

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					
Bearberry	<i>Arcostaphylos 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
PERENNIALS					
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>Helianthus heterothoides</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 Goldentrod	<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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ORDINANCE 05-2022

BOROUGH OF EATONTOWN
COUNTY OF MONMOUTH, STATE OF NEW JERSEY

**AN ORDINANCE OF THE BOROUGH OF EATONTOWN AMENDING CHAPTER 89, "LAND USE",
ARTICLE IX "DESIGN STANDARDS," SECTIONS 89-83 "PLANTING AND LANDSCAPE", ARTICLE X "SUBDIVISION
OF LAND AND SITE PLAN", SECTIONS 89-87 "APPLICATION FOR APPROVAL OF PRELIMINARY PLAT OF A
MAJOR SUBDIVISION, SECTION 89-90 "APPLICATION FOR APPROVAL OF PRELIMINARY PLAT OF A SITE PLAN",
AND ARTICLE VII AREA, BULK AND USE REQUIREMENTS, SECTION 89-39 "LANDSCAPING, BUFFERING AND
SCREENING" TO REQUIRE THE USE OF NATIVE PLANTS AND TREE SPECIES**

WHEREAS, the Borough's Environmental Commission (the "EC") and Shade Tree Commission ("STC") (the EC and STC shall be collectively referred to as the "Environmental Team") have studied and made recommendations to the Borough Council to require the use of native plants and tree species rather than invasive plantings in connection with development applications; and

WHEREAS, the planting and/or the growing of invasive species and plants not indigenous to the central New Jersey environment has been found to be destructive to the natural environment, indigenous flora, structures and walks, and properties where invasive species have been planted and/or permitted to grow; and

WHEREAS, native plants are localized, hardy and well-adapted to the local soils and climate; have lower maintenance and replacement costs; are more insect and disease resistant; and require less watering and fertilizing than non-native plants; and

WHEREAS, wildlife such as birds rely upon native plants with which they co- evolved for food, cover, and rearing their young and native plants have evolved to thrive in a specific region, and within specific ecosystems and support their ecosystems more diversely than exotic plantings;

WHEREAS, the planting and growing of invasive species threatens the value and physical integrity of both public and private property in the Borough; and

WHEREAS exotic plants may offer a nectar source for wildlife, in many cases their leaves, fruits, pollen and nectar are not the preferred food of our vital native insects and wildlife;

WHEREAS 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; and

WHEREAS, native plants help restore the ecological balance lost through development; and

WHEREAS, the Borough Council believes it is in the best interest of its residents to adopt the recommendations of its Environmental Team and prohibit the planting and/or growing of certain non-native invasive species within the Borough to protect and preserve the environment within the Borough of Eatontown;

NOW THEREFORE BE IT ORDAINED, by the Borough Council of the Borough of Eatontown, County of Monmouth and State of New Jersey that it hereby amends Article IX, Design Standards, Section 89-83 and Article X Subdivision of Land and Site Plan, Sections 89-87 and 89-90 as follows:
(additions are underlined deletions are ~~stricken~~):

§89-83 Planting and Landscaping

A. Grading and Selection of Plant Materials shall be amended to include a new subsection A(4) as follows:

- (1) Native species and their cultivars shall be used in all landscape designs brought before the Office of Planning and Zoning including Planning and Zoning Board applications. A list of native plants as well as their list of deer resistant native plants, specifically for Monmouth County published by the Native Plant Society of New Jersey shall be required and incorporated as if fully set forth at length herein, as published in Rutgers New Jersey Agricultural Experiment Station's web site: <https://njaes.rutgers.edu/fs1140/>.
- (2) Non-indigenous Plant Species and Invasive Species shall be prohibited. A list of invasive species and non-indigenous plant species shall be incorporated as if fully set forth at length herein as identified by the New Jersey Department of Environmental Protection, Natural and Historic Resources Group, Parks and Forestry, Office of Natural Lands Management, Natural Heritage Program 2004 publication "An Overview of Nonindigenous Plant Species in New Jersey", or any subsequent revision.
- (3) Under no circumstances shall it be allowable to plant any plants, shrubs, or trees that are listed on the NJ Invasive Species Strike Team's "Do Not Plant" list.

D. Consultation. It is the responsibility of contractor and/or applicant to consult with the Borough Arborist or Borough Engineer, prior to installation, for purpose of comprehension of specifications, plant material or planting details. To avoid monocultures, the following species diversity shall be used: Whenever an application plan calls for 5-10 plantings, two (2) or more different kinds of species shall be planted. If between 11-20 plantings, 4 or more species shall be planted; between 21-35, 5 or more species shall be used; and if more than 36 plantings are to be used, an additional species be provided for every twelve plantings and the minimum diversity amongst plantings shall be 10 percent.

