



FLORIDA
**MASTER
GARDENER**

Basic Pruning

Dr. Pat Williams

Essential Question



Can you assess the importance of proper pruning techniques?

Good Design Can Reduce Maintenance



Pruning Consideration Questions

- Why are you pruning?
- How does your plant grow? (shape, form or habit, leaf arrangement)
- When does it bloom/fruit?
- Training new plants versus pruning existing plants?

Reasons for General Pruning



- Shape
- Invigorate new growth
 - Short/stocky vs. tall/leggy
 - Encourage lateral bud growth
- Increase light (fruit trees and planting beds)
- Correct storm damage
- Remove dead, dying or diseased tissue

Good Design Can Reduce Maintenance



- Right time of year for the degree of pruning?
- Proper tools for the job?
- Is the job something you are physically able to perform?
- Does it require work above your shoulder height?

Types of Pruning



- Pinching: soft-tip vs. hard (up to 3")
- Heading back cuts
- Thinning back cuts (don't injure collar)
- How close to cut: no flush cuts or stubs
- Triple cut for heavy branches
- Hand pruning versus shearing
- Dormant vs. growing season

Age of Specimen



Pruning Process: Shrubs



- Hair Cut Rule
- Pruning done well should not look like pruning
- Walk around specimen and watch what is under your feet
- 5 Initial sizing cuts
- 3 Ds: dead, dying and diseased
- Crossing or rubbing branches
- Watersprouts and suckers

Pruning Process: Shrubs



- Reassess shape
- Know point of origin before branch removal
- Branch collars: no stubs
- Cut on angles above nodes
- 2 cuts to make removal easier and be care of limb drop damage

Pruning Process: Shrubs



- Pruning cuts: thinning out: removal of entire shoot to trunk; heading back: removal of partial shoots to point of origin on branch
- Deciduous shrubs: multiple stems or canes. Rejuvenation: too harsh in most cases, 6" in late winter. Renewal: 1/3 to 1/4 of canes each year to the ground (early spring)

Pruning Process: Shrubs



- Remove clustered stem cuts (hedges)
- Evergreen Plants: Dead zone - 6-12" past new growth

Pruning Shrubs





Many shrubs can be low maintenance if placed in the correct location.

Dwarf Burford holly



You often inherit issues that take expertise and time to correct.



Removing the shrub is always an option.

Reducing Size?

- Cut the longest stems back deep into the shrub. Try to cut above some foliage which will form the new canopy.
- If there will be no foliage after pruning, cut the shoots at different lengths so new foliage develops in layers.



Maintaining Size

Cane producing shrubs: Remove 1/3 of the tallest canes to the ground each year.



Without pruning, the aggressive upright branches only have leaves at the top of the plant.



- To reduce the size of a formal shrubs, cut below original heading cut.
- Perform in late winter or early spring for fastest recovery.

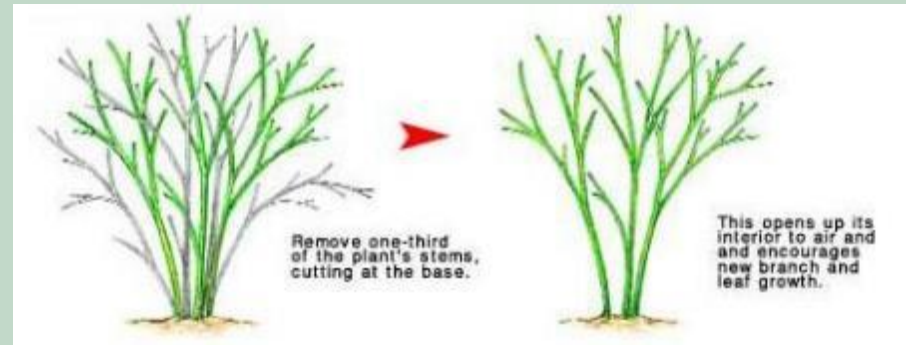
Thinning

- To reinvigorate old shrubs or to reduce plant density.
- Thinning is best done in late winter or early spring.
- May be done each year as needed.



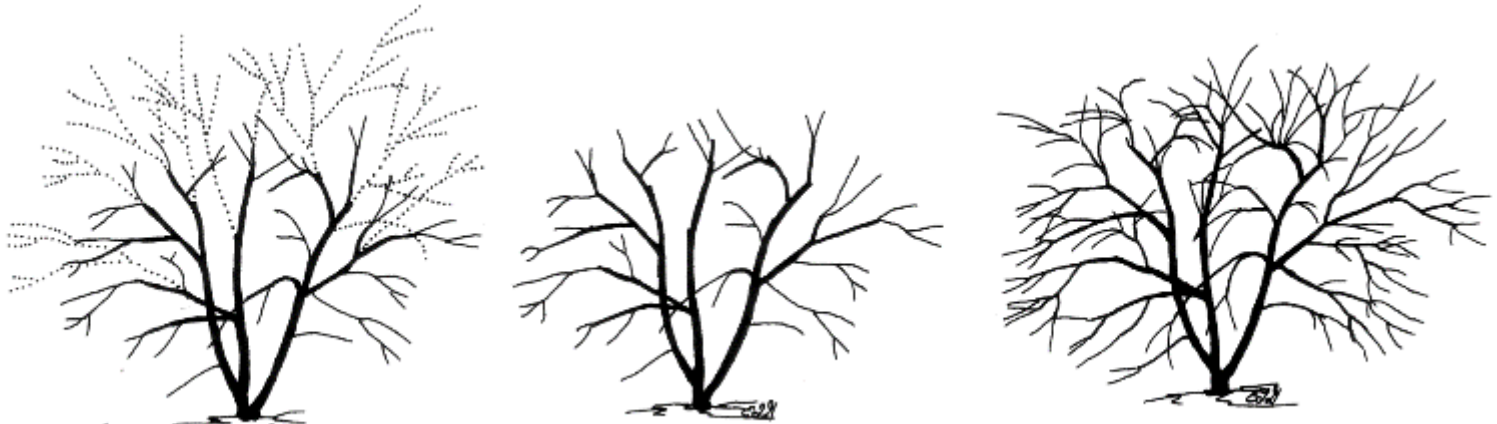
Renewal Pruning

1. Remove dead or severely diseased/damaged wood.
2. Choose the oldest stems and cut back to about 4 to 6 inches.
3. Some of the oldest stems may be cut back to their point of origin.
3. Cut back stems that extend far beyond the edge of the canopy.



