CARTER COUNTY AGRICULTURE & NATURAL RESOURCES NEWSLETTER

November & December 2024

Cooperative Extension Service
Carter County
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What's Inside	

Highlights:

⇒ The Northeast Area Livestock members voted to discontinue the mineral order. Kee's Farm Service and Hinton Mills both stock a mineral very similar to the UK IRM mineral. Additional feed stores may also have a similar mineral. UK mineral recommendations are available at www.rs.uky.edu/regulatory/feed/UKBeefIRMMineralSpecs.pdf.

⇒ Attend the East KY Hay Contest Award Announcement in Jackson or join us for a watch party on Tuesday, November 26 @ 5:30 PM.

Enjoy your newsletter,

Rebecca Konopka

Rebecca Konopka,
Carter County Extension Agent for
Agriculture & Natural Resources Education

Upcoming Events

Denotes events where preregistration is required. Call 474-6686 or email Rebecca.k@uky.edu to register.

11/19 @ 6:00 PM	**Northeast Area Livestock**	Extension Office
11/22 @ 9:00 AM	***Commercial Pesticide CEUs**	Online
11/26 @ 5:30 PM	***EKHC Results Watch Party***	Extension Office
12/3 @ 6:30 PM	**Little Sandy Beekeepers**	Extension Office
12/10 @ 8:00 PM	***Beef Webinar***	Online
12/12 @ Noon	***Winter Swag Workshop***	Extension Office
12/16 @ Noon	***Winter Swag Workshop***	Extension Office
12/25-1/1	**Extension Office Closed**	
1/6-7	***Fruit & Vegetable Conference***	Lexington
1/14 @ 10:00 AM	**District Board Meeting**	Extension Office
1/14 @ 8:00 PM	***Beef Webinar***	Online
1/16-17	***KY Cattlemen's Association**	Owensboro
1/22 @ 10:00 AM	***Ag Lender's Update***	Fleming County
1/25 @ 9:00 AM	***Barn Quilt Painting Party***	Extension Office
1/28 @ 6:00 PM	**Northeast Area Livestock**	Extension Office

Northeast Area Livestock Association

6:00 PM—Dinner is provided.

November 19—**Understanding Seed Tags** Speaker: Dr. Jimmy Henning

Meal Sponsored by Kee's Farm Service

January 28— **Electronic Identification Tags**

Mountain Cattlemen's Association

University of Kentucky College of Agriculture, Food and Environment
Cooperative Extension Service

East Kentucky
Hay Contest
WATCH PARTY

Carter and Boyd Counties will be hosting the 2024 East Kentucky Hay Contest results watch party.

Pizza and drinks will be provided.

Please call the Carter County Extension office at 606-474-6686 by November 18 if you plan to attend.

Guest Speakers:
Dr. Jimmy Henning - Contest Results
Dr. Lehmkuhler - Finishing Beef Cattle

DETAILS

Location:
Carter County Extension Office
94 Fairground Drive,
Grayson, KY 41143

Date & Time:
Tuesday, November 26
@ 5:30 PM

Winter Door Swag Workshops

December 12 & 16

12:00 PM

Carter County Extension Office

94 Fairground Drive Grayson, KY 41143

Call 474-6686 to register. Cost is $5.

If you prefer to make a centerpiece or vase, bring your own container.

Beef Cattle Management Webinar Series Resumes

Second Tuesday of each month @ 8:00 PM

If you have not registered previously for the webinars, send an email with your name and county to dbullock@uky.edu.

⇒ December 10, 2024 – **Winter Feeding Strategies to Extend Short Hay Supplies –** Lawton Stewart, Professor, University of Georgia

⇒ January 14, 2025 – **Important Traits for Bull Selection in Kentucky –** Matt Spangler, Professor, University of Nebraska

Cooperative Extension Service

Barn Quilt Paint Party

By: Liz's Barn Quilts

Saturday January 25

Carter County Extension Office

9am-3pm

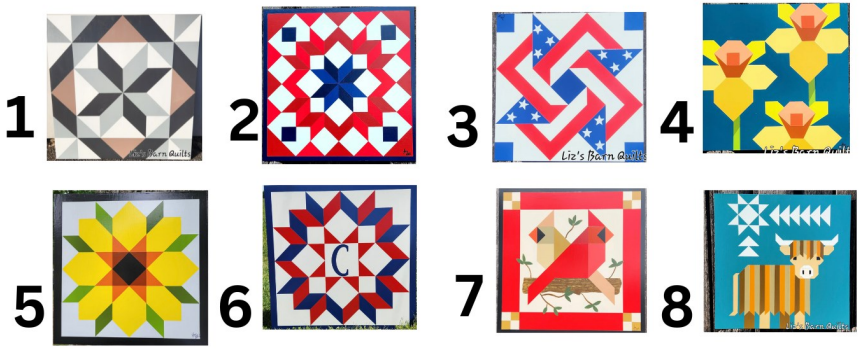
Outdoor Signs:2x2=$130, 3x3=$190

Prices Include:

