

# June AMT Office Hours

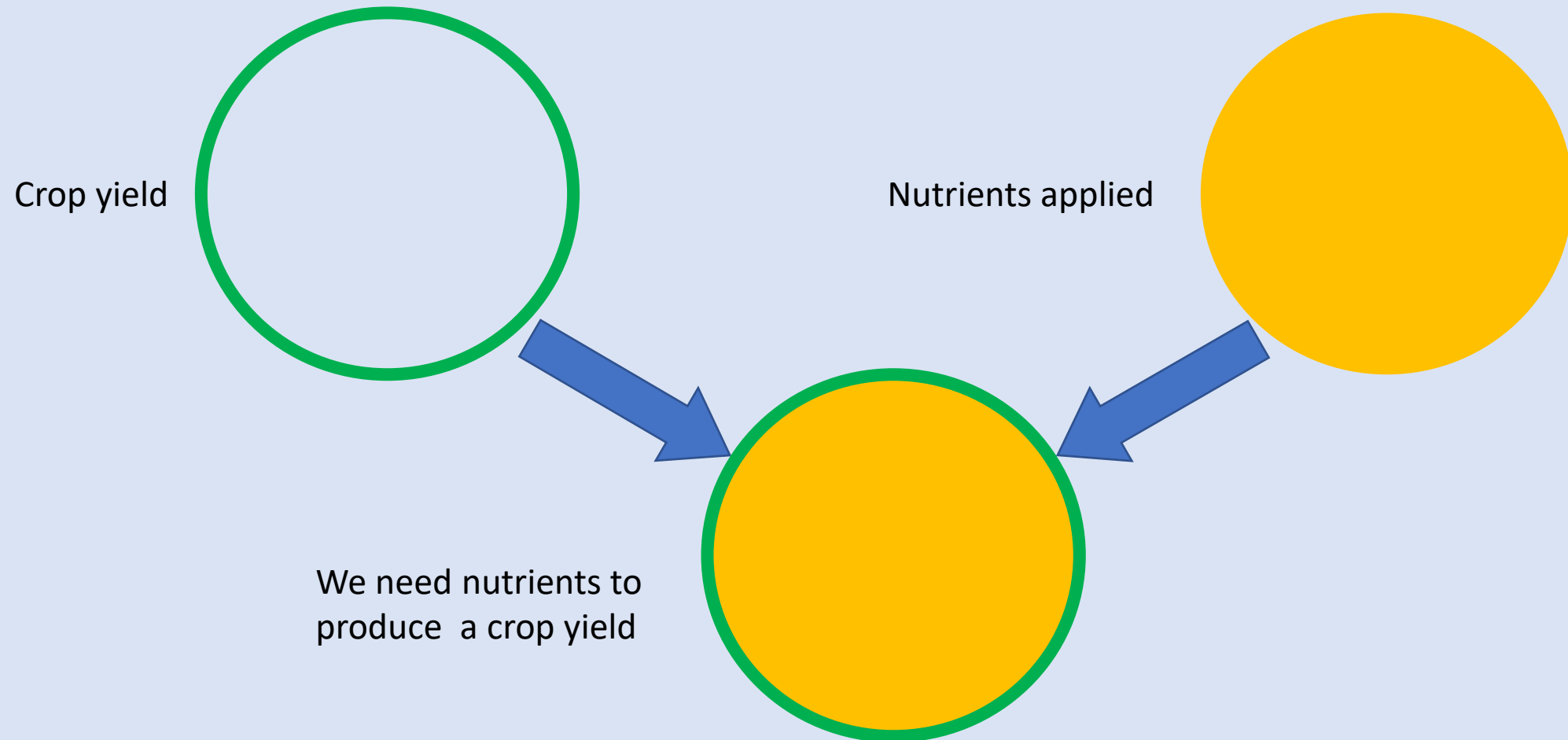
06/14/2024

# Topics:

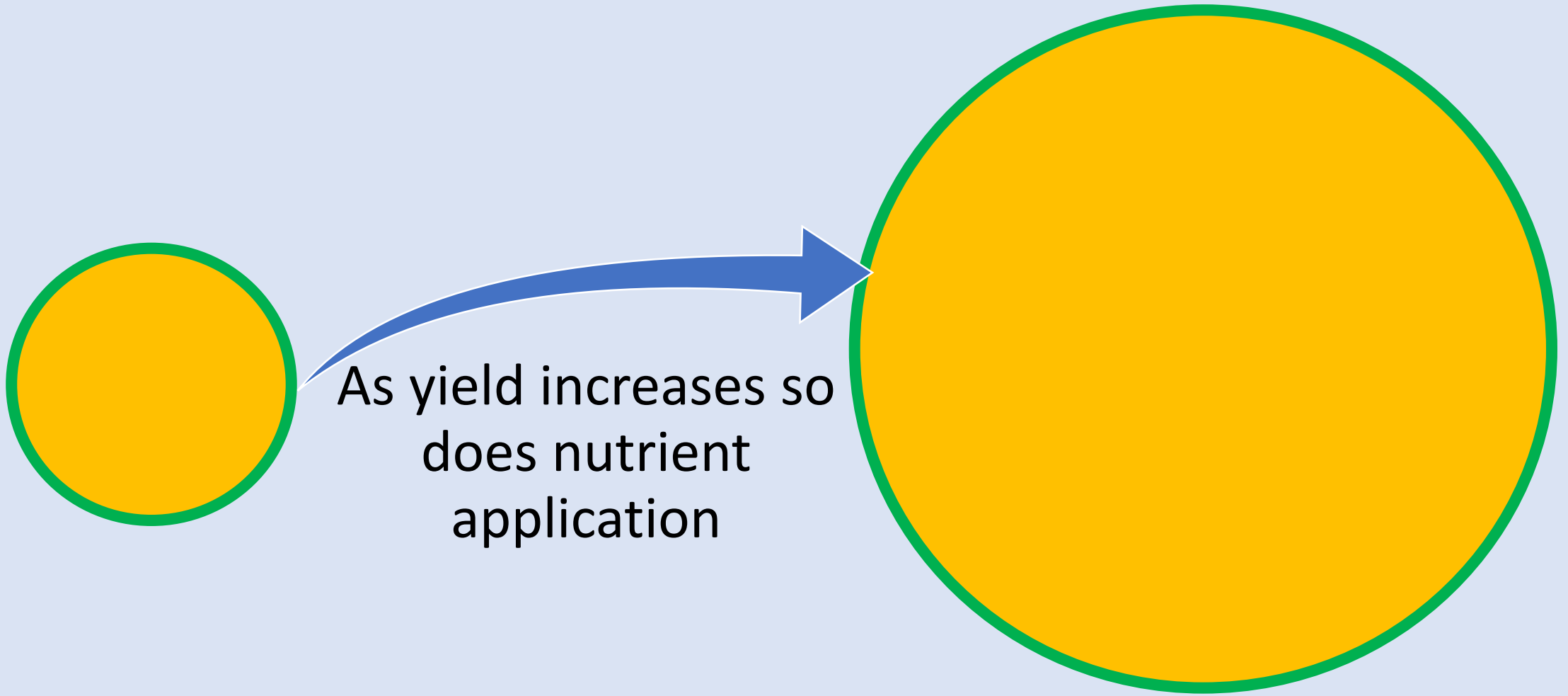
- Crop Yields – [Section 3.3](#)
