What is a pollinator? Pollen is the male reproductive element of flowering plants. It must be transported to the female portion which when fertilized, matures to seeds or fruits—food for people and wildlife. In showy flowers the mechanisms of transport (pollinators) are animals—insects, birds, bats. Flowers that are not showy rely on wind to transport pollen.

## Pollinators of the Day -- Bees



Honey Bees—Honey bees were brought to North American by European colonists in the 1600's (and brought to Europe from Asia far earlier). Because of their colonial social organization which continues over generations, they are now an important part of commercial agriculture. The honey bees collect pollen and nectar to feed the colony. Pollen is incidentally distributed from plant to plant as the bee forages. The nectar is transformed into honey in the hive as food for the colony

especially to maintain it over the nonflowering seasons. Honey bees are usually found in human provided box-like hives. When walking the lagoon trail, look down as you pass the garden area and you will see the home of the Hershey's Mill honey bees.



**Bumble Bees**--- While honey bees are responsible for over 80% of crop pollination, they can't collect pollen from some favorite vegetables—such as tomatoes, peppers, eggplant, potatoes, and blueberries. The pollen in flowers of these plants is tightly bound and must be loosened by vibration—or "buzz pollinated". Bumble bees can do this. Bumble bees are native to North

America and are colonial. Unlike honey bees, the colony only lasts one season. Only fertilized females overwinter and start new nests in the spring. Bumble bees sometimes choose bird houses to make their nests or you can provide a bumble bee specific nest box in your garden. Be patient it make take a few seasons for the bees to find your offering.



Carpenter Bees—Carpenter bees are the "busiest" of the bees—they visit more flowers per unit time and carry more pollen per trip than others. They visit a wide range of flowers but lucky for the flowers, they key in on one type in a given foraging trip. That way the pollen gets distributed to a receiver of the same species. Carpenter bees occur throughout the world and are commercially valuable in some places—in the middle East they are employed to pollinate cotton; in Australia they are raised in hot houses to pollinate tomatoes. They are solitary nesters, boring into wood, laying an egg and stuffing the

cavity with pollen for the hatched larva. The males are obvious guarding the nest while under construction. While you have probably seen them boring into siding or decks in Hershey's Mill, you can provide alternative nesting sites in suitable blocks of wood.

What should you plant in your pollinator garden to attract bees? Bees literally "don't see red." White, pink, lavender or yellow flowers are their preference.