

Title: 012 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.

Target Proficiency:

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

Trainer Preparation:

- Trainer should be familiar with the assigned reading/review material in the lesson plan that follows. 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:

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:

- 011 How to recognize and use components in soil survey.

Notes:

- 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.

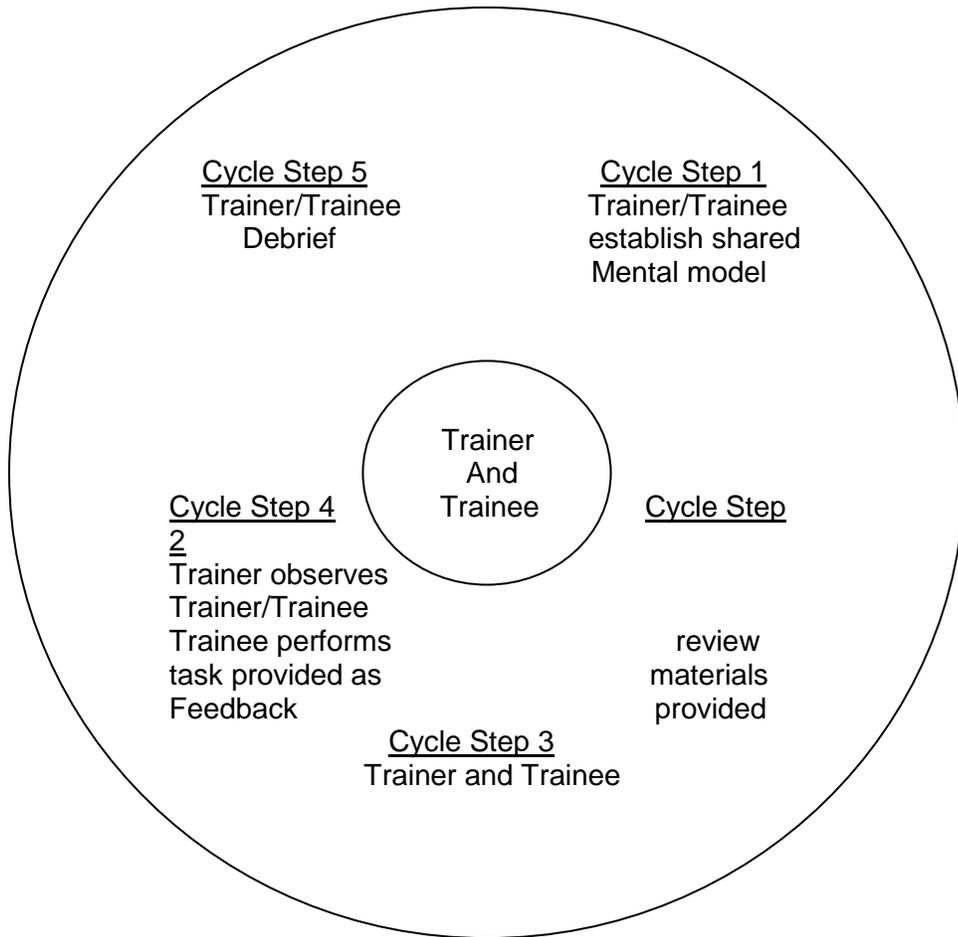
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The Five Step OJT Cycle for Declarative Training



Title: 012 How to recognize and distinguish map units in soil survey.

WHAT	WHY, WHEN, WHERE, HOW, SAFETY, QUALITY
Cycle step 1	MLRA SSO leader and Soil Scientist review objective(s) of module, agree as to what are components, where are they used.
Cycle step 2	Trainer and trainee should access via the internet and read/review: <ul style="list-style-type: none"> • NSSH 627.03 • NSSH 627.09 • Soil Survey Manual, chapter 2 <ul style="list-style-type: none"> ○ section on map units <ul style="list-style-type: none"> ▪ Designing Map Units ▪ Kinds of Map Units ▪ Inclusions within Map Units
Cycle step 3	MLRA SSO leader 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 map units.	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-discuss why they are or are not used in your soil survey area.
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-	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%

limiting minor components in a map unit.	<ul style="list-style-type: none"> • should not exceed 10%
Cycle 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 why it is what it is. Look at the inclusions and decide whether they are similar or dissimilar. • Give them the quiz provided.
Cycle step 5	Debrief, MLRA SSO leader addresses any questions and concerns.
Refresh.	Within a week, repeat some of the above for retention purposes.

SF-182

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

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 within the map unit.

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