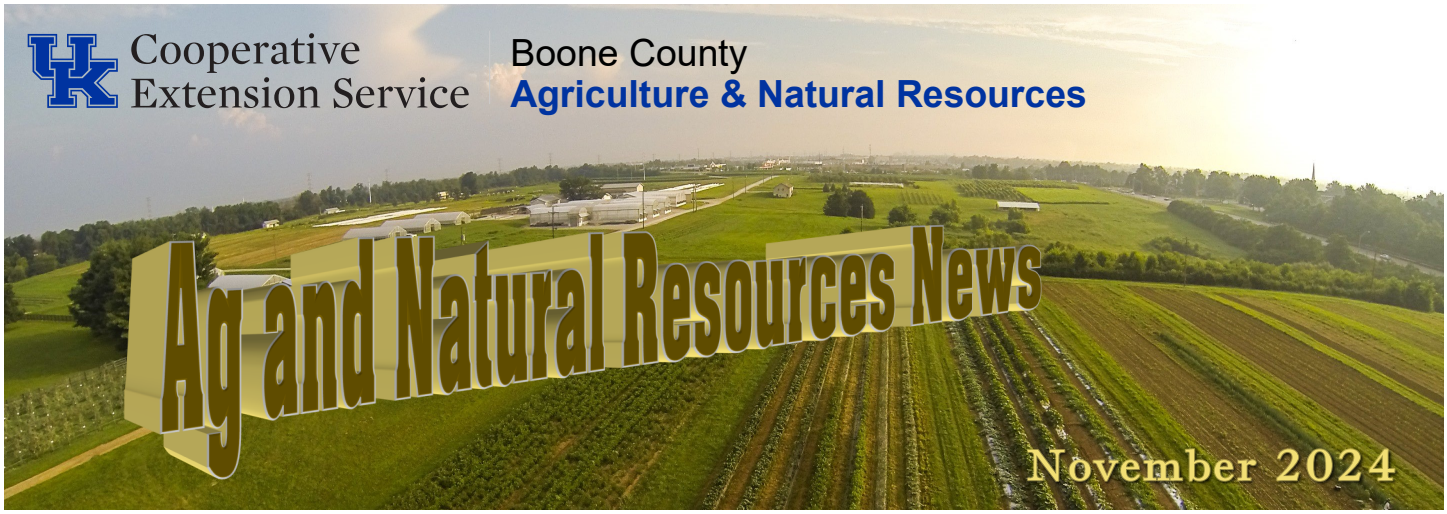

Mark your calendars now!

► Master Cattlemen
Starts **November 4, 2024**
Details on Page 5

► Election Day w BCES Closed
November 5, 2004

► KY Fencing School
November 14, 2024
Felicity, OH
Details on page 2

► Thanksgiving w BCES Closed
November 28 - 29, 2004

► BCES Closed
December 25 -January 1, 2025

► Wheat Field Day
May 12, 2025

Fall Nutrient Applications Has Its Advantages

Grain producers can take steps now to prepare for the next growing season. Fall is an ideal time to start by applying nutrients to the soil.

There are several benefits to autumn fertilizing. For one, it can prevent delays in planting come spring. Kentucky's fall weather is generally drier, reducing the risk of soil compaction during application. Additionally, purchasing fertilizer in these cooler months might lead to savings, as spring tends to be the busier season for fertilizer sales.

Before getting started, test your soil to ensure you only apply the nutrients your fields need. This approach saves both time and money. You can coordinate with your local extension office to submit soil samples to the University of Kentucky's regional testing labs.

Once your soil test results are in, follow UK recommendations for fertilizer application. Potash and phosphorus are particularly well-suited for fall application in Kentucky. These nutrients interact with the soil to keep them in place, preventing loss through leaching during the state's typically wet winters. If you're planting small grains this autumn, apply the recommended rates of

(Continued on next page)

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phosphorus and potash before planting. Double-crop producers should also account for soybean nutrient needs when applying fall wheat fertilizer.

UK encourages corn and full-season soybean producers to wait until the springtime to apply nitrogen and animal manures. Both run a high risk of leaching from the soil during the winter. Additionally, nitrogen losses can occur from denitrification and immobilization during the winter. Animal manures are most effective when there is a crop already growing in the field.

