

Social wasps (*vespidae*)



August is here and so are the wasps. Large numbers of worker wasps are out hunting for food and causing misery to all alfresco eaters and drinkers.

They use their strong jaws to cut up insects and caterpillars. Wasps will also carry off pieces of meat from road kill, and of course our picnics and BBQs, to feed the young larvae in their growing colonies. The flying wasps need sugar for instant energy – hence their love for all sweet things like plums, figs and beer.

Wasps have evolved a caste system of males, females and workers. The females are the largest and when fertilised by the male wasps in the autumn, become queens. Wasp queens alone hibernate over winter in frost free places like log piles, sheds and attics. The colony that bred them dies with the first frosts in late autumn. While removing ivy from St Michael's church tower on a cold day last February, I found dozens of hibernating queens tucked away amongst the frozen ivy leaves.

On emergence from hibernation in the spring you will see the queens recharging their batteries in the sun, on early flowering plants like Cotoneaster. They drink sugar rich nectar for energy. They are vulnerable to late frosts at this time, which can decimate the wasp population for the year ahead. Every dead Queen is one less nest.

A wasp queen can choose to nest anywhere, commonly under roof tiles, garden sheds and holes in the ground, but I have found them nesting in riding hats, wellies, bird boxes, dressing gowns and watering cans, in fact anything that has been left undisturbed from the moment of her arrival on a warm April day. She builds her embryonic nest about the size of a golf ball in mid-April. Into this small nest she lays her first eggs. Very soon these eggs hatch and she feeds the larvae chewed protein from her hunting trips until they pupate into the first worker wasps of the year. They take over all the hunting, building, guarding and nursing duties in the colony, leaving the queen to continue laying more eggs. She never leaves the nest again.

Colonies typically contain several hundred wasps and reach the size of a football. In a good year of plentiful food, and if the queen has chosen a good site, the nest can reach the size of an unshorn sheep and contain thousands of workers. The workers co-operate to circulate air into the nest by rhythmically fanning their wings. A nest in a hot attic sounds like a big purring cat. The paper structure itself helps to insulate from the extremes of summer weather, and prevents moisture loss from the vulnerable larvae. The nest colour varies according to the wood pulp the wasps bring back .One nest I saw in an attic was a vivid pink and black striped affair and had been constructed entirely from a chewed up copies of the Financial Times!

Wasps are of great benefit to the environment as natural insect pest controllers and flower pollinators .Watching the nest growing and seeing the workers carrying in their array of insect quarry is a fascinating spectacle. The nest should be treated with respect and can be a very real hazard when discovered accidentally.

However, it is possible to rub along next to them, and it may not always be necessary to destroy the nest.

James Otway
August 2010