




Smartscape for Homeowners Associations

Class #2 Plant Science, Irrigation & Pruning




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Learning Objectives

After participating in the HOA Program Class #2, participants will be able to:

1. Summarize basic plant science as it relates to plants, soil, and water
2. Discuss the importance of organic matter and how to use it properly
3. Explain what drip irrigation is, and its benefits and shortcomings
4. Review the basics of hydrozoning and seasonal watering schedules
5. Recognize common drip irrigation mistakes and troubleshoot
6. Describe best pruning practices for desert-adapted plants
7. Recognize common pruning mistakes

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Pruning

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Why Do We Prune Plants?

- To train young urban trees
- To improve tree structure
- To remove damaged/broken branches
- For plant health
- To improve appearance
- For clearance considerations

Always have a good REASON to prune

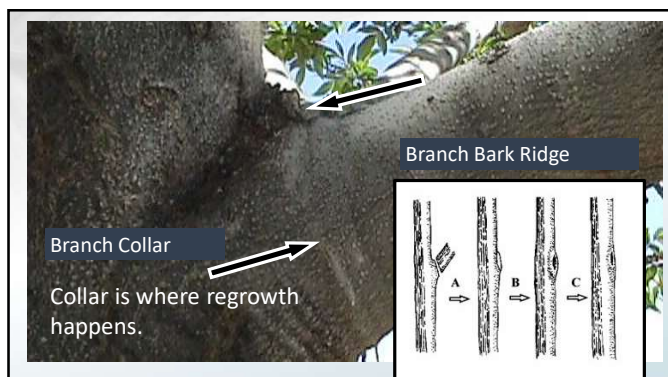
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Concerns About Pruning

- Every cut is a WOUND; Smaller & fewer wounds are preferred
- Large branch removal done badly
 - Torn edges difficult closure
 - Saw wounds on trunk
 - Don't apply a wound sealer
- Tree will use resources to seal, but it is a stressful recovery
- Always use CLEAN, SHARP tools

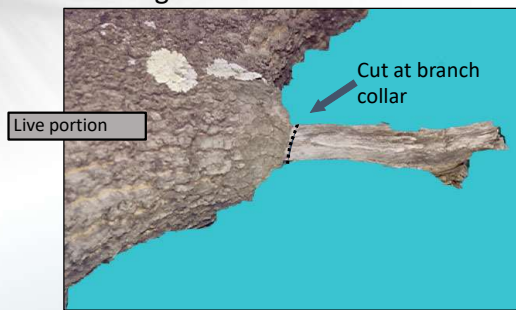


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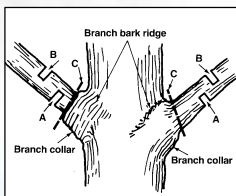
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Pruning dead stubs



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3-cut method for large limbs



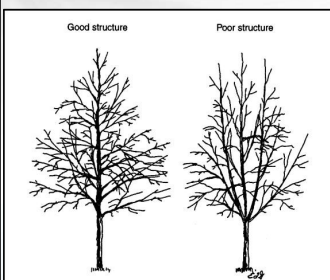
Do this....



So you don't have this.

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Pruning Young Trees for Structure



- DON'T DO ANYTHING for at least a YEAR!! Still rooting
 - Only prune if absolutely necessary
- Training Process during first 3-6 years:
 - Central leader
 - 1st permanent branch
 - Scaffold branches?
 - Subordinate, leave leader dominant
 - Temporary branches?

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What is Included Bark?

Included bark is bark that gets enclosed in the crotch of a tree as the branches and trunks develop.

- It weakens the branch attachment
- Tree becomes more prone to storm damage



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What's Wrong with Lifting the Crown on a Newly Planted Tree?



- Sunburn
- Weakens future trunk & structure
- Poor response to wind

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What's Wrong with Topping Trees?



- It is a source of invasion by rot-causing organisms.
- It reduces the food-manufacturing capacity of trees.
- New limbs that originate near the cuts are weakly attached and break easily in the wind.
- Unsightly!

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Poor Pruning Practices



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Which Do You Prefer?



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More Information

Books

- [Arizona Master Gardener Manual](#)

Websites

- [Programs | UA Cooperative Extension](#)
- [Resources | Pima Smartscape](#)
- [Western Plant Diagnostic Network](#)

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THANK YOU!

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Pima Smartscape Website
<https://www.pimasmartscape.arizona.edu>
<https://www.smartscape.org>



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