

## **Pollinator Project Questions & Answers**

### What is Pollination?

Pollination is the process of moving pollen from one flower to another of the same species, which produces fertile seeds. Most flowering plants are pollinated by bees, butterflies, bats and other animals and insects.

## Who are Pollinators?

Bees, butterflies, moths, hummingbirds, beetles, wasps, and even flies pollinate flowers.... but bees pollinate more than any other group.

## Why are Pollinators important?

Besides their beauty, insects and other animals pollinate one-third of all the food we eat including berries, apples, tomatoes and almonds. Their economic value is \$217 billion worldwide.

### Why do Pollinators need help?

Habitat loss, diseases, pollution and pesticide poisoning have caused a severe decline in pollinator species numbers.

# What are native plants and why should I use them?

Native plants are plants that have occur naturally or existed for many years in an area. Pollinators have evolved with native plants which are best adapted to the local growing season, climate and soils. Pollinators feed on specific plant species that they have adapted to. Non-native plants may not provide pollinators with enough food, nectar or pollen.

# What is a Solitary Bee? I thought they lived in hives!

Bees are a diverse group of insects that include over four thousand species native to North America. There are two groups organized according to the way they nest- Solitary or Social. Three-quarters of our native bees are solitary nest builders.

Solitary Bees include carpenter bees, sweat bees, mason bees, plasterer bees, squash bees, dwarf carpenter bees, leafcutter bees, alkali bees and digger bees. Most solitary bees nest in the ground while others create nests in hollow reeds, twigs or holes in wood. Social Bees live in social colonies and have cooperative brood care and a division of labor into reproductive and non-reproductive adults. These include honey bees, bumble bees and Africanized bees.



# Pollinator Project Questions & Answers (continued)

# How do Butterflies survive the winter?

Most butterflies overwinter as eggs, caterpillars and pupae. Tree cavities, leaf litter and branch piles shelter over-wintering butterflies from predators and cold weather.

## I've heard that many bees are dying because of Colony Collapse Disorder. What is the cause of this?

Colony Collapse Disorder is a rather mysterious phenomenon that occurs when the majority of worker bees in a colony disappear, leaving behind a queen, a few nurse bees, and plenty of food. Scientists believe the disorder is caused by a variety of factors, including parasitic mites, diseases, some chemical insecticides and fungicides (including neonicotinoid insecticides), habitat destruction, and immunesuppressing stress caused by all of the above.

### What is the difference between Colony Collapse Disorder and Pollinator Decline?

Beekeepers began noticing the Colony Collapse Disorder in 2006-2007, but pollinators in general have been declining for decades. Evidence has shown that the number of pollinator species has declined since the 1950s in some European countries. Scientists believe that – as with Colony Collapse Disorder – there are multiple causes, including but not limited to pesticides.

# Monarch butterfly numbers have declined by 90% in just 20 year!

### How can I protect Pollinators?

- 1. Grow plants that support pollinators.
- 2. Ban dangerous pesticides.
- 3. Preserving wild habitat.
- 4. Restore ecological agriculture.
- 5. Do not use Neonicotinoid pesticides. Check the label of nursery plants and products.