

OJT Training Module Cover Sheet

Title: 1021 How to determine the erodibility of soils in your area using spatial and attribute data.

Type: Skill Knowledge

Performance Objective: Trainee will be able to ...

- List the soil erodibility factors for wind and water erosion.
- Interpret the potential erodibility of soils based on the soil erodibility factors.

Target Proficiency:

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

Trainer Preparation:

- Select several areas for online demonstration and practice that have a variety of soil erodibility factors.
- Check availability of **Web Soil Survey** before beginning this module.

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:

- 1014 How to find access and use the WSS website.
- 1015 How to use Web Soil Survey interpretive information.
- 1020 Understanding the processes of soil erosion.

Notes:

Additional skill development is available in module 1022 How to determine NHEL and HEL.

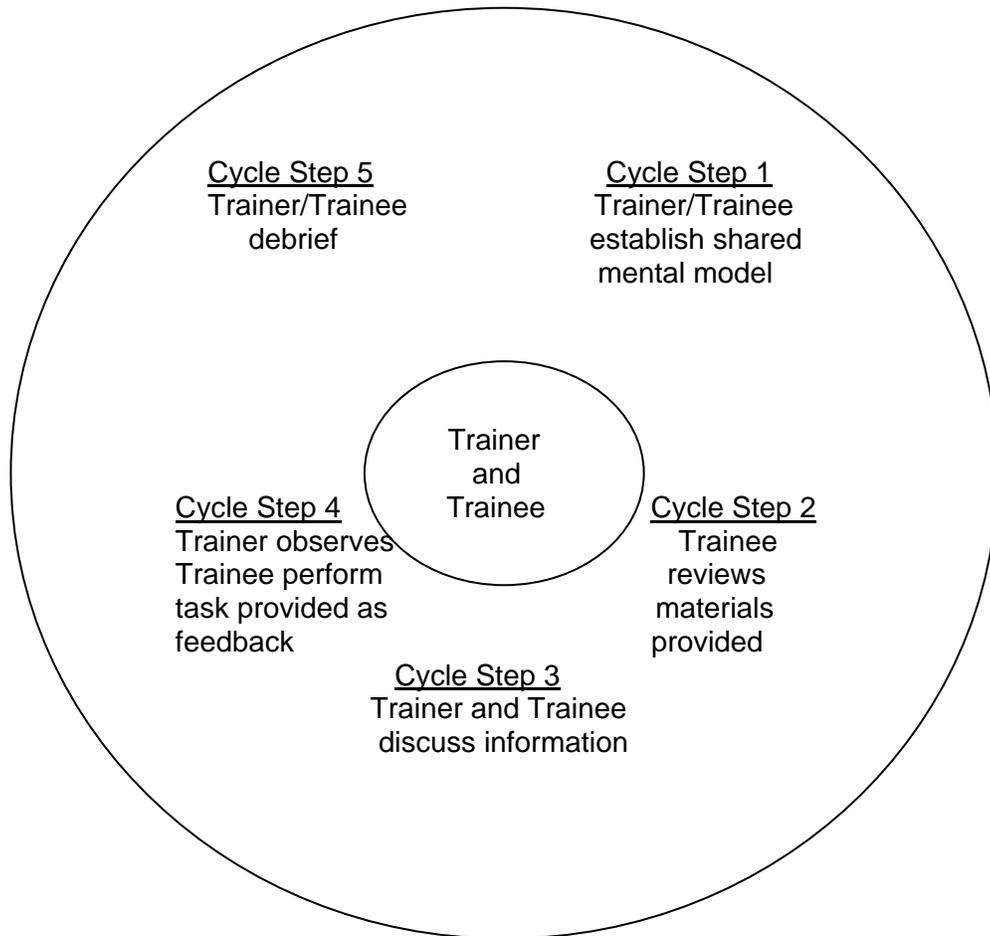
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The Five-Step OJT Cycle for Declarative Training (Knowledge)



OJT Module Lesson

Title: 1021 How to determine the erodibility of soils in your area using spatial and attribute data.

WHAT	WHY, WHEN, WHERE, HOW, SAFETY, QUALITY
Cycle step 1	Trainer and trainee review objectives of module, and trainer clarifies that this module is not about using erosion prediction tools, such as RUSLE2, WEPP, WEPS, or HEL.
Cycle step 2	Trainer and trainee access via the internet and read/review: <ul style="list-style-type: none"> • National Soil Survey Handbook 618: <ul style="list-style-type: none"> ○ T Factor ○ Soil Erodibility Factors, USLE, RUSLE2 ○ Wind Erodibility Group and Index
Cycle step 3	Trainer discusses which factors are used for determining water erosion and which are used for determining wind erosion. Trainer should also discuss whether or not both wind and water erosion are significant erosion issues for the local area. Trainer explains the application of erodibility factors regardless of current land use and land cover. Using the Web Soil Survey , trainer and trainee select an AOI, create the soil map and: <ul style="list-style-type: none"> • Go to soil properties and qualities, open Soil Erosion Factors and view the descriptions and ratings for each with discussion. Discuss the relative range of erosion potential for each of the factors. • Go to soil reports, select Soil Erosion, and observe the RUSLE2 related attributes description and soil report with discussion.
Cycle step 4	Trainer asks trainee to identify the erodibility factors for another parcel selected by the trainer or trainee. Ask the trainee to compare this new area with the area(s) in step 3 above and discuss which parcels are potentially more erodible.
Cycle step 5	Trainer and trainee can debrief the exercise and answer any questions. To add interest, trainer may choose to discuss situations found outside the local area and how they are treated.

OJT Module Lesson Measurement of Learning

Title: 1021 How to determine the erodibility of soils in your area using spatial and attribute data.

WHAT	WHY, WHEN, WHERE, HOW, SAFETY, QUALITY
Trainee's learning is measured.	Have the trainee complete the attached quiz below to reinforce the concepts in this module.

SF-182

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

Quiz

1. True or False? The T factor of a soil is determined by the crop grown and the management methods used to produce the crop.
2. True or False? To sustain long-term productivity, management of annual soil loss on a soil with a T factor of 1 must be more stringent than for a soil with a T factor of 5.
3. True or False? Soil properties influencing the soil erodibility factor K_w include texture, organic matter content, structure size class, and the saturated hydraulic conductivity of the subsoil.
4. True or False? Soil properties with the most influence on soil blowing include texture, organic matter content, carbonates, rock fragment content, and mineralogy.
5. True or False? Land use and land cover have maximum influence in determining soil erodibility factors.