



You want me to do *WHAT* to my Forest??

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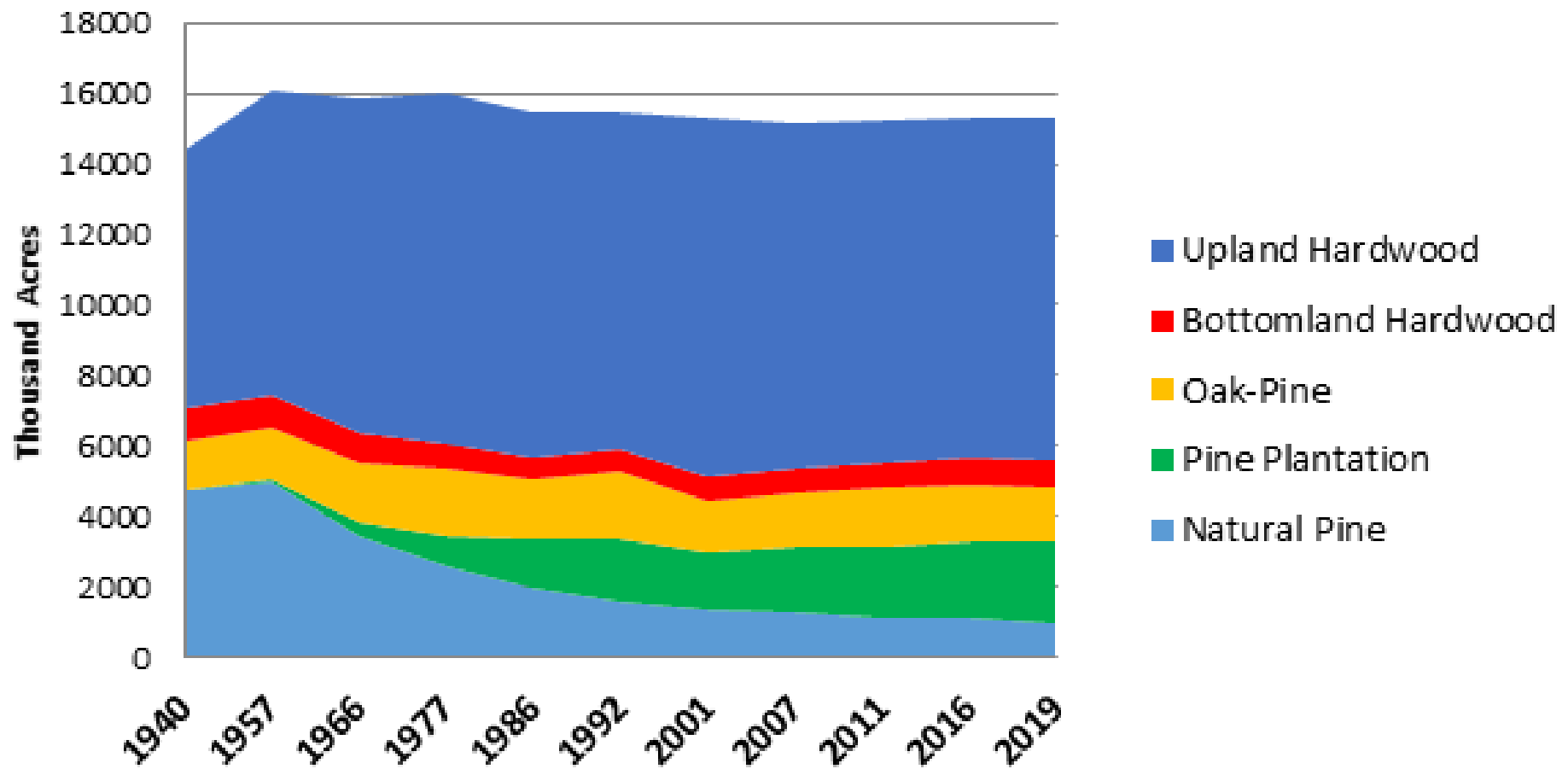


