Plant the Right Tree in the Right Location
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Landscape trees provide many important benefits including shade, value, and beauty. When a tree must be removed, for whatever reason, it can be a major loss. Most people will recognize the importance of removing a tree promptly after it dies. The unsightly remains and the potential liability if it topples over make removal almost a necessity. However, there are other reasons that a tree must sometimes be removed. When a tree is wrong for the climate; wrong for its intended purpose, or wrong for the location, it generally is necessary to remove it completely. Many sources, including Cooperative Extension, provide information on how to select plants right for the environment and purpose. This bulletin highlights the importance of matching a tree with the intended location and gives ten examples of trees planted in locations where problems have far outweighed the benefits.

The importance of planting the right tree for the location

Planting a tree in a location where it will fail to thrive or become a nuisance can be a costly mistake. Far too often, trees are planted where they will eventually create a hazard, fail to grow properly, bother the neighbors, or cause damage to sidewalks, foundations, or other structures. Later, sometimes after years of growth, the owners of an offending or struggling tree must pay the consequences financially and emotionally when it has to be removed. It would be much better to avoid these consequences by making sure upfront that the site selected is right for the characteristics and the needs of the tree.

Mistakes can be costly

Trees planted in the wrong place often cause significant losses to both residential and commercial properties. Examples of losses include time and money. For example, the time lost in dealing with frequent landscape issues can be expensive as well as aggravating, especially if it is a commercial property and the landscape issues intrude on a manager’s time. If a tree must be removed, the time between removal and when a new tree achieves the landscape purpose intended, such as shading an area, screening a view, or cooling a landscape, is an example of wasted time and effort. Additionally, the costs of paying someone to actually remove a tree in a safe manner can be significant. It is much better to plant the right tree in the right place upfront than experience the losses that are sure to come from making poor horticultural choices.

Heavy pruning is harmful to the tree and rarely solves problems

While planting a tree in the wrong place can cause many types of problems, the most common may be when a tree outgrows its allotted space and becomes a nuisance. Some try to reduce or solve this concern by cutting the tree back heavily. Unfortunately, such treatment usually encourages heavy regrowth that quickly returns the tree to its previous size. Additionally, heavy pruning often makes the condition worse by creating an ever more frequent need for repeat pruning. This cycle can be not only expensive, but it also can cause problems for the tree. It invites insect and disease infestations. It results in weak, poorly attached branches, and it upsets the delicate balance of energy in the plant. A heavily pruned tree left with a reduced number of leaves struggles to provide the energy needed for everyday living plus the extra amount required for repairing damage and returning the tree to good health.
Tips to avoid making costly mistakes

- Learn to recognize horticultural mistakes as you walk or drive through residential or commercial areas
- Resolve to avoid costly mistakes by making good choices before trees are planted
- Create and frequently review a landscape plan that takes into consideration the various elements of the landscape, including all potential hazards and problems
- Mark the expected size of the mature tree on the landscape plan to lessen the potential for mistakenly planting a tree in the wrong place
- Choose and plant a tree that will not offend or struggle in the place where it is located
- Never plan on “fixing” a tree hazard problem with intensive pruning after a tree is in place.
- Provide each tree with good care after planting to ensure good health during its life span.

Ten examples of trees planted in the wrong place

1. **The tree is growing into a power line.** Tree limbs growing into electrical lines strung from power poles can be dangerous hazards to people and property. Maintenance crews regularly trim out branches that grow into and around these lines. Such heavy pruning usually destroys the natural form of the tree and creates structural weaknesses that can later result in significant hazards. Heavy pruning also leaves large wounds that expose the tree to the ravages of insects and disease. Sometimes trees planted under power lines must be completely removed. At planting, a tree should be sited in a location where it can grow to its natural full-sized form without danger of growing into power lines.

2. **The tree branches grow into the street.** Planting a tree too close to a street or highway could eventually create a traffic hazard as the tree encroaches into space where bicycle, car, or truck traffic will either hit, or have to swerve around the branches. A tree growing in front of a traffic sign can obscure the message and make it difficult for motorists to see and react in a timely manner. In these cases, the tree exposes the property owner to potential liability. Trees with weeping or down-growing branches are common offenders. Examples include some species of mesquite, acacia, and palo verde. A tree that becomes a safety hazard will need frequent, often severe pruning to reduce the hazard. Since such pruning can be detrimental to tree health and often encourages a flush of new growth that generally returns the tree to its previous offending size, complete removal may be necessary.

