

The Back Forty News



FULTON COUNTY U OF A COOPERATIVE EXTENSION SERVICE NEWSLETTER

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January 2018

From the County Agent's desk...

Unfortunately, the fall rains that we hoped for never really materialized for much of Fulton County. In many cases, our neighbors in surrounding counties in Sharp, Izard, and Baxter managed to catch some of those rains that we either missed or only got a few hundredths in the rain gauge. So, as is the case in any farming situation, it's better to be proactive in pasture planning than reacting to a problem once it has already occurred. If the dry years of 2011-2012 are any indication of what the coming spring has in store for our pastures, then we ought to know that we're likely in store for some problems in pastures and hayfields. If this winter shapes up to be a cold, dry one, then I'd anticipate that we're in line to have some serious winterkill in bermudagrass pastures, particularly in varieties with poor cold tolerance. Giant bermudagrass varieties that are often sold in seed blends are usually the first to go in even a mild winter, but they make for some good marketing photos in that first growing season. The old standby variety, 'Wrangler', has perhaps the best cold tolerance. Common bermudagrass and varieties such as 'CD90160', 'Russell', 'Jiggs', and 'Tifton 85' all show low to moderate cold tolerance.

Winterkill in bermuda is often worse in a dry winter than a wet one. In dedicated bermudagrass fields, it'd be a good idea to plan for some overseeding next spring.

In regards to fescue, it won't be winterkill that thins stands, but the dry stretch from September until now has likely hurt fescue pastures. Much like in 2011-2012, when fescue stands thin, weeds move in. I attribute much of the sage grass that we have to this very thing. Dry years open up more bare ground, and undesirable weeds take advantage. If I had to guess, Spring-Summer 2018 will be a bumper crop year for ragweed and woolly croton. Much like in bermudagrass fields, it'd be wise to attempt to fill in those gaps in the fescue next March, and then plan on doing some spring weed control to give that overseeding a chance to survive. One quart of 2, 4-D amine applied in early March and likely again in mid-late May is going to be low cost practice that can really help keep fields productive next year. One thing that I can almost guarantee is that doing nothing to plan is likely going to result in some pretty weedy pastures in Fulton County next spring. Please don't hesitate to call or come by so we can discuss a plan of action for you. I'll be glad to come out and look at fields to determine if overseeding is going to be needed, and next spring we can help get sprayers calibrated and make decision on weed control.

Cooperators Needed: 2018 Project Needs

Attention newsletter readers! I'm looking for some Fulton County farms to do some projects with this coming year. Mostly, these are no work on your part. I just need a location to do them and a little cooperation on your part. Here's what I have in mind and some of the details of each. These are a direct result of feedback I've gotten from our agriculture subcommittee which is made up of Fulton County farmers. So, I didn't just dream these up! If you're interested in letting me use your place to do these, message me here or give me a call at the office at 870-895-3301 to discuss further details! I can do them anywhere, but fields along heavily traveled roads are preferred. I will say that, in most cases, we already know what the results of these will be, but the goal here is to showcase the results of the recommendations that I so often make.

1. Poultry litter vs. commercial fertilizer yield testing. I'll lay out strips. We'll fertilize with different sources (urea, ammonium nitrate, triple 17, litter, etc.) and then we'll monitor total forage yield throughout the growing season. This either needs to be a hayfield or an area of the field that cattle can be kept out of. We'll make the applications in March-April and monitor throughout the spring.
2. Sericea lespedeza control. A field with a heavy infestation of sericea lespedeza is needed. I'll make various herbicide application in strips. Then, measure the control of each. This will take place in May-June.
3. Herbicide-impregnated fertilizer (HIF) weed control. HIF is a relatively new option for forage and livestock producers to control weeds in their pastures and hayfields. The purpose is to test the efficacy and economic benefit of using HIF and compare it to foliar spray applications. Plot work will begin in February and continue into May/June. Results will be gathered approx. 3-4 weeks after the dates of application. This particular project will actually be done on 5-6 sites around the county with varying weed species present. So, I really need several different sites for this one.

Give me a call if you're interested! 870-895-3301.

