

Considerations for Grazing Management

“Grazing Management Essentials”

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Grazing Essentials

- 2a: of the utmost importance : BASIC, INDISPENSABLE, NECESSARY
Merriam-Webster

Johnny's Grazing Management Essentials

- Understanding pasture soil health
- Manage pasture nutrient distribution
- Power of One Wire (P.O.W)
- Extending the grazing season
- Cows that fit your environment



Water Makes Grass Grow

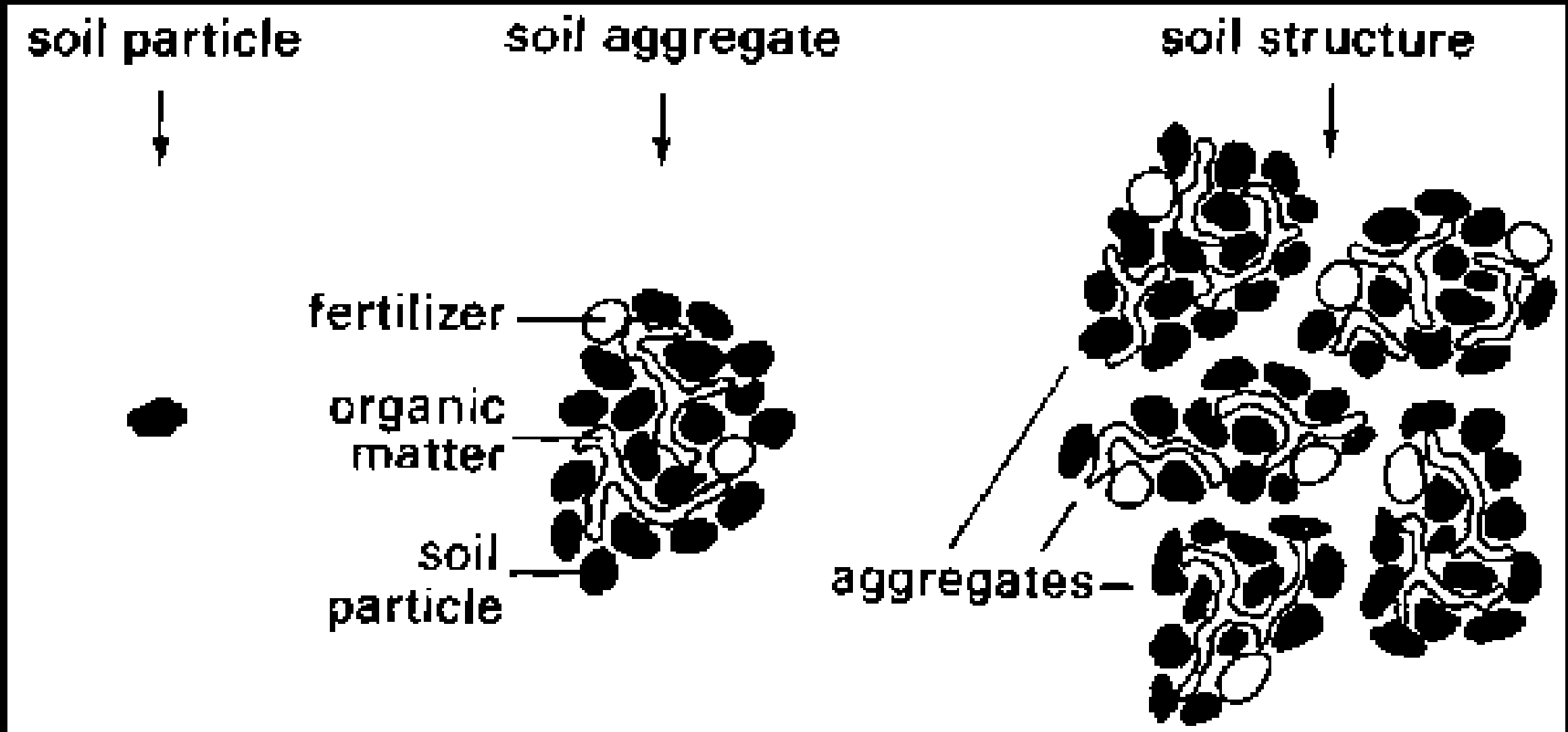
- Forage yield increases with annual precipitation
 - More forage will increase carrying capacity
 - More potential income
- Rainfall must enter the soil to produce forage
 - Effective rainfall
- Soil water retention varies
 - Soil type
 - Management
- How can we capture more of the rain that falls on our pasture?

