

## OJT Training Module Cover Sheet

**TITLE: 1107 Understand the soil survey procedures used in developing initial soil surveys.**

**Type:**      Skill      Knowledge

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

- Understand how initial soil surveys were made prior to GIS.
- Understand how initial soil surveys are made utilizing GIS and related tools.

**Target Proficiency:**

- Awareness    Understanding    Perform w/ Supervision  
 Apply Independently    Proficiency, can teach others

**Trainer Preparation:**

Be familiar with past and present methods used for developing initial soil surveys.

**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 may be facilitated using OJT modules:

- 001 MLRA concept for doing soil survey.
- 007 Understanding the processes of mapping soils.

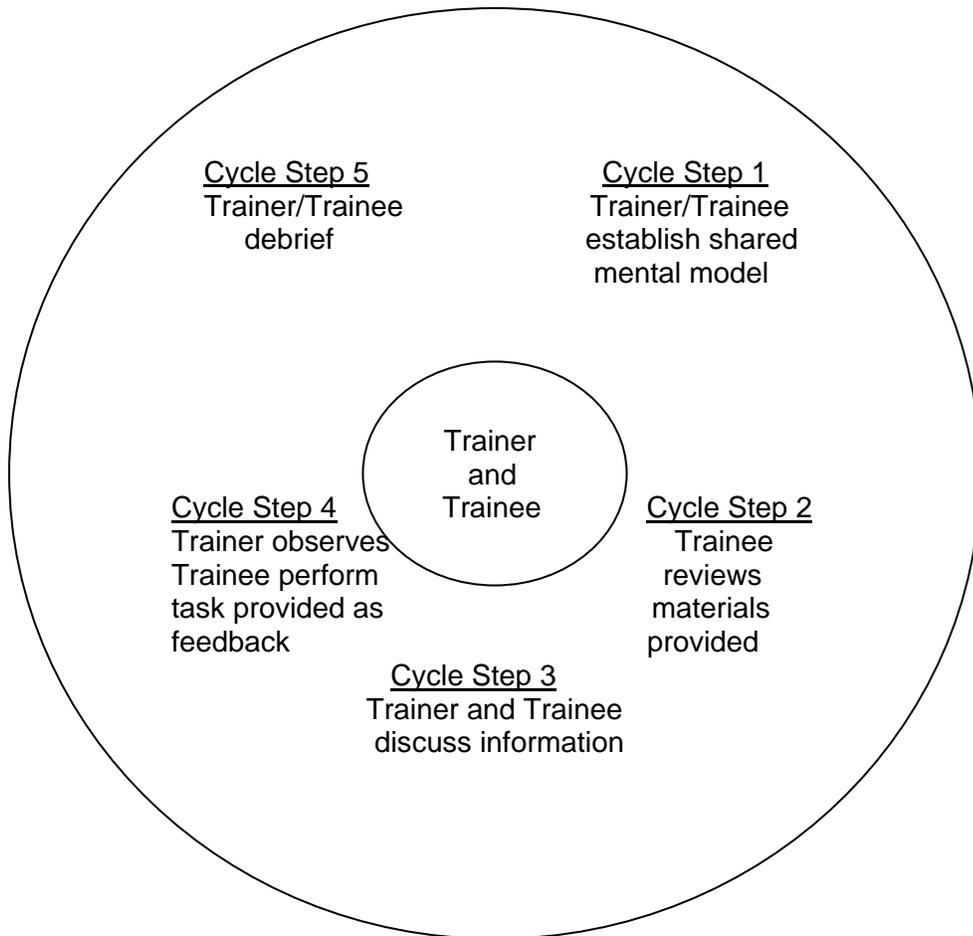
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# The Five-Step OJT Cycle for Declarative Training (Knowledge)



## OJT Module Lesson

**Title: 1107 Understand the soil survey procedures used in developing initial soil surveys.**

WHAT	WHY, WHEN, WHERE, HOW, SAFETY, QUALITY
Cycle step 1	Trainer and trainee review module objectives.
Cycle step 2	Trainer and trainee read/review: <ul style="list-style-type: none"> <li>• The attached file <b>How This Survey Was Made</b>, an excerpt from a 2009 published soil survey.</li> </ul> Optional review material for additional knowledge development, accessed via the internet: <ul style="list-style-type: none"> <li>• <b>Soil Survey Manual, Chapter 4.</b></li> </ul>
Cycle step 3	Trainer discusses the following with trainee:
1. Soil survey prior to GIS	Trainer should lead a discussion that includes all or part of the following: <ul style="list-style-type: none"> <li>• Memorandum of Understanding guidance for soil surveys (order of survey, scale of mapping, map unit delineation minimum size, documentation standards, etc.).</li> <li>• Tools used in field and office.</li> <li>• Kinds of maps, such as black and white photographs (low and high altitude), Infrared photos, topoquad sheets.</li> <li>• Photo interpretation as method of location.</li> <li>• Meeting national standards (OSDs and SIRs) versus gathering local data (typical pedons, interpretations).</li> <li>• Gathering documentation supporting correlation decisions – how that has been done and how it has changed.               <ul style="list-style-type: none"> <li>○ Field descriptions, field notes, selection of typical pedon</li> <li>○ Sampling for laboratory analysis</li> <li>○ Addition of transects to broaden information supporting decisions</li> <li>○ Documentation standards used to support map unit design and map unit components</li> </ul> </li> <li>• Development of NASIS changing standard from national focus to what exists locally (the datamapunit).</li> <li>• Length of time to complete an initial survey (based on size and complexity of survey area, and number of soil scientists assigned).</li> </ul>

	<ul style="list-style-type: none"> <li>• Why adjoining survey areas may not have joined maps and data (era of mapping, people involved, changes within NCSS way of doing things, etc.).</li> </ul>
2. Soil survey with GIS	<p>Trainer should continue discussion, adding how GIS and related tools affect initial survey activities.</p> <ul style="list-style-type: none"> <li>• Imagery versus photographs</li> <li>• Accuracy of point data location (pros and cons) with GPS and GIS tools</li> <li>• Accuracy of line placement in relation to landforms and surface morphometry</li> <li>• Speeding up delivery of data (available in days versus years)</li> <li>• Ability to edit data when needed</li> </ul>
Cycle step 4	<ul style="list-style-type: none"> <li>• Apply the trainees understanding from this module to their assigned job in regards to conservation</li> <li>• Answer any questions trainee may have.</li> </ul>
Cycle step 5	Debrief; trainer addresses any questions.

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

**Title: 1107 Understand the soil survey procedures used in developing initial soil surveys.**

<b>WHAT</b>	<b>WHY, WHEN, WHERE, HOW, SAFETY, QUALITY</b>
Trainee understands the mapping procedures used for initial soil surveys	If opportunity arises, take the trainee to the field to observe mapping of soil resource.

### **SF-182**

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