

AGRICULTURE NEWS *November 2011*



AGRICULTURE & NATURAL RESOURCES

Cooperative Extension Service

*Campbell County
3500 Alexandria Pike
Highland Heights, KY 41076
(859) 572-2600
Fax: (859) 572-2619
<http://ces.ca.uky.edu/campbell>*

Dear Campbell County Farmers,

Based on the calendar another growing season is coming to a close. As far as the weather goes, it has been another unusual year for farming. It has been a very wet year with a few weeks of hot, dry weather to remind us that things can change in an instant. We have been blessed with a beautiful fall that will keep us green for at least the next several weeks. This is especially good for fall pastures and livestock producers.

Each fall the Extension Service and Cattle Association host a Farm Issues dinner. This program is especially important this year as the Extension Service begins to develop what we call our "4 Year Plan of Work." When finished in May/June of 2012, this plan will lay out the broad based areas of focus for all Extension programs from July 2012 to July 2016. Each year we will have the opportunity to make minor changes to the plan. How can you have input into this 4 Year Plan of Work? You can begin by attending the Farm Issue Diner and making your suggestions known. I have always said that this is **MY** most important meeting of the year. It allows you to talk about what needs to be done and from there it is up to leaders/volunteers and me to develop, implement and evaluate strategic programs to address these issues. I will be sending out a few survey questions for more input in December. I will also be asking our local agriculture organizations for their input. For now, get involved by attending the November 15 program. See the program notice below for details.

Farm Issues Program



Each fall the Campbell County Extension Service Agriculture Council and the Campbell County Cattle Association hosts an evening program to give local farmers and agriculture leaders the opportunity to identify farm issues and agriculture opportunities that exist in Campbell County. Topics identified during this meeting will be used to develop educational programs, field days and tours by the Extension Service and the Cattle Association. This year's Farm Issues Program will be on November 15 at the Environmental Education Center on Racetrack Road, beginning with an evening meal at 6:30 p.m. and with open discussion on agriculture issues at 7:00 p.m.

Please call in meal reservations by November 14.

Johnsongrass, Fall Grazing, and Prussic Acid

[Rory Lewandowski](#), Extension Educator, Athens County and Buckeye Hills EERA

This has been a good year for johnsongrass growth. Johnsongrass is a perennial weed and it is also a warm season grass. It can be a good feed



source for beef animals as hay or in a grazing situation. However, this plant is a member of the sorghum family and graziers

need to beware of the potential of prussic acid or cyanine poisoning when it is grazed after a frost. Other familiar forage plants in this sorghum family are forage sorghum, sorghum x sudangrass hybrids and sudangrass.

Prussic acid is very toxic and is rapidly absorbed into the blood. It combines with hemoglobin in the blood to form cyanoglobin, which does not carry oxygen. Prussic acid poisoning symptoms include an increased rate of respiration, increased pulse rate, gasping, muscular twitching or nervousness, trembling, foaming at the mouth, spasms or convulsions. Death occurs from respiratory paralysis and can happen quickly, within a 15 to 20 minute time span.

Prussic acid accumulation is not equal throughout the plant. It tends to accumulate in leaves as compared to stems and is found in higher concentrations in the upper or younger leaves of the plant. In general, young, immature plants pose the greatest prussic acid poisoning threat to livestock.

Of concern to graziers is that frost damage to plants in the sorghum family, including johnsongrass, can lead to prussic acid formation. Livestock should not be allowed to graze any plants in the sorghum family immediately following a frost event. However, because prussic acid is actually a gas, it will dissipate from the plant as the plant dries out and with the passage of time. The general

recommendations regarding grazing plants in the sorghum family in the fall of the year are:

- * Do not graze on nights when frost is likely. High levels of prussic acid are produced within hours after a frost.
- * Do not graze after a killing frost until plants are dry, which is usually 5 to 7 days after the frost event.
- * After a non-killing frost, do not allow animals to graze the frosted plants that are shorter than 30 inches in height for 10 to 14 days. Plants above that height can be grazed after a 4-5 day period. New growth may appear at the base of the plant after a non-killing frost. This growth will contain high levels of prussic acid. Do not allow livestock to graze this growth. Wait for a killing frost and then give those plants another 2 weeks before livestock are allowed to graze.

