# OJT Training Module Cover Sheet

**Title:** 016 How to develop a soils key for your soil survey area.

<table>
<thead>
<tr>
<th>Type:</th>
<th>X Skill</th>
<th>☐ Knowledge</th>
</tr>
</thead>
</table>

**Performance Objective:** Trainee will be able to...
- Develop a soils key for their soil survey area.

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

**Trainer Preparation:**
- Have access to statewide keys to soils, if one exists.
- Have access to countywide keys to soils, if they exist.
- Have access to NASIS and a GIS application for determining soil series in your area.
- Have access to existing published county surveys or Preliminary Identification Legends for area of interest.
- Have access to Official Series Description information.

**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:**
- 002 Understand the relationship of the factors of soil formation in your soil survey area.
- 003 Understand the concept of landscape models and soil catenas.
- 015 How to use a soils key for your soil survey area.

**Notes:**
None

**Authors:**
Robert Tegeler

**Approved by:**
Marc Crouch
Craig Ditzler
The Five-Step OJT Cycle for **Procedural** Training (Skill)

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

- **Cycle Step 2**
  - Trainer observes 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:** 016 How to develop a soils key for your soil survey area.

## WHAT | WHY, WHEN, WHERE, HOW, SAFETY, QUALITY

<table>
<thead>
<tr>
<th>Cycle step 1</th>
<th>Discuss the intent of the soil key. (How do you want a key to help you?)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>As an aid to identify soil in the field</td>
</tr>
<tr>
<td></td>
<td>As a written record of the general landscape model used to make a survey</td>
</tr>
<tr>
<td></td>
<td>As an educational tool</td>
</tr>
<tr>
<td></td>
<td>Other</td>
</tr>
</tbody>
</table>

| Cycle steps 2 and 3 | Demo and prepare trainee for task.                                      |

<table>
<thead>
<tr>
<th>1. Trainer provides Trainee with one or two examples of existing soil keys. Include one for own soil survey area if it exists.</th>
<th>See Attachment: Key to Illinois Soils.pdf.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Identify the desired properties to be shown in the key.</td>
<td>Discuss the important properties that assist in identifying soil series and separating one series from another. Decide which properties to use in the key.</td>
</tr>
<tr>
<td>4. Identify the soil series in the survey area.</td>
<td>Discuss use of GIS to determine soil series in survey area. If necessary, request assistance from Resource Analyst (GIS person). Are any series “inactive”?</td>
</tr>
<tr>
<td>5. Locate the data for the properties selected (parent material, drainage, etc.).</td>
<td>Discuss use of OSD Web site and NASIS data to assist in obtaining needed properties.</td>
</tr>
<tr>
<td>6. Group the properties into categories.</td>
<td>Discuss use of OSD information to assist with grouping soils. Decide how you will group soils for this key (similar depth to bedrock, surface color, etc.).</td>
</tr>
<tr>
<td>7. Decide upon a format for displaying the key.</td>
<td>Develop the structure and select application (Word table, Excel, etc.).</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Cycle step 4</th>
<th>Trainee develops the soil key. See measurement of learning section for inclusion.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complete the key.</td>
<td>Point: This is as much an exercise to learn something about the soils in the area as it is to build a soils key. Trainee should focus on what is being learned about the soils.</td>
</tr>
<tr>
<td>Cycle step 5</td>
<td>Review the completed key. Answer any questions.</td>
</tr>
</tbody>
</table>
# OJT Module Lesson Measurement of Learning

**Title:** 016 How to develop a soils key for your soil survey area.

<table>
<thead>
<tr>
<th>WHAT</th>
<th>WHY, WHEN, WHERE, HOW, SAFETY, QUALITY</th>
</tr>
</thead>
</table>
| 1. Measurement of learning | Trainee should perform above exercise (see Cycle step 4) independently on sample area (county or other geographic area within the MLRA).  
Determine the soil series in the test area.  
Determine the properties to use as criteria to group or separate soil series.  
Separate the soils into groups.  
Report completion of exercise to Trainer. |

**SF-182**

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