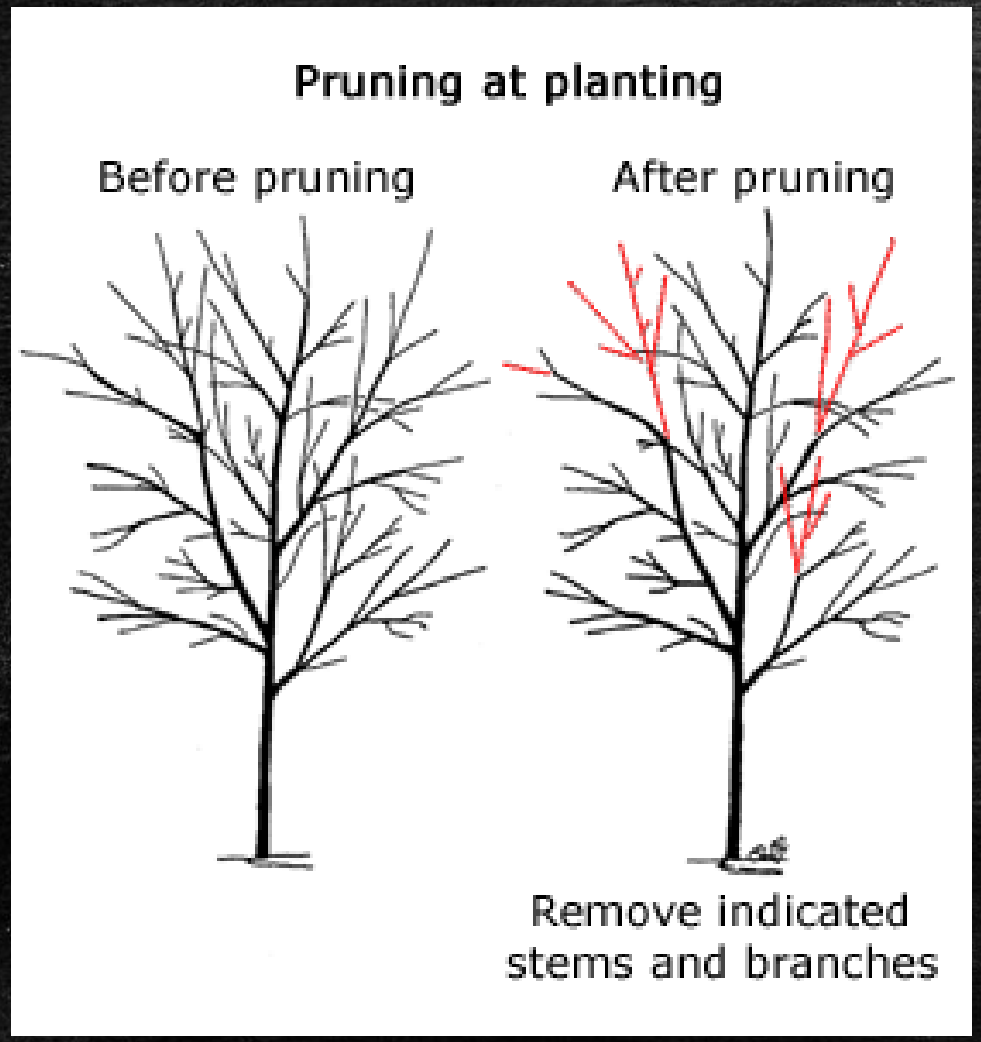
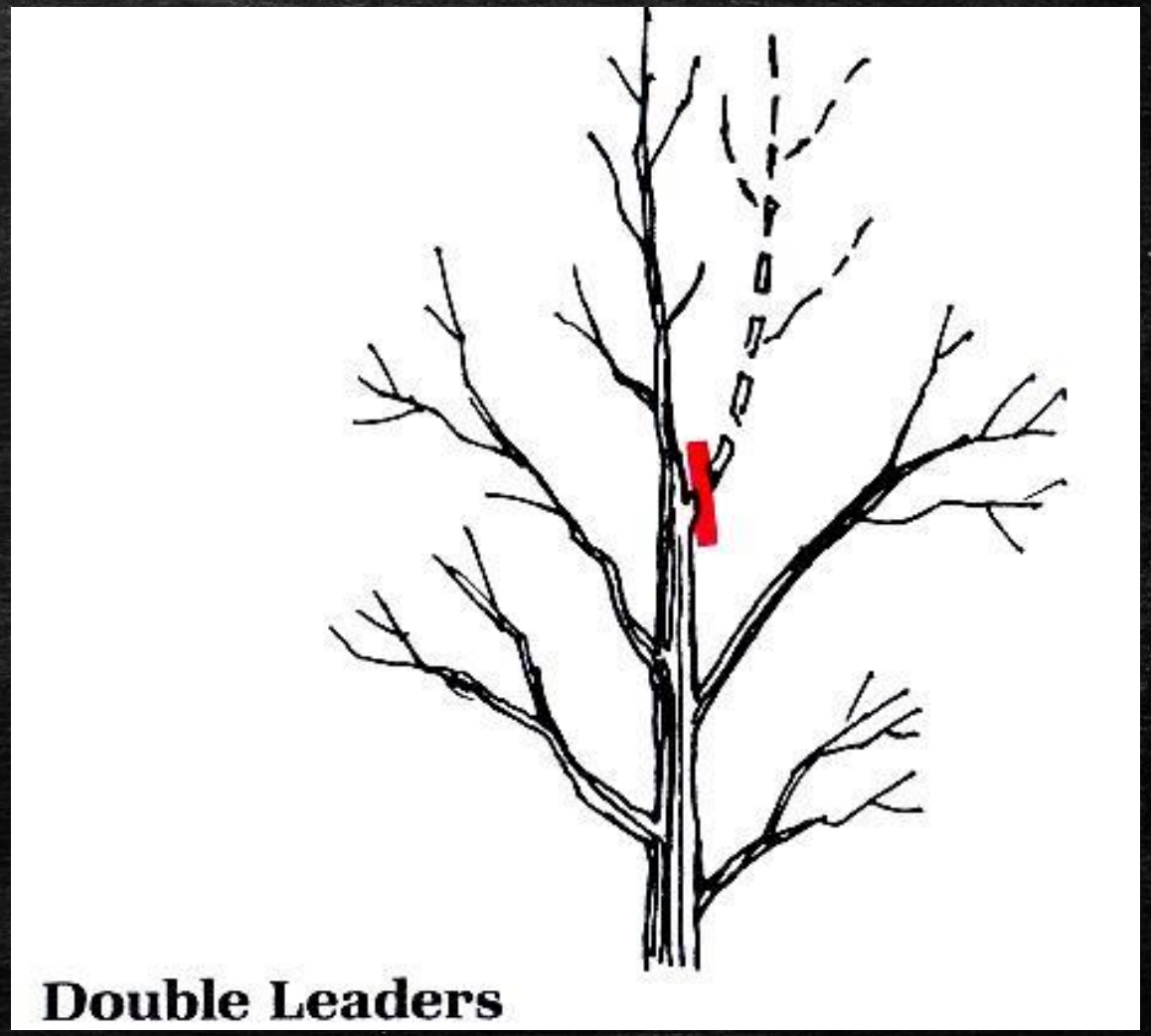
Subordinate, Reduce, Remove, or Walk Away

