

**FACT**



# **Converting Woodland to Silvopasture**

## ***Part 1: Assessing a Woodland Site***

# Introductions



Food Animal Concerns Trust (FACT) is a national nonprofit organization that works to ensure that all food-producing animals are raised in a humane and healthy manner.



Larissa McKenna & Samantha Gasson  
FACT's Humane Farming Program Team  
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Website: [foodanimalconcernstrust.org/farmer](http://foodanimalconcernstrust.org/farmer)

## **FACT's services to support livestock and poultry farmers include:**

- Conference scholarships (ongoing)
- Customized handouts (ongoing)
- Free webinars (ongoing)
- Fund-a-Farmer Grants (not currently accepting applications)
- Humane Farming Mentorship Program (not currently accepting applications)
- Financial and Business Training (not currently accepting applications)



# Our Presenter



Steve Gabriel

Wellspring Forest Farm  
Cornell Small Farms Program

PLEASE NOTE:

THESE SLIDES ARE SHARED FOR EDUCATIONAL PURPOSES AND CONTENT IS  
HELD BY STEVE GABRIEL AND WELLSRING FOREST FARM LLC

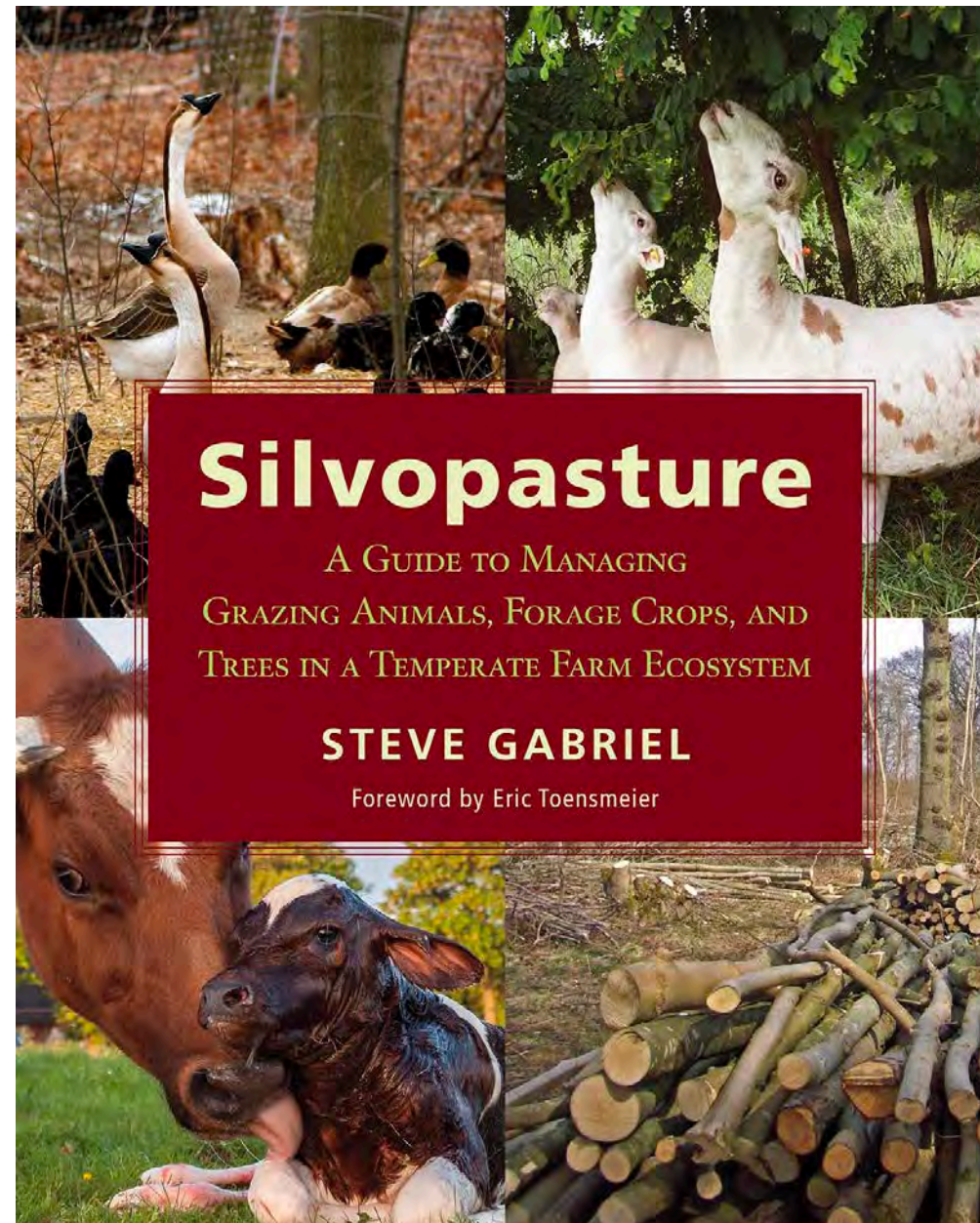
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ASKING FOR PERMISSION!

THANKS  
STEVEGABRIELFARMER@GMAIL.COM





# Woodland Conversion to Silvopasture, Part 1



[www.SilvopastureBook.com](http://www.SilvopastureBook.com)



# Woodland Conversion to Silvopasture Webinar Series

## **January 31: Part 1 - Assessing a Woods for Silvopasture**

What woods are a good fit for silvopasture?

Learn how to identify promising sites, and which ones to leave alone.

## **February 7: Part 2 - Thinning, Clearing, and Establishing Forage and Fodder**

Learn a range of techniques to thin trees, remove vegetation, and set a woodland up for efficient grazing.

[www.SilvopastureBook.com](http://www.SilvopastureBook.com)

# FACT's Silvopasture Webinars with Steve Gabriel

In October and November 2020, FACT (Food Animal Concerns Trust) hosted a three-part webinar series with silvopasture expert Steve Gabriel, in addition to several additional webinars. We are glad to provide access to these sessions for interested farmers and ranchers.

## WEBINARS

**Part 1: Designing Silvopasture Plantings**

**Part 2: Why Trees Die in Silvopasture (and how you can help save them!)**

**Part 3: Choosing the Right Animal, for the Right Place, at the Right Time**

**Trees for Livestock Food and Medicine** (*originally presented in March 2020*)

**Water Management for Pasture Grazing Systems** (*originally presented in March 2021*)

If you are experience any technical difficulties accessing the recordings above, you may also find them on **FACT's YouTube channel**. In addition to **webinars**, FACT also provides **grants**, **scholarships** and a **mentorship program** for livestock and poultry farmers who wish to raise their animals on well-managed pasture. To receive news and notifications about all of FACT's farmer services, please subscribe to our newsletter below.

<https://foodanimalconcernstrust.org/steve-gabriel>



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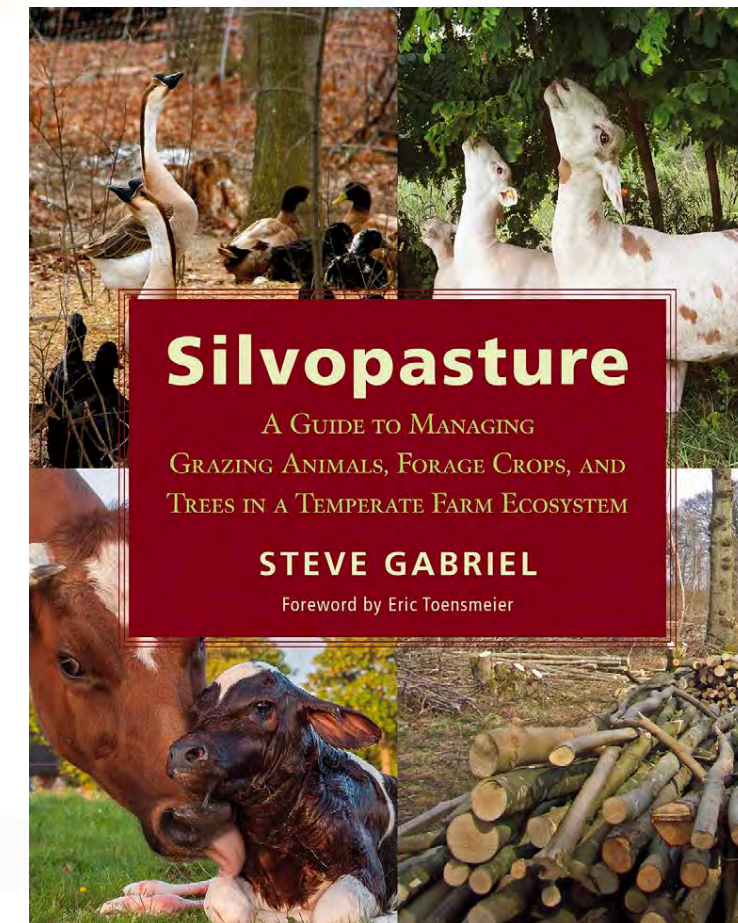
TREE FODDER

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# Silvopasture



## **Tree Fodder is building resilience (and carbon) on our farm.**

Our farm was first captured by the idea of tree fodder out of necessity. In 2016 our region of New York suffered a tremendous drought coupled with record high temperatures and the pastures simply stopped growing. Our neighbors were draining their ponds and driving two states over to find hay to feed animals. Members of the local Mennonite community, perhaps more versed in traditional ways, saw the writing on the wall and sold off or butchered their animals.

Grant report — Reference Library — Seminar Recordings  
[www.SILVOPASTUREBOOK.COM](http://www.SILVOPASTUREBOOK.COM)




# Silvopasture Practices for Land, Animal, and Farm Resilience Questionnaire

Are you actively integrating trees, livestock, and forages on lands in the Northeast US?

## NORTHEAST USA

(CT, MA, ME,  
NH, NJ, NY,  
PA, RI, VT)

 Cornell University

Prior to this survey, what was your level of awareness or understanding of Agroforestry Practices?

No awareness- no familiarity, have never heard of.  
Low awareness- heard of once or twice.  
Medium awareness-somewhat familiar or have heard of multiple times.  
High awareness- very familiar with practices, have seen or currently engage with.

	No Awareness	Low	Medium	High Awareness
Silvopasture	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Forest Farming	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Intercropping/Alley Cropping	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Windbreaks	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Riparian Buffers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## NEW YORK Farmers and Land Stewards

Both links at [www.SilvopastureBook.com](http://www.SilvopastureBook.com)



# FREE online class



## Forest Stewardship & Ecology

0% COMPLETE

### Course Curriculum

Start next lecture >

START HERE: About This Class

#### Welcome!



START HERE: About This Class

Start



Have resources to suggest? Let us know!

Start

#### Knowing our Roots: History & Indigenous Forestry



<> LESSON: Forest History

Start



VIDEO: Forest Ecology with Mike DeMunn

Start



<> VIDEO: A Message from Indigenous Women in Forest Management

Start



READING: The Pristine Myth

Start



ACTIVITY: Sit Spot

Start

<https://wellspring-forest-school.teachable.com/p/foundations-of-forest-stewardship>

