Tree Planting

The first step in tree selection is to determine the type of tree appropriate for your property and your needs. Climate and soil play big roles, so make sure that the tree species you are considering can flourish in your local climate and soil conditions.

Matching the right tree for your property is a key part of the tree selection process: What is the size of the site on which your new tree or trees will be situated?

How big will that spindly three-foot sapling be in 30 or 40 years?

Is an oak or a willow, either very large when fully grown, the best tree for a small front lawn?

Will a single small tree or bush be lost in a large lawn?

A crucial factor to consider is proximity to buildings, pathways, roads, and utilities (overhead and underground). Trees spread out both above and below ground and branch overhang and root growth can cause considerable damage and incur considerable expense if a tree is poorly situated.

Trees can play an important role in climate control. Deciduous trees planted on the south, west and east perimeters of a building will provide shade during the summer while allowing scarce sunlight through in the winter when leaves have fallen. Evergreens, on the other hand, planted on the north and west sides of a property, can reduce winter heating costs by serving as windbreaks.

Drainage is yet another issue to consider. Young trees do best when planted in good-quality, well-drained loamy soil. Heavy clays in poorly-drained sites present particular problems as many species of trees will not tolerate excess moisture. In all cases, stagnant water pooling around roots can lead to rot caused by a lack of oxygen.

You can do a general test for soil drainage by digging a hole in the planting area and filling it with water. If the water hasn't drained away in a couple of hours, drainage may be an issue. In areas where drainage is a particular problem, planting in raised beds of 12 to 18 inches of well-drained quality topsoil may be a solution.

Think of how different kinds of new trees can enhance the area you are planting them in. Make a list of the kinds of trees you admire and think about how they would look. Consider how your selection will grow and fill out over time. Some quick sketches or an internet search can help give you pictures to compare with your garden and show how new planting will develop.

Once you've decided on a type of tree, and where to plant it, you are almost ready to proceed, but even now your project can be met with difficulties that will cause problems for your new tree.

The most common mistake when planting a tree is a digging hole, which is both too deep and too narrow. Too deep and the roots don't have access to sufficient oxygen to ensure proper growth. Too narrow and the root structure can't expand sufficiently to nourish and properly anchor the tree.

As a general rule, trees should be transplanted no deeper than the soil in which they were originally grown. The width of the hole should be at least 3 times the diameter of the container or the spread of the roots in the case of bare root trees. This will provide the tree with enough worked earth for its root structure to establish itself.

When digging in poorly drained clay soil, it is important to avoid the sides and bottom of a hole becoming smooth. This forms a barrier, through which water may have difficulty passing. To break this up, use a fork to work the bottom and drag the points along the sides of the completed hole. Also, raising the centre of the hole slightly higher than the surrounding area allows water to disperse, reducing the possibility of water pooling in the planting zone.

Planting Container Trees

Container trees can be stored for a brief period of time after purchase as long as the soil in the container is kept moist and the tree stored in a shady spot. Remove metal or plastic containers fully before planting, and check the roots.

If they are tightly compressed or 'pot bound', use your fingers or a blunt instrument (to minimize root tearing) to carefully tease the fine roots away from the tight mass and then spread the roots prior to planting. In the case of extremely woody compacted roots, it may be necessary to use a spade to open up the bottom half of the root system. The root system is then opened out prior to planting. Loosening the root structure in this way is extremely important in the case of container plants. Failure to do so may result in the roots 'girdling' and killing the tree. At the very least, the roots will have difficulty expanding beyond the dimensions of the original container. To further assist this, lightly break up even the soil outside the planting zone. This allows roots that quickly move out of the planting zone to be more resilient as they anchor into existing surrounding soil conditions.

Once the tree is seated in the hole, the original soil is then back-filled into the hole to the soil level of the container. Do not overly compress the back-filled soil especially by tramping it with your feet. Compress gently, using your hands if needed.

Planting Bare-Rooted Trees

Planting bare-rooted trees is a little different as there is no soil surrounding the roots. Most importantly, the time between purchase and planting is a more critical issue, as the longer roots are exposed to the air, the more trauma the tree will suffer. When purchasing bare-rooted trees, inspect the roots to ensure that they are moist and have numerous lengths of fine root hairs. Care should be taken to ensure that the roots are kept moist in the period between purchase and planting. You can prune broken or damaged roots, but save as much of the root structure as you can.

If the root structure will not sit flat in the hole, make a small mound in the centre of the hole around which to splay the roots. Make sure that when properly seated, the tree is planted so that the visible mark where the roots become the trunk, is about two inches above the soil level. This is to allow for natural settling.

Once the tree is seated correctly, the original soil is then back-filled into the hole to the soil level of the container. Again, remember not to overly compress the back-filled soil especially by tramping it with your feet. Compress gently using your hands instead.