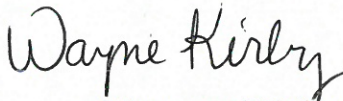


Winter 2023 Agriculture Newsletter

Cooperative Extension Service
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Knox County Extension
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Wayne Kirby,
ANR Agent

Important Dates

- **December 12th @ 8:00pm - Shooting the bull: Answering all your Beef Related Questions webinar!** (Registration is required – Email dbullock@uky.edu with Beef Webinar in the subject line and your county in the message.)
- **January 9th @ 8:00pm– Management decisions that impact reproductive efficiency in beef herds webinar.** (Registration is required – Email dbullock@uky.edu with Beef Webinar in the subject line and your county in the message.)
- **January 16th @ 6:00pm– Knox County Cattlemen meeting**
- **February 3rd @ 9:00am- Restricted use pesticide training @ Laurel County Extension Office.**
- **February 5th @7:00 am - News and Views**
- **February 15th @8:00 am - What's the cost of a cheap mineral webinar** (Registration is required – Email dbullock@uky.edu with Beef Webinar in the subject line and your county in the message.)
- **March 13th – Plant order deadline**
- **March 19th @ 7:00am - Knox County Cattlemen meeting**
- **May 21st @7:00am - Knox County Cattlemen meeting**

Cooperative Extension Service

Agriculture and Natural Resources
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MARTIN-GATTON COLLEGE OF AGRICULTURE, FOOD AND ENVIRONMENT

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Disabilities
accommodated
with prior notification

Imported Fire Ant Update

Imported fire ants have been a recurring problem in several Western Kentucky counties for almost 25 years. The pattern has been that suspect fire ant mounds (Figure 1) are reported, confirmed by a specialist, treated, and then eliminated. This has kept fire ants from becoming established in the western portion of the state. Most of these reported mounds have been in counties near the Land Between the Lakes Region.



Figure 1. Fire ants typically makes raised, dome-shaped mounds to help capture sunlight and heat the colony. When the colony is disturbed, workers “boil out” to defend their nest (Photo: Ric Bessin, UK).

In the winter of 2022, an fire ant mound was reported, confirmed, and eliminated in McCreary County. Soon after that, dozens of new mounds from various southern parts of the county were reported and confirmed, followed by numerous reports in southern Whitley

County. Fire ants mounds have also been found in several locations in Knox County and single locations in Bell and Laurel Counties. The mounds identified in Knox, Bell, and Laurel counties have been treated, but infestations in portions of McCreary and Whitley Counties are too extensive to eliminate.

While fire ants may have some value as a predator of insect and tick pests, they are a serious public health threat. For many people, an fire ant sting is painful and causes a raised pustule, but for some it can cause a serious anaphylactic reaction that can require prompt medical attention. UK Entomology’s webpage has a factsheet on fire ants (ENTFACT-469) that describes its identification, significance, biology, and management.

While it may not be possible to eliminate fire ants once it becomes established in an area, it is important to slow the spread of this invasive insect into new areas of Kentucky. Persons that find a suspect mound should contact their county Extension agent or take a picture and e-mail it to ReportAPest@uky.edu.

OFF THE HOOF

KENTUCKY BEEF CATTLE NEWSLETTER NOVEMBER 3, 2023

Each article is peer-reviewed by UK Beef IRM Team and edited by Dr. Les Anderson, Beef Extension Specialist, Department of Animal & Food Science, University of Kentucky

