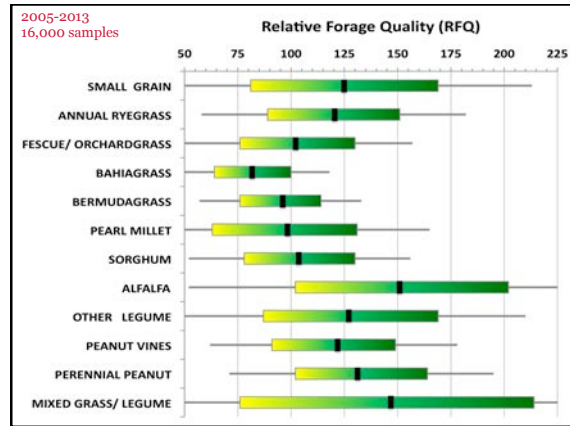


Improving Forage Quality


Seven management factors to consider when trying to improve the quality of stored forage

Dr. Lisa Baxter
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UGA-Tifton

UNIVERSITY OF GEORGIA EXTENSION **Baleage and Silage Short Course**
March 21st-22nd, 2019 | Forsyth, GA **GRASS**



Primary factors affecting forage quality



1. Plant maturity
2. Forage species
3. Bale storage
4. Rain during curing
5. Moisture at baling
6. Variety
7. Fertilization

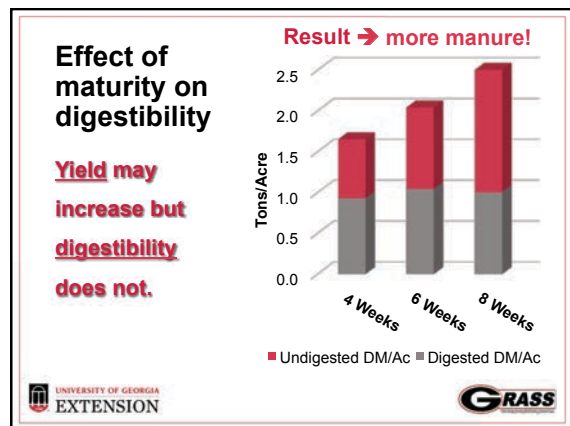
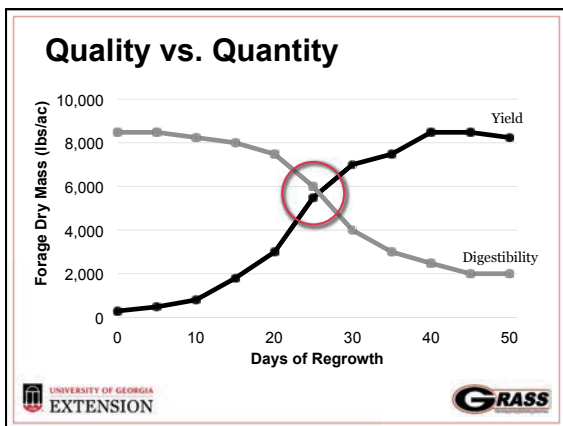
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Harvest Timing


The single biggest driver of forage quality is maturity!

- **Hybrid Bermudagrass**
 - 1st cut at 12-16 inches
 - Subsequent cuttings at 3.5-5 week intervals
- **Tall fescue, ryegrass, orchardgrass, etc.**
 - Spring cut at early flower stage or mid to late boot stage for higher quality
 - Subsequent cuttings at 10-12 inches (better quality)
- **Alfalfa**
 - Spring cut at when 10-20% of plants are blooming
 - Cut at late bud, ~ 10% bloom stage


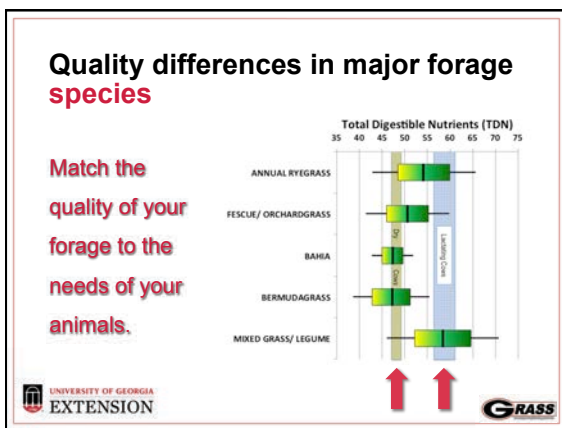
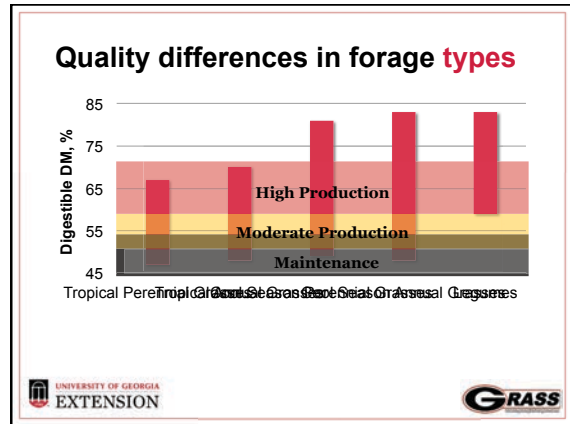
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Primary factors affecting forage quality




