

Ag and Natural Resources News

December 2022

Cooperative Extension Service
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Mark your calendars now!

► Crop Pesticide Management Webinar #4

December 6, 2022 · 10am

► Crop Pesticide Management Webinar #5

December 13, 2022 · 10am

► Cow-Calf School—Managing Forages

December 5, 2022 · 6:30pm
Kenton County

► Cow-Calf School—The Calf

December 7, 2022 · 6:30pm
Grant County

► Cow-Calf School—The Heifer

December 14, 2022 · 6:30pm
Kenton County

► Cow-Calf School—X10D Record Keeping

January 9, 2023 · 6:30pm
Kenton County

► **The Extension office will be closed from December 26 through December 2 for the holidays. We will reopen on January 3.**

Prevent Winter Damage from Moles and Voles

A common misconception is that moles and voles, those burrowing pests that destroy our lawns and gardens, take a break in the winter to hibernate. Nothing is further from the truth. In winter, moles and voles simply dig deeper to escape the cold, while continuing to eat with a ravenous appetite. We tend not to go out as much in the winter, therefore we do not see their signature tunnels, hills and holes, which are occasionally covered by snow. You can avoid surprises in your lawn this spring by preventing winter damage with a few precautionary measures. You can purchase traps, repellents and baits to help control mole problems. If you used mole repellents during the summer, continue to use them into winter. Stopping the use of repellents can leave your lawn and garden vulnerable to mole activity. If you see signs of damage in the winter, you should begin repellent applications immediately.



Photo Credit: David L. Clement, University of Maryland, Bugwood.org



Photo Credit: Tom Olander; <https://icwdm.org>

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The effectiveness of repellents for voles, which are sometimes called meadow mice, are not proven. When dealing with only a few voles, trapping might be the best option. Use ordinary mousetraps baited with peanut butter or apple. The traps must be placed in the runs and then covered with boards to be effective.

If you are unsure about mole and vole signs or control measures, you can seek professional help from a trusted pest control company. A pest control professional will notice signs of mole and vole activity and can apply any necessary treatments throughout the year if a problem is found.

Next fall, take proactive measures to prevent moles and voles as winter approaches. Avoid overwatering your garden or lawn with sprinklers and irrigation, which makes the soil moist and loose. Wet soil makes it easier for the moles and voles to move around, while providing moles with an abundance of their main food source, earthworms and grubs. Another preventive measure is not to mulch too early in the fall. Mulch is a great way to protect plants from plummeting temperatures and helps retain moisture, but it also provides attractive homes for voles. Wait to mulch until a couple of weeks after the first frost. It might convince a vole to take cover for the winter someplace else. Physical barriers in your beds and around trees can protect them from mole and vole damage as well.

Contact Boone County Extension Service of the University of Kentucky Cooperative Extension Service for information on mole and vole winter damage.

Source: Ray Tackett, UK Extension Horticulture Agent

Hard Surfaces Can Help Reduce Mud

If you have been farming for any length of time, you know the winter weather can make your farm quite muddy. Feeding livestock during the winter or moving equipment over unfrozen, wet ground can exacerbate the amount of mud on the farm.

Mud is not good for several reasons. It can cause topsoil erosion and increase soil compaction. Livestock that must walk through mud require more feed for energy but actually eat and drink less



because they expel so much energy getting to feed and water. Therefore, mud reduces daily average gains. Mud on animal's coats makes it harder for them to regulate their body temperature – increasing the amount of energy they need to generate heat for warmth in the winter and cool themselves in the summer. For horses, mud can increase the risk of slipping and falling and can make walking or standing difficult.

Fortunately, you can reduce the amount of mud on your farm by installing hard traffic pads on areas of your farm that tend to get the most traffic.

You have many choices for materials to use for heavy -use pads. Some of these include concrete, plastic traffic grid and geotextile fabric and rock. The material you use depends on many factors, including material availability, installation costs and the size of your operation.

Except for horses which require softer surfaces, concrete pads are by far the strongest, easiest to clean and lowest maintenance material for most livestock producers to use. Concrete pads should be placed in areas that receive heavy animal traffic, such as around waterers, adjacent to feed bunks, in holding areas and near gates. While the installation costs of concrete pads may be higher than other materials, you are going to save money in the long term, because you reduce the amount of wasted feed and get better gains on your livestock.



