Creek Trawl (Relevant Variables) Dredge Table

Discussion An exploratory dredge was performed, populated with Creek Trawl total CPUE as an dependent variables from the Creek Trawl as explanatory variables. All lifestage variables with 1- and 2-yr lags were added as explanatory variables although not all of these variables have single regression relationships with the Creek Trawl total CPUEs. The results shown in Table 5, are models suggested by the dredge subset to show only models below a 2.5 delta. Models are ranked by the dredge using Akaike information criterion with a correction for small samples (AICc) to estimate the goodness-of-fit of all linear models. "Parameters for the dredge are estimated using randomly sampled half of the data" with "log-likelihood given the remianing half of the data is used to calculate the AIC weights" (Package 'MuMln') Any model within 2.0 delta away from another model is not significantly different according to the AICc estimator.

Many of the models in Table 5 are illogical (e.g., Adult 1-yr. lag and Legal 1-yr. lag which are the same data). Multiple OLS regression models, both additive and with interaction, will be constructed using the models suggested by thi dredge in the next step.

Table 8: Exploratory dredge results of all relevant CPUE predicted with all relevant Creek Trawl lifestage variables with 1- and 2-yr. lags previously shown to have a significant relationhsip using single regression. Results show a subset of models ranked by AICc.

| | (Intercept) | B90_CPUELAG | B90_MatureMaleCPUE | B90_SubadultLAG | T38_CPUELAG | T38_ImmatureFemaleLAG | T38_ImmatureMaleLAG | T38_JuvLAG | T38_SubadultLAG | T38_SublegalLAG | df | logLik | AICc | delta | V |
|-----|-------------|-------------|--------------------|-----------------|-------------|-----------------------|---------------------|------------|-----------------|-----------------|----|------------|----------|-----------|--------|
| 33 | 2.368349 | NA | NA | NA | NA | NA | 0.3251731 | NA | NA | NA | 3 | 1.0170262 | 6.147766 | 0.0000000 | 0.220 |
| 257 | 2.384052 | NA | NA | NA | NA | NA | NA | NA | NA | 0.127959 | 3 | 0.6418507 | 6.898117 | 0.7503510 | 0.151 |
| 5 | 2.499268 | NA | NA | 0.0628136 | NA | NA | NA | NA | NA | NA | 3 | 0.5197726 | 7.142273 | 0.9945073 | 0.1342 |
| 129 | 2.396959 | NA | NA | NA | NA | NA | NA | NA | 0.2062587 | NA | 3 | 0.3579914 | 7.465835 | 1.3180696 | 0.114 |
| 9 | 2.394343 | NA | NA | NA | 0.090364 | NA | NA | NA | NA | NA | 3 | 0.1453933 | 7.891032 | 1.7432659 | 0.092 |
| 2 | 2.454075 | 0.0317337 | NA | NA | NA | NA | NA | NA | NA | NA | 3 | -0.0087891 | 8.199396 | 2.0516307 | 0.079 |
| 65 | 2.448377 | NA | NA | NA | NA | NA | NA | 0.2532513 | NA | NA | 3 | -0.0952955 | 8.372409 | 2.2246435 | 0.072 |
| 7 | 2.369265 | NA | 0.124825 | 0.0615186 | NA | NA | NA | NA | NA | NA | 4 | 1.7723062 | 8.455388 | 2.3076219 | 0.069 |
| 17 | 2.433365 | NA | NA | NA | NA | 0.2317977 | NA | NA | NA | NA | 3 | -0.1945887 | 8.570996 | 2.4232298 | 0.065' |