

Ag and Natural Resources News

April 2023

Cooperative Extension Service
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boone.ca.uky.edu



Mark your calendars now!

► **Bull Breeding Soundness Exams**
April 15, 2023 · By Appointment
Kenton County Fairgrounds

► **How to Raise Backyard Chickens: The Basics**
April 18, 2023 · 6:00pm
Boone County Extension Office

► **Kentucky Master Naturalist**
May 12, 2023

► **International Grassland Congress**
May 14-19, 2023
Northern Kentucky Convention Center, Covington

► **BCS: Do You Know Your Horse's Score?**
May 24, 2023 · 6:00pm
Kenton County Fairgrounds

Quality Forages

For livestock producers, achieving optimal animal performance is key to success. One important factor that can impact animal performance is the quality of the forage being fed. High-quality forage is essential for maintaining animal health and productivity, and can also help to reduce feed costs and improve overall profitability.

So, what exactly is high-quality forage? In general, high-quality forage is defined as feed that is high in protein, digestibility, and energy. This can be achieved through careful management of pasture and hay fields, including proper fertilization, and harvesting techniques.

One of the key components of high-quality forage is protein. Protein is essential for growth and maintenance of animal tissues, and is particularly important for young, growing animals and lactating females. Forage that is high in protein can help to promote healthy growth and development, as well as improve milk production in dairy cows.

In addition to protein, digestibility is another important factor in forage quality. Digestibility refers to the amount of nutrients that can be extracted from the feed by the animal's digestive system. High-quality forage is more easily digested, allowing animals to extract more nutrients and energy from the feed. This can lead to improved feed efficiency and reduced feed costs.

Energy content is also an important factor in forage quality. Energy is necessary for all metabolic processes in the animal, including growth, reproduction, and maintenance. Forage that is



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Tuscan Chicken & Pasta

1 lb. boneless and skinless chicken breasts
2 pints cherry tomatoes, halved
3 Tbsps. olive oil
¼ cup balsamic vinaigrette or Italian dressing
1 Tbsp. dried basil
1 tsp. garlic powder
1 tsp. onion powder
½ tsp. salt
½ tsp. black pepper
1 bag (6 oz.) spinach, chopped coarsely
8 oz. whole-wheat pasta or spaghetti
Parmesan cheese (optional)



Preheat the oven to 400° F. Line a large baking sheet with parchment paper or aluminum foil.

If using thick chicken breasts, slice crosswise into thinner cutlets. Place the chicken breast and halved tomatoes on the baking sheet. Drizzle with the olive oil and balsamic vinaigrette (or Italian dressing). Sprinkle with basil, garlic powder, onion powder, salt, and black pepper.

Place baking sheet in the preheated oven and cook for about 30 to 40 minutes or until the chicken reaches an internal temperature of 165°F using a meat thermometer.

While the chicken and tomatoes cook, prepare the pasta according to package directions. Once done, remove chicken and tomatoes from the oven. Add chopped spinach to the baking sheet. Cover and allow the spinach to steam and the chicken to rest for about 10 minutes or until the spinach wilts.

Cut the chicken into thin strips or bite-sized pieces. Combine cooked pasta with the chicken, tomatoes, and juices from the baking pan. Sprinkle with parmesan cheese, if desired.

*Servings: 6; Serving Size: 2 cups
Per serving: 350 calories; 13g total fat; 2g saturated fat; 0g trans fat; 55mg cholesterol; 350mg sodium; 35g total carbohydrate; 3g dietary fiber; 4g total sugars; 0g added sugars; 24g protein.*

Source: Brooke Jenkins, Extension Specialist, University of Kentucky Cooperative Extension Service

high in energy can help to support these processes, leading to improved animal performance and productivity.

So, how can livestock producers ensure that they are feeding high-quality forage to their animals? Here are a few key management practices to consider:

- ▶ **Soil fertility:** Proper soil fertility is essential for producing high-quality forage. Regular soil testing and fertilization can help to ensure that pasture and hay fields have the necessary nutrients for healthy plant growth.
- ▶ **Harvest timing:** Forage should be harvested at the appropriate stage of growth for maximum quality. Timing can vary depending on the type of forage and the region, but in general, forage should be harvested before it becomes overly mature and loses nutritional value.
- ▶ **Harvest method:** The method of harvest can also impact forage quality. Mowing and conditioning can help to improve drying time and reduce the risk of mold and spoilage.
- ▶ **Storage:** Proper storage of forage is important to maintain quality. Forage should be stored in a dry, well-ventilated area to prevent mold growth and spoilage.

