

Bourbon County Cooperative Extension Service

AGRICULTURE AND NATURAL RESOURCES NEWSLETTER



May
2016

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**Bourbon County
Extension Service**
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Upcoming Dates

May 24 th	Applied Master Cattleman 6:00 PM
May 31 st	Applied Master Cattleman 6:00 PM
June 4 th	Youth Horse Show
June 10 th	District Swine Show
June 14 th	Tobacco GAP Certification 5:30 PM
June 16 th	Tobacco GAP Certification 1:00 PM
June 18 th	Fair Entries 8:30-12:00 PM
June 20 th	Fair Entries 8:30-11:00 PM

Tobacco GAP Certification 2016

The Tobacco GAP training for Bourbon County was held in conjunction with the tobacco meeting in Harrison County. This training is required for anyone that plans to sell tobacco in 2016. If you were not able to attend this training and have not received your 2016 Tobacco GAP Training please contact the office to sign up for the June 14th or June 16th class. This is a video training and will last approximately 2 hours.

2016 Bourbon County Extension Summer Intern

Dear Producers,

I would like to introduce myself as the 2016 University of Kentucky Cooperative Extension Summer Intern at the Bourbon County Extension Office. I am Tara Wolfenbarger; a Career and Technical Education major with a Community and Leadership Development minor at the University of Kentucky. I am a member of a professional agricultural sorority UK Sigma Alpha, and the Bourbon County FFA Alumni. Through this internship I will be helping with Farm Week at Bourbon Central, 4-H Teen Conference, 4-H camp, the Bourbon County fair and other events and programs.

I am beyond excited to be working with my hometown community of Bourbon County. The University of Kentucky College of Agriculture Food, and Environment Cooperative Extension Service Intern Program is a comprehensive competitive program that allows college students to work in a professional role in one of the County or State Extension. The Extension internship will give me the opportunity to explore careers in nutrition, agriculture, environmental science, natural resources, family and consumer sciences, and youth development while focusing on community development.

Sincerely,

Tara Wolfenbarger



Educational programs of Kentucky Cooperative Extension serve all people regardless of race, color, age, sex, religion, disability, or national origin. University of Kentucky, Kentucky State University, U.S. Department of Agriculture, and Kentucky Counties, Cooperating. Disabilities accommodated with prior notification.

Cost Share Update

We expect CAIP applications for **Bourbon County** to be available in Mid-September, however; any projects completed after May 1st 2016 will qualify if you receive funding. Updates will appear in this portion of the newsletter as well as the newspapers. Application dates as well as the Informational Meeting will be advertised for 2 weeks prior. Please keep the following important information in mind as you begin summer projects that will qualify for cost share if you receive funding. Changes may have occurred since you last applied and received funds.

Reminders for turning in completed projects:

- NO CASH PURCHASES
- No reimbursements for purchases from or payments to immediate family members
- No purchase of transport equipment (trailers, wagons, carts)
- No purchase of fertilizer, pesticide, herbicide, and soil amendments. Lime is covered.
- Reimbursements for rental of spray equipment, safety switches & rollover bars have been added.
- Certification for Educational Requirement (Purple Form) is required. You must attend an educational session and provide the signed form for reimbursement.
- Only one individual per household is eligible to receive CAIP funds within a program year. If applicable, proof of residency may be requested to verify that multiple individuals within the same household are not applying.
- Tenant farmers are required to obtain written permission from the landowner to use the landowner's FSN on a CAIP application. Written permission must be submitted with the application to be eligible.
- For funding, a producer must submit all paperwork: Producer Report, Educational Certification, Cancelled checks, receipts, pictures and any additional documentation required
- Beef Quality Assurance Certification (BQA) is required for purchases made in the Large Animal category.
- If you do not have a smart phone or digital camera, I am happy to visit your farm and take pictures of your completed project for you. Call to schedule a farm visit! You can email pictures of your completed project to kimberly.poe@uky.edu

USDA Offers New Loans for Portable Farm Storage and Handling Equipment

USDA's Farm Service Agency (FSA) will provide a new financing option to help farmers purchase portable storage and handling equipment. The loans, which now include a smaller microloan option with lower down payments, are designed to help producers, including new, small and mid-sized producers, grow their businesses and markets.

