

Ag and Natural Resources News

February 2024

Cooperative Extension Service
Boone County
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boone.ca.uky.edu



[Mark your calendars now!](#)

► **Kentucky Maple Day**

February 3, 2024

► **Pesticide Applicator Training**

February 13, 2024, 6:00 pm

Boone County Extension Office

► **Beef Quality & Care Assurance Training**

February 22, 2024

► **Webinar:**

What's the cost of a Cheap Mineral

February 13, 2024



Ensuring Successful Breeding: The Crucial Importance of Bull Breeding Soundness Testing

In the world of livestock breeding, the health and fertility of animals play a pivotal role in the success of any breeding program. When it comes to cattle, one of the key factors influencing reproductive success is the breeding soundness of bulls. Breeding



soundness testing (BST) has emerged as a critical practice for cattle farmers, offering a comprehensive assessment of a bull's reproductive capabilities. Understanding the importance of having bulls tested for breeding soundness is essential for ensuring not only the well-being of the herd but also the long-term viability and profitability of the breeding operation.

BST involves a thorough examination of a bull's physical and reproductive health. Veterinarians typically assess various aspects, including overall body condition, structural soundness, and reproductive organs. The evaluation also includes semen analysis, where the quality and quantity of sperm are scrutinized. By conducting these tests, farmers gain valuable insights into the bull's ability to sire healthy offspring.

One of the primary reasons why bull breeding

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Cooperative Extension Service

Agriculture and Natural Resources
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MARTIN-GATTON COLLEGE OF AGRICULTURE, FOOD AND ENVIRONMENT

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Disabilities accommodated with prior notification.

SAVORY WINTER PORK STEW

Servings: 12

Serving Size: 1 cup

Recipe Cost: \$19.19

Servings: \$1.60



Ingredients:

- 1 teaspoon salt
- 1/2 teaspoon black pepper
- 1 teaspoon granulated garlic
- 1/2 cup all-purpose flour
- 2 pounds boneless pork loin chops, 3/4-inch thick
- 2 tablespoons olive oil, divided
- 1 carton (32 ounces) low-sodium chicken broth
- 3 large carrots, sliced in 1/4-inch rounds
- 2 celery stalks, diced
- 1 medium onion, diced
- 3 medium potatoes, diced
- 1 can (10 ounces) diced tomatoes with green chilies

Directions:

1. Wash fresh produce under cool running water, using a vegetable brush to scrub veggies with a firm surface. Dry and cut to prepare for this recipe.
2. In a plastic gallon bag, add salt, pepper, garlic, and flour. Set aside.
3. On a meat cutting surface, trim fat and cut pork loin chops into cubes using a serrated knife or kitchen shears.
4. Place pork pieces inside a gallon bag with flour and seasonings and seal. Shake bag until all pork pieces are dredged in flour.
5. Wash hands and surfaces after handling uncooked meat.
6. In a large nonstick skillet, heat 1 tablespoon of olive oil over medium heat. Brown half of the pork pieces in the skillet, flip over pieces until all sides are browned. Remove pork and place in a large soup pot. Add another 1 tablespoon of olive oil to the skillet and brown the remaining pork pieces; then add remaining pork to the soup pot. Note: An extra-large skillet can brown all the pork pieces at one time.
7. Add 3 cups of chicken broth, carrots, celery, and onion to the pork in the soup pot. Bring to a boil over high heat. Reduce heat to medium-low, stir occasionally to avoid ingredients sticking to the bottom of the pot. Cook 20 to 30 minutes, or until vegetables are tender.
8. Add the remaining chicken broth, potatoes, and diced tomatoes with chilies. Bring to a boil. Simmer on low heat for 10 to 15 minutes until potatoes are tender, but not mushy.
9. Refrigerate leftovers within 2 hours.