Fall Grazing of Grass/Clover Pastures After Frost

Forages such as alfalfa, clovers, and cool-season perennial grasses do NOT produce toxic compounds after a frost. So unlike the sorghum species that produce prussic acid after a frost, clovers, alfalfa, and perennial cool-season grasses are much safer to graze after a frost. HOWEVER, there is one concern when grazing alfalfa or clovers after a frost - and that is the risk of BLOAT.



For one or two days after a hard frost, the risk of bloat is higher for animals grazing legumes. The bloat risk is highest with grazing pure legume stands, and least when grazing stands having mostly grass and only low amounts of legumes present.

The safest management is to wait a few days after a killing frost before grazing pure legume stands - wait until the forage begins to dry from the frost damage. It is also a good idea to make sure animals have some dry hay before being introduced to lush fall pastures that contain significant amounts of legumes. To reduce the chance of bloat animals can be fed bloat blocks a few days before accessing these types of forages.

[Mark Sulc](#), OSU Extension Forage Specialist

Low Quality Hay and Forage Testing

Producing high quality hay depends upon cutting the forage plant at a vegetative stage and then getting enough dry sunny days to allow the plants to dry. While the frequent rainfalls we received in May and June was good for forage growth, it also hindered quality hay production. This year most first cutting hay was cut at a full bloom or later stage of maturity resulting in reduced forage quality. The potential for reduced livestock performance due to lower quality hay and the cost of energy feeds such as commodities and corn make forage testing more important than ever this year.

Livestock producers have a number of economical reasons to have forages tested before the winter feeding season begins. Knowing forage quality will help maximize animal performance, provide sufficient feed and lower input costs.

Most livestock producers have forages with different qualities on their farms because there is a tremendous variation in the quality of forages harvested at diverse stages of maturity. Also, weather damage and the species itself can affect forage feeding quality.

By having forages tested, you will know the equality of the different forages. Then you can match forage quality to livestock who have diverse nutritional needs and different management requirements that are influenced by age and stage of production. This will help you get the best performance from animals, whether it is reproduction, rate of gain, or milk production.

Winter feed comprises about one-half of the total feed costs for a beef herd. Therefore, it is desirable to develop a feeding and management plan to carry the cow herd through the winter at the least cost. You also might want to separate the herd into groups with similar nutrient and management requirements. This will keep you from over- or underfeeding cattle and wasting feed dollars.

The Campbell County Extension Service offers free forage sampling and ration balancing to livestock producers. Give me a call at 572-2600 if you are interested in this program.

Overgraze Pastures This Fall Before Over-Seeding a Legume

Now is the time to be thinking about pasture renovation in February and March. Adding legumes to cool-season pastures next spring is the best way to increase forage quality and animal performance. Legumes increase protein, forage digestibility and intake when added to a grass pasture. As a bonus, legumes make their own nitrogen which reduces fertilizer costs and reduces the negative impact of endophyte fescue.

The biggest challenge to establishing legumes into an existing grass pasture is competition by the grass on new, slow growing seedlings. Anything you do to reduce competition and slow



down grass growth will help. One of the best ways to slow down spring grass growth is to graze it hard now. Heavy grazing this fall prior to frost seeding or no-till seeding next spring will weaken the existing grass, reduce its spring growth and remove much of the old dead thatch. This will give the new legume seedlings a better chance to get started.

If you are frost seeding, close grazing is especially beneficial. Graze to the point where there is very little leaf surface left and some soil is exposed. While you're at it, also collect some soil samples. Then analyze them and apply any needed fertilizer and lime.

Plan to Lower Winter Feed Costs

Winter feeding is probably the single largest expense of maintaining the cow herd. This year will not be an exception due to high input costs (especially grain and concentrates). However, there are several management practices that we can use to lower our feed costs and make our herds more profitable.

The amount of hay and purchased feed needed can be decreased by extending grazing for as long as possible. This year grazing might continue until Thanksgiving, due to improved moisture conditions. Pastures that have received nitrogen and been allowed to accumulate growth can be grazed even farther into the winter, thus markedly delaying the start of winter feeding. Accumulated/stockpiled fescue pastures should be strip-grazed to avoid waste and increase grazing days.



