

Chapter 11: Soil: The Least Renewable Physical Component Of The Ecosystem

Read: All sections (very briefly skim 11.6, 11.7)

1. Define soil in terms your parents would be able to understand (distinguish between soil and dirt).
2. Define and briefly discuss the following physical properties of soils: texture (3 major components), structure (terms commonly used to describe), porosity (what it is and why it's important), consistency, bulk density, aeration (why important), and temperature (why important).
3. Given two identical plants growing on two soils of different texture that have both received the same amount of water: describe how one plant may wilt when the other doesn't (hint: be able to interpret Figure 11.4 A).
4. Explain the importance of soil organic matter to the forest ecosystem.
5. Briefly describe the importance of small soil organisms to the health and productivity of forest ecosystems.
6. List and describe the importance of five major factors that influence soil development.
7. Describe three major reasons why soils are important to plants.
8. Explain to a high school forestry class why soil conservation is vital to the long-term productivity of the forest.