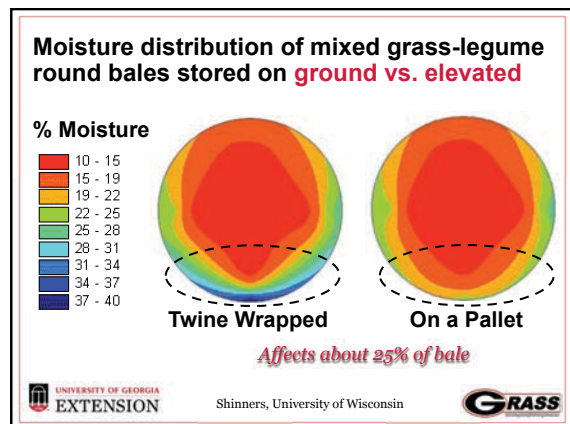
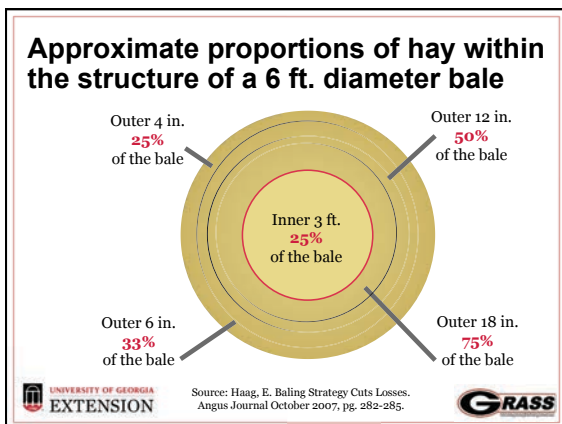
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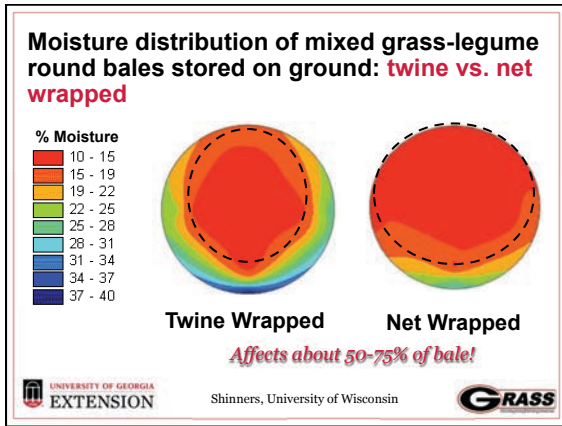



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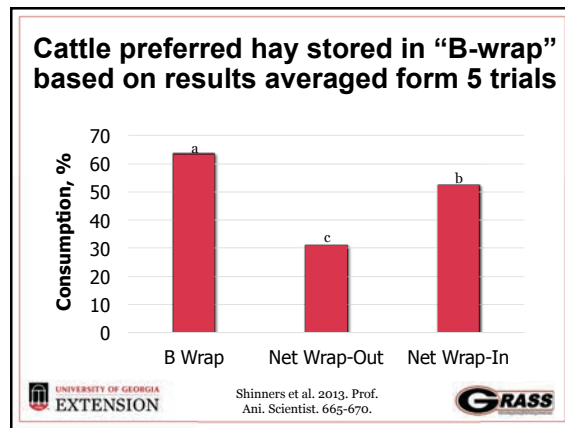





Breathable Net Wrap ("B-Wrap")

- Sheds rain, snow, & ice
- Permeable to water vapor
- On Deere's 6' balers in the 7, 8, 9, and 0 series
 - Requires application kit
- More expensive than barn storage
 - ~\$7-8/roll