- Grain Manure Acres – [Section 5.4.2](#)

# Why crop yields matter

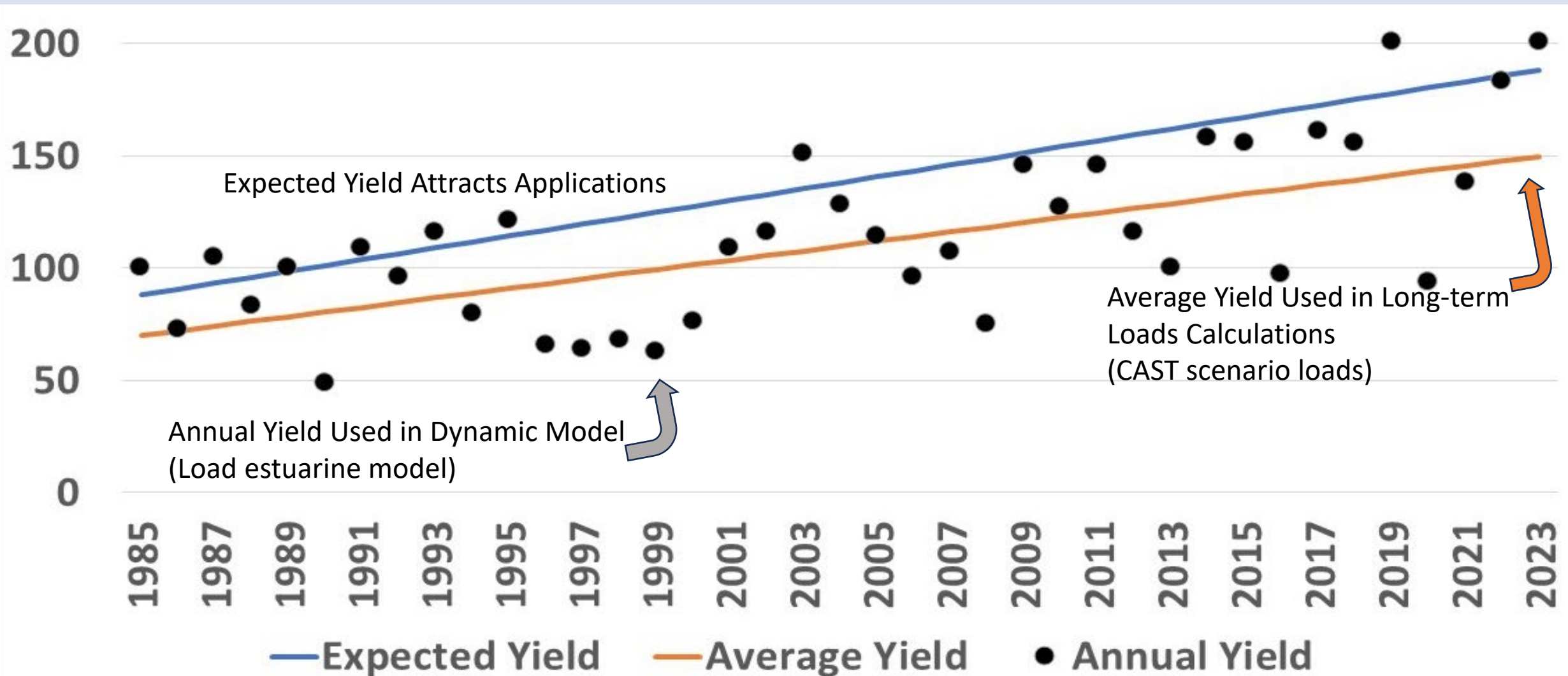
- Yields and nutrient applications are tied together