MGIA 2024

Subordinate, Or Remove: Letting The Leader Lead?





Subordination: Four Questions To Answer

1. How Well Does The Tree Compartmentalize?
2. Is The Tree A “Problem Child?”
3. Will The Subordination Be Permanent?
4. What If I Do Nothing?

How Well Does The Tree Compartmentalize?

Generally Good

- Sugar Maple
- Bur/White Oak
- Honey Locust
- Ginkgo
- Most Conifers
- Ironwood (*Ostrya virginiana)*

Generally Poor

- Silver Maple
- Red Maple
- Hackberry (*Celtis occidentalis)*
- Red Oak
- Basswood/Linden
- Beech

How Well Does The Tree Compartmentalize?

Generally Good

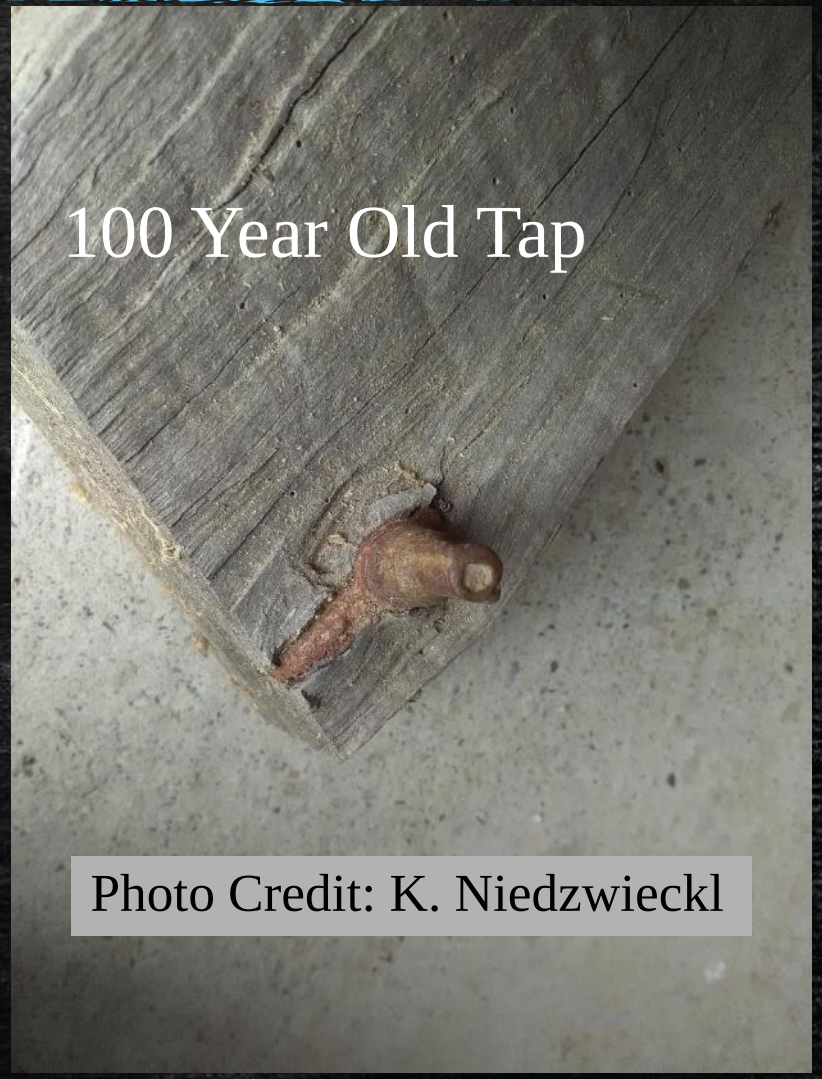
- Young Trees
- High Vitality Trees
- Trees Growing On Prime Sites

