

# How do solitary bees use urban gardens? A lockdown study

## Appendix

Ted Benton

For the full article, see *British Wildlife* Volume 32, Number 7, June 2021.

Nest-making solitary bee species recorded in the garden during spring and summer 2020, and the requirements that each species obtained from the garden (Yes = confirmed; ? = possible). See the main article text for full explanations of the groups and the requirements.

### Group 1. Species which obtained all, or almost all, of their requirements from the garden.

Species	Requirements						
	Shelter	Temperature	Forage: nectar	Forage: pollen	Mating activity	Nest site	Materials
<i>Hylaeus hyalinatus</i>	Yes		Yes	Yes	Yes	Yes	N/A
<i>Hylaeus pictipes</i>	Yes		Yes	Yes	?	Yes	N/A
<i>Heriades truncorum</i>	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<i>Chelostoma campanularum</i>	Yes	?	Yes	Yes	Yes	Yes	Yes
<i>Osmia bicornis</i>	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<i>Osmia caerulescens</i>	Yes	Yes	Yes	Yes	Yes	Yes	?
<i>Osmia leaiana</i>	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<i>Megachile ligniseca</i>	Yes	?	Yes	Yes	Yes	Yes	Yes

### Group 2. Species which probably did not nest in the garden, but made use of it for four or five different requirements.

Species	Requirements						
	Shelter	Temperature	Forage: nectar	Forage: pollen	Mating activity	Nest site	Materials
<i>Andrena bicolor</i>		Yes	Yes	Yes	Yes	?	
<i>Andrena bimaculata</i>		Yes	Yes	Yes	Yes		
<i>Andrena dorsata</i>		Yes	Yes	Yes	Yes		
<i>Andrena haemorrhoa</i>		Yes	Yes	Yes	Yes		
<i>Megachile centuncularis</i>	Yes		Yes	Yes	Yes	?	Yes
<i>Megachile willughbiella</i>	Yes		Yes	Yes	Yes	?	Yes
<i>Anthophora bimaculata</i>		Yes	Yes	Yes	Yes		
<i>Anthophora plumipes</i>		Yes	Yes	Yes	Yes		

**Group 3. Bees that were seen in the garden relatively frequently, but used it for only a limited set of purposes.**

Species	Requirements						
	Shelter	Temperature	Forage: nectar	Forage: pollen	Mating activity	Nest site	Materials
<i>Colletes hederæ</i>			Yes	Yes			
<i>Hylaeus communis</i>	Yes		Yes	Yes			
<i>Andrena nigroaenea</i>	Yes			?	Yes		
<i>Andrena nitida</i>	Yes			?	Yes		
<i>Andrena scotica</i>	?				Yes		
<i>Andrena tibialis</i>				?	Yes		
<i>Halictus tumulorum</i>			Yes	Yes			
<i>Lasioglossum albipes/calceatum</i>			Yes	Yes			
<i>Lasioglossum leucopus</i>			Yes	Yes			
<i>Lasioglossum leucozonium</i>			Yes	Yes			
<i>Lasioglossum morio</i>			Yes	Yes			
<i>Lasioglossum smeathmanellum</i>			Yes	Yes			
<i>Anthidium manicatum</i>	Yes		Yes	Yes			
<i>Anthophora furcata</i>			Yes	Yes			
<i>Anthophora quadrimaculata</i>			Yes	Yes			
<i>Ceratina cyanea</i>			Yes	Yes			

**Group 4. Species that were observed in the garden just once, or on a small number of occasions.**

Species	Requirements						
	Shelter	Temperature	Forage: nectar	Forage: pollen	Mating activity	Nest site	Materials
<i>Andrena chrysoseles</i>			Yes				
<i>Andrena fulva</i>	?						
<i>Andrena fulvago</i>			Yes				
<i>Andrena labiata</i>			Yes				
<i>Andrena trimmerana</i>					Yes		
<i>Lasioglossum lativentre</i>			Yes				
<i>Lasioglossum puncticolle</i>			Yes				
<i>Melitta leporina</i>			Yes				
<i>Dasypoda hirtipes</i>			Yes				
<i>Megachile leachella</i>			Yes				