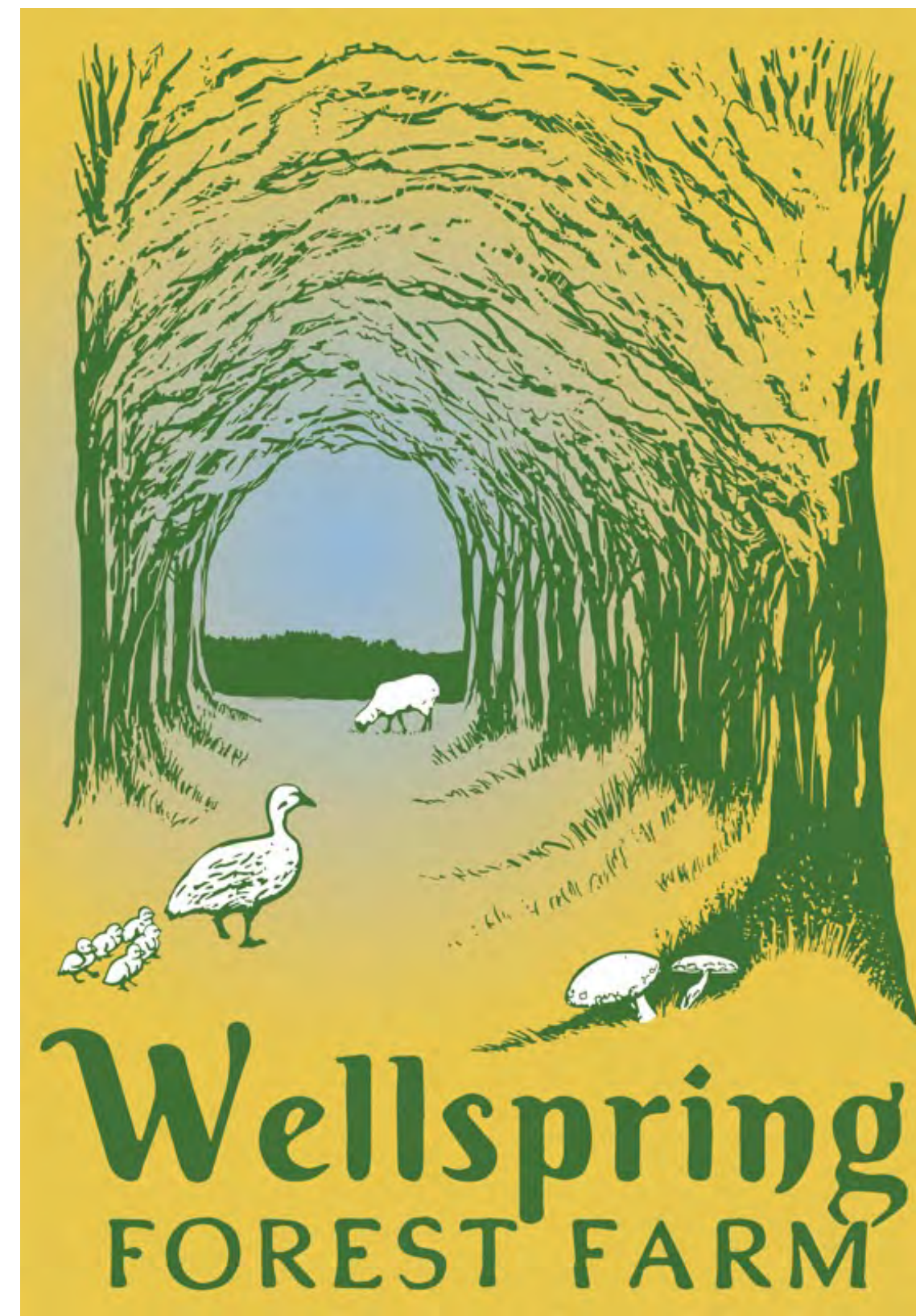


# Wellspring Forest Farm



**farming in the image of a forest...**



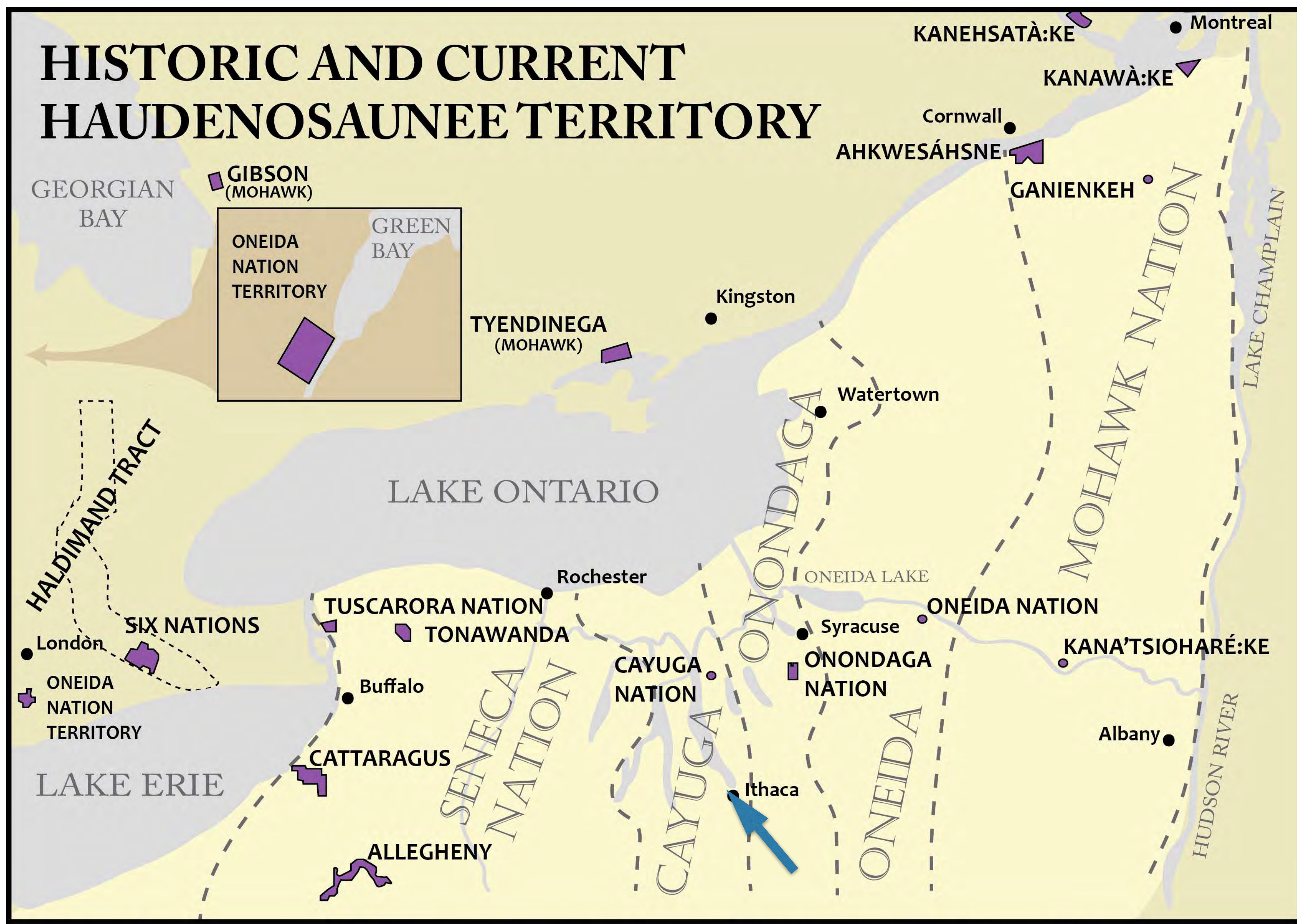


Mushrooms  
Maple Syrup  
Pastured Lamb  
Duck Eggs  
Elderberry Extract  
Education  
Agritourism





# HISTORIC AND CURRENT HAUDENOSAUNEE TERRITORY



**We are on unceded Gayogohó:no' (Cayuga) lands.**





**native-land.ca**





# Agroforestry used to be called...

*honoring  
indigenous  
wisdom*

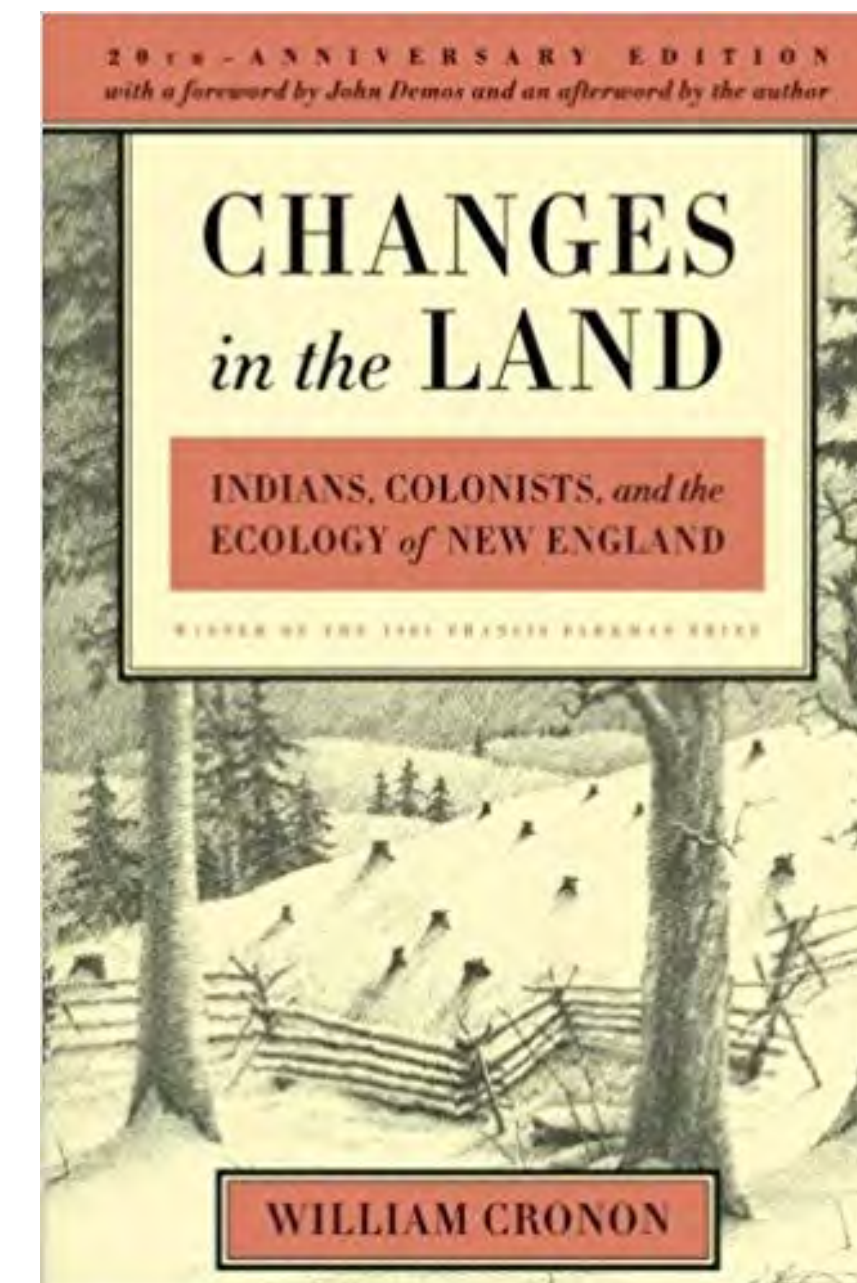
*Mike Demunn*



“The forests of New England, the Midwest, and the Southeast had been disturbed to varying degrees by [indigenous] activity prior to European occupation.

Agricultural clearing and burning have converted much of the forest into successional growth and semi-permanent grassy openings often of considerable size.

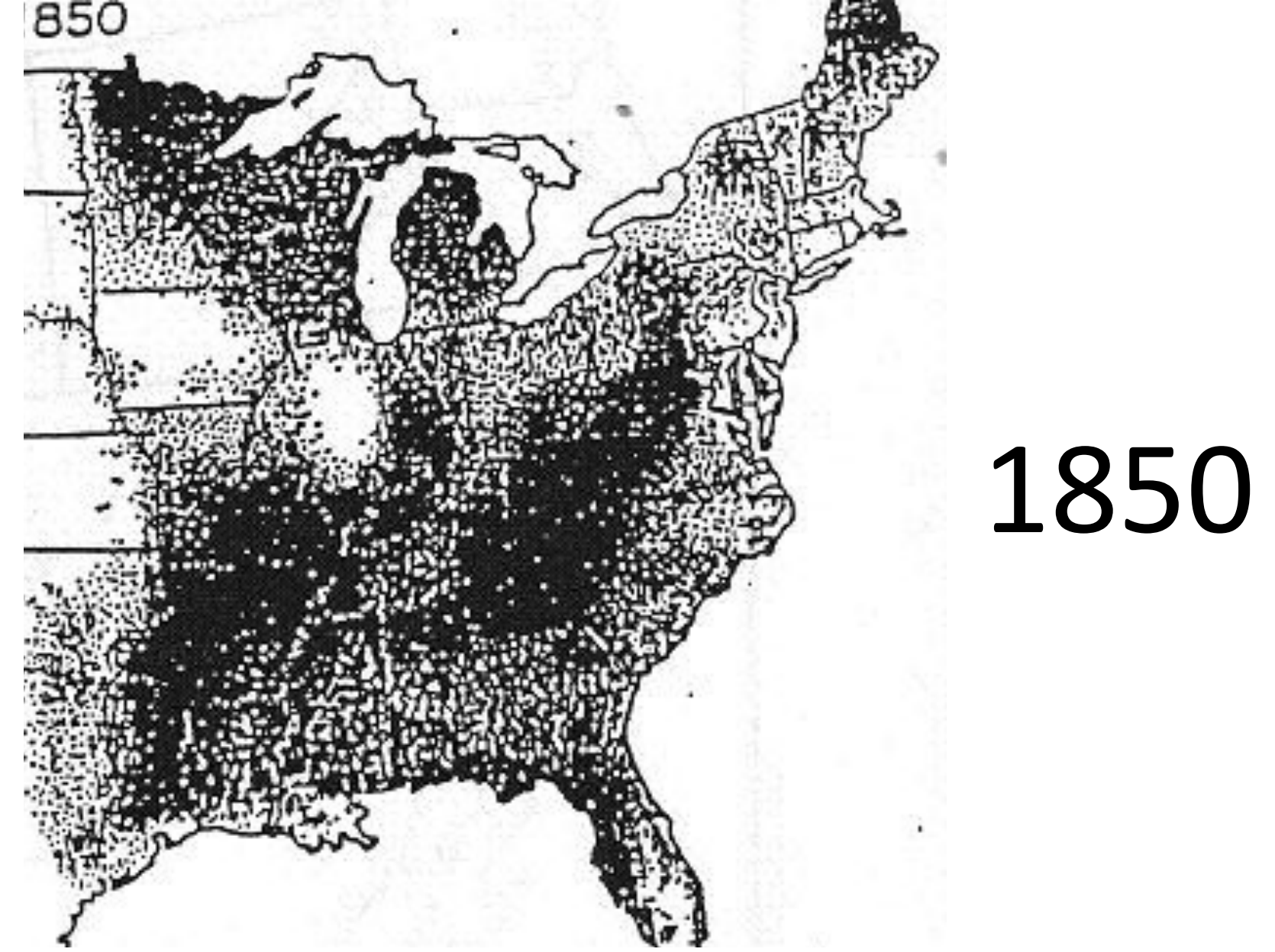
Much of the mature forest was characterized by an open, herbaceous understory, reflecting frequent ground fires.”