Timely Tips

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

Spring-calving cow herd

- If you need to replace cows, consider buying bred heifers in some of the Kentucky Certified Replacement Heifer sales that are being held across the state this month.
- Extend grazing for as long as possible to decrease the amount of stored feed needed. The drought is making this difficult for most of the state in 2023.
- Evaluate body condition of cows. Sort thin (less than body condition score 5) cows away from the cow herd and feed to improve their condition. Two and three-year olds may need extra attention now. These cattle can use the extra feed/nutrients.
- Dry cows in good condition can utilize crop residues and lower quality hay now (but don't let them lose any more body condition). Save higher quality feed until calving time. Keep a good mineral supplement with vitamin A available.
- Contact your herd veterinarian to schedule a pregnancy diagnosis for your cows if you have not already done so. Pregnancy diagnosis can also be accomplished using blood sampling. Several diagnostic labs will analyze blood samples for pregnancy and a chute-side test is on the market. Culling decisions should be made prior to winter feeding for best use of feed resources. Consider open, poor-producing, and aged cows as candidates for culling.
- A postweaning feeding period will allow you to put rapid, economical gains on weaned calves, keep them through the fall "runs" and allow you to participate in Kentucky CPH-45 sales. Consider this health and marketing program which is designed for producers which are doing a good job of producing high quality feeder calves.
- Replacement heifers require attention during the winter, too. Weaned heifer calves should gain at an adequate rate to attain their "target" breeding weight (2/3 of their mature weight) by May 1.

Fall-calving herd

- Continue to watch fall-calving cows. Catch up on processing of calves including identification, castration, and vaccinations.
- Cows that have calved need to go to the best pastures now! Help them maintain body condition prior to breeding in December.
- Vaccinate the cows while they are open and prior to the breeding season. Move cows to accumulated pasture or increase feed now. If at all possible, try to get animals vaccinated 45 days or longer before the breeding season.
- Start the breeding season in late November or early December for calving to begin in September. If you are using AI and/or estrous synchronization, get your supplies together now and schedule your technician. Don't forget Breeding Soundness Evaluations (BSE) on your bulls. Make final selection of replacement heifers now.

General

- Have your hay supply analyzed for nutritive quality and estimate the amount of supplementation needed. Consider purchasing feed now.
- Take soil tests and make fertility adjustments (phosphate, potash, and lime) to your pastures.

- This is a good time to freeze-brand bred yearling heifers and additions to the breeding herd.
- Graze alfalfa this month after a “freeze-down” (24 degrees for a few hours).
- Don’t waste your feed resources. Avoid excessive mud in the feeding area. Hay feeding areas can be constructed by putting rock on geotextile fabric. Feed those large round bales in hay “rings” to avoid waste. Concrete feeding pads could be in your long-range plans.

UK Beef Webinar Series

Dr. Darrh Bullock, Beef Extension Professor, University of Kentucky

We will be restarting our UK Beef Webinar Series in December. These sessions are open to any beef producers, but a one-time registration is required. If you have received notices in the past then you are registered and should get the notification, if not, you can register by sending an email with your name and county to dbullock@uky.edu with the topic heading of UK Beef Webinar Registration. The dates and topics are:

December 12, 2023 – Shooting the Bull – UK Beef Specialists will provide information on a hot topic in the beef industry and answer any questions posed by the attendees.

January 9, 2024 – Prebreeding Vaccination Considerations – Dr. George Perry, Texas A&M University

February 13 – What’s the Cost of a Cheap Mineral – Dr. Katie VanValin, University of Kentucky.

All webinars start at 8:00 EST/7:00 CST. All registered members will receive a Zoom invitation the morning of the presentation with the link and password. For more information contact Darrh Bullock at dbullock@uky.edu

What is the Cost of a Cheap Mineral?

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

The quality and cost of mineral supplements can vary greatly, and it can be overwhelming trying to make sense of all the numbers and information listed on the feed tag. While I am always a proponent of trying to manage feed costs, I caution producers against exchanging an adequate mineral for a poor-quality mineral. While saving a couple of dollars on a bag of mineral can certainly add up, it is important that the mineral being provided is still adequate to meet the needs of the herd to prevent mineral deficiencies which can become costly!