In conclusion, feeding high-quality forage is essential for maintaining animal health and productivity. By following best management practices for soil fertility, harvest timing, harvest method, and storage, livestock producers can ensure that they are providing their animals with the best possible feed for optimal performance and profitability.

Poison Hemlock

Poison hemlock, also known as *Conium maculatum*, is a highly toxic plant that can be found in pastures and hay fields throughout Kentucky. This plant is considered one of the deadliest in North America and is a serious threat to livestock and humans alike.

Poison hemlock is a biennial plant that can grow up to 10 feet tall. It has a smooth, hairless stem that is purple-spotted and hollow. The leaves of poison hemlock are fern-like and lacy, with finely divided segments. The flowers are small, white, and arranged in clusters at the top of the stem. Poison hemlock is often mistaken for wild carrot or Queen Anne's lace due to its similar appearance, but it can be distinguished by its hairless stems and purple spots.

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The toxic compounds in poison hemlock are found in all parts of the plant, but the highest concentrations are in the roots, leaves, and seeds. The plant contains several alkaloids, including coniine and gamma-coniceine, which can cause respiratory failure and death in humans and animals if ingested in sufficient quantities. Even small amounts of poison hemlock can be lethal to livestock, with symptoms including tremors, convulsions, respiratory distress, and eventually death.

In Kentucky, poison hemlock is commonly found in pastures and hay fields, particularly in areas with moist soils and high fertility. The plant can also be found along roadsides, in abandoned fields, and in disturbed areas such as construction sites. Because of its toxicity, it is important for livestock owners and farmers to identify and manage poison hemlock on their properties.



Poison Hemlock

One of the most effective ways to control poison hemlock is through manual removal, either by hand or by mowing. When removing poison hemlock, it is important to wear gloves and protective clothing to avoid skin contact with the plant's toxic compounds. Additionally, care should be taken to prevent the spread of seeds, as even small amounts can lead to the rapid spread of the plant.

Chemical control methods, such as herbicides, can also be effective in controlling poison hemlock. However, it is important to consult with a knowledgeable professional before using herbicides, as they can have unintended consequences such as damage to non-target plants or harm to beneficial insects.

In conclusion, poison hemlock is a serious threat to livestock and humans in Kentucky pastures and hay fields. It is important for farmers and landowners to be able to identify and manage this toxic plant to prevent harm to their animals and the environment. By following best management practices for control and removal, we can work to reduce the impact of poison hemlock and promote healthy, productive landscapes for years to come.



Mature Poison Hemlock

Soil Sampling is Important

Soil sampling is an important tool for pasture and hayfield management. Understanding the nutrient content and pH of the soil can help producers make informed decisions about fertilizer application and soil amendments, leading to improved forage quality and yield. In this article, we will discuss the importance of soil sampling and how it can benefit pasture and hayfield management.

Why is soil sampling important? Soil sampling provides valuable information about the soil's nutrient content and pH, which can help producers make informed decisions about fertilizer application and soil amendments. Over-fertilization can be costly and harmful to the environment, while under-fertilization can lead to poor plant growth and yield. Soil sampling can help producers determine the appropriate amount and type of fertilizer to apply, leading to improved forage quality and yield.

Soil sampling can also help identify potential soil nutrient deficiencies or imbalances. For example, a soil test may reveal that the soil is low in phosphorus, which is essential for plant growth and development. In this case, producers can apply a fertilizer that is high in phosphorus to correct the deficiency.

Finally, soil sampling can help to monitor changes in soil fertility over time. By regularly sampling the soil, producers can track changes in nutrient content and pH, and make adjustments to their management practices accordingly.

When should soil sampling be done? Soil sampling should be done at least once a year, ideally before the growing season begins. This allows producers to make any necessary fertilizer applications

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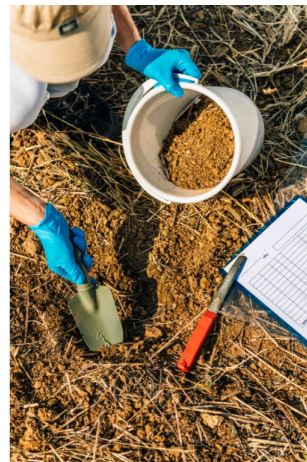
before the plants start actively growing. Soil sampling can also be done after the growing season, to assess the effectiveness of fertilizer applications and monitor changes in soil fertility over time.

