

Workshop One: Introducing Agricultural Research

February 1-2, 2017

College of Menominee Nation - Room SD126

Each unit will consist of a 40 minute presentation followed by time for questions, answers and discussion. There will be a short break between each unit presented.

DAY ONE: Wednesday, February 1, 2017

- 9:30 – 10:00 a.m.** **Moderator: Rebecca Edler**
Opening Prayer: Dale Kakkak
Welcome: Chris Caldwell, SDI Director
Brief History of Menominee Agriculture: Dr. David Overstreet, Archeologist
- 10:00 – 11:00 a.m.** **Unit One: Primary Concepts of Soil Science.**
Jamie Patton, Shawano County Agricultural Agent
Understanding the basics of soil health and function is key to conducting soil science research. In this session, we will learn about the soil chemical, physical and biological properties impacted by changes in land management and how these properties influence how a soil interacts within the environment.
- 11:00 – 12:00 p.m.** **Unit Two: Statistical Design.**
Harlan Pygman, CMN Faculty Member
This unit will present the basics of statistical science. We will differentiate between Descriptive and Inferential Statistics. Populations vs. samples and the importance of a truly random sample will be considered. While we will be using an experimental data collection technique in our project, we will briefly look at survey and observational techniques as well. Statistical tests applicable to our project will be introduced.
- 12:00 – 1:00 p.m.** **Break for lunch – Lunch is on your own.**
- 1:00 – 2:00 p.m.** **Unit Three: Research Design.**
Dr. Francisco Arriaga, UW-Ext, Madison
The application of statistics to soil and agricultural research will be presented along with the concepts of randomization, plot establishment, and the do's and don'ts of data analysis.
- 2:00 – 3:00 p.m.** **Unit Four: TEK and SEK.**
Jeff Grignon, Menominee Community Member
To enhance a research project, learn more about the importance of bringing together Traditional Ecological Knowledge (TEK) and Scientific Ecological Knowledge (SEK) by attending this unit. Braiding Sweetgrass, a book written by Robin Kimmerer, an expert in TEK, will be available at this session.