Ethan Rutledge

ECO 602

Week 9 Reading Questions

**Briefly (1 - 2 short paragraphs) describe at least two tradeoffs between the customized ML methods and the canned methods.**

Similar classical models may be close enough to linear regression that changing your model slightly in order to gain the convenience of using a standard procedure would be a good trade off. When the results of different models are similar on both biological and statistical grounds, you choose among them by balancing convenience, mechanistic arguments, and convention. They work well for comparing different but similar hypotheses.

**Briefly (1 - 2 sentences) describe each of the four key assumptions of the general linear modeling approach.**

All observed values are independent and normally distributed with a constant variance. Meaning the sampling of one individual didn’t influence the capture or attribute of another and that the sampling population has a true mean with standard deviations equal above and below. That if we repeat the sampling many times under the same environmental conditions, the observations will be normally distributed for each value of X. Constant variance means that with a representative sample, each individual will have the same variance or atleast approach constituency with enough effort. Any continuous predictor variables are measured without error meaning sampling or measuring was done correct.

**Explain how the normality assumption can be met in a general linear model, even if the response variable is not normally-distributed. (1 - 2 paragraphs)**

In a general linear model you can meet the normality assumption simply by changing precictor variables and the standard deviation of them and the response variables to whatever you want.