Source: Source: Stephanie Derifield, former Area Nutrition Agent; Ruth Ann Kirk, Lawrence County EFNEP Program Assistant Senior; and Danielle Fairchild, Lawrence County SNAP-Ed Program Assistant Senior, University of Kentucky Cooperative Extension Service

Nutrition facts per serving: 190 calories; 5g total fat; 1g saturated fat; 0g trans fat; 40mg cholesterol; 380mg sodium; 17g total carbohydrate; 2g dietary fiber; 3g total sugars; 0g added sugars; 21g protein; 0% Daily Value of vitamin D; 4% Daily Value of calcium; 6% Daily Value of iron; 10% Daily Value of potassium

soundness testing is crucial is its direct impact on herd fertility. Bulls that are deemed breeding sound are more likely to successfully impregnate cows, leading to a higher conception rate. This, in turn, results in a more efficient and productive breeding program. On the contrary, an infertile or sub-fertile bull can significantly reduce the overall reproductive performance of the herd, leading to economic losses for the farmer.

Moreover, by identifying reproductive issues early on through BST, farmers can take proactive measures to address any underlying problems. This may include implementing targeted nutritional plans, addressing health issues, or even replacing a bull if necessary. Timely intervention based on BST results can prevent the spread of genetic abnormalities or fertility issues within the herd, preserving the overall health and genetic diversity of the cattle.

Beyond reproductive success, bull breeding soundness testing contributes to the overall welfare of the animals. Just as in humans, infertility or reproductive disorders in bulls can be indicative of broader health issues. BST helps ensure that bulls are physically fit, structurally sound, and free from any conditions that may compromise their well-being. This attention to animal health is not only ethically responsible but also aligns with the growing consumer demand for sustainable and humane farming practices.

In addition to the individual benefits for farmers and the well-being of the herd, embracing bull breeding soundness testing aligns with broader industry trends and standards. Responsible breeding practices contribute to the reputation of cattle farms, fostering trust among consumers and industry stakeholders. This is particularly important in an era where consumers are increasingly conscious of the origins and practices associated with the products they purchase.

In conclusion, the importance of having bulls

tested for breeding soundness cannot be overstated in the realm of cattle farming. It is a proactive and strategic approach that not only enhances reproductive success and overall herd health but also aligns with ethical and industry standards. As cattle farmers continue to navigate the complexities of breeding programs, integrating bull breeding soundness testing into their practices is a wise investment for the sustainability and prosperity of their operations.



Attention

Pesticide Applicator Training

FEBRUARY 13, 2024

6:00 PM

BOUNTY COUNTY EXTENSION OFFICE

This training is required for anyone purchasing restricted use products for agricultural or horticultural crops. The training requires two hours to learn the material and complete certification.

Check your card now to see if you are due to take the training. This is the only time this class will be offered this year.

Registration required @ 859-586-6101 or boone.ca.uky.edu



PUTTING TOGETHER AN EMAIL LIST FOR THE NEWSLETTER

It seems that I hear from people each month that don't get this newsletter until the first week of the month and in some cases that causes some things not to be advertised that we are doing.

I thought I would give you an option of also receiving the newsletter by email if you would like.

You can email me at gary.stockton@uky.edu and tell me that you would like to be added to the email list and I will make sure that as soon as the newsletter is completed that you will get a copy.

If its easier, you can also scan the below QR code to get added to the email list.



SIX EASY STEPS TO MAXIMIZE YOUR PASTURE SUCCESS WITH CLOVER FROST SEEDING

Source: Jimmy Henning, plant and soil science professor

Kentucky's weather conditions are predictably unpredictable. During the Kentucky Forage and Grassland Council assembly in November, board members discussed a possible shift in optimal timing for frost seeding clover -- broadcasting red clover into winter wheat just before green-up -- due to the increasingly milder winters. With that said, be careful when making statements about Kentucky weather as weather variation complicates predicting the optimum period for frost seeding clovers.

As legumes, clovers are an essential part of a strong and healthy nitrogen cycle in grasslands. Distributing six pounds of red clover and one to two pounds of white clover over a grassy area with some bare soil in the later part of winter, combined with minimal competition control, can develop high-quality pasture.

