

Presentation Notes

Presentation How Soils are Formed

Lesson 4.1

Notes from Presentation:

Soil Development

- the following factors contribute to soil formation
 - climate
 - organisms
 - time
 - topography

Climate

- climate includes several forces that act upon soils, which break down rock into smaller fragments and eventually down to small particles
 - rainfall
 - temperature

Organic Matter

- add nutrients to the soil
 - plants-- decaying roots and leaves
 - soil organisms-- break down organic material

Parent Material

- soil comes from parent material
- soil forms from a rock broken down by weathering or chemical processes

Time

- spils develop at varying rates depending upon the climate and other formation factors
- the forces that form a given soil indicate how long it took the soil to be formed

Topography

- top of hill- larger particles and less organized
- bottom- smaller particles and deep

Soil Development Classifications

- addition- accumulation or deposition
- reduction- leaching and erosion
- translocation- movement within soil profile

transformation- soil changes in place by weathering or microorganism conversion

Erosion

- the opposite soil formation is erosion, which has a detrimental effect on soil
- erosion comes in two forms-- water, wind
- steep ground
- too much irrigation
- working soil in a rainy season
- not protecting soil with ground cover
- allowing wind to blow across worked soil

Soil is Gone

- poor crop production
- unusable
- more inputs

AFNR Reflection Page

List five key points that are important to remember from this presentation.

1. Topography
2. Soil Development
3. Soil comes from parent material
4. Translocation
5. Organic material adds nutrients

List three ideas or concepts that this new information has in common with previous things learned.

1. Parent Material
2. Organic Matter
3. Time

List questions or ideas that remain unclear about the information presented that should be asked for clarity at the appropriate time.

N/A