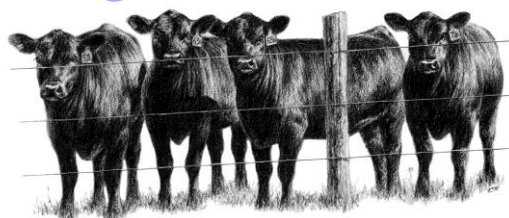


# The Back Forty News



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## FULTON COUNTY U OF A COOPERATIVE EXTENSION SERVICE NEWSLETTER

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July 2018

### From the County Agent's desk...

It sure seems like a long way off before we get back to milder temperatures and reliable rainfall. June was unseasonably hot, and rain was sporadic. Some areas of the county are in decent shape on rain and hay crops, while others have missed nearly every storm that has blown through. If your farm falls into the latter category, now is the time to start planning...not in 6 weeks when it potentially could be a much worse situation. As necessary as it may seem at the time, avoid grazing fescue pastures into the dirt. Doing so only means that they are much less likely to recover when adequate rainfall does finally return. It'd be far better and cheaper to feed a few bales here and there than to have to totally renovate a fescue pasture next season.

Then again, it may be the wettest July on record. I sure hope so. But it's better to have a plan and not need it than get hit with a severely dry summer with nothing else to do but sell inventory.

## NATURAL STATE PRECONDITIONED CALF PROGRAM

### GOGREEN

Cattle buyers looking for the best Arkansas livestock may need to look no further than the green ear tag awarded as part of the Natural State Preconditioned Calf Program. The University of Arkansas System Division of Agriculture program is meant to produce calves that are better prepared – or preconditioned – to deal with the stress that goes with leaving their birth ranch.

“Preconditioning involves vaccination, castration and calves who are weaned and understand how to find food and water in troughs,” said Shane Gadberry, professor-ruminant nutrition or the University of Arkansas System Division of Agriculture.



High-quality calves are important in Arkansas, which is ranked No. 11 in the nation for the number of beef cows. Most of the calves raised in Arkansas are not farm-to-plate, which means they will likely be spending part of their lives at another farm by the time they are six or seven months old.

**“When preconditioning is done right, everybody wins,” he said.** “Buyers spend less time and money treating sick cattle, sale barns provide healthier cattle and attract new business, and sellers often receive market incentives that cover vaccine costs and short-term retained ownership may advance market weights and total sale dollars.”

The program’s nickname “GoGREEN,” refers to the green ear tags placed on cattle meeting the program requirements, which include delaying marketing for at least 45 days after weaning.

### **How to enroll**

To participate, the rancher must first be Beef Quality Assurance certified. Beef Quality Assurance certification is available through local county Cooperative Extension Service office sessions this summer or online at [www.bqa.org](http://www.bqa.org). (See article below).

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Once enrolled in the GoGREEN program, ranchers should look at the criteria listed on the qualifying form and must have documentation of health products purchased and dates administered. After all the best management practices have been documented, tags can be picked up from the county Extension office.

The GoGREEN program is not free. There is a ranch enrollment fee of \$10 for 3 years and a \$2 per calf qualifying fee. The fees are used to cover the cost of tags and program administration and promotion.

If you're ready to GoGREEN, visit your local county Extension office to get started and visit the GoGREEN website at [www.uaex.edu/gogreen](http://www.uaex.edu/gogreen) for additional program details.

### **Origins**

A committee of extension agents helped develop the program with an eye to helping their clients who raise, sell and buy cattle. Unlike other Arkansas programs, the GoGREEN program is an any-barn, anytime program.

"We hope this will be a welcome marketing plus for sale barns that featured the green-tagged program calves," Gadberry said. "We are launching this program now, hoping to see GoGREEN tags showing up in sale barns this fall."

To learn more, visit your local county extension office to get started and visit the GoGREEN website at [www.uaex.edu/gogreen](http://www.uaex.edu/gogreen) for additional program details.

## BEEF QUALITY ASSURANCE



### What is BQA?

BQA is a nationally coordinated program implemented in each state in order to build trust and confidence in the beef industry. The goal of the Arkansas BQA Program is to encourage the consistent production of high quality cattle in Arkansas.

### How does BQA improve Arkansas beef?

Arkansas BQA programming focuses on educating and training beef producers and veterinarians on the issues in cattle food safety and quality. Instruction is based on information gained by the National Cattlemen's Association and includes common sense management techniques along with accepted scientific knowledge on how to raise cattle under optimum herd health management and handling conditions. Once BQA certified, producers are equipped with knowledge that will help them obtain the goal of producing a safe and wholesome product.

### How can Arkansas producers become certified?

Arkansas BQA offers two ways to participate.

1. **Online Certification:** Producers register through the National BQA Online Classroom, complete the desired training modules and pass the test. The National BQA Manual and training modules are available at no cost.
2. **In-person Certification:** Producers attend a course provided by an official Arkansas BQA trainer. Arkansas currently has 25 Extension Agriculture Agents available as BQA trainers. Producer information will be entered into the National BQA database.

\* For both types of certification, a state and national BQA number will be issued for the producer. To

### **Tentative Dates for Our Area:**

**Fulton County – Tuesday, August 28<sup>th</sup> at 6 p.m. at Fulton Co.  
Fairgrounds**

**Izard County – Thursday, August 30<sup>th</sup> at TBD at TBD**

remain current, producers must re-certify every 3 years.

## **NITRATE POISONING AND HOW TO AVOID IT**

**Brad Runsick, Fulton County Extension Agent**

Nitrate poisoning could become a problem for farmers in the coming weeks, especially if it were to turn off drier than it already is. 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 is fertilized, gets a good rain, and then is followed by weeks of drought, that is a pretty good recipe for nitrate accumulation. Also, nitrates 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've got questions or need it checked, feel free to give me a call at 870-895-3301.

## **PRUSSIC ACID IN JOHNSONGRASS**

**Brad Runsick, Fulton County Extension Agent**

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 considerable. 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.

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.



Brad Runsick

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