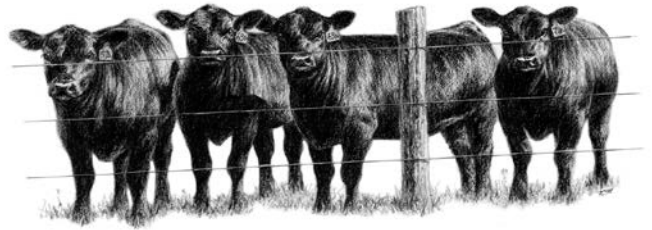


The Cattle Corner



BAXTER COUNTY U OF A COOPERATIVE EXTENSION SERVICE NEWSLETTER

Summer 2021

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From the County Agent's desk...

The April newsletter was all about flies and all of their associated problems. It sure feels relevant now with as much of a fly problem as many folks have had in recent weeks. Go revisit that newsletter that can be found on our website at:

www.uaex.edu/counties/baxter/newsletter.aspx

Also, in the past couple of weeks, there's been lots and lots of hay laid down and rolled up. Managing that feed supply and planning on how to use it this coming winter starts now. Be thinking about getting hay tested and go ahead and start planning for winter feeding, the single biggest expense on most cattle operations. Hay tests are dirt cheap for the valuable information they provide, and I'll come out and take the samples myself. At \$18 per test, it gives you great information about the quality of your hay, and more times than not, will save money on supplemental feed cost when rationing based on the hay quality vs. just guessing how to make up the deficiencies.

Summer Beef & Forage Tips

Tips for Spring Calving Herds:

- Processing spring-born calves at 3 months often occurs during the June-July period. Now is a good time to implant castrated male calves. Implanting calves can improve weight gain by approximately 10-15%.
- Fact Sheet 3019
- Make sure your cattle are protected against Blackleg. Summertime is when Blackleg issues are generally reported. With the inexpensive cost of the vaccine and the high value of cattle, Blackleg vaccination is very cheap insurance. Follow label directions.

Tips for Fall Calving Herds:

Check body condition scores

- Assessing body condition scores is essential in maximizing cow herd efficiency.
- It is much easier to increase condition in cows before rather than after they calve.

Plan heifer development for replacement heifers

- Acquiring or raising high quality replacement heifers is an essential and major investment for the cow-calf producer. The replacement heifer becomes the genetic building block for the cow herd.
- General goals for developing heifers should be to:
- Reach puberty by 12 to 14 months of age.
- Have a high percentage conceiving early in the breeding season.
- Be structurally large enough at calving to minimize calving difficulty.
- Rebreed in a timely manner.
- Raise a good calf to weaning.
- As summer and hot weather approaches, cattle will require fresh water. Many factors influence the amount of water required by cattle. The following table shows average water needs for various classes of beef cattle.

Note water consumption varies considerably, depending on temperature and stage of production. These allowances are not absolute requirements and should only be used as a guide in developing water sources or as a starting point for supplying water to penned cattle.

Forage Management Tips:

Fertilization of warm-season grasses:

- Fertilize bermudagrass pastures according to soil test reports taken earlier in the year for projected management (grazing or haying)
- Split N applications by fertilizing after each harvest

Weed control:

- Apply herbicides to summer annual broadleaf weeds
- MP 522 and MP 44 are outstanding resources for weed identification and control

Warm season annual forages:

- Sorghum-sudan or pearl millet are popular choices as summer annual forages
- Harvest for hay to graze
- In either case, leave 6 inches of stubble to reduce risk of nitrate poisoning
- In sorghum-sudan, prussic acid content can be high enough to be toxic, it will also be present in leaves after the plant is stressed from drought and/or low temperatures
- Reference Fact Sheet 2032

Hay management:

For cool season grasses, leave 2-3 inches stubble height to encourage regrowth

-Cut at boot stage/early bloom for optimum forage nutritive value

For bermudagrass:

-Cut when about 18 inches high, then cut approximately every 30 days

For more information on Management of Hay Production refer to MP 434

Sericea Lespedeza: Friend or Foe?

Brad Runsick, Baxter County Extension Agent

There's no doubt that sericea lespedeza grows readily here in Baxter County. Whether or not that's a good or bad thing is up for debate. Just like anything, there are two sides to this coin.

