Pee Dee GIS User Group Meeting

Wednesday, May 18th, 2016

Florence County Doctors Bruce and Lee Foundation Library
509 South Dargan Street
Florence, SC 29501

AGENDA

10:00 **Welcome -** Approval of February 2016 Minutes

10:10 **Sharpen your skills - Tech Transfer from Esri**
Matthew Jones & William Myers, Esri

We have seen a lot of advancement in GIS technology over the last year. The focus of this presentation is to bring you up to speed on some of the new technology and features. We will divide this presentation into sort, focused conversations that will cover a wide range of technology including: Drone2Map, Photo Survey, GeoEvent Processor, Web App Builder, Geo Form, Workforce, AGO credit allowance, vector control, per user requests, open data.

Matthew Jones – Esri Account Manager
William Myers – Solutions Engineer

11:00 **Break**

11:15 **Highlights from SCARC Conference**

11:30 **Lunch Break -** *Lasagna, Salad and Rolls catered by Stefano's*

11:45 **Membership Update, Financial Report and Open Discussion**

12:10 **Practical Applications of Field-Scale Spatial Data for Agricultural Crop Management**
Dr. Kendall Kirk, Ph.D. – Edisto Research & Education Center, Clemson University

Precision agriculture, loosely defined, involves management of crops and crop inputs at any scale less than field-scale. In many cases implementation of precision agriculture involves zone management and variable rate applications. Spatial management zones for a field are generally defined on the basis of soil productivity potential or demonstrated crop yields, with the goal of zone delineation being maximization of yield differences between zones and minimization of yield differences within zones. The crop yield monitor provides a tool useful for developing and assessing management strategies, but there exists a barrier to full realization of its benefits due to the burden of data analysis; furthermore, crop yield monitors are not commercially available for all crops. Variable rate controllers for crop inputs are often implemented in precision agriculture, the application rates generally being defined with respect to spatial distribution of yield goals. Many of these recent developments in precision agriculture and their subsequent challenges relative to practical application will be addressed, along with introduction of some related tools that Clemson University is developing to improve grower profitability.

Dr. Kendall Kirk started working at Clemson University's Edisto Research & Education Center in Blackville, SC as the Precision Agriculture Engineer in May 2014. Prior to that, he was a faculty member of the Agricultural Mechanization & Business Program at Clemson University for about 10 years. His current work focuses primarily on development and testing of new technologies, software tools, and management strategies for implementation of precision agriculture. Dr. Kirk is an inventor on three provisional U.S. patents and one pending utility patent in precision agriculture. He focuses on development of practical, commercializable technologies and software and works closely with regional farmers for testing and evaluation. Some of his current projects include work on the following: peanut yield monitor, hay yield monitor, on-baler hay bale weighing technologies, automated depth peanut digger, spatial image digitization software, crop yield data processing software, variable rate prescription strategies, and plant vigor analysis sensing and software.

12:50 **Closing Comments and Doorprizes**