



4-H Soil Observation Data Sheet

A record is part of your 4-H project. Keep your record neat, clean, and up-to-date. It's best to use a pencil. Write clearly. If you need help ask your parents or leaders. If you need more space, add notebook paper to your record.

Date _____ Crew members _____

Plot no. _____ Location _____ Weather _____

General data

Air temperature: 3 feet above ground _____ just above ground _____

Soil temperature: in organic layer _____ 3 inches deep into mineral soil _____

What is the soil moisture content of the mineral soil? (*circle one*) wet moist dry

How does the soil texture feel? (*circle one*) gritty (sand) smooth (silt) sticky (clay)

List the soil name (type) and map symbol according to the soil survey for your county. Include any important information (for example, percent of sand, silt, or clay).

List plants growing in this plot.

What is the relationship between the soil texture (sand, silt, or clay content) and plants?

What is the slope of this plot? (*circle one*) none (flat ground) 5–25% 25–50% over 50%

List any erosion concerns.

Explain how land uses (recreation, construction, logging, tree planting, grazing) could affect the soil resources in this plot.

Analyzing soil horizons

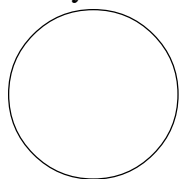
Contents of layers above top soil (if existing)

Select an area about 2 or 3 feet square on the ground. Sift through the top 3 inches, recording the evidence of plants and animals you observe. Replace the ground in as near original condition as possible.

Term and definition	Name or description of item in the soil	Quantity	Describe the characteristics (example: feel, smell, color)
Litter (identifiable dead plant or animal material on surface)			
Duff (partially decomposed, identifiable organic matter compacted)			
Humus (almost completely decomposed, non-identifiable organic matter)			

Soil horizons data

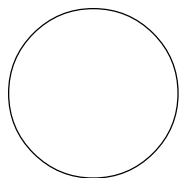
Sketch your soil profile, label the horizon, and record the data.



Horizon _____ Depth _____ Color _____

Texture _____ Structure _____ pH _____

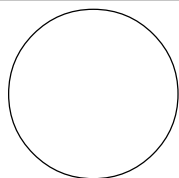
Plant roots visible _____



Horizon _____ Depth _____ Color _____

Texture _____ Structure _____ pH _____

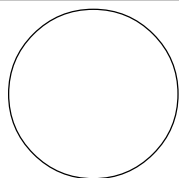
Plant roots visible _____



Horizon _____ Depth _____ Color _____

Texture _____ Structure _____ pH _____

Plant roots visible _____



Horizon _____ Depth _____ Color _____

Texture _____ Structure _____ pH _____

Plant roots visible _____

Parent material (C horizon)

Describe type of rock in the bedrock (if present)

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