## ECOLOGICAL SAMPLING

## What will we do?

We will perform this activity in and around Tuck creek, in groups of approximately five students. When we get to the creek I will explain boundaries and safety instructions, you will then complete the following:

- 1. Use a 4 m length of rope and 4 tent pegs to mark off a 1  $m^2$  area near the creek.
  - a. Insert the pegs into the pre-tied loops in the ropes.
  - b. Insert one peg into the ground, using the mallet if it is difficult.
  - c. Stretch the rope out until tight and put the next peg into the ground.
  - d. Repeat until you have all four pegs in the ground, making a square.
- 2. Count the number of each type of organism, plant and animal, found in the area you have created.
  - a. Count all organisms found on the surface of the square.
  - b. Using a garden spade, gently turn over the soil and count any organisms found under the surface of the square
    - i. Do not dig more than 10 cm into the soil.
- 3. Record all data in a chart.
  - a. Include columns for the name of the organism, the number of that type of organism, a description of the organism, and an image of the organism (see example)
- 4. Document, on a separate page, observations of other organisms you see around the creek.
- 5. Document additional observations (other things you notice with your senses) about the creek area.
- 6. After digging in one area for a while choose a new area.
  - a. You are not to move until instructed.

Note: There will be some organism for which you will not know the name. Simply draw them/take a picture of them, record observations, and then later you may use the internet to see if you can determine what type of organism it is.

## What should I bring?

- **W** Clothes that can get dirty
- 🕷 Extra shoes
- H Gloves
- 🕷 Jacket
- Cardboard to kneel on
- 🕷 Clipboard

- Small shovel (garden spade)
- H Pencils
- Heaper
- We Your Chart (will be made today)
- May bring a camera/phone AT YOUR OWN RISK

Example Observation Chart

Organism	Number	Details	Image
Spider	++++	black, small, dots on it, moves quickly	
Bee		looked fuzzy, made a buzzing noise, black and yellow with white wings	X
Dandelion	++++ 	white, no yellow lext, felt soft, very light	TACA