



Working with abiotic variables - *continued*

Determining Soil texture

Soil texture describes the relative proportions of sand, silt, and/or clay in a soil.

Soil texture is important because it affects the water and nutrient holding of a soil which in turn affects what sort of vegetation can grow in that soil. Coarse soils are usually less able to hold and retain nutrients and moisture than fine soils.

At our sugarloaf study site we often find the soil is one of the following textures:

Loamy sand

Clayey sand

Sandy loam

TASKS:

- To determine soil texture we will be getting our hands dirty. [This video](#) demonstrates the bolus and ribbon method we will be using. (Watch from 1.19 - 3.50)
- [This instruction sheet](#) gives a good outline of different soil textures and the steps we will take to measure them.

Link URL: <http://fieldofmarseec.nsw.edu.au/wp-content/uploads/2014/01/Soil-texture-test-instructions.pdf>

MEASURING SOIL TEMPERATURE

Soil temperature is an important ecological factor because it affects the germination of seeds as well as the growth rates of seedlings and roots.

When measuring soil temperature, it is important that the soil thermometer penetrates the soil and not just the layer of leaf litter, in reality this means a depth of 5 - 10 cm.

TASK:

[This information sheet](#) shows how to measure soil temperature with a soil temperature probe:
<http://fieldofmarseec.nsw.edu.au/wp-content/uploads/2014/01/Soil-temperature.pdf>