Maintaining Size

- Rounded shrubs: Cut the longest branches 6 to 24 inches back inside the outer edge of the plant.
- Make no cuts on the edge of the new, smaller canopy.
- Make reduction cuts to lateral branches with plenty of foliage.
- If there is a hole in the plant, make a heading cut at the point where you want foliage to fill in.



Hedges - Informal

- Informal hedges are lower maintenance and recover quicker from damage.

- Reduction or heading cuts are made on longest shoots into the canopy about 6-18 inches.

- Make sure lower branches are receiving sunlight to maintain full appearance.



Good

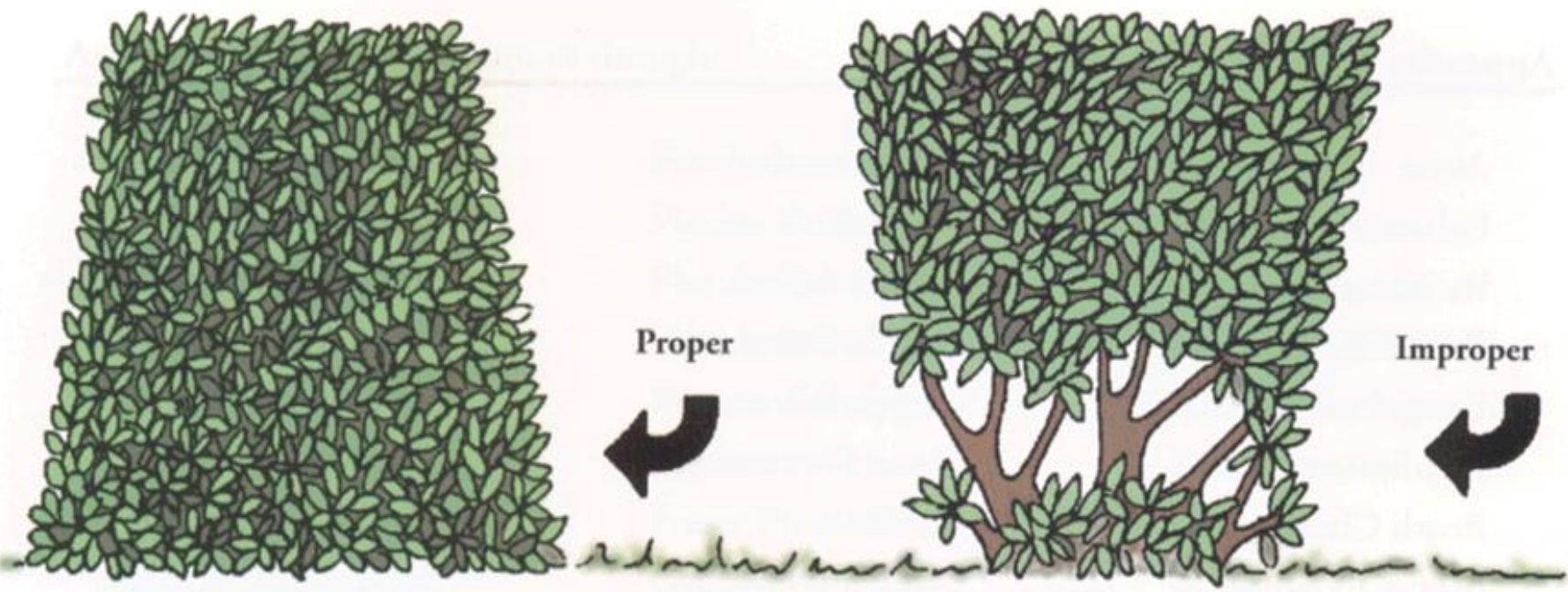


Bad

Hedges - Formal

- Formal hedges are maintained with regular heading cuts.
- Make cuts within an inch of last cuts to create a dense growth. The plant will be slightly larger after each hedging.
- Normally prune during active growth or after flowering.