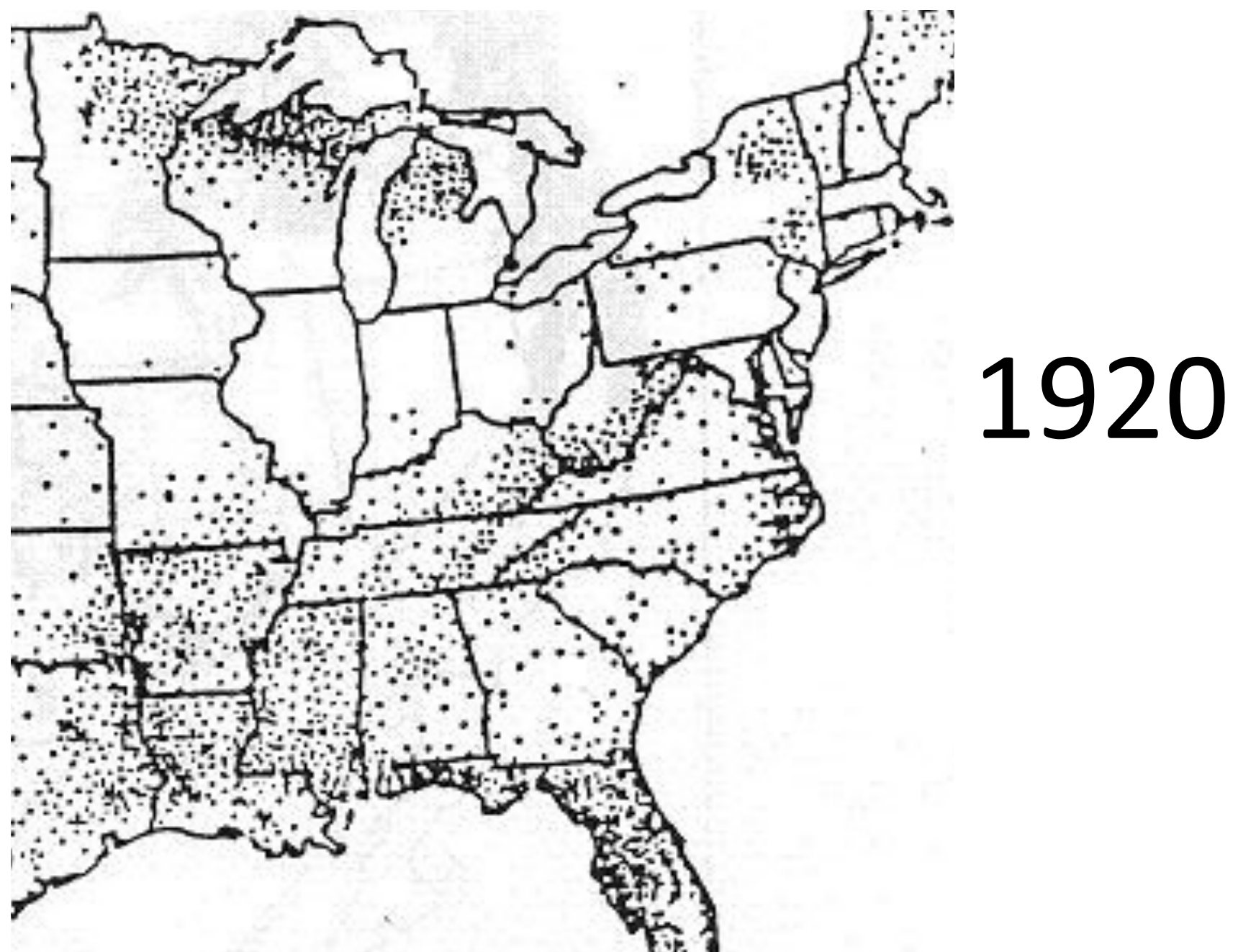




Forests never harvested by European settlers or their descendants, 1620.

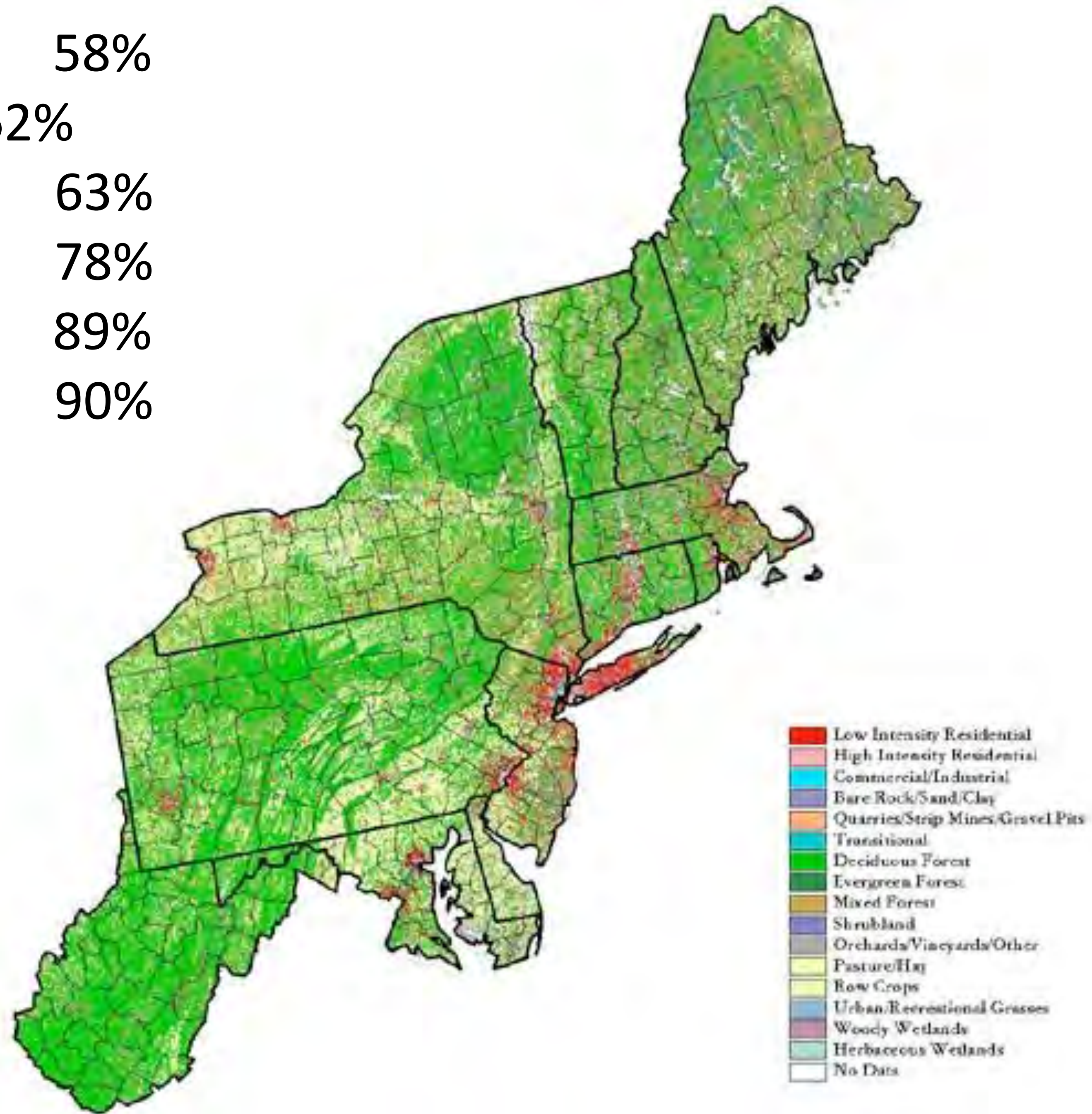


William B. Greeley, US Forest Service, 1925





PA 58%  
NY 62%  
MA 63%  
VT 78%  
NH 89%  
ME 90%





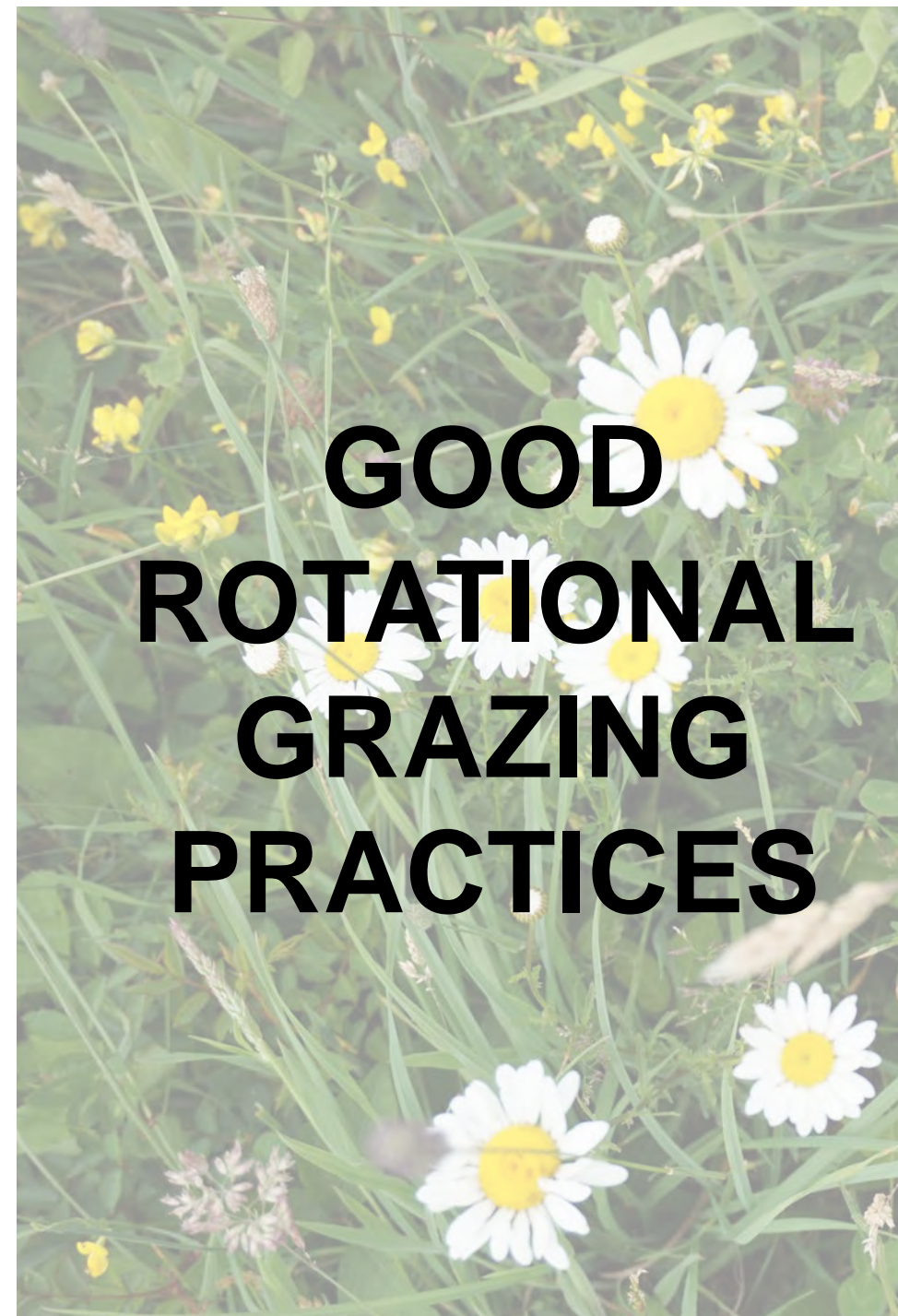
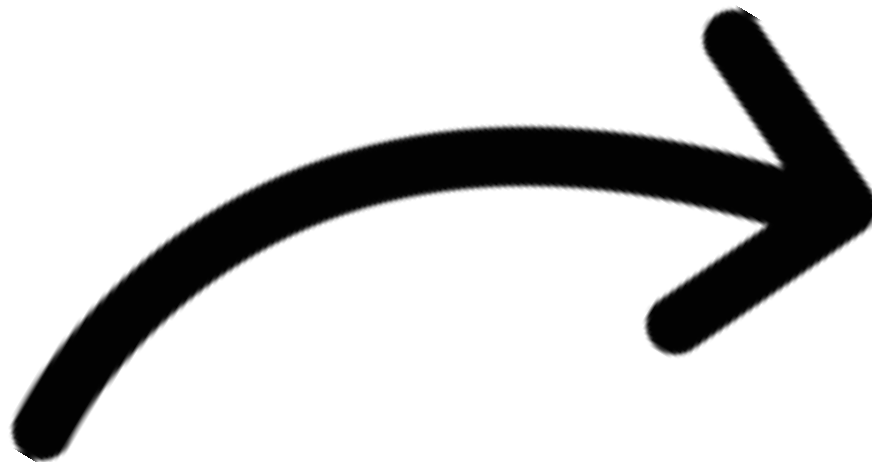
A herd of sheep of various colors (white, brown, black) is grazing in a lush green field. In the background, there are tall trees and a clear sky. The text is overlaid on the center of the image.