Soil Health Principles

1. Soil Armor
2. Minimizing Soil Disturbance
3. Plant Diversity
4. Continual Live Plant/Root



Living Roots Builds Soil Structure



Use Stock Density to Build Soil Health



Feeding All Your Livestock



Plant Diversity leads to Root Diversity



Soil Armor – Keep it Covered



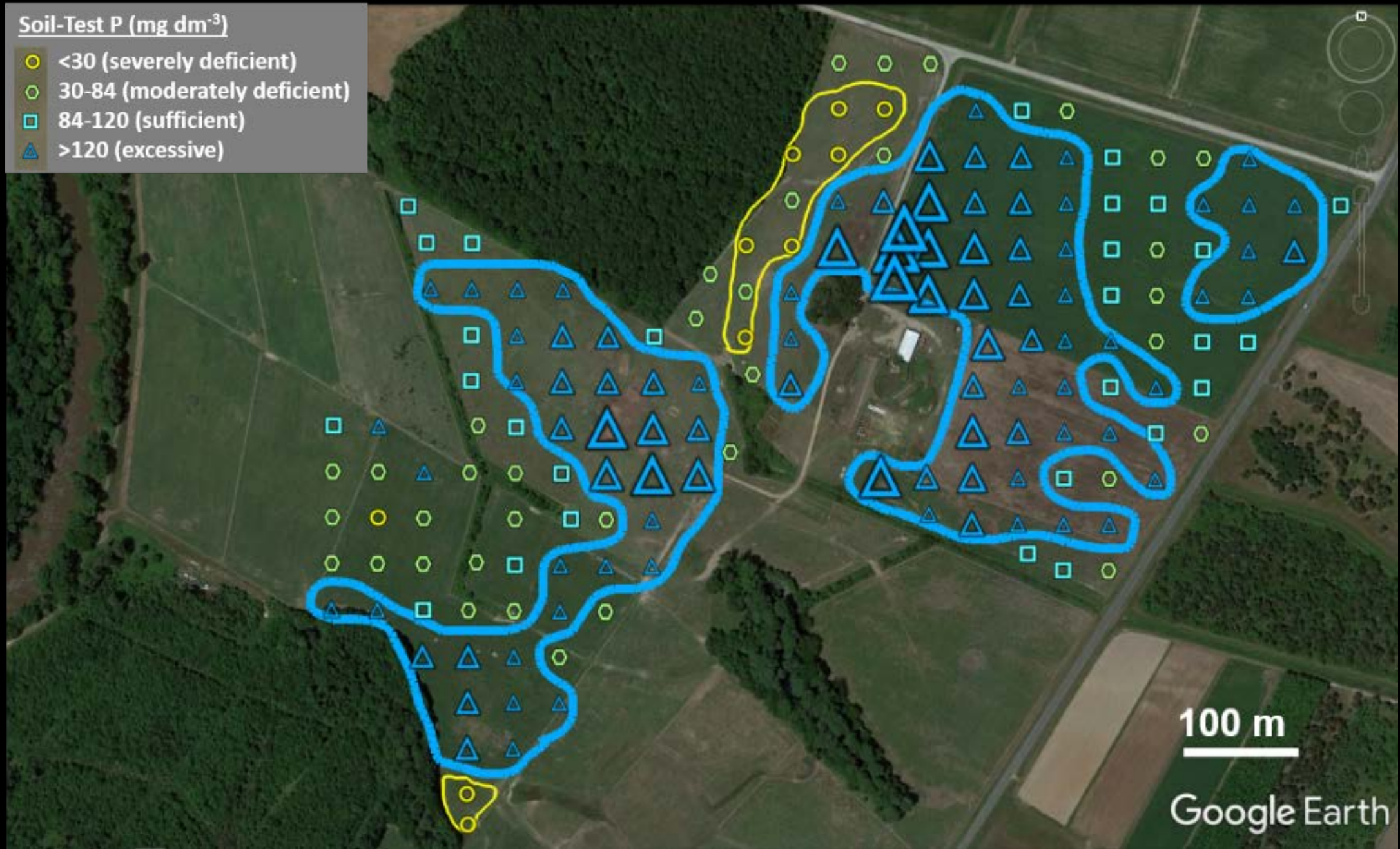
How can we disturb the soil in grazing systems?