If you've planted wheat this fall, apply just enough nitrogen to promote early growth and tillering, usually no more than 40 pounds per acre. Wheat-following crops like soybeans, tobacco or well-fertilized corn may not need additional nitrogen in the fall. If more nitrogen is required, remember that common phosphorus fertilizers in Kentucky, such as DAP (18-46-0) and MAP (11-52-0), also supply nitrogen that the wheat can utilize.

For more information about alternative grain storage, contact the Boone County office of the University of Kentucky Cooperative Extension Service.

Source: John Grove, Plant and Soil Sciences professor

November KY Fencing School — November 14, 2024

This November the KY Fencing schools is being held in southern Ohio as part of a collaboration with the Greenacres Foundation. The location is the GREENACRES Lewis Township Farm in Felicity, Ohio. "Fencing is vitally important on the farm," said Chris Teutsch, associate professor for the Department of Plant and Soil Sciences, stationed in the UK Research and Education Center at Princeton. "Good fences keep our livestock safe and animals from getting out. Understanding the ins and outs of proper fencing is important for anyone installing fencing on their property, including residential homeowners."

The school begins at 7:30 a.m. local time. The morning session addresses fencing types and costs, construction basics, electric fencing, innovations in technologies and an overview of Kentucky fence laws. The afternoon session is a hands-on fence-building session where participants put their knowledge and skills to work.

The demonstration includes:

- Safety, layout and a post-driving demonstration
- H-brace construction
- Knot tying, splices and insulator installation
- Installing Stay-Tuff fixed-knot fencing
- Installing high-electrified tensile fencing

Events conclude with questions and a survey at 4:30 p.m. Participants should pre-register at least one week prior to the event. Advance registration is $35 per person and includes a notebook, safety glasses, hearing protection, refreshments and a catered lunch.

Use the following to register:
https://2024FallFencingSchool.eventbrite.com
Register by Email: caroline.roper@uky.edu
By mail: Caroline Roper, PO Box 469, Princeton, KY 42445
Make Checks payable to KFGC.

For more information, contact Caroline Roper, Master Grazer Coordinator, at 270-704-2254 or caroline.roper@uky.edu

Alternative Storage Systems Could Help Farmers In Times Of Higher Yields

Alternative grain storage options are becoming increasingly valuable as agricultural production intensifies, offering farmers flexible and cost-effective solutions. While traditional grain bins are widely used, alternatives such as grain bags, flat storage and temporary structures provide practical choices for producers looking to manage harvests and mitigate risks. These systems offer benefits in terms of cost, accessibility and adaptability, allowing farmers to address specific needs without the heavy investment in permanent infrastructure.

Grain storage plays a key role in managing risk by reducing harvest delays, avoiding price lows during peak harvest times and allowing for earlier harvesting at higher moisture levels if drying systems are available. Traditional grain bins offer long-term storage but require significant initial investment and construction time. In contrast, alternative storage options can be quickly deployed and used for both short- and long-term needs, depending on the operation's scale and requirements.

One of the most popular alternatives is the use of grain bags. These commercial-grade plastic bags can hold 10,000 bushels of grain or more and provide a temporary but weather-tight storage solution. Grain bags are ideal for producers who need on-site storage without the infrastructure costs of permanent bins. However, because they are not reusable, regular monitoring is necessary to avoid spoilage from tears or punctures by wildlife. Despite these challenges, grain bags are a flexible and accessible option for short-term storage, particularly when paired with modern sensors to monitor moisture and temperature levels.

Flat storage systems are another alternative, utilizing open areas or machine storage buildings. These systems are versatile and capable of holding substantial amounts of grain but require careful management to maintain grain quality. Moisture protection, aeration and pest control are critical factors in maintaining the integrity of grain stored in flat structures. While they are a cost-effective solution, flat storage systems pose a higher risk of spoilage than more controlled environments, such as traditional bins.

Temporary storage structures, including bin rings and upright silos, can also provide a quick and scalable storage option where available. Bin rings can be set up rapidly and are often used when immediate storage is needed. However, they come with risks such as inadequate aeration and moisture control, making them less suitable for long-term storage. Protection from the elements and pests is a top priority with temporary storage structures, as they are more exposed than grain bags or permanent bins.

Alternative grain storage systems offer flexible solutions for farmers seeking to manage their harvests efficiently. These options can provide cost-effective, short-term storage solutions that, when properly monitored, help maintain grain value and reduce risks associated with spoilage and pests. A spreadsheet is available to easily calculate the holding capacity of various storage structures at https://bae.ca.uky.edu/extension/grain-storage-systems.

