


CARTER COUNTY

 Cooperative
Extension Service

AGRICULTURE & NATURAL RESOURCES

NEWSLETTER

Carter County

94 Fairground Drive Grayson, KY 41143

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extension.ca.uky.edu

February 2024 Upcoming Events

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

February 6 @ 6:30 PM	Little Sandy Beekeepers —Extension Office
February 8 @ 5:30 PM	*Regional Farmer's Market Meeting —Morehead State Farm Classroom*
February 8 @ 6:00 PM	*Master Cattleman —Boyd County Fairgrounds Expo Building*
February 9 @ 10:00 AM	*Ag Lenders Update —Fleming County*
February 12 @ 6:00 PM	*Beef Quality Care & Assurance Training —Extension Office*
February 13 @ 4:30 PM	Deadline to Order Berry Plants
February 13 @ 8:00 PM	*Beef Webinar —Online*
February 19 @ 6:00 PM	Ag Advancement Council Meeting —Extension Office
February 22 @ 5:30 PM	*Woods & Wildlife —Greenup County High School*
February 22 @ 6:00 PM	*Reducing Fertilizer Use —Morehead State Farm Classroom*
February 27 @ 6:00 PM	Northeast Area Livestock Association —Extension Office
February 29 @ 6:00 PM	*Master Cattleman —Boyd County Fairgrounds Expo Building*
March 5 @ 6:30 PM	Little Sandy Beekeepers —Extension Office
March 6 @ 1:30 PM	*Beef Quality Care & Assurance Training —Extension Office*
March 7 @ 6:00 PM	*Master Cattleman —Boyd County Fairgrounds Expo Building*
March 12 @ 10:00 AM	District Board Meeting —Extension Office
March 14 @ 5:30 PM	*Private Pesticide Applicator Training —Extension Office*
March 14 @ 6:00 PM	*Master Cattleman —Boyd County Fairgrounds Expo Building*

Enjoy your newsletter,

Rebecca Konopka



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

**Cooperative
Extension Service**

Agriculture and Natural Resources
Family and Consumer Sciences
4-H Youth Development
Community and Economic Development

MARTIN-GATTON COLLEGE OF AGRICULTURE, FOOD AND ENVIRONMENT

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Lexington, KY 40506



Disabilities
accommodated
with prior notification.

Little Sandy Beekeepers Association

First Tuesday of the Month @ 6:30 PM

February 6th

Speaker: Josh Cantrell

March 5th

Speaker & Topic: TBD

April 2nd

Speaker: Nathan Alexander, Big Sandy Basin Coordinator

Northeast Area Livestock

Fourth Tuesday of the Month @ 6:00 PM

February 27th

Topic: Calving Issues

Speaker: Dr. Phil Prater, Retired MSU DVM

March 26th

Topic: Cattle Handling Facilities

Speaker: Chris McBurney

Meal Sponsors: McBurney Livestock Equipment & Callicrate Banders

Greenup County Beekeepers' Association and the Greenup County FFA Present:

2024 BEGINNER BEEKEEPING SCHOOL

Saturday, Feb 10 9 am-2:30 pm

At Greenup County High School
196 Musketeer Dr. Greenup, KY 41144



**\$15 PER PERSON OR FAMILY. \$10 WITH MILITARY ID.
LUNCH PROVIDED!! KIDS PROGRAM AVAILABLE!**

PLEASE RSVP BY WEDNESDAY, FEB 7 BY PHONE OR EMAIL
606-473-9812 EXT 2270 OR CARRIE.DAVIS@GREENUP.KYSCHOOLS.US

**RAFFLE ITEMS INCLUDE: HIVE SET UP, TWO NUCLEUS HIVES,
TOOLS AND EQUIPMENT, AND MORE**

Upcoming Trainings

Please register by calling 474-6686 or email Rebecca.k@uky.edu.

Beef Quality & Care Assurance Training

Required for CAIP large animal reimbursement.

⇒ Monday, February 12th from 6:00–7:45 PM

⇒ Wednesday, March 6th from 1:30-3:15 PM

Small Ruminant Quality Assurance

Required from CAIP small animal reimbursement.

⇒ Wednesday, March 27th from 1:30-3:15 PM

Private Pesticide Applicator Training

Required to purchase Restricted Use Pesticides.

⇒ Thursday, March 14th from 5:30-8:30 PM

KDA Nuisance Weed Spraying Program

Applications Available from February 1-29.