- Grazing
- Equipment traffic
- Mowing
- Fertilizer/manure
- Herbicides
- Parasite/fly control



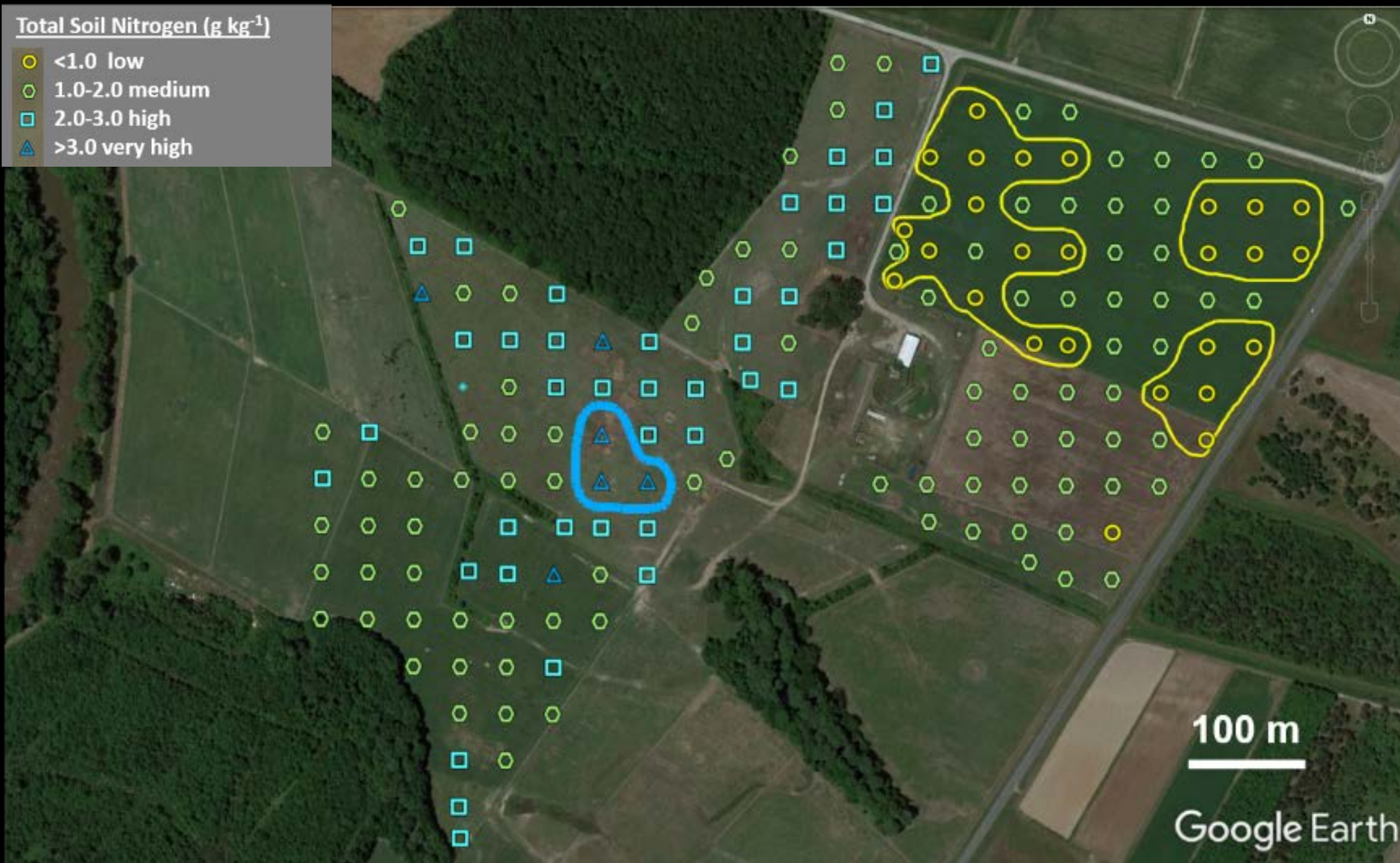
Soil-Test P (mg dm^{-3})

- <30 (severely deficient)
- 30-84 (moderately deficient)
- 84-120 (sufficient)
- △ >120 (excessive)



