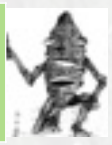

Working with abiotic variables

Measuring Air temperature, humidity & wind speed

Air temperature, humidity and wind speed are important abiotic factors that affect living things

Together with aspect (see 3.4.3) they influence the moisture levels of the soil, leaf litter and vegetation itself.

TASK:

Watch this video which explains how to use the Kestrel 3000, a specialised instrument that measures all three factors.
Link: https://vimeo.com/72245347

MEASURING LIGHT INTENSITY

Light intensity is the main source of energy in ecosystems.

In a forest foodchain the green plants are the producers that use light energy to photosynthesise and produce energy which is in turn used by the consumers.

Light intensity controls rates of photosynthesis and plant growth and, together with light duration (the length of daylight hours in a day), affects flowering, germination and consumer behaviour.

Too much light energy, however, will damage the chloroplasts (photosynthetic organelles in the plants leaf cells) and for this reason many Australian plants have a shiny coating on their leaves to reflect excess light.

The unit of measurement for light intensity is lux.

TASK:

Watch this video that details how to measure light intensity using a light meter.
Link: https://vimeo.com/85314012