**Silvopasture**  
is  
**ecological**  
**restoration**  
for  
**livestock**  
**habitat**













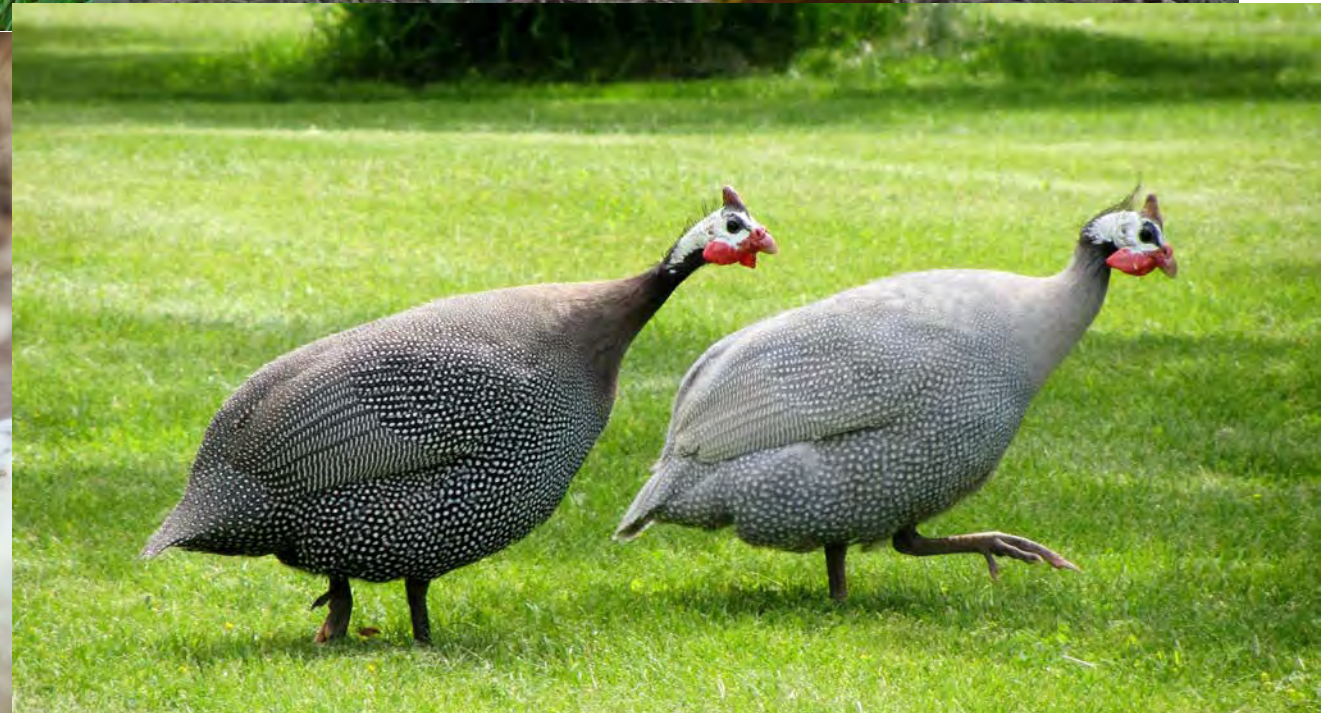
**Woodland  
Conversion**



**Trees in  
Pasture**



# Right animal, right place, right time!





# Silvopasture is NOT putting animals in the woods





"JOE BEAVER"

By Ed Nofziger



Forest Service, U. S. Department of Agriculture

"SORRY SISTER — NO GRAZING HERE ! WE KEEP COWS  
OUT OF WOODLOTS FOR THE SAME REASON THEY KEEP  
BULLS OUT OF CHINA SHOPS !"

**15 - 20 % of  
all pasture  
land is  
"woodland  
pasture"**

**At most,  
2% of this is  
identified as  
Silvopasture**

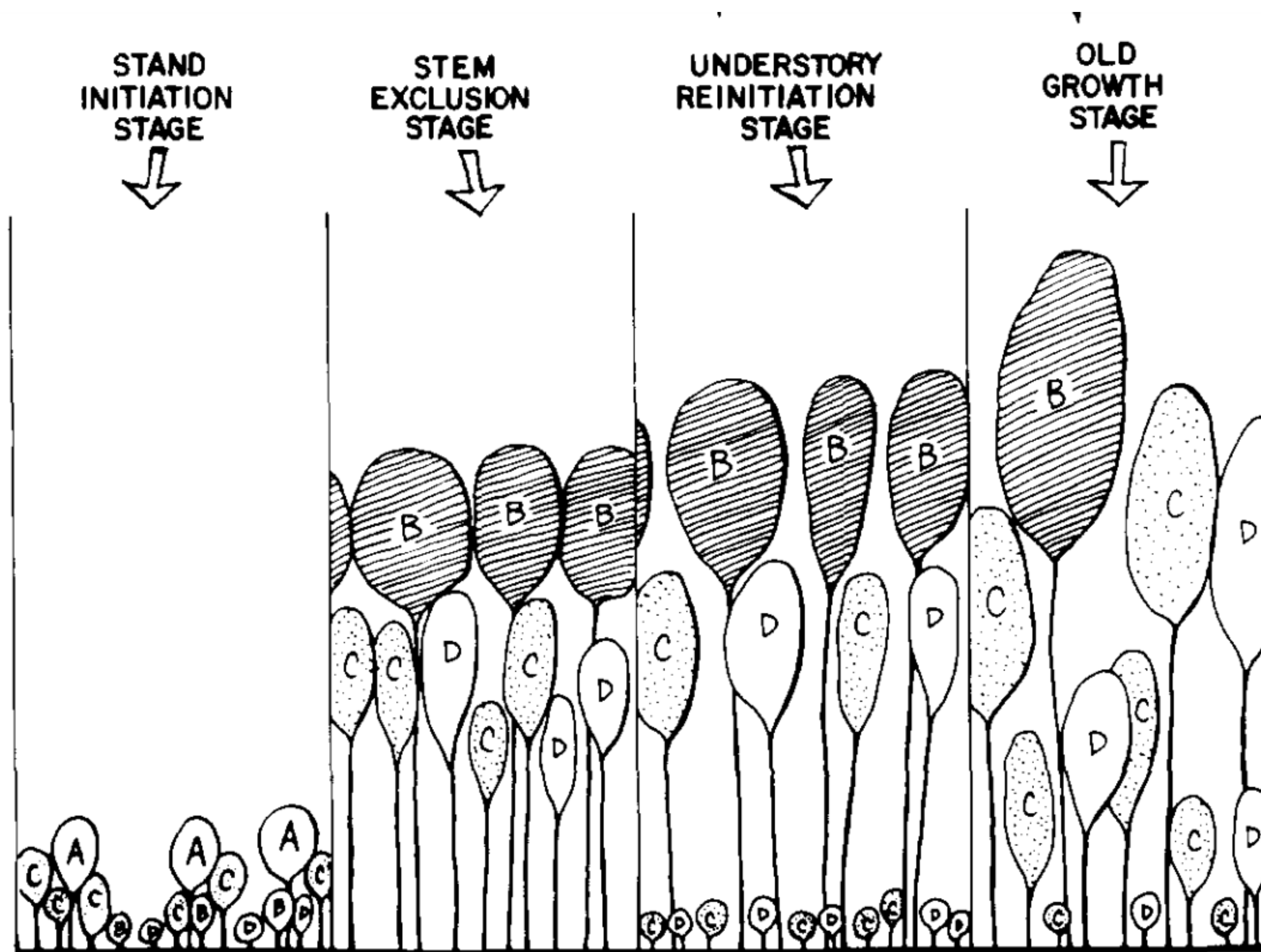




# Keys to Forest Management

“Thin as mother nature would thin”

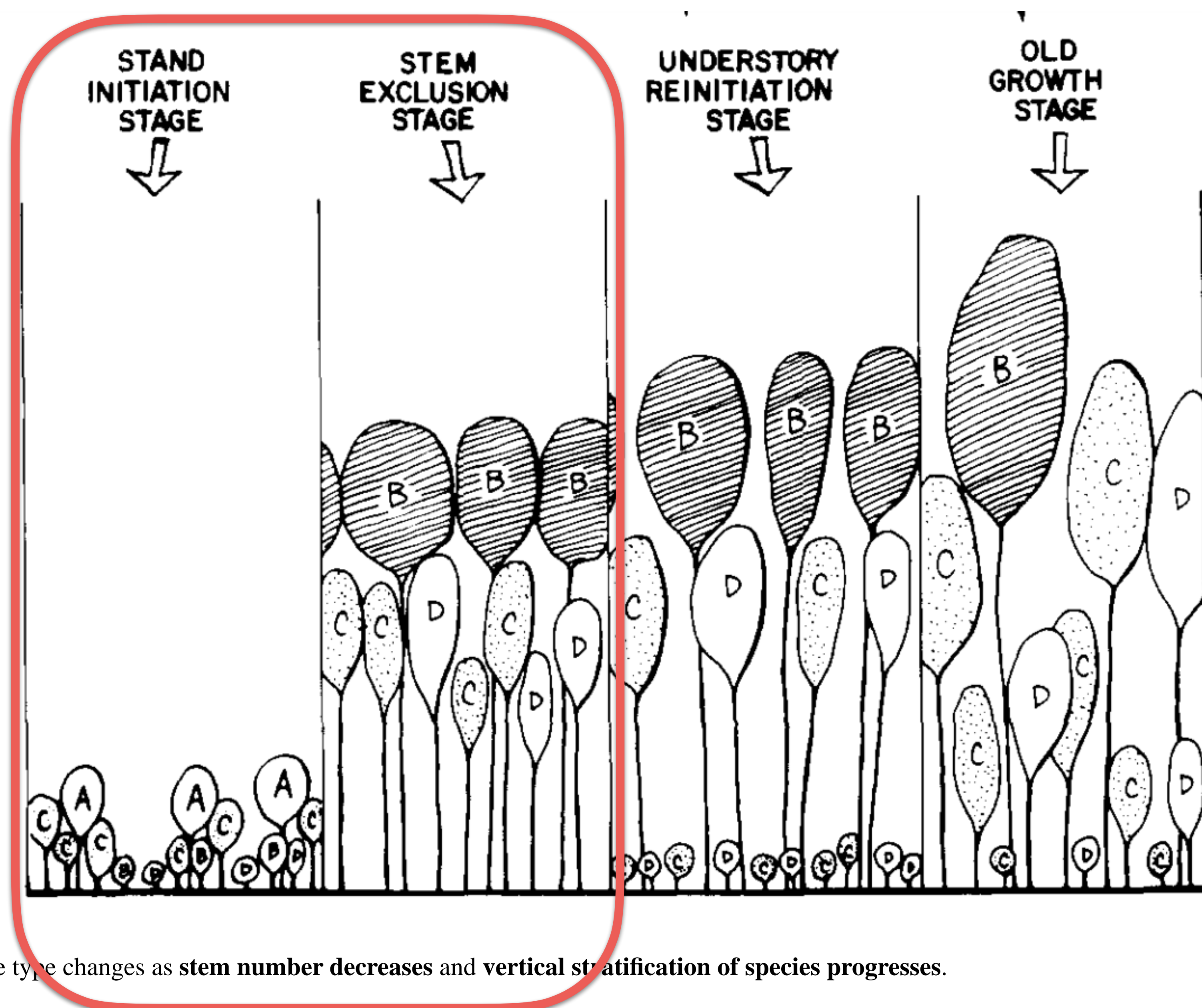




Dominant tree type changes as **stem number decreases** and **vertical stratification of species progresses**.

Barring intervening disturbances, the "old growth" stage may be reached in mixed alder--conifer stands in the Pacific Northwest in less than 200 years; in mixed oak--maple--England it may take several hundred years; in Douglas fir--hemlock--red cedar stands in the Pacific Northwest, it may take well over 500 years.





