

OJT Training Module Cover Sheet

Title: How to identify native/nonnative plants and relate them to soils in your soil survey area.

Type: Skill Knowledge

Performance Objective: Trainee will be able to:

- Identify plants and their relationship to soils
- Create a useable plant-soil relationship database that can be used to assist the Trainee in future fieldwork

Target Proficiency:

- Awareness Understanding Perform w/ Supervision
 Apply Independently Proficiency, can teach others

Trainer Preparation:

- Be familiar with SSM and NSSH materials
- Contact plant specialists who have some knowledge of plant-soil relationships in the survey area
- Become familiar with the USDA PLANTS Database and with local databases if available. (University Online Herbariums)
- Become familiar with Ecological Site Database (ESIS)

Special Requirements: None

Prerequisite Modules: None

Procedure:

- Follow the Five-Step OJT Cycle for Knowledge-Oriented Training.

Notes:

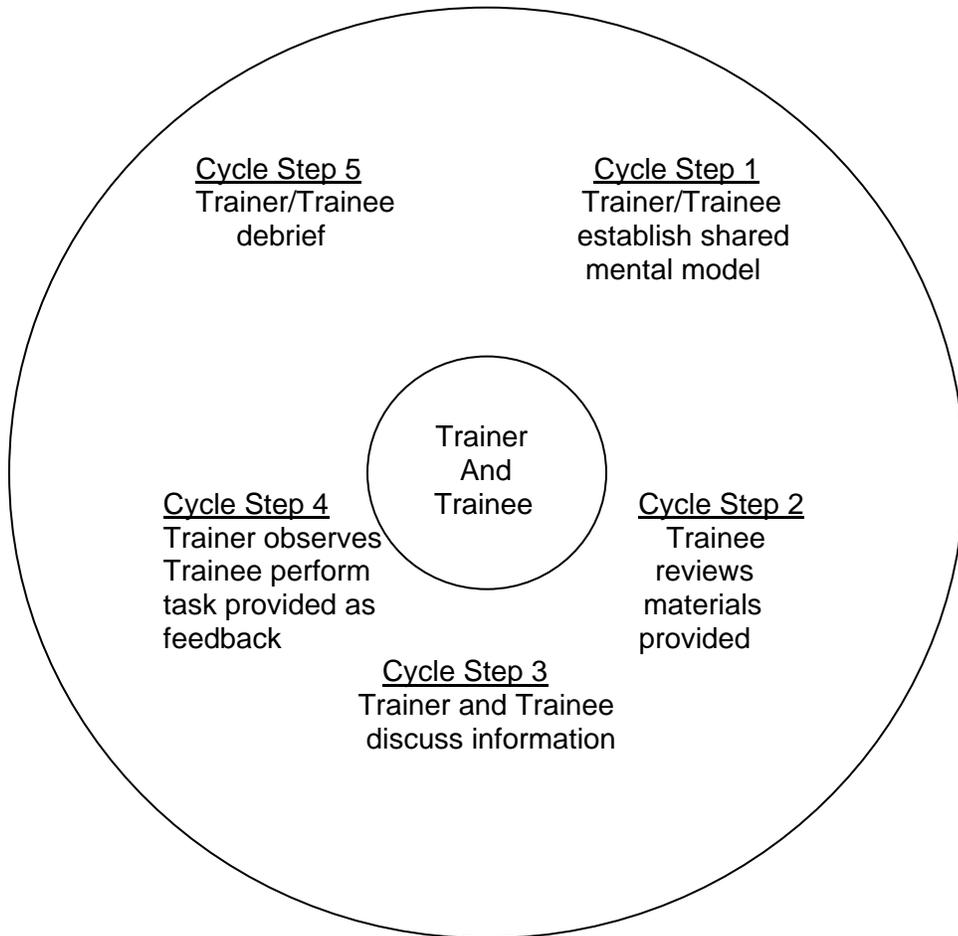
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The Five-Step OJT Cycle for Declarative Training (Knowledge)



OJT Module Lesson

Title: How to identify native/nonnative plants and relate them to soils in your soil survey area.	
WHAT	WHY, WHEN, WHERE, HOW, SAFETY, QUALITY
OJT Cycle for Knowledge Step 1	Trainer and trainee review objectives of module.
OJT Cycle for Knowledge Step 2	<ul style="list-style-type: none"> • Read/Review Soil Survey Manual (pg 9 in hardcopy), 2nd paragraph regarding Soil-Landscape Relationships, and Soil Survey Manual (pgs 71-72 hardcopy) section on vegetation under Studying Pedons. • Read/Review NSSH Part 627.02 in part where climatic zones and vegetation are discussed. • Review the USDA Plants Database Web site: http://plants.usda.gov/. • Trainer should discuss and review ecological sites and/or plant associations with the Trainee. Refer to the ESIS database if necessary: http://esis.sc.egov.usda.gov/.
OJT Cycle for Knowledge Step 3	Trainer asks Trainee to:
1. List the three main purposes for making correlations between plants and soils.	Ask the trainee to make a list, and discuss.
2. Understand how vegetation can be used in soil mapping.	Discuss with trainer how scientists have used plants to assist in soil mapping in the soil survey area.
3. Determine who the local plant specialist is.	Depending on your local area: NRCS Range Conservationist, NRCS Forester, NRCS Biologist, Soil Scientists, University Extension Specialists, Forest Service, BLM, etc.
4. Obtain appropriate plant identification books.	Ask local plant specialist to recommend plant identification books applicable to the survey area. A plant terminology book may also be helpful.
5. Understand the four main plant forms and the associated plant terminology for those forms.	<p>Open and review the attachment Figure 1- Comparison of plant groups.pdf.</p> <p>Note the four main plant forms:</p> <ol style="list-style-type: none"> 1] Grasses/Grass-like 2] Forbs 3] Shrubs 4] Trees

6. Identify plant-soil relationships for your area.	Ask local plant specialist to provide a list of plants that are indicators of soil characteristics in your area. Plants can be indicators of varying soil characteristics. Examples: salinity/sodicity indicators, texture indicators, soil climate indicators, hydric soil indicators.
7. Identify plant characteristics.	For each species, recognize identifying characteristics. Examples: Awns on grasses, thorns on shrubs. Use local identification books, terminology books, and the USDA Plants Database to assist in this step. The USDA PLANTS Database has much of this information. See Plant fact sheets: http://plants.usda.gov/java/factSheet
8. Create a working database/spreadsheet of soil-plant relationships for indicator plants in your survey area.	Agree on format; agree on how plants and soils will be correlated in the database/spreadsheet for your soil survey area. Do this for future reference and as an exercise to relate indicator species to soils in your survey area.
OJT Cycle for Knowledge Step 4	Going to the field at a chosen location and, using the new database/spreadsheet, ask the trainee to identify plants in the field and relate them to soil characteristics.
OJT Cycle for Knowledge Step 5	Debrief trainee, trainer, and local plant specialist; address any questions and concerns.
Refresh	Continuously update the database with new plant species, plant-identifying characteristics, and soil correlations as needed.

OJT Module Lesson Measurement of Learning

Title:	
WHAT	WHY, WHEN, WHERE, HOW, SAFETY, QUALITY
Apply knowledge gained to field work.	Select a variety of areas in the soil survey area where plant ID assists in identifying soils, and, using the database created by the trainee, have the trainee identify plants in the field and relate them to the soil characteristics at each location.

Performance Report Form

Open attachment: Trainee Performance Report Form template.pdf.