



# Statistical Consulting Center

Department of Statistics – Franklin College of Arts and Sciences

UNIVERSITY OF GEORGIA

## *SCC Seminar on Data Analysis*

### Statistical Methods for Data with Excess Zeroes

An Introduction and Overview

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Data with zeros are common in a wide variety of fields including agriculture, biology, medicine, public health, climatology, ecology, and more. Examples include responses that are subject to a limit of detection (e.g., concentrations of pollutants in soil, water, or air); counts of the number of plants or shoots or fruits in an agricultural experiment; proportions of plants, animals, pinecones surviving to maturity, affected by disease, etc.; number of insects of a given species trapped or killed under different conditions; proportion of leaf or fruit surface affected by disease; medical expenditures; rainfall totals; hospital lengths of stay; motor vehicle fatalities; and on and on. Such data present special challenges and are typically not modeled adequately using traditional linear and generalized linear models. Specialized models and techniques are often needed, such as zero-inflated regression models, hurdle models, two-part models, censored regression models, and other methods. In this talk I will give examples of data with excess zeros and I will provide an overview of statistical methodology for handling such data with an emphasis on practical matters.

**Friday, September 24, 2021, 1:45pm-3:00pm**

Zoom info: [clickable link](#)

Meeting ID: 965 0359 5782, Passcode: 220096

*About the SCC Seminar Series:* This series of talks, sponsored by the UGA Statistical Consulting Center, aims to present topics of interest to statisticians and users of statistics related to the practical use of statistics for data analysis. These talks are non-technical and should be accessible and of interest to a mixed audience of non-statisticians who wish to understand and use statistical methods to analyze their data, as well as statisticians, students of statistics, and other flavors of data scientist who are interested in statistical applications.

**Please share this announcement with colleagues who may be interested. To get announcements for future talks in this series, join the SCC listserv [here](#).**