Managing Cool Season Forages In Late Winter

Common Questions

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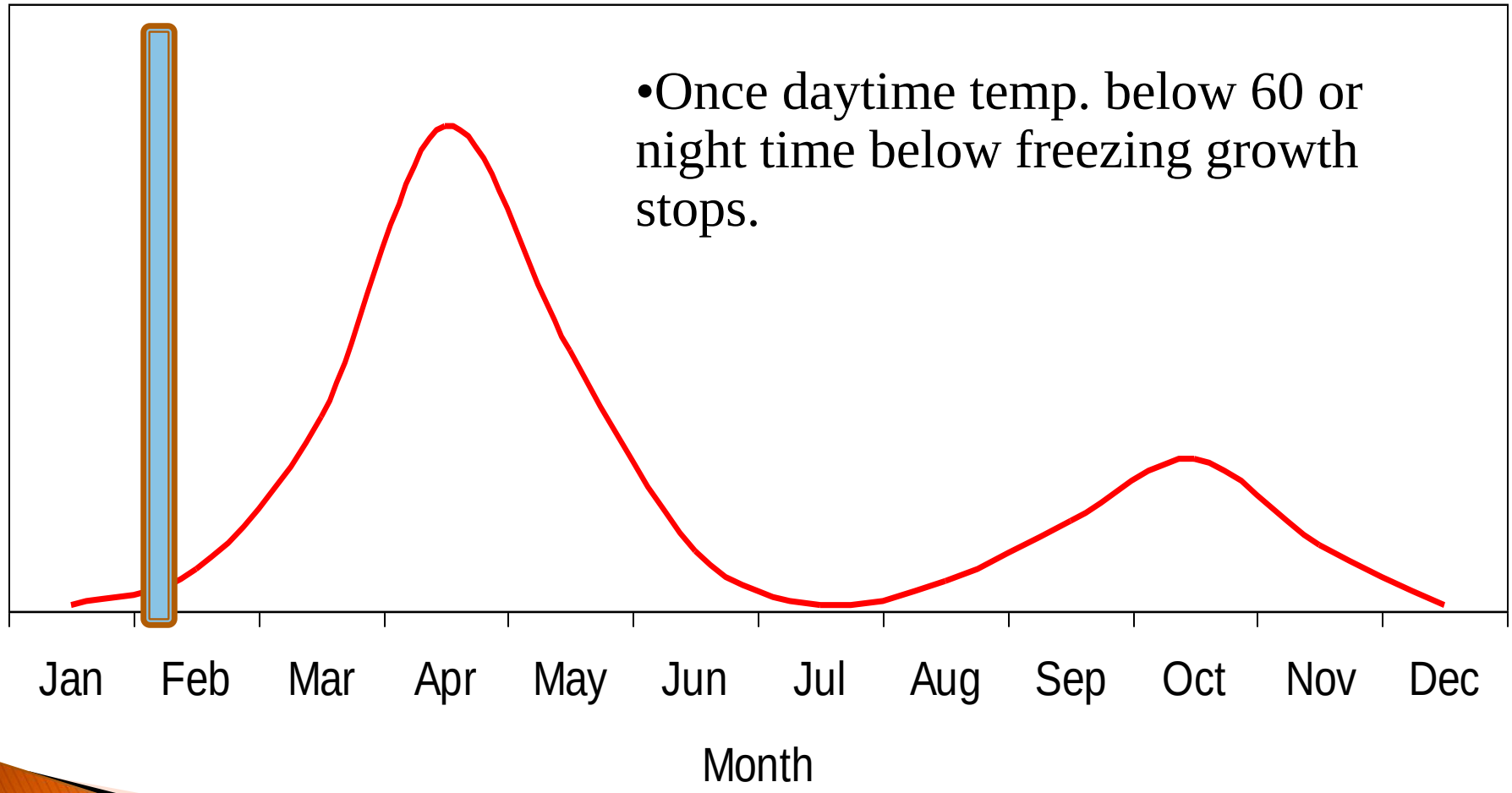
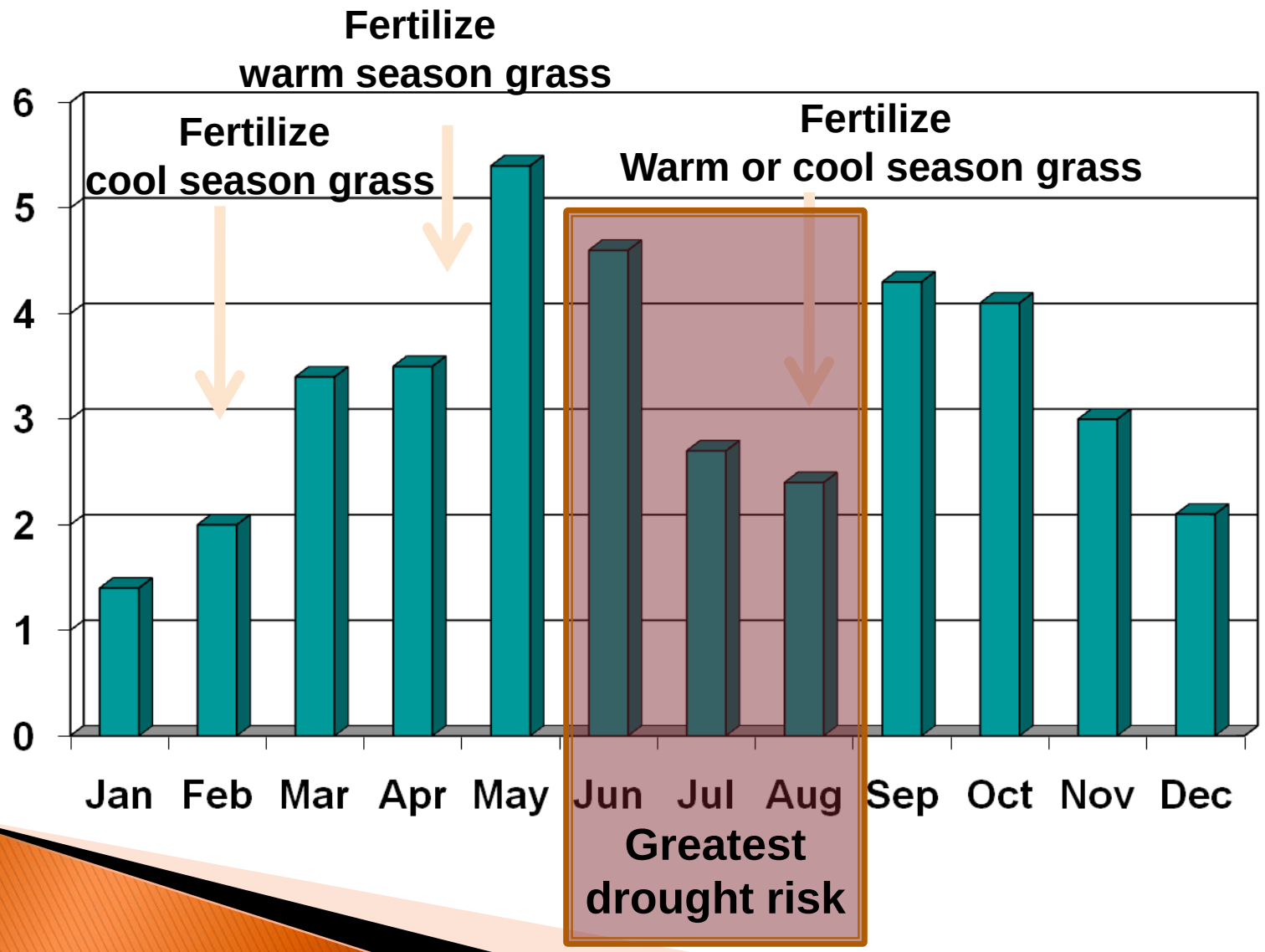
OSU | EXTENSION

