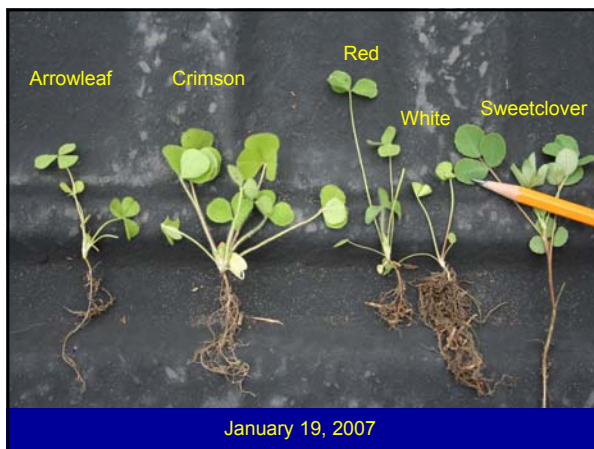
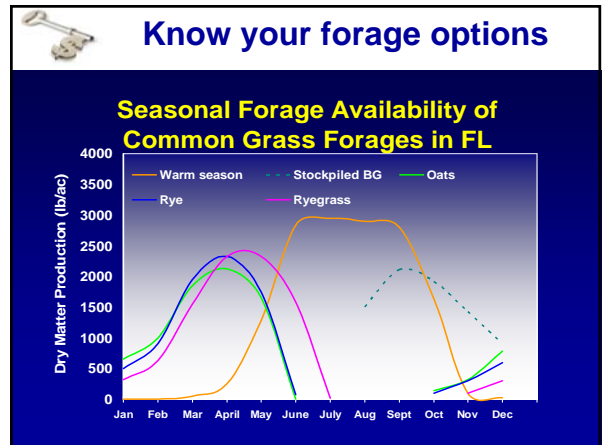




Whole Sale (\$/ton)


	Summer 2008	January 2009
Anhydrous ammonia	1000	500
Urea	800	300
DAP	1100	600
Potash	900	600

- No demand
- Crop prices ↓
- Natural gas ↓ (\$ 11 to 6 per million btus)



Species	Lb N fixed / Ac
Arrowleaf clover	113
Ball clover	84
Crimson clover	138
Rose clover	88
Red clover	112
Sub clover	159
Alfalfa	132-165
Peas	125 -150
Vetches	89- 111
Medics	111 - 131

Soil testing



UF Analytical Services Laboratory
 Extension Soil Testing Laboratory
 Wallace Building 401 FC Road 130740 Gainesville, FL 32611-0740
 Web: www.ufl.edu/ansl Fax: 352.392.6200

Profile Soil Test

Client Identification: 1 Site Name: 1000 Lab Order: 2012
 Ship: 001 - 0001 Legume or Legume grass seedling Report Date: 04/24/12

Show an optional soil recommendation on this report for selected soil samples with the optional optional fertilizer recommendation. The amount of fertilizer is based on the soil test results and the fertilizer recommendation. The fertilizer recommendation is based on the soil test results and the fertilizer recommendation. The fertilizer recommendation is based on the soil test results and the fertilizer recommendation.

SOIL TEST RESULTS AND THEIR INTERPRETATION

Parameter	Value	Interpretation
Soil pH	4.5	Acidic
Soil Salinity (EC)	0.2	Low
MEGACALCULATED		
PHOSPHORUS	0.05	Low
POTASSIUM	0.1	Low
MAGNESIUM	0.1	Low
CALCIUM	0.1	Low

LIME AND FERTILIZER RECOMMENDATIONS

Rate: 0.0 Soil Sample(s): 1000 (1000)

Phosphorus (P₂O₅): 0 Nitrogen: 0
 Potassium (K₂O): 100 Sulfur: 0
 Magnesium (Mg): 0 Zinc: 0

Fertilizer Recommendation

- Which nutrients?
- Optimum rate to apply.

