



# Getting Started with Silvopasture

MIXED LAND USE ON SMALL ACREAGE

# Silvopasture is

---

Managed mixed land use to produce both forage for grazers and timber/tree crops.

## What Silvopasture is NOT

---

Putting livestock “out in the trees” and leaving them there until they have eaten all the forage, trampled all the seedlings and browsed all your young trees.

Tess Hahn,  
Keeper of the Sheep

Bah Bah Blacktail Farm  
Careywood, Idaho

<https://www.bahbahblacktailfarm.com/>





# Silvopasture can describe a variety of land uses

---

Uniformly spaced trees with grazing

Patchy tree spacing with grazing

Outdoor “living barns” and windbreaks

Fields converted to food forests

Edges and alleys of forests used as extra pasture

Rainwater harvesting landscaping and fire fuel vegetation control

Today my goal is to acquaint you  
with some factors to consider as  
you decide how to design your  
own system.

What worked for me and what  
didn't. How it looks at my place.

# Why did farmers create open fields?

SUNLIGHT

---





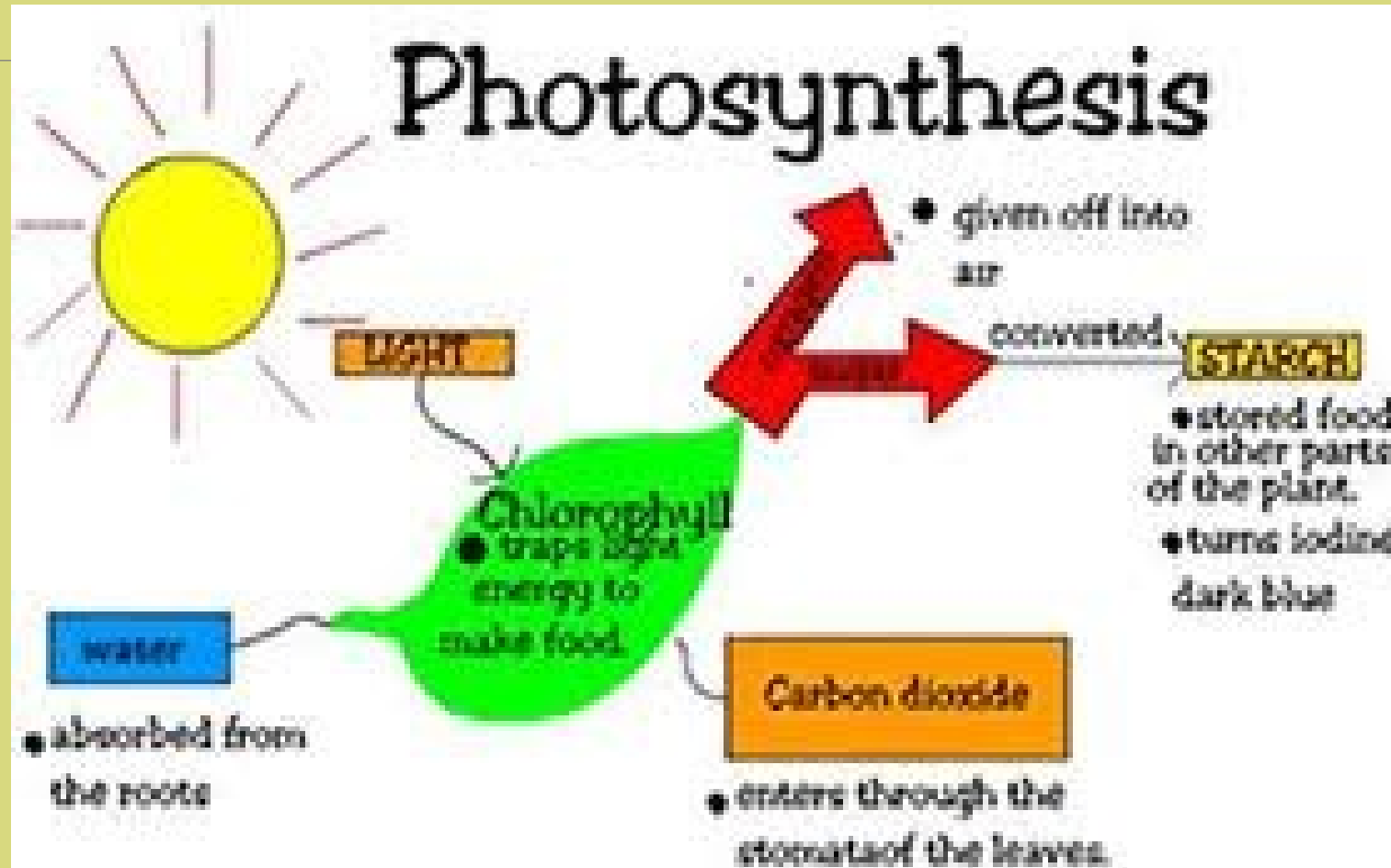
# Why do foresters care about canopy coverage?

