

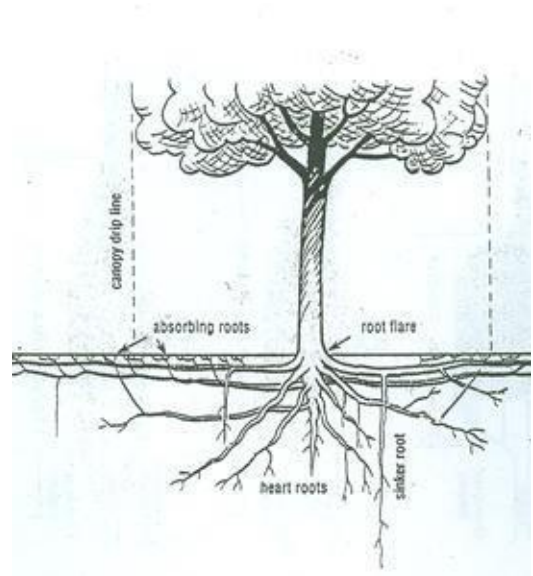
Our Tree Planting and Maintenance Tips

Can You See Your Root Flare?

Healthy trees show the flare of the roots on the soil surface. Trees planted too deep have the root flare buried and the tree trunk enters the ground straight as a telephone pole. Trees planted too deep are weakened from reduced oxygen to the roots and are stressed, thus are more susceptible to borers and scale insects.

Fertilizing Our Trees

Most of our trees are planted in a xeriscape area with non-fertilized buffalo grass turf. Soil tests indicate moderate phosphorus and potassium levels, so we are using a balanced fertilizer spread over the root zone in Oct or November. We are currently using 13-13-13 at 2 1/2 lb. spread to a diameter of 20 ft. on smaller trees and 5 lb. spread over a 30' diameter on larger trees. As phosphorus and potassium levels increase we will start using a standard high nitrogen, low phosphorus/potassium ratio. Trees next to the building are in a well fertilized fescue lawn do not need additional fertilization. See fertilizing link on right side of page.



The Sedgwick County Extension Arboretum is planted and maintained by the Extension Master Gardeners of Sedgwick County.

How We Plant

First we check in the root ball to determine the depth of the root flare. We want to plant the ball high enough that the top of the root flare shows at the soil level. The flare is sometimes 3-6 inches below the top of the root ball. Now we dig a wide, shallow hole; two times wider than the ball, and shallow enough that the root flare will show. In heavy soil areas we plant on a slight berm. We set the tree in the hole, then cut off all twine, burlap and wire basket from the top and sides of the ball (leaving burlap and basket at bottom of hole is OK). Stakes are driven on the north and south sides of the ball and nylon tree bands are tied from the trunk to the posts about 1-1/2 ft above the ground. Original, unamended soil, is added back to the hole and tapped firm with heel. We place a water ring around the outside of the hole large enough to hold 15-30 gallons of water. Woodchip mulch is placed from 3 inches from the trunk to over the water ring. We fertilize very lightly with 1 1/2 oz (3 Tablespoons) of 13-13-13 at the outer parts of the 5-6 ft diameter mulch ring.

Mulching

All trees are mulched with woodchips to a depth of 3 inches. Chips are kept 4 inches from the base of the tree but extends to 3 ft. from the trunk in all directions. Additional mulch is added

yearly to maintain the 2" mulch. As trees grow, the mulch is extended to the dripline of low spreading and weeping trees such as some of the crabapples.

Where We Plant

We look up first. Only those maturing under 20' go under or near utility lines. Our site ranges in pH from 6.2-8.2 and species are planted according to pH tolerances. Those preferring moist sites are planted in beds or in low drainage areas. Most are planted at spacings to allow them to grow to specimen size, though some will grow together as clump forms. We will start adding understory trees as shade develops.

Pruning

The only pruning at planting is to remove dead or broken branches. In the second season and following seasons, crossing and competing branches are removed to create a strong branch structure. Low branches are left (removed no higher than 1/3 of tree height) to help develop a tapered strong trunk. Dead and broken branches are removed at any time. Major heavy pruning is done only in January through early July. Light pruning, is done regularly throughout the season to keep plants looking at their best. **All pruning is done to maintain the natural habit of that species/variety.** Branches are cut back to the branch collar without leaving stubs.

Watering

All new trees are watered in to fill the water ring (at least 15-30 gallons). The first 2-3years, 14 gallon "Gator" bags are placed around the young trees during summer months, and are watered weekly when needed. Established trees in our buffalograss/xeriscape area are watered, during summer months with drip irrigation that is placed under the mulch at the edge of the mulch rings. They are watered to reduce stress, but not enough for optimum growth.

Staking

Most research points to not staking young trees since the blowing in the wind increases trunk strength. Since we are on an exposed windy site, we do stake some young trees for the first 1-2 years, until anchor roots have established. Steel posts are set on the north and south side of the trees and the fabric bands wrap around the trunk as low as possible. The goal is to keep the roots from shifting, while allowing the trunk to sway in the wind.

Tree Selection

Trees are selected for hardiness to zone 6b, alkaline soils, wind tolerance, strong branches, disease resistance and for use in a xeriscape setting. Our plant list started with the recommended lists from K-State Extension and have expanded with recommended plants by our Extension Specialists, Community Foresters, and local industry recommendations. We prefer planting ball & burlap or bareroot trees.

Tree Wraps

Research now guides toward not using tree wraps, but due to our xeric site, we do use a white plastic trunk protector that is used on thin barked trees for the first two winters; installing the trunk protector in October and removing in the spring when trees are leafing out. This will reduce winter sunscald on young trees.

Weed Tree Control

Seedling trees are pulled when possible. In unmowed grass areas (drainage ditches) trees less than 3 ft are treated with a brush control product containing triclopyr on foliage and branches at label rate during the summer. Those over three ft. are first cut off at the ground and the stumps treated immediately with triclopyr at label rate. Cut and stump treatment is done late summer to early fall.