FROM THE COUNTY AGENT'S DESK...

Summer is upon us, but thankfully we’ve managed to catch lots of timely rain. However, as we all know and history tells us, late June can see the last of spring and early summer rains. Pardon the pun, but make hay while you can. The long range forecast does show that we could have a little more than average rain and lower than average temperatures through July and August, but the term “long range forecast” doesn’t sound like something I’d put a whole lot of faith in, especially pertaining to weather. Plan now for how you’re going to handle a potentially dry July and August.
SHOULD I CREEP FEED?

Dr. John Jennings, Extension Forage Specialist

This time of year, cattle producers begin to ask ‘Should I creep feed my calves?’ The answer isn’t as simple as yes or no. There must be a definitive purpose for creep feeding and purposes may include:

- Increase weaning weight of purebred bulls and heifers
- Increase growth and maturity in replacement females
- Increase weaning weight of commercial market calves (steers and heifers)
- Take nursing pressure off the cow
- My neighbor creep feeds

While some of these bullets are justifiable, others are erroneous and some have the potential to be detrimental to both production and the pocketbook. For instance, heifers that become fleshy early in life due to creep feeding may have reduced milk production as a first-calf heifer and market data shows fleshy to fat cattle are discounted $5 to $18/cwt. Arkansas markets during the week of May 29, 2014 reported fleshy heifers, although few in number, discounted $17/cwt.

A common myth is creep feeding calves provides relief to the cow. Calves that are creep fed will continue to nurse their dams; therefore, creep feeding won’t be a direct benefit to the cow. If creep feeding benefits the cow, it will most likely be an indirect response to having slightly more available forage if calves are being creep fed at high enough rates to substitute creep feed in place of pasture.

Forage quality and quantity should be the initial determinant of the creep feeding decision. Creep feed is essentially a supplement to or substitute for pasture forages during the 60 to 90 days prior to weaning when a substantial part of the calf’s diet is no longer milk, but pasture. By this point in a calf’s life, milk has become more of a supplemental food source.

The economic return to creep feeding is influenced by creep feed, feed conversion and feed cost. Creep feed, feed conversion is the amount of additional weight gain associated with creep feeding. For instance, if calves gain, on average, 2.25 lb per day without creep feed but gain 2.5 lb per day when fed 1 lb of creep feed per calf, daily, the creep feed conversion is $1/(2.5-2.25) = 4$ lb feed per lb additional weight gained.
Table 1 below provides a guideline for possible creep feed conversion ratios given various categories of forage quality and quantity.

<table>
<thead>
<tr>
<th>Forage Quality:</th>
<th>Low-Moderate</th>
<th>Low-Moderate</th>
<th>Moderate-High</th>
<th>Moderate-High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forage Quantity:</td>
<td>Low</td>
<td>Moderate</td>
<td>Low-Moderate</td>
<td>Moderate-High</td>
</tr>
<tr>
<td>Example situations:</td>
<td>Unfertilized, over-grazed pasture, all types; drought</td>
<td>Native grasses or improved warm season grasses on low-fertility soils</td>
<td>Bermudagrass, bahiagrass in mid-to late-summer or fescue</td>
<td>Wheat, ryegrass, non-toxic fescue pasture</td>
</tr>
<tr>
<td>Potential creep feed conversion:</td>
<td>4 to 6:1</td>
<td>3:1 to 8:1</td>
<td>5:1 to 10:1</td>
<td>&gt;10:1</td>
</tr>
<tr>
<td>Feeding rate:</td>
<td>0.5 to 1% BW</td>
<td>&lt; 0.5 % BW</td>
<td>&lt;1% BW</td>
<td>0% BW</td>
</tr>
</tbody>
</table>

To help determine the break-even point between creep feed, feed conversion and feed cost, table 2 provides the break-even value of the additional weight gained.

