

Appendix A: Native Tree Species Selection

The University of Maryland Extension Burghardt Lab Tree List includes native tree species that do well when planted in urban areas in the Maryland region and provides information on tree characteristics, growing conditions, and suitable landscapes for planting. <https://cbtrust.org/wp-content/uploads/UMDEExtension-MDUrbanTreeSuitabilityList-forplanters-forwebsite-v3-7.xlsx>.

The Maryland State Archives Tree List features a wide range of native trees including tree profiles and colorful images: <https://msa.maryland.gov/msa/mdmanual/01glance/html/trees.html>

Several factors are important to consider as you choose your native tree species. You may choose to do the research and address these factors yourself or contact an arborist or other expert to talk these issues through. Contact the Trust for assistance finding a technical expert to discuss.

Purposes of the Project

- Consider the main goals of your project. Is the purpose of your project to provide shade for buildings, parks, or other infrastructure? If so, choose larger trees or trees with dense canopies (e.g., Hackberry). Is the purpose of your project to produce food? If so, choose native fruit or nut trees (e.g., Pawpaw, Serviceberry, or American Chestnut). Is the purpose of your project to beautify a community? (Choose trees that meet your aesthetic). You may want to use the Chesapeake Bay Native Plant Center to help you choose which native trees work best for your site(s): <http://www.nativeplantcenter.net/>. Additionally, use the Site Constraints and Site Preparation considerations below to decide what native trees may work best for your sites(s).

Site Constraints

Below are common constraints that could affect what trees would be most appropriate for your project:

- **Power lines:** If your site has overhead power lines, you are encouraged to plant trees that will remain below a certain height. Utility companies such as BGE, Pepco, Delmarva Power, etc. provide guidance to help choose tree species for sites with immediate overhead power lines. Information can be found at: <https://www.bge.com/SafetyCommunity/Safety/Pages/PlantingTrees.aspx>
- **Salt tolerance:** Consider tree susceptibility to salt damage from de-icing streets and sidewalks during the winter. Adverse soil changes from road and sidewalk salts are unfavorable to trees, so you may want to choose trees that are salt tolerant.
- **Parking:** Many street tree projects are in areas with street parking. You will want to choose trees that have minimal bark, seed, sap, twig, and fruit litter.
- **Tree pits:** Small tree pits do not work for trees that will grow to be large. If your tree pit is 32 square feet or smaller, you will only be able to use smaller species of trees. In some cases, tree pits can be expanded to accommodate larger tree species. Contact your local government department of public works or roads office to learn more about how to enlarge existing tree pits.
- **Deer densities/access:** If you are planting near forest fragments or in parks, deer rubbing on young trunks and deer browse can quickly damage a planting. Note that choosing species that are deer resistant (i.e., unpalatable) will lower the chance of “browse” but not “rubbing.” Even resistant species

will likely need trunk protection for the first two years of planting if deer are present. For more information visit: https://dnr.maryland.gov/wildlife/pages/hunt_trap/ddmtexclude.aspx

Aesthetics

The closer new trees align to expectations of the community, the more likely the community will invest in their care and advocate for their sustainability. For example, think about whether you want a dense canopy that will lead to lots of shade and will thus preclude understory plant growth (e.g., silver maple). Alternatively, you may choose species that provide more filtered light which will allow plant growth (e.g., honey locusts). Consider whether you want larger canopy species (e.g., (e.g., Northern red oak) or smaller species (e.g., Eastern redbud). Consider whether you want trees that will grow quickly to provide benefits as soon as possible, or if you want species that might live longer, but would take longer to provide benefits. Consider whether a tiered planting (canopy, sub-canopy, and understory planting) or a guild planting (a community of plants that grow and support each other by recycling nutrients back into the soil) could be appropriate for your site(s). If the purpose of your project is to reduce stormwater or particulate pollution, choose a diversity of native trees that maximize these services. Consider as many aspects as possible of your desired final product, and make sure to choose species that are most likely to accomplish your vision.

Maintenance Needs and Care

Different species of trees often require different degrees or types of maintenance. Consider factors about each of your potential tree species that drive different maintenance needs. For example, while all trees drop leaves, not all tree species drop leaves in the same way. Some drop significant amounts in the fall and therefore need clean-up scheduled to avoid clogging nearby storm drains. Other species such as evergreens do not drop as many leaves in fall. Yet others drop leaves in the fall, but the characteristics of the leaves are such that less intensive leaf removal is necessary.

Obtaining your Trees

Applicants can find a list of nurseries and landscape service providers by county on the following page: <https://cbtrust.org/grants/urban-trees/> (Resources for Applicants). Applicants are not required to use the provided resources, and not all these nurseries will have sufficient supply to support the Urban Trees Grant Program. Please contact your local plant nursery to inquire about native trees and stock availability. In addition, the Tree-Mendous Maryland program offers native trees for certain types of property. Information about the program can be found here: <https://dnr.maryland.gov/forests/Pages/treemendous/default.aspx>