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# Creating conditions for regeneration





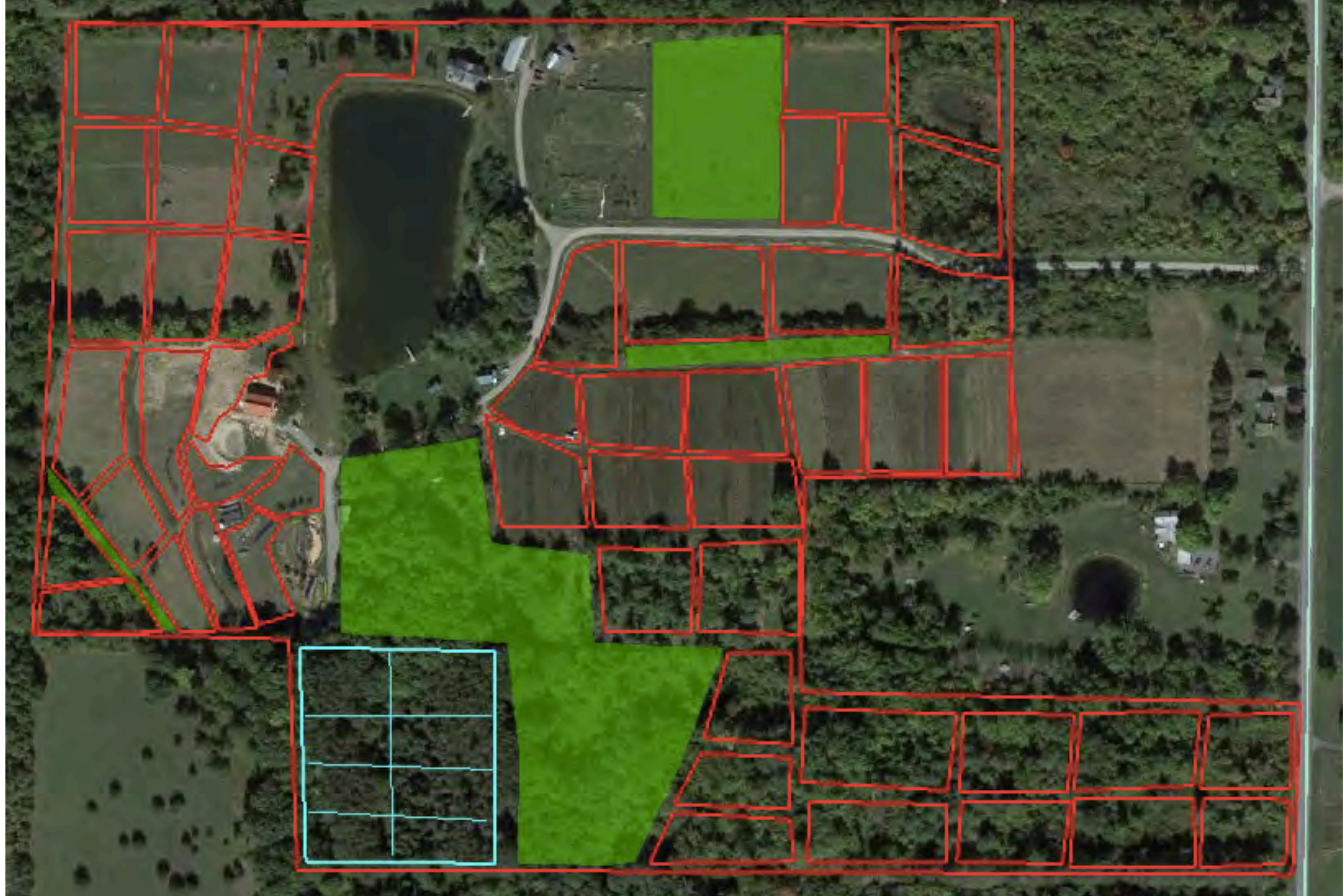
**Start with the most marginal, overgrown woods**











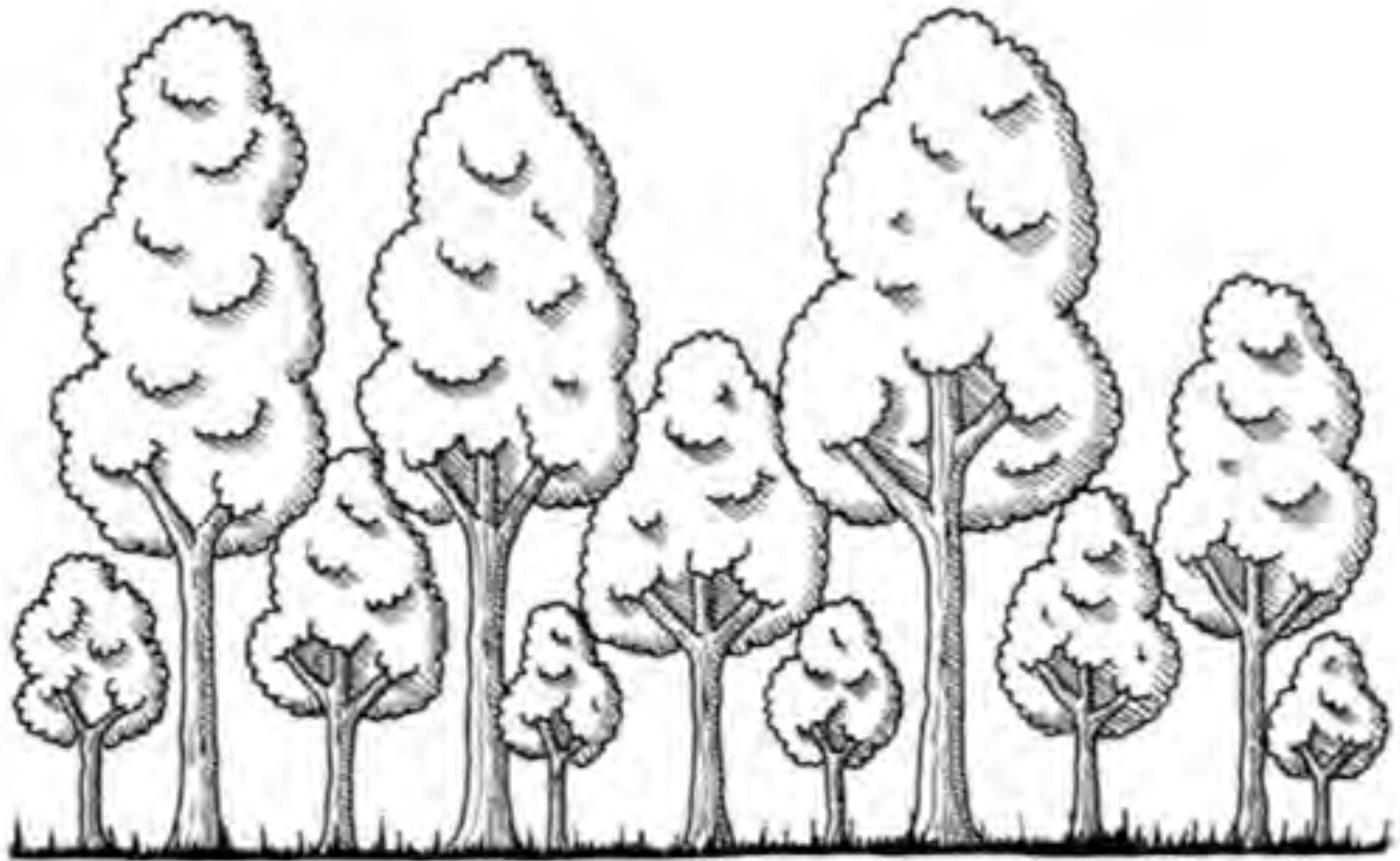
45 acres / 18 hectares



# Tree size does NOT equal age





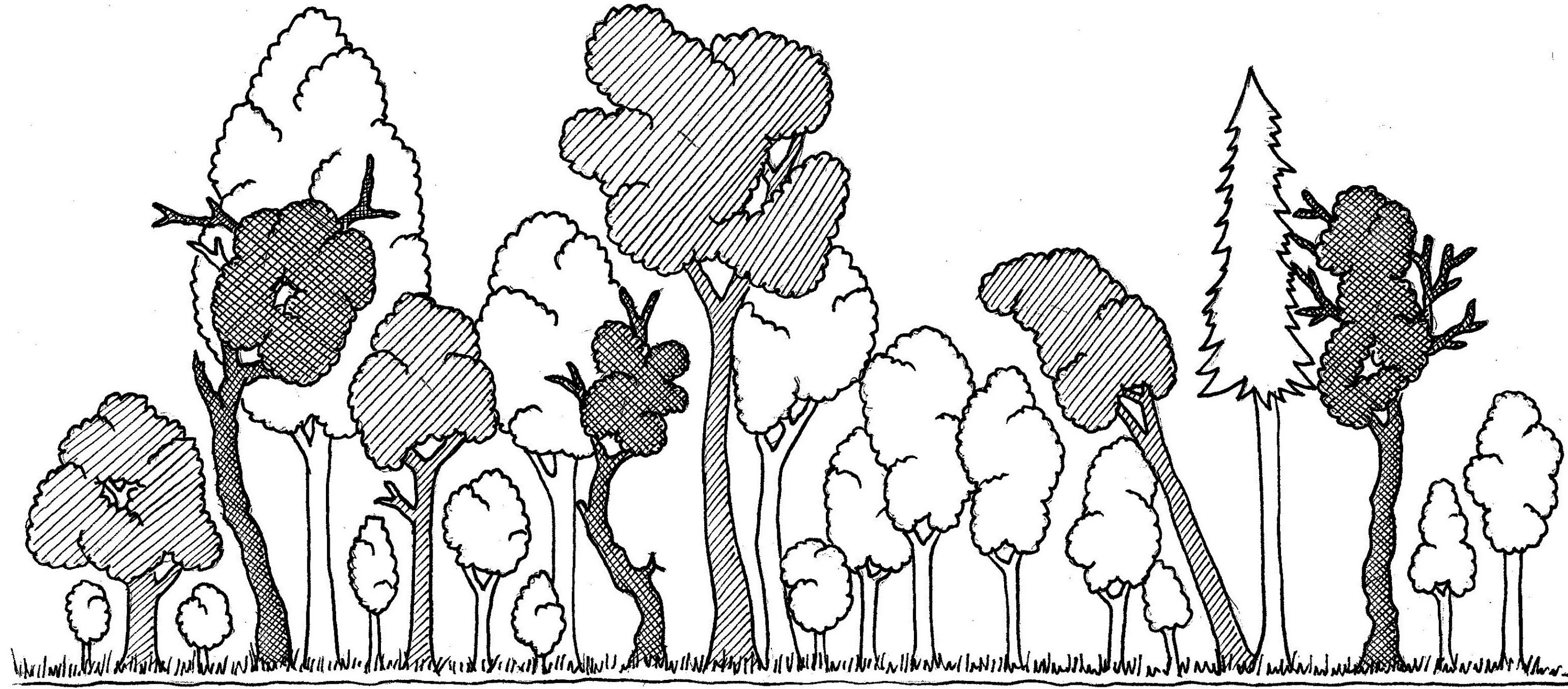


S D I C S I S D I C S

**Dominant - Codominant - Intermediary - Suppressed**



# Individual Tree Assessment



- diameter and height
- vigour (site index)
- crown shape
- disease/defect
- structure

