

Attracting Pollinators and Beneficial Insects to Your Garden and Landscape

Just as there are countless folks who are fond of bird-watching, so there are many who are fond of pollinator-watching. Along with gardening and other outdoor activities, observing these fascinating creatures and other insects in our gardens gives us a unique opportunity to interact and connect with a part of nature that could easily be overlooked. There are simple things to do - some that you may already be aware of - that have the potential to attract a great diversity of different creatures to your garden. Bio-diversity is important! Cultivating a wide variety of annuals, perennials, shrubs and trees not only has the potential to attract pollinators that will increase the bounty of your crops but you'll also attract beneficial insects that will help keep pests in check. Bio-diversity tends to lead to a more well-balanced system.

What can you do to create a habitat for beneficial insects and pollinators in your garden?

Provide a water source: A shallow bowl with lots of egg-sized rocks stacked around each other not only provides a water source they won't drown in but also gives them some shelter while they're drinking. Mud puddles or birdbaths are also often used by beneficial insects.

Provide areas for nesting: In addition to artificial nests (like the kind you might create for Mason bees) also include some natural, untidy features. **(1)** Leave areas of semi-bare soil in well-drained areas (70% of our native bees nest in the ground in dirt mounds, termite holes, etc). **(2)** Wood-nesting bees may be attracted to stumps, dead standing trees or other plants with hollow stems. **(3)** Bumble bees may nest in old rodent burrows, under thick grasses, in brush piles or in stone walls.

Provide a property free from pesticides and herbicides: All of the flowers in the world will not help if the pollinators or beneficials using them as food are ingesting poison or being sprayed with poison meant to kill a pest insect (many pollinators use "weeds" as a food source).

Provide food: Pollen = protein, nectar = carbohydrates for energy. Have multiple plant species blooming throughout the growing season. Include native plants, heirloom flower varieties, and kitchen herbs. Allow certain crops to go to seed instead of pulling them out or tilling them under (carrots, beets, lettuce and anything in the cabbage family). See the plant list below for an idea of what you can plant to keep insect friends calling your garden "home". This list is not exhaustive but should give you a good jumping off point.

(A) Annual, (P) Perennial, (S) Shrub, (T) Tree

Plant Family	Beneficials Attracted		
	Predators	Parasitoids	Pollinators
Bellflower Family <i>Campanulaceae</i>			
(P) Lobelia <i>Lobelia</i> spp.			hummingbirds, bumble bees
Barberry Family <i>Berberidaceae</i>			
(P) Oregon grape <i>Mahonia</i> spp.			mining bees, mason bees, bumble bees
Borage Family <i>Boraginaceae</i>			
(A) Borage <i>Borago officinalis</i>			honey bees, bumble bees
(A/P) Scorpionweed <i>Phacelia</i> spp.			honey bees, bumble bees, other bees
Buckthorn Family <i>Rhamnaceae</i>			
(S) Wild lilac <i>Ceanothus</i>	wasps, syrphids	wasps, tachinid flies	so many bees!
Buckwheat Family <i>Polygonaceae</i>			

