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

BOONE COUNTY EXTENSION SERVICE
Agriculture & Natural Resources

Ag and Natural Resources News

November 2022

Cooperative Extension Service
Boone County
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Mark your calendars now!

▶ Crop Pesticide Management Webinar #1
November 8, 2022 · 10am

▶ Crop Pesticide Management Webinar #2
November 15, 2022 · 10am

▶ Crop Pesticide Management Webinar #3
November 22, 2022 · 10am

▶ Cow-Calf School—The Bull
November 28, 2022 · 6:30pm
Kenton County

▶ Cow-Calf School—The Cow
November 30, 2022 · 6:30pm
Grant County

▶ The Extension office will be closed on November 24 & 25 for the Thanksgiving holiday.

Storing Pesticides Properly: Protect Others and Your Investment

Pesticides are not cheap and some are not always easy to come by. Pesticides represent a significant investment for those who use pesticides regularly. Generally, most pesticides are intended to have a 2- to 3-year storage life. Too much time in storage or poor conditions during storage can ruin many pesticides. This can cost producers substantial time and money and can create disposal issues. Mishaps can also occur in storage, so those storing pesticides should plan accordingly to ensure that storage procedures provide containments in case of leaks or spills. This article highlights the basics elements of good pesticide storage

Security

Pesticide storage areas should have easily visible signage to alert others and must be secured properly to keep out unwanted visitors. Post pesticide-warning signs on doors and windows to alert people that pesticides are stored there. Durable, high-visibility signs are available commercially. Only store pesticides in a locked cabinet, room, or building. This prevents children, animals, and other unauthorized people from having access to pesticides. Never transfer pesticides to containers that might cause children and others to mistake them for food or drink. Pesticides should always be transported and stored apart from fertilizers, other chemicals, feed, and seed.

Figure 1. *Pesticide storage areas need to be keep locked with clear signage (Photo: Ric Bessin, UK).*

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Household Hazardous Waste Collection Event

Saturday, November 5, 2022
9:00 AM - 2:00 PM
Thomas More Stadium
(FKA Florence Y'alls Ballpark)
7950 Freedom Way,
Florence, KY 41042

Residents of Boone, Campbell and Kenton Counties are welcome to dispose of their household hazardous waste for FREE at this event.

Brought to you by the Northern Kentucky Solid Waste Management Area & Northern Kentucky Household Hazardous Waste Action Coalition.

Items Accepted
- Aerosol cans
- Antifreeze
- Batteries
- Corrosives/flammables (fuel, gasoline, etc.)
- Electronics (computers, monitors, printers, cell phones, etc.)
- Ink/toner cartridges
- Light bulbs
- Oil
- Paint (10 can limit per vehicle)
- Pesticides (2 gallon liquid max/ 2 lb powder max per vehicle)
- Cylinders and tanks
- TVs (limit of 2 per vehicle)

Items Not Accepted
Paper, appliances, fertilizer, mercury-containing devices, medications and tires.

Before You Go
You must have a registration form filled out. Go to SD1.org/HHW to download a form.

Questions?
Please contact your county's solid waste coordinator.

Boone County: 859-334-3151
Kenton County: 859-392-1919
Campbell County: 859-547-1866

Protect Your Investment

As pesticide quality can degrade over time, try to purchase only the amount of a pesticide you intend to use within the year, maybe two. While this may sound easy, pesticide needs and available container sizes do not always align. So, you can protect your left-over products by carefully reading the *Storage and Disposal* section of each label for those pesticides you plan to store.

Figure 2. *Placing liquid containers into plastic totes is a method to separate herbicides, fungicides, and insecticides (Photo: Ric Bessin, UK).*

Different formulations of the same product often have different storage requirements. Storage areas should be cool, dry, and well-ventilated. Always store pesticides in their original containers. Regularly check containers for leaks, corrosion, or deterioration. Many dry materials should be stored in a cool, dry location with good ventilation. Partially-used bags of dry formulated pesticides can be stored in clear, sealable plastic bags to keep moisture out to avoid clumping or caking. Check to make sure caps on liquid containers are secured properly. Many liquid pesticides must be stored above a specific temperature to avoid crystallization, separation, or active ingredients otherwise falling out of solution. It may not be possible to re-suspend these materials for future use. Temperature requirements during storage are found on individual pesticide labels and will vary by product. Mark each pesticide container with the date of purchase before it is stored. Use older materials first. Keep liquids on lower shelves and dry formulations above them. Maintain a current inventory of your pesticides; this will let you manage ordering new products more effectively. I find it helpful to place pesticide containers into plastic tubs, so that if a leak occurs, it is contained to a small area.