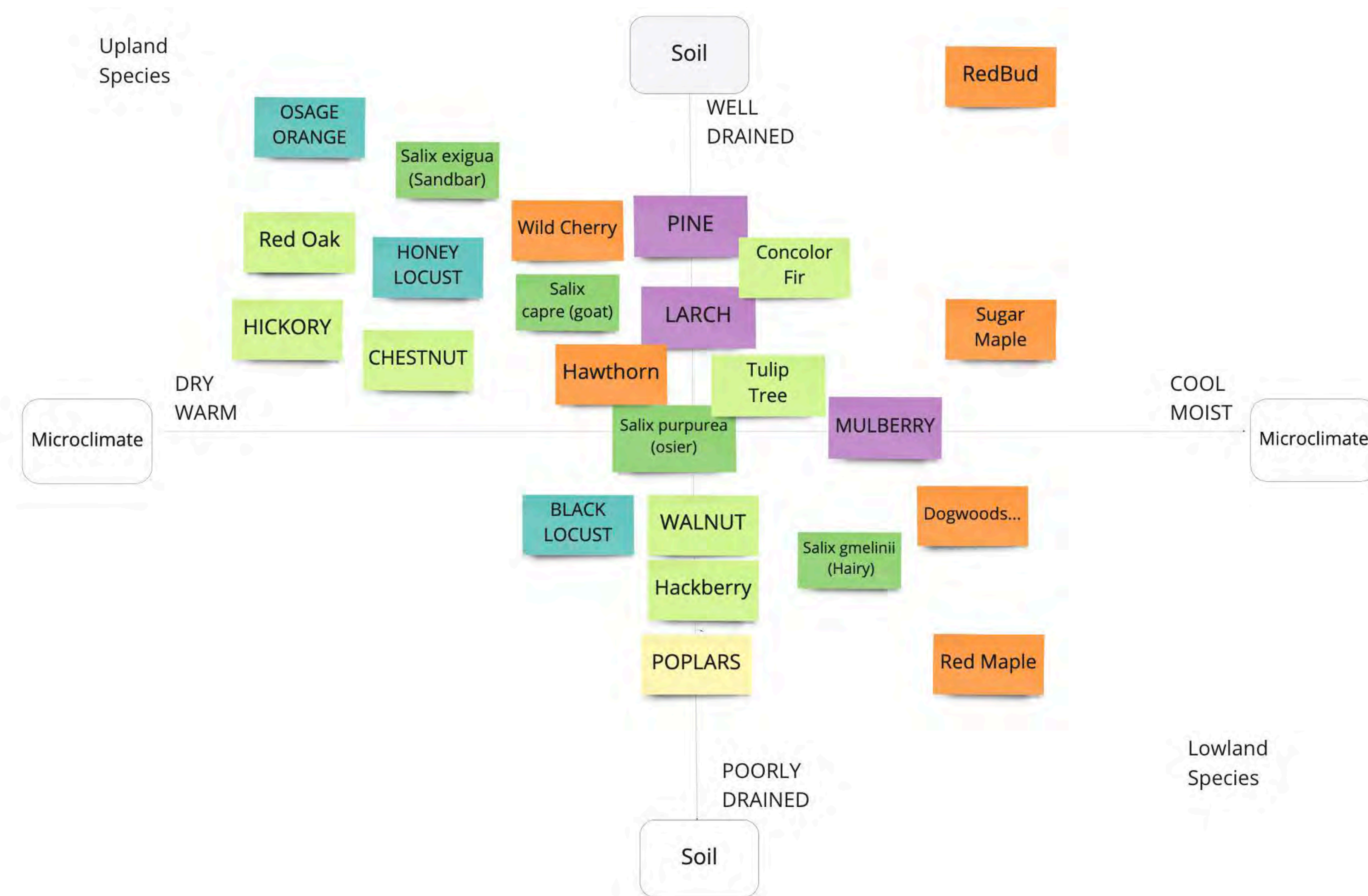


# Forests undergo a tremendous selection process



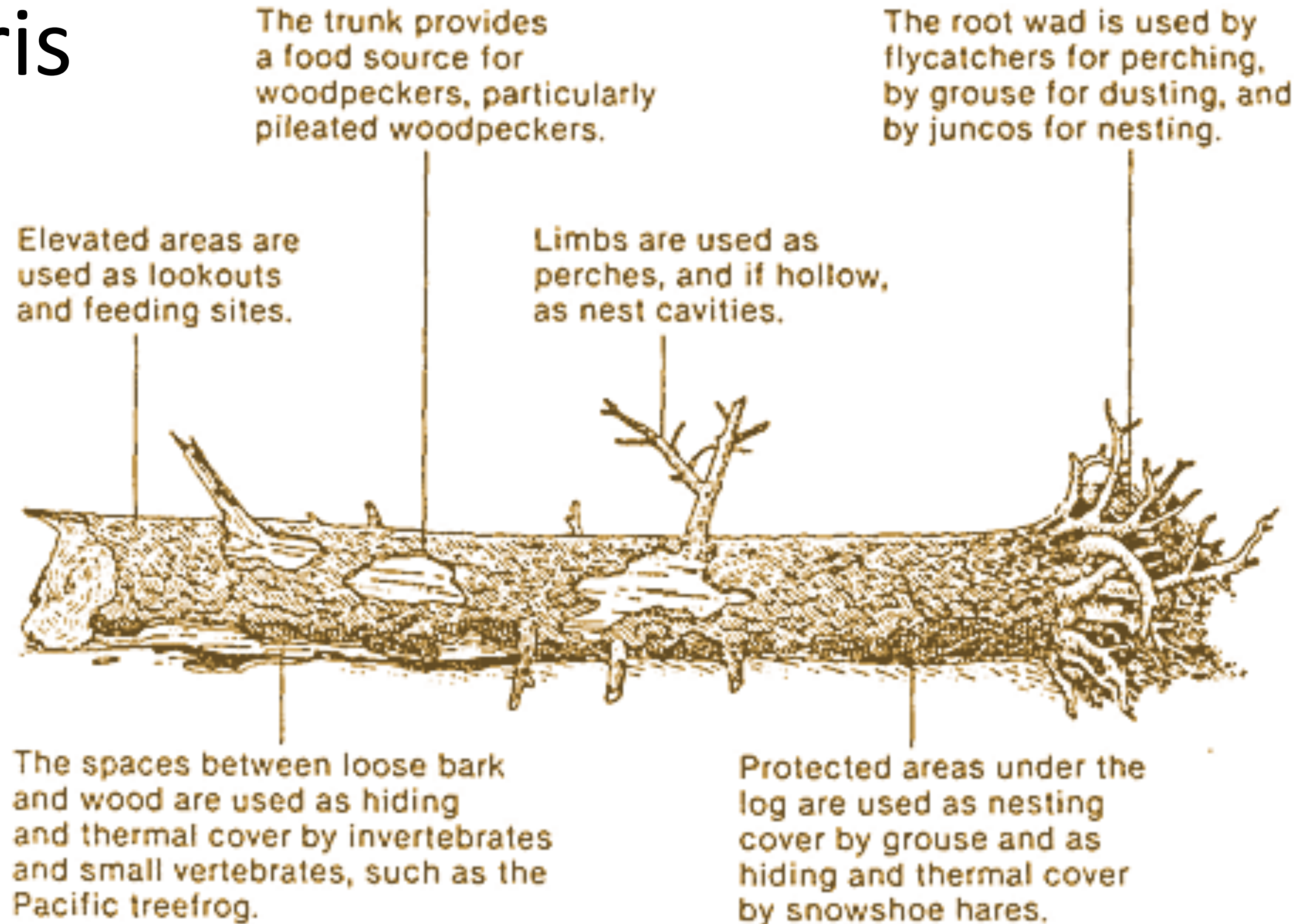


# Learn species, and its specific needs





# Coarse Woody Debris





# Snags

***5 - 10  
snags/acre***

***Basswood  
Poplar  
Pines  
Red Maple***



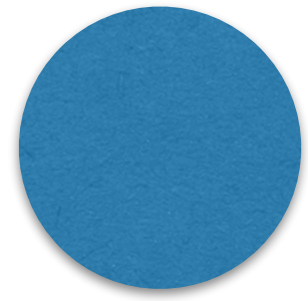


# Den Trees

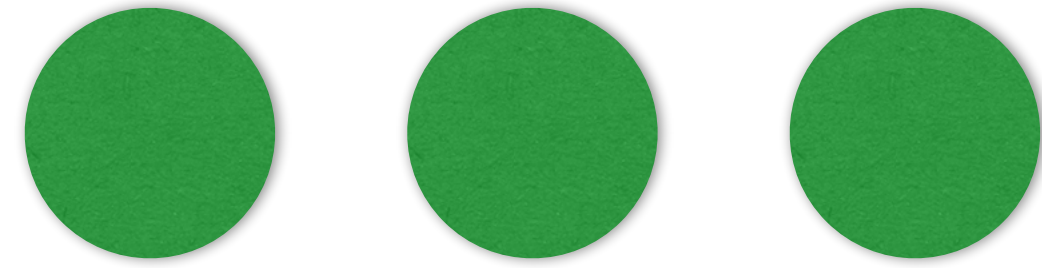




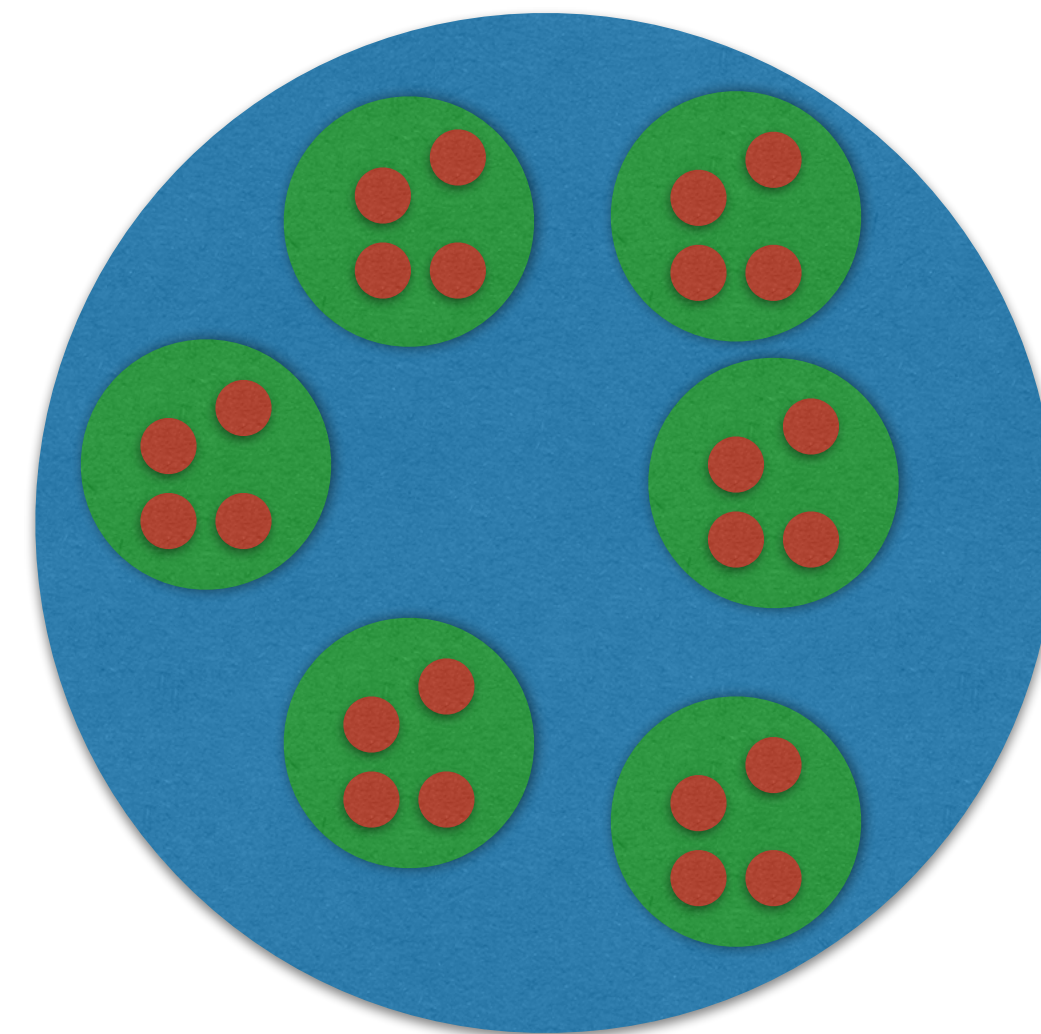
- FOREST (may include neighboring property)



- STAND (based on species, soil, topography, etc)



- TREE (based on goals & expressed genetics)





# Management = Forest Health + Landowner Yields

Increased Habitat

Increased Soil health

Decreased Erosion

Improved Regeneration

More bird species

Mature trees that die of old age

Lots of decay on forest floor

Resilience to disturbance

Wildlife

Income

Timber

Recreation/Hunting

Wild Crafting

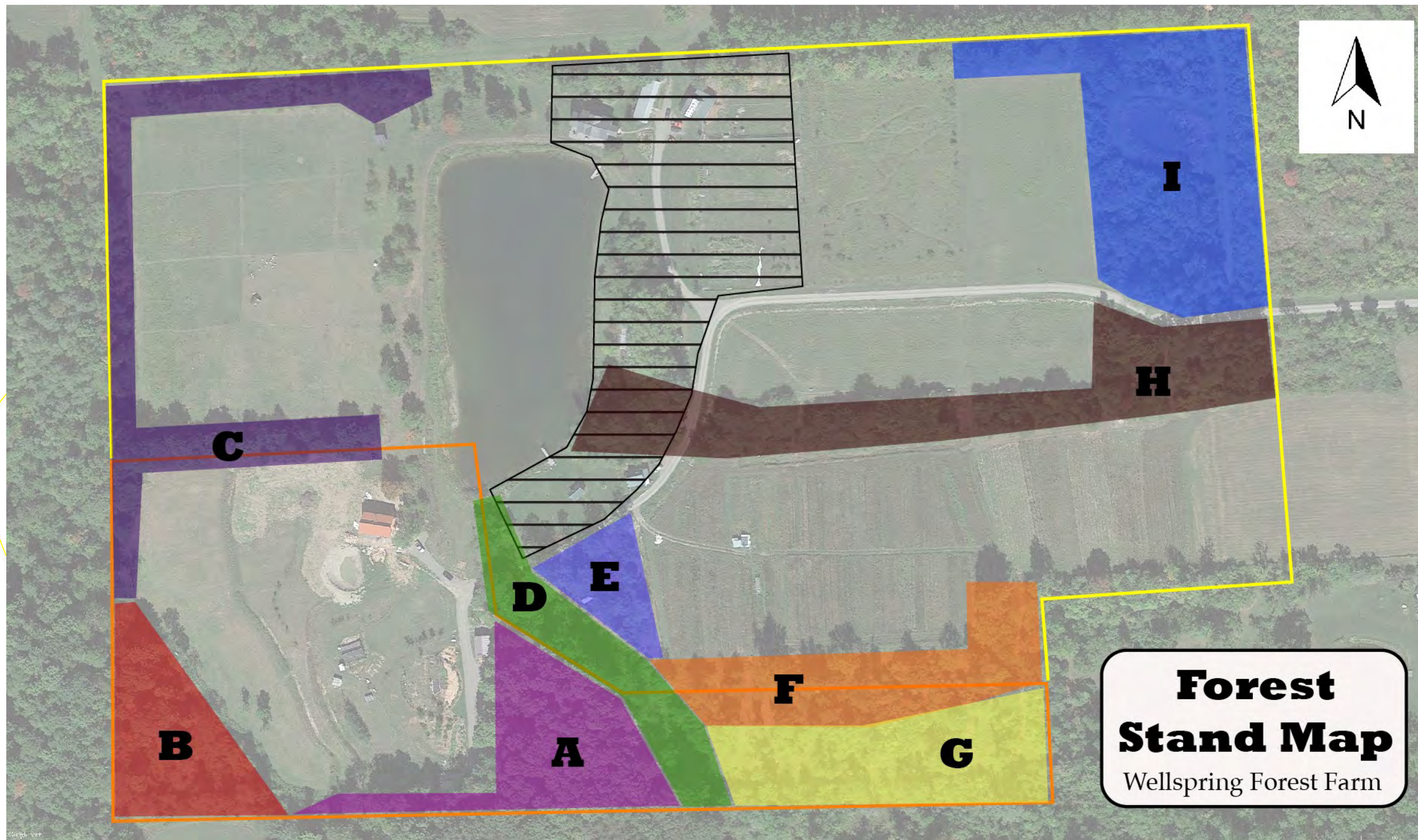
Watershed health

Non-timber products

“Do what is best”



