

Agricultural Soil and Water Conservation Stewardship
(2017 Current Topic)

Current Issue Learning Objectives

Key Topics

1. Soil and Water Conservation best management practices; their purpose and implementation.
2. How are soil and water conservation best management practices interrelated to the management of wildlife, forestry and aquatic systems?
3. How do agriculturists maintain a balance between their quality of life versus the quality of the environment?

Learning Objectives

Upon completion of the training, the student will be able to:

1. Identify and recommend soil and water conservation best management practices in agriculture.
2. Describe the role of the federal government in conservation programs that benefit both agricultural producers and the environment.
3. Identify the concept of soil quality/health to provide the needed functions for the conservation planning process.
4. Identify various types of soil erosion and utilize different methods to estimate and predict soil erosion to assess land use impacts.
 - a. RUSLE equation
 - b. Aerial Photographs
 - c. Topographic Maps
 - d. Soil Maps
 - e. USDA Classification System
 - f. Soil Surveys
5. Explain why land-use planning is important to our ecosystems and to our economy to achieve sustainable agriculture.

Resources

Online Resources:

The Farm Bill 2014 Programs- Fact sheet describing the conservation programs

<http://www.nrcs.usda.gov/wps/portal/nrcs/main/national/programs/farmbill/>

RCPP Projects by State

www.nrcs.usda.gov/wps/portal/nrcs/main/national/programs/financial/csp

Farmers Guide to Conservation Stewardship Programs

<http://sustainableagriculture.net/wp-content/uploads/2015/02/CSP-Farmers-Guide-2015-final.pdf>

Guidelines for Soil Quality Assessment in Conservation Planning

http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051259.pdf

USDA Guidelines for Soil Health Assessment

<http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/assessment/>

Soil Quality Indicator Facts Sheets

<http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/health/assessment/?cid=stelprdb1237387>

USDA official site for RUSLE

<http://www.ars.usda.gov/Research/docs.htm?docid=18095>

Understanding Erosion with the Revised Universal Soil Loss Equation

http://www.5counties.org/docs/roadedu/2012_5c_roads/rusle.pdf

Expanded Resources

Textbook:

Soil Science Management 6th Edition, Edward J. Plaster (Contact: Delmar Cengage Learning)

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