



From the Ground Up

Bath County Agricultural Newsletter

**DECEMBER/
JANUARY
2022**

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and Natural Resources*

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[BATH COUNTY AGRICULTURE](#)



PROGRAMS AVAILABLE:

**FOR MORE INFORMATION, YOU CAN CONTACT THE BATH COUNTY
EXTENSION OFFICE AT 674-6121**

Beef Quality and Care Certification—BQCA

January 24th—6:00 p.m.

Bath County Extension Office—\$5.00 registration fee

Private Pesticide Applicator Training

January 31—Bath County Extension Office

10:00 A.M. AND AT 6:00 P.M.

BEEF MINI SERIES

All meetings will begin at 6:00

January 17—Beef nutrition—Jeff Lehmkuhler—Montgomery County

February 16—Animal Health—Michelle Arnold—Menifee County

March 7—Preparing for the breeding season—Les Anderson—Bath County

SEE FLYER IN THIS NEWSLETTER FOR MORE DETAILS

RSVP TO THE BATH COUNTY EXT OFFICE AT

674-6121



BEEF PRODUCTION SERIES



Presented by:

UK Extension Service

Bath, Menifee, Montgomery Counties

Cooperative Extension Service

Bath County

2914 E. Hwy 60

Owingsville, KY 40360

(606)674-6121

Fax: (606)674-6687

MARK YOUR CALENDAR!

Bath, Montgomery and Menifee County Extension Offices are offering a beef cattle production series during the months of:

* **January**—Dr. Jeff Lehmkuhler—Managing the cows nutritional needs pre and post calving

Montgomery County Extension Office

January 17th at 6:00 p.m.

RSVP TO BATH COUNTY EXTENSION OFFICE BY JANUARY 15TH—674-6121

* **February**—Dr. Michelle Arnold—Requirements for a healthy beef cattle herd.

Menifee County Extension Office

February 16—6:00 p.m.

• **March**—Dr. Les Anderson—Managing reproductive efficiency in beef cows.

Bath County Extension Office

March 7th, 6:00 p.m.

Bath—(606) 674-6121

Menifee—(606) 768-3866

Montgomery—(859) 498-8741

Cooperative Extension Service
Agriculture and Natural Resources
Family and Consumer Sciences
4-H Youth Development
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LEXINGTON, KY 40546



Disabilities accommodated with prior notification.

December Tips & Tidbits



Environment

- Monitor your hay feeding area closely. Move feeders often if you are not using a high traffic area pad.
- Move horses to the sacrifice lot during wet periods or times the grass cover is poor and sod is likely to be damaged or destroyed by traffic.
- Provide adequate fresh clean water from a suitable source.

Mares and Lights

- Horses are seasonal breeders that only cycle during specific times of the year.
- Also known as “long-day breeders,” mares come into heat during periods of increased daylight, such as late spring and summer.
- Artificial lighting should increase the overall length of daylight to 14 to 16 hours. In practice, lights are generally turned on at the beginning and end of each night; some research suggests that artificial evening light alone may be sufficient to elicit a reproductive response.
- Place mares under lights at least 8 to 10 weeks before you wish to breed.
- Make sure the intensity of the light source is strong enough to affect the mare’s reproductive system. A plain 100-W incandescent bulb in a 12 x 12 ft. box stall is sufficient.
- Lights can also be installed in an outdoor paddock, using one light source to affect a larger number of mares.

Breed and Other Association Memberships

- Pay your dues for the upcoming year.
- Know the rules for each association you are a member of. It is your responsibility to be up to date for all programs you wish to participate in.
- Apply for any breeder’s incentive programs you are eligible for.
- Check on any year end awards programs and apply for all that you are eligible for.

