TIPS FOR PLANTING A TREE

Taken from http://cagardenweb.ucanr.edu/Landscape_Trees/

Choose a good location

Consider soil quality, water quality and availability, drainage, and other conditions before selecting a planting location and the species to grow there. Determine proximity to structures, pavement, overhead lines, and underground utilities that may be damaged by growing roots.

Determine how much light and heat occur at that location based on climate and nearby structures, pavement, and plants; choose species suited to those conditions. Examine the space available for growth and learn about the mature size of candidate plants. Give limbs and roots plenty of room to grow and use only plants that will fit at maturity. Most small trees should be placed at least 5 feet from structures and at least 3 feet from any paved area; larger trees should be placed even farther away. Look for overhead obstacles. Do not plant tall-growing species beneath utility lines. Utility companies prune trees that grow into overhead lines, which can severely disfigure trees and promote decay, structural failure, insect attacks, and increase utility costs.

Site preparation

Before planting, mark out a planting area that is at least two to three times the diameter of the root ball. Rototill, shovel, bore, or use an auger to mix the soil within this area to the depth of the plant's root ball. Mix the soil well. **Adding organic matter to the planting hole of trees and large shrubs has not shown consistent benefits.** Amending the entire potential root zone of trees is generally not practical, and amending soils around established plants will damage roots.

Provide for Roots

Healthy roots are vital to plant survival. Water, nutrients, and oxygen are absorbed by root tips and are essential for growth. Roots eliminate waste carbon dioxide, store food, reduce erosion, produce compounds essential to the plant, and support the plant structure above the ground.

Roots are often neglected because they grow underground and are not seen. Provide them with proper soil conditions and adequate space. Make sure large trees are planted away from buildings to reduce damage to foundations. Examine the surrounding soil for barriers to root growth before planting. After the first few years of growth, roots of healthy plants extend well beyond the canopy or drip line of the plant; these horizontally growing or lateral roots often extend for a distance equivalent to two to three times the diameter of the drip line. Most roots will be found in the upper 2 feet of soil.

Plant Properly

Container-grown woody plants can be transplanted any time of year, but planting in fall through spring is ideal. Dig a shallow hole and set the plant on settled ground in the center of the hole. Make sure the top of the plant's root crown is level with or slightly above surrounding soil. Avoid poorly drained areas or places where water frequently collects. Planting too deep or too shallow are common problems. Deep planting favors root and crown diseases. Planting too shallow leads to root damage from exposure and excessive drying.

Remove the container, cut any wires or rope around the root ball, and place the plant in the hole and position the main stem perpendicular to the ground. Check for roots that circle the container and gently spread them. Cut any broken or encircling roots. Backfill the hole after properly positioning the plant and preparing the roots. Settle the soil after planting by watering. Keep a four foot diameter or larger area around the trunk free of turf or other vegetation.

Mulches

A mulch is any material placed on the soil to cover and protect it. Mulches suppress annual weeds by limiting light required for weed establishment. Many types of landscape mulches are available. The benefits and drawbacks of mulch vary by their type. Organic mulches can improve soil conditions as they decompose and are often inexpensive

or free. Organic mulches include compost, grass clippings, greenwaste, leaves, and chipped, ground, or shredded bark or wood. Plan to replenish organic mulches periodically because they decompose, move, and settle. Inorganic mulches include gravel and crushed stones. They do not decompose to improve soil organic matter and usually must be purchased. If using a rock mulch, apply landscape fabric underneath to prevent soil and mulch from mixing, which favors weed growth and contaminates soil with rocks. Black plastic controls weeds, but restricts air and water movement. Manufactured, synthetic mulches called geotextiles, or landscape fabrics, allow water and air to pass through, avoiding a major disadvantage of black plastic.

In addition to good weed control, mulch conserves soil moisture by reducing evaporation and reducing water use by weeds. Mulch moderates the soil wetting and drying cycle between irrigations and moderates soil temperatures around roots, improving plant growth. Mulch also reduces compaction and erosion from irrigation, rainfall, and foot traffic.

When mulch is promptly applied to an adequately prepared site, especially after removing perennial weeds and their propagules, occasional hand-pulling or shallow hoeing of weed seedlings and periodic reapplication of organic mulch may be the only weed management activities necessary.

Mulching Problems

If not properly selected or used, mulches have disadvantages, such as favoring root diseases and certain weeds and interfering with irrigation. Keep organic mulch and waterproof synthetics 6 inches or more back from trunks to avoid promoting root and crown diseases. Regularly inspect mulch and remove any weeds soon after they appear.

Certain types of pathogens can be spread in some types of mulch. Depending on the type of plant pathogen and which plant parts will be used, you can apply the material as mulch around hosts after you chip or grind and properly handle it (e.g., by adequately heating or thoroughly composting). Slime mold, sometimes called dog vomit fungus, commonly grows in mulch. It is not harmful and will dry out within 1 or 2 days. Mushrooms sometimes grow in decaying mulch, and their appearance can alarm people or pose a hazard if children are tempted to eat them. Unless consumed, mushrooms are generally harmless to people, and many are beneficial.

Staking

Stake trees only if needed to protect or support the trunk or anchor the root ball during the first year or so after planting. Do not fasten trunks firmly; they must be allowed to flex some with the wind in order to develop stem strength. Remove any staking after a year or so; if the trunk is then unable to stand alone, determine the cause before restaking.

Care of Young Trees and Shrubs

New plants may need to be irrigated frequently during hot, dry weather. Be sure to wet the root ball directly; avoid ponding water around the trunk and avoid wetting the trunk. Allow the soil surface to dry between waterings. Increase the interval between irrigations as plants become established and encourage good root growth through less frequent, thorough soakings. Avoid frequent sprinkling that wets only the surface; this encourages undesirable shallow root growth and will not satisfy the plant's need for water.

Fertilize woody plants sparingly during their first growing season. Nitrogen is usually the only nutrient to which woody plants respond. Use slow-release fertilizers; quick-release fertilizers can harm young roots and retard plant growth if applied too heavily.

During the first few years of growth, prune young woody plants to encourage good structure and remove damaged or diseased stems; establishing a central leader or dominant main terminal is important. Avoid excessive pruning, which may retard growth. Remove weeds, turf, and ground covers that grow near the trunk of young trees; they can seriously retard young woody plant growth.