Topping hurts trees

Topping is perhaps the most harmful tree pruning practice. Topping is the indiscriminate cutting of tree branches to stubs or laterals that are not large enough to assume the termi-nal role. A reason for topping is to reduce the size of a tree. Owners often feel that their trees have become too large and may be a hazard. However, topping makes a tree more hazardous in the long term.

Topping often removes 50-100% of the leaves and temporarily starves a tree. The severity of the pruning activates latent buds, forcing the growth of multiple shoots at each cut. The tree needs to grow new leaves, and without the stored energy reserves to do so, it will be seriously weakened and may die. A stressed tree is also more vulnerable to insects and disease.

The proper pruning cut is just beyond the branch collar where the tree is equipped to close wounds. The tree can not wall off the multiple stub cuts, and the exposed wood de-cays down through the branches.

Topped trees produce multiple shoots from buds under the bark. Normal branches are firmly attached by overlapping layers of wood tissue, but these new shoots are anchored only on the outside of the branches. The new shoots grow fast and are prone to breaking. Instead of reducing the tree's height to make it safer, it has been made more hazardous.

Don't top trees!

Trees form a variety of shapes and growth habits to present their leaves to the sun. Topping destroys the natural form. Without leaves, a topped tree appears disfigured and mutilated. With leaves, it is a dense ball of foliage. A topped tree can never fully re-gain its natural form.

Services provided by Hot Springs Urban Forestry

Public Rights-of-Way

Tree Planting
Tree Pruning
Tree Removal
Bush Hogging
Watering
Fertilizing
Mulching
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Private Property Requests

Tree Inspections
Insect/Disease Diagnosis
Tree Related Questions

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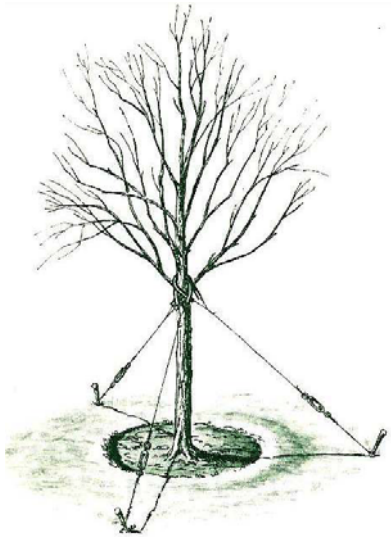
URBAN FORESTRY HOW-TO SERIES

HOW TO CARE FOR YOUR TREE



City of Hot Springs
Urban Forestry Division

Mulching

Mulching trees helps reduce landscape main-tenance and keep plants healthy. It also helps conserve moisture and reduces soil compaction, water runoff and soil erosion. Mulching promotes a more uniform soil temperature and the growth of soil microorganisms and earthworms. It eliminates the need to mow around trees, preventing damage from lawn-mowers and weed trimmers.

A 2" - 4" deep mulched area should include as much of the root zone as possible, extending at least 3' - 6' out from the tree. Pull the mulch 1-2" from the base of the tree to pre-vent bark decay.

Mulch can be applied any time of the year. However, the best time to mulch is late spring after the soil has warmed. The best organic materials include pine bark nuggets, pine straw, and compost. If the mulch layer becomes too deep, roots will grow in the mulch and not in the soil.

No Volcano Mulching!

How much space does it take to grow a tree?

Large trees
Above ground - average crown spread 70'
Below ground - needs 50' x 50' soil area
Medium trees
Above ground - average crown spread 30'
Below ground - needs 22' x 22' soil area
Small trees
Above ground - average crown spread 20'
Below ground - needs 14' x 14' soil area

Watering

Evaporation is the single most limiting factor for tree growth. Water shortages damage trees, leading to decline and pest problems. Watering insures tree health during seasonal droughts when the soil dries out too much. Over-watering can damage roots.

The best way to water trees is by providing a good soaking of the roots in the top foot of soil. Do not water the trunk or spray the tree foliage. Apply water to the area un-der the foliage, within the drip-line. The best time to water is at night to reduce evaporation loss.

Rainfall of 1-3" per week should keep an es-tablished tree healthy. Water if there is no rain (1" water = 5 gals/sq.yd.). Young trees need 2-3 gallons of water per inch of trunk diameter at least twice weekly. A few heavy waterings are much better than many light ones. Light waterings encourage shallow roots. Continue watering until it rains.

Fertilizing

Trees need nutrients to live and thrive. If nu-trients are deficient in the soil, the tree grows more slowly, is more susceptible to diseases and insects, and is shorter lived. Fertilizer provides trees with the appropriate nutrients. A soil test and/or shoot growth indicates whether fertilization is needed. If shoot growth is under 2", fertilizer may be needed. Yellow or "off-color" leaves may show a need for fertilization. The time to apply fertilizer is in the spring before trees start growing. If fer-tilizer is applied during hot weather, water it in. Never use a fertilizer containing any kind of herbicide around a tree.

Staking

New trees may need staking, or they may fall or lean due to a weak trunk, limited roots, or high winds. Most trees do not need staking. A general rule is to stake all bare-root trees more than 8' and container / B&B trees more than 6 feet tall or 1 inch or more in diameter. Use one stake for bare-root trees, and 2 or more stakes, or guy wires, for all others.

One stake method - A stake about 3/4 the height of the tree is first driven in 2-4" from the center of the hole on the wind side. Plant the tree and fasten just above the lowest main branches with 12-gauge wire or suitable substitute, forming a loose loop. Slip a short length of rubber hose onto the wire so it does not contact the bark.

Two stake method - Use two stakes driven 18" into soil a foot beyond the hole on opposite sides of the tree. The final stake height is 2/3 that of the tree. Use 12-gauge wire at-tached to stakes and looped loosely around the trunk. A rubber hose is used on the wire to protect the trunk. A third stake can be added.

Guy wire method - Fasten three wires to notched stakes driven in firm soil equal distance from the hole and from each other. The wire is fastened 2/3 the way up the trunk by a loose rubber hose covered loop. The other ends of all wires should be fastened equally tight to the stakes, allowing slight movement of the tree. Check the wiring occasionally to be sure it is not causing trunk injury. Remove staking within one year to prevent trunk girdling by wires.