

AGRICULTURE NEWS *February 2009*



Cooperative Extension Service

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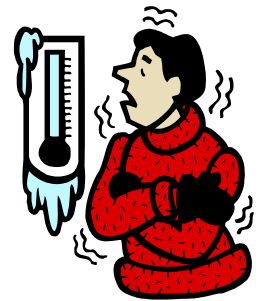
AGRICULTURE & NATURAL RESOURCES

Campbell County Farmers,

For me the recent ice and snow storm was a little challenging and humbling. Linda and I were without electricity (heat) and running water for about 54 hours, just long enough for a reality check. I wasn't exactly prepared for not having heat or running water. For the first 24 hours my thought process was that the electricity would come back on any minute. As day two began without electricity my thought process changed very quickly. The need to have supplemental heat in the house became extremely important. Fortunately for us we were able to purchase a small propane heater and had access to a generator that enabled us run the deep freeze and add heat to our bedroom and bathroom.

The humbling part of this whole experience is the fact that we live in a country where we are blessed with adequate food, clothing and shelter. It is only when something like losing electricity for a few days brings us(me) back to the reality of how blessed we are. Even in my life I have seen a lot of change. As a kid I lived with my grandparents whose small farm house had a pot belly stove for heat and an outhouse. I now live in a home with three bathrooms and geothermal heat. We live in a country with so many blessings!!

During the past 18 months farming has been much like the recent ice storm, challenging and for many a little humbling. With back to back summer droughts, major price increases in farm inputs and lower market prices, things have been tough. A major part of farming is riding out the lows and making the most of the more profitable years. Some of the most productive decisions made by farmers are made during challenging times. Even the smallest change can have significant impact on production and profitability and your ability to survive the lows. Several of our upcoming programs such as beef niche marketing, pasture renovation, rotational grazing and agriculture tourism will provide you with information that could improve your bottom line. Spring is just around the corner and the promise of warmer weather is something to look forward to. As always, give me a call if I can be of any help to you.



Cancelled Programs Rescheduled

The Pesticide Training programs have been rescheduled for March 17.
The Beef Niche Marketing program has been rescheduled for March 23.
See the enclosed program information for more details.

Time to Double Check Your Heifer Development Program

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

The first week of February is an extremely important “check-point” in spring heifer development programs. The key to proper heifer development lies in understanding the factors that influence conception in yearling heifers. One key factor regulating heifer fertility is age at puberty. Most producers don’t consider age at puberty of their heifers to be a major problem, yet few know how



many heifers are actually cyclic at the beginning of the breeding season. For maximum fertility and reproductive performance, heifers must have had at

least one estrus **before** the beginning of the breeding season. Our goal then is to incorporate reproductive management techniques to reduce the age of puberty, increase fertility, and shorten the interval to conception.

One of the largest factors that regulate puberty in the heifer is weight. For puberty to occur, heifers must weigh at least 65% of their mature weight. This weight is referred to as their target weight. Most heifer development programs require that heifers reach their target weight, approximately 65% of their expected mature weight, by the onset of their first breeding season. Because fertility increases until the third estrus after puberty, heifers should reach their target weight at least 30 days before the start of the breeding season. I refer to this date as the target date.

February is the time to determine if your heifers are “on track.” Most yearling heifers will need to reach 700-800 pounds (their projected target weight) by mid-April to ensure high fertility assuming that the heifer breeding season starts about mid-May. Weigh your heifers to determine how much they have left to gain to reach their target weight. If the heifers weighed on average 600 pounds and their target weight is 750 pounds then they will need to gain 150 pounds or 1.5 - 1.6 pounds each day to reach their target weight by mid-April. Heifers should reach a body condition score of 5.0-5.5 by their target date.

The next important phase in heifer development occurs one month prior to the start of the breeding season. At this time, heifers should be vaccinated (Vibrio fetus, Leptospirosis, and the respiratory disease complex which includes PI₃, BRSV, BVD and IBR; modified-live vaccine is preferred), dewormed, and pelvic area measurements should be obtained. Heifers with small pelvic areas and especially large heifers will small pelvic areas tend to have greater difficulty calving. Now is the time to contact

your local veterinarian to schedule this pre-breeding work.

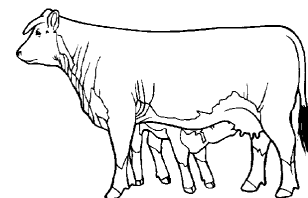
Producers should consider estrus synchronization and/or AI. Estrus synchronization and AI has many advantages which include: higher pregnancy rates, heavier, more uniform calves at weaning, and increase production and labor efficiency. The greatest advantage of AI is the ability to use superior, more predictable sires. Since a majority of calving problems in a herd occur when calving first-calf heifers, it seems only logical to synchronize and AI your heifers to proven calving ease bulls.