The advantages of cultivating clover are substantial, encompassing natural nitrogen fixation, and enhanced forage quality and yield. Particularly noteworthy is recent U.S. Department of Agriculture research indicating that red clover can significantly mitigate the vasoconstrictive effects of toxic endophyte tall fescue, making it an exceptionally valuable crop.



Frost seeding is a preferred establishment method due to its minimal equipment requirements. Typically, a small spinner seeder attached to a tractor or four-wheeler is all you would need for seed distribution. Red and/or white clover are well-suited for frost seeding as they exhibit rapid germination, shade tolerance, and vigorous root and shoot development in their seedling stages. Their small, smooth seeds are readily incorporated into the top quarter inch of soil through natural weather patterns or animal movement.

Despite the numerous advantageous clover traits are for establishment, it is crucial to adhere to the fundamental requirements of forage establishment, even in low-input methods like frost seeding.

These essentials include:

1. **Conduct soil analysis and apply necessary nutrients.** Clovers thrive in soil with a pH of 6.5 to 7 and medium to high levels of phosphorus and potassium. Nitrogen should only be added when diammonium phosphate is required for phosphorus provision.
2. **Choose a high-quality variety.** Opt for an improved variety with established performance and genetics. Selecting a superior red clover variety can yield up to three tons more hay per acre and extend the stand's lifespan compared to common, unclassified seeds. The University of Kentucky provides extensive yield data and persistence of white and red clover varieties for hay and pasture, available at http://forages.ca.uky.edu/variety_trials. It is advisable to check with seed suppliers to see if your favorite variety is available.
3. **Apply an adequate quantity of seed.** Typical seeding rates range from 8 to 12 pounds of red clover and one to two pounds of white/ladino clover per acre. A reduced rate, such as six pounds of red and one pound of white clover, still results in over 55 seeds per square foot (37 red and 18 white).
4. **Ensure seed contact with bare soil.** Removing excess grass or thatch, revealing bare ground, is imperative before overseeding. A major cause of frost seeding failures is excessive ground

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cover. Farmers can achieve bare soil exposure through controlled cattle movement or mechanically using a chain harrow.

5. **Achieve optimal seed-soil contact.** Frost seedings rely on precipitation and the freeze-thaw cycle to integrate clover seeds into the top quarter inch of soil. Utilizing a corrugated roller post-seeding can further enhance soil contact.
6. **Manage competition the following spring.** Avoid additional nitrogen application on overseeded fields. Be prepared for timely mowing to control grass or weed overgrowth above the clover. Although clover seeds are inherently vigorous, controlling competition can expedite and improve establishment.

With careful attention to soil fertility, variety selection, seeding rate, seed placement and competition management, clover can be successfully frost seeded into existing grass pastures.



KENTUCKY SMALL RUMINANT QUALITY ASSURANCE

Starting in 2023, SRQA will be required for CAIP applications!

Quality Assurance is knowing that as a small ruminant producer, you have used the best management practices possible in your operation. This includes using proper medications and anthelmintics to assure safe, wholesome products for public consumption, as well as providing your animals with the healthiest and safest environment in which to thrive.

Kentucky small ruminant meat producers are part of a national growing lamb and goat meat industry. Therefore, our products must **not** be considered poor quality in comparison to other red meats in the marketplace.

A quality assurance statement lets consumers know the product was grown to conform to laws governing domestic meat production and therefore provide assurance of quality to consumers. It also tells consumer that you have the welfare of your livestock at a top priority.

Ultimately, by providing quality assurance in your operation, you can guarantee increased profits because you will be raising animals that are at the peak of health, ready to produce products that are abundant and consistent.

What is the Kentucky SRQA Program?