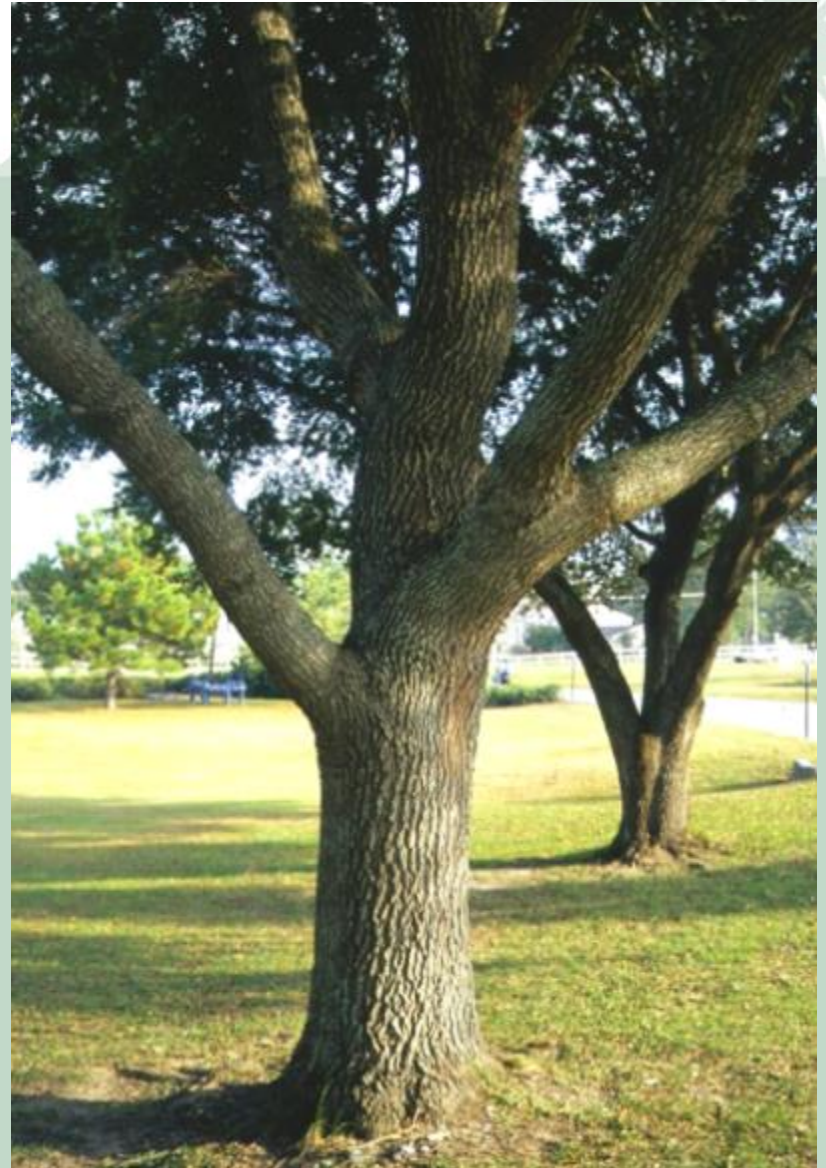


Rejuvenation Pruning

- Use this severe type of pruning sparingly in winter/spring for rejuvenation.
- After some recovery, practice thinning and reduction to keep plant manageable and healthy.



Which one is stronger?



Pruning Process: Trees

The background features a light green gradient. At the top right, there are stylized, spiky tree silhouettes. Along the top edge, there is a decorative border of stylized grass blades.

- Training purpose: excurrent or decurrent tree?
- Tree proportions 2/3 canopy, 1/3 bare trunk, avoid overlifting
- Multiple point of origin branches (dueling leaders)
- Tree branch height
- Trashy trunk growth (good or bad)

Pruning Process: Trees



- Aspect ratio
- Avoid liontailing
- Crotch angles: U is stronger, V is weaker
- 3 cut method for large branches
- Branch collars

Pruning Shade Trees

- Pruning techniques designed to develop and maintain strong structure.
- Trees that are well structured are aesthetically pleasing, long-lived, and have crowns that are preserved as they mature.
- Structural pruning is important for young and mature shade trees.



Other Inappropriate Pruning Practices

Overlifting removes too many branches along the trunk, resulting in many wounds. Crown structure is not addressed.



Liontailing is when trees are over thinned leaving growth at the tips. Trees then form heavy numbers of sprouts as they try to recover.

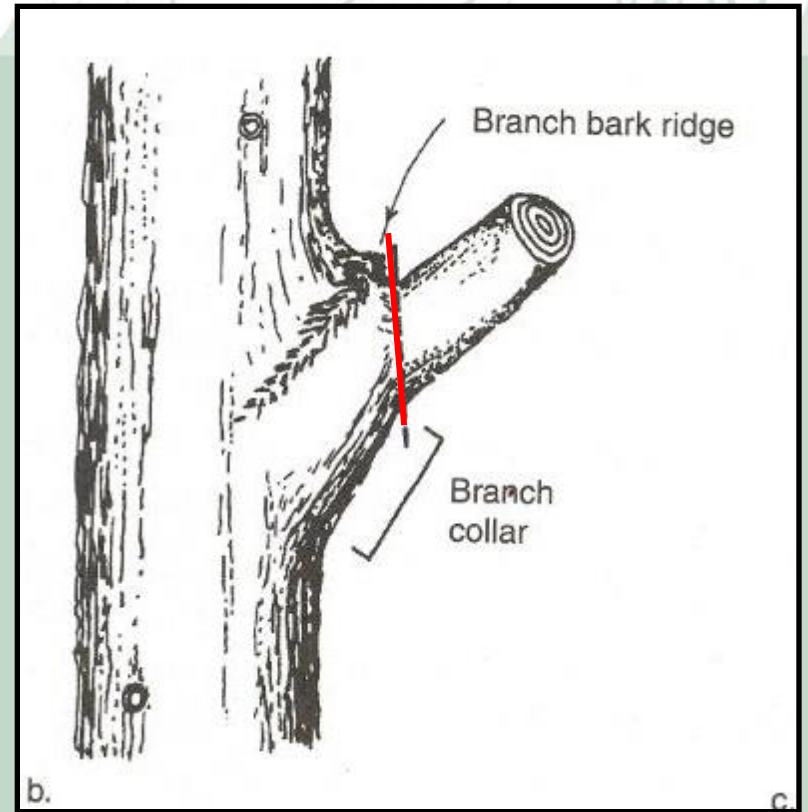
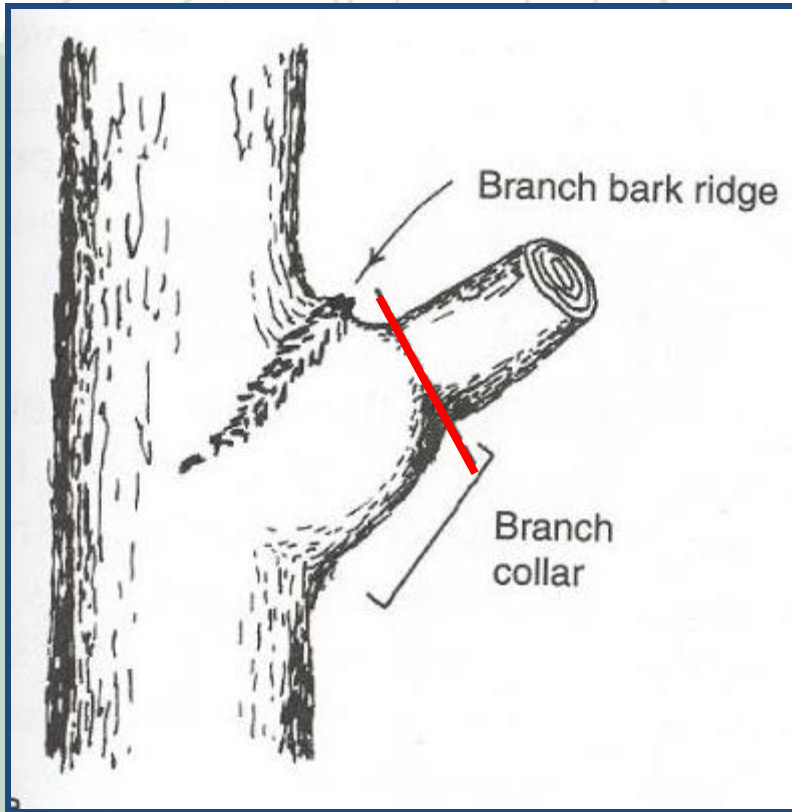