Spring-Calving Cow Herd

- Start cows on the high magnesium mineral supplement soon. Consider protein supplementation if hay is less than 10% crude protein. If cows are thin, begin energy (grain) supplementation now.
- Keep replacement heifer calves gaining enough to reach their “target” breeding weight (65% mature weight) by spring.
- Get ready for calving season! See that all equipment and materials are ready, including obstetrical equipment, record forms or booklets, ear tags, scales for obtaining birthweights, etc. Prepare a calving area where assistance can be provided easily if needed. Purchase ear tags for calves.
- Move early-calving heifers and cows to pastures that are relatively small and easily accessible to facilities in case calving assistance is needed. Keep them in good condition but don’t overfeed them at this time. Increase their nutrient intake after they calve.
- Consider vaccinating the cows to help prevent calf scours.
- Study the performance of last year’s calf crop and plan for improvement. Plan your breeding program.

General

- Feed hay in areas where mud is less of a problem. Consider preparing a feeding area with gravel over geotextile fabric.
- Increase feed as the temperature drops, especially when the weather is extremely cold and damp.
- Provide water at all times. Cattle need 5 to 11 gallons per head daily even in the coldest weather. Be aware of frozen pond hazards. Keep ice “broken” so that cattle won’t walk out on the pond trying to get water.
- Watch for rubbing or other signs of lice and treat if needed.
- Consider renovating and improving pastures with legumes, especially if they have poor stands of grass or if they contain high levels of the fescue endophyte.



Kentucky Beef Cattle Market Update

By *Kenny Burdine, Livestock Marketing Specialist, University of Kentucky*

Most cattle producers will happily wave good bye to 2008 and will be hoping that 2009 will be much improved. Many are wrestling with challenging management decisions as a result of the profitability challenges they are facing. Production costs were extremely high in 2008 and feeder cattle prices fell dramatically from summer to winter. However, it is difficult to make clear recommendations about strategies without good knowledge of the cost structure of the farm.

Given the situation that cow-calf operators are facing, I would strongly encourage them to spend some time this winter conducting a serious cost analysis. All producers know they are facing a challenge, but I don't think that many have a good feel for exactly what it is costing to maintain each cow in their herd. Winter is a good time to go through production and expense records to estimate these costs.

There are many ways to do this, but I like to start with forage production because it is probably the biggest expense for most cow-calf operators. Allocate fertilizer and lime between hay and pasture ground so grazing costs can be separated from hay production costs. From there, don't forget fuel, oil, repairs, and labor to these forage programs. Finally, you should also charge depreciation and interest on forage equipment to get an accurate assessment of what total feed costs truly are. The agricultural economics department has budgets available that may make this easier.

Once we have assigned a cost to the hay that is produced, we can estimate how much hay is fed per cow. This is best done by weighing representative bales and tracking how many are fed. However, a typical cow can easily consume two tons of hay per year or more, especially when we start including storage and feeding losses. Grazing costs can be estimated by multiplying pasture maintenance costs per acre by stocking rate.

Second, move into things such as mineral, water, health, labor, breeding, marketing, fence and building repairs, and other variable ex-

penses. You will likely find that a lot of little purchases can really add up here. If you don't keep good financial records throughout the year, this will likely require going through many farm store receipts and determining which expenses truly should be charged to your beef enterprise.

Finally, consider fixed costs like taxes and insurance, family labor, and opportunity costs like unpaid interest. This is also where depreciation on buildings and machinery that are not allocated to the hay enterprise will come in. Once all costs have been considered, the producer will be in a much better position to determine his or her best strategy given the challenges they are facing today. Enterprise budgets are also available for cow-calf operations, which could guide you through this process.

Production costs are likely as high as they have ever been for cow-calf operators. For some, the



best strategy may be to reduce cow numbers and decrease their dependence on stored feed. For others, it may be to add complementary enterprises like stockers to help spread overhead costs further.

These possibilities go on and on. Regardless, without knowing something about the cost structure of the herd, these types of decisions are impossible to make.

If you have never taken time to set up a financial record keeping system for your beef herd, the first of the year is an excellent time to do so. Many tools are available including record books, spreadsheets, and specific computer applications like Quicken or Quick Books. The most important record keeping decision you will make is just deciding to keep records. It's difficult to manage something that we never take time measure.

Soil Tests Can Save You \$\$

By Katie Pratt

With input costs remaining high, farmers are looking for ways to make their money go further. Testing soil from fields now can prevent over fertilizing in the spring and potentially save money on input costs.