The KY SRQA Program (Small Ruminant Quality Assurance) is a 1.5 hour certification program that helps producers understand:

The goals of Quality Assurance

1. Proper equipment needed
2. How to read a medicine label
3. How to read medicated feed tags
4. Veterinary Feed Directives
5. Prescription use of injectable, oral and water soluble antibiotics
6. Antibiotic stewardship
7. Record keeping
8. Biosecurity issues
9. Scrapie tag information
10. Animal welfare issues

To become certified go to <https://www.kysheepandgoat.org/srqa> and register for a class.

Keeping Your Woods Healthy

FORFS 17-03 Small Woods, Big Opportunities Series
Dr. Jeff Stringer and Christopher Reeves, Forestry

Before a landowner can approach the subject of improving woodland health, each owner must have some idea of how to define and then assess woodland health. Fortunately, there are some simple ways of gauging the health of woodlands. It is also often easy to determine what is making woodlands unhealthy and what can be done to improve woodland health. Assessing woodland health involves both evaluating individual trees as well as being able to evaluate the woodlands as a whole.

What is a Healthy Woodland?

It is generally agreed upon that regardless of landowner objectives healthy hardwood forests in Kentucky have the capacity to regenerate and maintain a diversity of native tree, shrub, and ground layer species that naturally occur together on the appropriate site and soils. It is helpful that many practices have been developed to maintain these attributes and the majority of landowners can use and benefit from them. One subject that must be discussed and understood before moving forward with evaluating woodland health is the difference between individual tree health and woodland health. It is important to understand that healthy woodlands can contain individual trees that are in poor health and will eventually die. For example, as woodlands age trees get bigger and some get overgrown and die. Some may be reaching their maximum age. All of this is a part of natural stand development. This is true whether we are discussing a woodlands that is being managed for timber production, old-growth, or recreation. It is similar for a human population, in that the population can be healthy but it will include those who are ill or lacking in vigor due to old age. The population is healthy as long as the entire population is not in this condition and young, healthy individuals are present to sustain the population. The same is true for woodlands. Woodlands may be healthy, even with individual trees that are in the process of losing vigor and/or are dead as long as there is adequate regeneration and ages of trees to replenish and maintain native species composition.



Exotic Invasives

One widely agreed upon tenet of woodland health is that native species should have adequate growing space and these native species should be able to naturally regenerate. This one tenet is universally at risk because of the occurrence of exotic (non-native) species that can occupy growing space and crowd out native species. This reduces natural biodiversity. Wildlife may also suffer as some exotic species may produce berries and fruit that wildlife eat that are often of much poorer quality than native berries and fruits. Some exotic species can also stop native tree species from regenerating if they are plentiful enough. Contact a forester to help determine if the presence of exotic invasives is significant enough to warrant control or treatment

There are specific methods that have been developed to control a broad range of invasive plants, and forestry and natural resource professionals should be consulted for specific and detailed control recommendations. Trying to undertake control of some invasive species without a technical understanding of the species and the woodlands situation could lead to ineffective control or make things worse. There are woodlands that may currently be devoid of invasive species, however this may not last. If invasive species are present in surrounding countryside, especially if they are present on an adjacent property, the risk of serious

invasion must be anticipated. Woodland owners should know how to determine if they are at risk. Woodland owners should also know what management practices might contribute to creating a problem, and how to deal with a problem if it occurs. Remember that just because exotic invasive species are not currently a problem, many factors may well put woodlands at risk for invasion.

Age and Woodland Health

The aging of woodlands is not inherently bad. However, the aging of individual trees and species within woodlands can create problems for woodland owners and lead to problems with woodland health. Problems with aging trees occur in particular in woodlands where all of the overstory trees are approximately the same age, these species reach their biologic maturity, and the main canopy starts to decline quickly. This is particularly important when the canopy contains short-lived species. This may create a situation where instead of having a few individual scattered trees die, the majority of the canopy may collapse. Significant canopy mortality causes problems with use and enjoyment of the woods and can lead to invasion from exotics. Foresters can help determine whether the vast majority of trees in the canopy are reaching biologic maturity. In older woods, woodland owners need to plan and potentially undertake silvicultural practices that will ensure that overstory trees are kept at the proper density and the woods are



capable of vigorously regenerating. Practices such as thinning and release give more room for canopy trees to grow and regeneration practices such as a midstory removal as part of the oak shelterwood method can facilitate regeneration. If the canopy is already in decline, woodland owners may choose to start regeneration where needed. Even small woodlands can maintain several age classes of trees by harvesting and regenerating group openings (0.5 to 1.5 acres in size). Keeping multiple age classes helps to maintain diversity and potentially increases the overall vigor of our woodlands. A wide range of species will be present in woodlands if the size of openings are in the recommended range.

