**OJT Training Module Cover Sheet**

**Title:** 1203 How to recognize soil structure.

**Type:** X Skill  □ Knowledge

**Performance Objective:** Trainee will be able to …
- Recognize and describe structure in a soil pedon in the field.

**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.
- Review types of soil structure found in your area.
- Locate road cuts or other sites for the trainee.
- Collect local samples of different structure. Box and label for training purposes (use fixative if necessary to preserve).

**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:**
None

**Notes:**
This module deals with training the non-soil scientist to recognize differing forms of soil structure using graphical information, photographs, and soil samples. Understanding the importance of soil structure and how it affects other soil properties is covered in module 1204-Understand how soil structure affects other soil qualities.

**Authors:**
Jim Lathem
Shawn McVey

**Approved by:**
Shawn McVey
The Five-Step OJT Cycle for **Procedural** Training (Skill)

**Cycle Step 1**
Trainer/Trainee establish shared mental model

**Cycle Step 2**
Trainer demonstrates task as Trainee observes

**Cycle Step 3**
Trainee performs task

**Cycle Step 4**
Trainee performs task and gives feedback

**Cycle Step 5**
Trainee/Trainee debrief
# OJT Module Lesson

**Title:** 1203 How to recognize soil structure.

<table>
<thead>
<tr>
<th>WHAT</th>
<th>WHY, WHEN, WHERE, HOW, SAFETY, QUALITY</th>
</tr>
</thead>
</table>
| **Cycle step 1** | Trainer and trainee should review the objectives of this module.  
Trainer and trainee should access via the internet and/or hardcopy (Field Book) and read/review:  
- Field Book for Describing and Sampling Soils:  
  - Soil Structure  
- Soil Survey Manual, Chapter 3:  
  - Soil Structure  
Optional:  
- Soil Quality Test Kit Guide, Section I-Test Procedures:  
  - Chapter 11: Soil Physical Observations and Estimations  
    - Soil Structure |
| **Cycle step 2** | Trainer reviews local soil structure with trainee to prevent confusion of similar structure that may not be found in the local area, using the review materials provided above.  
Using field sites, trainer demos identification of type, grade, and size of soil structure. |
| **Cycle step 3** | Trainer coaches trainee as trainee identifies type, grade, and size of soil structure. Use road cuts or open excavations to add variety and interest to the training. |
| **Cycle step 4** | Trainer provides feedback as trainee independently identifies soil structure.  
Use samples from correlation trays in the office to introduce a variety of structure that can be measured.  
Visit field locations (road cuts, pits, etc,) with trainer to gain practice identifying soil structure. |
| **Cycle step 5** | Trainer and trainee can debrief the exercise and discuss answers to any questions. To add interest, trainer may choose to discuss situations found elsewhere and how they are handled. |
OJT Module Lesson Measurement of Learning

Title: 1203 How to recognize soil structure.

<table>
<thead>
<tr>
<th>WHAT</th>
<th>WHY, WHEN, WHERE, HOW, SAFETY, QUALITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trainer observes trainee identify soil structure.</td>
<td>Using collected samples and field sites, repeat structure observations until trainer is satisfied that the trainee can recognize soil structure in the field.</td>
</tr>
</tbody>
</table>

SF-182

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