In the fescue belt, cattle are especially susceptible to selenium deficiency. Symptoms of selenium deficiency include white muscle disease in calves and decreased immune function and growth. Unfortunately, signs of mineral deficiency can be difficult to spot, and often producers may not realize they have an issue until testing is completed as part of a necropsy. Many complications from mineral deficiencies can be avoided all together by feeding an adequate mineral.

In the United States, concentrations of selenium in the feed are regulated by the Federal Drug Administration. This regulation exists to prevent selenium toxicity from occurring due to over supplementation which could have negative impacts on the health of livestock, wildlife, and humans. Since the inclusion rate of selenium is regulated not to exceed 3 mg per head per day, rarely will you see differences in selenium concentration in free-choice minerals formulated for a similar intake. For example, mineral supplements formulated to be consumed at 3 oz. per head per day will typically contain 35 parts per million of selenium. Since more selenium cannot be added to the mineral supplement, the type of selenium included in the supplement is especially important. Research from the University of Kentucky has shown that feeding a mix of selenium sources can be better than a single selenium source. For this reason, it is recommended that producers choose a mineral that provides 50% of the selenium from sodium selenite and 50% from a selenium yeast.

What is the cost of providing a better form of selenium in the mineral? Recent price comparisons have shown that the difference in price for providing a 50/50 blend of selenium sources increases the cost of the mineral by as little as \$1 per bag, assuming all other inclusions were similar. If we assume that a cow typical consumes 1.4 50 lb. bags of mineral per year, that is a difference of \$1.40 per cow per year. How does that compare that to cost of losing a single calf due to selenium deficiency?

Fortunately, it is possible to manage mineral costs while still providing a mineral that will meet the nutritional needs of the herd. Take some time to evaluate your mineral tag this year. What source of selenium is included? How much zinc or manganese is included in the mineral? Current recommendations from the UK Beef IRM Basic Cow-Calf Mineral are 3,200 ppm for zinc and 3,750 ppm for manganese. We rarely see deficiencies of these minerals in the state, so over feeding might be adding to your mineral cost without providing an added benefit. Producers can purchase the UK Beef IRM Mineral from local feed suppliers or use the sheet as a guide for selecting a mineral available locally. It is not uncommon for producers to show me a couple of mineral tags and ask me which they should be feeding. Much to their surprise, I don’t always recommend the more expensive mineral. Sometimes the better mineral is cheaper, but this isn’t always the case. It is important to evaluate mineral choices and select the mineral that meets the needs of your herd, without providing excess quantities of minerals or other ingredients that may not be beneficial. For help evaluating mineral choices, please reach out to your local Cooperative Extension Service.

Forage Timely Tips: December

- Begin utilizing stockpiled pastures. Graze pastures with orchardgrass and clovers first. Save tall fescue pastures for late winter grazing.
- Using polywire, strip graze stockpiled pastures to improve utilization. Start at the water source and allocate enough forage for 2-3 days. Back fencing is not necessary since pastures are not regrowing this time of the year.
- Make plans to frost seed red and white clover onto closely grazed tall fescue pastures in February. Seed supplies of improved varieties will be tight.
- Begin hay feeding as stockpiled forage is used up.
- Supplement hay with commodity feeds as needed.
- Minimizing waste by utilizing ring feeders.
-

(This entry was posted in Uncategorized by kyforagenews.)

Clover Seed in Short Supply

Red and white clover are currently in short supply, both in the U.S. and worldwide. This means that if you want to frost seed clover in February you are advised to purchase or line up your seed before Christmas. Improved varieties will be especially difficult to obtain if you wait until the last minute. To find the best adapted varieties for KY, go to the variety tab on the UK Forage Website and review the Long Term Summary.



Keep your chickens healthy this winter

Source: *Jacqueline Jacob, agriculture extension project manager.*

Keeping your chickens happy and healthy in the winter is important, but maintaining a cozy and vigorous flock during the colder month's demands diligent care.

