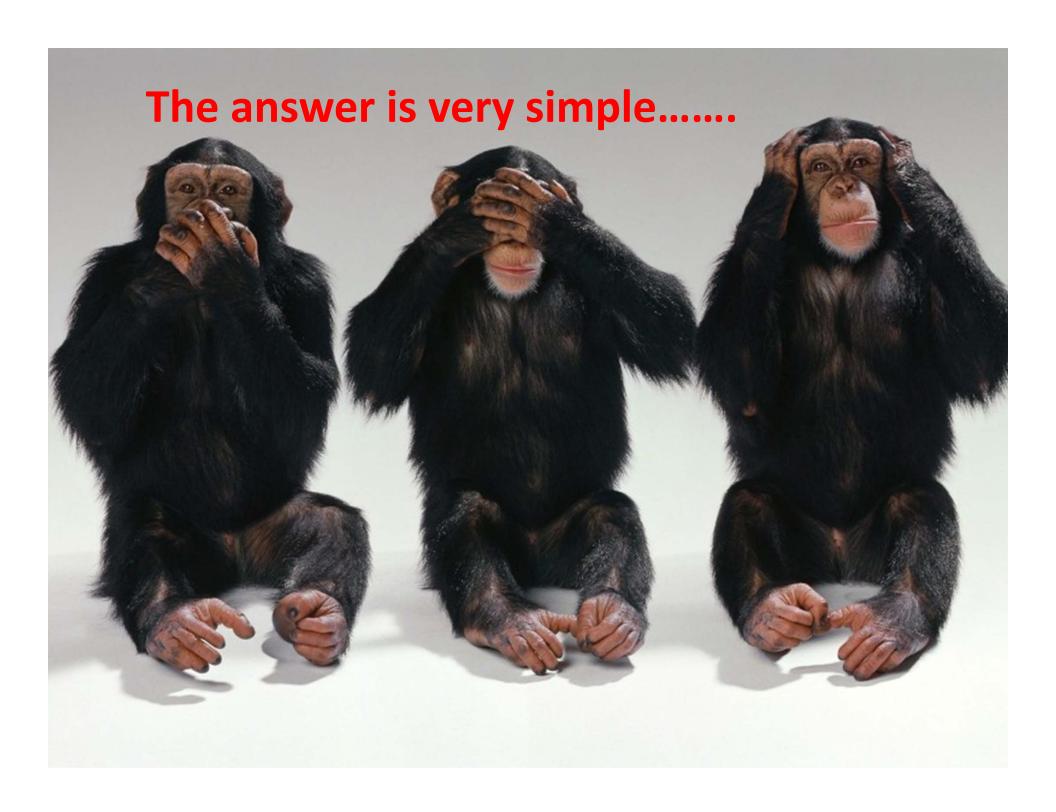




# Managing Feed Needs while Controlling Costs

Mark A. McCann, Extension Animal Scientist

August 22, 2011



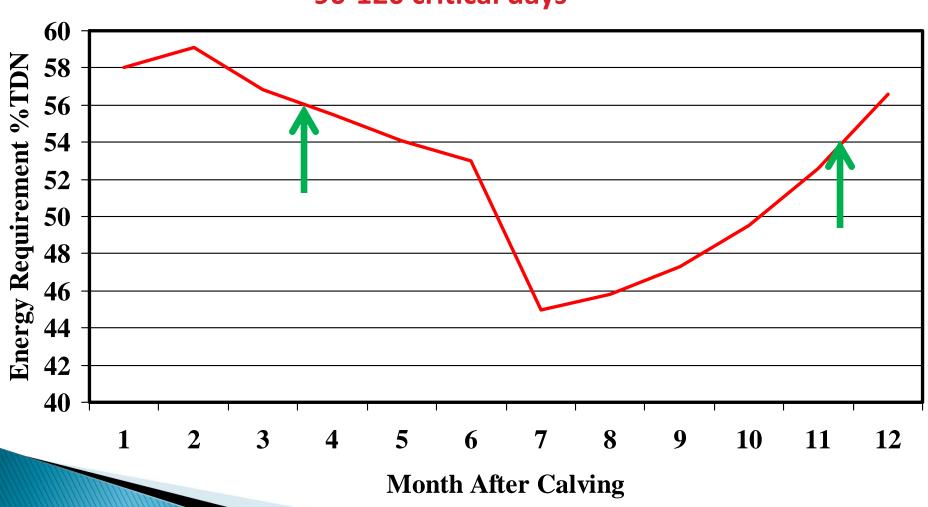


# Can't get something for nothing



# Cow energy requirements