Generally Poor

- Older Trees Especially Over-mature Trees
- Stressed Trees
- Trees Growing On Poor Sites
- Low Vitality Trees

Poor Compartmentalizer: Basswood

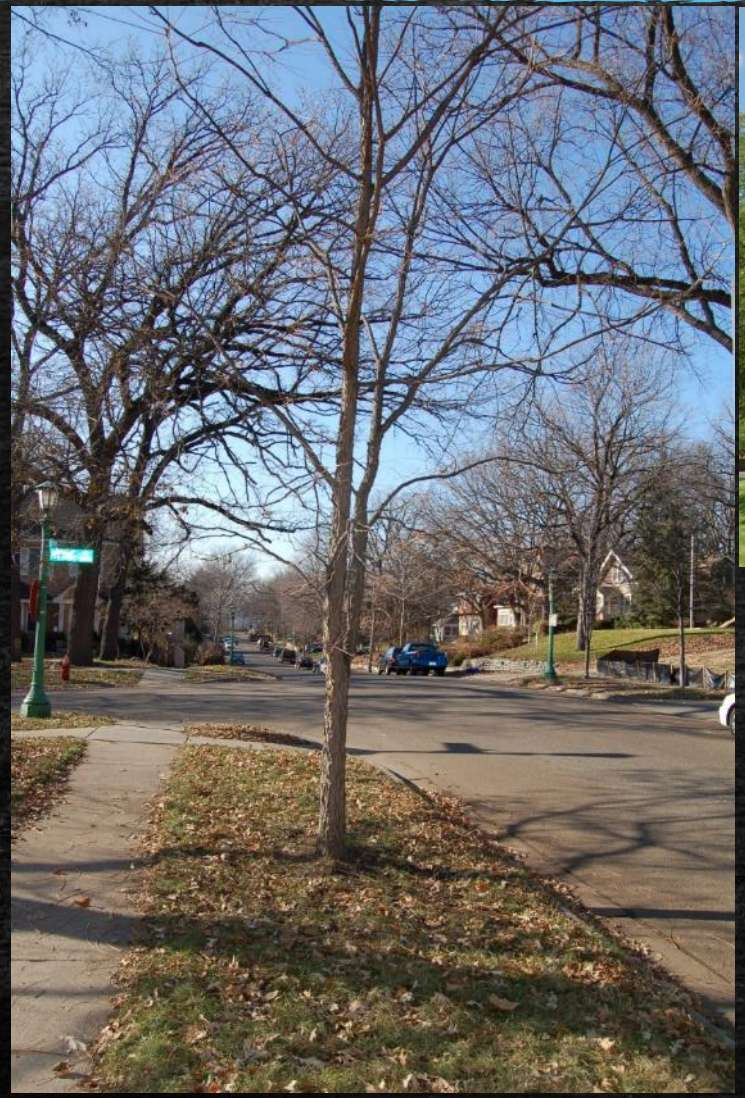
Good Compartmentalizer: Sugar Maple



Profiling Problem Plants

- Coffeetree
- Hackberry
- Freeman Maples
- American Elm Cultivars

Kentucky Coffeetree *(Gymnocladus dioicus)*



Young Hackberry…Old Hackberry

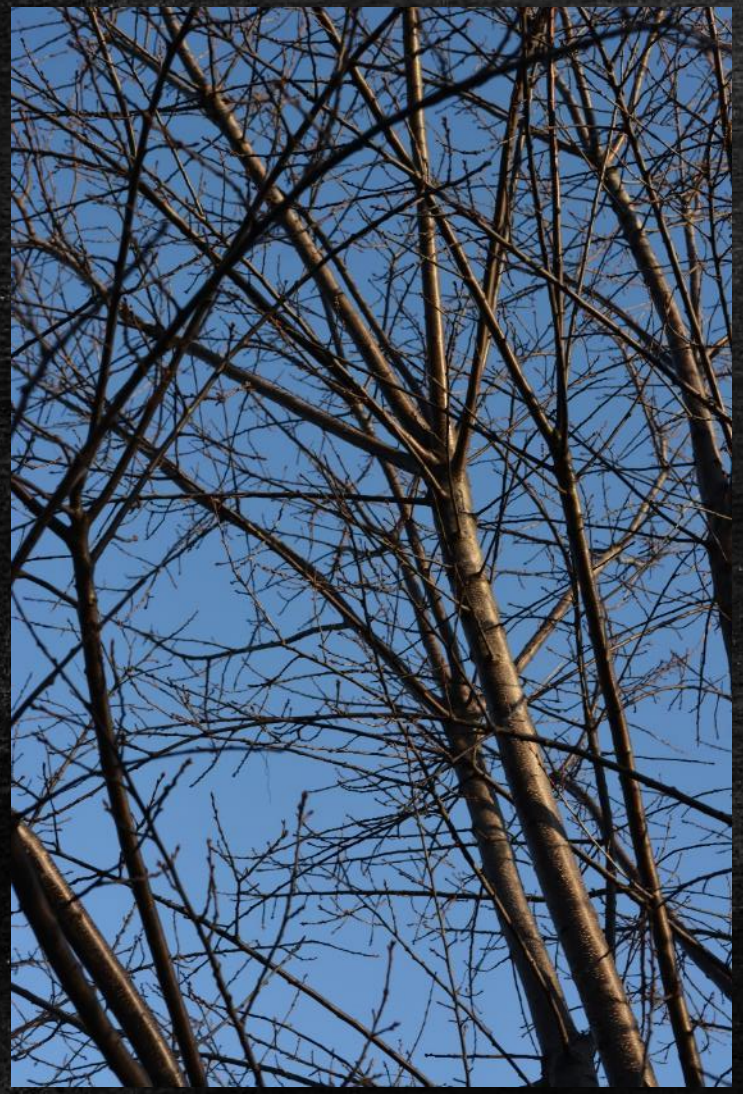
Freeman Maples (All The Problems Of Red and Silver)

