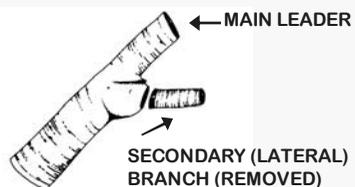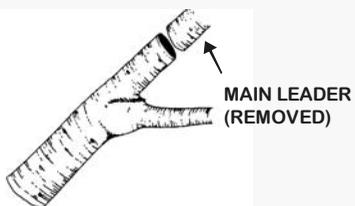## The Basic Cuts

Thinning Cut

Removes a branch back to its parent stem or the trunk. Reduces canopy density and allows light to penetrate the canopy and encourage growth on interior branches.

← MAIN LEADER

SECONDARY (LATERAL) BRANCH (REMOVED)

- **Opens foliage**
- **Reduces limb weight**
- **Retains tree's natural shape**
- **Preferred method of tree pruning**

Heading Cut

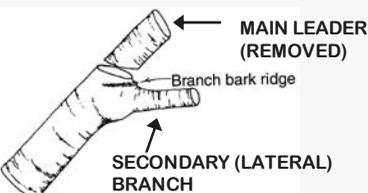Removes a branch or stem between nodes. Should <u>not</u> be used on mature trees. These cuts are responsible for the "hatracking" of trees.

MAIN LEADER (REMOVED)

- **Removes a shoot back to a bud or an older branch back to a stub or a lateral branch**
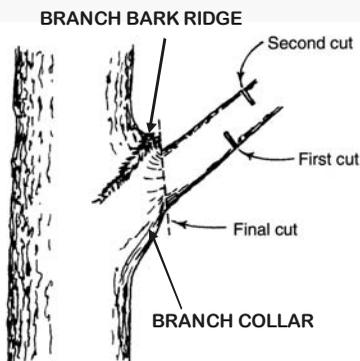- **Used to train young trees**

Reduction Cut

Removes the terminal portion of a stem or branch back to a smaller-diameter stem or branch. Reduces canopy size and improves the structure on older trees. The lateral branch should be at least one-third the diameter of the removed limb. Never remove more than 25% of the canopy.

MAIN LEADER (REMOVED)

Branch bark ridge

SECONDARY (LATERAL) BRANCH

- **Reduces branch length**
- **Reduces leader height**
- **Used on large trees**
- **Replaces heading cuts**

Branch illustrations from "An Illustrated Guide to Pruning", by E. F. Gilman, Delmar Publishers, Albany NY, 1997

Limb Removal

BRANCH BARK RIDGE

Second cut

First cut

Final cut

BRANCH COLLAR

1. Begin with a partial cut to prevent tearing. Start the cut about 1 to 2 inches up the branch.

2. Complete the cut to remove the branch.

3. The final cut removes the stub.

The best pruning cut is made outside the branch collar, at a 45 to 60 degree angle to the branch bark. Do not cut into the branch bark ridge – use an angle cut. <u>DO NOT FLUSH CUT</u>.

General Guidelines

When training young trees, remove no more than 1/3 of the foliage at one time.

When pruning mature trees, remove no more than 20 - 25% of the foliage at one time.

Roughly ½ of a tree's canopy should come from the branches on the lower 2/3 of the tree.

Prune for proper branch size. Branches should be no more than ½ to ¾ the diameter of the trunk.

Do not leave branch stubs, living or dead.

Use sharp hand tools designed for pruning and wear safety equipment.

Do not paint wounds with pruning paint. It does not prevent decay and can interfere with wound closure.

Avoid These Three Pruning Mistakes

Don't Top Your Trees

Many people wrongly remove the top portion of the tree canopy, leaving branch stubs. Never top a tree or allow anyone to top your trees (also called hat racking). Topped trees become more susceptible to storm damage and are unsightly. Topping initiates decay in the trunk and main branches, and may attract wood-boring insects. This practice may be illegal in some areas. Check with your local city government or the Palm Beach County Planning, Zoning and Building Department at (561) 233-5003.

Don't Overlift Your Trees

Overlifting (also known as "lion-tailing") is a common pruning practice that removes too many of the lower branches of a tree to provide clearance for cars, structures, etc. Often mistaken for crown thinning, this type of pruning is not suggested because it can cause a tree to become top-heavy, may reduce trunk taper, and can increase the chance of branch damage.

Don't Remove Green Palm Fronds

Cutting healthy green fronds robs a palm of valuable nutrients and can permanently stunt its growth. It also invites disease and increases the chance of freeze damage. Over-pruned palms develop bottleneck trunks. In high winds and hurricanes, this stressed and weakened point can cause the palm to break off and die. It is acceptable to prune brown and yellow fronds hanging below an imaginary horizon line. Pole pruners work best for this job.

Horizon Line

What To Remove When Pruning a Tree

- ❑ Injured, diseased, dead branches
- ❑ Rubbing branches
- ❑ Codominant leaders to encourage growth of one main trunk
- ❑ Limbs which as they grow outward will interfere with fences, buildings, signs, etc.

