

# Surviving 2018: Drought Aftermath



Andy McCorkill  
MU Extension Livestock Specialist  
Ph: (417) 345-7551  
Email: [mccorkilla@missouri.edu](mailto:mccorkilla@missouri.edu)

UNIVERSITY OF MISSOURI  
 Extension

# Summary

- High roughage costs
- Cheap grain / by-products
- Test Feedstuffs
- Balance rations
- Deliver appropriate rations
- Limit damage to pastures / cow herd
- Destock if necessary
- Consider future after pulled through this knot-hole

# Feed Less/Need Less

- Cull
- Wean
- Manage Hay Feeding
- Stockpile/winter grazing

# 4 O's of Culling

- Open
- Old
- Ornerly
- Other



# Poor Nutrition Pre-Calving

- Target BCS 5+ at calving
- Increased calving difficulty
- Poor quality colostrum
- Reduced re-breeding rates
- Fetal programming
  - Reduced carcass quality
  - Reduced heifer pregnancy rates



# Feed Efficiently

- Sort: Calving Season, Age Groups, BCS, etc.
- Feed is Scarce, Don't Waste what you have
  - Proper hay storage, only feed what they need
    - FORAGE TEST
  - Strip Graze
- Ionophore
- Wean Calves

# Management

## 1. Early Weaning

- Calves more efficient than cows
- Health adjustments – consult vet for vaccinations
- Save / maintain BCS on cows
  - Implications for calving, calf health, calf performance, reproduction and feed costs

## 2. Pastures

- Sacrifice paddock / pasture
- Minimize and localize long-term damage
- Weed control, fertilizer 2019

# Management

## 3. Reduce feeding losses

<u>Feeder Type</u>	<u>Hay Waste</u>
Cone Feeder	3.5%
Bale Rings	6.1%
Trailers	11.4%
Cradle Feeder	14.6%
Unroll, 1 days feed*	12.0%
Unroll, 3 + days feed*	40% +



Michigan State University, 2003.

\* University of Missouri

Open bottom bale feeders = 20+ % waste of original bale weight



# Hay Waste costs money

## Percent Hay Waste by Feeder Design

	Open	Sheeted	Cone
			
Fescue hay	19.2	13.6	8.9
Alfalfa haylage	7.0	4.9	6.5
Corn stover	38.7	32.0	13.6
Ammoniated corn stover	37.9	20.6	13.6

Forage waste during winter feeding costs Missouri beef producers over \$60 million per year

24 Hrs



# Stretching Feed Supplies

## 4. Limit hay access, cont.

- Ball park estimated hay savings:
  - ❖ 12 hour access = 7.5% decrease in DM disappearance
  - ❖ 8 hour access = 20% decrease in DM disappearance
  - ❖ 4 hour access = 40% decrease in DM disappearance
- **Do Not Use With Replacement Heifer Calves, First Calf Heifers or Thin, Older Cows!**



# Management

- 4. Limit hay access, cont.
  - Developing replacement heifers
    - Adequate hay quality/stockpile
    - Appropriate supplementation
    - Reach target weight goals for breeding
  - Time to consume 15 – 20 lbs. hay
    - 58 – 62% TDN = 3 hours feeding time, est.
    - 54 – 57% TDN = 6 hours feeding time, est.
    - < 53 % TDN = continuous access
    - Lactating cows = 8 hours high quality hay
      - Estimates from Univ. of IL

# Management

5. Limit feed hay + Grain supplement
  - Minimum 10 lbs. hay intake / hd. / day
  - Bulk of nutrients through grain mix
  - 24 – 30 inches of bunk space per cow
  - Consistency
    - Feed same times every day (2X/day; hay fed opposite grain)
    - Feed same amount of feed every day
    - Whole shell corn; slows starch digestion, decrease bloat, acidosis
    - Many options using by-product feeds
  - Cattle act hungry
    - Resist feeding more unless BCS dictates
    - HAVE GOOD FENCES!!!

