



Range Cattle Research and Education Center - Ona FL

Grazing management

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Forage Specialist

Warm-season grasses general characteristics

Species	Pros	Cons
Bahiagrass	Persistence Low maintenance	Production Nutritive value
Bermudagrass	Production Nutritive Value	Wet areas Overgraze Soil fertility
Stargrass	Production Nutritive Value	Cold Overgraze Soil Fertility
Limpograss	Winter production Nutritive value	Overgraze Soil Fertility

Warm-season legumes



Aeschynomene

Perennial peanut



Soil testing

UNIVERSITY OF FLORIDA EXTENSION
UF/IFAS EXTENSION SOIL TESTING LABORATORY
Wallace Building 631 PO Box 110740 Gainesville, FL 32611-0740
Email: soiltest@ufl.edu Web: soiltest.ufl.edu

Producer Soil Test

Client Information:
Cynthia B. Baskett
Alachua County Coop Ext Service
2800 NE 39th Ave
Gainesville, FL 32609-2038
Tel: 352/905-2402
Email: CBaskett@ufl.edu

Client Identification: A1
Site Number: 1539 Lab Number: 80741

Crop: Cool season annual Grasses (small grains and ryegrass) Plant Date: 15-Nov-02

These interpretations and recommendations are based upon soil test results obtained in conjunction with the specified crop under Florida's growing conditions. We do not see soil for P or there is no nitrogen and see the potential for availability. Thus, the N recommendation is based upon the amount of available nitrogen in the soil and the nitrogen in the fertilizer. If you require nitrogen services please refer to the nitrogen service such as fertilizer recommendations given below to guide in nitrogen application and indicate that request from the fertilizer recommendations given below to guide in nitrogen application.

SOIL TEST RESULTS AND THEIR INTERPRETATIONS

Topsoil pH:	6.0
pH (1:2 Sample:Water):	6.0
A-S Buffer Value:	8.6

SUBSTANCE EXTRACTABLE	V LOW	LOW	MED	HIGH	V HIGH
PHOSPHORUS (ppm P)	1	2	3	4	5
POTASSIUM (ppm K)	15	20	25	30	35
MAGNESIUM (ppm Mg)	100	150	200	250	300
CALCIUM (ppm Ca)	600	800	1000	1200	1400

LIME AND FERTILIZER RECOMMENDATIONS

Crop: Cool season annual grass (small grains and ryegrass)

Lime: 0.0 lbs per acre (1 Ton = 2000 lbs)

Nitrogen: lbs per acre

Phosphorus (P₂O₅): 80 lbs per acre

Potassium (K₂O): 80 lbs per acre

Remarks: per ground whenever applicable. These fixtures are an integral part of fertilization recommendations. See soiltest.ufl.edu

Weed Control



Species

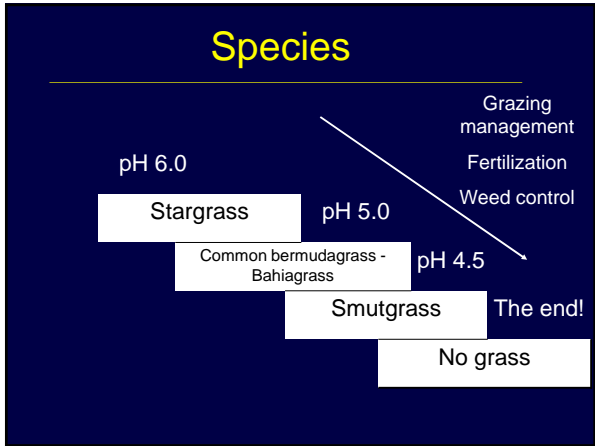
Stargrass

Common bermudagrass - Bahiagrass

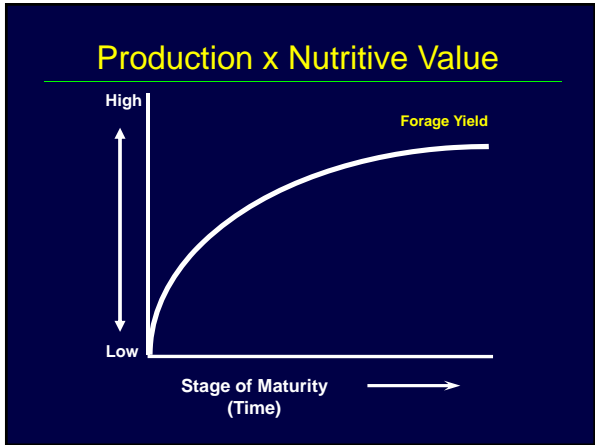
Smutgrass

No grass

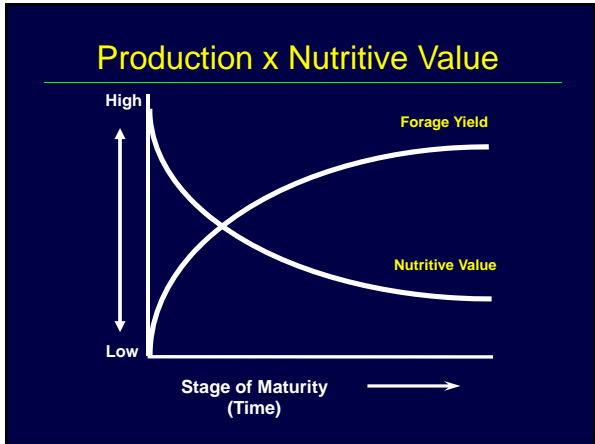
Species



Production x Nutritive Value



Production x Nutritive Value



Forage Nutritive Value



Water (~ 80%)

