

HOW DO I... PICK SUITABLE NATIVE PLANTS?

If you are adding plants to your yard or neighborhood and are considering native plants, or you want to learn more about them, this guide provides all the basics to acquaint you with native plants. This guide applies mostly to the Mid-Atlantic Chesapeake Bay region, but can be used as a general reference for other regions as well.

WHAT YOU NEED



ENTHUSIASM



CURIOSITY



RESEARCH
Internet or Library



PATIENCE

BENEFITS



Provides
Habitat



Fun Facts!



Beautify



Eco-Friendly



Improves air
quality



Reduce
stormwater



Pollinators



Grow
Environmental
Stewards

GETTING STARTED

- 1 WHAT ARE NATIVE PLANTS?** Native plants are flowers, herbs, ferns, grasses, shrubs and trees that naturally grow in an area, as opposed to being cultivated by humans. The geographic area where a plant is naturally found is often called its native range or region. Invasive plants are aggressively growing plants that are foreign to a region. The conditions across

a region, such as geology, topography, soils and climate, determine specific locations a plant is found within its native range; biota can also affect the geographic distribution of plants. Plants that are native in some regions may not be native in others. In the Mid-Atlantic, the three main nativity regions are the Coastal Plain, the Piedmont, and the Mountain region (Fig. 1). Every plant species “tolerates a range of soil, sunlight, moisture, temperature, and other conditions” (Ref. ①, p5). This incredible adaptability has allowed plants to survive for millions of years.



Fig. 1

(Ref. ①, p9)

2 WHY USE NATIVE PLANTS? Native plants often require less watering and fertilizing than non-native plants because they are adapted to local soils, climate and other conditions, which conserves water and puts fewer harmful chemicals into the air and ground. They are also less likely to need pesticides because many native plants are resistant to disease and pests. (Ref. ①, p4) This way, native plants can last longer and bring balance to natural ecosystems. True balance must also include wildlife. Native wildlife species depend on native plants, so using native plants can help restore animals populations we have decimated.

Natives in your yard can provide beauty and a unique splash in a sea of overused cultivated species. If you prefer a tightly manicured look, both native and non-native plants may

need more maintenance and care. It is generally best to let natives grow as they do naturally, with occasional cleaning up or pruning. Many native plants have attributes that are just as desirable, if not more, as popular non-native plants! Native plants can be harder to come by at your local nursery. However, by purchasing native plants, you encourage the nursery trade to meet the market need by providing a wider array and higher quantities of these environmentally beneficial species.








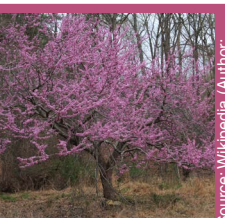


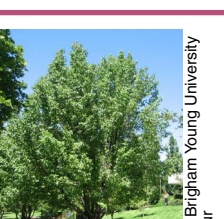

3 HOW TO CHOOSE THE RIGHT PLANT.

Native plants cannot necessarily survive in all locations within their native region because many sites have been disturbed by human activity. Activities such as construction and heavy daily use significantly change site conditions, causing survivability challenges for plants. In these cases a cultivar or non-aggressive non-native may be the best choice.





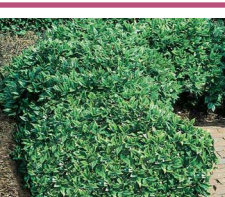

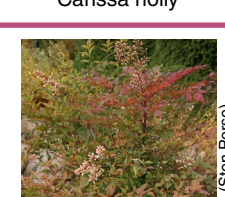
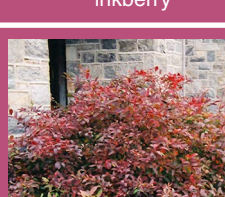




Some, but not all, native plants cannot handle tough urban conditions and the associated pollutants. When you are choosing species, consider the different ranges of conditions a plant can tolerate. Species with wider ranges will have higher survivability on more types of sites. It is important for you to determine the specific conditions at your site. Ask yourself how much precipitation you get in a year, how much sunlight the area gets, and what type of soil you have. (Some state Extension offices can test soil for you.) In the Mid-Atlantic, clay soils are common. One way to learn your ecoregion is to enter your zip code here: www.pollinator.org/guides.htm.