- ❑ Branches attached at acute angles ("v" shaped)
- ❑ Watersprouts and root suckers
- ❑ Limbs that turn inward, cross or extend beyond the natural outline of the crown
- ❑ Excess lateral branches to produce a ladder effect at maturity

A Pruning Primer

Regularly scheduled tree pruning improves tree health and form, controls growth and increases tree strength. Want to know more about pruning? Read on…

🍃 One Trunk Is Best

For many hardwood tree species, the main objective is to prune them into developing a single main dominant trunk. Trees with multiple (codominant) trunks are more likely to break apart or split during storm situations. Trees with a single trunk are structurally stronger and safer.

MULTI-TRUNK   SINGLE TRUNK

🍃 Pruning Mature Trees

Trees that receive the appropriate pruning measures while they are young will require little corrective pruning once mature. Older, established trees are much more difficult to prune once they have taken on an improper form. If a mature tree has poor structure (multiple trunks, weak branches), the main goal of pruning should be to minimize tree or branch failure and maintain overall tree health. This could include removing decaying branches, reducing the weight on large branches and/or thinning the canopy. The type of corrective pruning is dependant on the structure of the tree and in many cases a tree care professional (arborist) may be needed.

REMEMBER: The best way to avoid future problems with mature trees is to select good quality trees from a nursery and by performing regular pruning when the tree is young.

🍃 Types of Pruning

CANOPY REDUCTION
Reduction of the top, sides, or individual limbs by removing the leader or longest portion of a limb to a lateral. Used mainly to reduce the overall size of a tree. Reduction cuts are used for this type of pruning (see next page).

CANOPY RESTORATION
Improves the structure, form, and appearance of trees that have been severely headed, over-lifted, vandalized, or damaged from a storm. A tree care professional may be required to evaluate the tree and perform the necessary work.

CANOPY THINNING
The selective removal of the outer branches of the canopy to increase light penetration, air movement, and reduce branch weight.

CANOPY CLEANING
The selective removal of one or more of the following items: dead, dying, diseased, weak branches and watersprouts from a tree's crown.

Hiring An Arborist

Be certain that the tree trimmer is a member of the National Arborist Association (NAA), a member of the American Society of Consulting Arborists (ASCA) or an International Society of Arborculture (ISA) **Certified Arborist**. Although membership to one of these organizations does not guarantee quality of work, it demonstrates a willingness on the behalf of the arborist to maintain knowledge of the latest industry standards. Be certain that the arborist has an occupational license and is completely insured for property damage and personal liability.
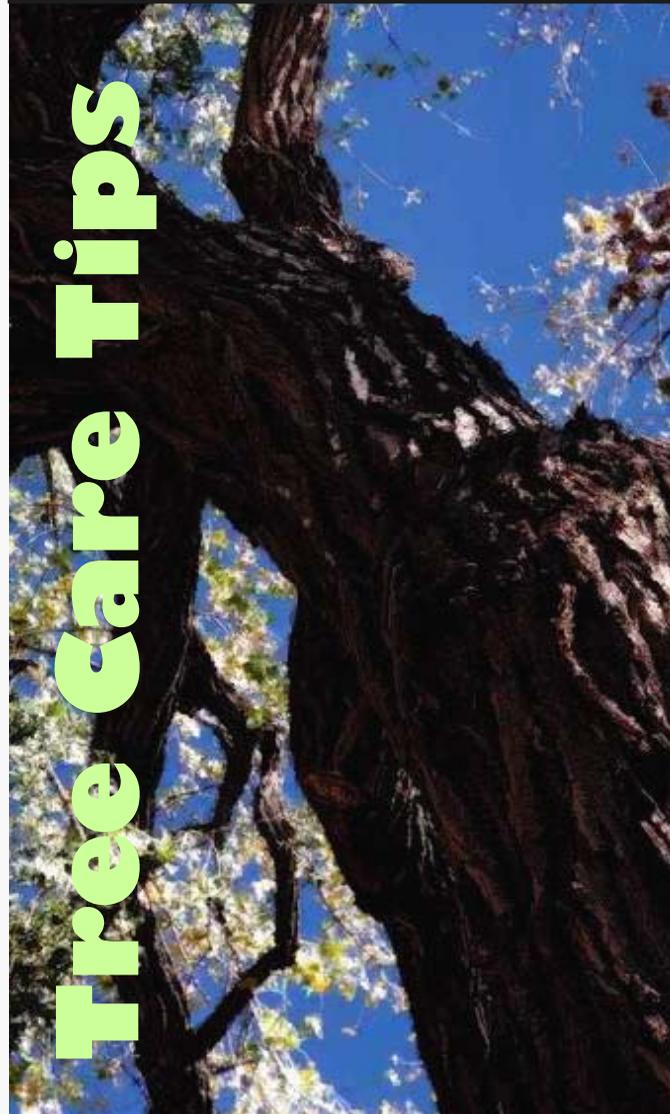
**Palm Beach County
Board of County Commissioners**,

Department of Environmental Resources Management
2300 N. Jog Road – Fourth Floor
West Palm Beach, FL 33411-2743
Phone: 561-233-2400
www.co.palm-beach.fl.us/erm

Tree Care Tips

A guide to proper pruning techniques