Dry Matter (~ 20%)

Forage Nutritive Value



Hay

Water (~ 20%)

Dry Matter (~ 80%)



Silage

Water (~ 65%)

Dry matter (~ 35%)

Forage Nutritive Value

Dry Matter

- Protein
- Lipids
- Sugars
- Starch
- Pectin
- Cellulose
- Hemicellulose
- Lignin
- Mineral
- Vitamins

Forage Nutritive Value

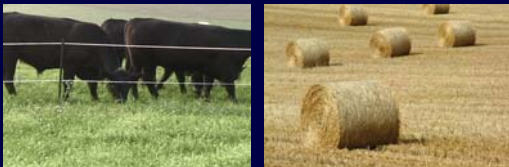
Dry Matter {
Protein (CP) { %N x 6.25
Energy (TDN) { Cell contents
Cell wall (Fiber)

Forage Nutritive Value

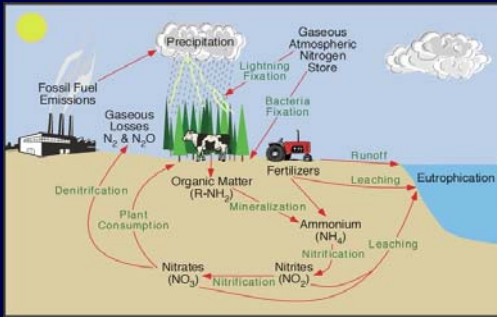
Bottom line:

CP and TDN

Utilization



Grazing systems



Grazing

- ✓ Two major objectives
- Optimize forage production and nutritive value
- Meet livestock requirement

Animal specie and grazing habit



Nutritional Requirement

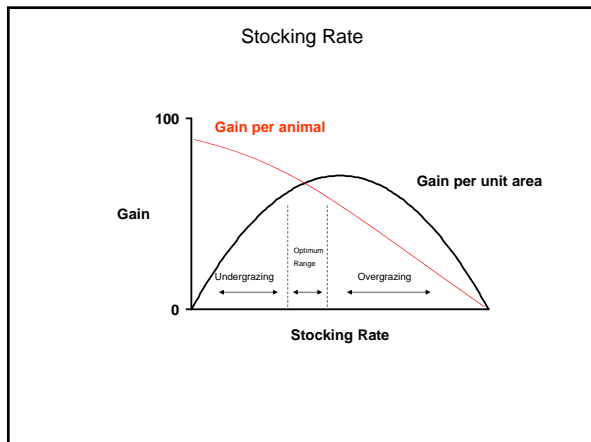
✓ Beef Cattle DM, TDN, and CP requirements

Class	DM (lbs)	TDN (%)	CP (%)
Dry cow mid preg	27	48	7
Mature cow 10# milk	30	56	9
2 yr old lact cow	21	63	11

Grazing

✓ Stocking rate

- Definition: Number of animals units per acre
- Animal unit = 1000 lbs liveweight

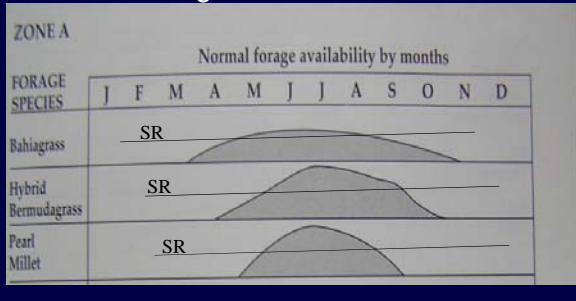


Stocking rate affects bull performance

Stocking rate (head/acre)	ADG (lb/day)	Gain/acre (lb/acre)
1	1.54	445
2	1.17	678
3	0.55	488

Grazing

✓ Stocking rate



Grazing

Never overstock!!!Never!



Grazing

✓ Stubble height



Grazing

✓ Rotational x Continuous

Continuous				
Rotational				



Grazing

✓ Rotational x Continuous

Continuous				
Rotational				

Grazing

✓ Rotational x Continuous

Continuous				
Rotational				

Grazing

✓ Rotational stocking



Summary

- ✓ Select the right forage specie, fertilization, and weed control program
- ✓ The purpose of grazing management is to supply forage to livestock in adequate quantity and quality
- ✓ Stocking rate is the most important decision on grazing management

EDIS

- ✓ UF extension publications
- ✓ <http://edis.ifas.ufl.edu>

Questions?

<http://rcrec-ona.ifas.ufl.edu>