“If you look at the economics of it, including input costs and commodity prices, it looks like it’s going to be very difficult for farmers to make a profit this year,” said Lloyd Murdock, UK extension soil specialist. “To make a profit, farmers will need to use best management practices, which include using fertilizer as efficiently as possible.”

Since plants need nutrients from the soil for life, soil health is vital for optimum crop production. A



soil test is a chemical analysis that reveals nutrient levels in the soil. Results from this test help determine which nutrients, if any, are lacking. Producers then use the test results along with past soil management practices and cropping history to decide

the amount of nutrients that should be applied.

“Our recommendations are based on Kentucky conditions and research and observations made in Kentucky,” said Frank Sikora, UK soil testing coordinator. “We have a good scientific basis for what we recommend.”

UK soil testing facilities in Princeton and Lexington conduct about 40,000 soil tests in a typical year. But this year, the facilities have seen about a 20 percent increase, which Sikora said is likely due to the high fertilizer costs.

Soil testing is typically done in the fall and spring. But the next couple of months are the best time to soil test because the state has received enough precipitation to ensure the most accurate results. In the last few years, Kentucky has had dry weather in the fall. Dry conditions can cause a lower soil pH and potassium level.

For pastures, hay fields and no-till agricultural practices, producers should collect soil samples no deeper than 4 inches. Research has shown that most of the soil’s fertility is in this top layer of soil. Take random soil cores (5 to 10 cores for fields less than 5 acres and 15 to 20 for larger fields) to improve the

accuracy of the soil test results. This will result in the most accurate soil tests and results.

Bring soil samples (dry and broken up) to the Campbell County Cooperative Extension office in Highland Heights. The extension office then sends the samples to one of the UK soil testing labs. Once the results are in, I will make specific recommendations on the types and amounts of nutrients/fertilizer that need to be applied to the field. Soil testing is a free service of the Campbell County Extension Office for county residents.

CERTIFIED SEED A GOOD INVESTMENT

Buying certified seed is one of the few investments that gives you a guaranteed high rate of return.

Red clover is one example. College of Agriculture research on improved and common varieties consistently shows that certified seed produce higher-yielding, longer-lasting stands. Certified red clover seed can return three to five tons more hay over the life of the stand. These stands persist up to 30 months, compared to 15 to 20 months for those planted to common seed.

Alfalfa variety trials also support the value of investing in certified seed. Any of the top five certified varieties will produce three-fourths of a ton higher yield per acre annually than a common variety.

Certified seed may cost up to twice as much as common varieties. However, certified seed are worth the added expense because yield is where you get the extra return on investment.

Planning your seed orders well in advance is another way to gain the most from your investment. It enables you to get the varieties you want and make the best deal on seed.

Before you contact seed dealers, review university and seed company variety trials and compile a short list of varieties you want to plant. Get in touch with seed dealers early to ensure that you get the seed varieties and quantities you need. Variety selection will be a part of the **Hay/Pasture Renovation program on February 24th.**

SWITCHGRASS USED TO FUEL POWER PLANT

Officials from East Kentucky Power Cooperative and the University of Kentucky recently demonstrated switchgrass' feasibility as an alternative energy form as it was combined with coal to generate electricity at East Kentucky Power's Spurlock Station in Maysville.



Randy Haas loading round bale switchgrass

This was believed to be the first time switchgrass was used as fuel for a power plant in Kentucky.

The switchgrass was mixed with the coal feedstock, replacing 1 to 2 percent of the coal normally used. East Kentucky Power will continue to study switchgrass' energy potentials, and could possibly increase the percentage of switchgrass used to 3 to 10 percent.

"We want to find out if switchgrass can be a viable supplemental fuel for our power plants," said Bob Marshall, president and CEO of East Kentucky Power. "This test will provide valuable information about how burning switchgrass affects our plant's fuel-delivery systems, boilers and emissions."

The test is part of an innovative four-year pilot project conducted by UK's College of Agriculture to determine if switchgrass can be grown sustainably and economically in Kentucky. A grant to the Kentucky Forage and Grassland Council from the Kentucky Agricultural Development Board is funding the project.

UK researchers are working with 20 farmers in north-east Kentucky (one being Randy Haas of Campbell County) to evaluate options for planting, growing, harvesting, transporting and processing the switchgrass. Each farmer manages a five-acre plot that UK forage specialists helped them establish.

University of Kentucky forage specialists believe that if this project is successful, switchgrass could provide a great opportunity for producers in this area to diversify their agricultural operations as well as generate additional income.



Switchgrass round bales at power plant in Mason County.