On one hand, sericea is a legume that if grazed or hayed when very immature and tender, is a highly nutritious legume. In a study done in Alabama back in 2004, 16 weaned steers were split into two groups and were fed either sericea or bermudagrass hay with equal supplementation from soy hulls over a 49 day feeding period. Those on the sericea hay gained an average daily gain of approximately 0.11 lbs./day more, while consuming roughly 4.5 lbs. less per head/day. Both the gain and the intake are significant



amounts. In just 49 days, the sericea group ate 1764 lbs. less than the bermudagrass group. That's roughly two bales. Also, they gained a total of 43 lbs. of more beef. Scatter those numbers out over an even larger herd, and you can start to see the difference. Let's say that a crop of 75 steers are fed sericea hay and fed for 70 days. Now, we're looking at an intake net difference of 23,625 lbs. of hay (4.5 lbs. x 75 head x 70 days), or roughly 30, 800 lb bales. And, for total gains? An additional 577.5 lbs. (.11 x 75 head x 70 days). If we figure on a price of around \$150/cwt, we're talking about an additional \$866 value. Just some food for thought.

However, managing sericea for hay is a little trickier. As with any forage, if it gets too mature, the quality can drop drastically. For sericea, that means getting it cut when it is no taller than 18 inches. And, that

happens very quickly when temperatures warm in late May/early June. Also, as is the case with legumes, the leaves will shatter very easily. Sericea will dry in about half the time it takes other forages. If allowed to dry too long, you'll wind up with a hay bale full of stems. A common means of haying sericea lespedeza is to cut it in the morning, give it 1 day to dry, and rake and bale the following morning when there is still dew on it, before it has completely, 100% cured. However, one knows the risks of baling hay too green as well – mold and chance of combustion, so there's a moisture window there that must be hit. Too wet and you get all the associated problems with green hay. If it lies out too long, you'll wind up with a hay bale of unpalatable, non-nutritious stems.

Another big benefit to sericea lespedeza is its tannin content. High tannin content forages help minimize the internal parasites (worms) in livestock, something that sheep and goat producers have known for a long time. If it's being grazed, the same rules apply as they do for hay. The stocking rate has to be right or else sericea will run off and leave them, getting too mature to be of any benefit. Not to mention, if allowed to, sericea can be highly competitive, choking out other desirable grasses.

Now, for the cons...and what to do about it if you want to control it. Sericea can absolutely take over a pasture or hayfield. It can get by on lower fertility fields, and it is a prolific reseeder. Over time, a pasture that isn't managed will wind up with only sericea and not much of anything else. It will shade out other forages, leaving behind lots of bare ground once it is gone. As mentioned before, the stocking rate must be right to keep it in check. If it's not grazed by the time it gets above 10-12" tall, it becomes mostly useless for grazing.

Sericea is easily controlled, but the timing must be right. Herbicide should be applied when plants are 12-15" tall, before they bloom. In fescue fields, apply 1.5-2.0 pints/acre PastureGard HL. Remedy at 1-2 pints/acre works well too. In fields that are primarily bermudagrass and if you have access to a boom sprayer, metsulfuron 60 DF at 1.0 oz./acre is excellent on sericea. Metsulfuron will harm fescue, though. As always, use a non-ionic surfactant at 0.25-0.50% of tank volume. Spray volumes need to be at least 10 gallons per acre. If you need any help calibrating a sprayer or calculating a treatment for a given field, don't hesitate to give me a call, and I'll be glad to come out.

So, all that to say, "Work with what you have." We obviously don't recommend that anyone go out and disk up their established bermudagrass or fescue/clover pastures just to plant sericea lespedeza, but if it's a problem on your place, there might be some scenarios where it can be utilized. For more information, give us a call at 870-425-2335.

Warmer Temperatures Mean Increased Water Needs for Cattle

Adapted from www.uada.edu

Fast Facts:

- Daily high temperatures of late spring and summer require greater hydration of cattle
- Most cattle require approximately 1 gallon of water for each pound of forage ingested
- Adult cattle require anywhere from 20 to 40 gallons of water a day

As summer approaches and high mid-day temperatures become the norm, cattle producers should give extra attention to making sure their herds have plenty of water to deal with extreme heat for the next several months.



“Water is probably the most overlooked feature on a livestock farm,” said Dirk Philipp, assistant professor-forages for the University of Arkansas System Division of Agriculture. “Clean, abundant drinking water is important for optimal animal importance.”

Philipp said that that access to drinking water typically increases the amount of dry matter, such as hay and other forage, that cattle ingest, which in turn helps regulate body temperature.

Insufficient water intake in cattle can result in decreased rates of rumination and respiration and

increased concentrations of urea and potassium in blood serum. Severe shortages over extended periods of time will result in animal losses, Philipp said, with the chance of survival under temperatures greater than 100 degrees Fahrenheit limited to three or four days.

