ADOPT A BUSHLAND

NAME

DATE

STUDENT ACTIVITY – YEARS FOUR TO SEVEN

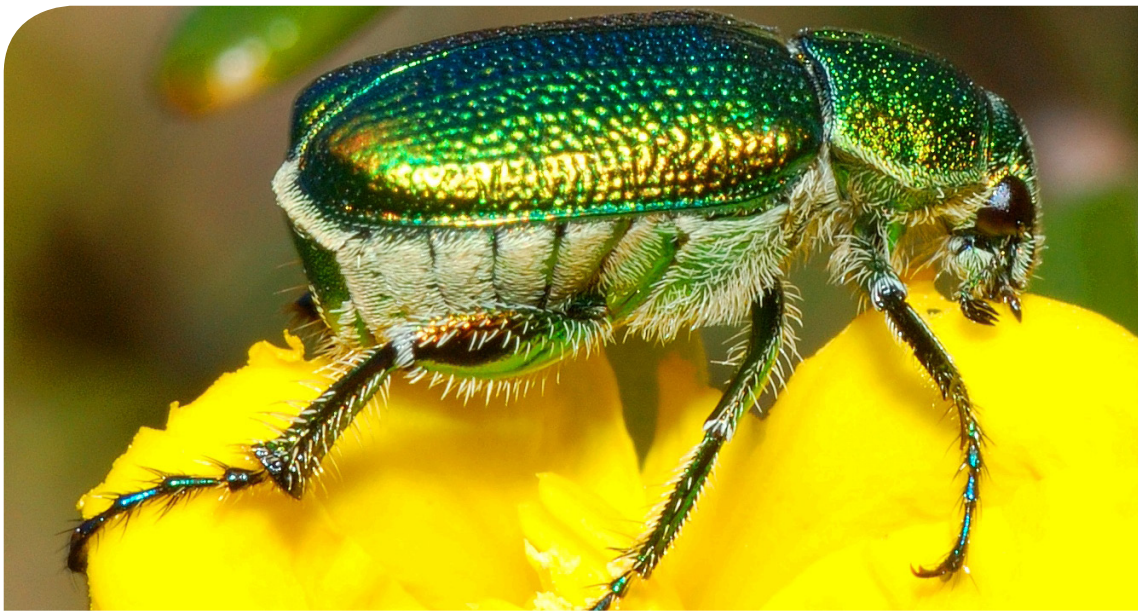
EXPLORING LEAF LITTER

A layer of leaf litter often sits on the top layer of soil in bushland. The leaf litter is made up of plant debris such as leaves, twigs, bark, seeds or nuts. Leaf litter is a very important part of the ecosystem, providing a home for many living things.

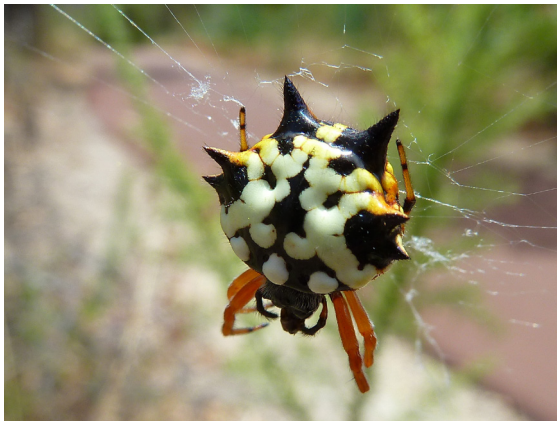
When leaf litter decomposes it adds nutrients back into the soil. The layer beneath the leaf litter is called humus. Humus is decaying plant matter that provides nutrients for plants and helps the soil to hold water.

There are many living things in the leaf litter such as microscopic bacteria, fungi and invertebrates. Invertebrates are animals which have no backbone (no vertebrate). Some help to break down the leaf litter, while other invertebrates hunt for food.

You are going to explore the leaf litter to see which living things you can find.