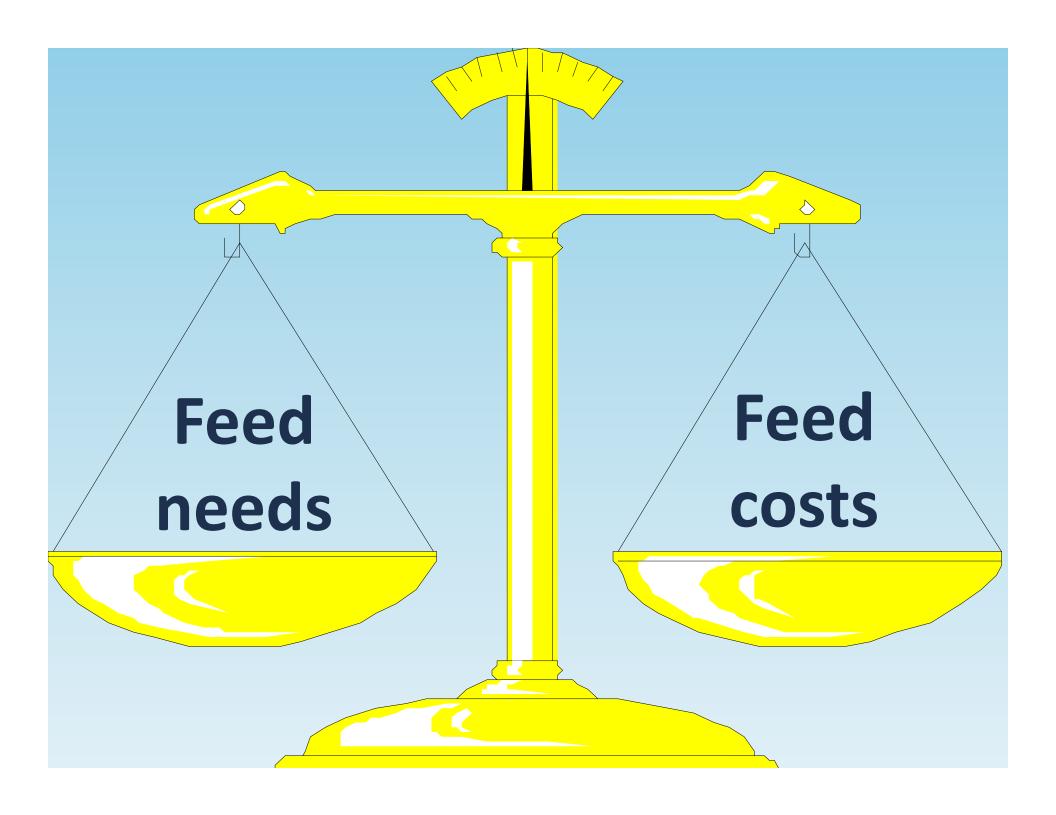
90-120 critical days

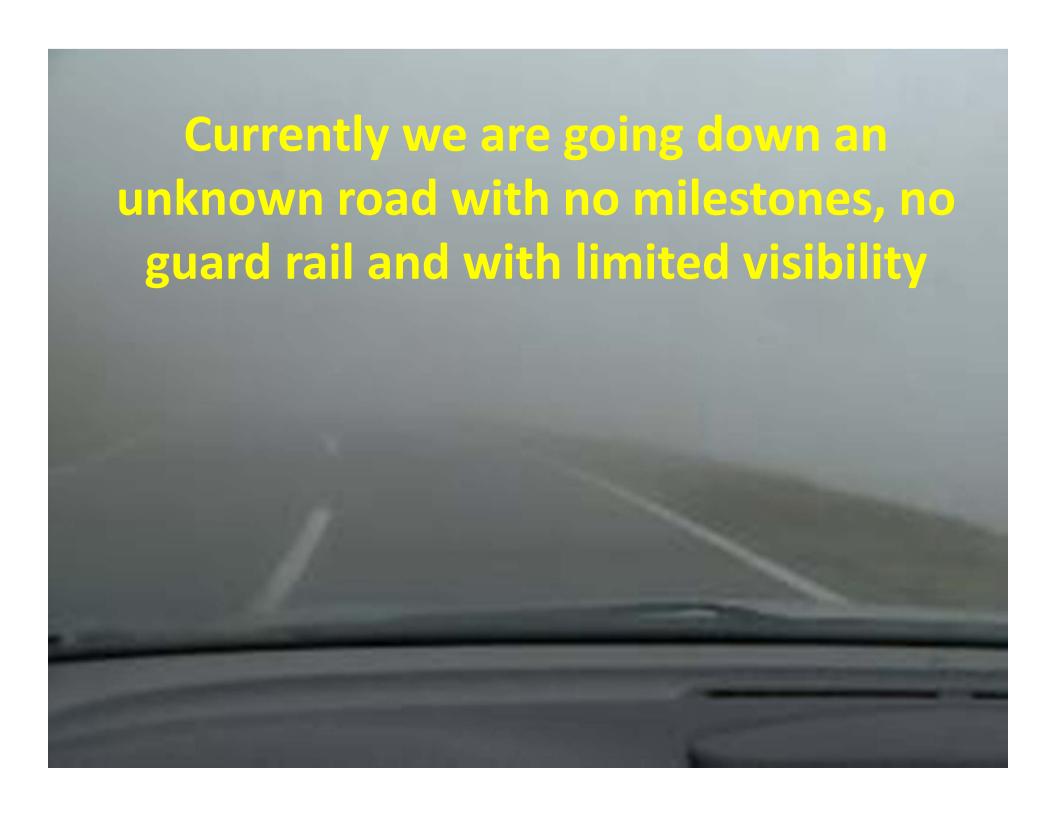


# Biological Priority for Nutrients

Priority	Function
1	Maintenance
2	Growth
3	Milk Production
4	Reproduction

Bottom line- need to calve at BCS 5+ & maintain body weight post-calving



