## A special feature on...

# Tree Tips

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Autumn 2001

Complimentary information from the Tree Foundation of Kern



A properly pruned California Sycamore.



A topped California Sycamore.

Topping is the practice of cutting back large diameter branches of a mature tree to stubs and is a particularly destructive pruning practice. Unfortunately, many people believe topping is a proper way to prune trees, and this destructive practice is prevalent in some communities.

## Special Edition - Read all about it!

Tree Foundation of Kern reports that close to \$10 million in social and environmental value is lost annually because of destructive shade tree pruning practices. A two-page abstract and 38 page report is posted on our web site at www.urbanforest.org documenting the findings of a year-long study of local pruning practices in metropolitan Bakersfield.

The good news is that with a little consciousnessraising, many of these problems can go away. This special issue of Tree Tips clarifies "tree topping" and proposes some remedies.

### **Shade Means Comfort**

Before 1950 trees were nature's air conditioners, cooling our homes and communities by 10 to 20 degrees and keeping us comfortable.

Our bodies will do everything possible to maintain a normal temperature of 98.6 degrees. However, when air temperature approaches or exceeds body temperature, our bodies start compensating by opening up the capillaries and increasing heart rate and blood flow at the skin surface to allow body heat to drain off. Sweating can be likened to a swamp cooler. Evaporation of sweat cools the skin, eliminating heat from our bodies. Keeping the body cool creates a lot of work and discomfort.

The larger the leaf canopy, the more shade a tree produces, and the more comfort for us. Tree topping removes large amounts of leaf area and harvests our shade crop, giving us no relief from summer heat. "Topping shade trees in an arid climate makes no sense," says Dana Adams, executive director of the Tree Foundation of Kern. "It's bad for the trees and it's bad for us."

## Why NOT to "Top"-10 Good Reasons:

- No Shade! Topping harvests the leaf crop that gives us the comfort of shade in our arid climate.
- 2. Starvation. Topping removes so much of the tree's leafy crown that it reduces the ability to sustain life.
- Shock. Once the leafy crown is removed, bark is exposed to direct sunlight and can cause scalding and death.
- Insects and disease. Topped branches can't isolate the wound. The exposed ends provide entry to insects and fungus.
- Weak limbs. New growth from topped branches is weakly attached and more liable to break in a storm.
- 6. Rapid new growth. Topping has the opposite of its intended effect. New branches are more numerous and often grow taller than before.
- 7. Death. Some species can't tolerate major branch loss and survive.
- 8. Butt ugly. A topped tree is a disfigured tree. It will never regain its grace and character.
- Hidden Costs. Lower property values, higher energy costs, removal and replacement in the event of death or disease, corrective pruning to restore the canopy, degraded air quality.
- 10. Degraded wildlife habitat. Birds can't nest in topped trees.

## **ISA Pruning Guidelines**

The 50 Year Strategic Plan for Kern Community Forests calls for strict adherence to ISA pruning guidelines:

- No topping.
- Make all cuts at the branch collar to promote good wound closure.
- Remove no more than 20% of the canopy every three years to avoid shock or death.

It's that simple.

## **Proper Pruning Pays**

Pruning your shade trees is the most common tree maintenance procedure that a home owner may perform. It can be expensive, however the greatest cost may be the damage to your tree investment if not properly done. An improperly pruned tree can become a long-term maintenance problem and may eventually require removal. Trees planted in your yard or along your street are investments that gain in value as they matures. Trees increase property values, decrease utility costs, clean the air, and make a more livable community. Poorly pruned trees are an eyesore.

Tree topping and poor pruning are a common complaint in the Bakersfield area. Some homeowners hire a tree service based on price only. Others may hire a gardener or someone who has left a card on the front door advertising fast service and tree topping. Please read on before you embark on hiring a tree service to prune your trees.

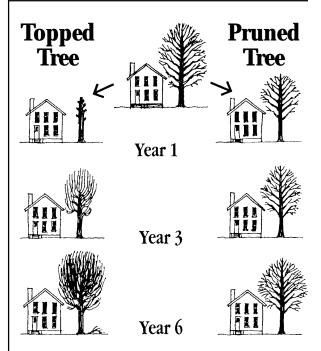
Although trees in the natural forest grow quite well with only nature's pruning, landscape trees require a higher level of care to maintain safety and aesthetics. Pruning should be done with an understanding of how the tree responds to each cut. Improper pruning can shorten the tree's life.

## **Reasons for Pruning**

Since each cut has the potential to change the growth of the tree, no branch should be removed without a reason. Common reasons for pruning are to remove dead branches, to remove crowded or rubbing limbs, to eliminate hazards or to increase light and air penetration to the inside of the tree's crown or to the landscape below. In most cases, mature trees should only be pruned as a corrective or preventive measure.

Routine thinning does not necessarily improve the health of a tree and may damage a tree if done during the growing season. Trees produce a dense crown of leaves to manufacture the sugar used as energy for growth and development. Removal of foliage through pruning can reduce growth and stored energy reserves. Heavy pruning can be a significant health stress for the tree.

Safety is a major concern. Also we want trees to compliment other landscape plantings and lawns. Proper pruning, with an understanding of tree biology, can maintain good tree health and structure while enhancing the aesthetic and economic values of our landscapes.

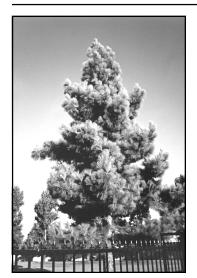


## **Proper Pruning - The Alternative to Topping**

**Year 1:** The topped tree is an ugly stub and a remnant of a once lovely tree. If pruned properly, the trees's size is reduced but form and beauty are retained.

