



ALASKA CHAPTER OF THE WILDLIFE SOCIETY
2021 ANNUAL MEETING AND WORKSHOPS
Virtual Meeting



Friday, April 23rd, 2021
8:30am – 12:30pm

**Statistical Workshop in R: Plotting observed
data versus fitted values; why, when, and how**

Plotting raw data and the fitted values of statistical models are both steps for developing inference from wildlife data. Generally, fitted values are relied on when interpreting results because these values help researchers distinguish sampling variation from true (i.e.; process) variation.

At the same time, there is often an inclination to treat continuous data as factors. This inclination is natural to many people as many people tend to categorize what we observe; descriptors like dry, damp, and wet, or calm, breezy, and windy are categories we tend to assign to environmental data that are most often continuous. However, this categorization of continuous data often leads to substantial loss of inference.

This workshop will distinguish between exploratory plotting of continuous data and the plotting of fitted values estimated from these data. We will discuss these concepts with practical examples that are relevant to data that many ecologists collect. Workshop participants will also work through several practical examples in Program R in which they plot continuous data, fit linear model(s) to those data, and then consider several methods for presenting the results of those models. Workshop participants will leave the workshop with practical examples they can apply to their work. Previous experience in R and familiarity with linear models is recommended.

You can pre-register for this workshop at twsalaskameeting.com.