Princeton & Valley Forge Elms (Too Bad They're DED Resistant)

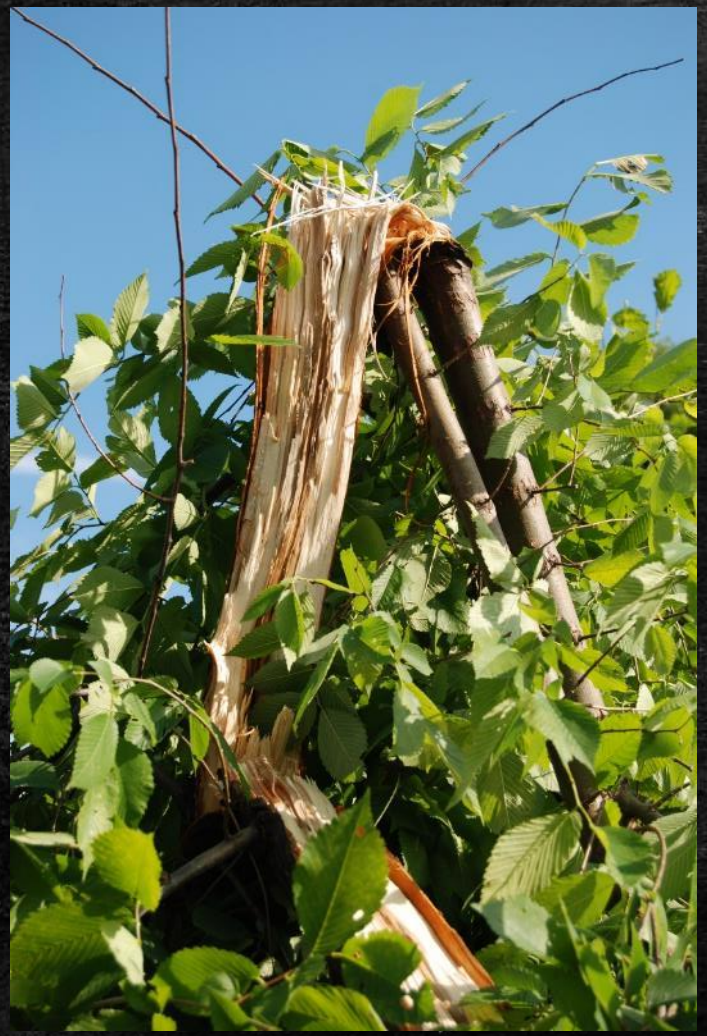
Will The Subordination Be Permanent?

Or, Just A Temporary Subordination?

What If I Do Nothing?



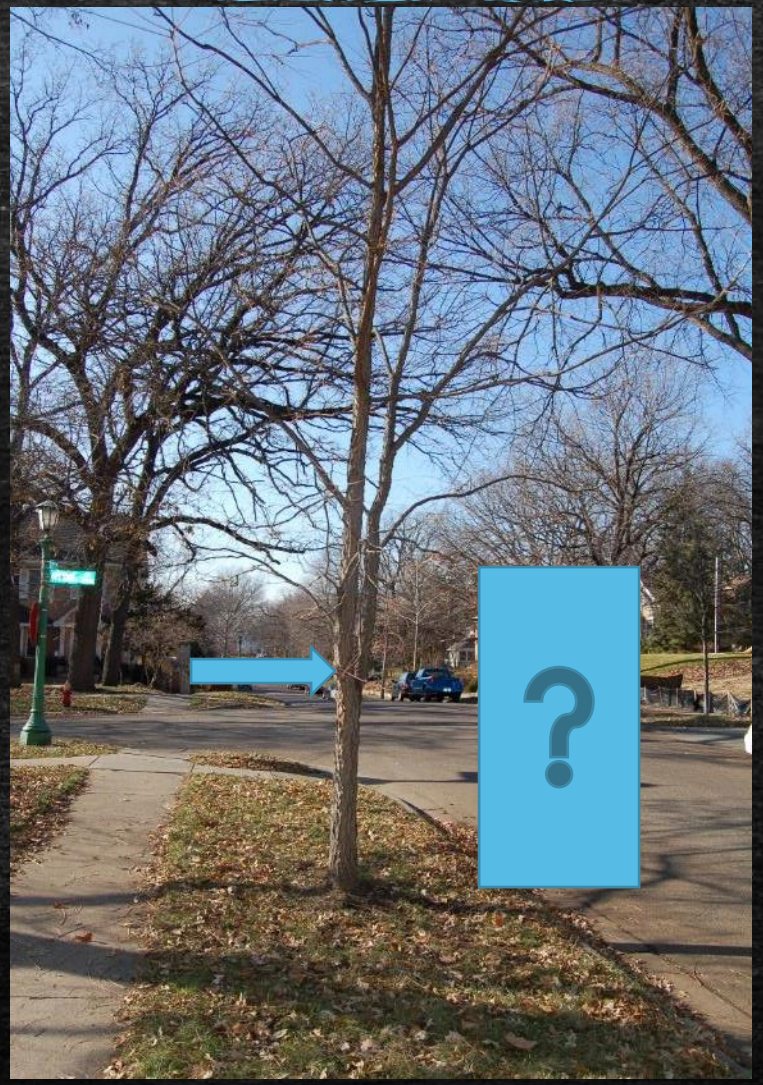
Often…Wind, Ice, Snow Will



What Does Size, What Does Size Have To Do With It?

