

Exploring Darwin's Worms: Worm Extraction



· EXPLORE ·
SOILS

Summary:

If you are wanting to categorize or build your own worm jars, you'll need some worms to look at and utilise. Worms operate at different levels in the soil and not all soil makes appealing or suitable habitats for worms.

Those with imported soil (top soil is commonly placed on amenity areas or recently landscaped) may find that the soil is not deep enough for the deep burrowing worms. While you may also struggle to find any of the composting types of worms in a soil with little organic matter.

For those who need to import worms it is possible to buy composting worms as it is the anecic worms which are sold as fresh water fish bait. However, it is worthwhile examining your own soils prior to spending money. These simple methods for extracting worms can be used with learners of all ages, with fun aspects such as a rain dance incorporated for younger learners.

Learning Objectives:

- Understanding the physiological and environmental needs of worms
- Examining the worms that exist in a soil environment

Equipment:

- ~4m of string
- 4 stakes
- Warm water
- Watering can
- Mustard powder
- Collection pot/s
- Trowel

Preparation:

None required.

Time Required:

Introduction 2 minutes.

Mark out 1m² with the string and stakes, 2 minutes.

Apply water, 5 minutes

Wait and collect worms, 10 minutes

Apply water, 5 minutes

Wait and collect worms, 10 minutes

Background Learning Needs:

None.

Risk Assessment:

Hazard	Likelihood	Severity	Mitigation
Injury illness from soil ingestion	Low	Medium	Use gloves when handling the soil
Irritation to eye from contact with mustard/vinegar	Medium	Low	Wear goggles and heat proof gloves
Site/local specific risks	Unknown	Unknown	Anyone running this activity is advised to conduct a risk assessment for the specific site and conditions

Description of Activities:

1. Mark out 1m² with the string and a stake in each corner.
2. Warm water is preferable, apply 10 litres gently over the marked area. A watering can with a rose is preferable.
3. Wait a number of minutes and some worms should begin to appear at the surface.
4. Collect those worms that appear.
5. Add a teaspoon of mustard powder to another 10 litres of water and apply again to marked area.
6. Wait and collect the worms that appear.
7. After 10 minutes, use a trowel to remove a chunk of the turf in the marked area, if there are many worms present in this extracted soil, consider digging a few holes and extracting the worms present in these.

Potential extension:

A simple worm divider can be made with a laminated sheet with the 4 groups of worms marked out and yogurt pots attached beneath, this allows learners to separate the worms into their categories at collection. See 'Types of worms' activity for more information