

AGRICULTURE & NATURAL RESOURCES

NEWSLETTER



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

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October 2022 Upcoming Events

Preregistration is required. Call 474-6686 or email <u>Rebecca.k@uky.edu</u> to register.

October 4 @ 6:00 PM	Little Sandy Beekeepers Association—Carter County Extension Office
October 11 @ 6:00 PM	*UK Beef Webinar—Online*
October 13 @ 6:00 PM	Northeast Area Livestock Association Meeting—Carter County Extension Office
October 15 @ 10:00 AM	*Eden Shale Farm Tour*
October 17 @ 5:30 PM	*Beef Conference—Online or Fayette County Extension Office*
October 21 @ 1:00 PM	Hike & Learn—Laurel Gorge Cultural Heritage Center
October 25 @ 6:00 PM	*Fertilizer Academy—Online*
October 27 @ 8:30 AM	*Grazing Conference—Clark County Extension Office*
October 31 @ 6:00 PM	Ag Advancement Council Meeting—Carter County Extension Office
November 1 @ 6:00 PM	Little Sandy Beekeepers—Carter County Extension Office
November 3 @ 6:00 PM	*Estate Planning—Online*
November 14 @ 6:00 PM	East KY Hay Contest Awards —Morgan County Extension Office (Call if you want to ride in the van.)
November 15 @ 6:00 PM	Northeast Area Livestock Association—Carter County Extension Office

- \Rightarrow Corn moisture testing available. Call to schedule an appointment.
- ⇒ The Olive Hill Farmer's Market is open on Saturdays and Wednesdays at 8:00 AM and Mondays at 3:00 PM until sell out each day. The Olive Hill market is located in the Save-a-Lot parking lot.
- \Rightarrow The Grayson Farmer's Market has closed for the season.
- ⇒ Be sure to check out our Facebook page (@CCESAG) in October for the Spooky & Not-So Spooky series. We'll be featuring several pests and beneficial organisms.

Enjoy your newsletter,

Repecca Kouopla

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



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NORTHEAST AREA LIVESTOCK ASSOCIATION MEETINGS

October 13th @ 6:00 PM

Speaker: Dr. Jonathan Larson Topic: Check Your Crevices—Ticks, People & Cattle in Kentucky

November 15th @ 6:00 PM

Speaker: Dr. Darrh Bullock Topic: Targeted Bull Selection

A dinner is served at all meetings.

All local livestock producers are invited to attend.

Membership in the local association or Kentucky Cattlemen's Association is encouraged, but not required for attendance.



LITTLE SANDY BEEKEEPERS ASSOCIATION MEETINGS

⇒ Tuesday, October 4th 6:00 PM Speaker: Storey Slone, Grow Appalachia

 \Rightarrow Tuesday, November 1st 6:00 PM

⇒ Tuesday, December 6th 6:00 PM Please let us know if you plan to attend the December meeting so we can adequately prepare for the dinner.



UK Beef Management Webinar Series

Registration is necessary. If you have not registered for previous beef webinars, then please send an email to dbullock@uky.edu with Beef Webinar in the subject line and your name and county in the message. You will receive the direct link with a password the morning of each meeting. This invitation will directly link you to the site and you will be asked for the password which can be found just below the link. Each session will be recorded and posted for later viewing. All meeting times are 8:00pm ET.

October 11—Shooting the Bull: Answering all your Beef **Related Questions!** – Updates and Roundtable discussion with UK Specialists

November 8—From Hay Sample to Feed Bunk: Winter Feeding Considerations for Cattle – Katie Mason, Assistant Professor, University of Tennessee

December 13—Packer and Consumer Trends with Some Holiday Beef Ideas – Gregg Rentfrow, Extension Professor, University of Kentucky and Alison Smith, Kentucky Beef Council Retail and Foodservice



HIKE & LEARN THIRD FRIDAYS LAUREL GORGE CULTURAL HERITAGE CENTER OCTOBER 21ST @ 1:00 PM

<u>The Details for this Month:</u>

Meet inside the Heritage Center.

We'll view a wildflower slideshow before we start the hike.

Closed-toe shoes are required. Bring your own snacks & drinks.

All ages welcome!

This is our final hike for 2022. Be sure to like the Carter County Agriculture Extension Service Facebook page for details about our 2023 Hike & Learn series.

WALKING DISTANCE: Approximately 2 miles

DIFFICULTY: Moderate

Hikes may be cancelled due to bad weather or trail conditions.