Think like a balloon



\*EXAMPLE  
DATA ONLY



# Status:

- Input on annual interpolations has been incorporated
- Long term trends are being worked on
  - Opportunity to provide further feedback

Questions?

# Grain Manure Acres: Last month

We discussed  
Land Uses

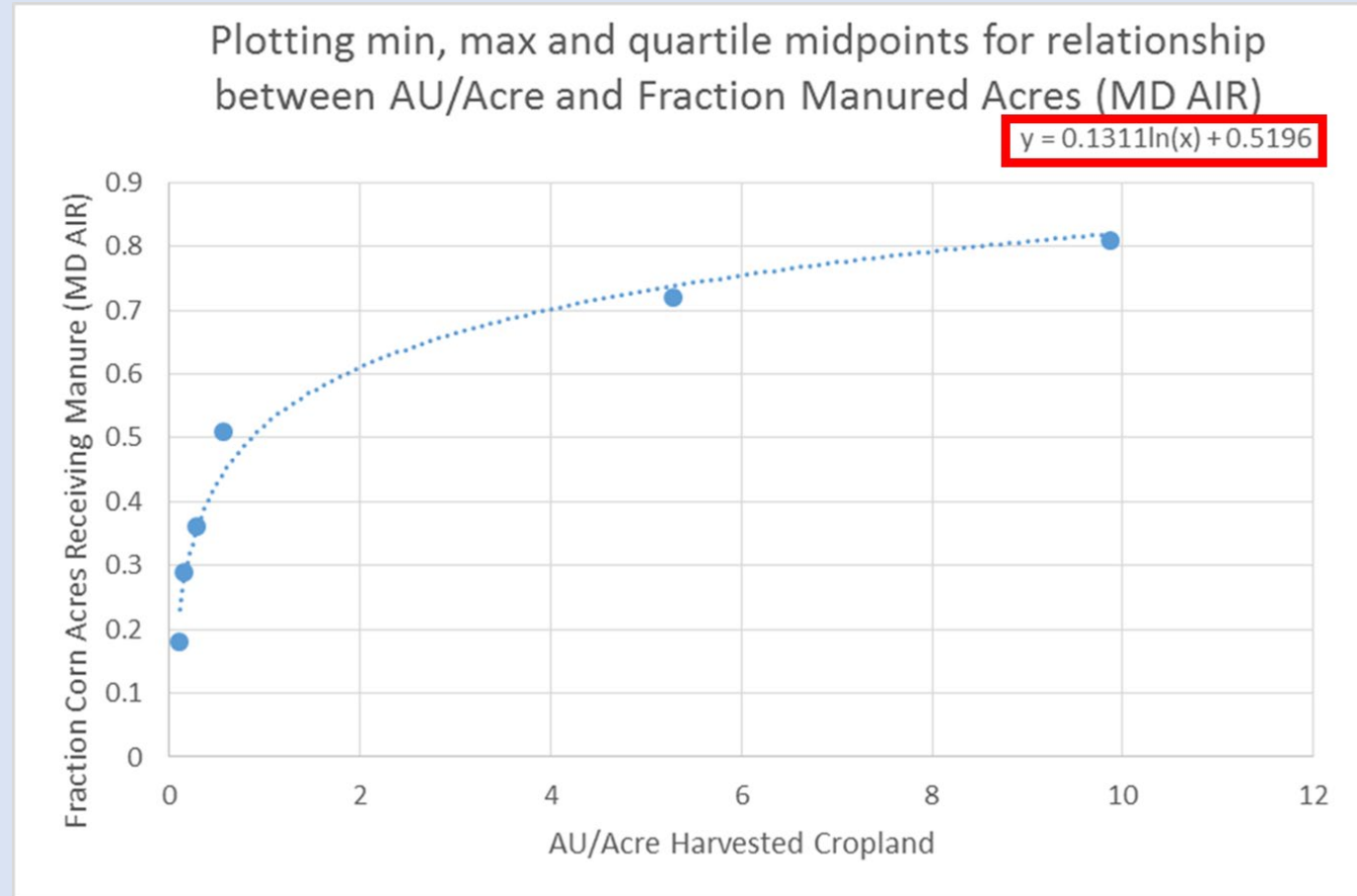
Several  
concerns with  
the grain  
manure acres

Can we  
improve the  
acres  
calculation?