Nostoc: A slimy-green Substance in Your Lawn

Occasionally after a rain in the spring and fall, you may notice a slimy-green substance has appeared in spots in your lawn overnight. Don't panic; it is not an extraterrestrial that will kill your lawn or pets. It is actually nostoc, a cyanobacterium and a hardy survivor that has been around for approximately 3 billion years. In its dormancy stage, nostoc will appear black and crusty, and when wet, it resurrects itself into a green moist mass. It can grow anywhere, from rocks to pavement, making surfaces very slippery. It is very hard to kill. The good news about nostoc, however, is that it is basically harmless, even if it is gross-looking. Nostoc can be a safety hazard when it is in the slimy-green stage as it can cause you to fall.

Nostoc in your lawn can indicate a drainage problem. You may need to improve the drainage in that area. Also, do not overwater the area and check its soil fertility. Too much phosphorus in the soil can spur its growth, so get a soil test from the Cooperative Extension Service office and follow the fertilizer recommendations. It can help improve the situation.

Contact Boone County Extension Office of the University of Kentucky Cooperative Extension Service for information on nostoc.

Source: Sharon Flynt, UK Extension Horticulture Agent; Adapted by Lacey Kessell, UK Environmental Agent.

The thickness of the pad will depend on the type of livestock you have, stocking density and whether the area also gets a lot of equipment traffic. Areas with livestock traffic require a pad that is at least 4 inches thick placed on several inches of gravel. Trucks, tractors and other heavy equipment need concrete pads at least 5 to 6 inches thick. A hilltop or sloped surface is often the best location for a hard surface pad, as they tend to be away from most waterways and will allow nearby vegetation to filter stormwater runoff. Make sure the location also drains away from feed bunkers, waterers and roads.

Concrete pads need to have a solid foundation to be successful. Prepare the site by removing topsoil until you reach soil that is easily compacted and make sure the area is level. Use at least 6 inches of compacted dense grade aggregate to provide a solid base for a concrete pad. Inadequate foundation preparation can cause a concrete pad to fail or freeze or damage water pipes.

Horse owners should similarly prepare their sites but should construct their pads using geotextile fabrics followed by 6-inch layer of crushed limestone and finished with 2-to-3 inches of dense grade aggregate. Create a more durable surface by compacting the dense grade aggregate using a small, smooth-drum roller like those used for asphalt projects.

More information about installing hard surfaces on your farm is available in the University of Kentucky Cooperative Extension Service publications AEN 115: Appropriate all-weather surfaces for livestock and ID-164: High traffic area pads for horses. They are available online at <http://www2.ca.uky.edu/agcomm/pubs/aen/aen115/aen115.pdf> and <http://www2.ca.uky.edu/agcomm/pubs/id/id164/id164.pdf> or you can get a hard copy from the Boone County Extension office.



Photo taken by YAMAMAYA; commons.wikimedia.org

2022 Census of Agriculture

In the October Newsletter I had an article about the upcoming Census of Agriculture and the importance of why we should respond to that census. I won't go into all the details of the how's and why's again. If you still have the October newsletter you can read that again or you can see the October newsletter on the Boone County Extension Office website. But I do want you to remember that the higher number of respondents to the census looks good for us when the USDA is determining how to split up the pot of money in their annual budget.

The reason I'm mentioning this again is because it is my understanding that the first mailing of census forms is being mailed out and you should have one in your mailbox by the time you receive the newsletter. If you did not receive a postcard about this from the USDA you can call 360-265-8219 to speak with David Knopf and he will help you get the information you need to complete your census form.

Safely Handling Chicks

The intestinal tracts of all mammals have various types of bacteria as part of their natural intestinal microflora. There are many opportunities for people, especially young children, to be exposed to these bacteria, such as pets, friends, etc.

Some types of bacteria may cause diseases like salmonella in susceptible humans. When dealing with animals in any situation personal hygiene is important. This is especially true when handling chicks in your backyard and small poultry flocks. Here are some reminders of proper hygiene practices.



Hand-washing is necessary to reduce any risk of bacterial infections. Wash your hands after coming in contact with any animals, birds or eggs. Proper hand-washing techniques include using soap and warm running water and rubbing your hands together vigorously for at least 20 seconds. Make sure you wash the back of your hands and wrists, in between fingers and under your fingernails. Rinse well and thoroughly dry your hands with a paper towel. Turn off faucets with your elbow or a paper towel.

If there is no access to running water, you should use antibacterial hand sanitizers or wipes with at least a 99 percent bacterial kill rate and then wash your hands as described above as soon as possible.

Supervise children when handling birds or animals. Don't allow them to nuzzle or kiss animals, chicks and ducklings. Don't allow children to touch their mouths or eyes with their hands during



or after handling animals and birds prior to hand washing. Make sure children don't eat and drink before thoroughly washing their hands.