**Year 3:** Vigorous weakly attached sprouts have sprung out of the topped tree in large numbers and are growing with abnormal rapidity. The pruned tree adds growth, but it does so more slowly and distributes it more evenly.

**Year 6:** In a relatively short time, the topped tree is as tall — and far bushier and more dangerous — than it was to begin with. The properly pruned tree is safer, more beautiful, and its size is better controlled.



A healthy pine



Topped Canary Island Pine

#### "Evergreens should **never** be pruned," says Ken Delfino, a registered professional forester.

## **CASE STUDY:**

In the triple digit heat of August 2001, a gardener who has expanded into tree care was hired to prune trees at an established parking lot in metropolitan Bakersfield. Photos of the topped California sycamore (on front page) and Canary Island pine (left) shown here depict his work. Twenty-seven large trees and 13 medium size trees were stripped of 90% of their leaves, and buildings, asphalt, lawn, cars, and people were robbed of shade. Based on the calculation set forth in our pruning study \$6,000 in annual benefits were decimated, including loss of energy savings, ozone and particulate matter absorption, carbon dioxide removal from atmosphere, property value, and rainfall interception which mitigates flooding.

## How To Hire A Professional Tree Service

Pruning large trees can be dangerous, and it is best to hire a tree service that employees a certified professional arborist. An arborist can determine what type of pruning is necessary to improve the health, appearance and safety of your trees. A professional arborist can provide the services , of a trained crew, with all of the required safety equipment and liability insurance.

An arborist is a specialist in the care of individual trees. Hiring an arborist is a decision that should not be taken lightly. Proper tree care is an investment that yields substantial returns. Well-cared-for trees are attractive and add considerable value to your property,

while poorly maintained trees can be a significant liability.

### What Is a Certified Arborist?

An arborist by definition is an individual who is trained in the art and science of planting, caring for and maintaining individual trees. ISA Arborist Certification is a non-governmental, voluntary process by which individuals can document their base of knowledge. It operates without mandate of law and is an internal, self-regulating device administered by the International Society of Arborculture. Certification provides a measurable assessment of an individual's knowledge and competence required to provide proper tree care.



Half of our survey respondents could not tell the difference between a topped and a properly pruned tree.

Certification is not a measure of standards of practice. Certification can attest to the tree knowledge of an individual, but cannot guarantee or ensure quality performance.

Certified arborists are individuals who have achieved a level of knowledge in the art and science of tree care through at least three years experience and who have passed a comprehensive examination developed by some of the nation's leading experts on tree care.

Certified arborists must also continue their education to maintain their certification. Therefore, they should be up-to-date on the latest techniques in arborculture.

## Choosing the Right Arborist for the Job

Here are things to consider when selecting an arborist:

- 1. Membership in professional organizations such as the International Society of Arboriculture (ISA), the National Arborist Association (NAA) or the American Society of Consulting Arborists (ASCA) demonstrates a willingness to stay up to date on techniques and information.
- 2. Check in the yellow pages for the official logo of the ISA Certified Arborist. Certified arborists are experienced professionals who have passed an extensive examination covering all aspects of tree care.
- 3. Ask for proof of insurance. A reputable arborist will have personal and property damage insurance as well as workers compensation insurance. Many homeowners have had to pay out large amounts of money for damages caused by an uninsured individual claiming to be a tree expert. You could be held responsible for damages and injuries that occur as a result of the job.
- 4. Ask for references to find out where the company has done work similar to the work you are requesting. Don't hesitate to check references or visit other work sites. Remember, tree care is a substantial, long-lasting investment!
- 5. Unless you know and are comfortable with the arborist, get more than one estimate. You may have to pay for the estimates, and it will take more time, but it will be worth the investment.
- 6. Be wary of individuals who go door-to-door and offer bargains for performing tree work. Improper tree care can take many years to correct, if ever. Are you willing to take that risk with your valuable investment?
- 7. Good arborists will only perform accepted practices and exclude practices such as topping a tree, removing an excessive amount of live wood, using climbing spikes on trees which are not being removed, and removing or disfiguring living trees without just cause.
- 8. Don't always accept the low bid. You should examine the credentials and the written specification of the firms that submitted bids and determine the best combination of price, work to be done, skill and professionalism to protect your substantial investment.
- 9. Get it in writing. Most reputable arborists will have their clients sign a contract. Be sure to read the contract carefully. Don't be afraid to ask questions such as: When will the work be started and completed? Who will be responsible for clean-up? Is this the total price? If I would like more to be done, what is your hourly rate?

This information was obtained from the website maintained by the International Society of Arboriculture. For additional information visit www.ag.uiuc.edu~isa.

## **ISA Certified Arborists in Kern County**

- Joe Bejarano, Paul Graham and Ed Lazaroti all with City of Bakersfield Recreation and Parks.
- Chance Ebersole, owner of Chance's Tree Service
- Christina Lopez with Jimmy's Tree Service
- Jake Cowden with Davey Resource Group

Many tree services follow ISA guidelines even though none of their workers are certified. All you have to do is ask.

COLLEGE Bakersfield

would too," says Conway Lopez, owner of General Tree Service. "The more info that's out "I would definitely send my people for tree care courses, and I think other tree services

pruning in spring, 2002. More information will be available in the spring course catalog later this autumn. some of the findings of the pruning study. Bakersfield College is planning to offer a special studies course in tree care and providers including landscape design, pest management, species identification, and nursery management. As a result of The Environmental Horticulture Program at Bakersfield College has a variety of courses that improve the skills of tree care

## Bakersfield College Offers Courses for Tree Care Workers

Took Inside!

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Proper Pruning PAYS!

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