



Measuring Soil Temperatures ● 1

How to measure variations in soil temperature at increasing depth

You will require a soil auger, digitalised temperature probe and a ruler

- 1 Select the site, which is representative of soil type A.
- 2 Using the soil auger, bore your first core (NB: this should be deep enough to take at least 3 temperature readings - at least 25cm).
- 3 Lay your sample along the ground and using the ruler, mark the midpoint of each depth increment. Insert the temperature probe to measure the soil temperature at depths of 5cm, 15cm and 25 cm.
- 4 Record the results in the table below. Continue with the same borehole until you reach a depth of 25cm (if you hit rock select a different sample nearby).
- 5 Underline the terms which best describe the colour, texture and moisture content of your core.
- 6 Repeat your readings at two separate, but representative, sites elsewhere with the same soil type. Repeat stages 1-6 at soil types B & C.

Soil type



All temperatures are °C

Depth of soil	Sample 1 temperatures	Sample 2 temperatures	Sample 3 temperatures	Average across 3 samples
0 - 10cm Midpoint of depth is 5cm				
0 - 10cm Midpoint of depth is 10cm				
0 - 10cm Midpoint of depth is 25cm				
	COLOUR : very dark, dark, average, light. TEXTURE: coarse sand, fine sand, silt, clay. MOISTURE : very wet, wet, moist, dry, dusty	COLOUR : very dark, dark, average, light. TEXTURE: coarse sand, fine sand, silt, clay. MOISTURE : very wet, wet, moist, dry, dusty	COLOUR : very dark, dark, average, light. TEXTURE: coarse sand, fine sand, silt, clay. MOISTURE : very wet, wet, moist, dry, dusty	

Underline the terms that best describe each core

