

Exploring Darwin's Worms: Worm Types



· EXPLORE ·
SOILS

Summary:

Great Britain is home to 29 species of earthworms and each of these can be divided between 3 ecological groupings, these groups reflect the burrowing and feeding habits of these worms. It is a useful and fun way to divide worms that you find and understand more about their activities in the soil and role in building soils.

Learning Objectives:

- Ecology and behaviour of earthworms
- Role of worms in soil development

Background Learning Needs:

Basic understanding of soil formation processes

Worm Groupings:

Earthworms have various degree of pink/red pigmentation, this is essentially UV protection. For children this can be fun to describe as the worms tan, this pigmentation is part of the way distinguish between the ecological niches of the worms. Worms are a critical agent in aggregation of soil, their casts (feces) add bacteria and mucus to the soil particles, gluing them together and progressing the chemical decomposition of detritus. Additionally, their mucus lining their skin lines their burrows and also creates aggregates. Their processing of fresh leaf litter to rich humus to fine organic rich soil fully mixed with geological weathered remains. Worms move this rich humic material within the soil profile, mixing the soil.

Epigeic:

These are entirely pink/red and often with paler banding across the entirety of their bodies length. They live within the litter deposits on the surface of the soil, which they also feed on. They make no burrows, moving between the rotting leaf surfaces and humus layer that forms the top horizon of the soil. They are typically short and skinny worms.

Endogeic:

These worms have no pigmentation as they never come to the surface, solely moving around topmost organic matter, the O and A horizon. They feed on the rich rotting detritus in which they build their horizontal burrows, which forms a network of shallow tunnels connecting together below the surface of the soil. These are easily distinguished by their small size and pale/grey bodies.