A study by Rosemary Malfi, University of Virginia, and Neal Williams, UC Davis, showed that native bumblebees, which are among our most important pollinators, thrive in urban and suburban environments. In fact, their abundance has been shown to actually increase with increased development. Besides the ubiquitous bumblebee, researchers counted around fifty other types of bees in a five-year survey of community gardens in New York City. Carpenter bees, leaf cutters, borer bees, mason bees, sweat bees, and others were drawn by the flowers and shrubs planted by urban gardeners.

The flip side of this, however, is the relative lack of abundance of some other wild bee species, particularly those that depend on early spring bloomers, or nest in bare soil.

“A nearly 75% of all plants on earth require animals for pollination.” — The Xerces Society

Pots for Pollinators

Plant flowers in raised beds and containers throughout your own urban garden, and the pollinators will find them. This has been proven in the Battery Rooftop Garden, a 35th floor New York garden that is isolated from life on the ground and pummeled by harsh winds. Despite the extreme altitude the garden is inhabited by a diversity of pollinators and other beneficial insects, an abundance that has been attributed to high floral diversity. If they can make it there, they can make it anywhere!

For in-depth information about other ways you can do your part, read the Council on Environmental Quality’s recent online publication: Supporting the Health of Honeybees and Other Pollinators.
If we are to sustain urban agriculture, we must support urban bees:

1. Be prepared for pollinators in spring. It’s especially important to plant spring-blooming flowers if there are no fruit trees or early-blooming shrubs in the vicinity of your urban garden. Columbine, California poppies, sweet alyssum, larkspur, bachelors’ buttons, clarkia, cerinthe, and cilantro will sustain bumblebees, miner bees, and other native pollinators until summer nectar and pollen sources become plentiful.

2. Plant flowers in summer. Group plants of the same species in clusters, and provide a diversity of species in your garden. Zinnias, coreopsis, cosmos, sunflowers, tithonia, echinacea, and herbs that flower, such as thyme, basil, oregano, and arugula will keep bees busy through the summer and into the fall.

3. Avoid pesticides. Hand-pick pests, or use non-toxic products such as horticultural oils or soap sprays. Particularly avoid broad-spectrum pesticides, even organic ones such as pyrethrin.

4. Offer water, and nesting options. Bumblebees often build nests in abandoned rodent nests. Other cavity nesters prefer rotting logs or stumps, or the soft pithy centers of elderberry or sunflower stems. This means “neatening up” can deprive bees of prime nesting sites! Bees also need access to clean, shallow water.

5. Leave spots of undisturbed soil. Bees with the fewest housing opportunities in the urban garden are ground-nesting native bees. Set aside an area of the garden where you will not cultivate the soil, as bees need direct access to the soil surface to construct their underground tunnels. Six to 36-plus inches under the surface, these narrow tunnels lead to small chambers (the brood cells), where next year’s bees will develop.

Frequent Fliers in the Urban Garden

Planting colorful flowers, such as the zinnias, scarlet runner beans, and cosmos, will attract pollinators to your garden. Studies have shown that they will stay and pollinate your crops also, ensuring a good harvest.

Most pollinators commonly seen in the urban garden are cavity nesters, and many are solitary bees, rather than hive dwellers. Some can easily be mistaken for wasps or flies. Left to right: Bumblebee (Bombus impatiens); sweat bee (Lasioglossum sp.); carpenter bee (Xylocopa virginica); metallic green sweat bee (Agapostemon sp.).

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