

The Journal

Nature Notes

In response to my article in July's Journal, reader Jenny Tweddle from Littlethorpe was kind enough to send in this picture of a Leafcutter Bee that is nesting in her bug house. The bug house has been in her garden for several years, but it is only in the last year or so that it has been used so maybe there is some hope that mine will be used next year. All Leafcutter Bees are solitary bees that collect pollen on brushes of hair beneath their abdomens. They mostly nest in a variety of holes or crevices, such as hollow stems and gaps in mortar, so they readily adapt to using the lengths of bamboo cane often seen in bug houses.



The nest inside the burrow is constructed from cut pieces of green leaves, mainly ash, birch, honeysuckle and rose leaves. Some

species use up to 14 oval pieces of leaf stuck together with saliva to make the nest and a further 6 or 7 pieces to construct the lid that seals off the nest. It has been shown that the leaves help keep the nest dry and also have some antimicrobial activity. Within the nest, each cell is provided with sufficient pollen to enable the bee larva to grow to maturity and, after a single egg is laid, the cell is sealed with more leaf cuttings. The larvae pupate in the autumn and the adults hibernate in the cells over winter before emerging in the spring. You may have seen neat ovals cut from the leaves of your roses, such as those shown here in my garden - now you know what caused them. The bee stands on the leaf and, using its sharp mandibles, cuts around itself until the last cut frees the segment of leaf allowing the bee to fly away with its prize.





In addition to the better known Honey Bees and Bumblebees, there are more than 200 species of solitary bees in this country and these, including the Leafcutter Bees, are important pollinators of fruit, vegetables and garden flowers. One hazard of leading a solitary life is that while the adult bee is away gathering pollen or leaves, a parasitic wasp can enter the nest and lay its egg in the cell that is under construction. When the wasp egg hatches, the wasp larva eats the bee larva and its stock of pollen which enables it to mature; in this way it avoids all the hard work of building a nest and providing food for its offspring, hence the alternative name of Cuckoo Wasp. One such wasp is perhaps this country's most beautiful insect, a Ruby-tailed Wasp, which

occasionally visits my garden. At around one centimetre in length, it is easily missed.

Leafcutter Bees and Ruby-tailed Wasps are completely harmless, like all of the other solitary bees and wasps. Many have stingers, but they use these only when in fear of their lives and if one should sting you it is more like a mosquito bite than a sting. Similarly, bumblebees only sting as a last resort and should also be treated as a valuable addition to any garden.