Cancelled hikes will not be rescheduled.

Sign up to receive Hike & Learn reminders, updates, and cancellation notifications by scanning this code.

All activities are FREE!





Laurel Gorge Cultural

Heritage Center

32 Old-KY 7 Sandy Hook, KY 41171



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Integrated Pest Management Field Day October 13, 2022

11 am - 2 pm (Eastern Time)

In-Person at the University of Kentucky Horticulture Research Farm

&

Live Stream Via Zoom

Join University of Kentucky Extension Vegetable Specialists at the UKY Horticulture Research Farm (South Farm) for a field day. Learn about ongoing research and how the information gained from these projects can be applied to your operation. Can't attend in-person? Sessions also will be broadcast live from the research farm via Zoom.

Register at: https://uky.az1.gualtrics.com/jfe/form/SV bgbzgTdgjoLGEho

Directions for in-person participation or Zoom link for virtual option will be provided once registration is complete

The Summer 2022 IPM Vegetable Virtual Field Day was conducted on July 26, 2022. Sessions from this event were recorded and are now available online. These videos provide information for growers of all experience levels. This series includes presentations from specialists from the University of Kentucky that provide information on integrated pest management (IPM) aspects of high tunnel and field vegetable production. Videos are available at tinyurl.com/3mdvkz62.

JOIN US AT EDEN SHALE FARM OCTOBER 15

Tour begins at 10 AM EST. Please call the KCA office at (859) 278-0899 or email kbn@kvcattle.org to reserve your spot for lunch. Reservations are capped at 100 participants.



Kentucky Beef Conference October 17, 2022 6:30-Welcome & Sponsor Recognition In person ayette County Extension Office Beau Neal, Fayette County Agriculture & 1140 Harry Sykes Way Natural Resources Extension Agent Lexington, Kentucky 40504 **Extension Remarks** 5:30-6:30 Dr. Laura Stephenson, UK Extension Registration, visit Director sponsors, meal **Beef Outlook & Marketing Strategies** \$10 registration fee RSVP by October 10th Patrick Linnell, Cattle-FAX Analyst to Favette County 7:15—Asian Longhorned Tick Concerns **Extension Office** Dr. Michelle Arnold, UK Ruminant

"Today's Challenges, Tomorrow's Opportunities

College of Agriculture, Food and Environment

859.257.5582 **Extension Veterinarian** 7:45-Feeding Drought Stressed Forages Zoom Webinar – FREE Dr. Jeff Lehmkuhler, UK Beef Nutrition **Registration Link: Extension Specialist** https://forms.gle/ 8:05—Breeding Stock Investment in JfvpRkiQ1Hx9ocnh9 **Expanding Beef Market** Once registration is Dr. Kenny Burdine, UK Beef Economic complete, you will be **Extension Specialist** emailed the zoom link. 8:30—Adjourn

Pest Proofing Your Home

By Zachary DeVries, Entomology Extension Specialist

Many pests seek refuge in homes and buildings in response to changes in weather, such as extended periods of rain or drought, or the onset of cool autumn temperatures. In response to these pest invasions, homeowners often apply liberal amounts of insecticides indoors. Although indoor insecticide application often provides quick results for the pests you see, this strategy is generally ineffective at providing a long-term solution because most of the pests being treated are coming in from outside the home. Therefore, to ensure a pest-free home, it is important that residents focus their attention towards denying pest entry before they make their way indoors, a process better known as "pest-proofing".

Outlined below are six tips for pest-proofing one's home or business. Steps 1 to 3 will also conserve energy and increase the comfort level during winter and summer. Equipment and materials can be purchased at most hardware or home improvement stores.

1. Install door sweeps or thresholds at the base of all exterior entry doors. Lie on the floor and check for light visible under doors. Gaps of 1/16 inch or less will permit entry of insects and spiders; 1/4-inch-wide gaps (about the diameter of a pencil) are large enough for entry of mice; 1/2-inch gaps are adequate for rats. Pay particular attention to the bottom corners as this is often where rodents and insects enter. Garage doors should be fitted with a bottom seal constructed of rubber (vinyl seals poorly in cold weather). Gaps under sliding glass doors can be sealed by lining the bottom track with 1/2- to 3/4-inch-wide foam weather stripping. Apply sealant (see #3 below) along bottom outside edge and sides of door thresholds to exclude ants and other small insects.

