**Bee Gardening at Copley Community Orchard**

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Erin is a project coordinator for EYA running a project called “Planning for Pollinators.” Her project involves planting bee gardens in urban areas of city space to provide habitat and record the impact this has on bee biodiversity. A first-stage pollinator bed(s) are being established at Copley Community Orchard (CCO) as part of this project on this day of presentation.

**Types of pollinators:**

Butterflies, beetles, bats, birds, wasps, flies and bees.

Bees are most important pollinators because they actively collect pollen, their food source, which in turn are the gametes of plant reproduction. Bees are the most successful therefore at transferring pollen between matching species of plants (bees search for singular species of flowers at a time on each foraging hunt).

There are over 4000 species of native bees in North America, and one study shows 52 species in Vancouver. Honeybees that are managed by people are not native. Native bees are 4x better pollinators of native plants than honeybees. Native bees are not well studied, but are showing alarming signs of decline in North America.

Mason bees are great pollinators for orchard crops.

Bumblebees perform buzz pollination which is the only type of pollination technique that can pollinate nightshade plants.

EYA had demonstration box of bee specimens and some other pollinating groups to show gardeners and participants.

**Attractive gardens for bees**

**The basics**

To make a garden attractive, bees need what we need: shelter, food, and water.

**Shelter**:

Establish bee houses such as mason bee or bumblebee homes (contact EYA for consultation on this if necessary). 70% of native bees nest in the ground (sandy soils, hard packed). Make all housing habitat Eastern facing so the sun hits it in the morning.

**Food** (Pollen and nectar resources):

Horticultural varieties of flowers are often not great food sources for bees although they look nice. A nice/strong smell to a flower is an indication that it has high nectar content. Plant native plants as native plant pollen has co-evolved with native bees and is the healthiest, best option as a food source for them (contact EYA for consultation on bee-friendly plants).

Plant flowers in bunch, not scattered, as bees forage on one type of plant at a time and having them grouped together is very attractive to them.

Plant groups of flowers so that you have a long bloom season, especially in spring when they are first emerging and need a good food source so they can survive.

Plant plants in sunny areas, shade may make the difference on variable days whether bees will be able to visit or not.

Try to plant flowering plants in a fashion that creates heat traps, so the flowers are in warm areas with little wind.

Plant different flower shapes, sizes and colours. The diversity of bees, their abilities, life history requirements, and size are different for different bees’ pollination strategies. Although most bees are generalists (they are not choosy about what is available), you create diversity for bee species when you introduce diversity of flowers.

Provide a source of water with sticks (bee landing pads) sticking out of the water for them to drink.