<https://www.kyagr.com/consumer/nuisance-weed-spraying-program-application.aspx>



Silvopasture Woodland Stewards Webinar Series

The Woodland Stewards Regional Webinar Series returns January 30 and continues every Tuesday until March 5 with live webinars at 1:00 PM. These webinars will be recorded and made available for later viewing. This year, the regional series is focusing on “Silvopasture: Managing Your Woodlands & Livestock in a New-Old Way”. The first offering on January 30 will provide an introduction to and overview of silvopasture for any level. There is no charge for the webinars but registration is required for each one.

Silvopasture Webinar Series

Visit <https://forestrywebinars.net/sponsor-pages/woodland-stewards> to join!

2/6

Establishing Pine Silvopasture

From pastures to plantations

2/13

Establishing Hardwood Silvopasture

From pastures to plantations

2/20

From Forage to Livestock

Managing animals in a Silvopasture systemly

2/27

Moving towards a Silvopasture System

Getting Started and Finding Help

3/5

Silvopasture Producers Share

A Panel Discussion

An Equal Opportunity Organization.

8th Annual Forestry Event: Woods & Wildlife for Your Wallet

Thursday, February 22, 2024 5:30^{PM}—8:45^{PM}

Sign in and view exhibits at 5:00

***Door Prize:
Chain Saw**



Free Sessions Include:

- Pond Management
- Citizen Scientist
- “Morning Sam”, “Morning Ralph” Protecting Livestock from Coyotes
- Forest Management for Wood and Wildlife
- Edible Plant Extractions
- Turkey Talk
- How to Manage and Improve Roads During a Timber Harvest
- Edible Mushrooms
- Invasive Species

Continuing credit hours (3) for Master Loggers

Location: Greenup County High School—Main Entrance

A Free dinner will be prepared by the Greenup County FFA,
please phone (606) 473-3228 by Feb. 16 to register.

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.

Dr. VanValin will be discussing this topic in more depth during February's Beef Webinar on February 13th. All webinars start at 8:00 EST. All registered members will receive a Zoom invitation the morning of the presentation with the link and password. To register email Darrh Bullock at dbullock@uky.edu or call 474-6686.

Poison Hemlock – A Growing Concern

Articles & Photos By: J. D. Green, Weed Science Extension Specialist

Poison hemlock (*Conium maculatum*) has become widespread throughout most of Kentucky. Although this plant is often seen along roadways, fence rows, and other non-cropland sites, it has expanded out into grazed pasture lands and hay fields. It has also become an increasing concern in residential locations when it is observed in areas that are not frequently mowed, such as vacant and abandoned lots. The concern not only stems from its invasive nature, but the fact that it is one of the most toxic plants in the world. Throughout history, the toxicity of poison hemlock is well known for accidental deaths of humans and other animals.

Description—Poison hemlock is classified as a biennial that reproduces only by seed. It is capable, however, of completing its lifecycle as a winter annual in Kentucky if it germinates during the fall months. New plants emerge in the fall or late winter forming a cluster of leaves that are arranged as a rosette on the ground (Fig 1). The individual leaves are shiny green and triangular in appearance. Although poison hemlock is most noticeable in late May and June during the flowering stage of growth, the vegetative growth stage is readily observed during the cooler months of the year (Fig 2) with its parsley-like leaves which are highly dissected or fern-like.

As the plant begins to send up flower stalks in the spring, the leaves are alternately arranged on the main stem. Each individual leaf is pinnately compound with several pairs of leaflets that appear along opposite sides of the main petiole. As the plant matures, poison hemlock creates a taproot and grows upwards to about 6 to 8 feet tall. At maturity the plant is erect, often with multi-branched stems (Figure 3). Poison hemlock has hollow stems which are smooth with purple spots randomly seen along the stem and on leaf petioles. There are no hairs on the plant that helps distinguish it from other plants similar in appearance. The flowers, when mature, are white and form a series of compound umbels (an umbrella-shaped cluster of small flowers) at the end of each terminal stalk. Poison hemlock can be associated with areas having adequate moisture throughout the year, as well as, drier environments.

Toxicity—The risk of exposure to poison hemlock toxicity is primarily through ingestion. Just small amounts of ingestion can result in possible death to all mammals. The principal toxin in poison hemlock is coniine and a few other toxic alkaloids, which are present in all parts of the plant, including the seeds and roots. A well-known case of human toxicity was the death of Socrates, a Greek philosopher, who was sentenced to death in 399 BC by ingestion of a poison hemlock potion.

There have been some concerns expressed that toxicity such as dermal reactions may occur by simply being in proximity of poison hemlock plants. However, it is unlikely that most people will experience skin rashes who come in direct contact with poison hemlock as opposed to exposure to other plants such as wild parsnip or other potentially toxic plants within the carrot plant family Apiaceae.