Water Systems in Winter

- If using water troughs, install tank heaters and make sure they are working. There are many types of heaters, such as floating, submersible or drain plug.
- Keep horses away from tank heaters and electric cords.
- If using water heaters in the barn, check often and do not let the buckets run dry.
- If using pasture waterers, make sure all water lines are insulated from cold air and the tank is in good working order.
- If temperatures are below freezing, check watering systems frequently to make sure water is available to horses.
- More horses on one waterer will increase the flow rate and decrease the chance of freezing.

Forages

- Continue grazing of stockpiled cool season grass pastures that are available.
- Begin feeding hay as efficiently as possible.
- Use a suitable hay feeder for your horses.



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

BQCA TRAINING

JANUARY 24TH AT 6:00 P.M.

BATH COUNTY EXT OFFICE

PRIVATE PESTICIDE APPLICATOR TRAINING

BATH COUNTY EXTENSION OFFICE

JANUARY 31 AT 10:00 A.M.

AND

JANUARY 31 AT 6:00 P.M.



EASTERN KENTUCKY



VIRTUAL BEEKEEPING SCHOOL



SATURDAY, JANUARY 21, 2023

All times are Eastern time zone

- *9:00 a.m. Opening comments, Charles May, Perry County Extension Agent for ANR and Missy Fugate, President, Perry County Beekeepers Association.*
- *9:30 a.m. Hive Health Sampling, Kenneth Holbrook, Kentucky State University.*
- *10:00 a.m. Honey Testing lab and its Service, Dr. Audrey Law, Bluegrass Community and Technical College.*
- *10:30 a.m. Beginner Beekeeping Equipment, Dr. Tammy Potter, KY State Apiarist.*
- *11:00 a.m. The Role of Genetics and Purdue Lab Services, Dr. Brock Harpur, Purdue University.*
- *12:00 p.m. Beginner Beekeeping II, Where to get Bees, Dr. Tammy Potter, KY State Apiarist.*
- *12:30 p.m. Question and Answer / Adjourn*

For more information and to register for the Virtual Beekeeping School, call the Perry County Extension Office (606-436-2044), provide your name, address, phone number and email address. A link will be sent to your email sometime a week before the school. This virtual Beekeeping school will be presented Via Zoom. Visit the Perry County Extension Service web page at <http://ces.ca.uky.edu/perry> and click on the Agriculture & Natural Resource Link for a registration form. Or contact Charles May at cmay@uky.edu.

2023 Eastern Kentucky Winter Virtual Beekeeping School Registration Form

Date: Saturday, January 21, 2023

Location: **Virtual Via Zoom**

Time: 9 a.m. All Times are Eastern Time Zone



Registration

Please print clearly or type:

Name, First _____ Last _____

Address _____ City: _____

State _____ Zip _____

Optional phone (_____) _____

Email address- Required to participate in Virtual Beeschool

Place Email Here: _____

**Zoom Link will be sent Via Email a few days Prior to The Date of the School
If you have received a receipt of registration and not received a link the few days prior
to the event call 606-436-2044 and the link will be provided.**

Questions about registration call Charles May at 606-436-2044 or email: cmay@uky.edu.

Cooperative Extension Service
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LEXINGTON, KY 40546



Disabilities
accommodated
with prior notification.



Calling All Farmers and Agricultural Workers!

Researchers at the University of Kentucky invite you to participate in a collaborative research project designed to better understand hip joint health and function in farmers and agricultural workers. The study will be conducted at the UK Human Performance Laboratory and Functional Assessment & Body Composition Laboratory.

You may be eligible to participate if you:

- Are between the ages of 18-75;
- Are currently a farmer or agricultural worker; and
- No previous lower extremity surgery.



For more information about participating, please contact:

Michael Samaan
(859)257-2706

michael.samaan@uky.edu

www.UKclinicalresearch.com

Register
Now!

