

Gmacs & BBRKC

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What's New?

- N-year projections (i.e. 1-year projection used for calculating Tier 3 or 4 OFLs)
- SPR/OFL/ABC calculations (Tier 3)
- Francis iterative weighting (Francis 2011)
- Different phases for “rec_ini” and “rec_dev”
- Small bycatches
- Custom transition matrix option
 - Can specify if it is a growth matrix or a transition matrix

What's New?

- Time-varying season length permanent
- More work on .Rmd documentation (for SMBKC but this work can be borrowed for other stocks)
 - Automatically import model output/tables
- SMBKC Assessment

Coming Soon

- Changes to selectivity again
- R Shiny application for developing them
 - The '.dat' and '.ctl' input files are becoming more complex
- BBRKC

Changing Selectivity Controls ... yet again

- Specify number of selectivity curves and type (i.e. parameter per size, logistic, dome-shaped)
- For the parameters of each curve specify initial values, priors, bounds, phase
- Then map each gear/sex/time-period to the desired selectivity
- This allows any combination of selectivity you could want (e.g. from 1975-1981 use selectivity 1, then from 1982-2000 use selectivity 2, then from 2001-present use selectivity 1 again, or mix up by sex, or even condition)
- This is happening on a new branch and will be merged when complete



BBRKC

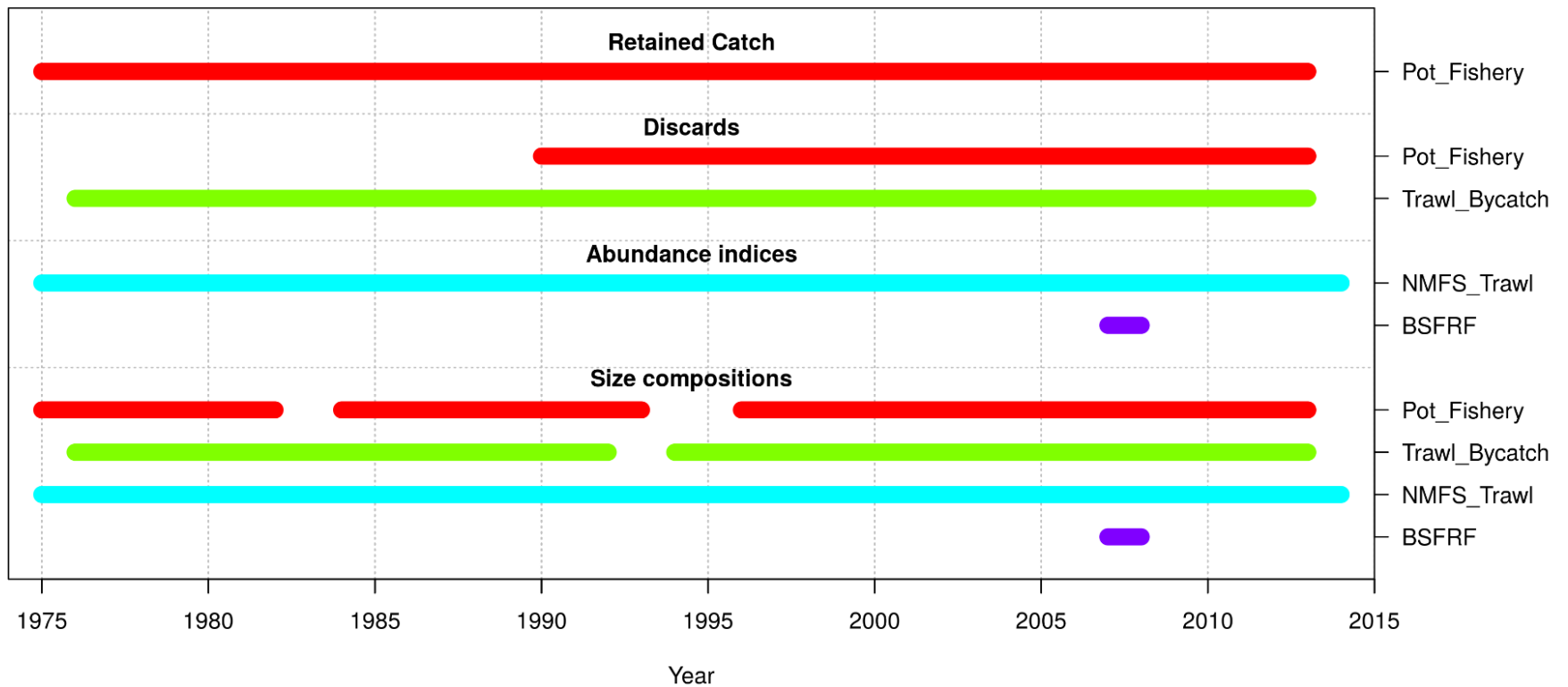
Progress so far

Summary

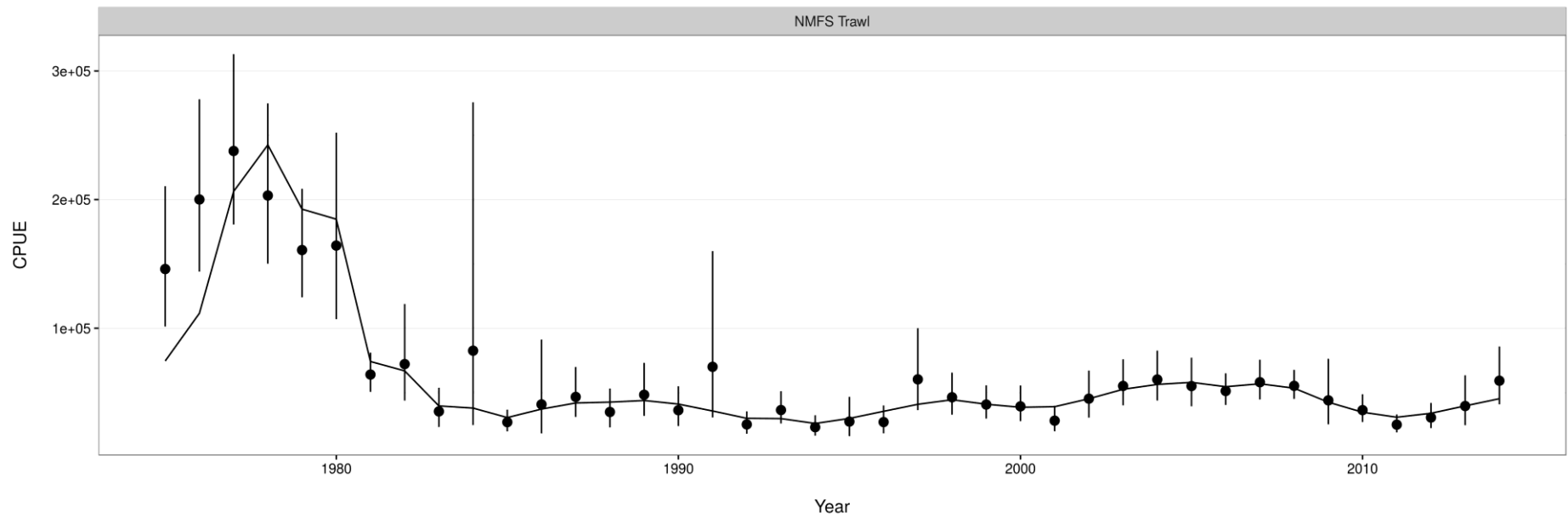
- Working on single sex model at the moment
- Poor fits so far, but still early days
- To do
 - Get latest data
 - Add extra time-varying code to Gmacs (molting, growth, and maturity)