Relative Growth Distribution of Cool-Season Forages



Rainfall for Okmulgee County

(1971–2000)



OSU Rules of Thumb – Fertility

- 1 acre will produce 1 ton of forage per year without fertility
- It takes 60 lbs actual N to make 1 additional ton of cool season grass
  - N Rich Strip + Greenseeker!
- Aim for Valentine's Day application (Feb 14)
- For most small grains, expect 2-4 tons of spring yield
  - 1 ton = 60 lbs N
  - 2 tons = 120 lbs N
  - 3 tons = 180 lbs N

What If Your Cool Season Pasture Will Be Limited?

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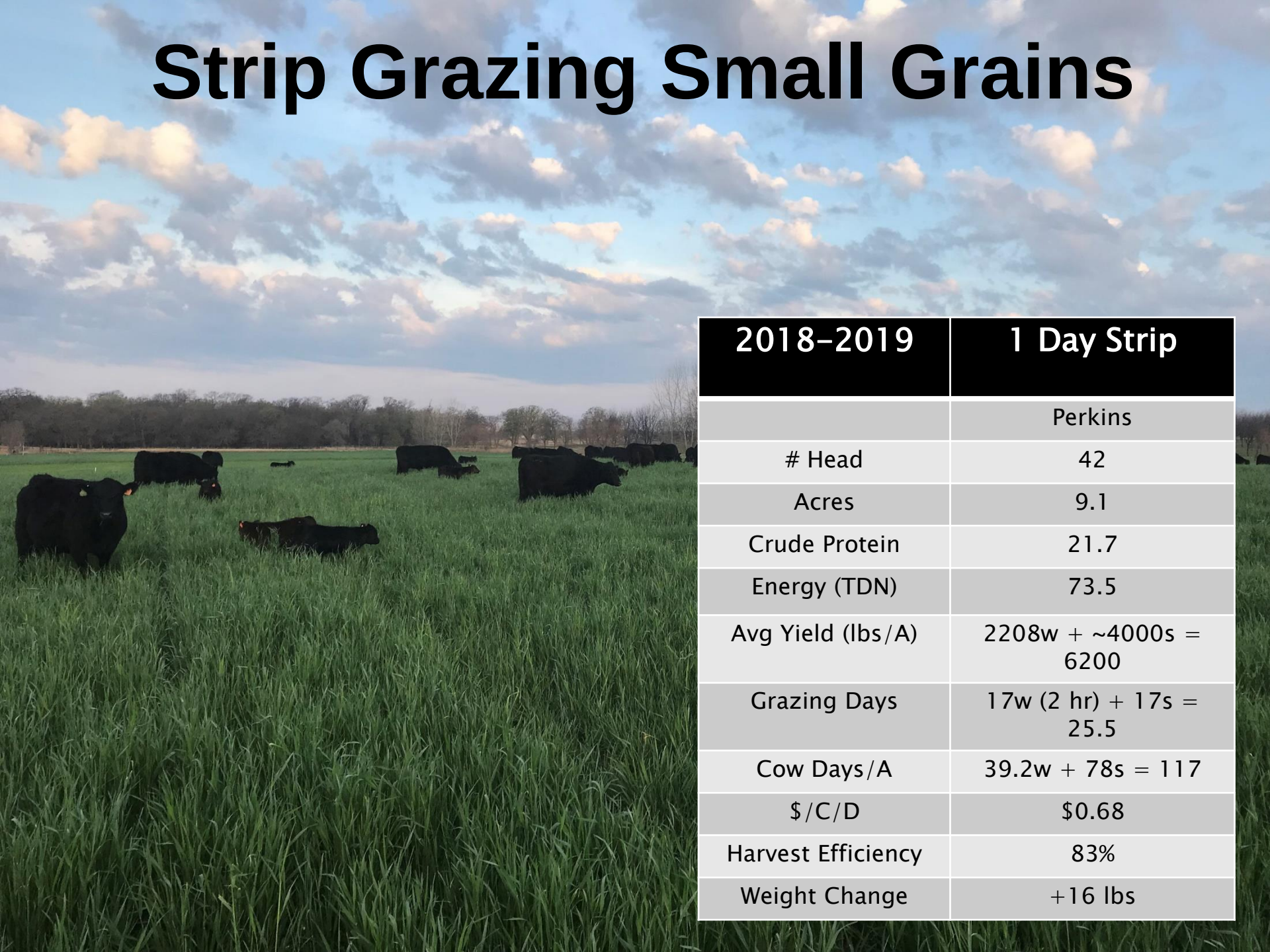
Strip Grazing Improves Utilization of Cool Season Forages
83% Harvest Efficiency


Timed Limit Grazing
2 hrs every Mon,
Wed & Fri

Strip Grazing Small Grains



2018-2019	1 Day Strip
	Perkins
# Head	42
Acres	9.1
Crude Protein	21.7
Energy (TDN)	73.5
Avg Yield (lbs/A)	2208w + ~4000s = 6200
Grazing Days	17w (2 hr) + 17s = 25.5
Cow Days/A	39.2w + 78s = 117
$/C/D	$0.68
Harvest Efficiency	83%
Weight Change	+16 lbs

Solar Panels!

- Grazing Strategy
  - Leave at least 50% green canopy cover at onset of winter!

Strip Grazed Small Grains In Various Stages of Regrowth Following Grazing

What If Your Cool Season Pasture Is Nonexistent?

EXTENSION

More Forage Needed!

- Following the second drought year of 2012 many were needing additional forage supplies to reduce hay feeding
- Most realized their predicament in Nov-Jan, too late for normal plantings
- Spring seeded small grains, ryegrass and legumes became a common question in County offices