The program also offers a new "microloan" option, which allows applicants seeking less than \$50,000 to qualify for a reduced down payment of five percent and no requirement to provide three years of production history. Farms and ranches of all sizes are eligible. The microloan option is expected to be of particular benefit to smaller farms and ranches, and specialty crop producers who may not have access to commercial storage or on-farm storage after harvest. These producers can invest in equipment like conveyers, scales or refrigeration units and trucks that can store commodities before delivering them to markets. Producers do not need to demonstrate the lack of commercial credit availability to apply.

Earlier this year, FSA significantly expanded the list of commodities eligible for Farm Storage Facility Loan. Eligible commodities now include aquaculture; floriculture; fruits (including nuts) and vegetables; corn, grain sorghum, rice, oilseeds, oats, wheat, triticale, spelt, buckwheat, lentils, chickpeas, dry peas sugar, peanuts, barley, rye, hay, honey, hops, maple sap, unprocessed meat and poultry, eggs, milk, cheese, butter, yogurt and renewable biomass. FSFL microloans can also be used to finance wash and pack equipment used post-harvest, before a commodity is placed in cold storage.

To learn more about Farm Storage Facility Loans, visit www.fsa.usda.gov/pricesupport or contact a local FSA county office Paris Service Center 609 Millersburg Rd, Paris KY, 40361 or (859) 987-1295

Picking apples off the grazing tree: How far can we extend the grazing season profitably? - Dr. Greg Halich UK Ag Economist

Will grazing more and feeding less hay always increase profitability? There are many cases where cattle farmers could graze more days profitably. I would guess that more than half the cattlemen in Kentucky and the region could find ways to do so. But the statement is not universally correct and we need to evaluate the specific situation to determine if increasing grazing days will pay off.

The idea that we can be more profitable by grazing more days and feeding less hay is a powerful one, and at first glance seems reasonable. I have seen figures stating the average cost of a grazing day and then comparing this to the average cost of a hay feeding day. The *average* hay feeding day is shown to be considerably more expensive (correctly) and thus the argument goes that by each additional day we can graze, we will save the difference. If this difference is \$0.50 per grazing day for example, and we have 50 cows, we are saving \$25 for each extra day that we graze the herd. Unfortunately, the economics behind this simple math breaks down upon closer examination.

The most important reason that this logic doesn't hold is that as we push the envelope and graze more and more days, those last few days grazing will not be at the same cost as the average cost of grazing – they will be higher, possibly much higher. The most effective way I have found to help farmers understand this phenomenon without using lots of economic jargon is the following analogy: Think about picking apples out of one of those big standard sized trees that used to be popular in orchards, during a banner year when it is loaded with apples. Where do you start picking? You get all the fruit that you can easily reach from the ground, correct? This is where you can pick most efficiently. Pretty easy, what do you do next? Well, you might get on your tippy toes and go around the tree and get a few more. Were you as efficient in terms of apples picked per minute as you were when your feet were firmly planted on the ground? No, not quite.

Then what? If you grew up picking apples, you will probably know to gently pull down some of the longer, flexible branches to reach more apples, right? Are you as efficient here as on your tippy toes? Again, not quite. The cost to pick those apples has increased again. So you have picked all the apples you can by pulling branches down. What do you do next? Depending on your coordination and dexterity, you either get a ladder or you climb up into the tree to start working on the rest. Are you going to be as efficient in either case as you were previously? Definitely not. The point of this analogy is that you are proverbially and literally picking the low hanging fruit

first, and then go on to the apples that are harder and harder to reach. Thus we start by picking the fruit that has the lowest cost, and as we work up into that tree, the cost per apple keeps increasing and increasing. Would you pick every last apple on that 30 foot tall tree? Probably not. Why? Because the cost of some of the apples, the ones that are hardest to reach, will likely be greater than the value of those apples. But if we used the *average cost* of picking an apple (when we were picking on the ground) as our guide for what we should do, and not the actual cost to pick those last apples, it would tell us to pick every last apple (i.e. graze 365 days a year).