Improper Pruning Practices or Tree Neglect

- Harms plant health
- Poor tree stability
- Poor appearance
- Early tree removal



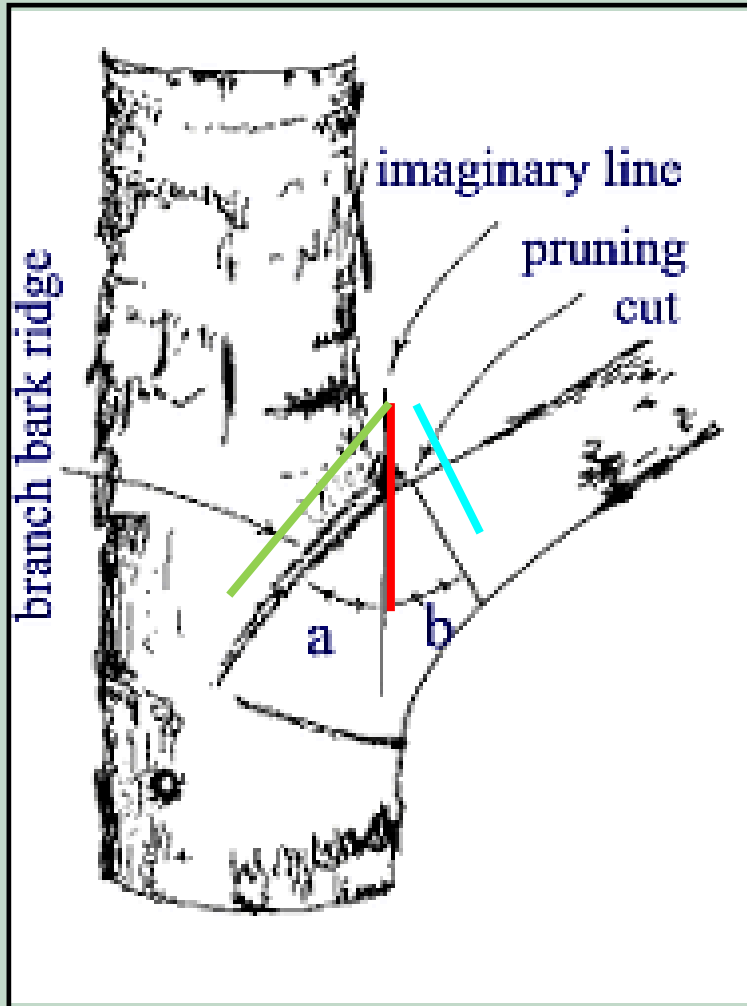
Proper Pruning Cuts



Collar vs. Stub

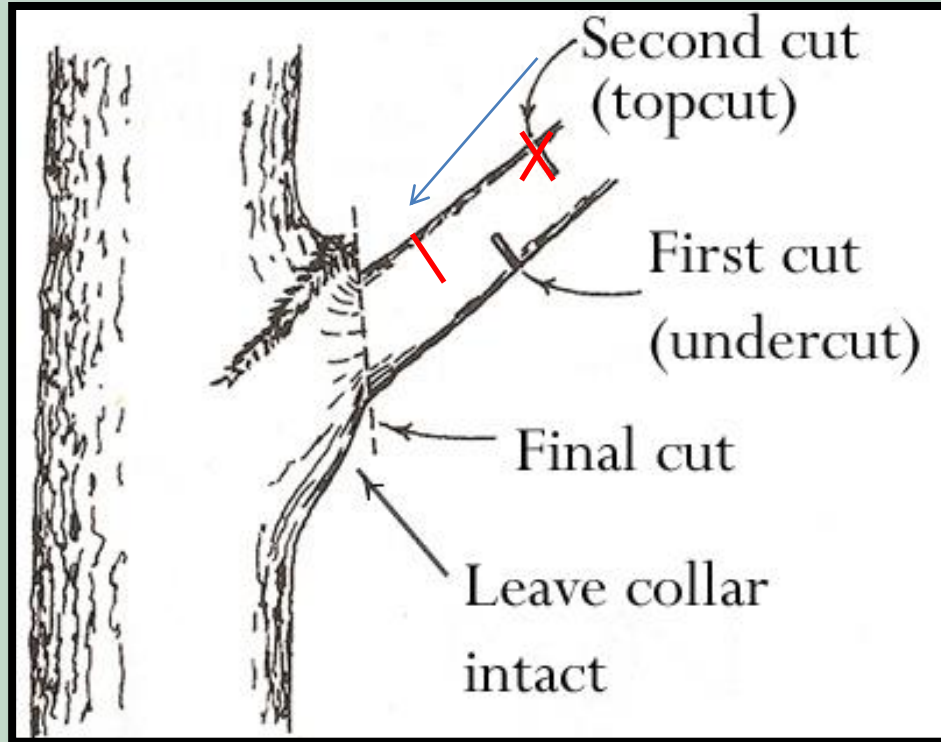


Pruning Cut Without a Visible Collar



1. Use the branch bark ridge as your guide (**green line**).
2. Then draw an imaginary line from the top of the ridge parallel to the trunk (**red line**).
3. Measure the distance between the two lines (a).
4. Apply the same distance from the center line outward on the branch (b).
5. Draw your imaginary line which will leave the collar intact (**blue line**).

