

Grazing and Diversity

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Two sides of the diversity question

1. How do we use grazing-based systems to achieve goals related to conservation of diversity?
2. How do we use diversity to improve grazing-based systems?

Scale of diversity

Strategy/target

Outcome/metric

Ecosystem

Forage systems across the landscape

Species

Forage species mixtures

Genetic

Forage blends and variety mixtures

Provisioning, regulating, and supporting ecosystem services

1. Diversity in grazing systems

- A. What role does **plant diversity** play in the functioning of grazing-based systems?



- B. What is the most effective strategy for increasing plant diversity in these systems?

2. Diversity of grazing-based systems

Open pasture



Photo credit: Nicole Antaya

Hayfield



A field being hayed



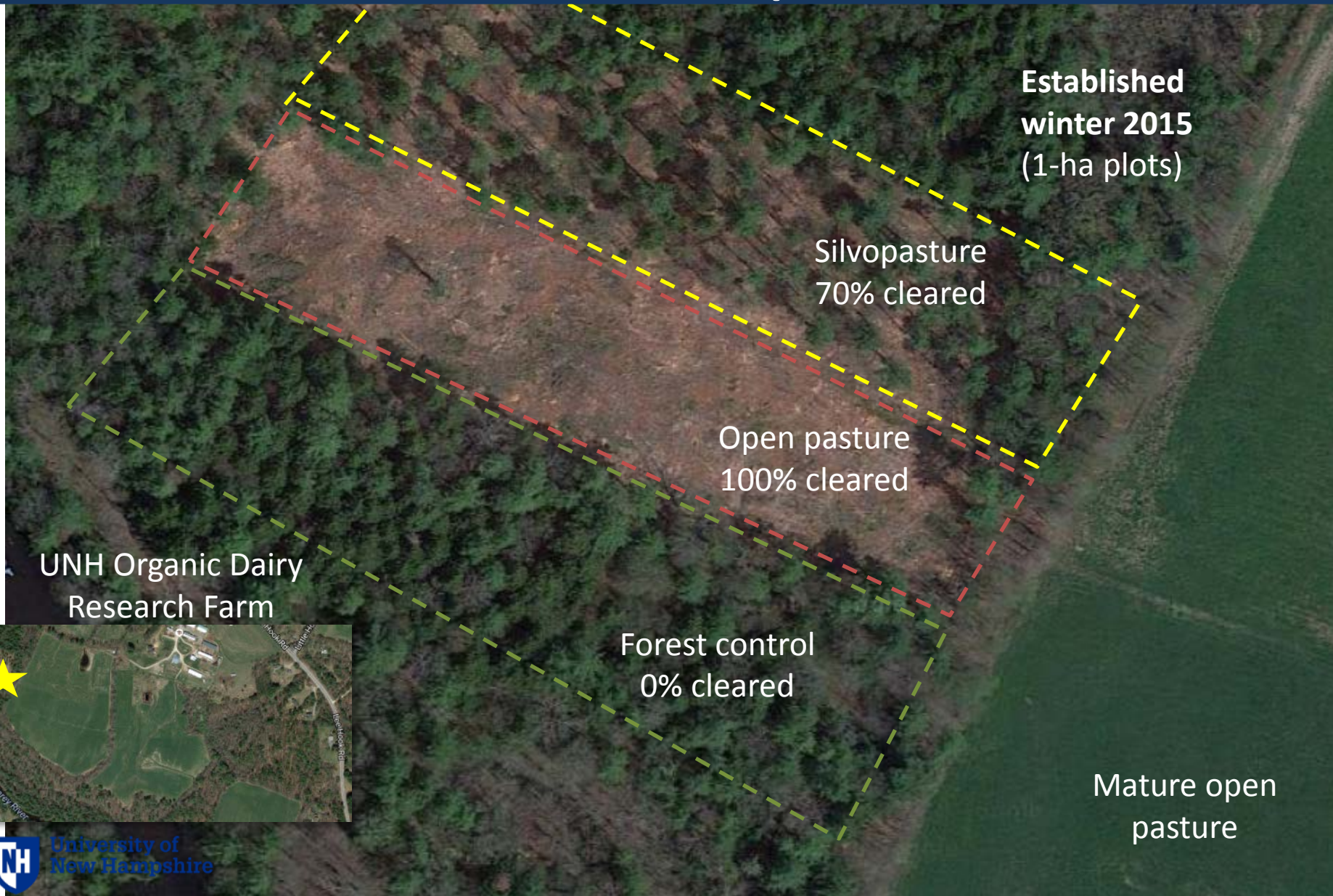
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Silvopasture

Photo credit: Bret Chedzoy

Agroecological and biogeochemical implications of conversion to silvopasture?



Agroecological and biogeochemical implications of conversion to silvopasture?



Silvopasture

Measuring dynamics of:

- C and N
- H₂O/hydrology
- Forage
- Timber
- Plant establishment invasion



Open pasture

Questions

- **How do we best balance our food production and conservation goals?**
- **How do we determine if production of livestock products (as opposed to other forms of agriculture or other land uses) is the best use of a given parcel of land?**
- **Where does agroforestry fit within a landscape that must continue to deliver a diverse range of ecosystem services?**