Codominant Leader Subordination: When Size Matters

Small, Young Trees



Codominant Leader/s On Young/Small Trees

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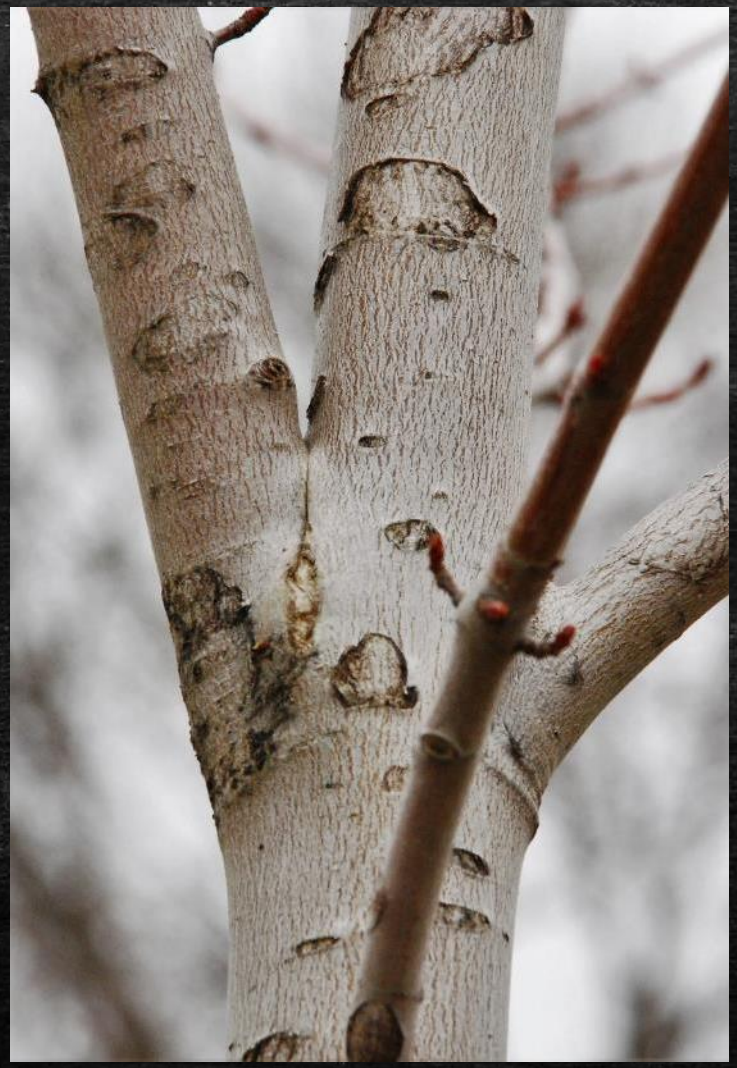
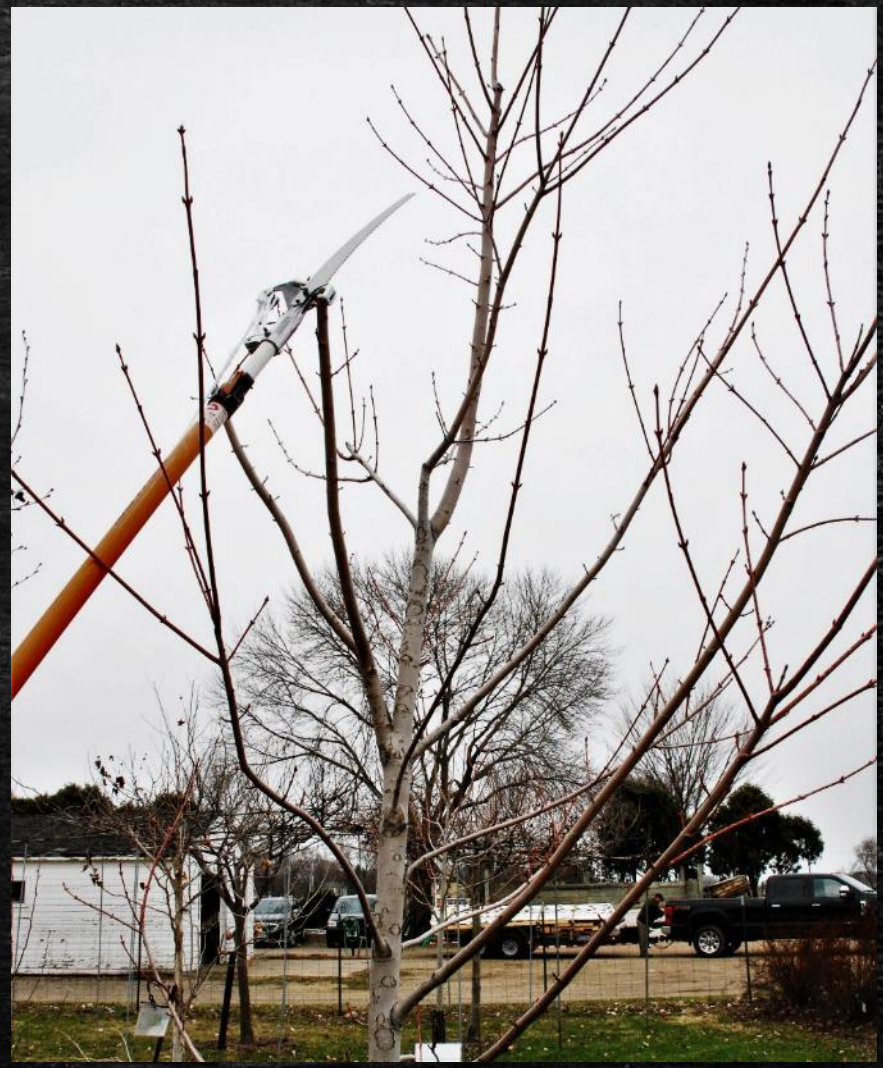
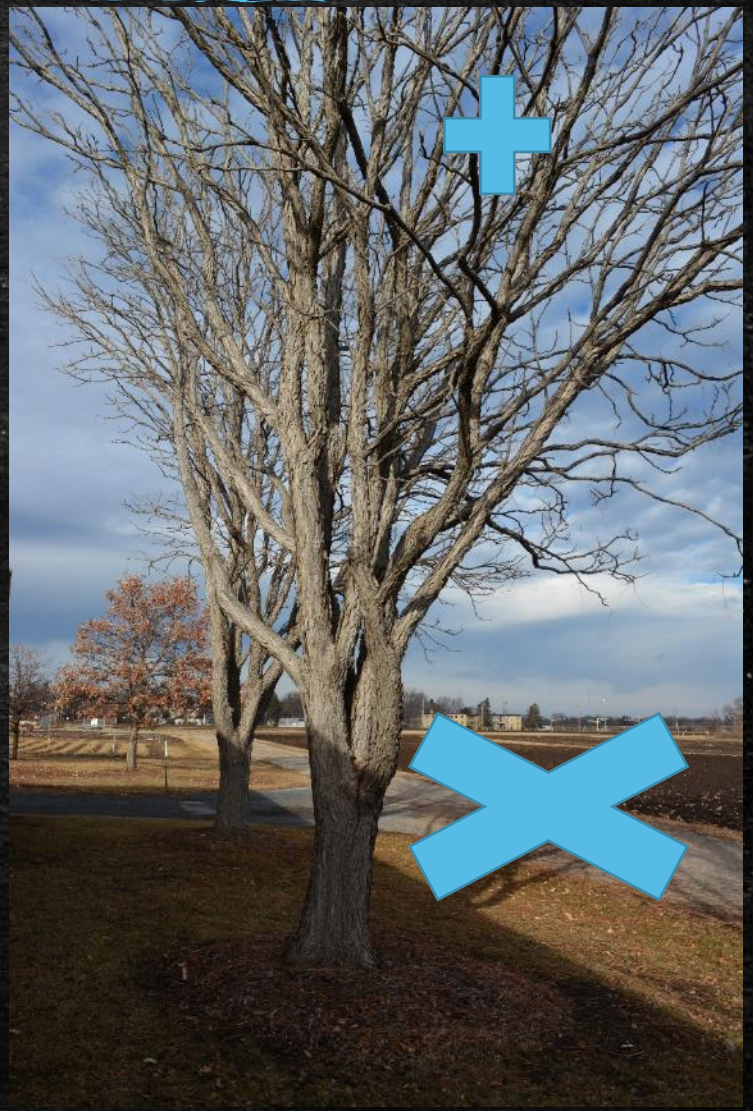




