FROM THE AGENT’S DESK...

Normally, this quarterly newsletter would come to you in July, but there’s enough going on in Fulton County agriculture these days that I thought that it couldn’t wait. I also wanted to take a short piece in this newsletter to take some time to give you a rundown of what our office does, what we can offer to you, and about our history.

The foundation for the Cooperative Extension Service first got kicked off with the Morrill Land-Grant Acts in the 1800s that created the land grant universities in each state, with the University of Arkansas and the University of Arkansas – Pine Bluff being the institutions for Arkansas. The purpose of these land grant institutions was “to teach such branches of learning as
are related to agriculture and the mechanic arts, in such manner as the legislatures of the States may respectively prescribe, in order to promote the liberal and practical education of the industrial classes in the several pursuits and professions in life." - 7 U.S.C. § 304.

The actual creation of state Cooperative Extension Services started with the Smith-Lever Act of 1914 that created a partnership between the USDA and the state land-grant agricultural colleges. Ultimately, this is where we wound up with our federal funding. The name, “Cooperative” refers to the funding cooperation between the federal, state, and county governments. Most of our funding comes from the state of Arkansas, some from Uncle Sam, and and some from Fulton County. We’re a bit of a unique organization in that we operate under the umbrella of the University of Arkansas, and we aren’t solely a federal, state, or county agency. We’re a little bit of everything!

Also, a little later, the Hatch Act of 1887 created the agriculture experiment stations, with the station north of Batesville perhaps being the one you’re most familiar with.

The experiment stations and the Cooperative Extension Service both fall under the University of Arkansas Division Of Agriculture. Much agriculture research is conducted at the experiment stations, research centers, and on the campus farm in Fayetteville. Then, it’s the job of Extension to “extend” that education out to the general public through the use of on-farm demonstrations, newsletters like these, field days, meetings, news articles, etc. Whatever means necessary to get quality, research-based information to you, the producer.

In addition to agriculture research and education, the Cooperative Extension Service is likely best known for its role in conducting the 4-H program, family and consumer science education, and community development work.

So, that’s probably enough of a history lesson for today, but I just wanted to give everyone a little background on what it is that we truly do. We extend informal education into the counties we work in. My job is to help you make better on-farm decisions to improve your operations, and ultimately your bottom line.
With that, I want everyone to know to not ever hesitate to call or come by if you ever want or need any help from me. As many of you may already know, I’m in and out of the office a lot. Whether it’s trainings on new information, out on a farm visit with another producer, or even “way too frequent” meetings, sometimes I can be hard to catch in the office. The way I look at it, is if I’m just sitting behind this desk all day, I’m not really doing my job to better help you all, anyway. However, that doesn’t mean that I’m not available. You can get me on my cell at 870-750-0848 or via email at brunsick@uaex.edu. It doesn’t hurt to call before you come by if you need to talk face to face, or if not, you can always leave me a message at the office and they’ll let me know.

**WHAT YOUR COUNTY EXTENSION OFFICE CAN DO FOR YOU**

Brad Runsick, Fulton County Extension Agent

So, now that might’ve gained a bit more information on where we come and what we do, I wanted to list a few things that are available through our office. Remember, our mission is education and services, so there is not anything in the way of programs to sign up on. That’s through different agencies. Many of you have small farms that may be more of a hobby than anything else. Some of your farms are a full blown business. In either case, I encourage you to make use of all of the resources available to you to improve your operation, particularly the free ones.

Since Fulton County is primarily a livestock and pasture kind of agriculture county, that’s what we’ll focus on. Also, this list isn’t all inclusive of everything that we do or can offer education-wise. I don’t have a big enough postage budget for that much paper. Unless a fee is specifically mentioned, then the service is free. So, here goes:

**Pasture and Hay (Forages)**

- Soil sampling with analysis and recommendations (free)
- Forage sampling (hay or green forage) to analyze for % moisture, crude protein, ADF, NDF, TDN, and NEL ($18 + postage)
- Forage sampling for nitrates ($5 + postage)
- Weed identification and control recommendations
Boom and boomless sprayer calibration
- On-farm visit with your county agent (me) to assist in developing a pasture or hayfield improvements
- Manure analysis for relative fertilizer value ($20 + postage)
- Forage establishment (how to, what rates, best timing, etc.)
- Armyworm (and other pest) identification and control
- Efficient hay storage and feeding recommendations

Livestock
- Livestock health recommendations (non-veterinary recommendations)
- Education and recommendations on how crude protein, ADF, NDF, TDN, and NEL fits into a herd ration balancing
- Ration balancing
- General herd health information (vaccinations, castration, dehorning, hormone implanting, etc.
- Recommendations on narrowing calving seasons down to 60 days or less
- Reproductive education concerning EPDs, bull testing, reproductive disease and management, etc.