2. **Seal utility openings** where pipes and wires enter the foundation and siding, such as around outdoor faucets, receptacles, gas meters, clothes dryer vents, and telephone/cable TV wires. These are common entry points for ants, spiders, wasps, rodents, and other pests. Holes can be plugged with mortar, caulk, urethane expandable foam, copper mesh (like the material in pot scrubbers), or other suitable sealant.

3. **Seal cracks around windows, doors, fascia boards, etc.** Use a good quality silicone or acrylic latex caulk/ sealant. Although somewhat less flexible than pure silicone, latex-type caulks clean up easily with water and can be painted. Caulks that dry clear are often easier to use than pigmented caulks since they don't show mistakes. Buy a good caulking gun; features to look for include a back-off trigger to halt the flow of caulk when desired, a built-in 'slicer' for cutting the tip off of new caulking tubes, and a nail for puncturing the seal within. Prior to sealing, cracks should be cleaned and any peeling caulk removed to aid adhesion. For a professional look, smooth the bead of caulk with a damp rag or a moistened finger after application. A key area to caulk on the inside of basements is along the top of the foundation wall where the wooden sill plate is attached to the concrete foundation. Ants, spiders, and other pests often enter through the resulting crack.

4. **Repair gaps and tears in window and door screens**. Doing so will help reduce entry of flies, gnats, mosquitoes, and midges during summer, and cluster flies, lady beetles, and other overwintering pests in autumn. Certain insects are small enough to fit through standard mesh window screen. The only way to deny entry of these tiny insects is to keep windows closed during periods of adult fall emergence.

5. Install 1/4-inch wire mesh (hardware cloth) over attic, roof, and crawl space vents in order to prevent entry of birds, bats, squirrels, rodents, and other wildlife. Be sure to wear gloves when cutting and installing hardware cloth as the wire edges are razor-sharp. Backing the wire mesh from the inside with screening will further help to prevent insects such as ladybugs, paper wasps and yellowjackets. If not already present, invest in a chimney cap to exclude birds, squirrels, raccoons, and other nuisance wildlife. Raccoons, in particular, are a serious problem throughout Kentucky. Many chimneys become home to a family of raccoons which, in turn, are often infested with fleas.

6. **Consider applying an exterior (barrier) insecticide treatment.** While sealing is the more permanent way to exclude pests originating from outdoors, comprehensive pest-proofing is laborious and sometimes impractical. For clients needing an alternative, pest-proofing can be supplemented by an exterior treatment with an

insecticide. Homeowners will get the most for their efforts by applying longer-lasting liquid formulations containing pyrethroids (e.g., cypermethrin, bifenthrin, cyfluthrin, Gamma-Cyhalothrin, etc.). Such products are sold at hardware and lawn and garden shops. For better coverage, it's often best to purchase these products as concentrates so that they can be diluted and applied with a pump up sprayer, hose end sprayer, etc. Treat at the base of all exterior doors, garage and crawl space entrances, around foundation vents and utility openings, and up underneath siding. It also may be useful to treat around the outside perimeter of the foundation. Be sure to follow all label instructions, and use this information only as general guidance. Clients who choose not to tackle these activities may want to hire a professional pest control firm, many of which offer pest-proofing services.

The Real Cost of Limiting Nutrients

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

Fall is rapidly approaching and all cow-calf producers need to access the body condition score (BCS) of their herd. Spring-calving cows are nearing weaning time and the fall is the most economical time to put weight back on. Now is also a key time to manage BCS score in fall-calving cows. Most realize the link between body condition score and reproductive rate but what is the economic impact of allowing BCS to decline? Each year producers face the decision of how much money should I put into my cows? Can I afford to feed them? So, what is the cost of letting your cows get thin? What is more cost effective; reducing costs by limiting nutrition to your cows and living with reduced reproductive performance or feeding your cows to perform? Let's use a real world example. The farm we will discuss had 100 fall-calving cows. The average body weight of these cows was about 1300 lbs. at a BCS of 5. These cows calved in good condition, averaging a BCS of a nearly 6. However, lack of rain resulted in limited pastures and the producer began to feed hay approximately September 1st, which coincided with the onset of calving. The hay was below average in quality (TDN of 48, CP of 7%). Money was tight for this operation so they made the decision NOT to supplement these cows. Making the assumption that these cows were average lactating cows and that they would consume about 27 pounds of hay (as fed) daily, the hay provided only 82% of their maintenance energy needs and would result in a loss of one BCS in about 57 days. This producer decided to synchronize and AI his cows. On November 21st when the timed AI was performed, the average BCS had decreased, as predicted above, averaging a strong 4. Remember each BCS equals about 75 pounds so these cows were losing weight rapidly. After the insemination, the bulls were turned out for 60 days then removed. The cows were diagnosed for pregnancy about 90 days after the insemination and their average BCS was a weak 4 so the cows likely lost another 30 pounds or so of body weight. Reproductive performance was terrible as only 29 conceived to the AI, 31 conceived via natural service, and 40 were OPEN!