Today's Topics

- Virginia's Hardwood Initiative
- Hardwood Management Practices

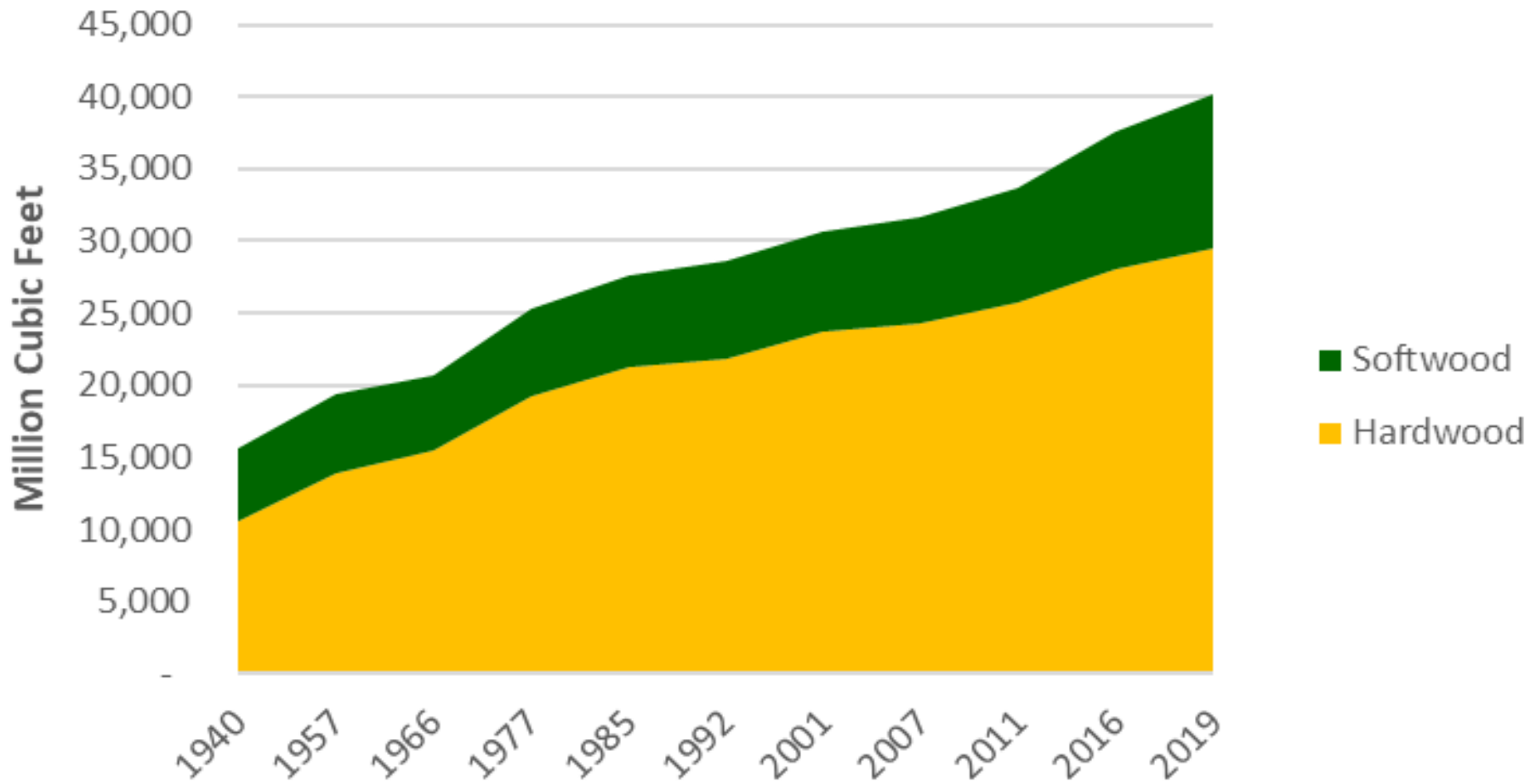
Hardwood Initiative

Forest Types on Timberland, 1940 - 2019



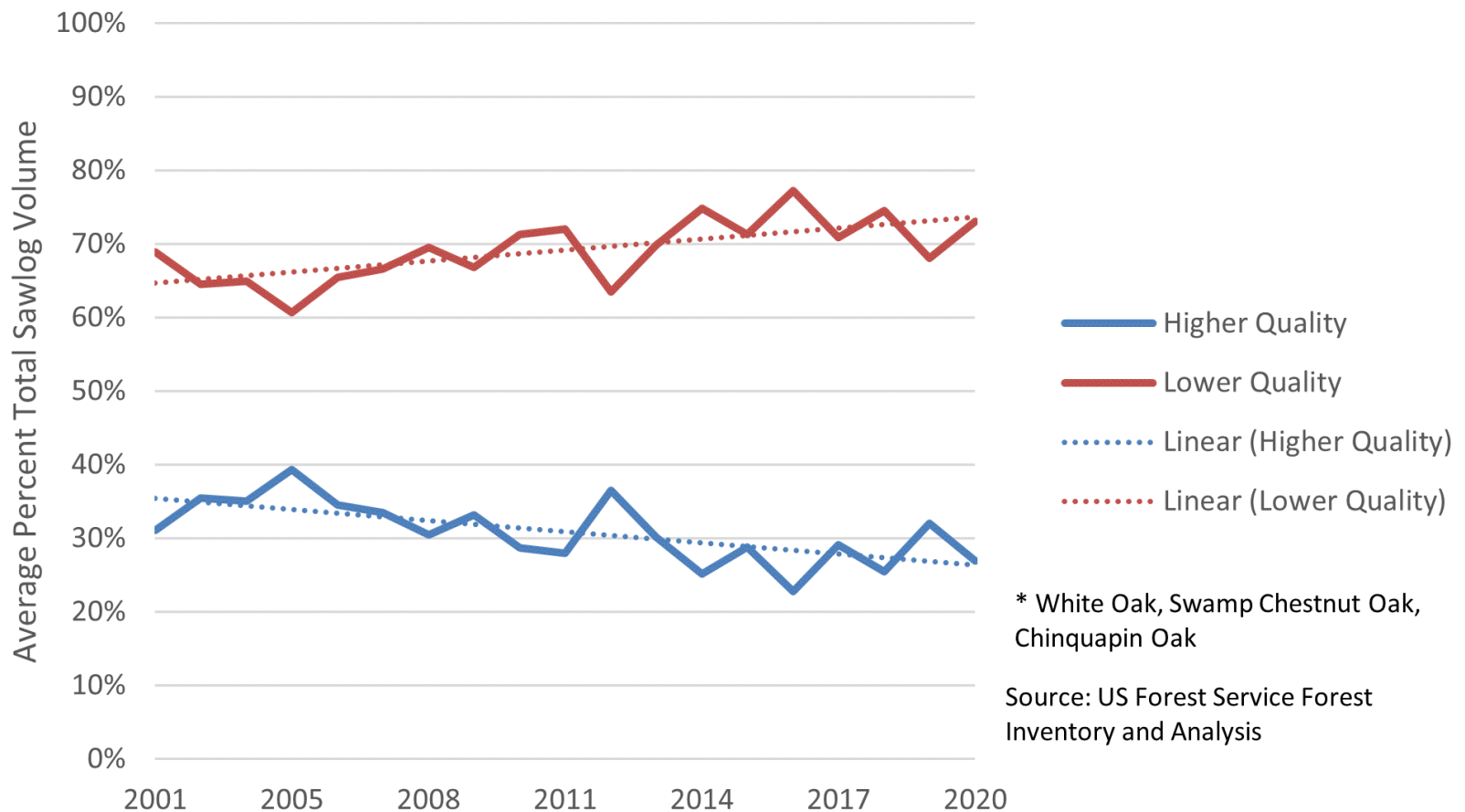
Hardwood Initiative

Softwood & Hardwood Volume on Timberland, 1940 - 2019



Hardwood Initiative

Sawlog Volume (percentage) by Tree Grade for Select White Oaks*, Virginia Statewide





Hardwood Initiative Activities

1. Stakeholders and advisory committee
2. Identify/define/refine management practices
3. Develop forestry services businesses
4. Integrate hardwood management into VDOF culture
5. Provide training for forestry professionals
6. Outreach and education
7. Implement incentives
8. Develop new markets



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Hardwood Management Practices