Scan
the code
with
your
phone



2023

46th Annual Kentucky Turf & Landscape Management Short Course

February 21-23, 2023

Hardin County Extension Center
111 Opportunity Way
Elizabethtown, KY



<https://2023KYTurfShortCourse.eventbrite.com>

Winter weather pushes livestock cold stress into emergency category

It took longer for winter to truly arrive this year, but it's making up for lost time with a blast of measurable snow across much of Kentucky. With significant accumulations expected and temperatures dipping into the single digits and low- to mid-teens, conditions will push the livestock cold stress index into the emergency category.

"The combination of cold air and wind create wind chills that cause dangerous and emergency-category periods of livestock cold stress," said Matt Dixon, agricultural meteorologist for the University of Kentucky College of Agriculture, Food and Environment's Ag Weather Center. "The wind chills for the overnight of Jan. 6 into Jan. 7 will be near or below zero in many areas."

Livestock producers should make sure animals have adequate shelter, water, dry bedding and feed to make it through cold periods. Pet owners should bring pets indoors. Animals have a higher requirement for energy in the colder months, which means they need high-quality grains and forages.

"The average horse, with a lower activity level, should eat between 1.5% and 2% of its body weight in feed per day to maintain its weight," said UK equine specialist Bob Coleman. "That feed requirement goes up in the winter, as horses use more calories to keep warm."

He recommended providing extra hay and making sure horses have shelter to get out of windy, damp weather.

Horses must have access to clean, unfrozen water. Coleman said to check often to make sure water sources are open. A decrease in water intake affects dry matter intake.

Ambient temperatures can impact the amount of dry matter cattle eat, providing an opportunity to compensate for increased maintenance energy needs. Producers either need to increase their animals' feed intake or increase the energy density of the diet by feeding higher quality hay or adding more grain or fat to the grain mix, UK beef specialist Jeff Lehmkuhler said.

Lehmkuhler recommended that producers continue to monitor cows during the wintertime and make sure to maintain the animals' body condition.

"Poor quality hay may not provide adequate energy to maintain gestating cows that are entering the third trimester," he said. "Consider having the hay tested to determine if you need to supplement during times of possible cold stress, especially for the enduring cold spells."

Producers should consider separating younger and thinner cows that may not have the same internal insulation as conditioned older cows and supplement them accordingly or offer them higher quality forage if available. Coleman said equine owners can employ similar strategies and separate animals according to body condition score.

"Producers should move cows to fields with natural windbreaks or provide man-made windbreaks, which are not the same as a barn," Lehmkuhler suggested. "Poorly managed barns combined with poor ventilation may actually hamper efforts to improve the environmental conditions. Energy or calories are critical. If the protein level in the forage is adequate, do not make supplement decisions based on protein level; rather purchase the most affordable calories. Stay warm and keep the waterers flowing."

The hair coat acts like home attic insulation—trapping air and enhancing the insulating value. Wet, muddy hair reduces insulating value and increases heat loss. As little as 0.1 inch of rain can immediately impact cold stress severity by matting the hair down reducing its insulating ability. Acclimation time, hide thickness, fat cover and other factors will also influence the degree of cold stress that animals experience.

The lower critical temperature value for cattle is the lowest temperature or wind chill at which no additional energy is required to maintain core body temperature.

“As the temperature declines below this lower critical value, the maintenance energy value for the animal is increased to maintain core body temperature,” he said. “Animals maintain core body temperature by increasing their metabolism, resulting in greater heat production, as well as other heat conservation strategies, such as reducing blood flow to the extremities, shivering and increased intake.”

Lehmkuhler said both external and internal insulation influences the lower critical temperature.

External insulation is the depth and thickness of the hair coat, condition of the hair coat and thickness of the hide. Thin-hided breeds such as some dairy cattle tend to have a lower insulating factor than thick-hided breeds like Herefords. The condition of the hair coat is extremely important as an external insulation barrier.

Dairy producers should make sure cows’ teats are dry before turning animals out when temperatures fall below 25 degrees Fahrenheit.