How is soil sampling done? Soil sampling is a simple process that can be done with a few basic tools. To take a soil sample, producers should first identify the area of the pasture or hayfield they wish to sample. Samples should be taken from several locations within the area, and mixed together to create a composite sample.

Producers can use a soil probe or auger to take the sample. The probe or auger should be pushed or drilled into the soil to a depth of six inches, and the soil collected in a clean container. The sample should be air-dried and sent to a soil testing laboratory for analysis.

What do soil test results mean? Soil test results will provide information about the soil's nutrient content and pH. The results will typically include recommendations for fertilizer application, based on the nutrient content and pH of the soil. Producers should use these recommendations as a guide for applying fertilizer, and make adjustments based on their own experience and management goals.

In conclusion, soil sampling is an important tool for pasture and hayfield management. Regular soil sampling can help producers make informed decisions about fertilizer application and soil amendments, leading to improved forage quality and yield. By understanding the nutrient content and pH of the soil, producers can make adjustments to their management practices and ensure that they are providing their animals with the best possible feed. Soil samples can be dropped off at the Extension Office and results should be back in 10 days to 2 weeks.



Is your herd bull ready for breeding season?

COOPERATIVE EXTENSION



Is he sitting down on the job?



Bull Breeding Soundness Examinations

Saturday, April 15, 2023

at Kenton County Fairgrounds

Cost per bull for examination
\$25 for NKCA members - \$50 for non-members
Vaccinations are additional

- Exams by licensed Veterinarians
- For all breeding age bulls (over 12 months old)
- Semen test
- Physical examinations
- Vaccinations and deworming available for extra charge




Gary Stockton
Boone County Extension Agent
for Agriculture

Please call the Boone County Extension Service at 859-586-6101 By April 8 to schedule an appointment.

(program will be cancelled if there are less than 25 bulls)

Sponsored by:

Northern KY Cattle Association □ UK Cooperative Extension Service

BCS: DO YOU KNOW YOUR HORSE'S SCORE?

Wednesday, May 24, 2023

6: 00 p.m.

**Kenton County
Fairgrounds**

**Light refreshments
will be served**

Learn the technique to evaluate a horse's body condition at this hands on program. Experts will teach you ways to assess if the horse is too fat, too thin, or about right.



**REGISTER
TODAY!**

**Call (859)356-3155 or visit
kentoncountyextension.org**

Cooperative Extension Service
Agriculture and Natural Resources
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4-H Youth Development
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Educational programs of Kentucky Cooperative Extension serve all people regardless of economic or social status and will not discriminate on the basis of race, color, ethnic origin, national origin, creed, religion, political belief, sex, sexual orientation, gender identity, gender expression, pregnancy, marital status, genetic information, age, veteran status, or physical or mental disability. University of Kentucky, Kentucky State University, U.S. Department of Agriculture, and Kentucky Counties, Cooperating.
LEXINGTON, KY 40546



Disabilities
accommodated
with prior notification.

HOW TO RAISE BACKYARD CHICKENS: THE BASICS

Tuesday April 18th, 2023 from 6:00-8:00 pm
Boone County Extension Office
(6028 Camp Ernst Road)

Are you...

- New to raising chickens
- Thinking about raising chickens
- Or need a refresher?

If so, this class is for you!

Topics include breeds, housing, caring for chicks, and egg handling.

Registration deadline is April 17th
Call (859) 586-6101 or visit boone.ca.uky.edu

Facebook: [@boonecoextension](https://www.facebook.com/boonecoextension)



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Kentucky Master Naturalist

BEGINNING MAY 12TH

Boone County Extension is excited to launch its first Kentucky Master Naturalist Volunteers Cohort.

This 10 to 12-week program will teach participants a wide range about their environment including:

- Wilderness Safety
- Water quality
- Wildlife
- Plants
- Geology
- And so much more!



Applications available
February 6th, 2023

Cost \$200, scholarships are available

Contact for more details

Call: (859) 586-6101

Email: lacey.laudick@uky.edu

Instagram: [@bcenvironmentaledu](https://www.instagram.com/bcenvironmentaledu)

Facebook:

[@boonecountyenviromentaleducation](https://www.facebook.com/boonecountyenviromentaleducation)

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U.S. to Host International Grassland Congress

Covington, KY
May 14-19, 2023

In 1948, the 892-page “Yearbook of Agriculture” was simply titled “Grass.” In the book’s foreword, then-Secretary of Agriculture Clinton Anderson wrote to a nation recovering from war:

“Many of the people with whom I have talked look upon grassland as the foundation of security in agriculture. They believe in grass, and so do I, in the way we believe in the practice of conservation, or in good farming, or prosperity, or cooperation. For grass is all those things; it is not just a crop. Grassland agriculture is a good way to farm and to live, the best way I know of to use and improve soil, the thing on which our life and civilization rest.”