Pruning Large Branches



Step 1

Make an undercut about 12 inches from the trunk.

Step 2

Make a top cut between the tree and the undercut.

Step 3

Remove the stub with final cut, being careful not to cut flush against the trunk. Leave the collar.

Collar is left intact.



One year later, wound wood grows evenly around the pruning cut.



Good cuts on young branches will be round.



Collar vs. Stub



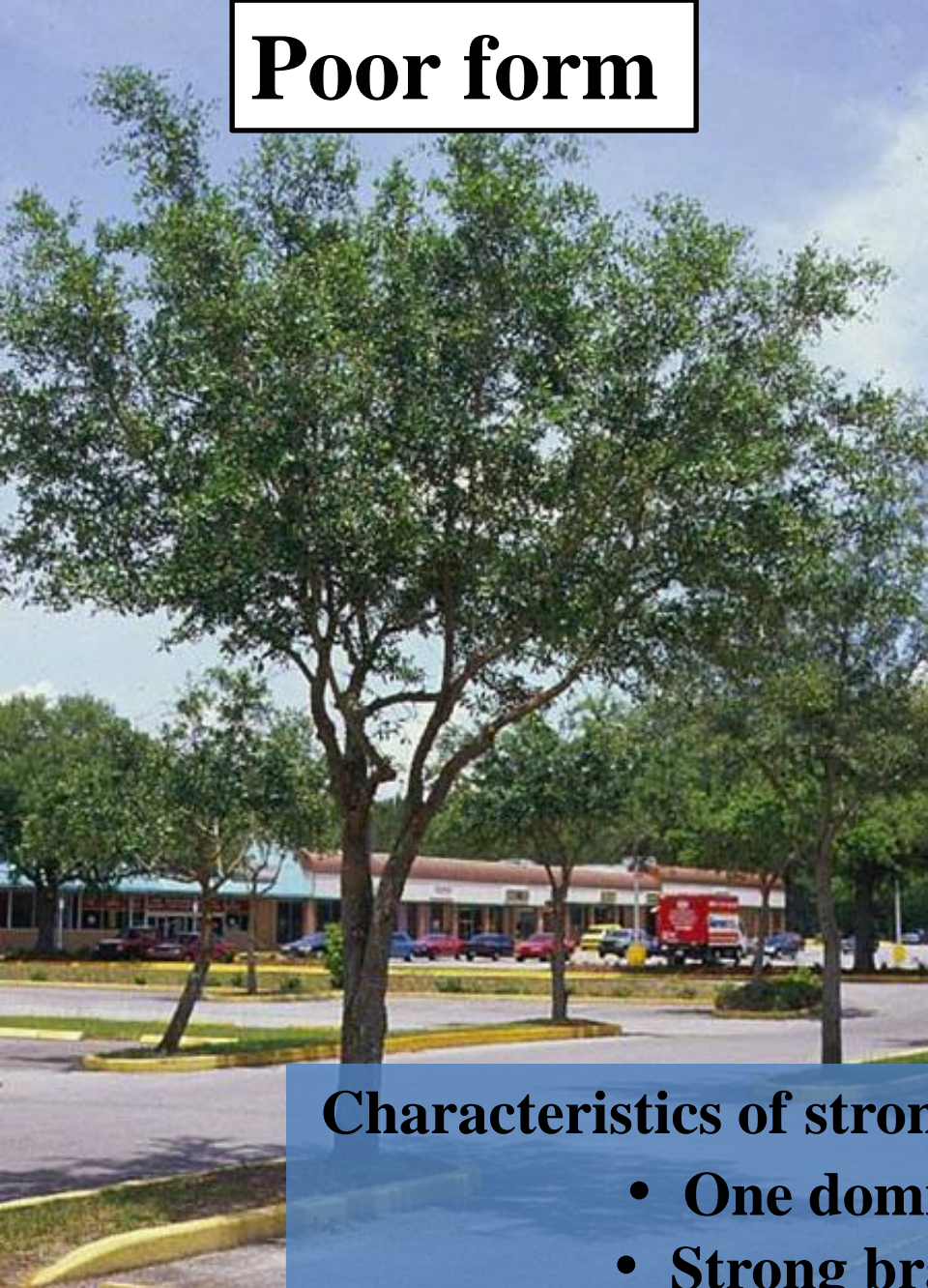
Pruning Paints and Wound Dressings



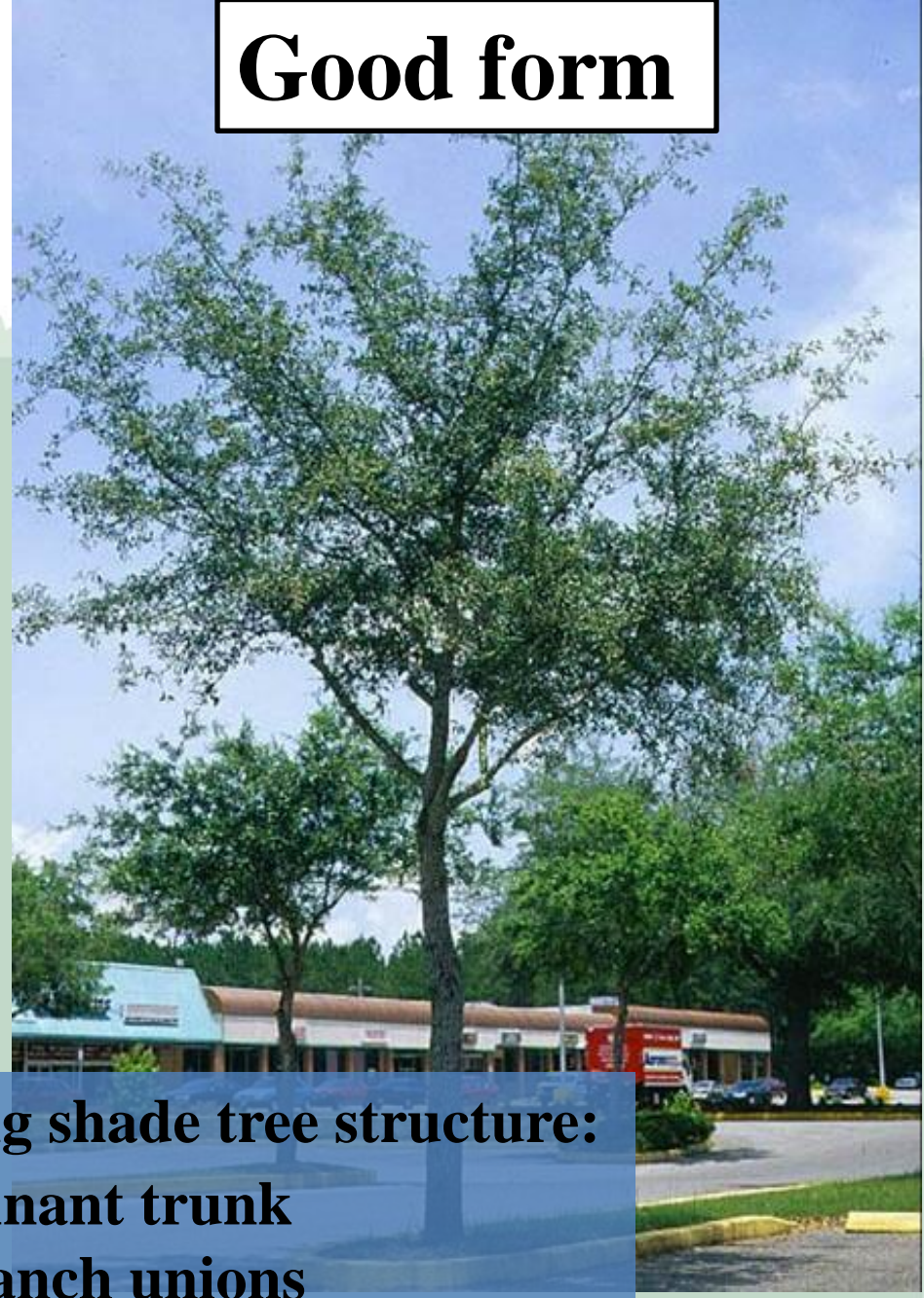
Do not prevent wood rot, cracks, or mushrooms.