Keep in mind that cultivated varieties of native plants tend to be easier to find, but they do not always provide the same benefits as the true species of the native plant. With cultivars, even the most seemingly subtle characteristic change can affect the way wildlife is able to use it. If you want to attract native creatures, it is best to plant the true species. It is also best to use true species when planting near an existing designated natural area. (Ref. ③, p7)

NATIVE ALTERNATIVES TO POPULAR NON-NATIVE TREES:

| Instead of this: → | Try this! |
|--|--|
|  <p>Source: Wikipedia (Author: Famartin)</p> <p><i>Acer palmatum</i> Japanese maple</p> |  <p>Source: Edsel and Eleanor Ford House, Michigan</p> <p><i>Amelanchier arborea</i> serviceberry</p> |
|  <p>Source: Gerry's Tree Nursery</p> <p><i>Acer platanoides</i> Norway maple</p> |  <p>Source: Bachman's Landscaping</p> <p><i>Quercus bicolor</i> swamp white oak</p> |
|  <p>Source: Great Hill Horticultural Foundation</p> <p><i>Cornus kousa</i> kousa dogwood</p> |  <p>Source: Missouri Botanical Garden</p> <p><i>Chionanthus virginicus</i> fringe tree</p> |
|  <p>Source: Floridata.com</p> <p><i>Lagerstroemia indica</i> crape myrtle</p> |  <p>Source: Wikipedia (Author: Dcjr)</p> <p><i>Cercis canadensis</i> eastern redbud</p> |
|  <p>Source: DCPages.com</p> <p><i>Prunus x yedoensis</i> Yoshino cherry</p> |  <p>Source: Mt. Cuba Center</p> <p><i>Cornus florida</i> flowering dogwood</p> |
|  <p>Source: Brigham Young University Tree Tour</p> <p><i>Pyrus calleryana</i> Bradford pear</p> |  <p>Source: Missouri Botanical Garden</p> <p><i>Betula nigra</i> river birch</p> |

NATIVE ALTERNATIVES TO POPULAR NON-NATIVE SHRUBS AND GRASSES:

| Instead of this: → | Try this! |
|---|---|
|  <p>Source: Missouri Botanical Garden</p> <p><i>Buxus 'Green Gem'</i> boxwood</p> |  <p>Source: Mt. Cuba Center</p> <p><i>Morella cerifera</i> wax myrtle</p> |
|  <p>Source: Walters Garden Center</p> <p><i>Euonymus alatus 'Compactus'</i> dwarf-winged burning bush</p> |  <p>Source: The Cary Award</p> <p><i>Vaccinium angustifolium</i> lowbush blueberry</p> |
|  <p>Source: Monrovia</p> <p><i>Ilex cornuta 'Carissa'</i> Carissa holly</p> |  <p>Source: Monrovia</p> <p><i>Ilex glabra</i> inkberry</p> |
|  <p>Source: Wikipedia (Sten Porse)</p> <p><i>Nandina domestica</i> heavenly bamboo</p> |  <p>Source: NetPS Plantfinder</p> <p><i>Itea virginica</i> Virginia sweetspire</p> |
|  <p>Source: James H Schutte</p> <p><i>Prunus laurocerasus 'Otto Luyken'</i> cherry laurel</p> |  <p>Source: Go Botany</p> <p><i>Clethra alnifolia</i> sweet pepperbush</p> |
|  <p>Source: Wikipedia (Daderot)</p> <p><i>Miscanthus sinensis</i> Chinese silver grass</p> |  <p>Source: McHenry County, IL Government Water Resources</p> <p><i>Panicum virgatum</i> switchgrass</p> |

ADDITIONAL NATIVE ALTERNATIVES

| NON-NATIVE PLANTS | NATIVE PLANTS |
|--|--|
| <i>Berberis thunbergii</i> f. <i>atropurpurea</i> Japanese barberry | <i>Rhus aromatica</i> fragrant sumac |
| <i>Buddleia davidii</i> butterfly bush | <i>Viburnum dentatum</i> arrowwood viburnum |
| <i>Camellia japonica</i> camellia | <i>Kalmia latifolia</i> mountain laurel |
| <i>Celastrus orbiculatus</i> Oriental bittersweet | <i>Lonicera sempervirens</i> coral honeysuckle |
| <i>Cortaderia selloana</i> pampas grass | <i>Andropogon gerardii</i> big blue stem |
| <i>Cryptomeria japonica</i> Japanese cedar | <i>Juniperus virginiana</i> red cedar |
| <i>Hydrangea macrophylla</i> bigleaf hydrangea | <i>Rhododendron periclymenoides</i> pinxterbloom azalea |
| <i>Ilex crenata</i> Japanese holly | <i>Ilex opaca</i> American holly |
| <i>Liriope muscari</i> liriope | <i>Carex glaucoidea</i> blue wood sedge |

TIPS & FAQs

✓ WHY ARE LATIN NAMES IMPORTANT?