Please give us a call or come by if you’ve ever got any questions about these or any other services that we might could help you with.

USDA ANIMAL DISEASE TRACEABILITY PROGRAM

Robert Wells, Drovers Cattle Network

On March 11, 2013, the United States Department of Agriculture (USDA) initiated the Animal Disease Traceability Program (ADTP) to track interstate livestock movement. According to the USDA, “Animal disease traceability, or knowing where diseased or at-risk animals are, where they have been and when, is very important to ensuring a rapid response when animal disease events take place. This will reduce the number of animal owners impacted by an animal disease event and reduce the economic strain on owners and affected
communities.” The new rule replaces the previous unpopular version of the National Animal Identification System (NAIS) and pertains to all livestock, including cattle, horses, sheep and goats.

The new rules will minimally change official identification requirements for animals that are shipped interstate, yet it will improve animal disease traceability. The ADTP will require livestock that move interstate to be accompanied by an Interstate Certificate of Veterinary Inspection (ICVI), owner-shipper statement or a brand certificate. The owner-shipper statement and brand certificate must be approved by officials in both the state of origin and the receiving state. Animals moved intrastate will be under the jurisdiction of the state’s regulations.

For cattle, the following are deemed officially accepted forms of identification:

- Metal ear tags (brucellosis “orange” tag or National Uniform Ear tagging System (NUES) “Brite” tag).
- Plastic ear tags (with or without RFID, but must have a unique 15-digit code with 840 as the first three digits, the U.S. shield and manufacturer’s logo or trademark).
- Group or lot identification when applicable.
- Brands, when recognized by a brand inspection authority, accompanied by an official brand inspection certificate and allowed by the receiving state.
- Ear tattoos acceptable to breed registries when accompanied by a breed registration certificate or back tags when cattle are moved directly to slaughter.

The metal ear tags will be provided at no cost to producers from the USDA as long as funds are available. Exempt cattle are those that are moved directly to a livestock slaughter facility or to an approved livestock tagging facility with an owner-shipper statement; moved from farm of origin to a veterinary medical facility and then returned to the farm of origin, directly from one state through another state and back to the original state; or moved as a commuter herd with a copy of the commuter herd agreement.

Ordinarily there is no requirement for a producer to maintain a copy of the movement document, but it is highly recommended that records be kept. However, if an animal loses an official ear tag, a replacement may be
used. If this occurs, then records that include the new identification number, the date it was implemented and the old number, if known, must be maintained for five years.

This situation could apply if mature breeding beef cattle are purchased and shipped between states. As the drought eases and producers restock, they will need to make sure that cattle have compliant identification and maintain those records necessary for USDA compliance.

Federal rules require the following animals to be officially identified:

- All sexually intact dairy cattle.
- All rodeo, exhibition or event cattle and horses.
- Sexually intact beef cattle over the age of 18 months.
- Equines that move interstate.
- Existing sheep and goat scrapie regulations apply.

**TIME TO BE THINKING ABOUT TRUE (SPRING) ARMYWORMS**

Brad Runsick, Fulton Co. Extension Agent

It’s time to be on the lookout for armyworms, if you aren’t already. Spring armyworms typically feed on cool season grasses, such as fescue, ryegrass, and orchardgrass, but they’ve been known to affect other species, as well. I’ve already heard of one case of armyworms in pasture in Searcy County, around Marshall. Spring armyworms don’t migrate here like the fall armyworms do, so it’s just a matter of the environment getting right for 2012’s batch to emerge. Last year, most of our problems occurred in April, but with the cool spring that we’re having, things have been a little delayed.

Then again, we may not have much of a problem at all. You just never know. One thing that we do know is that we can’t afford not to be ready if we have another year like last year. With Searcy County being a bit south of us, I’d expect that we won’t be far behind. As many of you know, an armyworm problem left unchecked can become a problem real quick. A large population can cause noticeable damage almost overnight.
It’d be a good idea to scout your pastures and hayfields now, possibly every day or two. Check early in the morning or late in the evening when the caterpillars are most active. Now keep in mind, scouting doesn’t happen at 15 mph in a pickup. You’ll need to get down and look under that forage growth. We recommend that you randomly check at least 10, 1 square foot areas in the field. If you find more than 3 armyworms per square foot, then chemical control is usually needed. Keep a lookout for lots of birds in certain parts of a field. Also, fields being affected by armyworm damage will often have a frosted appearance. If you plan to cut the hay, then it may be a good idea to cut the hay a little earlier than you expected to, and save yourself the spray application.