Some dressings may actually promote decay by trapping moisture.

Poor form



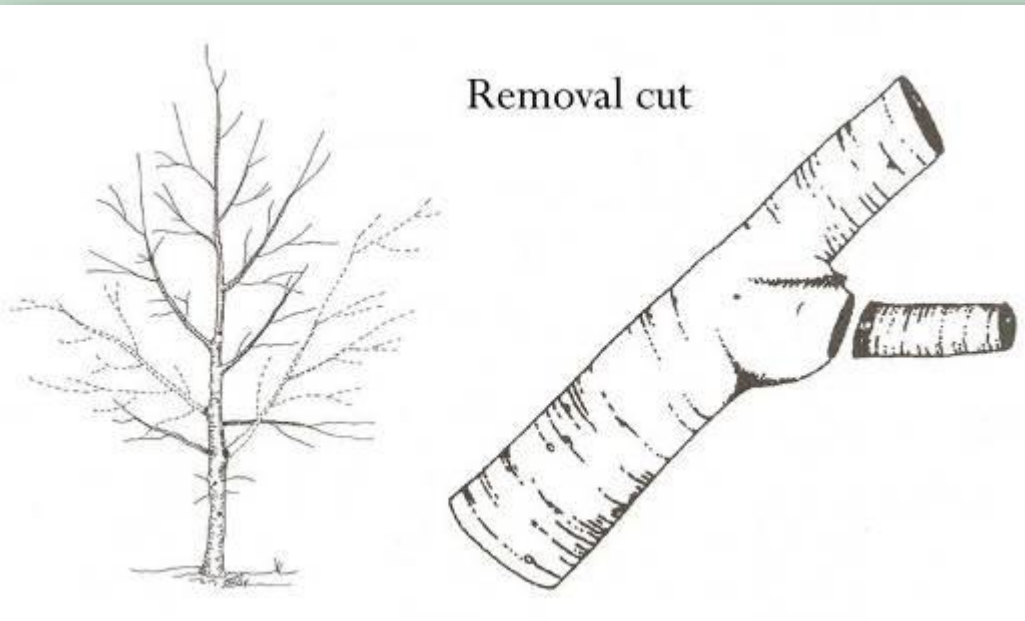
Good form



Characteristics of strong shade tree structure:

- One dominant trunk
- Strong branch unions
- Balanced canopy

Types of Pruning Cuts



Thinning or Removal Cut
Prunes a branch back to the trunk or parent branch.



Non-Heading Back Cuts

- Cuts through woody tissue at random points on the trunk or branches.
- Not often appropriate for landscape trees.
- Results in decay and weak structure.





