

By favoring native plants over exotic plants, gardeners can do a lot to sustain biodiversity! We need to drastically limit our use of non-native plants. Exotic plants and other natural landscaping materials wind up introducing invasive insects, fungi, and bacteria, and other harmful pathogens that wreak havoc on the environment and the economy. It is always difficult to predict which species might become invasive later.

A species becomes **INVASIVE** if it causes harm to the environment, economy, or human health.

Over \$138 billion per year spent on invasive species control in the US!

Non-native plants that become invasive:

- Reduce availability of surface water, groundwater, and sunlight
- Alter soil nutrients, decrease diversity of soil organisms
- Degrade aquatic habitats
- Degrade quality of wildlife forage
- Increase pressure on endangered species
- Increase fuel for fires, vines esp. dangerous

Benefits of using native plants

- Natural pest control, with predator-prey balance
- Less maintenance and water needed once established
- Increases diversity of animals in your yard, including birds and butterflies
- Complex & diverse habitats contain more natural enemies than simple habitats with only a few plant species
- Not contributing to continued problems with invasive species

All of Dr. Doug Tallamy's books have fantastic information on gardening with native plants. In his latest book, "Nature's Best Hope," Dr. Tallamy promotes planting native plants in our yards and open spaces, and together we can form a Homegrown National Park. "In the past, we have asked one thing of our gardens: that they be pretty. Now they have to support life, sequester carbon, feed pollinators and manage water."

There is a website where individuals, organizations and municipalities can put their yards and open spaces on the map to reach a goal of 20 million acres of **native plantings** in the United States:

<https://homegrownnationalpark.org>

At the same time, our native plants depend on native pollinators in order to reproduce. Without insect pollinators, entire ecosystems would quickly collapse. Unfortunately, our pollinators are in steep decline and need our help. By planting native plants like the ones mentioned below, we can support the pollinators while decreasing plant pests and diseases.

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 <http://www.jerseyyards.org> & enter your zip code and site specifics to get recommended plants for pollinators

Examples of native flowers that benefit pollinators:

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: 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

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

Landscaping with native plants is the best way to ensure your gardens make good forage for pollinators. Native flowers attract four times as many pollinators as non-native 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.

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 un-mulched 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

Sources for Native Plants

Pinelands Direct Native Plants (Retail branch of Pinelands Nursery)

<https://www.pinelandsdirect.com/>

(100% of stock is native)

Bowmans Hill Wildflower Preserve

PO Box 685

1635 River Road

New Hope, PA 18938-0685

Tel: (215) 862-2924

Fax: 215-862-1846

www.bhwp.org

email: bhwp@bhwp.org

(100% of stock is native)

Chesterfield Gardens Inc

615 Chesterfield-Jacobstown Rd.

Chesterfield NJ 08515

609-298-2726

www.chesterfieldgardensinc.com

(Only about 5-10% of stock is native)

Earth First Native Plant Nursery

(not open to the public, call or order online)

609-287-5090

www.earthfirstnatives.com

email: earth1stnatives@aol.com

(100% of stock is native)

Toadshade Wildflower Farm

Free catalog, online order forms

(Herbaceous Plants)

53 Everittstown Road

Frenchtown, NJ 08825

908-996-7500

www.toadshade.com

e-mail: toadshad@toadshade.com

(100% of stock is native)

RareFind Nursery

Mail order

957 Patterson Rd.

Jackson, NJ 08527

(732) 833-0613

www.rarefindnursery.com (Native plant category on website)

email: Support@rarefindnursery.com

Pinelands Preservation Alliance (PPA) at 17 Pemberton Rd. Southampton
Holds native plant sales in April and September