Soil Chemical Condition

- Soil acidity - pH
- Salinity

Nutrient Uptake (per 2 ton DM) by 'Coastal' Bermudagrass

	Nutrient	Pounds/Acre
Primary	Nitrogen	100
	Phosphorus	28
	Potassium	96
Secondary	Calcium	16
	Magnesium	6
	Sulfur	8
Micro's	Copper	0.050
	Manganese	0.050
	Zinc	0.1



Bahagrass fertilization

	Low N	Medium N	High N
	----- (lb N/acre) -----		
	50	80	160
P ₂ O ₅	As per soil and tissue recommendation		
K ₂ O	---Low--- None	-----Med and High----- As per soil test recommendation	

Phosphorus fertilization

Soil Phosphorus Test	Tissue Phosphorus Test	Phosphorus recommendation
Med to High	→ Not necessary	→ None
Low to very low	→ P more than 0.15 %	→ None
Low to very low	→ P is 0.15 % or less	→ 25 lb/acre P ₂ O ₅





Establishment & Fertilization

- High quality seed, and adequate seeding rates
- Timely weed control and planting (moisture)



Weed % of newly established Bahiagrass

Seeding rate (lb/acre)	FL Riata	Tifton 9	Pensacola	Argentine	Mean
	-----%				
10	21	42	40	37	35 a *
20	18	35	40	34	31 a
40	12	10	29	20	17 b
60	17	16	31	32	23 ab
Mean *(p<0.05)	17 b*	24 ab	34 a	30 ab	

Newman et al (2008)

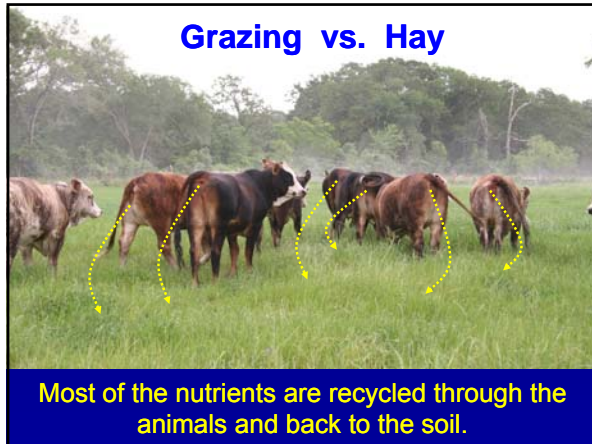
Bahiagrass seed price

	\$/#		\$/acre 20 #/acre	\$/acre 30 #/acre	
Pensacola	2.0	X	40	60	
Argentine	3.0	1.5X	60	90	
Tifton 9	4.0	2X	80	120	
Argent vs Pen				20	30
T-9 vs Pen				40	60

\$40 per acre/20 yr= \$2/acre, additional

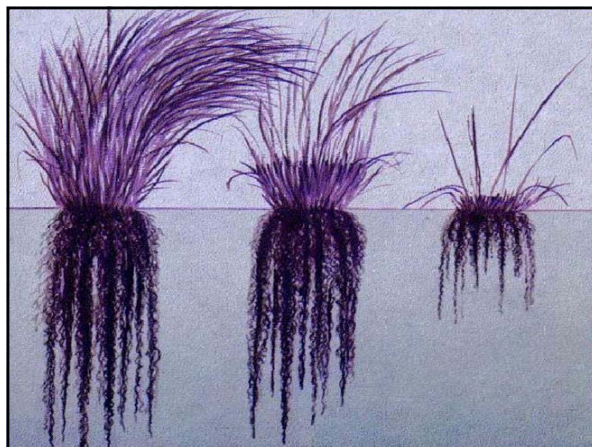
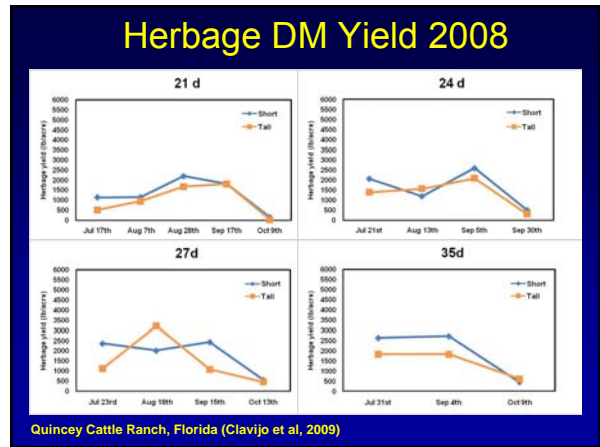
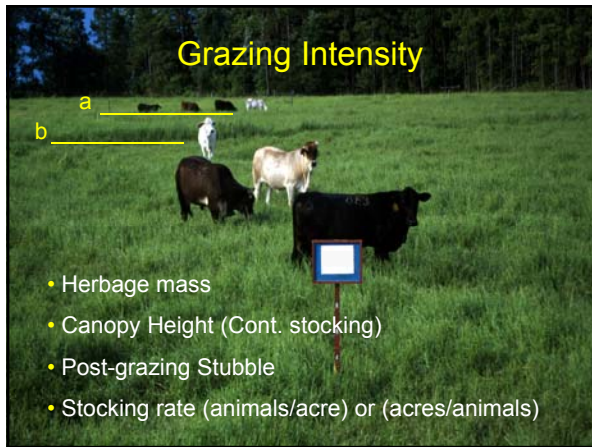
\$40 per acre/30 yr= \$1.3/acre, additional