<table>
<thead>
<tr>
<th>Creep Feed, Feed Conversion (lbs feed per lb additional weight gained)</th>
<th>4</th>
<th>6</th>
<th>8</th>
<th>10</th>
<th>12</th>
<th>14</th>
</tr>
</thead>
<tbody>
<tr>
<td>Creep Feed Cost, $/ton</td>
<td>180</td>
<td>0.36</td>
<td>0.54</td>
<td>0.72</td>
<td>0.90</td>
<td>1.08</td>
</tr>
<tr>
<td></td>
<td>220</td>
<td>0.44</td>
<td>0.66</td>
<td>0.88</td>
<td>1.10</td>
<td>1.32</td>
</tr>
<tr>
<td></td>
<td>260</td>
<td>0.52</td>
<td>0.78</td>
<td>1.04</td>
<td>1.30</td>
<td>1.56</td>
</tr>
<tr>
<td></td>
<td>300</td>
<td>0.60</td>
<td>0.90</td>
<td>1.20</td>
<td>1.50</td>
<td>1.80</td>
</tr>
<tr>
<td></td>
<td>340</td>
<td>0.68</td>
<td>1.02</td>
<td>1.36</td>
<td>1.70</td>
<td>2.04</td>
</tr>
<tr>
<td></td>
<td>380</td>
<td>0.76</td>
<td>1.14</td>
<td>1.52</td>
<td>1.90</td>
<td>2.28</td>
</tr>
</tbody>
</table>

While forage quality and quantity will ultimately determine calf response to creep feeding, feed price and calf value will ultimately determine return on investment for calves that will be marketed after weaning.

A common mistake when evaluating the value of gain is to apply current market price as the value of gain. In Arkansas, 550 lb steer calves were averaging $208/cwt the week ending May 29, 2014. Although these calves are selling for $2.08 per pound, this is not their value of gain.

To examine the value of additional weight gain based on current market prices, calculate the difference in total gross income for two different weights and divide that value by the difference in weight to estimate value of gain. For example, 475 lb number 1 steers were selling for $2.23/lb and 525 lb number 1 steers were selling for $2.13/lb. The value of gain from 475 to 525 lbs is $(1118.25 - 1059.25) / 50 = $1.18/lb.
Based on the value of gain and using table 2 above, if creep feed costs $260/ton delivered, steers would need to convert creep feed to weight gain at a rate less than 9 lbs feed per lb of additional weight gain. This rate of creep feed conversion or better could be expected when forage quality or quantity is moderate to low. If creep feed were to cost $320/ton, it is very unlikely feed conversion will be good enough to be profitable.

As a general rule, lower supplementation rates have better feed conversions. If forages are low in protein but not limited in the total amount available for grazing, place more emphasis on supplementing with just 1 to 2 pounds of a high protein supplement. If forages are moderate in protein content or forage quantity is limiting, consider a moderate protein supplement, and if necessary, feed at higher rates (1% body weight) when forage substitution is needed.

**GRASS GROWING STRATEGY FOR THE REST OF THE YEAR**

Dr. John Jennings, Extension Forage Specialist

The highs and lows of pasture growth over the past three years have shown one thing is for certain. Producers following a good pasture management strategy have a more consistent supply of forage than those that rely only on Mother Nature. With rising costs, controlling inputs is important. But the main input of pasture planning is strategy and that doesn’t cost anything. How you manage pastures in this season or this month greatly influences pasture performance in the next season or next month. For example, grazing a fescue/clover pasture early in April promotes more leafy grazing thirty days later and less seedstalks. Cutting fescue hay down to a 2-inch stubble in late June just as high temperatures hit in July stops growth and causes a lot of stand damage. The key to good pasture strategy is to stay on schedule. So this article will give some grass growing points and details for the remainder of summer into fall. Our experience on the research stations at Batesville, Fayetteville, and Hope and with many producers across the state, north to south and corner to corner, shows that all these practices work (or else I wouldn’t be recommending them).

**July: Plan for a last hay crop and for grazing through the rest of summer**

- Rotate pastures on a weekly basis to keep grass in a growing stage. This will be worthwhile when drought occurs. (Savings from improved grazing management = 2-3 weeks more grazing when drought hits)
- Fertilize for the last summer hay cutting and then cut and put it in the barn. Don’t plan on feeding it until late winter because you will be planning to grow lots of fall pasture. Barn stored hay will keep through next year and longer. (Savings from reducing hay waste with covered storage = 15% to 25% of your crop).
August: Plan for fall pasture

- Pick one or two bermudagrass or bahiagrass pastures to stockpile for fall grazing. These could be where you cut that hay in July. Clip or graze the stubble to about three inches tall and apply 50-60 lbs/acre of nitrogen fertilizer between August 1 and 15 (August 15 and 30 for far south Arkansas). Then let it grow until October just as you would for a hay cutting. But you will plan to strip graze it using a single temporary electric wire to make it last longer. The level of quality in this forage will support your cows until late December if enough forage is available. (Savings from grazing stockpiled forage instead of feeding hay = $25-$50 per animal unit or $50-$75 per acre of forage stockpiled).