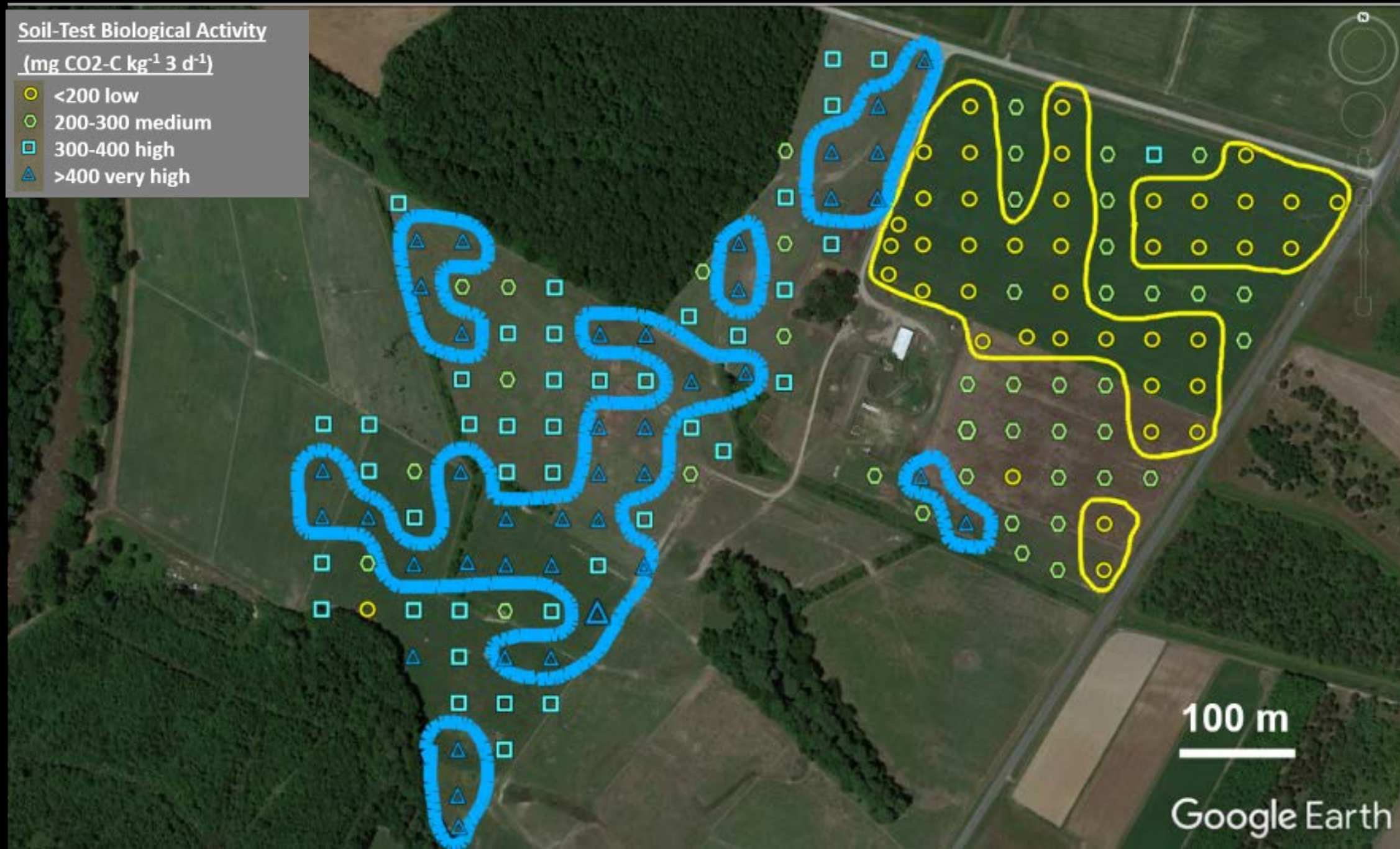
Total Soil Nitrogen (g kg^{-1})

- <1.0 low
- $1.0\text{--}2.0$ medium
- $2.0\text{--}3.0$ high
- △ >3.0 very high



Soil-Test Biological Activity(mg CO₂-C kg⁻¹ 3 d⁻¹)