For more information about alternative grain storage, contact the Boone County office of the University of Kentucky Cooperative Extension Service.

Source: Sam McNeill, professor of biosystems and agriculture engineering

Timely Tips — From "Off the Hoof"

Spring-calving herds

- Schedule a pregnancy examination of cows if not done previously. Winter feeding costs can be minimized by eliminating open cows prior to winterfeeding. Pregnancy status (pregnant versus open) can be determined using palpation, transrectal ultrasonography, or blood sampling. Stage of pregnancy can only be determined by palpation or ultrasonography (performed by your veterinarian). A new chute-side blood sampling kit (Alertys from IDEXX) is available for use. It provides yes/no pregnancy data in 20 minutes for about $8-10 per cow.
- Evaluate the body condition of your cows and improve their condition prior to winter. It takes about 75 pounds to increase body condition a full score.
- If you have already done a preweaning working, revaccinate (booster) calves as needed. Treat calves for internal and external parasites. If you vaccinate calves yourself, be sure to store, handle, and administer vaccines properly.
- Wean calves before cows lose body condition. Obtain weaning weights of your calves and remember weaning is the time to do your first round of culling and selecting breeding stock. You can eliminate obviously inferior calves, especially those with wild or nervous dispositions. Consider the number of heifers that you will need to save for your cow herd. Bulls that are old, unsound, roguish, etc. can be culled now. It is not too early to begin thinking about replacements.

Fall-calving herds

- The calving season should be in full swing for fall-calving cows. Check cows frequently. Identify calves and commercial males should be castrated and implanted.
- Take accurate records of calving and calving performance. Our new app (Stocket at Stocket.us) makes data collection and reporting simple, easy, and convenient.
- Put fall-calving cows on accumulated pasture before the breeding season. Be sure to save some grass in the breeding pastures.
- It is time to get everything ready for the fall-breeding season, too. Line-up semen, supplies, etc. now and get your bulls ready to go (don't forget their breeding soundness evaluation). Breeding soundness exams are a vital component to reducing the risk of reproductive performance and need to be conducted 30-45 days before EVERY breeding season. Contact your herd veterinarian to schedule the exams.
- Obtain yearling measurements (weight, hip height, scrotal circumference, etc.) on replacement animals - especially for registered ones. Contact your herd veterinarian and schedule pelvic area examinations and reproductive tract scores for your potential replacements. Use pelvic area to identify larger heifers with smaller than normal pelvic areas so you can remove them from the breeding pool. Reproductive tract scores can be used to identify immature heifers for culling. Typically, heifers with a reproductive tract score less than 3 have limited ability to conceive early in the breeding season.

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Stockers

- If you are purchasing weaned/stressed calves, have your receiving/feeding program in place. Feed a stress ration which contains at least 13% protein and is fairly energy dense.
- Manage to keep newly weaned and/or purchased calves healthy. Calves should be penned in a small lot with adequate feed, water, and shade to reduce stress. Careful handling and comfortable, uncrowded conditions can decrease stress.
- When newly weaned calves are purchased in the fall, sickness and death loss can be a big problem. Work with your veterinarian on a health and receiving program. Consider purchasing CPH-45 feeder calves that are pre-weaned, vaccinated, bunk-adjusted and treated for parasites.
- Watch calves closely for a few weeks after their arrival. Calves will normally break (get sick) 5-7 days after arrival, but they can break up to 14 days after they arrive. Have a treatment program ready for any health problems. Early recognition of sick cattle improves their chance of recovery. Watch for drooped ears, hollow appearance, reluctance to rise, stiff gait, coughing and dull or sunken eyes. A good "receiving" program is essential to profitability.

Forage Timely Tips

- Apply 30-40 lbs/N/acre to strengthen cool-season grass sods going into winter.
- If not already done, inventory hay and assess hay quality.
- Using a plate meter or grazing stick, estimate stockpile available for winter grazing.
- Adjust animal numbers or purchase additional hay to balance forage-feed supply to livestock needs.
- Graze crop residues and cover crops that will not overwinter. Be careful to avoid fields that contain johnsongrass that have recently frosted.
- Graze winter annuals that will not overwinter such as brassics and oats.
- Graze other winter annuals once they are 6-8 inches tall and are well anchored. Do NOT graze closer to 4 inches.

