N.C. Cooperative Extension Office of the Director of County Operations NC State University 2501 Founders Drive, Suite 120 Campus Box 7602; Patterson Hall Raleigh, NC 27695-7602



Caldwell County

County/Worksite Location: Caldwell County Cooperative Extension

Proposal/Program Area: ANR/CRD

Project Title: Using Technology to Improve Crop Yields

Immediate/ Site Supervisor: Seth Nagy

Other mentors/supervisors:

1 Eli Snyder

2 Charlie Godfrey

Project summary and intended outcomes:

Use precision Ag "tools" (grid soil sampling, remote sensing/scouting, tissue sampling, variable rate fertilizer application, etc.) to help achieve maximum yields.

The intern will also be exposed to other projects taking place through the Caldwell Extension Center such as rhubarb variety trial, cattlemen meetings, working with homeowners, community gardens, 4-H summer programs, etc.

What qualifications and previous coursework does the student need in order to be prepared for this internship, if any?

It is mandatory that the intern have a positive attitude and be able to work in a team environment.

Host supervisor will work with the intern's current skill set. Below is a list of qualifications/certifications/skills that will be used on this project.

- FAA Part 107 Remote Pilot Certification
- NCDOT UAS Knowledge Certification
- QGIS working knowledge
- Tissue Sampling
- Soil Sampling





- Working knowledge of Linux OS
- Growth stages corn and soybeans
- Weed ID

What benefits/skills will the student gain through this internship?

The intern will learn to communicate with Ag Professionals to include Extension agents, farmers, and Ag service companies. As well there will be technical skills gained involving gridsoil testing, tissue sampling, remote sensing, and GIS tools.

In addition the intern will be paired with other agents in the office to get a well-rounded Extension experience.