- <200 low
- ◊ 200-300 medium
- 300-400 high
- △ >400 very high



Grazing management to improve soil nutrient distribution





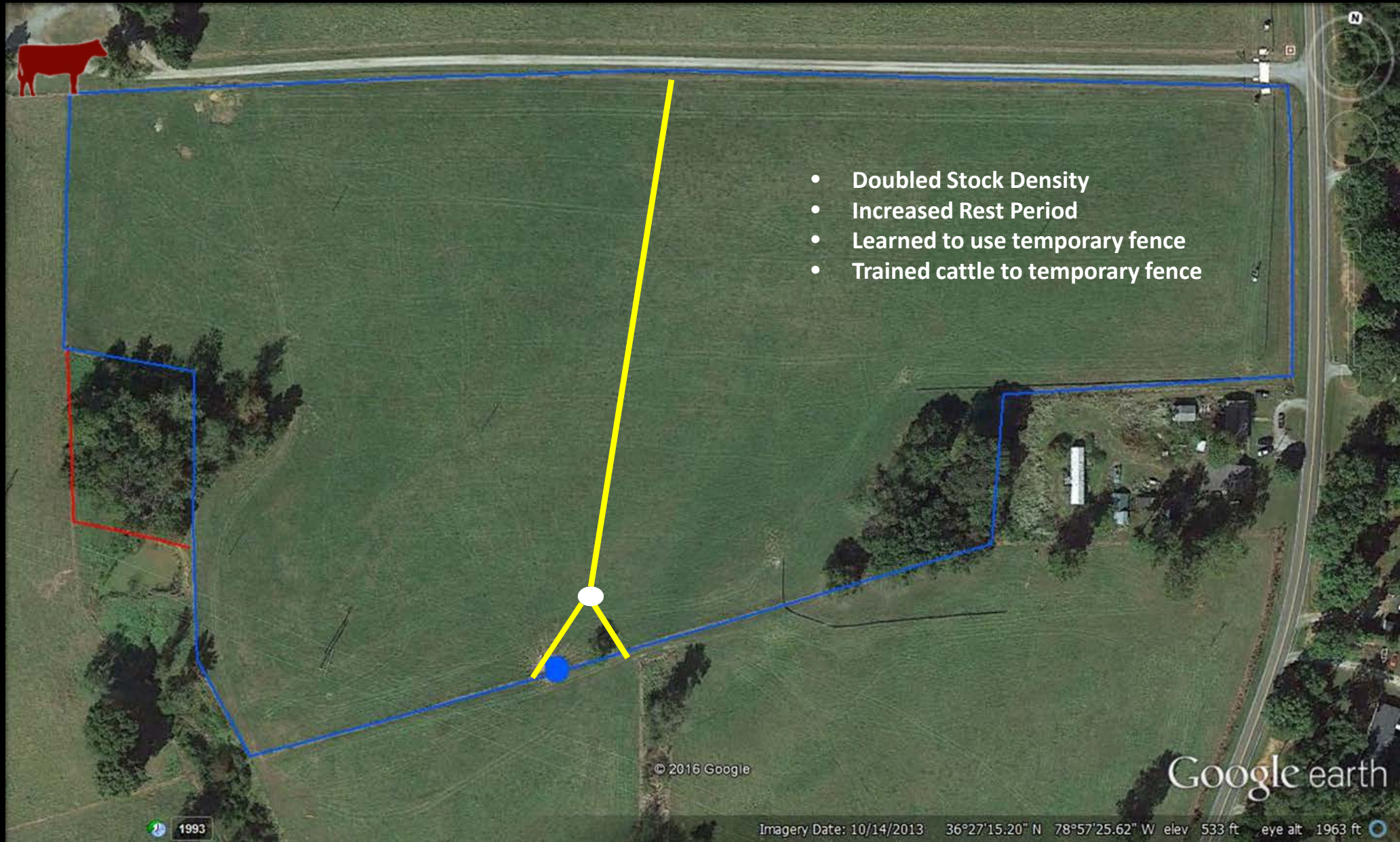
Unrolling Hay