- All supplies (board, brushes, paint, etc.)
- Boards primed and ready to paint
- Paint colors can be decided day of event
- Lunch (Please let us know of any dietary needs)
- Please bring drink, hair dryer, and 94" Frog Tape

Call 474-6686 to register
Must be paid in full by Dec 20th

Sorry, No refunds on missed event-alternate arrangements will be available.



Little Sandy Beekeepers Association

First Tuesday of the Month @ 6:30 PM

December 3— Topic: **Splitting Hives**

This is the annual Christmas dinner. Each member is asked to bring a dessert to share.

Are Growth Promoting Technologies Becoming a Lost Art for the Cow-calf Sector?

Dr. Katie VanValin, Assistant Extension Professor, University of Kentucky

Growth promoting technologies, when used correctly, are valuable tools that improve efficiency and increase weight gain in growing cattle. In the cow-calf sector, these include ionophores and implants. Although "technology" often implies new, these tools have been in the beef industry for decades. Yet, adoption seems to be stagnant or even declining – why?

Ionophores—Ionophores are antimicrobial feed additives, including monensin (Rumensin®), lasolicid (Bovatec®), and laidomycin propionate (CATTLYST®). While ionophores are antibiotic-like, they are not considered medically important for humans, so they do not require a veterinary feed directive (VFD) and can be purchased without a prescription. However, as they are classified as a medication, they must be bought premixed from a feed dealer.

The rumen hosts a multitude of microorganisms that digest feed and produce volatile fatty acids (VFAs), which the animal uses for energy. Acetate is the most common VFA, but propionate is more energetically efficient. Feeding ionophores shifts production towards propionate, leading to increased average daily gains, improved feed efficiency, and reduced methane production! Ionophores also help prevent bloat, acidosis, and coccidiosis! It is no surprise that ~90% of cattle on feed in the United States consume ionophores.

While ionophores are typically used for growing cattle, they can benefit replacement heifers and cows by decreasing the age of puberty, and shortening the post-partum interval, thus benefiting reproductive performance.

Ionophores can be mixed into feed, and there are also some pre-mixed products like free-choice minerals and tubs. Always read and follow all label directions, as toxicity can occur when feeding at high levels. Horses are particularly sensitive to ionophores, so avoid accidental feeding.

Implants—Implants are small pellets containing hormones, that are inserted into the back of the ear. Over time the implant is absorbed and

utilized to increase the secretion of growth hormone, promote protein synthesis, and decrease protein degradation, resulting in increased average daily gain. Implants have been around for decades and are arguably one of the most consistent practices we have in all of agriculture. Suckling calves implanted at around 90 days old often have weaning weights 10-20+ lbs higher compared to non-implanted calves.

However, a recent survey of Kentucky beef producers noted that only 21% implant their calves. This means potential revenue is left on the table. My rule of thumb is that unless we receive a premium that covers the money we are leaving on the table, we should absolutely be implanting calves.

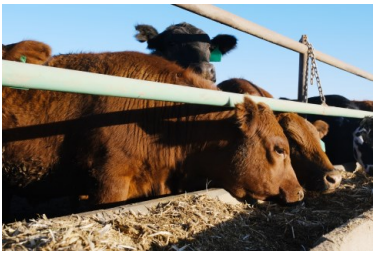
Implanting is quick, taking less than 1 minute. With calves at $2.70/lb. and an added 20 lbs. from implanting, a 500 lb. calf is worth$1,350 vs. a 520 lb. calf $1,404. The cost of calf-hood implants is less than $2.00 per head. For a 30 head heard, an extra half hour of work yields an additional $1,600.

Implanting suckling steer calves can also lead to similar gains as an intact bull calf, allowing for early castration without growth and avoiding discounts from the sale of bulls. Research shows that early castration is less stressful vs. castration at or after weaning. Implants are an effective strategy to capture growth, but also reduce stress on the animal.

For heifers, timing is key. Some research shows that implants negatively impact fertility, depending on when they are administered. The general recommendation is not to implant replacement heifers; however, heifers marketed as feeders can and do benefit from implants.

Be mindful of the implants pay our period- or the time it is effective. To get the full benefit be sure that implants are administered far enough in advance to capture the full pay our period. For example, is an implant has a payout period of 100 days, implant at least 100 days prior to marketing.