## SUNLIGHT

---



# The key to life on Earth



Every acre is 43,000 square feet of solar collector. Make the good use of the sunlight that falls on your land.

Maximize grass production & harvest it efficiently with ruminants.



---

Maximize solar collector  
leaves on your forage.  
Make sunlight available to  
the best trees by removing  
the competition.

# Silvopasture is good for you and for our planet

---

Multiple layers of production evens out the financial return from the land. Short term & long term. NOT “all or nothing”

Highest amount of carbon sequestration of any ag system. 2-3 times that of managed grazing alone

How so?

---

Trees create an upper layer storage of carbon in wood together with underground storage in roots and soil.

“Drawdown” by Paul Hawkin about regenerative agriculture

---

Cornell University studied the  
uses and challenges of  
silvopasture on small farms.  
Steve Gabriel, “Silvopasture”



# Challenges of Silvopasture

---

- Fencing establishment and maintenance
- Lack of knowledge of silvopasture *management* and concern about time requirements
- Lack of knowledge of forage quality and management
- Lack of supportive information from agricultural extension organizations

# To Succeed with Silvopasture

1. Consider sunlight needs of forage and trees
2. Match animals to land type and stage of succession
3. Move animals in rotation according to regrowth of the vegetation & keep them OFF long enough
4. Match the trees to the site and encourage diversified plant communities
5. Stack the management to save time and effort and create synergy of movement



# Tess' How to Do It

---

1. **Start with a Forest stand map & plan**
  - Trees are less mobile than animals.
  - Hydrology, slope and soils create a habitat.
  - Consider also the access to site



