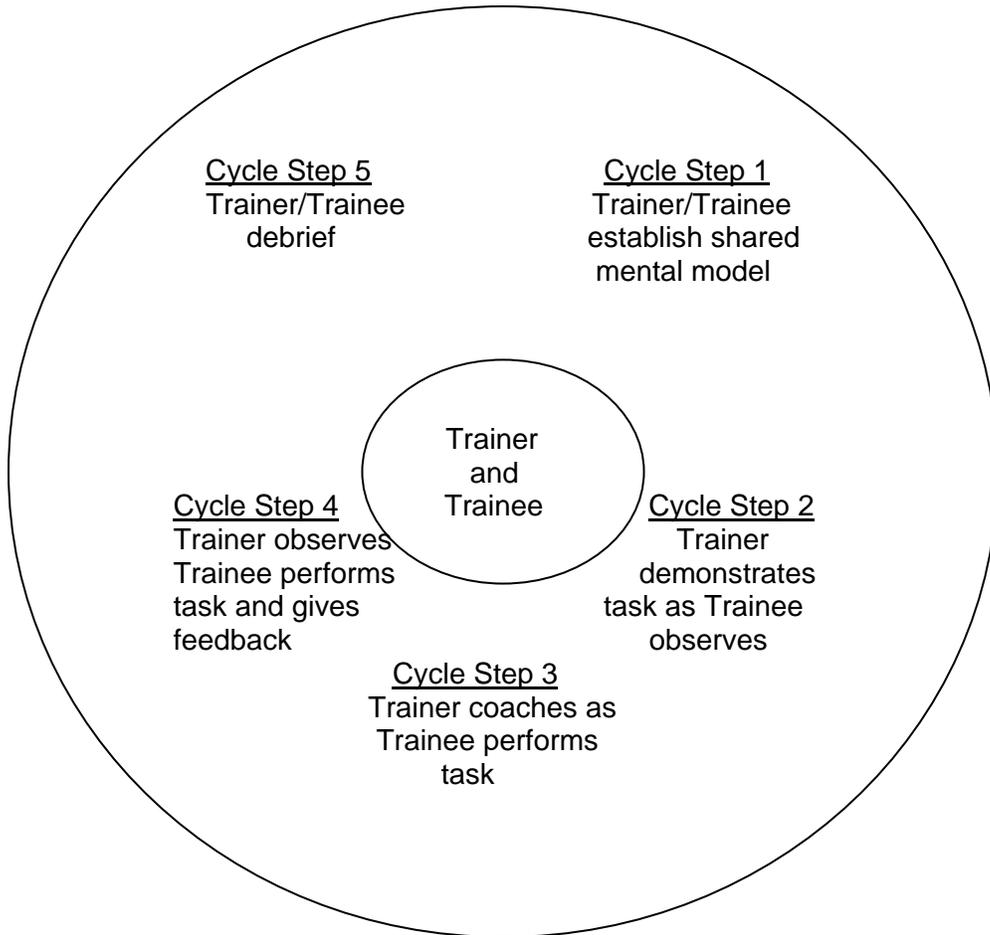


OJT Training Module Cover Sheet

Title: 115 How to describe texture in organic soil material.
Type: <input checked="" type="checkbox"/> Skill <input type="checkbox"/> Knowledge
Performance Objective: Trainee will be able to ... <ul style="list-style-type: none">• Estimate the amount of mineral soil material using field methods of the NCSS.• Describe the fiber content and type according to NCSS guidelines.
Target Proficiency: <input type="checkbox"/> Awareness <input type="checkbox"/> Understanding <input type="checkbox"/> Perform w/ Supervision <input checked="" type="checkbox"/> Apply Independently <input type="checkbox"/> Proficiency, can teach others
Trainer Preparation: <ul style="list-style-type: none">• Trainer should be familiar with the assigned reading/review material in the lesson plan that follows.• Have soil samples, calibration samples, and/or field locations with pit, trench, or auger borings available.• Have the <i>Field Book for Describing and Sampling Soils</i> available.• Have hardcopy of the 232 soil description form or Pedon PC available.•
Special Requirements: <ul style="list-style-type: none">• 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.• If you do not have texture calibration samples, you could ask the NSSL for appropriate samples for your survey area.
Prerequisite Modules: <ul style="list-style-type: none">• 101 How to use the <i>Field Book for Describing and Sampling Soils</i>.• 102 How to fill out a 232 soil description form.
Notes: None
Authors: Marc Crouch
Approved by: Shawn McVey