- Pick a bermudagrass field or a field to be renovated and plant forage brassica and ryegrass. Brassica planted in late August or early September on a lightly disked pasture will be ready to graze by mid to late October or can be deferred to graze in late November to December after the stockpiled bermudagrass. This option gives fescue/clover pastures more growing time in fall for grazing in November and December. The companion ryegrass in the mixture will be ready to graze in March and April. (savings from forage brassica/ryegrass = $25 to >$100 per animal unit)

September: Plan for winter pasture

- Pick a fescue field to stockpile for winter grazing. Clip or graze off old fescue forage to a 3-inch stubble and apply 50-60 lbs/acre of nitrogen fertilizer between September 1 and 15. Let it grow until early December or defer until January 1 if you have brassica to graze in December. Strip graze it with a single temporary electric wire to make it last twice as long as it would without strip grazing. The level of quality in this forage will support cows until spring greenup if enough forage is available. (Savings from stockpiled forage instead of feeding hay = $25-$50 per animal; Savings from strip grazing = an additional $10 per animal unit)

- In bermudagrass-based systems, interseed wheat and ryegrass for winter and spring grazing. Plant in a disked pasture in September and apply N fertilizer after emergence for grazing by December. Planting in October/November delays grazing until late winter or spring.

- Test all hay to determine quality levels. Producers had lots of hay last winter, but many complained at the poor performance of their animals being fed. Hay tests help you feed the best hay when livestock need the best quality. You can also limit feed hay to animals grazing winter annuals or stockpiled forage. This makes the pasture last longer and supplements hay quality. With all this winter grazing, maybe you didn’t need to harvest that last summer hay cutting after all. Good thing it’s stored in the barn.
Fulton County Cooperative Extension Service
118 West Locust/PO Box 308 • Salem, AR 72576
(870) 895-3301 • www.uaex.edu/fulton

FULTON COUNTY RESEARCH AND DEMONSTRATION RESULTS

-Brad Runsick, Fulton County Extension Agent

Spring Planted Clover Varieties

Back on March 15th, I planted a small research plot of 2 different white clover varieties to see how well they persisted with a late winter/early spring planting. Typically, a fall planting is always preferred, but I thought it'd be good to look at the alternate spring planting date. This was done on a food plot site.

The clover was planted on a Brockwell sandy loam soil where phosphorus, potassium, and pH were all at an optimum level for clover seeding. The two varieties were 'Kopu II' from AgResearch Grasslands of New Zealand and Synergy Ladino White Clover.

Planted at a rate of about 6 lbs./acre with 30 lbs. of nitrogen applied at planting, germination rates on both were great. More clover seedlings than I could count per square foot, probably 250-500. The clover was also seeded with chicory at the landowner's request (and on his dime) for the benefit to wildlife.

It quickly became overrun with volunteer ryegrass that had to be cut to prevent shading of the clover seedlings. This is definitely something to be mindful of on a spring planting. A burn down application with glyphosate, closer to the planting date would have been ideal. This would have cut down on some of this competition and allowed the clover to get a bit of a head start. Not that ryegrass is all bad, but it can be terribly competitive, and deer would really prefer to keep grasses around only 10% of their diet.

Just an update for you all on some ongoing research plot work! More details as they become available. My recommendation for now, solely based on visual assessment, is that there isn't really any significant difference between the two.

Spring Thistle Control Demonstration

As some of you may have seen, I sprayed some research plots on Hwy. 62, just west of Viola back in late winter to look at the benefits of using either 2, 4-D amine or Grazon P+D to control thistles. The farmer on that particular piece of ground had a pretty bad thistle problem last year, and in late February of this year it was easy to see that there would be another problem this year if nothing was done. Now, chemical control is only one tool in the toolbox for managing problem weeds, but it was really the only option for this situation. There were easily 1-2 small thistle plants in the rosette stage per square foot.

My plots were only small, roughly 5000 sq. ft. plots, but the producer decided to go ahead and spray the entire field. Today, at the writing of this newsletter, you'll be hard pressed to find a thistle anywhere out there. One quart of 2,
4-D amine per acre in late February and early March will easily provide 95-100% control of thistles. A follow up application this fall might be necessary for any misses or seed that germinates later, but that decision will have to be made later. For more information on weed identification, control measures, and/or sprayer calibration, give me a call at 870-895-3301.

Brad Runsick
Fulton Co. Extension
CEA-Agriculture/4H
870-895-3301
brunsick@uaex.edu

“Like” us on Facebook at Fulton County Coop Extension Service - Agriculture
Follow us on Twitter @FultonCountyAg