Think of grazing in this same light: The Grazing Tree. What are most livestock farmers going to do first to increase the number of grazing days and reduce the amount of hay they need to feed? The low hanging fruit years ago was simply applying nitrogen to pastures to boost production. Today, with nitrogen costs 4-5 times higher than it was 15-20 years ago, learning how to establish and manage a good clover stand is the new low-hanging fruit. This is probably the lowest cost method of increasing grazing days. What's next on the Grazing Tree? Realizing that everyone's Grazing Tree looks a bit different the next lowest hanging fruit is probably learning how to implement effective rotational grazing. These first two areas are where the Cooperative Extension Service in Kentucky has made great strides in my opinion. Both are relatively low cost methods to increase grazing days. But unfortunately, at some point we run out of apples at this level. What next?

Well, we could stockpile fescue: Set aside pasture in early August to build up forage reserves, and defer this grazing into late fall and winter. This will buy us additional grazing days. Unfortunately, many cattle farmers won't have excess pasture production in August to remove a portion of it from the rotation. If they did, they would be understocked for much of the grazing season, which is a cost of its own (foregone profit for the removed animals). So there would also be an indirect cost of reduced stocking rate in addition to the direct costs such as the nitrogen. Thus our cost to graze additional days keeps increasing.

To increase grazing days further beyond applying nitrogen and stockpiling we would likely have to reduce stocking rates even further so that our winter forage stockpile will be stretched further with fewer animals. This increases our grazing cost per day due to the foregone profit of the destocked animals as well as less total utilization of the total forage base (more will be wasted from the spring surplus with fewer animals keeping up with the heavy growth).

Thus the higher we continue to go in the Grazing Tree, the higher and higher the cost of a grazing day becomes. The average cost of a grazing day from the base pasture system (the low hanging fruit) has been long passed by. At some point, and that point will be different on every farm in

(Cont.) Kentucky, the cost to graze an additional day will be greater than the benefit (reduced hay feeding day). For quite a few years in the cattle cycle, up until about 2010 or 2011, we could have profitably climbed a lot further up into the Grazing Tree than we can today. During that time, profitability for cow-calf farms was low at best, and losing money at worst. In a situation like this, reducing stocking rate is not much of a cost: If you are making next to nothing per animal, less animals will not change overall profit by much. But if at the same time you are significantly reducing cost per animal by feeding less hay, your overall profitability will increase.

The last two years, however, with profits of \$300-500 per cow, reducing stocking rate comes at a very high cost. If we have to reduce stocking rate by just 10% to implement a particular practice, that is a \$50 indirect cost per cow that we need to add to the direct costs of that practice. Thus the same practices, or the degree that we push them, that may have been economically viable for extending the grazing season in 2006 may not be economically viable today. Put another way, you are better off having a relatively low stocking rate and reducing the hay fed per cow when profitability is low, and having a relatively high stocking rate and increasing the hay fed per cow when profitability is high. This, I'm afraid, is a concept that many cattle farmers as well as extension specialists have failed to grasp.

*This article was adapted from Dr. Greg Halich's proceedings from the 2016 Heart of America Grazing Conference. For all of the proceedings from this conference and the complete article from Dr. Halich starting on page 64, follow the link to: <http://www.uky.edu/Ag/Forage/HOA%20Proceedings%20Draft%201.pdf>.

Cattle Management Practices

When Grazing Alfalfa

Dr. Donna Amaral-Phillips, UK Dairy Specialist

Alfalfa is a versatile crop that can be planted in pure or mixed stands with cool-season grasses (i.e. orchardgrass/tall fescue) for grazing or harvesting as stored forage. These fields can be harvested for hay when excess pasture exists and re-enter the grazing rotation when the growth of other forages slow. When alfalfa stands are starting to thin, they can be grazed instead of being preserved as hay, which can extend the use of the stand by a year or more. Grazing tolerant varieties have been developed which can be used for both hay and grazing. The UK Grazing Variety Trials should be consulted when selecting a variety to plant

that has improved tolerance toward grazing.

High Quality Grazing: Alfalfa and alfalfa-grass pastures are high quality when grazed at the proper stage of maturity and can support excellent performance. They can be used for grazing higher performance cattle, such as stockers, grass-finished cattle, lactating dairy cows, or as a creep for beef calves. They can support daily gains of 2 lbs or more and have produced on average 790 lbs of beef per acre.

Forage gap filler: Alfalfa can be used for grazing throughout most of the grazing season. Cool-season grasses, such as tall fescue, grow best when environmental temperatures are between 70 and 80 °F. Whereas, alfalfa grows best when temperatures are between 75 and 90 °F or at slightly higher temperatures than cool season grasses. This characteristic extends grazing into the summer. In the fall, alfalfa should not be grazed or harvested between September 15th and a killing frost (or November 1st) to allow the plant to store root carbohydrates and improve winter survival. If grazing is needed between Sept. 15th and Nov. 1st, alfalfa can be rotationally grazed to maintain a height of at least 6 to 8 inches at the time cattle are moved.

