

# HOT SPRING COUNTY AGRICULTURE

HSC Extension Office

Winter 2016

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## Hi, Everyone!!

I'm Rachel Bearden and I would like to introduce myself to the agriculture community here in Hot Spring County, as your new County Extension Agent. As a native of Friendship, I am very familiar with the county and many of the agriculture practices that make up our home.

My background is in beef cattle and horses primarily. I was raised on a cow/calf operation and my husband and I are building our herd.

I have a Bachelor's of Science degree in Agriculture Science, with a minor in Animal Science, a Master's in the Arts of Teaching, and I recently completed my Master's of Science in Agriculture.



Over the next year, my goal is to have at least one educational agriculture program a month, but I want to make sure they are programs the ag community wants to see. You will be receiving a survey soon asking for your ideas for county programs, and I cannot emphasize enough how important these will be for planning.

Anytime you have questions, comments, concerns, or ideas, please feel free to contact me. I am very excited to be back

home and have the opportunity to give back to the farmers who keep our community growing!

## Buy Local, Burn Local!

You buy local produce. You buy local meats and cheeses. Why not buy local firewood?

It's convenient. You're helping the local economy. And most importantly, you're not helping destructive invasive species spread to other parts of the state.

Five ways you may be hurting the environment by moving firewood around:

No. 5 - You're spending energy you could save by buying firewood locally

No. 4 - You may

be spreading Thousand Cankers disease - killer of black walnuts

No. 3 - That wood might contain emerald ash borers - killer of tens of millions of ash trees

No. 2 - You may be introducing new pests like the sirex wood wasp - killer of Loblolly pine.

No. 1 - You might be moving around invasive species we don't even know about yet.



## Arkansas Fruit Production Survives Wild Weather by Ryan McGeeney



With some variations in production amounts, Arkansas growers enjoyed a relatively positive crop cycle in 2015, University of Arkansas System Division of Agriculture experts said.

John Clark, university professor and fruit breeder for the Division of Agriculture, said that relatively mild overall winter temperatures left most fruit production unharmed.

“Our winter damage wasn’t substantial,” Clark said.

“However, one of the things I noticed in May, particularly on blackberries, was more cold damage than I had anticipated, which I believe occurred in November during an early cold snap, when the plants weren’t fully ready for winter. An important predictor of fruit quality is how well things ‘harden off’ in the fall – which maybe things didn’t have the chance to do before a snap. But the blackberry crop was still quite good.”

Clark said when spring rolls around, Arkansas weather can’t be generalized across the state.

“You can have a frost in one place and nothing half a mile away,” he said. “But in general,

our spring was good. I heard some instances of frost damage during peach bloom in southern Arkansas.”

In August, the U.S. Department of Agriculture’s National Agricultural Statistics Service released its annual grape and peach production forecast for the state. The report forecast Arkansas grape production at 1,400 tons, a 6 percent drop from 2014. Peach production, however, increased 38 percent in 2015 to 900 tons.

“Overall, it was a positive year, despite the sheer amount of rainfall, which was more than I had ever seen in early summer,” Clark said. “Our new primocane fruiting blackberry developments, which fruit late-summer into the fall, performed quite well this year. Many years when we have above-90-degree temperatures, it will really damage the flower buds and the fruit set on those plants. But we had a pretty good yield, which we don’t always.

“That reflected a reasonably moderate summer,” he said. “Our most intense heat was from July 10-mid-August.”

Elena Garcia, extension fruit and nut specialist with the

Division of Agriculture, said that an unusually wet spring and isolated flooding in the summer impacted the overall flavor of some fruit produce.

“Although rainfall is an important aspect of fruit production, excessive rainfall can dilute flavors, and we saw that happening with some production this year,” Garcia said.

Clark said that excessive rainfall can also make pests and diseases more difficult to manage.

“It’s impossible to spray while it’s raining, obviously,” Clark said. “And rainfall before or after an application can mean a pesticide either washes off the plant or never grabs hold in the first place.

“The high rainfall did create a tremendous amount of bacterial spot disease on peaches,” he said. “Bacterial spot is something we don’t control at the Fruit Experiment Station in Clarksville, because we’ve developed varieties resistant to it.”

Clark said several incidences of powdery mildew developed on grapes at the Fruit Experiment Station, which was likely also worsened due to weather.



*“An important predictor of fruit quality is how well things ‘harden off’ in the fall – which maybe things didn’t have the chance to do before a snap.”*

*- John Clark, University of Arkansas Professor and Fruit Breeder*

## November Poultry Seminar

Small poultry flocks are becoming increasingly popular across the state of Arkansas. As the number of these chickens and other birds increase, safety and disease prevention is becoming more and more important.

In November, Dr. Dustan Clark traveled to Hot Spring

County to present information on disease prevention and poultry husbandry practices.

Dr. Clark is the Extension Veterinarian & Associate Poultry Center Director at the University of Arkansas in Fayetteville.

Many who attended the seminar claimed it was very helpful and informative.

