Grazing Herd Management during Drought:

Feeding & Management

Feeding During a Drought

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Feed Costs

- Feed costs are about 65% of total costs of beef production
- Harvested feed costs for winter = $150 This is 40 to 50% of total costs
- Drought – today's drylot feeding costs are 3 to 4 times higher than grazing costs in a normal year

TDN and Protein Requirements

- Lactating cow requires about 11% protein and 58 to 60% TDN (RFQ = 115)
- Dry cow requires about 8% protein and 55% TDN (RFQ = 90) in late gestation
- Dry cow needs 8% protein and 50% TDN in mid-pregnancy – This represents a large part of our herds at this time

Conserve the Hay You Have

- Use ring feeders – least amount of waste
- Roll only 1 days or less supply of hay out
- Store hay under a cover
- Wasted hay costs 2 to 3 times what it did just a couple or year's age

Why Forage Test

- Reduce feed costs – only provide supplemental nutrients that are deficient in the forage
- Match forage quality to cattle needs – can possibly limit high quality hay to dry cows
- Plan ahead for winter feed needs – know what supplements are needed – buy early in the fall when prices are usually cheaper
- By-products – highly variable in nutrient content, unusual feeds

Grouping Cattle

- Grouping reduces feed costs – avoid under and/or over feeding
- First calf heifers should be fed separate from older cows
- Replacement heifers should be fed separate
- Have at least two groups 1)heifers and thin cows and 2)older cows in good shape

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Feeding Straw

1) Very low in protein (3%) and TDN (45%)

2) Oat > Wheat > Rye

3) Must feed at least 1.5 lbs of protein

4) Supplement – 0.7% BW for dry cow and 1.15% for lactating

5) Impaction – can cause death – feeding low protein low energy feeds

6) Limit feed to 25% of diet in growing calf ration

7) consider mixing with dry feed/molasses

Feeding Hay - Summary

1) Forage test – hay quality is highly variable

2) Use forage test to balance ration – extension has computerized ration balancing programs available

3) Monitor body condition – forage test gives you a starting point, adjust ration to keep body condition at 5 to 6

4) Minimize waste when feeding

Feeding Options for Drought/Winter Feeding

- Limit feed grain/byproducts – used when little or no hay is available and/or hay is expensive
- Hay/grain combinations – used to stretch forage supply
- Crop residues – corn, straw, peanut hay, cotton stalks, gin trash
- Stockpiled forage/winter grazing/grain combinations
- Cattle can be fed with no pasture or hay, but it takes more management

Comparison of TDN and protein values of feeds

Feed	TDN	Protein
Corn	88	9
Wheat	88	14
Oats	75	13
Cottonseed	92	23
Citrus Pulp	80	8
Soyhulls	80	12
Distillers grains	88	28
Wheat middlings	83	18
Brewers grain	70	26
Corn gluten feed	80	21

Maximum Feeding Amounts Forage based diets

- Brewers grains – 3.5% of body weight
- Soybean hulls - 2%
- Corn gluten feed – 1%
- Distillers grains, citrus pulp, wheat middlings – 0.75% of body weight
- Corn, hominy feed, sorghum grain, wheat, whole cottonseed – 0.5% of body weight
- Candy, bread, bakery waste, molasses, peanuts, peanut skins – 0.25% of body weight

Limit feeding Grain/By-products

- Used when very little or no hay available and/or hay is more expensive than grain
- Feed grain based diet at about 1.3 to 1.5% of body weight for dry cow and 1.8 to 2.0% of body weight for lactating cow - handout
- Grain based means roughly 80% grain/by-product feeds and 20% roughage
- Very little roughage fed – 5 lbs/day hay, gin trash, peanut hulls, cottonseed hulls

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- Disadvantages -
  Requires feed bunks, some way to get feed to cows other than a shovel – biggest problems for most producers

  Requires Storage – commodity barn or grain bin

  Fine line between under and over feeding – request help when balancing rations

- Advantages –

  In most cases – cheaper and more available than hay

  Once producer is set up to use these feeds they provide a cheaper source of supplement in future years

