## **READING GUIDE\***

## Soil as a Natural Body II: Relief

see Buol et al. (2011), Chapter 3, p. 113-118

**OBJECTIVE**: To understand the role of relief (topography) in regulating soil forming processes, and to recognize the influence of various terrain attributes on soil development, soil properties, and soil management.

- 1. What is *relief*? What variables are used to quantify relief (topography)?
- 2. How is slope configuration described? How does slope configuration (slope shape) influence soil forming processes and resulting soil properties?
- 3. What slope positions are recognized in most landscapes? Describe the characteristics of each.
- 4. What is the difference between an *open drainage system* and *closed drainage system*? **How does** drainage pattern influence soil forming processes and resulting soil properties?
- 5. What is a catena? What is a toposequence? How are they similar? How are they different? **How can toposequences be used to study soil genesis?**

## SYNTHESIS:

6. How does relief influence or interact with other soil forming factors (parent materials, climate)? Explain your answer.

7. In terms of land use, what are the pros and cons of using or developing on floodplains and stream terraces? Colluvial footslopes?

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<sup>\*</sup> 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.