Flexible Stocking Plan, Trigger Dates, and Monitoring Forage

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Flexible Stocking Plan

- Estimate the average sustainable carrying capacity under average climatic conditions
  - Ignore annual crops and crop residues
  - Use – Range Evaluation in conjunction with Historic records
Flexible Stocking Plan

- Divide the herd (at least on paper) into a minimum of three herds
  - A Herd
  - B Herd
  - C Herd
Flexible Stocking Plan

The A and B Herds should:

- Be about 60-80% of the sustainable average carrying capacity
- Be proportional to the frequency, duration, and severity of drought risk in your area
- Be proportional to the amount of risk you or your business are capable of enduring
Flexible Stocking Plan

A Herd

- Most Profitable cows
- Yearling Heifers that have a lot of potential value
Flexible Stocking Plan

B Herd

- Replacement Heifers
- Steers that just need a few more pounds to hit a really good market niche
Flexible Stocking Plan

- **C Herd**
  - The remaining animals that could be sold tomorrow if forage gets short
    - Early weaned calves
    - Yearling steers
    - Older cows
    - Cows with poor genetics
Flexible Stocking Plan

Things to Remember:

- Have a plan in place before a decision of this magnitude has to be made
- If the herds have already been divided (at least on paper) your decisions won’t be a knee-jerk reaction
- Divide the remaining herd into three herds again
Trigger Dates

- Trigger Dates are tools that can help minimize the long term negative impacts of below average forage production.
- Trigger Dates help managers adapt to yearly rainfall variation.
- Trigger Dates assist managers in determining the proper course of action.
Trigger Dates

- Trigger Dates work if:
  - You know your historic monthly average precipitation
  - You know your average sustainable carrying capacity
  - You have a flexible stocking plan
## Trigger Dates

<table>
<thead>
<tr>
<th>Region</th>
<th>April 1</th>
<th>Central</th>
<th>West</th>
</tr>
</thead>
<tbody>
<tr>
<td>East</td>
<td></td>
<td>Sept 15 – Nov 1</td>
<td>24 Month</td>
</tr>
<tr>
<td>June 15</td>
<td></td>
<td>April 1</td>
<td>June 1</td>
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<td>July 15</td>
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<td>Sept – Nov</td>
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<td>Aug 15</td>
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</tbody>
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Trigger Dates

Central Region: Sept 15 – Nov 1

- How did the pasture finish the growing season

- Below average with short grass – little crown energy stored in to initiate spring growth

- Average with adequate leaf area – plant crown entered winter dormant period with adequate energy to initiate spring growth
Trigger Dates

- **Central Region: Nov 1 – April 1**
  - Maintain at least 800 lbs of residue (standing or mulch) to protect the soil surface
  - Good management during the winter increases the amount of moisture (if it rains or snows before April 1) that gets through the soil surface
Trigger Dates

- **Central: April 1**
  - Initial Stocking Rates: If less than 4 inches of effective moisture since November 1 or the grass finished in a weakened condition last fall – Reduce initial stocking rate by at least 10% (by weight) from average sustainable carrying capacity.
Trigger Dates

Central: June 15

- About 75% of the average annual precipitation has occurred by this date
- About 50% of forage production has been grown by this date
- If recorded precipitation (Nov 1-June 15) is less than 80% of the historic average – plan to reduce the stocking rate 30% by weight by July 1
Trigger Dates

- **Central: July 15**
  - July 15 may be the most important date for planning and stocking purposes during the growing season
  - About 75% of the grass production has occurred – under drought conditions it may be more than 75%
  - Even if it starts raining tomorrow most of the growth will be reproductive stems and seed heads rather than leaves
Central: July 15 cont’d

Measure available forage to determine how much time you have before a management decision has to be made.
Trigger Dates

- **Central: August 15**
  - 90% of forage growth has occurred
  - How the grass finishes between now and frost will determine how strong the perennial grasses will break dormancy next spring
  - Keep the 800 lbs/Ac minimum in mind when determining grazing/stocking decisions
Things to Remember

- Next years forage production depends on rainfall and this years management decisions
- Know your monthly historic precipitation pattern

“We plan for a drought every year and then hope it rains” – Earl Berlier, Rancher, Lakin Kansas
Monitoring Forage

“If you can’t measure it, you can’t manage it”. – Calvin Adams, Rancher, Barnard Kansas
Monitoring Forage

Monitoring Dates

- Similar to Trigger Dates depending on how closely you need to know the information

Minimum:

- July 15 – 75% of forage grown by this date
- September 1 – Great time to determine how much was grown this year and how much is in the pasture for the winter
Monitoring Forage

July 15

- Use a “Robel Pole” or yard stick to measure the average forage height in inches throughout a paddock or pasture
- Remember:
  - Tall dropseed, Silver bluestem, and Old World Bluestem may be grass but the cows don’t think of them as forage
Monitoring Forage

July 15

- Measure the average height of the grass inside a frame and clip the frame to determine the average weight of each inch of grass

- Weight X inches – residual = available forage

- Available Forage / Herd Demand = Time
Remember:

- The positive effects of good management are magnified before and during a drought.
- The negative effects of poor management are intensified during a drought.
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