OJT Training Module Cover Sheet

Title: 1207 How to recognize limiting soil layers in your area.

Type: **X** Skill ☐ Knowledge

Performance Objective: Trainee will be able to …

- Recognize limiting soil layers common to the local area.

Target Proficiency:
☐ Awareness ☐ Understanding **X** Perform w/ Supervision
☐ Apply Independently ☐ Proficiency, can teach others

Trainer Preparation:

- Trainer should be familiar with the assigned reading/review material in the lesson plan that follows.
- Trainer should arrange a field tour where limiting soil layers common to the local area can be observed.
- Have several OSDs with limiting layers available or in mind for review with the trainee.

Special Requirements:
Initiate an external learning request with a SF-182 in Aglearn for this activity. Instructions and a template are located on the training webpages for OJT modules.

Prerequisite Modules:

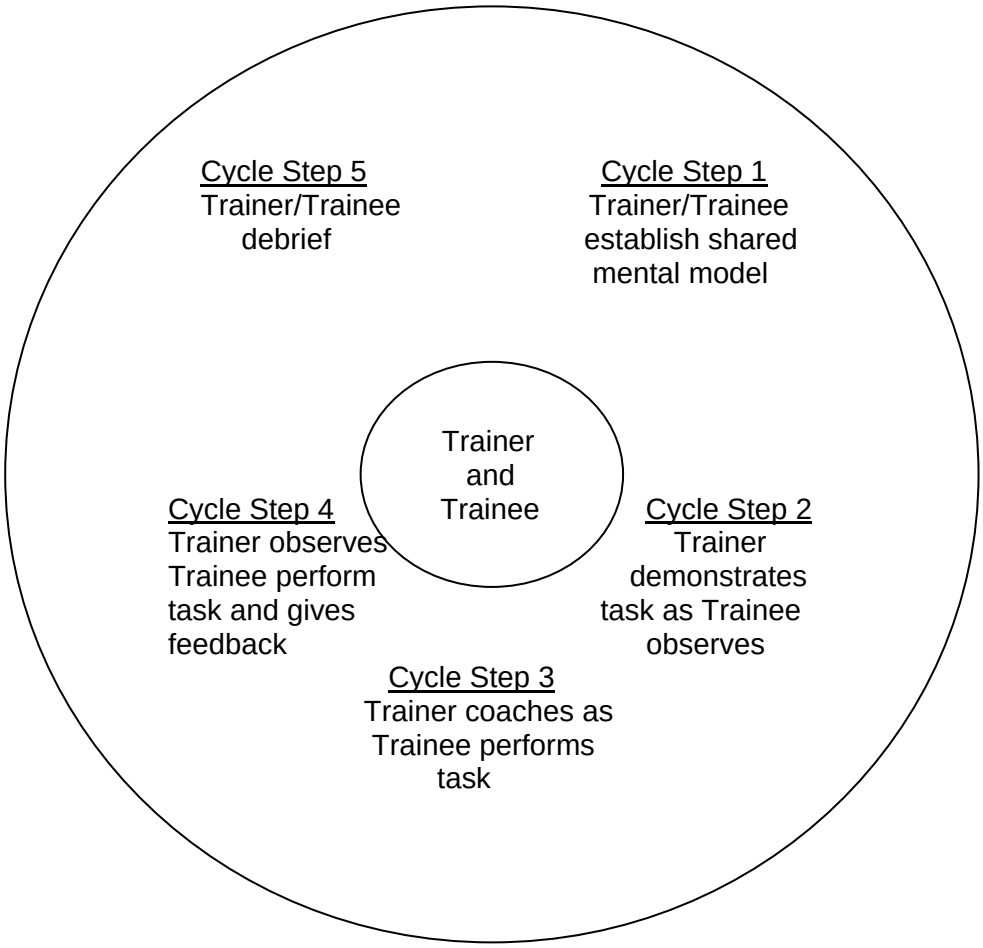
- 1019 Understand the effects of limiting layers on land use-overview.

Notes:
None

Authors:
Shawn McVey

Approved by:
Marc Crouch

The Five-Step OJT Cycle for Procedural Training (Skill)



OJT Module Lesson

Title: **1207 How to recognize limiting soil layers in your area.**	
WHAT	**WHY, WHEN, WHERE, HOW, SAFETY, QUALITY**
Cycle step 1	Trainer and trainee should review the objectives of this module. Trainer and trainee access via the internet and read/review: • National Soil Survey Handbook 618: o **Restriction Kind, Depth, Thickness, and Hardness** Restrictions can be physical, chemical, or thermal properties that reduce the movement of water and air through the soil or that otherwise provide an unfavorable environment for roots. • Keys to Taxonomy, Chapter 18: o Designations for Horizons and Layers: ▪ **Master horizon M and R and Suffix Symbols d, f, m, r, v, and x.** • Access appropriate Official Series Descriptions for the area to see use of these symbols and relate the restrictions to soils in the area.
Cycle step 2	Trainer shows trainee examples of restrictions in the field. Discuss the geogenic/pedogenic formation of the restrictions .Make identification of the restriction by way of color, texture, hardness, or other means. Make effort to relate restrictions to the landscape, landform, and surface morphometry. Have OSDs or field descriptions of soils observed to facilitate recognition and familiarity of these restrictions for the trainee.
Cycle step 3	In the field, trainer coaches trainee as trainee identifies restrictions in a soil profile. Coach the trainee in identification of the restriction by way of color, texture, hardness, or other means. Point out and explain any landscape features that provide clues to the presence of these restrictions.
Cycle step 4	Trainer provides feedback as trainee independently identifies any one or more local restrictions of the 20 recognized soil restrictions common to the area.

	Have the trainee identify restrictions within soil descriptions as well as in a soil profile. Visit field locations (road cuts, pits, etc.) with trainer to gain practice identifying soil restrictions. Practice reading the landscape, landforms, and surface morphometry for clues about the presence of soil restrictions.
Cycle step 5	Trainer and trainee can debrief the exercise and answer any questions. To add interest, trainer may choose to discuss restrictions found elsewhere, how they are formed, and how they are identified.

OJT Module Lesson Measurement of Learning

Title: **1207 How to recognize limiting soil layers in your area.**	
WHAT	**WHY, WHEN, WHERE, HOW, SAFETY, QUALITY**
Trainer observes as trainee identifies soil restrictions.	Using field sites, repeat observations until trainer is satisfied that the trainee can independently recognize limiting soil layers common to the area.

SF-182

Trainee and/or supervisor access Aglearn to verify completion of the module via its SF-182.