# Supplements \$\$\$\$\$

- By-Products
  - Distillers Grain
  - Corn Gluten
  - Soy Hulls
- Whole Grain Products
  - Corn, Milo, Oats, etc
- Lick Tubs/Liquid Feed
  - Convenience Feeds



# Nutritional Requirements

Production Stage	Dry Matter #/day	# Protein	% Protein	# TDN	%TDN
Dry Mature Cow Middle 1/3 pregnancy	18	1.5	7	9	49
Dry Mature Cow Last 1/3 pregnancy	20	1.8	8	10.5	54
Lactating Cows Average Milk	20	2.0	9.6	11.5	57
Lactating Cows Superior Milk	21	2.5	12.3	14	67
2 year old Heifer Lactating Average Milk	21	2.1	10	13	62

Based on a 1000# beef cow

# Feed and Nutritional Management

## 2. Hay / Silage Options

- **Chopped silage vs. baleage**
  - Oxygen exclusion; bale “bunkers”??
  - Accurate feed delivery – limit due to energy, nitrates?
- **Winter annuals**
  - Late winter, spring growth for grazing, hay, or baleage
- **Crop residues**
  - Grazing preferred especially if cover crops seeded
  - Corn stalk or wheat straw ammoniation– too dry??
  - Corn stalk hay – moisture in stalk, feed waste??



# Feed and Nutritional Management

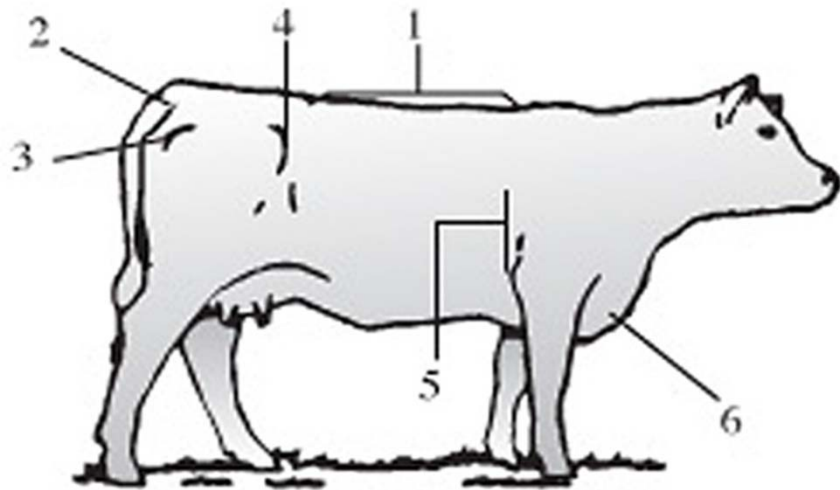
## 3. Test feeds and calculate rations

- Nutrient content of forages is based on maturity at harvest
- Separate nitrate test if concerned
- Price feed ingredient options-\$/# TDN on DM basis
- Appropriate energy
  - Calving and breeding issues 2019, 2020, 2021??
- Accurately weight and deliver feed
  - Limit waste
  - Insure every animal gets balanced ration every day

# Feed and Nutritional Management

4. Rumensin @ 200 mg / hd / day
  - At least 1 lb. supplement / day
  - Increase net energy value of low quality hay by ~ 15% (Okla. State)
  - Consistent intake for all cows
5. Feeding Management
  - Ensure every animal gets access to appropriate diet
    - Bunk and feeder space
    - Consistent feeding pattern
    - ACCURATE FEED MIXING & DELIVERY!!!

# Nutrition Indicators



- |              |          |            |
|--------------|----------|------------|
| 1. Back      | 3. Pins  | 5. Ribs    |
| 2. Tail Head | 4. Hooks | 6. Brisket |

Body Condition/Fat Cover



Manure Consistency

# Sharp Pencil! With a good eraser... and maybe a crystal ball