# What we looked at

- The use of Animal Units
  - 1000 lbs of animal = 1 Animal Unit (AU)
- Fraction of acres receiving manure is constrained to be between 0.18 and 0.81.



# What are these data?

MD provided Annual Implementation Report (AIR) data

A relationship was determined using these data

- Number of Animal Units (Aus) impacted the number of acres eligible to receive nutrients from manure

Let's stop and think:

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What if we have different types of animals within a county?

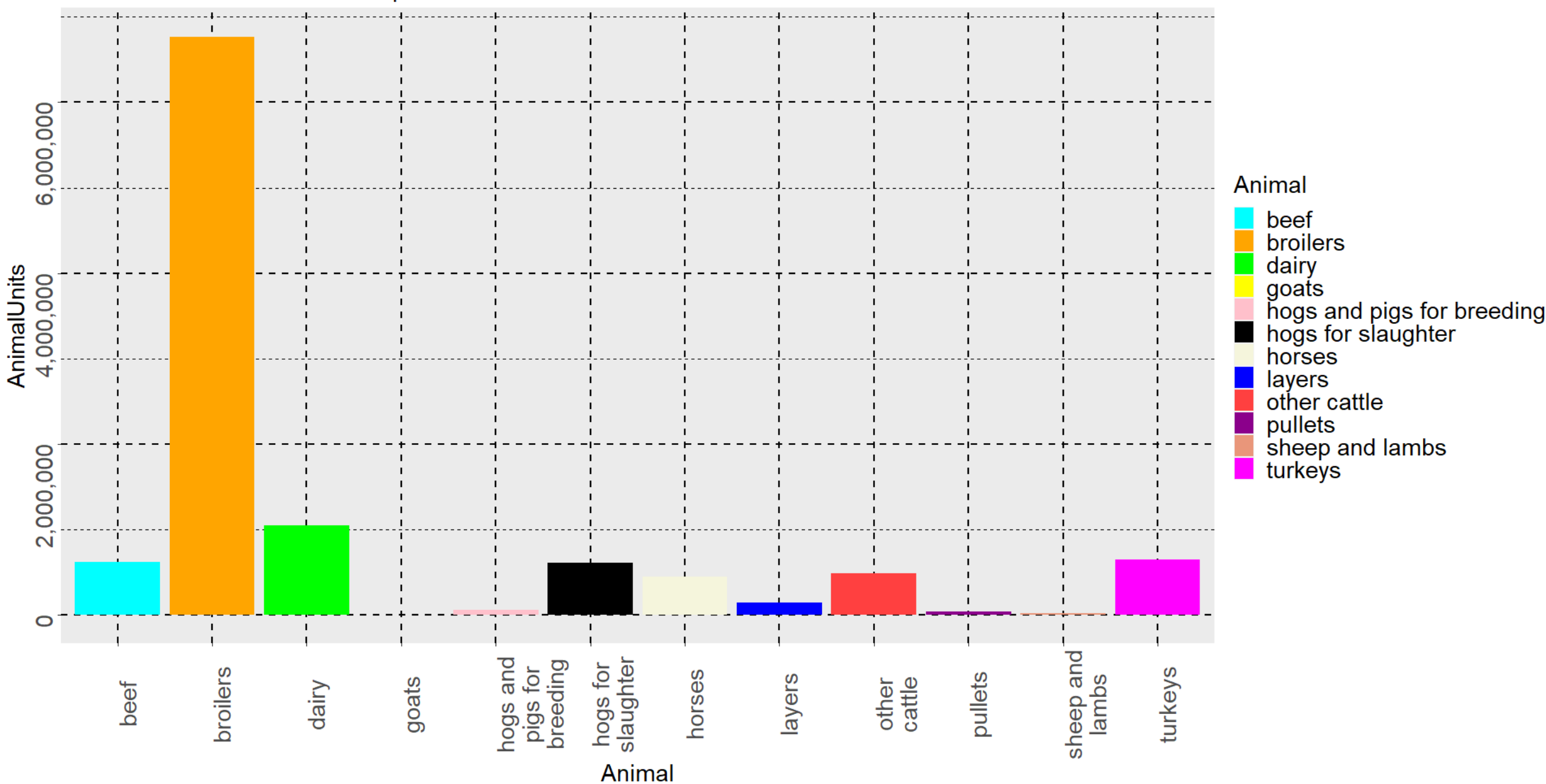
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How do we account for differences in the nutrient content?