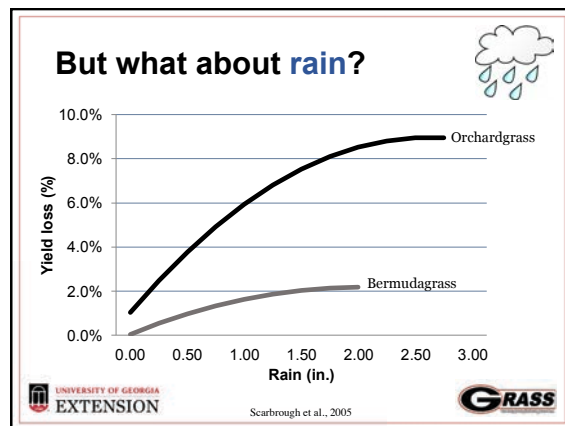
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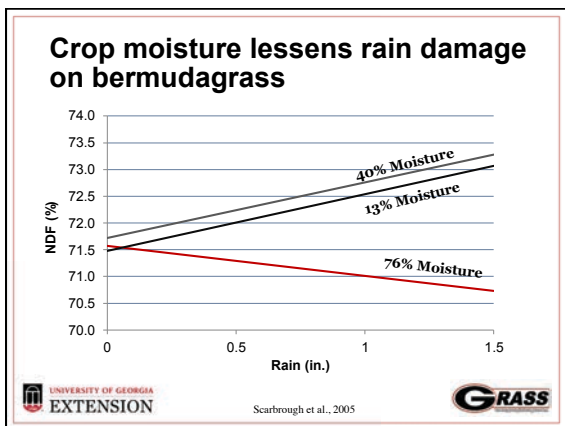


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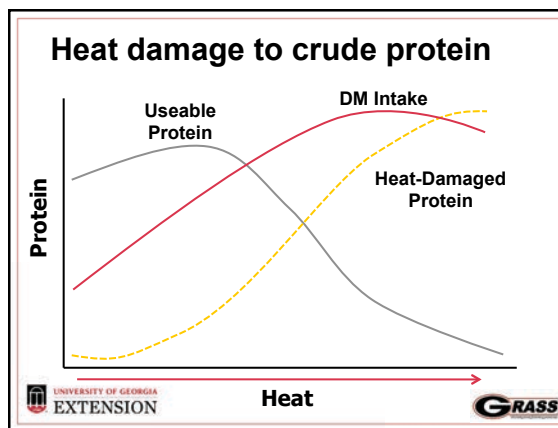
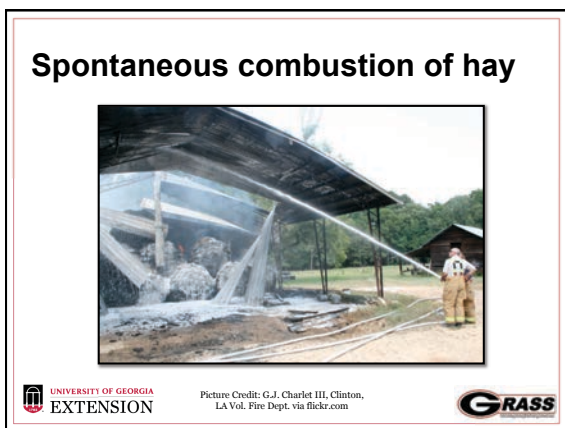




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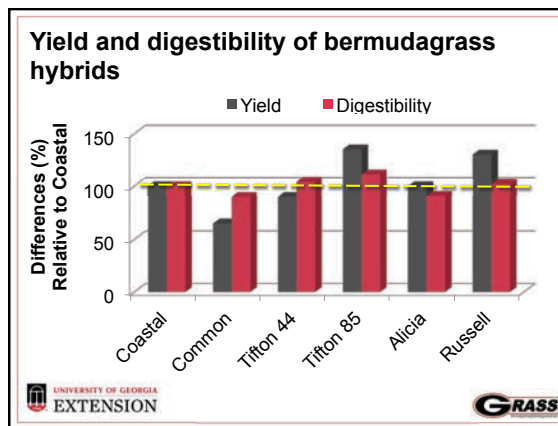
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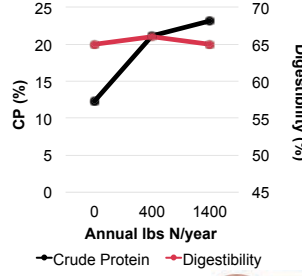


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What affects forage quality more? Harvest timing *or* fertilization?

CP increases with fertilization...
...but digestibility remains unchanged!



Annual lbs N/year	Crude Protein (%)	Digestibility (%)
0	~12	~65
400	~21	~66
1400	~24	~65

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Baron et al.

Primary factors affecting forage quality

Factor	Recommendation
Plant maturity	Cut at optimum time for your species.
Forage species	Use the highest-quality species that will persist in your environment.
Bale storage	Protect bales from rainfall and weathering during storage (i.e., barn, tarp, etc.).
Rain during curing	Avoid cutting if significant rainfall (> 0.50 inches) is predicted during curing.
Moisture at baling	Allow forage to dry to the appropriate moisture.
Variety	Use varieties that have proven to be higher in quality.
Fertilization	Provide fertilizer based on soil test recommendations.

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Questions?



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