You can do a few other things to reduce your risk of exposure to bacteria. Always clean and sanitize an incubator prior to incubating eggs and only set clean eggs from a reliable source. To prevent the potential transmission of bacteria from adults and children to your chicks or eggs, make sure to wash your hands prior to handling the eggs or birds. You should always thoroughly clean any surfaces that have been contaminated with animal feces. Clean and sanitize the incubator immediately after use and properly dispose of the shells and eggs that do not hatch.

For more information, contact the Boone Cooperative Extension Service.

Think Ahead to Meet Winter Hay Needs

Hay availability in Kentucky may be short this winter because of multiple, compounded issues. The variability of yield, quality and number of cuttings indicate the hay supply could get tight. It is important to protect the hay crop you have and use it wisely—that smart conservation and planning will help make hay last longer through the winter.

Due to weather events—droughts and floods—both hay quality and yield are down. To ensure an adequate amount of hay, farmers should enact several measures. Store hay inside a barn, where it will remain dry. Remember to store hay in barns that have access in all types of weather. If that is not feasible, cover with a tarp to protect from the elements. Buy hay by the ton if possible and require certified stamped weight.

Testing is the first step to knowing how much will be necessary to meet the nutritional needs of the animals they feed, from horses to cattle to goats. Hay is tested primarily for crude protein, acid

detergent fiber, neutral detergent fiber, total digestible nutrients, and relative feed value. Get your hay tested by the Kentucky Department of Agriculture to determine if you need to buy additional hay. For more information, refer to University of Kentucky



Cooperative Extension Service publication “Interpreting Forage Quality Reports,” at <http://www2.ca.uky.edu/agc/pubs/id/id101/id101.pdf>.

Farmers typically feed hay from mid-December until mid-March, approximately 110 days, though that will vary due to weather, pasture conditions and the needs of different animals. To reduce waste, you should get hay, whether round or square bales, off the ground, either by using pallets, feeders or hay carts. Doing this will help you reduce wasted hay by almost half. If that is not possible, feed in long rows so hay is immediately consumed, rather than leaving a round bale out for animals to pick at over time. They will consume the center of the round bale, which has remained dry and protected, first, and that judicious eating will greatly increase waste.

To determine hay needs:

- Calculate the number of days animals will need feed.
- Weigh a random sample of bales using scales at feed mills or truck stops so you know the average weight of your bales.
- With the results of a hay test, calculate how many pounds each animal will need daily.
- Determine the total amount of hay the herd will require over the winter.

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BBQ Venison Meatballs

Meatballs

- 1 lb. ground venison
(may substitute elk or beef)
- ½ cup 2% milk
- ¾ cup rolled oats
- ½ cup minced fresh onion
- ¼ teaspoon salt
- ¼ teaspoon black pepper

Sauce

- 1 cup ketchup
- ½ cup water
- ½ cup grated onion
- 2 Tbsps. vinegar
- ¼ cup brown sugar
- ¼ tsp. black pepper

Combine venison, milk, oats, onion, salt, and pepper in a large bowl. Use a sturdy spoon or clean hands to mix well. Shape meat mixture into 12 1-inch balls, and place in a shallow 9-by-13-inch baking pan. Combine all the sauce ingredients in a bowl and stir well. Pour sauce over meatballs. Bake uncovered at 350° F for 1 hour, turning over twice.

Yield: 6 servings. Per Serving: 160 calories, 3g total fat, 1g saturated fat, 0g trans fat, 65mg cholesterol, 220mg sodium, 14g total carbohydrate, 1g dietary fiber, 6g total sugars, 3g added sugars, 20g protein, 0% DV vitamin D, 4% DV calcium, 15% DV iron, 6% DV Potassium

*Source: <https://www.planeatmve.com/recipes/recipe/bbq-venison-meatballs/>
Adapted from: “Fish & Game Cookbook” Bonnie Scott. 2013.*



Upcycle your Christmas Tree for Wildlife Conservation

Consider upcycling your real Christmas tree after the holidays instead of letting it fill space in the landfill. This will allow the tree to decompose naturally enriching your soils and provide much needed cover for a lot of wildlife during the process.

Christmas trees can be thrown into ponds and lakes to provide shelter for young fish trying not to become the next meal! Be sure you have permission to do this before hand or you can take it to one of the drop off areas listed by KY Fish and Wildlife and they will do it for you! For Boone Co., you can drop off your tree at Camp Ernst Lake by the boat ramp in Burlington.

