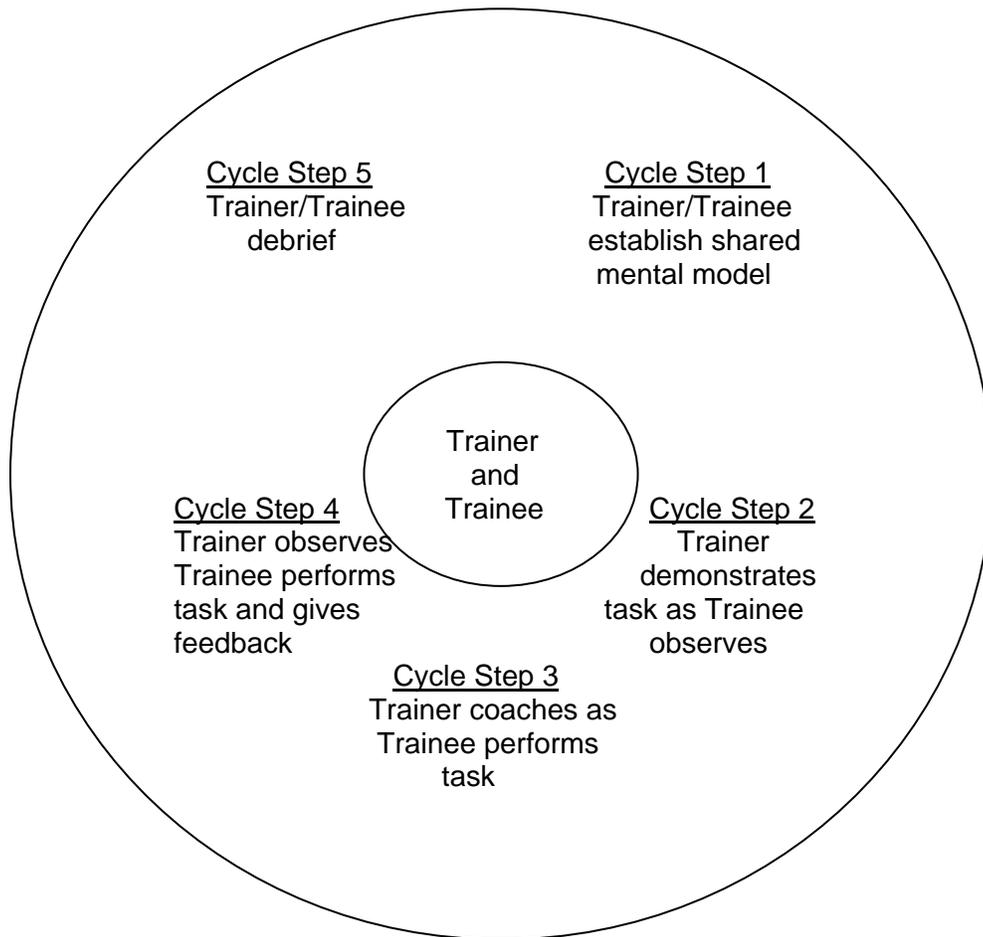


OJT Training Module Cover Sheet

Title: 1009 Soil Salinity – how to identify and measure.
Type: <input type="checkbox"/> Skill <input checked="" type="checkbox"/> Knowledge
Performance Objective: Trainee will be able to: <ul style="list-style-type: none">• Use, maintain and calibrate a pocket EC meter.• Recognize saline areas in the field using indicators provided.• Take a soil sample, measure soil salinity with a pocket EC meter, and relate meter readings to levels of salinity.
Target Proficiency: <ul style="list-style-type: none"><input type="checkbox"/> Awareness <input checked="" type="checkbox"/> Understanding <input type="checkbox"/> Perform w/ Supervision<input type="checkbox"/> Apply Independently <input type="checkbox"/> Proficiency, can teach others
Trainer Preparation: <p>Trainer should be familiar with the assigned reading/review material in the lesson plan that follows.</p>
Special Requirements: <ul style="list-style-type: none">• 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.• CAUTION - Be able to traverse uneven surfaces in the field and operate a spade or other digging tool.
Prerequisites: <ul style="list-style-type: none">• 1104 How to identify landscapes, landforms, and surface morphometry-overview.• 1008 Soil Salinity – Understand salinity development.
Notes: <p>None</p>
Authors: <p>Kent Cooley</p>
Approved by: <p>Marc Crouch Craig Ditzler</p>

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



OJT Module Lesson

Title: 1009 Soil Salinity – how to identify and measure.

WHAT	WHY, WHEN, WHERE, HOW, SAFETY, QUALITY
Second of three related soil salinity modules to be completed together.	
Cycle step 1	<p>Review objectives; locate references used as job aids for this module.</p> <p>Trainer and trainee should access hardcopy or via the internet and read/review:</p> <ul style="list-style-type: none"> • ¹ Soil Quality Test Kit Guide: <ul style="list-style-type: none"> ○ Electrical Conductivity. • ² Saline Seep Diagnosis, Control, and Reclamation, USDA ARS publications, Conservation Research Report Number 30, 1982.
Cycle step 2	Trainer should demo the following:
1. How to use, maintain, and calibrate EC meter.	Classroom exercise - Describe how EC meter works; show where on/off button, battery compartment, and calibration trimmer are located, acquire extra set of batteries and calibration solution, how to calibrate EC meter with calibration solution; understand meter readings (units of measurement); review care and maintenance of EC meter (see reference ¹).
2. Be able to recognize saline areas in the field.	Field exercise – CAUTION - Identify saline areas based on field indicators – white crusts on soil surface, plant species or lack thereof, uneven crop growth, use of imagery, etc. (see reference ²); how to identify recharge areas for saline seeps.
3. Measure soil salinity with a pocket EC meter.	Field exercise – How to take a sample, how many to take, how to make a 1:1 solution, and how to record meter readings (different units of measurement for different meters) (see reference ¹). Optional - discuss the use of Inductive Electromagnetic Soil Conductivity methods.
4. Correlate EC meter readings to soil salinity levels.	Class or field exercise – discuss soil salinity measurements as compared to soil salinity classes (see reference ¹ Table 5 - p. 59).
Cycle step 3	Have the trainee complete the above 4 action items with trainer supervision.
Cycle step 4	Have the trainee complete the above 4 actions without supervision.
Cycle step 5	Instructor summarizes what has been learned and lead into the next related module.

OJT Module Lesson Measurement of Learning

Title: 1009 Soil Salinity – how to identify and measure.	
WHAT	WHY, WHEN, WHERE, HOW, SAFETY, QUALITY
Identify salinity sites and complete EC readings and estimate salinity levels	Use cycle step 4 or additional sites for measurement of learning.

SF-182

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