

BEEF NUTRITION SHORT-COURSE

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WELCOME

- 5 Month Series of Nutrition Programming
- Wonderful Slate of Nationally Known Speakers
- Goal: Give you take home information to apply at your farm

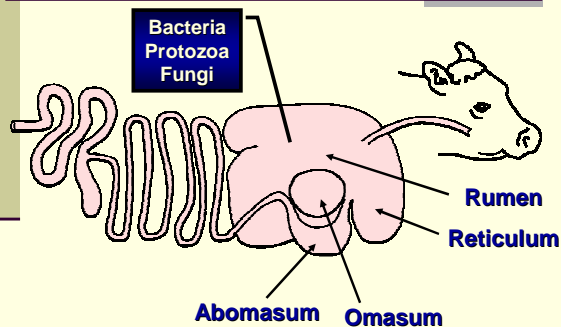
Ground Rules

- Ensure your individual microphones are off!
- If you are in a room that has overhead microphones, please keep paper rustlin', sneezin', coughin', burpin' and complainin' to yourself until a break
- Assigned periods for questions

Ground Rules

- We assume you know some basics about nutrition.
 - Body Condition Scores, Nutrients, Forage values, etc
- Assume that a cow has a voluntary feed intake of a range of 2-3% of her body weight relative to where she is in the production cycle

Rumen Function



Body Condition Score

- Body condition (energy stores) is an indicator cow nutrition status
- Condition Score in a scale to rate the level of flesh on cow
- With beef cattle 1 to 9 scale
 - 1 is very thin
 - 9 is very fat
 - 5 to 6 is considered ideal

Rosepine Research Station

Assessing the nutritional status of your cowherd with efficiency in mind

- Understanding where your cows are in the production cycle
- Understand the relationship between forage production, milk production and mature frame size
- Ensure the proper nutrients are supplied to the cow within the given production cycle

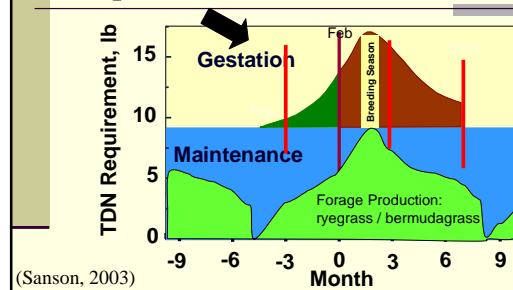
What does your cowherd look like? Can you guess the weight?



What are some things to notice?

- Cows are in differing stages of the production cycle.
 - Postpartum: 80 to 90 day period that begins at calving. Cows must repair themselves, lactate and rebreed
 - Lactating and Pregnant: 120 to 130 day period
 - Gestation: 100-110 day period
 - Pre-Calving 50 to 60 day period leading up to calving

Nutrient Requirement and Reproduction



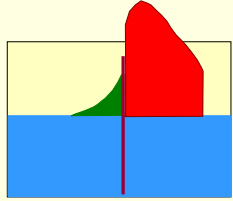
Step 2

Understand the relationship between forage production, milk production and mature frame size



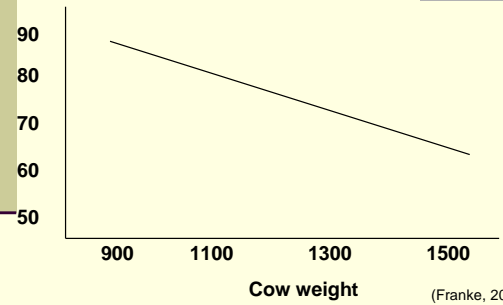
Lactation or Milk Production

- Nutrients required for milk production
 - Varies with amount of milk produced
 - When we increase milk production, we increase nutrient requirements
- Can we get too much milk?
 - Each lb of milk requires .3 lbs TDN
 - 10 lbs = 3 lbs
 - 20 lbs = 6 lbs



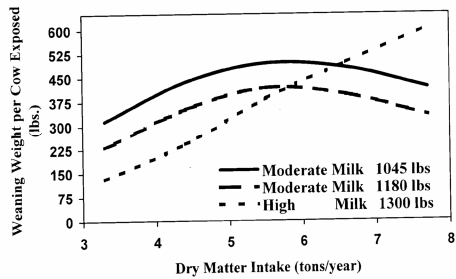
(Sanson, 2003)

Relationship between cow weight and reproduction in rotational crosses



(Franke, 2003)

Relationship between mature size, forage production and milk production



(adapted from Jenkins and Ferrell 1994).

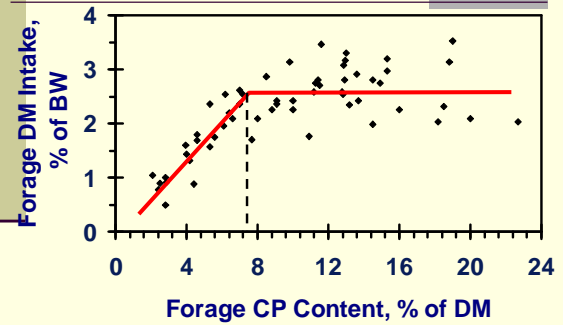
Step 3

Ensure the proper nutrients are supplied to the cow within the given production cycle

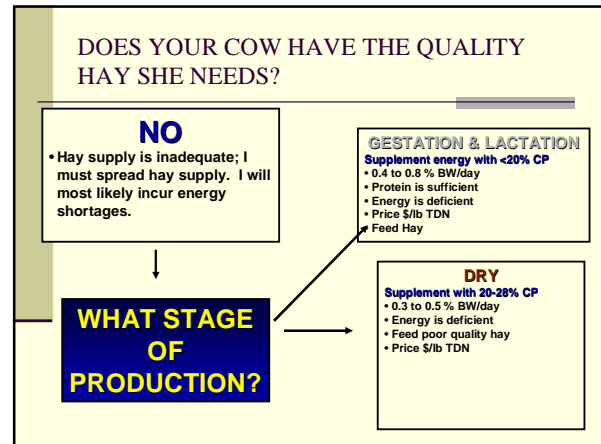
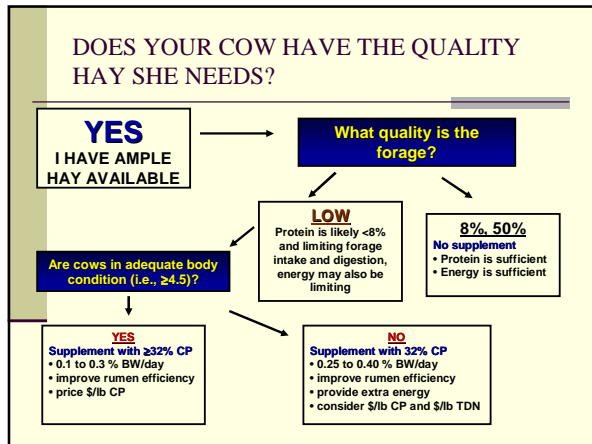
Hay Storage and Utilization



Forage dry matter (DM) intake relative to forage crude protein (CP) content



Adapted from Moore and Kunkle, 1995



In Summary

- Nutrition Management is consuming your problems before they consume you
- If your cowherd is not in a manageable state, then assessing nutrition is difficult and as in our example, downright impossible.
- When assessing your cowherd's needs, start with hay and body condition, then supply the proper nutrient relative to where you are in the production cycle.