Pollinator Garden Tool Kit

What is a Pollinator?

Before you can plan a garden for pollinators, it is good to be sure you know what a pollinator is. In order for a plant to make fruits or seeds it has to get pollen on its flowers from another flower. When an animal or insect comes to collect or eat the nectar in the flowers, some of the pollen from one flower gets on it and then falls off onto another flower as the pollinator moves around searching for more to eat.

After a flower becomes pollinated it will grow into fruit and seeds which can then grow into more plants. This is very important for nature and for our food supply. Without pollinators many plants would not be able to reproduce and we would not have many of the types of plants or food we have today. There are many types of animals in nature that act as pollinators. Bees and butterflies are the most common. Many birds, especially hummingbirds, are also pollinators and so are bats in tropical areas.

What do Pollinators need?

Pollinators need more than pollen. They need water too, and shelter from the winter and the weather. They need a safe place to lay their eggs and plants that will feed their larvae after the eggs hatch. A pollinator garden recognizes these needs and provides them year-round through various kinds of plants, rocks, mud, and other habitat features.

What do I put in a Pollinator Garden?

The most important parts of a pollinator garden are the native plants! Pollinators have very special relationships with the plants that they have been pollinating for thousands of years. Many pollinators have specialized mouthparts for reaching deep into long flowers, or have strict requirements for the type of species they will lay eggs on, called *host plants*. It is best to have a diversity of species to provide a diversity of resources for a wide range of pollinators. Below are examples of native wildflowers and shrubs with exceptional pollinator power!

Wildflowers

Yarrow (*Achillea millefolium*) Columbine (*Aquilegia canadensis*)

Harebell (*Campanula rotundifolia*) Lanceleaf Coreopsis (*Coreopsis lanceolata*)

Wild Lupine (*Lupinus perennis*) Wild Bergamot (Monarda fistulosa)

Foxglove beardtongue (*Penstemon digitalis*) Little Bluestem (*Schizachyrium scoparium*)

New England Aster (*Symphyotrichum novae-angliae*)

Shrubs and Small Trees

Pawpaw (*Asimina triloba*)   New Jersey Tea (*Ceanothus americanus*)
Flowering Dogwood (*Cornus florida*)   Choke Cherry (*Prunus virginiana*)
Red osier Dogwood (*Cornus sericea*)   Nannyberry (*Viburnum lentago*)

Beyond plants, pollinators need other resources to successfully reproduce. Solitary bees need bare earth for nesting in, Monarch butterflies need milkweed to lay eggs on, and many other butterflies and bees need a source of mud to collect salts and minerals from or to seal up their nests. Here are links to articles that will provide more information on habitat features you can provide for pollinators.

Features for Pollinators
http://content.yardmap.org/learn/bare-earth-for-native-pollinators/
http://content.yardmap.org/learn/milkweeds/
http://content.yardmap.org/learn/make-mud/
http://content.yardmap.org/learn/habitat-feature-snags/

Other Resourceful links

Pollinators at Home: Intro to Pollinator Gardening
http://content.yardmap.org/learn/pollinators-at-home-intro-to-pollinator-gardening/

Benefits of Native Plants
http://content.yardmap.org/learn/bees-use-drugs-evidence-of-self-medication/
http://content.yardmap.org/learn/encouraging-beneficial-insects-pays-off/

Habitat Curriculum for Students
http://content.yardmap.org/learn/at-a-school/

To learn more about pollinators and their habitats, explore these resources:
-Habitat Network Explore Page, enter your zip code for a wealth of local pollinator information:
http://content.yardmap.org/explore/
-Protecting and Enhancing Pollinators in Urban Landscapes:
http://msue.anr.msu.edu/uploads/resources/pdfs/ProtectPollinatorsInLandscape_FINAL-LowRes.pdf