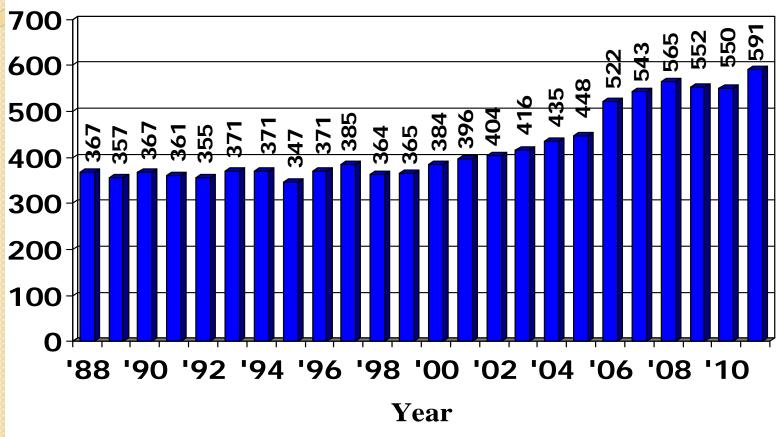




- Impact of the big three
  - Fertilizer, Feed and Fuel
- "I can't afford to fertilize my hay or pasture this year!"
- "No point in taking a soil test, I can't afford the fertilizer!"