Codominant Leaders On Established Trees

Subordinating & Reducing Leaders & Branches

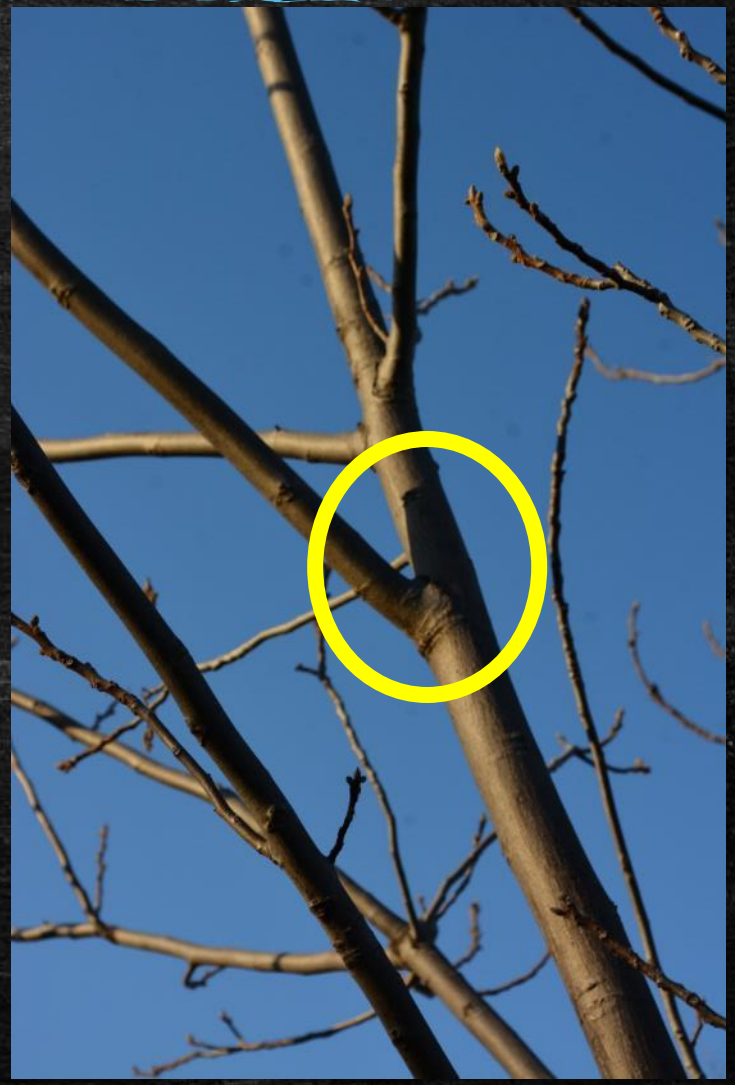
Subordinating Codominants On Mature Trees?