If ionophores and implants are not part of your management, consider how they could benefit your operation. Regardless of market conditions, these technologies are safe, proven, and effective ways to increase revenue in the cow-calf sector. For questions on ionophores or implants, reach out to your local extension office.



Coping with Low Precipitation

Dr. Jeff Lehmkuhler, University of Kentucky, Extension Professor

As the fall continues to provide us with extremely dry conditions, fall growth of forages will be limited this year. Cow-calf producers should be developing a drought plan as we move through the fall and winter. Below are a few tips to consider when navigating these dry fall conditions.

Things to consider during these dry conditions include:

⇒ Monitor body condition and record – Be sure to record body condition scores of cattle and monitor condition every month. Excessive losses in body stores reflect insufficient nutrient intake and should be corrected. Excessive body tissue loss can reduce milk production, lengthen anestrus and reduce herd productivity.

⇒ Feed hay early – Total dry matter intake is negatively impacted when forage availability is limiting. Providing stored forages such as hay early in the fall when pastures are not growing from lack of precipitation will help reduce body condition loss.

⇒ Cull – As market prices remain strong, now may be a time to consider culling opens, cows with structural issues, cows at the bottom of list production-wise, or those with poor disposition.

⇒ Early-wean – Lactation increases nutrient needs of cows significantly. Weaning calves can be done with confidence as early as 90 days with success but waiting until calves are 120 days will reduce post-weaning management needs. Weaning will lower the nutrient demand for cows and aid in maintaining body condition.

⇒ Substitute forage with grain – Using low-starch, highly digestible fibrous coproduct feedstuffs such as soybean hulls, wheat middlings, beet pulp and others can be used as means to increase energy intake. When providing coproduct or grain supplements, forage intake is not reduced on a 1:1 ratio. The actual forage intake may only be decreased by about 0.5 lb of dry matter for each pound of supplement dry matter offered.

⇒ Consider feeding an ionophore – Research has shown providing beef cows with 200 milligrams of an ionophore such as monensin reduces gaseous energy losses associated with rumen fermentation. Research

from Kentucky found that feeding an ionophore to beef cows maintained similar body condition and weights when cows were offered 15% less hay compared to cows that were not provided monensin. Ionophores must be mixed in with at least 1 pound of grain for beef cows but can be offered free choice in mineral mixtures or tubs to feeders and replacement heifers.

⇒ Have municipal water as a back-up – As limited precipitation continues to linger, ponds, streams, creeks, and springs dry up. Cows need 10-20 gallons of water daily. Limiting water intake will result in reduced dry matter intake and production. Having a waterer that is connected to a municipal water supply will ensure that cattle will have access to clean water. Don't forget to ensure the water supply is turned on, tank floats are working, and the tanks have been cleaned.

⇒ Consider creep for fall-born calves – Nursing calves will have a fully functional rumen around 6-10 weeks of age. Reduced forage availability and quality will reduce milk production by the dam, but also limit nutrient intake of the calves. Limited forage nutrient intake and reduced milk consumption will reduce weaning weights and prevent calves from meeting their genetic potential for gain. Creep feeding can provide access to additional feed and increase the nutritional plane of calves. Creep feeding may be in the form of higher quality forages or grain supplementation.

⇒ Control internal parasites – Young cattle are most susceptible to internal parasites. Work with your veterinarian to monitor fecal egg counts and develop a protocol to control internal parasites in cattle.

⇒ Liquidate – In the event that forage and/or water resources are not available, the best option may be to sell the herd. Starving cattle is unacceptable and not an option. As an owner of livestock, it is your responsibility to ensure cattle are provided access to forage and water. Selling cattle during a high market and waiting for to buy back when prices fall can be a viable option.

I am hoping that we receive some much-needed precipitation before frost to improve pasture conditions. However, the shortened day lengths and lingering frost will limit forage production. Develop your plans and be ready to act rather than hoping for rain next week.

Johnsongrass Control Moving into 2025

Dr. Travis Legleiter, UK Extension Weed Specialist

Johnsongrass has long been a problematic weed in Kentucky, but it hasn't always been at the top of our minds the last several years with the continual onslaught of weeds like waterhemp, Palmer amaranth, and Italian ryegrass. This year though, it seems Johnsongrass made a comeback or at least reminded us that it is still very much a problematic weed that needs to be managed. Unlike many of the weeds we deal with in our row crop acres, Johnsongrass is perennial that spread by seed and rhizomes. This allows Johnsongrass to gain a foothold in the Kentucky landscape of no-till row crops in close proximity to rights of way and perennial forage fields and pastures where this weed tends to thrive and spread.