Grazing Management

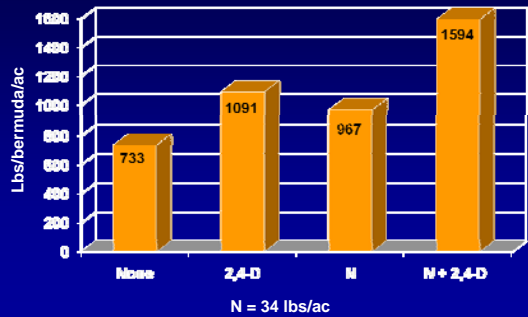
- * Grazing Intensity
- * Grazing Method
- * Timing



What now?

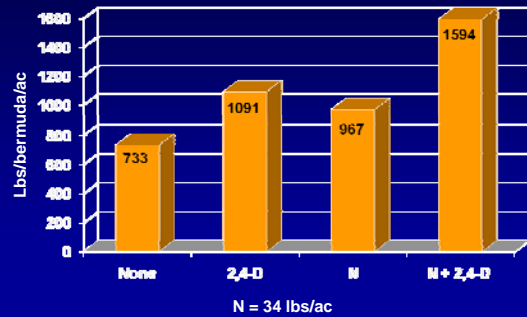
- Fuel was/is high, fertilizer is high, cattle prices down.
- What are the options?
 - Spray
 - Fertilize
 - Spray and fertilize
 - Mow
 - Do nothing

Bermudagrass, Ragweed and Nitrogen



25

34 lb N will cost \$20 - \$40/A
Herbicide will cost \$8 - \$25/A



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When should we spray?

- The earlier the better

Ona, FL

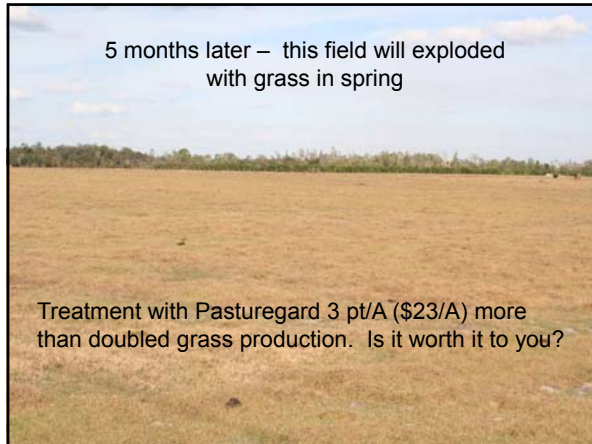
Dogfennel	Bahiagrass yield (lb/Acre)
None	5000
Removed April	3300
Removed May	3000
Removed June	2700
Removed July	1800
Removed August	2000

August dogfennel treatment –
Useless, right???



