



2021 FFA Farm Forum UNSTOPPABLE



Environmental Service Systems

Soil Sampling: A High-Tech Task

Scott Fleming, Nutrient Management Specialist and Sampling Director, Rock River Laboratory

Video Link: youtu.be/3bMy2SzJdJA

Presentation Description

Rock River Laboratory works with agriculture, lawn and garden, turf and wildlife industries to provide analysis of feedstuffs, soil, plant tissue, water and much more. In this video, we provide a brief look at the yearly and day-to-day activities of Rock River Laboratory's agronomy division. We will check out the high-tech equipment used to collect and analyze soil samples. You also will see an overview of nutrient management planning and precision agriculture.

About the Presenter

Scott is a certified crop advisor – precision ag specialist and technical service provider for Rock River Laboratory. He has directed the field operations of the lab for more than 12 years. Scott's role with the lab involves managing a crew of samplers, sample collection, nutrient management planning and outreach. His background includes Confined Animal Feeding Operation, nutrient management operations and agriculture retail.



Supplemental Activities

Plant-Soil Interactions

Link: agclassroom.org/matrix/lesson/236

Estimated time: 2 hours

Objective: Students will explain the roles of diffusion and active transport in moving nutrients from the soil to the plant and describe the formation of soil and soil horizons. They will describe the events of in the Great Dust Bowl, how they relate to soil horizons and how those events affected agricultural practices.

Know Your Nitrogen

Link: agclassroom.org/matrix/lesson/318

Estimated time: Two 60-minute sessions

Objective: In this lesson, students will test for plant-available soil nitrogen and learn how farmers use this test to precisely match fertilizer application to meet crop needs and reduce the amount of nitrogen left in the soil.