

# Gardening for Wildlife with Native Plants in Hunterdon County, New Jersey

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Wildlife requires water, cover, places to raise young, and food in the form of insects, nectar, seeds, and berries. Wildlife is not just birds. Wildlife includes the birds, bees, flies, caterpillars, butterflies, toads, frogs, eastern box turtles, salamanders and mammals that live with us in Hunterdon County. Is your garden alive?

Habitat loss is a contributing factor in the loss of wildlife including millions of birds, as well as a 90% decline in eastern monarchs, with many other wildlife species being listed as species of concern. 'Over half of all frog species are in danger of extinction – National Geographic. '

**Leave the stems.** 70% of Native Bees live in the ground, a smaller percentage in bee hotels, and some in the stems of flowers, plants, and grasses. Leave 8 to 24 inches of stems during outdoor spring cleanup-Xerces Society pamphlet. Also note *protecting bees.njaes.rutgers.edu*. '250 mason bees can pollinate an entire acre of apples or cherries with 95% efficiency.'

**Leave the Leaves**. Leaves provide overwintering habitat for many insects. 70 moths overwinter in leave litter. Leaves are great as mulch and compost enhancers. Oak leaves may suppress invasive stilt grass and Asian jumping worms.

# Water

Provide water for wildlife. Create a vernal pool with no fish, and no mosquitos by supporting dragonflies and frogs. 'A single Dragonfly larva eats 100 mosquito larva per day- The Science Times, 2019.' Native blue flag iris, pickerel weed.

#### **Food**

Insects are food for all types of wildlife, especially for juvenile birds. Shrubs and trees provide berries during fall migration. Trees supply hundreds of edible insects for wildlife, and pollen for insects and birds.

Birds plant trees. 'Brooklyn Botanic Garden 1999, at least 300 trees, shrubs and vines depend solely on birds to spread their seeds.' Note article *Jays plant acorns, Oaks and Folks*. Acorns are a critical component of winter diets for wildlife.

Native plants are adapted to local soil conditions and co-evolved with the wildlife we are trying to support. Plant natives, not cultivars until more studies have been completed. Example: Multiflora Rose berries have less than 1% fat content compared to the 50% fat content birds obtain by eating native dogwood and spicebush berries. A cultivar can be identified by the labeling, such as Liatris spicata 'Sunshine', or Monarda fistulosa 'Marshmallow'.

All the plants listed in the following pages are growing well in the presenters 5-acre property in Readington Township, NJ. The native soil is red, rocky, clay, with an acid pH.

**Native Grasses**: Purple top (*Tridens flavus*), northern sea oats (*Chasmanium latifolium*), little bluestem (*Andropogon virginicus*), social sedge (*Carex socialis*), rosy sedge (*Carex rosea*). Some birds eat the seeds. Bumblebee habitat. Food source for birds, mammals, skippers, wood nymphs, larval hosts. Structure.

**Native Vines**: Coral honeysuckle (*Lonicera sempervirens*), bloom is timed with the migration of hummingbirds. Virginia creeper (*Parthenocissus quinquefolia*). Leaves of 5 let it thrive. Birds love the berries during fall migration. Dutchmans pipe (*Aristolochia macrophylla*) planted to grow up a hackberry tree. Main larval food source for the pipevine swallowtail butterfly (*Battus philenor*).

# **Herbaceous Perennials**

- Wild bergamot (*Monarda fistulosa*). Popular with the day flying Hummingbird clearwig moth that overwinters in fallen leaves. Deer resistant.
- Virginia mountain mint (*Pycnanthemum virgineanum*). Covered in pollinators. Deer resistant.
- New England aster (*Aster novae-angliae*). Calico aster (*Symphyotrichum laterifforum*), White Wood aster (*Eurybia divaricate*). Fall blooming. Deer candy.
- Foxglove beardtongue (*Penstemon digitalis*), woodland edge, good for native bees. Deer resistant.
- Dense blazing star (Liatris spicata), skippers, hummingbirds, native and bumble bees. Sun.
- Milkweeds: Purple milkweed (*Asclepias purpurascens*), nutrition. Swamp milkweed (*Asclepias incarnata L*) moist soil. Common milkweed (*Asclepias syriaca*) sun, spreads. Butterfly milkweed (*Asclepias tuberosa*), sun, ignore once established. Milkweeds are critical for the survival of Monarchs. Enjoyed by many pollinators. Deer resistant. Monarchs may prefer swamp and common milkweed.
- Lance leaved coreopsis (*Coreopsis llancelolata*). Clay tolerant and drought tolerant, grows in a wide range of conditions. Special value to native bees (Xerces Society). Tall tickseed also mentioned.
- Purple coneflower (*Echinacea purpurea*). Grows well in a bathtub. Goldfinches eat the seeds. Tolerant of a range of conditions. Gray headed coneflower (*Ratbida pinnata*) under test.
- Purple giant hyssop (*Agatache scrophulariifolia*), a wildlife magnet, can be grown in a container. Full to partial sun.
- Joe pye weed (*Eutrochium purpureum*), several available. (Coastal, spotted, hollow stem) Swallowtail butterfly magnet.
- The goldenrods: confused with the allergen ragweed. Zigzag goldenrod (*Solidago flexicalis*). Many goldenrods are fantastic for pollinators and look great planted next to new England aster. Fall blooming. Some spread.

