



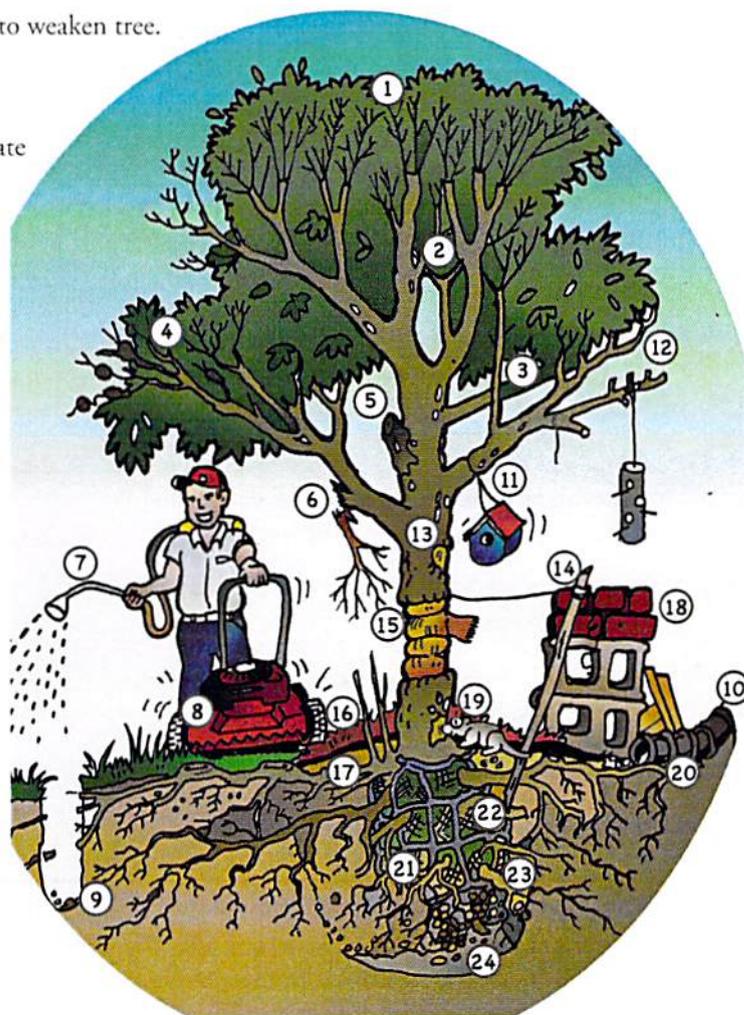
24 Ways to Kill a Tree

Bonnie Appleton, Extension Specialist, Hampton Roads AREC

Reviewed by David Close, Consumer Horticulture and Master Gardener Specialist, Horticulture, Virginia Tech

Few residential trees die of “old age.” Mechanical damage and improper tree care kill more trees than any insects or diseases. Avoid making the tree-damaging mistakes shown in the diagram below. Few of these items alone would kill a tree, but multiple problems will certainly stress, and could eventually kill, a tree.

1. “Top” tree to encourage watersprouts that weaken tree and encourage pests.
2. Leave co-dominant leaders to encourage “V” growth and splitting during winds and storms.
3. Leave crossing branches to rub protective bark and create wounds.
4. Ignore insect or disease damage.
5. Coat pruning cuts with paint or sealer to slow healing and promote pest problems.
6. Leave broken branches unpruned to encourage pests.
7. Spray unapproved herbicides over tree root area to weaken tree.
8. Damage roots and trunk with lawn equipment.
9. Rip through roots when digging trenches.
10. Plant close to house or obstacle to reduce adequate tree and root growing space.
11. Attach items to tree to damage bark and girdle branches with wire and rope.
12. Prune randomly to leave branch “stubs.”
13. Prune flush cuts to reduce wound closure.
14. Leave tree staked until guy wire girdles trunk.
15. Leave wrap on to constrict trunk growth and rot bark.
16. Pile up excessive mulch to encourage rodent damage and bark rot.
17. Put non-porous black plastic under mulch.
18. Stack items atop roots to cause soil compaction.
19. Leave ball roping on to girdle trunk.
20. Plant near downspout to assure excessive water or water lightly to encourage shallow root growth.
21. Leave top of wire basket in place to girdle roots.
22. Leave treated or synthetic burlap on to prevent root growth.
23. Dig hole too narrow and over amend backfill to discourage proper root spread.
24. Dig hole too deep or fill with gravel to collect water and drown roots.



How NOT to Kill a Tree

1. Do not top trees. Tree heights can be lowered by proper crown reduction that doesn't stimulate watersprout production.
2. When a tree is young, select one or the other of the competing upright branches to be the main branch and cut the other off.
3. Remove branches that cross and rub in order to prevent bark wounds.
4. Monitor for insects and diseases and treat appropriately if they are found.
5. Do not use anything to cover pruning cuts or wounds – trees seal their own wounds.
6. Cut broken branches off at the branch bark collar.
7. Spray the lawn with herbicides that will not damage trees.
8. Mulch around the tree to avoid hitting the tree trunk with lawn or edging equipment and to protect surface roots.
9. Dig around roots whenever possible but when not, make a clean pruning cut on the tree side of the root.
10. Know how big a tree will grow (height and width) and space accordingly away from houses and other obstacles.
11. Insert a nail or screw into your tree to which a wire or line can be attached. The tree will seal around the small wound made by the nail or screw.
12. Cut branches back to laterals so you don't leave stubs to which the branches will die back.
13. Do not make flush cuts. Cut on the outside of the branch bark collar.
14. Stakes generally aren't needed on small residential trees, but if they are, remove them after one year to avoid any damage.
15. Do not wrap the trunk with anything except a wide wire cage if animals are a problem.
16. Do not put mulch in contact with the trunk, and then pile mulch only 2 to 3 inches over the roots.
17. Do not put any type of fabric or plastic material under your mulch.
18. Do not stack items atop the roots; it causes soil compaction.
19. Take the ball roping off around the tree trunk. If the tree is in a container, remove the container before planting.
20. Divert water from the roots of trees that don't like wet soil, but when you water, water deeply to encourage deep root growth.
21. Remove the top horizontal round of wire from the basket. It is not necessary to remove the entire basket.
22. Remove the burlap, regardless of type, from atop the ball and down several inches on the ball side. It is not necessary to remove all the burlap.
23. Dig the hole at least twice as wide as the root system to encourage lateral root growth out of the root ball. Do not amend backfill for individual tree holes. Only amend if the entire planting area can be equally amended.
24. Dig your hole only as deep as the root system and do not put gravel in the bottom of the planting hole unless you install a drain to actively pull extra water away.

Additional Extension publications that can help you with tree planting and pruning: 430-295 and 430-455 through 430-462 at www.ext.vt.edu

Poster concept designed by Bonnie Appleton
Poster initially funded by a Virginia Urban and Community Forestry assistance grant.
Reviewed by: Dan Goerlich, Adam Downing, Guy Mussey and Roger Harris