

## **Red Mason Bees: Osmia Bicornis**

One of our most successful native, solitary bees, the Red Mason Bee is common across England, Wales and southern Scotland. Often overlooked, solitary bees represent up to 95% of the world bee population, and we have over 275 species of all bees across the UK.

They are important pollinators, but can be rather fussy feeders, often preferring only a few wildflowers. Red Mason bees are very efficient at pollinating orchard trees, as the females carry their pollen on the underside of their tummy. This makes them a bit messy, which helps to transfer pollen between flowers, rather than kept safe in pollen sacs on the legs of social bees.

They have a fascinating life cycle, which is easy to observe if you have a bee 'hotel' or nest box in your garden. They readily use these, made of bamboo or holes drilled in wood, as well as using holes in bricks and masonry, which is where their name comes from. They do not have a sting, so I have no worries about them being next to my back door, and I can watch them as they make themselves at home.



Adult bees emerge from their cocoons in late April and May, and they mate soon after. The male dies, his job done, and the female lays her eggs, often in the same place she started life as an egg. She backs into the brood cell to lay her egg deep in the narrow space, and then places a marvellous hamper of food for the egg - a parcel of pollen and nectar that it will feed on as it develops into a grub. After leaving this hamper of goodies, the female seals up the cell entrance with mud, which she collects and ferries to the nest. Watching them by my kitchen door, it is clear how industrious she is, making sure the entrance is fully sealed with mud, protecting the egg she has laid.

The grub, or larva, full of the pollen and nectar left by its mum, then pupates and overwinters in a cocoon it spins for itself. The adult bee is fully formed by the autumn, but spends the colder winter safe and snuggly in the protective cocoon. It comes out of the cell in late spring, almost exactly a year after it was first laid as a tiny egg.

## Question: How can gardens be made into better habitats for solitary bees?

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