Spring Seeded Forage Options

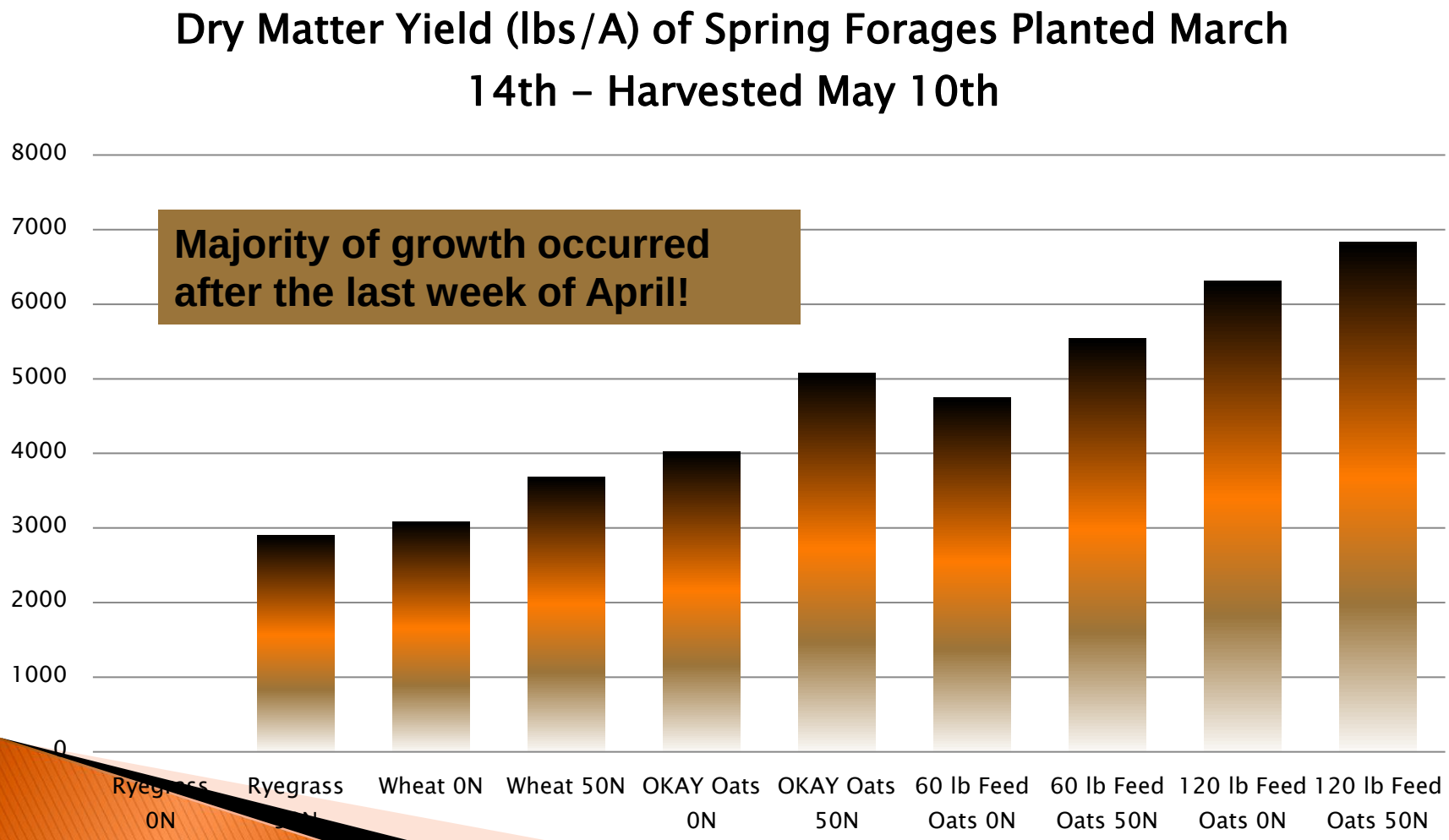
Gage Milliman & Brian C. Pugh
Nowata Co. Oklahoma
2013

Spring Seeding With a Goal – Nowata Materials & Methods

- March 14th, 2013
- Clean tilled seedbed
- Drill seeded
  - Annual Ryegrass @ 20 lbs/A
  - Ruby Lee Wheat @ 60 lbs/A
  - Okay Oats @ 60 lbs/A
  - Dry Feed Oats @ 60 lbs/A
  - Dry Feed Oats at 120 lbs/A
- Fertilized with either 0 or 50 lbs N as urea
- Samples were harvested from 3' x 5' area and weighed, subsamples dried for DM yield

Spring Seeded

March 14, 2013 planting
Tilled ground, drill seeded
0 or 50 lbs actual N as Urea @ planting (P&K adequate)
Harvested May 22, 2013
Significant growth following first of May!



Spring Seeded Forages Summary

- Spring seeding varieties did not produce significant yield until after last of April. This indicates the contribution to reducing winter feeding costs in the current year is questionable.