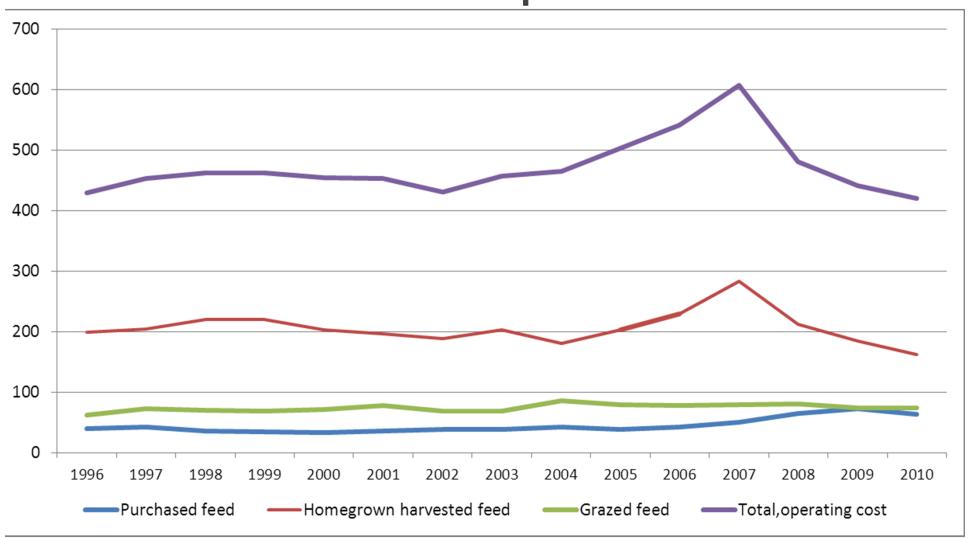
# U.S. Average Cow/Calf Cash Production Expenses



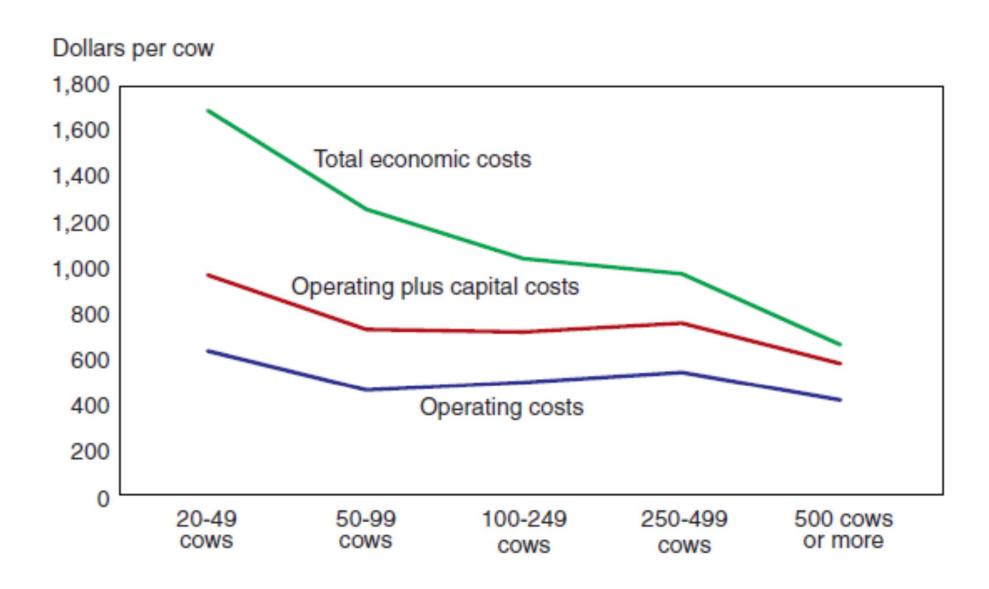
\* Includes interest costs and a pasture rental charge.

