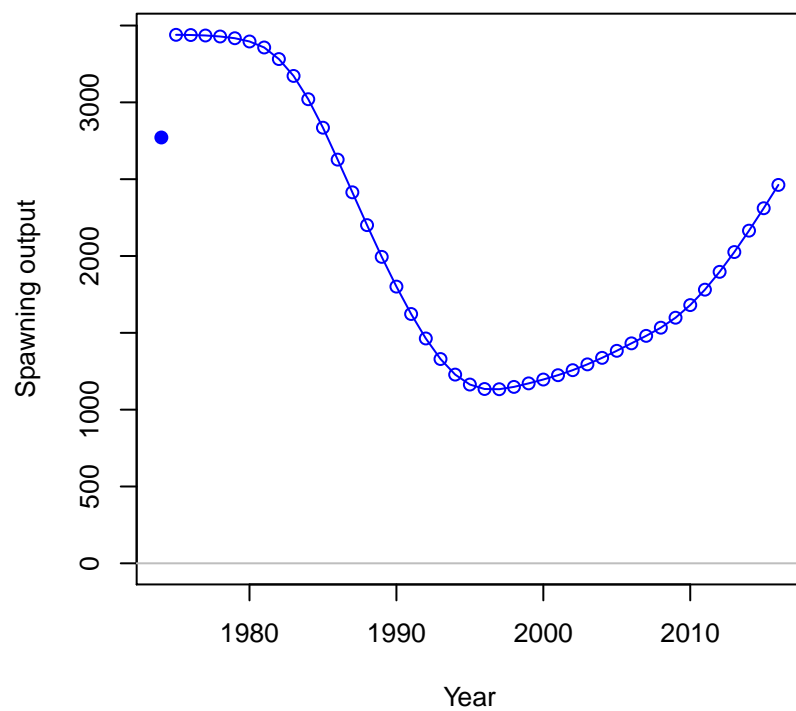
Male ending year selectivity and growth for S8_MEX



Total biomass (mt)



Spawning output



Summary biomass (mt)