# **Native Shrubs and Trees**

- The willows: pussy willow (*Salix discolor*), black willow (*Salix nigra*). Mourning cloak, Viceroy butterflies. Early blooming, high wildlife value-455 butterflies and moths utilize the willows.
- Highbush blueberry (*Vaccinium corymbosum*), as a lesson in testing your soil. State fruit of NJ. Native mining bees are more efficient pollinators of Blueberries than non-native honeybees.
- Buttonbush (*Cephalanthus accidentali*) is versatile. Butterflies, birds, nectar, native bees. Special value mention from Xerces Society, mid-summer bloom. 24 birds eat the seeds.
- American hazelnuts (Corylus American) can be grown in New Jersey. Food for mammals and humans.

- Spicebush (*Lindera benzoin*). Fun looking for caterpillars, red berries for fall bird migration, catbirds.
- Viburnums: blackhaw (*Viburnum prunifolium*), maple leaf (*Viburnum acerifolium*), arrowwood viburnum (*Viburnum dentatum L*). 100 species of moths and butterflies develop on viburnums. Food and cover for birds. Large shrubs.
- Purple flowering raspberry (*Rubus odoratus*). No prickers. Spreads. Native bee magnet.
- Hollies: inkberry holly (*Ilex glabra*), use in place of boxwood, high deer resistance, birds love the tiny berries. Winterberry holly (*Ilex verticulata*), food for 48 species of birds. American holly (*Ilex opaca*), winter emergency food for birds. American holly is a tree that can grow to 50 feet tall.
- Dogwoods: white dogwood (*Cornus florida*), 126 species of moths and butterflies, and 86 species of birds benefit during fall migration. Gray or swamp dogwood (*Cornus racemose*), adaptable, white berries eaten by 98 species of birds. Use in place of forsythia. Red osier dogwood (*Cornus sericea L*.)
- Eastern red bud (*Cercis canadensis*). Special value to native bees and bumblebees. Native shade garden underneath could include foamflower, wild geranium, trillium, Virginia bluebells.
- Common hackberry (*Celtis occidentalis*), 48 species of birds eat the fruit, butterflies overwinter in leaves.
- Eastern red cedar (*Juniperus virginiana*). Berries loved by 90 birds, including cedar waxwing. Evergreen, cover.
- Eastern white pine (*Pinus strobus*). 16 birds eat the seeds. Evergreen. Cover. 200 species of moths and butterflies utilize this tree.
- Maples: red maple (*Acer rubrum*), silver maple (*Acer saccharinum*). 285 species of moths and butterflies develop on Maples. Native bee favorite in early spring. Habitat for gray tree frog.
- Shagbark hickory (Carya ovata), high wildlife value, bats live under the shaggy bark. Tasty native nut.
- Black cherry (*Prunus serotina*), very high wildlife value-456 species of moths and butterflies utilize this tree. Native plum (*Prunus americana*), feeds wildlife and makes good jam. Larval host plant to many Insects.
- Northern red oak (*Quercus rubra*). State Tree of NJ. Scarlett oak *Quercus coccinea*. Learn to identify by leaf shape and color.
- Northern white oak \*Keystone\* top wildlife tree (Quercus alba). 534 butterflies and moths utilize this wildlife tree which can live more than 300 years. Swamp white oak (Quercus bicolor). The champion swamp white oak is in Sussex, New Jersey. The acorns are sweet and an important food for wildlife. Swamp white oaks can live 300 to 350 years.
- Other great oaks: pin oak (*Quercus palustris*), chestnut oak (*Quercus montana*), blackjack oak (*Quercus marilandica*).

### Resources

Bowmans Hill Wildflower Preserve

Cornell

Duke Farms in Hillsborough, NJ

Friends of Hopewell Valley Open Space

Gardeners News articles by Herbert Ling

Heather Holms, Biologist, and author

homegrownnationalpark.org

www.bhwp.org
www.allaboutbirds.org
www.DukeFarms.org
www.fohvos.org
www.gardenernews.com
www.pollinatorsnativeplants.com
www.udel.edu

### Resources, cont.

Lady Bird Johnson Wildflower Center

National Wildlife Federation

Native Plant Society

New Jersey Audubon Society

· Pat Sutton, Naturalist

Rutgers

• The Xerces Society for Invertebrate Conservation

USDA

www.wildflower.org/plants

www.nwf.org

www.npsnj.org

www.njaudubon.org

www.patsuttonwildlifegarden.com

njaes.Rutgers.edu/pubs/

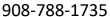
www.xerces.org

plants.usda.gov

# Where to purchase native plants

- https://www.jerseyyards.org/jersey-friendly-plants/where-to-buy-native-plants/
- http://www.npsnj.org/pages/nativeplants
- Township Tree Giveaways (New Jersey Forest Service) April, yearly.

# Rutgers Master Gardeners of Hunterdon County Helpline



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