Pregnancy check the spring calving cow herd now and eliminate the wintering of open cows—or move them to a fall-calving group. Favorable prices make this a good time to cull unproductive cows.

Calculate the amount of hay that you need to feed the cows through the winter and obtain forage analysis on your hay supply so that you can estimate your supplemental feed needs. Supplemental feed purchases can be made ahead of time for best prices. Be aware that the nutrient value of purchased ingredients—things like rice hulls, peanut hulls, cottonseed hulls, etc. may have very little feed value. You should know (based on your forage analyses) if you need protein, energy or both and purchase your feed accordingly.

Plan to minimize losses. Consider a feeding pad (geotextile fabric and gravel) with hay feeders to minimize mud and waste. Feed pads or structures will also minimize damage to your pastures during the wet winter months.

Cattle should be grouped according to their nutritional needs for winter feeding. There

are several distinct management groups in most beef herds:

- Cows nursing calves
- Weanling replacement heifers
- Bred yearling heifers
- Dry, pregnant cows
- Herd bulls

Most herds will have at least three of these groups which will benefit from being managed separately.

Increase feed to cows after calving to get calves off to a good start and to maintain the cows' body condition. Don't let cows lose much condition (flesh) this winter or next year's pregnancy rates will suffer. Calf prices will likely remain high so attempting to save money by under-feeding the cow herd this winter is bad business for the future.

By Dr. Roy Burriss, University of Kentucky Extension Beef Specialist

Electric Fence Review

Rory Lewandowski, Extension Educator, Athens County, Ohio

For many cattlemen using rotational grazing, the electric fence is a critical component of the total system. Although many farmers have learned the basics of electric fencing, most can benefit from a review every now and then. The basic components of your electric fence system that should be evaluated include: the fence energizer/charger, ground rods, and the fence wire. The fence energizer/charger is the "heart" of the electric fence system. Avoid some frustrations by spending the necessary money for high quality chargers.

Size the energizer/charger to handle your current fencing system, plus some room for growth. Sometimes the fence increases as a result of expanded pasture acreage or when the fence has increased as a result of more internal divisions. As the amount of fence grows, check to make sure that the charger is adequate for the amount of fence to be charged to deter livestock. As a general rule voltage levels and various livestock species include 1600 to 2000 volts for cattle and 3000 volts minimum for sheep and goats. There are many ways to evaluate chargers/energizers, but one method is to look at output in joules. Also remember that when a product is advertised by the miles of fence it can

energize, this includes one wire. If multiple wires are energized, these must be added together.

One component of the electric fence system that is sometimes overlooked is the ground rods. In a dry year, it is critical to have the correct number of ground rods, properly spaced installed to help keep enough voltage on fences. What is the correct ground rod system? A general rule of thumb says to install a minimum of 3 feet of ground rod per joule of energizer output capacity. For example, if I have a 15-joule energizer, this requires 45 feet of ground rods. Generally either galvanized or copper rods in 6 to 8 foot lengths are used. This energizer would require 6 to 8 ground rods depending upon if a 6 or 8-foot ground rod was used. If copper rods are used make sure to use a copper wire from the energizer ground terminal to the ground rod. If different metals are mixed, electrolysis can occur and the effectiveness of the grounding system is reduced, so stick with either galvanized or copper. Ground rods should be driven in their full length, or if rocky soils don't permit this, driven in at an angle. Ground rods should be at least 10 feet apart and 40 to 50 feet away from any other existing grounds. Ground rods should be



rods should be tied together in a system, connected with wire between rods. Try to locate ground rods in an area that is likely to stay moist. In

drought situations, it may be a good idea to water your ground rod areas to increase the effectiveness of your electric fence.

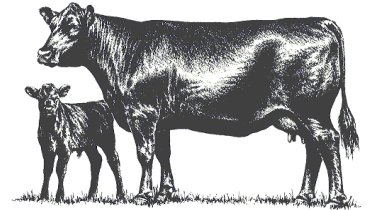
Finally evaluate the fence itself. Remember that as the diameter of the fence wire decreases, there is more resistance to push electric current around the fence. Polywire is very handy stuff but it should not be used to carry the charge long distances. Use high tensile wire to carry the charge and for perimeter fencing and polywire to hook on to the high tensile wire for internal paddock divisions. Voltage will be dropping in the fence as distance and amount of fence increases. Check to make sure the galvanized coating on the fence wire is intact. Rust is an enemy of electric fences.