Safe Use of Standby Generators

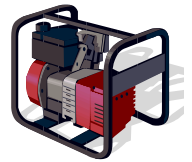
When winter storms and other disasters disrupt electrical service a standby generator can provide emergency electrical power. However, you need to take some special precautions to ensure safe, efficient operation of these generators.

Use a double-throw type transfer switch if you're connecting a standby generator directly to an existing electrical wiring system to provide power for a home, farm or small business. A double-throw switch allows you to place or "throw" the switch into two different positions.

One position feeds normal power from the utility line to the load, such as the household or building circuit just like the power flows under normal circumstances. In the other position, it disconnects the utility line and feeds power from the standby generator to the household or building circuit.

Remember, any time a standby generator is wired or directly connected into a household or building wiring system, a transfer switch must be used for the connection.

A double-throw type transfer switch is required by the National Electric Code and by electrical utility companies for two very good reasons. First, it prevents power back flow from the standby generator through the utility power line. This prevents possible electrocution of utility linemen working to restore service to the power lines. Second, it prevents damage to the standby generator when electrical service is restored; otherwise, the generator could be damaged extensively when power is reestablished.



You won't need to use a double-throw type transfer switch if you're plugging individual appliances like a refrigerator, freezer, sump pump or power tools directly into a small portable generator.

These are some more safety considerations to remember when using standby generators:

Ground the generator using number six copper wire and an eight-foot ground rod that is properly bonded to the electrical grounding system.

To avoid the possibility of carbon monoxide poisoning, never operate a standby generator in a basement or other enclosed area. Locate the generator away from buildings to prevent exhaust fumes from entering the building through the crawl space or open doors or windows.

Use extreme caution when operating the generator in wet conditions.

Use only approved containers to store fuel.

Never refill fuel when the generator is running or while the engine is hot.

Do not shut off the generator under load.

By Dr. Larry Piercy, Retired UK Farm Safety Specialist

RETAIL FERTILIZER PRICES

By Greg Halich and Lloyd Murdock, UK Specialists

Over the past several months, the wholesale price of fertilizer has declined, dramatically in some cases. Now, producers are beginning to see retail prices drop, but these declines are varying greatly between stores.

As wholesale fertilizer prices have dropped, some retailers have been reluctant to lower their prices. Many of them stocked up on fertilizer when prices were high and forecasted to go even higher. When wholesale prices began to decline, retailers were left with a surplus of expensive fertilizer. Now, they must decide whether to maintain their previous prices, lower them or buy less expensive fertilizer to average into the cost of their more expensive inventory.

These factors are causing producers to see a wide range of prices as they shop for fertilizer for spring.

In a normal year, the price Midwest producers pay for fertilizers generally varies no more than \$75 per ton between retailers. This year, there's a \$500 to \$600 difference between retailers on certain products. While there is a big spread on fertilizer costs, all of the prices are lower than they were in July. Nitrogen has seen the biggest drop. It is half of what it was just six months ago. The price of phosphorus is down 30 to 40 percent from this summer and potassium is about 20 percent less.

No one is sure how long prices will continue to drop. It is possible the demand for inputs will increase across the nation as it gets closer to planting time, which could drive up the costs. In the last couple of months, the demand for fertilizer has been low. Many producers in the upper Midwest who normally fertilize in the fall held off this year due to wet soil conditions and in hopes of prices dropping in the spring. Others that normally purchase fertilizer at the end of the year for tax purposes have not.

The fear is that if too many producers wait until the last couple of months to buy fertilizer it could clog the distribution infrastructure, and they may not be able to get the fertilizer they need or will have to pay more for it than they would otherwise.



Sell or Buy Ads

For Sale:

4'x5' mixed grass hay (brome, timothy and orchardgrass), 1st cutting, stored inside, \$30 roll.
Call Bill at 635-2825 or 391-4718

For Sale:

4'x5' mixed grass hay (orchardgrass and fescue,) 1st cutting, stored inside, \$30 roll.
Call Norman at 620-4283

For Sale:

4'x4' mixed grass hay, first cutting, stored inside, \$20 roll, large quantity discount. Call Kevin 496-7535.

For Sale:

1978 2440 John Deere Tractor, 60 horsepower, 5500 hours, 500 on engine overhaul, 245 self leveling quick attach loader with 6 foot bucket and bale spear. Vince 635-3387 or Greg 635-7755

For Sale:

Corn Silage at \$50/ton and 4'x5' round bales at \$35 per bale. Corn silage loaded and weighed at farm. Round bales stored inside or under tarp. Call Kendall at 620-4314.

Don Sorrell
Campbell County Agent for Agriculture
and Natural Resources