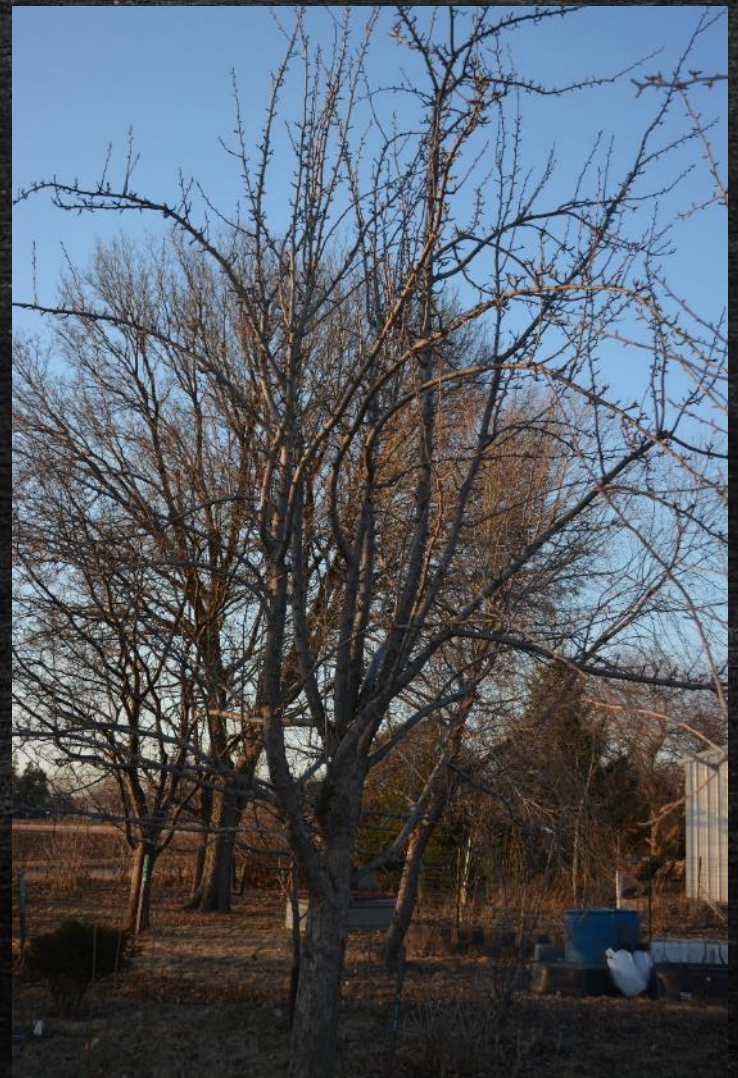
Subordination & Reduction & Branch Aspect

Branch Aspect > 50%, So Remove

Branch Aspect< 50%, So Subordinate



You Make The Decision



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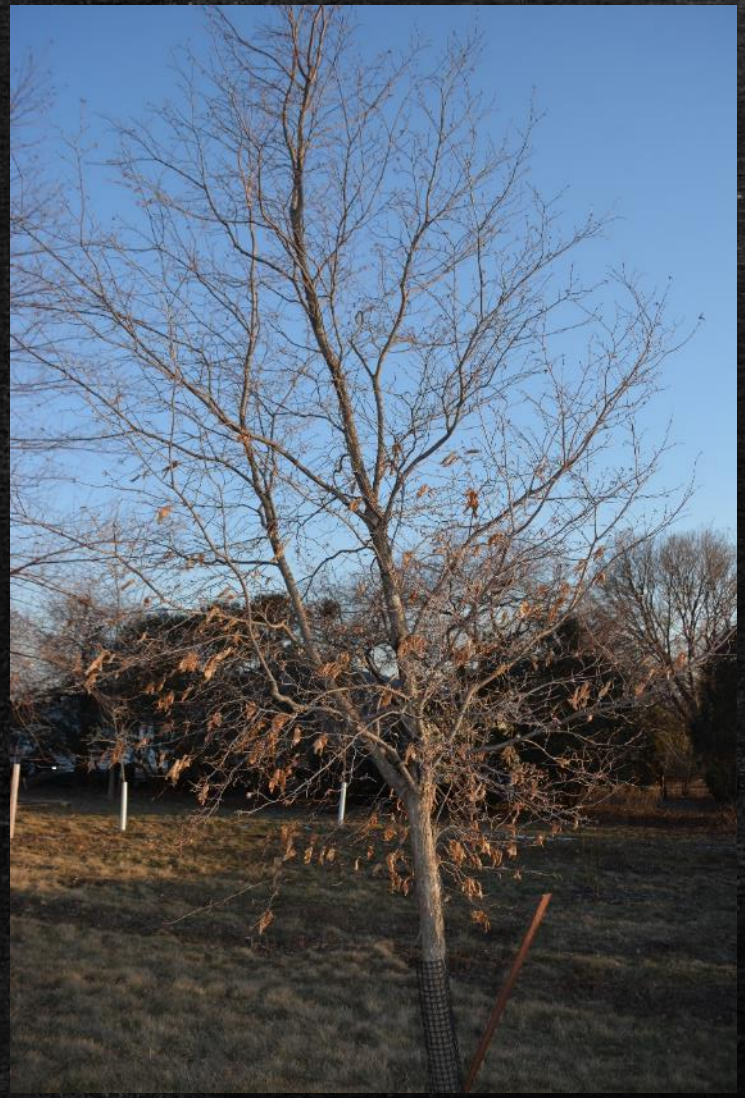