3. **The tree limbs and branches grow over the fence into the neighbor's yard.** If the neighbor doesn’t mind the tree or the shade that the tree provides, this may not be a problem. More frequently than not however, the people next door would prefer that trees not invade their space. The hassles and potential conflicts that could occur are easily avoided by planting the tree in a location where it will not cross property lines.

4. **The tree branches rub on the exterior walls or the roof of a building.** Branches blowing back and forth in the wind can scrape and damage brick, panel, or stucco walls. They can also rip asphalt shingles or break tiles on the roof. Branches touching a structure may also provide a green bridge for rodents such as roof rats and pack rats to enter the building. It is an essential step in the planning process to know the expected mature shape and dimensions of a tree so that a site with sufficient space can be selected. It is important to plant the tree away from buildings to avoid having to make expensive repairs or suffer other negative consequences.

5. **The tree invades the space of another tree.** Trees planted too close together compete for water, air, nutrients, and sunlight. A lack of proper nutrition or sunlight will generally stunt and weaken plants. Branches that cross and rub together are easily damaged, sometimes with serious consequences. The landscape plan should support good tree health by providing an appropriate amount of space between trees. (Figure 1.)
6. **The tree is damaging water, sewer, or natural gas lines.** Many trees have aggressive, fast-growing roots that can sometimes overpower and damage underground utility lines. Sewer pipes are particularly vulnerable to the invasion of some tree roots. Depending upon the type of line, the damage can range from a mere frustration to one of real danger. It is important to know where the utility lines are located and then to avoid planting trees with aggressive roots in their vicinity.

7. **The tree shades out lawn grasses and flower beds.** Dense shade from large trees will often prevent lawn grasses, bedding plants, shrubs, vines, and smaller trees from growing properly. Lack of sunlight and poor nutrition resulting from competition can lead to weak and unthrifty understory plants. The landscape plan should account for the light and nutrient needs of all desirable plants growing beneath larger trees. An alternative plan would save the tree by eliminating all understory plants completely. The tree could be further supported by replacing the understory plants with a thick layer of organic mulch to provide nutrients, protect the roots, cool the soil, and reduce evaporation of soil water.

8. **The tree is in a place where it can heave and buckle sidewalks, paved surfaces, and fences.** The roots of large trees, if they grow too close to the surface of the soil, can push up sidewalks, building foundations, and fences. This type of structural damage can be difficult, as well as expensive, to repair. Trees should be planted in a spot where their roots will have sufficient room to grow without causing damage to adjacent hardscape features.

9. **A compacted soil layer or caliche accumulation causes the roots of the tree to grow up close to or rise above the surface of the soil.** Shallow, improperly rooted trees often blow over in a windstorm. Exposed roots can damage mowing equipment and other expensive landscape tools. To avoid these problems, it is important to identify compacted soils and caliche deposits before planting. Soil compaction and restricted water penetration can easily be assessed by checking the percolation of water through the soil prior to planting. One way to test water percolation is to dig the planting hole and then, before putting the tree in the hole, fill the hole with water. The length of time required for the water to sink into the soil should be noted. If it takes longer than two to twelve hours, depending upon the texture of the soil, there could be a problem. Sandy soils will drain water much faster than clay soils but all soils should drain within an expected period of time. If soils are compacted, it would be best to resolve drainage problems by properly preparing the planting hole or by completely avoiding the area. (Figure 2.)
10. **The tree cannot be properly irrigated in a timely manner.** All plants, including those that are native to the area, require a specific minimum amount of water to survive. The water must come at the appropriate time and amount for it to be beneficial. If for some reason water cannot be properly supplied at the right time and in the correct amount to a given location, a tree may be in the wrong place. It is also a mistake to plant a tree into an area paved with bricks, cement patios, walkways, and other impervious hard surfaces because these surfaces inhibit proper irrigation. It is important to plan for and apply water correctly.

**Summary**

Planting a tree in the wrong location can be an expensive mistake. However, negative consequences can be prevented by locating a tree in a place where it will be free to grow to its full and natural size without becoming a nuisance. By learning how to recognize potential problems and taking the time to plan and install a tree properly, major landscape mistakes can be avoided. This will result in savings of both time and money.

Figure 2. Roots that grow above the surface of the soil often indicate a soil problem. At planting it is important to properly prepare the soil and avoid potential problems.
References


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