NW Corner

NE Corner

corner

© 2013 Google

Google earth

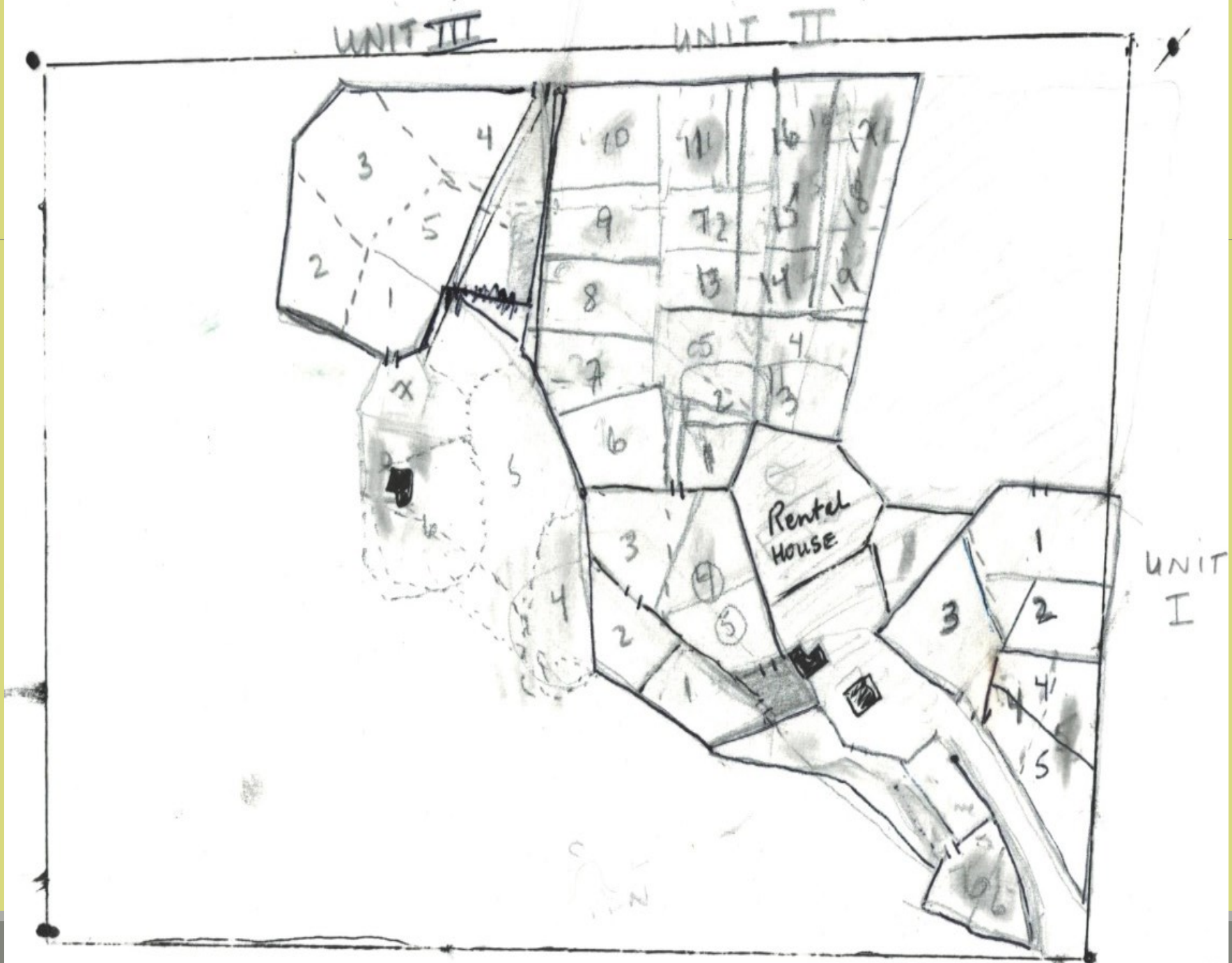


# Tess' How to Do It

---

2. Assess your land's various grazing areas
  - Score each pasture area's potential based upon sun, moisture, soil