More Drought Tolerant: Alfalfa plants have a deep tap root that allows them access to water stored deeper in the soil than grasses. Thus, they have a higher probability of growing and providing grazing during times of mild drought stress.

More Pounds of Grazable Forage: When compared to cool-season grasses, alfalfa yields more pounds of grazable forage over the grazing season. Tested alfalfa varieties in UK variety trials averaged 5.6 tons per acre whereas tall fescue averaged 3.5 tons per acre. Thus, established alfalfa stands out yielded tall fescue by 2.1 tons. To put this another way, an acre of pure alfalfa could support 100 more animal unit grazing days. Thus, incorporating alfalfa into a grazing program can increase the animal carrying capacity of a farm especially during the summer months.

Graze then Rest- Management Needed: Alfalfa and alfalfa-grass stands need to be rotationally grazed where the forage is grazed beginning at a height of 10 to 16 inches and cattle are removed when forage is grazed to no shorter than 3 inches. At that time, plants are allowed to regrow without grazing for 25 to 40 days. After this rest period, the plants can be harvested as hay, baleage, or grazed again. This rest period is needed to extend the life of the stand and for optimum plant growth. Regrowth of the alfalfa plant comes from the crown and not the stem of the plant, thus grazing to this height increases utilization of the plant.

Essentially, you want to have small enough paddocks that the animals eat the entire plant (stem and leaves) versus just the top of the plant. Cattle should not graze alfalfa plants longer than 5 to 7 days since new shoots start to develop after this time frame. Also, cattle eat the alfalfa plant from the top down. The top of the plant consists primarily of leaves, which are high in protein with little fiber. The stem is lower in protein and higher in fiber. By restricting the area grazed at one time, cattle will consume the entire plant more uniformly which helps minimize bloat risk. Thus, cattle grazing alfalfa and alfalfa-grass pastures ideally are rotated at least every 3 days. With dairy cows, cows are moved twice daily to the milking parlor so a new area can easily be provided twice daily. Cross fencing within a paddock can be used to achieve this.

Forage for creep grazing: Alfalfa and alfalfa-grass stands can be used to creep graze beef calves. The calves, not cows, are allowed access to the alfalfa or alfalfa-grass area. By allowing access to this high quality forage, gains for calves can be improved. Only a small acreage is needed when using alfalfa for creep grazing.

Incorporate grasses in alfalfa stands: Incorporating grasses in stands of alfalfa can reduce soil erosion, numbers of weeds, hoof damage and bloat. Stands that contain greater than 50% grass have a lower risk for bloat, but pure stands of alfalfa can be grazed with little or no risk for bloat. Management of the cattle is key.

Manage bloat risk: Animal management can reduce the risk for bloat. These management practices include, but are not limited to: (1) move cattle to pastures after the morning dew has dried and cattle have grazed in the morning, (2) do not put hungry cattle on pastures, (3) avoid grazing immature alfalfa, (4) do not remove cattle at the first sign of bloat, (5) observe cattle closely, and (6) feed appropriate amount of bloat-reducing compounds, such as poloxalene. For more information, on bloat prevention, see UK publication ID-186 “Managing Legume-Induced Bloat in Cattle” by following the link:

<http://www2.ca.uky.edu/agcomm/pubs/id/id186/id186.pdf>

Cattle Management to Extend Stand life: Under wet, muddy weather conditions, cattle should be removed from alfalfa fields to protect the crowns of alfalfa from hoof damage. Cattle should be placed on a sacrifice, grassy lot with a good sod base.

Grazing alfalfa after a hard freeze or November 1st can help decrease alfalfa weevil problems the next spring. The alfalfa weevil lays its eggs on the stems in the fall. By

removing the stems through grazing to a height of 2-3 inches, the eggs are removed decreasing problems next spring. This regrowth often times is lower in yield, thus not worthy of harvested as hay under less than ideal weather drying conditions.