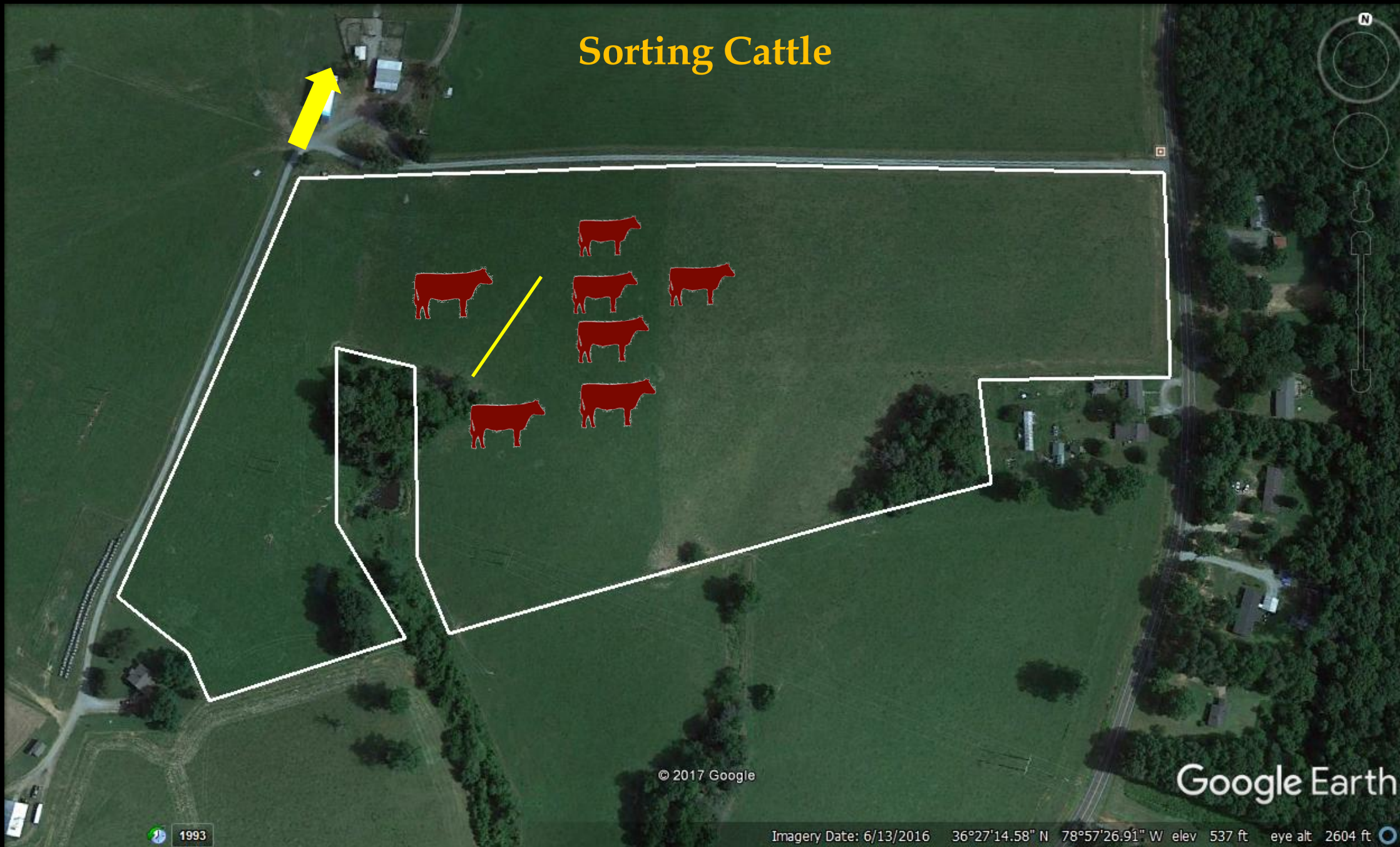
Unrolling Hay



“The Power of One Wire”



Sorting Cattle





What is the Power of One Wire?

It is the Key to Adaptive Grazing!