If consumed, all classes of livestock are known to be affected by poison hemlock. Cattle, horses, and goats are considered to be the most susceptible domestic animals although other animals can be affected as well. Symptoms of poisoning can occur rapidly anywhere within 30 minutes to 2 hours depending on the animal, quantity consumed, and other factors. Initial symptoms can include nervousness, trembling, muscular weakness and loss of coordination, dilation of pupils, coma,



Fig 1. Poison hemlock rosette

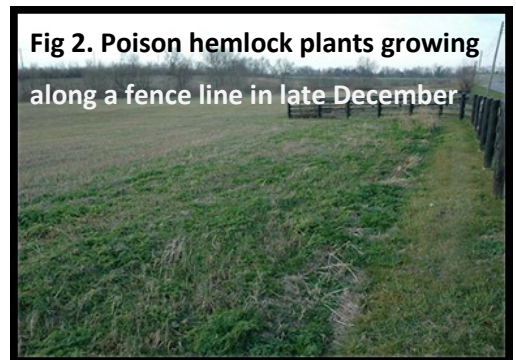


Fig 2. Poison hemlock plants growing along a fence line in late December

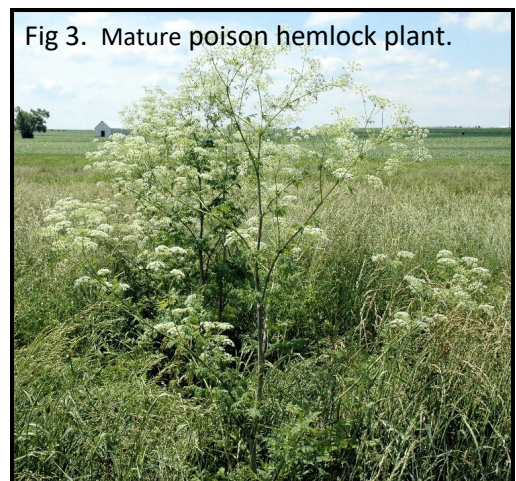


Fig 3. Mature poison hemlock plant.

and eventually death from respiratory paralysis. Lethal doses for cattle are considered to be in the range of 0.2 to 0.5% of the animal's body weight. Poison hemlock is also known to cause fetal deformation when pregnant animals consume the plant.

Fortunately, most animals tend to avoid grazing poison hemlock if other forage is readily available. However, animals may be more prone to consume green plants during the late winter and early spring when other forage species are more limited. Toxicity may be somewhat reduced in dried plants, but the potential for toxicity still exists, particularly when a sufficient quantity is consumed in dried hay. Therefore, extreme caution should be considered before feeding animals hay known to contain large quantities of poison hemlock. Also, animals may be attracted to consume poison hemlock when plants are treated with an herbicide.

Control—The principal strategy for poison hemlock control is to prevent seed production, which can be a challenge since a fully mature plant is capable of producing 35,000 to 40,000 new seeds. Once plants have produced flowers it is generally too late to utilize herbicide control methods. Whereas, mechanical control efforts (if feasible) such as mowing or cutting down individual plants should be initiated just before peak flower production to avoid or reduce the amount of new seed being produced.

As an overall strategy, make note of areas known to contain populations of poison hemlock and begin to look for emergence of new plants in the fall and during the winter months. Throughout the fall (October/November) or early spring (late February/March) is the best time of year for herbicide treatment. Herbicide products containing 2,4-D can be effective when applied to smaller, actively growing plants that are still in the younger rosette stage of growth. As plant rosettes become more mature, premixtures of products containing 2,4-D + dicamba, 2,4-D + triclopyr, or aminopyralid are needed for best results. Spot treatments with products containing 2,4-D, triclopyr, or glyphosate can also be used depending on the location. Always consult product labels for approved sites of application and for precautions that should be considered when applying herbicides.

Highly Pathogenic Avian Influenza detected in Kentucky: UK Specialists Urge Vigilance to Protect Poultry from Bird Flu

Bird flu is a concern for the state's largest agriculture commodity contributor.

By Jordan Strickler —Published on Jan. 19, 2024

Recent tests have confirmed the presence of Highly Pathogenic Avian Influenza (HPAI) in two deceased snow geese found in Henderson County. The Centers for Disease Control and Prevention assures that the risk to human health remains low. However, as the infected birds are migratory, the outbreak poses a significant threat to poultry within the state, affecting both large and small flocks.

