

Bee Emergence by Family Pt 2

By May, the bee season will be in full swing, with new arrivals daily. Here are some notable guests that are likely to see the welcome sign in your bee garden.

Sweat bees (including these genera featured in our App: [Halictus](#), [Lasioglossum](#), [Agapostemon](#), and [Augochlorella](#)) refer to a number of closely related bee genera belonging to the family Halictidae, and more specifically, to the subfamily, Halictinae. Although only those species belonging to the genera *Halictus* and *Lasioglossum* have actually earned this common name, due to their attraction to the salt in human perspiration, Halictinae members in general are often referred to as sweat bees.

Sweat bees are mostly ground-nesting bees which can be solitary or exhibit varying degrees of sociality. The social species, as well as many solitary species, have multiple generations of offspring from spring through summer. They are in fact some of the most abundant bees from spring through early fall, yet due to their small size – typically between ¼ and ½ inch – and somewhat dull, dark coloring, they often go unnoticed.



Halictus (sweat bee) on a mallow blossom. As generalists with multiple generations per year, sweat bees are some of the most abundant bees in our spring, summer and fall gardens. Because of their small size, however, they are often overlooked. Photo by Celeste Ets-Hokin.

Some sweat bees, however, such as *Agapostemon* and *Augochlorella*, have bright metallic green coloring, and are easy to spot on a garden flower. While the females of many *Agapostemon* species are entirely bright green, the males typically have a bright green thorax and yellow and black striped abdomen.



Female green sweat bee.



Male green sweat bee.

Females of some Agapostemon species are entirely green, while the males typically have a green thorax and yellow and black-striped abdomen. Photos by Celeste Ets-Hokin.

Since many species are active from spring through late summer or early fall, sweat bees are generalists, foraging on a wide range of flowers. Because they have short tongues, it is most common to see them on open-access flowers such as mallows or composite flowers such as [asters](#), coneflowers ([yellow coneflower](#) or [purple coneflower](#)), [coreopsis](#) and [cosmos](#). You can recognize even the smallest sweat bee females by the tell-tale scopae (or pollen brushes) on their hind legs, once they are loaded with pollen.



Female sweat bee (genus Halictus) foraging on a California poppy. Photo by Celeste Ets-Hokin.



Female green sweat bee collecting pollen from [Rosa rugosa](#), a single-petal rose. Photo by Celeste Ets-Hokin.

Leafcutter bees (genus [Megachile](#)) are some of the easiest bees to recognize in your garden. Well, at least the females are, because they have a very dense, obvious scopa on the underside of their abdomens. As members of the family, Megachilidae, leafcutter bees carry pollen in a scopa (brush of specialized hair for pollen transport) on their bellies, instead of on their hind leg, as do most female bees. When loaded with pollen, the underside of the female's abdomen appears bright yellow or orange, depending upon the flowers on which she's been foraging. A female leafcutter bee, *Megachile perihirta*, was in fact the first native bee I learned to identify.



Female leafcutter bees carry pollen in a brush of specialized hairs called a scopa, or pollen-brush, located on the underside of the abdomen. When her scopa is filled with pollen, the leafcutter bee female appears to have a pronounced yellow or orange abdomen, making her very easy to recognize. Photos by Celeste Ets-Hokin.



Leafcutter bee making her tunnel nest in a nest block placed in my backyard. Photo by Celeste Ets-Hokin.

Most leafcutter bees nest in wood tunnels, and will often use constructed wood block nests that are placed strategically around your garden. Leafcutter bees will come back year after year to make their nests in small wooden blocks.

Leafcutter bees have long tongues, and will typically forage on a variety of flower shapes. They can reach the nectar in deep, tubular flowers like [lupine](#), but females are often seen on composite flowers, such as [purple coneflower](#), [blanketflower](#), and [gumplant](#) to collect pollen.