All plants have only 1 scientific (aka, Latin) name but can have numerous common names, which are often regionally based. Sometimes two different plants have the same common name. This is problematic in communication and can lead to the wrong plants being purchased, planted or removed. So if you want to be sure you are buying or discussing the correct plant, Latin names are the way to go.

✓ BASIC LATIN PRIMER. The scientific names of plants are in Latin (and occasionally Greek) and have a base of 2 words. The first word is the genus, and the second word is the specific epithet. In the Latin name for the bald cypress tree, *Taxodium distichum*, “Taxodium” is the genus, and “distichum” is the specific epithet. Sometimes there are other words after the epithet. Words in single quotes refer to a

cultivar (a cultivated variety); words after “var.” and “subsp.” or “ssp.” are naturally occurring varieties and subspecies within the species; and if there is an “x” in the name, it is a hybrid created by humans. *Taxodium distichum* ‘Shawnee Brave’ is a cultivar of bald cypress. *Taxodium distichum* var. *distichum* is a variety of bald cypress. The hybrid *Taxodium distichum* x *mucronatum* is a cross between bald cypress and Montezuma cypress. Typically, Latin names are italicized, though the cultivar portion in single quotes is not. Sometimes the Latin is abbreviated, such as *T. distichum*.

✓ CONFIRM NATIVITY OF PLANTS IN YOUR AREA. A great all purpose list for the Mid-Atlantic is “Native Plants for Wildlife Habitat and Conservation Landscaping: Chesapeake Bay Watershed.” Also, look for lists specific to your county or city. For example, the City of Alexandria (Arlington County) has a guide with a list called “Keeping it Natural!” (See “Resources” for links.)

✓ GO TO AN ARBORETUM TO SEE NATIVE PLANTS. Arboreta are great places to learn about plants, because they have a wide variety of plants, clear signage and expert staff. The Maryland Public Garden Consortium lists great options, such as Cylburn, in Baltimore, and Adkins, on the Eastern Shore. www.mdpublicgardens.org/visit.html Don't forget about the National Arboretum on the eastern edge of DC!

✓ SEED COLLECTING. You can also collect seeds from known natives to plant yourself and help propagate natives!

✓ WHAT ABOUT CLIMATE CHANGE? WON'T DIFFERENT PLANTS BE NATIVE HERE SOON? This is a big question with a complicated answer. Even among plant experts and enthusiasts there are differing opinions about where we are and where we're going. But it is true that plants are affected by climate and will adjust the best they can to changes. Some plants have already begun to migrate away from existing known ranges due to temperature differences. If changes are too drastic, plants will not be able to migrate fast enough, will decline and eventually die out.

RESOURCES

Glossaries of useful plant jargon:

www.jerseyyards.org/resources/resourcesglossary

<http://gnps.org/education/glossary>

www.nrcs.usda.gov/Internet/FSE

PLANTMATERIALS/publications/capmctn873.pdf

The Ladybird Johnson Wildflower Center's **native plant database is a storehouse of detailed information** on species endemic to the USA.

www.wildflower.org/plants

Maryland Extension's **Home and Garden Information Center** has professional horticulturists who provide answers to your pest and plant questions free of charge!

<https://extension.umd.edu/hgic>

Go to www.alexandriava.gov and search for "Keeping it Natural" to find specific information on **project planning considerations**.

Many other fantastic resources are available from these great folks:

Chesapeake Conservation Landscaping Council

www.chesapeakelandscape.org

Maryland Native Plant Society

www.mdflora.org

If you dig this guide, check out our other plant related Action Guides: "HOW DO I CREATE A NATIVE POLLINATOR GARDEN?" and "HOW DO I PLANT A TREE?"



REFERENCES:

- 1 Slattery, Britt E., Kathryn Reshetiloff, and Susan M. Zwicker. 2003.
Native Plants for Wildlife Habitat and Conservation Landscaping: Chesapeake Bay Watershed. (U.S. Fish & Wildlife Service)
www.nps.gov/plants/pubs/chesapeake/pdf/chesapeakenatives.pdf
- 2 **How to Choose and Use Native Plants** (Chesapeake Bay Program)
www.chesapeakebay.net/takeaction/howto/how_to_choose_and_use_native_plants
- 3 **Conservation Landscaping Guidelines** (Chesapeake Conservation Landscaping Council)
www.chesapeakelandscape.org/wp-content/uploads/2014/04/8_elements_2013.pdf

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