

Incorporating Native Plants in Your Residential Landscape

Fact Sheet FS1140



Cooperative Extension

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What are Native Plants?

The term native plant is fluid and can have many different meanings. In general, native plants are species that were present at the beginning of the European settlement of North America. These plants, over time, have evolved to grow in a specific region. Native plants have established complex relationships with other native plants, insects and animals, some of which are dependent on one another to thrive. Generally, native plants naturally occur within a radius of 100 miles of your area and many can do well with a minimum of care once established.

Why Consider Native Plants?

Native plants have evolved to thrive in a specific region, and within specific ecosystems. These plants, when situated in the proper environment, support their ecosystems more diversely than exotic plantings. While many homeowners have incorporated flowering plants in their landscapes to attract certain birds and butterflies, the habitat needed to support insect life is greatly needed. Exotic plants may offer a nectar source for wildlife, but in many cases their leaves, fruits, pollen and nectar are not the preferred food of our vital native insects and wildlife. The lack of proper habitat and food sources for native birds and insects is one factor in the decline of many of these species in the United States.

The reliance on standard exotic landscape plants leads to predictable landscapes regardless of the region. This creates a loss of regional aesthetic identity. Homeowners who desire for pristine landscapes have created residential properties devoid of leaf and plant litter. With proper planning you can maintain a more natural landscape using native plants, saving money on fertilizers and achieving a lower maintenance landscape.

When considering the use of native plants in your residential garden, it is necessary to identify your landscape goals and to assess conditions in your landscape to guide your selection of the most appropriate native plants for your property.

Identify Your Landscape Goals

- Reduce maintenance and use of fertilizers and pesticides.
- Incorporate native plants by replacing plants that are not doing well; adding natives to an existing landscape; or systematically replacing exotic plants with natives.
- Transition the landscape to reflect the native plants of my region.
- Provide habitat for certain native species to successfully reproduce.
- Provide a food source for native wildlife and insects.

Native Landscape Planning Considerations

The key to success is to prepare a working plan and amend it as you progress. Here are some things to consider:

- Determine the desired length of time to transition your landscape to native plants.
- Inventory what plants, native or exotic, you already have on your property.
- Set a goal of the number or percentage of natives you want in your landscape, and identify the exotic plants you want to replace.
- Take into consideration any special uses you would like to highlight in the plant such as producing food for you and/or wildlife, seasonal color and textures, fragrance, etc.

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- Know the growth habit of the plants, including their mature size, rate of growth, and ability to spread or stay where planted in the landscape.
- Strive for a mixture of plants that provide continuous color in the garden, thereby offering more nectar and pollen sources, resulting in a more sustainable landscape.

Assessing Current Landscape Conditions

There are three elements to successful planting that you must consider for each specific space on your property. These individual assessments are necessary since conditions can vary on your property depending on the location.

1. Is the soil mostly sand, silt or clay textured? Wet, or well drained? Is the soil acidic, neutral or alkaline? If you don't know, contact your county Cooperative Extension office for a soil test for a minimal fee.
2. What amount of sun light is available throughout the day? Full sun equals 6+ hours of direct sunlight, part sun equals 4 to 6 hours of direct sunlight, part shade equals 2 to 4 hours of direct sunlight and shade equals less than 2 hours of direct sunlight.
3. How much water is available by natural means? You must be willing to commit to watering any new plants when there's inadequate rainfall to get them established the first year.

Picking the Right Plants

Now the fun part begins by identifying what native plants you'd like for your landscape. Table 1 identifies native plants that tend to be more readily available through local nurseries and plant catalogs. Keep in mind that your native plants, if situated properly, will grow readily so consider buying smaller sized plants. Smaller sized plants also adapt better to their new locations and often catch up in size to larger sized plants within a few years.

Where to Buy Native Plants

It is important to emphasize that you should not acquire native plants from the wild. Purchase your plants from a reputable dealer using plant species native to your area. If you're having trouble finding any of these plants, you can either ask your local nursery if they can order it for you, or check out one of the website links provided.

Suggested Reading

Field Guide to Wildflowers of North America, D.M. Brandenburg, 2010, Sterling Press.
 Armitages Native Plants for North American Gardens, A.A. Armitage, 2006, Timber Press.
 Bringing Nature Home, Douglas Tallamy, 2009, Timber Press.
 Plant Communities of New Jersey, K.H. Anderson and B.R. Collins, 1994, Rutgers Press.
 Native Plants of the North East, Donald J. Leopold, 2005, Timber Press.

