

Alberta Envirothon Soils/Land Use Key Points

Students should be able to:

- 1. Recognize soil as an important and dynamic resource.
- 2. Recognize and understand the features of a soil profile.
- 3. Describe basic soil properties and soil formation factors.
- 4. Understand the origin of soil parent materials.
- 5. Identify soil consistencies (e.g. clay, organic matter, sand and silt).
- 6. Identify and list soil characteristics (e.g. texture, structure, etc.) and their relation to soil properties.
- 7. Determine basic soil properties and limitations (e.g. mottling and permeability) by observing a soil pit or a soil profile.
- 8. Understand the nature of plan nutrients and how they are held by soil.
- 9. Recognize the characteristics of wetland (hydric) soils.
- 10. Understand soil drainage classes and know how wetlands are defined.
- 11. Understand soil water, its movement, storage, and uptake by plants.
- 12. Understand the effects of land use on soils.
- 13. In land use planning discussions, discuss how soil is a factor in or is impacted by non-point source pollution.
- 14. Identify types of soil erosion and discuss methods for reducing erosion.
- 15. Utilize soil information, including a soil survey.