Cuts on Crape Myrtle

- Topping typically delays flowering compared to unpruned crape myrtles.
- Some cultivars may have a shorter bloom season.
- Number of flowers decreases as pruning severity increases.
- Basal sprouting increases, which can result in higher maintenance.



Structural Pruning Strategies

1)



- 1) Develop or retain a dominant leader
- 2) Space main branches along the dominant trunk

2)

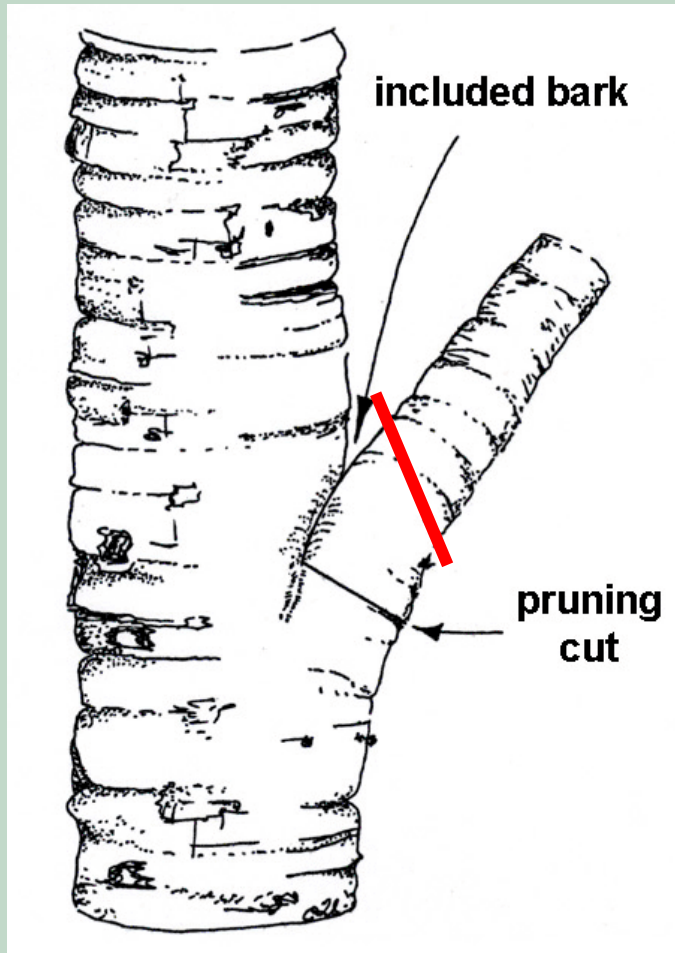


Structural Pruning Strategies

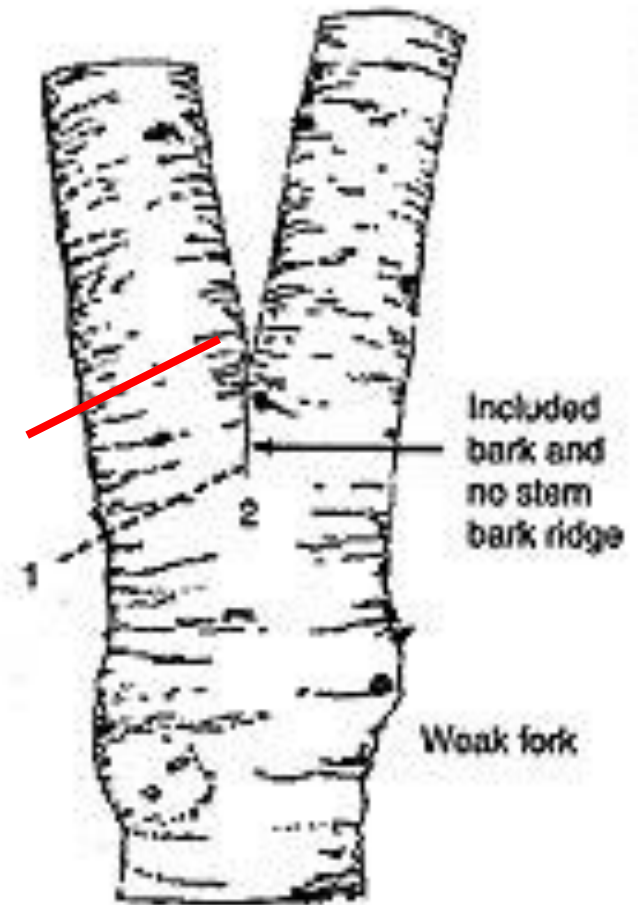
3) Prevent or suppress formation of included bark



Pruning Cuts for Included Bark



Two codominant stems





After Reduction

Structural Pruning Strategies



- Reduce growth rate of low aggressive branches when trees are younger.
- On mature trees, removal of these branches result in wounds that are not able to compartmentalize, leading to decayed areas.

Pruning Ornamental Grasses



- Prune in early spring, after last frost.
- Cut grasses about 12 inches above the ground.



Pruning Palms

- Remove completely dead fronds, fruit and flower stalks.
- Can remove living flower or fruit stalks if desired.
- Hurricane cuts are not appropriate pruning techniques



Pruning Palms



- If nutrient deficiencies exist, never remove any leaves that are not completely dead.
- If no deficiencies exist and palm has a full canopy (360 degree green fronds), remove no more healthy leaves than will be produced during the interval between prunings—and preferably less!
- **Never** remove any living leaves originating above the horizontal plane (9:00 to 3:00 positions).

Pruning Palms

- If leaves are partially damaged from the cold, they should stay on the palm until new leaves form.



International Society of Arboriculture (ISA)



- Certified arborists are trained and knowledgeable in all aspects of arboriculture.
- Practical experience or appropriate degree
- Must pass exam and abide by a code of ethics.
- ISA maintains a list of certified arborists.
<http://www.isa-arbor.com/>

Pruning Tools

The background features a light green gradient with a decorative border at the top consisting of stylized grass and plant silhouettes.