Carder Bees (genus [Anthidium](#)) are also Megachilids, so the females carry pollen in a scopa on the underside of their abdomens. However, the distinctive feature of carder bees, both male and female, is their striking, unique coloration. Most carder bees are black with distinct bands of yellow or white on their abdomen and thorax. Sometimes these bands are broken, making their abdomens look almost spotted, as in this native carder bee, *Anthidium maculosum*.



Carder bees (genus [Anthidium](#)) have striking yellow or white markings on their black thorax and abdomen. Photo by Celeste Ets-Hokin.

Male carder bees are extremely territorial, and will aggressively defend a patch of garden flowers for potential female mates. Any flower-visiting insect that ventures into a male carder bee's territory is likely to be knocked off that flower by the territory holder. The male carder bee patrols his territory in a regular pattern, stopping repeatedly at an established vantage point on his route. From this perch, he can watch for trespassers or for female mates.

The non-native species, *Anthidium manicatum*, is now a regular on the North American garden circuit. Though like all male bees, he is harmless to humans, he is nonetheless the most aggressive territorial bee known worldwide. You may have already seen this robust black bee, with bold yellow bands, take command of your yard! Otherwise, just watch for the “garden bully”



Anthidium manicatum is an introduced species from Europe, but has been widely introduced in North America, and is a frequent garden visitor. Photo by Rollin Coville.

Carder bees are cavity or wood tunnel nesters, and as opportunists will take advantage of any suitable tube or tunnel with a closed end. Along with the abandoned beetle tunnels and hollow plant stems typically used in the wild, carder bee females have been known to nest in everything from the soft mortar in old walls, to man-made wood block nests, to bits of pipe or hose lying around the backyard. The female “cards” the soft fibers from plant stems, such as lambs ear, to line and partition her nest. Favorite forage flowers for carder bees include [salvias](#), [lavenders](#), lambs ear and [catmint](#).

Worker bumble bees (genus [Bombus](#)) are the female offspring of those bumble bee queens you saw in early spring. They have taken over the foraging duties for the queen, so that she can focus on laying eggs. The worker females are much smaller than the queens, especially those females from the first round of offspring.

These females are on a vital mission, and move quickly from one flower to the next to collect enough pollen and nectar to supply the colony. When the “corbicula” or pollen basket (specialized hair structure for transporting pollen mixed with nectar) on the hind legs of the female workers is full, it appears as a large, shiny globule of whatever color pollen was being collected.



Bumble bee worker with full corbicula. Photo by Celeste Ets-Hokin.

Since they are social species with multiple generations throughout the spring and summer season, bumble bees are generalists – they must be adapted to foraging on a variety of different plants that bloom at different times of the year. Favorite late spring/early summer blooms for bumble bees include [Phacelia](#) (scorpionweed), [lupine](#), [purple coneflower](#), [California poppy](#), [penstemons](#) and [blazing star](#).

Other early summer bees include small carpenter bees (genus [Ceratina](#)) and yellow-faced bees (genus [Hylaeus](#)), although you may have to look a bit harder to find these smaller bees in your garden. Both bees are small, black and relatively hairless, though small carpenter bees are more elongated and shiny, with some species even having a blue or green metallic sheen. *Hylaeus* species are distinguished by yellow markings on their face, thorax and legs.



Small carpenter bee on bulbine.



Yellow-faced bee on bulbine.

You may have to look a little harder to notice these small, black bees in your garden. Photos by Celeste Ets-Hokin.

While they represent entirely different families of bees (*Ceratina* belongs to the family Apidae, and *Hylaeus* to the family, Colletidae), both are generalist foragers, and are active from spring through summer. *Ceratina* females chew out the soft pith of plant stems such as blackberry to make their nests; most *Hylaeus* species nest in pre-existing wood tunnels in stems or twigs.

As small bees, they are both often found on small flowers such as [buckwheat](#) and [figwort](#). They can also be spotted on composite flowers with small corollas, such as gumplant ([Grindelia](#)) and fleabane ([Erigeron](#)), or on open flowers like [rose](#), blackberry and [California poppy](#). Their small size even permits them to crawl inside deep flowers like [lupine](#) or [penstemons](#) to reach the nectar at the base of the petals.