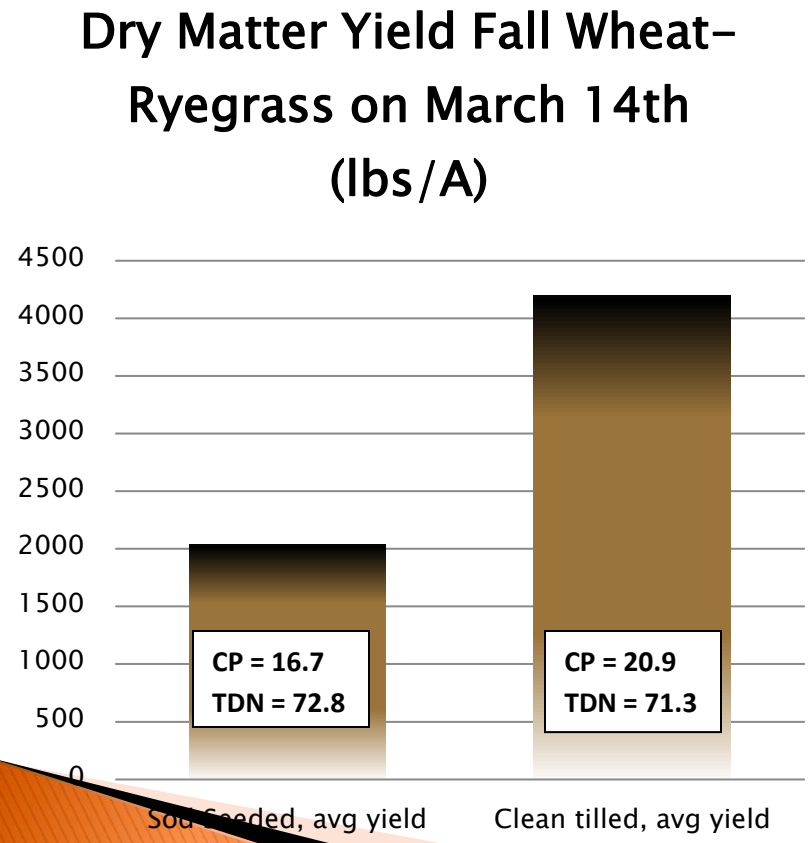
Spring Seeded Forages Summary

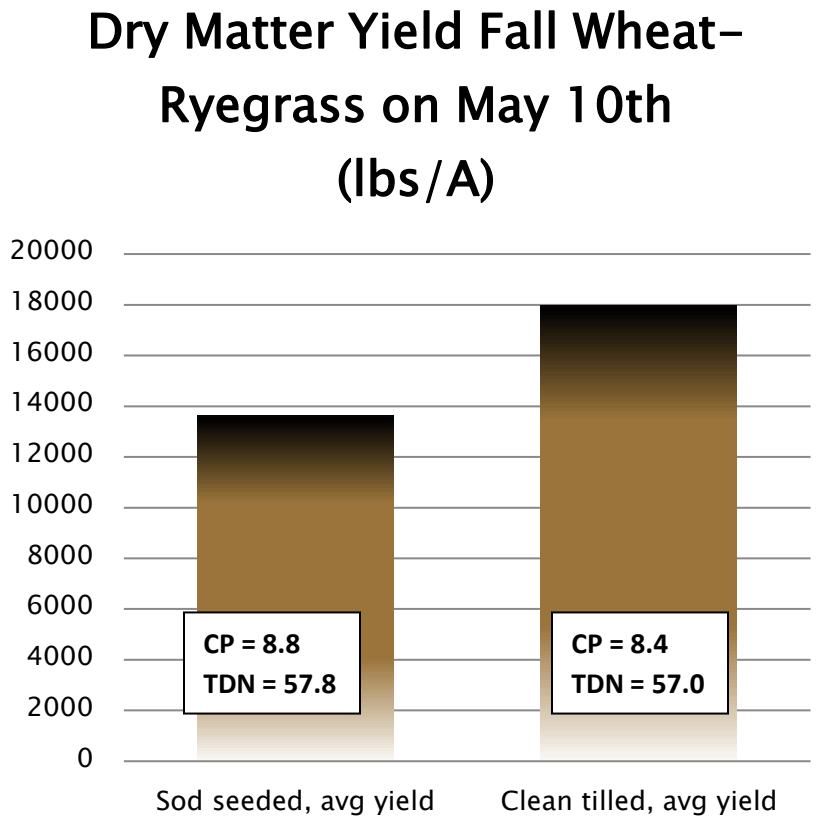
- Oats were the best option for DM yield
- Annual ryegrass and wheat were the worst
- Shows a great opportunity for “last minute” hay crop
- Great for replenishing haystocks for NEXT YEAR!

Proper Planning!