If you were unable to attend the seminar, there is information available at the Extension office.



**Dr. Clark inspecting chicken at the seminar.**

## Be Prepared for Calving Season by Dr. Tom Troxel, Professor

Calving is one of the most important times on the production calendar. Management decisions made prior to this period can influence success at calving and ultimately profitability of an operation. Calving difficulty (dystocia) is a very important economic problem in the U.S. beef cattle industry.

### Nutrition

The last trimester of pregnancy is when the majority of fetal growth occurs. During this period, the nutrient requirements of the cow increase accordingly. In particular, the last 45 days prior to calving is a critical time. The best method to assess the nutritional status of the cow is to monitor body condition. Ideally, most cows should enter the calving season with a body condition score (BCS) of 5. However, early-calving cows (January and February) and young cows (two- and three-year-olds) should have a BCS closer to 5.5 or 6. Research has clearly demonstrated that body condition can have a dramatic impact on subsequent reproductive performance. If cows are thinner than desired, it is advisable to alter the plane of nutrition to add body condition prior to calving. After calving, the nutrient demands associated with lactation make it difficult and expensive to add body condition.

A common misconception regarding pre-calving nutrition is that feeding cows too well results in increased calving

difficulty. This is absolutely incorrect! Actually, underfeeding cows prior to calving could increase calf scours and mortality and reduce calf survival. Along the same vein, overfeeding can be a problem as well. Cows that are over-conditioned actually deposit fat in the birth canal, which can lead to calving problems. Some research suggests that calf vigor can be influenced by the pre-calving plane of nutrition. Calves from cows on a maintenance or high plane of nutrition got up and nursed more quickly than calves from cows on a low plane of nutrition. Time to nurse is critical in getting an adequate amount of colostrum in calves prior to gut closure.

### Vaccination

The focus of pre-calving vaccination programs is to provide immunity to the calf via colostrum. There are several diseases that can be vaccinated at this time; however, to vaccinate for every possible disease is neither practical nor economically prudent. Consult your veterinarian to develop the vaccination strategy that is appropriate to your operation.

### Timing of Feeding

The Konefal Calving Method was developed by a beef producer in Manitoba, Canada. This method involves feeding cows twice daily at approximately 11:30 a.m. and 9:30 p.m. Using this regime, Gus Konefal was able to get 80 percent of his cows to calve between 7 a.m. and 7 p.m.

Research at Iowa State University produced similar results. Results of USDA research were not as dramatic but still showed a 10 to 20 percent reduction in the number of cows calving between 10 p.m. and 6 a.m. Management decisions made prior to calving can influence success at calving and ultimately profitability of an operation.

### Calving Management

Preparing calving facilities prior to calving is wise. The calving area should be clean and dry and be in close proximity to shelter and facilities needed to assist cows with calving difficulty. Maternity pens with a headgate, crowding gate and nursing panel can also be quite helpful. Calf shelters and/or warming boxes should also be cleaned and checked (wiring in particular). Once the facilities are prepared, it is always wise to make a list of needed items and make sure they are accessible. Some key items would include calving jack, OB chains or straps, iodine, tube feeder, rags or towels, light source, tags and/or tattoo equipment.

### Colostrum

Colostrum is critical to survival of the newborn calf. The immune system of newborn calves is not completely developed. Consequently, the antibodies and immunoglobulins in colostrum are a substantial component of the immune protection in newborn calves. Calves should receive 5 to 6

percent of their body weight as colostrum within 6 hours and again within the subsequent 6 hours.

If the calves are not able to nurse or the cow's production of colostrum is insufficient, colostrum from other cows or commercial colostrum supplements may be necessary. Ideally, colostrum should be collected from cows within 24 hours of calving and fed fresh. Colostrum can also be collected, frozen and used later. Johne's disease can be spread via colostrum, so caution should also be exercised when collecting colostrum from unknown animals. Colostrum should only be used from cows known to be Johne's free.

When collecting colostrum, consider freezing it in "serving" sizes, or one to two quarts per container. Once colostrum has been thawed, it should not be refrozen. Correct thawing will also help prevent the antibodies and immunoglobulins from being damaged. Frozen colostrum should either be slowly warmed in warm water to a final temp of 105 to 110 degrees F or in a microwave on medium power. In both cases, the colostrum should be stirred frequently.

Commercial colostrum supplements are available, and research suggests that calves fed colostrum supplements are healthier than calves that received no colostrum. However, the level of protection was lower than in calves fed frozen colostrum.

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WE'RE ON THE WEB!

[HTTP://UAEX.EDU/COUNTIES/  
HOT-SPRING/](http://uaex.edu/counties/hot-spring/)

I hope you found this newsletter helpful and interesting! As new as I am, I am very open to suggestions! My goal is to have a seasonal newsletter. If you have ideas for articles, please feel free to let me know! The goal of the county extension program is to benefit our local ag community, and for that I need your input! Be watching for that survey and be thinking of what you would like to see!

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