



## *Kids! Fostering Mason Bees*

By Susan Morrison, UC Master Gardener, for the 2013 Sustainability Fair

### **ABOUT MASON BEES**

There are over 120 species of mason bees in North America. They are important to gardeners, as they make outstanding pollinators. Unlike honeybees, mason bees are native to North America and well adapted to live here. They are not choosy about pollen, happily visiting a wide range of flowers. Because they are messy pollen gatherers, much of what they gather falls off. As a result, they pollinate nearly every flower they visit. One mason bee can pollinate 2,000 blooms in a single day!

Mason bees are solitary, which means each female builds a nest alone in a hole instead of in a hive. Adult bees stay in cocoons during the fall and winter and emerge in spring when the weather becomes warm. The female lays one egg at a time and then seals the space off with mud to create a chamber. She repeats this process until the hole is filled with eggs, sealing the opening with mud. The larvae grow and change into pupas, and by the end of the summer, they've developed into adult bees.

Mason bees are very gentle. Females can sting, but rarely do so. Their stings are quite mild – about the equivalent of a mosquito bite. Because they are small and black or metallic blue-green, they are sometimes confused with flies, but have longer antennae and four wings vs. only two.

### **BUILDING A BEE BOX**

Visit <http://www.helpabee.org/building-bee-condos.html> for links to instructions.

### **CARING FOR A BEE BOX**

Place your bee box on an east or south facing wall, in the sun and ideally protected from wind or rain. Bees use mud to build a nest inside the bee boxes, so digging a shallow hole nearby, roughing up the edges in a few spots and keeping it damp during the spring will give them a place to excavate.

Once bees emerge in the spring, clean the bee house with a mixture of one part bleach to six parts water. Use an old toothbrush to scrub out the holes. Alternately, you can line the inside of the holes with paper tubes, but avoid plastic as it can cause dampness to build up inside the cocoons. Consider making or purchasing a second bee box to switch out each spring, so that a clean house is immediately available.

### **ATTRACTING MASON BEES**

Most importantly, it is critical to avoid using pesticides.

Because mason bees emerge in warm weather and live for only six to eight weeks, plants that bloom in the spring are ideal. Mason bees have a strong preference for fruit trees, but gather nectar and pollen from flowers as well. California native plants, including beards tongue, buckwheat, California lilac and clarkia, make excellent choices. Mason bees will also collect the pollen from non-native plants such as catmint, coreopsis, lavender, rosemary and salvias. Mason bees cannot see the color red, so choose plants with blue or lavender flowers.