Suggested Websites

Native Plant Society of NJ, www.npsnj.org
 National Wildlife Federation; Backyard Wildlife Habitat; www.nwf.org/habitats
 National Parks Service, Plants Conservation Alliance, www.nps.gov/plants/
 Wild-Ones, Native Plant Landscaping, www.for-wild.org
 USDA Plants Database, www.plants.usda.gov
 New Jersey Natural Resource Conservation Service, www.nj.nrcs.usda.gov/plants.html

Figure Captions

Page 1 (l-r): *Eupatorium purpureum*, *Geranium maculatum*, *Asclepias tuberosa*.
 Page 2 (t-b): *Cornus sericea*, *Lobelia cardinalis*, *Clethra alnifolia*



Table 1. Northeastern U.S., Mid-Atlantic States Native Plant Recommendations

Common Name	Latin Name	Soil Type	Sunlight	Height & Growth	Comments
TREES					
American Elm	<i>Ulmus americana 'Princeton'</i>	Average	Full sun	100 ft., rapid	New cultivar resistant to Dutch Elm disease.
American Holly	<i>Ilex opaca</i>	Average	Full sun-pt. shade	30 ft, slow	Evergreen. Need male & female for red berries.
American Hornbeam	<i>Carpinus caroliniana</i>	Average-moist	Full sun-pt. shade	30 ft., slow	Can't tolerate drought, nice small shade tree.
Bald Cypress	<i>Taxodium distichum</i>	Dry-moist	Full sun	100 ft., rapid	Thrives in wet or dry soils, conifer sheds needles in fall.
Eastern Red Cedar	<i>Juniperus virginiana</i>	Average	Sun-pt. shade	40-60 Ft, slow	Evergreen. Resistant to drought.
Eastern Red Oak	<i>Quercus rubra</i>	Average-moist	Full sun-pt. shade	80 ft., moderate	Tolerates pollution, fall foliage.
Eastern Redbud	<i>Cercis canadensis</i>	Average	Sun-pt. shade	30 ft., moderate	Magenta flowers in early spring; drought resistant.
Eastern White Pine	<i>Pinus strobus</i>	Average	Sun-pt. shade	100 Ft, rapid	Evergreen.
Flowering dogwood	<i>Cornus florida</i>	Average	Pt. Sun-shade	30 Ft., moderate	White flowers in spring; fall foliage.
Pawpaw	<i>Asimina triloba</i>	Average	Sun-pt. shade	25 ft., slow	Flavorful, edible fruit in fall; need two for pollination.
Pin Oak	<i>Quercus palustris</i>	Acid, avg-moist	Full sun-pt. sun	70-90 ft., rapid	Easy keeper, roots won't buckle paving; produces acorns.
Red Maple	<i>Acer rubrum</i>	Dry-moist	Sun-pt. shade	40-60 ft., rapid	Red fall foliage, easy keeper.
River Birch	<i>Betula nigra</i>	Average-moist	Full sun-pt. sun	40-60 ft., rapid	Peeling bark adds interest, does well in soggy areas.
Sugar Maple	<i>Acer saccharum</i>	Average-moist	Sun-pt. shade	60-70 ft., slow	Good shade tree, bright fall foliage.
SHRUBS					
Beatberry	<i>Arctostaphylos uva-ursi</i>	Dry - average	Sun-shade	6-12"	Evergreen low growing shrub, red berries.
Highbush blueberry	<i>Vaccinium corymbosum</i>	Acid, moist	Full sun-pt. shade	6-12'	Excellent fall color, edible fruit.
Hollyleaved Barberry	<i>Mahonia aquifolium</i>	Average	Sun-pt. shade	8 ft., moderate	Evergreen. Drought tolerant.
Inkberry Holly	<i>Ilex glabra</i>	Acid, moist	Full sun-pt. shade	4-8'	Evergreen, small black berries.
Mountain Laurel	<i>Kalmia latifolia</i>	Acid, avg-moist	Part Sun-shade	7-15 ft., slow	Evergreen. White flowers in spring. Mulch well.
Northern Bayberry	<i>Morella pensylvanica</i>	Dry - moist	Full sun-pt. shade	5-8 ft., rapid	Tough plant thrives in all soil types.
Northern Spicebush	<i>Lindera benzoin</i>	Average-moist	Full sun-pt. sun	12 ft., slow	White or yellow flowers in spring, yellow foliage in fall.
Pasture rose	<i>Rosa carolina</i>	Dry - average	Sun-shade	6-12"	Fragrant 2" wide pink flowers.
Red Chokeberry	<i>Aronia arbutifolia</i>	Dry - moist	Part sun-pt. shade	6-10'	Beautiful fall foliage, red fruits.
Redstem Dogwood	<i>Cornus sericea</i>	Average-moist	Full sun	12 ft., moderate	Has bright red stems if pruned in fall. Fall foliage.
Serviceberry	<i>Amelanchier alnifolia</i>	Average-moist	Sun-pt. shade	8-12 ft., moderate	Tasty edible fruit in early summer; easy keeper.
Southern Arrow-wood	<i>Viburnum dentatum</i>	Acid, average	Sun-pt. shade	3-8 ft., slow	White flowers in spring, fall fruit for birds.
Summersweet	<i>Clethra alnifolia</i>	Acid, moist	Full sun-pt. shade	5-8'	Late summer flowers.
Virginia sweetspire	<i>Itea virginica</i>	Moist - average	Full sun-pt shade	3-6'	Long lasting fall color.
Winterberry	<i>Ilex verticillata</i>	Acid, avg-moist	Full sun-pt. sun	6-10 ft., moderate	Evergreen. Need male & female for red berries.