**Source: Livestock Marketing Information Center – Updated March 2011** 

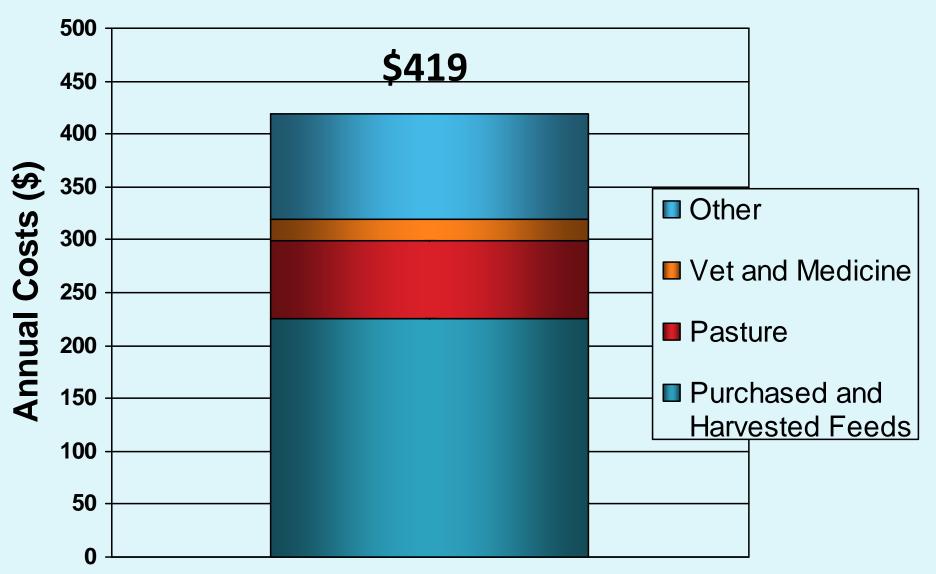
# Annual Cow Costs Eastern Uplands



### Impact of herd size on cow costs

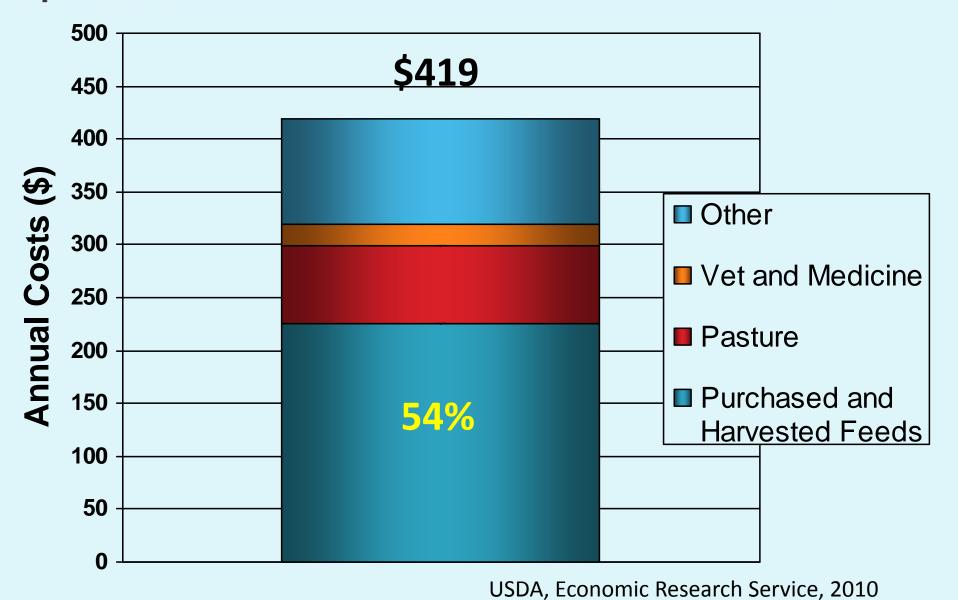


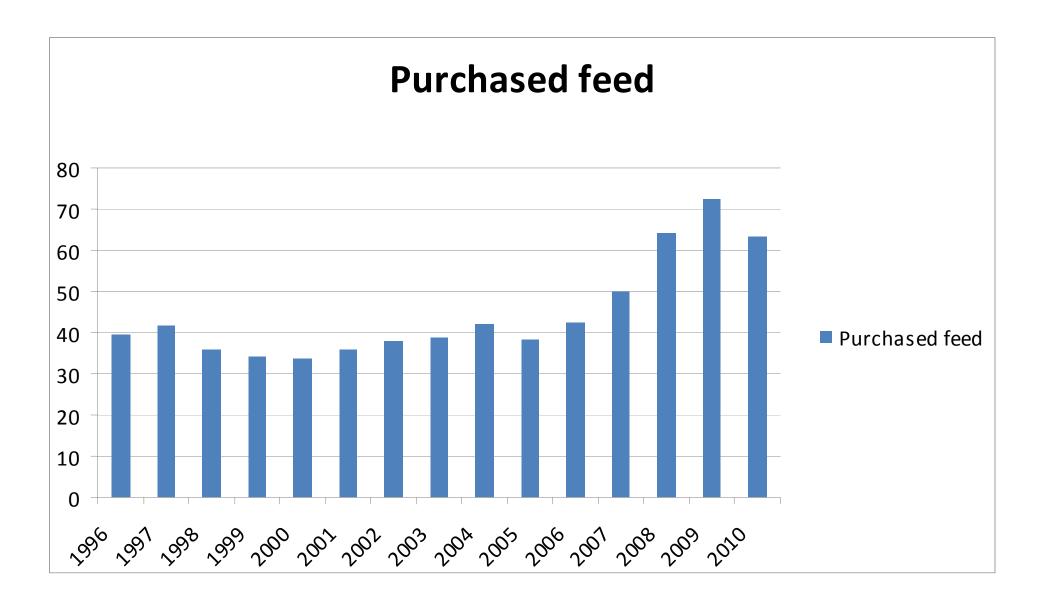
#### Annual operating costs per cow Eastern Uplands



USDA, Economic Research Service, 2010

# Annual operating costs per cow Eastern Uplands





2011 ????

# Where to economize?





A key difference between high and low profit beef herds is the annual costs of harvested feed

#### Harvested feeds

- Cost of production and harvest
- Storage loss/cost
- Feeding loss
- Buy vs produce
- Capital Investment







# Reduce Harvested Forage

- Key Concepts
  - Cow nutrient requirements
  - Forage amount & nutrient supply
- Key Options
  - Stockpiled fescue
  - Rotational grazing
  - Annuals
  - **Crop Residues**



# **Unrolling hay**

Reduce overfeeding

Reduce winter mud



Increase dispersion of nutrients over farm

Hay rings vs unroller



# Forage Test

- ASAP after harvest
- If shelter is limited, cover the best and earliest produced.... Identify & record location
- Match hay to stage of production and nutrient need
- Shop for supplements which balance hay