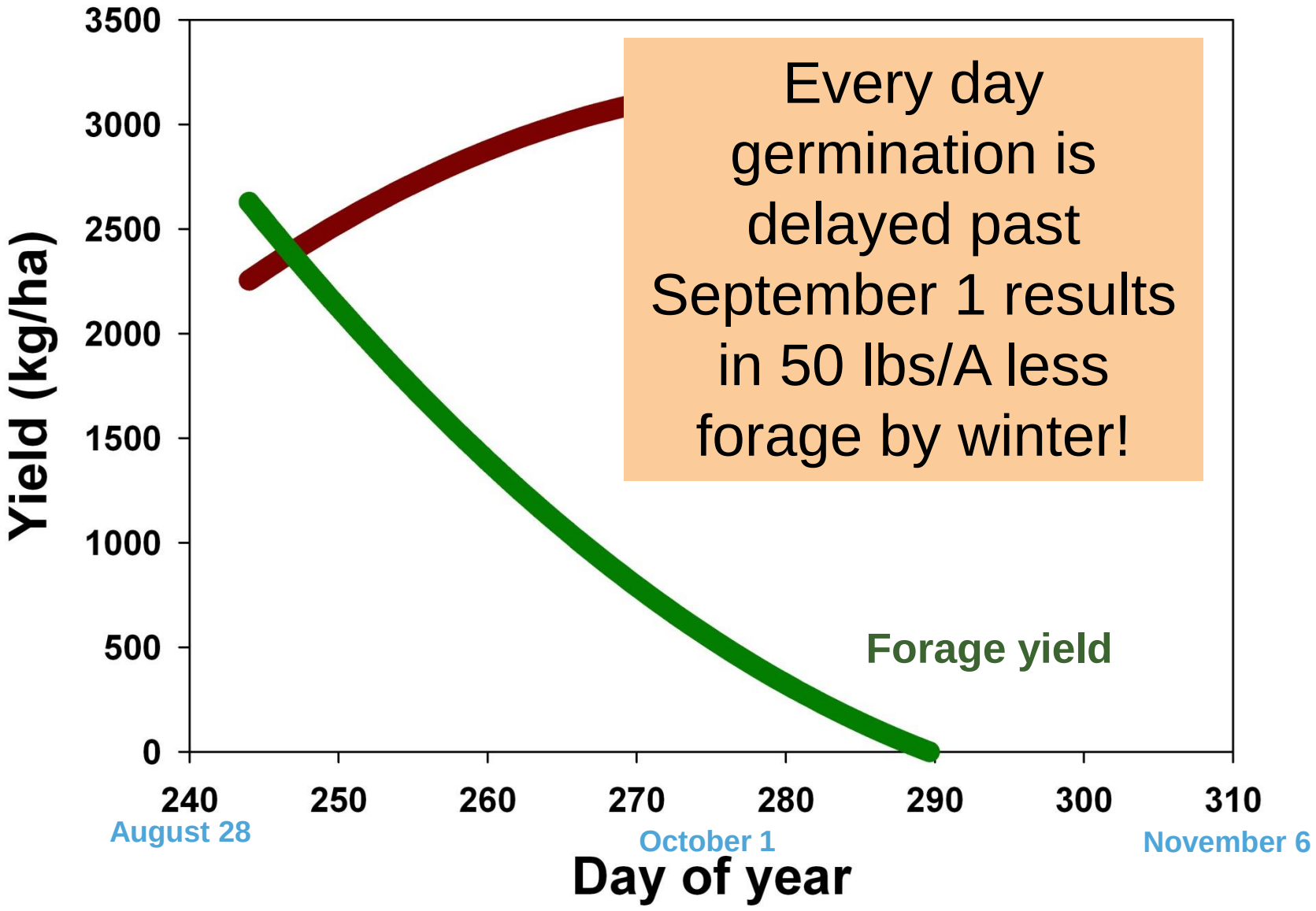
Fall Seeded Comparison

Early September planting following Bermudagrass
Lime, P & K to soil test rec. pre-plant
Half drilled on tilled ground, half no-till
100 lbs Wheat + 20 lbs Annual Ryegrass
46 lbs actual N as Urea @ planting
Sampled March 14th, 2013 – vegetative
Harvested May 10th, 2013 – headed (dough)