Common Name	Latin Name	Soil Type	Sunlight	Height & Growth	Comments
PERRENIALS					
Black Eyed Susan	<i>Rudbeckia hirta</i>	Average	Full sun	1-2 ft.	Yellow or orange flowers all summer.
Bunchberry Dogwood	<i>Cornus canadensis</i>	Acid, average	Part sun-shade	3-6 inches, slow	Groundcover. White flowers in spring, red berries in fall.
Butterfly Weed	<i>Asclepias tuberosa</i>	Dry-average	Full sun	2 ft.	Orange summer blooms, host to monarch caterpillars.
Cardinal Flower	<i>Lobelia cardinalis</i>	Average-moist	Part sun-pt. shade	3 ft.	Red flowers in summer, attracts hummingbirds.
Christmas Fern	<i>Polystichum acrostichoides</i>	Dry-average	Part sun-shade		Small fern.
Dense Blazing Star	<i>Liatris spicata</i>	Average	Full sun-pt. sun	1-3 ft.	Purple spiked flower in summer.
Eastern Joe Pye Weed	<i>Eupatorium dubium</i>	Moist	Sun-pt. shade	3-4 ft.	Purple flowers in summer, attracts butterflies & birds.
Eastern teaberry	<i>Gaultheria procumbens</i>	Acid, average	Part sun-shade	3-6 inches, moderate	Evergreen groundcover. White flowers in spring, fragrant.
False Sunflower	<i>Heliopsis helianthoides</i>	Dry-moist	Full sun	3-5'	Long blooming, from June to September.
Foam flower	<i>Tiarella cordifolia</i>	Average-moist	Pt. shade-shade	1.5-2'	Soft flowers on a spike from the center of the plant.
Golden tickseed	<i>Coreopsis tinctoria</i>	Average-moist	Sun-pt. sun	1-3 ft.	Yellow tiny daisy-like flowers all summer; can be invasive.
Great Blue Lobelia	<i>Lobelia siphilitica</i>	Moist -wet	Full sun-pt. shade	3 ft.	Beautiful blue flowers, attracts butterflies.
Grey Goldenrod	<i>Solidago nemoralis</i>	Dry, poor	Full sun-pt. shade	2' tall	Showy yellow plumes ideal for dry garden sites.
New England Aster	<i>Aster novae-angliae</i>	Dry - average	Sun-pt. shade	2-6 ft.	Purple flowers late summer. Attracts bees & butterflies.
Pink Tickseed	<i>Coreopsis rosea</i>	Acid, avg-moist	Full sun-pt. shade	18-24 inches	Pink daisy-like summer blooms; can be invasive.
Purple Coneflower	<i>Echinacea purpurea</i>	Average	Full sun	2 ft.	Purple summer blooms, goldfinches love its seeds!
Royal Fern	<i>Osmunda regalis</i>	Average-moist	Shade	6 ft., moderate	Beautiful large fern, has fall color.
Trumpet Honeysuckle	<i>Lonicera sempervirens</i>	Average-moist	Full sun-pt. sun	10-20 ft., rapid	Climbing vine with red or orange blooms in summer.
Wild geranium	<i>Geranium maculatum</i>	Average	Full sun-pt. shade	2'	Low growing mounding plant that spreads easily.
Boneset	<i>Eupatorium perfoliatum</i>	Average-moist	Full sun-shade	3-6'	Flat topped flower clusters that bloom from spring to fall.

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