#### Comparing the Value of Feeds

Need to calculate price corrected for nutrient concentration differences

```
Ex. 48% CP Soybean Meal @ $400 per ton

0.48 x 2000 = 960 lbs of CP

$400 / 960 = 41.6¢ per lb of CP

22% CP Corn Gluten Feed @ $180 per ton

0.22 x 2000 = 440 lbs of CP

$180 / 440 = 40.9¢ per lb of CP
```

- The more expensive feed is the more economical source of protein
- Need to consider energy, physical form, storage

#### Mineral options



Match forage mineral content, generally-

low in copper

marginal in phosphorus

no benefit of feeding Hi-mag beyond spring

# Summary – Nutrition Economics

- Meet cow's nutritional needs (120d are critical)
- Maximize use of grazed forages/ residue
- Minimize use of harvested forages
- Remember the balance of inputs and outputs related to forages and grazing management
- Test forages
  - Quality pays
  - Not everything needs the best

# Summary – Nutrition Economics

- Consider purchasing hay
- Need to shelter at least 50% of hay crop
- Unroll hay rolls whenever possible
- Shop and purchase feed as cheaply as possible
  - don't forget to include waste & added labor
  - Match supplement to nutrient need (protein or energy)
- Match mineral program to cow needs & programs



COWBOY PHILOSOPHY

