## Holistic Planned Grazing

## In the Kansas Fint Hills

## Holistic M anagement Basics

- Consider the whole when making decisions, the whole includes the triple bottom line.
- Finance/Economics
- Ecology
- Society (Community)


## Holistic Planned Grazing

- Using a grazing chart, I plan my grazing twice per year. Once for the growing season and once for the dormant.
- Plan your activities on the ranch first, like burning, calving, breeding and weaning, and where you want the cows at those times.
- Then plan backwards from those events.
- I also plan my winter stockpile paddocks.


## What is M ob Grazing?

- Also called high stock density grazing.
- A more intense version of M iG (M anagementIntensive Grazing).
- Cattle stocked at high density, often over 100,000 lbs per acre and moved often, at least once daily.
- Some grazers use $5+$ moves per day.


## Grazing Chart



Graze The Prairie

## Late Summer/Fall



## Dormant Season Chart



## Grazing Chart

- You can download the chart for free on our website http://www. grazetheprairie.com. Click on grazing, then more info then grazing chart (bottom of page).
- Excel file.
- Charts are set for 2 seasons, growing and dormant. You can enter the date of the start of each and it updates automatically.
- Save a blank copy for future years.


## What I Did in 2015

- 1360 acres divided into 16 permanent paddocks with high tensile electric fence.
- 265 cows and yearling heifers that totaled about 250,000 lbs plus 13,000 lbs bulls equals 263,000 lbs.
- Over the whole grazing cell, the stock density then was 193 lbs/acre (263,000 / 1360)


## What I did cont'd

- Permanent paddocks are 60 to 95 acres. I divided them into 10 acre breaks, or a total of 136 paddocks over the 1360 acres.
- This raised the stock density to $(263,000 / 10)=$ 26,300 lbs per acre.
- M ore importantly, it allowed for a 135 day recovery between graze periods.




## Procedure

- On ATV use poly wire and fiberglass posts to construct each break fence. Follow the GPS vectors to get fences in the right place
- I like to have 2 fences in front of the cattle at all times.
- Every morning, roll up one fence and let cows onto new paddock.
- Graze away from the water. No back fence, the first fence is always the closest to water.


## Cow Days Per Acre

- 1 cow for a day in a paddock is 1 cow day.
- Adjust for animal units. Yearling heifer is about .7 animal units.
- My 240 cows will include 40 heifers, but the cows are 1.1 AU so it equals 248 AU
- Therefore one 24 hour day is 248 cow days.


## Cow Days Per Acre

- Estimate supply by experience or forage stick.
- We estimated 70 cow days per acre on Nov $1{ }^{\text {st. }}$
- 248 / $70=3.5$ acres per day if we eat it all, or 7 acres/day if we leave half.


## Cow Days Per Acre

- New Zealand research show you become pretty accurate with estimating CDA after 30 repetitions.
- I try to estimate at least 2-3 paddocks ahead of the cows.
- This is faster and easier than using the grazing stick, but I recommend doing both for awhile.


## Dormant Season Planning

- Measure stockpile at beginning of dormant season.
- Calculate cow days per acre as before.
- Plan how many days in each paddock.
- M ore temp fences = better performance and less supplemental feed.





## Considerations

- Rule of thumb is one rotation for every ten inches of annual precipitation. We get 35 inches, so that means 3.5 rotations.
- Another rule of thumb is to move fast during fast growth and slowly during slow growth.
- Previously I have done one quick rotation in M ay and June, then one more from July 1 to November 1 (120 days), then 1 in the dormant season.
- Still a good plan, but.....


## 2016 plan

- Getting short of grass late in the dormant season.
- M ore stockpile, more paddocks is the solution.
- Drop 515 acres (6 paddocks) after two rotations will allow for 135 day recovery.
- Leaves 845 acres ( 10 paddocks) for grazing for rest of season ( 125 days) means 12.5 days per paddock.


## 2016 plan

- 2 rotations during remaining growing season is about 6 days in each paddock.
- (6-1) x $10=50$ day recovery.
- OR 1 rotation depending on recovery.
- Either way, I will strip out the paddocks for daily moves.


## 2016 plan

- 240 cows for 120 days is 28,800 cow days.
- With 845 acres, need 34 cow days per acre.
- Leave at least $30 \%$ residual need approx 50 CDAs.
- In the stockpile, then, if we winter 248 animal units, need 38,775 cow days or 125 CDAs assuming 60\% grazing efficiency. 165 day dormant season.


## Is It Enough Forage?

- We grow about 4000 lbs forage dry matter per acre.
- That equates to 130 animal unit days per acre.
- Should grow 67,000 ADA in the stockpile. But will use 15,000 of those in May and June, leaving 52,000 total ADAs for dormant season.
- Demand is 39,000.


## Why M ob Graze?

- Less selective grazing. Cows eat a wider variety of species and don't overgraze the good stuff like big bluestem.
- Better manure/urine concentration.
- Longer recovery periods. M ore paddocks almost always means more recovery.
- Very quick to check your cows on 10 acres versus hundreds or thousands.