“If you turn out an animal with a wet udder or teats, frostbite is almost a certainty,” said Michelle Arnold, UK extension veterinarian. “Treat signs of frostbite immediately, since damage to the teat ends can quickly lead to damage of the keratin seal and that can allow mastitis-causing bacteria to enter the udder.”

The key is to give animals a draft-free place to get out of the wind during extreme wind chill conditions.

“The challenge is to make that space available and still provide enough ventilation to allow fresh air to circulate,” she said.

Dry bedding is also very important. If cows, goats or sheep lie in wet bedding, frostbite is a big risk. Producers also need to make sure the animals’ hair coats are kept dry and as clean as possible.

“Perhaps the most important thing producers can do is to take care of themselves in extreme cold,” Arnold said. “If you get into trouble, you can’t be the caregiver your livestock need. Keep an extra set of clothes and a blanket in the truck. An extra pair of dry boots is a great plan as well.”

Dixon said this event will be a short round of extreme cold with a warmup expected over the weekend.

“It’s a good practice run for our farmers and livestock producers to make sure they are ready for another blast,” he said. “Even with the warmup, we’re expecting another rainfall event right on the heels of this snow event that could lead to minor flooding.”



Prepare for Cold Weather

The way to avoid [frostbite and hypothermia](#) is to plan for extreme cold before it arrives. Don't get caught unprepared.

Check the Forecast at [weather.gov](#) or your favorite weather app, station, etc.: Make checking the forecast part of your regular routine so you'll know when to expect cold weather.

- **Adjust Your Schedule:** If possible, adjust your schedule to avoid being outside during the coldest part of the day, typically the early morning. Try to find a warm spot for your children while waiting for the school bus outside.
- **Protect Your Pets, Livestock and other Property:** If you have pets or farm animals, make sure they have plenty of food and water, and are not overly exposed to extreme cold. Take precautions to ensure your water pipes do not freeze. Know the temperature thresholds of your plants and crops.
- **Fill up the tank:** Make sure your car or vehicle has at least a half a tank of gas during extreme cold situations so that you can stay warm if you become stranded.

[Dress for the outdoors even if you don't think you'll be out much.](#)

- **Update Your Winter Car Survival Kit:** Make sure your car survival kit has the following:
 - **Jumper cables:** flares or reflective triangle are great extras
 - **Flashlights:** Replace the batteries before the winter season starts and pack some extras
 - **First Aid Kit:** Also check your purse or bag for essential medications
 - **Baby, special needs gear:** If you have a baby or family member with special needs, pack diapers and any special formula or food
 - **Food:** Stock non-perishable food such as canned food and a can opener, dry cereal and protein rich foods like nuts and energy bars
 - **Water:** Have at least 1 gallon of water per person a day for at least 3 days
 - **Basic toolkit:** Pliers, wrench, screwdriver
 - **Pet supplies:** Food and water
 - **Radio:** Battery or hand cranked
 - **Cat litter or sand:** For better tire traction
 - **Shovel:** To dig out snow
 - **Ice scraper:** Even if you usually park in a garage, have one in the car.
 - **Clothes:** Make sure you dress for the weather in warm clothes, gloves, hat, sturdy boots, jacket and an extra change of clothes for the cold
 - **Warmers:** Pack extra for body, hands, feet
 - **Blankets or sleeping bags:** If you get stranded in traffic on a lonely road, you'll be glad to have it.
 - **Charged Cell Phone:** Keep a spare charger in your car as well



Duck and Potatoes



This institution is an equal opportunity provider. This material was funded by USDA's Supplemental Nutrition Assistance Program — SNAP.