Establishment

- Competition / Invasive control
- TSI- Midstory removal
- Prescribed burning
- Harvesting

Increase Growth

- Crop tree release
- TSI- Vine control
- TSI- Cull tree control
- Liberation
- Harvesting



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Hardwood Management Practices

Competition / Invasive Control

- Non-natives- open season year round
- Natives- work with a forester



Hardwood Management Practices

Vine Control

- Grapevine sometimes a problem





Hardwood Management Practices

Two ways to increase average value of the stand:

- Make the best trees better
- Control less desirable trees



Hardwood Management Practices

Crop Tree Release

An activity that removes competition from selected trees

- Increase/maximize growth of selected trees
- Preserve trees in the stand that may be outcompeted without help



Hardwood Management Practices

Crop Tree Release

- Most appropriate in young stands (10 to 30 years old) but works in older stands too
- Concentrate site resources on most desirable trees
- Increases diameter growth rate
- Increases mast production

Crop Tree Release



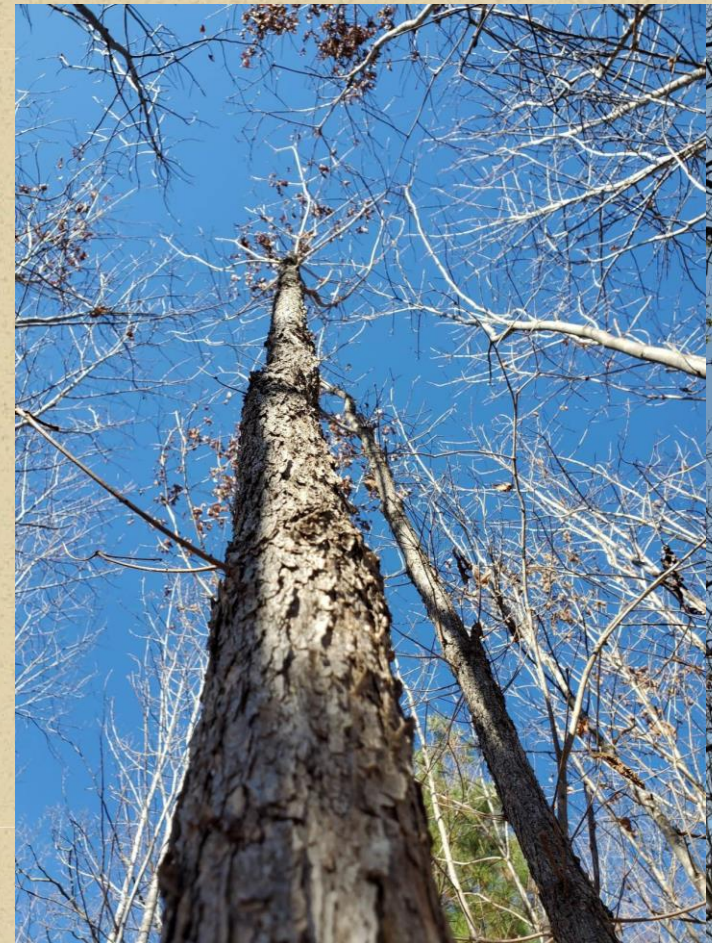


Crop Tree Release

- Define landowner objectives
- Inventory forest
- Determine characteristics of trees that further landowner goals
- Identify and mark Crop Trees in the forest
- Release Crop Trees from competition
- Monitor/measure