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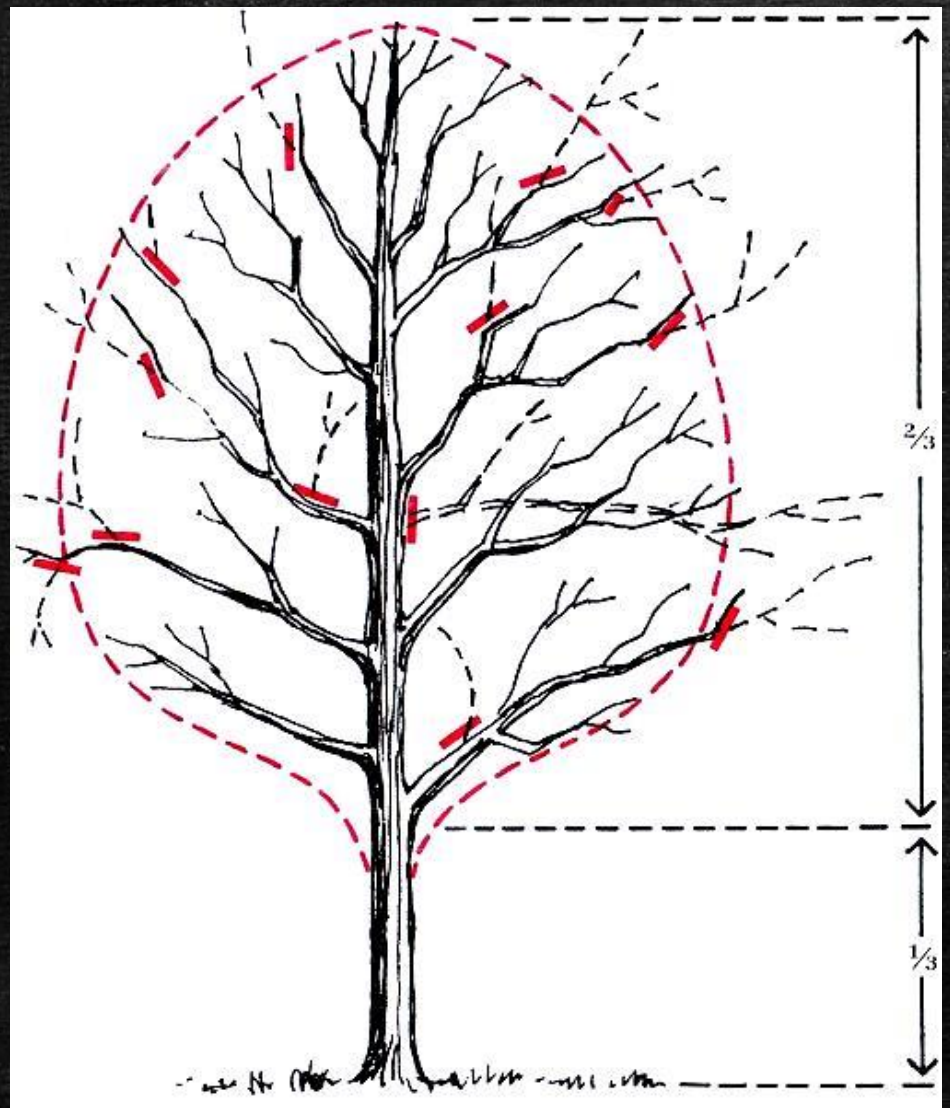
Subordination vs Reduction

Reduction Pruning: Three Questions

1. Is It For Size Control?
2. Is It For Fruit Production?
3. Is It To Reduce Wind Loading Damage?

Reduction Pruning For Size Control

Reduction Pruning For Size Control



Reduction Pruning For Size Control

Size Reduction: Pruning vs Topping

Size Reduction: Pruning vs Rounding Over

Size Reduction For Fruit Production

Size Reduction For Fruit Production

Photo Credit: D. Gjertson

Reduction Pruning To Reduce Wind Loading Damage?

- Little Evidence Of Benefit (one study)
- Avoid Excessive Loss Of Photosynthetic Potential
- Avoid Excessive Crown Elevation

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Trees.umn.edu (Outreach, then Gary's Presentations)