Kentucky Beef Cattle Market Update

Kenny Burdine, Livestock Marketing Specialist, University of Kentucky

This was one of the more frustrating spring markets I remember. After seeing calf prices reach record levels in the spring of 2014 and take those records out in the spring of 2015, a reversion back to 2013 calf price levels was not what most were hoping for. Admittedly, I was expecting stronger prices when I made forecasts last winter. For the most part, I think the same factors that pulled the market down in the second half of 2015, also explain the weakness the spring. While the beef trade picture has improved somewhat, it is not where many had hoped it would be given the production increases we are likely to see. Pork and poultry are both likely to show another production increase in 2016 and those forecasts have been raised since winter. And although slaughter weights have decreased from their fall 2015 highs, they do remain high from a historical perspective.

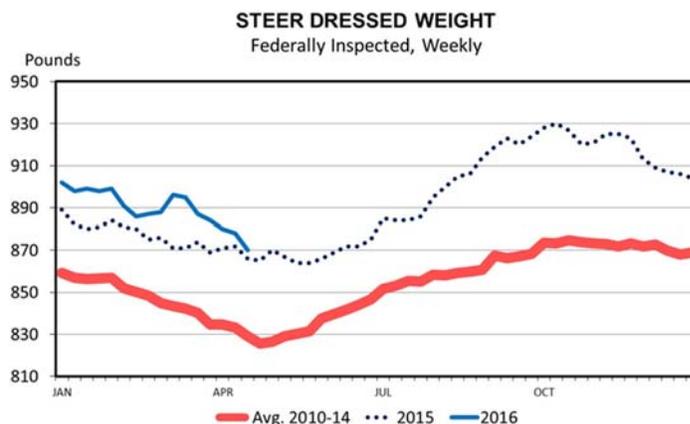
As I write this (5-12-16), the market is enjoying its second straight week of improvement. After trading at levels around \$140 per cwt, August feeder cattle futures have pushed into the upper \$140's and tested the \$150 level. For the first week of May, 550 lb steer calves were moving at around \$155 per cwt on a state average basis, with some larger groups well into the \$160's. At the same time, 850 lb steers were trading in the mid-\$130's for the most part. The recent improvement in feeder cattle futures has set a slightly more optimistic tone in local markets.

I really wanted to show about 20 different charts this month, but narrowed it down to two. The first chart below is the most recent 5 market weighted average fed cattle price. You'll notice that the fed cattle market seemed to drop sooner than normal this year. It usually puts in a bottom around June and moves up through fall. That would be encouraging if it happened this year since the market dropped from summer to fall in 2015 and simply didn't allow the feeder cattle market to pick up any momentum after spring. (Cont.)



I also wanted to show the chart of dressed weights as I think this has been another major factor impacting our markets. You can easily see the extremely high levels from fall 2015 and can also see that weights have dropped significantly from then. However, you'll also notice that weights typically do decrease from fall to spring and we are at about the usual seasonal low as I write this. So, it's probably a bit early to say that this issue is safely in our rear-view mirror. It will be very interesting to watch slaughter weights for the remainder of 2016 for a handful of reasons, most of which are related to feed prices and cattle on feed numbers. Clearly, the price of feed, in relation to what fed cattle prices do, will determine how hard feedlots push feedyard cattle.

While I try not to read a great deal into a single month's cattle on feed report, it is worth noting that the April report finally showed a sizeable drop in the number of cattle that had been on feed over 120 days. It was also the second straight month that we saw a drop in the number of cattle that had been on feed over 90 days. This is certainly a sign that we may be working through some of those very heavy cattle and is consistent with the drop in slaughter weights we have been seeing. The second trend that likely needs to be pointed out is the increase in the number of cattle that are being placed weighing more than 700 lbs. Heavy placed cattle tend to finish heavier, which may have implications for the second half of 2016. But, at the same time, I feel that this is primarily due to the fact that feeder cattle inventory outside of feedyards had been growing for a while, so it is somewhat encouraging that we are seeing some of those cattle placed. We either deal with them now or later, and if we deal with them later, they will only have great impact when they hit the market.



SMART TIPS

HAVE FUN AND START SLOW

Staying active shouldn't be a chore. It can help you feel better about yourself and the way you live your life. Choose activities that you enjoy and that fit your lifestyle.

If you are just starting physical activity, build up slowly. This will help to prevent injury. After a few weeks, increase how often and how long you are active.

Source: USDA MyPlate