Protect Yourself

Pesticide storage areas should be well ventilated and dry. Without proper ventilation, pesticide storage areas will collect volatiles from opened containers. Storage areas should have adequate lighting so that labels can be easily read. A well-lit area also helps to reduce accidents. Keep the area uncluttered; this reduces tripping hazards when working with pesticides. Have single-use towels, soap, eye-wash supplies, and change of clothes available**.** While larger facilities may have an eye-wash station, smaller storage areas may have bottles of eye wash

Figure 3. *Proper ventilation reduces pesticide exposure (Photo: Ric Bessin, UK).*

solution. Store your Personal Protective Equipment (PPE) apart from your pesticides. Reusable PPE should be cleaned after each use and air-dried before storage, as well as stored in areas away from pesticides to avoid contamination during storage.

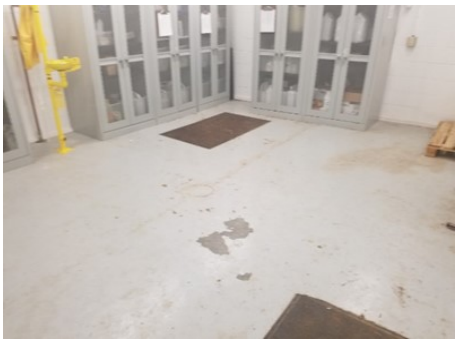

Figure 4. Pesticide storage areas must have an impervious floor (Photo: Ric Bessin, UK).

Protect the Environment

Store pesticides in an area with an impervious floor. The floor of the storage site should be made of sealed cement, glazed ceramic tile, no-wax sheet flooring, or another easily cleaned, impervious material. The area should be self-contained with no drains leading out of the area. Larger storage areas with more than 300 gallons of liquid pesticides are considered commercial facilities and need to have a curb around the floor that can contain a minimum of 110% of the volume of the largest container in storage. In these larger facilities, a sump will collect spills and pump them into a storage tank. Inspect the storage site to determine the likely path of pesticides in case of spills, leaks, drainage of equipment wash water, and heavy pesticide runoff from firefighting or floods.

Be Prepared

Have materials on hand to respond to spills and leaks. Spills and leaks will happen, so plan on them! Absorbent materials like kitty litter, sawdust, or floor-sweep compound are used to clean up spills. Use the 3 C's to manage spills; Control, Contain, then Cleanup. Control means to stop the leak at the source. For example if a container has a leak on the bottom, invert he container to stop the leak. Contain means to limit the spread of materials that have leaked by surrounding the spill with absorbent material. The final step is to clean up the spill. Be sure to use all necessary PPE as listed on the pesticide label.

***Figure 5**. Have the spill kit readily available (Photo: Ric Bessin, UK)*

It is a legal requirement to store pesticides properly and in a secured place to meet regulations and keep persons and the environment safe. With the winding down of the growing season in the fall, now is good time to review your pesticide storage and update inventories.

Source: Ric Bessin, Entomology Extension Specialist

Spotted Lanternfly Found Close to Northern Kentucky

There's a new invasive insect attacking trees—the spotted lanternfly. While this invasive insect has been attracting attention for a while in the Northeast, gathering in large numbers and feeding on trees, last year it was detected in southeastern Indiana, just across the river from Kentucky (Figure 1). Spotted lanternfly poses a major risk to trees in forests, landscapes, and orchards. While we don't want to find spotted lanternfly in Kentucky any time soon, the sooner it is detected after it arrives, the more options will be available for managing it. Join us in a search for this unwelcome insect!

