

# Are assessed stocks a representative sample of fished species in the US?

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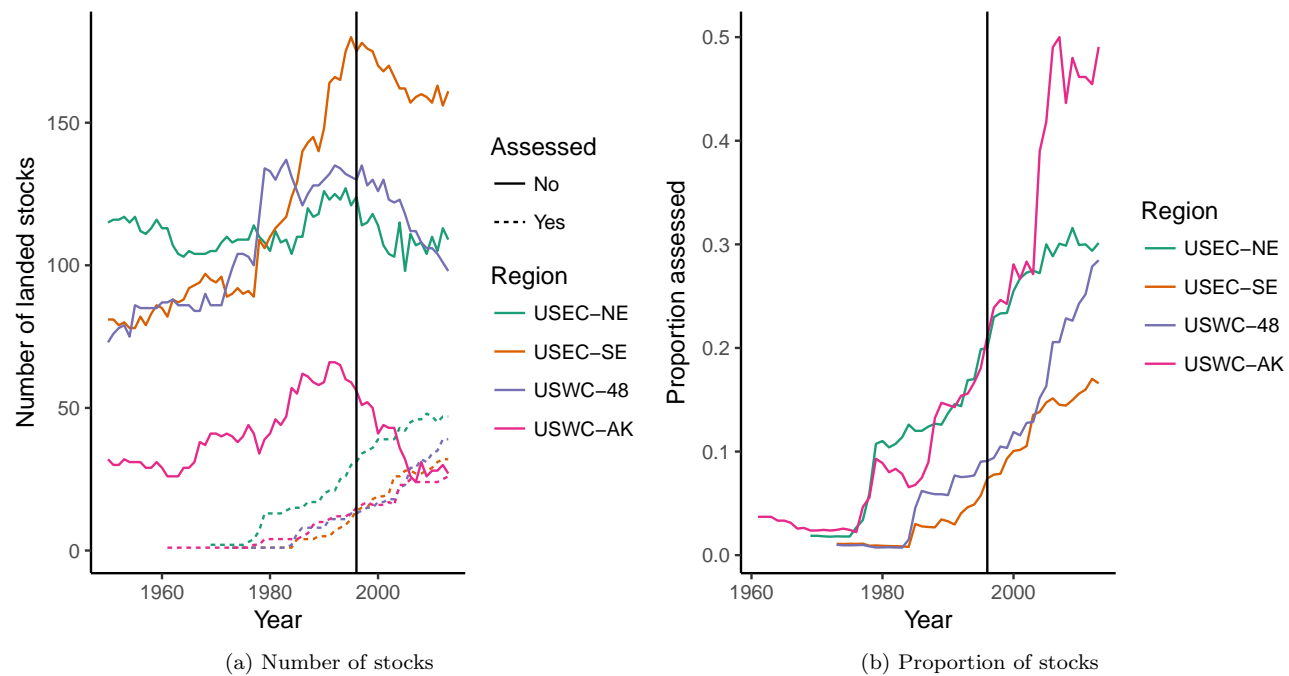


Figure 1: Timeline of a) the number of stocks landed by region and assessment status and b) proportion of landed stocks that are assessed. The vertical line marks the enactment of the Sustainable Fisheries Act of 1996

