FLife: Operating Model Conditioning

Lobster L Kell & A Tidd 21 July, 2018

Life history parameters

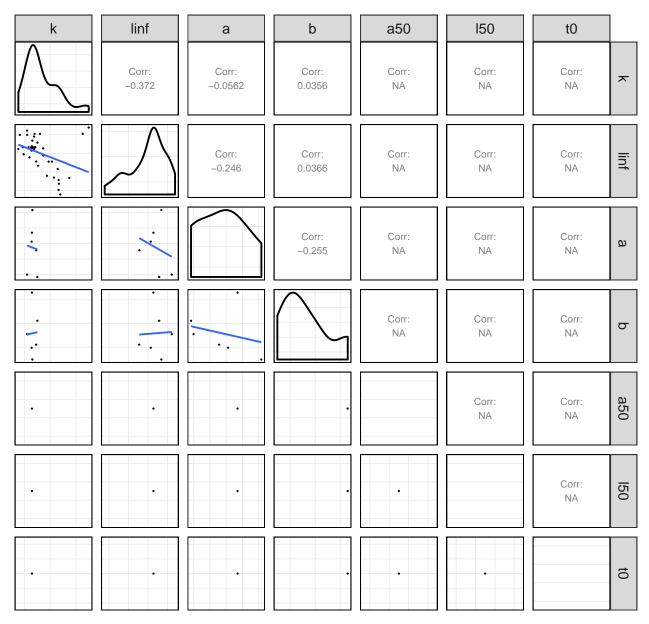


Figure 1 Pairwise scatter plots of life history parameters.

Equilibrium dynamics

The parameters are then used by <code>lhEql</code> to simulate the equilibrium dynamics by combining the spawner/yield per recruit relationships with a stock recruiment relationship.

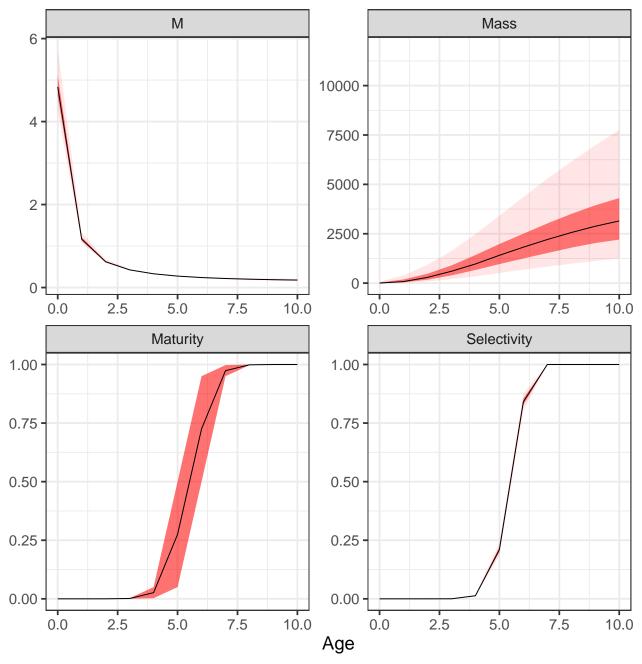


Figure 2 Vectors.

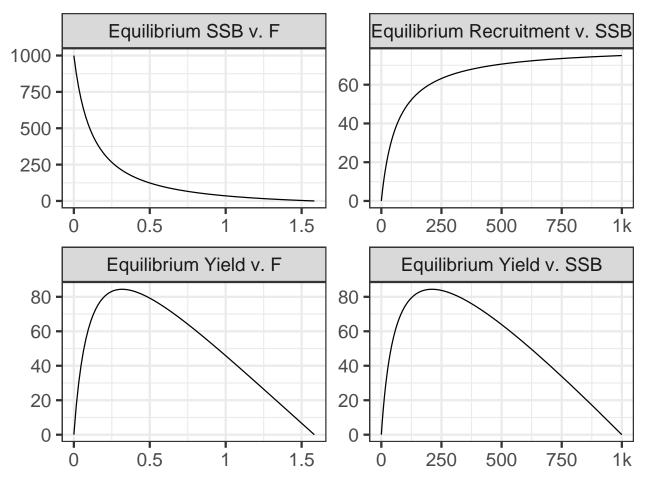


Figure 3 Example equilibrum Curve.