Dry Cow

A 1200 lb dry cow **IN GOOD CONDITION** can be maintained by

8 lb corn gluten feed
7 lb corn
4 lb roughage
4 oz. high calcium mineral + ionophore (Rumensin, Bovatec)

Lactating Cow

A 1200 lb lactating cow **IN GOOD CONDITION** can be maintained by

9.5 lb corn gluten feed
9 lb corn
4 lb roughage
4 oz. high calcium mineral + ionophore (Rumensin, Bovatec)

Things you MUST do to limit feed

- Start cattle slowly on grain – 5 lbs first day
- Feed every day and at the same time
- Allow enough bunk space for all cows to eat at once
- Have secure fence – cows will act hungry until they adapt
- Provide a roughage source (limit it)
- Buy in bulk
- Feed ionophore – Rumensin, Bovatec

Limit Hay/Grain Combinations

- By-products such as soyhulls or corn gluten feed can be fed to stretch forage supply (1 lb of feed replaces about 1.5 to 2 lbs of hay)
- Must forage test hay to determine how much supplemental protein and energy is needed
- Need a good idea of what bales weigh to determine daily feeding amounts
- Pre-determined amount of hay can be fed per day OR you can limit access to hay – next slide

Limit Feeding Hay

	Hours per day cows allowed to eat hay			
Item	4	8	12	24
Hay lbs/day	17.1	23.8	27.5	30.7
% of 24-hr Total	56	78	90	-----
Weight gain	48	94	119	136

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Limit Hay/Grain Combinations Cont'd

- Start limiting BEFORE you run out of hay
- How do you limit hay?
- Square bales
- Round bales – roll hay out, limit access to hay in rings

Stockpiled Forage

- Do not cut after mid to late August
- Plains trial – pregnant cows were grazed on stockpiled bermudagrass in Nov/Dec
- Can extend grazing to mid-Dec on bermudagrass in south GA
- Fescue will maintain higher quality in winter than bermudagrass – north GA
- Must strip graze – cows were allowed to graze an area that lasted one week
- Lactating cows may need supplement on stockpiled bermudagrass

Stockpiled Forage/Winter Annuals/ Grain Combinations

- Can limit graze and then feed grains/by-products to provide necessary nutrients
- Disadvantage – very difficult to determine intake of pasture
- Watch body condition scores very closely
- Cows should have at least 1 hour of grazing per day
- Feed lower protein feeds when using winter annuals
- Supplementation levels will vary with forage growth – 3 to 4 hours of grazing should provide 50% of daily nutrients?

Crop Residues

- Hay will be in limited supply this winter
- Crop residues offer alternatives to hay – especially in south GA
- Peanut hay – test and supplement if necessary
- Gin trash – low quality, TDN (40 – 50%) - gin trash is cheap but needs supplement
- Peanut hulls – low energy TDN (25%), limited to a roughage source for grain based diets
- Straw – discussed earlier

Crop Residues

- Cotton, Corn stalks – dry cows can be maintained on residue with no supplement - protein and energy supplement needed for lactating cows
- One acre of cotton stalk residue lasted a dry cow approximately 35 days at Plains
- Vegetable crops – can be utilized; have feeds analyzed for nutrient content and we can work them into a ration for you, these feeds are usually very high in water content

Early Weaning

- Creep feeding – high feed costs – suggest weaning the calf
- Can sell cull cows earlier
- Greatly reduces needs of the cow (25 - 30%)
- Calf – must be fed high quality pasture plus supplement or a grain-based diet
- NO summer permanent pasture will work
- Winter annuals plus supplement at 1% of body weight works well
- Cheaper to feed calf directly than feed calf through the cow (milk) – fall calving

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Summary

- Limit storage and feeding losses of hay
- Analyze feedstuffs for nutrient content
- Grains/by-products can substantially reduce feeding costs compared with purchasing hay
- Cows need a minimum of 5 lbs of roughage per day
- Most options presented require special management considerations – ask for help
- Utilize crop residues if possible
- A dry cow is much easier to feed than a lactating cow – seriously consider early weaning
- Always maintain a body condition score of at least 5

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