This past spring and summer, Johnsongrass seemed to really explode and was much more prominent in our corn and soybean acres. I believe there were a couple of reasons for the perceived sudden increase in Johnsongrass pressure. I believe we have been building our Johnsongrass stock (rhizomes) for the past couple of years and the weather this year was set up perfectly for Johnsongrass to thrive. Generally, across the state we had a great April for field work and planting of corn and early soybean and for burndown of winter annuals for May planted crops. Then we received multiple heavy rainfall events in May that kept planters and sprayers out of the field. These spring conditions in combination with a warm winter and fields with existing Johnsongrass rhizomes allowed for a perfect scenario for Johnsongrass to thrive. Following the successful clearing of winter annuals from the field, Johnsongrass was able to immediately emerge from rhizomes and thrive in the late April and May conditions with little interruption from field activities.

The good news is that our postemergence applications in both corn and soybeans were largely successful. Other than a few isolated locations, herbicide resistant Johnsongrass has not become prevalent in Kentucky and no cases of glyphosate resistance has been identified. This is not to say that we should not worry about that possibility though.

As I indicated above, I believe in many of our no-till fields we have been allowing for the establishment of Johnsongrass rhizome networks. John-

songrass emerging from rhizomes is significantly harder to control than seedling Johnsongrass. Management of rhizome Johnsongrass should be approached from a long-term perspective rather than the short-term approach often taken with annual weeds.

Having this long-term approach in mind producers and consultants should be evaluating fields for the potential need for fall herbicide application. If you had fields with particularly heavy Johnsongrass infestations this year, even if your post programs were effective, you should go observe those fields to see how much Johnsongrass has regrown or emerged since harvest. Fields with significant Johnsongrass regrowth or emergence this fall should be considered for a fall application.

As a perennial plant Johnsongrass has now started the process of preparing for its explosive reemergence next spring. It is doing this by pushing nutrients down into the rhizome network to be stored over the winter and to be used next spring. Farmers can use this to their advantage by making applications of glyphosate to the Johnsongrass that will also move to the rhizome network causing significant damage to the network and overall weakening or killing the plant going into next spring. Although, it should not be expected that a single fall application will permanently take out the Johnsongrass in a field. It will take several years of intense management to deplete an established population. Again, Johnsongrass requires a long-term control approach.

Here are a few keys for fall applications for Johnsongrass:

- ◊ Scout fields to assure Johnsongrass has had time to regrow or emerge following harvest
- ◊ Apply 0.75 to 1.125 lb ae glyphosate plus AMS
- ◊ If applications are occurring in late fall, target periods of warmer weather if possible

Refer to page 16 of AGR-6 (https://publications.ca.uky.edu/files/AGR6.pdf) for a product use rates for the above listed glyphosate rates.

Image 1. Johnsongrass emergence from rhizomes following corn harvest. (Oct. 2, 2024).

Fruit, Orchard, and Vineyard Sanitation: Cleaning Up Today May Keep Disease Away

By Kimberly Leonberger, Plant Pathology Extension Associate, and Nicole Gauthier, Plant Pathology Extension Specialist

Autumn has arrived in Kentucky, and it is time to focus on fruit, orchard, and vineyard sanitation. Good sanitation practices can help reduce disease-causing pathogens. These organisms can survive for months or years on dead plant material or in soil, causing infections in subsequent years. Elimination of disease-causing organisms reduces the need for fungicides and can improve the effectiveness of disease management practices. Following these sanitation practices both in autumn and throughout the growing season can reduce disease pressure in home and commercial fruit plantings.

Sanitation Practices

⇒ Remove diseased plant tissues from infected plants

- ◊ Prune cankers (Figure 1) by making cuts well below visible symptoms. For plants with a history of bacterial infections, clean tools between each cut with a sanitizer, such as rubbing alcohol or household bleach. For plants with fungal infections, clean tools between rows or blocks.
- ◊ Rake and remove fallen buds, flowers, fruit, twigs, and leaves (Figure 2).

⇒ Collect all fruit from trees, bushes, and vines. Discard diseased fruit since it can serve as a source of inoculum in subsequent growing seasons (Figure 3).

⇒ Above and below ground portions of severely

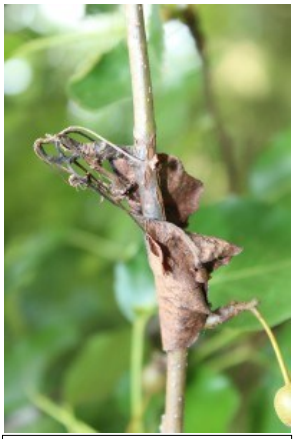


Figure 1. Cankers can provide an overwintering site for plant pathogens. (Photo: Nicole Gauthier, UK)

infected trees, bushes, and vines should be completely removed and destroyed.

