

## OJT Training Module Cover Sheet

**Title:** 1205 Understand the significance of soil color in your survey area.

**Type:**      Skill      Knowledge

**Performance Objective:** Trainee will be able to ...

- Understand why soil color is important to understanding soils
- Recognize what different colors indicate about the soils in your soil survey area.

**Target Proficiency:**

Awareness    Understanding    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.

**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:**

Additional skill development can be found in module 1206 How to use the Munsell system to describe soil color

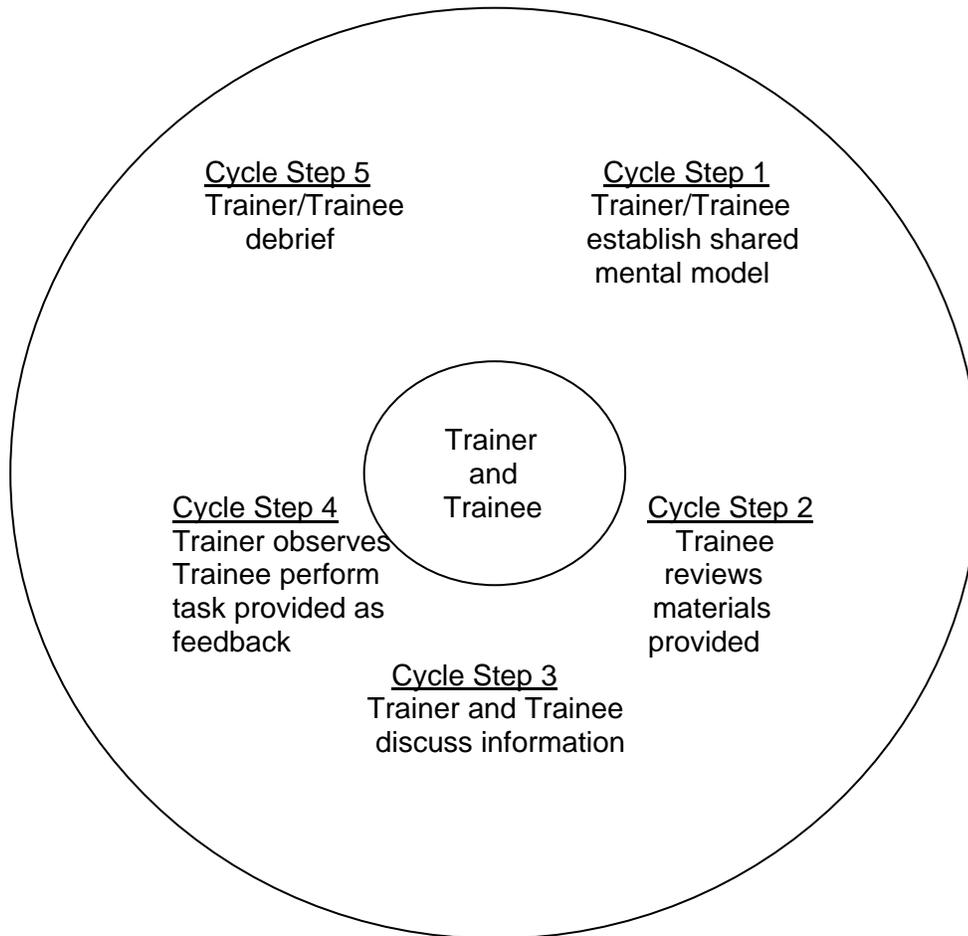
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# The Five-Step OJT Cycle for Declarative Training (Knowledge)



## OJT Module Lesson

Title: 1205 Understand the significance of soil color in your survey area.	
WHAT	WHY, WHEN, WHERE, HOW, SAFETY, QUALITY
Cycle step 1	Trainer and trainee review objectives of module.
Cycle step 2	<p>Trainer and trainee access via the internet and read/review:</p> <ul style="list-style-type: none"> <li>• <b>Soil Quality Indicator Information Sheets:</b> <ul style="list-style-type: none"> <li>○ Biological           <ul style="list-style-type: none"> <li>▪ <b>Total Organic Carbon</b></li> </ul> </li> </ul> </li> <li>• <b>Field Indicators of Hydric Soils in the United States:</b> <ul style="list-style-type: none"> <li>○ <b>Concept</b> <ul style="list-style-type: none"> <li>▪ <b>Iron and Manganese Reduction, Translocation, and Accumulation</b></li> </ul> </li> <li>○ <b>General Guidance for Using the Indicators</b></li> <li>○ <b>Glossary</b> for the definitions of:           <ul style="list-style-type: none"> <li>▪ <b>depleted matrix</b></li> <li>▪ <b>gleyed matrix</b></li> <li>▪ <b>redox concentrations</b></li> <li>▪ <b>redox depletions</b></li> <li>▪ <b>redoximorphic features</b></li> </ul> </li> <li>○ Also, for indicators used in your area, review the pictures of hydric soils to see common color combinations representing hydric soils.</li> </ul> </li> </ul>
Cycle step 3	<p>Trainer and trainee discuss the following:</p> <ol style="list-style-type: none"> <li>1. Soil color is the most visual of all the soil properties we measure. We may not always understand what the soil color tells us, but we can see that the color is different and we can describe differences in the soil because of color.</li> <li>2. Soil Quality: Soil organic carbon is one of the most important constituents of the soil because it can affect plant growth as both a source of energy and a trigger for nutrient availability through mineralization. Soil color can be used as an indication of relative soil organic carbon content between soils within the same landscape. In general, the darker the soil color, the greater the content of soil organic carbon.</li> <li>3. Soil Classification: In your survey area, what are</li> </ol>

	<p>typical soil colors? For example, in areas of Mollisols, what is the typical topsoil color? Discuss some examples of how soil color impacts soil classification in your survey area.</p> <p>4. Hydric Soils: What are hydric soils? How is soil color used to identify hydric soils?</p>
Cycle step 4 & 5	<p>Trainer can debrief trainee and address any concerns. Trainer may want to incorporate soil correlation samples to add variety and interest.</p>

## **OJT Module Lesson Measurement of Learning**

**Title: 1205 Understand the significance of soil color in your survey area.**

<b>WHAT</b>	<b>WHY, WHEN, WHERE, HOW, SAFETY, QUALITY</b>
Trainee's learning is measured.	Have the trainee complete the attached quiz below to reinforce the concepts in this module.

### **SF-182**

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

## Quiz

1. True or False? Gley colors are used in the identification of hydric soils.
2. True or False? Redox concentrations and redox depletions are both identified by soil color.
3. True or False? Soil color can be used as an indication of relative soil organic carbon content between soils within the same landscape.
4. Describe one example of how soil color impacts soil classification in your survey area.