TREE SELECTION AND PLACEMENT

Understanding the various factors to consider when selecting trees.

Human Activity

Exposed

Overhead or underground utilities, pavement, buildings, other trees, visibility. The list goes on and on. Make sure there is adequate room for the tree to grow to maturity, both above and below ground.

Exposure

The amount of sunlight available will affect tree and shrub species selection for a particular location. Most woody plants require full sunlight for proper growth and flowering. Some do well in light shade; however, few species perform well in dense shade. Wind exposure is also a consideration. Wind can dry out soils, damage tree crowns, and uproot newly planted trees. Special maintenance, such as staking or more frequent watering, may be necessary to establish young trees and shrubs on windy sites.

Drainage

Tree roots require oxygen to develop and thrive. Poor drainage limits oxygen availability to the roots and may ultimately kill the tree. If drainage is an issue on your property, ask a local arborist about what can be done to correct the problem.

Hardiness

Hardiness is the plant’s ability to survive in the extreme temperatures of the particular geographic region in which you are planting the tree. Plants can be cold hardy, heat tolerant, or both. Trees native to your region are best. Most plant reference books provide a map of hardiness zone ranges. Check with your local garden center for the hardiness information for your region.

Space Constraints

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Tree selection and placement are two of the most important decisions a homeowner makes when landscaping a new home or replacing a tree. Many trees have the potential to outlive those who plant them, so the impact of this decision can last a lifetime. Matching the tree to the site benefits both the tree and the homeowner.

One of the most common tree care questions is: “Which kind of tree should I plant?” Before this question can be answered, a number of factors need to be considered:

- Why is the tree being planted? What functions will it serve?
- Is a small, medium, or large tree best suited for the location and available space? Do overhead or belowground utilities preclude planting a large, growing tree — or any tree at all? What clearance is needed for sidewalks, patios, or driveways?
- What are the soil conditions? Is enough soil available of sufficient quality to support mature tree growth?
- How will necessary maintenance be provided? Will someone water, fertilize, and prune the tree as needed after planting?

Answering these and other questions can help you choose the “right tree for the right place.”

Tree Function
Large, healthy trees increase property values and make outdoor surroundings more pleasant. A deciduous shade tree that loses leaves in fall provides cooling relief from summer’s heat while allowing the winter sun to warm a home. An ornamental tree displays beautiful flowers, leaves, bark, or fruit. Evergreens with dense, persistent foliage can provide a windbreak or a screen for privacy. A tree or shrub that produces fruit can provide food for the owner or wildlife. Street trees decrease the glare from pavement, reduce runoff, filter out pollutants, and add oxygen to the air we breathe. Street trees also improve the overall appearance and quality of life in a city or neighborhood.

Form and Size
A basic principle of modern architecture is “form follows function.” Selecting the right form (shape) to complement the desired function (what you want the tree to do) can significantly reduce maintenance costs and increase the tree’s value in the landscape. In addition, mature tree size determines the level of benefits received. Larger trees typically provide the greatest economic and environmental returns. Depending on site restrictions, you can choose from hundreds of form and size combinations. A low, spreading tree may be planted under overhead utility lines. A narrow, columnar evergreen may provide a screen between two buildings. Large, vase-shaped trees can create an arbor over a driveway or city street.

Site Conditions
Selecting a tree that will thrive in a given set of site conditions is the key to long-term tree survival and reduced maintenance.

Consider the following when selecting a tree:
- soil conditions
- exposure (sun and wind)
- drainage
- space constraints
- hardiness zone
- human activity
- insect and disease susceptibility

Soil Conditions
In dense urban areas and new subdivisions, soil is often disturbed, shallow, compacted, and subject to drought. Most trees will suffer in these conditions without additional care. An arborist can take soil samples from your yard to test for texture, fertility, salinity, and pH (alkalinity or acidity). These tests can be used to determine which trees are suited for your property and may include recommendations for improving poor soil conditions. When selecting a tree, check for signs of structural problems, damage, and poor tree health.