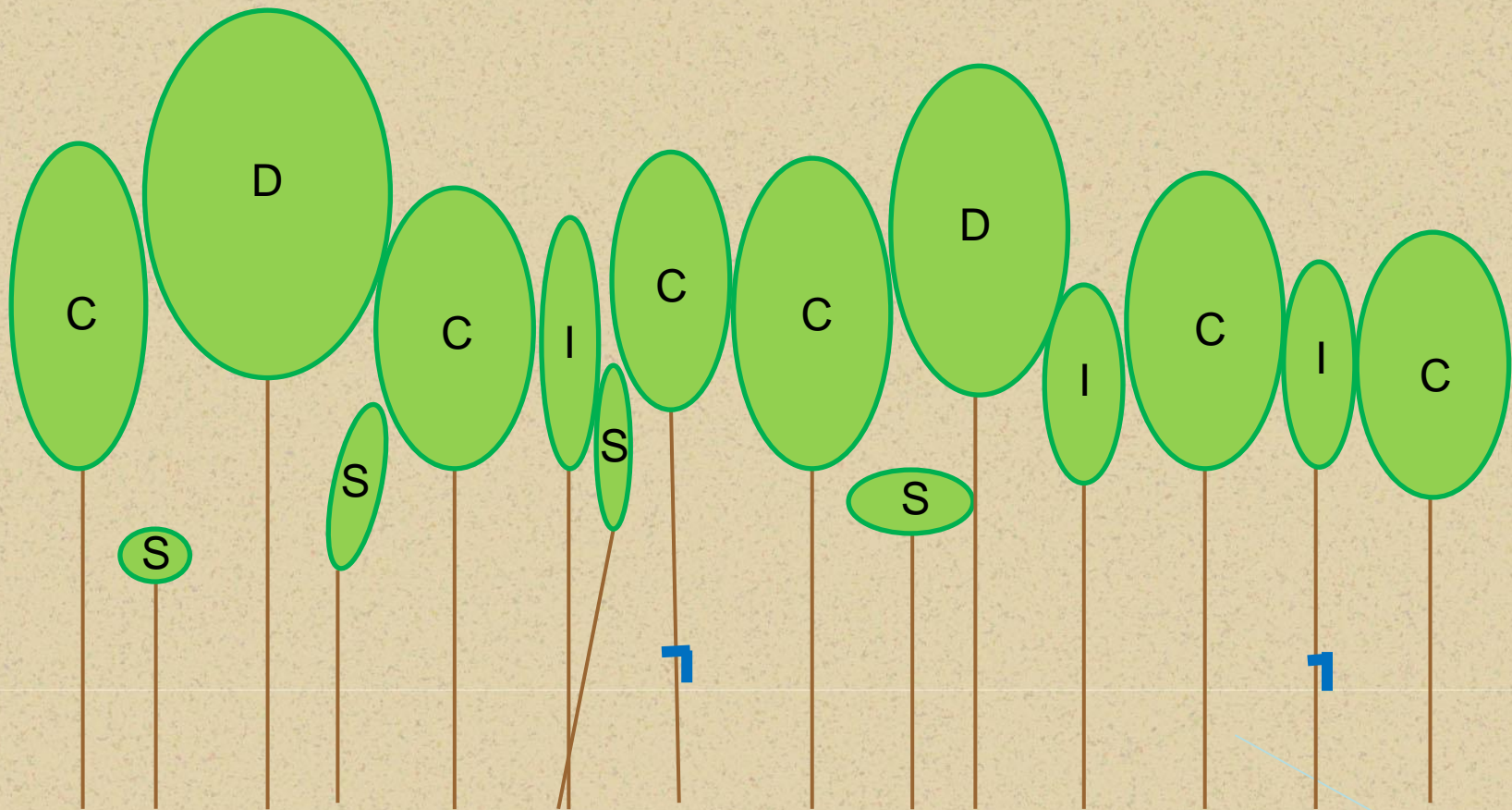
Crop Tree Release

- Describe the Crop Trees
- I know it when I see it...



