

Fenceline

by Jody G. Holthaus

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Livestock-Natural Resources

They say the only person that likes change is a baby with a wet diaper! We have been moving the Extension office in Holton. After 60+ years in the courthouse, there is quite an accumulation of items. We ran across some pretty cool old stuff, photos and yearly reports. We still have quite a few boxes to sort through, but things are coming along, stop in and see us at 114 W. 5<sup>th</sup>. At some point, we will have an open house, not quite yet!

It is time to think about winter supplements for you beef cow herd. With lower grain prices, there are many attractive opportunities.

Steps to formulate a supplement for beef cows can be summarized as follows:

1. Evaluate current feed (forage) supply using a laboratory to analyze nutrient content of feeds.
2. Determine nutrient requirements of groups to feed. Some adjustments for cold temperatures are included. A practical rule of thumb is to increase energy intake by 1% for every degree of coldness below the lower critical temperature of a cow. For practical purposes, a 20° F temperature can be used as the lower critical temperature. Thus, if outside temperature is 0° F with calm wind speed, then energy intake will have to be adjusted 20%. If the daily TDN requirement during this period is 11.2 lb., then an additional 2.24 lb. TDN are required to prevent environmental stress on the cow. Take note and adjust for wind chill.
3. Estimate dry matter intake.
4. Compare nutrient intake with nutrient requirements and determine what nutrient(s) need to be supplemented.
5. Select supplement based on its nutrient content and price.
6. Determine amount of supplement to use.
7. Feed supplement according to determined amounts.
8. Evaluate cow performance (i.e., body weight or condition changes) as a result of supplementation.

David G. Hallauer  
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### Woody Plant Control – Cut Stump Applications

Last week's column focused on basal bark applications for use in trees that are six inches or less in diameter. Problem is, it doesn't seem to take long before they get larger than that – sometimes much larger! At those times, it's typically best to cut the tree off at ground level and treat the cut surface using what we refer to as a cut stump application.

A number of cut stump application products are available. Triclopyr containing products like Crossbow, Remedy Ultra, and PastureGard HL are typically mixed in some proportion to diesel fuel, or kerosene. Cottonwood, elm, and oak can be treated with a one to one ration of dicamba instead of triclopyr. Black locust and honey locust can be treated with a ten percent solution of Milestone in water. Just make sure you do so in a timely manner, typically within 30-60 minutes before sap seals over the exposed area. Treat any exposed trunk or exposed roots. Eastern red cedar roots do not resprout, so as long as it is cut below the lowest green branch, it will be killed. Any others will likely resprout from below ground buds causing major problems! Some species will require extra persistence as well. Locust species may sprout from all along the root system, meaning you'll want to make sure and get good cut stump coverage.

Tordon RTU and Pathway can be used on cut surfaces in noncropland areas such as fence rows, roadsides, and rights-of-way. However, Tordon RTU, and Pathway are not labeled for use on range and pasture.

It's the little things that can trip you up when making cut stump treatments. Before spraying, be sure to brush sawdust and debris off the cut surface so herbicide can get to the growing surface. Apply herbicide to freshly cut stumps and be sure to spray the cut surface and stump to ground level. Spray any exposed roots above soil surface with application to the cambium layer critical to the application success. Be sure to apply enough liquid that it pools on cut surface and always read and follow label directions.

For a full list of herbicides for brush control, contact your District Office to request a copy of the 2015 Chemical Weed Control guide.

### Tree Planting Time

Fall is a great time to plant trees! Interested in containerized seedlings through the Kansas Forest Service? Good news! Order forms are now available!

Trees available for fall planting include Bur Oak, Eastern Red cedar, Eastern White Pine, Pecan, Ponderosa Pine, Redbud, Southwestern White Pine, and Swamp White Oak. They are sold in bundles of 25 trees for a cost of \$50. Marking flags, tree tubes, weed barrier fabric, and other planting materials are also available.

As much as I'd like for you to get started right away, that may not be the best idea! Tree plantings provide huge home energy savings, dust/sight protection, and farmstead windbreaks as well as others. You can get pretty frustrated, however, if you put all the work in to planting a windbreak only to have it fail!

