

BEES, WASPS AND ANTS IN CHURCHYARDS

Bees, wasps and ants, of which there are 570 species, all belong to one family of insects.

Unfortunately all these insects are generally regarded as either a nuisance or positively dangerous and people seek to destroy them.

Although it is the social bees and wasps which are most well-known, there are many solitary species of bees and wasps which look similar, but are equally as valuable for conservation, and cause no harm

This factsheet concentrates on the problems they may cause and how to avoid them.

Why Are Bees, Wasps And Ants Special?

BEES are essential pollinators of plants and play a vital role in food production.

WASPS capture, sting and paralyse their prey of weevils, flies, caterpillars, aphids and spiders which are fed to larvae. They control pest species of crops.

ANTS are scavengers on insects and carrion. They are also food for a variety of birds, spiders, amphibians and reptiles.

Conservation Status

There are over 30 species of bees, wasps and ants identified as priority species under the UK Biodiversity Action Plan, including species of bumble bees, mining bees, flower bee, carder bees, cuckoobees, mason bees and wasps, ruby tailed wasps and 7 species of ants.

Conservation efforts often concentrate on the most recognised bumble bees as populations in Europe including Britain have declined massively in the last 50 years.

Other species are just as valuable but not as recognised. Mistaken identities can lead to the eradication of animals from a building, garden or even churchyard where they are doing no harm.

Churchyards and Burial Grounds are a real haven for many species of bees, wasps and ants.

Churchyard Ant Hills

These often ancient, archaeological features, up to a metre high are the work of the yellow meadow ant (*Lasius flavus*), a species of old pastures.



The visible above ground hill is the tip with the colony extending much further below ground. Inside the galleries, which are maintained by specialist worker ants, there may be up to 40,000 ants feeding on the honeydew from aphids, which are farmed by the ants. The aphids live underground on plant roots, and specialised worker ants milk the honeydew, taking it back to the other ants in the mound. In autumn ants collect aphid eggs and store them, returning hatched new aphids to the plant root areas in spring.

In early August, some ants hatch which have wings, and are males and females. They emerge from the mound, all at once to mate and the fertilised queens go in search of a suitable nesting hole for a new colony.

The ant hills are warm, and the disturbed soil results in the development of a distinctive collection of plants such as wild thyme and fine leaved grasses. The ant hills also attract birds and other invertebrates. 80% of a green woodpeckers' winter diet may come from ant hills. Grey partridge and choughs also feed on them.

Ant hills have such a value for conservation that they could be seen as a nature reserve worthy of protection in their own right.

Bees

There are 250 species of bee in the British Isles, and 90% of these are solitary. The bumble bee and the honeybee are the most well known social bees.

Bumble Bees

True bumble bees are hairy with a rounded shape and a buzz. They are social insects which often nest in old mouse or vole holes underground or in tussocky vegetation, with between 200-300 in a nest

In Spring, the fertilised queen emerges from overwintering in soil, feeds on nectar and pollen e.g. pussy willow, and is ready to lay eggs, so searches for dry cavity on or below ground surface to establish a nest. A ball of pollen, in a thimble sized waxen honeypot is filled with nectar and the eggs laid in it. The queen bee broods, crouching over them to keep them warm until they hatch. When the first daughters become adult worker bees, they forage for food, and the queen carries on laying eggs. These are fed by the workers which collect pollen and nectar from flowers. At the end of the season queens and males are produced which mate and the males die. Only new queens live over winter.

Bumble bees need a wide variety of flowers throughout the summer, from which to collect pollen and nectar.

Churchyards provide the three things necessary for bumble bees to thrive: nectar and pollen in the early spring for young queens to feed on, mouse holes for nesting and food for the young bees.

If there is a bees nest in the churchyard grassland then mark the nest with sticks and avoid mowing that spot. Nests are only annual so will not re-occur.



Wasps

All wasps feed their brood on flies, so they can be considered as beneficial. The harmless solitary species nest in cracks in stonework. It is the social wasps which cause alarm. Unfortunately they all look very much alike though their habits are different. The wasps which make their beautiful paper nests from chewed up wood hanging from tree branches are unlikely to sting or become a nuisance. It is the workers of the species which nest underground that are the problem. So please if you have wasps which are bothersome do not assume the wasps with the visible nests are causing the trouble.

How to improve your Churchyard for Bees, Ants and Wasps

- Areas of long, tussocky grassland attract small mammals, and the thick grass and mouse holes can become nest sites for bumble bees.

- Provide a variety of flowers producing nectar through the year. Ideally, these would be native wildflowers in grassland, but cultivated flowers in formal beds can be chosen for their food value e.g. Michaelmas daisy, ice plant.
- Undisturbed compost heaps and log piles provide nest and hibernation sites for bumble bees.
- Bundles of hollow stems in a sunny spot provide sites for solitary bees.
- Protect any ant hills from mowing or digging. They also need to be in full sun, and should be kept clear of overgrowing trees, brambles or shrubs.
- If the mound really has to be moved then cut it off at ground level in the winter. The ants below ground will remain unharmed. If the whole nest must be moved then do this in late August and move to a sunny spot.

Find Out More about the fascinating life styles of this order of insects, the aculeate hymenoptera.

The Bees, Wasps and Ants Recording Society
www.bwars.com

Buglife – The invertebrate Conservation Trust
www.buglife.org.uk

Amateur Entomologists' Society PO Box 8774
London SW7 5ZG www.amentsoc.org

FSC AIDGAP Guide to Bees of Britain

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