The water needs of individual animals depend on several factors, including outdoor temperature, the age of the animal and the moisture content of the animal’s forage diet. Philipp recommended producers make sure their cattle get approximately one gallon of water per pound of dry matter consumed.

While a typical beef cow needs 20-30 gallons of water per day, lactating beef cows need 25-35 gallons; lactating dairy cows need 30-40 gallons of water each day. Weaned calves need about 10-15 gallons of water each day.

A higher pace of production can place additional demands for water consumption on cattle than the animals would typically need for daily “body maintenance,” Philipp said. Additionally, calves need proportionally more water than mature cows, Philipp said, because water needs are actually linked more to body surface area than to body weight.

“Mature animals have about 10 times more water reserves for metabolic functions than calves,” he said. “Therefore, young animals are much more sensitive to water-related stress and distress, such as diarrhea.”

Philipp said that the best approach to making water readily available to herds is to set up dedicated, waterline-fed access points. Examples include freeze-proof watering stations, tire tanks that can be connected to ponds and stock tanks that are filled periodically with fresh water or hooked up to a water line.

Dedicated pond and stream access points are better than nothing, Philipp said, although bacteria, pathogens and parasites are often abundant in those situations, due to the high contamination potential from cattle feces.

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 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.

Johnsongrass Problems

Brad Runsick, Baxter County Extension Agent

Nitrates

Drought stressed johnsongrass isn't a problem right now with as much rainfall as we've had, but we're never far from a drought when nitrate poisoning could become a problem for farmers in the coming weeks. Nitrates tend to build up in stressed plants, especially under conditions where there has been a history of excessive nitrogen fertilization, particularly chicken litter. While nitrates can accumulate in weeds and cool season grasses, such as fescue, johnsongrass is perhaps the most common grass species where we see problems with nitrate accumulation. Problems arise when rapid growth is followed by a shutdown in plant growth, such as during times of drought. For example, if a field gets heavy nitrogen fertilization and is then followed by weeks of drought...that next shot of run that kicks it off again will be when nitrates are rapidly accumulated. Nitrates also tend to be at greater concentrations in the lower portions of the plant, and unlike prussic acid poisoning, it can carry over into hay.

Symptoms of nitrate poisoning include difficult and painful breathing, rapid breathing, muscle tremors, weakness, low tolerance to exercise, diarrhea, frequent urination, dark to chocolate colored blood and collapse. Milk production may also be reduced. Poisoning can cause death within half an hour to four hours after symptoms appear. At lower levels, it can also cause abortions, poor appetites, and slow growth.

So, what can you do? Pay particular attention to fields that have johnsongrass. If it looks like plant growth was rapid and then just came to a standstill, be aware that nitrate accumulation could be a problem.

There are no visible symptoms on the plant of nitrate accumulation. For years, farmers have suspected that the white powder that tends to build up on johnsongrass is a symptom. This is the fungal disease, powdery mildew, which is harmless and not related to nitrate accumulation. That's not to say that the plant can't have powdery mildew and nitrate accumulation at the same time. Here are a few tips to avoid nitrate poisoning:

1. Follow recommendations for nitrogen fertilization, and be careful not to exceed 4 tons of poultry litter yearly per acre on cool season grasses. The risk will be minimized by spreading litter uniformly and limiting application to 2 tons per acre per application.

2. When a crop is grown under conditions that cause nitrate accumulation, delay harvest of the crop until conditions improve to permit nitrate content to drop to a safe level.
3. If high levels of nitrate have accumulated in plants, raise the cutter bar and leave more stem, the portion of the plant with the highest concentration of nitrate, in the field.
4. Have suspected forage tested before feeding to cattle.
5. Dilute toxic forage by mixing it with nontoxic forages and/or energy feeds such as molasses or corn. Use forage nitrate analysis to determine dilution rates. Energy feeds, such as shelled corn, when fed daily at a minimum of 2 pounds per head, will offset production losses as long as the average forage nitrate concentration does not exceed 1,500 ppm.
6. Feed a nutritionally balanced ration. Iodized salt and vitamin A or green feed supplementation lessens the toxicity of nitrates.
7. Adapt cattle slowly to elevated levels of nitrate. Don't give hungry animals a full feed. Never exceed maximum recommended levels of nitrate intake.
8. Feed suspect forage in small amounts several times a day rather than all at one feeding.
9. Be aware that forage re-growth and volunteer plants are highly suspect following nitrate fertilization and drought.
10. Observe animals closely for signs of toxicity and call a veterinarian immediately if symptoms are observed.