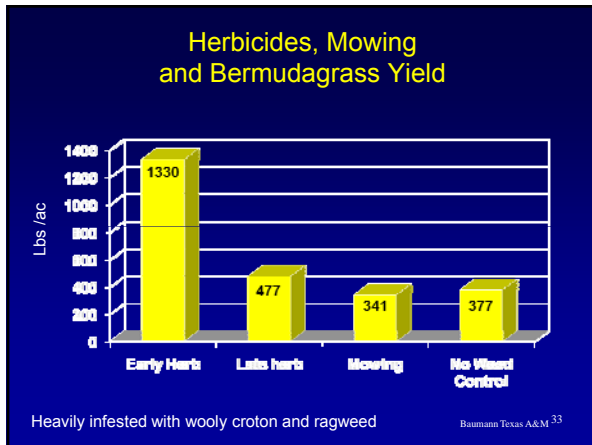
5 months later – this field will exploded
with grass in spring





- So, weed control and fertilize will give similar yields, but weed control is cheaper.
- What about mowing??

\$8 - \$25 \$8 - \$15



Mowing

CONS

- Too late to prevent competition.
- Perennials will regrow.

PRO

- May prevent weed seed production.
- May satisfactorily control of dogfennel.

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Mowing

Take home point

Do you really want to spend \$8 - \$15/A for inconsistent weed control?

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Do I spray or fertilize first?

- Spray first.
- Control existing weeds.
- Begin soil-test based lime and fertilizer program.

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Spray or Mow?

- I would only mow if it is for small areas.
- Large-scale mowing will cost more than it gives.



Basal Stem Spray

1. Stems should be less than 4 inches in diameter.
2. More effective on trees with smooth bark.
3. Can be done anytime. Easiest to do during the dormant season.



Mix: 80% diesel fuel or basal oil + 20% Remedy by volume. Or use Pathfinder to avoid the mess and smell with diesel.

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Courtesy of BASF

Weed Questions

Keys to Forage Profitability

- 🔑 Match forage quality to animal REQ.
- 🔑 Know fertilization needs
- 🔑 Use forage legumes
- 🔑 Manage weeds
- 🔑 Minimize mowing

We will survive this crisis!



Table 2. Establishment Costs per Acre (Bahigrass) – 2009 †

Concept	Unit	Quantity	Unit Price (\$)	Total
A. Operating Costs				
Soil Preparation				
Plowing	Passes	1.00	2.60	2.60
Disking	Passes	2.00	3.30	6.60
Planting and Fertilization ‡				
Seed (early spring-mid to avg)	Lbs	20.00	1.90	38.00
Planting	Passes	1.00	1.41	1.41
Chalkpacking	Passes	1.00	1.22	1.22
Nitrogen (7-10 days AP)	Lbs	30.00	0.60	18.00
Nitrogen (30 days AP)	Lbs	50.00	0.60	30.00
PDS (low - soil test) (7-10 days AP)	Lbs	25.00	0.73	18.25
K2O (low - soil test) (7-10 days AP)	Lbs	25.00	0.85	21.25
K2O (low - soil test) (30 days AP)	Lbs	25.00	0.85	21.25
Micronutrients*	Lbs	6.15	5.00	30.75
Lime (2 ton per acre every 2 yr)	Ton	1.00	24.00	24.00
Weed Control				
Mowing (planting to 6")**	Passes	2.00	4.00	8.00
Herbicide after 6"	Gals	0.25	69.22	16.31
Labor	hr	2.00	8.50	17.00
Interest (operating cost)	\$	191.48	0.00	17.23
Total Operating Costs				271.87
B. Ownership Costs				
Tractor & Machinery (depreciation, insurance, taxes)	Acres	1.00	21.10	21.10
Land charge	Acres	1	25	25.00
Miscellaneous Overhead (10% of total operating costs)	\$	271.87	10.00%	27.19
Total Ownership Costs				73.29
C. Total Costs (A + B) (Bahigrass Establishment per Acre)				345.14

† This budget is for planning purposes only.

‡ Fertilization and liming should be based on a soil test.

* Includes 1.5 lb each of elemental Zn, Mn, Cu, & Fe from a sulfate source. 0.15 lb B & 5 lb S per acre.

** 2 passes - to control weeds, weeds are mowed at 6-8" height back to 2" height.