BAD PRUNING IS AN EXPENSIVE WAY TO SAVE MONEY
Pruning

• Maintain Safety
• Improve tree structure and health
• Satisfy customer goals
• Aesthetically pleasing
• ANSI A300 Standards
Pruning Objectives

- Reduce potential failure
- Provide clearance
- Reduce shading
- Reduce wind resistance
Pruning Objectives

- Maintain health
- Influence flowering or fruiting
- Improving a view
- Improving aesthetics
Pruning Objectives

• Reduce potential failure
Pruning Objectives

• Provide clearance
Pruning Objectives

- Reduce shading
Pruning Objectives

• Reduce wind resistance
Pruning Objectives

• Maintain health
Pruning Objectives

- Influence flowering or fruiting
Pruning Objectives

• Improving a view
Pruning Objectives

• Improving aesthetics
Branch Attachment

- Branch Collar
**Hardwoods**

Dead Branch

Second Cut
Cut First
Branch Collar

Living Branch

Branch Bark Ridge
Second Cut
First Cut
Third Cut
Branch Collar

**Conifers**

Final Cut

Second Cut
Cut first
Branch Collar

For Living or Dead Branches
Branch Attachment

• Branch Protection Zone
Branch Attachment

• Branch Bark Ridge
Branch Attachment

- Codominant Stems
Branch Attachment

- Included Bark
Branch Attachment

- Codominant & Included Bark
Pruning

• Know your plant and its response to pruning.
• Less pruning is usually better.
• Remember your Objectives: Safety, health and beauty, in that order.
Safety First!

- Power Lines
- Underground Utility Lines – 1-800-782-5348 – Call two days before Digging
Pruning Guidelines

• Eliminate Hazard Branches:
  – Deadwood
  – Heavy branches
  – Co-dominant stems

• Remove:
  – Crossovers
  – Parallel branches

• Don’t remove more than 1/3 of the bio-mass per season
More guidelines

• Identify strong central leader; eliminate competing laterals

• Evenly distribute scaffold branches, vertically and radial.

• Direct or control growth with proper thinning.
  – Topping - NO
  – Drop-crotch pruning - Yes
Pruning Cuts

- Thinning Cuts
- Reduction Cuts (bench cut)
- Heading Cuts
Pruning Cuts

- Thinning Cuts
- Reduction Cuts (bench cut)
- Heading Cuts
Restrict Growth

- Overhead
- Sidewalks & drives
- Side power lines
Reduction Cut

lateral branch remains
Angle perpendicular to branch being removed

Angle of FINAL CUT

Angle of branch bark ridge

Branch bark ridge
Pruning Cuts

• Thinning Cuts

• Reduction Cuts (bench cut)

• Heading Cuts or Topping (only used with storm damaged trees) (internodinal cutting)
Structural Pruning

• Leader
• Subordinated
• Permanent branch
• Scaffold branches
• Temporary branches
Structural Pruning

• Leader
Broken lines indicate where two lateral shoots competing with the central leader should be removed.
Structural Pruning

- Subordinated lateral
Apical Control
Structural Pruning

• Lowest permanent branch
Structural Pruning

- Scaffold branches

Figure 7. Scaffold branches of trees should have proper vertical and radial spacing on the trunk
Structural Pruning

- Temporary branches
Tree Health

- Dead & diseased wood
- Rubbing branches
Plant Quality

- Flowers
- Fruits
- Stems
- Leaves
Pruning Methods (Types)

- Crown Cleaning
- Thinning
- Watersprouts
- Lion tailing
- Crown Raising
- Vista
Pruning Methods (Types)

- Crown Reduction
- Restoration
- Utility
- Palms
- Espalier
- Pollarding
Pruning Methods (Types)

- Crown Cleaning
Pruning Methods (Types)

- **Crown Cleaning**
Pruning Methods (Types)

- Thinning
Pruning Methods (Types)

• Watersprouts & Suckers
Pruning Methods

• Lion tailing
Pruning Methods (Types)

• Crown Raising
Pruning Methods (Types)

• Vista Pruning
Pruning Methods (Types)

• Crown Reduction
Pruning Methods (Types)

- Restoration

Before restoration pruning

Remove indicated sprouts

After restoration pruning

- Too many sprouts at one location
- Remove some sprouts
  - Shorten other sprouts
- New leader has room to develop lateral branches
Pruning Methods (Types)

- **Utility**

Utility Pruning

Right Tree Right Place
Pruning Methods (Types)

- Palms (fronds)
Palm Tree Skinning and Trimming

BEFORE

AFTER
Pruning Methods (Types)

• Espalier
Pruning Methods (Types)

• Pollarding
Pruning Hedges
**Formal**
Shear both sides and the top.

**Informal**
Selectively shear back unwanted growth.

**Correct**
Taper hedge sides so that bottom is wider than the top.

**Incorrect**
Lower leaves and stems will die without adequate light.
Pruning Shrubs
Pruning Shrubs

Renewal Pruning

BEFORE

AFTER
Extensive rejuvenation
Wound Dressing
Pruning Tools

• Use the right tool
  – By-pass cutters (no anvils)
  – Extension tool
  – Non-metal handles
  – Hand saws for final cut
When to Prune?

• Whenever the knife is sharp!
• Whenever the bees are not in the trees!
Plant Growth Regulators

- Growth inhibitors
- Antigibberellins