**OJT Training Module Cover Sheet**

**Title:** 106 How to use the Munsell Soil Color Charts to describe soil colors.

**Type:** ☒ Skill  ☐ Knowledge

**Performance Objective:** Trainee will be able to …
- Use the Munsell Soil Color Charts to describe soil color.

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

**Trainer Preparation:**
- Trainer should be familiar with the concepts of describing soil color as discussed in Chapter 3, Part 6, of the *Soil Survey Manual*.
- Have soil samples available.

**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.
- Have the Munsell Soil Color Charts available.

**Prerequisite Modules:**
None

**Notes:**
This module could be done in conjunction with other modules relative to describing soil matrix and feature colors according to NCSS guidelines, including among other properties which include color:
- 107 How to describe soil matrix colors.
- 108 How to describe mottles.
- 109 How to describe redoximorphic features.

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Marc Crouch
The Five-Step OJT Cycle for **Procedural** Training (Skill)
## OJT Module Lesson

**Title:** 106 How to use the Munsell Soil Color Charts to describe soil colors.

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<tr>
<th>WHAT</th>
<th>WHY, WHEN, WHERE, HOW, SAFETY, QUALITY</th>
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| Cycle step 1 | • Trainee should access via the internet and read *Soil Survey Manual*, Chapter 3, section on *soil color*.  
  • Thumb through the *Munsell Soil Color Charts* to review the charts available.  
  • Agree that this module targets familiarity with the Munsell Soil Color Charts only. |
| Cycle step 2 | Do the following: |
| Cycle step 3 | Coaching the trainee, have the trainee use the color charts for broken and crushed samples. Have the trainee add water to a dry sample to reach an appropriate moisture state and use charts for color. |
| Cycle step 4 | Without coaching the trainee, have the trainee use the color charts for broken and crushed samples. Have the trainee add water to a dry sample to reach an appropriate moisture state and use charts for color. |
| Cycle step 5 | Answer any questions. Repeat any steps as necessary. |

1. **Review definitions of hue, value, and chroma.** These were part of the reading assignment in the SSM.
2. **Review conditions for measuring color.** This was part of the reading assignment in the SSM. Discuss light conditions, moisture content, and roughness (related to broken and crushed samples).
3. **Use a “broken” sample to demonstrate locating hue, value, and chroma with the charts.** If doing this module as a stand alone, use samples in the office. If doing it in conjunction with other soil color-related modules, use available pit, road cut, or auger boring. Demonstrate how you “acquire” a broken sample.
4. **Use a “crushed” sample to demonstrate locating hue, value, and chroma with the charts.** Demonstrate crushing and smoothing of a sample.
5. **Demonstrate how to add water to reach the appropriate moisture state for moist colors.** SSM reading assignment covers this. Discuss and demonstrate as needed.
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<tr>
<th>WHAT</th>
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<tbody>
<tr>
<td>Quiz</td>
<td>Complete the quiz below.</td>
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<tr>
<td>Use the soil color charts to describe soil color.</td>
<td>Cycle steps 3 and 4 accomplish this as a measure of learning.</td>
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SF-182

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

1. Match the following appropriately:

<table>
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<th>Hue</th>
<th>Degree of lightness or darkness of a color in relation to neutral gray scale</th>
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<tbody>
<tr>
<td>Value</td>
<td>Measure of chromatic composition of light that reaches the eye</td>
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<tr>
<td>Chroma</td>
<td>Relative purity or strength of the spectral color</td>
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2. Moist color is made at the point where color does not change with additional moistening.
   a. True
   b. False

3. Dry state for color is air-dry and should be made at the point where color does not change with additional drying.
   a. True
   b. False

4. Which one or more of the following can affect a person’s perception of color?
   a. Angle of the sun
   b. Atmospheric conditions
   c. Cloud cover
   d. Type of light source in office or laboratory setting

5. In your survey area, the _______ state is standard and given first in descriptions.
   a. Dry
   b. Moist