Feed Options When the Grass Doesn't Grow

2008 Corn Silage and Forage Field Day

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"How Do We Feed Cows With No Grass"



Critical Control Point for Profitability – Feed Cost

- Feeding the cow herd is the largest cost area in beef enterprises, approx 45-50% of annual maintenance cost.
- Stored or supplemental feeds constitute the largest, most variable portion.
- Designing nutrition / supplementation program correctly is a must.



Defining the Situation

- What is the overall objective of the nutrition / supplementation program
 - Extend the forage base
 - Meet nutritional deficiencies
 - Alter cow production
- You have to know where you want to go before you can get there.



Know what have you to work with

- Cattle
- Forages
- Feeds



Know what the cattle Need

- Different cows have different requirements
 - Age, physiology, breed, etc.
 - Intake Potential
 - Energy
 - drives body condition score
 - Protein
 - How do you feed cattle with different requirements



Which Cow are You Feeding





Know What the Cattle Need





What forage are you using

- Cow-calf production in Florida relies on pasture / forage
- Determine Pasture-Forage:
 - Quantity
 - Quality and composition
 - Utilization rate



What Pasture?





Pasture and Forages

- Pasture if you have it
- Hay if you can find it or afford it
- Summer Annuals if you can grow it
- Any other option if you can find it or feed it



Supplemental Feeds

- Depending on your situation everything or nothing is an option
- Supplements have constraints in use
 - Availability Storage Handling Feeding

http://www.animal.ufl.edu/extension/beef/documents/Short06/MHersom.pdf



Supplemental Feeds

- No one feed alternative is perfect
 - Energy: fiber vs starch
 - Protein: DIP vs UIP
 - Mineral: Excess vs deficiency, balance
 - Concentrated source of some characteristic
 - Fat, sulfur, mycotoxins
- Cattle do not have a nutritional requirement for any feedstuff



Supplemental Feeds

- There is no "best" supplement
- Comparing supplements
 - Determine level of intake
 - Determine concentration of nutrients
 - comm. often don't list TDN80 Crude Fiber = TDN
 - Determine \$/lb of nutrient supplemented
 - Determine \$ of excess nutrient supplemented
 - Factor in all cost/benefits associated with feeding
 - Intangibles
 - Suitability
 - Convenience



Feed	TDN,%	
Whole Cottonseed	95	_
Hominy	91	
Corn	88	
Dried Distillers Grains	90	
Soybean Meal	87	
Wheat Middlings	83	
Citrus Pulp	82	
Corn Gluten Feed	80	
Soybean Hulls	80	
Cottonseed Meal	75	
Molasses	72	
Wet Brewers Grains	70	
Peanut Skins	65	
Peanut Hulls	22	INNIVERSITY of
Urea	0	UF FLORIDA
		IFAS Extension

Feed	Crude Protein, %	
Urea	281	
Cottonseed Meal	49	
Soybean Meal	49	
Dried Distillers Grains	30	
Wet Brewers Grains	24	
Corn Gluten Feed	24	
Whole Cottonseed	23	hard the second
Wheat Middlings	18	1 1. 200
Peanut Skins	17	
Soybean Hulls	12	
Hominy	12	
Corn	9	
Citrus Pulp	9	
Peanut Hulls	8	LUNIVEDCITY of
Molasses	5	UF FLORIDA
		IFAS Extension

Feed	Fiber, NDF%	
Peanut Hulls	74	
Soybean Hulls	67	
Corn Gluten Feed	45	
Whole Cottonseed	44	
Dried Distillers Grains	44	
Wet Brewers Grains	42	
Wheat Middlings	37	
Peanut Skins	28	
Cottonseed Meal	26	
Hominy	25	
Citrus Pulp	24	
Corn	9	
Soybean Meal	8	
Molasses	The second second	
Urea	-	UF FI



Feed	\$ / Ton*	% TDN	% CP	\$ / cwt	\$ / cwt TDN	\$ / cwt CP
Whole Cottonseed	308	95	23	15.40	14.63	66.96
Hominy	238	91	12	11.90	13.08	99.17
Corn	240	88	9	12.00	13.64	133.33
Dried Distillers Grains	198	88	30	9.90	11.25	33.00
Citrus Pulp	188	82	9	9.40	11.46	104.44
Corn Gluten Feed	178	80	24	8.90	11.13	37.08
Soybean Hulls	204	80	12	10.20	12.75	85.00
Cottonseed Meal	325	75	49	16.25	21.67	33.16
Blackstrap Molasses	107	72	5	5.35	7.43	107.00
90% DM basis	137	72	5	6.88	9.55	137.57
Hay [†]	111	54	10	5.55	10.28	55.50

* Priced September 26,2008 † \$60/900 lb roll



Supplementation Management

- Start feeding before the grass runs out
- Supplement only those animals where there is an economic return
- Feed supplement where/how all cattle have access to the supplement
- Monitor cow body condition score
- Consider all alternatives



Other Feed Options

- Ammoniated Low-quality Forages
 - Hays, crop residues, straws
- Cull Vegetables
 - Greater water content, other issues
- Unusual By-products
 - Limited consistency, storage, delivery
- Abandoned Crops
 - Fencing, water, timing, other issues

- Cotton gin trash
- Cottonseed hull
- Rice bran
- Rice hulls
- Bakery product/waste
- Candy waste products



What Management Can We Use

Group Feeding

- do waste feed on animals that don't need it
- Limit / Program Feeding
 - input of management to fully utilize feed resources
- Culling
 - remove cattle that will consume the most feed resources, not the ones that will generate this or next year's income
- Hope and Pray for Rain



Limit / Program Feeding

- Supply nutrients to meet requirements
 - Have to know nutrient requirements
 - Have to know feedstuffs
 - Have to have facilities
- Commitment
- Management



Limit / Program Feeding

- Pros
 - Increase efficiency of feed use
 - Control feed intake
 - Extend feed resources

- Cons
 - Intensity of management
 - Equipment
 - Facilities

Maintain a minimum of 5% roughage in the diet



Final Remarks

- Grazing forage alone often does not meet energy and/or protein demands of cattle
- Forage-Cattle-Supplement interaction can be complicated
 - Forage quality
 - Forage availability
 - Cattle requirements change
 - Supplement characteristics



Final Remarks

- Right now energy is our most limiting nutrient
- We can allow cows to slide in BCS if we can make it up later
- Evaluate feedstuff on a price / unit of nutrient
- Find roughage where you can get it