The threat Spotted lanternfly feeds on a wide range of trees, gathering in large numbers, sucking sap, and stressing trees over time. As these insects feed, they decrease the plant's health and can cause mortality. Their high numbers on trees (and the black, sooty mold that accompanies their feeding) pose a particular threat to wine production, fruit growing, and Christmas tree production. Although the outcomes of infestations in diverse woodland settings and natural areas are less clear than in more uniform agricultural and landscape settings, the added drain on trees' resources may compound existing

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tree stress issues and trigger decline. The regulatory response to spotted lanternfly can also impact Kentuckians. Restrictions on the movements of goods like lumber, the need for quarantines, and even the requirement of permits to travel or move goods out of infested areas could all have consequences for those living in infested areas.

What should we look for? Spotted lanternflies start life as eggs, then progress through nymphal stages before becoming adults.

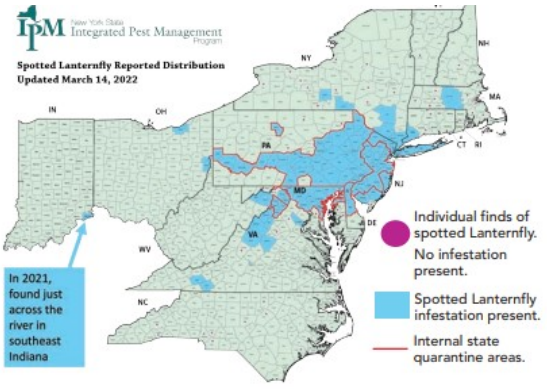

Figure 1. Spotted lanternfly was recently detected in southeast Indiana.

- Eggs are laid in masses that typically contain 30-40 eggs and are coated in a putty-like substance. Initially this coating is white, but it darkens over time to look like mud. These egg masses can be found on natural objects like logs but have also been found on many human-made objects like vehicles and equipment. Egg masses can be found from fall through early summer.
- Nymphs of spotted lanternfly develop through several stages before reaching adulthood and looks different depending on what stage it is in. At first, nymphs are black with white dots. Then they go through a stage that is black with red patches and white spots. Nymphs of all stages will jump when approached. Look for nymphs from late spring to early fall.
- Adults are over an inch long with a mixture of stripes and spots on their wings. Adult spotted lanternflies are quick and will run and jump when approached. The color of their wings is khaki pink. When their front wings are open, a second, smaller pair of wings underneath can be seen that are red with black spots. Look for the adults in the summer and fall.

Spotted lanternflies feed by inserting piercing mouthparts into host plants, which allows them to suck sap. This drain of resources stresses plants and results in other notable signs and symptoms, including:

- Wilted foliage
- Branch dieback
- Accumulation of "honeydew," a sticky, sugary fecal material
- Black, sooty mold growing in honeydew
- Increased visitations of flies, bees, and wasps feeding on honeydew

What does it feed on?

Tree-of-heaven, an invasive plant that is a problem on its own, is the primary host plant of spotted lanternflies, but they are also known to feed on over 70 different species of plants. Potential hosts include willow, maple, apple, walnut, pine, and stone fruit trees. They may also be found on hops plants, grape vines, and other orchard crops.

How to spot tree-of-heaven:

- Large (1-4 feet long) compound leaves with many (10-24) spear-shaped leaflets with smooth edges
- Small lobes at the base of leaflets, with a distinctive glandular bump on the underside
- Branches and stems that give off an unpleasant smell when cut (like rancid peanut butter)
- Smooth, green bark when young, turning gray with age
- Very large tree growth (greater than 80 feet tall) is possible, but it is also common to see dense thickets of smaller trees that are clonally connected through roots
- Tree-of-heaven must be carefully distinguished from native look-alikes like black walnut and sumac.

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Have you seen spotted lanternfly?

1. Take a photo or capture the specimen.
2. Get it identified by submitting it to your local extension professional or forester. If spotted lanternfly is discovered and the infestation is relatively contained, efforts will be made to locally eradicate the insects to prevent their continued local spread and establishment.

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https://kywoodlandsmagazine.ca.uky.edu/sites/kywoodlandsmagazine.ca.uky.edu/files/kwm_15_1_foresthealth.pdf
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University of Kentucky 2022 Crop Pest Management Webinar Series begins in November

Information regarding your pest management questions is just a few mouse clicks away. As offered in previous years, the University of Kentucky has once again organized five webinars on field crop protection topics that will be hosted through the Southern Integrated Pest Management Center beginning on Nov. 8, 2022. The weekly webinars will feature University of Kentucky Extension Specialists speaking on topics ranging from Weed Science to Plant Pathology to Entomology.