- Pruners: bypass vs. anvil ($\frac{1}{2}$ inch)
- Loppers: handle length ($\frac{1}{2}$ to $1 \frac{1}{2}$ inch)
- Shears
- Saws (landscaping versus carpentry)
- Pole saws
- Chain saws (only use on stable branches)

Pruners



Anvil



Bypass



Free Pair of Pruners



Loppers

- Handle length will dictate leverage and diameter to be cut.
- Be careful of telescopic handles.



Pruning Shears

- Used for small leaved plants only.
- Hedges
- Telescopic handles are useful



Pruning Saws

- Curved fixed blades
- Folding
- Larger teeth



Hand Sharpeners



Swiss Sharpener by AM Leonard



96% positive (1,262)

\$32.39 from A.M. Leonard 

For shears, knives, scissors and more! This ultimate **sharpener** has a concave composite steel blade. Two precision **sharpening** ...
Manual

Istor Professional Sharpener I-15



\$29.99 from 5+ stores

The Istor I-15 Professional **Sharpener** is a versatile all-purpose **sharpener** ideal for tradesmen, household, and outdoor use ...
Manual

Istor Standard Sharpener I-10



\$16.99 from 10+ stores

★★★★★ 1 product review

The **SWISS** istory All-Purpose **Sharpener** features a concave composite steel blade with two precision **sharpening** edges bonded to ...

Hand Sharpeners



Corona Sharpening Tool, Garden Tool Blade Sharpener, AC 8300

\$8.38 from 25+ stores

★★★★★ 52 product reviews

A 5 inch super-carbide file. Ideal for sharpening all blades. Easy to fit in pocket.

Other size options: 1.6 oz (\$6)



Biteharder Standard Series Carbide Runner Sharpener Tool - CRST150-60

\$58.46 from 10+ stores

★★★☆☆ 1 product review

Easily re-sharpen carbide runners providing the perfect edge every time you ride. Use with a portable drill so you can re ...



Speedy Sharp Carbide Knife Sharpener - (2) PACK-

\$23.91 from Amazon.com - Seller

The MICRO 100 KS-1 - MADE IN USA The most universal sharpener ever manufactured. It sharpens fast, is durable, compact, and ...

Pruning Tools



Bypass Hand Pruners



Folding Pruning Saw



Pole Saw



Hedge Trimmers



Loppers



Chainsaw

Finding a Certified Arborist



- Large trees: consult with a *Certified Arborist*:
www.isa-arbor.com and select **Find an Arborist** (International Society of Arboriculture)
- Arborist vs. tree cutting service

Finding a Certified Arborist

The screenshot shows the ISA International Society of Arboriculture website. At the top, there is a navigation bar with a search site input field, a 'Join ISA' button, a 'Checkout' button with a shopping cart icon, and social media icons for Facebook, Twitter, LinkedIn, YouTube, and RSS. Below this is a main navigation menu with links for 'About ISA', 'Find an Arborist', 'Newsroom', 'Job Bank', 'Contact Us', and 'LOGIN'. A secondary menu includes 'Membership', 'Professional Credentials', 'Education and Research', 'Events', 'Shop', and 'Public Outreach'. The page content is divided into a left sidebar and a main area. The sidebar has a 'MyISA TOOLBAR' and a 'LOGIN or CREATE AN ACCOUNT' link. The main area features a breadcrumb trail: 'Home > Find an Arborist > Arborist Search > Find an Arborist'. The main heading is 'Find an Arborist'. Below the heading, there is a paragraph explaining that ISA credential holders can list themselves in an online directory, which is voluntary and may not include all arborists in a specific area. It also mentions a 'Verify an Arborist's ISA Credentials' tool. Below this is a section for search options: 'Search by Name' and 'Search by Location'. The 'Search by Name' form has input fields for 'First Name' and 'Last Name', and a 'Search' button. The 'Search by Location' form has a 'Country' dropdown menu, a 'Please select...' prompt, and a 'Search' button. In the left sidebar, there is a book titled 'The Practical Science of Planting Trees' by Gary H. Moore and R. H. Howarth, with prices for ISA Members (\$59.95) and Non-Members (\$69.95), and an 'Add to Cart' button.

ISA International Society of Arboriculture

SEARCH SITE

Join ISA

0 Checkout

f t in YouTube RSS

About ISA • Find an Arborist • Newsroom • Job Bank • Contact Us • LOGIN

Membership • Professional Credentials • Education and Research • Events • Shop • Public Outreach

MyISA TOOLBAR LOGIN or CREATE AN ACCOUNT

Arborist Search >>

Home > Find an Arborist > Arborist Search > Find an Arborist

Find an Arborist

ISA credential holders have the opportunity to list themselves in this online directory. This is a voluntary listing and may not include all the arborists in your area who hold an ISA credential. To verify an arborist's ISA credentials, please use the [Verify a Credential](#) tool.

Use the search options below to locate an arborist.

Search by Name

First Name

Last Name

Search by Location

Country

or

The Practical Science of Planting Trees

ISA Members: \$59.95

Non-Members: \$69.95

Price in US Dollars

ISA promotes the hiring of companies who have ISA certified professionals on staff. ISA Certified Arborists[®] are held to a Code of Ethics and are encouraged to follow industry standards. Certification demonstrates the individual has the knowledge to perform tree work correctly, but does not guarantee the quality of the work performed by that individual. If you feel someone has not provided proper tree care, you may report a [code of ethics violation](#).

Hurricane Pruning



- Assess if plant can be saved and be patient
- Leaning trees: how far?
- What does the canopy look like?
healthy/green or wilted/browning/dying
- Exposed root ball or soil heave?
- Chainsaw blight was rampant after Irma
- Three cut limb removal
- **NO** ladders or pole pruners

Which will recover?