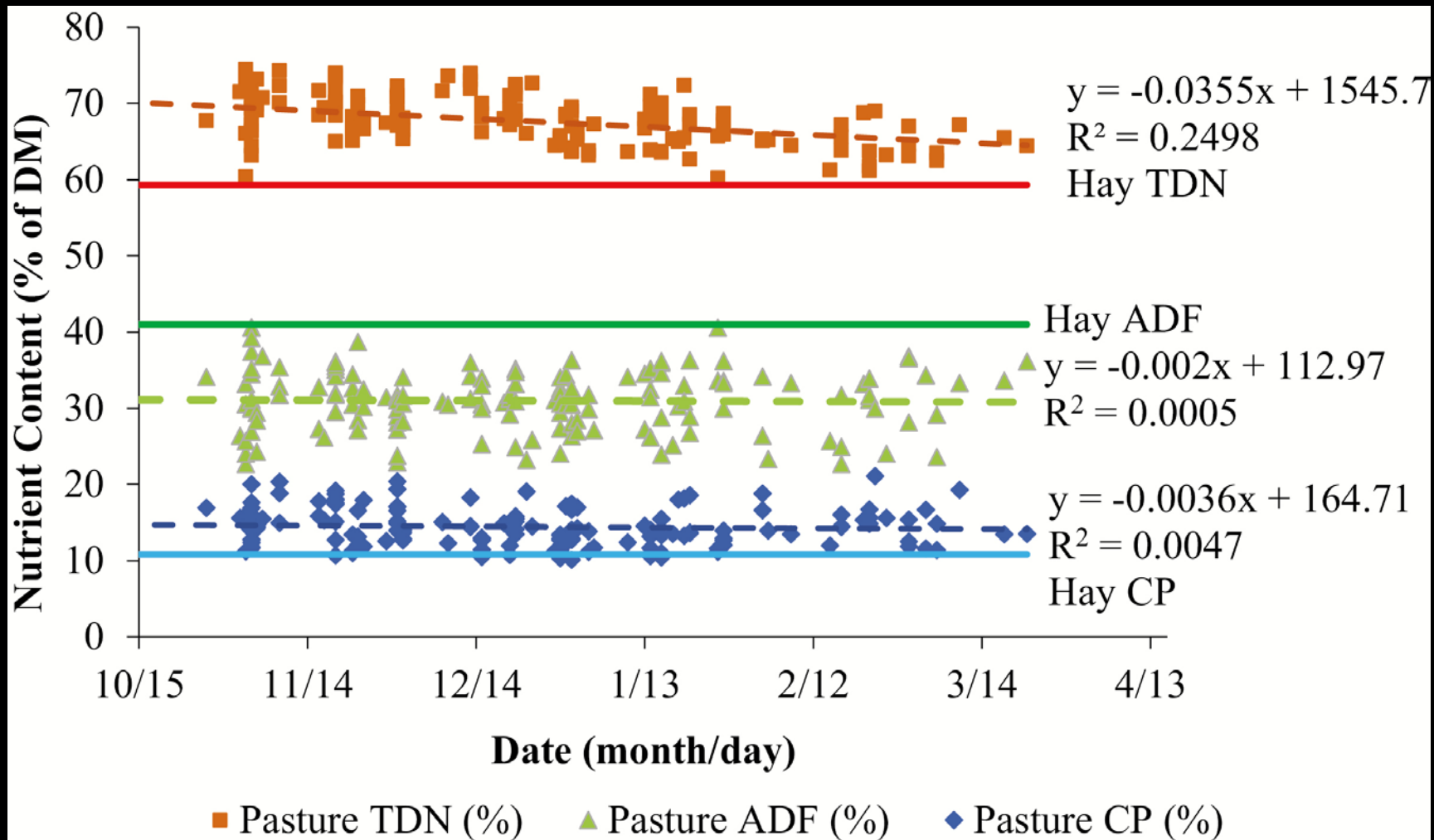
- **Better forage production is only the beginning of Adaptive Grazing**
- **Better observation equals better management**
 - **Livestock Health and welfare – BQA**
 - **Keep in Touch with Pasture Ecology**
 - **A Good Lifestyle - physical exercise, family activity, safety, etc.**
- **Improved livestock handling**
- **Protecting “hot spots”**
- **Preserving pasture shade....protect trees**
- **Temporary fence repair after storm damage**

Extending the Grazing Season

- All forages can be stockpiled
- Excellent livestock nutrition
- Rested plant
- Feeds the Soil Food Web
- Nutrient Distribution
- Ground cover
- Limited equipment (Safety)



Stockpiled Fescue Quality







For every \$1.00 your cattle consume they will deposit approximately \$0.85 somewhere on your farm.
Will they deposit it in the correct location?



Extending the Grazing Season - Annuals

- Livestock will remove high quality forage quickly
- Strip grazing offers the best utilization and control
 - Temporary fence should be used



Finding Functional Cows

- Average weaning weight
 - Growth characteristics of calves
- Pounds of calf weaned per cow exposed
 - Reproductive performance of cows
- Pounds of calf weaned per pound of female exposed
 - Begins to account for individual unit inputs
- Pounds of calf weaned per unit of forage consumed
 - Manufacturing mentality