Credits have been applied for regarding Kentucky Pesticide Applicator credits and Certified Crop Advisor continuing education. Pre-registration for the webinars is required through the registration URL provided. Dates, speakers, and registration links are **listed at right**. All webinars will begin at 10 a.m. EST/ 9 a.m. CST, on the Tuesday morning listed.

For more information contact Jason Travis, Agricultural Extension Associate for the University of Kentucky, at (859) 562-2569 or by email at jason.travis@uky.edu.

By Jason Travis, Plant and Soil Sciences Agricultural Extension Associate

Crop Pesticide Management Webinars

On-line via Zoom

Webinar #1
November 8, 2022 • 10am
Weed Control Lessons Learned From the 2022 Crop Season
Speaker: Dr. JD Green
Registration URL: https://zoom.us/webinar/register/WN_4JQovXYvR76AZXp_tSmBwg

Webinar #2
November 15, 2022 • 10am
Managing Important Soilborne Diseases of Soybean in Kentucky
Speaker: Dr. Carl Bradley
Registration URL: https://zoom.us/webinar/register/WN_t6D6toO8Sh2BhyoD3iw1HQ

Webinar #3
November 22, 2022 • 10am
Implementing Defensive Shifts Against Problematic Kentucky Weeds
Speaker: Dr. Travis Legleiter
Registration URL: https://zoom.us/webinar/register/WN_QnugWPJJQUynBXDf4io9zg

Webinar #4
December 6, 2022 • 10am
Corn Disease Management Questions Asked in 2022
Speaker: Dr. Kiersten A. Wise
Registration URL: https://zoom.us/webinar/register/WN_KwibLTsHQY6oJjiKzURCEQ

Webinar #5
December 13, 2022 • 10am
Entomological Studies in Corn and Soybeans Under Difficult Circumstances (Covid, a Tornado & Drought) in 2022
Speaker: Dr. Raul Villanueva
Registration URL: https://zoom.us/webinar/register/WN_3KVwBMYKQYKnxzW1K-A0-g

Chronic Wasting Disease (CWD) Testing Sites

Make sure your deer harvest is safe while helping Kentucky Department of Fish and Wildlife Resources (KDFWR) monitor the health of the state's deer herd.

KDFWR has set-up deer sample freezers throughout the state for hunters to use to have their deer tested for CWD at no cost to the hunter! Closest freezers to Boone County is Gallatin County Extension Office and Curtis Gates Lloyd Wildlife Management Area.

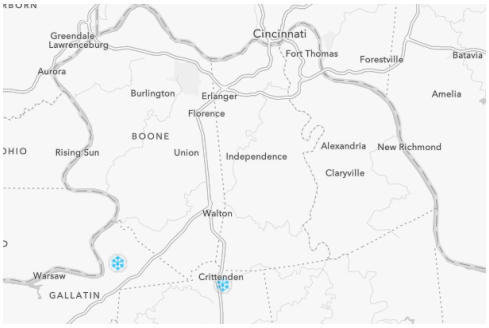
Hunters who intend to submit a deer head for testing and age determination should:

- Remove any antlers, if present, and preserve the head with at least 4 inches of the neck attached.
- Place the head in a garbage bag and seal the open end with a knot. Garbage bags will be available at each location.
- Fill out a biological sample tag. Hunters must provide their name, phone number, email address, telecheck confirmation number, county of harvest, indicate if the deer was male or female and if the deer was harvested on public land.
- The top portion of the tag should be attached to the garbage bag. Zip ties will be provided at each location. Hunters should keep the bottom portion of the completed tag for their records.
- Use the sample ID on the bottom portion of the tag to look up results using the following link: Chronic Wasting Disease Lookup App.
- Place the bag containing the sample into the freezer.

Step-by-step instructions will be posted at each location. If 10 or more deer are submitted from Boone County, KYDFWR will consider putting a sample freezer at Boone County Extension.