General Reminders

- Avoid prussic acid poisoning that can happen when frost ruptures the plant cells in sorghums, sorghum-sudan hybrids, sudangrass, and johnsongrass releasing prussic (hydrocyanic) acid. Fields can be grazed after the plants have dried up after a frost. New growth that occurs in stalk fields is potentially dangerous whether frosted or not.
- Take soil samples for soil analysis to determine pasture fertility needs. Apply phosphate, potash, and lime accordingly.
- Test hay quality and make inventory of hay supplies and needs. Adjust now - buy feed before you run out in the winter.
- Do not harvest or graze alfalfa now so the plant can replenish its root reserves.
- Remove fly-control eartags from all animals, dispose of according to instructions on package. Treat for grubs/lice.

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

Non-Timber Forest Products
Have You Considered Shagbark and Shellbark Hickories?

Hickories can be gathered from woodlands, and varieties that produce high-quality nuts make a nice addition to Kentucky woodland plantings. Native hickories that have relatively high-quality nuts and are the most suitable for nut production include shellbark hickory (Carya laciniosa), shagbark hickory (Carya ovata), and crosses between these species (Figure 2). While shagbark hickory and shellbark hickory look similar, there are a number of ways to tell them apart (Table 1). Pecan (Carya illinoensis) is actually a type of hickory—note that its scientific name is Carya, the same as hickories. This indicates that pecan is a type of hickory and can breed with other hickories: pecan shoots can be successfully grafted onto hickory trees, and hickory shoots can be grafted onto pecan trees. However, from a practical standpoint, we typically refer to pecans as being distinctly different from hickories. Other native hickories, including mockernut hickory C. tomentosa and some pignut hickories C. galabra and ovalis, also produce sweet kernels but have unacceptable cracking qualities.

Figure 2. Shellbark and shagbark nuts, left to right.
Photo courtesy: John Strang

Pruning and Nut Production

Pruning on hickories is minimal and consists mostly of encouraging the growth of branches that form and grow outward from the stem, which is done by removing branches that emerge from the trunk at narrow angles and pruning to promote only one main leader. If two leaders occur, prune one off. Nut production can take 10 to 15 years for seedling trees, while grafts on older trees may produce in three to four years. To obtain these production times, trees will need to be well maintained by controlling competing weeds through hoeing or mulching around tree bases, fertilization, and watering the young trees, particularly in the first season after transplanting. Hickories planted in a shaded wooded area may grow very slowly and take many years to produce nuts. Nut production is much better where trees are well spaced and receive maximum sunlight. The best hickory varieties produce yields in the 50- to 75-pound range per tree in good years. A very productive variety will bear nuts in threes, as opposed to singly or in pairs. Most hickory varieties have an alternate bearing tendency, producing a heavy crop one year followed by a light crop.

Hickory Pests

Hickory pests include the pecan weevil and pecan scab. The pecan weevil emerges from the ground during nut hardening from late August through the end of September. The female chews a hole in the nut and deposits an egg, which hatches into a white grub that feeds on the nut kernel. When the grub is mature, it chews a hole through the shell during the late September to December period and drops to the ground. An earthen cell is made and the grub pupates, remaining in the soil for one to two years before hatching out and continuing the cycle. Weevils generally do not move much, and sub- sequent generations continue to feed on the same tree. Some hickory varieties have better weevil resistance than others. Guinea fowl, or guinea hens, and bantam chickens can substantially reduce this pest. Pecan scab is a fungus that is a serious problem for pecans. It can defoliate trees and lead to nut losses. This disease is less

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of a problem for hickories in Kentucky, only occasionally seen on shagbark trees and rarely on shellbark hickories.

Cracking and Extracting

After patiently cracking and extracting the meats from a few hickory nuts, one quickly realizes that nut size matters, but it is not the primary consideration in determining nut suitability. Exceptional hickory varieties don't have just a good hickory flavor, they have nuts in which the meat will separate easily from the shell, leaving a large proportion of halves. If a hickory nut is sawed in half crosswise to view shell protrusions into the meat, an indication of shelling ease can be obtained.