Upcoming Calendar of Events (see articles for more details)

| <u>What</u> | <u>When</u> | <u>Where</u> | <u>Cost</u> |
|--------------------------------------------------------------------------------------------|-------------------------------------------------|--------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|
| Private Applicator Training for Purchasing Restricted Use Pesticides (PAT) - Izard County | Tuesday, January 23 rd at 6:00 p.m. | Ozarka College in Melbourne | \$10 for the training (at the door) + \$10 for a 1 year or \$45 for a 5 year license (sent to AR State Plant Board) |
| Private Applicator Training for Purchasing Restricted Use Pesticides (PAT) - Fulton County | Tuesday, February 20 th at 6:00 p.m. | Fulton County Fairgrounds Hickinbotham Miller Building | \$10 for the training (at the door) + \$10 for a 1 year or \$45 for a 5 year license (sent to AR State Plant Board) |
| 2018 North Central Arkansas Beef & Forage Conference | Tuesday, February 27 th at 6:00 p.m. | Salem High School Cafeteria | \$10 (pay at the office); Must pre-register by Wed., February 21 st . |

Private Applicator Training (PAT) for Restricted Use Pesticides

Local farmers, ranchers, and other agricultural producers who wish to renew an expiring pesticide license or receive a first time private pesticide applicator license will have the opportunity to receive the required training. Some of the folks that are up for recertification will have gotten a letter from the State Plant Board notifying them that their certification is up. If you are receiving this letter, then according to our records and the Arkansas State Plant Board, your license is about to expire.

The training will be held in Salem on *Tuesday, February 20th, 2018 at 6:00 p.m.* at the Fulton County Fairgrounds in the Hickinbotham-Miller building. This training is **NOT** for certification of commercial (for-hire) pesticide applicators!

There is a \$10 per person fee which *must* be paid at the door at the time of training. This fee is not related to the licensing fees charged by the State Plant Board. It is only for the training. The fee for the license is \$10 for one (1) year or \$45 for five (5) years. That amount you will pay in later to the State Plant Board, not the Fulton Co. Extension Office. Checks or exact cash preferred.

2018 North Central Arkansas Beef & Forage Conference

The 2018 NC Arkansas Beef and Forage Conference will be held right here in Fulton County this spring, on February 27th at 6 p.m. at Salem High School Cafeteria. The cost to attend is \$10 which must be paid at registration at your respective County Extension Office by Wednesday, February 21st. Fulton County folks just need to come by our office on the courthouse square to register and pay. You can also mail in a check with the registrants name(s) to: Fulton County Extension Office, P.O. Box 308, Salem, AR 72576. A catered meal will be provided.

Topics and Speakers

Farm Service Agency Drought Recovery Opportunities – Flint McCullough, Farm Service Agency

Pasture Crop Insurance Options – Michael Pasketwitz, Izard County Extension Agent

Spring Pasture Weed Control (Herbicide Impregnated Fertilizer, Johnsongrass wicking, dormant bermudagrass applications, and general weed control) – UA County Extension Agents, Brad Runsick, Michael Pasketwitz, Joe Moore, and Nathan Reinhart

General herd spring health – Dr. Jeremy Powell, UA DVM

Beef cattle fly control and parasite management – Dr. Kelly Loftin, UA Extension Entomologist

Beef Herd Management Precautions (Winter 2017-2018)

Fall 2017 was extremely dry for most of Arkansas. Most of the state is currently in severe to extreme drought with burn bans issued for half the counties and little rain in the forecast. The current winter forecast is above normal temperature with equal chances of being above or below average for precipitation. Some things to consider this winter include:

Vitamin A – cattle producers that normally do not feed hay until December or January had to start feeding hay as early as mid-October. Hay is low in Vitamin A content and cows have a 3 to 4 month body reserve. Long term hay feeding may lead to Vitamin A deficiency and cause problems with reproduction in the herd. Cows may need up to 50,000IU of vitamin A daily. Avoid using salt blocks this winter and supplement cows with a complete mineral mix that has at least 150,000IU vitamin A. Vitamin A can also be administered as an injectable, but the high dose also requires a withdrawal time for slaughter. Injectable vitamins should not be administered to mature cows if they need to be marketed within the withdrawal period.

Protect Hay Lots – fire danger is high. Unintentional fires can be started with coal embers from disposed fireplace ash. Avoid storing all hay in a single location, use natural fire breaks (streams, roads) to separate hay stores when possible. Man-made fire breaks can also be constructed.

Hay Quality – a warm and dry forecast will help minimize environmental stress; however, cows may still require supplementation to maintain body condition. Harvesting hay on time during summer 2017 was difficult. Overly mature hay will be low in protein and TDN. Test hays to determine the right type of supplement. Undernourishment during the third stage of pregnancy may reduce lifelong performance of offspring.

Avoid too much salt – Cows have a high salt tolerance so cattle producers will sometimes use salt to control intake of self-fed supplements. Right now, producers are voicing more concern over dwindling water supply than dwindling hay stock. High salt intake with restricted water intake could lead to salt toxicity.

