

OJT Training Module Cover Sheet

Title: 019 How to interpret photo images in your soil survey area.

Type: **X** Skill Knowledge

Performance Objective: Trainee will be able to...

- Interpret photo images commonly found in their soil survey area.

Target Proficiency:

Awareness Understanding Perform w/ Supervision

X Apply Independently Proficiency, can teach others

Trainer Preparation:

Assemble various photo bases (black and white, color, infrared) of the soil survey area for use.

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 is available in AgLearn via the following course:

- Basic Photo Interpretation

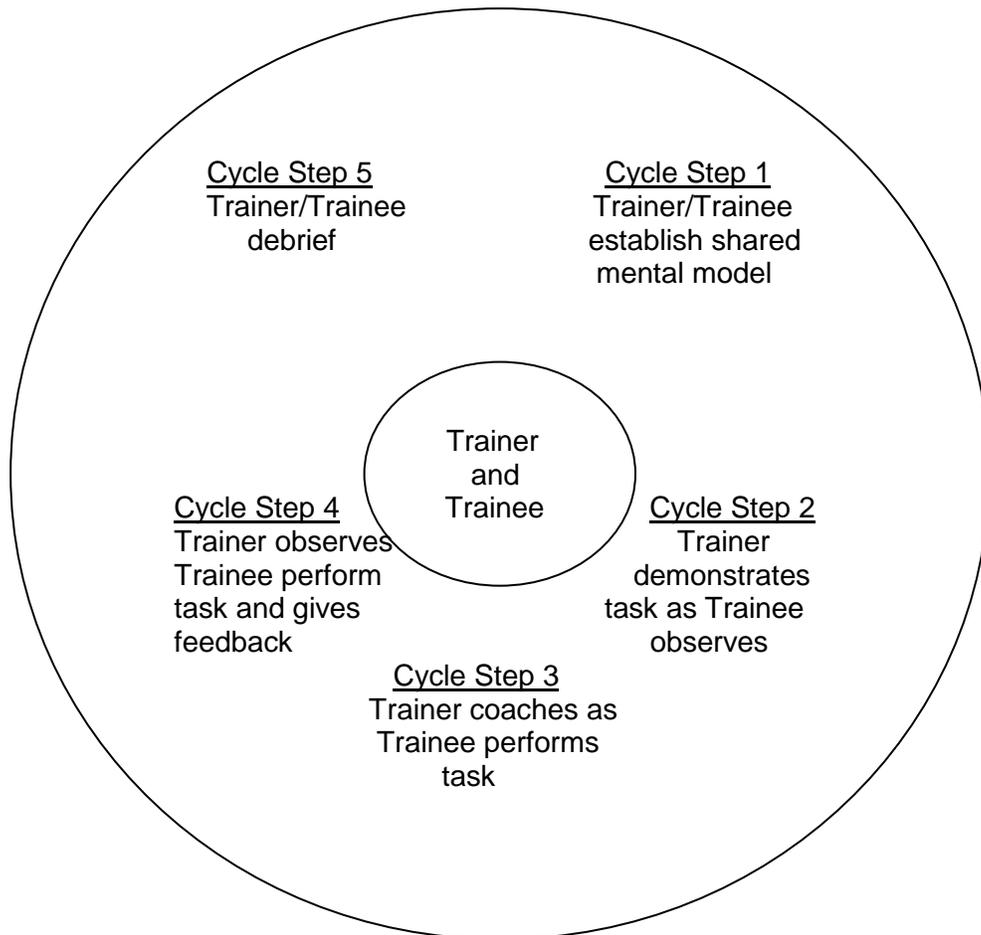
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The Five-Step OJT Cycle for Procedural Training (Skill)



OJT Module Lesson

Title: **019 How to interpret photo images in your soil survey area.**

WHAT	WHY, WHEN, WHERE, HOW, SAFETY, QUALITY
Cycle step 1	Trainer and trainee review objectives of module.
Cycle step 2	Trainer shows trainee the following:
1. Identify the photo base.	Trainer explains type of photo imagery being used (e.g., black and white, color, or infrared) and the characteristics of each.
2. Locate and identify a feature on the photos that is familiar and visually easy to recognize.	<p>Trainer demonstrates to trainee what a known feature looks like in the various kinds of imagery. Discuss why both know what the feature is, especially the characteristics of the feature.</p> <p>Try to describe the feature in terms of the seven basic image characteristics for viewing and identifying features:</p> <ol style="list-style-type: none"> 1) Size – compare the size of the known feature to that of an unknown feature 2) Shape 3) Shadow – may add to the determination of size and profile shape 4) Texture – finer vs. coarser 5) Tone – compare the contrast, saturation, and brightness of the feature to those of the images of other features 6) Pattern – discuss where the feature is on the landscape 7) Site association – discuss features associated with the known feature
3. Locate and identify a feature on the photos that is not so familiar.	<p>Trainer demonstrates to trainee how to interpret an unknown feature by describing the feature in terms of its characteristics.</p> <p>Trainer demonstrates use of ancillary materials to interpret the feature:</p> <ol style="list-style-type: none"> 1) Stereo paired imagery and stereoscope; 2) Other maps of the area (such as, topographical maps, geology maps, crop information) 3) Measurement of the feature <p>Seek agreement from the trainee on identification of</p>

	the feature. Consider a field trip to ground truth the feature identification.
Cycle step 3	Trainer coaches trainee as trainee performs Step 2 above on a different feature. Use a different photo if necessary.
Cycle step 4	The trainer provides feedback after the trainee does the following:
1. Identify the photo base on an unused photo.	Trainee identifies the type of photo imagery being used. Ask the trainee to describe some of the characteristics of this imagery.
2. Locate and identify features on photos.	Trainer should select two or three features on the image and ask the trainee to name the feature or at least discuss what the feature could be. Encourage use of the seven basic image characteristics for viewing and identifying features. Trainee should identify and use appropriate ancillary materials to interpret the feature until it is identified.
Cycle step 5	Trainer can debrief trainee and address any concerns. Trainer should let trainee know about new technology for image analysis in GIS.

OJT Module Lesson Measurement of Learning

Title: **019 How to interpret photo images in your soil survey area.**

WHAT	WHY, WHEN, WHERE, HOW, SAFETY, QUALITY
Trainee's learning is measured.	Have the trainee complete the attached quiz to reinforce the concepts in this module.
Apply knowledge gained to field work.	The trainee successfully and independently interprets photo images common to his or her work area.

SF-182

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

Quiz

1. Ancillary information useful in photo interpretation may include which of the following?
 - A) Crop information and crop calendars.
 - B) Stereoscope.
 - C) Topographic maps.
 - D) All of the above.

2. Healthy vegetation appears _____ on color infrared photography?
 - A) Blue.
 - B) Green.
 - C) Magenta.
 - D) Yellow.

3. Features of soils that can possibly be identified using photo interpretation are:
 - A) Erosion by wind or water.
 - B) Surface texture and stoniness.
 - C) Wetness and ponding.
 - D) All of the above.