Other fish habitat drop-offs can be found at https://fw.ky.gov/Fish/Pages/Xmas_Tree_Recycling.aspx

Trees can also simply be put outside away from the foundation of the house. Birds and small mammals like rabbits will use the brushy cover to avoid predators and protect themselves from the elements. Keep in mind that trees can take a few years to decompose.

Take your tree outside, stand and all! Redecorate your tree after the holidays outdoors with a variety of DIY birdseed ornaments. This could be a great family activity. Birds will love the protection of the evergreen branches combined with an easy to reach food source! You can find lots of ideas at <https://www.birds.cornell.edu/k12/make-your-own-feeder/>. If you have peanut or tree nut allergies in your family you can substituted peanut butter and birdseed for sunflower butter and dried fruit!

Forward planning and good management practices will help ensure an adequate hay supply during the winter. Because hay is a commodity, with a price that relies on supply and demand, it is unlikely that prices decrease in the coming winter months. So, if you do not have enough, you should buy it now, before more buyers move into the market. A tight supply, plus possible hay purchases from bordering states, may possibly elevate what are already high prices. Straw is also likely to be expensive.

For more information, review University of Kentucky Cooperative Extension Service publication "Quality Hay Production," <http://www.ca.uky.edu/agc/pubs/agr/agr62/agr62.pdf>, or contact the Boone County Cooperative Extension Service.

Tips for Success with Your Christmas Tree

Consider these tips for relieving the stress of buying and setting up your farm-grown Christmas tree this holiday season. The scent of a real Christmas tree in the house, the allure of a family outing to select a real tree and the appeal of buying local are among the reasons people buy real Christmas trees. For some, especially people who grew up in households with an artificial tree, buying and setting up a real tree may seem like daunting task. With a little planning, however, having a real tree can add a fun and enjoyable family experience to the holidays.

Before buying your tree, decide where in your home you are going to display the tree. Keep the tree away from direct heat sources such as fireplaces or furnace vents because these may cause the tree to use more water and dry faster. Having an electrical outlet near the tree will eliminate the need to run unsightly extension cords to the tree. Double-check there is adequate floor space for the height of tree you want to display.

Finally, and most importantly, measure the height of your ceiling. Trees usually appear smaller outdoors than they do inside, so measure your tree rather than relying on the "eyeball test" when picking out your tree at a tree lot or choose-and-cut farm.



Consumers can buy trees already cut at a tree lot or they can cut their own at a choose-and-cut farm. Common options for buying pre-cut trees include big box stores and supermarkets, garden centers and freestanding tree lots. Pre-cut trees at box stores or supermarkets offer the convenience of buying trees while doing other



shopping. Buying at garden centers or stand-alone tree lots supports local businesses.

Pre-cut trees are usually grown on large farms that specialize in wholesale production, are harvested, and then shipped to retail outlets. Choose-and-cut farms are usually smaller tree farms where consumers can wander fields, find their tree and cut the tree with saws provided by the farm. Many choose-and-cut farms also provide family-themed entertainment,

such as hay wagon rides, petting zoos, bonfires, gift shops and hot chocolate or cider stands.

For many people, the most stress-inducing step of having a real Christmas tree is putting the tree in a stand and getting it to stand straight. A simple way around this issue is using a drill stand. Many tree lots, choose-and-cut farms and retail lots will drill trees with specially-designed drills that match the pin in the stand, ensuring trees stand upright and straight.

For traditional, screw-in stands, recognize that this is a two-person job. Place the stand on the bottom of the tree before standing the tree up. The best plan of attack is



to have one person adjust the tightening screws on the stand while the second person adjusts the tree and checks for straightness.

For all types of tree stands, keep the baling twine on the tree until the tree is in the stand and upright. This keeps the tree compact and easier to handle as you bring it in the house and get it situated in the stand.

To keep your tree fresh and green start with a fresh tree. This will help with needle retention. The best way to ensure a fresh tree is to cut one yourself. Cut ½ inch to 1 inch off the

base of the tree right before you put it in the tree stand. This will help with water uptake. Keep water in the stand and check daily.

Christmas Tree Recycling

Recycle your natural Christmas trees! **Please remove all tinsel, ornaments, ribbons, lights, and bags.** All trees will be mulched and properly disposed of.

FLORENCE ONLY:

Christmas Tree Pick-Up

Curbside Pickup: January 4th, 2023

You must leave your tree on the curb. Any trees not on the curb will not be picked up.

Christmas Tree Drop-Off:

December 26, 2022, through January 7, 2023—**ONLY**—Please do not drop off after these dates!