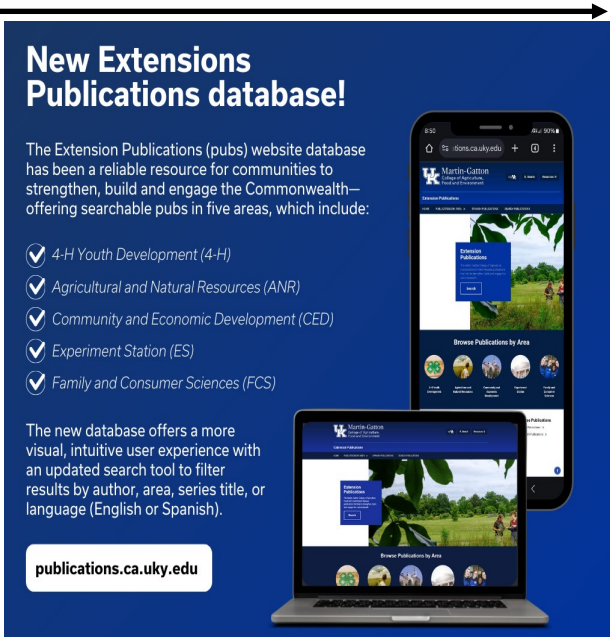
⇒ All discarded plant material should be burned, buried, or removed with yard waste. Do not compost diseased plant material.

⇒ Remove weeds, including roots, which may serve as alternative hosts for pathogens.

⇒ When treating infected plants with fungicides, remove infected tissues prior to application.

Figure 2. Debris is a major source of infective propagules. Gather and discard fallen buds, flowers, fruit, twigs, and leaves. (Photo: Kim Leonberger, UK)

Figure 3: Diseased fruit, whether on the ground or attached to the tree, can serve as a source of inoculum during the current and future growing seasons. (Photo: Nicole Gauthier, UK)



Let's talk row cover...

Alexis Sheffield, Extension Specialist, Horticulture

Often used as a physical barrier for insects, this time of year we tend to think about using something a bit more heavy-duty to protect against frost. Generally, when thinking about row cover, most people are referring to the woven, fabric type material. However, in recent years I've heard the term also used for plastic/poly coverings.

With "Frost-mas" recently hitting many areas of the state, I thought it might be helpful to have a quick review of row cover fabric weights and pros and cons of using them.

When deciding on which row-cover is right for your winter crops consider a couple things.

- What is the hardiness temp or zone of the crop in question?
    - This High Tunnel Planting Calendar (https://www.uky.edu/ccd/production/system-resources/gh-ht/plantingdates) has minimum air temps for a variety of veg crops for reference!
- Are you expecting to leave the fabric on most of the winter or is this just for nighttime temps and extreme lows?
    - This is an important consideration especially for light transmission but also humidity. Thick fabric can allow too much moisture build up leading to disease problems.

Lastly a few tips for any of you who are new to using frost fabric.

- Make sure the fabric is not touching the plant. Anywhere the fabric touches the leaf surface, has the potential to freeze. Use some sort of hoop or structure to float the fabric over the leaf surfaces.
- Make sure the fabric is touching the ground. The way row cover works against frost, is by trapping the thermal mass that is leaving the ground.
- Have plenty of weights! When winter's wind comes whipping through the field, don't be stuck chasing your row cover down! Use something with round edges to prevent tearing or bury the edges with soil if your cover will stay on all winter.

Fall Nutrient Applications

Fall is an ideal time to apply fertilizer to Kentucky soils. Soil testing is crucial to determine the specific nutrient needs of your fields. Nitrogen and animal manures should generally be applied in the spring to avoid losses.

BENEFITS OF FALL FERTILIZATION:

- Prevents planting delays in spring.
- Reduces risk of soil compaction due to drier weather.
- May lead to savings on fertilizer costs.

For more information, visit your local county extension office!

Source: John Grove, Plant and Soil Sciences professor
An Equal Opportunity Organization.

Winter Considerations for Cattle

- **Review winter feeding plan**
- **Ensure that winter feeding area is at least 100 to 150 feet away from streams, wells, sink holes, etc.**
- **Inspect water systems in preparation for winter months and protect them from freezing**
- **Ensure safe dependable water sources**
- **Limit access to streams/ ponds**

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RETURN SERVICE REQUESTED

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