Too often we tend to take notice of corn, soybeans, wheat, and cotton as they develop and paint the rural landscape, but it’s grass and other forage acres that cover over one quarter of the land area in the U.S. and the world. Privately owned grasslands account for 528 million of our nation’s acres. Grass and other forage lands are as important today as they were in 1948 and before — maybe, even more so.

In 2023, and for the first time in over 40 years, the American Forage and Grassland Council will host the International Grassland Congress (IGC). It will be held in **Covington, KY, from May 14 to 19** and offer producers, researchers, extension agents and specialists, and others a unique opportunity to listen and talk to grassland scientists, farmers, ranchers, and industry leaders from over 60 countries around the world. The theme of the conference is “Grassland for Soil, Animal, and Human Health.”

The IGC program is packed with academic presentations on the production, storage, and utilization of forages and will offer discussions of grassland policies, social issues, and ecosystem services. There will also be a trade show marketplace, which will be the hub of the event, where over 1,000 attendees from more than 60 countries will gather to visit with sponsors and exhibitors, network at evening receptions, and view scientific posters.

One day during the congress is reserved for area tours (included with registration) in Kentucky, Indiana, and Ohio. There will also be optional pre-congress tours in the Southern Plains, Southeast, Northeast, and Pacific Northwest regions of the U.S.

For additional information or to register for the IGC, visit <https://internationalgrasslands.org/2023-igc/> or follow-on social media at @IGC2023.

Earth Day Seed Giveaway

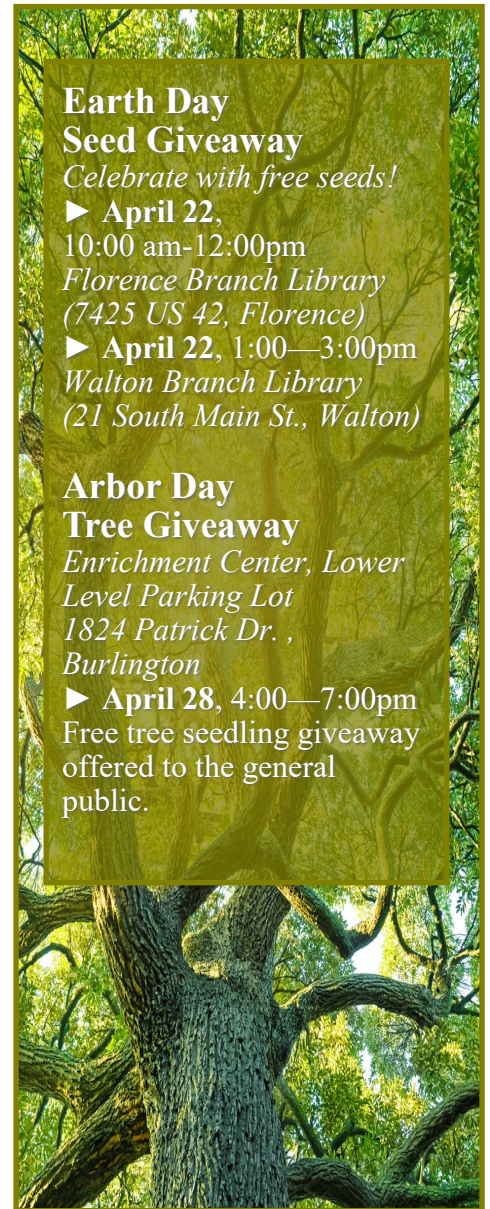
Celebrate with free seeds!

- ▶ **April 22,**
10:00 am-12:00pm
Florence Branch Library
(7425 US 42, Florence)
- ▶ **April 22,** 1:00—3:00pm
Walton Branch Library
(21 South Main St., Walton)

Arbor Day Tree Giveaway

*Enrichment Center, Lower
Level Parking Lot*
*1824 Patrick Dr. ,
Burlington*

- ▶ **April 28,** 4:00—7:00pm
Free tree seedling giveaway
offered to the general
public.



College of Agriculture,
Food and Environment
Cooperative Extension Service

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