

Title: How to recognize and distinguish map units in soil survey

Type: Skill Knowledge

Performance Objectives: The Soil Scientist will be able to:

- List and define the kinds of map units
- Define similar and dissimilar soils
- Define the difference between limiting and non-limiting dissimilar minor components
- Apply quantity (%) conventions to dissimilar soils in determining extent of components

Trainer Preparation:

- Be familiar with SSM and NSSH materials
- Pull together local examples from published soil surveys in the MLRA of the kinds of map units, examples of inclusions, prior to training (see Cycle Step 4 below)

Special Requirements:

- None

Prerequisite Modules:

- Module 1 - Components

Procedure:

- Follow the Five Step OJT Cycle for Knowledge Oriented Training

Notes/Purpose:

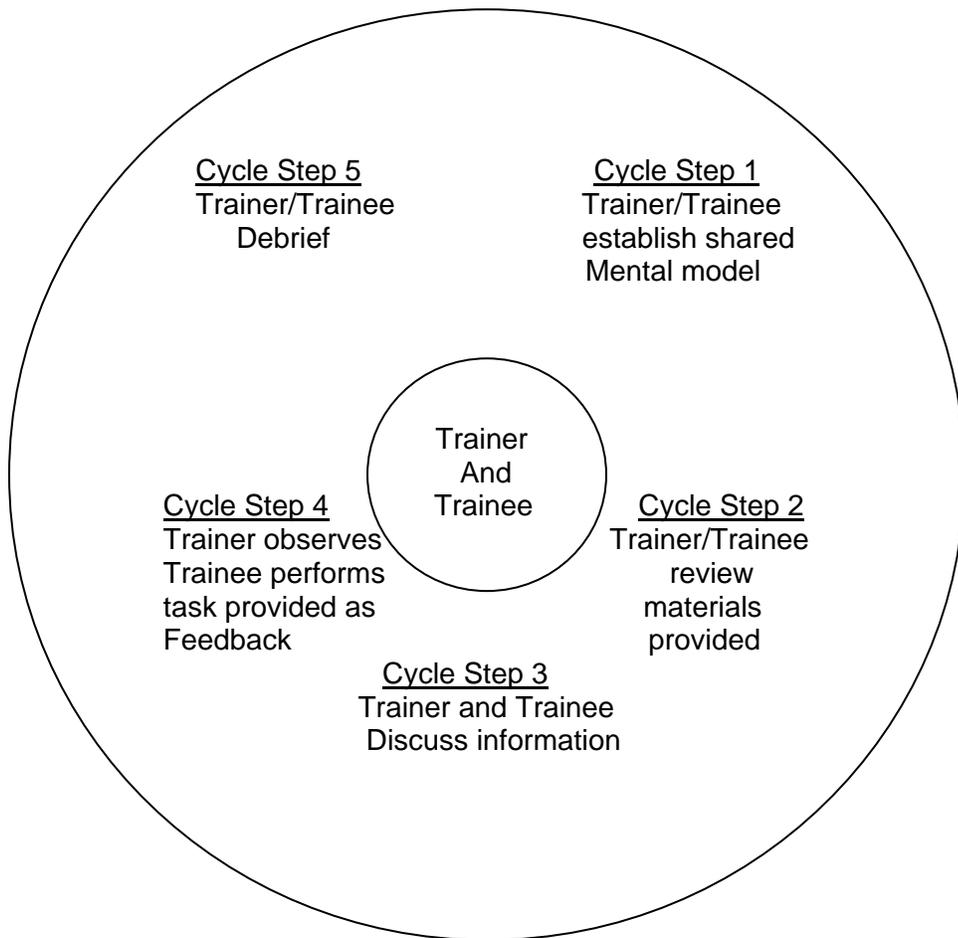
- Acquire this knowledge prior to attendance of the Soil Correlation course
- Testing during the Soil Correlation course will include measurement of this knowledge
- Exercises during the Soil Correlation course will require this knowledge
- Map unit design and correlation within the assigned MLRA requires this knowledge

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The Five Step OJT Cycle for Knowledge Oriented Training



Title : How to recognize and distinguish map units in soil survey

WHAT	WHY, WHEN, WHERE, HOW, SAFETY, QUALITY
OJT Cycle for Knowledge Step 1	SSPL and Soil Scientist review objective(s) of module, agree as to what are components, where are they used
OJT Cycle for Knowledge Step 2	Employee (and SSPL): <ul style="list-style-type: none"> • Read/Review NSSH sections 622.07, 627.03, 647.03(e)(3)(i) • Read/Review SSM pgs 22-30
OJT Cycle for Knowledge Step 3	SSPL leads, ask them to:
1. Define what is a map unit	Ask them for the definition and discuss it versus a delineation
2. List the 4 kinds of components	Ask them to make a list
3. Define a consociation	Ask them to define a consociation
4. Define a complex	Ask them to define a complex
5. Define an association	<ul style="list-style-type: none"> • Ask them to define an association • Ask them to differentiate an association from a complex
6. Define an undifferentiated group	Ask them to define an undifferentiated group
7. Define point and line segment soil map unit delineations	Ask them to define point and line segments and discuss how they may be used
8. Define an ecological site units	Ask them to define ecological units
9. Define a similar soil	Ask them to define a similar soil and discuss how they will be handled in today's soil survey
10. Define a dissimilar soil	Ask them to define a dissimilar soil and discuss: <ul style="list-style-type: none"> • The difference of limiting versus non-limiting minor components • how dissimilar soils will be handled in today's soil survey
11. determine the percentages of dissimilar components as they relate to limiting and non-limiting minor components in a map unit	Ask them what relates to these numbers for minor components in a map unit: <ul style="list-style-type: none"> • less than 15% • less than 25% • should not exceed 10%
OJT Cycle for Knowledge Step 4	<ul style="list-style-type: none"> • Pull together examples of each kind of map unit from published soil surveys from the MLRA and ask them to name and discuss

	<p>why it is what it is. Look at the inclusions and decide whether they are similar or dissimilar.</p> <ul style="list-style-type: none">• Give them the quiz provided
OJT Cycle for Knowledge Step 5	Debrief, SSPL addresses any questions and concerns
Refresh	Within a week, repeat some of the above for retention purposes.

Measurement of Learning Quiz

1. Scale of mapping is a factor in distinguishing a complex from an association.

True

False

2. Statements about a map unit may also be made for a single delineation/polygon.

True

False

3. By definition, a single dissimilar minor component may exceed 10% of the map unit.

True

False

4. A minor dissimilar component that is deeper to bedrock than the major component(s) in the map unit is _____ to use and management.

Limiting

Non-limiting

5. Ecological sites are correlated based on the plant community.

True

False

6. Line segment delineations of map units may be used in soil survey.

True

False

Trainee Performance Report Form

Trainee's Name: _____ Job Title: _____

Trainer's Name: _____ Date: _____

Task (module title)	Date(s) of Training	Rating		Trainer's Comments
		Acceptable	Unacceptable	
Module 2 – Map Units				

Additional Trainer's comments:
Trainee's Comments:
Action to be taken if unacceptable:

Trainer	Date
Trainee	Date
Supervisor	Date