

The seen heroes



ANTS (FORMICIDAE)

Ants often just visit the compost heap to get food, but it can become their home. By burrowing, they provide air passages, as well as breaking down some of the material itself.

They feed on aphid honeydew, fungi, seeds, scraps, other insects and sometimes other ants. This bringing of fungi and other organisms into their nests helps move minerals around the compost, especially phosphorus and potassium.



FRUIT/VINEGAR FLIES (DROSOPHILIA SPR.)

During the early stages of the composting process, flies provide ideal airborne transportation for bacteria on their way to the pile. Fruit flies' larval phase is spent in compost as maggots, feeding on yeast in the fluids produced as fruit decomposes and crawling to a drier area to pupate. The adults feed upon organic vegetation.



WOODLICE (ISOPODA)

Related to shrimps, lobsters and crabs, these are the only crustaceans to have adapted to living a terrestrial life. They feed on dead and rotting vegetation and are able to break down the cellulose fibres contained in woody material.

They are of great benefit to the composting process as they chew up the organic matter, making it more suitable for microbes and worms when expelled.



SLUGS AND SNAILS (MOLLUSCA)

The gardener's nemesis. These generally feed on living plant material, but will attack fresh rubbish and plant debris. Many feed on surface-rotting vegetation and fungi and then move down into the mineral structure

of the soil. Some species produce enzymes in their gut capable of digesting cellulose, making it readily available for the soil microbes to consume. Mucus, produced by slugs and snails in large quantities, may serve to promote the development of water-stable soil particles, thereby contributing to good soil structure.



PSEUDOSCORPIANS (CHELONETHI)

Resembling true scorpions in everything except their size, lack of tail and sting, these creatures are found in moist, decaying vegetation. Only 4mm long, these pseudoscorpions feed upon other litter dwelling creatures such as mites and spring tails.



MITES (ACARI)

A common compost invertebrate, mites are often mistaken for spiders. Compost mites feed on fungi, fungal spores, dung and detritus. Other species will consume nematodes, collembola and small prey items like fly eggs.



CENTIPEDES (CHILOPODA)

Despite their name, each of the 20 or so body segments of a centipede has one pair of legs and it can be known to have more than one hundred pairs of feet. The common centipede (*Lithobius forficatus*) – reddish brown/chestnut with

long legs and antennae – likes to live in dark, damp sheltered areas – compost bins are perfect.



MILLIPEDES (DIPLOPODA)

As saprophytes (consumers of decaying material), dead plant material, decaying wood and rotting leaves form the preferred menu list for millipedes, although some will eat carrion and fungi. They break down decaying matter, making it

more susceptible to microbial action, while their faeces is utilised by soil microbes.



SPRING TAILS (COLLEMBOLA)

Collembola represent one of the most abundant and widespread groups of soil arthropods and prefer a damp, moist area. Their common name, spring tail, derives from their ability to jump considerable distances (7-10cms).

They eat a wide range of foodstuffs, including fungi, mould, decaying plant material, algae, faeces, mosses, spores, pollen, while carnivorous species consume nematode worms and rotifers. They speed up the decaying process and are one of the very few creatures that are known to break down DDT in soil.



WORMS (ANNELIDA)

The king of the compost heap and a secondary decomposer, the worm selects food that is already being decomposed by microbes and decomposes it further. Worms are constantly tunnelling and feeding on dead plants and decaying insects.

Their tunnelling aerates the compost and enables water, nutrients and oxygen to filter down. Material passes through a worm's digestive system and is passed out in the form of casts, the richest and finest quality of all humus material.

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