

Homes for Solitary Bees.

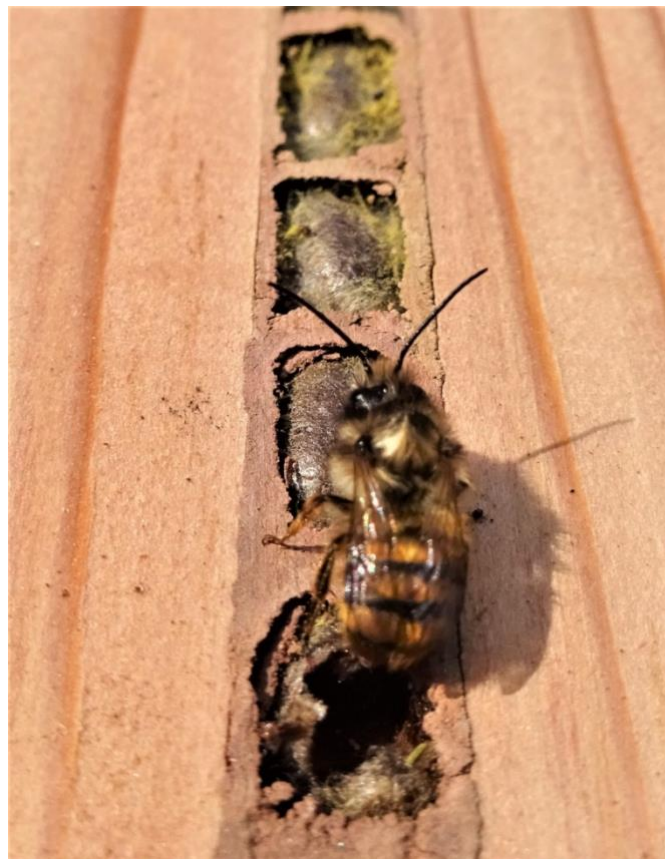
Ann Goddard

Walking down the garden path through the archway one bright spring day in 2020 I noticed a cloud of bees filling the air. On investigation a myriad of small volcano-like craters in the loose sandy soil around the base of the arch were observed – mining bees. Thus began a project to find out about solitary bees and bee homes.

There are approximately 270 species of bee in the UK, 24 species of bumblebees, one honeybee, and around 250 solitary bee species. (Bumblebee Conservation Trust 2021). About 90% of the UK bee species are solitary bees, playing an important part as pollinators. Unfortunately, around a third of wild bees are in decline in the UK. This is likely driven by various pressures including habitat loss, climate change and pesticides (Powney *et al* 2019).

Browsing around garden centres and online you will see a plethora of wildlife homes, bug houses etc. many of which have become popular. Research into such bee homes for conservation purposes raises questions. One research project, in Toronto Canada, found that some bee hotels could facilitate the increase of parasites, predators and diseases. When hotels were designed with varying nesting hole widths, different bees were encouraged to co-aggregate increasing the opportunity for parasites to attack related species, develop new hosts or affect more susceptible species (MacIvor and Packer 2015).

So, was a bee home a good idea or not? After choosing a design, I placed it in the garden in early Spring 2021 to see what would happen and it was quickly colonised by mason bees, then later in the summer by *Megachile* (leafcutter) bees



03. Bees just emerged. Ann Goddard.

In 2022: 15 out of the 17 cells emerged with two failing, an overall 88% successful emergence rate, confirming my choice of bee home and location. As I have discovered, bee homes need to be sited correctly and properly maintained. Tubes should be accessible so that debris can be removed as the bees are unable to do this themselves and some designs on the market are better than others (Entomologist Lounge, 2017). The test for mine will be how successful it continues to be in the future.

References

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Images

01. Tray from bee home showing cells. Ann Goddard.
02. Bee home with solitary bees emerging from cells. Ann Goddard
03. Bees just emerged. Ann Goddard



01. Tray from bee home showing cells. Ann Goddard.



02. Bee home with solitary bees emerging from cells. Ann Goddard.