

Ants.

Ants are abundant and important insects in many gardens.

Although ants can cause concern they are an important part of biodiversity.



Ants are related to bees and wasps (Hymenoptera). They live in nests that contain many hundreds and sometimes thousands of ants. Most are wingless sterile females, known as workers, but there will also be fertile females (queens), and males. More than 30 species of ant are found in Britain, a few of these can occur in gardens.

Ants are one of the most numerous animals and important components of ecosystems worldwide affecting fauna and flora of entire ecosystems. In gardens they can be important predators, but also manage greenfly and other aphids and can cause soil disturbance.

Ants are an important part of the biodiversity of a healthy garden.

Ants feed mainly on other invertebrates, including other ants

They also collect the sweet liquid known as honeydew, which is excreted by aphids and some other sap-feeding insects

Ants can protect aphids from ladybirds and other predators in order to secure their supply of honeydew. Increased numbers of aphids may result in more damage to plants

Ants do little direct damage to plants, although they can disturb soil around plant roots and deposit it on the surface during their nest building activities. This can be an issue on

lawns and where low-growing plants are being buried by excavated soil. They may also disturb plant roots in pots and containers. This disturbance can also mean that plants are more prone to wilting especially when dry at the roots

Sometimes ants will nest in a compost heap or bin. They will not be causing any damage in this situation

Some ants (mostly *Myrmica* species - commonly known as red ants) can sting, but for most people this is no more than a minor irritation

Non-pesticide control.

Ants should be tolerated in gardens wherever possible, they do not cause direct damage to garden plants and are an important part of the biodiversity gardens can support. They predate many other invertebrates

Unless nests are particularly troublesome, ants are best left alone. If a colony is destroyed it is likely that its place will be taken by in-coming queen ants, which take over the territory and may establish even more new nests

Disperse ant heaps on lawns by brushing the excavated soil on a dry day before the lawn is mown. If the lawn has an uneven surface due to years of ant activity, peel back the turf in the raised areas, remove excess soil and relay the turf. This is easier to do in the winter when ants are less active

A pathogenic nematode, *Steinernema feltiae*, is available from some suppliers of biological controls for treating ant nests in lawns and flower beds. The microscopic, worm-like nematodes are watered into the soil in places where ants are bringing soil up onto the surface. This nematode may also affect non-target insects

Biology

Ant nests contain one or more fertile female queen ants, which lay eggs in brood chambers within the nest. Most of the other ants in a nest are smaller wingless sterile females, which are known as worker ants. Their role is to maintain, guard and enlarge the nest, feed the larvae and gather food for the colony.

The white maggot-like larvae are fed on a liquid diet secreted by worker ants

When fully fed, the larvae turn into pupae

Some species of ants pupate inside spindle-shaped whitish-brown silk cocoons. These cocoons are often referred to as 'ant eggs'. The real eggs are very small and not easily seen with the naked eye

At certain times of year, ant nests produce winged ants. These are young queens and male ants, They often emerge *en masse* on what is sometimes known as 'flying ant day' These fly up and mate, after which the males die and the young queens try to find suitable places where they can establish new nests

Once mated, the queen ant no longer needs wings, so they are bitten off