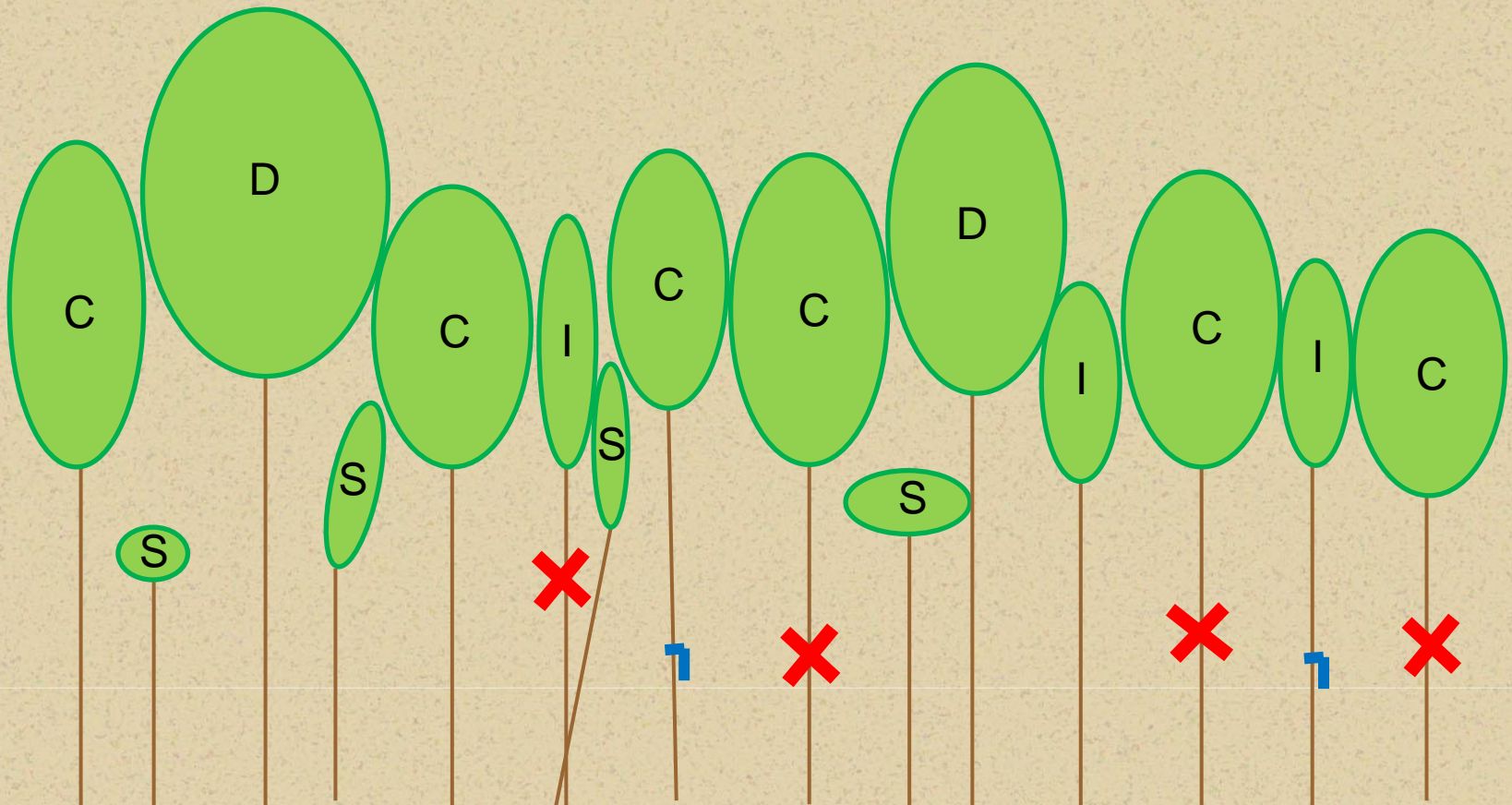
Crop Tree Release

Co-Dominant and Intermediate Trees



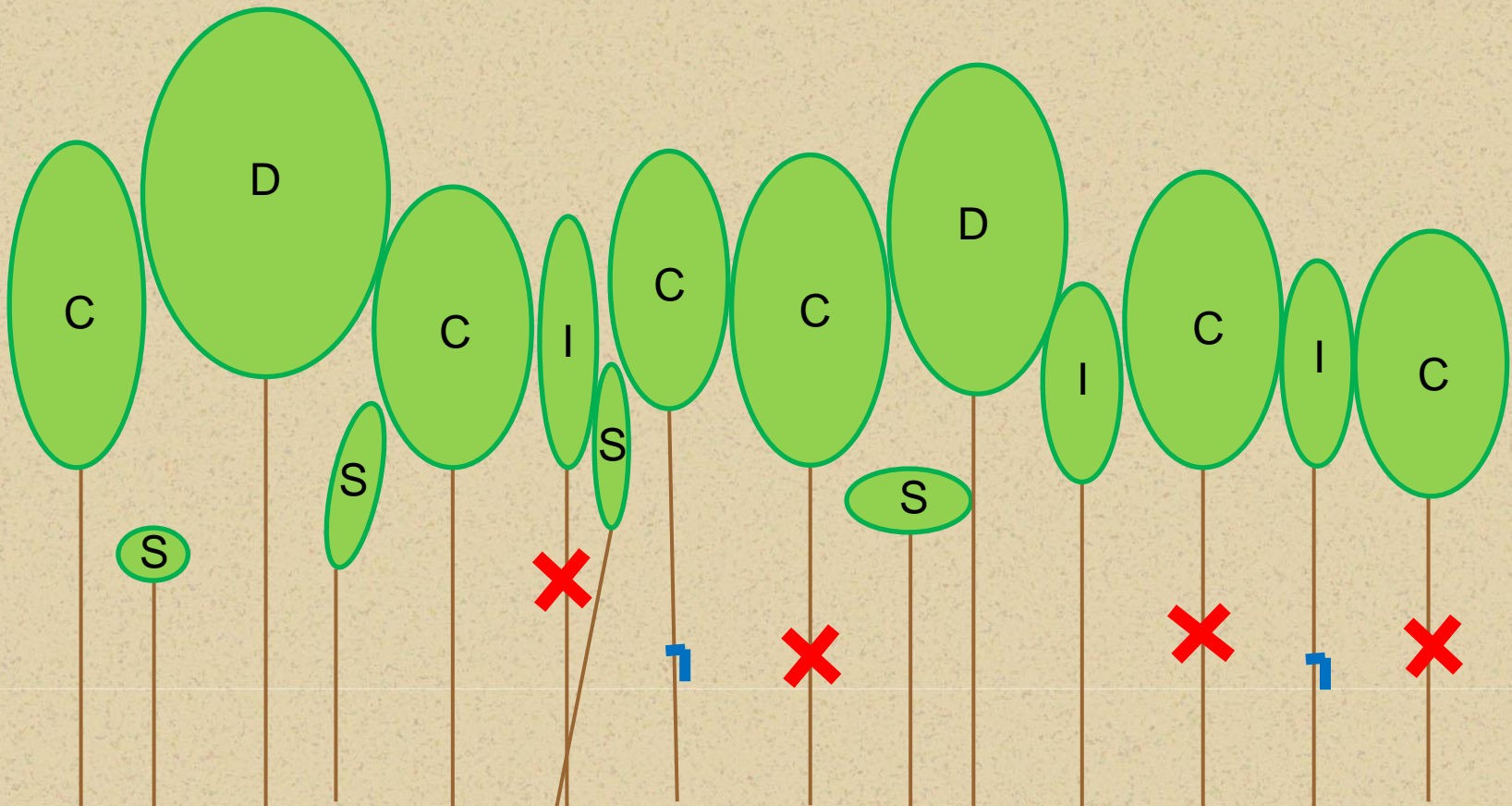
Crop Tree Release

Control competing trees



Crop Tree Release

Kill competing trees

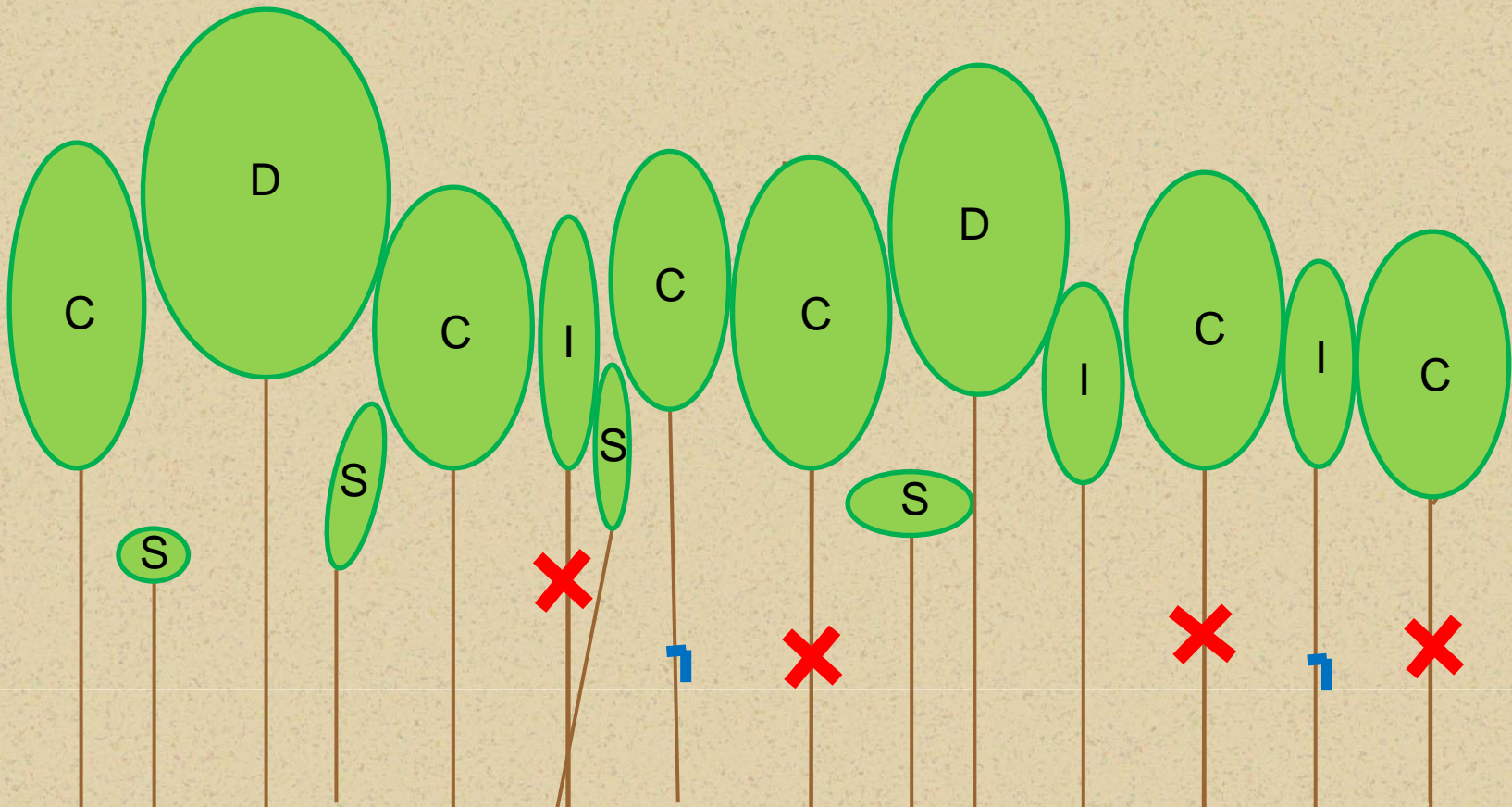


Crop Tree Release



Crop Tree Release

Kill competing trees



Crop Tree Release

Girdling doesn't
always work!



Crop Tree Release



Crop Tree Release



Crop Tree Release



Crop Tree Release





Crop Tree Release

- Young trees released on 4 sides (10-40 years old)
- Older trees released on 2-3 sides (50+ years old)



Crop Tree Release

- Makes good trees better, can make more good trees
- Works at all stand ages
- Determine objectives
- Describe crop trees
- Identify crop trees and release



Cull Tree Control

- Define landowner objectives
- Inventory forest
- Determine characteristics of trees that detract from landowner goals
- Identify and control cull trees in the forest



Cull Tree Control

- Determine characteristics of trees that detract from landowner goals
 - Incapable of producing a sawlog (stem quality)
 - Undesirable species (depends on goals, e.g. Sourwood)

Cull Tree Control

- Defects from mechanical damage
 - Lightning
 - Strikes from falling or harvesting
 - Frost cracks



Cull Tree Control

- Defects due to tree form
 - Recovered from terminal bud breakage
 - Sweep, crook





Cull Tree Control

- Control by
 - Cut and completely sever stem
 - Cut enough to fall but leave attached
 - Herbicide- basal, cut stump, hack-and-squirt
 - Girdle depending on species

Cull Tree Control

- Girdling doesn't always work!



Cull Tree Control

- One man's cull...





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Questions





For More Information

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or

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