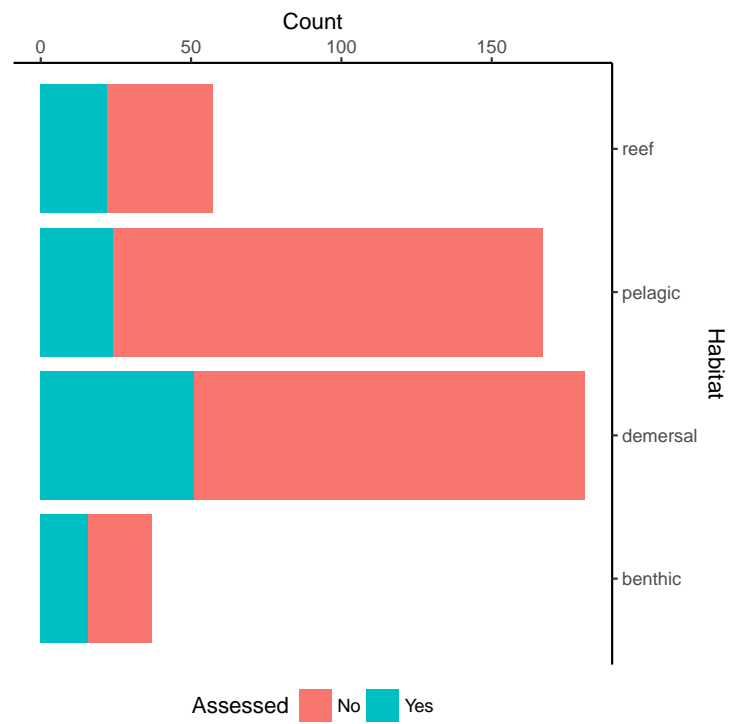


Figure 2: Assessment status at time of last known status (censoring time) by habitat

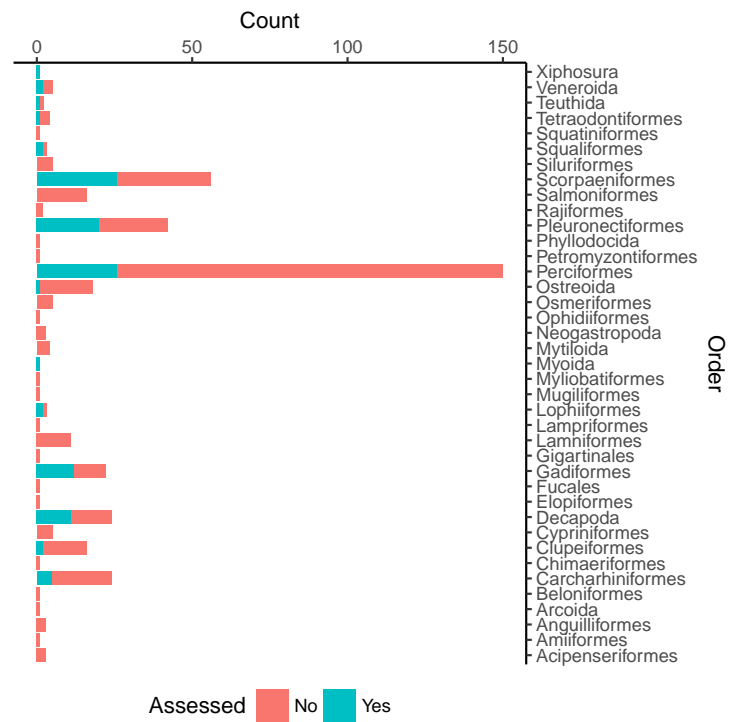


Figure 3: Assessment status at time of last known status (censoring time) by phylum

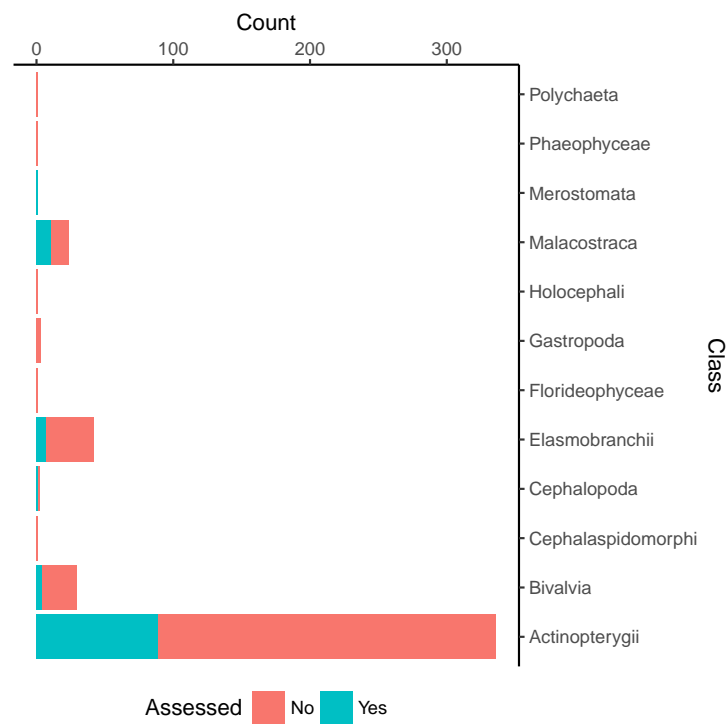


Figure 4: Assessment status at time of last known status (censoring time) by Class