Avoid water restriction – Pond water levels are getting low. Deep mud can restrict access and reduce water consumption. Shallow water can also freeze solid more easily. A reduction in water intake will lead to a reduction in feed intake and productivity. Monitor water supply and develop an action plan early. Pregnant cows can consume 6 to 9 gallons per day, while lactating cows can consume 11 to 17 gallons per day, for a temperature range 40F to 70F.

Extension Launches Webpage Devoted to Cattle Working Facilities

The keystone of good animal welfare and beef quality assurance is cattle working facilities. University of Arkansas's beef cattle specialist, Shane Gadberry, working alongside county Extension agents across the state with support of the Arkansas Beef Checkoff are working together to bring a new perspective to this topic. The webpage is a go to source to download the Extension publication, Cattle Working Facilities (MP239). The webpage also provides details on pen size, feed bunk space, and shade area. There are also links to equipment manufacturers. The new perspective this webpage is offering is being captured at 50 to 250 foot above the ground. The webpage connects visitors to video footage and still aerial images of working facilities captured using the Animal Science Department's drone. Anyone planning to build or update their facility can watch videos to get a birds-eye view of facility layouts other producers around the state have envisioned. Dr. Gadberry sees this as just the beginning of what can be a very useful site. The goal is to capture facilities that have some practical aspects and offer examples scaled from the smallest to very large operations. Topography and existing infrastructure prohibits a one-size fits all approach to designs. The goal with



this project is to illustrate what others have done so their fellow cattle producers can glean from those ideas and adapt what fits their operation. The web address is <https://www.uaex.edu/farm-ranch/animals-forages/beef-cattle/beef-cattle-handling-facilities.aspx> . A person can navigate to the site by going to www.uaex.edu and click on the Farm & Ranch - Animals and Forages link then using the left navigation pane click the Beef Cattle - Beef Cattle Handling Facilities link.

Poultry Litter as a Fertilizer: Applying Efficiently and Accurately

There is no doubt that using poultry litter to improve the fertility of our soils can be very advantageous to farmers, particularly if you've got a good relationship with someone that has poultry houses. Poultry litter contains the nitrogen, phosphorus, and potassium that are found in most commercial fertilizer blends, but there is lots of variability in litter.

A study conducted by the University of Arkansas a few years ago showed this variability spread over almost 300 litter samples. The average of those samples was 62 lbs. of N per ton, 69 lbs. of P₂O₅ per ton, and 60 lbs. of K₂O per ton. That's essentially the numbers that come off of your soil test analysis.

Most litter contains approximately equal parts of the big three primary macronutrients we're concerned with in soil fertility and growing forages. However, very rarely does a soil actually need equal parts of N, P, and K to bring its nutrient concentrations up to an optimum level. Just as an application of 17-17-17 commercial fertilizer is an inaccurate means of fertilizing to the soil's needs year after year, so too can the use of only litter be a practice that isn't cost effective. It's also not very environmentally responsible.

Part of the reason that our soils and forages don't need this nice, little neat ratio of N, P, and K is because of the utilization of those nutrients by our forages and our own history of fertilization. Both bermudagrass and fescue use about the same N and K per ton of grass produced, but P is another story. Most forages only use about 15-20 lbs. of P per ton of forage. They'll use closer to 50 lbs. of N and K. So, years of poultry litter application will typically result in astronomical levels of P in relation the N and K levels.

Keep in mind, grazed pastures and hayfields are treated completely differently from a P and K standpoint because of the nutrient cycling that goes on in grazed fields. In grazed pastures, a field that already has optimum levels of P and K shouldn't have P and K applied year after year. There's no need because the nearly 85% of that P and K is cycling right through the animal and back onto the field. Hayfields are different because of the removal of nutrients via the hay bale.

Don't get me wrong, litter can be great if you've got a good source and someone you trust to possibly pull you an accurate sample. However, if you're applying to satisfy the N and K needs in the soil and you don't have a great phosphorus need, then you're paying for a lot of P you might not need. On the other hand, if you're just putting out enough to satisfy the P, then you're not getting enough N to produce anymore forage versus no application at

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all. The best practice for using litter as a fertilizer is to have a soil test and a litter test in hand when figuring on what your application will be. Some litter will be good, but some will be all bedding and nearly worthless as a fertilizer. You won't know unless you test it, and I don't believe I'd waste my time or money on an application unless I knew for sure what I had. Also, if it is lower quality, at least you'd know how much commercial fertilizer to use to make up the difference if it's a deal you just can't refuse. So, always weigh out the costs of fertilizers' nutrient values against each other instead of just the cost per ton. Soil tests are free, and litter tests will run you around \$20 + postage. Both samples will only be as good as the job done by the sampler, too. Once we get the results in, I'll be glad to sit down with you to figure it all out and come up with an application.

For more information on soil or litter sampling, call 870-895-3301 or come by!



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