For more Information visit https://fw.ky.gov/Wildlife/Pages/Chronic-Wasting-Disease.aspx

Source: Adapted from the Kentucky Fish & Wildlife website



← Scan code for testing results and for more information about Chronic Wasting Disease. (fw.ky.gov/CWD)

Cabbage Roll Stew

1 pound ground beef
1 onion, chopped
1 (14.5 ounce) can carrots, drained
1 medium cabbage head, finely chopped or shredded
1 tablespoon garlic powder
2 cups low-sodium beef broth
1 (28 ounce) can tomato sauce
1 (15 ounce) can, no-sodium added, diced tomatoes
1 teaspoon oregano
1 teaspoon ground thyme
1 cup dry brown rice
½ teaspoon salt
½ teaspoon pepper

Heat a large pot over medium heat. Add beef and cook until brown, breaking up large pieces of beef. Remove from pot and set aside.

Discard the fat, saving two tablespoons in the pot. Add onion and carrots. Sauté for two minutes. Add cabbage and garlic powder. Cook 3-4 minutes.

Add beef broth, tomato sauce, diced tomatoes, oregano and thyme. Stir to combine.

Bring to a light boil. Add rice and the cooked beef. Cover pot and reduce heat to medium-low. Simmer until rice is cooked, about 25 minutes, stirring occasionally. Stir in ½ to 1 cup of water if soup is too thick.

Season with salt and pepper.

Source: Adapted from USDA What's Cooking?

Northern Kentucky Cow-Calf School

What is Cow-Calf School?

Cow-calf operations are the backbone of the beef industry. Our area is a prime area for these small operations because of the great forage base and our rolling pastures. This series of classes are designed as a refresher for current cow-calf operators or a new farmer to the beef industry.

Each class will cover a specific topic around cow-calf operations. Those who complete all classes may be eligible to receive a year's subscription to a record keeping sysem, X10D, created especially for Kentucky farmers. (Complimentary subscription is limited to participants from Boone, Campbell, Carroll, Kenton, Gallatin, Grant, Owen, and Pendleton counties.)

CLASSES

All classes start at 6:30pm with dinner and program immediately follows at 7:00pm. To register call Boone County Cooperative Extension Service (859-586-6101) or go online to boone.ca.uky.edu by November 25, 2022.

THE BULL
Monday, November 28
Kenton County Extension Office
- Ensure your bulls are healthy and fertile. Learn the strategies of seleting a bull, understanding genetic traits, and meeting your bull's health needs.

THE COW
Wednesday, November 30
Grant County Extension Office
- Ensure your cows remain healthy and learn about nutrition requirements. Learn reproductive management and the importance of timing your calving season.

MANAGING FORAGES
Monday, December 5
Kenton County Extension Office
- It was once said if you are in the cattle business, you are in the forage business too. Learn about grasses and legumes and how to meet the nutritional needs of your herd.

Call 859-586-6101 to register or go online to boone.ca.uky.edu by November 25, 2022

THE CALF
Wednesday, December 7
Grant County Extension Office
- Nutritional needs and healthy calves begin long before they are born. Learn ways to ensure successful deliveries and raising a healthy calf to take to market.

THE HEIFER
Wednesday, December 14
Kenton County Extension Office
- Heifer development is not that complicated as long as you plan for it. Learn ways to manage her first calf and her first lactation. Learn about getting her rebred so she can remain in the herd as a productive cow.

X10D RECORD KEEPING
Monday, January 9, 2023
Kenton County Extension Office
- This online platform is designed for cow-calf operators to utilize recordkeeping as a management tool. Items such as vaccination records, input costs around feed and feeding, and when culling is needed are all part of this program. More information will be forthcoming during the cow-calf school.

Have You Considered A Mentor Or Being A Mentor?

The purpose of mentoring is to connect an individual who has a lot of knowledge and experience with someone who hasn't gained the same knowledge or experience.

Why should I consider a mentor?
By having someone who knows more than yourself share advice, offer guidance and be a sounding board for your thoughts you stand to benefit from experienced farmers.

Where can I find a mentor?
If you are early in a cow-calf operation having a mentor will help you grow and be successful. The offices of the Kentucky Cooperative Extension Service here in Northern Kentucky can help connect you with more experienced beef farmers.

What are my next steps?
If you are an experienced farmer or a new farmer simply call your local Cooperative Extension office and speak with the Agriculture Natural Resources Agent in your county. We can help you make connections.

College of Agriculture, Food and Environment
Cooperative Extension Service

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