



How to Kill a Tree

The Value of Trees

- ❖ Water Quality: 1 million trees = \$3.5 million in annual storm water runoff costs saved
- ❖ Air Quality: 1 million trees = \$5 million in air pollution clean-up
- ❖ Energy: 1 million trees = \$10 million in annual energy savings
- ❖ Real Estate: 1 front yard tree = 1% increase in home sales price
- ❖ Business: Shaded business district = 11% increase in business

Water Conservation and Trees

- ❖ Tree canopies and root systems provide a natural filter to our water supply.
- ❖ Trees along streams hold stream banks in place to protect against flooding. One tree reduces 4000 gallons of storm water runoff annually.
- ❖ Tree roots stabilize soil and prevent erosion by trapping soil that would otherwise become silt. Silt destroys fish eggs and other aquatic wildlife and makes rivers and streams shallower.
- ❖ Trees provide shade to cool the landscapes and the soil beneath them, reducing evaporation of irrigation water that has been applied.

A few facts....

- ❖ Urban trees only live a fraction of their natural life spans.....
- ❖ A tree that would live 80 years in the forest is expected to live an average of 20 years in the suburbs, and only 7 years in an urban setting!
- ❖ The most common cause of tree death is abuse and neglect from its number one pest.....*Homo sapiens*

The Top Ten Causes of Tree Death:

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|-----|----------------------|----|-----------------------------|
| 10. | Automobiles | 5. | Lack of Watering |
| 9. | Misuse of Herbicides | 4. | The Wrong Tree for the Site |
| 8. | Bark Damage | 3. | Vandalism |
| 7. | Soil Compaction | 2. | Improper Pruning |
| 6. | Poor Planting | 1. | Construction Damage |

A Five-Step Program for Assisted Herbicide

1. Selection

- ❖ Plant a big tree in a small space.
- ❖ Plant a tall tree under utility lines.
- ❖ Choose an overused species, and plant lots of it.
- ❖ Use the fastest growing species of tree that you can find.
- ❖ Pay no attention to insect and disease susceptibility of your tree selection.

2. Planting

- ❖ Leave a tree out where the sun and wind will dry out the roots or rootball prior to planting
- ❖ Plant the tree too shallow.
- ❖ Plant the tree too deep.
- ❖ Plant in soil that is too dry or too wet.
- ❖ Forget to water.
- ❖ Water too much.
- ❖ Leave stakes and guy wires on the tree.
- ❖ Leave wire baskets, burlap and ropes on the root ball.
- ❖ Handle the tree by the trunk, not the root ball.
- ❖ Plant too close to your building.
- ❖ Plant a big tree in a small space.
- ❖ Plant flowers and grass under and around the tree.

3. Pruning

- ❖ Top your tree or make repeated heading cuts.
- ❖ Over prune your tree.
- ❖ Prune all species and all ages of trees alike.
- ❖ Make flush cuts.
- ❖ Use wound dressings.
- ❖ Ignore storm damage.
- ❖ Hire a “fly-by-night” tree company

4. Maintenance

- ❖ Hit the tree with a lawnmower and/or string trimmer time and time again.
- ❖ Over-fertilize.
- ❖ Use salt or other deicers around your trees in winter.
- ❖ Let low heavy branches form; they'll break off during a storm.

- ❖ Use herbicides around the trees.

5. Construction Activities

- ❖ Trench through root zones, cutting as many roots as possible.
- ❖ Change the landscape drastically near the tree.
- ❖ Build a patio around it.
- ❖ Build a walk that goes right by it.
- ❖ Inflict a wound during construction.
- ❖ Give a sudden exposure to the sun by removing surrounding trees.
- ❖ Park your car, store materials and drive trucks or construction equipment underneath the tree (compact the soil).