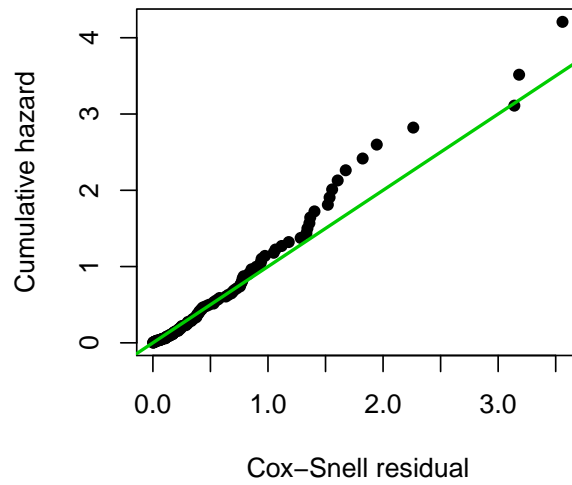


Figure 5: Model fit of the Weibull survival model, based on Cox-Snell residuals calculated at the posterior mean of the linear predictor. For a perfect fit all data points (solid points) would lie on the  $y=x$  line.

Table 1: Posterior mean and  $P(\beta > 1)$  for model parameters

Parameter	Posterior Mean	Bayesian P
land	0.91	1.00
stdprice	0.19	0.72

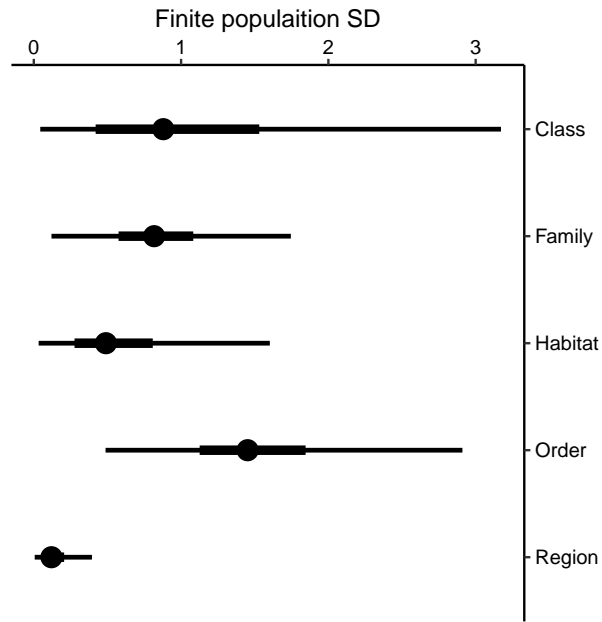


Figure 6: Comparison of finite population standard deviation for random effects in the Weibull survival model. The circle shows the posterior median, with thick bars showing the inter-quartile range of the posterior and the thin line is the 95% confidence interval