Planting date effects on wheat forage and grain yield



Summary

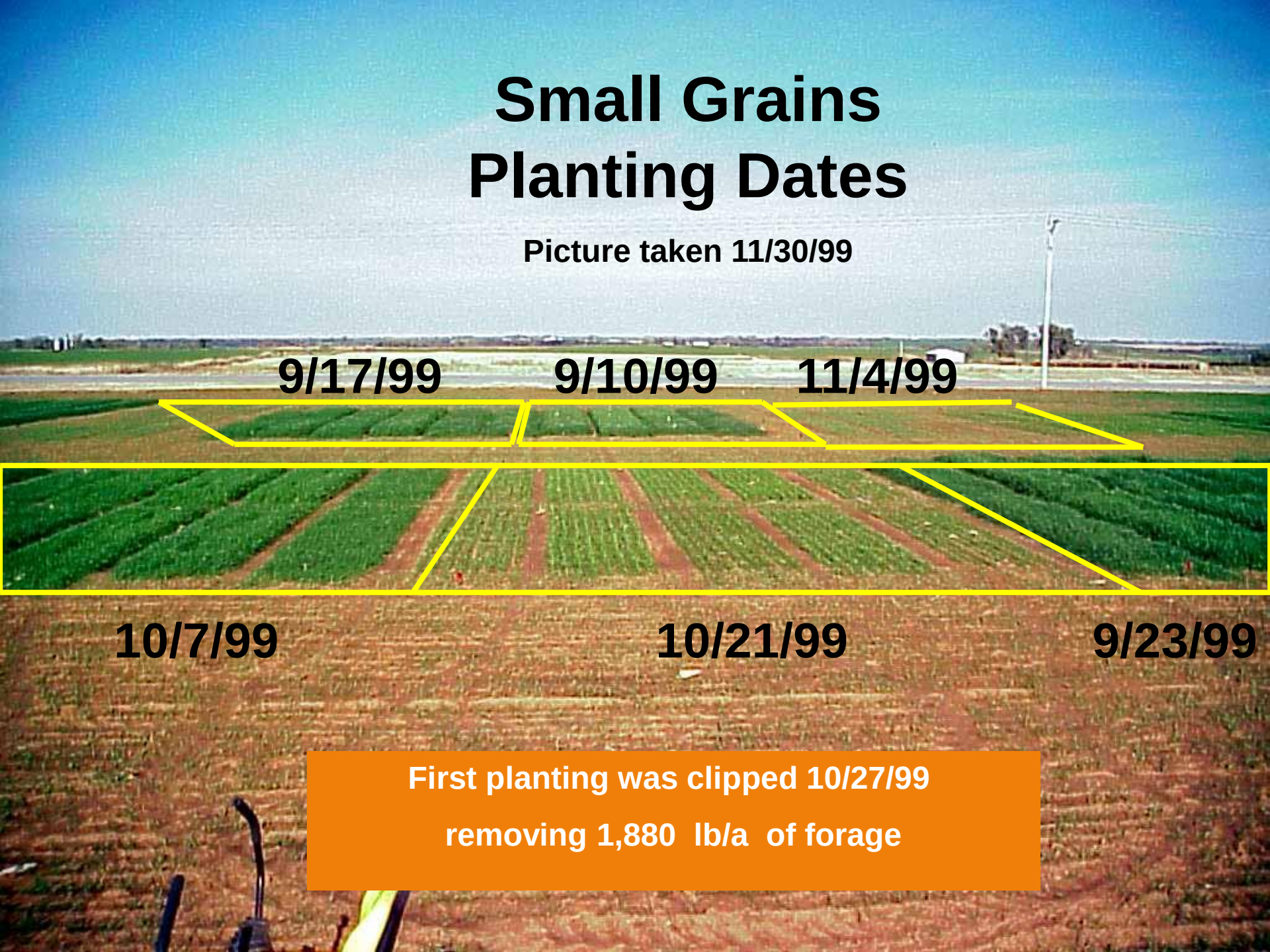
- Prior forage planning will ease drought effects!
- OSU trials have shown the benefit of early seeding for fall forage production
- Fall seeding beats spring seeding in OK!
- Follow fertility recommendations for optimum yields and economic returns