§ 89-87 Application for Approval of Preliminary Plat of a Major-Subdivision

(B)(1) General requirements. All plats containing proposals or designs for drainage, streets and subdivision layouts shall be prepared by a professional engineer licensed to practice in the State of New Jersey and shall bear the address, signature, embossed seal and license number of said professional engineer. The preliminary plat shall be based on a land survey conducted not more than five years prior to the date of application and certified to the subdivider and shall be drawn at a scale of not less than 100 feet to the inch for subdivisions up to 100 acres in size, and not less than 200 feet to the inch for subdivisions over 100 acres in size, and shall show or be accompanied by the following specified information, and the design information and submissions required by the provisions of the design standards portion of this chapter shall accompany the preliminary plat including the number, location and species of all required non-invasive shade trees or other plantings which are set forth at <https://njaes.rutgers.edu>.

§ 89-90 Application For Approval Of Preliminary Plat Of A Site Plan

(B)(26) Landscaping and screening plan showing the location, number, and species of all required non-invasive shade trees or other plantings type in conformance with the list identified at <https://njaes.rutgers.edu>, spacing and number of each type of tree or shrub and the location type and amount of each type of ground cover to be utilized.

§89-39 Landscaping Buffering and Screening

In conjunction with multifamily, commercial, industrial, and residential development, all areas of a lot not occupied by buildings, pavement or other surfacing, or other required improvements, or undisturbed areas in which trees, shrubs, and undercover do not exist in the appropriate quality and quantity, shall be landscaped by planting grass and/or ground cover, shrubs and trees. Such trees and shrubs shall be a type approved by the Shade Tree Commission and the trees shall have a minimum caliper of 2 1/2 inches at a height of one foot. Placement of the plant material shall be appropriate to enhancement of the property and in accordance with a landscape plan approved by the Site and Design Committee Minimum evergreen screening tree size shall be six to eight foot tall. Trees shall be planted four feet minimum with a preference to six feet from sidewalks, pavement, curbs or other

impervious surfaces, except buildings where trees shall be planted a minimum of 10 feet away. All shade trees and screening trees shall be non-invasive species and varieties required by the Borough Code at Section 89-83 and as approved by ~~recommended from the "Eatontown Shade Tree Commission Approved Tree List" (latest version)~~. Only small shade trees shall be planted under or within 15 feet of an overhead utility. No large or medium shade trees will be permitted. (See definition section for size of trees.) No certificate of occupancy shall be given until shade trees are installed as required by approved site plan for that lot. If the site is ready but is not in the proper planting season, a temporary certificate of occupancy (TCO) will be used. Trees must be planted within six months of issuance of TCO. At such time the trees are accepted by the Borough arborist or Borough Engineer, a certificate of occupancy shall be issued. ~~There shall be no more than seven shade or screening trees of one species clumped or in a row together. There shall be no more than 15 shrubs of one species and variety clumped or in a row together. The following species diversity shall be used: Whenever an application plan calls for 5-10 plantings, two (2) or more different kinds of species shall be planted. If between 11-20 plantings, 4 or more species shall be planted; between 21-35, 5 or more species shall be used; and if more than 36 plantings are to be used, an additional species be provided for every twelve plantings and the minimum diversity amongst plantings shall be 10 percent.~~ All shade, ornamental and screening trees shall be balled and burlapped.

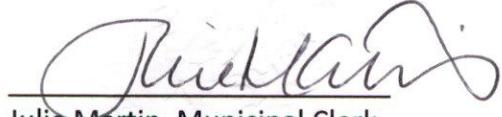
BE IT FURTHER ORDAINED, that

- A. All other Ordinances or provisions of the Code of the Borough of Eatontown or parts thereof, which are inconsistent with any provisions in this Ordinance, are hereby repealed to the extent of such conflict or inconsistency.
- B. If any provision or portion of this Chapter is held to be unconstitutional, preempted by Federal or State Law or otherwise invalid by any court of competent jurisdiction, the remaining provisions of this chapter shall not be invalidated.
- C. This Ordinance shall take effect upon its passage and publication as required by law.

DATE INTRODUCED: February 23, 2022

DATE ADOPTED: March 9, 2022

ATTEST:



Julie Martin, Municipal Clerk
Date: 3-10-2022

APPROVED:



Anthony Talerico, Jr., Mayor