

Educator Notes:

Investigating the soil food web



Learning and engagement approach

- This activity is designed to engage young learners aged from 7 – 13
- The activity is intended to:
 - Facilitate an observation of soil samples
 - Allow children to look closely for living things in the soil
 - Demonstrate the importance of things living in the soil
 - Increase awareness of biodiversity.

Choosing a location for your investigation

- The soil food web is most obvious in the organic layer. The organic layer is where leaves, twigs, mulch and dead plant material is found.
- We suggest an area that is shaded and moist.
- Please conduct the identification component of this activity in the shade, as heat and sunlight can hurt the organisms.
- Be sure to return the samples back to where you found them after the children have finished looking at them.

Safety considerations for the activity

- Check the weather before conducting any outdoors activity; if there is going to be extreme temperatures, storms or high wind, postpone the activity.
- Ensure that everyone is wearing closed shoes, hats, sunscreen and has a water bottle handy.
- Keep any allergy plan information at hand and any associated allergy medication.
- The leaf litter can be home to animals such as spiders and centipedes; make sure children know not to handle animals and only move them with paintbrushes and spoons.
- Ensure that everyone washes their hands after finishing this activity.

Sourcing magnifiers

Magnifiers can be bought from discount stores and other similar shops, however most devices have a camera that zooms in on a subject quite well. There are also apps that transform a device's camera into a macro-lens.

Reference resources

- Sustainable Gardening Australia has a good overview of the soil food web and they also include a diagram that elaborates on the food web and its components.
- Springtails are small invertebrate animals that live in the compost layer. There is a [good overview about Springtails](#) in *The Conversation*.
- Find out all about fungi and what the mycelial threads look like in this [video from Gardening Australia](#)
- Cool Australia provides an elaboration on [Scientific Drawing Guidelines](#)

This activity can be conducted as a stand-alone activity or linked to:

- [Getting the buzz on bees and other beneficial insects](#)
- Creating composting
- [Installing a no dig garden bed](#)