The North Carolina
Cattle Industry
Assessment

Johnny Rogers and Matt Poore

EVALUATING COW-CALF PRODUCTION EFFICIENCY BY COMPARING MATURE COW WEIGHT AND CALF WEANING WEIGHT

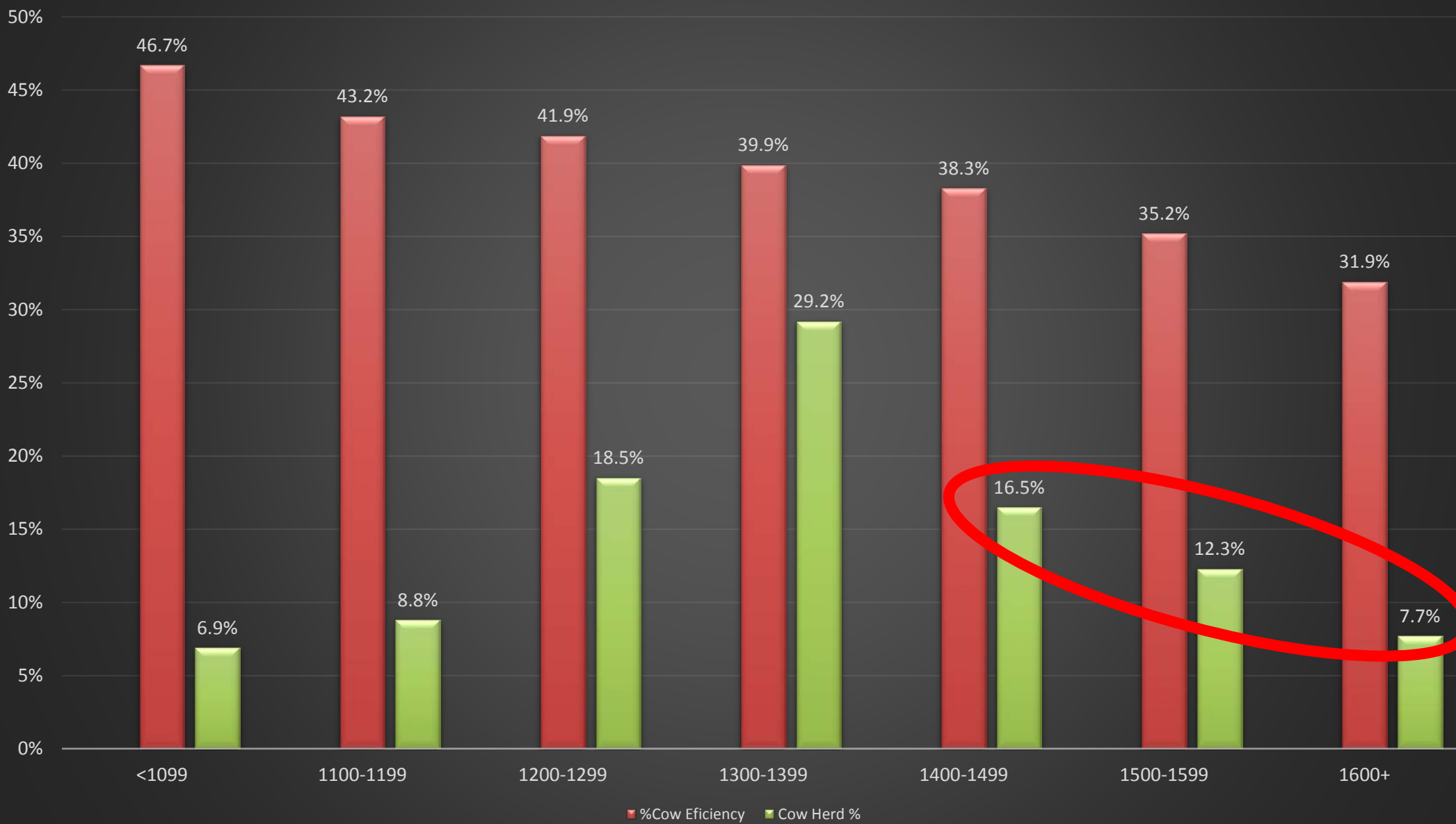
Selecting Cattle for Improved Efficiency

Income

-Expenses

Profit (Loss)

NC Cow Efficiency Project



What is an Ideal Cow?

- Crossbred cow that is adaptable to the specific farm/ranch environment and forage resource (Tall Fescue)
- Cow Size? 1,000 to 1,300 lbs. (not 1500 to 1700 lbs.)
- Maternally oriented or a multi-purpose cow?
- Balance or optimize cow herd
 - Cow efficiency, Growth and Carcass
 - Can lead to higher production costs
- Low-input cow herd
 - Moderate cow size and maternal focus
 - Steer value?
 - High value replacement females
- Terminal system
 - Source and cover low-input females with bulls that emphasize growth, carcass and feed efficiency.
 - Sell all progeny



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Pasture based livestock systems using sound grazing principles provide tremendous economic and ecological benefits to our society.



Amazing Grazing

NC STATE UNIVERSITY'S
Pasture-Based Livestock Education Program



Thank you
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NC STATE

EXTENSION

