

Feeding Alternatives to Stretch Forage Supplies



OKLAHOMA COOPERATIVE
EXTENSION SERVICE

COW POKES[®]

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**“Boy, I bet this country could shore
look tough in a drought!”**



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Drought Survival

- ✓ Best bet is to have a drought management plan in place for your operation.
 - ✓ Know what you are going to do before it happens.
 - ✓ Stretching forage resources
 - ✓ Rotational grazing
 - ✓ Variable stocking rate
 - ✓ Winter feed options
 - ✓ Replacing hay or minimizing hay requirements



What steps can be taken?

- ✓ Buy hay from your neighbors.
- ✓ Ship in hay from out of state.
- ✓ Limit Feed Hay
- ✓ Find alternative feeds
 - ✓ High supplement rates to reduce hay intake
 - ✓ Program feed cows to meet maintenance requirement



Early Weaning

- At 3 months of age calves begin to graze contributing to the stocking pressure on a pasture.
- A 400 lb calf is considered to be about $\frac{1}{2}$ of a stocking unit.
- An 1100 lb cow is 1 stocking unit.
- A lactating cow also has higher nutrient requirements and will eat more than a dry cow.

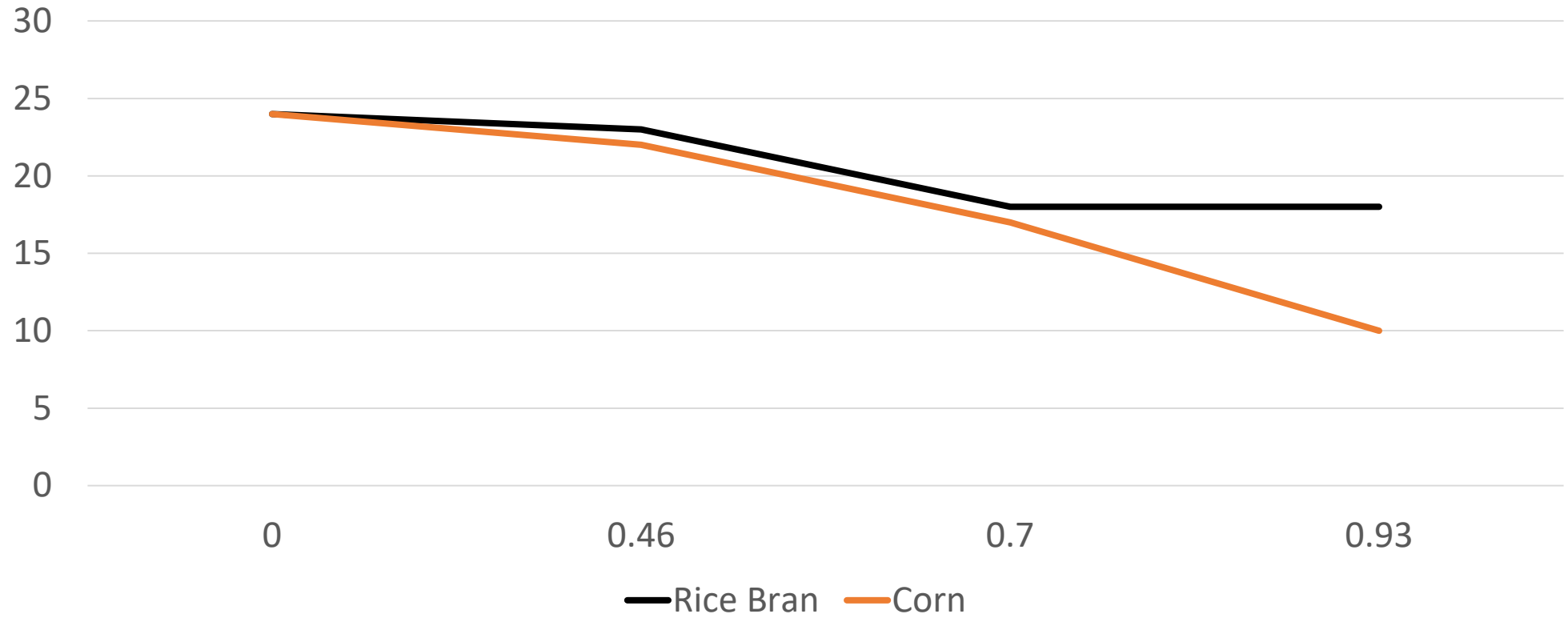




- Examine the effects of de-oiled rice bran feeding rate on
 - Hay Intake
 - Nutrient intake from hay
 - Total tract digestibility of CP, DM, OM, and fibers
- Cow were fed supplement at 0, 0.46, 0.70, and 0.93 % of BW



Hay Intake with Increasing Supplementation



What to expect?

- 1100 lb cow non-lactating fed 0.66% of BW
 - Intake = 19 lb dry matter, daily
 - 0.66% bodyweight = 7.26 lbs feed dry matter /d
 - As Fed is approximately 8 lbs of feed/d
 - Will reduce forage intake by about 1/3
- 30 head (1 bull unit) herd non-forage feed intake at 0.66% BW.
 - 8 lb/d x 30 hd x 30 days = 7200 lbs per month
 - 48,000 lb truckload = 6.7 month supply.

Avoid long term storage of high starch feeds or high fat feeds.
