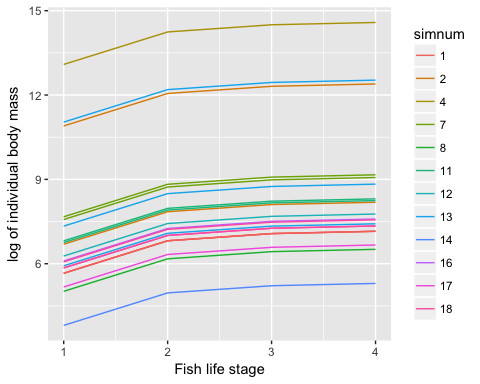
Results\_Outline\_Jeff

Stephanie Bland

December 04, 2017

## Part A: Show that new models are realistic (Show our setup is good)

Figures:

* Fig 1a: Von Bert curves 

## Loading required package: grid

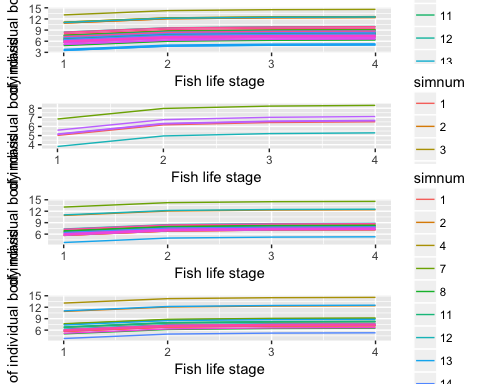


Figure 2 Von-Bertalanffy curves for surviving fish in several simulated food webs. Each colour represents a different food web.

* Fig 1b: Allometric Ratios are invariant

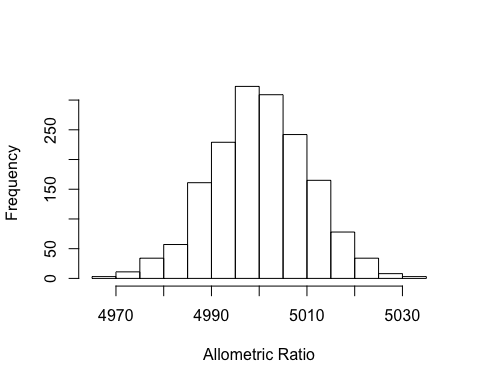


Figure 2 A histogram of the allometric ratios for all the surviving adult fish life stages.

Text:

* Show VB curves look good
* Hist of fish Allometric ratios are similar to initial distribution (so fish go extinct randomly with respect to their allometric ratio)

## Part B: General simulation Output (Start looking at time series results, and compare model types

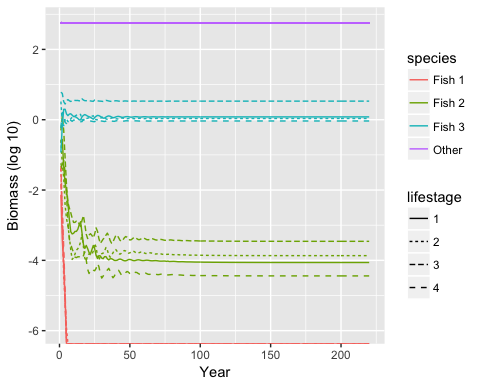
Figures: Fig 2: Time Series for a linked Model 

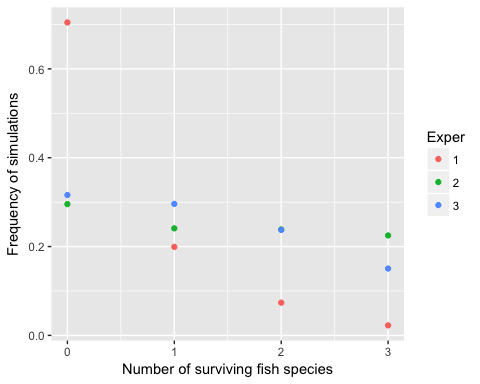
Fig 3: Hist of number of surviving species (a=0,1,2,3; b=none,all) 

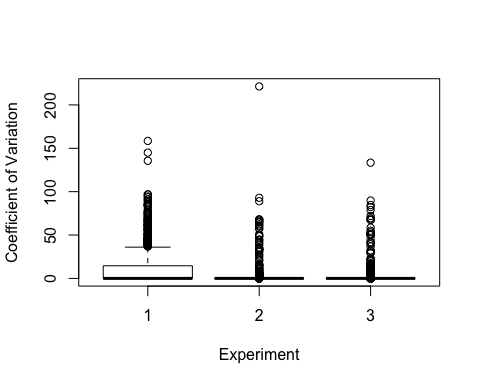
Fig 4a: CV of tot biomass against Model type 

Fig 4b: CV of fish biomass against Model type

* (Maybe, if time permits) - A comparison plot of time series for diff sims and models in supplementary

Text: 80.2% of our simulations met the criteria for the first part of the analysis, meaning fish stabilized in at least one of the experiments. 24.275% of our simulations met the second criteria, where at least one fish must stabilize in every experiment. It was anticipated that some simulations would never stablize, given that we placed minimal constraints on food webs during the web creation stage. Thus, some of the webs would invariably end up being completely biologically unrealistic. This process of weeding out unstable webs might seem unintuitive at first, but it mimics what we observe in nature. Just as natural landscapes are eventually populated by stable ecosystems after a long process of species invasions and extinctions. A typical time series of the simulation for a food web that eventually stabilizes is illustrated in figure 3.

## Part C: Output for linked model

Figures:

* Fig 5: Life History correlation plots

Text: