**SOIL ANALYSIS DATA**

Record data in the table below. For several of the variables measured (see below), prepare graphs with the various sample quadrats on the x-axis and the variable in question on the y-axis. This could optionally be done by entering the data from the table into a spreadsheet and having the computer make the graphs.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Location | 1st Quadrat | 2nd Quadrat | 3rd Quadrat | 4th Quadrat |
| Moisture Status(range) |  |  |  |  |
| Structure(label) |  |  |  |  |
| Color |  |  |  |  |
| Consistence(category) |  |  |  |  |
| Texture(label) |  |  |  |  |
| Presence of Roots & Rocks(none, few, many) |  |  |  |  |
| Presence of Free Carbonates(none, slight, strong) |  |  |  |  |
| pH(range) |  |  |  |  |
| Nitrogen(range) |  |  |  |  |
| Phosphorus(range) |  |  |  |  |
| Potash(range) |  |  |  |  |
| Infiltration Rate(inches per minute) |  |  |  |  |
| Soil Temperature(°F) |  |  |  |  |

**Are your data reasonable?**

Texture

In general, soil texture is similar as you go deeper into the soil, with a gradual increase in clay. If there is a very sharp difference in texture (such as a clayey soil over a very sandy soil) this may be an indication of a different parent material due to deposition. This may occur if you are in an area near a stream where flooding is common, or where human activity has disturbed the soil and *fill* has been added.

Structure

Granular structure is generally found where there are many roots. Soils with high amounts of clay typically have blocky or massive structure.

Consistence

When the soil has single grained structure, the consistence is always loose and the texture is usually sand or other very sandy texture such as loamy sand.

Carbonates

If free carbonates are present, the pH should be 7 or above since high amounts of calcium carbonate decrease the soil acidity and increase the pH.

How do your findings match up?

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**Presence of Free Carbonates**

none

few

many

1st Quadrat

2nd Quadrat

3rd Quadrat

4th Quadrat

Sample Quadrats

Amount Present

**Infiltration Rate**

0

¼

½

¾

1

1¼

1½

1st Quadrat

2nd Quadrat

3rd Quadrat

4th Quadrat

Sample Quadrats

Inches Per Minute

**Soil Temperature**

65

70

75

80

85

90

95

1st Quadrat

2nd Quadrat

3rd Quadrat

4th Quadrat

Sample Quadrat

°F