Timely Tips

Dr. Roy Burris, University of Kentucky Beef Specialist

Spring-calving herds

- Schedule a pregnancy examination of cows if not done previously. Winter feeding costs can be minimized by eliminating open cows prior to winterfeeding.
- If you have already done a preweaning working, revaccinate (booster) calves as needed. Treat calves for internal and external parasites. If you vaccinate calves yourself, be sure to store, handle and administer vaccines properly.
- Wean calves before cows lose body condition.
- Obtain weaning weights of your calves and enter this in a record keeping program. Keep good records and treat your cow-calf operation like a business.
- Weaning is the time to do your first round of culling and selecting breeding stock. You can eliminate obviously inferior calves, especially those with wild or nervous dispositions. Consider the number of heifers that you will need to save for your cow herd. Bulls which are old, unsound, roguish, etc. can be culled now. It is not too early to begin thinking about replacements now.
- Evaluate the body condition of your cows and improve their condition prior to winter.



Fall-calving herds

- The calving season should be in full swing for fall calvers. Check cows frequently. Identify calves and commercial males should be castrated and implanted.
- Put fall-calving cows on accumulated pasture (if you have any) before the breeding season.
- It is time to get everything ready for the fall-breeding season, too. Line-up semen, supplies, etc. now and get your bulls ready to go (don't forget their breeding soundness evaluation).

Stockers/Backgrounders

- Manage to keep newly weaned and/or purchased calves healthy. Calves should be penned in a small lot with adequate feed, water and shade to reduce stress. Careful handling and comfortable, uncrowded conditions can decrease stress.
- If you are purchasing weaned/stressed calves, have your receiving/feeding program in place. Feed a stress ration which contains at least 13% protein and is fairly energy dense.
- When newly-weaned calves are purchased in the fall, sickness and death loss can be a big problem. Work with your veterinarian on a health and receiving program.
- Watch calves closely for a few weeks after their arrival. Have a treatment program ready for any health problems. Early recognition of sick cattle improves their chance of recovery. Watch for drooped ears, hollow appearance, reluctance to rise, stiff gait, coughing and dull or sunken eyes. A good "receiving" program is essential to profitability.

MAG-60: A New Avenue of Feeder Calf Production and Marketing

Dr. Les Anderson, Beef Extension Specialist, University of Kentucky

To enhance the value of our feeder calves, UK and KBN (KY Beef Network) has launched the MAG (Management And Genetics) - 60 (60-day postweaning) program. This program received funding in June from the Agriculture Development Board. In this program, KBN will partner with beef producers to synchronize estrus in their beef females for timed insemination. Females will be time-inseminated to reduce the labor costs associated with AI. Producers will AI their females to a small, select group of sires that are proven in their ability to sire productive, profitable calves.

Steers sired by AI will be managed according to CPH health requirements and will be backgrounded for a minimum of 60 days postweaning. The calves will be age and source verified and will be subjected to ultrasound to determine potential carcass merit. Thus, we will be marketing feeder steers that are age, source, and genetically verified for superior performance. Feeder calves that are age, source, and genetically



verified are likely worth \$7-10 more per hundred than a normal CPH-45 feeder if sold in load lots. Feed-

ers produced in this program will be co-mingled by our marketing agents and marketed either in CPH-like feeder calf sales, video sales, or directly to feedlots.

The heifers from the MAG-60 program will also greatly enhance the ability of our producers to increase profits. First, since all calves will be subjected to carcass ultrasonography, our cooperators herds can retain heifers with the genetic potential to excel in carcass traits. Second, heifers not retained will be developed and sold in a premium bred-heifer sale. This heifer sale(s) should also increase the cooperator's opportunity to diversify their marketing options and increase the profit potential.