If you suspect that you’ve got a problem, there are a handful of insecticides on the market that will control armyworms, including Mustang Max, Sevin 80S, Sevin XLR Plus, Warrior or Karate, Intrepid, Tracer 4E, and Entrust. Generic lambda-cyhalothrin will likely be your cheapest option at less than $5 per acre. Some have haying and grazing restrictions, so be sure and pay attention to the label. Also, some of these are restricted use pesticides and will require a license for purchase. For more information on armyworm identification and control, feel free to give me a call at 870-895-3301 or my cell at 870-750-0848.

**FIRE ANTS (REGULATION, CONTROL, AND WHERE WE ARE GOING FORWARD)**

Brad Runsick, Fulton County Extension Agent

With last year’s dry conditions and hay shortages, lots and lots of hay was moved into Fulton County from other areas. Many of those areas may have very well been fire ant quarantined areas. Of course, there were regulations and certification procedures in place to attempt to curtail the spread of fire ants into those non-quarantined areas like much of northern Arkansas, but in many cases, that didn’t stop the spread of fire ants. Already, there have been confirmed cases of fire ants in Izard, Marion, and Sharp counties in Arkansas and Ozark County in Missouri. Now, I should mention that a few confirmed cases do not immediately result in the entire county being quarantined. In fact, back in 1999, as some of you may remember, there were confirmed
cases in Fulton County, but fortunately, those were eradicated. Additionally, there’s a population on the UofA campus in Fayetteville that have been there since 1997.

There are two common types of fire ants: Red Imported Fire Ants (RIFA) and Black Imported Fire Ants (BIFA). Also, there are hybrids between the two whose genetics tend to exhibit better cold tolerance than that of its parentage. Most of these hybrids are found along the Mississippi River in Arkansas and Mississippi. All three look a lot alike.

So, now for some facts. Some have erroneously said that fire ants can’t survive our winter in northern Arkansas. That is not entirely true. Fire ant quarantines even extend into northern North Carolina and coastal Virginia. Fire ants can most definitely survive cold temperatures, and just brief periods of cold won’t do much to slow them down. Just 2 days with daytime highs below 32°F had no effect on the survivability of colonies. In fact, even at 7 days with daytime highs staying below 34°F, 13% of the colonies still survived. Now, it has been cold as of late, but it has not been consistently that cold. So, in summary, Fulton County’s cold weather isn’t going to affect them much.

Alright, so if fire ants are in Fulton County, then what? Well first of all, that is an “IF”. I’ve not heard of any confirmed cases yet. The Arkansas State Plant Board who handles the regulatory aspect of fire ant hay movement has made it know that they will **NOT** pursue punitive actions toward buyers, but they do want to know the general location from which it originated and where it is now in an effort to try to eradicate the ants those newly infested locations. Also, if only worker ants came in, and there was no queen, then they’ll just die out. However, we can’t assume that there is no queen, so if any are found, we would need to plan to control them accordingly.

If fire ants came in on hay, it’ll be on hay that was stored directly on the ground, which of course, most is. The hay bales will look fluffy and broken down on the underside. Fire ants also will build mounds for their colonies. These mounds will not be volcano shaped like most ants make, but will instead be somewhat fluffy looking with no central opening. They can be as much as 2 feet tall, too. Look for them in hay feeding and storage areas, near building that might retain heat, and on southern facing slopes. If we have any entire
colonies transported, we won’t see much until spring. If it’s a newly mated queen, it might not even be until next fall, but if there is going to be a chance to eradicated and contain them, we need to be on the lookout. If you suspect that you may have some, identification is the first goal. They can be lured out with hot dog pieces in a small medicine bottle or similar container. Wait 15-30 minutes and then come back and check. If you’ve got them, a plan can be developed to control them. There are fire ant baits and contact killer insecticides. The baits will only work when soil temperatures are above 65°F, and carbaryl (Sevin) and lambda-cyhalothrin are the best options for contact control. However, be sure to follow all label directions concerning application, grazing restrictions, and haying restrictions. Most folks are pretty familiar with these two since they are used extensively for armyworm control. Let me know if you’ve got any questions concerning identification or control, and I’ll be glad to help. Call the Extension Office at 870-895-3301, email me at brunsick@uaex.edu, or my work cell at 870-750-0848.

