Holistic Planned Grazing

In the Kansas Flint Hills
Holistic Management 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 Mob Grazing?

• Also called high stock density grazing.
• A more intense version of MiG (Management-Intensive 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.
Late Summer/Fall
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Legend: XXXX = Grazed

Note: The chart represents the dormancy season chart with details for different areas and yields, but the specific data is not clearly visible in the image.
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.
• More 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\(^{st}\).
• \(248 / 70 = 3.5\) 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.
- More 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 May 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.
• More 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 Mob 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. More paddocks almost always means more recovery.

• Very quick to check your cows on 10 acres versus hundreds or thousands.