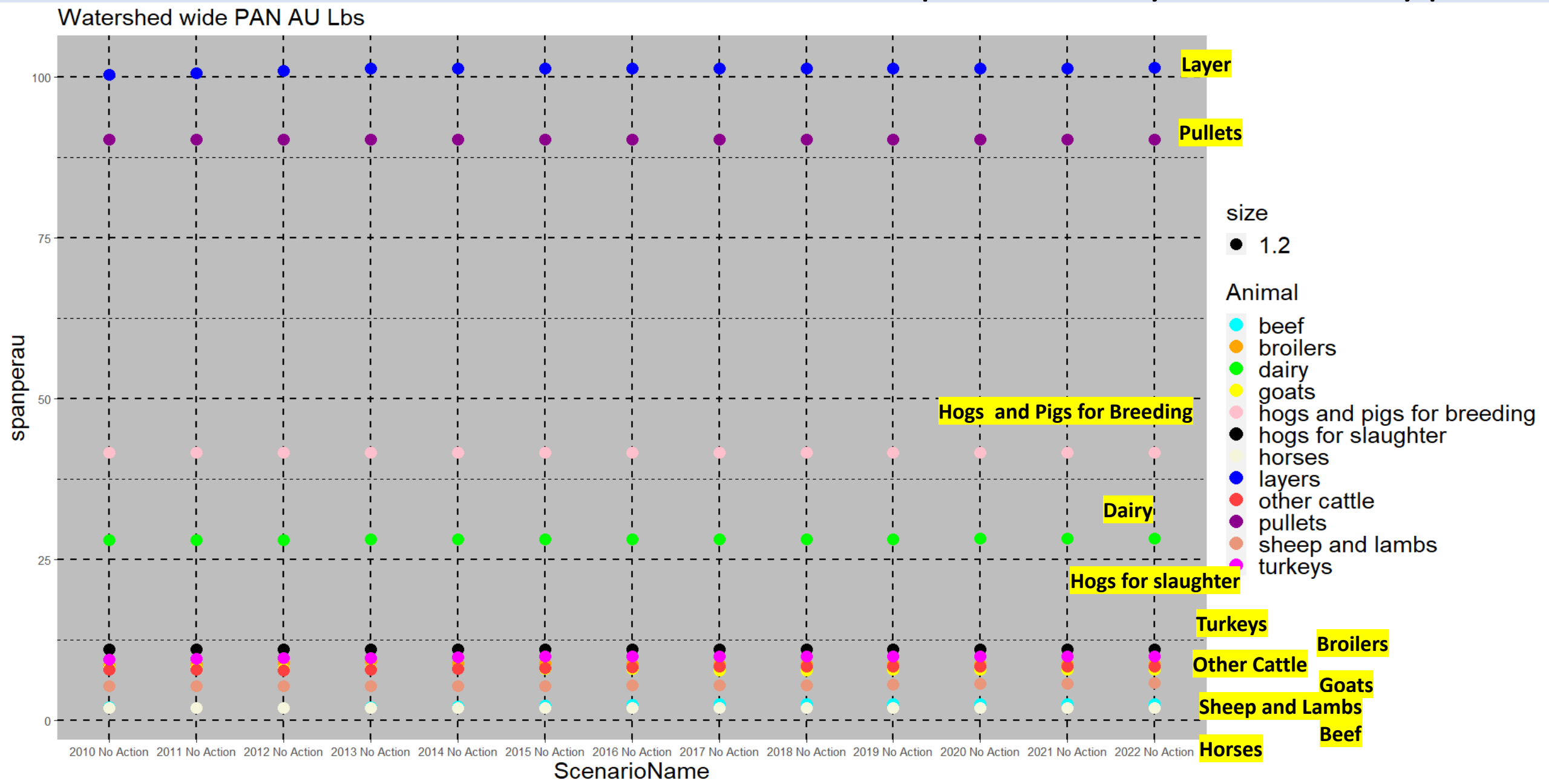
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Is there improved data on corn manure applications?