# DEFINE STANDS





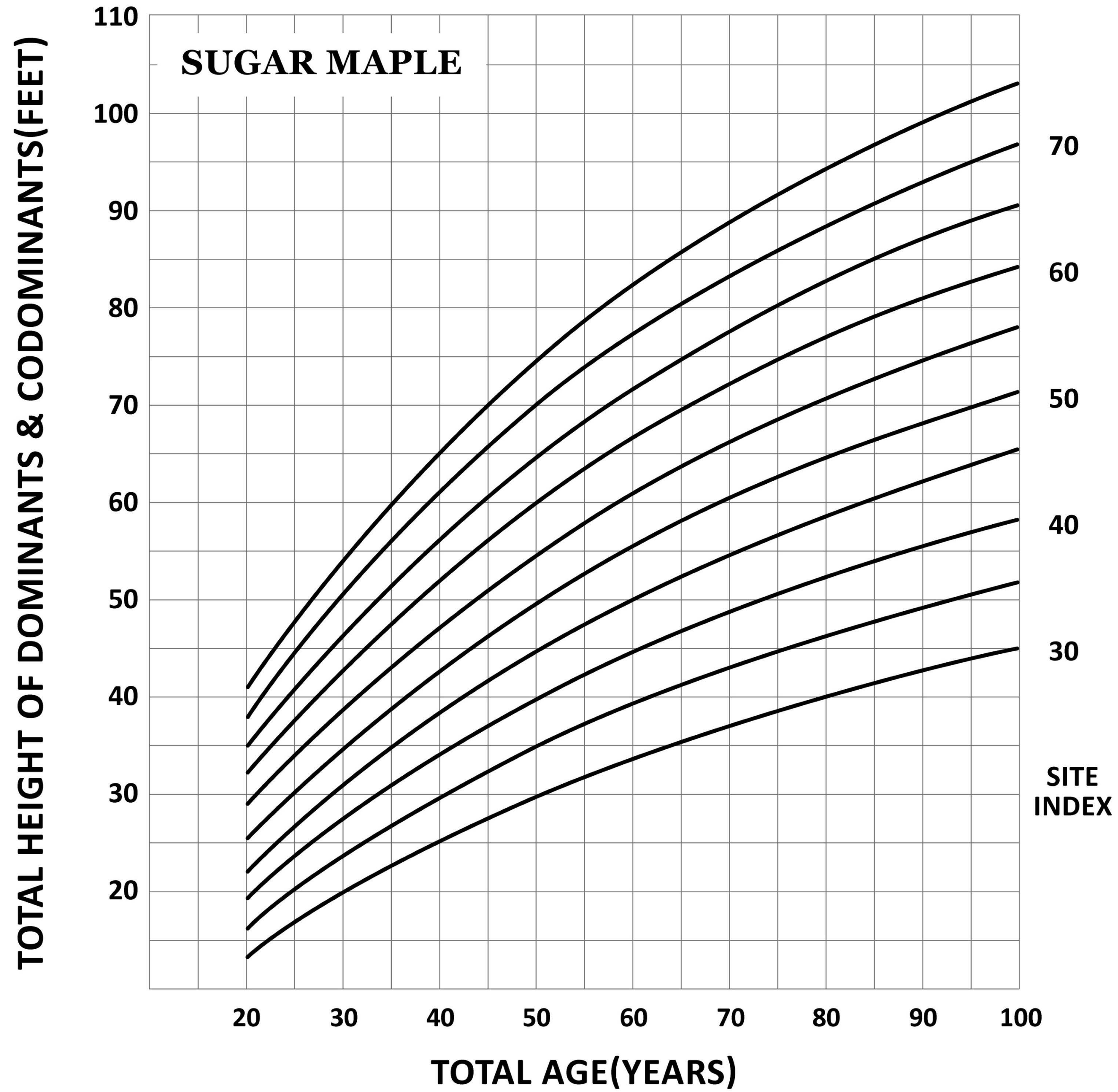


# Tree Height

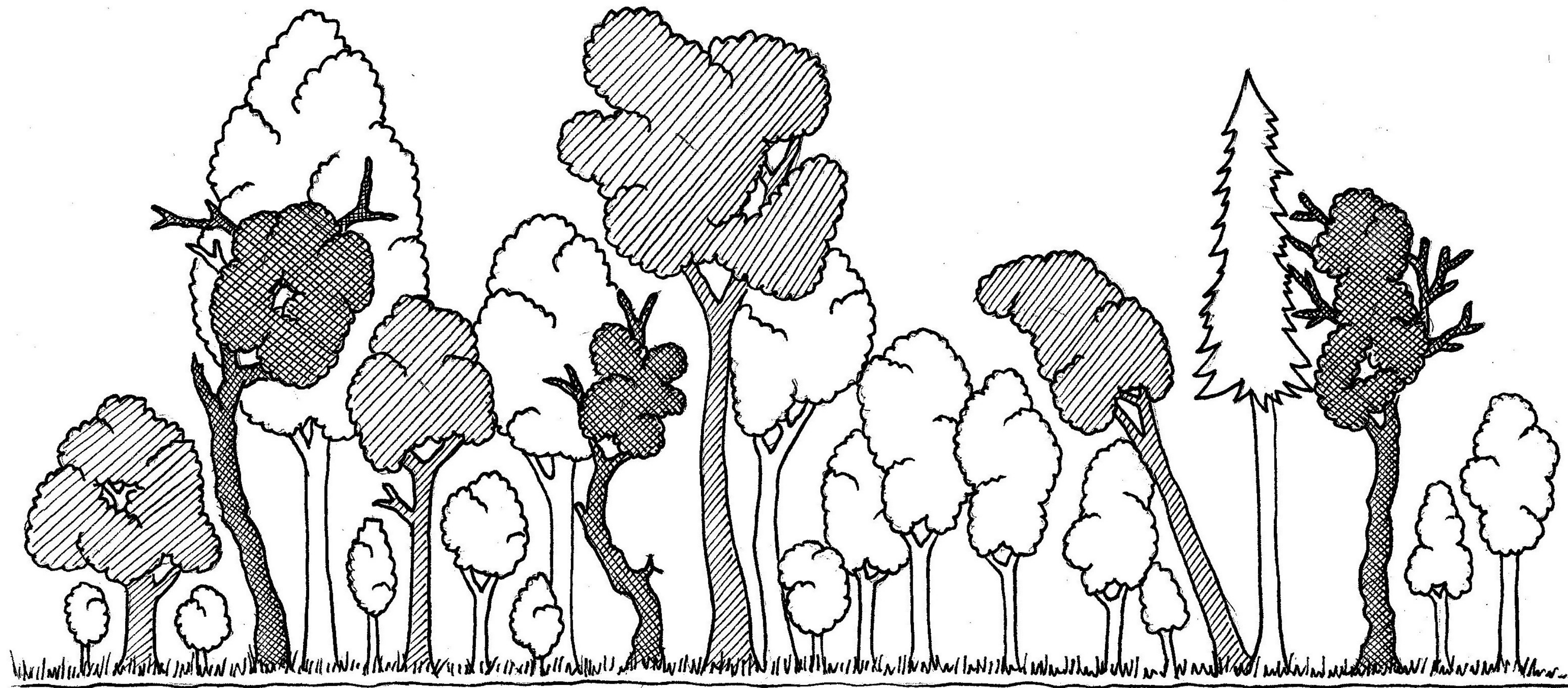
# Tree Age











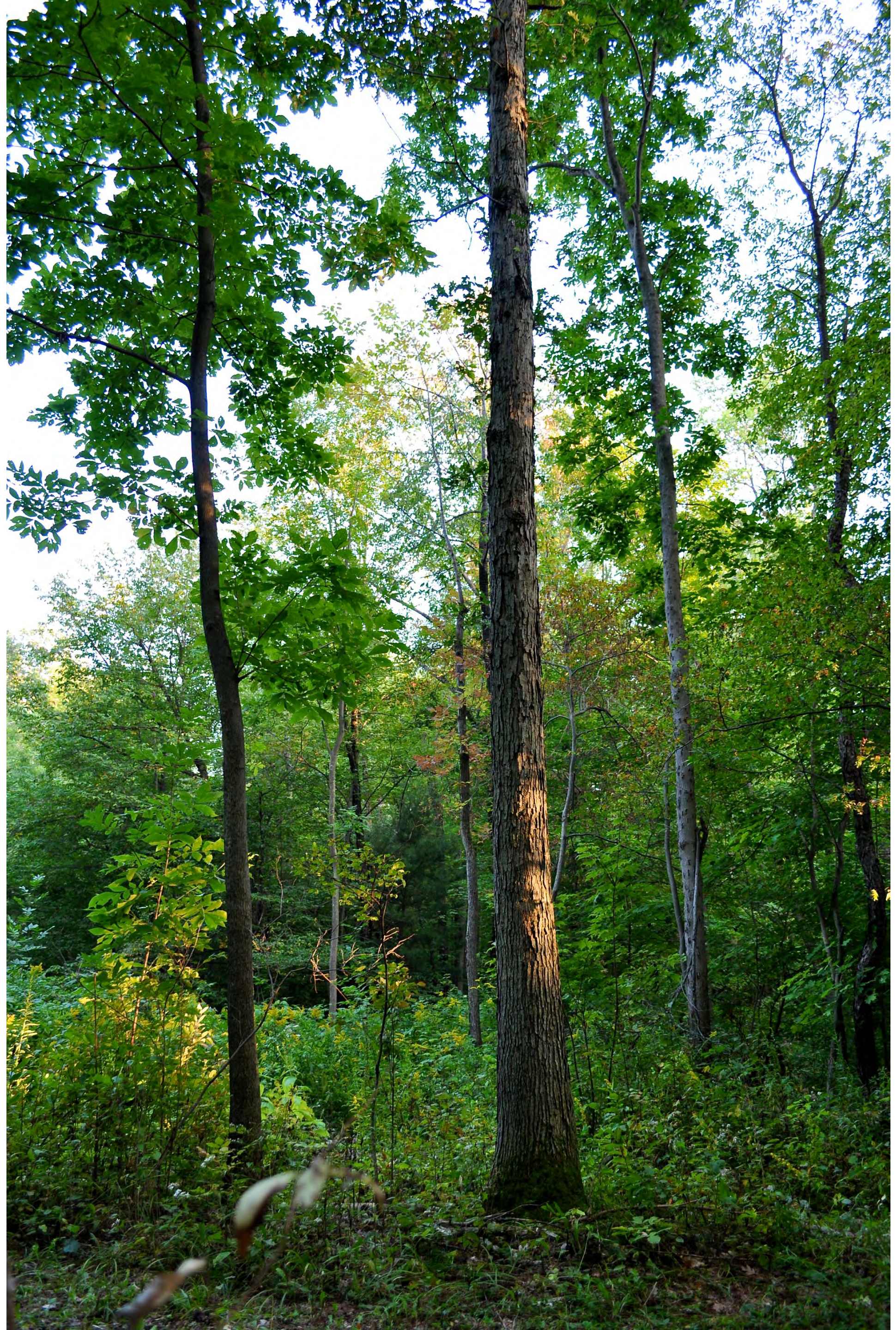
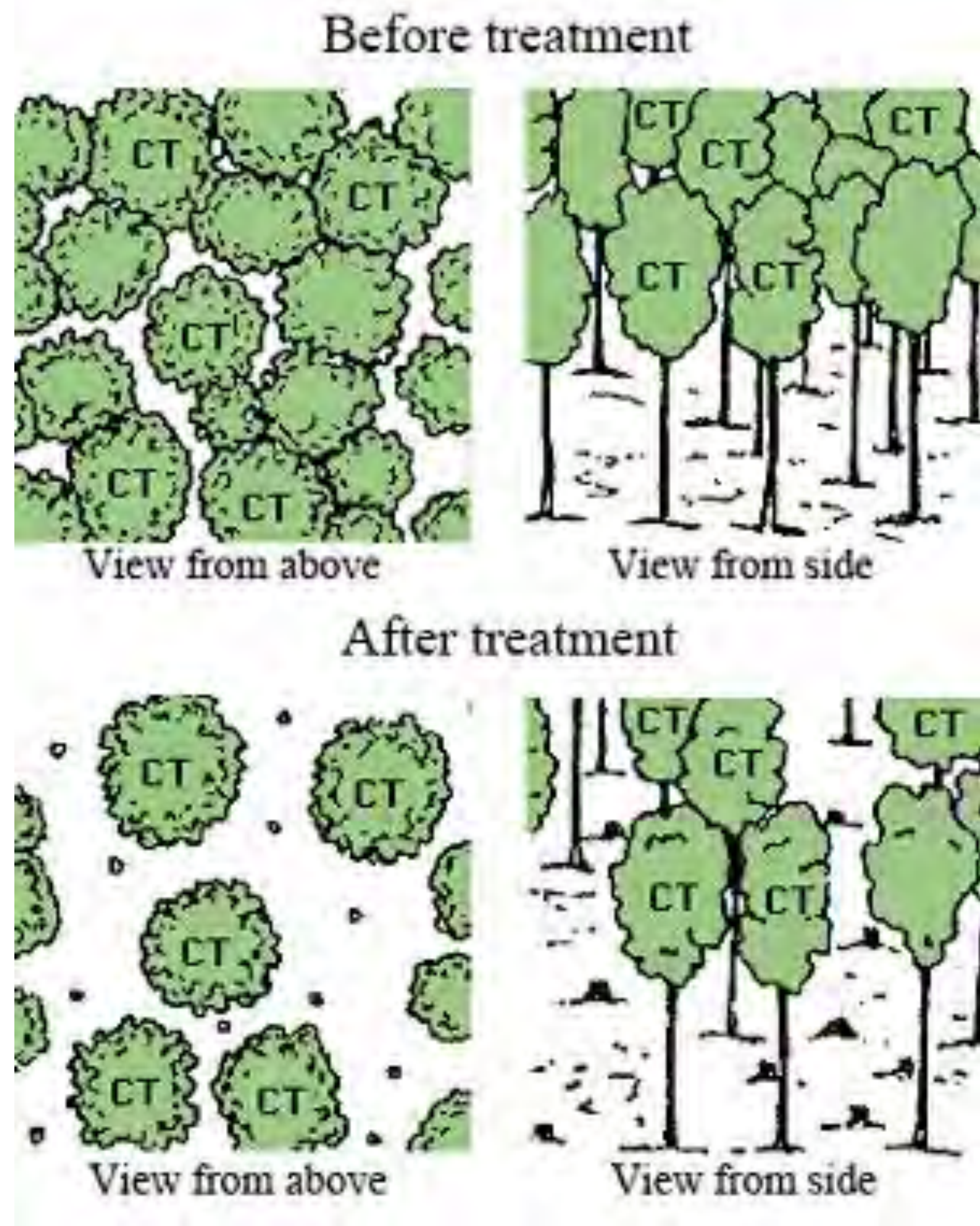
Who is here now? Who is growing well on this site?

