BILLINGS FARM & MUSEUM

POLLINATOR CELEBRATION:

WHO POLLINATES WHAT?

Oranges, raspberries, lemons, peaches, apples, limes, grapefruit, chilies, pomegranates (grenadine), and grapes (prosecco) are self-pollinating. This means they don't need an outside source to pollinate their flowers and produce fruit. In self-pollinating plants, the flowers contain both male (stamen) and female (carpel) parts which grow very close to each other in the flower. This allows the flower to drop pollen from its stamens directly onto its carpel which pollinates the plant. Although these plants are self-pollinating, bees still help to speed up the process. Self-pollinating trees that are visited by bees tend to have higher fruit yields due to the bees moving pollen.

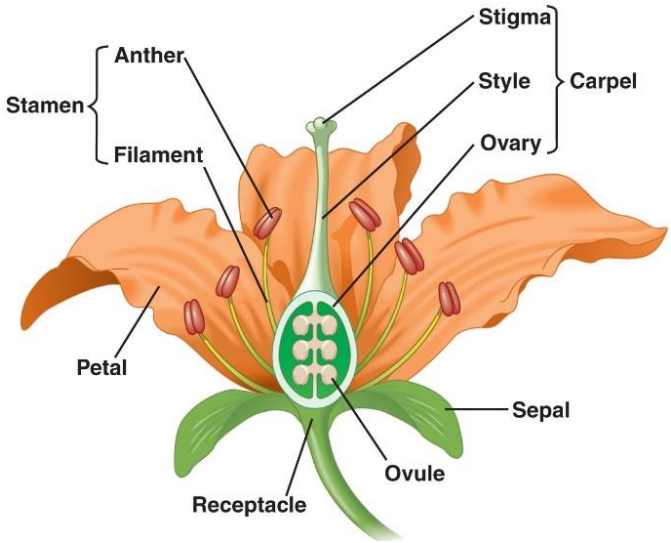

Diagram of a self-pollinating flower.

Did you know there are two types of cherries? Sweet cherries and sour cherries have a major difference in how they are cultivated. Sweet cherries need bees for pollination and sour cherries don't. Sour cherries are self-pollinated so they don't need any insects moving their pollen around. Sweet cherries on the other hand do need bees; in fact, without bees they won't produce any fruit. Maraschino cherries are sweet cherries and they need bees to pollinate them.

Montmorency Tart Cherries
(Also called sour, red or pie cherries)

Sweet Cherries
(Also called purple or snack cherries)

POLLINATOR CELEBRATION:

WHO POLLINATES WHAT?

A bee pollinates some mint flowers.

Mint plants have many small purple flowers that bees love to visit. We eat the leaves of the plant which do not require pollination for us to enjoy.

Bees make honey by first visiting flowers where they suck up nectar from the flower's nectaries. (This is also the time when bees collect pollen on hairs on their back legs and transfer it to other flowers thus pollinating them.) Bees swallow the nectar into their honey stomach which is different than their food stomach. When they return to the hive, they pass the nectar via mouth to worker bees who chew it. The worker bees will chew the nectar for about half an hour and pass it to another bee to chew until it becomes honey. Once the honey is ready, the bees store it in honeycomb cells and cap it with wax to keep it clean.

A bee pollinates some mint flowers.

Pineapples cultivated by humans are pollinated by hand. This is because they are selected to not have seeds which worsens the quality of the fruit. Pineapples growing naturally in the wild are pollinated by hummingbirds and bats.

A Swallow-Tailed Hummingbird feeds on a pineapple flower.

POLLINATOR CELEBRATION:

WHO POLLINATES WHAT?

Cranberry plants are not self-pollinating and need bees in order to produce fruit. These plants have male and female flowers growing on the same plant which require bees or other insects to transfer the pollen.

A honeybee pollinates some cranberry flowers.

Mexican Long-Tongued bat feeding on an Agave flower.

Tequila is made from the Blue Agave plant which is pollinated by bats. The flowers of the Blue Agave only open at night and these nocturnal flowers are pollinated by very few species. The Mexican Long-Nosed bat and Lesser Long-Nosed bat are both on the endangered species list and the Mexican Long-Tongued bat is listed as a species of concern. These bats migrate from Arizona and New Mexico to southern Mexico in the winter following the nectar trail which is the blooming agave and cacti.

Vermouth is an aromatized wine containing herbs, spices, barks, flowers, and seeds. Cinnamon, found in vermouth, is pollinated by flies. Clove is also commonly in vermouth and is pollinated by bees.

Cinnamon trees stripped to expose the inner bark which is where the spice cinnamon comes from.