Protecting Woodlands from Abuse

Care should be taken so that activities undertaken do not harm the woodlands. Also, woodland owners need to be concerned about protecting their woodlands from the carelessness of others. If care is not taken during logging, dragging logs can result in damage to trees that are to be retained. If not planned correctly, logging can also affect the ability of the woodlands to regenerate the species desired. If soils are worked when they are wet and skidding is not controlled, significant compaction can occur to the soil outside of skid trails, landings, and roads that are expected to be compacted during a harvest. Often a forester can help significantly with these issues. It is also important to protect woodlands from trespass including unauthorized harvesting. It is helpful to have boundaries marked to aid in making loggers working on adjacent property clearly aware of where the property boundary is. While issues such as ATV trespass and dumping are an issue, clearly marking boundaries can help. Uncontrolled wildfire can also be a problem. Foresters can help layout fire lanes and prescribe other practices that can help to reduce the occurrence of wildfire. Maintaining healthy woodlands is no accident. Oftentimes active plans are necessary to ensure that woodlands remain healthy or that an unhealthy woods is improved. By following a few basic principles, such as ensuring healthy vigorous tree canopies, monitoring or controlling invasive species, and protecting woodlands from damage, owners can rest assured their woodlands are healthy.



Logger WebTV

FEBRUARY 27, 2024

KY COUNTY EXTENSION OFFICES

9 a.m. - 4 p.m. EST

Hosted at the following Extension Offices:

Boone, Breathitt, Breckinridge, Casey, Crittenden,
Cumberland, Elliott, Fleming, Graves, Grayson,
Hancock, Harlan, Henderson, Jefferson, Letcher,
Logan, Madison, Martin, Morgan, Nelson, Ohio, Owen,
Perry, Russell, Taylor and Whitley counties

\$50 course fee and, if required, \$25 renewal fee

INFO: Beth Williams, 859-257-6230

Gary Stockton,
Boone County Extension Agent for Agriculture
gary.stockton@uky.edu

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

Is your herd bull ready
for breeding season?
Is he sitting down on the job?

 Cooperative
Extension Service



BULL BREEDING SOUNDNESS EXAMINATIONS



Saturday, April 13, 2024
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 & Natural Resources



Dan Allen, Kenton County Extension Agent
for Agriculture & Natural Resources

**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

**Cooperative
Extension Service**

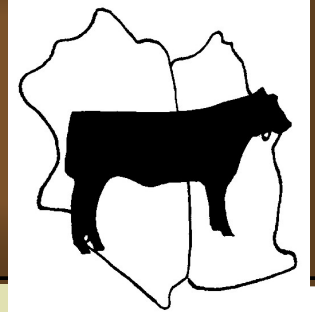
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University of Kentucky, Kentucky State University, U.S. Department of Agriculture, and Kentucky Counties, Cooperating.
Lexington, KY 40506



Northern Kentucky Cattle Association Scholarship



Applications Available Now

At **Kenton** or **Boone County**
Extension Offices

Kenton County Extension

10990 Marshall Rd.
Covington, KY 41015
(859) 356-3155

Boone County Extension

6028 Camp Ernst Rd.
Burlington, KY 41005
(859) 586-6101

or download and
complete pdf application at
√ www.kentoncountyextension.org
√ boone.ca.uky.edu

**Completed applications must be turned in to
Boone or Kenton County Extension Offices by April 15, 2024**