If you suspect a problem, it'd be worth not losing a cow to have it checked. Nitrate forage testing is a \$5 service offered by our office. If you have questions or need it checked, feel free to give me a call at 870-425-2335.

Prussic Acid

Nitrates aren't the only problem that can arise with drought stressed forages. As it gets drier and drier, oftentimes, johnsongrass is one of the few grasses remaining in the field with some forage capacity available. Fescue has long since dried up. Bermuda may still be kicking somewhat, but with prolonged drought and high heat, it too will slow down considerably. Therefore, many producers' fields are left with not much besides johnsongrass and few drought tolerant weeds, and that can be a recipe for problems. The previous article mentioned nitrates, but there is another potential problem. Prussic acid, also known as hydrocyanic acid, can build up in stressed johnsongrass, much like nitrates. It can occur in all sorghum type grasses, as well as wilted wild cherry leaves. However, unlike nitrates, prussic acid will usually concentrate in the upper portions of the plant, whereas nitrates tend to accumulate in the lower portions. Also, unlike nitrates, prussic acid doesn't carry over much into hayed forages. The process of curing forages through haying decreases prussic acid levels. There are no reliable test for prussic acid in forages because the levels can change so rapidly after taking a sample.

The symptoms of prussic acid poisoning may be labored breathing, weakness, increased heart rate, and twitching. The symptoms of nitrate poisoning may be very similar, and the cause of the symptoms may be confused between the two. Here's a list of a few things you can do to try to avoid problems with prussic acid.

- 1.) Do not allow animals to graze fields with succulent, young, short growth. Graze only after plants reach a height of 18 to 24 inches.
- 2.) Do not graze drought damaged plants in any form, regardless of height, within four days following a good rain. It is during this period of rapid growth that accumulation of prussic acid in the young tissue and of nitrates in the stems is most likely to occur.
- 3.) Do not graze wilted plants or plants with young regrowth.
- 4.) Do not rely on drought damaged material as the only source of feed. Keep either dry forage or green chop from other crops available at all times. Uneven growth as a result of drought can best be utilized as silage or hay.
- 5.) Do not use frost damaged sorghum as pasture or green chop during the first seven days after the first killing frost.
- 6.) Delay pasturing for at least seven days or until the frosted material is completely dried out and brown colored. Do not rely on frosted material as the only source of feed. Do not graze at night when frost is likely.
- 7.) Do not turn hungry cattle onto a pasture of sorghum, sorghum sudan hybrid or johnsongrass. Fill them up on hay or other forage first, and begin grazing in the late afternoon.
- 8.) An option for using potentially toxic forage is to harvest it as hay or silage. Prussic acid levels decline in stored forages. Well cured hay is safe to feed.

Summer Weed and Brush Control

Brad Runsick, Baxter County Extension Agent

As of the writing of this in mid-June, we're right on time to control many warm season weeds in pastures and hayfields. This does NOT include thistles, buttercup, and other cool season weeds. It's far too late to do much good on those, and they've already done their damage anyway. Now is an ideal time to control ragweed, horsenettle, maretail, red sorrel, and wooly croton. Woody brush, like oaks, honeylocusts, buckbrush, and others can be controlled all summer long with the one caveat. You can't get good brush control in the middle of a dry spell. Wait until you get an inch or two of rain from a summer storm, and then spray. Those plants need to be actively growing. For ragweed and croton, 1 qt./acre of 2,4-D amine will do the job. If you've got horsenettle or red sorrel, you'll want to upgrade to GrazonNext, Grazon P+D, or DuraCor...again, at 1 qt./acre. A good, general brush control mix is to use 1 qt./acre of either GrazonNext or Grazon P+D, along with 1 pint/acre of Remedy (or similar generics). If only spot spraying, use 1% of either of the Grazon products with ¼% Remedy. With brush, if you mix it too strongly, it tends to burn the leaves off faster than it can kill the plant. More isn't always better. With any application, always throw in 0.5% non-ionic surfactant (NIS), by volume. That's the equivalent of 2 cups per 25 gallons water. That Grazon + Remedy does NOT tend to a great job on cedars (You need a chainsaw or undiluted, soil applied Tordon for that.) or prickly pear cactus. Surmount is the better option there.

For more specific recommendations, I can come look at your place. We'll identify what your main problem is and tailor a spray recommendation from that.

A handwritten signature in black ink that reads "Brad A. Runsick". The signature is written in a cursive style with a long, sweeping tail on the final letter.

Brad Runsick
Baxter County Extension Agent
870-425-2335

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