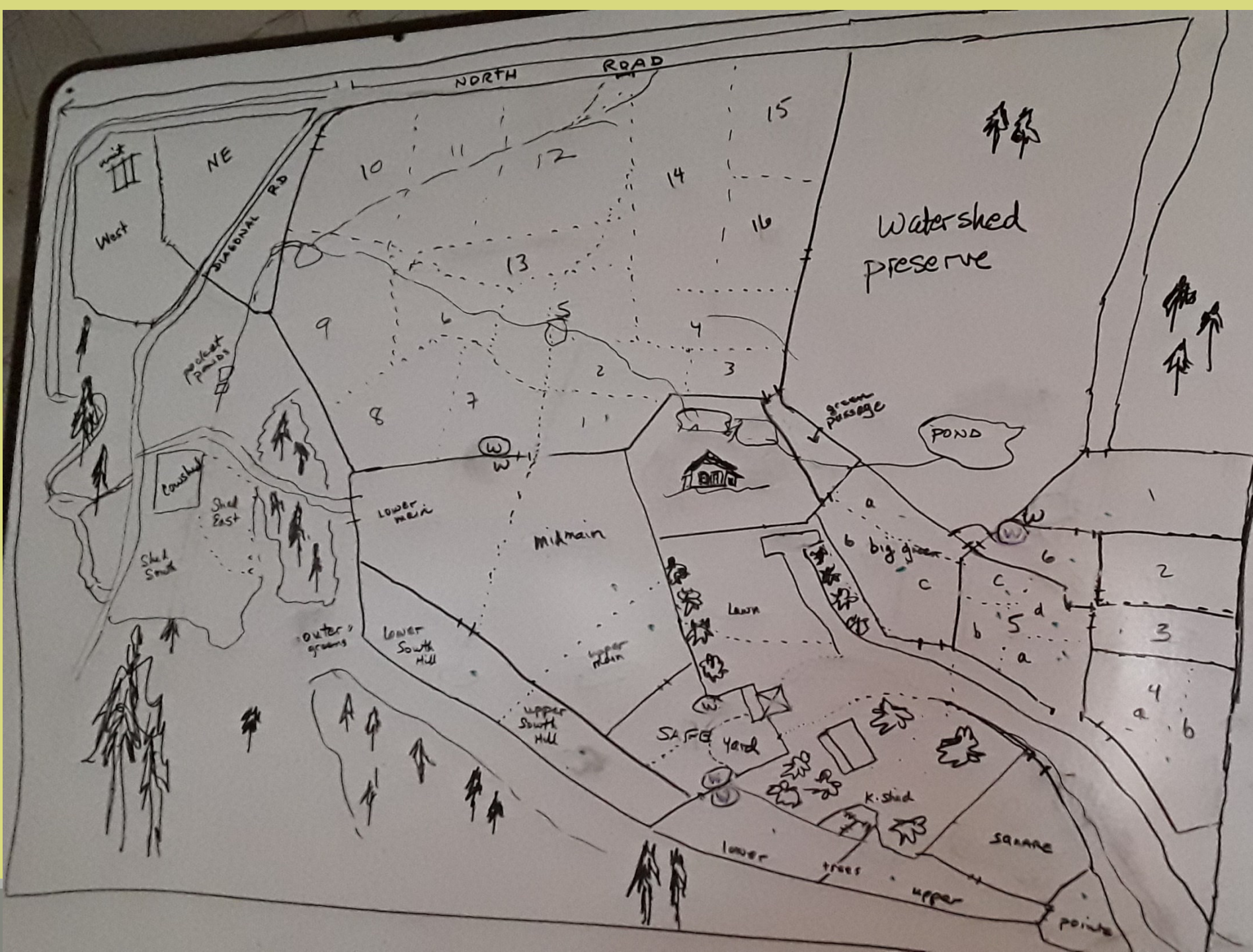
# Tess' How to Do It

## 3. Make a grazing plan

- The sequence and duration of your rotation is based upon the REGROWTH INTERVAL!
- This is the time required to regrow harvestable grass at that particular site.