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



OJT Module Lesson

Title: 115 How to describe texture in organic soil material.	
WHAT	WHY, WHEN, WHERE, HOW, SAFETY, QUALITY
Cycle step 1	<p>Trainee should access via the internet and read Soil Survey Manual, Chapter 3 section on Organic Soils under Particle Size Distribution.</p> <p>Trainee should access via the internet and read National Soil Survey Handbook 618:</p> <ul style="list-style-type: none"> ○ Texture Class <p>Trainee should access via the internet and read Soil Survey Field and Laboratory Methods Manual, Soil Survey Investigations Report No. 51, version 1.0.;</p> <ul style="list-style-type: none"> ● Section 5.2, pages 251-253, Pyrophosphate Color ● Section 5.3, pages 253-255, Fiber Volume. <p>Access hardcopy of via the internet and review material about texture in the <i>Field Book for Describing and Sampling Soils</i>, focusing on the “Terms Used in Lieu of Texture.”</p> <p>Trainee should access hardcopy or via the internet and read Keys to Taxonomy, Characteristics Diagnostic for Organic Soils, Kinds of Organic Material.</p>
Cycle step 2	Do the following:
1. Review what can be recorded according to the <i>Field Book Describing and Sampling Soils</i> .	<p>Note that textural class is usually recorded and that the terms include terms used in lieu of texture. Note that one set of terms is used with organic layers of mineral soils and another set is used with Histosols or histic epipedons (see footnotes in the <i>Field Book Describing and Sampling Soils</i>).</p> <p>Trainer should point out that horizons are described in a mineral soil or histic epipedon and tiers are described in Histosols.</p>
2. Review definition of fibers and fibric, hemic and sapric soil materials.	See <i>Soil Taxonomy</i> . Pay particular attention to the quantity of fibers in each of the three classes and use of sodium-pyrophosphate to determine if sample is organic or limnic material (could be optional if not an issue in your survey area).
3. Demonstrate how to estimate percent fiber.	<p>Follow this procedure:</p> <ol style="list-style-type: none"> 1. Use a wet sample in palm of hand. 2. Rub sample with thumb 10 times. 3. Roll into a ball.

	<p>4. Open ball and estimate amount of live fiber remaining.</p> <p>5. If organic versus limnic material is an issue in your survey area, include demonstration of use of sodium-pyrophosphate.</p> <p>6. Use proper in lieu of texture term to describe the “texture” of the horizon (histic epipedon or mineral soil) or tier (Histosol).</p> <p>Note to the trainee that estimating improves with experience and calibration.</p>
4. (Optional) Demonstrate SSIR 51 method for determining fiber volume.	Do in your SSO Laboratory. Demonstrate only if the procedures are used in your soil survey area.
Cycle step 3	Coaching the trainee, have the trainee describe and record organic texture.
Cycle step 4	Repeat cycle step 3 without coaching. During project activities, assign the trainee the task of estimating and recording organic texture as soil descriptions are completed.
Cycle step 5	Answer any questions. Repeat any steps as necessary.

OJT Module Lesson Measurement of Learning

Title: 115 How to describe texture in organic soil material.	
WHAT	WHY, WHEN, WHERE, HOW, SAFETY, QUALITY
Describe organic texture routinely during project activities.	During project activities, assign this task to the trainee. Sign off on performance when target proficiency is achieved.

SF-182

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