

Backyard Habitats: Attracting Native Pollinators

Try to choose native plants; many ornamentals produce little or no pollen and nectar. Flowering shrubs (shadbush) or fruit trees can fill in during spring. Impatiens and annual salvia don't provide nectar and pollen. For fall, consider asters, goldenrods, joe-pye weeds and sedums.

- Use a variety of flowering plants that bloom spring through fall; flowers that are bright colors (red for hummers)
- Go to www.pollinator.org, (scroll down on right, click on "Free pollinator friendly planting guides", and enter your zip code to get recommended plants for pollinators)

Flowers:

Asters: New England aster (*Aster novae-angliae*)-dry, NY aster (*Aster novi-belgii*)-wet, Showy aster (*Aster spectabilis*)
Bee balms: Bee Balm (*Monarda didyma*), Wild Bergamot (*Monarda fistulosa*), Horsemint, Spotted (*Monarda punctata*)
Blazing Star, Dense (*Liatris spicata*)-dry
Boneset, Common (*Eupatorium perfoliatum*)-moist
Cardinal Flower (*Lobelia cardinalis*)-wet - hummingbirds
Foxglove Beardtongue (*Penstemon digitalis*) - white
Goldenrods: *Solidago odora*, *Solidago sempervirens*, *Solidago caesia*, *Solidago graminifolia*, *Solidago rugosa*, *Solidago speciosa*
Honeysuckle, Trumpet (*Lonicera sempervirens*) – red flowering vine, good for hummingbirds
Iris, Blueflag (*Iris versicolor*)-wet
Ironweed, New York (*Vernonia noveboracensis*)-wet
Joe Pye Weeds: Sweetscented (*Eupatorium purpureum*)- dry, Common (*Eupatorium dubium*), Hollowstem (*Eupatorium fistulosum*)- wet
Milkweeds: Butterfly Milkweed - orange (*Asclepias tuberosa*), Swamp Milkweed- pink (*Asclepias incarnata*) common milkweed (*Asclepias syriaca*)
Mountain mints: Short-toothed (*Pycnanthemum muticum*), Narrow-leaved (*Pycnanthemum tenuifolium*)- both dry
Sage, Lyre-leaved (*Salvia lyrata*) – pale violet, shady moist areas
Sunflower, False or Oxeye (*Heliopsis helianthoides*)- dry
Sunflower, Swamp (*Helianthus angustifolius*)-wet
Vervain, Blue (*Verbena hastata*)- moist

In general; Daisies, zinnias, dahlias, sunflowers, buttercups, goldenrods, valerians, mustards, asters, echinacea

Herbs: sage, mints, oregano, lavender, catnip, fennel, parsley*, rosemary, thyme

Shrubs: blueberry, buttonbush, shadbush, sweet pepperbush

Trees: alder, black gum, crabapple, American holly, black locust, eastern redbud, basswood, buckeye, magnolia, maples, sycamore, tulip tree, willows

Fruits and vegetables: Tomatoes, eggplants, potatoes, strawberries, blueberries, raspberries, watermelons, gourds, peppers, cucumbers

Food for caterpillars – host plants

- *Parsley, dill, and fennel are host plants for the black swallowtail caterpillar. When you plant these, you plant them with the intent that they will likely get eaten.
- Other host plants for caterpillars: Milkweed = monarch; Thistle = painted lady; Hops vine = Eastern comma and question mark; Virginia creeper = sphinx moths; Spicebush and sassafras = spicebush swallowtail; Blueberry – azures

And most importantly don't use pesticides! Encourage birds and insect predators of pests. Also encourage neighbors to reduce reliance on chemical pesticides.

Chemically maintained lawns in the U.S. use more pesticides per acre than any food crop

www.planetnatural.com Planet Natural: Earth Friendly products for Home, lawn, and garden care

<http://www.care2.com/greenliving>

1001 all natural secrets to a pest free property: www.pestfreeproperty.com

For honeybee removal: Central Jersey Beekeepers Association: <http://cjba.njbeekeepers.org/swarmremoval>

Provide no nectar or pollen for insects:

Daffodils, tulips, annual salvia, marigolds, pansies, lilacs, crape myrtle

Landscaping with native plants is the best way to ensure your gardens make good forage; native flowers attract four times as many pollinators as nonnative ones.

Extend bloom seasons for three seasons.

Have more than one floral source, plant a variety of colors, shapes, and types of flowers

- Provide water in shallow bird baths or dishes where pollinators can easily land.

The Xerces Society, www.xerces.org

Named after the Xerces blue, first butterfly in the US to go extinct, dedicated to the conservation of invertebrates

Website has publications that can be downloaded as pdf's:

Guidelines for providing native bee habitat on farms

Pollinator friendly parks: How to enhance parks and greenspaces for native pollinator insects

Pollinators in natural areas: A primer for habitat management

Pollinator Conservation Handbook

For native bees:

Bee houses are for native bees to live in. Hole-nesting bees do not defend the holes and do not sting unless they are grabbed.

Leave holes in a block of wood, or bee boxes for shelter. Bee boxes can be found on the xerces.org website, (click on bee nesting fact sheets)

2/3 of bee species nest in the ground, Leave some small patches of unmulched soil for native bees to nest in the ground

The following commonly used insecticides (neonicotinoids) are **highly toxic to bees & other beneficial insects and wildlife:**

Imidacloprid

Fipronil

Thiacloprid

Dinotefuran

Acetamiprid

Thiamethoxam

Clothianidin

Pollinator	Shape	Color	Scent	Examples of flowers
Beetles	Large, shallow bowl shaped	Dull green/white	Strong, fruity	Magnolia, water lily
Carrion flies	Often funnel-shaped	Dark reddish brown	Decaying flesh	Skunk cabbage, purple trillium
Bees	Not tubular, with a landing platform	Yellow, blue, pink, purple, white	Sweet	Clovers, violets, mints, goldenrods etc.
Butterflies	Tubes with rim	Vivid colors	Weak	Butterfly bush, mints, milkweeds
Moths	Tubes without rims, open at night	White or pale yellow	Strong	Morning glory, phlox, evening primrose
Birds	Deep wide tube	Red	None	Cardinal flower, trumpet creeper
Bats	Single large or small grouped	Dull white	Strong at night	Mimosa, agave, saguaro