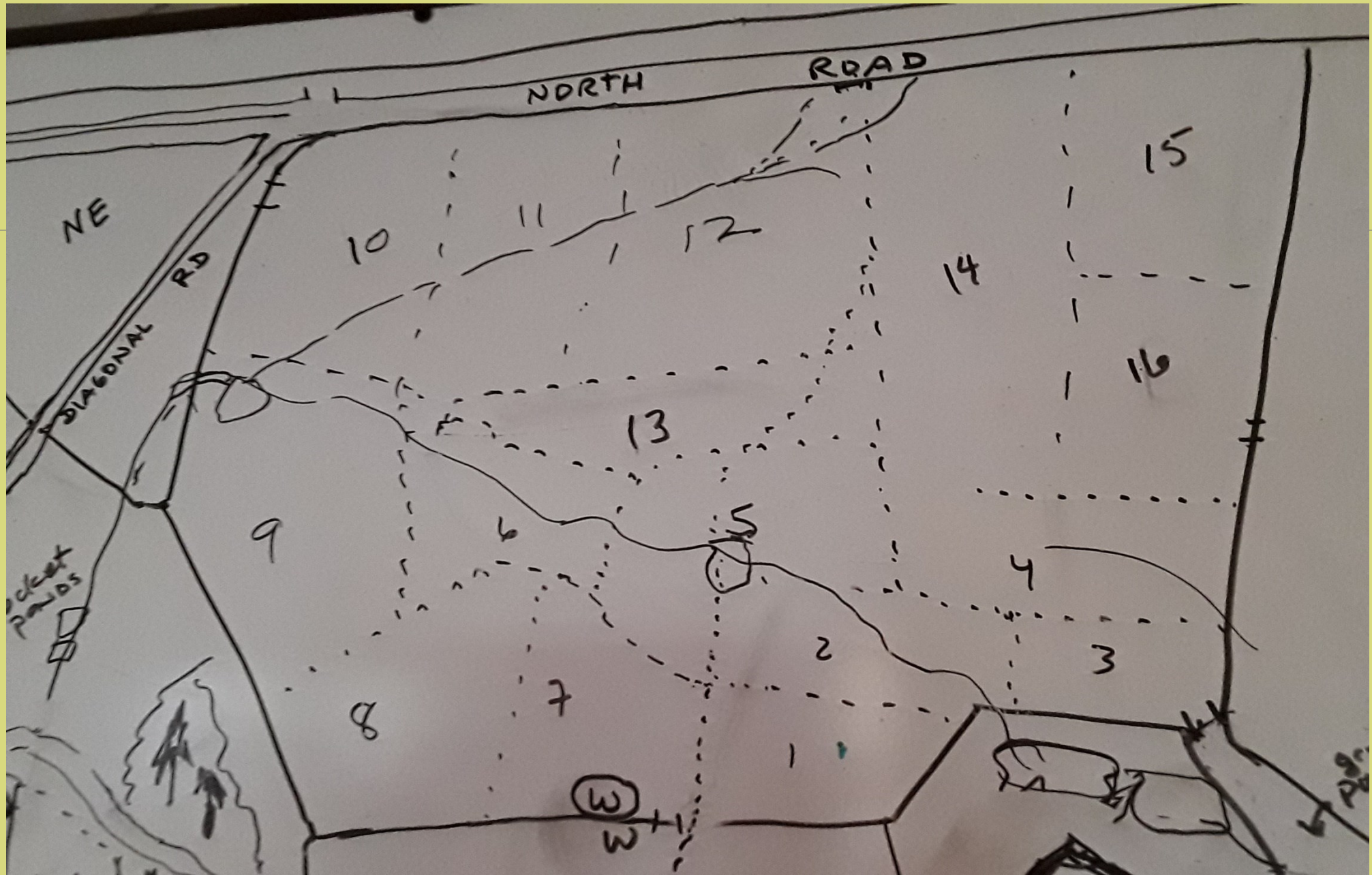


- Big Green a
- Big Green b
- Big Green c
- Unit I, sec 1
- Unit I, sec 2
- Unit I, sec 3
- Unit I, Sect 4a
- Unit I, Sect 4b
- Unit I, Sect 5a
- Unit I, Sect 5b
- Unit I, Sect 5c
- Unit I, Sect 5d

- Kill shed
- SQUARE
- POINT
- TREE HILL
- SOUTH HILL - high
- SOUTH HILL - low
- Upper main
- Middle main
- Lower main
- Outer greens

- Unit II, sect 1
- sect 2
- sect 3
- sect 4
- sect 5
- sect 6
- sect 7
- sect 8
- sect 9
- sect 10
- sect 11
- sect 12
- sect 13
- sect 14
- sect 15
- Unit II Sect 16

- Unit III East
- Unit III West
- packet ponds
- Driveway
- Lawn



---

**Helpful Tips:** Rows and alleys make it easier for fencing and gates.  
Put gates on high, harder ground to avoid muddy messes.



---

**First**, identify the trees to keep.  
Consider leaving trees a bit denser  
at first, then, in a second pass, you  
can weed out the weak ones. Basal  
DbH 40-60 ideal.













# SUMMARY

---

Start with the plan for your trees, then assess the *regrowth interval* needed for your various grazing areas. Make your grazing plan sequence based on regrowth interval.

Create fenced grazing units and rotate stock thru them on a time schedule that allows recovery and regrowth for the forage.

Use the silvopastures STRATEGICALLY to compliment and facilitate your rotational grazing plan by providing supplemental grazing at key times.



**DON'T underestimate the length of time (and money) it takes for conversion of forestland into pasture.**  
Microbes of soil must change, fungi vs bacterial dominant.  
Chris Maser in "The Redesigned Forest" talks about the process of woodland conversion/trees into pastures.  
Usually better to buy what you want.



# Good livestock guardian dogs essential





# Learn about grasses and forages



	Typical Yearly Grazing Calendar															
	J	F	M	A	M	J	J	A	S	O	N	D				
Cool-Season Grass Tall Fescue																
Cool-Season Legume White Clover																
Warm-Season Grass Switchgrass																
Warm-Season Legume Alfalfa																
Summer Annual Sorghum/Sudan																
Miscellaneous Forages Corn Stalks																



# About Forages

- Tannins in forages can reduce bloat and are anti-parasitic
- High tannin forages useful to include:
  - Birdsfoot trefoil
  - Lespedeza
  - Sainfoin
  - Chicory
  - small burnet
  - Willow
  - Poplar
  - Mulberry
  - black locust





## LIVESTOCK GRAZING GUIDELINES FOR CONTROLLING NOXIOUS WEEDS IN THE WESTERN UNITED STATES



By  
**Jason C. Davison**  
Forage and Alternative Crops Specialist  
University of Nevada Cooperative Extension

**Ed Smith**  
Natural Resource Specialist  
University of Nevada Cooperative Extension

**Linda M. Wilson**  
Invasive Plant Ecologist  
Plant, Soil and Entomological Sciences  
University of Idaho



University of Nevada  
Cooperative Extension



EB-06-05



A WESTERN REGION SUSTAINABLE AGRICULTURE, RESEARCH, AND EDUCATION PROJECT

The University of Nevada, Reno is an Equal Employment Opportunity/Affirmative Action employer and does not discriminate on the basis of race, color, religion, sex, age, creed, national origin, veteran status, physical or mental disability, and sexual orientation in any program or activity it operates. The University of Nevada employs only United Citizens and aliens lawfully authorized to work in the United States.



<https://www.bahbahblacktailfarm.com>