Expectations of rancher:

- Provide a healthy, properly conditioned female for estrus synchronization
- Pay for the synchronization pharmaceuticals, labor, and facilities to accomplish the timed AI
- Work with the KBN field representatives and the AI service technicians to coordinate breeding
- Process the cattle to meet CPH-45 health requirements
- Age and source verify the cattle
- Background the cattle for a minimum of 60 days before sale
- Subject the cattle to carcass ultrasound and pay for **one-half** of the cost
- Market the calves through MAG-60 sales (either feeder calf or bred heifer sales)

- If the producer chooses to market the cattle elsewhere, the producer will reimburse KBN for the full amount of the cost-share (\$20 for AI plus the cost of the ultrasound). Cooperators will sign a contract that indicates they will market their feeders through MAG-60 or repay KBN their costs.

Expectations of KBN:

- Provide funding for cost of semen and service (\$20)
- Provide funding for one-half the cost of the carcass ultrasonography
- Work with the faculty at the University of Kentucky to develop a list of bulls of various breeds to use and a breeding strategy
- Provide personal service and technical support to organize the estrus synchronization and AI, age and source verification, carcass ultrasonography, and sale dates and delivery
- Promote the MAG-60 sales

If you are interested in the MAG-60 program, give me a call at 859-572-2600.

Kentucky Beef Cattle Market Update

Kenny Burdine, Livestock Marketing Specialist, University of Kentucky

This continues to be the feeder cattle market that just dares you to blink. The November contract, which was trading just under \$143 at the time of this writing, had traded below \$126 in late May. The end of September provided several very strong upward days about the time that we usually start to see our seasonal price declines. Both the October and November feeder cattle futures contracts remain a little off their contract highs, but January and March have both pushed through theirs.

The drought in Texas and Oklahoma continues to affect the cattle markets. Feedlot placements, which had been running ahead of 2010 levels, fell back in the September report. This was especially true of the heavier placement weights, which is consistent with expected drought effects. Wheat pasture may also become an issue this winter as it is clearly going to be behind, at best, in those areas.

If you are looking at placing calves into winter backgrounding programs, I would encourage you to run the numbers carefully. Certainly, calves are expensive and feed prices are high, but spring feeder cattle futures contracts are also looking very strong. Decisions should be made based on expected profit levels, and that requires working through a breakeven analysis using current calf prices, feed prices, and the expectation of feeder cattle prices in the

Health and Safety Issues for Kentucky's Aging Farmers

Because farmers are exposed to multiple hazards throughout extended careers, physical problems can start early. To maintain health, Kentucky farm workers must pay attention, particularly as they age, to issues caused by their way of life.

Falls. Falls are one of the leading causes of death. It is important to note that most falls occur from the same level—"trips and slips" are the main danger. Being pushed by a cow, slipping in mud, falling on ice—mundane accidents that occur on the ground can cause injury, especially for an older person.

Hearing loss. Farm work routinely exposes farmers to damaging noises. For example, the ear which is turned to the front of the tractor, where the exhaust is loudest, will have greater hearing loss. Farm youth have more hearing loss than non-farm youth, which, because hearing loss is cumulative, is a hazard. As farmers age, they may not be able to hear important noises such as approaching machinery, verbal warnings, or people approaching them, increasing the danger to them and people around them.

Risk of suicide. Farmers have the highest suicide rates of any occupation. Farmers are exposed to multifaceted stress and pressure. In addition to hard physical labor and long days throughout the year, a farmer must be able to endure the vagaries of nature and livestock, adverse weather conditions, market fluctuations, government policy changes, and family pressures. This unique, emotional pressure can be difficult to manage, and in some cases, it can lead to suicide.

Melanoma. Farmers don't often use sunscreen and may not practice regular skin self-exams. Of special note are the tips of the ears. Many farmers wear baseball caps, which increase the sun exposure of the ears and back of the neck. Working without a shirt or in sleeveless tops also increases the risk of sun damage.

Cataracts. Repeated sun exposure from farming accelerates the risk of developing cataracts. Statistically, farmers are more likely to develop cataracts, largely because they do not wear protective sunglasses.

Preventative care. Farmers often ignore their own health and safety, adopting a fatalistic view that "it won't happen to me." They routinely skip vaccines such as tetanus and infrequently visit doctors.

Farmers often define health as the ability to work. In a lifelong profession that expects, reveres and upholds such commitment, careful health screenings and regular physical check-ups are necessary to keep farmers working during their advanced years.

Source: Deborah Reed, UK College of Nursing



Is this a picture of any Campbell County farmers??

Don Sorrell
Campbell County Agent for Agriculture
and Natural Resources