Selling and Marketing Nuts

Think back to the last time that you went to the store and purchased shelled hickory nuts…still thinking? Unfortunately, hickory nuts are not bought and sold on a commercial basis. Part of the reason for this is that until recently there have been no commercial crackers for hickories as there are for pecans and black walnuts. So, nuts are generally cracked one at a time. When cracking hickory nuts, it helps to soak the nuts in water overnight to make the kernels more flexible and enable extraction of larger nutmeat portions. Another hard and fast rule when cracking nuts to store is to avoid tasting the nuts until the cracking and picking are completed. This assures that you will have more than a small quantity to store. Over time the oils in hickory nutmeats turn rancid, so it is best to store the nutmeats in freezer bags or tightly sealed containers in the freezer. Currently most hickory nuts are sold in the shell at farmers markets or on the Internet when they are available. One of the most enjoyable aspects of hickories is their unique hickory flavor. Cherished memories are borne of sitting around a hot crackling fire on a cold winter day and patiently extracting and consuming the amber kernels. Pecan pies are excellent, but hickory nut pies are exceptional. Consider this the time to plant a few hickory trees and start a family tradition of hickory nut pies for the holidays!

Table 1. Shagbark and shellbark hickory tree, leaf, and nut characteristics.

Characteristics	Shagbark	Shellbark
Habitat	Upland areas across the state	Bluegrass Region with limestone
Mature trunk	Shaggy	Coarser plates than shagbark
Leaflets	5 with up to 7, terminal leaflet largest	7 with as few as 5 or up to 9, larger leaf
Terminal buds	Smaller	Larger, often retain bud scales 1-2 years
Husk	1/8 to ½ inch thick	¼ inch thick
Nut shape	Round to ovate	Variable
Nut diameter	1¼ to 1¾ inches	1¾ to 2½ inches
Shell	White in color, longer with a thin shell	Light brown, hard, and thick

Let Us Know…

How can we best serve you? If you would like to opt out of future mailings or receive this newsletter electronically, email us at boone.ext@uky.edu or give us a call at 859-586-6101.

Wild Turkey & Broccoli Casserole

Servings: 8 Serving Size: 1 slice

Ingredients:
2 packages (10 ounces each) frozen broccoli, or 2 bunches fresh broccoli, washed and cut into pieces
4 cups cubed, cooked wild turkey meat
1 cup light mayonnaise
2 cans (10.5 ounces each) low-sodium cream of chicken soup
1 teaspoon curry powder or 1 tablespoon prepared mustard
1 teaspoon lemon juice
½ cup grated cheddar cheese
½ cup panko breadcrumbs
1 tablespoon melted butter

Directions:
To cook turkey breast, preheat oven to 325 degrees F. Add vegetable oil to roasting pan. Place turkey breast in roasting pan. Season meat lightly with garlic powder and black pepper. Cover with lid or aluminum foil. Cook at 325 degrees F until internal temperature is 165 degrees, about 1 ½ to 3 ½ hours for 4 to 8 pounds of meat. Let meat cool in pan for 5 minutes before cutting into cubes. Steam broccoli until tender. Drain. Grease a 2-quart casserole dish or 9-by13-inch pan. Place turkey on the bottom and arrange the broccoli over the turkey. Combine mayonnaise, cream of chicken soup, curry powder or mustard, and lemon juice. Combine cheese, breadcrumbs and butter. Sprinkle over casserole. Bake at 350 degrees F for 30 minutes.

Source: Adapted from: "Fish & Game Cookbook" Bonnie Scott. 2013.

Nutrition Facts per Serving: 270 calories, 12g total fat, 3g saturated fat, 0g trans fat,65mg cholesterol, 660mg sodium, 17g total carbohydrate, 0g dietary fiber, 2g total sugars, 23g protein, 6% DV calcium, 6% DV Iron, 8% DV Potassium

Gary Stockton named new County Director for Boone County Extension!

Gary has most recently served Boone County as the Extension Agent for Agriculture & Natural Resources. Throughout his career, he has worked for the Cooperative Extension Service in Louisiana as a Parish Chair and Extension Agent, as well as a vocational agriculture teacher.

Gary began his new role October 1st. He'll be working alongside the current County Director, Jerry Brown, in the coming months during the transition process.

College of Agriculture,
Food and Environment
Cooperative Extension Service

Lacey Kessell,
Boone County Extension Agent
for Natural Resource &
Environmental Education
lacey.laudick@uky.edu