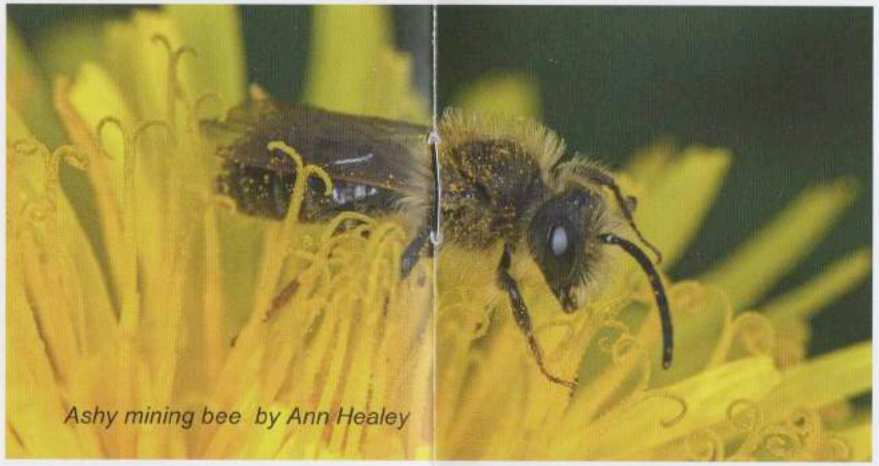
Bees and Wasps under your feet!

By Hugh Bradshaw



Ashy mining bee by Ann Healey

In the Park, as summer fades into autumn, it's hard to escape the frenzied attention of wasps as they seek a sugar rush. These are social wasps which, like honey and bumble bees, make nests and raise young colonially.

However, the Park is also home to over 150 species of solitary bee and wasp. As their name suggests, these insects do not live in colonies but rather make their own separate nests which can be in masonry, wood or the stems of vegetation but mostly they are made in tunnels in the ground. The sandy soil of the Park's acid grasslands provides an ideal environment for many of these insects.

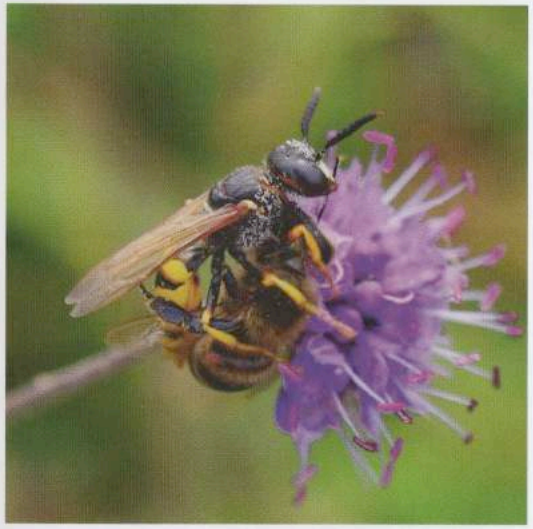
Solitary bees come in different shapes and sizes but many look like small furry honey-bees. They are important pollinators of wild flowers and also very helpful to farmers. The mining bees are the most numerous group and dig tunnels up to 60cm long. The female then lays her eggs on small balls of pollen and nectar in separate cells within the tunnel. Although called solitary bees, where conditions are right, many bees can dig tunnels in close proximity causing huge aggregations of bees.

The Tawny mining bee emerges early in the year. Its distinctive ginger hue gives a splash of colour in the spring whereas the Ashy mining bee, in contrast, is mono-chrome with two broad ashy grey bands on its back. Some mining bees are tied to flower sources like the Ivy mining bee, a recent coloniser to England, or the nationally scarce Bryony mining bee which has also been recorded in the Park.

Ivy mining bee by Ann Healey

Solitary wasps lead a much darker life. Unlike the bucolic existence of the solitary bee, the solitary wasp's lifecycle could come straight out of science fiction. Although adults generally feed on nectar (including flowering ragwort and bramble), the lava must feed on flesh. Female solitary wasps therefore spend a lot of time hunting for other insects. Once located the prey is paralysed by a sting but this does not kill it. Instead it enables the female wasp to build up a cache of living food, which will not decay, in its burrow to feed its larva.

The Park's wasps include the nationally scarce Bee wolf wasp which preys on honey-bees. Its tunnel can be up to a metre in length within which up to 100 honeybees may be cached.



Bee wolf wasp preying on a honey bee by Mike Waite

The Red-banded sand wasp collects caterpillars and it can be found in the sandier areas of the Park. Because the sand wasp itself is not large but the caterpillar prey may be, it often has to drag its victim on foot back to the burrow. The females are not averse to piracy, raiding each other's nests to steal the stores of caterpillars.

Other solitary wasp species prey on different insects but much is still to be discovered about them. Undoubtedly there are new species of bee and wasp to be discovered in the Park.

Top photos: Bee wolf wasp going to its tunnel by Nigel Jackman