



2014 SOIL OBJECTIVES

2014 Regional Stewardship Challenge

Key Point 1 ***Understand what soil is and its functionality***

- a. Define what soil is and its many functions

Key Point 2 ***Understand concepts of soil development and soil landscape relationships***

- a. Recognize and understand the features of a soil profile
- b. Identify soil horizons and soil properties in a soil profile and understand how they affect the use and management of soils
- c. State the five soil forming factors and explain how these factors affect soil development
- d. Define the four major processes that change parent material into soils
- e. Understand the difference between Prairie and Forest soils
- f. Understand how glaciation affected soils across Illinois
- g. Understand soil taxonomy and the 12 Soil Orders

Key Point 3 ***Use and interpret all aspects of a County Soil Survey***

- a. Understand the history of the soil survey
- b. Know how to use a soil survey to identify soil-related limitations for a specified land use

Key Point 4 ***Define and understand types of soil erosion and methods used for reducing erosion***

- a. Distinguish between sheet, rill and gully erosion and identify conservation practices that help to control water erosion
- b. Understand how wind erodes the soil and identify conservation practices to correct this problem
- c. Describe the benefits of conservation tillage and crop residue management

Key Point 5 ***Understand soil quality/health and ways they are evaluated***

- a. Define soil quality, how it can be evaluated and its importance.
- b. Describe the management approaches used to improving soil quality and health

Key Point 6 ***Understand soil texture and drainage***

- a. Understand soil water and drainage classes and how they affect the use and management of soils
- b. Use a soil textural triangle to determine soil texture for a given amount of sand, silt, and clay
- c. Define Hydric Soils and know their criteria, properties and colors

Key Point 7 ***Understand soil organism interactions***

- a. Understand the concept of a soil food web
- b. Understand the different roles that various soil organisms play in the soil environment

Key Point 8 ***Understand urban soils***

- a. Understand urban soils and how their properties vary in comparison to non-urban soils