READING GUIDE*

Soil Map Units

Soil Survey Division Staff (1993), Chapter 2, p. 22-44 (p. 7-22)

OBJECTIVE: *To understand the proper design, delineation, and interpretation of soil map units.*

1. What is a *map unit*? What is a *delineation*? What are map unit *components*?
2. What are differences between a map unit and a taxonomic unit?
3. Under what conditions is only part of a polypedon is represented in a delineation? A complete polypedon? Several polypedons?
4. What factors control the kinds of map units used in a survey? What tests must be evaluated when designing map units for a survey?
5. Why might it be important to reflect differences in genesis and morphology, even if these differences do not affect current interpretations?
6. Why are soil taxonomic classes useful for defining the characteristics of soil map units? Why are different taxonomic categories (e.g., series vs. Great Group) used for different surveys?
7. **What factors influence how map units are designed and defined for a given survey?**
8. What properties are useful for delineating phases? **WHY?** Which are not? **WHY?** Give examples of each.
9. What is a *consociation*? May soils other than the named series and phase exist within a consociation? What is the general composition of a consociation relative to the named series and phase and included soils?
10. When is a *complex* used on a soil map? How is an *association* different from a soil complex?
11. What is an *undifferentiated group*? When is an undifferentiated group used on a soil map?
12. What is an *inclusion*? Why do inclusions exist within map unit delineations? What is the significance of *similar* vs. *dissimilar* inclusions? *Limiting* vs. *nonlimiting* inclusions?
13. **Why is it important to know about inclusions within a map unit delineation?**
14. What soil properties can be used to differentiate phases? Which are most common? **Explain the importance of each.**
15. What are *miscellaneous areas*? What are some commonly recognized miscellaneous areas?

SYNTHESIS:

16. What are examples of land uses in West Virginia that can be limited by soil properties? What specific features, if observed in a soil, would lead you to conclude that such a limitation existed? How would you design a soil map unit to help a user identify the presence of such limitations?

* *Questions in plain type represent basic facts and concepts. Questions in **bold** type are those that are answered in the text but require more careful consideration. The Synthesis questions at the end help you apply the facts and concepts to a relevant issue.*