Data

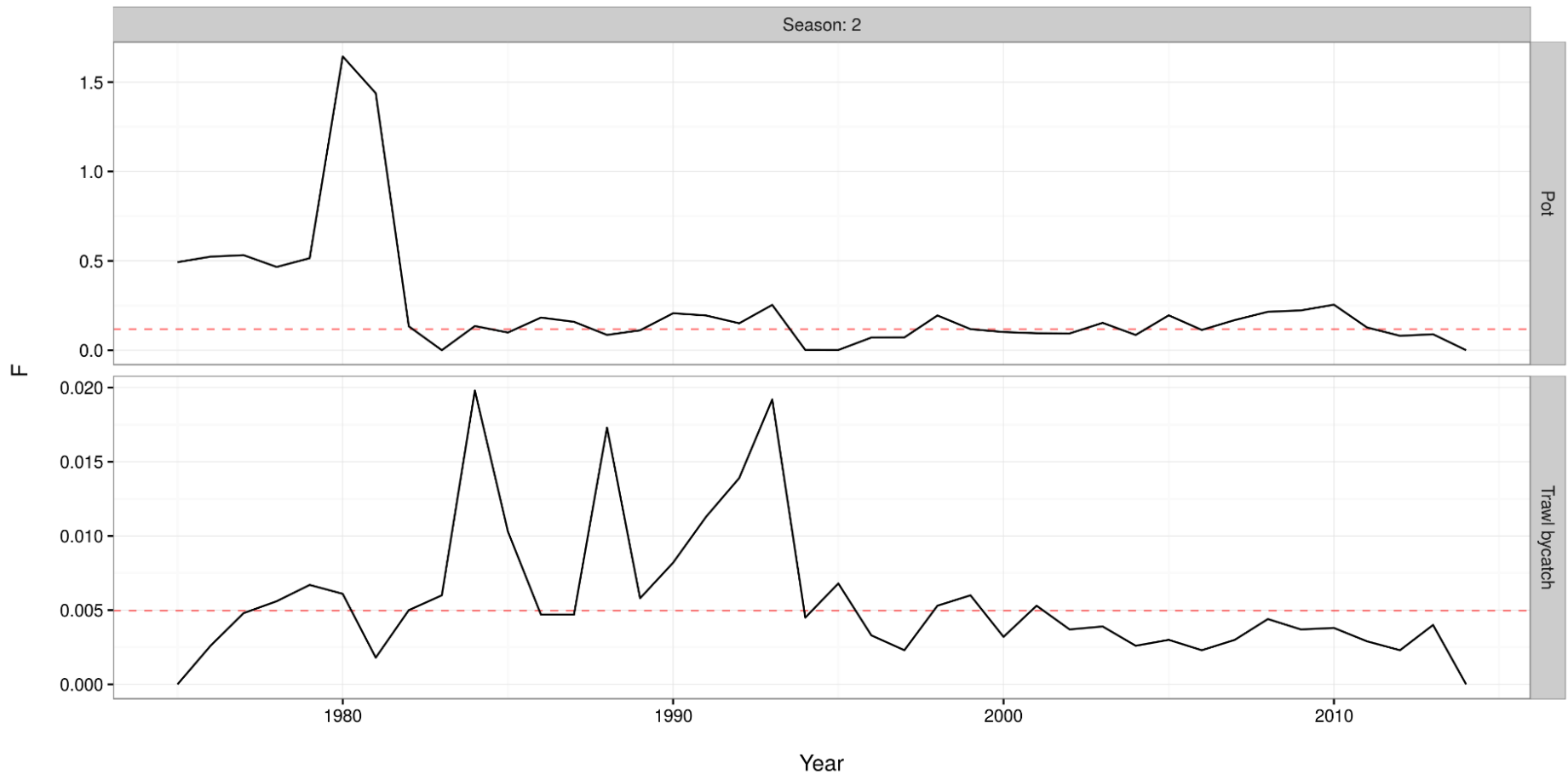
Data by type and year



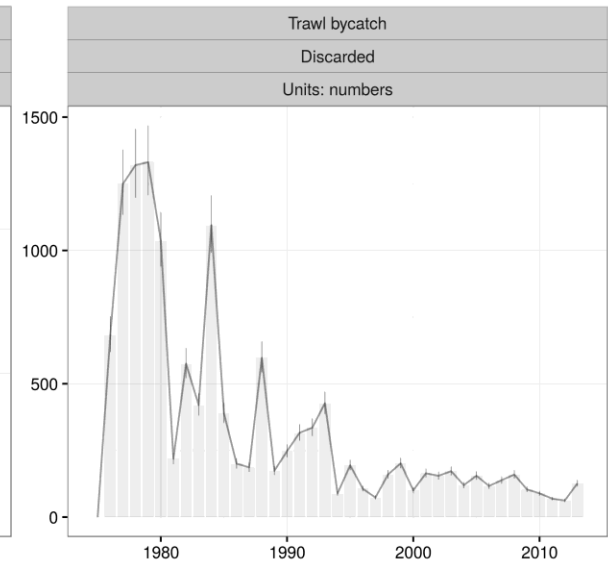