Population dynamics

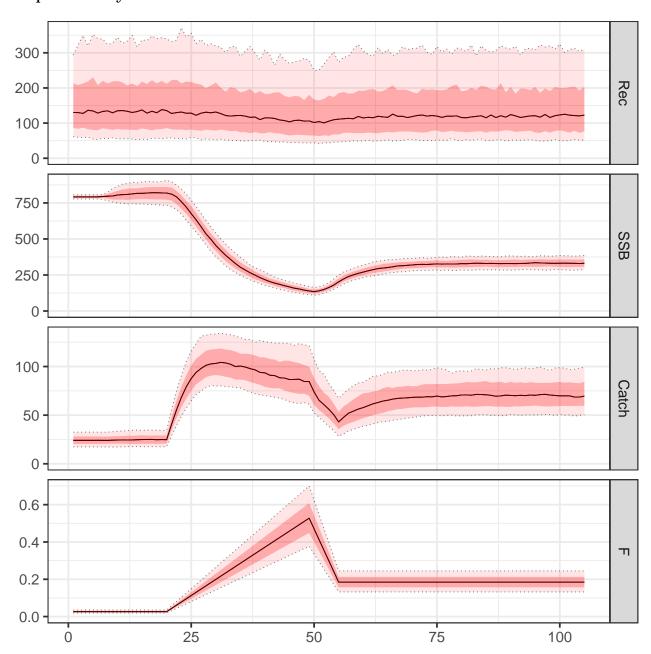


Figure 4 Time series.

Session Info

R version 3.4.1 (2017-06-30) Platform: x86_64-pc-linux-gnu (64-bit) Running under: Ubuntu 16.04.2 LTS Matrix products: default BLAS: /usr/lib/libblas/libblas.so.3.6.0 LAPACK: /usr/lib/lapack/liblapack.so.3.6.0 locale: [1] LC CTYPE=en US.UTF-8 LC NUMERIC=C [3] LC_TIME=en_GB.UTF-8 LC_COLLATE=en_US.UTF-8 [5] LC MONETARY=en GB.UTF-8 LC MESSAGES=en US.UTF-8 [7] LC_PAPER=en_GB.UTF-8 LC_NAME=C [9] LC ADDRESS=C LC TELEPHONE=C [11] LC MEASUREMENT=en GB.UTF-8 LC IDENTIFICATION=C attached base packages: [1] stats graphics grDevices utils datasets methods base other attached packages: [1] FLife_3.2.0 ggplotFL_2.6.4 FLasher_0.1.0 FLFishery_0.1.4 lattice_0.20-35 GGally_1.4.0 [5] FLBRP_2.5.3 FLCore_2.6.8 [9] reshape_0.8.7 dplyr_0.7.6 plyr_1.8.4 ggplot2_3.0.0 [13] knitr_1.20 loaded via a namespace (and not attached): [1] Rcpp 0.12.17 pillar 1.1.0 compiler 3.4.1 [4] RColorBrewer_1.1-2 bindr_0.1.1 tools 3.4.1 [7] digest 0.6.15 evaluate 0.10.1 tibble 1.4.2 [10] gtable_0.2.0 pkgconfig_2.0.1 rlang_0.2.1 [13] Matrix_1.2-10 yaml_2.1.18 bindrcpp_0.2.2 withr_2.1.2 stringr_1.3.1 [16] gridExtra_2.3 [19] stats4 3.4.1 rprojroot 1.3-2 grid 3.4.1 [22] tidyselect 0.2.4 glue 1.2.0 R6 2.2.2 [25] rmarkdown_1.9 FLRP_1.0.1.9002 reshape2_1.4.3 [28] purrr_0.2.5 magrittr_1.5 backports_1.1.2 [31] scales_0.5.0 codetools_0.2-15 htmltools_0.3.6 [34] MASS_7.3-47 assertthat_0.2.0 colorspace_1.3-2 [37] labeling_0.3 stringi_1.2.3 lazyeval_0.2.1 [40] munsell_0.5.0

Software Versions

- R version 3.4.1 (2017-06-30)
- FLCore: 2.6.8FLBRP: 2.5.3FLasher: 0.1.0FLife: 3.2.0
- ggplotFL: 2.6.4
- Compiled: Sat Jul 21 22:36:05 2018

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References