

# The Api:Cultural Guide to creating homes for Solitary Bees

Attracting bees into your garden by planting the right types of flowers is relatively easy, but getting them to stay and make your garden their home means providing nesting habitat.

For urban solitary bees one limiting factor in our neatly managed gardens is nest site availability as many species require holes in rotting wood or un-disturbed areas of ground to dig their burrows.

You can help provide solitary bees with valuable nesting sites by creating easy to make bee hotels or artificial nesting mounds.



Above: Tawny mining bees nest in lawn and Leaf cutter bee

The simplest way to make a solitary bee hotel is find a block of wood and drill different sized holes into it and then erect on a south facing fence or wall. Mason, leafcutter and plasterer bees will use these to nest in.

Make holes of different sizes to fit different sized types of bees from 3-30mm across



Above: Home made solitary bee nest

Many species of Solitary Bee prefer to nest in hollowed out plant stems. Dried stems of cow parsley, Bamboo, Rhubarb flower stems or Teasel work well. Chop them into 10cm lengths and stuff into sections of guttering pipe or cleaned out tin cans and erect facing South /South East for best results.



Other species prefer to nest in dry sandy or clay banks. You can provide those species with a home by building a bird box with a water tight lid but leave the front of the box missing and open. Mix together sharp sand and a very weak amount of cement mix to loosely bind the sand particles together. Once the mixture is ready pour into the nest box and compact into the box cavity. When the sand mixture has dried make some holes in it then it can be hung up somewhere south facing where mason and miner bees may use it. You could also try this with clay rather than sand and cement.

Sparsely vegetated mounds of dry earth or sandy soil can attract ground burrowing species.

These home made nest boxes are just as good for bees as expensive shop bought ones and can be made on as small or large a scale as you like. Even small scale boxes will attract nesting bees.

left: a home made Mason bee box



## Examples of good materials to use to attract tube nesting bees

Many plants have hollow stems which when dried can be used to make nests boxes for tube nesting species. Many of these plants would naturally be used by bees for nesting in the wild but you can maximise their potential by cutting to size at the node ends and erecting them horizontally in bunches in sections of pipe, old tin cans or tied up in bundles. Avoid plastic tubes as they are non porous and can increase the likelihood of fungal pathogens infecting the developing bee larva.

Sedum flower stalks  
Dead Sunflower stalks  
Teasel stalks  
Rhubarb flower stalks  
Hollow Bamboo canes  
Cow Parsley stems  
Hogweed stems

Helenium stems  
Cardboard tubes  
Paper tubes  
Balsam Stalks  
Knotweed stalks  
Verbena stalks

**Avoid plastic straws—they are non porous**

Always face your solitary bee installations south so that the warmth of the sun will benefit the developing larva.

As well as providing nest sites many species of solitary bee require access to other plant materials which they use to line their nests with or to plug the entrance.

You can further attract them to nest by including some of these plants in your garden.

**Lambs Ears *Stachys Bizantia*** is used by the Wool Carder Bee to line its nest.  
**Rose Bushes *Rosa sp.*** Are used by Leafcutter bees to plug their nest entrances.



**Clockwise, left to right:**  
Female Hairy Footed Flower Bee excavates her nest burrow in dry clay beneath a windowsill on a London housing estate.

A colony of *Andrena* mining bees nesting in sand between paving slabs in a London suburb.



A large nesting installation in Bishops Park, Fulham

A red Mason Bee plugs the entrance to her nesting hole with mud collected from the edge of a garden puddle