► **Boone County Extension Enrichment Center** (1824 Patrick Drive, Burlington, KY 41005)

► **Stringtown Park** (7340 Burlington Pike, Florence, KY 41042)

► **Union Park** (10165 Old Union Road, Union, KY 41091)

► **Walton Park - near the back ballfields** (35 Old Stephenson Mill Road, Walton, KY 41094)

► **Lakeside Christian Church - Hebron Campus** (1980 North Bend Road, Hebron, KY 41048)

Questions? Please contact Megan Clere at 859-334-3151

https://www.boonecountyky.org/departments/solid_waste/events.php

Consider these tips in order to reduce the mess of getting a tree out of the house after the holidays. Use a turkey baster or a large sponge to transfer any water remaining in the tree stand to a bucket or plastic container. To reduce the amount of needles lost while taking the tree out, lay a bedsheet on the floor and gently lay the tree down on it. Wrap the sheet around the tree to collect any loose needles that may come off while taking the tree out of the house.

Recycle your tree at the end of the holidays. Some communities have curbside tree pick-up for recycling and many others have central drop-off points. Consider the recycling options we have listed or check your local paper or community websites for recycling options in your area.

Adapted from Michigan State Christmas Tree Publications

Invasive Species Hunting Season

Winter creeper (*Euonymus fortunei*), also known as creeping euonymus, was introduced in the early 1900's from China as an evergreen ornamental groundcover. Since its first introduction, winter creeper has spread throughout the eastern US and even to some parts of the midwest region. Infestations can be easy to spot this time of year due to their evergreen, oppositely arranged leaves. The leaves reach about one inch or less in length and are a shiny dark green with silver-toned veins.

These plants can form thick mounds of groundcover which can restrict and outcompete forest floor native species. It also has an amazing ability to climb as high as 70' into trees which can weigh down branches, strangle trunks and shade out the native tree it grows on as well as trees below it. When winter creeper is still getting established it can sometimes be confused with periwinkle (*Vinca* spp.). However, winter creeper has very fine teeth along the leaf margins where periwinkle have smooth margins (the outer rim of the leaf).

To eliminate this invasive plant from your woodlands concentrate on plants that are climbing into trees first. These plants are flowering and creating seed that then spread other areas. Cut stems at the base then spray with glyphosate or triclopyr in a 25% solution. This will help prevent resprouting of the cut vines. Viney mats can be mowed over, or hit with a string trimmer to cut open the waxy covering over the leaves. Then spray the area with a 2% solution of glyphosate or triclopyr; be cautious of other desirable plants in the area to avoid harming them. Retreatments might be necessary, so be patient. An organic method in controlling viney mats is by mowing over the area and covering with thick black plastic for at least 2 years.



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Table 1. List of Some Commonly used Herbicides for Winter Creeper. ¹

Active Ingredient	Common Brands	Treatment	Cautions
glyphosate	Roundup, Accord, and others ²	Cut vines growing up trees allow to resprout and spray new foliage with 25% solution of concentrate (40-50% active ingredient). Weed eat or mow ground mats of winter creeper, allow to resprout and spray new foliage with 2% solution. Or weed eat mats and apply herbicide to damaged foliage.	Winter creeper, typical of many vines is difficult to control and may require more than one application. The waxy nature of mature leaves is one factor that must be addressed either by adding surfactant or by treating newly formed leaves, or damaging older leaves prior to application.
triclopyr - amine	Garlon 3a	Weed eat or mow ground mats of winter creeper, allow to resprout and spray new foliage with 2% solution. Or weed eat mats and apply herbicide to damaged foliage.	Make sure that you follow label directions. Mix and apply the chemical in the proper manner and at the recommended times.
triclopyr - ester	Garlon 4	Volatilization is a serious problem for foliar applications of the ester in summer. Use a 25% solution on the cut stumps during the summer.	Protect your eyes during mixing and application (where necessary) and check label for personal protective equipment and other precautions.
picloram/ 2,4-D	Pathway	On uncut foliage July to October apply 3% solution with surfactant. Repeat applications may be necessary. ³	

¹ Other herbicide brands can be used for winter creeper control. The herbicides that are listed are those that have been commonly used or recommended.

² There are currently a large number of brand names for glyphosate herbicides. Many are for use in fields or fence rows. Few such as Accord are labeled for use inside a forest (see Kentucky Woodlands Magazine Vol.1 Issue 1 for more information on glyphosate herbicides.)

³ From Nonnative Invasive Plants of Southern Forests, USDA Forest Service, SRS GTR-62 by James H. Miller.