This example may seem exaggerated but this scenario actually occurred on a farm and is a real-world example of improperly managing body condition score. The question then becomes which was the more economical management scheme; no supplementation and reduced reproduction or supplementation to meet nutrient needs. To help determine this let's first look at our losses. In the above scenario, 40 cows were examined as open. Of these, let's assume 7 would have been open regardless so 33 calves were lost due to the reduced input management. Let's say these 33 calves (17 steers, 16 heifers) would have weaned at 525 pounds (550 for steers, 500 for heifers) so we lost 17,350 pounds of product. If the average sell price was about \$149.79 cwt our lost income would be about \$25,988 (173.5 x \$149.79).

Allowing the cows to lose weight likely also increased the cost per Al pregnancy. Our data from thousands of properly conditioned cows suggested that typically we achieve a 60% conception rate to Al and 92-93% overall pregnancy rate. The cost per cow to perform the insemination totaled approximately \$40 (\$10 CIDR, \$13 GnRH & PG, \$5 technician, \$12 semen) per cow or \$4,000 total. The reproductive failure basically doubled the cost per pregnancy from \$67 (\$40/.60) to \$138 (\$40/.29)



making it impossible for this operation to recoup the cost of the AI.

What would it cost to supplement these cows to maintain their weight for this period of time? To meet their nutrient needs, these cows would need about 12 pounds of our soyhull/corn gluten supplement mixed at a ratio of 2:1 assuming a 1:1 substitution of supplement for hay intake. At the time of this situation, the cost of our supplement averaged \$150 per ton for the feeding period which lasted from September 1st to bull removal on February 1st or 123 days. So the cost of supplementation would be about \$11,070 (\$.075 per pound x 12 pounds x 123 days x 100 cows = \$11,070). If you back calculate, the break-even weaning weight for this level of supplementation is slightly less than 350 pounds.

So what is cheaper? What if we would have separated the thin cows and fed them to match their nutrient needs? What if we would have taken the \$4,000 we used for the AI and used it to purchase supplement? What if we had cut our hay earlier so that the TDN exceeded 55% (nutrient needs of the lactating cow) even though we would have made less hay?

We could ask several more questions. We could consider several more options. The decision to supplement is easy math.

The Variability of the First Fall Freeze

by Tony Edwards - National Weather Service Charleston, WV

With the turning of the calendar to the month of October, Mother Nature typically responds with cooler temperatures and more pleasant weather compared to the heat and humidity of summer. With the cooler temperatures at night, most locations across Kentucky will likely see their first freezing temper-



atures during the month of October, putting an end to the growing season. However, where you live - and the elevation at which you live - can have a significant impact on when you see those first freezing temperatures of the fall.

Many locations in Kentucky typically see their first freeze during the last week of October. However, rural areas in valleys away from bodies of water can see this occur a week earlier, while locations on ridge tops or near large bodies of water can see this first freeze occur up to a week later, into early November. You may wonder why this variability occurs?



As shown in the illustration above, cold air is heavy and tends to drain into the lower elevation valleys and hollows on clear, calm nights. As this happens, warmer air rises and typically forms what's known as the thermal belt. This thermal belt can keep the ridgetops several degrees warmer than the valleys. In fact, in the extreme terrain of eastern Kentucky, ridgetop locations can quite often be 10 to 20 degrees warmer than the valleys below on calm and clear mornings. Water also holds heat longer and so larger bodies of water such as lakes and rivers can moderate the temperatures for nearby locations.

So, while it's pretty much inevitable that our gardens will succumb to the cold at some point during the month, the location of your garden in relation to elevation and proximity to bodies of water can make a big difference in how long those last tomatoes and peppers linger on the vines.



Carter County 94 Fairground Drive Grayson, KY 41143

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OCTOBER 2022

CARTER COUNTY AGRICULTURE & NATURAL RESOURCES NEWSLETTER

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Thank you to Matt & Tracy Prichard for hosting the Farm & Family Field Day!