

Soil life

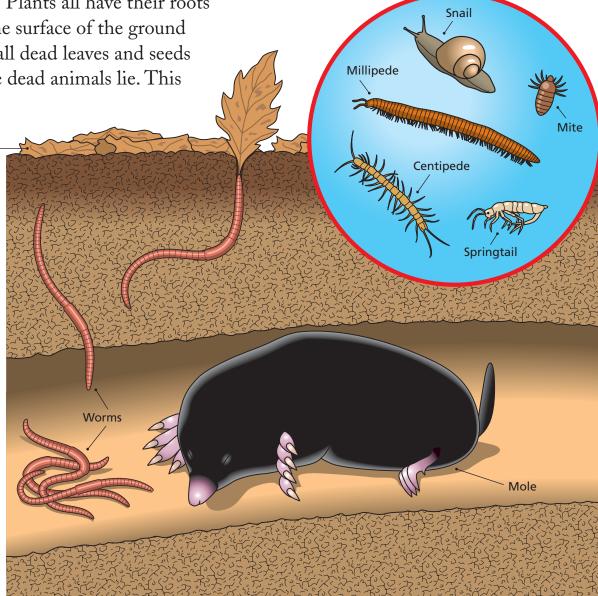
A huge variety of life can be found in the upper layers of the soil.

When you walk across open ground, you may think that there is nothing below your feet. But hidden out of sight in every soil there are huge numbers of animals that make the soil their home (Picture 1).

Underground homes

Why would an animal want to live underground? Plants all have their roots in the soil. The surface of the ground is also where all dead leaves and seeds fall and where dead animals lie. This provides a plentiful supply of food for many creatures. The soil also gives shelter from the cold and heat.

But, of course, it is much more difficult to move around inside the soil than in the air or in water. So animals have to have special shapes that allow them to burrow



(Picture 1)
Animals that
live in the soil
and where you
might find
them.

Leaf litter -

about. If they are small, animals can also move around among the dead leaves and still keep largely out of sight.

Where earthworms live

Earthworms eat dead plants and animals. They also burrow their way through the soil by eating it. An earthworm eats about its own weight of soil and food each day.

There is no point in an earthworm burrowing too deeply, however, because the deeper parts of soil contain less to eat. So the home (habitat) of an earthworm is in the soil just below the surface – the region we normally call the topsoil.

Where springtails live

Springtails are tiny, wingless insects less than 10mm long. Many are able to spring from place to place, but mostly they crawl about in the leaves that rest on the soil. Springtails eat dead leaves and so they live where the leaves are moist and soft. They do not eat the dried leaves on the surface.

Where moles burrow

Moles are the most common large animals to live entirely in the soil. They eat earthworms and so make their home in the topsoil where the earthworms are to be found.

Investigating the earthworm's home

You can dig out a section of moist soil using a trowel and put it in a glass jar.



(Picture 2) A jar is a suitable place to keep worms for a few days. Place a layer of soil at the bottom, then a layer of sand and a layer of leaves above this. Add two or three worms. You can see how the worms work as they mix the yellow sand with the brown soil.

Place a layer of sand in the jar, then a layer of moist, dead leaves. Place some earthworms on the surface. If you cover the sides of the jar with black paper and keep the soil moist, the earthworms will behave quite normally. If you remove the black paper from time to time, you can see just where the earthworms prefer to live (Picture 2).

Summary

- Many animals live in the soil because it is sheltered.
- The soil surface is a rich source of food and most animals live in the topsoil close to their food.