QUESTIONS?

EXTENSION

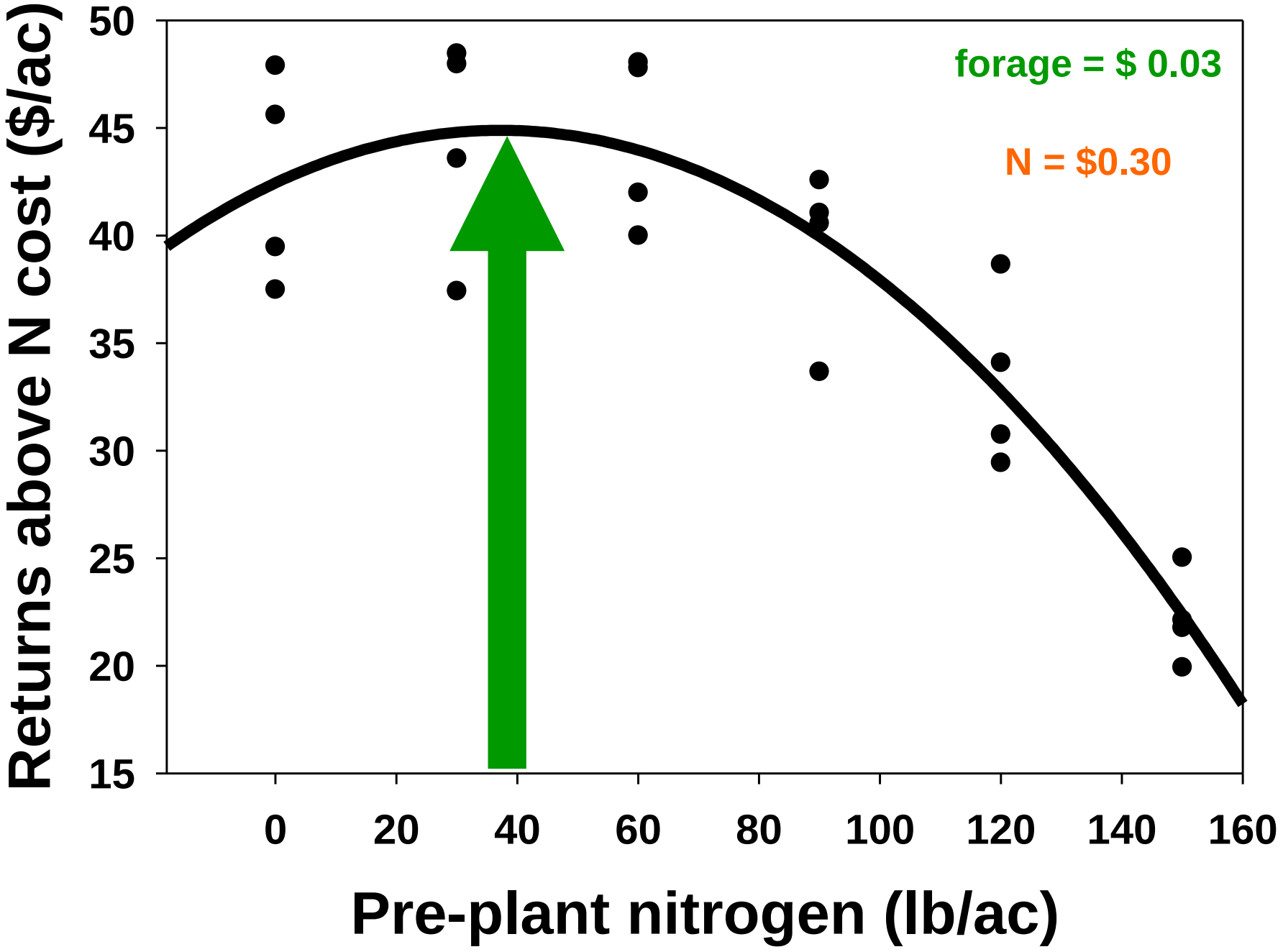
Small Grains Planting Dates

Picture taken 11/30/99

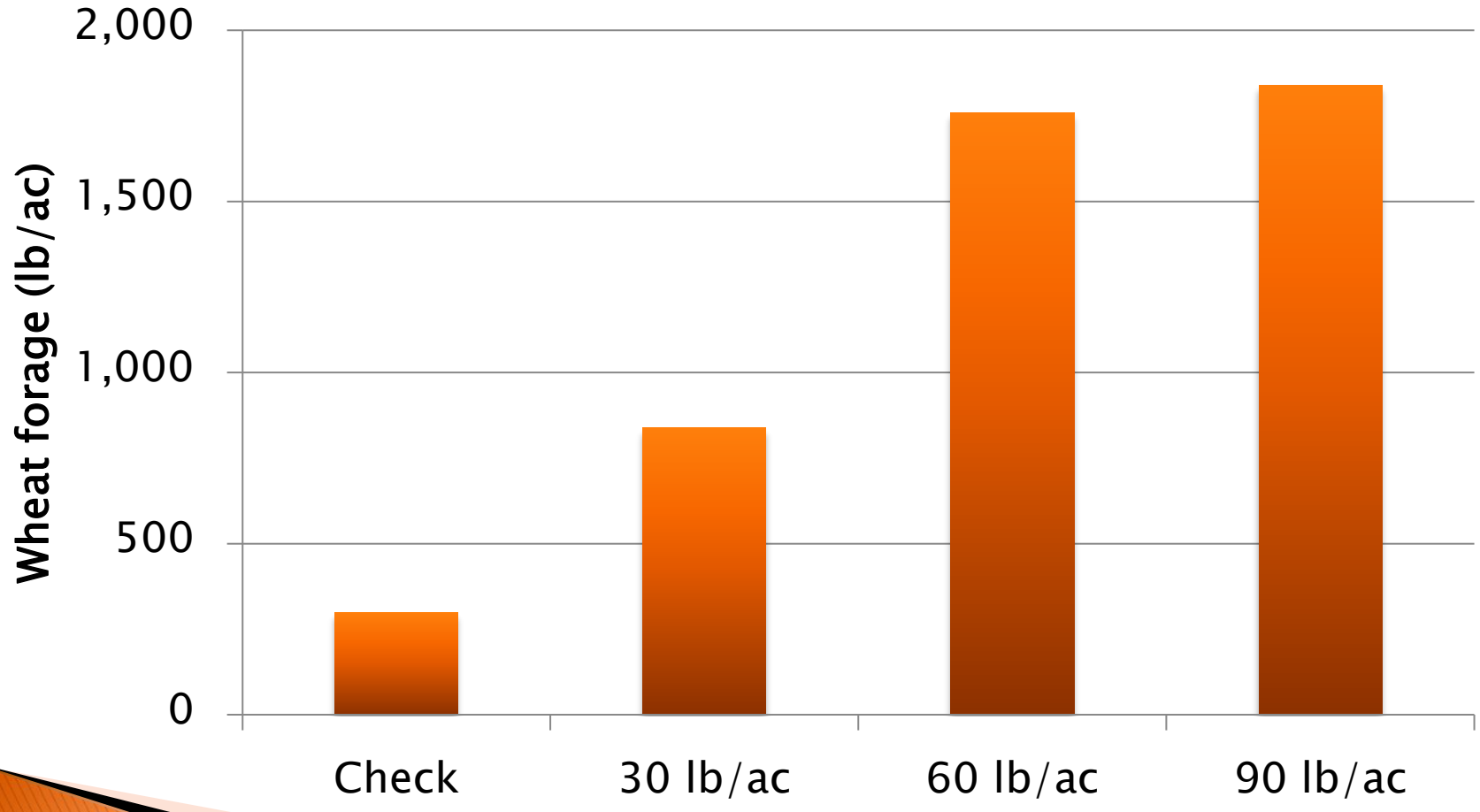


First planting was clipped 10/27/99

removing 1,880 lb/a of forage


forage = $ 0.03
N = $0.30
Returns above N cost ($/ac)
50
45
40
35
30
25
20
15
0
20
40
60
80
100
120
140
160
Pre-plant nitrogen (lb/ac)

Effect of in-furrow DAP on wheat forage yield



Spring Seeded Forages Conclusion

- Effectively reducing winter feeding through grazing of small grain forages requires proper forage budgeting in conjunction with a fall-seeded stand.
- Proper management is necessary for sod-seeded SG to ensure the greatest return in forage production.
- Sod-seeding may still be best left to fall-seeded stands due to the limitations of spring seeding