Consider, soybean hulls, corn gluten feed, or defatted rice bran.



Limit Feeding High Concentrate Diets to Cows

- Cows have been successfully wintered using *High Concentrate* feeds fed at a low rate.
- Very management intensive
 - Feed management critical
 - Animal Husbandry!!
- Can save up to ½ of cost of feeding hay and supplement.



Rough guidelines for limit-fed rations based on corn grain

Stage of production	Corn, % of BW	Protein Supplement, lb/day	Roughage, % of BW
Gestation	0.75%	2	0.5
Lactation, average milk	1.0%	3	0.5
Lactation, High milk	1.1%	3.5	0.5

Arkansas Study

	SUPP	CN,CSH	CN,RH	CGF,CSH	CGF,RH
Corn, cracked	--	70.5	70.5	--	--
CGF	90.3	--	--	78.5	78.5
CSH	--	20.0	--	20.0	--
Rice hulls	--	--	20.0	--	20.0
CSM	--	7.0	7.0	--	--
Urea	--	1.0	1.0	--	--
Salt	1.0	--	--	--	--
Mineral	8.7	1.5	1.5	1.5	1.5

Arkansas Study

	SUPP	CN,CSH	CN,RH	CGF,CSH	CGF,RH
BW					
D 0	1,120	1,111	1,133	1,171	1,083
D 91	1,186	1,149	1,131	1,248	1,129
BW change	79	26	-11	75	57
BCS					
D 0	5.6	5.6	5.8	5.7	5.4
D 91	6.2	6.1	6.1	6.4	6.4
Feed DMI	27	11.5	10.4	13.9	11.9
Daily cost	1.03	0.55	0.46	0.62	0.61

What to Expect

- Aggressive behavior at the bunk
- Consume ration in as little as 20 to 30 minutes
 - Lots of “free time” to pace, crib
 - Takes 1 to 2 weeks to “adapt”
 - Increased roughage may help
- Variation in weight gains/losses?
 - Hay/concentrate ratio
 - Bunk Space?
 - Calves consuming feed
 - Raise feed bunks?
 - Provide creep access





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Feed Management

- Work up to program-fed diet slowly
 - Start with 3-4 lb grain plus free choice hay
 - Increase grain by no more than 1 lb/day
 - When grain level is reached, begin removing hay
- Consistent, accurate feeding
 - Good management essential



Conclusions

- Things could be worse!



- Changes may need to be made to make ranch drought proof
 - if economical, this could be profitable