(A) Buckwheat <i>Fagopyrum esculentum</i>	syrphids	wasps	leafcutter bees, other bees
Cabbage Family Brassicaceae			
(A) Broccoli <i>Brassica oleracea</i>	syrphids	wasps	variety of bees
(P) Sweet Alyssum <i>Lobularia maritime</i>	syrphids	wasps, tachinid flies	variety of bees
(P) Candytuft <i>Iberis umbellata</i>	syrphids		variety of bees
(A) Mustards <i>Brassica hirta & juncea</i>	syrphids, bugs		variety of bees
(A) Radish <i>Raphanus sativus</i>	syrphids		variety of bees
Carrot Family Apiaceae			
(A) Caraway <i>Carum caryi</i>	syrphids, bugs, lacewings		variety of bees
(A) Chervil <i>Anthriscus cerefolium</i>		wasps	variety of bees
(A) Cilantro <i>Coriandrum sativum</i>	syrphids	wasps, tachinid flies	variety of bees
(A) Dill <i>Anethum graveolens</i>	syrphids, lady beetles	wasps	variety of bees
(A) Fennel <i>Foeniculum vulgare</i>	syrphids	wasps	variety of bees
(A) Lovage <i>Lovisticum officinale</i>	wasps		variety of bees
(P) Sea Holly <i>Eryngium</i> spp.	syrphids		variety of small bees
Daisy Family Asteraceae			
(P) Blanketflower <i>Gaillardia</i> spp.			variety of bees
(P) Chamomile <i>Anthemis nobilis</i>	ladybeetles		
(P) Cosmos <i>Cosmos bipinnatus</i>	syrphids, lacewings		long-horned bees, sweat bees, other bees
(P) Goldenrod <i>Solidago altissima</i>	soldier beetles, bugs, ladybeetles	wasps	variety of bees including honey bees
(A) Mexican Sunflower <i>Tithonia tagetifolia</i>	syrphids		butterflies, bumble bees, hummingbirds
(P) Purple coneflower <i>Echinacea</i> spp.			bumble bees, sweat bees, leafcutter bees, butterflies
(A) Sunflower <i>Helianthus annuus & debilis</i>	syrphids, ladybeetles	wasps	wasps, flies, butterflies and so many bees!
(P) Yarrow <i>Achillea millefolium</i>	syrphids	wasps	leafcutter bees, other bees
Geranium Family Geraniaceae			
(P) Wild Geranium <i>Geranium</i> spp.			variety of bees, bumble bees
Heather Family Ericaceae			
(S) Blueberry <i>Vaccinium</i> spp.			mining bees, bumble bees, mason bees
(S) Manzanita <i>Arctostaphylos</i> spp.			bumble bees, mason bees
(S) Rhododendron <i>Rhododendron</i> spp.			bumble bees
Legume Family Fabaceae			
(P) Lupine <i>Lupinus</i> spp.			bumble bees, mason bees, honey bees
Mint Family Lamiaceae			
(A) Basil <i>Ocimum</i> spp.			bees, flies
(P) Beebalm <i>Monarda</i> spp.			bumble bees, sweat bees
(P) Catnip <i>Nepeta</i> spp.			bees

(A/P) Giant hyssop <i>Agastache</i> spp.			variety of bees, butterflies, hummingbirds
(P) Lavender <i>Lavandula</i> spp.			honey bees, mason bees, small carpenter bees, bumble bees, carder bees
(P) Mint <i>Mentha</i> spp.	syrphids	wasps	flies, wasps, small bees
(P) Oregano <i>Origanum</i> spp.	syrphids	wasps	bumble bees, small bees, flies
(P) Rosemary <i>Rosmarinus officinalis</i>			bees
(P) Russian sage <i>Perovskia atriplicifolia</i>			bumble bees, carder bees
Poppy Family <i>Papaveraceae</i>			
(A/P) California poppy <i>Eschscholzia</i> spp.			bees
Rose Family <i>Rosaceae</i>			
(T) Plum, cherry, almond, peach <i>Prunus</i> spp.			early-season bees
Scabiosa <i>Dipsaceae</i>			
(A) Pincushion Flower <i>Scabiosa caucasica</i>	syrphids	wasps	
(A) Scabiosa <i>Scabiosa atropurpurea</i>	syrphids		variety of bees
Willow Family <i>Salicaceae</i>			
(T) Willow <i>Salix</i> spp.			so many bees!

Some Helpful (and Fun) Resources:

The Xerces Society Guide: Attracting Native Pollinators

http://pollinator.org/list_of_pollinated_food.htm

<http://www.organicgardening.com/learn-and-grow/flowers-borders>

<http://www.projectnoah.org/>

http://www.xerces.org/wp-content/uploads/2008/09/Western_BB_guide.pdf

<http://www.greatsunflower.org/>

<http://www.xerces.org>