Cindy Williams  
Meadowlark Extension District Agent  
Food & Nutrition, FNP

## Making Better Bacon. Is that Possible?

Just when you thought it couldn't get any better, improved bacon could soon be on its way. Bacon is one of the most popular cuts of pork, and finding a way to deliver restaurants and consumers an even better product is the focus of research at Kansas State University.

Terry Houser, associate professor in the K-State Department of Animal Sciences and Industry, is exploring what level of pork belly fat saturation will result in long shelf life and better flavor. Currently, bacon used in the food service sector, which includes restaurants, is stored frozen but is not vacuum packaged, he said. This method can lead to off-flavors in meat with higher levels of unsaturated fat.

Houser and his team are studying the influence a pig's iodine levels a measure of fat saturation has on shelf life value of bacon. He said if bacon fat is too unsaturated, it could cause the fat to be soft and undesirable to the consumer. Also, unsaturated fat causes problems with slicing the bellies once they are cooked and smoked.

The theory behind the research, Houser said, is that pigs with relatively high iodine levels result in problems with bacon quality from those pigs' bellies. Pigs with relatively high iodine levels have a more unsaturated fat in the belly, which means those bellies will be softer and more prone to increased rates of lipid oxidation, Houser said.

Increased rates of lipid oxidation have been lined to greater occurrence of rancid flavors in meat products, he explained. Additionally, soft bellies are challenging to slice with commercial meat processing equipment and may result in lower slicing yields for the bacon manufacturer.

We wanted to see what the effects freezing has on lipid oxidation, or off-flavor development in those bacon products, Houser said. The results showed us that bacon is very unstable once it is in a frozen storage, in a HRI (hotel, restaurant and institutional) type of packaging system.

Houser and his team's on-going research to create better bacon will explore ways to identify bacon that is higher in unsaturated fat and how to make the fat more stable in frozen storage.

Nancy C. Nelson  
Meadowlark District Agent  
Family Life

## Kansas Radon Facts

Radon exposure in homes and other indoor environments is the leading cause of lung cancer death for non-smokers in the United States, and the second overall cause of lung cancer death behind tobacco smoking.

The Environmental Protection Agency (EPA) estimates that approximately 1 in 4 homes in Kansas will test at or above the EPA's radon action level of 4.0 picocuries of radon per liter of indoor air (pCi/L). The US Surgeon General and the Kansas Radon Program recommends all homes in Kansas be tested for radon gas.

Radon test kits can be obtained from most Kansas State Research and Extension county/district offices for a reduced fee. Radon test kits can also be purchased online via [www.sosradon.org](http://www.sosradon.org) at retail price. Test kits purchased through your local Extension office or the Kansas Radon Program include the laboratory analysis fee and return postage.

The most common technique used to reduce elevated indoor radon levels in single- and two-family homes is called Active Soil Depressurization (ASD). An ASD radon mitigation system is a permanently installed pipe-and-fan system that places a direct constant vacuum on the soil beneath the house's foundation, constantly reducing the amount of radon under the foundation that can penetrate into the living space of the home.

ASD radon mitigation systems can reliably and easily reduce elevated radon levels in 95% of homes or more. In Kansas, the average starting radon level of homes that have been mitigated is approximately 9.5 pCi/L. The average post-mitigation radon result is 1.3 pCi/L.

Currently, KDHE has collected over 73,000 radon measurements in Kansas. The observed state-wide average indoor radon value for Kansas is 5.1 pCi/L, with over 35,000 measurements reported at or above 4.0 pCi/L.

You can call the Kansas Radon Hotline toll-free at (800) 693-5343 and speak with a Kansas Radon Program representative. Their frequently asked questions can be found at [www.kansasradonprogram.org/faq](http://www.kansasradonprogram.org/faq), and several topic-specific fact sheets can be found at [www.kansasradonprogram.org/factsheets](http://www.kansasradonprogram.org/factsheets).