University of Kentucky Martin-Gatton College of Agriculture, Food and Environment animal science experts offer tips to keep producers' poultry safe.

"This is a concern for anyone with a poultry flock," said Jacqueline Jacob, UK Department of Animal and Food Science agriculture extension project manager. "It is important for every poultry flock owner to review their biosecurity program and ensure all the steps are followed."

Understanding Avian Influenza:

Avian Influenza (AI), or bird flu, is an influenza type A virus affecting various bird species, including poultry and wild birds. Classified based on their pathogenicity, Highly Pathogenic Avian Influenza strains, such as the one currently identified, are known for their rapid spread and high fatality rates in poultry.

Signs of avian influenza include sudden death; little to no appetite or energy; little to no egg production; soft or deformed eggs; nasal discharge; coughing, sneezing or breathing difficulty; swelling around the head, neck and eyes; purple discoloration; loss of muscle control; drooping wings; twisting of the head and neck; inability to move and diarrhea. Birds may have the disease for three to seven days before they show signs, and death can occur between 24 and 48 hours after the first sign.

Poultry owners, especially in Kentucky with its diverse range of poultry farms, are urged to adhere strictly to the outlined precautions and guidelines.

Key precautions for handling wild game:

With waterfowl season still open, the Kentucky Fish and Wildlife urges hunters to follow routine precautions when handling wild game:

- ⇒ Avoid harvesting or handling wild birds that appear sick or are found dead.
- ⇒ Process harvested waterfowl in open, well-ventilated areas.
- ⇒ Utilize gloves and practice hand hygiene post-handling, using soap and water or alcohol-based hand sanitizers.
- ⇒ Clean and disinfect equipment that comes into contact with birds.
- ⇒ Refrain from eating, drinking or smoking during the handling or cleaning of game birds.
- ⇒ Securely dispose of bird remains, ensuring they are inaccessible to scavengers.
- ⇒ Make certain all game meat is cooked to an internal temperature of 165 degrees Fahrenheit.
- ⇒ Prevent dogs and cats from consuming raw or undercooked waterfowl meat.

More information about HPAI and wild birds is available on Kentucky Fish and Wildlife's website at fw.ky.gov under Avian Influenza.

Immediate Actions for Poultry Owners:

Observe the "FLU" biosecurity and prevention guidelines:

F—Flock observation—Early detection is important to stop the spread of disease. Growers need to observe flocks daily and note changes in appearance, behavior and drinking and eating habits.

L—Limit traffic—Contaminated clothing and equipment can spread avian influenza between poultry premises. Keep a log of visitors and vehicles on the farm. Be aware of places visitors may have had contact with birds or their droppings such as hunting lands, ponds, pet stores, zoos and parks. Visitors can accidentally bring disease to the farm.

U—Unwanted critters—avian influenza can be spread through the feces and bodily fluids of infected birds, so keep poultry from coming into contact with wild birds.

Tony Pescatore, extension faculty and assistant UK Department of Animal and Food Sciences chair, said it's a good idea to keep areas mowed around poultry houses and coops to control wild birds and rodents. Keep all other animals out of the chicken house. Growers should isolate new or returning birds from the rest of the flock for at least 30 days.

If bird owners observe unusual symptoms or a large number of deaths in a flock, contact a local veterinarian or the Kentucky Department of Agriculture at www.kyagr.com/statevet/poultry.html or by phone at (502) 573-0282.

Additional information on bird flu, including biosecurity tips for backyard flocks, can be found at <http://healthybirds.aphis.usda.gov>.

UK animal science specialists are always working alongside the UK Veterinary Diagnostic Laboratory and the Kentucky Department of Agriculture's State Veterinarian office to demonstrate a committed alliance for the betterment of the commonwealth's agricultural and wildlife sectors.



Carter County
 94 Fairground Drive
 Grayson, KY 41143

RETURN SERVICE REQUESTED

FEBRUARY 2024

CARTER COUNTY AGRICULTURE & NATURAL RESOURCES NEWSLETTER

WHAT'S INSIDE:

Upcoming Events	Pg 1-3
Beekeepers Meeting	Pg 2
Bee School	Pg 2
Northeast Area Livestock	Pg 2
Silvopasture Webinars	Pg 3
Woods & Wildlife	Pg 3
Minerals	Pg 4
Poison Hemlock	Pg 5-6
Avian Influenza	Pg 6-7

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US Department of Agriculture, Office of the Assistant Secretary for Civil Rights, 1400 Independence Avenue, SW, Washington, D.C. 20250-9410.

