

# Decomposers

## Level 1

### Bacteria

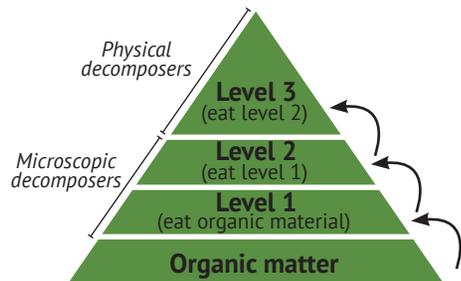
These microscopic organisms are the most important members of the compost food web. Bacteria digest the plant material by producing the appropriate enzyme to digest whatever material they find themselves on. The bacteria break down the tough cell walls of the organic matter.

### Fungi and actinomycetes

These move in after the bacteria. The actinomycetes give the compost a very pleasant earthy smell. Fungi get involved during the final stages of composting, when the organic material has been changed to a more digestible form.

## Level 2 and 3

After the bacteria and fungi have started the decomposition process, larger organisms move in to help transform the organic waste matter by physical action such as chewing, sucking and grinding.



# We're here to help



Our Master Composters support residents to compost. This helps them to provide a valuable resource for the garden, whilst at the same time each compost bin diverts around 150 kilograms of organic matter from the waste stream every year.

[www.homecomposting.org.uk](http://www.homecomposting.org.uk)

## Join us

Garden Organic brings together thousands of people who share a common belief - that organic growing is essential for a healthy and sustainable world.

We are a membership charity with many benefits, including free entry to Ryton Organic Gardens; our stunning demonstration gardens located just outside Coventry.

To find out more about our charitable aims and to become a member please visit our website:

[www.gardenorganic.org.uk](http://www.gardenorganic.org.uk)

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# The creatures in your compost heap



## Who lives in the bin

A compost heap isn't just a heap of dead stuff; it is a hotbed of biological activity.

One gram of compost can be home to literally millions of microscopic creatures. A whole range of creatures make up the complex food web found within a compost bin. These creatures feed on the decaying organic matter, as well as each other, to survive. They appear, like magic, just when they are needed.

So you can see that a compost heap is a bit like a **mini-beast nature reserve**. Many of the species that live in your bin or heap actively contribute to the composting process, while others such as ground beetles and centipedes, will use it as a temporary refuge as they hunt for a meal.

A compost heap can also provide temporary shelter for small animals such as slow worms and hedgehogs, which in turn eat slugs and snails, common pests in many gardens.

## Who eats whom?

Decomposition is part of the natural world. Many of the species you encounter in a compost bin have been recycling organic matter for millions of years.

There is a whole food web working together to produce compost; this includes a wide range of micro-organisms and invertebrates. The food web below illustrates which organisms eat what within the compost bin.

If you follow the arrows from the decaying organic matter you will be able to see which organisms feed off other organisms by either eating droppings or eating other organisms within the compost bin, helping to keep a balance in the population. In turn when the creatures die they become the decaying organic matter.