Chickens, which typically have an internal temperature around 106 degrees Fahrenheit, may experience cold stress when the environment's chill overwhelms their heat-generating capabilities. Indications that your chickens might be feeling the cold include behaviors like feather fluffing, huddling and tucking one foot up to their body for warmth. When such stress is prolonged, it can impair their well-being and could be fatal.

When considering your flock, it's vital to recognize that not all breeds are equally winter-resistant. Heavier breeds, such as the Plymouth Rock or Orpington, tend to endure cold better than their lighter counterparts or those with substantial combs and wattles, which are susceptible to frostbite. Monitoring the flock dynamics, especially if diverse breeds are present, is crucial since bullying over resources can leave some chickens malnourished and more vulnerable to the cold.

Preparing your coop for the winter is fundamental. It should be a sanctuary, protecting against elements and predators alike. Roosts are essential, providing an elevated perch that shields them from the cold ground and also allow the feet to dry better. These should be crafted from materials like wood, avoiding metal or plastic, which can aggravate the cold. Perches should be spacious to prevent overcrowding, but cozy enough to allow shared body heat.

Managing airflow is essential; you must ensure adequate ventilation to prevent the buildup of harmful ammonia and moisture accumulation. Chickens can withstand relatively cold temperatures as long as they are dry. You may need to insulate the coop to keep the warmth in. On below freezing nights, it may be necessary to provide supplemental heat.

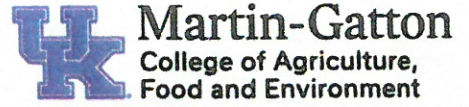
Historically, infrared heat lamps have been used to provide supplemental heat, but they can be a major fire risk. Alternative heat sources that have lower fire risk are now available. Use only equipment designed for livestock, and always have installations carried out by a professional.

Regarding nutrition, chickens' dietary intake tends to increase during winter since they require more energy to keep warm. Treats like scratch grains are beneficial for their warmth-inducing digestion and as an activity stimulant, but should be offered sparingly and never mixed with a complete, nutritionally balanced feed as it would dilute nutrients. Ensuring continuous access to unfrozen water is equally important because chickens will not eat if they cannot drink.

Egg production might dip due to reduced daylight; therefore, some opt for supplementary lighting to stimulate laying. It is important that the number of light hours per day never decreases during egg production. A minimum of 14 light hours per day (no more than 18) is recommended to maintain egg production throughout the year.

Tending to chickens in winter revolves around striking a delicate balance: ensuring they're warm but not overheated, well-fed but not overindulged and active yet secure from the harsh external environment. With meticulous planning and proactive management, your poultry can thrive even when the temperatures drop.

Receipt No. _____



2024 Plant Order Form

**Cooperative
Extension Service**

Purchaser Information:

Name: _____

Address: _____

City, State, Postal Code: _____

Telephone: _____

Email: _____

Knox County
 215 Treuhaft Blvd. Suite #7
 Barbourville, KY 40906
 (606) 546-3447

Quantity	Item	Unit Price	Total
_____ bundles	Strawberries (Allstar) (June bearing—larger berry)	\$6.50 (bundle of 25)	
_____ bundles	Strawberries (Earliglow) (June bearing—smaller, sweeter berry)	\$6.50 (bundle of 25)	
	Blackberries (Natchez)	\$4 each	
	Blueberries (Duke) (two varieties needed for pollination)	\$8 each	
	Blueberries (Chandler) (two varieties needed for pollination)	\$8 each	
	Raspberries (Prelude) - bare root	\$4 each	
	Jewel Black Raspberries	\$4 each	
	Asparagus (Millennium)	\$1 each	
_____ bundles	Onion plants (Candy)	\$5 (bundle of 60)	
Total Due			

Pre-payment is required by Friday, March 15, for all plant orders.

Make checks payable to: WTA Ag Fund

Payment Information:

Amount Paid: _____

Date: _____

Received by: _____

Check No.: _____ or Cash _____

Plants are expected to ship from the nursery during the first full week of April. We will call you to let you know when the plants are available for pickup.

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