**HAY QUALITY AND COSTS**

Brad Runsick, Fulton Co. Extension Agent

The time of year is upon us when many producers are starting to roll up that first cutting of hay. It seems that the fescue sure got stemmy fast. I suspect that’s a result of those cool nights that we had so late into the spring. The fescue broke dormancy just fine, but it didn’t stay vegetative for very long. Bermuda has really turned on this past week or so with the nighttime lows staying above 60°F. With that, here’s a couple of things to consider in the coming hay season:

1.) Quality vs. Quantity

It can be a balancing act. Producers want to make enough hay, but as most know, the more mature that hay gets, the more the nutritional value of that hay goes down. Don’t forget, total lbs. of TDN and crude protein is what we’re really after. Not total lbs. of hay. For bermuda, the break-even on this is around 28 days. Now, most producers will say, “Whoa! I can’t be cutting hay every 4 weeks.” However, consider this. All things equal, at day 28, bermuda will test out at about 16% crude protein and 55% TDN. If you push that out to 42 days, that
C.P. % drops to 12% and TDN to 50%. If you go even further, at 56 days, you can expect C.P. % to be somewhere around 8% and TDN to fall to 43%.

Consider a 1000 lbs. mature cow that is not lactating needs a ration to be somewhere around 50% TDN and 6% C.P. in order to maintain body condition, that 56 day old bermuda will meet her protein requirements, but not TDN. And she’s the animal that has the lowest maintenance requirements on the farm.

A 1000 lbs. cow that is lactating will need closer to 56% TDN and 9% C.P. A 500 lb. growing steer or heifer will need around 65% TDN and 11-12% C.P.

As you can see, our hay isn’t lacking in meeting the protein needs of the herd, but it is lacking in TDN. So, maybe, save some money on unnecessary protein supplements and cut the hay a little earlier to maximize that TDN %. And remember, forage and hay testing is available from our office at a cost of $18 per sample plus postage. Feel free to call if you’ve got any questions or need me to come out to pull core samples on your hay. Knowing where your hay stands now will help you balance out those rations this winter.

2.) Fertility Replacement and Nutrient Mining in Hayfields

With fertilizer prices high, no one wants to hear it, but we really cannot afford NOT to fertilize hayfields. You’ve got to have nutrients to grow grass. That’s the bottom line. If we continually remove those nutrients through hay cuttings, eventually we’ve withdrawn everything from the bank, so to speak. On the average, bermuda removes about 46 lbs. of N, 12 lbs. of P, and 50 lbs. of K per ton of hay. That is the equivalent of approximately 135 lbs of ammonium nitrate, 26 lbs. of diammonium phosphate (DAP), and 83 lbs. of potash per acre. That’s just with 1 ton of hay being taken off! So, if you remove four, 750 lb. round bales off of an acre of ground, that equals 138 lbs. of N, 36 lbs. of P, and 150 lbs. of K removed, or approximately 400 lbs. of ammonium nitrate, 80 lbs. of DAP, and 250 lbs. of potash. So, that ought to tell you something about products on the market that recommend applications of their product that contains only a fraction of these amounts of nutrients.
With that being said, what we get a lot of times is a potassium deficit in hay fields. Producers can really see the effects of good N fertilization, and our soils typically aren’t too deficient in phosphorus (P). Bermuda doesn’t remove that much P anyway. The result is low potassium (K) levels in our soils: something bermuda really needs. As potassium is mined out of the field, the stand starts to thin and can’t withstand drought as well as a fertile field. Ultimately, it results in low yields and poor quality on what you do make.

So, consider keeping good record of how many bales you make each year and what they truly weigh. I say that because many folks way overestimate the weight of their bales by a couple hundred lbs. Most of the ones I weigh are usually somewhere between 600-800 lbs. Very rarely do they reach 1000 lbs. Then, take that information and know how much you need to put back to at least replace what was removed. If you’re starting out with low P or K numbers, then you’ll have to add additional fertilizer above the replacement in order to build the fertility to an optimum level.

The hay business is tough, particularly on smaller farms. The input costs of equipment, maintenance, diesel, herbicide, and fertilizer is tough to overcome, especially if the hay that is getting rolled up is low quality. Everyone wants to make hay because it just seems like that’s what a cattle farmer is supposed to do, but oftentimes the bottom line just doesn’t justify it. No doubt, hay has been expensive to purchase for the last two years, but I would bet if you put the pencil to it, even at $50 per bale on a decent quality bale, it’d be tough to produce it for much less than that and still maintain your soil fertility for the long term.

Good luck with it this year, and hopefully our soil moisture will hold up a little longer into the summer and we won’t need to feed as much of that high dollar hay!

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