Little Green Spring Scarab



Christmas Spider

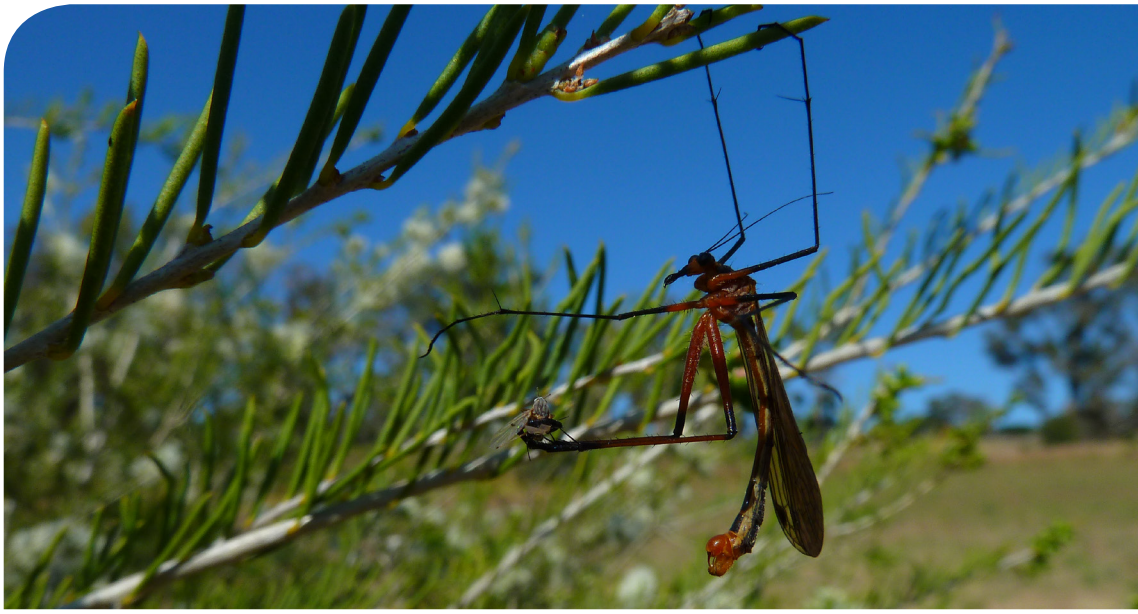
Millipedes

You will need

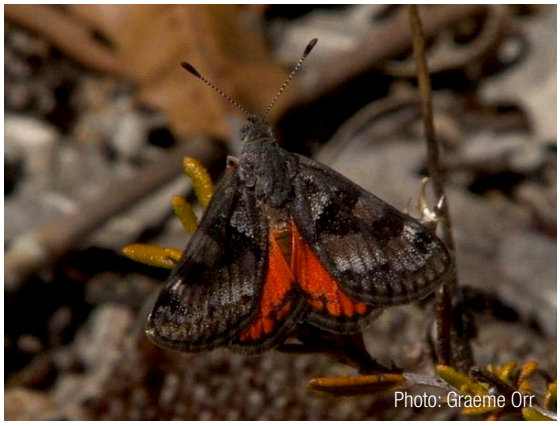
- gloves
- garden trowel
- forceps or tongs
- garden forks
- white desk tray or similar
- smaller containers e.g. yoghurt tubs
- magnifying glass

Method

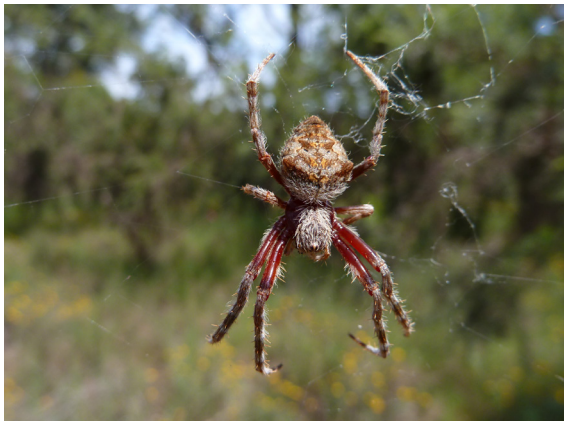
1. Collect all the equipment and carry them in the white tray.
2. Find a place where there is enough leaf litter for at least two scoops using the garden trowel.
3. Put on a pair of gloves – these are for safety. Invertebrates can bite or sting!
4. Place two scoops of leaf litter into the empty white tray.
5. Very carefully look through the leaf litter using the garden fork and forceps. Place any invertebrates into the smaller containers. Only put one living thing per container.
6. Record observations in the table of results titled 'Observation of Leaf Litter Living Things'.
7. Clear the tray out putting back the leaf litter and invertebrates. Push aside the leaf litter and put two scoops of humus into the white tray.
8. Very carefully look through the humus using the garden fork and forceps. Place any invertebrates into the smaller containers. Only put one living thing in each container.
9. Record observations in the table of results titled 'Observation of Humus Living Things'.



Scorpionfly



Graceful Sun Moth



Woolly Spider

Observation of Leaf Litter Living Things					
Name	**Number (tally)**	**Number of body parts**	**Number of legs**	**Number of antennae**	**Other**
Caterpillar	III	1	64	2 (1 pair)	brown and green

Observation of Humus Living Things					
Name	Number (tally)	Number of body parts	Number of legs	Number of antennae	Other

Questions:

1. Draw a bar graph of the results from the observation tables.

2. Which group had the most number of living things? _____
_____
_____
_____

3. Which group had the least number of living things? _____
_____
_____
_____

4. What is a decomposer? _____
_____
_____
_____

5. Which living things are decomposers? _____
_____
_____
_____

6. What is a consumer? _____
_____
_____
_____

7. Which living things eat other invertebrates? _____
_____
_____

8. Did you find any living things in the humus that weren't in the leaf litter? If so what?_____
_____
_____

9. Classify your invertebrates. Put the name of the invertebrates into the right box.

Insects 6 legs, 3 body parts (head, thorax and abdomen), antennae	**Arachnids** 8 legs, 2 body parts (head, abdomen)
Chilopods 1 pair of legs on each body segment, flat body, carnivores	**Diplopods** 2 pairs of legs on each body segment, round body, herbivores
Annelids no legs, segmented body	**Molluscs** tentacles with eyes, shell, flat foot, asymmetrical