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Duck and Potatoes

- 1 wild duck, cleaned
- 1 unpeeled apple, cut in half
- 3 to 4 cups water
- ½ teaspoon salt
- ½ teaspoon pepper
- 4 large potatoes, diced
- 3 carrots, peeled and sliced
- 1 large onion, diced
- 2 teaspoons ground sage

Place whole duck and apple in a 5-quart kettle with 3 to 4 cups of water. Cover. Boil for 30 minutes. Place duck in 15x10 baking dish, add 2 cups liquid from boiled duck. Season

with salt and pepper. Cover. Bake at 350 degrees Fahrenheit for 45 minutes. Add potatoes, carrots, onion, and sage. Bake 45 minutes to 1 hour longer or until duck and potatoes are tender. (The internal temperature of the duck should reach 165 degrees Fahrenheit at the leg joint.) If necessary, add water to keep liquid on duck and potatoes.

Note: To reduce fat content, remove skin and visible fat before cooking. This will also reduce "wild" flavor.

Yield: 6 servings

Nutrition Facts

6 servings per container
Serving size 3 ounces meat,
one potato, 1/2 cup vegetables (484g)

Amount per serving
Calories 600

% Daily Value*

Total Fat 29g	37%
Saturated Fat 10g	50%
Trans Fat 0g	
Cholesterol 150mg	50%
Sodium 190mg	8%
Total Carbohydrate 46g	17%
Dietary Fiber 6g	21%
Total Sugars 7g	
Includes 0g Added Sugars	0%
Protein 38g	
Vitamin D 0mcg	0%
Calcium 53mg	4%
Iron 10mg	60%
Potassium 1,430mg	30%

* The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.

Timely Tips

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

Spring Calving Herd

- Be sure that weaned heifer calves are on a feeding program that will enable them reach about 65% of their mature weight before the start of the breeding season. Rations should be balanced to achieve gains sufficient to get heifers from their current weight to that “target” weight.
- Body condition is important, plan an adequate winter program for cows to be at least body condition score 5 (carrying enough flesh to cover the ribs) before the calving and breeding season. This will help them to breed early in the spring. Thin cows should be fed to regain body condition prior to winter. Don’t let cows lose weight/condition. Supplementation will most likely be needed. Find low-cost supplemental feeds to meet the nutrient needs of cattle.

Divide the herd into groups for winter feeding

- weaned heifer calves
 - first-calf heifers, second-calvers and thin mature cows
 - the remainder of the dry cows which are in good body condition
 - herd sires
- Begin feeding the lowest quality forage to dry cows which are in good condition during early winter and save the best hay for calving time or for weaned calves.
- Order and number ear tags for next year’s calf crop this winter. It is also a good time to catch up on freeze branding and replacing lost ear tags.

Fall Calving Herd

- Get breeding supplies together, if using estrous synchronization and/or A.I.
 - Have Breeding Soundness Evaluation (BSE) performed on bulls (even if you used them this spring).
 - The fall breeding season starts. Breeding can best be accomplished on stockpiled fescue pasture; otherwise, cows with calves should be fed 25-30 pounds of good quality hay or its equivalent. Supplement with grain, if needed, and minimize hay waste. **DON’T ALLOW THESE COWS TO LOSE BODY CONDITION PRIOR TO OR DURING THE BREEDING SEASON.** It is easy to wait too long to start winter feeding. Don’t do it unless you have stockpiled fescue.
 - Nutrition level of cows during the first 30 days after conception is critical. Pay attention.
- Observe performance of bulls during breeding season. Watch cows for return to estrus, if you see several in heat, try to determine the cause and consider changing bulls.

General

- Complete soil testing pasture to check for fertility and pH.
- Consider putting down geotextile fabric and covering with gravel in feeding areas before you begin hay feeding to minimize waste of expensive hay. Or, perhaps, construct concrete feeding pads for winter feeding areas.
- Monitor body condition and increase feed, if needed, for all classes of cattle.



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THE BATH COUNTY EXTENSION OFFICE
WILL BE CLOSED FROM
DECEMBER 23 TILL JANUARY 3RD.

Cooperative Extension Service
Bath County

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<http://Bath.ca.uky.edu>

WE WISH EVERYONE A GREAT HOLI-
DAY SEASON AND A VERY HAPPY BE-
GINNING TO 2023.

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