**Title:** 108 How to describe mottles.

**Type:** ✘ Skill  ☐ Knowledge

**Performance Objective:** Trainee will be able to …
- Describe and record soil mottles using the Munsell Soil-Color Charts and the *Field Book for Describing and Sampling Soils*.

**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.
- Have soil samples and field locations with pit, trench, road cut, or auger borings available.
- Have the Munsell Soil-Color Charts available.
- Have the *Field Book for Describing and Sampling Soils* available.
- Have hardcopy of the 232 soil description form or Pedon PC 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.

**Prerequisite Modules:**
- 101 How to use the Field Book for Describing and Sampling Soils.
- 102 How to fill out a 232 soil description form.
- 106 How to use the Munsell Soil Color Charts to describe soil colors.

**Notes:**
This module could be done in conjunction with the prerequisite modules listed above, and:
- 107 How to describe soil matrix colors.

**Authors:**
Marc Crouch

**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
Trainer coaches as Trainee performs task

Cycle Step 4
Trainer observes Trainee performs task and gives feedback

Cycle Step 5
Trainer/Trainee debrief
# OJT Module Lesson

## Title: 108 How to describe mottles.

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<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-Mottling  
  - Field Book for Describing and Sampling Soils section on Mottles |
| Cycle step 2 | Do the following: |
| 1. Review what can be recorded according to the Field Book and SSM. | Note that quantity (class and %), size, contrast, color, and moisture state are usually recorded. Shape is an optional descriptor. |
| 2. Demonstrate how to describe and record mottles | Do this in the field. |
| Cycle step 3 | • Coaching the trainee, have the trainee describe and record mottles as appropriate in the survey area. |
| Cycle step 4 | Repeat cycle step 3 without coaching. |
| Cycle step 5 | During project activities, assign the trainee the task of describing and recording mottles as soil descriptions are completed. |
| Cycle step 5 | Answer any questions. Repeat any steps as necessary. |
OJT Module Lesson Measurement of Learning

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<td>Describe mottles routinely during project activities.</td>
<td>During project activities, assign this task to the trainee. Sign off on performance when target proficiency is achieved.</td>
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**SF-182**

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