What are the trees doing in the next 10 years? 50 years?

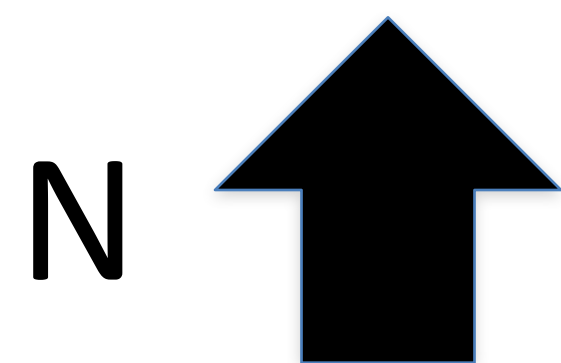
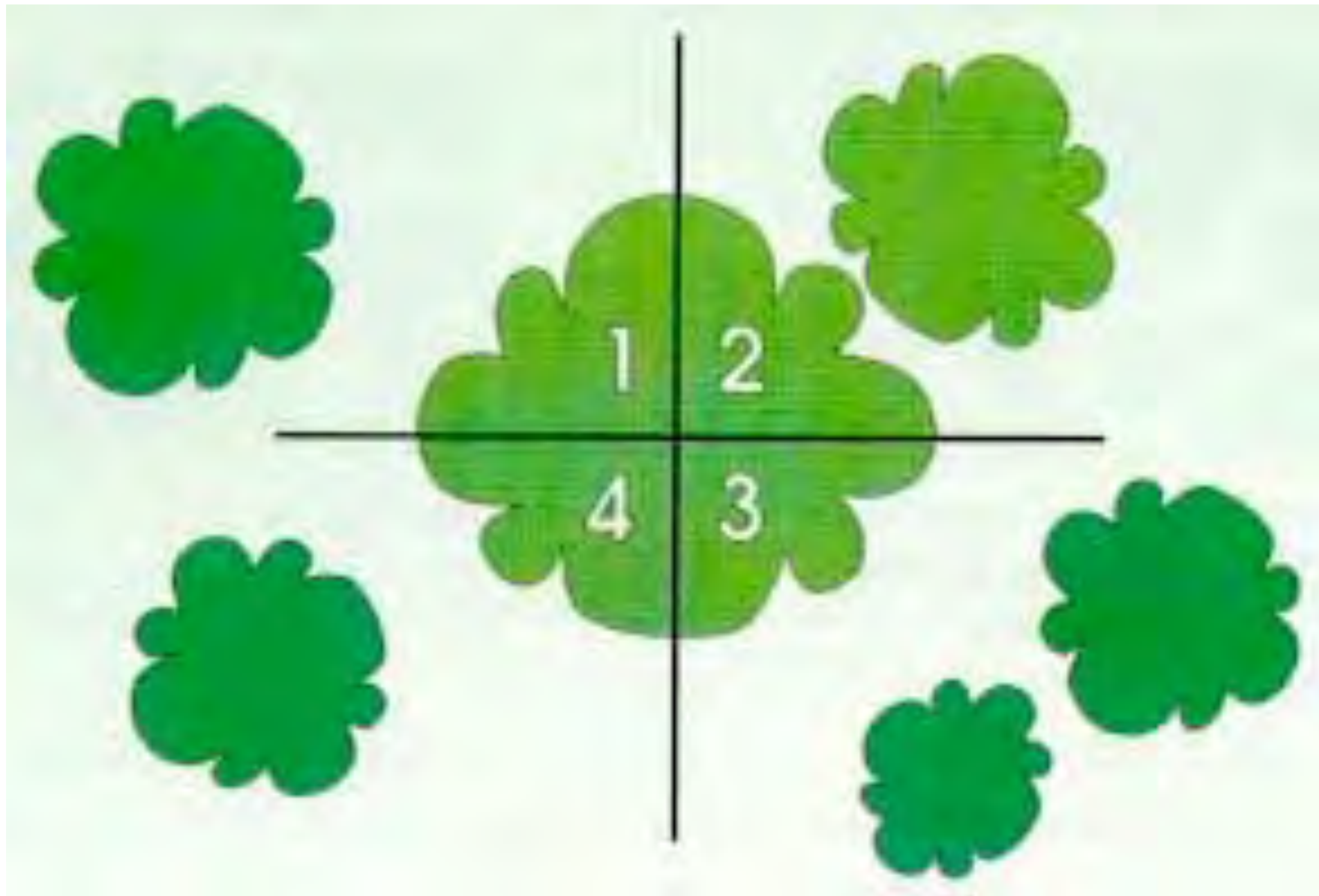
Is Silvopasture a restorative practice or potentially harmful?



# Crop Tree Management

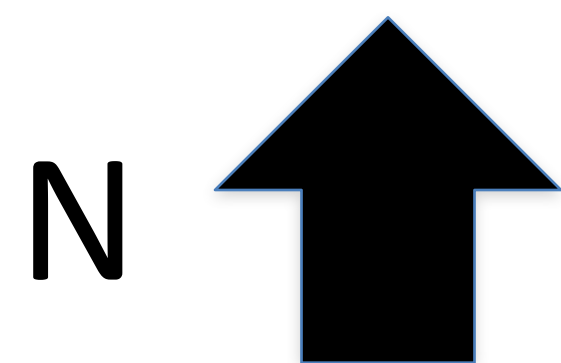
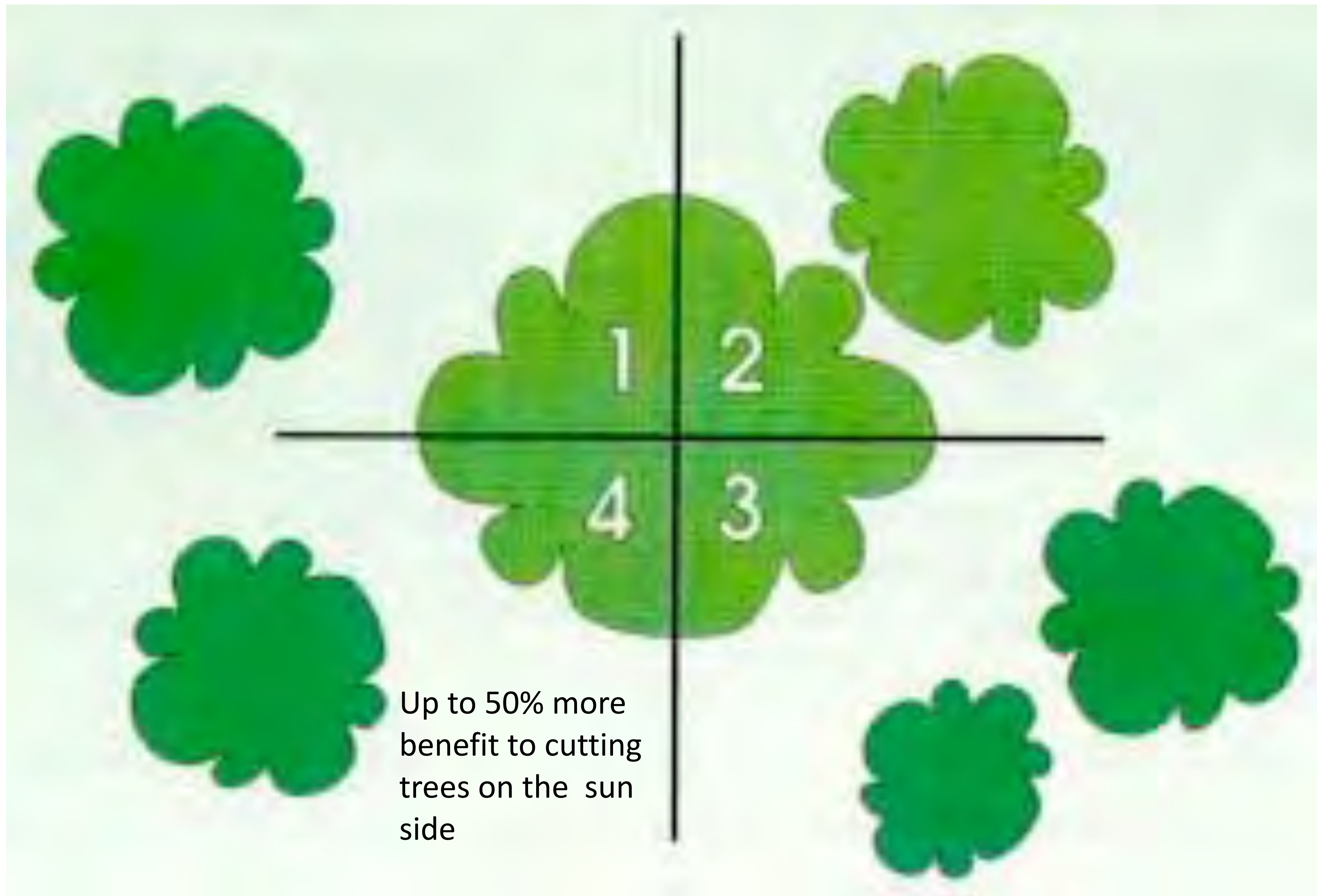






<http://ohioline.osu.edu/for-fact/0050.html>









**THANK  
YOU!!**

**Steve Gabriel - [stevegabrielfarmer@gmail.com](mailto:stevegabrielfarmer@gmail.com)**

**[www.WellspringForestFarm.com](http://www.WellspringForestFarm.com)**



# Connect with



## Upcoming webinars

- 🐔 February 7: Converting Woodland into Silvopasture Part 2
- 🐔 February 24: Medicinal Grazing and Unexpected Outcomes
- 🐔 March 7: Beefing Up Your Farm's Brand & Online Presence
- 🐔 March 29: Business Structure Basics for Your Farm

## Grants, Scholarships, Training, Mentorship & More!

- 🐔 Scholarships – *ongoing*
- 🐔 Customized handouts on the nutritional benefits of food from pastured animals

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