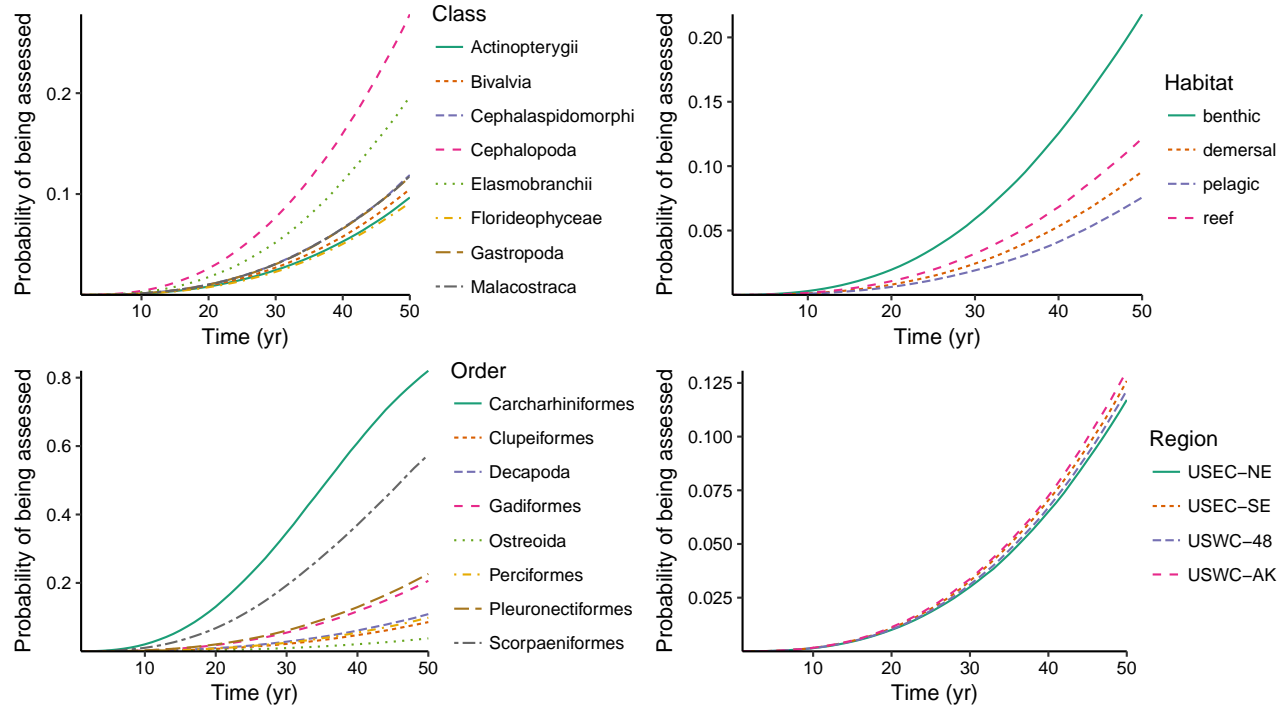


Figure 7: Marginal probability of a stock being assessed as a function of time, for stocks of various taxonomic orders, class, regions and habitats. For taxonomic variables, only the eight levels with the most stocks represented in our dataset are shown. Marginal probabilities were evaluated at the mean of continuous covariates.



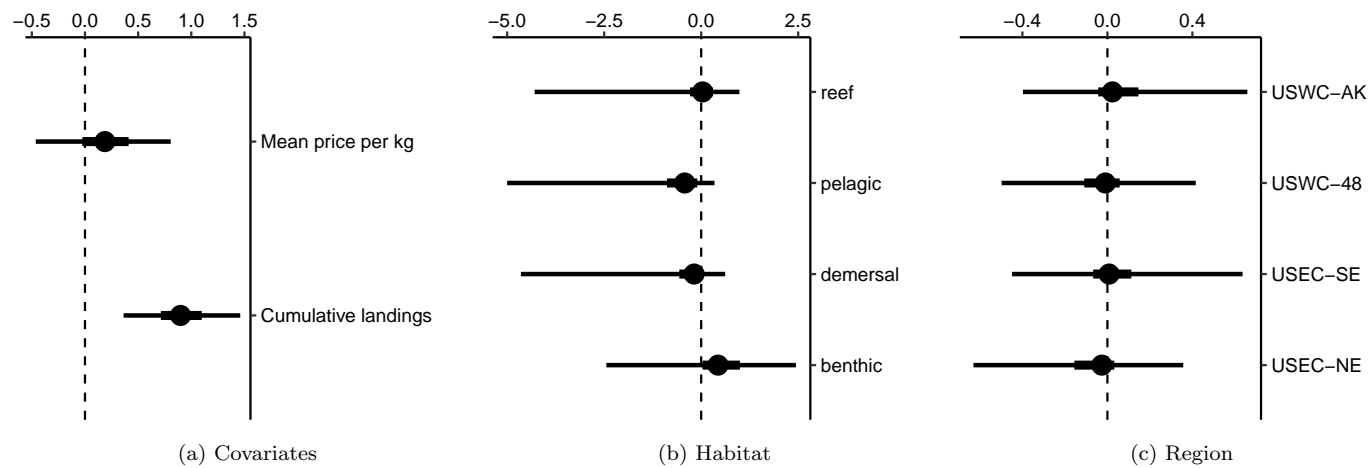


Figure 8: Summaries of estimated posterior distributions for a) continuous covariates in the model, b) habitat random effects, and c) regional random effects. The circle shows the posterior median, with thick bars showing the inter-quartile range of the posterior and the thin line is the 95% confidence interval.