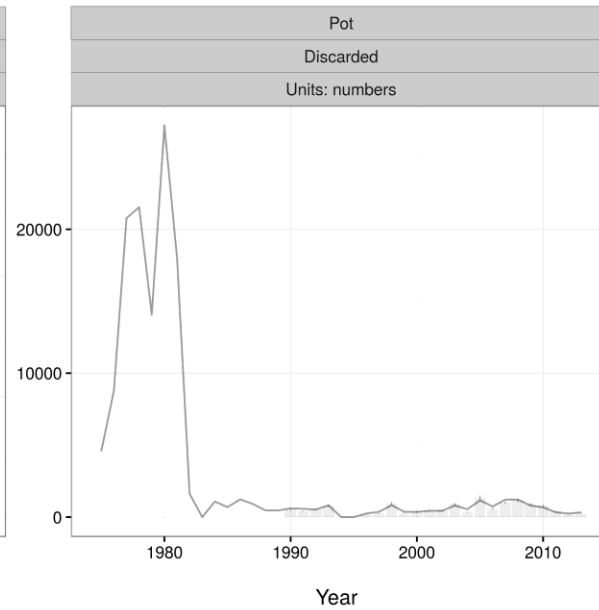
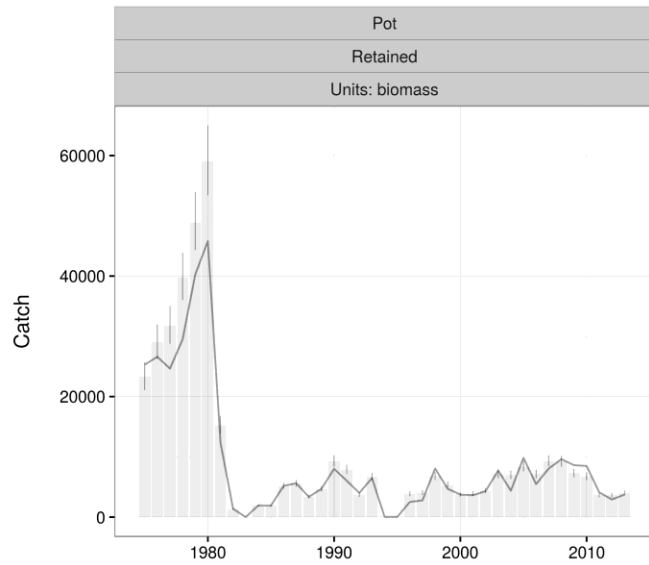
Survey



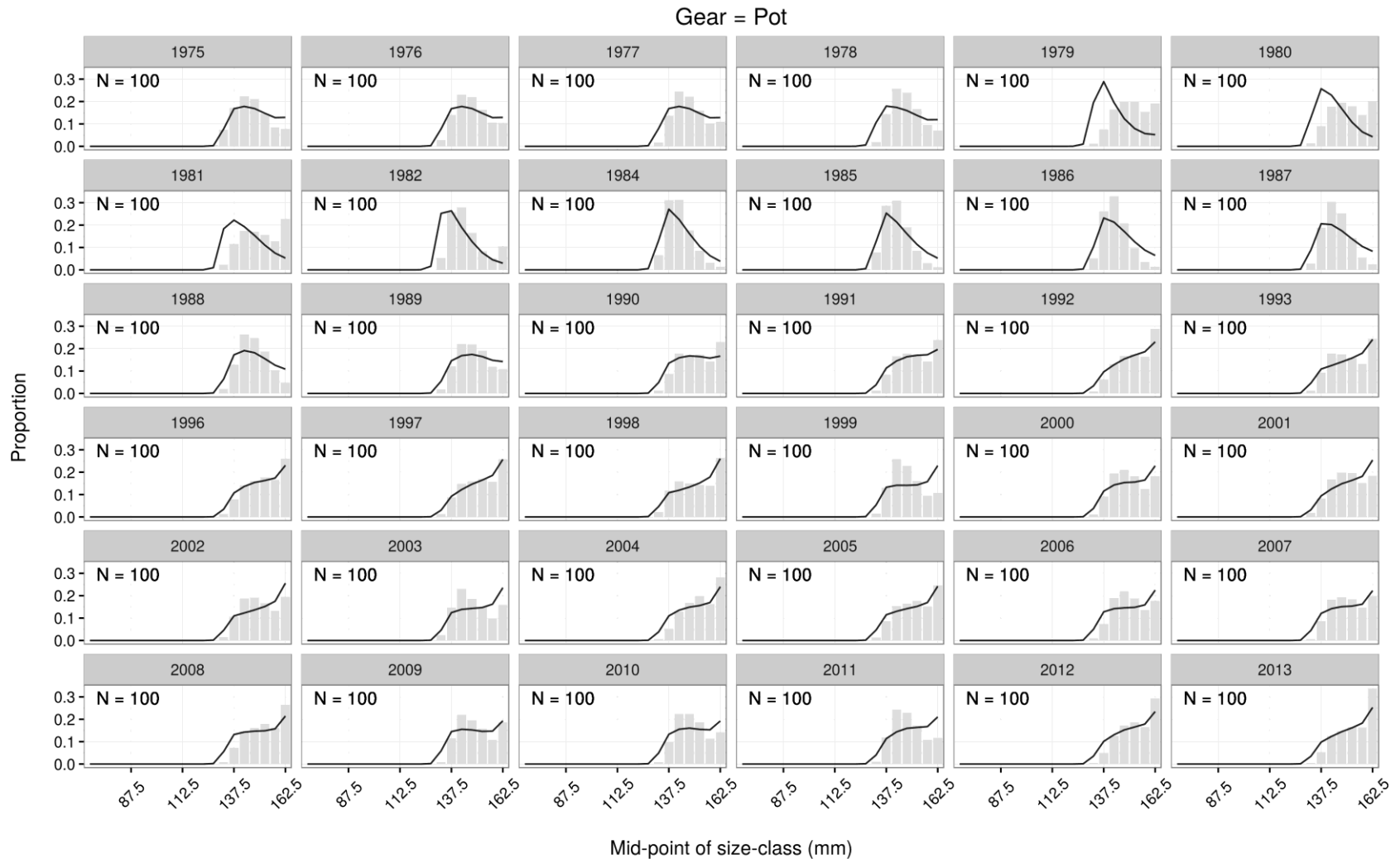
Fishing mortality



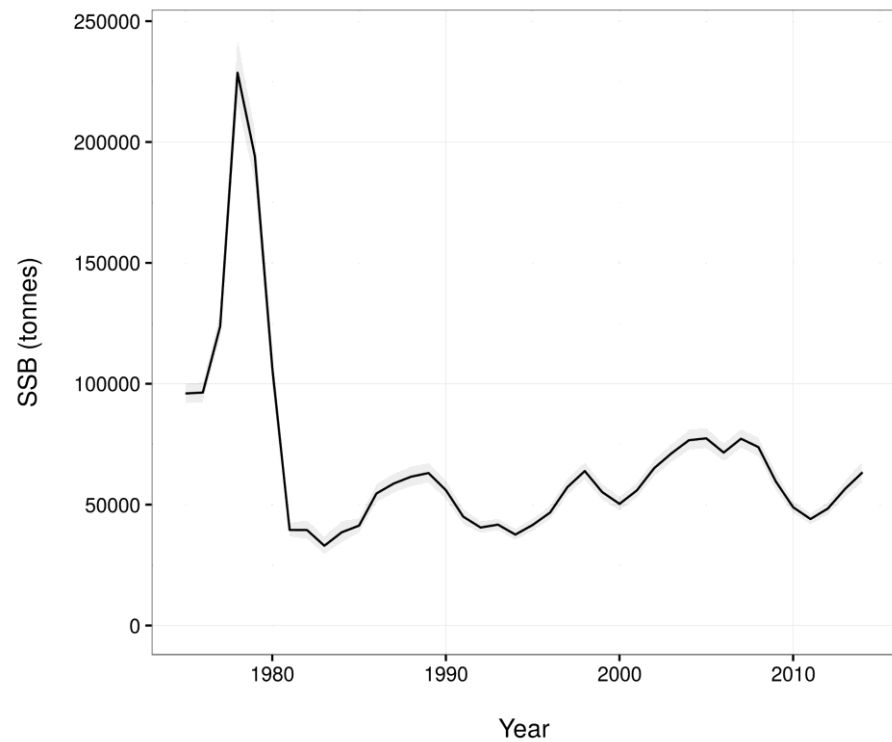
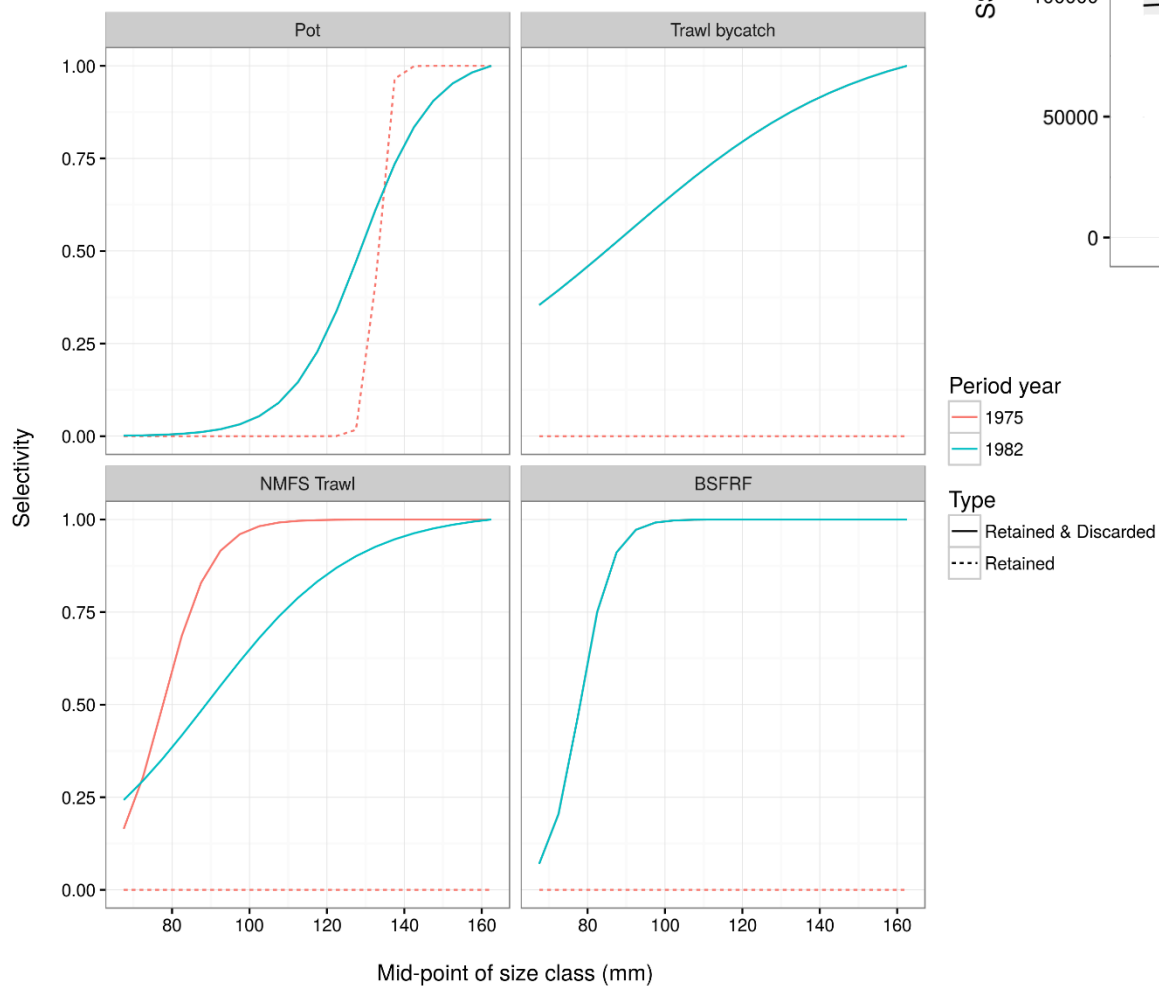
Catch



Size Compositions



SSB



References

Francis, R.I.C.C. 2011. Data weighting in statistical fisheries stock assessment models. Can. J. Fish. Aquat. Sci. 68: 1124-1138.