2022 Watershedwide AU's compared



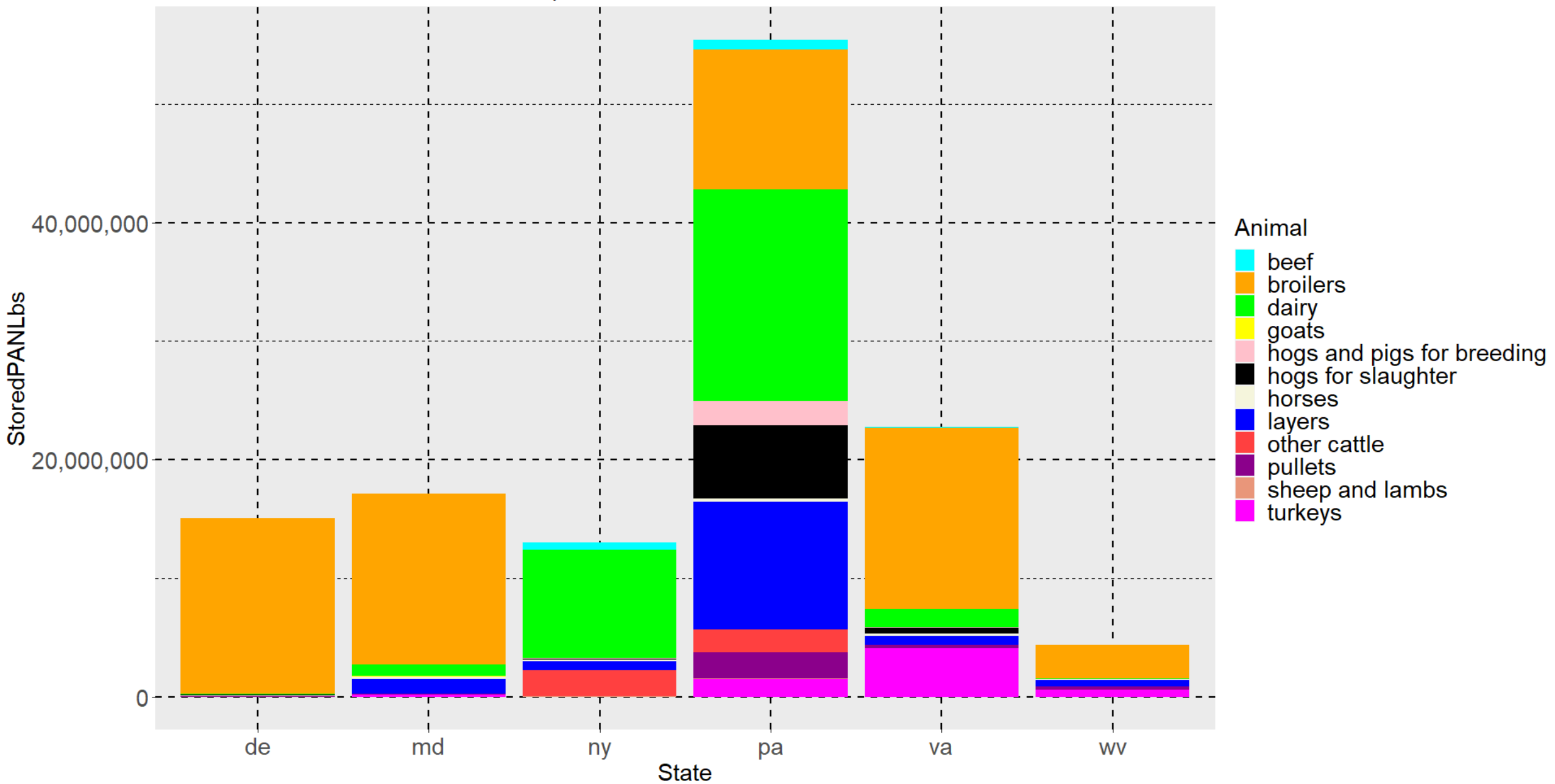
# Plant Available N in stored manure per AU by animal type:



[illegible]

beef
broilers
dairy
goats
hogs and pigs for breeding
hogs for slaughter
horses
layers
other cattle
pullets
sheep and lambs
turkeys

2022 Statewide AU's stored PAN compared



The question:

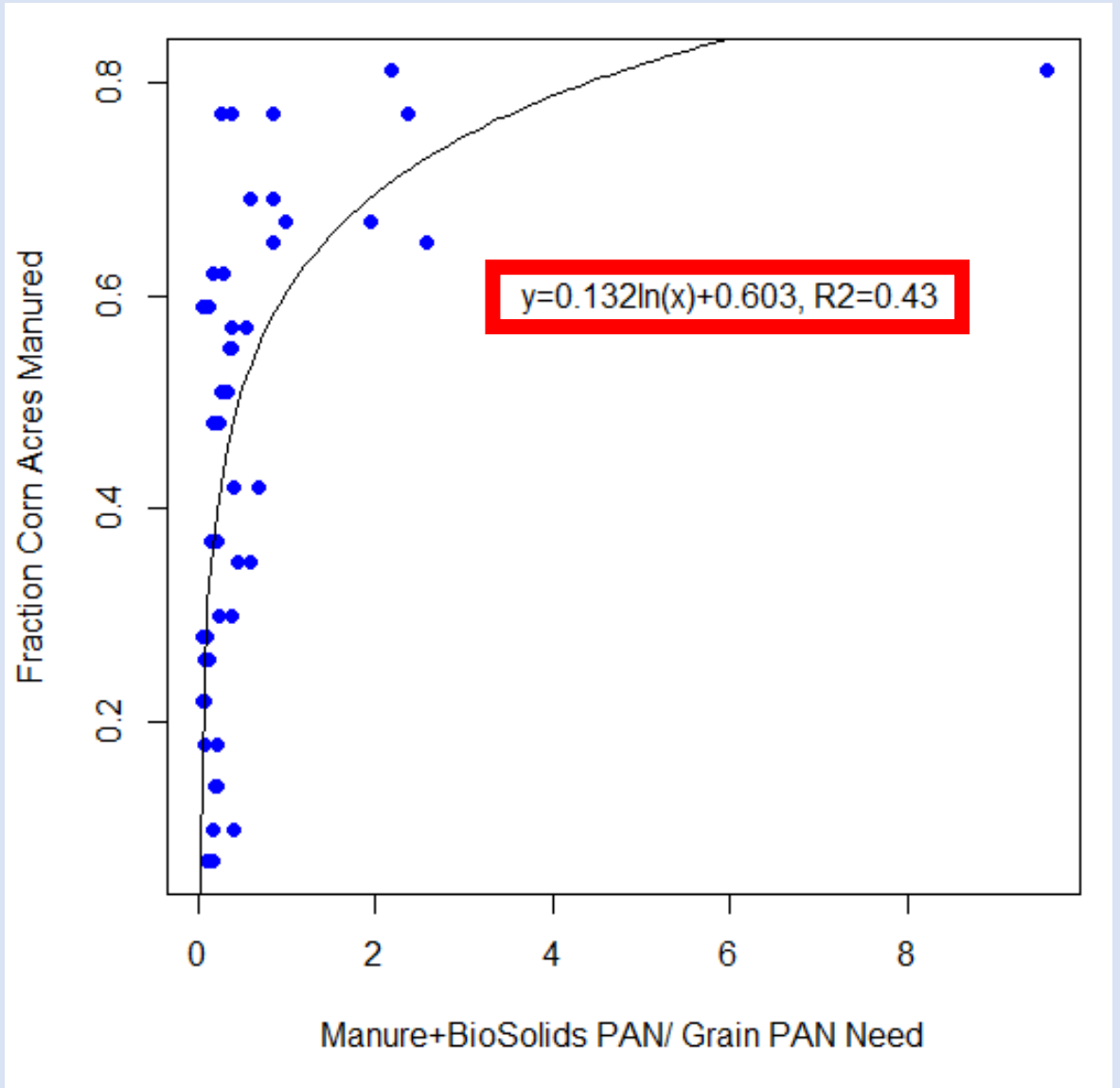
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Why would we use AU's if  
Plant Available Nitrogen (PAN)  
is what matters for things like  
nutrient management plans?

