amendments are recommended by your soil test results, use soil amendments or improvements that compensate for the deficiencies in the soil. Then mix with the existing soil to evenly distribute the amendment material throughout the planting hole. After planting, *lightly* tamp (do not pack) the soil around the tree for *stability*, taking care *not to put soil on top of the root-ball*. Water the tree to remove soil air spaces and settle the soil.

After planting, add composted mulch to a *1-to-2* inch depth on the disturbed area of soil. **Keep mulch away from the base of the tree trunk.** *Do not* use grass clippings or uncomposted wood chips. As the tree grows and the canopy increases, annually increase the mulched area just beyond the drip-line or branch spread.

Staking a tree is only necessary if the tree is in danger of falling over. Typically, only the larger trees (generally those trees 8 feet or greater in height) require staking. If staking is necessary, use no more than 2 or 3 stakes, taking care not to use any type of restraint that can cut into the young trees' sensitive bark. Remove the stakes as soon as the tree is stabilized, usually no more than one year after planting.

#### Maintenance

Weather conditions after planting are crucial to the survival of a newly planted tree. Moisture loss from the leaves and soil is the primary cause of mortality. Monitor the leaves and soil moisture every other day at several locations around the tree. Maintain a constant level of moisture around the root-ball so that the soil does not become completely dry. This should be done for several seasons until the tree has established itself. Do not overwater! Take note of tree vigor, as well as any disease or insect infestations in subsequent years. Contact a tree-care professional before applying fertilizers, or pesticides.

For more information, contact your local nursery, landscaper, arborist, or The Cooperative Extension office in your area. Planting trees provides a lifetime benefit to you and your community. Plant a living legacy. Plant a tree!

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# HOW TO BUY A TREE

This information bulletin provides an overview of tree selection, planting and maintenance procedures. Adhering to these guidelines can help ensure that the tree you select will provide years of benefits to you and your community.

#### Research

Trees provide many benefits to the community, from shade and windbreaks to improved air quality and decreased erosion. Before purchasing a tree, determine the benefits desired and choose your tree accordingly. Libraries, local Cooperative Extension agents, and bookstores contain a wealth of information on trees and other plants.

#### Site Selection

Plan ahead! Carefully plan the location of the tree. Determine the space the tree will require when mature. For example, if there is 25 feet of overhead space available for the tree, then select a tree whose canopy is less than 25 feet at maturity. Other factors affecting space requirements are overhead utility lines, underground utilities, such as water, sewer or septic field, and underground electric, telephone or cable television lines.

Care must be taken to ensure that the root system can develop properly without interfering with underground utilities. A utility-locating service called "Miss Utility" is available in the Washington area. A representative of Miss Utility will come to your property and mark the utility lines to be avoided during excavation. There is no charge in most cases, but Miss Utility must be notified two full working days prior to excavation activities. The toll-free number for this service is 1-800-257-7777.

Soil conditions are also very important. How will the tree tolerate the soil and weather conditions dictated by the site? Gather samples of soil from the proposed planting site and have them analyzed. (Your local Cooperative Extension office typically provides this service, but plan a month or so ahead.) Frequently, soil in residential areas is "disturbed" and may have a heavily compacted clay base. These soils may need to be amended or improved by adding topsoil or organic materials before planting. The soil restrictions of the planting site should help to determine the tree species you select.

## **Species Selection**

Once you have evaluated the planting site, consider which trees are suitable for the location. Correct positioning of the tree can maximize energy conservation and other benefits offered by a particular tree species. Some positioning considerations are:

✓ shading
✓ noise abatement
✓ fall color
✓ wind break
✓ flowering

Select a species that provides the most benefit to your site. Be sure to identify those tree species that can tolerate local weather and site conditions. For example, a tree that is sensitive to road salt and cold wind is not the proper tree to use as a screen for a road or walkway. Making these determinations before purchasing a tree can save time and expense.

Another factor to consider is a tree's susceptibility to pests or disease. Some trees within the same family may be more resistant to disease than others. For example, crabapple "cultivars" (those plants that are cultivated for genetic improvements) are more resistant to diseases such as apple scab, cedar-apple rust and fireblight, than the more common crabapple varieties. Cultivars can eliminate or significantly reduce the need for chemical treatments for pests, which can save time, money, and reduce chemical runoff. In most cases, native mature trees that have proven disease and pest resistant are your best choice. "Exotic" or non-native trees may be less healthy in your landscape. However, exotics are sometimes preferable to accommodate soil and water conditions that have changed during land development. Check with a local landscape professional to help choose the best species for your site.

### Individual Tree Selection

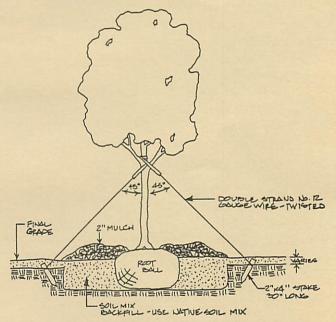
Seek the help of a reputable nursery or landscape contractor who is familiar with the survival rates of the trees planted in your area. Beware of tree "bargains" available at stores that do not specialize in the nursery industry. A "bargain" *may be* a tree of poor quality or one unsuitable for the local climate. Typically, a locally grown tree is better adapted to the local climate than a tree grown a few hundred miles away.

When selecting a balled and burlapped tree, inspect the area where the trunk and the ball meet. The tree trunk should be snug in a solid ball of earth. Look for damaged bark, open wounds, discolored leaves or signs of insects and disease. Trees heeled in mulch piles may have tree wrap on the trunks to guard against sun blistering and handling damage. *Inspect underneath the tree wrap*, since it could be concealing trunk injuries or insect infestations.

When selecting a tree, remember that a small tree transplants more easily, reestablishes itself quicker, and costs less than a large tree.

## **Planting**

The optimal time to plant a tree is either in the spring or fall, depending on the species. Check the calendar for Arbor Day in your area, since this is generally a good time to plant. Although trees can be planted year-round, the best time to *transplant* a tree is when the tree is dormant, typically fall, winter or early spring. Consumers should know that trees available for purchase in mid-summer were dug in the spring, and have been out of the ground for several months. As the time between the digging and planting increases, so does the risk of reduced vigor and mortality.



When planting a tree, dig a hole *at least* two and a half times the diameter of the root-ball, and place the tree in the hole so that the top of the root-ball is slightly raised above the surrounding grade (*see* illustration). This will allow for the settling that occurs after planting. Once the tree is positioned properly, carefully cut and peel back the burlap from the root-ball and remove as much of the wire or rope as possible. While it is important to remove burlap or other material covering the root-ball, breaking the root-ball of earth can harm the tree. Do not remove wrapping and packaging materials if it will result in doing severe damage to the root-ball. Fill the planting hole with the original soil that was removed. If soil