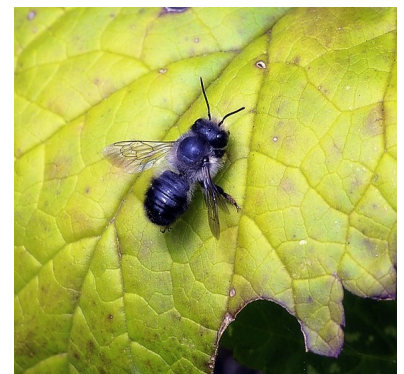




HOME SWEET... HOME!

Can you connect each “bee” to its home?
Learn about these important pollinators on
the next page.





Big and metallic black (males are golden brown with big green eyes), the female **Carpenter Bee** (*Xylocopa varipuncta*) literally chews her channel nest into the soft, decaying wood of an agave stalk or dead tree trunk. Like other solitary bees, a single egg will be laid on a cache of pollen/nectar and walled in to await its metamorphosis. These bees will steal nectar by cutting into flowers below the stamens, bypassing the pollination process.



The **Honey Bee** (*Apis mellifera*) is an immigrant to North America, brought by early settlers who kept hives for the honey. Honey bees are social, living in large groups and working cooperatively to build the hive—wax honeycombs with six-sided cells which may hold pollen or honey or bee larvae. Jobs are divided among worker bees, the builders, gatherers and defenders of the hive; short-lived drones, reproductive males; and the queen, mother of them all.



Native to the Sonoran Desert, **Digger Bees** (*Centris pallida*) are big (about 3/4") and fuzzy, covered with grayish-yellow hairs. The bees feed on the nectar and pollen of palo verde, creosote and cactus flowers. Female bees dig tunnels in the ground to use for a nest. In a space at the end, they place a loaf of bee "bread" made of pollen and nectar and lay an egg on top. The larva feeds on the bread and hatches a year later.



NOT a bee, but a **Paper Wasp** (*Polistes* spp.) identifiable by its shiny, hairless body and very narrow waist. Not efficient pollinators, adult wasps do feed on nectar and rotting fruit, as well as hunting other insects. Unlike solitary bees and more like Honey Bees, wasps build communal nests. In the case of paper wasps, using chewed plant fibers to create a cluster of open chambers in the shape of an umbrella, hung from a flat surface.



Excellent pollinators, **Mason Bees** (*Osmia* spp.) have a 95% success rate due to the fact that they literally wallow in a flower, getting pollen everywhere and thus increasing the chances of pollination. Females actually do masonry work, selecting pencil-sized tubular holes and using mud to create individual chambers in which to place a pollen supply and lay an egg. Nests are never far from a pollen source, so bee houses filled with reed tubes can be placed close to crops.



Those precise shapes cut from your leafy plants are the work of **Leaf Cutter Bees** (*Megachile* spp.). Female Leaf Cutters will use their jaws to trim circular pieces of leaf they will later roll and stuff into a pre-existing hole, forming a cocoon for a single offspring. Multiple cocoons will be wedged into the same tube, the end closed and blocked with chewed leaf parts. Some Leaf Cutters will nest in soil, others in wood or plant stems, or even bolt holes in a concrete wall.