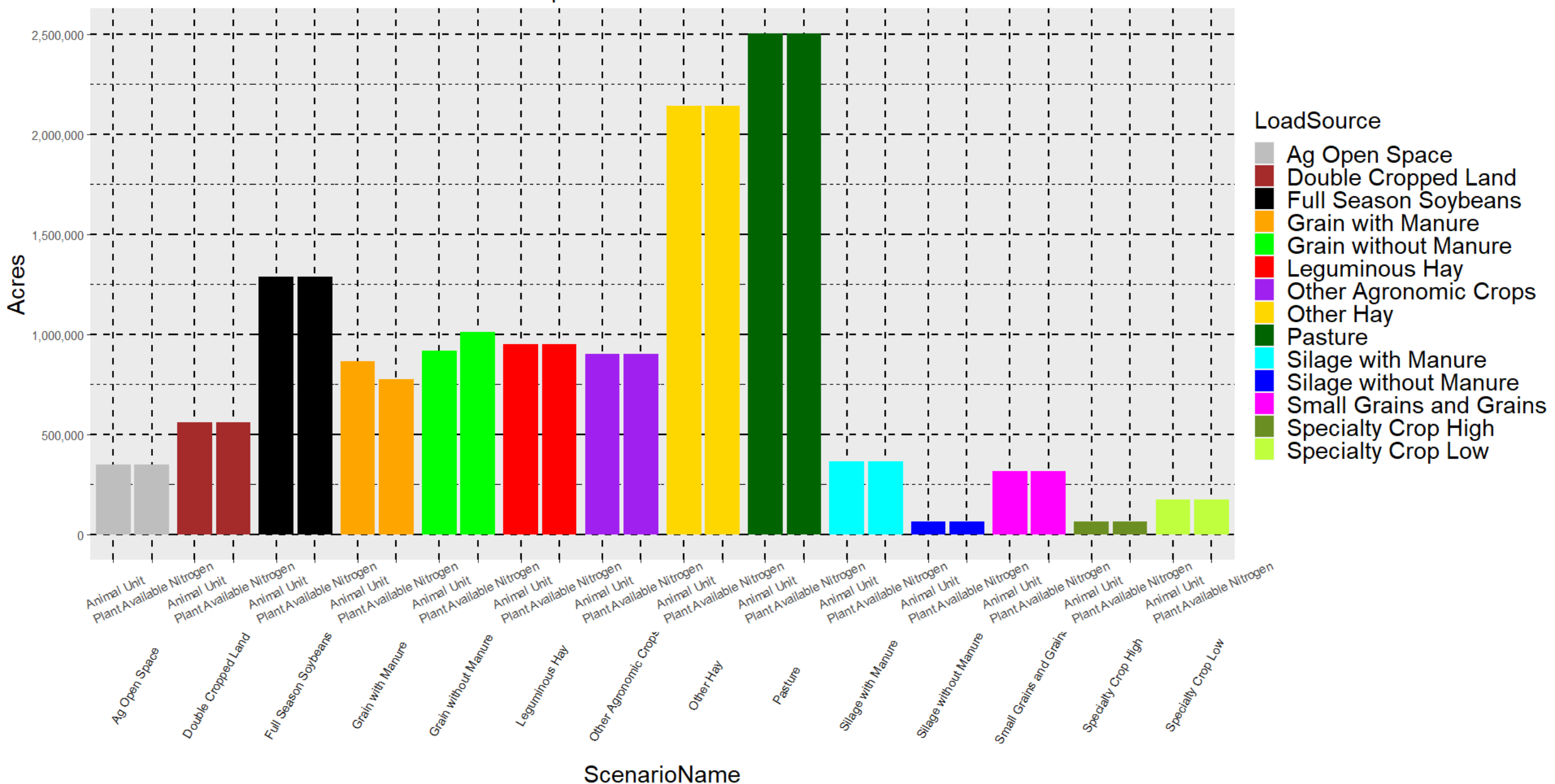


# Where did this lead us?

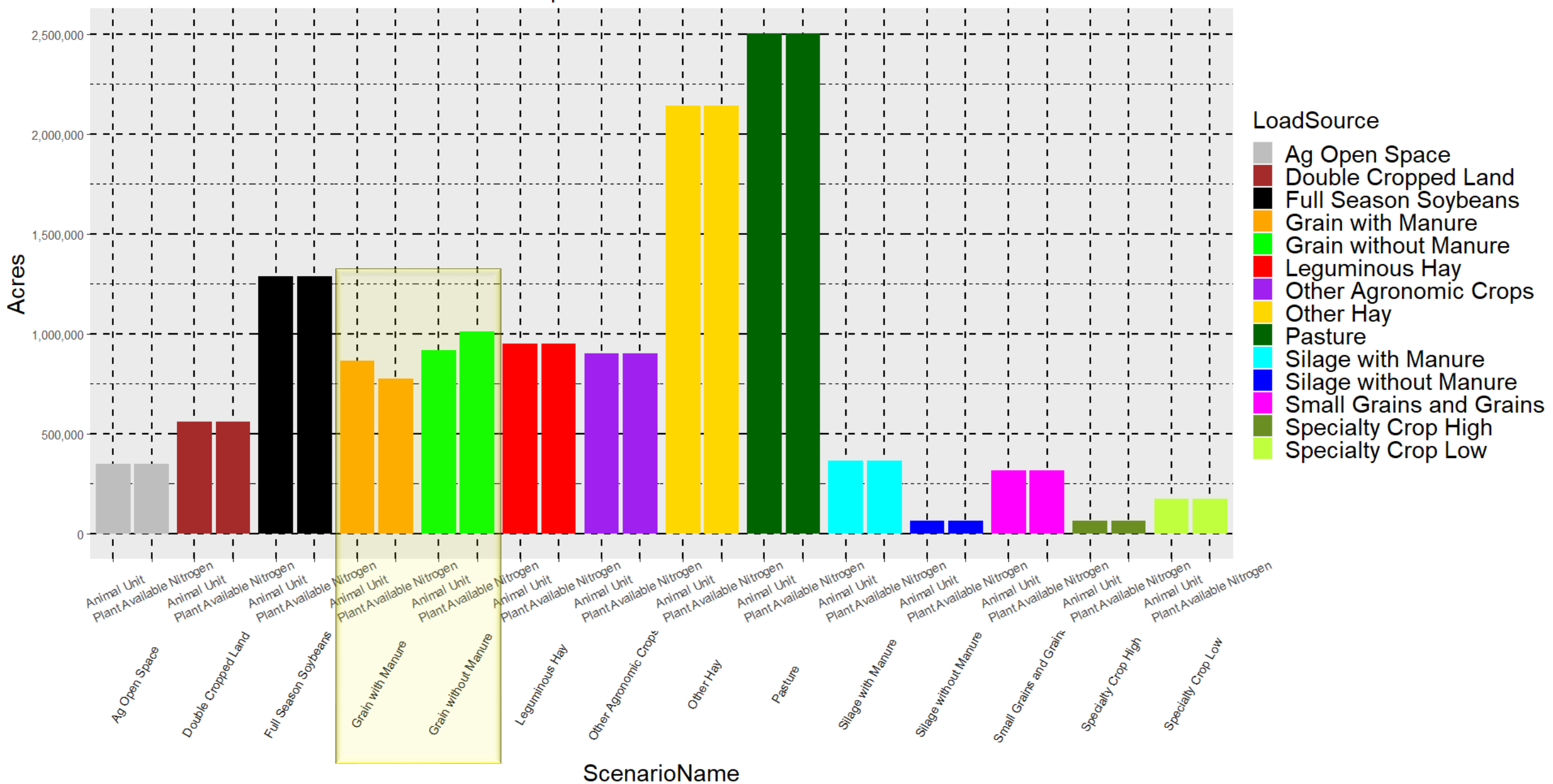
- Replaced AU's with PAN
- Grain specific nutrient need (crop need)
- Calculate the acres of grain with and without manure



Acres of each Land Use for AU vs PAN compared 2020



Acres of each Land Use for AU vs PAN compared 2020



# Main takeaways:

- PAN was said to be more relevant to Ag Nutrient Management planning than AUs
- PAN yields a different relationship to acres of grains which receive manure
- We will need to debate if this is an improvement

Questions?